

## 9.1 Town of Ithaca

This section presents the jurisdictional annex for the Town of Ithaca. 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 Town of Ithaca and who in the Town participated in the planning process; an assessment of the Town of Ithaca’s risk and vulnerability; the different capabilities utilized in the Town; and an action plan that will be implemented to achieve a more resilient community.

### 9.1.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Ithaca’s hazard mitigation plan primary and alternate points of contact.

*Table 9.1-1. Hazard Mitigation Planning Team*

Primary Point of Contact	Alternate Point of Contact
Name/Title: Dan Thaete, Town Engineer Address: Town of Ithaca Phone Number: 273-1656 x225 Email: DThaete@town.ithaca.ny.us	Name/Title: Susan Ritter, Director of Planning Address: Town of Ithaca Phone Number: 273-1736x120 Email: SRitter@town.ithaca.ny.us
<b>NFIP Floodplain Administrator</b>	
Name/Title: Marty Moseley – Director of Code Enforcement Address: 215 North Tioga Street, Ithaca, NY 14850 Phone Number: 607-273-1783 Email: mmoseley@town.ithaca.ny.us	

### 9.1.2 Municipal Profile

The Town of Ithaca surrounds the City of Ithaca on all sides, and is a mix of rural, urban, and suburban landscapes. The Town of Ithaca encompasses 30 square miles, including the Village of Cayuga Heights, and is home to three State Parks, and many smaller town parks and trails. Fall Creek, Cascadilla, Buttermilk, Enfield Glen, and Six Mile Creek and their respective gorges cross run throughout the Town. Parts of Cornell University, and the Ithaca College campus are located within the Town. Also found in Ithaca is the Cayuga Medical Center; EcoVillage, a community dedicated to sustainable living; and the Namagyal Monastery, the center for Tibetan Buddhism in the United States. New York State Routes 13, 34, 79, 98B, and 366 converge in the Town of Ithaca.

The Ithaca was designated as a Military Tract for Revolutionary War veterans in 1782, with the first white settlers arriving in 1789. A post office was established in 1804, and Tompkins County was created in 1817. The Town of Ithaca was incorporated in 1821, separating from the Town of Ulysses. Flour, lumber, and whiskey mills lined



the creeks in Ithaca, and manufacturing grew in the 19th century with the Ithaca Gun Company and the Ithaca Calendar Clock Company, and the town grew with Cornell University's founding in 1865. The main industry in the town today is education and agriculture, supplemented by tourism to the Finger Lakes region.

The Town of Ithaca is governed by a six-member Town Board, elected for four-year terms, and a Town Supervisor, elected for two-year terms. Other Town Committees include the Agriculture committee, codes and ordinances committee, conservation board, planning board and committee, public works committee, and the zoning board of appeals.

According to the 2014-2018 American Community Survey, the Town of Ithaca's population is 16,233.

## 9.1.3 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.1-2 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

at the end of this annex illustrates the geographically delineated hazard areas and the location of potential new development, where available.

*Table 9.1-2. Recent and Expected Future Development*

Type of Development	2014		2015		2016		2017		2018	
<b>Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)</b>										
Single Family	19	0	28	1	6	1	7	0	6	1
Multi-Family	7	0	5	0	6	0	33	0	7	0
Other (commercial, mixed-use, etc.)	3	0	13	0	9	0	6	0	2	0
Total	29	0	46	1	21	1	46	0	15	1
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)		Known Hazard Zone(s)*		Description / Status of Development		
<b>Recent Major Development and Infrastructure from 2014 to Present</b>										
Maplewood Redevelopment	Apartments for College Student	495		201 Maple Ave		0		Complete		
<b>Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years</b>										
Amabel Subdivision		30		5 Mile Dr.		0		Planning Board Approved		

SFHA Special Flood Hazard Area (1% flood event)

\* Only location-specific hazard zones or vulnerabilities identified.



## 9.1.4 Capability Assessment

The Town of Ithaca performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of planning, legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities.
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity for the impacts of climate change.
- Information on National Flood Insurance Program (NFIP) compliance.

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, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in Capability Assessment (Section 9.1.4). The Town of Ithaca identified specific integration activities that will be incorporated into municipal procedures are included in the updated mitigation strategy. **This is shown in bold text in the comments box where appropriate.** Appendix I provides the results of the planning/policy document review.

### 9.1.4.1 Planning, Legal, and Regulatory Capability

The table below summarizes the regulatory tools that are available to the Town of Ithaca and where hazard mitigation has been integrated.

*Table 9.1-3. Planning, Legal, and Regulatory Capability*

	Does your municipality have this? (Yes/No)	Code Citation and Date (code chapter, name, date, link)	Authority (local, town, state, federal)	Department / Agency Responsible	State Mandated
<b>Codes, Ordinances, &amp; Requirements</b>					
Building Code	Yes	The Uniform Code (19 NYCRR Parts 1219 to 1229)	Local and State	Local Code Department	Yes
Comments: NYS Uniform and Energy Code 2020; Regulated at local and state levels. The Uniform Code (19 NYCRR Parts 1219 to 1229) now includes the 2015 editions of the code books published by the International Code Council (the "2015 I-Codes"), as amended by the publication entitled the 2017 Uniform Code Supplement (publication date: July 2017).. Article 18 of the Executive Law (§§ 370 through 383) establishes the State Fire Prevention and Building Code Council, directs the Code Council to promulgate and maintain the Uniform Code, and charges each city, town, and village in the State (with the exception of the City of New York) with the duty of administering and enforcing the Uniform Code within its municipal boundaries.					



	Does your municipality have this? (Yes/No)	Code Citation and Date (code chapter, name, date, link)	Authority (local, Town, state, federal)	Department / Agency Responsible	State Mandated
Zoning Code	Yes	Chapters 270: Zoning ( <a href="https://www.ecode360.com/8661341">https://www.ecode360.com/8661341</a> ) & 271: Zoning: Special Land Use Districts ( <a href="https://www.ecode360.com/8663020">https://www.ecode360.com/8663020</a> )	Town	Code Enforcement & Planning Departments, Zoning Board of Appeals, Planning Board	No
<p><b>Comment:</b> Article IX, Section 2, of the State Constitution and by the various state enabling statutes. In New York, the zoning enabling acts continue to require that zoning be undertaken "in accord with a well-considered plan"11 or "in accordance with a comprehensive plan."12 Unless the town, city or village has adopted a comprehensive plan document using the more recently-enacted statutes (described later herein), local officials must refer to the extensive body of case law to determine how zoning can meet the more general "comprehensive plan" requirement. **May be impacted by State wetland regulations which protect wetlands greater than 12.4 acres and established buffer zones. Regulated at local level.</p> <p><b>*During the next update of the municipal zoning code, the Town will review the HMP and determine how they can incorporate the HMP into the zoning code. By doing so, it will help promote development and redevelopment patterns that are at less risk from known hazards.</b></p>					
Subdivision Regulations	Yes	Chapter 234: Subdivision of Land ( <a href="https://www.ecode360.com/8660770">https://www.ecode360.com/8660770</a> )	Town	Town Planning Board	No
<p><b>Comment:</b> Subdivision is defined in the State enabling Statutes as: the division of any parcel of land into a number of lots, blocks, or sites as specified i a local ordinance, law or regulation, with or without streets or highways, for the purpose of sale, transfer of ownership, or development. There is not a requirement by NYS for subdivisions. Each municipality is permitted to further define subdivision for its own purposes in connection with its subdivision review procedure. The enabling statutes provide that a plat showing a division of land which is subject to a municipality's subdivision regulations, may not also be subject to review under its site plan review authority. (general city law s. 32 &amp; 33, Town Law s. 276 &amp; 277, Village Law s. 7-728 &amp; 7-730).</p> <p><b>*When the Town updates the subdivision regulations, they will review the HMP and consider different ways to integrate the HMP into the regulation. By doing so, it helps the Town encourage new developers to design areas that avoids or minimizes hazards.</b></p>					
Stormwater Management Regulations	Yes	Chapter 228: Stormwater Management and Erosion and Sediment Control ( <a href="https://www.ecode360.com/8660454">https://www.ecode360.com/8660454</a> )	Town	Engineering Department	Yes
<p><b>Comment:</b> Codes Rules and Regulations of the State of New York, Title 6. Department of Environmental Conservation, Chapter X. Division of Water Resources, Subchapter A. General Article 3. State Pollutant Discharge Elimination System, Part 750. State Pollutant Discharge Elimination System(SPDES) Permits. New York Environmental Conservation Law, Article 17, Titles 7, 8 and Article 70. New development and redevelopment projects that result in a land disturbance of one acre or greater, including projects less than one acre if they are part of a larger common plan of development or sale or if controlling such activities in a particular watershed is require a permit by the Department</p>					
Post-Disaster Recovery Plan or Regulation	No	N/A	Local	N/A	No
<p><b>Comment: The Town is participating in the development of the county-wide resiliency/recovery plan.</b></p>					
Real Estate Disclosure	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent	Yes
<p><b>Comment:</b> In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of \$500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit.</p> <p><b>*The Town will review the HMP and identify areas of integration that they can incorporate into their real estate disclosure procedures. This can include developing disclosure requirements to have natural hazard related information and include all natural hazards that can impact the Town.</b></p>					



	Does your municipality have this? (Yes/No)	Code Citation and Date (code chapter, name, date, link)	Authority (local, Town, state, federal)	Department / Agency Responsible	State Mandated
Growth Management Regulation	No	N/A	N/A	N/A	No
<p><b>Comment:</b> In New York State, virtually all land use regulation, which is the primary tool for Smart Growth, takes place at the municipal level (i.e., in a city, village or town government). Land use planning is also primarily a municipal function. While State law provides for certain planning functions at the county or regional level, these mechanisms are largely advisory, whereas municipal planning is directly related to land use regulation.</p>					
Site Plan Review	Yes	Chapter 270, Article XXII: Site Plan Review and Approval Procedures <a href="https://www.ecode360.com/8662406">https://www.ecode360.com/8662406</a>	Town	Local Planning Board	No
<p><b>Comment:</b> The authority to require site plan review is derived from the State enabling Statutes (General City Law s. 27-a, Town Law s. 247a, Village Law s. 7-725a)The local legislative body has the power to delegate site plan review to the planning board, zoning board, etc. <b>*When the Town updates the site plan review requirements, they will review the HMP and identify ways, if any, to integrate the HMP into the requirements.</b></p>					
Environmental Protection	Yes	Title 6 NYCRR Part 617  Chapter 148: Environmental Quality Review <a href="https://www.ecode360.com/8658815">https://www.ecode360.com/8658815</a>	State  Town	Zoning Board of Appeals, Planning Board, Town Board	Yes
<p><b>Comment:</b> New State Environmental Quality Review Act (SEQR) Title 6 NYCRR Part 617 Regulations are in effect as of January 1st, 2019</p>					
Flood Damage Prevention Law	Yes	Federal :Participation in the NFIP State: Community Risk and Resiliency Act (CRRA)  Chapter 157: Flood Damage Protection <a href="https://www.ecode360.com/8658984">https://www.ecode360.com/8658984</a>	Local, State, Federal  Town	Code Enforcement Department	Yes - BFE+2 feet for all construction in the SFHA (residential and non-residential)
<p><b>Comment:</b> A community must adopt a Flood Damage Prevention Ordinance to participate in the National Flood Insurance Program. <b>*The Town's law meets the minimum requirements set by NYS. In the event those requirements are revised, the Town will revise their law to include any revisions.</b></p>					
Municipal Separate Storm Sewer System (MS4) Regulation	Yes	Chapter 228: Stormwater Management and Erosion and Sediment Control <a href="https://www.ecode360.com/8660454">https://www.ecode360.com/8660454</a>	Town	Engineering Department	Yes
<p><b>Comment:</b> This requires urbanized areas (local governments) to develop a stormwater management program that will reduce the amount of pollutants carried by stormwater during storm events to waterbodies to the "maximum extent practicable". The goal of the program is to improve water quality and recreational use of waterways. A Municipal Separate Storm Sewer Systems Permit, GP-0-15-003 is required.</p>					
Emergency Management	Yes	NYS Executive Law, Article 2B.	Local	Local OEM	Yes
<p><b>Comment:</b> The development of the New York State Comprehensive Emergency Management Plan (CEMP) is required under NYS Executive Law, Article 2B.</p>					
Climate Adaptation	No	NYS Executive Law, Article 75	Local	-	Yes
<p><b>Comment:</b> The environmental conservation law was amended by adding ARTICLE 75 - CLIMATE CHANGE under Assembly Bill A. 8429 and Senate Bill S. 6599, dated June 18, 2019.</p>					
Disaster Recovery Ordinance	No	NA	Local	NA	No
<p><b>Comment:</b></p>					



	Does your municipality have this? (Yes/No)	Code Citation and Date (code chapter, name, date, link)	Authority (local, Town, state, federal)	Department / Agency Responsible	State Mandated
Disaster Reconstruction Ordinance	No	NA	Local	NA	No
<b>Comment:</b>					
Other Applicable Codes, Ordinances, & Requirements	-	-	-	-	-
<b>Comment:</b>					
<b>Planning Documents</b>					
Comprehensive Plan	Yes	Comprehensive Plan, September 2014 ( <a href="http://www.town.ithaca.ny.us/comprehensive-plan">http://www.town.ithaca.ny.us/comprehensive-plan</a> )	Town	Planning Department; Town Board	No
<p><b>Comment:</b> Optional under NYS Law, municipality may adopt a comprehensive plan or proceed through a planning process which has evolved based on case law. (Per State Legislature General City Law section 28a, Town Law s. 272a, Village Law s. 7-722) **May be impacted by State wetland regulations which protect wetlands greater than 12.4 acres and established buffer zones. Regulated at the local level.</p> <p><b>*When the Town updates their comprehensive plan, they will review the HMP and identify any opportunities to integrate the HMP into the comprehensive plan. This will help promote consistency between the two plans and encourage multi-objective management and planning in the community.</b></p>					
Capital Improvement Plan	Yes	Upon request at Town Hall or Public Works Facility	Town	Public Works, Engineering, Planning, Accounting Departments; Town Board	No
<b>Comment:</b> A local government can decide to adopt its capital plan pursuant to General Municipal Law Section 99-g.					
Disaster Debris Management Plan	No	-	Local	NA	No
<p><b>Comment:</b> Based on past experience with disaster management, it is apparent that local municipalities that have an Emergency Debris Management Plan in place are able to manage their emergency response in a more comprehensive and coordinated manner and are able to address recovery and clean up faster and more efficiently than those without plans. With that in mind, the Department developed an Emergency Management Plan Tool Kit. The NYSDEC (Department) strongly urges all municipal officials to conduct pre-disaster planning and prepare emergency debris management plans. The Department recommends that these plans should be reviewed and updated annually.</p> <p><b>*The Town is developing a debris management plan in conjunction with the County.</b></p>					
Floodplain or Watershed Plan	No	-	Local	NA	No
<b>Comment:</b> The State Pollutant Discharge Elimination System (SPDES) permit program is a primary way the DOW implements its watershed protection and restoration activities.					
Stormwater Plan	Yes	Town of Ithaca Stormwater Management Plan dated January 2011	Local	Engineering Department	Yes
<b>Comment:</b> Local Authority - Could be an element of the Comprehensive Plan. There is a required planning process that must be followed when addressing stormwater management in regulated new development and redevelopment projects.					
Open Space Plan	Yes	Town of Ithaca Park, Recreation and Open Space Plan, 1997	Town	Planning, Engineering, and Public Works Departments; Town Board	Yes



	Does your municipality have this? (Yes/No)	Code Citation and Date (code chapter, name, date, link)	Authority (local, Town, state, federal)	Department / Agency Responsible	State Mandated
<b>Comment:</b> Planning boards prepare or oversee the preparation of local comprehensive plans, which should include an open space element. The primary purpose of a local open space plan is to cause the important open lands in the community to be conserved for open space uses.					
Urban Water Management Plan	No	-	Local	NA	No
<b>Comment:</b>					
Habitat Conservation Plan	No	-	Local	NA	No
<b>Comment:</b> Laws related to habitat protection and biodiversity control the use and application of certain pesticides, demolition projects and clearing of vegetated areas. Identifying certain critical habitat areas could be included in the Comprehensive Plan. Critical Habitat is a part of certain State and Federal Permitting. The State had a Wildlife Action Plan requires to maintain eligibility for the State Wildlife Grant Program.					
Economic Development Plan	No	-	Local	NA	No
<b>Comment:</b> An Economic Development Plan may be prepared by a local government and be included or separate from the Comprehensive plan.**May be impacted by State wetland regulations which protect wetlands greater than 12.4 acres and established buffer zones.					
Shoreline Management Plan	No	Article 34, Environmental Conservation Law, Coastal Erosion Hazard Areas 6 NYCRR Part 505, Coastal Erosion Management Regulations	Local	-	Yes
<b>Comment:</b> Article 34, Environmental Conservation Law, Coastal Erosion Hazard Areas 6 NYCRR Part 505, Coastal Erosion Management Regulations					
Community Wildfire Protection Plan	No	-	Local	-	No
<b>Comment:</b> Under the federal Farm Bill, every 10 years each state must submit a State Forest Action Plan to the U.S. Forest Service. The Plan must be approved by the State Forester, who in New York is the director of DEC's Division of Lands and Forests. The next update of the Plan must be submitted to the Forest Service by June 2020.					
Forest Management Plan	No	-	Local	-	No
<b>Comment:</b>					
Transportation Plan	Yes	Town of Ithaca Transportation Plan, 2007	Town	Planning, Engineering, Public Works Departments; Town Board	No
<b>Comment:</b>					
Agriculture Plan	Yes	Agricultural and Farmland Protection Plan, 2011 ( <a href="http://www.town.ithaca.ny.us/town-agriculture/farm-protection-plan">http://www.town.ithaca.ny.us/town-agriculture/farm-protection-plan</a> )	Town	Planning Department; Town Board	Yes
<b>Comment:</b> Municipalities may develop agricultural and farmland protection plans, in cooperation with cooperative extension and other organizations, including local farmers.					
Other (tourism, business dev, etc.)	No	-	-	-	-
<b>Comment:</b>					
<b>Response/Recovery Planning</b>					
Comprehensive Emergency	No	NYS Executive Law, Article 2B	Local	Local OEM	Yes



	Does your municipality have this? (Yes/No)	Code Citation and Date (code chapter, name, date, link)	Authority (local, Town, state, federal)	Department / Agency Responsible	State Mandated
Management Plan					
<p><b>Comment:</b> The development of the New York State Comprehensive Emergency Management Plan (CEMP) is required under NYS Executive Law, Article 2B. The plan is developed and maintained by the New York State Office of Emergency Management and agencies that comprise the NYS Disaster Preparedness Commission (DPC). <b>*When the Town updates their CEMP, they will review the HMP and identify any areas that can be integrated. This can include an analysis of the potential hazards to the Town and update goals and objectives to align with the HMP, as necessary.</b></p>					
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	Local	Local OEM	Yes
<p><b>Comment:</b> HIRA is an annual requirement that all states must complete to remain eligible to receive federal homeland security grant funding. It also involves a hazard and capability assessment but DHSES has several methodological concerns with the THIRA process and has developed CEPA to serve as the State's system to capture and analyze hazard/capability information. However, CEPA has been engineered to support the completion of the THIRA.</p>					
Post-Disaster Recovery Plan	No	-	Local	-	No
<p><b>Comment:</b></p>					
Continuity of Operations Plan	No	-	Local	-	No
<p><b>Comment:</b> According to the FEMA, "State and local governments should consider developing or updating contingency plans for the continuity of operations (COOP) of vital government functions. Jurisdictions must be prepared to continue their minimum essential functions throughout the spectrum of possible threats from natural disasters through acts of terrorism. COOP planning facilitates the performance of State and local government and services during an emergency that may disrupt normal operations." <b>*The Town is participating with training with the County.</b></p>					
Public Health Plan	No	-	Local	-	-
<p><b>Comment:</b></p>					
Other: Emergency Response Plan	No	-	Local	-	No
<p><b>Comment:</b> Nothing is mandated by law in NYS, however, article 2B of the Executive Law provides for authority to draft emergency plans by various levels of government in NYS.</p>					
<p><b>Other:</b> Special Purpose Ordinances (such as critical or sensitive areas)</p>					
<p><b>Comment:</b></p>					

Table 9.1-4. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Response Yes/No; Provide further detail
Development Permits. If yes, what department?	Yes – Planning Department/Engineering Department
Permits are tracked by hazard area. For example, floodplain development permits.	No
Buildable land inventory If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No





### 9.1.4.2 Administrative and Technical Capability

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

*Table 9.1-5. Administrative and Technical Capabilities*

Resources	Available? (Yes or No)	Department/ Agency/Position
<b>Administrative Capability</b>		
Planning Board	Yes	Planning Department (Planning Board)
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	Planning Department (Conservation Board)
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	Planning Department (Economic Development Committee)
Warning Systems / Services (mass notification system, outdoor warning signals)	No	-
Maintenance programs to reduce risk	Yes	Public Works/Engineering Department(s)
Mutual aid agreements	Yes	Public Works Department
<b>Technical/Staffing Capability</b>		
Planners or engineers with knowledge of land development and land management practices	Yes	Planning and Engineering Departments
Engineers or professionals trained in building or infrastructure construction practices	Yes	Code Enforcement and Engineering Departments
Planners or engineers with an understanding of natural hazards	Yes	Planning and Engineering Departments
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	Yes	Code Enforcement, Engineering and Public Works Departments
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Engineering and Planning Departments
Scientist familiar with natural hazards	No	-
NFIP Floodplain Administrator (FPA)	Yes	Code Enforcement Department
Surveyor(s)	Yes	Engineering Department
Emergency Manager	No	-
Grant writer(s)	Yes	Planning and Town Clerk Departments
Resilience Officer	No	-
Other	-	-

### 9.1.4.3 Fiscal Capability

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

*Table 9.1-6. 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



Financial Resources	Accessible or Eligible to Use (Yes/No)
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	No
Open Space Acquisition funding programs	Yes
Other	No

### 9.1.4.4 Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Town of Ithaca.

*Table 9.1-7. Education and Outreach Capabilities*

Indicate if your jurisdiction has the following resources	Yes/No; Please describe
Public information officer or communications office?	Yes – Town Clerk
Personnel skilled or trained in website development?	Yes – Network / Record Specialist
Hazard mitigation information available on your website; if yes, describe	No
Social media for hazard mitigation education and outreach; if yes, briefly describe.	Yes – Town Facebook ( <a href="https://www.facebook.com/Town-of-Ithaca-NY-115601466558988">https://www.facebook.com/Town-of-Ithaca-NY-115601466558988</a> ) and Twitter ( <a href="https://twitter.com/IthacaTown">https://twitter.com/IthacaTown</a> ) accounts could be used if necessary
Citizen boards or commissions that address issues related to hazard mitigation; if yes, briefly describe.	No
Other programs already in place that could be used to communicate hazard-related information; if yes, briefly describe.	No
Warning systems for hazard events; if yes, briefly describe.	No
Natural disaster/safety programs in place for schools; if yes, briefly describe.	No
Other	No

### 9.1.4.5 Community Classifications

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

*Table 9.1-8. Community Classifications*

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	NP	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	3 (Residential) 4 (Commercial)	2017



Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	02/2Y	8/29/16
NYSDEC Climate Smart Community	Yes	N/A	2009-086
Storm Ready Certification	NP	-	-
Firewise Communities classification	NP	-	-
Other	NP	-	-

Note:

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

### 9.1.4.6 Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current ability to adjust to, protect from, or withstand a hazard event. This term is often discussed in reference to climate change; however, adaptive capacity also includes an understanding of local capacity for adapting to current and future risks and changing conditions.

The Town a Green Building Policy that is being drafted, as well as a Green New Deal Committee that reviews and proposes green policies for the maintenance and purchasing of Town owned buildings, equipment, vehicles, etc.

The table below summarizes the adaptive capacity for each hazard and the jurisdiction’s rating.

*Table 9.1-9. Adaptive Capacity*

Hazard	Adaptive Capacity (Capabilities) - High/Medium/Low*
Disease Outbreak	Medium
Drought	Medium
Extreme Temperature	Medium
Flood	Medium
Harmful Algal Bloom	Medium
Invasive Species	Medium
Severe Storm	Medium
Severe Winter Storm	High

- \*High Capacity exists and is in use
- Medium Capacity may exist; but is not used or could use some improvement
- Low Capacity does not exist or could use substantial improvement
- Unsure Not enough information is known to assign a rating

### 9.1.4.7 National Flood Insurance Program

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



## NFIP Floodplain Administrator (FPA)

Marty Moseley, the Town’s Director of Code Enforcement serves as the FPA.

*Table 9.1-10. Floodplain Administrator Questionnaire*

NFIP Topic	Comments
<b>Flood Vulnerability Summary</b>	
Describe areas prone to flooding in your jurisdiction. <ul style="list-style-type: none"> <li>Do you maintain a list of properties that have been damaged by flooding?</li> </ul>	<ul style="list-style-type: none"> <li>Lake shore area along, Forest Home Creek - area, and Five Mile Drive and the Cayuga Inlet area.</li> <li>Yes, if a building permit was issued, we have all files electronically.</li> </ul>
Do you maintain a list of property owners interested in flood mitigation? <ul style="list-style-type: none"> <li>How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)?</li> </ul>	<ul style="list-style-type: none"> <li>No</li> <li>Unknown</li> </ul>
Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> <li>If so, state what projects are underway.</li> </ul>	FEMA is updating mapping in the Town and City of Ithaca with a tentative timeline of 2 years to be finished.
How do you make Substantial Damage determinations? <ul style="list-style-type: none"> <li>How many were declared for recent flood events in your jurisdiction?</li> </ul>	As defined in the NYS Uniform Code and as defined in Chapter 157 of Town Law
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> <li>If there are mitigation properties, how were the projects funded?</li> </ul>	Four properties have been built in compliance with flood laws since 2014-2019, which were privately funded.
Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> <li>If not, state why.</li> </ul>	No, they are maps from the 1980’s which do not represent the most accurate flood data.
<b>Resources</b>	
What local department is responsible for floodplain management?	Code Enforcement and Engineering Departments
Are any certified floodplain managers on staff in your jurisdiction?	No, but attend we have attended floodplain training
Do you have access to resources to determine possible future flooding conditions from climate change?	Yes
Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> <li>If so, what type of assistance/training is needed?</li> </ul>	Would prefer to attend more training on an annual basis.
Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability)	Permit review, site plan review, GIS mapping, education/outreach, inspections, engineering of Town projects, issuance of permits, etc.
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Based on the definition in Chapter 157 of Town Law and the NYS Uniform Code.



NFIP Topic	Comments
What are the barriers to running an effective NFIP program in the community, if any?	Mapping needs to be updated.
<b>Compliance History</b>	
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <ul style="list-style-type: none"> <li>If so, state the violations.</li> </ul>	Not that we are aware of.
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	1/8/2016
<b>Regulatory</b>	
What is the local law number or municipal code of your flood damage prevention ordinance? <ul style="list-style-type: none"> <li>What is the date that your flood damage prevention ordinance was last amended?</li> </ul>	Chapter 157: Flood Damage Prevention ( <a href="https://www.ecode360.com/8658984">https://www.ecode360.com/8658984</a> ) amended in its entirety 5-11-1987 by L.L. No. 9-1987
Does your floodplain management program meet or exceed minimum requirements? <ul style="list-style-type: none"> <li>If exceeds, in what ways?</li> </ul>	Meets management program
Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	All projects that proceed to the Planning Board are analyzed for impacts on contiguous properties, which may include flooding or conveyance of water.
<b>Community Rating System (CRS)</b>	
Does your jurisdiction participate in CRS? <ul style="list-style-type: none"> <li>If yes, is your jurisdiction interested in improving its CRS Classification?</li> <li>If no, is your jurisdiction interested in joining the CRS program?</li> </ul>	No

### 9.1.4.8 National Flood Insurance Program (NFIP) Summary

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

*Table 9.1-11. NFIP Summary*

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# SRL Properties
Town of Ithaca	21	20	\$36,215.01	1	-

Source: FEMA 2020

Notes: Policies, claims, repetitive loss, and severe repetitive loss statistics provided by FEMA Region 2, and current as of July 7, 2020. The total number of repetitive loss properties does not include severe repetitive loss properties. SRL property information was not included in the available data set.

RL Repetitive Loss; SRL Severe Repetitive Loss



### 9.1.4.9 Additional Areas of Existing Integration

The Town of Ithaca has long understood the connections between hazard mitigation, conservation and land use. This is shown in many ways including through the development of its local stream setback law. This law is the most robust in the County which frames specific setbacks from streams based on the size of their contributing watersheds. The Town further invests in the hazard – conservation – land use commitment through its local agriculture conservation easement program and farmland protection planning efforts.

Mitigation work at the Town can further be integrated with the Town’s Comprehensive Plan implementation.

### 9.1.4.10 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all 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.

#### Evacuation Routes

Town of Ithaca relies on the NYS Routes for evacuation through and around town. Based on the nature of the emergency a combination of State Routes 79, 34, 13, 96 and 89 will be utilized. However, evacuation routes are specific to hazard event and routes will vary according to the location of the event. The Town will identify evacuation routes according to procedures outlined in the ESF16 annex of the Tompkins County 2021 CEMP.

#### Sheltering

The following are currently known shelters located in the Town of Ithaca.

*Table 9.1-12. Shelter Locations in the Municipality*

Shelter Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
Bethel Grove Bible Church Family Center	1749 Slaterville Road, Ithaca, NY	102	-	-	-	-	-
Cornell University - Various Locations	-	2150/1075	-	-	-	-	-
Dewitt Middle School	560 Warren Road, Ithaca, NY	375/187	-	-	-	-	-



Shelter Name	Address	Capacity	Accommodates Pets?	ADA Compliant?	Backup Power?	Types of Medical Services Provided	Other Services Provided
TST Boces	555 Warren Road, Ithaca, NY	400/200	-	-	-	-	-

## Temporary Housing

The Town does not currently have any land noted for temporary housing. However, there are several hotels and residence halls in the Town and has not identified sites for the placement of temporary housing for residents displaced by a disaster or potential sites suitable for relocating structures out of the floodplain and/or building new homes once properties in the floodplain are acquired. In the event temporary housing is needed, the Town will work with the County to find suitable locations using the locations identified in Section 4 (County Profile) Table 4-9 as a starting point.

*Table 9.1-13. Temporary Housing Locations in the Municipality*

Site Name	Site Address	Infrastructure / Utilities Available (water, electric, septic, etc.)	Capacity (number of sites)	Type	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
In the event temporary housing is needed, the Town will work with the County to find suitable locations using the locations identified in Section 4 (County Profile) Table 4-9 as a starting point.					

## Permanent Housing

The Town notes areas throughout its municipality for increased permanent housing as outlined in its Land Use Code. In addition, as part of the planning process, a countywide buildable land analysis was conducted and presented in Section 4 (County Profile). The municipality can utilize this analysis to identify potential locations.

*Table 9.1-14. Permanent Housing Locations in the Municipality*

Site Name	Site Address	Infrastructure / Utilities Available (water, electric, septic, etc.)	Capacity (number of sites)	Type	Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code
See TOI Zoning Map					

## 9.1.5 Hazard Event History Specific to the Town of Ithaca

Town of Ithaca has a history of natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) 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 Town and its municipalities. The Town of Ithaca's history of federally declared



(as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Town of Ithaca. Table 9.1-15 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 9.1-15. Hazard Event History*

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
May 13-22, 2014	Severe Storms and Flooding (DR-4180)	Yes	On May 16, heavy rainfall resulted in flash flooding and washed out roads.	While this event impacted the community, due to lack of resources damage history has not been documented.
August 3, 2014	Heavy Rain and Flash Flooding	-	Showers and thunderstorms in the area produced torrential downpours. In the County, several roadways were inundated causing approximately \$100,000 in property damage.	While this event impacted the community, due to lack of resources damage history has not been documented.
June 14-15, 2015	Heavy Rain and Flash Flood	-	A tropical-like airmass was in place allowing for a stripe of 2-4 inches of very heavy rain to fall in a narrow band extending from near Watkins Glen to areas north of Binghamton. Severe flash flooding was encountered with numerous roads and culverts destroyed by raging water. In some areas, homes, schools and other businesses were flooded. In Tompkins County, flooding caused the washout of numerous bridges in the area. The County had approximately \$1.5 million in damages from this event.	While this event impacted the community, due to lack of resources damage history has not been documented.
March 14-15, 2017	Severe Winter Storm and Snowstorm (DR-4322)	Yes	Snowfall ranged between 12 and 24 inches in Tompkins County with the highest amounts in the far southeast part of the county.	While this event impacted the community, due to lack of resources damage history has not been documented.
July 24, 2017	Heavy Rain and Flash Flooding	-	Widespread thunderstorms produced three to inches of rain. This led to streams and creeks overflowing their banks and flash flooding in many areas. The County had approximately \$75,000 in property damage.	While this event impacted the community, due to lack of resources damage history has not been documented.
October 31- November 1, 2019	Severe Storms, Straight-Line Winds and Flooding (DR-4472)	Yes	-	While this event impacted the community, due to lack of resources damage history has not been documented.

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)





N/A Not applicable

## 9.1.6 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 Town of Ithaca’s risk assessment results and data used to determine the hazard ranking.

### 9.1.6.1 Critical Facilities

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 0.2-percent or 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 (NYS DHSES 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 9.1-16. Potential Flood Losses to Critical Facilities*

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
WATER INTAKE F CR INLET A-F (FOREST HOME)	Government	No	Yes	-
VEG CROPS PUMP HOUSE	Education	Yes	Yes	2021T. Ithaca 018
RESOURCE ECOLOGY AND MANAGAMENT LAB	Education	Yes	Yes	2021T. Ithaca 018
IPD RANGE	Government	Yes	Yes	2021T. Ithaca 018
BRIDGE FISH HATCHERY	Education	Yes	Yes	2021T. Ithaca 018
AQUACULTURE BUILDING	Education	Yes	Yes	2021T. Ithaca 018
30- and 60-Foot Dams	Dam	Yes	Yes	2021T. Ithaca 018

Source: Tompkins HAZUS



### 9.1.6.2 Hazard Ranking

This section provides 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 (Risk Assessment) 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 jurisdiction may have differing degrees of risk exposure and vulnerability compared to Tompkins County as a whole. Therefore, each Town of Ithaca 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 Ithaca. The Town of Ithaca has reviewed the Town 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 of Ithaca indicated the following:

- While a range of hazards are of concern in the Town, flooding presents the most concern and also most opportunities for mitigation.

*Table 9.1-17. Hazard Ranking Input*

Hazard	Ranking
Disease Outbreak	Medium
Drought	High
Extreme Temperature	Medium
Flood	High
Harmful Algal Bloom	Medium
Invasive Species	Medium
Severe Storm	High
Severe Winter Storm	Medium

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

### 9.1.6.3 Identified Issues

The Town of Ithaca has identified the following vulnerabilities within their community:

- Flooding, Severe Storm and Drought present the highest concerns.

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

- Lyme disease was noted as an associate concern with climate change.
- Investments in infrastructure was seen as the best mitigation.
- Most felt that the Town cares about their well-being in relation to hazard events.



- The impact of increase in heavy rain events on local drainage systems are an increasing concern. These structures can often be overwhelmed now after heavy rain storms and flood driveways and basements because street drainage is inadequate. This is made worse when inadequate drainage is not required with new developments and increase in hard scape causes water run off rather than absorption. This ultimately impacts water quality in the Lake.

## 9.1.7 Mitigation Strategy and Prioritization

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

### 9.1.7.1 Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2014 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 9.1-18. Status of Previous Mitigation Actions

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2021 HMP or Discontinue 2. If including action in the 2021 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Cost	Level of Protection	
T11		Flash Flood, Landslide	Town of Ithaca	Establish conservation corridors and green infrastructure along stream banks to encourage riparian vegetation for channel and floodplain stabilization and wildlife habitat. Priority focus area should be bank stabilization of the intermittent streams which flow into Six Mile Creek like those near the Six Mile Creek Vineyard.	Ongoing	Cost	-	Working with the Cayuga Lake Watershed Intermunicipal Organization to obtain funding for stream bank stabilization/restoration.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
T12		Severe Storm	Town of Ithaca	Analyze drainage issues that occur post large storm events at corner of Pine Tree Road / Ellis Hollow / Mitchell Roads as well as Route 13 at Buttermilk Falls Road and implement appropriate mitigation measures.	Ongoing	Cost	-	Monitoring County, State, and local projects, in the areas of concern, in efforts to mitigate the drainage issues.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
T13		Utility Failure, Ice Storm	Town of Ithaca	Promote underground utilities on new development projects	Ongoing	Cost	--	Promote the installation of underground utilities as development projects progress through the Planning/Approval process. Local code(s) have been established outlining the requirement(s) of underground utility installation.
						Level of Protection	-	
						Damages Avoided;		



Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2021 HMP or Discontinue 2. If including action in the 2021 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Evidence of Success		



### 9.1.7.2 Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Ithaca has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2014 Plan:

2015-Installation of a 72" SRPE pipe within the existing/damaged drainage pipe beneath Elm Street Extension-Coy Glen Creek. Pipe was damaged during a heavy rain/flash flood storm event in 2014.

### 9.1.7.3 Proposed Hazard Mitigation Initiatives for the Plan Update

The Town of Ithaca participated in a mitigation action workshop in October 2020 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: e.g., 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 9.1-19 summarizes the comprehensive range of specific mitigation initiatives the Town of Ithaca 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 (Mitigation Strategy), 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 9.1-20 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan update.



Table 9.1-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2021 T Ithaca - 001	NYS RT 13A/Glenside Road Drainage Modifications	1, 4	Flood	<p><b>Problem:</b> NYS RT 13A (Five Mile Dr.) at Glenside Rd. intersection. During large rainstorm events roadside swales and backlot drainage swale overtop and flood roadway and adjacent properties.</p> <p><b>Solution:</b> Install regional stormwater management device upstream to mitigate runoff. Review drainage along roadway for possible upgrades.</p>	No	No	1 Year	Town of Ithaca, NYSDOT	\$500,000	Road damage, accessibility, property damage	BRIC, HMGP, Local Match	Medium	SIP	SP
2021 T Ithaca - 002	Code Enforcement Cloud Permit Program	1-5	All Hazards	<p><b>Problem:</b> The Code Enforcement Department does not have access to documents or plans outside of Town Hall due to limitations of current practices. This is problematic when assessing damaged buildings, and when attempting to see what impacts the damaged building may have on the public safety or health impact. This delays the response of an assessment program</p> <p><b>Solution:</b> Purchase a cloud-based software to enhance electronic permitting, code enforcement activities, record retention system, plan review, and provide for online access to model code to the Public. The cloud-based software system will allow for a faster response time and allow for all files to be accessed during an emergency event</p>	No	No	1 Year	Town of Ithaca	\$610,000	Require elevation of structures in identified flood areas, when required, avoid loss of life when rapid assessment is required for structurally damaged buildings during natural and man-made events. Allow for increased communication between departments.	BRIC, HMGP, State Funds, Local Match	High	SIP	PR



Table 9.1-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2021 T Ithaca - 003	Water Supply Redundancy	1,3	Drought	<p><b>Problem:</b>With the City and Town's growing population and increased exposure to droughts during the summer due to climate change, Ithaca continues to struggle with inadequate water supply for its residents.</p> <p><b>Solution:</b>The city of Ithaca can conduct a study to examine potential new sources for backup water supply during the summer, or potential collaboration with neighboring municipalities to expand overall capacity during the summer drought months.</p>	Yes	No	2 Years	TOI	Unknown	Added drought resilience	NYS DOS Resiliency Plan Funding	High	SIP	PR
2021 T Ithaca - 004	HABs Response Planning	1,5	HABs	<p><b>Problem:</b>Cayuga Lake has elevated cases of harmful algal bloom</p> <p><b>Solution:</b>Collaborate with neighboring municipalities also along Cayuga Lake such as through the intermunicipal organization to create a Tompkins County-specific response plan to address increasing levels of Harmful Algal Bloom.</p>	No	Yes	5 Years	Tompkins County Planning	Unknown	Unknown	Local Funds, NYSDEC WQIP	Med	NSP	PR
2021 T Ithaca - 005	Disease Management	1	Disease Outbreak	<p><b>Problem:</b>Ithaca is unique in terms of the overall size of the City/ Town and the high number of university students with the presence of Cornell University, Ithaca College, and to an extent Tompkins Cortland Community College. While the universities act</p>	No	No	5 Years	Tompkins County Health	Unknown	Unknown	Local Funds	Med	LPR	PR





Table 9.1-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				<p>as major economic stakeholders within the community, they also pose a significant threat to the local communities around disease outbreak. Thus, local residents are constantly vulnerable to students (who are often from out of town) spreading and exacerbating disease outbreaks.</p> <p><b>Solution:</b> While it is unrealistic to confine students to specific areas of the city, in cases where disease outbreak is spread through physical contact, the city and town of Ithaca might consider developing an emergency action plan in preparation for such an event and having procedures in place to reduce physical contact and thus transmission, especially to local communities.</p>										
2021 T Ithaca - 006	Tree Management Program	3,5	Severe Storm, Severe Winter Storm	<p><b>Problem:</b> Severe Storms and Winter Storms often result in downed trees and loss of power and property damages.</p> <p><b>Solution:</b> The Town could develop tree maintenance programs to assess and monitor at-risk trees and develop a schedule to remove these trees. The Town could also consider grounding utility lines or tree pruning and monitoring near utility lines.</p>	No	No	5 Years	TOI	Unknown	Reduced tree damage to public and private property	Local funds, NYSDEC	Med	NSP	NR, PP



Table 9.1-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2021 T Ithaca - 007	Flash Flood Study	4,5	Flood	<b>Problem:</b> The Town experiences flash flood events and subsequent damages. This leads to road closures, damages, and emergency rescues. <b>Solution:</b> Conduct a study to determine the cause of flash flood events and identify problem areas. Once study is complete, the municipality will review the findings, determine the best solution(s), and implement projects.	No	No	5 Years	TOI, City DPW	Unknown	Unknown	NYSDEC WQIP, HMGP	Med	SIP	PP, SP
2021 T Ithaca - 008	Fish Hatchery Analysis	5	Flood	<b>Problem:</b> Bridge Fish Hatchery is located in the 1% annual chance flood area. <b>Solution:</b> Outreach to determine if facility is designed to withstand a 100-year flood and if not, provide information about the flood risk and alternatives to relocation.	Yes	Yes	5 Years	TOI	Unknown	Unknown	Local Funds	Med	SIP	PP
2021 T Ithaca - 009	AquaCulture Analysis	All	Flood	<b>Problem:</b> Aquaculture Building is located in the 1% annual chance flood area. <b>Solution:</b> Outreach to determine if facility is designed to withstand a 500-year flood and if not, provide information about the flood risk and alternatives to relocation.	Yes	Yes	5 Years	TOI	Unknown	Unknown	Local Funds	Med	SIP	PP
2021 T Ithaca - 010	Resource Ecology Lab Analysis	All	Flood	<b>Problem:</b> Resource Ecology and Management Lab is located in the 1% annual chance flood area.	Yes	Yes	5 Years	TOI, Cornell	Unknown	Unknown	Local Funds	Med	SIP	PP



Table 9.1-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				<b>Solution:</b> Outreach to determine if facility is designed to withstand a 100-year flood and if not, provide information about the flood risk and alternatives to relocation.										
2021 T Ithaca - 011	Ithaca Police Range Analysis	All	Flood	<b>Problem:</b> IPD Range is located in the 1% annual chance flood area. <b>Solution:</b> Outreach to determine if facility is designed to withstand a 100-year flood and if not, provide information about the flood risk and alternatives to relocation.	Yes	Yes	5 years	TOI, City of Ithaca	Unknown	Unknown	Local Funds	Med	SIP	PP
2021 T Ithaca - 012	Tributary Analysis	All	Flood	<b>Problem:</b> City Flooding due to Town Streams <b>Solution:</b> Coordinate with City to study certain areas in the Town that may impact the City due to potential flooding of specific areas of the City.	No	Yes	3 Years	TOI	Unknown	Unknown	Local Funds, NYSDEC WQIP	Med	NSP	PP, NR, SP
2021 T Ithaca - 013	Sandbank Road Retrofit	1,3	Flood	<b>Problem:</b> Lower end or portion of Sandbank Road located in the 1% annual chance flood area <b>Solution:</b> Elevate the road where the road system is impacted by the 1% annual chance of flooding area	No	No	5 Years	TOI DPW	Unknown	Unknown	Local Funds, BRIC	Med	PP	SP
2021 T Ithaca - 014	Drainage Swales Retrofit	1,3	Flood	<b>Problem:</b> NYS RT 79 (Slaterville Rd.) between Honness Ln. and Burns Road, flooding of drainage swales along east side of roadway <b>Solution:</b> Conduct a study to determine the cause of flash flood in this area. Once study is complete, the municipality will review the findings, determine the	No	No	5 Years	TOI	Unknown	Unknown	Local Funds	Med	PP	SP



Table 9.1-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				best solution(s), and implement project(s).										
2021 T Ithaca - 015	East Shore Drive Analysis	All	Flood	<b>Problem:</b> NYS RT 34 (East Shore Dr.) Ithaca/Lansing Town Line, south to NYS RT 13. Flooding of roadside swales. <b>Solution:</b> Conduct a study to determine the cause of flash flood in this area. Once study is complete, the municipality will review the findings, determine the best solution(s), and implement project(s).	No	No	5 Years	TOI	Unknown	Unknown	Local Funds	Med	PP	SP
2021 T Ithaca - 016	13A Roadside Ditch Analysis	All	Flood	<b>Problem:</b> NYS RT 13A (Five Mile Dr.) at Glenside Rd. intersection. Flooding of roadside swales due to rear-lot drainage swale discharge from Glenside Rd. properties. <b>Solution:</b> Conduct a study to determine the cause of flash flood in this area. Once study is complete, the municipality will review the findings, determine the best solution(s), and implement project(s).	No	No	5 Years	TOI DPW	Unknown	Unknown	Local Funds	Med	PP	SP
2021 T Ithaca - 017	Repetitive Loss Property Outreach	1	Flood	<b>Problem:</b> There are some repetitive loss properties in the Town. <b>Solution:</b> Conduct outreach to flood-prone property owners and provide information on mitigation alternatives and flood risk. After preferred mitigation measures are	No	No	3 Years	TOI	Unknown	Unknown	Local Funds	Med	EAP	PP, PI, PR



Table 9.1-19. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				identified, collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating residential homes in the areas that experience frequent flooding.										
2021 T Ithaca 018	Critical Facility Resiliency Assessment	1,2	Flood, Severe Storm	<p><b>Problem:</b> The VEG CROPS PUMP HOUSE, RESOURCE ECOLOGY AND MANAGAMENT LAB, IPD RANGE, BRIDGE FISH HATCHERY, AQUACULTURE BUILDING, and 30- and 60-Foot Dams are all identified critical facilities located in the 100-year floodplain.</p> <p><b>Solution:</b> Because these facilities are not municipally owned, the Town will conduct outreach to Cornell and the City of Ithaca to investigate any retrofitting options to improve flood mitigation. If measures are recommended apply for FEMA funding to advance improvements.</p>	Yes	Yes	5 Years	Town of Ithaca	Unknown	Unknown	BRIC, Local Funds	Med	SIP	SP

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  
 EHP Environmental Planning and Historic Preservation  
 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  
 Pre-Disaster Mitigation Grant Program  
 BRIC Building Resilient Infrastructure and Communities 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.

Critical Facility:

Yes  Critical Facility located in 1% floodplain

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



**Table 9.1-20. 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
2021 T. Ithaca - 001	NYS RT 13A/Glenside Road Drainage Modifications	0	1	1	1	0	1	1	1	-1	1	0	1	0	0	6	Medium
2021 T. Ithaca - 002	Code Enforcement Cloud Permit Program	1	1	1	1	1	1	1	1	0	0	1	1	1	1	12	High
2021 T. Ithaca - 003	Water Supply Redundancy	1	1	1	1	1	1	0	0	0	0	1	1	1	0	9	High
2021 T. Ithaca - 004	HABs Response Planning	1	1	0	1	0	0	0	1	0	1	0	0	1	0	6	Med
2021 T. Ithaca - 005	Disease Management	1	0	1	1	0	0	0	1	1	0	0	1	1	1	8	Med
2021 T. Ithaca - 006	Tree Management Program	0	1	1	0	1	0	0	1	0	0	0	1	0	0	5	Med
2021 T. Ithaca - 007	Flash Flood Study	1	1	0	0	1	0	0	1	1	0	0	0	0	0	5	Med
2021 T. Ithaca - 008	Fish Hatchery Analysis	0	1	1	1	0	0	0	1	0	0	0	1	0	0	5	Med
2021 T. Ithaca - 009	AquaCulture Analysis	0	1	1	1	0	0	0	1	0	0	0	1	0	0	5	Med



**Table 9.1-20. 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
2021 T. Ithaca - 010	Resource Ecology Lab Analysis	0	1	1	1	0	0	0	1	0	0	0	1	0	0	5	Med
2021 T. Ithaca - 011	Ithaca Police Range Analysis	0	1	1	1	0	0	0	1	0	0	0	1	0	0	5	Med
2021 T. Ithaca - 012	Tributary Analysis	0	1	1	1	0	0	0	1	0	0	0	1	0	0	5	Med
2021 T. Ithaca - 013	Sandbank Road Retrofit	0	1	0	0	1	0	0	1	0	1	1	0	0	0	6	Med
2021 T. Ithaca - 014	Drainage Swales Retrofit	1	1	0	0	1	0	0	1	0	1	1	0	0	0	6	Med
2021 T. Ithaca - 015	East Shore Drive Analysis	1	1	0	0	1	0	0	1	0	1	1	0	0	0	6	Med
2021 T. Ithaca - 016	13A Roadside Ditch Analysis	1	1	0	0	1	0	0	1	0	1	1	0	0	0	6	Med
2021 T. Ithaca - 017	Repetitive Loss Property Outreach	1	1	1	0	0	0	0	0	1	0	0	0	0	1	5	Med
2021 T. Ithaca - 018	Critical Facility Resiliency Assessment	0	1	1	1	0	0	0	1	0	0	0	1	0	0	5	Med

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





## 9.1.8 Proposed Mitigation Action Types

The table below indicates the range of proposed mitigation action categories.

*Table 9.1-21. Analysis of Mitigation Actions by Hazard and Category*

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Invasive Species		002			002					
Flood		002			002					
Flood		001, 002, 007, 008, 009, 010, 011, 013, 014, 015, 016, 018	012	017	002	007, 008, 009, 010, 011, 012, 013, 014, 015, 016, 017	017	012,	001, 002, 012, 018	
Severe Storm		002, 018	006		002	006		006	018	
Severe Winter Storm		002	006		002	006		006		
HABs		002	004		002					
Drought		002, 003			002, 003, 004					
Disease		002	005		002, 005					

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

## 9.1.9 Staff and Local Stakeholder Involvement in Annex Development

The Town of Ithaca 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: Code Enforcement, Public Works and Planning. Dan Thaete, Marty Moseley, and Sue Ritter represented the community on the Town of Ithaca 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 Town of Ithaca's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meetings).

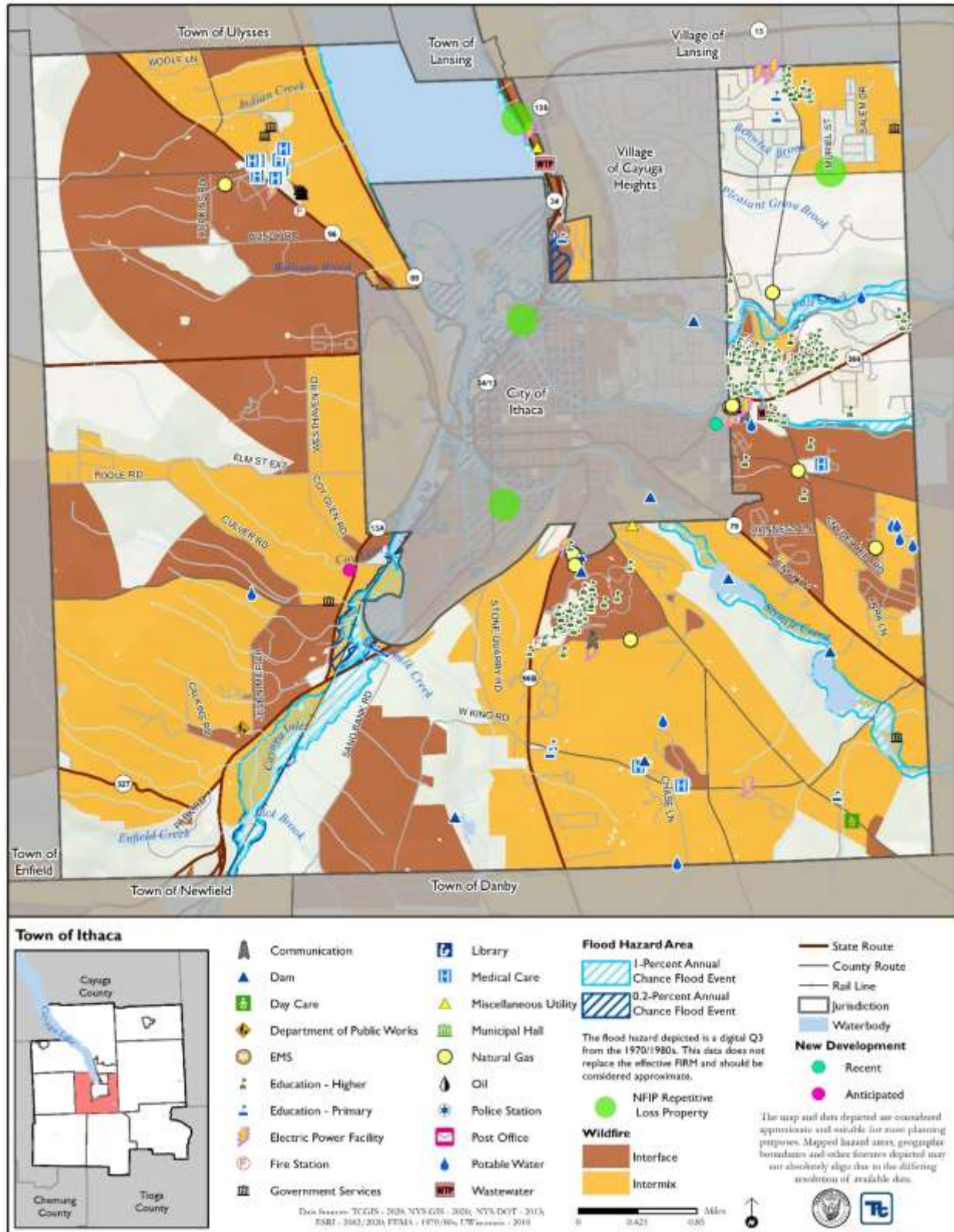
## 9.1.10 Hazard Area Extent and Location

---

A hazard area extent and location map has been generated for the Town of Ithaca that illustrates the probable areas impacted within the Town of Ithaca. This map is based on the best available data at the time of the preparation of this plan and is considered to be adequate for planning purposes. The map has only been generated for those hazards that can be clearly identified using mapping techniques and technologies, and for which the Town of Ithaca has significant exposure. The map is provided on the next page.



Figure 9.1-1. Town of Ithaca Hazard Area Extent and Location Map



Action Worksheet			
<b>Project Name:</b>	NYS RT 13A/Glenside Road Drainage Modifications		
<b>Project Number:</b>	2021 T. Ithaca - 001		
Risk / Vulnerability			
<b>Hazard(s) of Concern:</b>	Flood		
<b>Description of the Problem:</b>	NYS RT 13A (Five Mile Dr.) at Glenside Rd. intersection. During large rainstorm events roadside swales and backlot drainage swale overtop and flood roadway and adjacent properties.		
Action or Project Intended for Implementation			
<b>Description of the Solution:</b>	Install regional stormwater management device upstream to mitigate runoff. Review drainage along roadway for possible upgrades.		
<b>Is this project related to a Critical Facility?</b>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<b>Is the critical facility located in the 1% annual chance flood area?</b>		Yes <input type="checkbox"/>	No <input 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)			
<b>Level of Protection:</b>	2-100-year storm events	<b>Estimated Benefits (losses avoided):</b>	Road damage, accessibility, private property damage
<b>Useful Life:</b>	30 yrs.	<b>Goals Met:</b>	1,3,4
<b>Estimated Cost:</b>	\$500,000	<b>Mitigation Action Type:</b>	SIP, NSP
Plan for Implementation			
<b>Prioritization:</b>	Low	<b>Desired Timeframe for Implementation:</b>	3-5 years
<b>Estimated Time Required for Project Implementation:</b>	1 year	<b>Potential Funding Sources:</b>	local
<b>Responsible Organization:</b>	Town of Ithaca, NYSDOT	<b>Local Planning Mechanisms to be Used in Implementation if any:</b>	N/A
Three Alternatives Considered (including No Action)			
<b>Alternatives:</b>	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
Progress Report (for plan maintenance)			
<b>Date of Status Report:</b>			
<b>Report of Progress:</b>			
<b>Update Evaluation of the Problem and/or Solution:</b>			



<b>Action Worksheet</b>		
<b>Project Name:</b>	NYS RT 13A/Glenside Road Drainage Modifications	
<b>Project Number:</b>	2021 T. Ithaca - 001	
<b>Criteria</b>	<b>Numeric Rank (-1, 0, 1)</b>	<b>Provide brief rationale for numeric rank when appropriate</b>
<b>Life Safety</b>	0	The projects has limited protection for life safety
<b>Property Protection</b>	1	The project prevents flooding
<b>Cost-Effectiveness</b>	1	The project is cost effective
<b>Technical</b>	1	The project has adequate technical backup
<b>Political</b>	0	The project has adequate political support
<b>Legal</b>	1	The project has adequate legal support
<b>Fiscal</b>	1	The project has adequate funding
<b>Environmental</b>	1	There are no environmental issues with the project
<b>Social</b>	-1	There can be social implications for this project
<b>Administrative</b>	1	There are no administrative issues
<b>Multi-Hazard</b>	0	This project only prevents flooding
<b>Timeline</b>	1	The timeline is adequate
<b>Agency Champion</b>	0	Agency championship has not been identified
<b>Other Community Objectives</b>	0	Not identified at this point
<b>Total</b>	6	
<b>Priority (High/Med/Low)</b>	Low	



Action Worksheet			
<b>Project Name:</b>	Code Enforcement Cloud Permit Program		
<b>Project Number:</b>	2021 T. Ithaca - 002		
Risk / Vulnerability			
<b>Hazard(s) of Concern:</b>	Severe Storm, Severe Winter Storm, Extreme Temperature		
<b>Description of the Problem:</b>	The Code Enforcement Department does not have access to documents or plans outside of Town Hall due to limitations of current practices. This is problematic when assessing damaged buildings, and when attempting to see what impacts the damaged building may have on the public safety or health impact. This delays the response of an assessment program		
Action or Project Intended for Implementation			
<b>Description of the Solution:</b>	Purchase a cloud-based software to enhance electronic permitting, code enforcement activities, record retention system, plan review, and provide for online access to model code to the Public. The cloud-based software system will allow for a faster response time and allow for all files to be accessed during an emergency event		
<b>Is this project related to a Critical Facility?</b>		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<b>Is the critical facility located in the 1% annual chance flood area?</b>		Yes <input type="checkbox"/>	No <input 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)			
<b>Level of Protection:</b>	100-year (1%) flood	<b>Estimated Benefits (losses avoided):</b>	Require elevation of structures in identified flood areas, when required, avoid loss of life when rapid assessment is required for structurally damaged buildings during natural and man-made events. Allow for increased communication between departments.
<b>Useful Life:</b>	10 yrs.	<b>Goals Met:</b>	1, 2, 3, 4, 5,
<b>Estimated Cost:</b>	\$610,000	<b>Mitigation Action Type:</b>	SIP
Plan for Implementation			
<b>Prioritization:</b>	Medium	<b>Desired Timeframe for Implementation:</b>	1-2 years
<b>Estimated Time Required for Project Implementation:</b>	1 year	<b>Potential Funding Sources:</b>	Local, State, Federal
<b>Responsible Organization:</b>	Town of Ithaca	<b>Local Planning Mechanisms to be Used in Implementation if any:</b>	N/A
Three Alternatives Considered (including No Action)			
<b>Alternatives:</b>	<b>Action</b>	<b>Estimated Cost</b>	<b>Evaluation</b>
	No Action	\$0	Potential loss or records due to outdated system, potential loss of life in extreme circumstances dealing with assessment of damaged buildings, lack of communication to other departments



			which could lead to staff wasting time conducting multiple inspections on the same building from separate departments.
<b>Progress Report (for plan maintenance)</b>			
<b>Date of Status Report:</b>			
<b>Report of Progress:</b>			
<b>Update Evaluation of the Problem and/or Solution:</b>			



Action Worksheet		
<b>Project Name:</b>	Code Enforcement Cloud Permit Program	
<b>Project Number:</b>	2021 T. Ithaca - 002	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
<b>Life Safety</b>	1	Program will identify when others have inspected damaged property and would limit the number of inspections being conducted on one structure, so several inspectors are not inspecting the same building at different times.
<b>Property Protection</b>	1	Program would allow for staff to determine if a property is located in a flood area, which may require certain construction codes to be updated at the time of a building permit being issued.
<b>Cost-Effectiveness</b>	1	Cost to implement are inevitable due to required technology being utilized to create a more effective use of time and improve communication across multiple departments.
<b>Technical</b>	1	Program purchase is technically feasible
<b>Political</b>	1	There is support by the Town Board Members to purchase a new program to improve communication between departments and with the public. Program may allow for public to gain information easier on a property.
<b>Legal</b>	1	Yes, the Town can legally authorize the use of a software program to benefit the departments and the public.
<b>Fiscal</b>	1	The Town has budgeted some monies for this project, but it is undetermined if we will be able to achieve other funding sources to purchase a cloud-based program.
<b>Environmental</b>	1	Environmental permits could be issued by the Town Engineering Department (SWPPP) and therefore would have an overall positive impact so one can track when environmental permits have not been issued for work being conducted.
<b>Social</b>	0	
<b>Administrative</b>	0	Yes, we have staff that will need to take on additional responsibilities to implement this software system, but the benefits outweigh the negative impact that this would have on the community.
<b>Multi-Hazard</b>	1	Software program can be used across all departments, so Engineering can issue stormwater permits and Code Enforcement can issue building permits. All staff can monitor each property and verify that the improvements are not having a negative impact on their specific areas of expertise, like environmental or building codes. This would allow us to verify that structures
<b>Timeline</b>	1	Timeline would be expected to be completed in 1-2 years, which would possibly allow the use of the system withing 18 months.
<b>Agency Champion</b>	1	Yes, Marty Moseley
<b>Other Community Objectives</b>	1	This software program would further our endeavors to be a green community thus reducing the amount of paper that we receive for permit applications.
<b>Total</b>	12	

