



9.17 Town of North Norwich

This section presents the jurisdictional annex for the Town of North Norwich. 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 North Norwich’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.

9.17.1 Hazard Mitigation Planning Team

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

Table 9.17-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Joseph Eldred, Highway Superintendent 6521 Co. Road 32, Norwich NY 13815 607-334-9224 x.2 / cell: 607-316-6787 nonhwy@gmail.com	Robert Wansor, Supervisor 6578 State Hwy 12, Norwich, NY 607-334-4703 drbob.wansor@gmail.com
NFIP Floodplain Administrator	
Steve Fox, Chenango County Code Enforcement 5 Court Street Norwich, NY 13815 607-337-1975 StevenF@co.chenango.ny.us	

9.17.2 Municipal Profile

According to the U.S. Census, the 2010 population for the Town was 1,783.

The Town of North Norwich is located directly north of the City of Norwich and is in the eastern half of Chenango County. The Chenango River flows southward through the town.

The first settlers came to North Norwich in 1794. The Town of North Norwich was established in 1849 from the northern part of the Town of Norwich. The former Chenango Canal passed through the town.

The Town of North Norwich is governed by an elected five member Town Board composed of a Town Supervisor, who also represents the town at the County Board of Supervisors, and four (4) Council members. This governing body will assume responsibility for adoption and implementation of this plan. The Town has an elected: Town Highway Superintendent; two (2) Town Justices and a Town Clerk.

9.17.3 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 9.17-2 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development. Figure 9.17-1 at the end of this annex illustrates the geographically-delineated hazard areas and the location of potential new development, where available.



Table 9.17-2. Recent and Expected Future Development

Type of Development	2016		2017		2018		2019		2020	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)										
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	0	-	0	-	0	-	0	-	0	-
Multi-Family	0	-	0	-	0	-	0	-	0	-
Other (commercial, mixed-use, etc.)	0	-	0	-	0	-	0	-	0	-
Total	0	0	0	0	0	0	0	0	0	0
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		
Recent Major Development and Infrastructure from 2015 to Present										
Earl B. Clark Industrial Park	Commercial IDA Project	Unknown		97.-1-36.3		AE flood zone on boundary-not development area		Vacant land at this time- some infrastructure		
Hamlet of North Norwich – Extension of NYSE & G Natural Gas Service	Commercial and Residential	Unknown		NYS Rte. 12 & Co. Roads 20 and 23		Flood Zone AE and a near river parcels and railroad		Primarily residential		
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years										
None identified at this time										

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.17.4 Capability Assessment

The Town of North Norwich 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 9.17.4). The Town of North Norwich identified specific integration activities that will be incorporated into municipal procedures are included in the updated mitigation strategy.



Planning, Legal, and Regulatory Capability

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

Table 9.17-3. 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	Has this been integrated? Describe how in comments	Provide Mitigation Action # if applicable
Codes, Ordinances, & Requirements							
Building Code	Yes	The Uniform Code (19 NYCRR Parts 1219 to 1229)	Local and State	Handled by County	Yes	N/A	N/A
<p>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.</p>							
Zoning Code	No	-	Local	-	No	-	-
<p>Comment: 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>							
Subdivision Regulations	Yes	Adopted 1996	Local	Local Planning Board	No	No	-
<p>Comment: 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 in 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 & 33, Town Law s. 276 & 277, Village Law s. 7-728 & 7-730).</p>							
Stormwater Management Regulations	Yes	Subdivision Regulations	Local, State	NYSDEC permits required for any major construction projects	Yes	-	-
<p>Comment: 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	-	-	-	No	-	2021-Chenango County-001
Comment:							
Real Estate Disclosure	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent	Yes	N/A	N/A
<p>Comment: 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>							



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Growth Management Regulation	Yes	Site Plan Review and Subdivision Regulations	Local	Local Planning Board	No	No	-
<p>Comment: 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	General City Law s. 27-a, Town Law s. 247a, Village Law s. 7-725a	Local	Local Planning Board	No	No	-
<p>Comment: 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.</p>							
Environmental Protection	Yes	Title 6 NYCRR Part 617	State	?	Yes	N/A	N/A
<p>Comment: 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	Adopted 4/1987, Amended 10/18/2010 – Local Law No.1, Flood Damage Prevention	Local, State, Federal	Administered by County Code Official under an MOU with Town	Yes - BFE+2 feet for all construction in the SFHA (residential and non-residential)	Yes	N/A
<p>Comment: A community must adopt a Flood Damage Prevention Ordinance to participate in the National Flood Insurance Program.</p> <ul style="list-style-type: none"> Local Law No. 1 of the year 2010, A local law entitled "FLOOD DAMAGE PREVENTION" enacted by the Town Board of the Village of North Norwich. The Town Board of the Town of North Norwich finds that the potential and/or actual damages from flooding and erosion may be a problem to the residents of the Town of North Norwich and that such damages may Include: destruction or loss of private and public housing, damage to public facilities, both publicly and privately owned, and injury to and loss of human life. It is the purpose of this local law to: <ul style="list-style-type: none"> (1) 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; (2) require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; (3) control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters; (4) control filling, grading, dredging and other development which may increase erosion or flood damages; (5) regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands, and; (6) qualify and maintain for participation in the National Flood Insurance Program This local law shall apply to all areas of special flood hazard within the jurisdiction of the Town of North Norwich, Chenango County, New York. The areas of special flood hazard for the Town of North Norwich, Community Number 361089, are identified and defined on the documents prepared by the Federal Emergency Management Agency as various Flood Insurance Rate Map Panels, whose effective date is November 26, 2010. The Chenango County Health Department Division of Code Enforcement is hereby appointed Local Administrator to administer and implement this local law by granting or denying floodplain development permits in accordance with its provisions. A floodplain development permit is hereby established for all construction and other development to be undertaken in areas of special flood hazard in this community for the purpose of protecting its citizens from increased flood hazards and insuring that new development is constructed in a manner that minimizes its exposure to flooding. It shall be unlawful to undertake any development in an area of special flood hazard, as shown on the Flood Insurance Rate Map enumerated in Section 3.2, without a valid floodplain development permit. The following standards apply to all new subdivision proposals and other proposed development in areas of special flood hazard; (1) Proposals shall be consistent with the need to minimize flood damage; (2) Public utilities and facilities such as sewer, gas, electrical and water systems shall be located and constructed so as to minimize flood damage; and, (3) Adequate drainage shall be provided to reduce exposure to flood damage. No new construction, substantial improvements or other development in the floodway (including fill) shall be permitted unless a technical evaluation determines no increase in flood levels. 							





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<p>New and substantially improved residential and non-residential structures located in areas of special flood hazard, shall have the lowest floor (including basement) elevated to or above two feet above the base flood elevation.</p> <ul style="list-style-type: none"> In order to prevent potential flood damage to certain facilities that would result in serious danger to life and health, or widespread social or economic dislocation, no new critical facility shall be located within any Area of Special Flood Hazard, or within any 500-year flood zone shown as a B zone or a Shaded X zone on the Community's Flood Insurance Rate Maps 							
Municipal Separate Storm Sewer System (MS4) Regulation	No	EPA Phase II Stormwater Rule	Federal	-	Yes	-	-
<p>Comment: 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	N/A	NA/
<p>Comment: 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>Comment: 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	-	-	-	No	-	2021-Chenango County-001
<p>Comment:</p>							
Disaster Reconstruction Ordinance	No	-	-	-	No	-	2021-Chenango County-001
<p>Comment:</p>							
Other Applicable Codes, Ordinances, & Requirements	Yes	-	-	-	-	-	-
<p>Comment: Sanitary Code. Adopted 1975 Refuse Disposal. Adopted 1962 Telecommunication Towers. Adopted 2001 Hazardous Waste. Adopted 1989 Junk Storage. Adopted 1999 Junk Cars. Adopted 1994 Mobile Home. Adopted 1996</p>							
<p>Planning Documents</p>							
Comprehensive Plan	No	-	Local	-	No	-	-
<p>Comment: 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>							
Capital Improvement Plan	No	-	Local	-	No	-	-
<p>Comment: A local government can decide to adopt its capital plan pursuant to General Municipal Law Section 99-g.</p>							





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Disaster Debris Management Plan	No	-	Local	-	No	-	-
<p>Comment: 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>							
Floodplain or Watershed Plan	Yes	-	State	NYSCED permit and Federal Agencies	No	No	-
<p>Comment: The State Pollutant Discharge Elimination System (SPDES) permit program is a primary way the DOW implements its watershed protection and restoration activities.</p>							
Stormwater Plan	Yes	Subdivision Regulations	Local, State	?	No	No	-
<p>Comment: 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.</p>							
Open Space Plan	No	-	Local	-	Yes	-	-
<p>Comment: 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.</p>							
Urban Water Management Plan	No	-	Local	-	No	-	-
<p>Comment:</p>							
Habitat Conservation Plan	No	-	Local	-	No	-	-
<p>Comment: Laws related to habit 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.</p>							
Economic Development Plan	No	-	Local	-	No	-	-
<p>Comment: 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.</p>							
Shoreline Management Plan	N/A	-	Local	-	Yes	N/A	N/A
<p>Comment: Article 34, Environmental Conservation Law, Coastal Erosion Hazard Areas 6 NYCRR Part 505, Coastal Erosion Management Regulations</p>							
Community Wildfire Protection Plan	No	-	Local	-	No	-	-
<p>Comment: 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.</p>							
Forest Management Plan	No	-	Local	-	No	-	-
<p>Comment:</p>							
Transportation Plan	No	-	Local	-	No	-	-
<p>Comment:</p>							
Agriculture Plan	Yes	Right to Farm Law	Local	Town Board	Yes	No	-
<p>Comment: Municipalities may develop agricultural and farmland protection plans, in cooperation with cooperative extension and other organizations, including local farmers.</p>							





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Other (tourism, business dev, etc.)	No	-	-	-	-	-	-
Comment:							
Response/Recovery Planning							
Comprehensive Emergency Management Plan	No	-	Local	-	Yes	-	-
Comment: 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).							
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	Local	-	Yes	-	-
Comment: 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.							
Post-Disaster Recovery Plan	No	-	-	-	No	-	2021-Chenango County-001
Comment:							
Continuity of Operations Plan	No	-	Local	-	No	-	-
Comment: 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.							
Public Health Plan	Yes	2019-2021 Community Health Needs Assessment and Community Health Improvement Plan	County	Chenango County Health Department	Yes	Yes	N/A
Comment: Addresses need for heating/cooling centers, lack of homeless shelters and homeless services, vulnerable populations and need for access to community lifelines such as medical services and hospitals, emergency shelters, grocery/food stores. References to communicable diseases as a concern within the County, with objectives to coordinate vaccinations, testing, and healthy behaviors.							
Other: Emergency Response Plan	No	-	Local	-	No	No	-
Comment: 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.							
Other: Special Purpose Ordinances (such as critical or sensitive areas)							
Comment: Emergency Response Plan. State Mandated. Fire District/Chenango County EMS							



Table 9.17-4. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Response Yes/No; Provide further detail
Development Permits. If yes, what department?	Yes; Town Clerk and Chenango County Code Enforcement
Permits are tracked by hazard area. For example, floodplain development permits.	Yes; Town Clerk and Chenango County Code Enforcement
Buildable land inventory If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No; still mostly rural/agricultural

Administrative and Technical Capability

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

Table 9.17-5. Administrative and Technical Capabilities

Resources	Available? (Yes or No)	Department/ Agency/Position
Administrative Capability		
Planning Board	Yes	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Warning Systems / Services	Yes	Hyper-Reach/Notify Chenango
Maintenance programs to reduce risk	Yes	Highway Department
Mutual aid agreements	Yes	Fire Response/EMS
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	County Planning & Development
Engineers or professionals trained in building or infrastructure construction practices	Yes	County Highway Engineer for highway, drainage support
Planners or engineers with an understanding of natural hazards	Yes	County Planning & Development
Staff with expertise or training in benefit/cost analysis	Yes	Contract if necessary
Professionals trained in conducting damage assessments	Yes	Chenango County Code Enforcement
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	County Planning & Development
Scientist familiar with natural hazards	Yes	Chenango County Soil and Water Department
NFIP Floodplain Administrator (FPA)	Yes	Chenango Co. Health Dept., Div. of Code Enforcement-NFIP Admin.
Surveyor(s)	Yes	County Highway Department
Emergency Manager	Yes	Chenango County Emergency Management Office in conjunction with North Norwich Fire Department
Grant writer(s)	Yes	County Planning & Development; Cornell Co-Operative Extension
Resilience Officer	No	-
Other	-	-

Fiscal Capability

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



Table 9.17-6. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes available to residents in past
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	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	Yes
Open Space Acquisition funding programs	No
Other	-

Education and Outreach Capability

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

Table 9.17-7. Education and Outreach Capabilities

Indicate if your jurisdiction has the following resources	Yes/No; Please describe
Public information officer or communications office?	No
Personnel skilled or trained in website development?	Yes – The Town maintains a website
Hazard mitigation information available on your website; if yes, describe	No
Social media for hazard mitigation education and outreach; if yes, briefly describe.	No
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.	Yes – Hyper-Reach and Notify Chenango
Natural disaster/safety programs in place for schools; if yes, briefly describe.	No
Other	-

Community Classifications

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

Table 9.17-8. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	NP	N/A
Building Code Effectiveness Grading Schedule (BCEGS)	No	NP	N/A



Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	North Norwich 9/10 Norwich Fire 3/10	N/A
NYSDEC Climate Smart Community	No	NP	N/A
Storm Ready Certification	No	NP	N/A
Firewise Communities classification	No	NP	N/A
Other	-	-	-

Note:

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

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 2016). 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 table below summarizes the adaptive capacity for each hazard and the jurisdiction’s rating.

Table 9.17-9. 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
Natural Gas	Medium
Severe Storm	High
Severe Winter Storm	High
Wildfire	Medium

- *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

National Flood Insurance Program

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

NFIP Floodplain Administrator (FPA)

Steve Fox, Chenango County Code Enforcement

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of North Norwich.



Table 9.17-10. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# SRL Properties	# Policies in the 1% Flood Boundary
Town of North Norwich	7	3	\$40,347	0	-	2

Source: FEMA 2019

Notes: Policies, claims, repetitive loss, and severe repetitive loss statistics provided by FEMA Region 2, and current as of July 31, 2019. 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

Resources

The County Building Code Enforcement Officer, Steve Fox, serves as the NFIP Floodplain Administrator and Building Inspector for the majority of municipalities within Chenango County.

Duties and responsibilities of the Code Enforcement Officer/NFIP FPA are permit review, and inspections for new construction and compliance with New York State and FEMA requirements. Records of losses and inspections, and development permits are kept in paper copies in the Code Enforcement office. The NYS DEC keeps records of repetitive loss properties within the County. The Town of North Norwich has its own Planning Board that approves Land Subdivisions.

The County Planning Board preforms NYS 239 Reviews for required building permits.

Steve Fox has undergone the Certified Floodplain Manager (CFM) courses but did not take the exam and is not certified.

Compliance History

The community is currently in good standing in the NFIP and has no outstanding compliance issues. The Town of North Norwich has not completed any Community Assistance Visits (CAV).

Regulatory

The Town of North Norwich Flood Damage Prevention Ordinance (FDPO) was last updated on October 18, 2010. The Town’s floodplain management program meets minimum requirements. Floodplain management is supported by the actions of Chenango County Code Enforcement.

Additional Areas of Existing Integration

It is the intention of this municipality to incorporate hazard mitigation planning and natural hazard risk reduction as an integral component of ongoing municipal operations. The following textual summary and table identify relevant planning mechanisms and programs that have been/will be incorporated into municipal procedures, which may include former mitigation initiatives that have become continuous/on-going programs and may be considered mitigation “capabilities”:

- **Infrastructure Protection/Floodplain Management:** Enhance stormwater management: Increase the size and capacity of existing culverts. Increase number of culverts where necessary.
- **Infrastructure Protection/Floodplain Management:** Control construction of Beaver Dams in wetlands and along the small streams by working with NYSDEC. The areas needing special attention: West Cayuga St, Sherburne-Four Corners-Brookins Rd, Cooley and Follett Hill Roads.





- **Infrastructure Protection/Floodplain Management:** Retrofit flood prone roadways by raising above flood elevation and oversize existing culverts especially in the Follett Hill and Ripple Rd. areas.

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

NY-12 is the most likely evacuation route for North Norwich Residents. However, road conditions change often, and residents should seek out accurate and up-to-date information from the Town or County Website.

Sheltering

DCMO BOCES Occupational Center has been identified as a sheltering location on the Red Cross National Shelter Survey (NSS).

Temporary Housing

The Town of North Norwich 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.

Permanent Housing

While the Town of North Norwich did not identify potential locations for permanent housing, as part of the planning process, a countywide buildable land analysis was conducted and presented in Section 4 (County Profile). The Town can utilize this analysis to identify potential locations.

9.17.5 Hazard Event History Specific to the Town of North Norwich

Chenango County 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 County and its municipalities. The Town of North Norwich’s history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Chenango County. Table 9.17-11 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 9.17-11. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
March 13-14, 2016	Snow	Yes	Heavy snow, vehicle damage	Dump Truck damages
October 2019	Flooding	Yes	Heavy rain and flooding washing out roads and damaging culverts	Damage to roads and culverts

Notes:

EM Emergency Declaration (FEMA)





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

9.17.6 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 North Norwich’s risk assessment results and data used to determine the hazard ranking.

A gradient of certainty was developed to summarize the confidence level regarding the input used to populate the hazard ranking. A certainty factor of high, medium or low was selected and assigned to each hazard to provide a level of transparency and create increased understanding of the data used to support the resulting ranking. The following scale was used to assign a certainty factor to each hazard:

- High—Defined scenario/event to evaluate; probability calculated; evidenced-based/quantitative assessment to estimate potential impacts through hazard modeling.
- Moderate—Defined scenario/event or only a hazard area to evaluate; estimated probability; combination of quantitative (exposure analysis, no hazard modeling) and qualitative data to estimate potential impacts.
- Low—Scenario or hazard area is undefined; there is a degree of uncertainty regarding event probability; majority of potential impacts are qualitative.

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 500-year flood even, 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 9.17-12. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
None Identified				

Source: HAZUS-MH 4.2

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 Chenango 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 North Norwich. The Town of North Norwich 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 of North Norwich indicated the following:

- Agreement with calculated rankings – no changes made.

Table 9.17-13. Hazard Ranking Input

Disease Outbreak	Drought	Extreme Temperature	Flood	Harmful Algal Bloom	Invasive Species	Natural Gas	Severe Storm	Severe Winter Storm	Wildfire
Medium	Medium	Medium	Medium	Low	Medium	Low	High	Medium	Medium

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

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

Identified Issues

The municipality has identified the following vulnerabilities within their community:

- Meads Pond Road adjacent to County property and Mobile Home Park ongoing problem with drainage issues.
- Tracy Road major drainage problems, upgraded culverts but may continue to be a problem area.
- Bridge on route 12
- Many culverts are undersized. See Mitigation Action # 2021-T. North Norwich-001 and 2021-T. North Norwich-002.

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

- Thompson Creek on State Hwy 320 blocked by downed trees diverting water during heavy/excessive rain to divert through yards. The water table rise causes water in our basement either through seepage or sump hole overflow.
- Cell phone connections are horrible here. I often can't get a message out or in for several days. If the power and land line is out, 911 emergency I can't reach with my cell.
- Flood-prone lots around the Chenango River on State Hwy 320 near Woods Corners. The creek behind our house is blocked upstream by downed trees and rocky sediment causing water to be diverted through backyards bordering the creek and ending up flowing through our property.

9.17.7 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 2015 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.

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Table 9.17-14. 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	-	
TNN-1 (Former TNN-1)	Enhance stormwater management	Flood, Severe Storm	Town of N. Norwich Highway Dept., Chenango Co. DPW Soil/Water; NYSDEC	Increase the size and capacity of existing culverts. Increase number of culverts where necessary.	Ongoing Capability	Cost	-	The Town continues to identify and replace undersized culverts. See Mitigation Action # 2021-T. North Norwich-001
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
TNN-2 (Former TNN-2)	Control construction of Beaver Dams	Flood, Severe Storm	Town of N. Norwich Highway Dept., Chenango Co. DPW Soil/Water; NYDEC	Control construction of Beaver Dams in wetlands and along the small streams by working with NYSDEC. The areas needing special attention: West Cayuga St, Sherburne-Four Corners-Brookins Rd, Cooley and Follett Hill Roads.	Ongoing Capability	Cost	-	The Town continues to work with Chenango County Soil and Water Conservation District and the NYSDEC to monitor beaver dams and follows their recommendations for beaver management.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
TNN-3 (Former TNN-3)	Retrofit flood-prone roadways	Flood, Severe Storm	Town of N. Norwich Highway Dept., Chenango Co. DPW	Retrofit flood prone roadways by raising above flood elevation and oversize existing culverts especially in the Follett Hill and Ripple Rd. areas.	Ongoing	Cost	-	The Town continues to retrofit roadways and replace undersized culverts. See Mitigation Action # 2021-T. North Norwich-002
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
TNN-4 (Former TNN-4, -5)	Support and participate in Federal, State and County-led programs and initiatives intended to build local and regional mitigation and risk-reduction capabilities (see Section 9.1), specifically: <ul style="list-style-type: none"> Attend regional workshops, trainings and continuing education as made available by the County with FEMA, ISO and NYS DHSES support, and as appropriate for the community, anticipated to included: NFIP for Insurance Agents, Lending Institutions and Realtors; Floodplain Management and the Certified Floodplain Managers (CFM) certification. Public education and awareness program for floodplain residents. Updates to NFIP floodplain mapping. Promotion of “Firewise” programs in the County. Establishment of an interagency program involving Public Health/DSS/Area Agency on Aging to identify vulnerable populations (elderly, homebound, homeless), and the development/enhancement of plans, programs and facilities to meet the specific needs of these populations.							



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		
	See above	All Hazards	Chenango County, as supported by relevant local department leads	See above	Ongoing Capability		-	The Town continually supports mitigation awareness and actions as developed by County, State, and Federal partners.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	

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Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of North Norwich has not identified any mitigation projects or initiatives apart from those included in the in the 2015 HMP.

Proposed Hazard Mitigation Initiatives for the Plan Update

The Town of North Norwich worked with the consultant and the Chenango County Department of Planning & Development after the mitigation action workshop held on January 13, 2021. They were provided access to FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards including FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013); Types of Mitigation Actions; and a link to the FEMA Individual and Community Preparedness Division (ICPD) Protective Actions Research website (<https://community.fema.gov/ProtectiveActions/s/>).

Table 9.17-15 summarizes the comprehensive-range of specific mitigation initiatives the Town of North Norwich 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 9.17-16 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan update.



Table 9.17-15. 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. North Norwich-001	Bryant Road Culvert	1, 2, 3, 4	Flood, Severe Storm, Severe Winter Storm	Problem: The culverts on Bryant Road are worn out and experiencing erosion between them, cavitating the roadway underneath.	No	No	Short, within next 5 years	Town of North Norwich Highway Department	\$80,000	Reduces roadway repairs after storms and flood events – estimated at \$150,000	General Fund/CHIPS	High	SIP, NSP	NR, SP
				Solution: The Town of North Norwich Highway Department will replace the culverts with a larger, single concrete box culvert that is appropriately sized to handle the water flow to reduce flooding and erosion of the roadway.										
2021-T. North Norwich-002	Posson Road Culvert	1, 2, 3, 4	Flood, Severe Storm, Erosion	Problem: There are two culverts on Posson Road that are undersized and worn out, causing damages to the roadway that needs frequent repairs to combat erosion and deterioration of the road.	No	No	Short, within next 5 years	Town of North Norwich Highway Department	\$80,000	Reduces roadway repairs after storms and flood events – estimated at \$150,000	General Fund/CHIPS	High	SIP, NSP	NR, SP
				Solution: The Town of North Norwich Highway Department will replace the two culverts with one larger culvert to eliminate erosion concerns.										
2021-T. North Norwich-003	Intermediate Hazard Dam Outreach	1, 2, 3, 4, 5, 7	Flood	Problem: The NYSDEC owned Howard Jeffrey Dam is classified as an "intermediate hazard" Class B Dam and is located within the Town of North Norwich.	Yes	No	Short, within next 5 years	Town of North Norwich	Low	High	Municipal Budget	High	EAP	PR
				Solution: The Town will coordinate with the NYSDEC about any changes to the status of the Dam and aid in the development of updated EAPs as necessary.										

Notes:

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

Acronyms and Abbreviations:

CAV Community Assistance Visit
 CRS Community Rating System

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program
 HMGP Hazard Mitigation Grant Program

Timeline:

The time required for completion of the project upon implementation





DPW	Department of Public Works	PDM	Pre-Disaster Mitigation Grant Program
EHP	Environmental Planning and Historic Preservation	BRIC	Building Resilient Infrastructure and Communities
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		

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:

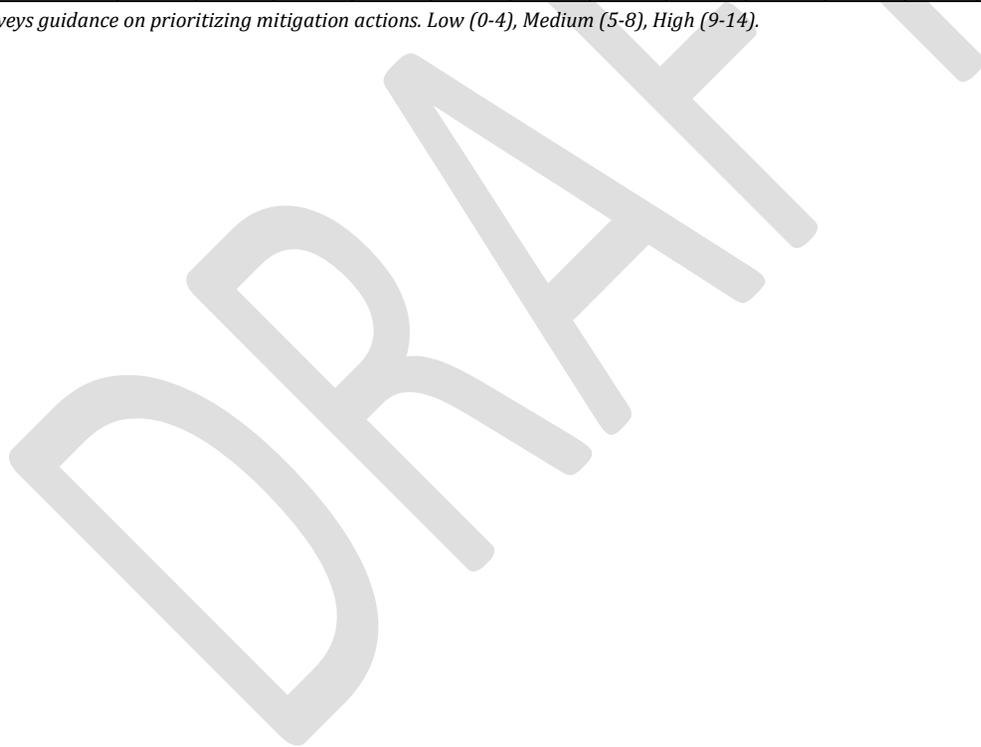
- Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management 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 9.17-16. 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. North Norwich-001	Bryant Road Culvert	1	1	1	1	1	1	0	1	0	0	1	1	0	0	9	High
2021-T. North Norwich-002	Posson Road Culvert	1	1	1	1	1	1	0	1	0	0	1	1	0	0	9	High
2021-T. North Norwich-003	Intermediate Hazard Dam Outreach	1	1	1	0	0	0	1	1	1	1	1	1	1	0	10	High

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





9.17.8 Proposed Mitigation Action Types

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

Table 9.17-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Disease Outbreak										
Drought										
Extreme Temperatures										
Flood		001, 002	001, 002	003	003			001, 002	001, 002	
Harmful Algal Bloom										
Invasive Species										
Natural Gas										
Severe Storm		001, 002	001, 002					001, 002	001, 002	
Severe Winter Storm		001	001					001	001	
Wildfire										

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

9.17.9 Staff and Local Stakeholder Involvement in Annex Development

The Town of North Norwich 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 Highway Department and the Supervisor’s Office. The Highway Superintendent represented the community on the Chenango 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.

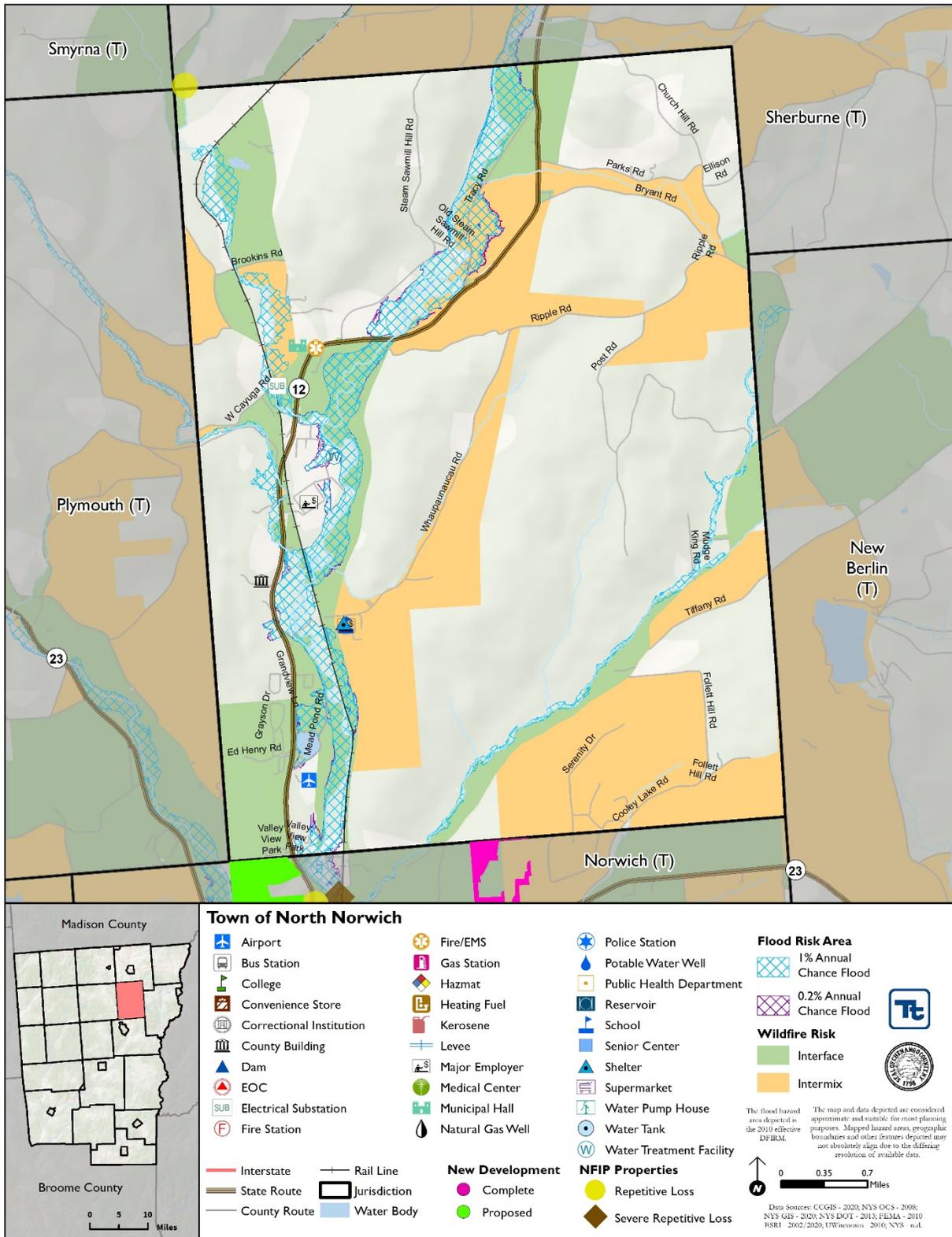
Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

9.17.10 Hazard Area Extent and Location

A hazard area extent and location map has been generated for the Town of North Norwich that illustrates the probable areas impacted within the municipality. 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 North Norwich has significant exposure. The map is illustrated below.



Figure 9.17-1. Town of North Norwich Hazard Area Extent and Location Map





Action Worksheet			
Project Name:	Bryant Road Culvert		
Project Number:	2021-T. North Norwich-001		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Severe Winter Storm		
Description of the Problem:	The culverts on Bryant Road are worn out and experiencing erosion between them, cavitating the roadway underneath.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town of North Norwich Highway Department will replace the culverts with a larger, single concrete box culvert that is appropriately sized to handle the water flow to reduce flooding and erosion of the roadway.		
Is this project related to a Critical Facility?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Is the critical facility located in the 1% annual chance flood area?		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:	100-year flood	Estimated Benefits (losses avoided):	Reduces roadway repairs after storms and flood events – estimated at \$150,000
Useful Life:	50 years	Goals Met:	1, 2, 3, 4
Estimated Cost:	\$80,000	Mitigation Action Type:	SIP, NSR
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within next 5 years
Estimated Time Required for Project Implementation:	90 days	Potential Funding Sources:	General Fund/CHIPS
Responsible Organization:	Town of North Norwich Highway Department	Local Planning Mechanisms to be Used in Implementation if any:	DEC
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Replace with two new culverts	\$60,000	Does not eliminate erosion/road deterioration concerns
	Elevate entire roadway	N/A	Unfeasible, does not address erosion events
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Bryant Road Culvert	
Project Number:	2021-T. North Norwich-001	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Stop road from erosion
Property Protection	1	Eliminate the potential of road closure
Cost-Effectiveness	1	Closing and repairing the roadway would be costly
Technical	1	Will last a lifetime
Political	1	Residents and Town Officials agree
Legal	1	Within ROW
Fiscal	0	Funds are not in place for this project
Environmental	1	Permits would need to be granted
Social	0	Alt. routes would be used
Administrative	1	Resources would be used
Multi-Hazard	1	Reduce the chance of roadway closure and flooding
Timeline	1	Permits and Supplies would be available
Agency Champion	0	
Other Community Objectives	0	
Total	9	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Posson Road Culvert		
Project Number:	2021-T. North Norwich-002		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm, Erosion		
Description of the Problem:	There are two culverts on Posson Road that are undersized and worn out, causing damages to the roadway that needs frequent repairs to combat erosion and deterioration of the road.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town of North Norwich Highway Department will replace the two culverts with one larger culvert to eliminate erosion concerns.		
Is this project related to a Critical Facility?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Is the critical facility located in the 1% annual chance flood area?		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:	100-year flood	Estimated Benefits (losses avoided):	Reduces roadway repairs after storms and flood events – estimated at \$150,000
Useful Life:	50 years	Goals Met:	1, 2, 3, 4
Estimated Cost:	\$80,000	Mitigation Action Type:	SIP, NSR
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within next 5 years
Estimated Time Required for Project Implementation:	90 days	Potential Funding Sources:	General Fund/CHIPS
Responsible Organization:	Town of North Norwich Highway Department	Local Planning Mechanisms to be Used in Implementation if any:	DEC
Three Alternatives Considered (including No Action)			
Alternatives:	Alternatives:	Action	Estimated Cost
	No Action	No Action	\$0
	Replace with two new culverts	\$60,000	Does not eliminate erosion/road deterioration concerns
	Elevate entire roadway	N/A	Unfeasible, does not address erosion events
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Posson Road Culvert	
Project Number:	2021-T. North Norwich-002	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Stop road from erosion
Property Protection	1	Eliminate the potential of road closure
Cost-Effectiveness	1	Closing and repairing the roadway would be costly
Technical	1	Will last a lifetime
Political	1	Residents and Town Officials agree
Legal	1	With in ROW
Fiscal	0	Funds are not in place for this project
Environmental	1	Permits would need to be granted
Social	0	Alt. routes would be used
Administrative	0	Resources would be used
Multi-Hazard	1	Reduce the chance of roadway closure and flooding
Timeline	1	Permits and Supplies would be available
Agency Champion	0	
Other Community Objectives	0	
Total	9	
Priority (High/Med/Low)	High	