



## 9.1 Chenango County

This section presents the jurisdictional annex for the County. 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 County participated in the planning process; an assessment of the County’s risk and vulnerability; the different capabilities utilized in the County; 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 County’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
Shane H. Butler, Director of Planning 5 Court Street, Norwich, NY 13815 607-337-1640 <a href="mailto:shaneb@co.chenango.ny.us">shaneb@co.chenango.ny.us</a>	Colleen Bradley, Planner 5 Court Street, Norwich, NY 13815 607-337-1640 <a href="mailto:cbradley@co.chenango.ny.us">cbradley@co.chenango.ny.us</a>

### 9.1.2 Municipal Profile

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

### 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. The jurisdictional annexes for each municipality summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development. The Chenango County Department of Planning and Development and the Planning & Economic Development Committee plays a vital role in promoting economic vitality, environmental integrity and strong communities.

### 9.1.4 Capability Assessment

An inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies was developed for the County. 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.

Areas where mitigation is currently integrated are summarized in this Capability Assessment. Chenango County identified specific integration activities that will be incorporated into procedures are included in the updated mitigation strategy. Refer to Appendix G for the results of the planning/policy document review and the answers to integration survey questions.

### Planning, Legal, and Regulatory Capability

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

**Table 9.1-2. Planning, Legal, and Regulatory Capability**

	Do you have this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible	State Mandated	Has this been integrated? Describe how in comments	Provide Mitigation Action # if applicable
<b>Codes, Ordinances, &amp; Requirements</b>							
Building Code	Yes	Regulated at Local and State Levels	State, Local	Local Code Department	Yes	Yes	N/A
Comment: NYS Uniform and Energy Code 2020; Regulated at local and state levels.							
Zoning Code	Yes	Municipal Code	Local	Local Zoning Board of Adjustment	No	Yes	N/A
Comment: The Towns of Afton, German, Greene, Norwich, Oxford, Smithville and Smyrna, the City of Norwich, and the Villages of Afton, Bainbridge, Greene, New Berlin, Oxford, and Sherburne all have zoning codes.							
Subdivision Regulations	Yes	Municipal Code	Local	Local Board	No	Yes	N/A
Comment: Most municipalities in the County have subdivision regulations.							
Stormwater Management	Yes	Water Quality Protection and Restoration Program	Local	Performed at the local level	Yes	Yes	N/A
Comment: Stormwater Management Regulations are performed at the local level and varies by municipality.							
Post-Disaster Recovery	No	-	-	-	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	Yes	N/A
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.							
Growth Management	Yes	Regulated at local level	Local	Local Planning Board	No	Yes	N/A
Comment: Each jurisdiction manages their own growth and development, pursuant to their local codes.							
Site Plan Review	Yes	Regulated at local level	Local	Local Planning Board/ County	No	Yes	N/A



SECTION 9.1: Chenango County

	Do you have this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible	State Mandated	Has this been integrated? Describe how in comments	Provide Mitigation Action # if applicable
				Planning & Development			
Comment: Over half of the municipalities have Site Plan Review or Zoning administered at the local level. The County Planning & Development Department performs 239 Reviews for all municipalities.							
Environmental Protection	Yes	Title 6 NYCRR Part 617	State	NYSDEC	Yes	Yes	N/A
Comment: New State Environmental Quality Review Act (SEQR) Title 6 NYCRR Part 617 Regulations are in effect as of January 1st, 2019							
Flood Damage Prevention	No	Regulated at local level	Federal, State, Local	County Building Inspector supports municipalities	Yes - BFE+2 feet for all construction in the SFHA (residential and non-residential)	Yes	N/A
Comment: This is performed at the local level in Chenango County. While the County is not an NFIP community, under MOAs with various jurisdictions, the County building inspector serves as local NFIP Floodplain Administrator							
Municipal Separate Storm Sewer System (MS4)	No	-	Federal	-	Yes	No	-
Comment: There are no MS4 systems within Chenango County.							
Emergency Management	Yes	NYS Executive Law, Article 2B.	Local	Local OEM	Yes	Yes	N/A
Comment: The development of the New York State Comprehensive Emergency Management Plan (CEMP) is required under NYS Executive Law, Article 2B.							
Climate Adaptation	Yes	-	County Planning	-	No	Yes	-
<b>Comment:</b> Chenango County became a registered Climate Smart Community in March 2021.							
Disaster Recovery Ordinance	No	-	-	-	No	No	2021-Chenango County-001
Comment:							
Disaster Reconstruction Ordinance	No	-	-	-	No	No	2021-Chenango County-001
Comment:							
Other	No	-	-	-	-	-	-
Comment:							
<b>Planning Documents</b>							
Comprehensive Plan	Yes	Guiding Chenango, Adopted 2016	County	Planning, County Board of Supervisors	No	Yes	N/A
Comment: Goals of the 2016 Comprehensive Plan include expansion of residential water supplies, minimizing water contamination hazards, utilizing the mitigation measures identified in the Hazard Mitigation Plan, effective land use and growth management to prevent loss to natural resources, preserve wetlands for recreational and flood control purposes, discourage development within the 100-year floodplain, promoting the FEMA CRS system, implementing and utilizing the measures found within the Hazard Mitigation Plan, updating the HMP on a 5-year cycle, and encouraging renewable energy sources.							
Capital Improvement Plan	Yes	Multi-year budget, revised annually	County and Local	Various Departments, Board of Supervisors	No	Yes	N/A
Comment: The 2020 Chenango County Budget includes line items for bioterrorism preparedness including disaster preparation coordinator, conservation of public lands, road maintenance and construction, snow-removal, and extreme winter recovery services.							



	Do you have this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible	State Mandated	Has this been integrated? Describe how in comments	Provide Mitigation Action # if applicable
Disaster Debris Management Plan	No	-	-	-	No	No	2021-Chenango County-002
Comment:							
Floodplain or Watershed Plan	Yes	Upper Susquehanna River Watershed; local floodplain regulations	County, Local	Chenango County Soil and Water Conservation District	No	Yes	N/A
Comment: Approximately 98% of Chenango County is located within the Upper Susquehanna River watershed. The Chenango County SWCD implements projects to minimize nutrient and sediment pollution from agricultural and municipal pollution sources by implementing best practices through Comprehensive Nutrient Management Plans (CNMP) improvements, riparian buffers, and water management systems.							
Stormwater Plan	Yes	Water Quality Protection and Restoration Program	Federal, State, Local	Performed at the local level	Yes	Yes	N/A
Comment:							
Open Space Plan	No	-	-	-	Yes	No	-
Comment:							
Urban Water Management Plan	No	-	-	-	No	No	-
Comment:							
Habitat Conservation Plan	No	-	-	-	No	No	-
Comment:							
Economic Development Plan	Yes		Local	Local municipal function	No	No	-
Comment: Commerce Chenango is the Economic Development Agency for Chenango County.							
Shoreline Management Plan	N/A	-	-	-	Yes – if coastal	-	-
Comment:							
Community Wildfire Protection Plan	Yes	Not indicated	Regional, Local	Chenango County Fire and Emergency Services	No		
Comment: Not that encompasses the entire County.							
Forest Management Plan	No	-	-	-	No	No	-
Comment:							
Transportation Plan	Yes	Coordinated Transportation Plan, 2019	County	Planning	No	Yes	N/A
Comment: Goals of the 2019 Chenango County Coordinated Transportation Plan that incorporate hazard mitigation concepts include addressing the issue of first mile/last mile and other transportation gaps in the County, expanding public transportation services, and addressing issues for emergency transport.							
Agriculture Plan	Yes	Agriculture & Farmland Protection Plan, 2012	County	Planning	No	Yes	N/A



	Do you have this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible	State Mandated	Has this been integrated? Describe how in comments	Provide Mitigation Action # if applicable
<p>Comment: The 2012 Agriculture and Farmland Protection Plan address the role of agriculture in the county and the importance of protecting lands, water quality, and leveraging land use planning mechanisms to protect lands. Objectives of the plan include using agricultural lands to lessen the impacts of floodwaters as a natural flood control measure, and preventing undesirable impacts of natural gas incidents.</p>							
Other	No	-	-	-	-	-	-
<p>Comment:</p>							
<p><b>Response/Recovery Planning</b></p>							
Comprehensive Emergency Management Plan	Yes	Chenango County EMPs	State, County, Local	Chenango County Fire and Emergency Services	Yes	Yes	N/A
<p>Comment:</p>							
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-	Yes	-	-
<p>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.</p>							
Post-Disaster Recovery Plan	Yes	Defined in Continuity of Operations Plan (COOP)	Local, State	Various Department	No	No	2021-Chenango County-001
<p>Comment:</p>							
Continuity of Operations Plan	Yes	Not Indicated	Local, State	Various Department	No	-	-
<p>Comment:</p>							
Public Health Plan	Yes	2019-2021 Community Health Needs Assessment and Community Health Improvement Plan	County	Chenango County Health Department	Yes	Yes	N/A
<p>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.</p>							
Other	Yes	-	-	-	No	-	-
<p>Comment:</p> <ul style="list-style-type: none"> <li>• Hazardous Material (Haz-Mat) Response Plan. Adopted November 2004</li> <li>• Fire &amp; Mutual Aid Plan. Adopted 1961 – Latest Revision January 2020</li> <li>• Emergency Medical Services Plan. Adopted 1996 – Latest Revision June 2008</li> </ul>							

**Table 9.1-3. Development and Permitting Capability**

Indicate if your jurisdiction implements the following	Response Yes/No; Provide further detail
Does your jurisdiction issue development permits? - If no, who does? If yes, which department?	Yes, Chenango County Code Enforcement for building permits.
Does your jurisdiction have the ability to track permits by hazard area?	Yes, Chenango County Code Enforcement for building permits
Does your jurisdiction have a buildable lands inventory?	No. Buildout varies by municipality.



Indicate if your jurisdiction implements the following	Response Yes/No; Provide further detail
-If yes, please describe briefly.	
-If no, please quantitatively describe the level of buildout in the jurisdiction.	

### Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the County.

**Table 9.1-4. Administrative and Technical Capabilities**

Resources	Available? (Yes or No)	Department/ Agency/Position
<b>Administrative Capability</b>		
Planning Board	Yes	Planning Department
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	Environmental Management Council – the council will serve as the County’s Climate Smart Communities Task Force
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	Commerce Chenango
Warning Systems / Services	Yes	Hyper-Reach/Notify Chenango
Maintenance programs to reduce risk	No	-
Mutual aid agreements	Yes	Plan adopted Aug 1961, Revisions Jan 2020
<b>Technical/Staffing Capability</b>		
Planners or engineers with knowledge of land development and land management practices	Yes	Chenango County Planning Dept.; Chenango County D.P.W.
Engineers or professionals trained in building or infrastructure construction practices	Yes	Chenango County D.P.W., Chenango County Code Enforcement
Planners or engineers with an understanding of natural hazards	Yes	Chenango County Planning Dept.; Chenango County D.P.W.
Staff with expertise or training in benefit/cost analysis	Yes	Multiple Departments
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	Chenango County Planning Dept.; Chenango County D.P.W.; Chenango County 911 Center; Chenango County Soils & Water; County Real Property Tax
Scientist familiar with natural hazards	Yes	Chenango County Soils & Water; Chenango County Emergency Management
NFIP Floodplain Administrator (FPA)	Yes	Provide service to municipalities with MOU
Surveyor(s)	Yes	Chenango County D.P.W.
Emergency Manager	Yes	Chenango County Fire Rescue and Emergency Services
Grant writer(s)	Yes	Multiple Departments
Resilience Officer	No	-
Other	No	-

### Fiscal Capability

The table below summarizes financial resources available to the County.

**Table 9.1-5. Fiscal Capabilities**

Financial Resources	Accessible or Eligible to Use (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes



Financial Resources	Accessible or Eligible to Use (Yes/No)
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	Yes
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	Yes

### Education and Outreach Capability

The table below summarizes the education and outreach resources available to the County.

**Table 9.1-6. Education and Outreach Capabilities**

Indicate if your jurisdiction has the following resources	Yes/No; Please describe
Public information officer or communications office?	Yes
Personnel skilled or trained in website development?	Yes
Hazard mitigation information available on your website; if yes, describe	Yes
Social media for hazard mitigation education and outreach; if yes, briefly describe.	Not specifically but could.
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.	Hyper-Reach/Notify Chenango, Social Media, Emergency Management Smartphone App
Warning systems for hazard events; if yes, briefly describe.	Hyper-Reach/Notify Chenango, Social Media, Emergency Management Smartphone App
Natural disaster/safety programs in place for schools; if yes, briefly describe.	No, individual schools have these specific to their district.
Other	-

### Community Classifications

The table below summarizes classifications for community programs available to the County.

**Table 9.1-7. 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)	Not applicable	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Not applicable	-	-
NYSDEC Climate Smart Community	No	NP	N/A
Storm Ready Certification	Yes	N/A	2018



Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Firewise Communities Classification	No	NP	N/A
Other: NYSERDA Clean Energy Community	Yes	N/A	2019

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 9.1-8. Adaptive Capacity

Hazard	Adaptive Capacity (Capabilities) - High/Medium/Low*
Disease Outbreak	Medium
Drought	Medium
Extreme Temperatures	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

Management and regulation of the regulatory floodplains are done at the local level. Refer to the individual jurisdictional annexes for details on the NFIP for each municipality.

### Additional Areas of Existing Integration

- **Comprehensive (Land Use) Planning:** The County updated their Comprehensive Plan in 2016. The Plan specifically identified that the 2008 HMP and information from the concurrent HMP update was used in the development of the Comprehensive Plan update, and includes information on the 2006 and 2011 flooding, and updated floodplain mapping.
- **Comprehensive Emergency Management Plan:** The County updated their Comprehensive Emergency Management Plan (CEMP) in July 2011, which specifically references the 2008 HMP as well as the concurrent HMP Update.
- **Highway Department:** The Highway Department has a revolving (5-10 year) program of maintaining and improving all county infrastructure, including roads, bridges and related stormwater management



systems. Whenever stormwater management systems (culverts) are repaired or replaced, they are routinely upsized. The Department leverages available 406 Mitigation opportunities when repairing disaster-damaged infrastructure.

- **Natural Gas Development:** The County Department of Planning and Development maintains a Natural Gas webpage (<http://www.co.chenango.ny.us/planning/natural-gas/>) that includes links to the activities of the County Natural Gas Advisory Committee, and the Four County Natural Gas Collaborative (Chenango, Otsego, Delaware and Madison Counties), as well as mitigation strategies Chenango municipalities can implement to address some of the impacts (primarily heavy vehicle traffic over local roads, and noise) of natural gas development.

## 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. Refer to Section 4 (County Profile) for an overview of evacuation, sheltering, temporary housing, and permanent housing.

### Evacuation Routes

Chenango County Emergency Management notes that there are no specific evacuation routes identified in the County, as hazard conditions (e.g. flooding) is unpredictable. As such Hyper-Reach and Notify Chenango alerts are sent to residents advising them of evacuations, as necessary, along with routes to travel. Similarly, residents should obtain real-time information through such sources in the event that sheltering is needed, as shelters are opened on an event-specific basis.

While there are no official evacuation routes in Chenango County, the County can use major roadways to evacuate residents. These routes include State Routes 23, 26, and 206 (East and West) and State Route 12 and County Route 32 (North and South). Figure 4-24 in Section 4 (County Profile) shows potential evacuation routes in the County.

### Sheltering

With support and cooperation of the American Red Cross and local jurisdictions, the County references an inventory of suitable shelter locations and can assist with the coordination and communication of shelter availability as necessitated by the execution of local municipal emergency operation plans. Figure 4-18 in Section 4 (County Profile) provides a map that shows the shelter locations in the County.

### Temporary Housing

Through the Department of Social Services, Chenango County has agreements with Super 8, Norwich Motor Lodge and Red Roof Inn for placement in the event of an emergency. Table 4-15 in Section 4 (County Profile) lists the facilities identified by Chenango County and its municipalities for locations that can be used for temporary housing.

### Permanent Housing

To support identification of potential sites suitable for relocating houses out of hazard areas (i.e., the floodplain) or building new homes once properties in hazard areas or the floodplain are acquired, the County performed a buildable parcel analysis. The analysis identified potential areas for post-disaster development in accordance with the 2017 NYSDHSES Hazard Mitigation Planning Standards Guide requirement “to identify long-term housing options for relocating displaced residents to maintain post-disaster social and economic stability”. The



County analysis provides an indication of vacant land suitable for development. In this case, vacant land is defined as a parcel that is classified as vacant and is located outside the following hazard areas:

- 1) FEMA floodplain.
- 2) wetlands.
- 3) federal, state and county park land.
- 4) utility public land
- 5) land that has steep slopes (>15% gradient) without consideration of ownership or availability.

Refer to Figure 4-23 in Section 4 (County Profile) for a map that shows locations of potential long-term housing in the County.

### 9.1.5 Hazard Event History Specific to the County

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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 County'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. For details of hazard events that impacted the County, refer to Volume I, Section 5 of this plan.

### 9.1.6 Hazard Ranking and Jurisdiction-Specific Vulnerabilities

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The hazard profiles in Section 5 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the County'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

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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 9.1-9. Potential Flood Losses to Critical Facilities**

Name	Type	Exposure		Addressed by Proposed Action
		1% Event	0.2% Event	
Chenango County Highway Department	County Building	Yes	Yes	2021-Chenango County-003
Chenango County Office Building	County Building	No	Yes	2021-Chenango County-004

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 County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the County. The County 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 County indicated the following:

- Floods are a frequent occurrence in the County and is a major concern for the County and many municipalities.
- Severe storms are a major concern for residents in the County, who experience frequent power outages as a result of these storm types.
- While there is high exposure to wildfires due to the WUI, event history is minimal, therefore the risk was reduced to medium.
- Although there are no additional wells being drilled in the County, there are still active natural gas wells, and the Steering Committee felt it was important to continue to include natural gas accidents in the 2021 Update as a hazard of concern.

**Table 9.1-10. Hazard Ranking**

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

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

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

### Identified Issues

The County has identified the following vulnerabilities:





- Ongoing issue of erosion along the eastern bank of the Susquehanna River in area north of NYS 206 and CR 39 intersection, creating potential of compromising integrity of road base by undermining CR 39. See mitigation action # 2021-Chenango County-010.
- County DPW identifies their biggest ongoing struggle is the regulatory restrictions restricting their ability to clean steam and riverbeds around structures, annually or at least every other year, to protect their structures and support the proper flow of floodwaters.
- Lack of emergency generator for the County Office Buildings. This would allow essential operations to remain open during a power outage event. This would prevent data loss for Information Technology and prevent vaccine spoilage for Public Health Department. See mitigation action # 2021-Chenango County-006.
- Broadband connection throughout the County Departments both in the County Office Building and outside buildings is poor.
- Lack of cell phone coverage in many areas throughout the County.

Specific areas of concern based on resident response to the County Hazard Mitigation Citizen survey are included in the annexes throughout section 9 (Jurisdictional Annexes).

### 9.1.7 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 County'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.



Table 9.1-11. 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	
Chenango-1 (Former CC-3)	Backup Power Sources to County Buildings	All Hazards	Emergency Management, Chenango County DPW	Provide backup power sources to the County office building and nursing homes in the County.	In Progress	Cost	\$200,000	Chenango County has been discussing the need for a building upgrade. Discussions regarding a backup generator have been entertained but due to COVID-19, the status of the building project is in the air.
						Level of Protection		
						Damages Avoided; Evidence of Success	Building resiliency, loss of Public Health medical supplies, and potential data losses in Information Technology.	
Chenango-2 (Former CC-5)	Develop and implement an enhanced all-hazards, public outreach / education / mitigation information program on natural hazard risks and what they can do in the way of mitigation, preparedness (including flood insurance), and response in the event of an emergency. This program will:							
	<ul style="list-style-type: none"> <li>• Provide seasonal education, notification and warnings (flooding, severe storms, structural and wildfires) via the county webpages, newsletters, mobile application and other media.</li> <li>• Prepare and distribute the Emergency Preparedness booklets, distributed at fairs, open houses, public offices and places of mass gathering.</li> <li>• Promote the HyperReach Emergency Notification System, as well as the County public education and notification application (supports evacuation and sheltering notification and instructions).</li> <li>• Continue to hold Community Preparedness classes for the public.</li> <li>• Implement a local public awareness and education program for floodplain residents.</li> <li>• Promote "Firewise" programs in the County (see also Chenango-7).</li> </ul>							
	In addition, the County will work with municipalities to provide outreach to special purpose districts (e.g. school districts, fire districts) and private owners of critical facilities that have been identified as specifically vulnerable (e.g. within an NFIP-delineated 100- or 500-year floodplain) explaining their risk and identifying mitigation options, including the availability of grant funding. This outreach shall identify the need to protect critical facilities to the 500-year event or "worst damage scenario".							
	See above	All Hazards	Planning Department, Emergency Management, Chenango County DPW, Public Health, Office of the Aging, Cooperative	See above	In progress, continuously.	Cost	-	This is part of the County's daily operations
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	



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		
			Extension, NYS DHSES, FEMA, and municipalities					
Chenango-3 (Former CC-7)	Where appropriate support retrofitting or relocation of structures located in flood-prone areas, focusing on Repetitive Loss and Severe Repetitive Loss properties. At this time there are no County structures known to have significant flood vulnerability, however the County will continue to promote and support local efforts to mitigate public and private structures. Efforts to mitigate critical facilities shall recognize Federal and State directives for protection to the 500-year event or "worst damage scenario". See Action Worksheet.							
	See above	Flood, Severe Storm	Chenango County Planning Department, Chenango County Building Codes Enforcement, Chenango County DPW	See above	Ongoing Capability	Cost	-	This is part of the County's daily operations
						Cost	-	
Cost	-							
Chenango-4 (Former CC-11)	Continue to support opportunities for Chenango Weatherization Program	Severe Winter Storms, Extreme Temperatures	OFC, Chenango County	Opportunities for Chenango (OFC) is a community action agency, offering home weatherization, first-time home ownership, well/septic upgrades and mobile home replacement programs. These programs, supported through NYS Community Development grants acquired with the assistance and support of Chenango County, providing an opportunity for	Ongoing Capability	Cost	-	This is part of the County's daily operations
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	





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.
				County residents to live in a safe environment.				
Chenango-5 (Former CC-12)	Conduct tree trimming along roadways; designate snow routes and strengthen critical road sections and bridges throughout the county system of 308 centerline miles of roadway and approx. 138 bridge structures. Efforts to mitigate critical infrastructure shall recognize Federal and State directives for protection to the 500-year event or "worst damage scenario". These efforts support countywide emergency management (response) capabilities, including the maintenance of routes that may be used to facilitate evacuations and other emergency support functions. See Action Worksheet.							
	See above	Severe Storms, Severe Winter Storms	Chenango DPW, Chenango county Emergency Management	See above	Ongoing Capability	Cost	-	This is part of the County's daily operations
					Level of Protection	-		
					Damages Avoided; Evidence of Success	-		
Chenango-6 (Former CC-13)	When designing planning projects, the County DPW and Chenango County Soil and Water Conservation District (SWCD) shall continue to incorporate Best Management Practices (BMPs) that mitigate localized flooding and drought situations. These design practices include the establishment of wetlands, and water holding areas (detention/retention) or sedimentation basins which are designated to capture or retain water and slowly release it back into the environment. These mitigation efforts shall include the consideration of protection to the 500-year event or "worst damage scenario".							
	See above	Flood; Drought	Chenango County DPW, Chenango County Soil/Water	See above	Ongoing Capability	Cost	-	This is part of the County's daily operations
					Level of Protection	-		
					Damages Avoided; Evidence of Success	-		
Chenango-7 (Former CC-15)	Promote "Firewise" Programs in the County	Wildfire	Chenango County Emergency Management, Jurisdictional Fire Districts, NYS Forestry	Promote "Firewise" Programs in the County	In Progress	Cost	-	Chenango County is not currently participating in the Firewise Program. See mitigation action # 2021-Chenango County-008.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
Chenango-8	Continue to work the United States Army Corps of Engineers (ACOE), FEMA, NYS DHSES to address the ongoing issue of erosion along the eastern bank of the Susquehanna River in area north of NYS 206 and CR 39 intersection, creating potential of compromising integrity of road base by undermining CR 39. The full scope of the problem starts in Otsego and Delaware counties, continues through General Clinton Park and 206/39 intersection in Town of Bainbridge, and into Afton, some 10-15 miles. Streambank erosion in the area of the 206/39 intersection in Town of Bainbridge is now within 10-15 feet of CR 39. Assure that any mitigation addresses the 500-year flood event or "worst damage scenario". These efforts support countywide emergency management (response) capabilities, including the maintenance of routes that may be used to facilitate evacuations and other emergency support functions. See Action Worksheet.							
	See above					Cost	-	



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.
						Level of Protection	Damages Avoided; Evidence of Success	
		Flood, Severe Storms, Severe Winter Storms	County, ACOE, FEMA, NYS DHSES	See above	Ongoing Capability	Level of Protection	-	Continue to address erosion concerns as 2021-Chenango County-010
						Damages Avoided; Evidence of Success	-	
Chenango-9	Arrange/facilitate and/or promote regional workshops, trainings and continuing education (prepared and offered by others)	All Hazards	Chenango County Department of Planning and Development with support of the Department of Code Enforcement for training and workshops offered by NYSSFMA, NYS DHSES, NYSDEC, FEMA, ISO	NFIP for Insurance Agents, Lending Institutions and Realtors, Community Rating System – limited promoting workshops or training opportunities offered by others are available, and Floodplain management and the Certified Floodplain Managers (CFM) certification	Ongoing Capability	Cost	-	This is part of the County’s daily operations
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
Chenango-10	Refer to the County HMP when updating the County Comprehensive Plan (integration action).	All Hazards	County Planning	Refer to the County HMP when updating the County Comprehensive Plan (integration action).	Ongoing Capability	Cost	-	This was done in the most recent plan. Efforts should continue to refer to the Hazard Mitigation Plan when the County Comprehensive Plan is updated in the future.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
Chenango-11	StormReady Certification	Flood, Severe Storm, Severe Winter Storm	Bureau of Fire, working with other county departments and agencies and the NWS	Complete ongoing efforts to become StormReady certified, having completed Skywarn Training in 2012 and May 2014.	Complete	Cost	-	StormReady Certification was awarded in 2018.
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	



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	
Chenango-12	Engineering and Construction Phase of Innovative Readiness Training (IRT) Program	All hazards	County Fire and Emergency Services along with other County Departments	County to continue to support the IRT program, which is led by branches of the U.S. military. The next phase of this program in Chenango County includes building a new fire apparatus bay at the county training center, and rewiring the electrical system at the county fairgrounds. It is noted that the county fairgrounds could be used for the post-disaster location of temporary housing, and support other disaster response and recovery functions.	Ongoing Capability	Cost	-	This is part of the County's daily operations
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	
Chenango-13	County-Wide Housing Location/Relocation Planning Initiative for Disaster Displaced Residents and Structures: Chenango County Fire and Emergency Services to develop and implement a program to work with all Chenango County municipalities to identify sites within the community suitable for relocation of houses out of the floodplain, or building new houses once properties in the floodplain are demolished. As part of this program, all communities will be surveyed to identify potential sites, including any pre-disaster actions that may be required to make them viable for these purposes. Further, this effort will include working with other County departments and regional and local stakeholders who own or manage potentially suitable sites (e.g. County parks) for the potential siting of temporary housing, and determining what improvements would need to be made to accommodate temporary housing (e.g. water, electric, sanitary services, bathing facilities), and that outside funding would likely be needed if such improvements were not already available.							
	It is noted that while a community may identify suitable sites for relocation, the use (including transfer of ownership) of suitable private property would be at the discretion of the property owner.							
	See above	All hazards requiring temporary or	Chenango County Fire and	See above	In Progress	Cost	-	Continue to promote the Planning Initiative as 2021-Chenango County-009
					Level of Protection	-		



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	
		permanent relocation	Emergency Services, working with all municipalities and other County departments and agencies			Damages Avoided; Evidence of Success	-	
Chenango-14	<p>Natural Gas Development Risk Management Support: Continue provide outreach, education, land use and regulatory support to Chenango County municipalities to manage the current and future impacts and risks of natural gas development, through the following ongoing and potential activities and initiatives:</p> <ul style="list-style-type: none"> <li>Continue to maintain and update the County Department of Planning and Development Natural Gas webpage (<a href="http://www.co.chenango.ny.us/planning/natural-gas/">http://www.co.chenango.ny.us/planning/natural-gas/</a>) that includes links to the activities of the County Natural Gas Advisory Committee, and the Four County Natural Gas Collaborative (Chenango, Otsego, Delaware and Madison Counties), as well as mitigation strategies Chenango municipalities can implement to address some of the impacts (primarily heavy vehicle traffic over local roads, and noise) of natural gas development.</li> <li>Land Use and Regulatory review of proposed natural gas development sites. It would be expected, due to the 239 Review process, that any major new projects would be brought before the review committee at the County level before construction began. Municipalities with zoning and site plan review regulations would submit plans for the 239 Review process primarily when the municipality regulates: storage of pipes, equipment, buildings, etc. that are regulated by NYSDEC, PSC or FERC.</li> <li>If and when the current moratorium on natural gas development in the NYS is lifted, work to reconvene the County Natural Gas Advisory Committee, and the Four County Natural Gas Collaborative to promote regional, county and local efforts to manage the risks and impacts of natural gas development.</li> <li>Continue to update, as appropriate, spill and explosion response in the County Emergency Plan.</li> </ul>							
	See above	Natural Gas	Chenango County Department of Planning and Development	See Above	No Progress	Cost	-	-
Chenango-15	Infestation Mitigation	Infestation	CCDPD; working with NYSDEC and other state and regional stakeholders	The County shall continue to support infestation control plans for Emerald Ash Borer and mosquito spraying for West Nile that have been developed by NYSDEC.	In Progress	Cost	-	Continue to work with the NYSDEC on Infestation Management as 2021-Chenango County-007
						Level of Protection	-	
						Damages Avoided; Evidence of Success	-	



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

The County 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 County participated in a mitigation action workshop on January 13, 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA ‘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 9.1-12 summarizes the comprehensive-range of specific mitigation initiatives the County 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 9.1-13 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan update.



Table 9.1-12. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2021-Chenango County-001	Post-Disaster Recovery Plan	1, 2, 6, 7	All Hazards	<p><b>Problem:</b> The County does not have a post-disaster recovery plan to coordinate response between municipalities and county departments.</p>	No	No	Short; Within 2 years	Chenango County Planning & Development; Chenango County Bureau of Fire & Emergency Management	Low; <\$10,000	High; Ensures coordination and efficient recovery procedures	County Budget, NYS Local Government Efficiency Grant Program	Medium	LPR	PR, ES
				<p><b>Solution:</b> The Chenango County Department of Planning &amp; Development will work with the Chenango County Bureau of Fire &amp; Emergency Management and the County Board of Supervisors to develop a plan for post-disaster recovery. The Post-Disaster Recovery Plan will feature hazards, risk, and vulnerabilities profiled in this HMP, as well as a detailed plan to utilize county supplies and equipment to mitigate and recover more efficiently and effectively from future disasters, including a plan for evacuation, sheltering and housing, strengthening collaborations throughout the county and a plan for short and long-term recovery.</p>										
2021-Chenango County-002	Debris Management Plan	1, 2, 3, 5, 6, 7	All Hazards	<p><b>Problem:</b> The County does not have an overarching Debris Management Plan to coordinate clean-up of debris after hazard events.</p>	No	No	Short; Within 2 years	Chenango County Planning & Development; Chenango County Bureau of Fire & Emergency Management	Low; <\$10,000	High; Ensures coordinated plan to safely remove debris	County Budget, NYS Local Government Efficiency Grant Program	Medium	LPR	PR, ES
				<p><b>Solution:</b> The Chenango County Department of Planning &amp; Development will work with the Chenango County Bureau of Fire &amp;</p>										





Table 9.1-12. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Emergency Management and the County Board of Supervisors to develop a debris management plan as a framework for organizing the rapid, safe, and cost-effective separation, removal, collection, recycling, and disposal of debris after a disaster. This plan will include goals to minimize debris-related threats to public health, safety, and the environment following any hazard event.										
2021-Chenango County-003	County Highway Department Relocation	2, 3, 4, 6, 7	Flood	<p><b>Problem:</b> The County Highway Department building is located within the 1% SHFA.</p> <p><b>Solution:</b> The County Highway Department building is an essential facility, providing support during and after disaster events and there is potential for damages to equipment and delays in essential functions of the department if impacted by flood. The County will seek funding to relocate the building to a plot of land that is outside of the 0.2% chance SFHA, as well as away from the Chenango River to eliminate flash flood risk from overtopping. Once a plot of land has been identified, the County will conduct a survey of the land to ensure it meets the criteria of the department. Flood</p>	Yes	No	Within 5 years	Chenango County Highway Department	High	High	FEMA BRIC, FMA, HMGP	High	SIP	PP, SP



Table 9.1-12. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				control measures will be considered in the design to withstand all potential flood risks.										
2021-Chenango County-004	County Office Retrofitting	2, 3, 4, 6, 7	Flood	<p><b>Problem:</b> The Chenango County Office Building is located within the 0.2% SFHA.</p> <p><b>Solution:</b> Continuity of operations of governmental functions is essential before, during, and after a hazard event. Chenango County departments will work to conduct a flood vulnerability study of the impacts of floodwaters on the building and work together with an engineer to ensure that the best course of action for retrofitting the building be taken. This can include relocation, elevation, or other structural flood control measures.</p>	Yes <span style="color: blue;">💧</span>	No	Within 5 years	Chenango County	High	High	FEMA BRIC, FMA, HMGP	High	SIP	PP, SP
2021-Chenango County-005	Support Alternate Energy Sources	3, 4, 7	Natural Gas	<p><b>Problem:</b> Chenango County was previously reliant on natural gas well drilling and natural gas energy sources for businesses and homes.</p> <p><b>Solution:</b> The Chenango County Department of Planning &amp; Development will work with Commerce Chenango to support implementation of alternative, green energy sources throughout the county, including solar,</p>	No	No	Short; Continuous/ within timeframe of HMP	Chenango County Planning & Development, Support from Commerce Chenango	Low to support grant writing and implementation	High, Increases resiliency of County and reduces risk from natural gas hazards	NYSERDA, Municipal Budgets	Medium	LPR	PR



Table 9.1-12. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				wind, hydrology, as well as separate energy grids for communities. Commerce Chenango will support grant writing and project management and development for interested parties.										
2021-Chenango County-006	Backup Generators	1, 2, 3, 6, 7	All Hazards	<p><b>Problem:</b> The County Office Building, as well as various nursing/senior homes and community facilities lack backup power.</p> <p><b>Solution:</b> The County will seek funding to purchase generators for these facilities to ensure continuous operations. Generators will be permanent fixtures for each facility, and have automatic capabilities to eliminate power losses. Generators will also be raised or kept in locations that reduce exposure to hazards. Size and capacity for each generator will be determined on a case-by-case basis to meet the needs of each facility.</p>	Yes	No	Short, To begin acquiring generators as soon as possible	Chenango County Planning & Development	Medium-High	High, Ensures continuity of operations and eliminates power losses at critical facilities	NYS DEC, FEMA HMA, County Budget	High	LPR	PP, ES
2021-Chenango County-007	Infestation Control	1, 2, 3, 5, 6, 7	Invasive Species, Harmful Algal Bloom	<p><b>Problem:</b> Invasive Species, such as the Emerald Ash Borer and mosquito threaten public lands and trees, as well as public health and safety throughout the County.</p> <p><b>Solution:</b> Chenango County Environmental Health will continue to collaborate with the NYSDEC on developing</p>	No	No	Short, To begin planning within 1 year	Chenango County Environmental Health with support from NYSDEC	Medium	High, Reduces impacts and risk from multiple hazards	NYSDEC, County Budget	High	LPR, NSP	PR, NR





Table 9.1-12. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				and implementing infestation control plans for the Emerald Ash Borer, mosquitos and ticks, Harmful Algal Blooms, and other species that impact the county, its' crops and forests.										
2021-Chenango County-008	Support Firewise Program Participation	1, 2, 3, 5	Wildfire	<p><b>Problem:</b> There are currently no municipalities within the County that participate in the NFPA Firewise Program.</p> <p><b>Solution:</b> The Chenango County Bureau of Fire &amp; Emergency Management will work with the Chenango County Planning &amp; Development, supported by Municipal Fire Departments to encourage participation in the Firewise USA program. Participation in the Firewise program allows communities to develop a framework to increase the ignition resistance of their homes and community, reducing wildfire risk through a wildfire risk assessment and an action plan for prioritized risk reduction.</p>	No	No	Short	Chenango County Bureau of Fire & Emergency Management, Chenango County Planning & Development, with support from Municipal Fire Departments	Low	High, increases personal preparedness and readiness and awareness of fire risk to residents	USDA Forest Service, County and Municipal Budgets	High	LPR, EAP	ES, PR, PP, PI
2021-Chenango County-009	Housing Location/Relocation Planning Initiative for Displaced Residents and Structures	All Goals	All Hazards	<p><b>Problem:</b> The County, nor any municipalities, keep a buildable land inventory of possible locations to relocate displaced residents or structures in the event of repetitive losses or proximity to hazard areas (i.e. WUI).</p> <p><b>Solution:</b> Chenango County Planning &amp; Development</p>	No	No	Short, To begin land inventory within 1 year, relocations as necessary	Chenango County Planning & Development, support from Chenango County Bureau of Fire & Emergency Management	Low to conduct land analysis	High, Ensures safe growth and establishment of open space to be kept for relocation purposes	County and Municipal Budgets, NYS Department of State, FEMA FMA	High	LPR, EAP	PR, PP, PI, SP





Table 9.1-12. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category	
				will develop and implement a program to work with all Chenango County municipalities to identify sites within the community suitable for relocation of houses out of the floodplain or building new houses once properties in the floodplain are demolished. As part of this program, all communities will be surveyed to identify potential sites, including any pre-disaster actions that may be required to make them viable for these purposes. Chenango County Department of Planning & Development will assist communities in developing a county-wide buildable land inventory through GIS mapping software that can be referenced when a relocation is necessary. Further, this effort will include working with other County departments and regional and local stakeholders who own or manage potentially suitable sites (e.g. County parks) for the potential siting of temporary housing, and determining what improvements would need to be made to accommodate temporary housing (e.g. water, electric, sanitary services, bathing facilities), and that outside funding											



Table 9.1-12. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				would likely be needed if such improvements were not already available.										
2021-Chenango County-010	River Streambank Stabilization	1, 2, 4, 6, 7	Severe Storm, Severe Winter Storm, Flood	<p><b>Problem:</b> Due to recent major flooding events in 2006, 2001, and December 2020, erosion is becoming a great concern for the county along the Susquehanna and Chenango riverbanks.</p> <p><b>Solution:</b> The Chenango County Soil &amp; Water Conservation District will work with relevant municipalities to address erosion and streambank stabilization concerns along the Susquehanna and Chenango Rivers and other streams, as reported. These projects will use environmentally sound methods to reduce erosion while not impacting fish and wildlife populations, while also ensuring that more land is not lost to erosion, especially in the Villages along the banks.</p>	No	No	Short, To begin implementing erosion control projects as soon as funding is available	Chenango County Soil & Water Conservation District	Medium-High, Dependent on needs of riverbank	High, Increases viability of communities along the rivers	FEMA BRIC, FMA, NYSDEC, Municipal Budgets	High	NSP, SIP	NR, SP
2021-Chenango County-011	Climate Smart Community Designation	1, 2, 3, 4, 5, 7	All Hazards	<p><b>Problem:</b> The County is not currently participating in the NYS Climate Smart Communities Program to promote mitigation measures and resiliency to climate change.</p> <p><b>Solution:</b> The Chenango County Department of Planning &amp; Development will work towards pledging Chenango County as part of</p>	No	No	Short, The County is in progress of receiving CSC designation	Chenango County Department of Planning & Development	Low, \$5,000	High	County Budget, NYS Climate Smart Communities Grants	High	LPR	PR





Table 9.1-12. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				the Climate Smart Communities Certification Program. By participating in the Program, the County will have access to additional resources to implement mitigation initiatives, including strengthening riparian zones, implementing green infrastructure, and promoting alternative energy sources.										
2021-Chenango County-012	County-Wide EMS	1, 3, 5, 7	All Hazards	<p><b>Problem:</b> Many communities throughout the County are only served by volunteer EMS/Fire, and there is limited capacity for the City of Norwich EMS/Fire to service the entire county during emergencies. A lack of volunteers exacerbates this issue.</p> <p><b>Solution:</b> The County will investigate opportunities for a county-wide EMS system to more efficiently respond to hazards by decreasing response time to rural areas of the county and increasing overall life safety and property protection.</p>	No	No	Short, within scope of HMP	Chenango County Emergency Management	High	High, ensures life safety during all hazards	Department of State reimbursement funding & grants	High	LPR	PR, ES
2021-Chenango County-013	Training Local Officials on Updating Ordinances, Codes, and Plans	All	Flood/Dam Failure	<p><b>Problem:</b> Many of the municipal codes, ordinances, and plans do not contain specifics on dam safety and hazard mitigation.</p> <p><b>Solution:</b> To train local government officials including Supervisors, Code Officials and Planning and</p>	Yes	No	Ongoing	Chenango County Department of Planning & Development	Low	Increases awareness; hazard mitigation integration	County Budget	High	LPR	PR, PI



**Table 9.1-12. Proposed Hazard Mitigation Initiatives**

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				Zoning Board members on updating and integrating dam safety and hazard mitigation efforts and information into ordinances, codes, and comprehensive plans. The training would also include using the BATool to update municipal annexes with updated hazard mitigation actions and initiatives and other pertinent information. By integrating this information, municipalities in Chenango County will become more prepared pre-disaster, and more resilient during a disaster.										

**Notes:**

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

Acronyms and Abbreviations:

- 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

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- PDM Pre-Disaster Mitigation Grant Program
- BRIC Building Resilient Infrastructure and Communities

Timeline:

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

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Table 9.1-13. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community	Total	High / Medium / Low
2021-Chenango County-001	Post-Disaster Recovery Plan	1	1	1	1	1	1	1	1	0	1	1	1	1	1	13	Medium
2021-Chenango County-002	Debris Management Plan	1	1	1	1	1	1	1	1	0	1	1	1	1	1	13	Medium
2021-Chenango County-003	County Highway Department Relocation	0	1	1	1	1	1	0	1	1	1	1	1	1	1	12	High
2021-Chenango County-004	County Office Retrofitting	0	1	1	1	1	1	0	1	1	1	1	1	1	1	12	High
2021-Chenango County-005	Support Alternate Energy Sources	0	0	1	1	1	1	0	1	0	1	1	1	0	0	8	Medium
2021-Chenango County-006	Backup Generators	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2021-Chenango County-007	Infestation Control	0	1	1	0	1	0	1	1	1	0	1	1	1	1	10	High
2021-Chenango County-008	Support Firewise Program Participation	1	1	1	0	1	1	1	1	1	1	0	1	1	1	12	High
2021-Chenango County-009	Housing Location/Relocation Planning Initiative	1	1	1	1	1	0	1	1	1	1	1	1	1	1	13	High
2021-Chenango County-010	Susquehanna River Streambank Stabilization	1	1	1	0	1	1	0	0	1	1	1	1	1	1	11	High
2021-Chenango County-011	Climate Smart Community Designation	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2021-Chenango County-012	County-Wide EMS	1	1	0	0	0	0	0	1	1	1	1	1	1	1	9	High
2021-Chenango County-013	Training Local Officials on Updating Ordinances, Codes, and Plans	1	1	1	1	1	1	1	0	0	1	0	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).





### 9.1.8 Proposed Mitigation Action Types

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

**Table 9.1-14. Analysis of Mitigation Actions by Hazard and Category**

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Disease Outbreak	001, 002, 006, 009, 011, 012			009	001, 002, 009, 011, 012	006, 009	009		009	001, 002, 006, 012
Drought	001, 002, 006, 009, 011, 012			009	001, 002, 009, 011, 012	006, 009	009		009	001, 002, 006, 012
Extreme Temperatures	001, 002, 006, 009, 011, 012			009	001, 002, 009, 011, 012	006, 009	009		009	001, 002, 006, 012
Flood	001, 002, 006, 009, 011, 012, 013	003, 004, 010	010	009	001, 002, 009, 011, 012, 013	003, 004, 006, 009	009, 013	010	003, 004, 009, 010	001, 002, 006, 012
Harmful Algal Bloom	001, 002, 006, 007, 009, 011, 012		007	009	001, 002, 007, 009, 011, 012	006, 009	009	007	009	001, 002, 006, 012
Invasive Species	001, 002, 006, 007, 009, 011, 012		007	009	001, 002, 007, 009, 011, 012	006, 009	009	007	009	001, 002, 006, 012
Natural Gas	001, 002, 005, 006, 009, 011			009	001, 002, 005, 009, 011, 012	006, 009	009		009	001, 002, 006, 012
Severe Storm	001, 002, 006, 009, 011, 012	010	010	009	001, 002, 009, 011, 012	006, 009	009	010	009, 010	001, 002, 006, 012
Severe Winter Storm	001, 002, 006, 009, 011, 012	010	010	009	001, 002, 009, 011, 012	006, 009	009	010	009, 010	001, 002, 006, 012
Wildfire	001, 002, 006, 008, 009, 011, 012			008, 009	001, 002, 008, 009, 011, 012	006, 008, 009	008, 009		009	001, 002, 006, 008, 012

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

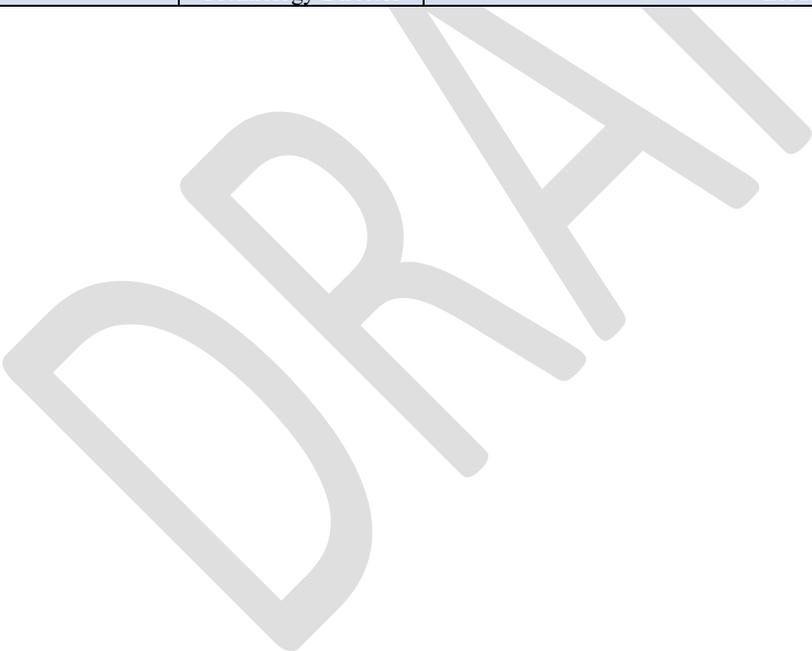


### 9.1.9 Staff and Local Stakeholder Involvement in Annex Development

The County 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 jurisdiction representatives. 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. The following table summarizes who participated and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

**Table 9.1-15. Contributors to the Annex**

Name	Title	Method of Participation
Shane Butler	Planning Director	Reviewing and providing information related to capability assessment, hazard ranking, past mitigation initiatives status, critical facilities, project identification and developing the 2021 mitigation strategy.
Colleen Bradley	Planner	Reviewing and providing information related to project identification and developing the 2021 mitigation strategy.
Matt Beckwith	Emergency Management Director	Reviewing and providing information related to County Plans.
Julie Gates	Public Facilities Director	Reviewing and providing information related to building resiliency needs.
Herm Ericksen	Information Technology Director	Reviewing and providing information related to Information Technology needs.





Action Worksheet			
<b>Project Name:</b>	2021-Chenango County-009		
<b>Project Number:</b>	Housing Location/ Relocation Planning Initiative for Displaced Residents and Structures		
Risk / Vulnerability			
<b>Hazard(s) of Concern:</b>	All Hazards		
<b>Description of the Problem:</b>	The County, nor any municipalities, keep a buildable land inventory of possible locations to relocate displaced residents or structures in the event of repetitive losses or proximity to hazard areas (i.e. WUI).		
Action or Project Intended for Implementation			
<b>Description of the Solution:</b>	Chenango County Planning & Development will develop and implement a program to work with all Chenango County municipalities to identify sites within the community suitable for relocation of houses out of the floodplain or building new houses once properties in the floodplain are demolished. As part of this program, all communities will be surveyed to identify potential sites, including any pre-disaster actions that may be required to make them viable for these purposes. Chenango County Department of Planning & Development will assist communities in developing a county-wide buildable land inventory through GIS mapping software that can be referenced when a relocation is necessary. Further, this effort will include working with other County departments and regional and local stakeholders who own or manage potentially suitable sites (e.g. County parks) for the potential siting of temporary housing, and determining what improvements would need to be made to accommodate temporary housing (e.g. water, electric, sanitary services, bathing facilities), and that outside funding would likely be needed if such improvements were not already available.		
<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 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)			
<b>Level of Protection:</b>	High, relocation eliminates risk	<b>Estimated Benefits (losses avoided):</b>	Ensures safe growth and establishment of open space to be kept for relocation purposes
<b>Useful Life:</b>	Land inventory should be updated on annual basis	<b>Goals Met:</b>	All Goals
<b>Estimated Cost:</b>	Low, \$10,000 to survey land and \$5,000 to maintain	<b>Mitigation Action Type:</b>	Local Plans and Regulations, Education and Awareness Program
Plan for Implementation			
<b>Prioritization:</b>	High	<b>Desired Timeframe for Implementation:</b>	To begin land inventory within 1 year, relocations as necessary
<b>Estimated Time Required for Project Implementation:</b>	To begin land inventory within 1 year, relocations as necessary	<b>Potential Funding Sources:</b>	County and Municipal Budgets, NYS Department of State, FEMA FMA
<b>Responsible Organization:</b>	Chenango County Planning & Development	<b>Local Planning Mechanisms to be Used in Implementation if any:</b>	Hazard Mitigation Planning, Land Use Planning, Smart Growth
Three Alternatives Considered (including No Action)			
<b>Alternatives:</b>	<b>Action</b>	<b>Estimated Cost</b>	<b>Evaluation</b>
	No Action	\$0	Current problem continues
	Municipalities perform and keep individual land inventories	\$100,000+	Potential for disconnect or mismanagement and does not allow for information sharing and relocation across municipal boundaries
	Conduct land analysis when need to relocate structure	N/A	Not cost effective or efficient, does not encourage relocation in a timely manner
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>			



Action Worksheet		
<b>Project Name:</b>	2021-Chenango County-009	
<b>Project Number:</b>	Housing Location/ Relocation Planning Initiative for Displaced Residents and Structures	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Relocation ensures safety of residents
Property Protection	1	
Cost-Effectiveness	1	Keeping a central location of buildable land is cost effective and efficient
Technical	1	County Planning has GIS capabilities
Political	1	
Legal	0	Needs owner approval
Fiscal	1	
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	All hazards
Timeline	1	
Agency Champion	1	County Planning & Development
Other Community Objectives	1	Hazard Mitigation Planning, Land Use Planning, Smart Growth
<b>Total</b>	13	
<b>Priority (High/Med/Low)</b>	High	



Action Worksheet			
<b>Project Name:</b>	2021-Chenango County-010		
<b>Project Number:</b>	River Streambank Stabilization		
Risk / Vulnerability			
<b>Hazard(s) of Concern:</b>	Severe Storm, Severe Winter Storm, Flood		
<b>Description of the Problem:</b>	Due to recent major flooding events in 2006, 2001, and December 2020, erosion is becoming a great concern for the county along riverbanks.		
Action or Project Intended for Implementation			
<b>Description of the Solution:</b>	The Chenango County Soil & Water Conservation District will work with relevant municipalities to address erosion and streambank stabilization concerns along the Susquehanna and Chenango Rivers and other streams, as reported. These projects will use environmentally sound methods to reduce erosion while not impacting fish and wildlife populations, while also ensuring that more land is not lost to erosion, especially in the Villages along the banks.		
<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 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)			
<b>Level of Protection:</b>	500-year flood	<b>Estimated Benefits (losses avoided):</b>	Increases viability of communities along the rivers
<b>Useful Life:</b>	30 years	<b>Goals Met:</b>	1, 2, 4, 6, 7
<b>Estimated Cost:</b>	Medium-High, Dependent on needs of riverbank	<b>Mitigation Action Type:</b>	Natural Systems Protection, Structure & Infrastructure Projects
Plan for Implementation			
<b>Prioritization:</b>	High	<b>Desired Timeframe for Implementation:</b>	To begin implementing erosion control projects as soon as funding is available
<b>Estimated Time Required for Project Implementation:</b>	1-2 years	<b>Potential Funding Sources:</b>	FEMA BRIC, FMA, NYSDEC, Municipal Budgets
<b>Responsible Organization:</b>	Chenango County Soil & Water Conservation District, Chenango County Planning & Development	<b>Local Planning Mechanisms to be Used in Implementation if any:</b>	Hazard Mitigation Planning, Watershed Protections
Three Alternatives Considered (including No Action)			
<b>Alternatives:</b>	<b>Action</b>	<b>Estimated Cost</b>	<b>Evaluation</b>
	No Action	\$0	Current problem continues
	Redirect riverbanks away from development	\$10M+	Not environmentally sound, there is much development along rivers, unfeasible
	Add levees/dams to rivers to reduce flooding	\$10M+	Will disrupt water flow and wildlife habitats, and drinking water supplies, unfeasible
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>			



Action Worksheet		
<b>Project Name:</b>	2021-Chenango County-010	
<b>Project Number:</b>	River Streambank Stabilization	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	Eliminates losses of land to erosion
Cost-Effectiveness	1	
Technical	0	May need engineering support
Political	1	
Legal	1	
Fiscal	0	
Environmental	0	Will take extra precautions to avoid environmental concerns
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm, Winter Storms, Ice Jams
Timeline	1	
Agency Champion	1	SWCD, Planning
Other Community Objectives	1	
<b>Total</b>	11	
<b>Priority (High/Med/Low)</b>	High	