



9.6 Town of Columbus

This section presents the jurisdictional annex for the Town of Columbus. 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 Columbus’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.

9.6.1 Hazard Mitigation Planning Team

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

Table 9.6-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Kevin Cross, Highway Superintendent 4340 State Hwy 80, Sherburne, NY 13460 607-847-8593 highway@columbus.us	Thomas Grace, Town Supervisor 4340 State Hwy 80, Sherburne, NY 13460 607-242-8957 graceforcolumbusny@gmail.com
NFIP Floodplain Administrator	
Steve Fox, Chenango County Code Enforcement 5 Court St. Norwich, NY 13815 607-337-1795 StevenF@co.chenango.ny.us	

9.6.2 Municipal Profile

The Town of Columbus is situated in the northeast corner of Chenango County. It is approximately 35 miles south of Utica and 35 miles west from Cooperstown, NY.

Columbus was established 1805. The first community in the United States to be so named. Most of the town is in agricultural use. Dairy farming is the main industry. Other industries are Chobani, Golden Artist’s Paint, Columbus Wood Working, and Edmunds Lumber Company.

The Town of Columbus 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.

According to the U.S. Census, the 2010 population for the Town of Columbus was 975. The estimated 2018 population was 903, a 7.4 percent decrease from the 2010 Census. Data from the 2018 U.S. Census American Community Survey indicate that 3.7 percent of the population is 5 years of age or younger and 16.7 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.6.3 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 9.6-2 summarizes recent and expected future development trends, including major



residential/commercial development and major infrastructure development. Figure 9.6-1 at the end of this annex illustrates the geographically-delineated hazard areas and the location of potential new development, where available.

Table 9.6-2. Recent and Expected Future Development

Type of Development	2015		2016		2017		2018		2019	
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										
None identified										
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years										
None identified										

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.6.4 Capability Assessment

The Town of Columbus 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 9.6.4). The Town of Columbus identified specific integration activities that will be incorporated into municipal procedures are included in the updated mitigation strategy. Appendix G provides 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 Town of Columbus and where hazard mitigation has been integrated.

Table 9.6-3. 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
Codes, Ordinances, & Requirements							
Building Code	Yes	The Uniform Code (19 NYCRR Parts 1219 to 1229) – Local Law #1 of 1987, Building Code and Code Enforcement Officer	Local, State	Handled by County – Code Enforcement Officer	Yes	Yes	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> <ul style="list-style-type: none"> Town of Columbus Local Law #1 of 1987, Building Code and Code Enforcement Officer. A local law authorizing the Town of Columbus to enforce the New York State Uniform Fire Prevention and Building Code by creating the position of Code Enforcement Officer and by designating all information associated with compliance to the administration of said code. No person, firm, corporation, association or other organization shall commence the erection, construction, enlargement, alteration, improvement, removal or demolition of any building or structure, except an agricultural building or structure, nor install heating equipment without having applied for and obtained a permit from the Code Enforcement Officer. 							
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>							
Subdivisions	Yes	Adopted 1996, amended 2001 – Local Law #1 of 2020, Subdivision Law	Local	Local Planning Board	No	Yes	N/A
<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> <ul style="list-style-type: none"> Town of Columbus, Local Law # 1 of 2020, Subdivision Law. It is the purpose of this law to provide for the orderly future growth and development of the Town of Columbus, and to maintain the safety, health and welfare of the population. The Planning Board of the Town of Columbus is authorized and empowered to approve subdivision plats showing lots, blocks or sites, with or without streets or highways. The Subdivision Plat must show the locations of wetlands and other significant environmental features (wells, surface water). The application shall include, a completed Part 1 of SEQRA Long EAF, a soil composite map, and results of Perc Tests. 							
Stormwater Management	Yes	Subdivision Regulations	Local, State	NYSDEC	Yes	No	-
<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</p>							





	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
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 NYSDEC permits required for any major construction projects							
Post-Disaster Recovery	Yes	Not Indicated	Local	Chenango County EMS	No	No	-
Comment:							
Real Estate Disclosure	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent	Yes	No	-
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	Not Indicated	Local	Not Indicated	No	No	-
Comment: In New York State, virtually all land use regulation, which is the primarily 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.							
Site Plan Review	Yes	General City Law s. 27-a, Town Law s. 247a, Village Law s. 7-725a – Local Law #1, 2014 Site Plan Review Law	Local	Local Planning Board	No	Yes	N/A
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. <ul style="list-style-type: none"> Town of Columbus Local Law# 1-2014 Site Plan Review Law. The Town Board of the Town of Columbus, New York does hereby ordain and enact the Town of Columbus Site Plan Review Law pursuant to the authority and provisions of Section 10 of the Municipal Home Rule Law and Section 274-a of the Town Law. It is the intent of this local law to ensure the optimum overall conservation, protection, preservation, development and use of the natural and man-related resources of the Town, by regulating land use activity within the Town through review and approval of site plans. The Planning Board's review of the site plan shall include, as appropriate; Adequacy of stormwater and drainage facilities; Adequacy, type and arrangement of trees, shrubs and other landscaping constituting a visual and/or noise buffer between the applicant's and adjoining lands, including the maximum retention of existing vegetation; and Special attention to the adequacy and impact of structures, roadways and landscaping in areas with susceptibility to ponding, flooding and/or erosion. 							
Environmental Protection	Yes	Title 6 NYCRR Part 617	State	Not Indicated	Yes	No	-
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	Yes	Adopted 4/1/1989, amended 11/1/2010	Federal, State, Local	Managed through MOU with County? – Code Enforcement Officer/Local Administrator	Yes - BFE+2 feet for all construction in the SFHA (residential and non-residential)	Yes	N/A
Comment: A community must adopt a Flood Damage Prevention Ordinance to participate in the National Flood Insurance Program. <ul style="list-style-type: none"> Town of Columbus Local Law #2, 1989. The Town Board of the Town of Columbus finds that the potential and/or actual damages from flooding and erosion may be a problem to the residents of the Town of Columbus 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: <ol style="list-style-type: none"> regulate uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging 							



	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>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.</p> <ul style="list-style-type: none"> The Code Enforcement Officer is hereby appointed Local Administrator to administer and implement this local law by granting or denying development permit applications in accordance with its provisions. A Development Permit shall be obtained before the start of construction or any other development within the area of special flood hazard as established in Section 3.2. New construction and substantial improvements of any resident or non-residential structure shall be elevated to or above the BFE The floodway is an extremely hazardous area due to high velocity flood waters carrying debris and posing additional threats from potential erosion forces. When floodway data is available for a particular site as provided by Section 4.3-2, all encroachments including fill, new construction, substantial improvements, and other development are prohibited within the limits of the floodway unless a technical evaluation demonstrates that such encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge. 							
Municipal Separate Storm Sewer System (MS4)	Yes	EPA Phase II Stormwater Rule	Federal	Not Indicated	Yes	No	-
<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	Not Indicated	Yes	No	-
<p>Comment: The development of the New York State Comprehensive Emergency Management Plan (CEMP) is required under NYS Executive Law, Article 2B.</p>							
Climate Change	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	Yes	Not Indicated	Local	Chenango County EMS	No	No	-
<p>Comment:</p>							
Disaster Reconstruction Ordinance	Yes	Not Indicated	Local	Chenango County EMS	No	No	-
<p>Comment:</p>							
Other	Yes	Local	-	-	-	-	-
<p>Comment:</p> <ul style="list-style-type: none"> Road Preservation Law – adopted 2012 Sanitary Code – adopted 1993 Refuse Disposal – adopted 1989 Right to Farm – adopted 1990 Salvage Yard Regulation – adopted 1996 Telecommunications – adopted 2009 Road Use Law – adopted 2012 Wind Power Facilities Law – adopted 2015 							
<p>Planning Documents</p>							
Comprehensive Plan	Yes	General City Law section 28a(3)(a); Town Law section	Local	Local Planning Board	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
		272-a(2)(a); Village Law section 7-722(2)(a) – Comprehensive Plan, 2/8/2007					
<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 Adopted 1996</p> <ul style="list-style-type: none"> The enactment of land use laws (commonly known as zoning) and regulations should be a goal of the Town in the near future. This is necessary to protect the residents, the Town, its tax base and environment. A major objective of the Town of Columbus is to maintain the rural character and natural environment so that it may be used and enjoyed by all the citizens of the Town. Land use policies should encourage practices designed to minimize runoff and erosion and discourage practices contrary to these goals such as building on slopes and/or clear cutting wood lands. The Town should adopt land use policies to promote the health of the watershed through the preservation and management of wetlands, forest, and open spaces. Local ordinances should be retained and enforced to prohibit the pollution of water, air or soil by toxic and/or noxious materials or conditions. 							
Capital Improvement Plan	Yes	General Municipal Law Section 99-g.	Local	Not Indicated	No	No	-
<p>Comment: A local government can decide to adopt its capital plan pursuant to General Municipal Law Section 99-g.</p>							
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	No	-	Local	-	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	Not Indicated	Local, State	NYSDEC	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	NYS Constitution - Article 9; Statute of Local Governments. Section 10 (7)	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	-	-



	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
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.							
Shoreline Management Plan	N/A	-	Local	-	Yes	-	-
Comment: Article 34, Environmental Conservation Law, Coastal Erosion Hazard Areas 6 NYCRR Part 505, Coastal Erosion Management Regulations							
Community Wildfire Protection Plan	No	-	Local	-	No	-	-
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.							
Forest Management Plan	No	-	Local	-	No	-	-
Comment:							
Transportation Plan	No	-	Local	-	No	-	-
Comment:							
Agriculture Plan	No	-	Local	-	Yes	-	-
Comment: Municipalities may develop agricultural and farmland protection plans, in cooperation with cooperative extension and other organizations, including local farmers.							
Other	No	-	Local	-	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	Yes	Not Indicated	County	Chenango County EMS	No	-	-
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	County	Chenango County Health Department	Yes	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
		Improvement Plan					
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:	Yes	Not Indicated	Local, State	Chenango County EMS	Yes	-	-
Comment: <ul style="list-style-type: none"> Emergency Response Plan – State Mandated 							

Table 9.6-4. Development and Permitting Capability

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

Administrative and Technical Capability

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

Table 9.6-5. 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	Not Indicated	-
Mutual aid agreements	Not Indicated	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	County Planning & Development County Highway Engineer
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 County Highway Engineer
Staff with expertise or training in benefit/cost analysis	Yes	Contract if necessary
Professionals trained in conducting damage assessments	No	-
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



Resources	Available? (Yes or No)	Department/ Agency/Position
		Department
NFIP Floodplain Administrator (FPA)	Yes	MOU with Chenango County NFIP Floodplain Administrator, Updated MOU
Surveyor(s)	Yes	County Highway Department, if available manpower
Emergency Manager	Yes	Chenango County Emergency Management Office in conjunction with New Berlin, Sherburne and W. Edmeston Fire Departments
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 Columbus.

Table 9.6-6. 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	Yes. Free for subdivision review and road prevention requirements.
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	-

Education and Outreach Capability

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

Table 9.6-7. 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?	No
Hazard mitigation information available on your website; if yes, describe	No
Social media for hazard mitigation education and outreach; if yes, briefly describe.	No



Indicate if your jurisdiction has the following resources	Yes/No; Please describe
Citizen boards or commissions that address issues related to hazard mitigation; if yes, briefly describe.	Not indicated
Other programs already in place that could be used to communicate hazard-related information; if yes, briefly describe.	Town of Columbus Quarterly Newsletter
Warning systems for hazard events; if yes, briefly describe.	Hyper-Reach/Notify Chenango
Natural disaster/safety programs in place for schools; if yes, briefly describe.	Not Indicated
Other	-

Community Classifications

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

Table 9.6-8. 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
Public Protection (ISO Fire Protection Classes 1 to 10)	No	NP	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 9.6-9. 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



Hazard	Adaptive Capacity (Capabilities) - High/Medium/Low*
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 Columbus.

Table 9.6-10. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# SRL Properties	# Policies in the 1% Flood Boundary
Town of Columbus	0	4	\$17,049	0	-	0

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 Columbus 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 Columbus has completed Community Assistance Visits (CAV), with the most recent visit completed in 1991.



Regulatory

The Town of Columbus's Flood Damage Prevention Ordinance (FDPO) was last updated in 1989. 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

- The Town is considering participating in incentive-based programs such as CRS.
- The Town has an annual program in place to increase culvert sizes, clean road side ditches, and open water discharge areas where possible. Additionally, the Town has re-routed Shawler Brook to minimize flooding along Hemlock Road and improved drainage at the intersection of County Route 25 and NYS Route 80.
- The Town supports and participates in all Federal, State and County-led programs intended to build local and regional mitigation and risk reduction capabilities, including workshops and trainings, public education and awareness, updates to NFIP flood mapping, and the development of plans and programs to meet the needs of vulnerable populations.

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

Evacuation routes are specific to hazard event and routes will vary according to the location and type of event. Residents should seek up-to-date information from the Chenango County Office of Emergency Management.

Sheltering

The Town Highway Garage can be used as a temporary shelter.

Temporary Housing

The Town of Columbus 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 Columbus 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.

9.6.5 Hazard Event History Specific to the Town of Columbus

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 Columbus'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 9.6-11 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 9.6-11. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
April 26, 2011	DR-1993	Yes	Flooding resulted in shoulder and road being washed out.	Damages to Town Roads
June 26, 2013	DR-4129	Yes	Flooding resulted in shoulder and road being washed out.	Damages to Town Roads
March 14, 2017	DR-4322	Yes	Winterstorm Stella	External wires damaged
October 31, 2019	DR-4472	Yes	Flooding resulted in shoulders, pipes, and roads to become washed out.	Damages to Town Roads

Notes:

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

9.6.6 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 Columbus’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 9.6-12. 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 Columbus. The Town of Columbus 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 Columbus indicated the following:

- Agreement with calculated rankings – no changes made

Table 9.6-13. 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	Low	Low	Medium	Medium	High	Medium	Medium

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

Identified Issues

The municipality has identified the following vulnerabilities within their community:

- Numerous roads and culverts have been damaged compromising the highway infrastructure.
- Creek banks have eroded resulting in loss of property from flooding and high water.

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

- No Response



9.6.7 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 9.6-14. 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	Level of Protection	
TCL-1 (Former TOC-3)	Continued improvement of drainage and maintenance	Flood, Severe storms	Town of Columbus, Town Highway Department	Continued improvement of drainage and maintenance along Town roadways. The Town has a general annual road maintenance program for the increasing of culvert sizes, cleaning of roadside ditches, and open water discharge areas where possible.	Ongoing Capability	-	-	It's part of the Town's day-to-day operations
						Damages Avoided; Evidence of Success	-	
TCL-2 (Former TOC-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.							
See above	All Hazards	Chenango County, as supported by relevant local department leads	See above	Ongoing Capability	Cost	-	It's part of the Town's day-to-day operations	
						Level of Protection		-
						Damages Avoided; Evidence of Success		-



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

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

Proposed Hazard Mitigation Initiatives for the Plan Update

The Town of Columbus 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 9.6-15 summarizes the comprehensive-range of specific mitigation initiatives the Town of Columbus 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 9.6-16 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan update.



Table 9.6-15. 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. Columbus-001	Walt Phillips Rd Culvert replacement	1, 2, 4	Flood, Severe Storm, Road Wash-Out	<p>Problem: The pipe currently in place on Walt Phillips Rd is too small to handle the spring runoff and any heavy rain events.</p> <p>Solution: The Town of Columbus will install an adequate pipe and wing walls for the amount of water that flows down the stream.</p>	No	No	1 month	Town of Columbus	\$85,000	It would save the road from being washed out	FEMA FMA, Bridge NY	High	SIP	SP
2021-T. Columbus-002	Button Rd Culvert replacement	1, 2, 3, 4	Flood, Severe Storm	<p>Problem: The pipe currently in place does not handle the spring run-off and any heavy rain events. We are consistently repairing the road due to the water overflow eroding the gravel from the road surface.</p> <p>Solution: A pipe large and wing walls large enough that allow enough water to flow through the pipe without overflowing onto the road surface is necessary to alleviate the problem.</p>	No	No	1 month	Town of Columbus	\$85,000	Loss of highway that would trap the residence who live above the pipe on the dead-end road	FEMA, CHIPS	High	SIP	SP

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 9.6-16. 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 Objectives	Total	High / Medium / Low
2021-T. Columbus-001	Walt Phillips Rd Culvert replacement	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2021-T. Columbus-002	Button Rd Culvert replacement	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High

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





9.6.8 Proposed Mitigation Action Types

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

Table 9.6-17. 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	
Harmful Algal Bloom										
Invasive Species										
Natural Gas										
Severe Storm		001, 002							001, 002	
Severe Winter Storm										
Wildfire										

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

9.6.9 Staff and Local Stakeholder Involvement in Annex Development

The Town of Columbus 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 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.

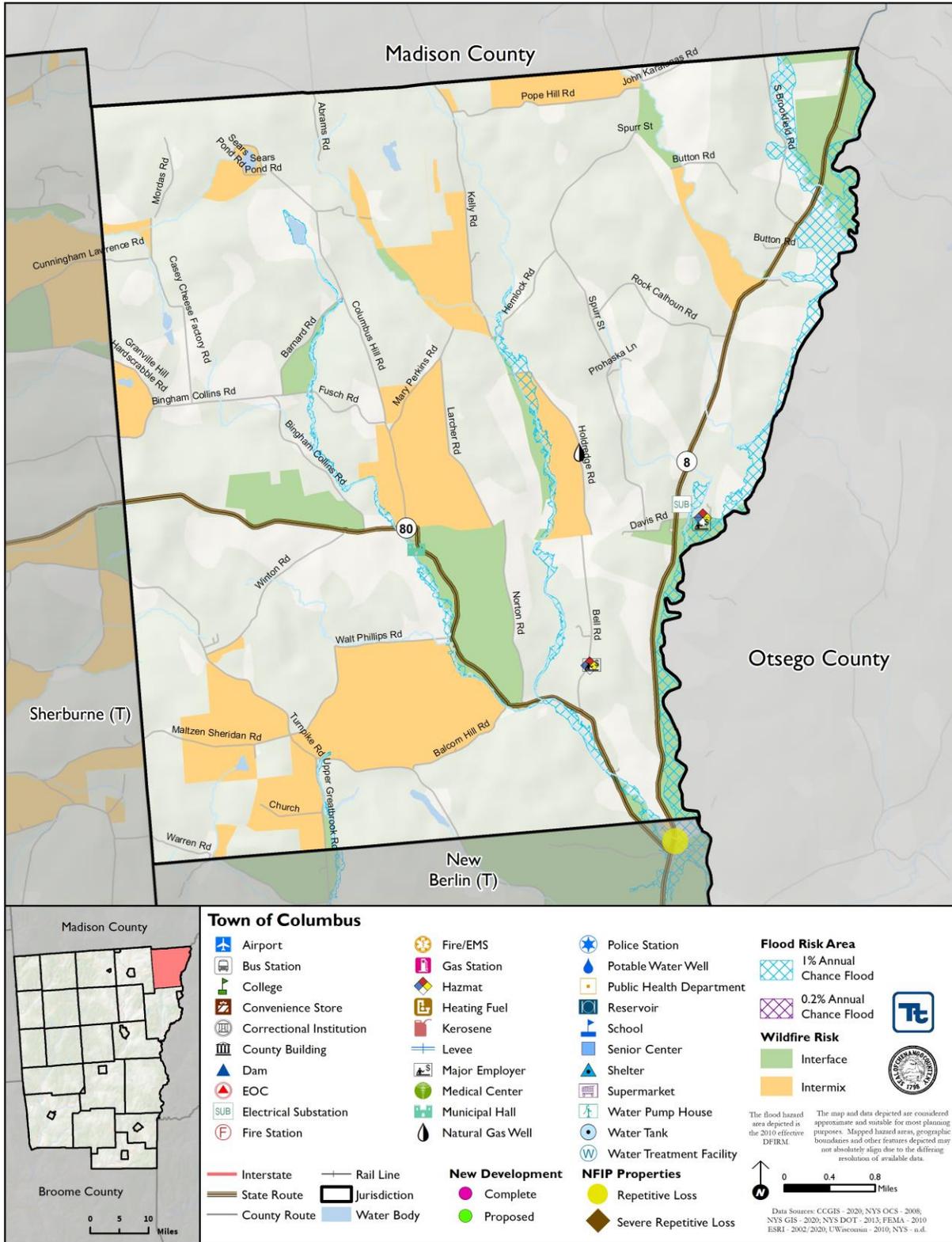
Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

9.6.10 Hazard Area Extent and Location

A hazard area extent and location map has been generated for the Town of Columbus 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 Columbus has significant exposure. The map is illustrated below.



Figure 9.6-1. Town of Columbus Hazard Area Extent and Location Map





Action Worksheet			
Project Name:	Walt Phillips Rd Culvert replacement		
Project Number:	2021-T. Columbus-001		
Risk / Vulnerability			
Hazard(s) of Concern:	Flooding and road wash out		
Description of the Problem:	The pipe currently in place on Walt Phillips Rd is too small to handle the spring run off and any heavy rain events		
Action or Project Intended for Implementation			
Description of the Solution:	We would like to install an adequate pipe and wing walls for the amount of water that flows down the stream		
Is this project related to a Critical Facility?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is the critical facility located in the 1% annual chance flood area?	<input type="checkbox"/>	<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:	Yes it floods the road annually	Estimated Benefits (losses avoided):	It would save the road from being washed out
Useful Life:	50 years	Goals Met:	1, 2, 4
Estimated Cost:	\$85,000	Mitigation Action Type:	SIP
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	6 months or less
Estimated Time Required for Project Implementation:	1 month	Potential Funding Sources:	FEMA
Responsible Organization:	Town of Columbus	Local Planning Mechanisms to be Used in Implementation if any:	DEC, Soil and Water, Highway Superintendent
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Replace culvert with bridge	N/A	Too expensive, not cost effective
	Relocate roadway	N/A	Walt Phillips Rd is a critical roadway for the Town and connects to highway – unfeasible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Walt Phillips Rd Culvert replacement	
Project Number:	2021-T. Columbus-001	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	If the pipe washes out the fire department and ambulances cannot get through. The road would be closed.
Property Protection	1	The highway would be washed out
Cost-Effectiveness	1	Replacing with a bridge would be far too expensive
Technical	1	Plans are in place for it to be done
Political	1	Many vehicles use the road daily
Legal	1	Yes, it is part of highway maintenance
Fiscal	1	This project would put a large stress on the local taxpayers without outside sources
Environmental	1	This is a certified trout stream. If the pipe is not replaced, it will muddy the water and the stream will fill with gravel
Social	1	Without completing the project, a large amount of traffic would get cut off including vehicle traffic and agricultural vehicles
Administrative	1	The highway department can complete the project
Multi-Hazard	1	Multiple, from vehicle traffic, environmental, and safety
Timeline	1	Should take 1 month
Agency Champion	1	The town board, community, and highway dept would like it completed
Other Community Objectives	1	Travel, commerce, and safety concerns would be addressed
Total	14	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Button Rd Culvert replacement		
Project Number:	2021-T. Columbus-002		
Risk / Vulnerability			
Hazard(s) of Concern:	Pipe failure and road wash out		
Description of the Problem:	The pipe currently in place does not handle the spring run-off and any heavy rain events. We are consistently repairing the road due to the water overflow eroding the gravel from the road surface.		
Action or Project Intended for Implementation			
Description of the Solution:	A pipe large and wing walls large enough that allow enough water to flow through the pipe without overflowing onto the road surface is necessary to alleviate the problem.		
Is this project related to a Critical Facility?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is the critical facility located in the 1% annual chance flood area?	<input type="checkbox"/>	<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):	Loss of highway that would trap the residence who live above the pipe on the dead-end road
Useful Life:	50 years	Goals Met:	1, 2, 3, 4
Estimated Cost:	85000.00	Mitigation Action Type:	SIP
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	6 months or less
Estimated Time Required for Project Implementation:	1 month	Potential Funding Sources:	FEMA, CHIPS
Responsible Organization:	Town of Columbus	Local Planning Mechanisms to be Used in Implementation if any:	DEC, Soil and Water, Highway Superintendent
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Replace culvert with bridge	N/A	Too expensive, not cost effective
	Relocate roadway	N/A	Would displace residents, not possible
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Button Rd Culvert replacement	
Project Number:	2021-T. Columbus-002	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	If the pipe fails it will trap residence with no way out of their homes
Property Protection	1	The road would be washed out, leaving no way for people to get out or emergency vehicles to gain access
Cost-Effectiveness	1	Very cost effective as being a dead-end road, there is no way for people to have access to their property
Technical	1	The pipe could be changed by the highway department
Political	1	There is support on the political level to improve the pipe
Legal	1	The highway dept has the responsibility to maintain the structure
Fiscal	1	The project would put the town taxpayers at a strain on our budget
Environmental	1	The pipe is located on a certified trout stream, it will muddy the water if it fails
Social	1	If the pipe fails, the two businesses on the road would not be able to operate
Administrative	1	The highway department could change the pipe or contract the work to be done
Multi-Hazard	1	Multiple travel interruption and environmental impacts
Timeline	1	Can be completed in 2 years
Agency Champion	1	The town officials and residents support highway improvements
Other Community Objectives	1	Business, travel, and safety concerns would be addressed
Total	14	
Priority (High/Med/Low)	High	