34. TOWN OF OTTO

This jurisdictional annex to the Cattaraugus County Hazard Mitigation Plan (HMP) provides information to assist public and private sectors in the Town of Otto with reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs; its focus is on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. The annex presents a general overview of Otto, describes who participated in the planning process, assesses Otto's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

34.1 HAZARD MITIGATION PLANNING TEAM

The Town of Otto identified primary and alternate HMP points of contact and developed this plan over the course of several months, with input from many Town departments. The Highway Superintendent represented the community on the Cattaraugus County HMP Planning Partnership and supported the local planning process 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.

Table 34-1 summarizes Town officials who participated in the development of the annex and in what capacity. Additional documentation of the Town's planning activities through Planning Partnership meetings is included in Volume I.

Table 34-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Robert Barber, Highway Superintendent Address: 8842 Otto-East Otto Road, Cattaraugus, New York, 14719 Phone Number: (716) 474-6746 Email: skeeterspete@aol.com	Name/Title: Paul Stang, Deputy Supervisor Address: 8842 Otto-East Otto Road, Cattaraugus, New York, 14719 Phone Number: (716) 801-2591 Email: Pastang62@gmail.com
National Flood Insurance Program Floodplain Administrator	
Name/Title: Jeff Hollar, Building Inspector Address: 8842 Otto-East Otto Road, Cattaraugus, New York, 14719 Phone Number: (716) 307-3069 Email: eastottoceo@gmail.com	
Additional Contributors	
Name/Title: Robert Barber, Superintendent of Highways Method of Participation: Provided updated information on hazard event history, NFIP, development permits.	
Name/Title: Ron Wasmund, Former Supervisor Method of Participation: Provided updated information on hazard event history, NFIP, development permits.	
Name/Title: Jeff Hollar, Code Enforcement Officer Method of Participation: Provided updated information on hazard event history, NFIP, development permits.	

34.2 COMMUNITY PROFILE

The Town of Otto lies in the northwest part of Cattaraugus County in western New York. The town has a total area of 41.6 square miles. It shares its northern border with Erie County and is bordered to the east by the Town of East

Otto, to the southeast by the Town of Mansfield, to the southwest by the Town of New Albion, and to the west by the Town of Persia. There is one hamlet, Otto, located within the Town of Otto. The South Branch Cattaraugus, Cattaraugus, and Mansfield Creeks flow through the town.

Research has shown that some populations are at greater risk from hazard events because of decreased resources or physical abilities. These populations can be more susceptible to hazard events based on a number of factors including their physical and financial ability to react or respond during a hazard, and the location and construction quality of their housing. Data from the 2022 5-Year American Community Survey indicates that 1.4 percent of the population is 5 years of age or younger, 29.6 percent is 65 years of age or older, 0.9 percent is non-English speaking, 6.3 percent is below the poverty threshold, and 20.5 percent is considered disabled.

34.3 JURISDICTIONAL CAPABILITY ASSESSMENT AND INTEGRATION

Otto performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume I describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment for this annex includes analyses of the following:

- Planning and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into day-to-day local government operations. As part of the hazard mitigation analysis, planning and /policy documents were reviewed and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. Development of an updated mitigation strategy provided an opportunity for Otto to identify opportunities for integrating mitigation concepts into ongoing Town procedures.

34.3.1 Planning and Regulatory Capability and Integration

Table 34-2 summarizes the planning and regulatory tools that are available to Otto.

Table 34-2. Planning and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
CODES, ORDINANCES, & REGULATIONS				
Building Code	Yes	Local Law #1, 2020, New York State Uniform Fire Prevention and Building Code	State and Local	Building Inspector
How has or will this be integrated with the HMP and how does this reduce risk?				

	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
This chapter provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) in this Town. This chapter is adopted pursuant to Section 10 of the Municipal Home Ruie Law. Except as otherwise provided in the Uniform Code, other state law, or other section of this chapter, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions of this chapter.				
Zoning/Land Use Code	Yes	Zoning Code, 2018	Local	Building Inspector
How has or will this be integrated with the HMP and how does this reduce risk? It is the purpose of this law to promote the public health, safety and general welfare. Specifically, the purpose of this law is: 1. To retain the unique community character of the Town of Otto as a rural, agriculturally based community, while at the same time providing opportunities for compatible development. 2. To secure safety for its residents from flood, fire and other dangers, both natural and manmade. 3. To provide adequate light and air. 4. To prevent the overcrowding of land and to avoid undue concentration of population. 5. To prevent congestion on the streets and roadways in the Town. 6. To facilitate the adequate provision of transportation, water, sewerage, schools, parks, and other public requirements. 7. To accommodate solar energy systems equipment and access to sunlight necessary, therefore. 8. To implement the broad guidelines contained in the document, Vision 2020, which has been adopted by the Town Board of the Town of Otto as a policy for future development of the Town through the year 2020. 9. To accommodate wind energy systems equipment and access to wind necessary, therefore. 10. To accommodate Electrical Vehicle Supply Equipment (EVSE).				
Subdivision Code	Yes	Zoning Code, 2018	Local	Zoning Board of Adjustment
How has or will this be integrated with the HMP and how does this reduce risk? Empowers local authoritative body to approve plats showing lots, blocks or sites, with or without streets or highways, to approve the development of entirely or partially undeveloped plats already filed and to approve preliminary plats within jurisdictional boundaries. This ensures that all approved plats for land development fall within local rules and regulations for environmental preservation, building code standards and wildfire protection ordinances.				
Site Plan Code	Yes	Zoning Code, 2018; Article 8: Site Plan Review	Local	Planning Board
How has or will this be integrated with the HMP and how does this reduce risk? The purpose of this article is to ensure that any new development in the Town of Otto is in harmony with the current rural character of the town and that new development meets the guidelines for development laid out in Vision 2020. An additional purpose is to evaluate site plans in order to minimize conflicts between a proposed development and neighboring existing uses and natural features of the site; this will minimize any potential adverse effects to the health, safety, and general welfare of the Town of Otto.				
Stormwater Management Code	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Post-Disaster Recovery/ Reconstruction Code	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Real Estate Disclosure Requirements	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent
How has or will this be integrated with the HMP and how does this reduce risk? 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				

	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
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	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Environmental Protection Ordinance(s)	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Flood Damage Prevention Ordinance	Yes	Local Law #1, 1988 – Flood Damage Prevention	Federal, State, County and Local	Building Inspector
How has or will this be integrated with the HMP and how does this reduce risk? Promotes public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas. A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards or which result in damaging increases in erosion or in flood heights or velocities. B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction. C. Control the alteration of natural floodplains, stream channels and natural protective barriers which are involved in the accommodation of floodwaters. D. Control filling, grading, dredging and other development which may increase erosion or flood damages. E. Regulate the construction of flood barriers which will unnaturally divert floodwaters, or which may increase flood hazards to other lands. F. Qualify for and maintain participation in the National Flood Insurance Program.				
Wellhead Protection	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Emergency Management Ordinance	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Climate Change Ordinance	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Other	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
PLANNING DOCUMENTS				
General/Comprehensive Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Capital Improvement Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				

	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
Disaster Debris Management Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Floodplain Management or Watershed Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Stormwater Management Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Open Space Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Urban Water Management Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Habitat Conservation Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Economic Development Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Community Wildfire Protection Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Community Forest Management Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Transportation Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Agriculture Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Climate Action/ Resilience/Sustainability Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Tourism Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				

	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
Business/ Downtown Development Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Other	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
RESPONSE/RECOVERY PLANNING				
Comprehensive Emergency Management Plan	Yes	Comprehensive Emergency Management Plan (CEMP)	County	OES
How has or will this be integrated with the HMP and how does this reduce risk? The CEMP defines the scope of preparedness and emergency management activities necessary in the County. This document assigns responsibility to organizations and individuals for carrying out specific actions that exceed routine responsibility at projected times and places during an emergency; sets lines of authority and organizational relationships and shows how all actions will be coordinated; identifies how people and property are protected; and identifies personnel, equipment, facilities, supplies, and other resources available within the jurisdiction or by agreement with other jurisdictions.				
Continuity of Operations Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Substantial Damage Response Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Threat and Hazard Identification and Risk Assessment	Yes	Threat & Hazard Identification & Risk Assessment (THIRA)	County	OES
How has or will this be integrated with the HMP and how does this reduce risk? The Threat and Hazard Identification and Risk Assessment (THIRA) is a three-step risk assessment process that helps the County understand its risks to natural, technological, and human-caused hazards and what must be done to address those risks.				
Post-Disaster Recovery Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Public Health Plan	Yes	Health Department Strategic Plan 2022–2025	County	Health Department
How has or will this be integrated with the HMP and how does this reduce risk? The Cattaraugus County Health Department's (CCHD) Strategic Planning Process began in April 2022 using the resources of the New York State Department of Health NYS Public Health Corp Fellows. As a part of this process, the fellows reviewed the 2018–2021 strategic plan for past successes and failures and discussed what was needed for future success. Both an external assessment, in which county demographic data, economic factors, health outcomes, and community health assessment findings that have the potential to affect the agency and strategies were examined, and an internal assessment of a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis was completed.				
Other: Community Needs Assessment and Community Health Improvement Plan	Yes	Community Needs Assessment and Community Health Improvement Plan	County	Health Department
How has or will this be integrated with the HMP and how does this reduce risk?				

	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
The 2022–2024 OGH/BRMC Community Service Plan (CSP) and the CCHD's Community Health Assessment and Community Health Improvement Plan (CHA-CHIP) were conducted to identify significant health needs as outlined by the New York State Department of Health's 2022–2024 Prevention Agenda, where applicable. It also provides critical information OGH/BRMC, the CCHD, and others in a position to make a positive impact on the health of the region's residents. The CSP/CHA-CHIP enables the health department, hospital, and other community partners to strategically establish priorities, develop interventions, and direct resources to improve the health of residents living in the service area. The CSP/CHA-CHIP includes a detailed examination of priority areas identified in the NYS Prevention Agenda: (1) prevent chronic diseases; (2) promote a healthy and safe environment; (3) promote healthy women, infants and children; (4) promote well-being and prevent mental health and substance use disorders; and (5) prevent communicable diseases. The Prevention Agenda is a six-year effort to make New York the healthiest state. Developed in collaboration with 140 organizations, the plan identifies New York's most urgent health concerns, and suggests ways local health departments, hospitals, and partners from health, business, education, and community organizations can work together to solve them.				

34.3.2 Development and Permitting Capability

Table 34-3 summarizes the capabilities of Otto to oversee and track development.

Table 34-3. Development and Permitting Capability

	Yes/No	Comment
Do you issue development permits? • If you issue development permits, what department is responsible? • If you do not issue development permits, what is your process for tracking new development?	Yes	Code Enforcement
Are permits tracked by hazard area? (For example, floodplain development permits.)	Yes	Town of Otto Zoning, Special Use Permits
Do you have a buildable land inventory? • If you have a buildable land inventory, please describe	No	-
Describe the level of buildout in your jurisdiction.	N/A	There are areas in the Town which may be developed in the future.

34.3.3 Administrative and Technical Capability

Table 34-4 summarizes potential staff and personnel resources available to Otto and their current responsibilities that contribute to hazard mitigation.

Table 34-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comment (available staff, responsibilities, support of hazard mitigation)
ADMINISTRATIVE CAPABILITY		
Planning Board	Yes	The Planning Board makes recommendations to the Town Board regulations relating to any subject matter over which

Resources	Available? (Yes/No)	Comment (available staff, responsibilities, support of hazard mitigation)
		the Planning Board has jurisdiction; reviews and makes recommendations on any proposed Town comprehensive plan or amendments; has the authority to make investigations, maps, reports and recommendations relating to the planning and development of the Town; reviews all applications for special use permits, site plan review, master plan developments and amendments to the zoning ordinance; reviews all applications for subdivisions under the provisions of the Town subdivision regulations; has the authority to review and make recommendations on any other matters referred to it by the Town Board.
Zoning Board of Adjustment	Yes	With due consideration for the purpose and intent of this Zoning Law, and without limiting the powers with which the Board is vested, the Zoning Board of Appeals shall have the power and authority to hear and determine appeals from and review any order, requirement, decision or determination made by the Building Inspector charged with the enforcement of this Code. The Board may reverse or affirm, wholly or partly, or may modify the order, requirement, decision, interpretation or determination appealed from and may make such order, requirement, decision, or determination as ought to be made and to that end shall have all the powers of the Building Inspector; hold a public hearing and approve or deny each application for a use or area variance; revoke any decision to grant a variance after a public hearing, if the owner/applicant fails to comply with any conditions of approval of the original application.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	The Highway Department maintains the Town roads and grounds.
Construction/Building/Code Enforcement Department	Yes	Building Inspector enforces the construction code and administers the NFIP.
Emergency Management/Public Safety Department	Yes	Fire Department, emergency manager supplied by County
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Local Highway Department
Mutual aid agreements	Yes	Cattaraugus County, NYSDOT
Human Resources Manual - Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk?	No	-
Other	No	-

Resources	Available? (Yes/No)	Comment (available staff, responsibilities, support of hazard mitigation)
TECHNICAL/STAFFING CAPABILITY		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	Yes	Superintendent of Highways, Code Enforcement Officer
Personnel skilled or trained in GIS and/or Hazus applications	No	-
Staff that work with socially vulnerable populations or underserved communities	No	-
Environmental scientists familiar with natural hazards	No	-
Surveyors	No	-
Emergency manager	No	-
Grant writers	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

34.3.4 Fiscal Capability

Table 34-5 summarizes financial resources available to Otto.

Table 34-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community Development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvement project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas, or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Withhold public expenditures in hazard-prone areas	No
Other federal or state funding programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Yes

34.3.5 Education and Outreach Capability

Table 34-6 summarizes the education and outreach resources available to Otto.

Table 34-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment
Public information officer or communications office	Yes	
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	No	-
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	Yes	Reverse 911, NY Alert, Everbridge, IPAWS, County Administrator
Natural disaster/safety programs in place for schools	Yes	
Organizations that conduct outreach to socially vulnerable populations and underserved populations	No	-
Public outreach mechanisms / programs to inform citizens on natural hazards, risk, and ways to protect themselves during such events	No	-

34.3.6 Community Classifications

Table 34-7 summarizes classifications for community programs available to Otto.

Table 34-7. Community Classifications

Program	Participating? (Yes/No)	Classification	Date Classified
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
National Weather Service StormReady Certification	No	-	-
Firewise Communities classification	No	-	-
New York State Climate Smart Communities	No	-	-
Other: Organizations with mitigation focus (advocacy group, non-government)	No	-	-

N/A = Not applicable

— = *Unavailable*

34.3.7 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 2022). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. Table 34-8 summarizes the adaptive capacity for each identified hazard of concern and the Town’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement

Table 34-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak
Flood	Moderate
Landslide	Moderate
Pandemic	Moderate
Severe Storm	Moderate
Severe Winter Weather	Moderate
Utility Interruption	Moderate
Wildfire	Moderate
Flood	Moderate

34.4 NATIONAL FLOOD INSURANCE PROGRAM COMPLIANCE

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The floodplain administrator listed in Table 34-1 is responsible for maintaining this information.

34.4.1 NFIP Statistics

Table 34-9 summarizes the NFIP policy and claim statistics for Otto.

Table 34-9. Otto NFIP Summary of Policy and Claim Statistics

# Policies	0
# Claims (Losses)	0
Total Loss Payments	$0.00
# Repetitive Loss Properties (NFIP definition)	0
# Repetitive Loss Properties (FMA definition)	0
# Severe Repetitive Loss Properties	0

NFIP Definition of Repetitive Loss: The NFIP defines a repetitive loss property as any insurable building for which two or more claims of more than $1,000 were paid by the NFIP within any rolling 10-year period since 1978.

FMA Definition of Repetitive Loss: FEMA's Flood Mitigation Assistance (FMA) program defines a repetitive loss property as any insurable building that has incurred flood-related damage on two occasions, in which the cost of the repair, on average, equaled or exceeded 25 percent of the market value of the structure at the time of each such flood event.

Definition of Severe Repetitive Loss: A residential property covered under an NFIP flood insurance policy and: (a) That has at least four NFIP claim payments over $5,000 each, and the cumulative amount of such claims payments exceeds $20,000; or (b) For which at least two separate claims payments have been made with the cumulative amount of the building portion of such claims exceeding the market value of the building. At least two of the claims must have occurred within any 10-year period, more than 10 days apart.

Source: FEMA 2024

34.4.2 Flood Vulnerability Summary

Table 34-10 provides a summary of the NFIP program in Otto.

Table 34-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction.	Colvin Road, Traffic Street at Harvey Road, Zoar Valley North Otto Road, Thompson Road at Town line. These are just roads.
Do you maintain a list of properties that have been damaged by flooding?	No list of private properties.
Do you maintain a list of property owners interested in flood mitigation?	No known list, possible 8148 South Hill Road due to land slide.
How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)?	Possibly 8191 South Hill Road for basement flooding. 8842 Otto-East Otto Road Town of Otto, Salt shed and land acquisition.
Are any RiskMAP projects currently underway in your jurisdiction? If so, state what projects are underway.	No known projects.
How do you make Substantial Damage determinations?	Highway Department estimates damages, reports to County Emergency Services.
How many Substantial Damage determinations were declared for recent flood events in your jurisdiction?	Last declaration that effected Otto was 2015-16.
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? If there are mitigation properties, how were the projects funded?	No personal properties, ditches and embankments.
Do your flood hazard maps adequately address the flood risk within your jurisdiction? If not, state why.	No, nothing current on mapping.
NFIP Compliance	
What local department is responsible for floodplain management?	Building Inspector
Are any certified floodplain managers on staff in your jurisdiction?	No, lack of available training to become certified.

NFIP Topic	Comments
Do you have access to resources to determine possible future flooding conditions from climate change?	Yes, Cattaraugus County GIS Coordinator.
Does your floodplain management staff need any assistance or training to support its floodplain management program? If so, what type of assistance/training is needed?	Yes, no training available, funding for trainings, no local courses.
Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability)	Do not allow development in flood plains, evaluation and permitting necessary, need signage for education outreach at Otto Firehall, would support whole Town.
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	Code Enforcement and Insurance Adjuster
What are the barriers to running an effective NFIP program in the community, if any?	Funding, staffing, and training
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? If so, state the violations.	Not aware of any.
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	CAC: February 2, 2007 CAV: Not applicable
What is the local law number or municipal code of your flood damage prevention ordinance?	Local Law #1, 1988 – Flood Damage Prevention
What is the date that your flood damage prevention ordinance was last amended?	June 29, 1988
Does your floodplain management program meet or exceed minimum requirements? If exceeds, in what ways?	Meets requirements.
Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	Do not allow the building in flood plains.
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	No plan on joining, lack of staffing, not enough loss.

34.5 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 appreciating a jurisdiction's overall risk to its hazards of concern. Recent and expected future development trends, including major residential/commercial development and major infrastructure development, are summarized in Table 34-11 through Table 34-13.

Table 34-11. Number of Building Permits for New Construction Issued Since the Previous HMP

	New Construction Permits Issued			
	Single Family	Multi-Family	Other (commercial, mixed-use, etc.)	Total
2019				
Total Permits	2	0	19	21
Permits within SFHA	0	0	0	0
2020				

	New Construction Permits Issued			
	Single Family	Multi-Family	Other (commercial, mixed-use, etc.)	Total
Total Permits	0	0	15	15
Permits within SFHA	0	0	0	0
2021				
Total Permits	5	0	15	20
Permits within SFHA	0	0	0	0
2022				
Total Permits	2	0	11	13
Permits within SFHA	0	0	0	0
2023				
Total Permits	3	0	13	16
Permits within SFHA	0	0	0	0
2024				
Total Permits	0	0	0	0
Permits within SFHA	0	0	0	0

SFHA = Special Flood Hazard Area (1% flood event)

Table 34-12. Recent Major Development and Infrastructure from 2019 to Present

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zones*	Description / Status of Development
The Town did not indicate any recent major development or infrastructure occurred between 2019 to present.					

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

Table 34-13. Known or Anticipated Major Development and Infrastructure in the Next Five Years

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zones*	Description / Status of Development
North Otto Road	Storm sewer Drainage	1	CR12 going North 900 feet	Poor drainage, water crossing road, freezes in winter	Cattaraugus County Road and job

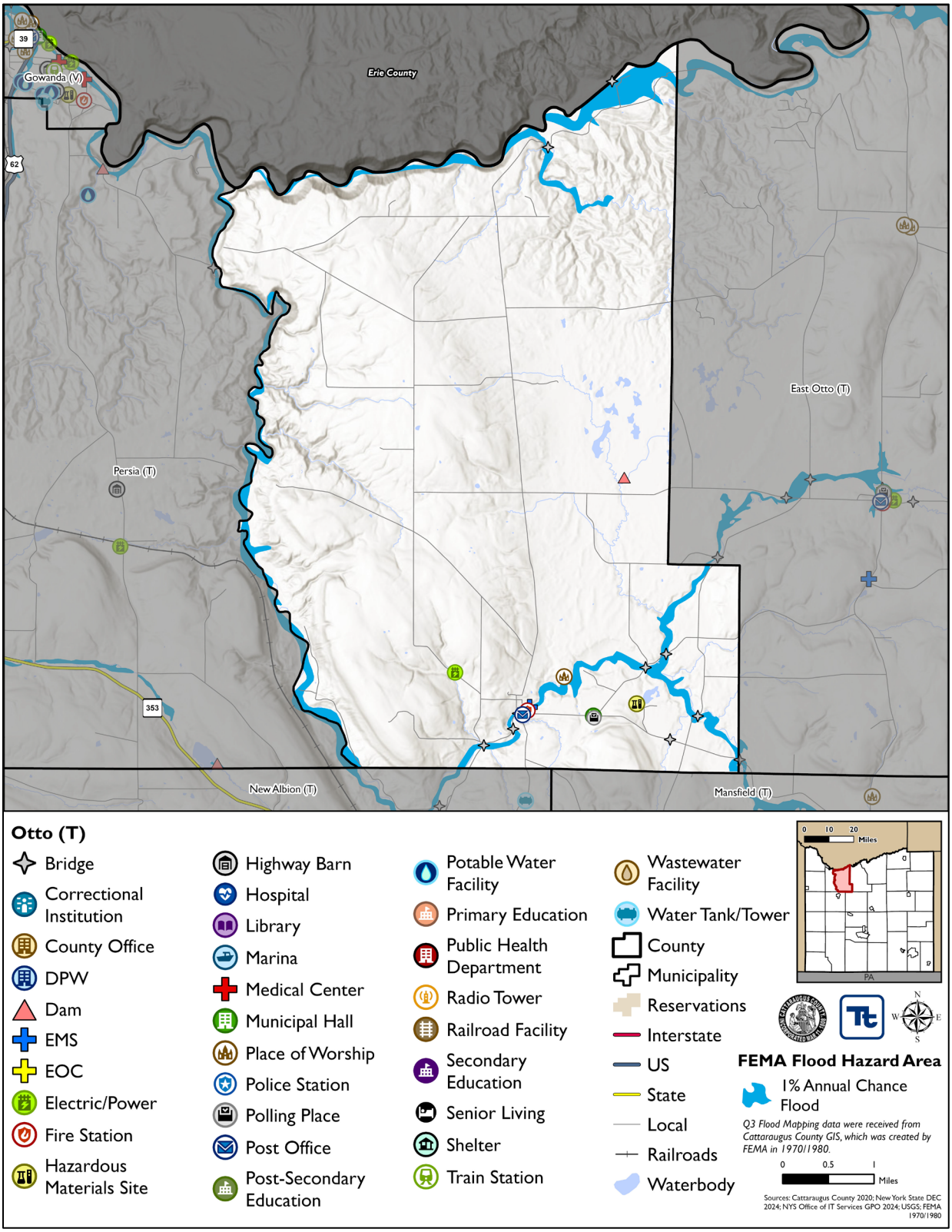
34.6 JURISDICTIONAL RISK ASSESSMENT

The hazard profiles in Volume I provide detailed information regarding each planning partner's vulnerability to the identified hazards, including summaries of Otto's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

34.6.1 Hazard Area

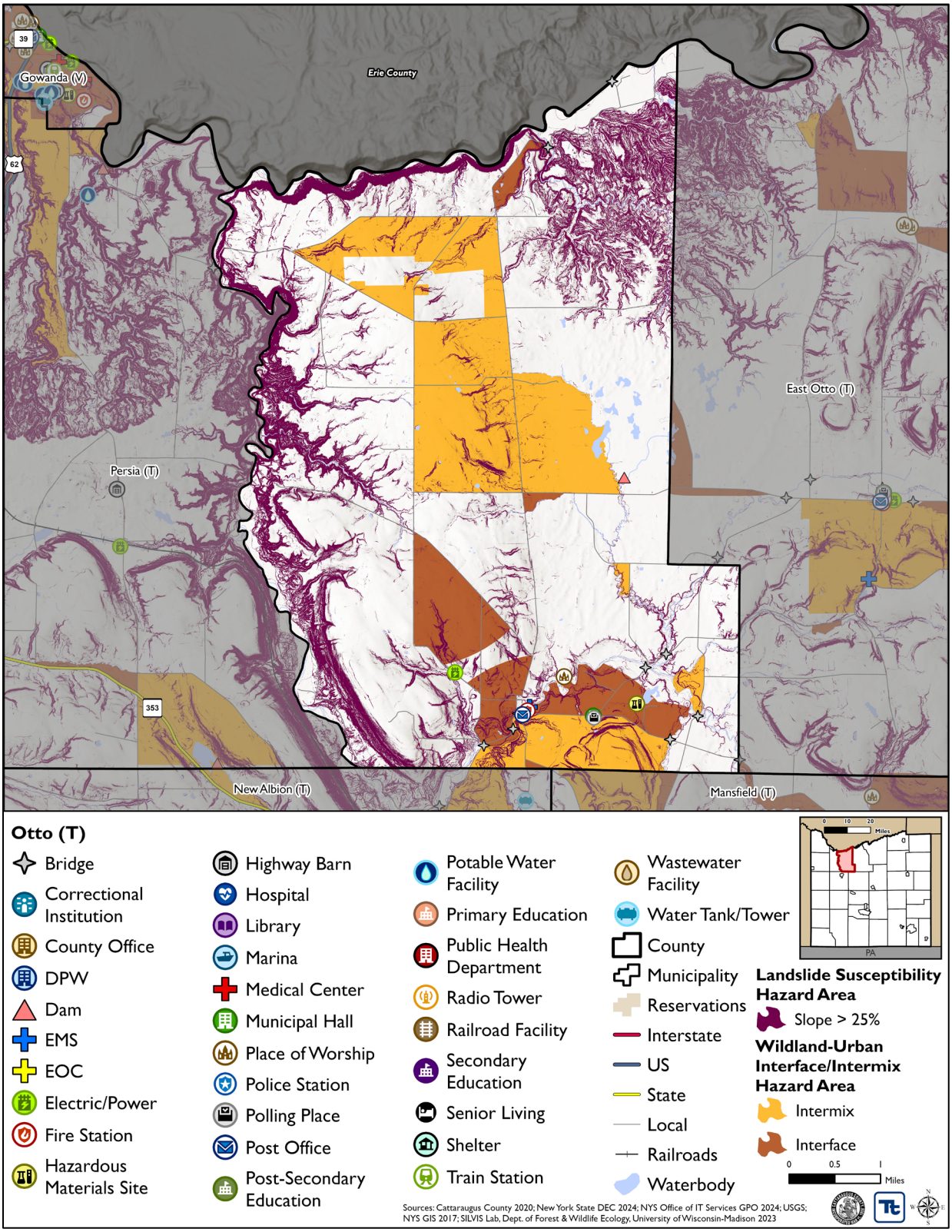
Hazard area maps provided below illustrate the probable hazard areas impacted within the Town are shown in Figure 34-1 through Figure 34-2. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Otto has significant exposure. The maps show the location of potential new development, where available.

Figure 34-1. Otto Flood Hazard Area Extent and Location Map



Note: The shown flood hazard area is limited to the FEMA-defined flood hazard areas. Areas of localized flooding are not reflected in the above Figure.

Figure 34-2. Otto Landslide and Wildfire Hazard Area Extent and Location Map



34.6.2 Hazard Event History

The history of natural and non-natural hazard events in Otto is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 34-14 provides details on loss and damage in Otto during hazard events since the last hazard mitigation plan update.

Table 34-14. Hazard Event History in Otto

Dates of Event	Event Type (Disaster Declaration)	County Designated?	Summary of Event	Summary of Damage and Losses in Otto
October 31-November 1, 2019	DR-4472	No	Severe Storms, Straight-Line Winds, and Flooding	The Town experienced minor damages, minimal trees down.
March 13, 2020	EM-3434 DR-4480	Yes	COVID-19 Pandemic	The Town had quarantined personnel, stay at home for 1 week
January 12, 2020	High Wind	N/A	High wind	The Town experienced minor damages
July 16, 2020	Thunderstorm Wind	N/A	Trees and wires were reported down in Gowanda.	The Town experienced minor damages, couple trees across roads.
July 19, 2020	Thunderstorm Wind	N/A	Multiple reports of trees down around Gowanda, Ashville Bay, Napoli and Portville.	The Town did not incur any documented damages or losses.
August 15, 2020	Flash Flood	N/A	Marble Road and Potter Road in Lime Lake were reported to be washed out by law enforcement.	The Town did not incur any documented damages or losses.
September 7, 2020	Thunderstorm Wind	N/A	Property damage in Olean.	The Town did not incur any documented damages or losses.
November 15, 2020	High Wind	N/A	Property damage throughout Cattaraugus County.	The Town had several trees on roadways, no major problems
July 13, 2021	Thunderstorm Wind	N/A	Several reports were received of trees down, trees on cars, trees on houses, and powerlines down in Salamanca, Olean, and Allegany.	The Town did not incur any documented damages or losses.
December 11, 2021	High Wind	N/A	Dozens of reports of trees and powerlines down were received.	The Town had several small trees down.
March 6, 2022	High Wind	N/A	High wind	The Town had limbs down.
July 24, 2022	Thunderstorm Wind	N/A	Trees and powerlines reported down in East Otto, Randolph, and South Dayton.	The Town did not incur any documented damages or losses.

Dates of Event	Event Type (Disaster Declaration)	County Designated?	Summary of Event	Summary of Damage and Losses in Otto
November 20, 2022	EM-3589	Yes	Severe Winter Storm and Snowstorm	The Town experienced a typical Snowstorm, no major overtime or extra plowing necessary.
January 11, 2024	Power Failure	N/A	Lost electric for several days, lack of backup power, stand by generator needed	The Sewer Plant and Highway Dept. lost power for several days. Threat to Cattaraugus Creek on sanitary waste overflow and trucks blocked in the garage, no heat, trucks freezing up, can't maintain roads properly in winter when events occur.

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

34.6.3 Hazard Ranking and Vulnerabilities

The hazard profiles in Volume I have detailed information regarding each planning partner's vulnerability to the identified hazards. The following presents key risk assessment results for Otto.

Hazard Ranking

The participating jurisdictions have differing degrees of vulnerability to the hazards of concern, so each jurisdiction ranked its own degree of risk to each hazard. The community-specific hazard ranking is based on problems and impacts identified by the risk assessment presented in Volume I. The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard; and changing future climate conditions. Otto reviewed the County hazard ranking and individual results to assess the relative risk of the hazards of concern to the community. During the review of the hazard ranking, the Town agreed with the preliminary rankings.

Table 34-15 shows Otto's final hazard rankings for identified hazards of concern. Mitigation action development uses the ranking to target hazards with the highest risk.

Table 34-15. Hazard Ranking

Hazard	Rank
Dam and Levee Failure	Medium
Flood	Medium
Landslide	High
Pandemic	Medium
Severe Storm	High
Severe Winter Storm	High

Hazard	Rank
Utility Failure	Medium
Wildfire	Medium

Note: The scale is based on the hazard rankings established in Volume I, modified as appropriate based on review by the jurisdiction

Critical Facilities

Table 34-16 identifies critical facilities in the community located in the 1 percent and 0.2 percent annual chance floodplains.

Table 34-16. Critical Facilities Flood Vulnerability

Name	Type	Vulnerability		Addressed by Proposed Action	Already Protected to 0.2% Flood Level (describe protections)
		1% Event	0.2% Event		
Otto 01	Bridge	X	-	2025-OttoT-15	-
Otto 02	Bridge	X	-	2025-OttoT-15	-
Otto 03	Bridge	X	-	2025-OttoT-15	-
Otto 04	Bridge	X	-	2025-OttoT-15	-
Otto 07	Bridge	X	-	2025-OttoT-15	-
Otto Fire Department	EMS	X	-	2025-OttoT-01	-

Source: Cattaraugus County 2024

34.6.4 Identified Issues

After a review of Otto's hazard event history, hazard rankings, hazard location, and current capabilities, Otto identified the following vulnerabilities within the community:

- The Otto Fire Department is located in the special flood hazard area and may be vulnerable to flooding. Critical facilities must be protected to the 0.2% annual chance flood level.
- Open air storage of salt and sand leads to loss of materials from erosion and leaching. These materials exposed to heavy rains, snowfalls, and flooding conditions negatively impacts the environment and disrupts natural ecosystems. The loss of materials can result in the reduction in effectiveness of mitigating impacts from severe winter storms, as salt and sand is utilized to minimize potential risks on roadways, including ice and snow.
- Critical facilities require backup power to ensure continuity of operations. The Sewer Plant, Water Plant, and Town Hall, do not have back up power, which could impact the continuity of operations at the facilities in the event of a utility or power failure. High winds associated with severe storms and severe winter storms are known to cause utility failures, which would impact the continuity of operations at both critical facilities. Rising water levels from floods could impact these facilities; back-up generators would permit any influx of water to be removed from the facilities via pumping systems.
- Undersized culverts often result in the flooding of roadways due to the inability to handle the influx of water. Debris build-up in these undersized pipes may also result in water back-flow, leading to further roadway flooding instances and impacting the integrity of the culverts. Several culverts in the Town are undersized

or have been damaged from instances of flooding and the debris caused by severe storms and severe winter winters including culverts located on the following roads:

- Traffic Street at Harver Road
- Scotts Corners Road at King Wolfs
- Skinner Hollow Road
- Gibson Hill Road (two locations)
- Dake Hill at Gibson Hill Road
- North Otto Road at Wickham Road

The undersized drainage pipe on North Otto Road is on private property. Flooding is caused from farmers diversion ditch being full of sediments and trees allowing water to drain to the Cattaraugus Creek.

- The intersection of Dake Hill Road, Gibson Hill Road, and Hebner Hill Road have sight distance issues which leads to dangerous conditions during severe winter storms and heavy rainfalls associated with severe storms by reducing visibility.
- Landslide events are often driven by hazards such as heavy rain events, flooding, heavy snowmelt, and wildfires. Landslides can destroy the natural and built environments, causing detriment to the structures in its path. South Hill Road, Skinner Hollow Road, and Dunkleman Hill Road are prone to landslides. Landslides may be able to be mitigated by cutting banks to prevent erosion.
- The Town has an outdated Comprehensive Emergency Management Plan (CEMP). Hazard mitigation principles need to be integrated into the CEMP. A CEMP establishes the overall authority, roles, and functions performed during incidents. Incorporating hazard mitigation principles into a CEMP ensures hazard risk is identified.
- The current flood damage prevention ordinance does not include the 2-foot mandated NYS freeboard requirements. While the existing ordinance may be compliant with NFIP requirements, State requirements which exceed NFIP requirements must be adhered to.
- Floodplain managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties. Training is sorely needed for all municipal officials and for code enforcement officials in charge of municipalities. Very little zoning precludes homeowners from building in floodplains, leading to problems later.
- The Town faces risk from wildfires but does not have a comprehensive education and outreach program to educate residents and businesses about hazard mitigation, preparation, response, and recovery utilizing a variety of outreach methods. The Town does not currently have hazard mitigation information and outreach on the Town website.
- Following emergency events, individuals may be unable to stay in their places of residence due to storm damages. Flooding from dam and levee failures can cause residences to become uninhabitable; wildfires and landslides can compromise the integrity of the structure; and severe storms and severe winter storms can lead to utility failures. The Town needs to identify locations for the placement of temporary sheltering. The Town will investigate the use of the school, highway garage, and local churches as potential locations.
- Flood prone roads not only interrupt the movement of persons and goods but can lead to isolation issues where first responders are unable to reach their destination and cause evacuation routes to be inaccessible. Flooded road ways may be caused by debris in culverts from severe storms and severe winter storms. There are multiple roads in Town which may benefit from flood mitigation strategies, such as the elevation of the roadways or the hardening of the infrastructure surrounding them to reduce likelihood of flooding including:

  - North Otto Road
  - Colvin Road
  - Traffic Street
  - Harvey Road
  - Thompson Road
- The Town faces risk from pandemic but does not have a comprehensive education and outreach program to educate residents and businesses about hazard mitigation, preparation, response, and recovery utilizing a variety of outreach methods. The Town does not currently have hazard mitigation information and outreach on the Town website.
- The Town has dams within its jurisdiction. Despite not being identified as high-hazard potential dams, these structures have the potential to impact the people, property, infrastructure, and environment nearby.
- Scour on bridges can develop due to erosion. Erosion may occur due to waters impacting the bridge's structure during severe winter storms and severe storms when the precipitation causes the water movements to be more erratic. Rising waters may cause flooding conditions to further erode the structure of the bridge. The following bridges in the jurisdiction should be evaluated to determine useability and to identify potential solutions, as necessary:
  - Otto 01
  - Otto 02
  - Otto 03
  - Otto 04
  - Otto 07
- Federal accreditation of floodwater retention structures shows the dams and levees have met and continue to meet the minimum regulatory standards set by the regulatory agencies. The accreditation of these structures show they are able to support efforts in the mitigation of flood risk.

34.7 MITIGATION STRATEGY AND PRIORITIZATION

This section discusses the status of mitigation actions from the previous HMP, describes proposed hazard mitigation actions, and prioritizes actions to address over the next five years.

34.7.1 Past Mitigation Action Status

Table 34-17 indicates progress on the Town's mitigation strategy identified in the 2020 HMP. Actions that are still recommended but not completed or that are in progress are carried forward and combined with new actions as part of the mitigation strategy for this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the capability assessment earlier in this annex.

34.7.2 Additional Mitigation Efforts

In addition to the mitigation actions completed in Table 34-17, Otto identified the following mitigation efforts completed since the last HMP:

- Significant amount of tree cutting to minimize the number of trees landing in roadways.

Since the adoption of the County's first HMP, Otto has made significant mitigation progress in the following areas:

- Increasing culvert size to accommodate modern water levels.
- Increasing rock in ditches and cofferdams to slow water velocity and erosion.
- Tree cutting and right of way clearing.

Table 34-17. Status of Previous Mitigation Actions

Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2020-Otto-001	Otto Fire Department Flood Protection	Flood, Severe Storm	Engineer, Fire Dept	Problem: The Otto Fire Department is located in the Special Flood Hazard Area. Critical facilities must be protected to the 500-year flood level. Solution: The town will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the Fire Department to protect it to the 500-year flood level. Options include: •Elevation of facility •Floodproofing of facility •Mobile flood barriers Once the most cost-effective option is identified, the town will carry out the option.	1. No Progress 2. Funding constraints	1. Include 2. Not applicable 3. Not applicable
2020-Otto-002	Culvert Upgrades	Severe Storm, Severe Winter Storm	Engineer, Highway	Problem: The following culverts are at Traffic Street is undersized and needs to be replaced. Flooding occurs during heavy rain events. •Traffic Street at Harver Road •Scotts Corners Road at King Wolfs •Skinner Hollow Road	1. No Progress 2. Lack of funding, excessive permitting restrictions	1. Include 2. Not applicable 3. Not applicable

Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
				•Gibson Hill Road (two locations) •Dake Hill at Gibson Hill Road •North Otto Road at Wickham Road •Wickham Road new North Otto Road Solution: The town will replace and upsize the repetitively damaged/undersized culverts, following an engineering study to determine the appropriate size upgrades.		
2020-Otto-003	Salt and Sand Barn	Flood, Severe Storm	Administration, Highway Department	Problem: The town requires a sand/salt structure to protect the salt and sand supplies from exposure to precipitation and runoff. The town currently does not have room to build a facility. Solution: The town will identify an appropriate property for a salt and sand barn and purchase the property. The Town Highway Department will then construct a salt sand barn with a structurally sound and weather-proof structure to protect the town salt and sand supply for winter storm response.	1. No progress 2. Located possible land, it's caught up in estate and is currently bank owned, would be very valuable to the Town for the future	1. Include 2. Not applicable 3. Not applicable

Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
2020-Otto-004	North Otto Road Drainage Pipe	Winter Storm	Engineer, FPA	Problem: The undersized drainage pipe on North Otto Road leads to drainage issues. The pipe is on private property. Flooding is caused from farmers diversion ditch being full of sediments and trees allowing water to drain to the Cattaraugus Creek. Solution: The town will advise the property owner of the best way to replace the repetitively damaged/undersized drainage pipe in Town of Otto on North Otto Rd on private property	1. No progress 2. Land owners don't want to invest in drainage, or they want a diversion ditch in their field. Funding is needed.	1. Include 2. Not applicable 3. Not applicable
2020-Otto-005	Sight Issues in Winter Storm Events	Landslide	Engineer	Problem: Intersection of Dake Hill & Gibson Hill and Hebner Hill have sight distance issues which leads to dangerous conditions during winter storms. Solution: Investigate possible changes to intersection of Dake Hill in Town of Otto and Hebner Hill such as restructuring the roadways to reduce blind grade.	1. No Progress 2. Landowner on Hebner Hill Road feels cutting road down will endanger his house and foundation. Lack of funding for engineering and inspections for seismic activity in his basement	1. Include 2. Not applicable 3. Not applicable
2020-Otto-006	Landslide Study	All Hazards	Engineer	Problem: Landslide conditions exist at South Hill, Skinner Hollow, and Dunkleman Hill Rd.	1. No Progress 2. DEC and restrictions, funding for engineering	1. Include 2. Not applicable 3. Not applicable

Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
				Solution: Conduct landslide study to determine landslide risk and potential mitigation actions.		
2020-Otto-007	Town Hall Backup Power	All Hazards	Engineer, OEM	Problem: Backup power sources are necessary to maintain critical services for critical facilities. The Town Hall lacks a permanent power source. The Town Hall location houses the Town Hall, Court, Clerk, and DPW. Solution: The Town Engineer will research what size generator is necessary to supply backup power to the Town Hall. The town will then install a backup power generator and necessary electrical components.	1. No Progress 2. Funding and lack of grant writer	1. Include 2. Add Water and Sewer Plants for backup power 3. Not applicable
2020-Otto-008	Update Emergency Operations Plan	Flood	OEM	Problem: The town's Emergency Operations Plan was last updated in 2006. The Plan requires updated. Solution: The town will update the plan and include hazard mitigation integration concepts.	1. No Progress 2. Town prioritized other projects	1. Include 2. Not applicable 3. Not applicable
2020-Otto-009	Flood Damage Prevention Ordinance	Flood	FPA	Problem: The Town of Otto's flood damage prevention ordinance requires update. Solution: The town will adopt an updated flood damage prevention	1. No Progress 2. Town prioritized other projects	1. Include 2. Not applicable 3. Not applicable

Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
				ordinance to maintain NFIP compliance.		
2020-Otto-010	FPA Training	Wildfire	Administration	Problem: Floodplain administration staff require additional training. Solution: The Town FPA and staff who assist with floodplain administration will attend trainings and workshops offered by FEMA and NYS to develop additional floodplain administration skills.	1. No Progress 2. Limited training availability	1. Include 2. Not applicable 3. Not applicable
2020-Otto-011	Wildfire Outreach	All Hazards	Administration	Problem: Additional public education on wildfire risk is needed. Solution: The town will conduct outreach to residents, business owners, and organizations about what they can do to protect their structures from wildfires.	1. No Progress 2. Town prioritized other projects	1. Include 2. Not applicable 3. Not applicable
2020-Otto-012	Identification of Permanent Housing Locations	Flood	Administration	Problem: The Town of Otto needs to identify locations for the placement of permanent housing. Solution: The Town of Otto will work with Cattaraugus County to identify regional locations for permanent housing.	1. No Progress 2. Town prioritized other projects	1. Include 2. Change to temporary sheltering 3. Not applicable
2020-Otto-013	North Otto Road	Flood, Severe Storm	Highway Department	Problem: North Otto road experiences flooding which limits	1. No Progress 2. Funding constraints.	1. Include 2. Not applicable 3. Not applicable

Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2025 HMP or Discontinue 2. If including action in the 2025 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
				access and slows emergency response. Solution: The town will elevate North Otto Road 3 feet to keep the roadway surface above potential flood levels.		

34.7.3 Proposed Hazard Mitigation Actions for the HMP Update

Otto participated in the mitigation strategy workshop for this HMP to identify appropriate actions to include in a local hazard mitigation strategy. Its comprehensive consideration of all possible activities to address hazards of concern included review of the following FEMA documents:

- FEMA 551 “Selecting Appropriate Mitigation Measures for Floodprone Structures” (March 2007)
- FEMA “Mitigation Ideas—A Resource for Reducing Risk to Natural Hazards” (January 2013).

The action worksheets included at the end of this annex list the mitigation actions that Otto would like to pursue in the future to reduce the effects of hazards. The actions 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 Town priorities.

Table 34-18 indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table to further demonstrate the wide range of activities and mitigation measures selected.

Volume I identifies 14 evaluation criteria for prioritizing the mitigation actions. To assist with rating each mitigation action as high, medium, or low priority, a numeric rank is assigned (-1, 0, or 1) for each of the evaluation criteria. Table 34-19 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 34-18. Analysis of Mitigation Actions by Hazard and Category

Hazard	Actions That Address the Hazard, by Action Category									
	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam and Levee Failure	X				X					X
Flood	X	X		X	X		X		X	X
Landslide	X	X			X					X
Pandemic	X			X			X			X
Severe Storm	X	X			X				X	X
Severe Winter Storm	X	X			X				X	X
Utility Failure	X	X							X	X
Wildfire	X	X		X	X		X			X

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 structures to reduce the impact of hazards.

Natural Systems Protection (NSP)—These are actions that minimize damage and losses and 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

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 preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.

Structural Flood Control Projects (SP)—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.

Emergency Services (ES)—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities

Table 34-19. Summary of Prioritization of Actions

Project Number	Project Name	Scores for Evaluation Criteria															High / Medium / Low
		Life Safety	Property Protection	Cost-Effectiveness	Political	Legal	Fiscal	Environmental	Social Vulnerability	Administrative	Hazards of Concern	Climate Change	Timeline	Community Lifelines	Other Local Objectives	Total	
2025-OttoT-01	Critical Facility Protection	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High
2025-OttoT-02	Salt and Sand Storage Shed	0	0	1	1	1	0	1	1	1	1	1	1	1	0	10	Medium
2025-OttoT-03	Generators at Critical Facilities	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2025-OttoT-04	Undersized Culverts and Drainage	1	1	1	1	1	0	1	0	1	1	1	1	1	0	11	High
2025-OttoT-05	Line of Sight Mitigation at Intersections	1	0	1	1	1	1	0	1	1	1	1	1	1	0	11	High
2025-OttoT-06	Landslide Mitigation	1	1	1	1	1	0	1	1	1	1	1	1	1	0	12	High
2025-OttoT-07	Comprehensive Emergency Management Plan Update	1	1	1	1	1	1	0	1	1	1	0	1	1	0	11	High
2025-OttoT-08	Flood Damage Prevention Ordinance Update	1	1	1	1	1	1	1	1	1	1	1	1	0	0	12	High
2025-OttoT-09	Floodplain Management Training	1	1	1	1	1	1	1	1	1	0	1	1	0	0	11	High
2025-OttoT-10	Wildfire Education and Outreach	1	1	1	1	1	1	0	1	1	0	1	1	0	1	11	High
2025-OttoT-11	Temporary Sheltering	1	0	1	1	1	1	0	1	1	1	1	1	1	0	11	High
2025-OttoT-12	Floodprone Roads	1	1	1	1	1	0	1	1	1	1	1	1	1	0	12	High
2025-OttoT-13	Pandemic Education and Outreach	1	1	1	1	1	1	0	1	1	0	1	1	0	1	11	High
2025-OttoT-14	Dam Owner Partnership	1	1	1	1	1	1	0	1	1	0	1	1	1	0	11	High
2025-OttoT-15	Bridge Evaluations	1	1	1	1	0	0	1	1	1	1	1	1	1	0	11	High

Project Number	Project Name	Scores for Evaluation Criteria															High / Medium / Low
		Life Safety	Property Protection	Cost-Effectiveness	Political	Legal	Fiscal	Environmental	Social Vulnerability	Administrative	Hazards of Concern	Climate Change	Timeline	Community Lifelines	Other Local Objectives	Total	
2025-OttoT-16	Federal Accreditation Standards	1	1	1	1	0	0	0	1	1	1	1	1	1	1	11	High

Note: Volume I, Section 16 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-6), Medium (7-10), High (11-14).

Action 2025-OttoT-01. Critical Facility Protection

Lead Agency:	Critical Facility Owners and Managers		
Supporting Agencies:	Town Council		
Hazard(s) of Concern:	☐Dam and Levee Failure ☒Flood ☐Landslide ☐Pandemic	☐Severe Storm ☐Severe Winter Storm ☐Utility Failure ☐Wildfire	
Description of the Problem:	The Otto Fire Department is located in the special flood hazard area and may be vulnerable to flooding. Critical facilities must be protected to the 0.2% annual chance flood level.		
Description of the Solution:	The Town will conduct a feasibility assessment to determine what additional floodproofing measures are needed at the critical facilities to protect them to the 500-year flood level. Options include: • Elevation of facility • Floodproofing of facility • Mobile flood barriers Once the most cost-effective option is identified, the Town will carry out the option.		
Estimated Cost:	Medium		
Potential Funding Sources:	FEMA HMA, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Town Budget		
Implementation Timeline:	Within 5 Years		
Goals Met:	1, 3, 5		
Benefits:	Ensures continuity of operations of several critical facilities in the Town.		
Impact on Socially Vulnerable Populations:	Protection of critical facilities provides an opportunity for first responders and emergency managers to maintain critical services that socially vulnerable populations rely on.		
Impact on Future Development:	The risk of significant damage occurring to the structure will be reduced, which will allow critical operations to be maintained or only briefly interrupted in severe events. This provides continued support to both current and future development in the service area.		
Impact on Critical Facilities/Lifelines:	This action will protect critical facilities, maintaining the critical services that it provides.		
Impact on Capabilities:	This action improves continuity of operations during a flood event, allows for a more rapid return to pre-disaster capabilities after a flood event, and faster deployment of post disaster capabilities.		
Climate Change Considerations:	This action addresses anticipated increases in flooding frequency and severity through protection to the 500-year (0.2-percent annual chance) flood level.		
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)	
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)	
Priority	☒High	☐Medium	☐Low
Alternatives:	**Action**	**Evaluation**	
	No Action	Current problem exists	
	Relocate facility	Relocation is expensive and results in loss or delay of critical services in the immediate area	
	Establish plans to enter into MOU with neighboring critical facilities to provide service during flood events	Reduction in response times and delay of critical services in the immediate area.	

Action 2025-OttoT-02. Salt and Sand Storage Shed

Lead Agency:	Highway Department	
Supporting Agencies:	Town Council	
Hazard(s) of Concern:	☐Dam and Levee Failure ☒Flood ☐Landslide ☐Pandemic	☒Severe Storm ☒Severe Winter Storm ☐Utility Failure ☐Wildfire
Description of the Problem:	Open air storage of salt and sand leads to loss of materials from erosion and leaching. These materials exposed to heavy rains, snowfalls, and flooding conditions negatively impacts the environment and disrupts natural ecosystems. The loss of materials can result in the reduction in effectiveness of mitigating impacts from severe winter storms, as salt and sand is utilized to minimize potential risks on roadways, including ice and snow.	
Description of the Solution:	Construct a shed to house bulk salt and sand storage. The construction of this shed will reduce loss of material to erosion and leaching from rain and snow melt and ensure that there are enough critical materials for roadway treatment during storms.	
Estimated Cost:	Medium	
Potential Funding Sources:	FEMA HMA, USDA Community Facilities Grant Program, Town Budget	
Implementation Timeline:	Within 2 years	
Goals Met:	1, 4, 5	
Benefits:	This action will support the continuity of operations for the critical services within the Town, including the Highway Department and first responders. The Highway Department will maintain its capability to provide road treatments in time of need, ensuring roads are accessible for first responders and regular travelers.	
Impact on Socially Vulnerable Populations:	Vulnerable populations will have access to maintained roads, ensuring safe travel,	
Impact on Future Development:	Individuals living within future development in the Town will have access to safe, treated roadways.	
Impact on Critical Facilities/Lifelines:	The construction of this structure will enhance the transportation lifeline by ensuring roads are safe to traverse during severe winter storms. Furthermore, it will create an additional critical facility.	
Impact on Capabilities:	This action will ensure the Highway Department is able to maintain its capabilities.	
Climate Change Considerations:	Climate change is likely to result in more frequent and severe rainfall events. These events would further expose materials stored outside to the elements, degrading not just the materials, but pushing them into the environment, potentially disrupting the ecosystem.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☐High	☒Medium ☐Low

Alternatives:	Action	Evaluation
	No Action	Current problem exists
	Install underground salt and sand facility	Not feasible
	Share a facility with another municipality	Administratively burdensome

Action 2025-OttoT-03. Generators at Critical Facilities

Lead Agency:	Engineering	
Supporting Agencies:	Town Council	
Hazards of Concern:	☐Dam and Levee Failure ☒Flood ☐Landslide ☐Pandemic	☒Severe Storm ☒Severe Winter Storm ☒Utility Failure ☐Wildfire
Description of the Problem:	Critical facilities require backup power to ensure continuity of operations. The Sewer Plant, Water Plant, and Town Hall, do not have back up power, which could impact the continuity of operations at the facilities in the event of a utility or power failure. High winds associated with severe storms and severe winter storms are known to cause utility failures, which would impact the continuity of operations at the critical facility. Rising water levels from floods could impact these facilities; back-up generators would permit any influx of water to be removed from the facilities via pumping systems.	
Description of the Solution:	The Town Engineer will conduct a study to determine the required generator capacity to support the critical facility. The Town will then purchase and install the generator and all necessary electrical hookup components. The installation of the back-up emergency generators will ensure continuity of operations for the critical facilities and their operations during each identified hazard of concern. With expectations to provide essential services during times of emergency and otherwise, having a back-up power source is crucial. Long-term risks are mitigated through an emergency generator by reducing the likelihood of impacts from power outages, allowing essential services to continue.	
Estimated Cost:	High	
Potential Funding Sources:	FEMA HMA, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Town Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 4, 5	
Benefits:	This action protects public health and safety and ensures continued operation of critical facilities and their essential functions during a power outage.	
Impact on Socially Vulnerable Populations:	Protection of critical facilities provides an opportunity for first responders, utility workers, and emergency managers to stage and deploy resources to vulnerable and hazard prone areas.	
Impact on Future Development:	This action results in protection of critical facilities that could support future development.	
Impact on Critical Facilities/Lifelines:	This action protects public health and safety and ensures continued operation of critical facilities and their essential functions during a power outage.	
Impact on Capabilities:	This action ensures continuity of operations to maintain capabilities.	
Climate Change Considerations:	Climate change is likely to increase severe weather events such as flooding, wind, and extreme temperatures that result in power failures. This action accounts for a likely increase in power failure events.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternatives	Action	Evaluation
	No Action	-
	Microgrid	Costly and difficult to implement.
	Solar panels and battery backup	Solar power is unlikely to be able to provide battery power for extended power failure events.

Action 2025-OttoT-04. Undersized Culverts and Drainage

Lead Agency:	Highway Department	
Supporting Agencies:	Building Inspector, Engineer	
Hazard(s) of Concern:	☐Dam and Levee Failure ☒Flood ☐Landslide ☐Pandemic	☒Severe Storm ☒Severe Winter Storm ☐Utility Failure ☐Wildfire
Description of the Problem:	Undersized culverts often result in the flooding of roadways due to the inability to handle the influx of water. Debris build-up in these undersized pipes may also result in water back-flow, leading to further roadway flooding instances and impacting the integrity of the culverts. Several culverts in the Town are undersized or have been damaged from instances of flooding and the debris caused by severe storms and severe winter winters including culverts located on the following roads: • Traffic Street at Harver Road • Scotts Corners Road at King Wolfs • Skinner Hollow Road • Gibson Hill Road (two locations) • Dake Hill at Gibson Hill Road • North Otto Road at Wickham Road The undersized drainage pipe on North Otto Road is on private property. Flooding is caused from farmers diversion ditch being full of sediments and trees allowing water to drain to the Cattaraugus Creek.	
Description of the Solution:	The Town Engineer will complete an engineering survey of the culverts in Town that are undersized and contribute to flooding to determine the proper size necessary to provide stormwater capacity. The Town Highway Department will complete the necessary upsizing for the culverts. The Town will advise the property owner of the best way to replace the repetitively damaged/undersized drainage pipe	
Estimated Cost:	TBD after study is complete	
Potential Funding Sources:	FEMA HMA, CHIPS, Town Budget, Private Owner	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 4	
Benefits:	Overall flooding will be reduced, which will result in less frequency of road closures and reduced damage occurring to culverts and roadways during severe events. Businesses are likely to remain in place if they are able to remain open, or re-open sooner following a flood.	
Impact on Socially Vulnerable Populations:	Areas that were previously vulnerable to frequency or severe flooding events will be less likely to be impacted by flooding events.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded.	
Impact on Critical Facilities/Lifelines:	Transportation routes are more likely to remain open. Evacuation routes will remain intact. Access to health and medical facilities will be maintained, both for healthcare workers and the population who requires treatment for injuries and illness.	
Impact on Capabilities:	Identifying the culverts that are at greatest risk of damage or failure can allow for resource staging to take place where the need is greatest ahead of a flood event.	
Climate Change Considerations:	Climate change is likely to result in more frequent and severe rainfall events. This action upsizes culvert sizes to meet changing stormwater needs as the result of climate change.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternatives:	Action	Evaluation
	No Action	Current problem exists
	Remove roadway	Roadway cannot be removed

	Raingardens	Raingardens are unlikely to be able to absorb enough stormwater to prevent flooding during severe rainfall events.

Action 2025-OttoT-05. Line of Sight Mitigation at Intersections

Lead Agency:	Highway Department	
Supporting Agencies:	Engineering	
Hazard(s) of Concern:	☐Dam and Levee Failure ☐Flood ☐Landslide ☐Pandemic	☒Severe Storm ☒Severe Winter Storm ☐Utility Failure ☐Wildfire
Description of the Problem:	The intersection of Dake Hill Road, Gibson Hill Road, and Hebner Hill Road have sight distance issues which leads to dangerous conditions during severe winter storms and heavy rainfalls associated with severe storms by reducing visibility.	
Description of the Solution:	Investigate possible changes to intersection of Dake Hill Road, Gibson Hill Road, and Hebner Hill Road such as restructuring the roadways to reduce blind grade.	
Estimated Cost:	TBD after method of reduction is selected	
Potential Funding Sources:	Town Budget, CHIPS	
Implementation Timeline:	Within 3 years	
Goals Met:	1, 2	
Benefits:	This action will increase the line-of-sight visibility when driving and turning and Dake Hill Road, Gibson Hill Road, and Hebner Hill Road. The increased visibility will reduce the likelihood of traffic incidents.	
Impact on Socially Vulnerable Populations:	Populations utilizing the identified intersections will have better visibility when turning out from the roads.	
Impact on Future Development:	Not applicable	
Impact on Critical Facilities/Lifelines:	This action will strengthen the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on Capabilities:	This action improves the Town's capabilities in terms of transportation.	
Climate Change Considerations:	A warmer atmosphere means storms have the potential to be more intense and occur more often, including increased periods of intense rain events.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternatives:	Action	Evaluation
	No Action	Current problem exists
	Make roadways dead ends	Not feasible
	Knock down structures to open sight lines	Costly, property owners may protest

Action 2025-OttoT-06. Landslide Mitigation

Lead Agency:	Highway Department	
Supporting Agencies:	Engineering	
Hazard(s) of Concern:	☐Dam and Levee Failure ☒Flood ☒Landslide ☐Pandemic	☒Severe Storm ☒Severe Winter Storm ☐Utility Failure ☒Wildfire
Description of the Problem:	Landslide events are often driven by hazards such as heavy rain events, flooding, heavy snowmelt, and wildfires. Landslides can destroy the natural and built environments, causing detriment to the structures in its path. South Hill Road, Skinner Hollow Road, and Dunkleman Hill Road are prone to landslides. Landslides may be able to be mitigated by cutting banks to prevent erosion.	
Description of the Solution:	The Town Engineer will complete an assessment to identify an appropriate, cost-effective method to mitigation landslide risk near the Allegany River. Possible mitigation measures include: • Construction of retaining walls, soil nailing, ground anchor walls • Install horizontal drains to reduce soil saturation • Cut banks along water ways to prevent oversaturated soils from falling • Install netting	
Estimated Cost:	TBD after mitigation technique is chosen	
Potential Funding Sources:	FEMA HMA, Town Budget, CHIPS	
Implementation Timeline:	Within 5 years	
Goals Met:	1	
Benefits:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on Socially Vulnerable Populations:	This action will assist socially vulnerable populations whose properties are impacted by landslide near the Allegany River. Keeping the roadway open to traffic also permits vulnerable populations to travel to critical appointments.	
Impact on Future Development:	Future development in the impacted area will be less likely to be impacted by landslides.	
Impact on Critical Facilities/Lifelines:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on Capabilities:	This action improves the Town's reliability in terms of transportation.	
Climate Change Considerations:	A warmer atmosphere means storms have the potential to be more intense and occur more often, including increased periods of intense rain events. Saturated soils can lead to an increased possibility of landslide occurrences. Conversely, drier summer conditions may fuel wildfires, leading to unstable soils and resulting in landslide occurrences.	
Mitigation Category	☐Local Plans and Regulations (LPR) ☒Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternatives:	Action	Evaluation
	No Action	Current problem exists
	Reconstruct roadway outside of hazard area	Not feasible
	Close road and reroute traffic around hazard area	Not feasible, would cause confusion amongst travelers

Action 2025-OttoT-07. Comprehensive Emergency Management Plan Update

Lead Agency:	Town Council	
Supporting Agencies:	Cattaraugus Office of Emergency Services	
Hazard(s) of Concern:	☒Dam and Levee Failure ☒Flood ☒Landslide ☒Pandemic	☒Severe Storm ☒Severe Winter Storm ☒Utility Failure ☒Wildfire
Description of the Problem:	The Town has an outdated Comprehensive Emergency Management Plan (CEMP). Hazard mitigation principles need to be integrated into the CEMP. A CEMP establishes the overall authority, roles, and functions performed during incidents. Incorporating hazard mitigation principles into a CEMP ensures hazard risk is identified.	
Description of the Solution:	The Town will update the Comprehensive Emergency Management Plan (CEMP), with support from the Cattaraugus Office of Emergency Services. The CEMP will integrate hazard mitigation principles into its contents, including addresses capabilities related to reduce the risk to the identified hazards of concern identified with this Hazard Mitigation Plan. The Town will send the CEMP to the County for review, followed by a State review.	
Estimated Cost:	Low	
Potential Funding Sources:	Town Budget, EMPG	
Implementation Timeline:	3 years	
Goals Met:	1, 2, 4, 5	
Benefits:	The CEMP details what the Town will do during a disaster (incident command implementation, command center location and activities, specific plans by department, etc.). The creation of a CEMP will permit the Town to integrate new plans, policies, capabilities, and hazard assessments.	
Impact on Socially Vulnerable Populations:	The section overview portion of the CEMP covers a discussion of a variety of topics, including population distribution and locations, including any concentrated populations of individuals with disabilities, others with access and functional needs, or individuals with limited English proficiency.	
Impact on Future Development:	Future development will be protected by the actions which the Town performs following the CEMP.	
Impact on Critical Facilities/Lifelines:	The section overview portion of the CEMP covers a discussion of a variety of topics, including vulnerable critical facilities (e.g. nursing homes, schools, hospitals, infrastructure).	
Impact on Capabilities:	This action will update a planning and response capability for the Town.	
Climate Change Considerations:	Climate change may result in an increase in the frequency and severity of weather-related disaster events. As impacts from climate change are increasingly felt, the contents in an CEMP, including in the basic plan and any annexes, may need to be updated.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternatives:	Action	Evaluation
	No Action	Current problem exists
	Integrate hazard mitigation principles in only hazard appendices	The plan will miss integration opportunities in the basic plan and annexes
	Ask County to integrate hazard mitigation into the County CEMP	Town CEMP will remain undeveloped

Action 2025-OttoT-08. Flood Damage Prevention Ordinance Update

Lead Agency:	Building Inspector		
Supporting Agencies:	Town Council		
Hazard(s) of Concern:	☐Dam and Levee Failure ☒Flood ☐Landslide ☐Pandemic	☐Severe Storm ☐Severe Winter Storm ☐Utility Failure ☐Wildfire	
Description of the Problem:	The current flood damage prevention ordinance does not include the 2-foot mandated NYS freeboard requirements. While the existing ordinance may be compliant with NFIP requirements, State requirements which exceed NFIP requirements must be adhered to.		
Description of the Solution:	The Town will work with Cattaraugus County and NYSDEC to ensure its Flood Damage Prevention Ordinance is updated to adhere to NYS requirements. After obtaining the appropriate review and concurrence by the NFIP State Coordinator and the FEMA Regional Office, the Town will update and adopt the Flood Damage Prevention Ordinance.		
Estimated Cost:	Low		
Potential Funding Sources:	Town Budget		
Implementation Timeline:	Within 3 years		
Goals Met:	1, 2, 4		
Benefits:	The updated ordinance will improve floodplain management, meet NFIP and State requirements, and increase resilience of new and substantially improved structures in the floodplain.		
Impact on Socially Vulnerable Populations:	The action will result in better regulation of construction standards within the Special Flood Hazard Area where significant risk to socially vulnerable populations exists.		
Impact on Future Development:	The action will result in stronger regulation of construction standards for future development in the Special Flood Hazard Area.		
Impact on Critical Facilities/Lifelines:	Critical facilities and lifelines located in the Special Flood Hazard Area will be required to meet the requirements set forth in the ordinance.		
Impact on Capabilities:	This action will improve floodplain management capabilities through better outlining of responsibilities and administrative procedures.		
Climate Change Considerations:	The updated ordinance includes the State's higher standards that are in place to address heightened flood risk due to climate change such as those for floodway rise and mandatory freeboard.		
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)	
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)	
Priority	☒High	☐Medium	☐Low

Alternatives:	Action	Evaluation
	No Action	Current problem exists
	Update only freeboard requirements	Other areas of the ordinance which need to be updated would not be
	Leave NFIP	Residents lose flood insurance coverage

Action 2025-OttoT-09. Floodplain Management Training

Lead Agency:	Building Inspector	
Supporting Agencies:	Town Council	
Hazard(s) of Concern:	☐Dam and Levee Failure ☒Flood ☐Landslide ☐Pandemic	☐Severe Storm ☐Severe Winter Storm ☐Utility Failure ☐Wildfire
Description of the Problem:	Floodplain managers require training. Those responsible for floodplain management are lacking in their knowledge of required duties. Training is sorely needed for all municipal officials and for code enforcement officials in charge of municipalities. Very little zoning precludes homeowners from building in floodplains, leading to problems later.	
Description of the Solution:	Where feasible, the Town will have Code staff attend trainings at FEMA's EMI in Emmitsburg Maryland for NFIP Basics and the Intermediate Floodplain management course (E0273). Where not feasible, officials will attend virtual trainings and review available resources from FEMA and ASFPM at the ASFPM (https://www.floods.org/) website. Encourage staff to become Certified Floodplain Managers via the Association of State Floodplain Manager's CFM Certification Program.	
Estimated Cost:	Low	
Potential Funding Sources:	Town Budget	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 3, 4	
Benefits:	Providing an opportunity for staff and officials to become further educated on floodplain management practices and standards can aid in the development of plans and procedures in a way that is conscious of the flood hazard.	
Impact on Socially Vulnerable Populations:	Officials that are up to date on flood risk are more likely to encourage development outside areas of high flood risk, which is where socially vulnerable populations have historically resided. Safer dwellings may be developed in a less vulnerable location.	
Impact on Future Development:	Officials that understand best practices in floodplain management will have the opportunity to influence future development and prevent unsafe building in flood hazard areas.	
Impact on Critical Facilities/Lifelines:	The opportunity will exist for leaders and operators of utilities and other essential services to attend training and provide direction on ways the prepare for, plan for, and prevent interruptions in service as a result of a flood.	
Impact on Capabilities:	Officials that attend trainings will have a more confident understanding of floodplain management principles and the basics of NFIP requirements and standards.	
Climate Change Considerations:	Climate change is likely to result in stronger and more frequent rainfall events that will contribute to increased flood risk	
Mitigation Category	☐Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☒Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☒Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternatives:

Action	Evaluation
No Action	Current problem exists
Hire outside contractors for floodplain administration	Costly
Establish shared service agreements for floodplain administration from neighboring municipalities	Neighboring municipalities are unlikely to have the staff capacity to take on this role

Action 2025-OttoT-10. Wildfire Education and Outreach

Lead Agency:	Town Supervisor		
Supporting Agencies:	Town Council, Cattaraugus County		
Hazard(s) of Concern:	☐Dam and Levee Failure ☐Flood ☐Landslide ☐Pandemic	☐Severe Storm ☐Severe Winter Storm ☐Utility Failure ☒Wildfire	
Description of the Problem:	The Town faces risk from wildfires but does not have a comprehensive education and outreach program to educate residents and businesses about hazard mitigation, preparation, response, and recovery utilizing a variety of outreach methods. The Town does not currently have hazard mitigation information and outreach on the Town website.		
Description of the Solution:	Create outreach materials, or utilize those from Cattaraugus County, on wildfire risks and methods of mitigation measures. Methods of distribution may include Town events, the Town newsletters, social media, the Town website, and having the materials on display for the public at Town libraries and offices. Outreach materials will be specified with education and information for the wildfire hazard.		
Estimated Cost:	Low		
Potential Funding Sources:	Town Budget		
Implementation Timeline:	1 year		
Goals Met:	1, 2, 3, 4		
Benefits:	This action will improve the public education and outreach capabilities in the Town by including discussions on disaster preparedness and hazard mitigation to residents and business owners, which will contribute to the resiliency of the Town.		
Impact on Socially Vulnerable Populations:	Socially vulnerable populations will learn how to prepare for and mitigate the wildfire hazard which may impact them in the Town.		
Impact on Future Development:	Not applicable		
Impact on Critical Facilities/Lifelines:	Businesses, which may be considered critical facilities or lifelines, would be more informed on how to prepare for emergency events and mitigate the risks of the wildfire hazard. With these businesses becoming more resilient, this action would contribute to their continuity of operations.		
Impact on Capabilities:	This action would build upon the County's public education and outreach capabilities and adapt it to the Town's needs.		
Climate Change Considerations:	Climate change is likely to increase the intensity and frequency of many climate related disaster events. This action will inform residents and business owners of how to reduce risk from the wildfire hazard and how climate change may exacerbate those risks.		
Mitigation Category	☐Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☒Education and Awareness Programs (EAP)	
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☒Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)	
Priority	☒High	☐Medium	☐Low

Alternatives:

Action	Evaluation
No Action	Current problem exists
Rely on state or federal resources	Resources may be generalized and not specific to the risks in the Town
Use only a few methods for distribution	Using only a few methods of distribution may hinder socially vulnerable populations from receiving the guidance

Action 2025-OttoT-11. Temporary Sheltering

Lead Agency:	Town Supervisor	
Supporting Agencies:	Town Council, Cattaraugus County Office of Emergency Services, Neighboring Jurisdictions, American Red Cross	
Hazard(s) of Concern:	☒Dam and Levee Failure ☒Flood ☒Landslide ☐Pandemic	☒Severe Storm ☒Severe Winter Storm ☒Utility Failure ☒Wildfire
Description of the Problem:	Following emergency events, individuals may be unable to stay in their places of residence due to storm damages. Flooding from dam and levee failures can cause residences to become uninhabitable; wildfires and landslides can compromise the integrity of the structure; and severe storms and severe winter storms can lead to utility failures. The Town needs to identify locations for the placement of temporary sheltering. The Town will investigate the use of the school, highway garage, and local churches as potential locations.	
Description of the Solution:	The Town Supervisor will lead efforts to identify a suitable location to temporarily relocate residents or visitors in need of temporary sheltering. The Town will consider options to partner with neighboring jurisdictions for a regional location. The Town will contact the Cattaraugus County Office of Emergency Services for assistance as needed to identify a suitable, approved location.	
Estimated Cost:	Medium	
Potential Funding Sources:	Town Budget, County Budget, Neighboring Jurisdictions, American Red Cross, HSGP	
Implementation Timeline:	Within 5 years	
Goals Met:	1, 2, 4, 6	
Benefits:	Providing a safe, climate-controlled location for individuals in need following an emergency can provide a sense of gratitude and normalcy to an otherwise negative event. Removing individuals from at-risk locations and offering a temporary locations for impacted persons to gather, increases the safety of the overall community.	
Impact on Socially Vulnerable Populations:	Socially vulnerable populations are often the most risk during emergencies and disaster events. Offering a safe location for these populations can ensure their health is looked after and they are removed from harm's way.	
Impact on Future Development:	The temporary sheltering facility will be able to support population increases brought in from potential future development.	
Impact on Critical Facilities/Lifelines:	This action would create, or expand on already existing, critical facilities, as sheltering locations are critical facilities.	
Impact on Capabilities:	This action will create a new capability of the Town by offering a resource for its visitors and residents to utilize should they be in need of temporary sheltering.	
Climate Change Considerations:	The changing climate may lead to the Town, its residents, and visitors being exposed to hazards more frequently. Extreme temperatures have occurred more often in recent years which lead to drought; heavier rainfalls during severe storms have increased the occurrence of flooding. A temporary sheltering facility can provide a safe location for impacted individuals.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternatives:

Action	Evaluation
No Action	Current problem exists
Utilize County facilities	May require signed agreements; reliant on County opening facilities
Utilize American Red Cross facilities	Reliant on American Red Cross opening a facility

Action 2025-OttoT-12. Floodprone Roads

Lead Agency:	Highway Department	
Supporting Agencies:	Engineering	
Hazard(s) of Concern:	☐Dam and Levee Failure ☒Flood ☐Landslide ☐Pandemic	☒Severe Storm ☐Severe Winter Storm ☒Utility Failure ☐Wildfire
Description of the Problem:	Flood prone roads not only interrupt the movement of persons and goods but can lead to isolation issues where first responders are unable to reach their destination and cause evacuation routes to be inaccessible. Flooded road ways may be caused by debris in culverts from severe storms and severe winter storms. There are multiple roads in Town which may benefit from flood mitigation strategies, such as the elevation of the roadways or the hardening of the infrastructure surrounding them to reduce likelihood of flooding including: • North Otto Road • Colvin Road • Traffic Street • Harvey Road • Thompson Road	
Description of the Solution:	The Town will develop specific mitigation solutions for flood-prone road systems after conducting a flood study. Possible solutions may include: • Elevation of roadways • Installation or improvement of drainage systems • Regrading of roadway and soils • Resurfacing or reshaping roadways	
Estimated Cost:	TBD after mitigation technique is chosen	
Potential Funding Sources:	FEMA HMA, Town Budget, CHIPS	
Implementation Timeline:	Within 5 years	
Goals Met:	1	
Benefits:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on Socially Vulnerable Populations:	This action will assist socially vulnerable populations whose properties are impacted by flooding along flood-prone roads.	
Impact on Future Development:	Future development in the impacted area will be less likely to be flooded.	
Impact on Critical Facilities/Lifelines:	This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses.	
Impact on Capabilities:	This action improves the Town's reliability in terms of transportation.	
Climate Change Considerations:	A warmer atmosphere means storms have the potential to be more intense and occur more often, including increased periods of intense rain events.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☒Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternatives:

Action	Evaluation
No Action	Current problem exists
Relocate all flood-prone road system	Not feasible
Raise all flood prone roads	Cost prohibitive

Action 2025-OttoT-13. Pandemic Education and Outreach

Lead Agency:	Town Supervisor		
Supporting Agencies:	Town Council, Cattaraugus County		
Hazard(s) of Concern:	☐Dam and Levee Failure ☐Flood ☐Landslide ☒Pandemic	☐Severe Storm ☐Severe Winter Storm ☐Utility Failure ☐Wildfire	
Description of the Problem:	The Town faces risk from pandemic but does not have a comprehensive education and outreach program to educate residents and businesses about hazard mitigation, preparation, response, and recovery utilizing a variety of outreach methods. The Town does not currently have hazard mitigation information and outreach on the Town website.		
Description of the Solution:	Create outreach materials, or utilize those from Cattaraugus County, on pandemic risks and methods of mitigation measures. Methods of distribution may include Town events, the Town newsletters, social media, the Town website, and having the materials on display for the public at Town libraries and offices. Outreach materials will be specified with education and information for the pandemic hazard.		
Estimated Cost:	Low		
Potential Funding Sources:	Town Budget		
Implementation Timeline:	1 year		
Goals Met:	1, 2, 3, 4		
Benefits:	This action will improve the public education and outreach capabilities in the Town by including discussions on disaster preparedness and hazard mitigation to residents and business owners, which will contribute to the resiliency of the Town.		
Impact on Socially Vulnerable Populations:	Socially vulnerable populations will learn how to prepare for and mitigate the pandemic hazard which may impact them in the Town.		
Impact on Future Development:	Not applicable		
Impact on Critical Facilities/Lifelines:	Businesses, which may be considered critical facilities or lifelines, would be more informed on how to prepare for emergency events and mitigate the risks of the pandemic hazard. With these businesses becoming more resilient, this action would contribute to their continuity of operations.		
Impact on Capabilities:	This action would build upon the County's public education and outreach capabilities and adapt it to the Town's needs.		
Climate Change Considerations:	Climate change is likely to increase the intensity and frequency of many climate related disaster events. This action will inform residents and business owners of how to reduce risk from the pandemic hazard and how climate change may exacerbate those risks.		
Mitigation Category	☐Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☒Education and Awareness Programs (EAP)	
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☒Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)	
Priority	☒High	☐Medium	☐Low

Alternatives:

Action	Evaluation
No Action	Current problem exists
Rely on state or federal resources	Resources may be generalized and not specific to the risks in the Town
Use only a few methods for distribution	Using only a few methods of distribution may hinder socially vulnerable populations from receiving the guidance

Action 2025-OttoT-14. Dam Owner Partnership

Lead Agency:	Town Council		
Supporting Agencies:	NYS DEC, Dam Owners		
Hazard(s) of Concern:	☒Dam and Levee Failure ☐Flood ☐Landslide ☐Pandemic	☐Severe Storm ☐Severe Winter Storm ☐Utility Failure ☐Wildfire	
Description of the Problem:	The Town has dams within its jurisdiction. Despite not being high-hazard potential dams, these structures have the potential to impact the people, property, infrastructure, and environment nearby.		
Description of the Solution:	The Town will work with the owners of the dams to ensure inspections and safety procedures are up to date. If cost-effective mitigation measures or retrofit options are identified that can increase the level of safety and length of useful life, the Dam Owner will pursue funding support, permit approval from NYS DEC, and implement the cost-effective measures.		
Estimated Cost:	Low		
Potential Funding Sources:	Town Budget		
Implementation Timeline:	Within 5 years		
Goals Met:	1, 2, 3		
Benefits:	This action will improve the safety and security of those who live near the dams and increase the resilience of responding agencies.		
Impact on Socially Vulnerable Populations:	The action will result in better preparedness within for those living near areas where the dams are located.		
Impact on Future Development:	Future development near the dams will be more secure as safety procedures and inspections are regularly performed on the dams.		
Impact on Critical Facilities/Lifelines:	Dams are considered a critical facility. This action will create an understanding of the safety procedures in place for each identified dam and strengthen the structural integrity of dam, as needed.		
Impact on Capabilities:	This action will improve planning and response capabilities through the understanding of responsibilities and procedures.		
Climate Change Considerations:	Climate change may result in an increase in the frequency and severity of weather-related disaster events, which may contribute to the likelihood of a dam failure event. This action will increase the capabilities to respond to these events.		
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)	
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)	
Priority	☒High	☐Medium	☐Low

Alternatives:	Action	Evaluation
	No Action	Town will be unaware of any safety concerns for the dam or its condition
	Utilize information from NYS DEC	Owners may not be required to submit a safety plan to the State
	Utilize information from the National Inventory of Dams	Not all dams are listed on the inventory

Action 2025-OttoT-15. Bridge Evaluations

Lead Agency:	Highway Department	
Supporting Agencies:	Cattaraugus County Engineering, Cattaraugus County Public Works, NYS DOT	
Hazard(s) of Concern:	☐Dam and Levee Failure ☒Flood ☐Landslide ☐Pandemic	☒Severe Storm ☒Severe Winter Storm ☐Utility Failure ☐Wildfire
Description of the Problem:	Scour on bridges can develop due to erosion. Erosion may occur due to waters impacting the bridge's structure during severe winter storms and severe storms when the precipitation causes the water movements to be more erratic. Rising waters may cause flooding conditions to further erode the structure of the bridge. The following bridges in the jurisdiction should be evaluated to determine useability and to identify potential solutions, as necessary: • Otto 01 • Otto 02 • Otto 03 • Otto 04 • Otto 07	
Description of the Solution:	The Highway Department will work with Cattaraugus County Engineering and Public Works to evaluate each bridge to determine its current usability. The evaluation will indicate whether the County will need to replace or retrofit the identified bridges and causeways. This evaluation should be performed in partnership and/or with feedback from NYS DOT as necessary.	
Estimated Cost:	Medium	
Potential Funding Sources:	FEMA HMA, County Budget, BRIDGENY	
Implementation Timeline:	Within 5 years	
Goals Met:	1	
Benefits:	This action will ensure the bridges in the jurisdiction are structurally sound to continue in operation.	
Impact on Socially Vulnerable Populations:	Not applicable	
Impact on Future Development:	Not applicable	
Impact on Critical Facilities/Lifelines:	This action will ensure transportation routes remain open and accessible to the public for daily use and evacuation needs; the bridges provide a point of access for first responders into communities that may have faced damage from a hazard event on either side of the bridges.	
Impact on Capabilities:	Not applicable	
Climate Change Considerations:	Climate change is likely to increase the intensity and frequency of many climate related disaster events. This action will work to ensure the structure of the bridges are impervious to erosion at their base due to rising water levels.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☒Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☐Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternatives:

Action	Evaluation
No Action	Current problem exists
Remove bridges	May cause significant traffic problems
Replace bridges	Cost prohibitive

Action 2025-OttoT-16. Federal Accreditation Standards

Lead Agency:	Municipal Engineer	
Supporting Agencies:	Cattaraugus County Public Works, FEMA, USACE, Dam Owners, Levee Owners	
Hazard(s) of Concern:	☒Dam and Levee Failure ☒Flood ☐Landslide ☐Pandemic	☐Severe Storm ☐Severe Winter Storm ☐Utility Failure ☐Wildfire
Description of the Problem:	Federal accreditation of floodwater retention structures shows the dams and levees have met and continue to meet the minimum regulatory standards set by the regulatory agencies. The accreditation of these structures show they are able to support efforts in the mitigation of flood risk.	
Description of the Solution:	The Town will partner with Cattaraugus County to assist with communications to dam and levee owners and operators. Communication with dam and levee owners and/or operators will be focused on ensuring the structure(s) are accredited and/or how to get the structure(s) accredited.	
Estimated Cost:	Low	
Potential Funding Sources:	County Budget, Jurisdictional Budget, Dam Owners, Levee Owners	
Implementation Timeline:	4 years	
Goals Met:	1, 2, 4, 6, 7	
Benefits:	Federal accreditation of floodwater retention structures shows the dams and levees have met and continue to meet the minimum regulatory standards set by the regulatory agencies. The accreditation of these structures show they can support efforts in the mitigation of flood risk.	
Impact on Socially Vulnerable Populations:	Accreditation of the structures show they can support efforts in the mitigation of flood risk, including impacts on the populations, and their property, near the structures.	
Impact on Future Development:	Accreditation of the structures show they can support efforts in the mitigation of flood risk. Future development near the structures will have reduced risk to the flood hazard.	
Impact on Critical Facilities/Lifelines:	Accreditation of the structures show they can support efforts in the mitigation of flood risk. Critical facilities near the structures will have reduced risk to the flood hazard. Dams and levees are critical facilities. Accredited structures meet the minimum regulatory standards set by the regulatory agencies.	
Impact on Capabilities:	This action will strengthen flood risk reduction capabilities. Having an accredited structure means they can support efforts in mitigating the risk of the flood hazard.	
Climate Change Considerations:	Climate change is likely to increase the intensity and frequency of many climate related disaster events, including heavy rainfalls and flooding events. Heavy rainfalls can cause additional pressure and stress on dams and levees, leading to failure. Federal accreditation of floodwater retention structures shows the dams and levees have met and continue to meet the minimum regulatory standards set by the regulatory agencies.	
Mitigation Category	☒Local Plans and Regulations (LPR) ☐Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)
CRS Category	☐Preventative Measures (PR) ☐Property Protection (PP) ☐Public Information (PI)	☐Natural Resource Protection (NR) ☐Structural Flood Control Projects (SP) ☒Emergency Services (ES)
Priority	☒High	☐Medium ☐Low

Alternatives:	Action	Evaluation
	No Action	Current problem exists
	Only work to ensure dam accreditation	Levees may not be accredited
	Only work to ensure levee accreditation	Dams may not be accredited