



2. COUNTY OF GENESEE

This jurisdictional annex to the 2025 Genesee County Hazard Mitigation Plan (HMP) Update provides information to assist public and private sectors in the County of Genesee 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 Genesee County, describes who participated in the planning process, assesses Genesee County's risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

2.1 HAZARD MITIGATION PLANNING TEAM

The County of Genesee identified primary and alternate HMP points of contact and developed this plan over the course of several months, with input from many County departments. The Emergency Management Coordinator represented the community on the Genesee County HMP Planning Partnership and Steering Committee 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 2-1 summarizes County officials who participated in the development of the annex and in what capacity. Additional documentation of the County's planning activities through Planning Partnership meetings is included in Volume I.

Table 2-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Tim Yaeger, Emergency Management Coordinator Address: 7690 State Street Road, Batavia NY 14020 Phone Number: 585-344-0078 Email: tim.yaeger@co.genesee.ny.us	Name/Title: Gary Patnode, Deputy Emergency Management Coordinator Address: 7690 State Street Road, Batavia NY 14020 Phone Number: 716-864-6240 Email: gary.patnode@co.genesee.ny.us
National Flood Insurance Program Floodplain Administrator	
NFIP Administration is performed at the jurisdictional level.	
Additional Contributors	
Name/Title: Felipe A. Oltramari, Director of the Department of Planning Method of Participation: Completed capability assessment	
Name/Title: Elizabeth Allen, Financial Management Assistant Method of Participation: Provided essential information to contribute to the completion of the annex.	

2.2 COMMUNITY PROFILE

Genesee County is a predominantly rural and agricultural county centrally located in Western New York State. Genesee County is located midway between the Cities of Rochester and Buffalo. The County is bordered on the north by Orleans County, on the east by Monroe and Livingston Counties, on the south by Wyoming County, and on the west by Erie and Niagara Counties. Genesee County is roughly rectangular in shape and covers 501 square miles. It is primarily rural, with the major exception of the City of Batavia and its surrounding suburbanized areas.



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 American Community Survey indicates that 5.2 percent of the population is 5 years of age or younger, 19.5 percent is 65 years of age or older, 0.7 percent is non-English speaking, 10.1 percent is below the poverty threshold, and 15 percent is considered disabled.

2.3 JURISDICTIONAL CAPABILITY ASSESSMENT AND INTEGRATION

Genesee County 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 Genesee County to identify opportunities for integrating mitigation concepts into ongoing County procedures.

2.3.1 Planning and Regulatory Capability and Integration

Table 2-2 summarizes the planning and regulatory tools that are available to Genesee County.

Table 2-2. 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
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All codes, ordinances, and regulations are administered at the municipal level.

PLANNING DOCUMENTS

General/Comprehensive Plan	Yes	Genesee 2050, 2022	County	Planning
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How has or will this be integrated with the HMP and how does this reduce risk?

Genesee County updated its Comprehensive Plan to reach its 2050 goals and to reimagine the comprehensive planning process. The Genesee 2050 Plan shapes how the county will grow and change. The plan covers topics outlined below, including housing, land use, transportation, and agriculture and food production, among others.



	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
Capital Improvement Plan	Yes	Six-Year Capital Improvement and Asset Acquisitions Program, yearly	County	County Manager
How has or will this be integrated with the HMP and how does this reduce risk? The capital improvement plan (CIP) consists of one or more capital improvement projects, which are financed through a capital budget. The CIP permits the County to plan strategically for community growth and transformation.				
Disaster Debris Management Plan	Yes	Genesee County Debris Management Plan	County	OEM
How has or will this be integrated with the HMP and how does this reduce risk? The debris management plan establishes procedures and guidelines for managing disaster debris in a coordinated, environmentally responsible, and cost-effective manner. The plan facilitates response and recovery activities, facilitates the quick return of a community to normalcy, reduces impacts to humans and the environment, ensures effective use of resources, helps to control and minimize costs, and aids in complying with applicable local, state/tribal/territorial, and Federal regulations.				
Floodplain Management or Watershed Plan	Yes	Subwatershed in the Lake Erie Plan (2018), Black Creek (2014) and Oatka (2014)	Regional	NYS Department of State
How has or will this be integrated with the HMP and how does this reduce risk? Lake Erie Plan: This report is part of a multi-phased watershed planning process and has been prepared to directly supplement previous work conducted by Buffalo Niagara Riverkeeper in Phase I of the Niagara River Watershed Management Plan (Healthy Niagara), and ongoing work by project partners Erie County Department of Environment and Planning, and the Lake Erie Watershed Protection Alliance. Phase I began the watershed planning process through assessment of current conditions, trends, and major contributors to regional water quality at a watershed-wide scale. This document builds on the priorities identified through the Phase I planning process, aims to provide a “snapshot in time” of water quality conditions throughout the Niagara River Watershed, and develop implementation plans to address specific concerns identified in five priority sub-watersheds Oatka Plan: The purpose of this planning effort, the Oatka Creek Watershed Management Plan, was the formation of a long-term strategy to ensure the protection and restoration of Oatka Creek water quality and compatible land use and development. The result is this watershed management plan for the protection and enhancement of Oatka Creek. This briefing describes the Plan’s discrete components and the project’s process to develop strategies to protect and restore water quality within the Oatka Creek Watershed. Black Creek Plan: The purpose of this planning effort, the Black Creek Watershed Management Plan, was the formation of a long-term strategy to ensure the protection and restoration of Black Creek water quality and compatible land use and development. The result is this watershed management plan for the protection and enhancement of Black Creek. This briefing describes the Plan’s discrete components and the project’s process to develop strategies to protect and restore water quality within the Black Creek Watershed.				
Stormwater Management Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Open Space Plan	Yes	Genesee County Smart Growth Plan, February 2022 Genesee County Recreation Plan, Adopted 2022	County	Planning
How has or will this be integrated with the HMP and how does this reduce risk? Smart Growth Plan: The purpose of the plan is to minimize the impacts from additional growth and development that would otherwise occur as a result of the extension of water service. The County Legislature committed to preparing the Smart Growth Plan as a mitigating action identified in the Environmental Impact Statement prepared for the extension of water service. The objectives of the Smart Growth Plan are to focus County resources to support economic				



	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
<p>development opportunities in the most promising locations; encourage the revitalization of existing industrial areas, business districts, and residential neighborhoods in the City of Batavia and developed village areas; and protect farmland and the rural character of the countryside, and maintain the viability of agriculture.</p> <p>Recreation Plan: This Recreation Plan is a long-term strategy that evaluates the existing and ongoing recreational opportunities and assets in Genesee County while also providing a roadmap and vision for future development and enhancement to the County's recreational opportunities—all with an emphasis on promoting a vision of enhanced community livability, connectivity, health and safety. Genesee County recognizes the importance of parks, trails, and recreation in the lives of its residents. Our vision is to be a community that improves public health through recreation, provides recreational opportunities for every resident and visitor, strategically invests in green space and play space, and works to promote the story of Genesee County's unique and abundant recreational assets. This plan is multi-jurisdictional and represents an important step towards achieving a desired vision and direction for the involvement of Genesee County and the surrounding local governments in the planning and support of parks, trails, and recreation throughout the County.</p>				
Urban Water Management Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				
Habitat Conservation Plan	Yes	Green Genesee Road Map, 2015	County	Planning
<p>How has or will this be integrated with the HMP and how does this reduce risk?</p> <p>Genesee County, being a rural county, is subject to the same pressures that many other rural areas are, most notably, increased development pressure which can lead to unplanned fragmentation and sprawl and changing land use practices including farming practices that can lead to unintended loss of resources. This often undesirable, but typical, pattern of land development results from opportunistic instead of optimized land use decisions. The Green Genesee Road Map helps guide important land use decisions in a way that maintains, supports, and improves the quality of life currently enjoyed in Genesee County.</p>				
Economic Development Plan	Yes	Generating Growth in Genesee County, 2019	County	Genesee County Economic Development Center
<p>How has or will this be integrated with the HMP and how does this reduce risk?</p> <p>Genesee County Economic Development Center's (GCEDC) strategic development model is built on five interrelated pillars: shovel-ready site development, workforce development, innovation support, economic incentives, and placemaking. This report reviews GCEDC's performance in each of these five pillars through the creation of relevant metrics and comparison with peer regions. The report presents strategies and policy recommendations for consideration by GCEDC and other relevant policymakers and stakeholders.</p>				
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	Yes	Forest Management Plan - Genesee County Park & Forest, 2003	County	DPW - Parks
<p>How has or will this be integrated with the HMP and how does this reduce risk?</p> <p>The Genesee County Park & Forest Management Plan provides a roadmap for managing the forest to achieve long-term management goals, promote forest, water, and human health, and ensure sustainable ecosystems and resilient watersheds.</p>				
Transportation 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
Agriculture Plan	Yes	Genesee County Agricultural and Farmland Protection Plan, 2017	County	Planning

How has or will this be integrated with the HMP and how does this reduce risk?

This County Agricultural and Farmland Protection Plan is intended to reinforce and enhance agriculture in Genesee County, and strongly support efforts to maintain its vitality.

Climate Action/ Resilience/Sustainability Plan	Yes	Genesee County Resiliency Plan, 2023	County	Planning
The purpose of the January 2023 Genesee County Countywide Resiliency Plan (Plan) is to increase the resiliency of Genesee County communities by preparing current and future generations to recover, adjust, and thrive in a changing world. The Plan provides a list of recommended strategies and projects that will increase resiliency for Genesee County. Several priority projects include specific strategies and details to facilitate immediate implementation. The Plan contains an overview and general understanding of current and future climate trends and impacts; identification of assets, risks, vulnerabilities, and opportunities; development and prioritization of resilience strategies and projects designed for immediate implementation.				

Tourism Plan	Yes	2023 Tourism Marketing Plan	County	Chamber of Commerce
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How has or will this be integrated with the HMP and how does this reduce risk?

The 2023 Tourism Marketing Plan outlines how the Chamber of Commerce is working on advertising various events and expanding program development to entice and encourage the tourism industry to rebound following the COVID-19 pandemic.

Business/ Downtown Development Plan	No	-	-	-
How has or will this be integrated with the HMP and how does this reduce risk?				

Other	Yes	Genesee County Resiliency Plan, 2023	County	Planning Department
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How has or will this be integrated with the HMP and how does this reduce risk?

The purpose of the January 2023 Genesee County Countywide Resiliency Plan (Plan) is to increase the resiliency of Genesee County communities by preparing our current and future generations to recover, adjust, and thrive in a changing world. The Plan provides a list of recommended strategies and projects that will increase resiliency for Genesee County. Several priority projects include specific strategies and details to facilitate immediate implementation. The Plan contains an overview and general understanding of current and future climate trends and impacts; identification of assets, risks, vulnerabilities, and opportunities; development and prioritization of resilience strategies and projects designed for immediate implementation.

Other	No	Genesee County Housing Needs Assessment and Market Analysis, 2024		Planning Department
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How has or will this be integrated with the HMP and how does this reduce risk?

Genesee County is updating its Housing Needs Assessment and Market Analysis. This update will help housing providers, housing developers, municipalities, Genesee County agencies, and not-for-profit organizations to better understand the county's housing market. The study is intended to guide housing policies and assist housing providers in designing projects that meet the county's full spectrum of current and future housing needs

RESPONSE/RECOVERY PLANNING

Comprehensive Emergency Management Plan	Yes	Genesee County CEMP, 2013	County	OEM
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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. This document assigns responsibility to organizations and individuals for carrying out specific actions that exceed routine responsibility



	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
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	Yes	Genesee County Continuity of Operations Plan, 2025	County	OEM
How has or will this be integrated with the HMP and how does this reduce risk? The purpose of the Continuity of Operations (COOP) plan is to establish policy and guidance to ensure that essential functions for an agency are continued in the event that manmade, natural, or technological emergencies disrupt or threaten to disrupt normal operations. Genesee County will have a COOP established in the Fall of 2025.				
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	Genesee County Emergency Preparedness Assessment, 2022	County	OEM
How has or will this be integrated with the HMP and how does this reduce risk? The 2022 Genesee County CEPA (County Emergency Preparedness Assessment) is a framework and tool to assess risk, capabilities, and the potential need for support during disasters. The CEPA is an initiative to better understand local emergency preparedness in a more systematic way in New York State.				
Post-Disaster Recovery Plan	Yes	Genesee County Recovery Plan, 2024	County	OEM
How has or will this be integrated with the HMP and how does this reduce risk? The Genesee County Recovery Plan is a guidance document that identifies policies, operational strategies, and roles and responsibilities to guide decisions and actions for long-term recovery and redevelopment following a major or catastrophic disaster. It provides planning and decision-making processes for recovery policies and programs within the County.				
Public Health Plan	Yes	All-Hazards PHEPR Plan, 2023	County	Public Health
How has or will this be integrated with the HMP and how does this reduce risk? The Genesee and Orleans County Health Departments Public Health Emergency Preparedness and Response plan (GO Health PHEPR plan) is a planning and operations-based document that provides guidance for all aspects of health-related emergency management activities and functions. The PHEPR plan provides the basis for the planning, training, and use of State, Regional and County public and private public health resources to respond, mitigate, and recover from a public health emergency or disaster in either Genesee or Orleans County.				
Other:	Yes	Mass Casualty Incident Plan, 2016	County	OEM
How has or will this be integrated with the HMP and how does this reduce risk? The purpose of the mass casualty incident plan is to provide an orderly and efficient set of response procedures and guidelines for incidents that are of a larger magnitude than our normal day-to-day response. This plan, overall, encompasses fire/EMS and police agency responses. Although each agency has an individual plan of action, this document addresses pre-hospital medical care provided by a combined agency response, through the use of the incident command system, and unified command system.				

2.3.2 Development and Permitting Capability

Table 2-3 summarizes the capabilities of Genesee to oversee and track development.



Table 2-3. Development and Permitting Capability

	Yes/No	Comment
Do you issue development permits? <ul style="list-style-type: none">If you issue development permits, what department is responsible?If you do not issue development permits, what is your process for tracking new development?	No	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	-
Do you have a buildable land inventory? <ul style="list-style-type: none">If you have a buildable land inventory, please describe	No	-
Describe the level of buildout in your jurisdiction.	N/A	Refer to Volume II, Chapters 3-23

2.3.3 Administrative and Technical Capability

Table 2-4 summarizes potential staff and personnel resources available to Genesee and their current responsibilities that contribute to hazard mitigation.

Table 2-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comment (available staff, responsibilities, support of hazard mitigation)
ADMINISTRATIVE CAPABILITY		
Planning Board	Yes	Planning Dept
Zoning Board of Adjustment	No	-
Planning Department	Yes	Planning Dept
Mitigation Planning Committee	Yes	OEM
Environmental Board/Commission	No	-
Open Space Board/Committee	Yes	Park Advisory, Arts Culture Parks & Recreation Focus Group
Economic Development Commission/Committee	Yes	Genesee County Economic Development Center, Economic & Workforce Development Focus Group
Public Works/Highway Department	Yes	DPW
Construction/Building/Code Enforcement Department	Yes	OEM has a Code Enforcement Officer but only responsible for County Buildings
Emergency Management/Public Safety Department	Yes	OEM
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	Safety Committee, Risk Management
Mutual aid agreements	Yes	OEM Fire & EMS 2012, Shared Services Highway
Human Resources Manual - Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk?	No	-



Resources	Available? (Yes/No)	Comment (available staff, responsibilities, support of hazard mitigation)
Other	No	-
TECHNICAL/STAFFING CAPABILITY		
Planners or engineers with knowledge of land development and land management practices	Yes	Planning, Soil Water (District technicians assist with the planning of mainly agricultural best management practices for water quality and quantity issues and assist with stream bank management and flood mitigation.)
Engineers or professionals trained in building or infrastructure construction practices	Yes	DPW
Planners or engineers with an understanding of natural hazards	Yes	DPW, Planning, Soil Water (District technicians plan for water quality and quantity hazards.)
Staff with expertise or training in benefit/cost analysis	Yes	Planning
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazus applications	Yes	Planning, Soil Water (District staff are trained in GIS)
Staff that work with socially vulnerable populations or underserved communities	No	-
Environmental scientists familiar with natural hazards	Yes	Soil Water (Mainly water quality and quantity issues, and erosion)
Surveyors	No	-
Emergency manager	Yes	
Grant writers	Yes	County Manager
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

2.3.4 Fiscal Capability

Table 2-5 summarizes financial resources available to Genesee County.

Table 2-5. 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	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No



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

2.3.5 Education and Outreach Capability

Table 2-6 summarizes the education and outreach resources available to Genesee County.

Table 2-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment
Public information officer or communications office	Yes	Public Communications and Web Design Specialist can act as a PIO
Personnel skilled or trained in website development	Yes	Public Communications and Web Design Specialist
Hazard mitigation information available on your website	Yes	Genesee County Hazard Mitigation Plan
Social media for hazard mitigation education and outreach	Yes	Facebook
Citizen boards or commissions that address issues related to hazard mitigation	Yes	Safety, Security & Justice Focus Group
Warning systems for hazard events	Yes	Reverse 911
Natural disaster/safety programs in place for schools	Yes	State requirement
Organizations that conduct outreach to socially vulnerable populations and underserved populations		
Public outreach mechanisms / programs to inform citizens on natural hazards, risk, and ways to protect themselves during such events	Yes	Reverse 911, Social Media and through the Public Communications and Web Design Specialist

2.3.6 Community Classifications

Table 2-7 summarizes classifications for community programs available to Genesee County.

Table 2-7. 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	-	-



Program	Participating? (Yes/No)	Classification	Date Classified
Other: Organizations with mitigation focus (advocacy group, non-government)	No	-	-

N/A = Not applicable

— = Unavailable

2.3.7 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 2-8 summarizes the adaptive capacity for each identified hazard of concern and the County’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 2-8. Adaptive Capacity

Hazard	Adaptive Capacity - Strong/Moderate/Weak
Civil Unrest	Moderate
Dam Failure	Moderate
Drought	Moderate
Earthquake	Moderate
Epidemic	Moderate
Extreme Temperature	Moderate
Flood	Moderate
Hazardous Materials	Moderate
Severe Storm	Moderate
Severe Winter Storm	Moderate
Terrorism	Moderate
Transportation Accidents	Moderate
Utility Interruption	Moderate
Wildfire	Moderate

2.4 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 2-1 is responsible for maintaining this information.



2.4.1 NFIP Statistics

Table 2-9 summarizes the NFIP policy and claim statistics for Genesee County.

Table 2-9. Genesee NFIP Summary of Policy and Claim Statistics

# Policies	395
# Claims (Losses)	171
Total Loss Payments	\$1,482,846
# Repetitive Loss Properties	11
# Severe Repetitive Loss Properties	2

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 2018

Note: FEMA was only able to provide aggregate Repetitive Loss Claim Data to support this Hazard Mitigation Plan update. For this reason, NFIP summary data in this plan update is sourced from the previous 2019 Hazard Mitigation Plan.

2.4.2 Flood Vulnerability Summary

Table 2-10 provides a summary of the NFIP program in Genesee County.

Table 2-10. NFIP Summary

NFIP Topic	Comments
Floodplain Administration is conducted at the municipal level.	

2.5 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 2-11 through Table 2-13.

Table 2-11. 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
2016	Permitting is carried out at the municipal level.			
Total Permits				



	New Construction Permits Issued			
	Single Family	Multi-Family	Other (commercial, mixed-use, etc.)	Total
Permits within SFHA				
2017				
Total Permits				
Permits within SFHA				
2018				
Total Permits				
Permits within SFHA				
2019				
Total Permits				
Permits within SFHA				
2020				
Total Permits				
Permits within SFHA				
2021				
Total Permits				
Permits within SFHA				
2022				
Total Permits				
Permits within SFHA				
2023				
Total Permits				
Permits within SFHA				
2024				
Total Permits				
Permits within SFHA				

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

Table 2-12. Recent Major Development and Infrastructure from 2016 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
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Refer to Volume II, Chapters 3-23 for recent major development and infrastructure across the County.

* Only location-specific hazard zones or vulnerabilities identified.



Table 2-13. 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
Refer to Volume II, Chapters 3-23 for anticipated major development and infrastructure across the County.					

2.6 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 Genesee County's risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

2.6.1 Hazard Area

The hazard profiles in Volume 1, Chapter 6 through Chapter 19 provide detailed information regarding each plan participant's vulnerability to the identified hazards. Chapter 4 (Methodology) and Chapter 20 (Hazard Ranking) provide detailed summaries for the County of Genesee's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided in the municipal annexes illustrate the probable areas impacted within the jurisdiction based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the County of Genesee has significant exposure. The maps also show the location of potential new development, where available.

2.6.2 Hazard Event History

The history of natural and non-natural hazard events in Genesee County is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 2-14 provides details on loss and damage in Genesee County during hazard events since the last hazard mitigation plan update.

Table 2-14. Hazard Event History in Genesee County

Dates of Event	Event Type (Disaster Declaration)	County Designated?	Summary of Event	Summary of Damage and Losses
February 15-16, 2016	N/A	N/A	Heavy snow accumulations occurred in Central New York, with portions of Genesee County reporting up to 14 inches of snow.	DPW responses
March 8, 2017	N/A	N/A	Strong winds caused widespread power outages in Genesee County. Trees and power lines were downed. Power poles were snapped. The strong winds derailed a train in Batavia (Genesee County). Twelve out of thirty-one freight cars were blown	EOC activated and operating. Collaboration with National Grid for recovery. Opened shelter at the VA property.



Dates of Event	Event Type (Disaster Declaration)	County Designated?	Summary of Event	Summary of Damage and Losses
			off the tracks. 76-mile per hour winds were recorded in Genesee County. Minor injuries were reported to drivers in Alexander. Winds damaged several buildings.	
January 30-31, 2019	N/A	N/A	Extreme cold temperatures were recorded in Genesee County, combined with wind gusts of between 35 to 50 miles per hour, wind chills dropped to as low as -26 degrees Fahrenheit.	No impacts incurred
January 20, 2020 - May 11, 2023	DR-4480-NY and EM-3434-NY, Biological	Yes	The coronavirus pandemic resulted in roughly 19,956 positive cases and the deaths of 211 County residents as of August 20, 2024.	Facilitated the logistics for the pandemic, including distribution and purchasing. Provided support for vaccination and issuing guidance for first responders.
November 18, 2022 – November 21, 2022	EM-3589-NY, Winter Storm	Yes	A lake effect storm occurred and dropped multiple feet of snow in western New York.	Supported Erie County by providing resources.
December 23, 2022 – December 28, 2022	DR-4694-NY and EM-3590-NY, Winter Storm	Yes	A historic lake effect blizzard occurred northeast of Lake Erie and Lake Ontario during the Christmas holiday weekend. The combination of high winds in excess of 70 mph and heavy lake effect snow resulted in devastating impacts across western New York.	DPW responses. Coordination with opening shelters – approximately 180 persons for three days. Rescue and recovery of hundred in the Town of Alabama. Sent resources up to Erie County to assist with apparatuses.
July 10, 2024	N/A	N/A	The remnants of Tropical Storm Beryl impacted the County through the production of severe thunderstorms, heavy rains, strong winds, downed trees and power lines, and a confirmed EF-0 tornado in the Towns of Darien and Alexander.	Minimal impacts, some powerlines and trees down.
July 15, 2024	N/A	N/A	Strong thunderstorm developed and produced strong winds, heavy rain, and hail resulting in downed trees and power lines. The storms also produced an EF-0 tornado in the Town of Pavilion and flooded roadways, including NYS Route 5 where five feet of water accumulated at a railroad overpass in LeRoy.	Minimal impacts, some powerlines and trees down. Private property damages.

EM = Emergency Declaration (FEMA)



FEMA = Federal Emergency Management Agency

DR = Major Disaster Declaration (FEMA)

N/A = Not applicable

2.6.3 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 Genesee County.

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. Genesee 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 County indicated it agreed with the preliminary rankings.

Table 2-15 shows Genesee County's final hazard rankings for identified hazards of concern. Mitigation action development uses the ranking to target hazards with the highest risk.

Table 2-15. Hazard Ranking

Hazard	Rank
Civil Unrest	Low
Dam Failure	Medium
Drought	Medium
Earthquake	Low
Epidemic	Medium
Extreme Temperature	Medium
Flood	Medium
Hazardous Materials	Medium
Severe Storm	High
Severe Winter Storm	High
Terrorism	Low
Transportation Accidents	High
Utility Interruption	High
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 2-16 identifies critical facilities in the community located in the 1 percent and 0.2 percent annual chance floodplains.



Table 2-16. 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		

Refer to Volume II, Chapters 3-23 for critical facilities across the County.

Source: Genesee County 2017, 2021, 2023, 2024; NYS GIS Clearinghouse 2021, 2023, 2024; Genesee Orleans Wyoming Opioid Task Force 2021; Genesee Orleans Health Department 2024; NY Open Data 2024; US DOT 2023, Clark Patterson Lee Inc 2024; US EPA 2021; HIFLD 2021; US NPS 2021; USGS 2023

2.6.4 Identified Issues

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

- Since the area was last mapped by USGS in 1984 and 1994, significant changes in population, agricultural, and industrial land use have taken place, without corresponding updates to the understanding of the region's groundwater resources, particularly with respect to aquifer recharge, discharge, and extraction. During this time, agricultural, industrial, and mining expansions have increased the rate of groundwater extraction in both the unconsolidated and bedrock aquifers, while flood mitigation efforts along Tonawanda Creek may be affecting recharge rates in the floodplain.
- 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 across the County are undersized or have been damaged from instances of flooding and the debris caused by severe storms and severe winter storms.
- There are two unranked hazard dams, fifty low-hazard dams, and eight intermediate-hazard dams within the County. Despite not being high-hazard potential dams, these structures have the potential to impact the people, property, infrastructure, and environment nearby.
- 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.
- Sediment from stormwater runoff can clog small waterways and cause localized flooding and water supply contamination Countywide. Flooding can result in closed roadways, damage private property and infrastructure, and cause significant safety concerns.
- Large quantities of manure can spill and contaminate infrastructure, drinking water, and the environment. Local responders might not be aware of where these spills could occur to be able to plan for responding to these events.
- FIRMs in the County are from the early 1980s and might not adequately show the risk faced by individuals, businesses, and infrastructure operators from flooding. Inaccurate flood maps can misinform the public of actual flood risk and may prevent interested homeowners from receiving or applying for flood insurance. Correctly displaying the areas at risk to the flood hazard is not only critical to visually show the risk, but to support grant applications for funding to mitigate the flood risk at identified locations within or around the floodplain.
- Given that the FIRMs are outdated, individuals can be unaware that they are in areas vulnerable to repetitive flooding. Genesee County includes 10 repetitive loss properties and two severe repetitive loss properties.



- Property owners who experience repeated losses from flooding may be unaware that options exist to protect their properties from future flood events, and municipal officials may not understand the benefits or requirements of using federal mitigation funding to protect those properties.
- Critical facilities require backup power to ensure continuity of operations. The County Courthouse, County Building One, Office of the Aging facility, County Airport, County Animal Shelter, 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 interruptions, 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.
- The County currently does not have a map showing where fire hydrants are located throughout the County. Emergency response providers, particularly those responding via mutual aid to areas with which they are not familiar, might waste valuable time searching for a hydrant location during an emergency.
- In some of the rural areas of the County, water for firefighting operations is not available from hydrants. Fire departments are forced to rely on tanker trucks for firefighting. This results in limitations in available water and can be problematic where access for tanker trucks is difficult.
- Several dangerous intersections in the County need safety improvements and should be analyzed and prioritized based on traffic safety data. There are major State and US Routes and Interstates which traverse the County and maintain high traffic rates; these roads may also be utilized to transport hazardous materials.
- Municipal officials reported that stream bank erosion is a problem throughout the County but lack a consolidated list of problem areas or strategies for correction. Stream banks become eroded due to heavy rains from severe storms, degradation from flood waters and compacted snow and ice from severe winter storms. Stabilization measures, such as including gabions, riprap, drainpipes and/or related improvements, should be considered to prevent flooding.
- Much of Genesee County's population relies on private wells for their potable water. Many residents might not understand the importance of having their drinking water tested, as it could be contaminated because it is not treated at the municipal or county level. If residents are having their wells tested, they might not understand the test results. Individuals could be ingesting dangerous agents without knowing it.
- The availability of safe drinking water is crucial to the longevity of the County and its municipalities. Drinking water has the potential to be impacted by several hazards of concern including drought, earthquake, epidemic, extreme temperature, flood, hazardous materials, severe storm, severe winter storm, terrorism, utility interruption, and wildfire. Safe drinking water can be affected in several ways from these hazards including loss of supply, increased demand, deterioration of water quality, power interruptions, changes in water quality, damage or collapse of infrastructure, limited access to facilities, increased sediment, or field operation interruptions.

2.7 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.



2.7.1 Past Mitigation Action Status

Table 2-17 indicates progress on the County's mitigation strategy identified in the 2019 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.

2.7.2 Additional Mitigation Efforts

Genesee County did not identify any additional mitigation efforts completed since the last HMP.

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Table 2-17. Status of Previous Mitigation Actions

Project Number	Project Name	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.
GC-1	Erosion and Sedimentation Regulations	SWCD; municipalities, County Planning Department	Sediment from stormwater runoff can clog small waterways and cause localized flooding and water supply contamination countywide. Flooding can result in closed roadways, damage private property and infrastructure, and cause significant safety concerns.	1. No Progress 2. Mainly regulated from State level.	1. Discontinue 2. Not applicable 3. Regulations are in place and enforced at the State level.
GC-2	Manure Storage Locations	SWCD; OEM, municipalities	Large quantities of manure can spill and contaminate infrastructure, drinking water, and the environment. Local responders might not be aware of where these spills could occur to be able to plan for responding to these events.	1. In Progress 2. SWCD has implemented stricter guidelines for manure	1. Include 2. Not applicable 3. Not applicable
GC-3	FIRM Update	County OEM; County Planning Department	FIRMs in the county are from the early 1980s and might not adequately show the risk faced by individuals, businesses, and infrastructure operators from flooding.	1. In Progress 2. FEMA has been working with the County, State, and local jurisdictions to update the FIRMs	1. Include 2. Not applicable 3. Not applicable
GC-4	Countywide Repetitive Loss Areas Analysis	County OEM; County Planning Department	Given that the FIRMs are outdated (see GC-3), individuals can be unaware that they are in areas vulnerable to repetitive flooding. Genesee County includes 11 repetitive loss properties and two severe repetitive loss properties.	1. In Progress 2. FEMA has been working with the County, State, and local jurisdictions to update the FIRMs	1. Include 2. Not applicable 3. Not applicable
GC-5	Repetitive Loss Property Information	County Planning Department; County OEM, Highway, SWCD	Property owners who experience repeated losses from flooding may be unaware that options exist to protect their properties from future flood events, and municipal officials may not understand the benefits or requirements	1. In Progress 2. County has assisted Town of Alexander with repetitive loss projects.	1. Include 2. Not applicable 3. Not applicable



Project Number	Project Name	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.
			of using federal mitigation funding to protect those properties.		
GC-6	New County Courthouse Backup Generator	County OEM	Government operations might not be able to function if power is unavailable during or after a hazard event. The facility lacks a backup power source	1. No Progress 2. Financial Constraints	1. Include 2. Not applicable 3. Not applicable
GC-7	Old County Courthouse Backup Generator	County OEM	Government operations might not be able to function if power is unavailable during or after a hazard event. The facility lacks a backup power source.	1. No Progress 2. Financial Constraints	1. Include 2. Not applicable 3. Not applicable
GC-8	County Building One Backup Generator	County OEM	Government operations might not be able to function if power is unavailable during or after a hazard event. The building lacks a backup power source.	1. No Progress 2. Financial Constraints	1. Include 2. Not applicable 3. Not applicable
GC-9	Office of the Aging Backup Generator	County OEM	Government operations might not be able to function if power is unavailable during or after a hazard event. The facility lacks a backup power source.	1. No Progress 2. Financial Constraints	1. Include 2. Not applicable 3. Not applicable
GC-10	County Airport Backup Generator	County OEM	Airport operations and airfield facilities might not be able to function if power is unavailable during or after a hazard event. This could pose a safety risk to aircraft passengers and crew. The airport lacks a backup power source.	1. No Progress 2. Financial Constraints	1. Include 2. Not applicable 3. Not applicable
GC-11	County Animal Shelter Backup Generator	County OEM	The animal shelter might not be able to operate during a power outage. If the shelter cannot operate, it cannot accept animals, which could lead to individuals choosing not to evacuate from a hazard area because there is nowhere safe to bring their pets	1. No Progress 2. Financial Constraints	1. Include 2. Not applicable 3. Not applicable



Project Number	Project Name	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.
GC-12	Emergency Alerts	County OEM; municipalities, Health Department, local police, fire departments.	Individuals cannot appropriately react to emergency messages if they do not receive those messages.	1. Completed 2. Implemented IPAWS	1. Discontinue 2. Not applicable 3. Project complete
GC-13	Hydrant Locations	County OEM; local fire departments	The county currently does not have a map showing where fire hydrants are located throughout the county. Emergency response providers, particularly those responding via mutual aid to areas with which they are not familiar, might waste valuable time searching for a hydrant location during an emergency.	1. In Progress 2. System being updated with a number of sources	1. Include 2. Not applicable 3. Not applicable
GC-14	Well Testing	County Health; municipalities	Much of Genesee County's population relies on private wells for their potable water. Many residents might not understand the importance of having their drinking water tested, as it could be contaminated because it is not treated at the municipal or county level. If residents are having their wells tested, they might not understand the test results. Individuals could be ingesting dangerous agents without knowing it.	1. In Progress 2. The Health Department is seeking to expand its outreach with private property owners to ensure their drinking water is tested for contaminants.	1. Include 2. Not applicable 3. Not applicable
GC-15	Hazardous Materials Plans	County OEM; applicable businesses	The release of a hazardous material can injure or kill thousands of people. The health impact of a release is based on the time for which individuals are exposed and the nature of the chemicals themselves.	1. Completed 2. Updated in 2023 – HazMat reached accreditation from NYS	1. Discontinue 2. Not applicable 3. Project complete



Project Number	Project Name	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.
GC-16	Water Resources Protection	County Health Department; County OEM, municipalities, SWCD	A hazardous materials release can result in the contamination of surface water or groundwater.	1. In Progress 2. Tabletop exercise conducted. Updating the NYS Geographic Response Plan.	1. Include 2. Not applicable 3. Not applicable
GC-17	Rural Fire Suppression Water Supply	County OEM; local fire departments	In some of the rural areas of the county, water for firefighting operations is not available from hydrants. Fire departments are forced to rely on tanker trucks for firefighting. This results in limitations in available water and can be problematic where access for tanker trucks is difficult.	1. In Progress 2. Continuing to look for methods to expand coverage.	1. Include 2. Not applicable 3. Not applicable
GC-18	Local Road Safety Plan	Highway; County OEM, County Planning, municipalities	Several dangerous intersections in the county need safety improvements and should be analyzed and prioritized based on traffic safety data.	1. In Progress 2. Anticipated completion end of 2025 – Genesee Transportation Council	1. Include 2. Not applicable 3. Not applicable
GC-19	Stream Bank Erosion Plan	SWCD; municipalities, County Highway	Municipal officials reported that stream bank erosion is a problem throughout the county but lack a consolidated list of problem areas or strategies for correction.	1. No Progress 2. Due to liabilities, regulatory issues, and streams on private lands, this action is discontinued.	1. Discontinue 2. Not applicable 3. Due to liabilities, regulatory issues, and streams on private lands, this action is discontinued.



2.7.3 Proposed Hazard Mitigation Actions for the HMP Update

Genesee County 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 Genesee County 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 County priorities.

Table 2-18 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 2-19 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.



Table 2-18. 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
Civil Unrest	X				X					
Dam Failure	X				X					
Drought	X		X		X			X		
Earthquake	X				X					
Epidemic	X				X					X
Extreme Temperature	X				X					
Flood	X	X	X	X	X	X	X	X	X	X
Hazardous Materials	X	X			X					X
Severe Storm	X	X			X				X	X
Severe Winter Storm	X	X			X				X	X
Terrorism	X				X					
Transportation Accidents	X				X					
Utility Interruption	X	X			X				X	X
Wildfire	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 2-19. 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-GeneseeCo-01	Tonawanda Creek Recharge Evaluation	0	0	1	1	1	0	1	1	1	1	1	1	1	1	11	High
2025-GeneseeCo-02	Undersized Culverts	1	1	1	1	1	0	1	0	1	1	1	1	1	0	11	High
2025-GeneseeCo-03	Dam Owner Partnership	1	1	1	1	1	1	0	1	1	0	1	1	1	0	11	High
2025-GeneseeCo-04	Floodplain Management Training	1	1	1	1	1	1	1	1	1	0	1	1	0	0	11	High
2025-GeneseeCo-05	Erosion and Sedimentation Regulations	1	1	1	1	1	1	1	0	0	1	1	1	0	1	11	High
2025-GeneseeCo-06	Manure Storage Locations	0	0	1	1	1	1	1	0	0	1	1	1	0	1	9	Medium
2025-GeneseeCo-07	FIRM Update	1	1	1	1	1	1	1	1	1	0	1	1	0	0	11	High
2025-GeneseeCo-08	Countywide Repetitive Loss Areas Analysis	1	1	1	1	1	1	1	1	0	0	1	1	0	1	11	High
2025-GeneseeCo-09	Repetitive Loss Property Information	1	1	1	1	1	1	1	1	1	0	1	1	0	1	12	High
2025-GeneseeCo-10	Generators at Critical Facilities	1	1	1	1	1	1	0	1	1	1	1	1	1	0	12	High
2025-GeneseeCo-11	Hydrant Locations	1	1	1	1	1	1	0	0	0	1	1	1	1	1	11	High
2025-GeneseeCo-12	Rural Fire Suppression Water Supply	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High
2025-GeneseeCo-13	Local Road Safety Plan	1	0	1	1	1	1	1	1	1	1	1	1	1	0	12	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-GeneseeCo-14	Stream Bank Erosion Plan	1	1	1	1	1	1	1	1	1	1	1	1	0	1	13	High
2025-GeneseeCo-15	Well Testing	1	0	1	1	1	1	1	1	0	1	1	1	1	1	12	High
2025-GeneseeCo-16	Safe Drinking Water	1	0	1	1	1	0	1	1	0	1	1	1	1	1	11	High

Note: Volume I, Section 22 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-6), Medium (7-10), High (11-14).



Action 2025-GeneseeCo-01. Tonawanda Creek Recharge Evaluation

Lead Agency:	Genesee County	
Supporting Agencies:	City of Batavia, Town of Batavia	
Hazard(s) of Concern:	<input type="checkbox"/> Civil Unrest <input type="checkbox"/> Dam Failure <input checked="" type="checkbox"/> Drought <input type="checkbox"/> Earthquake <input type="checkbox"/> Epidemic <input type="checkbox"/> Extreme Temperature <input checked="" type="checkbox"/> Flood	<input type="checkbox"/> Hazardous Materials <input type="checkbox"/> Severe Storm <input type="checkbox"/> Severe Winter Storm <input type="checkbox"/> Terrorism <input type="checkbox"/> Transportation Accidents <input type="checkbox"/> Utility Interruption <input type="checkbox"/> Wildfire
Description of the Problem:	Since the area was last mapped by USGS in 1984 and 1994, significant changes in population, agricultural, and industrial land use have taken place, without corresponding updates to the understanding of the region's groundwater resources, particularly with respect to aquifer recharge, discharge, and extraction. During this time, agricultural, industrial, and mining expansions have increased the rate of groundwater extraction in both the unconsolidated and bedrock aquifers, while flood mitigation efforts along Tonawanda Creek may be affecting recharge rates in the floodplain.	
Description of the Solution:	The area has a unique combination of an unconfined, unconsolidated glacial aquifer that may be hydrologically connected to an underlying limestone karst aquifer. The objective of the project is to evaluate the groundwater resources of the Tonawanda glacial and Onondaga bedrock aquifers to manage the water resources amid growing concerns of future sustainability of local water supplies in the Batavia area and Genesee and Wyoming counties. Project activities include development of a groundwater-flow model of the glacial and bedrock aquifers to help improve understanding of the hydrogeologic conditions and the available water resources in a region undergoing significant changes to land use, water use, and climate. This proposed study will help stakeholders by characterizing hydrogeologic connections between the glacial valley-fill Tonawanda Aquifer and the underlying karstic bedrock aquifers; characterizing recharge, discharge, and groundwater-flow paths in the combined aquifer system; and determining the hydrologic effects of current and future water-use withdrawals from the Tonawanda aquifer from proposed stakeholder-provided water-management scenarios.	
Estimated Cost:	Phase I – Aquifer mapping and hydrogeological characterization – \$350,000 Phase II – Groundwater-flow model development – \$450,000 Phase III – Model refinements and reporting – \$200,000	
Potential Funding Sources:	FEMA HMA, County Budget	
Implementation Timeline:	One year per phase, project initiation upon grant award	
Goals Met:	1	
Benefits:	<ul style="list-style-type: none">• Regional drought protection – provide critical information about where and how the aquifers are most effectively recharged, supporting future projects that will restore and protect aquifer recharge areas and protect the region's groundwater in times of drought.• Regional flood protection – inform and support the development of future flood control projects, such as restoration of the floodplain at 'The Flats', which will provide aquifer recharge and flood protection for the City of Batavia, including disadvantaged populations.• Agriculture, industry, mining, and commercial success – facilitate sustainable groundwater planning and water use permitting, ensuring that the resource can continue to support agriculture, industry, mining, and commerce in the region.• Clean drinking water – identify the ways that groundwater contaminants travel through the limestone karst aquifer and can contaminate the gravel aquifer, and vice versa, allowing for adequate planning, protection, and effective response in the event of a hazardous leak or contamination event.• Public recreation – allow the resource to continue to support water-based public recreation such as swimming, fishing, and boating at the DeWitt Recreation Area, Seven Springs Country Club, Godfrey's Pond, Chapin Mill Retreat Center, Horseshoe Lake, Tonawanda Creek, and other locations.• Informed and confident decision making – provide leadership at Genesee County, City of Batavia, and Town of Batavia with critical information and accurate tools to make	



	<p>land use and water use decisions affecting aquifer recharge, discharge, extraction, and water quality.</p> <ul style="list-style-type: none">• Public education – expand and enhance public education around groundwater resources, planning, use, and protection, as well as hazardous mitigation planning for droughts and flooding.• Wildlife habitat – ensure the sustainability of the resource upon which a variety of aquatic and terrestrial species depend, as well as the associated economic, recreational, and health benefits of fishing, hunting, bird watching, and related activities.		
Impact on Socially Vulnerable Populations:	Safe and predicable water supplies are foundational to supporting socially vulnerable populations. This project will identify the exact nature of the communication between the aquifers and how aquifer recharge can be addressed to determine if continued agricultural, industrial and residential growth can be sustained. The information will also support flood mitigation efforts to protect socially vulnerable populations.		
Impact on Future Development:	This proposed study will help stakeholders by characterizing hydrogeologic connections between the glacial valley-fill Tonawanda Aquifer and the underlying karstic bedrock aquifers; characterizing recharge, discharge, and groundwater-flow paths in the combined aquifer system; and determining the hydrologic effects of current and future water-use withdrawals from the Tonawanda aquifer from proposed stakeholder provided water-management scenarios.		
Impact on Critical Facilities/Lifelines:	The bedrock aquifers are a source of recharge to the Tonawanda Aquifer but also have a high potential for contamination and have not been studied in detail. In 2023, the region experienced moderate drought conditions that led to the drying of some springs, small streams, and lower than average groundwater levels in monitoring wells. These observations have raised concerns with local leadership about future aquifer sustainability. As part of this investigation a study of the aquifer systems will be conducted and a detailed groundwater model of the combined Tonawanda and Onondaga aquifer system developed to better understand the complex hydrogeological conditions, and to address concerns about long-term future use of groundwater resources in the area.		
Impact on Capabilities:	<p>These support municipal water supplies, domestic water-supply wells, and a preponderance of agricultural, industrial, mining, and other vital commercial uses, including O-AT-KA Milk Products, LLC and HP HOOD, two of the largest agriculture sector employers in the region, both of which are threatened by water shortages.</p> <p>The outcome of this study will give municipal government officials critical information they need to make land use and water permitting decisions that will not impact the sustainability of the water supply. An understanding of the finite nature of local water resources will help officials avoid overtaxing the aquifer or preventing recharge. It will also inform flood mitigation planning and projects. The sustainability of this vital resource cannot be guaranteed without accurate information this study will provide. This information is central to informing decision making around land use and groundwater use.</p>		
Climate Change Considerations:	<p>Even as the impacts of climate change are being felt, their long-term impacts on municipal water supplies and aquifer recharge are not yet understood. At either end of a spectrum of potential impacts where flooding defines one end and drought the other, climate change's impacts on these aquifers can be devastating. Flooding conditions will overwhelm the system and make it vulnerable to contamination; drought will deprive users of the necessary resources to maintain wells and water supplies for municipal, domestic, industrial and commercial uses.</p> <p>An understanding of these aquifers can help officials better manage so that resources are managed through drought and flooding. Knowing how, and where, to mitigate flooding will support decision-making to protect downstream communities, prevent contamination and allow safe aquifer recharge that will protect against drought.</p>		
Mitigation Category	<input type="checkbox"/> Local Plans and Regulations (LPR) <input type="checkbox"/> Structure and Infrastructure Project (SIP)		<input checked="" type="checkbox"/> Natural Systems Protection (NSP) <input type="checkbox"/> Education and Awareness Programs (EAP)
CRS Category	<input type="checkbox"/> Preventative Measures (PR) <input type="checkbox"/> Property Protection (PP) <input type="checkbox"/> Public Information (PI)		<input checked="" type="checkbox"/> Natural Resource Protection (NR) <input type="checkbox"/> Structural Flood Control Projects (SP) <input type="checkbox"/> Emergency Services (ES)
Priority	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low
Alternatives:	Action		Evaluation
	No Action		Current problem exists



2. County of Genesee

	Town and Village of Batavia lead projects	Limited staffing, financial capabilities
	Focus on water supplies only in Genesee County and exclude Wyoming County	Water supply also feeds in from Wyoming County, would not be a full view

DRAFT



Action 2025-GeneseeCo-02. Undersized Culverts

Lead Agency:	Genesee County Engineering																
Supporting Agencies:	Genesee County Public Works																
Hazard(s) of Concern:	<table><tr><td><input type="checkbox"/> Civil Unrest</td><td><input type="checkbox"/> Hazardous Materials</td></tr><tr><td><input type="checkbox"/> Dam Failure</td><td><input checked="" type="checkbox"/> Severe Storm</td></tr><tr><td><input type="checkbox"/> Drought</td><td><input checked="" type="checkbox"/> Severe Winter Storm</td></tr><tr><td><input type="checkbox"/> Earthquake</td><td><input type="checkbox"/> Terrorism</td></tr><tr><td><input type="checkbox"/> Epidemic</td><td><input type="checkbox"/> Transportation Accidents</td></tr><tr><td><input type="checkbox"/> Extreme Temperature</td><td><input checked="" type="checkbox"/> Utility Interruption</td></tr><tr><td><input checked="" type="checkbox"/> Flood</td><td><input type="checkbox"/> Wildfire</td></tr></table>			<input type="checkbox"/> Civil Unrest	<input type="checkbox"/> Hazardous Materials	<input type="checkbox"/> Dam Failure	<input checked="" type="checkbox"/> Severe Storm	<input type="checkbox"/> Drought	<input checked="" type="checkbox"/> Severe Winter Storm	<input type="checkbox"/> Earthquake	<input type="checkbox"/> Terrorism	<input type="checkbox"/> Epidemic	<input type="checkbox"/> Transportation Accidents	<input type="checkbox"/> Extreme Temperature	<input checked="" type="checkbox"/> Utility Interruption	<input checked="" type="checkbox"/> Flood	<input type="checkbox"/> Wildfire
<input type="checkbox"/> Civil Unrest	<input type="checkbox"/> Hazardous Materials																
<input type="checkbox"/> Dam Failure	<input checked="" type="checkbox"/> Severe Storm																
<input type="checkbox"/> Drought	<input checked="" type="checkbox"/> Severe Winter Storm																
<input type="checkbox"/> Earthquake	<input type="checkbox"/> Terrorism																
<input type="checkbox"/> Epidemic	<input type="checkbox"/> Transportation Accidents																
<input type="checkbox"/> Extreme Temperature	<input checked="" type="checkbox"/> Utility Interruption																
<input checked="" type="checkbox"/> Flood	<input type="checkbox"/> 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 across the County are undersized or have been damaged from instances of flooding and the debris caused by severe storms and severe winter storms.																
Description of the Solution:	The County 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. Genesee County Public Works will complete the necessary upsizing for the culverts.																
Estimated Cost:	TBD after study is complete																
Potential Funding Sources:	FEMA HMA, CHIPS, County Budget																
Implementation Timeline:	Within 5 years																
Goals Met:	1, 2																
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	<table><tr><td><input type="checkbox"/> Local Plans and Regulations (LPR)</td><td><input type="checkbox"/> Natural Systems Protection (NSP)</td></tr><tr><td><input checked="" type="checkbox"/> Structure and Infrastructure Project (SIP)</td><td><input type="checkbox"/> Education and Awareness Programs (EAP)</td></tr></table>			<input type="checkbox"/> Local Plans and Regulations (LPR)	<input type="checkbox"/> Natural Systems Protection (NSP)	<input checked="" type="checkbox"/> Structure and Infrastructure Project (SIP)	<input type="checkbox"/> Education and Awareness Programs (EAP)										
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<input type="checkbox"/> Public Information (PI)	<input type="checkbox"/> Emergency Services (ES)																
Priority	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low														
Alternatives:	<table><thead><tr><th>Action</th><th>Evaluation</th></tr></thead><tbody><tr><td>No Action</td><td>Current problem exists</td></tr><tr><td>Remove roadway</td><td>Roadway cannot be removed</td></tr><tr><td>Raingardens</td><td>Raingardens are unlikely to be able to absorb enough stormwater to prevent flooding during severe rainfall events.</td></tr></tbody></table>			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	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-GeneseeCo-03. Dam Owner Partnership

Lead Agency:	Local Jurisdictions																
Supporting Agencies:	Genesee County Office of Emergency Management, Genesee County Planning, NYS DEC, Dam Owners																
Hazard(s) of Concern:	<table><tr><td><input type="checkbox"/> Civil Unrest</td><td><input type="checkbox"/> Hazardous Materials</td></tr><tr><td><input checked="" type="checkbox"/> Dam Failure</td><td><input type="checkbox"/> Severe Storm</td></tr><tr><td><input type="checkbox"/> Drought</td><td><input type="checkbox"/> Severe Winter Storm</td></tr><tr><td><input type="checkbox"/> Earthquake</td><td><input type="checkbox"/> Terrorism</td></tr><tr><td><input type="checkbox"/> Epidemic</td><td><input type="checkbox"/> Transportation Accidents</td></tr><tr><td><input type="checkbox"/> Extreme Temperature</td><td><input type="checkbox"/> Utility Interruption</td></tr><tr><td><input type="checkbox"/> Flood</td><td><input type="checkbox"/> Wildfire</td></tr></table>			<input type="checkbox"/> Civil Unrest	<input type="checkbox"/> Hazardous Materials	<input checked="" type="checkbox"/> Dam Failure	<input type="checkbox"/> Severe Storm	<input type="checkbox"/> Drought	<input type="checkbox"/> Severe Winter Storm	<input type="checkbox"/> Earthquake	<input type="checkbox"/> Terrorism	<input type="checkbox"/> Epidemic	<input type="checkbox"/> Transportation Accidents	<input type="checkbox"/> Extreme Temperature	<input type="checkbox"/> Utility Interruption	<input type="checkbox"/> Flood	<input type="checkbox"/> Wildfire
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<input type="checkbox"/> Extreme Temperature	<input type="checkbox"/> Utility Interruption																
<input type="checkbox"/> Flood	<input type="checkbox"/> Wildfire																
Description of the Problem:	There are two unranked hazard dams, fifty low-hazard dams, and eight intermediate-hazard dams within the County. 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 County will work with local jurisdictions to contact 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:	County Budget, Jurisdictional Budgets																
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 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	<table><tr><td><input checked="" type="checkbox"/> Local Plans and Regulations (LPR)</td><td><input type="checkbox"/> Natural Systems Protection (NSP)</td></tr><tr><td><input type="checkbox"/> Structure and Infrastructure Project (SIP)</td><td><input type="checkbox"/> Education and Awareness Programs (EAP)</td></tr></table>			<input checked="" type="checkbox"/> Local Plans and Regulations (LPR)	<input type="checkbox"/> Natural Systems Protection (NSP)	<input type="checkbox"/> Structure and Infrastructure Project (SIP)	<input type="checkbox"/> Education and Awareness Programs (EAP)										
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Priority	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low														
Alternatives:	<table><tr><th>Action</th><th>Evaluation</th></tr><tr><td>No Action</td><td>County and local jurisdictions will be unaware of any safety concerns for the dam or its condition</td></tr><tr><td>Utilize information from NYS DEC</td><td>Owners may not be required to submit a safety plan to the State</td></tr><tr><td>Utilize information from the National Inventory of Dams</td><td>Not all dams are listed on the inventory</td></tr></table>	Action	Evaluation	No Action	County and local jurisdictions 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	Evaluation																
No Action	County and local jurisdictions 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-GeneseeCo-04. Floodplain Management Training

Lead Agency:	Local Jurisdictions		
Supporting Agencies:	Genesee County Office of Emergency Management, Genesee County Planning		
Hazard(s) of Concern:	<input type="checkbox"/> Civil Unrest <input type="checkbox"/> Dam Failure <input type="checkbox"/> Drought <input type="checkbox"/> Earthquake <input type="checkbox"/> Epidemic <input type="checkbox"/> Extreme Temperature <input checked="" type="checkbox"/> Flood <input type="checkbox"/> Hazardous Materials <input type="checkbox"/> Severe Storm <input type="checkbox"/> Severe Winter Storm <input type="checkbox"/> Terrorism <input type="checkbox"/> Transportation Accidents <input type="checkbox"/> Utility Interruption <input type="checkbox"/> 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.		
Description of the Solution:	Where feasible, local jurisdictions will have 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:	Jurisdictional Budgets		
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	<input type="checkbox"/> Local Plans and Regulations (LPR) <input type="checkbox"/> Structure and Infrastructure Project (SIP) <input type="checkbox"/> Natural Systems Protection (NSP) <input checked="" type="checkbox"/> Education and Awareness Programs (EAP)		
CRS Category	<input type="checkbox"/> Preventative Measures (PR) <input type="checkbox"/> Property Protection (PP) <input checked="" type="checkbox"/> Public Information (PI) <input type="checkbox"/> Natural Resource Protection (NR) <input type="checkbox"/> Structural Flood Control Projects (SP) <input type="checkbox"/> Emergency Services (ES)		
Priority	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> 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-GeneseeCo-05. Erosion and Sedimentation Regulations

Lead Agency:	Genesee County Soil and Water Conservation																
Supporting Agencies:	Genesee County Planning, Local Jurisdictions																
Hazard(s) of Concern:	<table><tr><td><input type="checkbox"/> Civil Unrest</td><td><input type="checkbox"/> Hazardous Materials</td></tr><tr><td><input type="checkbox"/> Dam Failure</td><td><input checked="" type="checkbox"/> Severe Storm</td></tr><tr><td><input type="checkbox"/> Drought</td><td><input type="checkbox"/> Severe Winter Storm</td></tr><tr><td><input type="checkbox"/> Earthquake</td><td><input type="checkbox"/> Terrorism</td></tr><tr><td><input type="checkbox"/> Epidemic</td><td><input type="checkbox"/> Transportation Accidents</td></tr><tr><td><input type="checkbox"/> Extreme Temperature</td><td><input type="checkbox"/> Utility Interruption</td></tr><tr><td><input checked="" type="checkbox"/> Flood</td><td><input type="checkbox"/> Wildfire</td></tr></table>			<input type="checkbox"/> Civil Unrest	<input type="checkbox"/> Hazardous Materials	<input type="checkbox"/> Dam Failure	<input checked="" type="checkbox"/> Severe Storm	<input type="checkbox"/> Drought	<input type="checkbox"/> Severe Winter Storm	<input type="checkbox"/> Earthquake	<input type="checkbox"/> Terrorism	<input type="checkbox"/> Epidemic	<input type="checkbox"/> Transportation Accidents	<input type="checkbox"/> Extreme Temperature	<input type="checkbox"/> Utility Interruption	<input checked="" type="checkbox"/> Flood	<input type="checkbox"/> Wildfire
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<input type="checkbox"/> Dam Failure	<input checked="" type="checkbox"/> Severe Storm																
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<input type="checkbox"/> Earthquake	<input type="checkbox"/> Terrorism																
<input type="checkbox"/> Epidemic	<input type="checkbox"/> Transportation Accidents																
<input type="checkbox"/> Extreme Temperature	<input type="checkbox"/> Utility Interruption																
<input checked="" type="checkbox"/> Flood	<input type="checkbox"/> Wildfire																
Description of the Problem:	Sediment from stormwater runoff can clog small waterways and cause localized flooding and water supply contamination Countywide. Flooding can result in closed roadways, damage private property and infrastructure, and cause significant safety concerns.																
Description of the Solution:	Encourage the revision of local laws to include measures for erosion and sediment control. Provide a draft or template local law for local jurisdictions to reference. Erosion and sediment control is critical in managing flooding and water supply contamination.																
Estimated Cost:	Low																
Potential Funding Sources:	NYSDOS, Local Jurisdictions, County Budget																
Implementation Timeline:	3 years																
Goals Met:	1																
Benefits:	This action can result in the improvement of stormwater quality, and a reduction in sediment entering water supplies and waterways.																
Impact on Socially Vulnerable Populations:	This action may reduce the amount of contaminants which infiltrate the water systems in local jurisdictions. Safe and predictable water supplies are foundational to supporting socially vulnerable populations.																
Impact on Future Development:	The local law may include provisions to reduce erosion and sedimentation at new construction sites.																
Impact on Critical Facilities/Lifelines:	This action may reduce the amount of contaminants which infiltrate the water systems in local jurisdictions.																
Impact on Capabilities:	This action will add regulatory capabilities to local jurisdictions and strengthen their initiatives to keep sediment out of waterways, which may contaminate water supply mechanisms.																
Climate Change Considerations:	Climate change is likely to result in stronger and more frequent rainfall events. These events can facilitate in the movement of sediment into stormwater infrastructure and waterways.																
Mitigation Category	<table><tr><td><input checked="" type="checkbox"/> Local Plans and Regulations (LPR)</td><td><input type="checkbox"/> Natural Systems Protection (NSP)</td></tr><tr><td><input type="checkbox"/> Structure and Infrastructure Project (SIP)</td><td><input type="checkbox"/> Education and Awareness Programs (EAP)</td></tr></table>			<input checked="" type="checkbox"/> Local Plans and Regulations (LPR)	<input type="checkbox"/> Natural Systems Protection (NSP)	<input type="checkbox"/> Structure and Infrastructure Project (SIP)	<input type="checkbox"/> Education and Awareness Programs (EAP)										
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<input type="checkbox"/> Public Information (PI)	<input type="checkbox"/> Emergency Services (ES)																
Priority	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low														
Alternatives:	<table><tr><th>Action</th><th>Evaluation</th></tr><tr><td>No Action</td><td>Current problem exists</td></tr><tr><td>Require only for construction projects</td><td>Will reduce sedimentation during construction, but not applicable for all properties</td></tr><tr><td>Do not draft or provide template local law</td><td>Requirements may differ across local jurisdictions</td></tr></table>			Action	Evaluation	No Action	Current problem exists	Require only for construction projects	Will reduce sedimentation during construction, but not applicable for all properties	Do not draft or provide template local law	Requirements may differ across local jurisdictions						
Action	Evaluation																
No Action	Current problem exists																
Require only for construction projects	Will reduce sedimentation during construction, but not applicable for all properties																
Do not draft or provide template local law	Requirements may differ across local jurisdictions																



Action 2025-GeneseeCo-06. Manure Storage Locations

Lead Agency:	Genesee County Soil and Water Conservation																
Supporting Agencies:	Genesee County Office of Emergency Management, Local Jurisdictions																
Hazard(s) of Concern:	<table><tr><td><input type="checkbox"/> Civil Unrest</td><td><input checked="" type="checkbox"/> Hazardous Materials</td></tr><tr><td><input type="checkbox"/> Dam Failure</td><td><input type="checkbox"/> Severe Storm</td></tr><tr><td><input type="checkbox"/> Drought</td><td><input type="checkbox"/> Severe Winter Storm</td></tr><tr><td><input type="checkbox"/> Earthquake</td><td><input type="checkbox"/> Terrorism</td></tr><tr><td><input checked="" type="checkbox"/> Epidemic</td><td><input type="checkbox"/> Transportation Accidents</td></tr><tr><td><input type="checkbox"/> Extreme Temperature</td><td><input type="checkbox"/> Utility Interruption</td></tr><tr><td><input checked="" type="checkbox"/> Flood</td><td><input type="checkbox"/> Wildfire</td></tr></table>			<input type="checkbox"/> Civil Unrest	<input checked="" type="checkbox"/> Hazardous Materials	<input type="checkbox"/> Dam Failure	<input type="checkbox"/> Severe Storm	<input type="checkbox"/> Drought	<input type="checkbox"/> Severe Winter Storm	<input type="checkbox"/> Earthquake	<input type="checkbox"/> Terrorism	<input checked="" type="checkbox"/> Epidemic	<input type="checkbox"/> Transportation Accidents	<input type="checkbox"/> Extreme Temperature	<input type="checkbox"/> Utility Interruption	<input checked="" type="checkbox"/> Flood	<input type="checkbox"/> Wildfire
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<input type="checkbox"/> Extreme Temperature	<input type="checkbox"/> Utility Interruption																
<input checked="" type="checkbox"/> Flood	<input type="checkbox"/> Wildfire																
Description of the Problem:	Large quantities of manure can spill and contaminate infrastructure, drinking water, and the environment. Local responders might not be aware of where these spills could occur to be able to plan for responding to these events.																
Description of the Solution:	Document the location of manure storage facilities through the voluntary Agricultural Environmental Management (AEM) Program.																
Estimated Cost:	Medium																
Potential Funding Sources:	USDA, County Budget																
Implementation Timeline:	3 years																
Goals Met:	1																
Benefits:	This action will result in the reduction in manure spills, and the protection of infrastructure, drinking water, and the environment.																
Impact on Socially Vulnerable Populations:	Safe and predicable water supplies are foundational to supporting socially vulnerable populations.																
Impact on Future Development:	Not applicable																
Impact on Critical Facilities/Lifelines:	This action will permit local responders to be aware of where manure spill incidents may occur.																
Impact on Capabilities:	The voluntary Agricultural Environmental Management (AEM) Program will be utilized more by both property owners, local responders, and the County.																
Climate Change Considerations:	Climate change is likely to result in stronger and more frequent rainfall events. These events can facilitate in the movement of contaminants in manure, which can spill out of contained areas and contaminate infrastructure, drinking water, and the environment.																
Mitigation Category	<table><tr><td><input checked="" type="checkbox"/> Local Plans and Regulations (LPR)</td><td><input type="checkbox"/> Natural Systems Protection (NSP)</td></tr><tr><td><input type="checkbox"/> Structure and Infrastructure Project (SIP)</td><td><input type="checkbox"/> Education and Awareness Programs (EAP)</td></tr></table>			<input checked="" type="checkbox"/> Local Plans and Regulations (LPR)	<input type="checkbox"/> Natural Systems Protection (NSP)	<input type="checkbox"/> Structure and Infrastructure Project (SIP)	<input type="checkbox"/> Education and Awareness Programs (EAP)										
<input checked="" type="checkbox"/> Local Plans and Regulations (LPR)	<input type="checkbox"/> Natural Systems Protection (NSP)																
<input type="checkbox"/> Structure and Infrastructure Project (SIP)	<input type="checkbox"/> Education and Awareness Programs (EAP)																
CRS Category	<table><tr><td><input type="checkbox"/> Preventative Measures (PR)</td><td><input type="checkbox"/> Natural Resource Protection (NR)</td></tr><tr><td><input type="checkbox"/> Property Protection (PP)</td><td><input type="checkbox"/> Structural Flood Control Projects (SP)</td></tr><tr><td><input type="checkbox"/> Public Information (PI)</td><td><input checked="" type="checkbox"/> Emergency Services (ES)</td></tr></table>			<input type="checkbox"/> Preventative Measures (PR)	<input type="checkbox"/> Natural Resource Protection (NR)	<input type="checkbox"/> Property Protection (PP)	<input type="checkbox"/> Structural Flood Control Projects (SP)	<input type="checkbox"/> Public Information (PI)	<input checked="" type="checkbox"/> Emergency Services (ES)								
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<input type="checkbox"/> Property Protection (PP)	<input type="checkbox"/> Structural Flood Control Projects (SP)																
<input type="checkbox"/> Public Information (PI)	<input checked="" type="checkbox"/> Emergency Services (ES)																
Priority	<table><tr><td><input type="checkbox"/> High</td><td><input checked="" type="checkbox"/> Medium</td><td><input type="checkbox"/> Low</td></tr></table>			<input type="checkbox"/> High	<input checked="" type="checkbox"/> Medium	<input type="checkbox"/> Low											
<input type="checkbox"/> High	<input checked="" type="checkbox"/> Medium	<input type="checkbox"/> Low															
Alternatives:	<table><tr><th>Action</th><th>Evaluation</th></tr><tr><td>No Action</td><td>Current problem exists</td></tr><tr><td>Local jurisdictions create and share locations via spreadsheet</td><td>Not a shared system, may result in discrepancies, not accessible by all parties</td></tr><tr><td>Remove cows from farms</td><td>Not economical, cost prohibitive</td></tr></table>			Action	Evaluation	No Action	Current problem exists	Local jurisdictions create and share locations via spreadsheet	Not a shared system, may result in discrepancies, not accessible by all parties	Remove cows from farms	Not economical, cost prohibitive						
Action	Evaluation																
No Action	Current problem exists																
Local jurisdictions create and share locations via spreadsheet	Not a shared system, may result in discrepancies, not accessible by all parties																
Remove cows from farms	Not economical, cost prohibitive																



Action 2025-GeneseeCo-07. FIRM Update

Lead Agency:	Genesee County Office of Emergency Management		
Supporting Agencies:	Genesee County Planning, Local Jurisdictions, NYDEC, NYSDHSES, FEMA		
Hazard(s) of Concern:	<input type="checkbox"/> Civil Unrest <input type="checkbox"/> Dam Failure <input type="checkbox"/> Drought <input type="checkbox"/> Earthquake <input type="checkbox"/> Epidemic <input type="checkbox"/> Extreme Temperature <input checked="" type="checkbox"/> Flood <input type="checkbox"/> Hazardous Materials <input type="checkbox"/> Severe Storm <input type="checkbox"/> Severe Winter Storm <input type="checkbox"/> Terrorism <input type="checkbox"/> Transportation Accidents <input type="checkbox"/> Utility Interruption <input type="checkbox"/> Wildfire		
Description of the Problem:	FIRMs in the County are from the early 1980s and might not adequately show the risk faced by individuals, businesses, and infrastructure operators from flooding. Inaccurate flood maps can misinform the public of actual flood risk and may prevent interested homeowners from receiving or applying for flood insurance. Correctly displaying the areas at risk to the flood hazard is not only critical to visually show the risk, but to support grant applications for funding to mitigate the flood risk at identified locations within or around the floodplain.		
Description of the Solution:	The County will actively participate in the remapping process. This participation will include providing data and information to support map revisions, identifying areas of flooding concern, providing review of preliminary maps, and adopting updated flood damage prevention local laws when the FIRMs are finalized.		
Estimated Cost:	Low		
Potential Funding Sources:	FEMA HMA, State Budget, County Budget, Jurisdictional Budgets		
Implementation Timeline:	Within 5 years		
Goals Met:	1, 2, 3, 4		
Benefits:	Updating FIRMs will provide a more complete picture of the floodplain and the overall flood hazard in Genesee County. This will inform other sectors of the community, including land use, development, permitting, and codes and standards.		
Impact on Socially Vulnerable Populations:	An analysis of the floodplain will inform future community development and land use and prevent vulnerable populations from residing in areas of heightened flood risk.		
Impact on Future Development:	Updated FIRMs will decide which populations and structures will require flood insurance to be built in areas of flood hazard.		
Impact on Critical Facilities/Lifelines:	Creation of updated floodplain maps will inform efforts to increase the resilience of critical infrastructure that is present in those areas, including transportation routes, water treatment plants, and other utility services. This will also aid in preventing future development of infrastructure in these areas.		
Impact on Capabilities:	An understanding of the floodplain will allow for the development of processes, plans, training and staff placement to address flooding issues in the areas of greatest concern before they occur.		
Climate Change Considerations:	The maps that are developed as a result of this action may not remain current or valid for the length of time that they may have in the past due to changes in floodplains and increases in extreme rainfall events.		
Mitigation Category	<input checked="" type="checkbox"/> Local Plans and Regulations (LPR) <input type="checkbox"/> Structure and Infrastructure Project (SIP) <input type="checkbox"/> Natural Systems Protection (NSP) <input type="checkbox"/> Education and Awareness Programs (EAP)		
CRS Category	<input checked="" type="checkbox"/> Preventative Measures (PR) <input type="checkbox"/> Property Protection (PP) <input type="checkbox"/> Public Information (PI) <input type="checkbox"/> Natural Resource Protection (NR) <input type="checkbox"/> Structural Flood Control Projects (SP) <input type="checkbox"/> Emergency Services (ES)		
Priority	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low
Alternatives:	Action		Evaluation
	No Action		Current problem exists
	County creates its own flood maps		Time consuming, cost prohibitive, may not be recognized as official documentation in grant applications
	FEMA updates maps without County input		Required changes for areas of flooding may not be incorporated



Action 2025-GeneseeCo-08. Countywide Repetitive Loss Areas Analysis

Lead Agency:	Genesee County Office of Emergency Management										
Supporting Agencies:	Genesee County Planning										
Hazard(s) of Concern:	<div><input type="checkbox"/> Civil Unrest</div> <div><input type="checkbox"/> Dam Failure</div> <div><input type="checkbox"/> Drought</div> <div><input type="checkbox"/> Earthquake</div> <div><input type="checkbox"/> Epidemic</div> <div><input type="checkbox"/> Extreme Temperature</div> <div><input checked="" type="checkbox"/> Flood</div> <div><input type="checkbox"/> Hazardous Materials</div> <div><input type="checkbox"/> Severe Storm</div> <div><input type="checkbox"/> Severe Winter Storm</div> <div><input type="checkbox"/> Terrorism</div> <div><input type="checkbox"/> Transportation Accidents</div> <div><input type="checkbox"/> Utility Interruption</div> <div><input type="checkbox"/> Wildfire</div>										
Description of the Problem:	Given that the FIRMs are outdated, individuals can be unaware that they are in areas vulnerable to repetitive flooding. Genesee County includes 10 repetitive loss properties and two severe repetitive loss properties.										
Description of the Solution:	Complete a Countywide repetitive loss areas analysis (RLAA) to determine areas that have or are expected to experience repeated losses from flooding. During this analysis, detailed building information will be collected to develop an understanding of the exact causes of repetitive flood damage. The purpose of the RLAA will be to generate mitigation solutions for individual buildings or areas.										
Estimated Cost:	Medium										
Potential Funding Sources:	FEMA HMA, County Budget										
Implementation Timeline:	3 years										
Goals Met:	1, 2, 3										
Benefits:	This action would foster comprehensive floodplain management by identifying areas experiencing repeated losses from flooding and potentially removing at risk properties from the flood hazard area or elevating properties to reduce the flood risk.										
Impact on Socially Vulnerable Populations:	Collecting data regarding flood prone areas provides an opportunity to introduce location-specific opportunities for assistance. Socially vulnerable populations may be able to have houses elevated or acquired when it would otherwise be unaffordable.										
Impact on Future Development:	Identification of at-risk flood areas may limit construction in areas that are prone to hazard events. Homes or properties may be acquired, which will remove those structures from the floodplain and prevent future development on those sites.										
Impact on Critical Facilities/Lifelines:	Removing structures from flood hazard areas decreases the demand on utilities and emergency services including health and medical, law enforcement, and search and rescue.										
Impact on Capabilities:	This action will enhance the current NFIP capabilities in the County and local jurisdictions.										
Climate Change Considerations:	Climate change is likely to increase the frequency and severity of severe rainfall, flash flooding, riverine flooding, and coastal flooding from sea level rise and storm surge events. Removing structures from the floodplain will reduce the response and recovery costs as a result of these events and decrease the loss of human life as a result of these events. Elevating structures will reduce the recovery costs.										
Mitigation Category	<div><input checked="" type="checkbox"/> Local Plans and Regulations (LPR)</div> <div><input type="checkbox"/> Structure and Infrastructure Project (SIP)</div> <div><input type="checkbox"/> Natural Systems Protection (NSP)</div> <div><input type="checkbox"/> Education and Awareness Programs (EAP)</div>										
CRS Category	<div><input type="checkbox"/> Preventative Measures (PR)</div> <div><input checked="" type="checkbox"/> Property Protection (PP)</div> <div><input type="checkbox"/> Public Information (PI)</div> <div><input type="checkbox"/> Natural Resource Protection (NR)</div> <div><input type="checkbox"/> Structural Flood Control Projects (SP)</div> <div><input type="checkbox"/> Emergency Services (ES)</div>										
Priority	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low								
Alternatives:	<table><thead><tr><th>Action</th><th>Evaluation</th></tr></thead><tbody><tr><td>No Action</td><td>Current problem exists</td></tr><tr><td>Deployable flood barriers</td><td>Requires deployment. Residents may not have adequate time to deploy, especially those who are elderly or disabled.</td></tr><tr><td>Elevate all properties</td><td>Cost prohibitive, may not be required</td></tr></tbody></table>			Action	Evaluation	No Action	Current problem exists	Deployable flood barriers	Requires deployment. Residents may not have adequate time to deploy, especially those who are elderly or disabled.	Elevate all properties	Cost prohibitive, may not be required
Action	Evaluation										
No Action	Current problem exists										
Deployable flood barriers	Requires deployment. Residents may not have adequate time to deploy, especially those who are elderly or disabled.										
Elevate all properties	Cost prohibitive, may not be required										



Action 2025-GeneseeCo-09. Repetitive Loss Property Information

Lead Agency:	Genesee County Planning		
Supporting Agencies:	Genesee County Office of Emergency Management, Genesee County Soil and Water Conservation, Local Jurisdictions		
Hazard(s) of Concern:	<div><input type="checkbox"/> Civil Unrest</div> <div><input type="checkbox"/> Dam Failure</div> <div><input type="checkbox"/> Drought</div> <div><input type="checkbox"/> Earthquake</div> <div><input type="checkbox"/> Epidemic</div> <div><input type="checkbox"/> Extreme Temperature</div> <div><input checked="" type="checkbox"/> Flood</div> <div><input type="checkbox"/> Hazardous Materials</div> <div><input type="checkbox"/> Severe Storm</div> <div><input type="checkbox"/> Severe Winter Storm</div> <div><input type="checkbox"/> Terrorism</div> <div><input type="checkbox"/> Transportation Accidents</div> <div><input type="checkbox"/> Utility Interruption</div> <div><input type="checkbox"/> Wildfire</div>		
Description of the Problem:	Property owners who experience repeated losses from flooding may be unaware that options exist to protect their properties from future flood events, and municipal officials may not understand the benefits or requirements of using federal mitigation funding to protect those properties.		
Description of the Solution:	The County will provide information for municipal officials and property owners about the possibility of buying out or raising repetitive loss properties. Local jurisdictions will conduct outreach to the impacted properties and will provide information on mitigation alternatives. After preferred mitigation measures are identified, the local jurisdictions will collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating of the affected properties that experience frequent flooding. The parameters for this initiative would be funding, benefits versus cost, and willing participation of property owners.		
Estimated Cost:	Medium		
Potential Funding Sources:	FEMA HMA, Jurisdictional Budgets, County Budget, Property Owners		
Implementation Timeline:	3 years		
Goals Met:	1, 2, 3		
Benefits:	This action would foster comprehensive floodplain management by removing at risk properties from the flood hazard area or elevating properties to reduce the flood risk.		
Impact on Socially Vulnerable Populations:	Collecting data regarding homeowners that reside within flood prone areas provides an opportunity to introduce location-specific opportunities for assistance. Socially vulnerable populations may be able to have houses elevated or acquired when it would otherwise be unaffordable.		
Impact on Future Development:	Increased outreach to homeowners within a flood prone area will limit construction in areas that are prone to hazard events. Homes may be acquired, which will remove those structures from the floodplain and prevent future development on those sites.		
Impact on Critical Facilities/Lifelines:	Removing structures from the floodplain decreases the demand on utilities and emergency services including health and medical, law enforcement, and search and rescue.		
Impact on Capabilities:	Outreach which promotes the removal of risk from the immediate floodplain via acquisition of properties will free up resources for search and rescue and other emergency operations as needed. This action will enhance the current NFIP capabilities in the County and local jurisdictions.		
Climate Change Considerations:	Climate change is likely to increase the frequency and severity of severe rainfall, flash flooding, riverine flooding, and coastal flooding from sea level rise and storm surge events. Removing structures from the floodplain will reduce the response and recovery costs as a result of these events and decrease the loss of human life as a result of these events. Elevating structures will reduce the recovery costs.		
Mitigation Category	<div><input type="checkbox"/> Local Plans and Regulations (LPR)</div> <div><input checked="" type="checkbox"/> Structure and Infrastructure Project (SIP)</div> <div><input type="checkbox"/> Natural Systems Protection (NSP)</div> <div><input type="checkbox"/> Education and Awareness Programs (EAP)</div>		
CRS Category	<div><input type="checkbox"/> Preventative Measures (PR)</div> <div><input type="checkbox"/> Property Protection (PP)</div> <div><input type="checkbox"/> Public Information (PI)</div> <div><input type="checkbox"/> Natural Resource Protection (NR)</div> <div><input checked="" type="checkbox"/> Structural Flood Control Projects (SP)</div> <div><input type="checkbox"/> Emergency Services (ES)</div>		
Priority	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low
Alternatives:	Action	Evaluation	
	No Action	Current problem exists	



2. County of Genesee

	Levee around floodplain	Costly, not enough room.
	Deployable flood barriers	Requires deployment. Residents may not have adequate time to deploy, especially those who are elderly or disabled.

DRAFT



Action 2025-GeneseeCo-10. Generators at Critical Facilities

Lead Agency:	Genesee County Engineering																
Supporting Agencies:	Genesee County Office of Emergency Management, Genesee County Administration																
Hazards of Concern:	<table><tr><td><input type="checkbox"/> Civil Unrest</td><td><input type="checkbox"/> Hazardous Materials</td></tr><tr><td><input type="checkbox"/> Dam Failure</td><td><input checked="" type="checkbox"/> Severe Storm</td></tr><tr><td><input type="checkbox"/> Drought</td><td><input checked="" type="checkbox"/> Severe Winter Storm</td></tr><tr><td><input type="checkbox"/> Earthquake</td><td><input type="checkbox"/> Terrorism</td></tr><tr><td><input type="checkbox"/> Epidemic</td><td><input type="checkbox"/> Transportation Accidents</td></tr><tr><td><input type="checkbox"/> Extreme Temperature</td><td><input checked="" type="checkbox"/> Utility Interruption</td></tr><tr><td><input checked="" type="checkbox"/> Flood</td><td><input type="checkbox"/> Wildfire</td></tr></table>			<input type="checkbox"/> Civil Unrest	<input type="checkbox"/> Hazardous Materials	<input type="checkbox"/> Dam Failure	<input checked="" type="checkbox"/> Severe Storm	<input type="checkbox"/> Drought	<input checked="" type="checkbox"/> Severe Winter Storm	<input type="checkbox"/> Earthquake	<input type="checkbox"/> Terrorism	<input type="checkbox"/> Epidemic	<input type="checkbox"/> Transportation Accidents	<input type="checkbox"/> Extreme Temperature	<input checked="" type="checkbox"/> Utility Interruption	<input checked="" type="checkbox"/> Flood	<input type="checkbox"/> Wildfire
<input type="checkbox"/> Civil Unrest	<input type="checkbox"/> Hazardous Materials																
<input type="checkbox"/> Dam Failure	<input checked="" type="checkbox"/> Severe Storm																
<input type="checkbox"/> Drought	<input checked="" type="checkbox"/> Severe Winter Storm																
<input type="checkbox"/> Earthquake	<input type="checkbox"/> Terrorism																
<input type="checkbox"/> Epidemic	<input type="checkbox"/> Transportation Accidents																
<input type="checkbox"/> Extreme Temperature	<input checked="" type="checkbox"/> Utility Interruption																
<input checked="" type="checkbox"/> Flood	<input type="checkbox"/> Wildfire																
Description of the Problem:	Critical facilities require backup power to ensure continuity of operations. The County Courthouse, County Building One, Office of the Aging facility, County Airport, County Animal Shelter, 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 interruptions, 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 County Engineer will conduct a study to determine the required generator capacity to support the critical facility. The County 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, County Budget																
Implementation Timeline:	Within 5 years																
Goals Met:	1, 2																
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	<table><tr><td><input type="checkbox"/> Local Plans and Regulations (LPR)</td><td><input type="checkbox"/> Natural Systems Protection (NSP)</td></tr><tr><td><input checked="" type="checkbox"/> Structure and Infrastructure Project (SIP)</td><td><input type="checkbox"/> Education and Awareness Programs (EAP)</td></tr></table>			<input type="checkbox"/> Local Plans and Regulations (LPR)	<input type="checkbox"/> Natural Systems Protection (NSP)	<input checked="" type="checkbox"/> Structure and Infrastructure Project (SIP)	<input type="checkbox"/> Education and Awareness Programs (EAP)										
<input type="checkbox"/> Local Plans and Regulations (LPR)	<input type="checkbox"/> Natural Systems Protection (NSP)																
<input checked="" type="checkbox"/> Structure and Infrastructure Project (SIP)	<input type="checkbox"/> Education and Awareness Programs (EAP)																
CRS Category	<table><tr><td><input type="checkbox"/> Preventative Measures (PR)</td><td><input type="checkbox"/> Natural Resource Protection (NR)</td></tr><tr><td><input type="checkbox"/> Property Protection (PP)</td><td><input type="checkbox"/> Structural Flood Control Projects (SP)</td></tr><tr><td><input type="checkbox"/> Public Information (PI)</td><td><input checked="" type="checkbox"/> Emergency Services (ES)</td></tr></table>			<input type="checkbox"/> Preventative Measures (PR)	<input type="checkbox"/> Natural Resource Protection (NR)	<input type="checkbox"/> Property Protection (PP)	<input type="checkbox"/> Structural Flood Control Projects (SP)	<input type="checkbox"/> Public Information (PI)	<input checked="" type="checkbox"/> Emergency Services (ES)								
<input type="checkbox"/> Preventative Measures (PR)	<input type="checkbox"/> Natural Resource Protection (NR)																
<input type="checkbox"/> Property Protection (PP)	<input type="checkbox"/> Structural Flood Control Projects (SP)																
<input type="checkbox"/> Public Information (PI)	<input checked="" type="checkbox"/> Emergency Services (ES)																
Priority	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low														
Alternatives	<table><tr><th>Action</th><th>Evaluation</th></tr><tr><td>No Action</td><td>Current problem exists</td></tr><tr><td>Microgrid</td><td>Costly and difficult to implement.</td></tr><tr><td>Solar panels and battery backup</td><td>Solar power is unlikely to be able to provide battery power for extended power failure events.</td></tr></table>			Action	Evaluation	No Action	Current problem exists	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	Evaluation																
No Action	Current problem exists																
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-GeneseeCo-11. Hydrant Locations

Lead Agency:	Genesee County Office of Emergency Management																
Supporting Agencies:	Local Fire Departments																
Hazard(s) of Concern:	<table><tr><td><input type="checkbox"/> Civil Unrest</td><td><input checked="" type="checkbox"/> Hazardous Materials</td></tr><tr><td><input type="checkbox"/> Dam Failure</td><td><input type="checkbox"/> Severe Storm</td></tr><tr><td><input type="checkbox"/> Drought</td><td><input type="checkbox"/> Severe Winter Storm</td></tr><tr><td><input type="checkbox"/> Earthquake</td><td><input type="checkbox"/> Terrorism</td></tr><tr><td><input type="checkbox"/> Epidemic</td><td><input type="checkbox"/> Transportation Accidents</td></tr><tr><td><input type="checkbox"/> Extreme Temperature</td><td><input checked="" type="checkbox"/> Utility Interruption</td></tr><tr><td><input type="checkbox"/> Flood</td><td><input checked="" type="checkbox"/> Wildfire</td></tr></table>			<input type="checkbox"/> Civil Unrest	<input checked="" type="checkbox"/> Hazardous Materials	<input type="checkbox"/> Dam Failure	<input type="checkbox"/> Severe Storm	<input type="checkbox"/> Drought	<input type="checkbox"/> Severe Winter Storm	<input type="checkbox"/> Earthquake	<input type="checkbox"/> Terrorism	<input type="checkbox"/> Epidemic	<input type="checkbox"/> Transportation Accidents	<input type="checkbox"/> Extreme Temperature	<input checked="" type="checkbox"/> Utility Interruption	<input type="checkbox"/> Flood	<input checked="" type="checkbox"/> Wildfire
<input type="checkbox"/> Civil Unrest	<input checked="" type="checkbox"/> Hazardous Materials																
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<input type="checkbox"/> Epidemic	<input type="checkbox"/> Transportation Accidents																
<input type="checkbox"/> Extreme Temperature	<input checked="" type="checkbox"/> Utility Interruption																
<input type="checkbox"/> Flood	<input checked="" type="checkbox"/> Wildfire																
Description of the Problem:	The County currently does not have a map showing where fire hydrants are located throughout the County. Emergency response providers, particularly those responding via mutual aid to areas with which they are not familiar, might waste valuable time searching for a hydrant location during an emergency.																
Description of the Solution:	Establish and maintain an inventory of the existing wet and dry hydrant locations and develop an understanding of future development needs. A map will be developed from the inventory. The map will be distributed to fire departments and stored in the CAD system.																
Estimated Cost:	Medium																
Potential Funding Sources:	USFA, County Budget																
Implementation Timeline:	2 years																
Goals Met:	2, 3																
Benefits:	Emergency providers will be able to better identify where each hydrant is located, permitting access to the hydrant more quickly to begin fire suppression activities.																
Impact on Socially Vulnerable Populations:	This action will allow fire departments to perform fire suppression activities more quickly.																
Impact on Future Development:	Properties will be better supported by first response agencies, as this action will assist in ensuring resources are identified in a shared inventory.																
Impact on Critical Facilities/Lifelines:	Future development will be better supported by first response agencies, as this action will assist in ensuring resources are identified in a shared inventory.																
Impact on Capabilities:	This action will benefit the safety and security lifeline by providing fire departments an inventory of locations of hydrants throughout the County.																
Climate Change Considerations:	This action will strengthen the capabilities of the County and local jurisdictions by identifying the location of hydrants throughout the County and creating a shared inventory for use.																
Mitigation Category	<table><tr><td><input checked="" type="checkbox"/> Local Plans and Regulations (LPR)</td><td><input type="checkbox"/> Natural Systems Protection (NSP)</td></tr><tr><td><input type="checkbox"/> Structure and Infrastructure Project (SIP)</td><td><input type="checkbox"/> Education and Awareness Programs (EAP)</td></tr></table>			<input checked="" type="checkbox"/> Local Plans and Regulations (LPR)	<input type="checkbox"/> Natural Systems Protection (NSP)	<input type="checkbox"/> Structure and Infrastructure Project (SIP)	<input type="checkbox"/> Education and Awareness Programs (EAP)										
<input checked="" type="checkbox"/> Local Plans and Regulations (LPR)	<input type="checkbox"/> Natural Systems Protection (NSP)																
<input type="checkbox"/> Structure and Infrastructure Project (SIP)	<input type="checkbox"/> Education and Awareness Programs (EAP)																
CRS Category	<table><tr><td><input type="checkbox"/> Preventative Measures (PR)</td><td><input type="checkbox"/> Natural Resource Protection (NR)</td></tr><tr><td><input type="checkbox"/> Property Protection (PP)</td><td><input type="checkbox"/> Structural Flood Control Projects (SP)</td></tr><tr><td><input type="checkbox"/> Public Information (PI)</td><td><input checked="" type="checkbox"/> Emergency Services (ES)</td></tr></table>			<input type="checkbox"/> Preventative Measures (PR)	<input type="checkbox"/> Natural Resource Protection (NR)	<input type="checkbox"/> Property Protection (PP)	<input type="checkbox"/> Structural Flood Control Projects (SP)	<input type="checkbox"/> Public Information (PI)	<input checked="" type="checkbox"/> Emergency Services (ES)								
<input type="checkbox"/> Preventative Measures (PR)	<input type="checkbox"/> Natural Resource Protection (NR)																
<input type="checkbox"/> Property Protection (PP)	<input type="checkbox"/> Structural Flood Control Projects (SP)																
<input type="checkbox"/> Public Information (PI)	<input checked="" type="checkbox"/> Emergency Services (ES)																
Priority	<table><tr><td><input checked="" type="checkbox"/> High</td><td><input type="checkbox"/> Medium</td><td><input type="checkbox"/> Low</td></tr></table>			<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low											
<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low															
Alternatives:	<table><tr><th>Action</th><th>Evaluation</th></tr><tr><td>No Action</td><td>Current problem exists</td></tr><tr><td>Local jurisdictions create their own inventory and share</td><td>Inventory attributes may be inconsistent</td></tr><tr><td>Inventory only dry hydrants</td><td>Would not capture all available hydrants</td></tr></table>			Action	Evaluation	No Action	Current problem exists	Local jurisdictions create their own inventory and share	Inventory attributes may be inconsistent	Inventory only dry hydrants	Would not capture all available hydrants						
Action	Evaluation																
No Action	Current problem exists																
Local jurisdictions create their own inventory and share	Inventory attributes may be inconsistent																
Inventory only dry hydrants	Would not capture all available hydrants																



Action 2025-GeneseeCo-12. Rural Fire Suppression Water Supply

Lead Agency:	Genesee County Office of Emergency Management		
Supporting Agencies:	Local Fire Departments		
Hazard(s) of Concern:	<input type="checkbox"/> Civil Unrest <input type="checkbox"/> Dam Failure <input type="checkbox"/> Drought <input type="checkbox"/> Earthquake <input type="checkbox"/> Epidemic <input type="checkbox"/> Extreme Temperature <input type="checkbox"/> Flood <input checked="" type="checkbox"/> Hazardous Materials <input type="checkbox"/> Severe Storm <input type="checkbox"/> Severe Winter Storm <input type="checkbox"/> Terrorism <input type="checkbox"/> Transportation Accidents <input type="checkbox"/> Utility Interruption <input checked="" type="checkbox"/> Wildfire		
Description of the Problem:	In some of the rural areas of the County, water for firefighting operations is not available from hydrants. Fire departments are forced to rely on tanker trucks for firefighting. This results in limitations in available water and can be problematic where access for tanker trucks is difficult.		
Description of the Solution:	Work to ensure a reliable source of water for fire suppression in rural-residential areas in the northern part of the County through the cooperative efforts of water districts, fire districts, and residents. The County will install hydrants and identify ponds from which the departments can draft water.		
Estimated Cost:	High		
Potential Funding Sources:	USFA, FEMA AFG, County Budget		
Implementation Timeline:	4 years		
Goals Met:	1, 2		
Benefits:	This action will increase the number of reliable water sources available for fire departments to perform fire suppression activities.		
Impact on Socially Vulnerable Populations:	Properties will be better supported by first response agencies, as this action will assist in ensuring resources are available to suppress fires.		
Impact on Future Development:	Future development will be better supported by first response agencies, as this action will assist in ensuring resources are available to suppress fires.		
Impact on Critical Facilities/Lifelines:	This action will benefit the safety and security lifeline by providing fire departments additional hydrants to hook-up to in order to provide fire suppression activities.		
Impact on Capabilities:	This action will strengthen the capabilities of the County and local jurisdictions by working to provide water suppression support.		
Climate Change Considerations:	Higher temperatures are expected to increase the amount of moisture that evaporates from land and water. These changes have the potential to lead to more frequent and severe fires.		
Mitigation Category	<input type="checkbox"/> Local Plans and Regulations (LPR) <input checked="" type="checkbox"/> Structure and Infrastructure Project (SIP) <input type="checkbox"/> Natural Systems Protection (NSP) <input type="checkbox"/> Education and Awareness Programs (EAP)		
CRS Category	<input type="checkbox"/> Preventative Measures (PR) <input type="checkbox"/> Property Protection (PP) <input type="checkbox"/> Public Information (PI) <input type="checkbox"/> Natural Resource Protection (NR) <input type="checkbox"/> Structural Flood Control Projects (SP) <input checked="" type="checkbox"/> Emergency Services (ES)		
Priority	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low
Alternatives:	Action		Evaluation
	No Action		Current problem exists
	Purchase more tankers for each jurisdiction		Cost prohibitive
	Identify ponds for suppression only		Waterbodies may not be available in each jurisdiction



Action 2025-GeneseeCo-13. Local Road Safety Plan

Lead Agency:	Genesee County Public Works		
Supporting Agencies:	Genesee County Sheriff's Office, Genesee County Office of Emergency Management, Genesee County Planning, Local Jurisdictions, NYS DOT, USDOT		
Hazard(s) of Concern:	<input type="checkbox"/> Civil Unrest <input type="checkbox"/> Dam Failure <input type="checkbox"/> Drought <input type="checkbox"/> Earthquake <input type="checkbox"/> Epidemic <input type="checkbox"/> Extreme Temperature <input type="checkbox"/> Flood <input checked="" type="checkbox"/> Hazardous Materials <input type="checkbox"/> Severe Storm <input type="checkbox"/> Severe Winter Storm <input type="checkbox"/> Terrorism <input checked="" type="checkbox"/> Transportation Accidents <input type="checkbox"/> Utility Interruption <input type="checkbox"/> Wildfire		
Description of the Problem:	Several dangerous intersections in the County need safety improvements and should be analyzed and prioritized based on traffic safety data. There are major State and US Routes and Interstates which traverse the County and maintain high traffic rates; these roads may also be utilized to transport hazardous materials.		
Description of the Solution:	Develop a countywide Local Road Safety Plan to identify problem areas and describe coordination among agencies that respond to incidents.		
Estimated Cost:	Low		
Potential Funding Sources:	County Budget		
Implementation Timeline:	2 years		
Goals Met:	1, 2		
Benefits:	The Local Road Safety Plan will detail what the Town will do during a disaster (incident command implementation, command center location and activities, specific plans by department, etc.). The creation of the Transportation Plan will permit the Town to integrate new plans, policies, capabilities, and hazard assessments.		
Impact on Socially Vulnerable Populations:	Not applicable.		
Impact on Future Development:	Future development will be better protected by having a reliable transportation system.		
Impact on Critical Facilities/Lifelines:	The section overview portion of the Local Road Safety Plan covers a discussion of a variety of topics, including vulnerable transportation lifelines (e.g. flood prone roads).		
Impact on Capabilities:	This action will create 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 which may impact transportation lifelines.		
Mitigation Category	<input checked="" type="checkbox"/> Local Plans and Regulations (LPR) <input type="checkbox"/> Structure and Infrastructure Project (SIP) <input type="checkbox"/> Natural Systems Protection (NSP) <input type="checkbox"/> Education and Awareness Programs (EAP)		
CRS Category	<input checked="" type="checkbox"/> Preventative Measures (PR) <input type="checkbox"/> Property Protection (PP) <input type="checkbox"/> Public Information (PI) <input type="checkbox"/> Natural Resource Protection (NR) <input type="checkbox"/> Structural Flood Control Projects (SP) <input type="checkbox"/> Emergency Services (ES)		
Priority	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low
Alternatives:	Action		Evaluation
	No Action		Current problem exists
	Rely on local jurisdictions to develop plans		Information may not be applicable for County-maintained roads
	Develop plans without jurisdictional input		Known issues at jurisdictional level will not be brought to fruition to County



Action 2025-GeneseeCo-14. Stream Bank Erosion Plan

Lead Agency:	Genesee County Soil & Water Conservation																
Supporting Agencies:	Local Jurisdictions, Genesee County Public Works																
Hazard(s) of Concern:	<table><tr><td><input type="checkbox"/> Civil Unrest</td><td><input type="checkbox"/> Hazardous Materials</td></tr><tr><td><input type="checkbox"/> Dam Failure</td><td><input checked="" type="checkbox"/> Severe Storm</td></tr><tr><td><input type="checkbox"/> Drought</td><td><input checked="" type="checkbox"/> Severe Winter Storm</td></tr><tr><td><input type="checkbox"/> Earthquake</td><td><input type="checkbox"/> Terrorism</td></tr><tr><td><input type="checkbox"/> Epidemic</td><td><input type="checkbox"/> Transportation Accidents</td></tr><tr><td><input type="checkbox"/> Extreme Temperature</td><td><input type="checkbox"/> Utility Interruption</td></tr><tr><td><input checked="" type="checkbox"/> Flood</td><td><input type="checkbox"/> Wildfire</td></tr></table>			<input type="checkbox"/> Civil Unrest	<input type="checkbox"/> Hazardous Materials	<input type="checkbox"/> Dam Failure	<input checked="" type="checkbox"/> Severe Storm	<input type="checkbox"/> Drought	<input checked="" type="checkbox"/> Severe Winter Storm	<input type="checkbox"/> Earthquake	<input type="checkbox"/> Terrorism	<input type="checkbox"/> Epidemic	<input type="checkbox"/> Transportation Accidents	<input type="checkbox"/> Extreme Temperature	<input type="checkbox"/> Utility Interruption	<input checked="" type="checkbox"/> Flood	<input type="checkbox"/> Wildfire
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<input type="checkbox"/> Extreme Temperature	<input type="checkbox"/> Utility Interruption																
<input checked="" type="checkbox"/> Flood	<input type="checkbox"/> Wildfire																
Description of the Problem:	Municipal officials reported that stream bank erosion is a problem throughout the County but lack a consolidated list of problem areas or strategies for correction. Stream banks become eroded due to heavy rains from severe storms, degradation from flood waters and compacted snow and ice from severe winter storms. Stabilization measures, such as including gabions, riprap, drainpipes and/or related improvements, should be considered to prevent flooding.																
Description of the Solution:	Develop a plan to correct stream bank erosion. Identify problem areas and coordinate all the necessary partners to correct stream bank erosion areas where needed and appropriate.																
Estimated Cost:	Medium																
Potential Funding Sources:	County Budget																
Implementation Timeline:	Within 3 years																
Goals Met:	1, 2																
Benefits:	Overall flooding will be reduced, which will result in less frequency of road closures and reduced damage to properties.																
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 surrounding problematic areas will have its risk of flood impacts reduced.																
Impact on Critical Facilities/Lifelines:	Not applicable																
Impact on Capabilities:	Not applicable																
Climate Change Considerations:	Climate change is likely to result in more frequent and severe rainfall events. These events can lead to an influx of water, resulting in flooding conditions.																
Mitigation Category	<table><tr><td><input checked="" type="checkbox"/> Local Plans and Regulations (LPR)</td><td><input type="checkbox"/> Natural Systems Protection (NSP)</td></tr><tr><td><input type="checkbox"/> Structure and Infrastructure Project (SIP)</td><td><input type="checkbox"/> Education and Awareness Programs (EAP)</td></tr></table>			<input checked="" type="checkbox"/> Local Plans and Regulations (LPR)	<input type="checkbox"/> Natural Systems Protection (NSP)	<input type="checkbox"/> Structure and Infrastructure Project (SIP)	<input type="checkbox"/> Education and Awareness Programs (EAP)										
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CRS Category	<table><tr><td><input checked="" type="checkbox"/> Preventative Measures (PR)</td><td><input type="checkbox"/> Natural Resource Protection (NR)</td></tr><tr><td><input type="checkbox"/> Property Protection (PP)</td><td><input type="checkbox"/> Structural Flood Control Projects (SP)</td></tr><tr><td><input type="checkbox"/> Public Information (PI)</td><td><input type="checkbox"/> Emergency Services (ES)</td></tr></table>			<input checked="" type="checkbox"/> Preventative Measures (PR)	<input type="checkbox"/> Natural Resource Protection (NR)	<input type="checkbox"/> Property Protection (PP)	<input type="checkbox"/> Structural Flood Control Projects (SP)	<input type="checkbox"/> Public Information (PI)	<input type="checkbox"/> Emergency Services (ES)								
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Priority	<table><tr><td><input checked="" type="checkbox"/> High</td><td><input type="checkbox"/> Medium</td><td><input type="checkbox"/> Low</td></tr></table>			<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low											
<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low															
Alternatives:	<table><tr><th>Action</th><th>Evaluation</th></tr><tr><td>No Action</td><td>Current problem exists</td></tr><tr><td>Elevate nearby roads</td><td>Cost prohibitive</td></tr><tr><td>Acquire all properties which flood</td><td>Cost prohibitive</td></tr></table>			Action	Evaluation	No Action	Current problem exists	Elevate nearby roads	Cost prohibitive	Acquire all properties which flood	Cost prohibitive						
Action	Evaluation																
No Action	Current problem exists																
Elevate nearby roads	Cost prohibitive																
Acquire all properties which flood	Cost prohibitive																



Action 2025-GeneseeCo-15. Well Testing

Lead Agency:	Genesee County Health Department																
Supporting Agencies:	Local Jurisdictions																
Hazard(s) of Concern:	<table><tr><td><input type="checkbox"/> Civil Unrest</td><td><input type="checkbox"/> Hazardous Materials</td></tr><tr><td><input type="checkbox"/> Dam Failure</td><td><input type="checkbox"/> Severe Storm</td></tr><tr><td><input checked="" type="checkbox"/> Drought</td><td><input type="checkbox"/> Severe Winter Storm</td></tr><tr><td><input type="checkbox"/> Earthquake</td><td><input type="checkbox"/> Terrorism</td></tr><tr><td><input checked="" type="checkbox"/> Epidemic</td><td><input type="checkbox"/> Transportation Accidents</td></tr><tr><td><input type="checkbox"/> Extreme Temperature</td><td><input checked="" type="checkbox"/> Utility Interruption</td></tr><tr><td><input type="checkbox"/> Flood</td><td><input type="checkbox"/> Wildfire</td></tr></table>			<input type="checkbox"/> Civil Unrest	<input type="checkbox"/> Hazardous Materials	<input type="checkbox"/> Dam Failure	<input type="checkbox"/> Severe Storm	<input checked="" type="checkbox"/> Drought	<input type="checkbox"/> Severe Winter Storm	<input type="checkbox"/> Earthquake	<input type="checkbox"/> Terrorism	<input checked="" type="checkbox"/> Epidemic	<input type="checkbox"/> Transportation Accidents	<input type="checkbox"/> Extreme Temperature	<input checked="" type="checkbox"/> Utility Interruption	<input type="checkbox"/> Flood	<input type="checkbox"/> Wildfire
<input type="checkbox"/> Civil Unrest	<input type="checkbox"/> Hazardous Materials																
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<input type="checkbox"/> Extreme Temperature	<input checked="" type="checkbox"/> Utility Interruption																
<input type="checkbox"/> Flood	<input type="checkbox"/> Wildfire																
Description of the Problem:	Much of Genesee County's population relies on private wells for their potable water. Many residents might not understand the importance of having their drinking water tested, as it could be contaminated because it is not treated at the municipal or county level. If residents are having their wells tested, they might not understand the test results. Individuals could be ingesting dangerous agents without knowing it.																
Description of the Solution:	The County will develop a program to provide free testing of water wells for homeowners. Currently, the Genesee County Health Department offers water sampling packages to private well owners for a cost.																
Estimated Cost:	Approximately \$30 per test, full cost of program dependent on participation by homeowners																
Potential Funding Sources:	County Budget																
Implementation Timeline:	4 years																
Goals Met:	1, 3																
Benefits:	This action will assist in ensuring there is clean, safe, potable drinking water for property owners by protecting the water quality in private wells.																
Impact on Socially Vulnerable Populations:	Safe and predicable water supplies are foundational to supporting socially vulnerable populations.																
Impact on Future Development:	Future development with a private well(s) will be supported by a County program which seeks to ensure clean, safe drinking water.																
Impact on Critical Facilities/Lifelines:	This action will strengthen the water systems lifeline by ensuring safe, clean water.																
Impact on Capabilities:	Not applicable																
Climate Change Considerations:	Higher temperatures are expected to increase the amount of moisture that evaporates from land and water. These changes have the potential to lead to more frequent and severe droughts, which, in turn, increases the demand for potable, clean water.																
Mitigation Category	<table><tr><td><input checked="" type="checkbox"/> Local Plans and Regulations (LPR)</td><td><input type="checkbox"/> Natural Systems Protection (NSP)</td></tr><tr><td><input type="checkbox"/> Structure and Infrastructure Project (SIP)</td><td><input type="checkbox"/> Education and Awareness Programs (EAP)</td></tr></table>			<input checked="" type="checkbox"/> Local Plans and Regulations (LPR)	<input type="checkbox"/> Natural Systems Protection (NSP)	<input type="checkbox"/> Structure and Infrastructure Project (SIP)	<input type="checkbox"/> Education and Awareness Programs (EAP)										
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<input checked="" type="checkbox"/> Preventative Measures (PR)	<input type="checkbox"/> Natural Resource Protection (NR)																
<input type="checkbox"/> Property Protection (PP)	<input type="checkbox"/> Structural Flood Control Projects (SP)																
<input type="checkbox"/> Public Information (PI)	<input type="checkbox"/> Emergency Services (ES)																
Priority	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low														
Alternatives:	<table><tr><th>Action</th><th>Evaluation</th></tr><tr><td>No Action</td><td>Current problem exists</td></tr><tr><td>Jurisdictions absorb costs for testing</td><td>May be cost prohibitive for some jurisdictions</td></tr><tr><td>County hires outside agency to perform testing</td><td>Would cost County extra funds when current staffing can perform tests</td></tr></table>	Action	Evaluation	No Action	Current problem exists	Jurisdictions absorb costs for testing	May be cost prohibitive for some jurisdictions	County hires outside agency to perform testing	Would cost County extra funds when current staffing can perform tests								
Action	Evaluation																
No Action	Current problem exists																
Jurisdictions absorb costs for testing	May be cost prohibitive for some jurisdictions																
County hires outside agency to perform testing	Would cost County extra funds when current staffing can perform tests																



Action 2025-GeneseeCo-16. Safe Drinking Water

Lead Agency:	Genesee County Health Department	
Supporting Agencies:	Genesee County Administration, Genesee County Office of Emergency Management	
Hazard(s) of Concern:	<input checked="" type="checkbox"/> Civil Unrest <input type="checkbox"/> Dam Failure <input checked="" type="checkbox"/> Drought <input checked="" type="checkbox"/> Earthquake <input checked="" type="checkbox"/> Epidemic <input checked="" type="checkbox"/> Extreme Temperature <input checked="" type="checkbox"/> Flood	<input checked="" type="checkbox"/> Hazardous Materials <input checked="" type="checkbox"/> Severe Storm <input checked="" type="checkbox"/> Severe Winter Storm <input checked="" type="checkbox"/> Terrorism <input type="checkbox"/> Transportation Accidents <input checked="" type="checkbox"/> Utility Interruption <input checked="" type="checkbox"/> Wildfire
Description of the Problem:	The availability of safe drinking water is crucial to the longevity of the County and its municipalities. Drinking water has the potential to be impacted by several hazards of concern including drought, earthquake, epidemic, extreme temperature, flood, hazardous materials, severe storm, severe winter storm, terrorism, utility interruption, and wildfire. Safe drinking water can be affected in several ways from these hazards including loss of supply, increased demand, deterioration of water quality, power interruptions, changes in water quality, damage or collapse of infrastructure, limited access to facilities, increased sediment, or field operation interruptions.	
Description of the Solution:	<p>The County will investigate the feasibility of several potential projects and determine which are the most cost-effective to implement without overstressing its capabilities. The County may choose to reference suggested projects from the US EPA's "Incident Action Checklists". Potential projects may include:</p> <ul style="list-style-type: none">• Develop an emergency drinking water supply plan and establish contacts to discuss procedures.• Identify priority water customers (e.g., hospitals), obtain their contact information, map their locations and develop a plan to restore those customers first.• Monitor water supply and calculate how long water could be provided if the drought persists• Review or develop a conservation plan and prepare for voluntary or mandatory conservation measures.• Know the largest water users and be aware of usage patterns in order to determine the most effective conservation practices for the system.• Determine if technical assistance programs are offered by the state, including wellhead protection programs for community water supplies.• Join New York State Water/Wastewater Agency Response Network (WARN) or other local mutual aid network.• Coordinate water usage with neighboring irrigation districts that are supplied by the same aquifer.• Coordinate with other neighboring water systems to develop a water use plan.• Identify generator needs at water facilities.• Review public information protocols. These protocols should include developing water advisory messages (e.g., boil water, warnings that service disruptions are likely due to extreme winter weather) and distributing them to customers using appropriate mechanisms, such as reverse 911.• Identify essential personnel at water system facilities and ensure they are trained to perform critical duties in an emergency (and possibly without communication), including the shut down and startup of the system.• Set up an automatic back-up on critical systems and ensure the process is producing a readable, uncorrupted restore file on a routine basis.	
Estimated Cost:	Medium	
Potential Funding Sources:	FEMA HMA, County Budget	
Implementation Timeline:	5 years	
Goals Met:	1, 2	
Benefits:	This action will permit the County to investigate various methods to provide safe drinking water to its residents.	
Impact on Socially Vulnerable Populations:	Safe and predicable water supplies are foundational to supporting socially vulnerable populations.	



Impact on Future Development:	Future development will be supported by a system which can provide clean, safe drinking water to those which occupy the new facilities.										
Impact on Critical Facilities/Lifelines:	This action will strengthen the water systems lifeline by ensuring safe, clean water.										
Impact on Capabilities:	This action will ensure the County is able to maintain its supply of potable water.										
Climate Change Considerations:	Higher temperatures are expected to increase the amount of moisture that evaporates from land and water. These changes have the potential to lead to more frequent and severe droughts, which, in turn, increases the demand for potable, clean water.										
Mitigation Category	<input checked="" type="checkbox"/> Local Plans and Regulations (LPR) <input type="checkbox"/> Structure and Infrastructure Project (SIP)	<input type="checkbox"/> Natural Systems Protection (NSP) <input type="checkbox"/> Education and Awareness Programs (EAP)									
CRS Category	<input checked="" type="checkbox"/> Preventative Measures (PR) <input type="checkbox"/> Property Protection (PP) <input type="checkbox"/> Public Information (PI)	<input type="checkbox"/> Natural Resource Protection (NR) <input type="checkbox"/> Structural Flood Control Projects (SP) <input type="checkbox"/> Emergency Services (ES)									
Priority	<input checked="" type="checkbox"/> High	<input type="checkbox"/> Medium	<input type="checkbox"/> Low								
Alternatives:	<table><tr><th>Action</th><th>Evaluation</th></tr><tr><td>No Action</td><td>Current problem exists</td></tr><tr><td>Rely on State to resolve problem</td><td>State does not have jurisdiction</td></tr><tr><td>Rely on local jurisdictions to resolve problem</td><td>Local jurisdictions may not have the staff or funding to resolve problem</td></tr></table>	Action	Evaluation	No Action	Current problem exists	Rely on State to resolve problem	State does not have jurisdiction	Rely on local jurisdictions to resolve problem	Local jurisdictions may not have the staff or funding to resolve problem		
Action	Evaluation										
No Action	Current problem exists										
Rely on State to resolve problem	State does not have jurisdiction										
Rely on local jurisdictions to resolve problem	Local jurisdictions may not have the staff or funding to resolve problem										