



9.1 Erie County

This section presents the jurisdictional annex for Erie County. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the county participated in the planning process; an assessment of the county’s risk and vulnerability; the different capabilities utilized in the county; and an action plan that will be implemented to achieve a more resilient community.

9.1.1 Hazard Mitigation Planning Team

Erie County followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many county departments, including Public Works, Homeland Security and Emergency Management and Environment and Planning. The Department of Homeland Security and Emergency Services represented the county on the Erie County Hazard Mitigation Plan Planning Partnership and Steering Committee and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.1-1. Hazard Mitigation Planning Team

| Primary Point of Contact | Alternate Point of Contact |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name/Title: Gregory Butcher, Deputy Commissioner Address: Department of Homeland Security and Emergency Services Phone Number: 716-858-2944 Email: Gregory.butcher@erie.gov | Name/Title: Melissa Calhoun, Special Assistant Address: Department of Homeland Security and Emergency Services Phone Number: 716-858-2944 Email: Melissa.calhoun@erie.gov |
| Additional Contributors | |
| Name/Title: Daniel Castle, Deputy Commissioner, Erie County Department of Environment & Planning Method of Participation: Participated in several meetings and provided written input | |
| Name/Title: Joe Fiegl, Deputy Commissioner, Erie County Division of Sewerage Management Method of Participation: Participated in a meeting and provided input in writing and on the phone | |
| Name/Title: Jon DePlanche, Senior Engineer, County Highway Department Method of Participation: Participated in a meeting and provided input in writing and on the phone | |
| Name/Title: Joanna Panasiewicz Method of Participation: Participated in meetings and completed capabilities information and information about identified hazards and risks | |

9.1.2 Jurisdiction Profile

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



9.1.3 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. The jurisdictional annexes for each municipality summarize recent and expected future development trends, including major residential/commercial development and major infrastructure development. The Erie County Department of Environment & Planning leads the county’s economic development efforts, oversees environmental compliance, collaborates on local and regional planning, provides digital mapping services, and provides wastewater treatment services in seven sewer districts across the county. The department also provides technical assistance to municipal boards, such as planning and zoning boards, as well as to municipalities updating their master plans or zoning.

9.1.4 Capability Assessment and Integration

Erie County performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 6 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Classification under various community mitigation programs.
- The community’s adaptive capacity to withstand hazard events.

Areas where mitigation is currently integrated are summarized in this Capability Assessment. Erie County identified specific integration activities that will be incorporated into procedures are included in the updated mitigation strategy.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to Erie County. The comment field provides information as to where hazard mitigation has been integrated.

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

| | Jurisdiction has this. (Yes/No) | State Mandated? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Department / Agency Responsible |
|---------------------------------------------------------------------------------|---------------------------------|--------------------------|-------------------------------------------------------------------|-------------------------------------------|---------------------------------------|
| Codes, Ordinances, & Requirements | | | | | |
| Building Code | No | Yes | Regulated at Local and State Levels | State and Local | Local Code or Building Departments |
| Comment: NYS Uniform and Energy Code 2020; Regulated at local and state levels. | | | | | |
| Zoning Code | Yes | No | Regulated at local level | Local | Zoning Board of Appeals or Adjustment |
| Comment: Adopted and enforced at the local level | | | | | |
| Subdivision Ordinance | No | No | Regulated at local level | Local | Planning or Zoning Boards |



| | Jurisdiction has this. (Yes/No) | State Mandated? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Department / Agency Responsible |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|--------------------------|---------------------------------------------------------------------------------------|-------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| Comment: Adopted and enforced at the local level | | | | | |
| Stormwater Management Ordinance | Yes | No | NYS SPDES Article 17 Title 8, Environmental Conservation Law Implementing Regulations | Local | Erie County Department of Environment and Planning /DSM (manages City of Lackawanna's stormwater management system) |
| Comment: Statewide regulation related to stormwater management standards. | | | | | |
| Post-Disaster Recovery Ordinance | No | No | - | - | - |
| Comment: None | | | | | |
| Real Estate Disclosure | Yes | Yes | Property Condition Disclosure Act, NY Code - Article 14 §460-467 | State | NYS Department of State, Real Estate Agent |
| Comment: In addition to facing potential liability for failing to disclose under the exceptions to "caveat emptor," a home seller must make certain disclosures under the law or pay a credit of \$500 to the buyer at closing. While the PCDA requires a seller to complete a standardized disclosure statement and deliver it to the buyer before the buyer signs the final purchase contract, in practice, most home sellers in New York opt not to complete the statement and instead pay the credit. | | | | | |
| Growth Management | No | No | Regulated at local level | Local | Local Planning Boards |
| Comment: Regulated at the local level and is pursuant to their local codes. | | | | | |
| Site Plan Review | Yes | No | NYS General Municipal Law 239 L & M | State | Erie County Department of Environment and Planning and Erie County Department of Public Works |
| Comment: New York State General Municipal Law Section 239 requires municipalities to refer certain projects and/or actions to Erie County for review. The County's Department of Environment and Planning reviews and makes a recommendation or provides comments on the project to the local board within 30 days. | | | | | |
| Environmental Protection Ordinance | No | No | - | - | - |
| Comment: Regulated by NYS regulations per New York State Environmental Conservation Law; Department of Environmental Conservation. | | | | | |
| Flood Damage Prevention Ordinance | No | Yes | Regulated at local level | Local | Municipal floodplain administrator |
| Comment: Regulated and enforced at the local level | | | | | |
| Municipal Separate Storm Sewer System (MS4) | Yes | No | NYS SPDES Article 17 Title 8, Environmental Conservation Law Implementing Regulations | County/State | Erie County Department of Public Works |
| Comment: The County Department of Public Works and other county departments implement the MS4 regulations to manage storm flows safely and collaboratively. | | | | | |
| Emergency Management Ordinance | Yes | Yes | Erie County Charter – Article 14, Emergency Management Ordinance | County | Erie County Department of Homeland Security and Emergency Services |
| Comment: This article establishes the county's Department of Homeland Security and Emergency Services | | | | | |
| Climate Change Ordinance | No | Yes | - | - | - |
| Comment: New York State Climate Leadership and Community Protection Act; NYS Department of Environmental Conservation | | | | | |
| Disaster Recovery Ordinance | No | No | - | - | - |
| Comment: None | | | | | |



| | Jurisdiction has this. (Yes/No) | State Mandated? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Department / Agency Responsible |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Disaster Reconstruction Ordinance | No | No | - | - | - |
| Comment: None | | | | | |
| Other | Yes | No | LL6-2007, Green Buildings Act | Local | County Department of Public Works - Erie County Department of Environment and Planning. And all local municipalities. |
| Comment: The Plan states that all major facility projects of Erie County shall be designed, constructed, and certified to at least the LEED silver standard. 2) Public buildings can be built and renovated using high-performance methods that save energy costs, preserve the environment, and make workers and students safer and more productive. | | | | | |
| Planning Documents | | | | | |
| Comprehensive Plan | Yes | No | Framework for Regional Growth | Erie & Niagara Counties | Erie County Department of Environment and Planning |
| <p>Comment: Erie & Niagara Counties have partnered to develop the Framework for Regional Growth. As envisioned by County leaders, the Framework establishes basic policies and principles to guide the future growth and development of the Region. Specifically, the Framework provides:</p> <ul style="list-style-type: none"> ▪ a vision for how we wish the region to grow and redevelop over the next 15 years. ▪ direction regarding growth and redevelopment matters to county decision-makers and other regional organizations linked to the two counties via funding, membership, or other relationships. ▪ information on the ways local governments, private sector, and non-profit actions and initiatives can reinforce the overall regional vision; and ▪ mechanisms to ensure that the goals, concepts, and recommendations of the Framework for Regional Growth are implemented in an efficient and accountable manner. | | | | | |
| Capital Improvement Plan | No | No | - | - | - |
| Comment: While the County does not have a capital improvement plan, the Department of Environment Planning plays a lead role in coordination and review of proposed capital projects. Department personnel review capital projects for consistency with the county's comprehensive plan and manage the environmental review process for capital projects. The Division of Sewerage Management has a separate asset management/capital improvement planning process for Erie County Sewer District facilities. | | | | | |
| Disaster Debris Management Plan | Yes | No | County Emergency Management Plan, 2018, Debris Management | - | - |
| Comment: The development of the New York State Comprehensive Emergency Management Plan (CEMP) is required under NYS Executive Law, Article 2B. The plan is developed and maintained by the New York State Office of Emergency Management and agencies that comprise the NYS Disaster Preparedness Commission (DPC). The CEMP is contained in three distinct, but interconnected volumes. The CEMP contains information about debris management planning. | | | | | |
| Floodplain or Watershed Plan | Yes | No | Regional Niagara River/ Lake Erie Watershed Management Plan Phase 2 – June 2019 www.erie.gov/wmp | Erie County and regional counties | Developed by Erie County and the Lake Erie Watershed Protection Alliance and Buffalo Niagara Waterkeeper |
| Comment: The goal of the Watershed Management Plan is to outline a strategy to improve water quality within the Niagara River/Lake Erie watershed. Active participation and stakeholder involvement is key to developing a comprehensive and successful watershed-wide management plan. Stakeholders such as citizens, community groups, environmental organizations, businesses, agencies, and public officials will have opportunities as detailed in this plan, to shape the resulting findings and recommendations. The Plan is based upon water quality monitoring, modeling and assessments currently underway. | | | | | |
| Stormwater Plan | Yes | No | NYS SPDES Article 17 Title 8, Environmental Conservation Law Implementing Regulations. And County Stormwater Management Plan; November 2010 | Local | Erie County Department of Environment and Planning and County Department of Public Works |
| Comment: The aim of the NYS State Pollution Discharge Elimination System is to protect water quality by reducing pollution. | | | | | |
| Open Space Plan | No | No | - | - | - |
| Comment: None | | | | | |
| Urban Water Management Plan | No | No | - | - | - |
| Comment: None | | | | | |



| | Jurisdiction has this. (Yes/No) | State Mandated? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Department / Agency Responsible |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|--------------------------|-----------------------------------------------------------------------------------|-------------------------------------------|------------------------------------------------------------------------------------------------------------|
| Habitat Conservation Plan | Yes | No | Niagara River Habitat Conservation Strategy – August 2021 | County | Developed by Buffalo Niagara Waterkeeper |
| Comment: The purpose of the Strategy is to serve as blueprints for habitat restoration and conservation in both the Niagara River watershed and Niagara River Greenway. Both efforts followed the Conservation Action Planning (CAP) process like that utilized for the Lake Ontario Watershed, the Lake Erie Watershed, and the Niagara River Watershed in Canada. | | | | | |
| Economic Development Plan | Yes | Yes | Erie and Niagara County Framework for Regional Growth, 2017 | Regional | Counties, all municipalities |
| Comment: The Erie County Comprehensive Economic Development Strategy (CEDS) is an extraction and combining of the primary findings and strategic directives of several recent planning studies and reports undertaken by County and City government, economic development organizations and area institutions. | | | | | |
| Shoreline Management Plan | No | No | - | - | - |
| Comment: None | | | | | |
| Community Wildfire Protection Plan | No | No | - | - | - |
| Comment: None | | | | | |
| Forest Management Plan | No | No | - | - | - |
| Comment: A Draft Plan was developed in 2003 but not adopted. | | | | | |
| Transportation Plan | Yes | No | New York State Transportation Improvement Plan Title 23 USC and 49 USC Chapter 53 | State | County Department of Environment and Planning and Niagara Frontier Transportation Authority |
| Comment: The State Transportation Improvement Plan is a five-year capital plan for NYS Transportation facilities and includes certain projects in Erie County. The EC Department of Public Works collaborates with the Greater Buffalo Niagara Regional Transportation Council to develop county projects within the Transportation Improvement Program annually. | | | | | |
| Climate Change /Resilience/ Sustainability Plan | Yes | No | Erie County Climate Action and Sustainability Plan for internal operations, 2019 | County | County Department of Environment and Planning |
| Comment: In addition to this plan the county is also developing a climate vulnerability assessment. | | | | | |
| Agriculture Plan | Yes | No | County Agricultural and Farmland Protection Plan, 2012 | County | Erie County Department of Environment and Planning; Erie County Agricultural and Farmland Protection Board |
| <p>Comment: The Plan sets as its key goal is to keep land in agricultural production by protecting farmland, helping a new generation to farm, and improving the viability of all farms in the County. Included in the Plan are:</p> <ul style="list-style-type: none"> • an analysis of agriculture and development pressure in the County, • summaries of the various public meetings and individual interviews that were conducted as part of the process, Erie County Agricultural and Farmland Protection Plan pg 2 • summaries of other planning documents specific to agriculture that are currently being used in the County, • information about the “tools in the toolbox” that Erie County does, and can, use to support farms and protect farmland, and • a set of strategies with goals and recommended actions for implementation. | | | | | |
| Other | - | - | - | - | - |
| Comment: None | | | | | |
| Response/Recovery Planning | | | | | |
| Comprehensive Emergency Management Plan | Yes | Yes | County Emergency Management Plan, 2017 | State/ county | Erie County Department of Homeland Security and Emergency Services |
| Comment: Each county in New York State is required to prepare a CEMP. The purpose of this plan is to minimize the effect of disasters by (i) identifying appropriate local measures to prevent disasters, (ii) developing mechanisms to coordinate the use of local resources and manpower for service during and after disasters and the delivery of services to aid citizens and reduce human suffering resulting from a disaster, and (iii) providing for recovery and redevelopment after disasters. | | | | | |



| | Jurisdiction has this. (Yes/No) | State Mandated? (Yes/No) | Code Citation and Date (code chapter, name of plan, date of plan) | Authority (local, county, state, federal) | Department / Agency Responsible |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|--------------------------|-------------------------------------------------------------------|-------------------------------------------|--------------------------------------------------------------------|
| Strategic Recovery Planning Report | No | No | - | - | - |
| Comment: None | | | | | |
| Threat & Hazard Identification & Risk Assessment (THIRA) | No | No | - | - | - |
| Comment: See "Other" for information about the county's CEPA. | | | | | |
| Post-Disaster Recovery Plan | Yes | No | Comprehensive Emergency Management Plan Annex 16.0 | State and county | Erie County Department of Homeland Security and Emergency Services |
| Comment: Post Disaster Recovery is a section of the CEMP | | | | | |
| Continuity of Operations Plan | Yes | No | County Continuity of Operations Plan, 2012 | State and county | Erie County Department of Homeland Security and Emergency Services |
| Comment: The COOP states that all emergency response activities within the county will utilize the National Incident Management System (NIMS). This plan employs a MAC structure that includes a MACC coordinator, a Planning section (situation unit / resource unit / strategic foresight unit), a Logistics section, Joint Information Center (JIC) and agency/organization representatives. | | | | | |
| Public Health Plan | No | Yes | - | - | - |
| Comment: None | | | | | |
| Other | Yes | Yes | County Emergency Preparedness Assessment (CEPA) | State and county | Erie County Department of Homeland Security and Emergency Services |
| Comment: Every three years, NYS DHSES assesses the county's programs in a manner similar to how the state develops its THIRA. | | | | | |

Development and Permitting Capability

The table below summarizes the capabilities of Erie County to oversee and track development.

Table 9.1-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---------------------------------------------------------------------------------------------------------------------------------------------------|--------|----------------------------------|
| Do you issue development permits? If yes, what department is responsible? | No | - |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | No | - |
| Do you have a buildable land inventory? If yes, please describe. If no, please quantitatively describe the level of buildout in the jurisdiction. | No | Buildout varies by municipality. |

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to Erie County and their current responsibilities which contribute to hazard mitigation.



Table 9.1-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, integration of hazard mitigation): |
|-----------------------------------------------------------------------------------|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Administrative Capability | | |
| Planning Board | No | - |
| Zoning Board of Adjustments | No | - |
| Planning Department | Yes | Erie County Department of Environment and Planning leads the county's economic development efforts, oversees environmental compliance, collaborates on local and regional planning, provides digital mapping services, and provides wastewater treatment services in seven sewer districts across the county. |
| Mitigation Planning Committee | No | - |
| Environmental Board/Commission | Yes | The Division of Environmental Compliance Services develops and implements programs in partnership with a variety of stakeholders to address the pressing environmental needs and concerns of the region. The Division leads and supports a variety of programs in the county, including but not limited to climate action and sustainability, invasive species, public outreach, water quality, and watershed management. |
| Open Space Board/Committee | No | - |
| Economic Development Commission/Committee | Yes | Erie County Office of Economic Development is part of the Department of Environment and Planning. They focus on business development, attraction, retention, and expansion. |
| Public Works/Highway Department and Weight and Measures | Yes | The Department of Public Works provides safe, functional roadways and bridges for the traveling public. The department also provides leadership and management in the design, construction, maintenance, and management of county-owned facilities. The department is divided into four divisions: Buildings and Grounds, Highways, Weights and Measures, and Fleet. The Department regularly addresses stormwater, sewer and tree trimming needs to address hazard impacts. |
| Construction/Building/Code Enforcement Department | No | No |
| Emergency Management/Public Safety Department | Yes | The Department of Homeland Security and Emergency Services is responsible for the overall planning and response coordination for emergencies in the county and ensures the county is prepared to respond to, and recover from, all natural and man-made emergencies for our citizens, employers, and visitors. |
| Warning Systems / Services (mass notification system, outdoor warning signals) | Yes | ECDHSES manages the warning system, to include NY-Alert, Ready Erie app, IPAWS, NAWAS |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | Yes | The Department of Public Works provides safe, functional roadways and bridges for the traveling public. The department also provides leadership and management in the design, construction, maintenance, and management of county-owned facilities. The Highway Division is responsible for the engineering and inspection of over a thousand miles of roadways. The Division is currently working on several projects including culvert repairs and replacements, roadway extensions, roadway stabilizations and bridge replacements. |
| Mutual aid agreements | Yes | The Department of Homeland Security and Emergency Services maintains a mutual aid plan and an Emergency Managers Mutual Aid structure. |
| Other | No | - |
| Technical/Staffing Capability | | |



| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, integration of hazard mitigation): |
|------------------------------------------------------------------------------------------------------------|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Planners or engineers with knowledge of land development and land management practices | Yes | The County Department of Environment and Planning leads the County's economic development efforts, oversees environmental compliance, collaborates on local and regional planning, provides digital mapping services, and provides wastewater treatment services in seven sewer districts across the county. |
| Engineers or professionals trained in building or infrastructure construction practices | Yes | The Division of Buildings and Grounds – designs, constructs, maintains, and manages county-owned facilities. The Division of Sewerage Management designs, constructs, maintains, and manages Erie County Sewer District facilities. Division of Highways designs, constructs and maintains county owned transportation assets. |
| Planners or engineers with an understanding of natural hazards | Yes | County Department of Public Works and County Department of Environment and Planning |
| Staff with expertise or training in benefit/cost analysis | No | - |
| Professionals trained in conducting damage assessments | No | - |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | Yes | County Department of Environment and Planning |
| Scientist familiar with natural hazards | No | - |
| NFIP Floodplain Administrator (FPA) | No | - |
| Surveyor(s) | No | - |
| Emergency Manager | Yes | The county's Emergency Manager is the Deputy Commissioner of Preparedness and Homeland Security |
| Grant writer(s) | No | - |
| Resilience Officer | No | - |
| Other (this could include stormwater engineer, environmental specialist, etc.) | Yes | The County Department of Environment and Planning staffs a Compliance Specialist, a Hazardous Waste Coordinator, a Sustainability Coordinator, and a Watershed Protection Coordinator |

Fiscal Capability

The table below summarizes financial resources available to Erie County.

Table 9.1-5. Fiscal Capabilities

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



| Financial Resources | Accessible or Eligible to Use? (Yes/No) |
|-----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Other federal or state Funding Programs | No |
| Open Space Acquisition funding programs | No |
| Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution]) | EPA Great Lakes Restoration Grants, NYS CFA grants for infrastructure, nonpoint source pollution and conservation. |

Education and Outreach Capability

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

Table 9.1-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|----------------------------------------------------------------------------------------------|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Public information officer or communications office | No | - |
| Personnel skilled or trained in website development | Yes | The Office of GIS (EDDEP) and the Department of Information and Support Services |
| Hazard mitigation information available on your website | Yes | The Department of Homeland Security and Emergency Services has information about hazard mitigation and the HMP update with links to the HMP project website. The main county website has news and announcements on the main page. |
| Social media for hazard mitigation education and outreach | No | The county employs the following social media platforms to distribute hazard mitigation related information; Facebook, Linked In, Instagram, Twitter and YouTube |
| Citizen boards or commissions that address issues related to hazard mitigation | Yes | Erie County Environmental Management Council, Lake Erie Watershed Protection Alliance, County Agricultural and Farmland Protection Board, WNY Stormwater Coalition, Solid Waste Management Boards |
| Other programs already in place that could be used to communicate hazard-related information | Yes | Community Climate Change Task Force, Erie County Hazardous Waste Program, Food Policy Council of Buffalo and Erie County. |
| Warning systems for hazard events | No | - |
| Natural disaster/safety programs in place for schools | No | - |
| Other | No | - |

Community Classifications

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

Table 9.1-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|---------------------------------------------------------|-------------------------|--------------------------------|---------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | No | - | - |
| Public Protection (ISO Fire Protection Classes 1 to 10) | No | - | - |
| NYSDEC Climate Smart Community | Yes | Bronze | 9/26/2019 |
| Storm Ready Certification | Yes | - | 7-13-2016 |
| Fire wise Communities classification | No | - | - |
| Other | No | - | - |





Note:

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

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current capabilities to adjust to, protect from, or withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each hazard of concern and the jurisdiction’s rating.

Table 9.1-8. Adaptive Capacity

| Hazard | Adaptive Capacity - Strong/Moderate/Weak* |
|---------------------|-------------------------------------------|
| Coastal Erosion | Strong |
| Cyber Attack | Moderate |
| Earthquake | Moderate |
| Expansive Soils | Strong |
| Extreme Temperature | Strong |
| Flood | Moderate |
| Hazardous Materials | Strong |
| Landslide | Strong |
| Pandemic | Strong |
| Severe Storm | Strong |
| Severe Winter Storm | Strong |
| Utility Failure | Strong |
| Wildfire | Strong |

*Strong Capacity exists and is in use
 Moderate Capacity may exist; but is not used or could use some improvement
 Weak Capacity does not exist or could use substantial improvement

9.1.5 National Flood Insurance Program (NFIP) Compliance

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

9.1.6 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes and Procedures

Erie County has an Evacuation Annex 2019 that directs evacuation procedures countywide and provides guidance on operations and responsibilities for evacuations when necessary.

Sheltering

Erie County has identified the following designated emergency shelters within the county.



Table 9.1-9. Designated Emergency Shelters

| Site Name | Address | Capacity | Accommodates Pets? | ADA Compliant? | Backup Power? | Types of Medical Services Provided | Other Services Provided |
|--------------------------------------------------------------------------------------------------------------------------------------|---------|----------|--------------------|----------------|---------------|------------------------------------|-------------------------|
| None Identified. The County will collaborate with municipalities to identify potential emergency shelters, per Proposed Action # 009 | | | | | | | |

Temporary Housing

Each jurisdiction must identify sites for the placement of temporary housing units to house residents displaced by a disaster. Erie County has identified the following sites suitable for placing temporary housing units.

Table 9.1-10. Temporary Housing Locations

| Site Name | Site Address | Capacity (number of sites) | Type | Infrastructure / Utilities Available (water, electric, septic, etc.) | Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code |
|-------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------------------------|------|----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| None Identified. The County will collaborate with municipalities to identify potential temporary housing locations, Proposed Action # 010 | | | | | |

Permanent Housing

Structures located in the regulatory floodplain may need to be relocated due to high flood risk or new properties must be built once severely damaged properties are demolished. Jurisdictions must identify suitable sites currently owned by the jurisdiction and potential sites under private ownership that meet applicable local zoning requirements and floodplain laws. Erie County has identified the following areas suitable for relocating homes outside of the floodplain.

Table 9.1-11. Permanent Housing Locations

| Site Name | Site Address | Capacity (number of sites) | Type | Infrastructure / Utilities Available (water, electric, septic, etc.) | Actions Required to Ensure Conformance with the NYS Uniform Fire Prevention and Building Code |
|-------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------------------------|------|----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| None Identified. The County will collaborate with municipalities to identify potential temporary housing locations, Proposed Action # 009 | | | | | |

9.1.7 Jurisdictional Risk Assessment

The hazard profiles in Section 5 (Risk Assessment) provide detailed information regarding each plan participant’s vulnerability to the identified hazards. Refer to Section 5.2 (Methodology and Tools) and Section 5.4 (Hazard Ranking) for a detailed summary for Erie County’s risk assessment results and data used to determine the hazard ranking discussed later in this section.

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



Hazard Event History

Erie County has a history of natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. The County’s history of federally declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Erie County. For details of hazard events that impacted the County, refer to Volume I, Section 5 of this plan.

Hazard Ranking and Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes Erie County’s risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Erie County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for Erie County. Erie County has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the county indicated agreement with the results as shown below.

Table 9.1-12. Hazard Ranking Input

| | | | | | | |
|-----------------|--------------|--------------|---------------------|---------------------|----------|---------------------|
| Coastal Erosion | Cyber Attack | Earthquake | Expansive Soils | Extreme Temperature | Flood | Hazardous Materials |
| Low | Medium | High | Low | Medium | Low | Low |
| Landslide | Pandemic | Severe Storm | Severe Winter Storm | Utility Failure | Wildfire | |
| Low | Medium | High | High | High | Medium | |

Note: The scale is based on the hazard rankings established in Section 5.3 and modified as appropriate during review by the jurisdiction

Critical Facilities

New York State Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2’ above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 0.2-percent annual chance





flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities because of a 1-percent annual chance flood event.

Table 9.1-13. Potential Flood Losses to Critical Facilities

| Name | Type | Exposure | | Addressed by Proposed Action |
|-----------------|------------------|----------|------------|------------------------------|
| | | 1% Event | 0.2% Event | |
| Springville Dam | County owned dam | Yes | Yes | 2022-Erie County-002 |

Source: XXXX

Identified Issues

After review of Erie County’s hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, Erie County has identified the following vulnerabilities within their community:

- Municipalities are not generally participating in the Community Rating System.
- The Springville dam is county owned and is designated a High Hazard Dam. The county assumed ownership and converted the parcel into a park. The county regularly reports to NYSDEC that the dam is serviceable.
- The Erie County Court building is vulnerable to wind damage.
- The Erie County Correctional Facility parking lots are subject to flooding.
- Coastal erosion is causing damage to lakeside structures
- Ellicott Creek is eroding streambank/road embankment and endangering road which is a main access route to Heim Elementary School, Beechwood Continuing Care Facility, and Getzville Fire Dept.
- Parking lots at the Erie County Correctional Facility are in the floodplain and sometimes are covered with water.
- Several streams throughout the county are eroding.
- Residents living along coastal areas need more information about the hazards.
- The county is not able to identify shelters and temporary/permanent housing locations.
- There are approximately 20 pump stations that lack a backup redundant power source and backup power for cooling centers should be considered.

9.1.8 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2015 HMP. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.



Table 9.1-14. Status of Previous Mitigation Actions

| Project # | Project | Hazard(s) Addressed | Brief Summary of the Original Problem | Responsible Party | Status (In Progress, Ongoing, No Progress, Complete) | Evaluation of Success (if project status is complete) | | <ol style="list-style-type: none"> Next Steps Project to be included in 2022 HMP or Discontinue If including action in the 2022 HMP, revise/reword to be more specific (as appropriate). If discontinue, explain why. |
|-----------|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------|--------------------|------------------------------------------------------|-------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | | | | Cost | | |
| 1 | Road repair/ culvert reconstruction – various locations County-wide | Flooding | Not Identified | DPW | Ongoing Capability | Level of Protection | | <ol style="list-style-type: none"> Discontinue This is a continuing item across the county and should be removed from this list. Per EC DPW |
| | | | | | | Damages Avoided; Evidence of Success | | |
| | | | | | | Cost | | |
| 2 | Debris Removal from Creeks & Streams – various locations County-wide | Flooding | Not Identified | DPW | Ongoing Capability | Level of Protection | | <ol style="list-style-type: none"> Discontinue This is a continuing item across the county and should be removed from this list. Per EC DPW |
| | | | | | | Damages Avoided; Evidence of Success | | |
| | | | | | | Cost | | |
| 3 | NOAA Storm Watcher and Storm Ready Programs | Nnatural events | Not Identified | Emergency Services | Ongoing Capability | Level of Protection | | <ol style="list-style-type: none"> Discontinue This is a Continuing Item with 3-year renewal Skywarn Spotter Trainings are conducted yearly |
| | | | | | | Damages Avoided; Evidence of Success | | |
| | | | | | | Cost | | |
| 4 | Tree removal & trimming along various County roads to prevent power outages and road closures. | Severe storms, tornadoes, winter storms, high winds, ice storms | Not Identified | DPW | Ongoing Capability | Level of Protection | | <ol style="list-style-type: none"> Discontinue This is a continuing item across the county and should be removed from this list. Per EC DPW |
| | | | | | | Damages Avoided; Evidence of Success | | |
| | | | | | | Cost | | |
| 5 | Replace & upgrade storm drainage system along various County roads to reduce flood risks. | Flooding | Property Damage | DPW | Ongoing Capability | Level of Protection | | <ol style="list-style-type: none"> Discontinue This is a continuing item across the county and should be removed from this list. Per EC DPW |
| | | | | | | Damages Avoided; Evidence of Success | | |
| | | | | | | Cost | | |



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

Erie County did not identify specific mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2015 HMP.

Proposed Hazard Mitigation Initiatives for the HMP Update

Erie County participated in a mitigation action workshop in June 2021 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Flood prone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

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

Table 9.1-15. Analysis of Mitigation Actions by Hazard and Category

| Hazard | FEMA | | | | CRS | | | | | |
|---------------------|------|-----|-----|-----|-----|----|----|----|----|----|
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Coastal Erosion | - | - | - | X | - | - | - | - | - | X |
| Cyber Attack | - | - | - | X | - | - | - | - | - | X |
| Earthquake | - | - | - | X | - | - | - | - | - | X |
| Expansive Soils | - | - | - | X | - | - | - | - | - | X |
| Extreme Temperature | - | - | - | X | - | - | - | - | - | X |
| Flood | X | X | - | X | X | X | X | X | - | X |
| Hazardous Materials | - | - | - | X | - | - | - | - | - | X |
| Landslide | - | - | - | X | - | - | - | - | - | X |
| Pandemic | - | - | - | X | - | - | - | - | - | X |
| Severe Storm | - | X | - | X | - | X | X | - | - | X |
| Severe Winter Storm | - | X | - | X | - | X | X | - | - | X |
| Utility Failure | - | - | - | X | - | - | - | - | - | X |
| Wildfire | - | - | - | X | - | - | - | - | - | X |

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

Table 9.1-16 summarizes the comprehensive range of specific mitigation initiatives Erie County would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.1-17 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.



Table 9.1-16. Proposed Hazard Mitigation Initiatives

| Project Number | Project Name | Goals Met | Hazard(s) to be Mitigated | Description of Problem and Solution | Critical Facility (Yes/No) | EHP Issues | Estimated Timeline | Lead Agency | Estimated Costs | Estimated Benefits | Potential Funding Sources | Priority | Mitigation Category | CRS Category |
|----------------------|-------------------------------------------------|-----------|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|------------|--------------------|----------------------------------------------------------------------------|-------------------------------|------------------------------------------------------------------|--------------------------------------------|----------|---------------------|--------------|
| 2022-Erie County-001 | Community Rating System | 1 | Flood | <p>Problem: Communities are not generally participating in CRS.</p> <p>Solution: Encourage all municipalities to participate in the CRS, which will decrease flood insurance rates and protect more properties. The county will provide technical assistance to help interested jurisdictions move forward.</p> | No | No | Within 5 years | County Emergency Management, County Department of Environment and Planning | Staff Time | Protect facilities from flooding damage | Municipal budget | High | LPR | PR |
| 2022-Erie County-002 | Protect Springville Dam to the 0.2% flood event | 1 | Flood | <p>Problem: The Springville dam is county owned and is designated a High Hazard Dam. The county assumed ownership and converted the parcel into a park. The county must regularly report to NYSDEC that the dam is serviceable.</p> <p>Solution: The county will develop a feasibility study to determine the condition and required repairs of the dam. Once the study is completed, the county will implement a routine inspection, assessment, and maintenance of the dam.</p> | Yes 💧 | No | 1 year | County Emergency Management, Department of Public Works | TBD by feasibility assessment | Preserve dam functionality and properties downstream from damage | BRIC and High Hazard Potential Dam Program | High | LPR, SIP | PP, PR |



| Project Number | Project Name | Goals Met | Hazard(s) to be Mitigated | Description of Problem and Solution | Critical Facility (Yes/No) | EHP Issues | Estimated Timeline | Lead Agency | Estimated Costs | Estimated Benefits | Potential Funding Sources | Priority | Mitigation Category | CRS Category |
|----------------------|-----------------------------------------------------|-----------|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|------------|--------------------|--------------------------------------------|--------------------------------|-------------------------------------------------------|------------------------------------------------------------------|----------|---------------------|--------------|
| 2022-Erie County-003 | Manage Streambank erosion and flooding | 1 | Flood, Severe Storm | <p>Problem: Ellicott Creek eroding streambank/road embankment endangering access to Heim Elementary School, Beechwood Continuing Care Facility, and Getzville Fire Department.</p> <p>Solution: County Public Works Department will assess the danger posed to the facilities. The DPW will then implement erosion control measures.</p> | Yes | No | Within 1 year | County DPW | \$1,200,000 | Ensure continued access to these important facilities | Municipal budget | High | EAP | PR |
| 2022-Erie County-004 | Erie County Correctional Facility | 1 | Flood | <p>Problem: Several buildings and parking lots of the prison are in the 0.2% annual chance flood area and susceptible to flood damages.</p> <p>Solution: The County Sheriff and Public Works Department will complete a study to determine mitigation options to alleviate flooding in this area. Once projects are identified, they will be implemented.</p> | No | No | Within 3 years | County Sheriff and Public Works Department | TBD during design process | Ensure continued access to the Correctional facility | Municipal budget for study; HMGP and FMA for mitigation measures | High | LPR, SIP | PP |
| 2022-Erie County-005 | Protect Erie County Court building from wind damage | 1 | Severe Storm, Severe Winter Storm | <p>Problem: The building's exterior cladding is vulnerable to high wind which could generate large pieces of flying debris.</p> <p>Solution: The Sheriff Department will determine and implement the optimal</p> | No | No | Within 3 years | County Sheriff Department | TBD by engineering feasibility | Ensure continued access to the County Court | BRIC, HMGP, Municipal budget | High | SIP | PP |



| Project Number | Project Name | Goals Met | Hazard(s) to be Mitigated | Description of Problem and Solution | Critical Facility (Yes/No) | EHP Issues | Estimated Timeline | Lead Agency | Estimated Costs | Estimated Benefits | Potential Funding Sources | Priority | Mitigation Category | CRS Category |
|----------------------|--------------------------------------------------------------------------------------|-----------|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|------------|--------------------|----------------------------------------|-----------------------------|---------------------------------------------------------|---------------------------|----------|---------------------|--------------|
| | | | | wind damage protection measures. | | | | | | | | | | |
| 2022-Erie County-006 | Provide/improve backup power to pumping stations and other sewer district facilities | 1 | Flood | <p>Problem: There are approximately 20 county operated pump stations that lack backup redundant power source, with other pumping stations and facilities with older units requiring upgrades. In the event of a power outage, the locations are at risk of not being able to provide the proper services to the county.</p> <p>Solution: Develop and prioritize a list of pump stations to receive backup power or for improvements to existing backup systems. This will include identifying the type, size, and fuel source for each generator. Once identified, the county will begin purchasing and installing the generators.</p> | Yes | No | Within 5 years | County Division of Sewerage Management | TBD by feasibility analysis | Ensure continued service from these critical facilities | HMGP, county budget | High | SIP | PP |



| Project Number | Project Name | Goals Met | Hazard(s) to be Mitigated | Description of Problem and Solution | Critical Facility (Yes/No) | EHP Issues | Estimated Timeline | Lead Agency | Estimated Costs | Estimated Benefits | Potential Funding Sources | Priority | Mitigation Category | CRS Category |
|----------------------|-----------------------------------------------------------------------|-----------|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|------------|--------------------|--------------------------------------------------------------------------|-----------------|--------------------------------------------------------------------------------------------------------------|------------------------------|----------|---------------------|--------------|
| 2022-Erie County-007 | Coastal Resilience Outreach | 2 | Flood, Severe Storm, Severe Winter Storm | <p>Problem: Severe weather including precipitation and wind, coupled with high lake levels have caused severe coastal erosion and flooding of structures along the Lake Erie coastline, exposing these critical facilities to failure.</p> <p>Solution: Working with NY Sea Grant, convene with municipal representatives to complete a needs assessment to assess the current understanding of coastal processes, regulations, and programs/resources and develop a Story Map resource with information on natural processes, NFIP, permitting case studies/ examples, and flood mitigation project examples.</p> | No | No | Within 2 years | Sea Grant, County Department of Homeland Security and Emergency Services | \$50,000 | Improve capacity of local stakeholders to implement hazard mitigation measures along the Lake Erie coastline | Sea Grant, county budget | High | EAP | PI |
| 2022-Erie County-008 | Identify Emergency Shelters and temporary/permanent housing locations | 1 | All Hazards | <p>Problem: Erie County does not maintain a list of identified shelters, temporary housing locations, or permanent housing locations. In the event of an emergency or disaster, the county does not have identified facilities for residents to go to. Nor do they have a buildable land inventory to relocate displaced residents or structures in the event of repetitive losses or proximity to hazard areas (i.e., WUI).</p> | Yes | No | Within 3 years | County Department of Homeland Security and Emergency Services | Staff Time | Provide emergency shelters and temporary/permanent locations | BRIC, HMGP, municipal budget | High | LPR, SIP | ES |



| Project Number | Project Name | Goals Met | Hazard(s) to be Mitigated | Description of Problem and Solution | Critical Facility (Yes/No) | EHP Issues | Estimated Timeline | Lead Agency | Estimated Costs | Estimated Benefits | Potential Funding Sources | Priority | Mitigation Category | CRS Category |
|----------------|--------------|-----------|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|------------|--------------------|-------------|-----------------|--------------------|---------------------------|----------|---------------------|--------------|
| | | | | Solution: The Department of Homeland Security and Emergency Services will work with the necessary departments and agencies to develop and implement a program to identify sites suitable for shelters, temporary housing, and permanent housing. This will also include identifying ways to make the sites suitable to provide these services to the county. | | | | | | | | | | |

Notes:

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

Acronyms and Abbreviations:

- CAV Community Assistance Visit
- CRS Community Rating System
- DPW Department of Public Works
- EHP Environmental Planning and Historic Preservation
- FEMA Federal Emergency Management Agency
- FPA Floodplain Administrator
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program
- OEM Office of Emergency Management

Potential FEMA HMA Funding Sources:

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

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.





- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses and 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 Storm Ready and Fire wise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*



Table 9.1-17. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Technical | Political | Legal | Fiscal | Environmental | Social | Administrative | Multi-Hazard | Timeline | Agency Champion | Other Community Objectives | Total | High / Medium / Low |
|----------------------|--------------------------------------------------------------------------------------|-------------|---------------------|--------------------|-----------|-----------|-------|--------|---------------|--------|----------------|--------------|----------|-----------------|----------------------------|-------|---------------------|
| 2022-Erie County-001 | Community Rating System | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 11 | High |
| 2022-Erie County-002 | Protect Springville Dam to the 0.2% flood event | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 12 | High |
| 2022-Erie County-003 | Manage Streambank erosion and flooding | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 12 | High |
| 2022-Erie County-004 | Erie County Correctional Facility | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 11 | High |
| 2022-Erie County-005 | Protect Erie County Court building from wind damage | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | High |
| 2022-Erie County-006 | Provide/improve backup power to pumping stations and other sewer district facilities | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | High |
| 2022-Erie County-007 | Coastal Resilience Outreach | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 11 | High |
| 2022-Erie County-008 | Identify Emergency Shelters and temporary/permanent housing locations | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 10 | High |

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



9.1.9 Action Worksheets

The following action worksheets have been developed by Erie County to aid in the submittal of grant applications to support the funding of high priority proposed actions.

| Erie County Action Worksheet | | | |
|---------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Project Name: | Protect Springville Dam to the 0.2% flood event | | |
| Project Number: | 2022-Erie County- 002 | | |
| Risk / Vulnerability | | | |
| Hazard(s) of Concern: | Flood | | |
| Description of the Problem: | The Springville dam is county owned and is designated a High Hazard Potential Dam. The county assumed ownership and converted the parcel into a park. The county must regularly report to NYSDEC that the dam is serviceable. | | |
| Action or Project Intended for Implementation | | | |
| Description of the Solution: | The county will develop a feasibility study to determine the condition and required repairs of the dam. Once the study is completed, the county will implement a routine inspection, assessment, and maintenance of the dam. | | |
| Is this project related to a Critical Facility? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Is this project related to a Critical Facility located within the 100-year floodplain? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| (If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater) | | | |
| Level of Protection: | 0.2% annual chance flood | Estimated Benefits (losses avoided): | Ensures continuity of operation of this Potential High Hazard dam |
| Useful Life: | 50 years | Goals Met: | 1 |
| Estimated Cost: | TBD by feasibility assessment | Mitigation Action Type: | Structure and Infrastructure Project |
| Plan for Implementation | | | |
| Prioritization: | High | Desired Timeframe for Implementation: | 1 year |
| Estimated Time Required for Project Implementation: | Within 1 year | Potential Funding Sources: | BRIC, High Hazard Potential dam |
| Responsible Organization: | County Emergency Management, Department of Public Works | Local Planning Mechanisms to be Used in Implementation if any: | Hazard Mitigation, Emergency Management |
| three Alternatives Considered (including No Action) | | | |
| Alternatives: | Action | Estimated Cost | Evaluation |
| | No Action | \$0 | Problem continues. |
| | Remove dam | Very High | Loss of flood control services provide by the dam, including controlling intrusion from sea lamprey; infeasible |
| Progress Report (for plan maintenance) | | | |
| Date of Status Report: | | | |
| Report of Progress: | | | |
| Update Evaluation of the Problem and/or Solution: | | | |



| Erie County Action Worksheet | | |
|--------------------------------|-------------------------------------------------|-------------------------------------------------------------------------------|
| Project Name: | Protect Springville Dam to the 0.2% flood event | |
| Project Number: | 2022-Erie County- 002 | |
| Criteria | Numeric Rank (-1, 0, 1) | Provide brief rationale for numeric rank when appropriate |
| Life Safety | 1 | Project will protect critical services provided by the High Hazard dam |
| Property Protection | 1 | Project will protect the important flood control services provided by the dam |
| Cost-Effectiveness | 1 | |
| Technical | 0 | |
| Political | 1 | |
| Legal | 1 | The county has legal authority to complete the project. |
| Fiscal | 1 | Project requires funding support |
| Environmental | 1 | |
| Social | 1 | |
| Administrative | 1 | |
| Multi-Hazard | 0 | Flood |
| Timeline | 1 | 1 year |
| Agency Champion | 1 | |
| Other Community Objectives | 0 | |
| Total | 12 | |
| Priority (High/Med/Low) | High | |



| Erie County Action Worksheet | | | |
|---------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|---------------------------------------------------------------------|
| Project Name: | Protect the Erie County Court House from wind damage | | |
| Project Number: | 2022-Erie County-005 | | |
| Risk / Vulnerability | | | |
| Hazard(s) of Concern: | Severe Storm, Severe Winter Storm | | |
| Description of the Problem: | Original construction of the building has degrading materials has allowed water to get behind the building. The Building's cladding is vulnerable to high wind which could generate large pieces of flying debris. | | |
| Action or Project Intended for Implementation | | | |
| Description of the Solution: | The Department of Public Works will determine and implement wind damage protection measures. The Department will then work with the Sheriff Department to ensure that protective measures are implemented. | | |
| Is this project related to a Critical Facility? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | |
| Is this project related to a Critical Facility located within the 100-year floodplain? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | |
| (If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater) | | | |
| Level of Protection: | Protect up to 100 mph winds | Estimated Benefits (losses avoided): | Ensures continuity of operations at the important county courthouse |
| Useful Life: | 20 years | Goals Met: | 1 |
| Estimated Cost: | TBD by feasibility assessment | Mitigation Action Type: | Structure and Infrastructure Project |
| Plan for Implementation | | | |
| Prioritization: | High | Desired Timeframe for Implementation: | 1 year |
| Estimated Time Required for Project Implementation: | Within 3 years | Potential Funding Sources: | BRIC, HMGP, municipal budget |
| Responsible Organization: | County Sheriff | Local Planning Mechanisms to be Used in Implementation if any: | Hazard Mitigation, Emergency Management |
| Three Alternatives Considered (including No Action) | | | |
| Alternatives: | Action | Estimated Cost | Evaluation |
| | No Action | \$0 | Problem continues. |
| | Tear down the courthouse building | Very High | Loss of important services provided at the courthouse. |
| Progress Report (for plan maintenance) | | | |
| Date of Status Report: | | | |
| Report of Progress: | | | |
| Update Evaluation of the Problem and/or Solution: | | | |



| Erie County Action Worksheet | | |
|--------------------------------|------------------------------------------------------|-------------------------------------------------------------------|
| Project Name: | Protect the Erie County Court House from wind damage | |
| Project Number: | 2022-Erie County-005 | |
| Criteria | Numeric Rank (-1, 0, 1) | Provide brief rationale for numeric rank when appropriate |
| Life Safety | 1 | Project will protect critical services provided by the courthouse |
| Property Protection | 0 | |
| Cost-Effectiveness | 1 | |
| Technical | 1 | |
| Political | 1 | |
| Legal | 1 | The county has legal authority to complete the project. |
| Fiscal | 0 | |
| Environmental | 1 | |
| Social | 1 | |
| Administrative | 1 | |
| Multi-Hazard | 1 | Severe Storm |
| Timeline | 1 | 3 year |
| Agency Champion | 1 | |
| Other Community Objectives | 1 | |
| Total | 12 | |
| Priority (High/Med/Low) | High | |