

### 3.0 MITIGATION STRATEGY

§ 201.6(c)(3)	A mitigation strategy that provides the jurisdiction's blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs and resources, and its ability to expand on and improve these existing tools.
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According to FEMA (2013), “the mitigation strategy is made up of three main required components: mitigation goals, mitigation actions, and action plan for implementation. These provide the framework to identify, prioritize, and implement actions to reduce risk to hazards.” This section contains the aforementioned items; it describes the updated goals and objectives for this mitigation plan, it outlines the action items or projects for each participating jurisdiction within Ashtabula County, and each project identifies the agency responsible for completing the project as well as a general timeline for completion.

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### 3.1 Mitigation Goals

At the first plan update meeting, the committee members discussed the previous goals for the plan and decided to reduce the number of goals. With these revisions, the committee intends to make the goals more comprehensive, rather than based on a single hazard, and apply them to all jurisdictions, rather than just one. The committee identified keywords that they thought expressed the overall sentiment of hazard mitigation. During the second meeting, the committee members reviewed the eight new goals and established the final list as follows.

1. Reduce the amount and duration of **utility failures** in Ashtabula County, including potential failures of high-hazard potential dams, caused by all potential hazards.
2. Protect Ashtabula County's **vulnerable populations** before, during, and after emergency events or incidents from all hazards.
3. Increase the ability to **coordinate and communicate** before, during, and after a disaster.
4. Proactively **reduce the cost** of recovery operations to jurisdictions by preventing the destruction of property and infrastructure.
5. Encourage **partnerships and networking** opportunities for jurisdictional officials and first responders within Ashtabula County and across the county and state borders.
6. Promote **awareness and education** of all potential hazards to the public in Ashtabula County regarding personal hazard mitigation strategies.
7. Reduce or avoid the **displacement of people and animals** due to hazardous events in Ashtabula County.
8. Become an increasingly **self-sustainable** county during emergencies from all potential hazards.

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§ 201.6(c)(3)(ii)	A section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure. All plans approved by FEMA after October 1, 2008, must also address the jurisdiction's participation in the NFIP, and continued compliance with NFIP requirements, as appropriate.
§ 201.6(c)(3)(iii)	An action plan describing how the actions identified in paragraph (c)(3)(ii) of this section will be prioritized, implemented, and administered by the local jurisdiction. Prioritization shall include a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed projects and their associated costs.

#### 3.2 Mitigation Actions

This section serves as a mitigation action plan to reduce the losses and other impacts Ashtabula County may suffer from the hazards included in the risk assessment. “A mitigation action is a specific action, project, activity, or process taken to reduce or eliminate long-term risk to people and property from hazards and their impacts. Implementing mitigation actions helps achieve the plan’s mission and goals. The actions to reduce vulnerability to threats and hazards form the core of the plan and are a key outcome of the planning process” (FEMA, 2013).

##### Types of Mitigation Actions

There are five primary types of mitigation actions that can work to reduce long-term vulnerability: local plans and regulations, structure and infrastructure projects, natural systems protection, education programs, and preparedness and response activities (Coastal Hazards Research Center & Center for Sustainable Community Design, n.d.).

- **Local Plans and Regulations:** Local land use or comprehensive plans embody the goals, values, and aspirations of the community, as expressed through a process of community engagement. Local ordinances and review processes influence land development and building construction. In some cases, plans and regulations can work at cross-purposes. For example, a capital improvement plan may call for extending water and sewer lines to an area that is vulnerable to natural hazards. Examples include the following.
  - Comprehensive plans
  - Land use ordinances
  - Subdivision regulations

- Development review
  - Building codes and enforcement
  - NFIP Community Rating System
  - Capital improvement programs
  - Open space preservation
  - Stormwater management regulations and master plans
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- **Structure and Infrastructure Projects:** These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. These projects could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct human-made structures to reduce the impact of hazards. Examples include the following.
    - Acquisitions and elevations of structures in flood-prone areas
    - Utility undergrounding
    - Structural retrofits.
    - Floodwalls and retaining walls
    - Detention and retention structures
    - Culverts
    - Safe rooms
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- **Natural Systems Protection:** These are actions that minimize damage and losses while preserving or restoring the functions of natural systems. Examples include the following.
    - Sediment and erosion control
    - Stream corridor restoration
    - Forest management
    - Conservation easements
    - Wetland restoration and preservation
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- **Education Programs:** These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Although this type of mitigation reduces risk less directly than structural projects or regulations, it is an important foundation. A greater understanding and awareness of hazards and risk among local officials, stakeholders, and the public can lead to direct actions. Examples include the following.

- Radio or television spots
  - Websites with maps and information
  - Real estate disclosure
  - Presentations to school groups or neighborhood organizations
  - Mailings to residents in hazard-prone areas.
  - StormReady
  - Firewise Communities
- **Preparedness and Response Activities:** Mitigation actions that reduce or eliminate long-term risk and are different from actions taken to prepare for or respond to hazard events. Mitigation activities lessen or eliminate the need for preparedness or response resources in the future. When analyzing risks and identifying mitigation actions, the planning team may also identify emergency response or operational preparedness actions.

For some hazards such as tornadoes, including preparedness actions in the mitigation plan may be necessary and practical. The mitigation plan may be the best place for your community to capture and justify the need for these actions. However, these will not supplant or meet the federal requirements for identifying mitigation actions. It is important that the planning team understands the difference and can distinguish between mitigation and other emergency management activities.

Examples include the following.

- Mutual aid agreements with neighboring communities to meet emergency response needs
- Purchasing radio communications equipment for emergency responders
- Notifying citizens of available shelter locations

### Prioritization

The prioritization process occurred over three planning meetings. During Meeting 3, committee members determined ten criteria by which to score projects for prioritization. During Meeting 4, committee members weighted each of the ten criteria. The criteria weights correlated to the points assigned to each project. Finally, during Meeting 5, the consultant displayed each project on a projector screen, and committee members confirmed each project's adherence to

the criteria. In the tables below, projects with the same priority received the same prioritization score. See Appendix 2 for weighting calculations and project scoring matrices. Criteria were as follows.

- **Criterion 1 (10 points):** The project attempts to reduce the negative impacts of frequent hazards.
- **Criterion 2 (9 points):** The project attempts to reduce the negative impacts of severe hazards.
- **Criterion 3 (8 points):** The project addresses more than one hazard at once.
- **Criterion 4 (7 points):** The project aims to protect the most vulnerable populations.
- **Criterion 5 (6 points):** The project is easily funded with local funds or attainable grants.
- **Criterion 6 (5 points):** The project promotes partnerships within the county.
- **Criterion 7 (4 points):** The project is easy to implement (i.e., most of the population agrees with the project, and it doesn't have negative political ramifications).
- **Criterion 8 (3 points):** The project directly aligns with one or more of the goals set by the committee.
- **Criterion 9 (2 points):** The project protects the environment.
- **Criterion 10 (1 point):** The project is already scheduled to start or is in progress.

#### Jurisdictional Mitigation Actions

The following table lists the active hazard mitigation actions for Ashtabula County and the villages and cities that participated in this plan update. These actions have broad applicability and benefit multiple jurisdictions or unincorporated areas. In some instances, county agencies, villages, or cities included specific mitigation projects that support the broader actions, and those also appear in the table.

ASHTABULA COUNTY HAZARD MITIGATION ACTIONS					
Number	Old Number	Action	Applicable Jurisdictions	Potential Funding Source	Priority
1	1.2.1 3.1.2 3.1.4 5.5.3 9.1.3 10.1.3 11.1.1	<p><b>Goal Alignment:</b> 6: Promote awareness and education</p> <p><b>Action Type:</b> Education Programs</p> <p>Undertake periodic public awareness campaigns to educate the public on the benefits of mitigation and preparedness, as well as how to respond appropriately to myriad hazards. Topics could include the following.</p> <ul style="list-style-type: none"> <li>• Causes and prevention of wildfires</li> <li>• Coastal erosion signs and impacts</li> <li>• Constructing a 72-hour kit</li> <li>• Family disaster plans</li> <li>• Natural hazards that could contribute to water shortages</li> <li>• Specific hazards associated with severe weather</li> </ul> <p><b>Coordinating Agency:</b> Ashtabula County EMA</p> <p><b>Support Agency(ies):</b> (a) Ashtabula County LEPC, (b) Emergency Response Organizations (including public health departments, hospitals, school systems, and other preparedness partners), and (c) Administrators from the Applicable Jurisdictions</p> <p><b>2019 Status:</b> The planning committee consolidated several actions from the previous plan into a single education action. Organizations such as emergency responder agencies, the Ashtabula County EMA, and the local emergency planning committee regularly disseminate information; thus, this action has been completed, but on-going.</p>	<ul style="list-style-type: none"> <li>• Ashtabula County</li> <li>• Andover Village</li> <li>• Ashtabula City</li> <li>• Conneaut City</li> <li>• Geneva City</li> <li>• Geneva-on-the-Lake Village</li> <li>• Jefferson Village</li> <li>• North Kingsville Village</li> <li>• Orwell Village</li> <li>• Roaming Shores Village</li> <li>• Rock Creek Village</li> <li>• Andover Twp.</li> <li>• Ashtabula Twp.</li> <li>• Austinburg Twp.</li> <li>• Cherry Valley Twp.</li> <li>• Colebrook Twp.</li> <li>• Denmark Twp.</li> <li>• Dorset Twp.</li> <li>• Geneva Twp.</li> <li>• Harpersfield Twp.</li> <li>• Hartsgrove Twp.</li> <li>• Jefferson Twp.</li> <li>• Kingsville Twp.</li> <li>• Lenox Twp.</li> <li>• Monroe Twp.</li> <li>• Morgan Twp.</li> <li>• New Lyme Twp.</li> <li>• Orwell Twp.</li> <li>• Pierpont Twp.</li> <li>• Plymouth Twp.</li> <li>• Richmond Twp.</li> <li>• Saybrook Twp.</li> <li>• Sheffield Twp.</li> <li>• Trumbull Twp.</li> <li>• Wayne Twp.</li> <li>• Williamsfield Twp.</li> <li>• Windsor Twp.</li> </ul>	Local Funding	1

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2	8.2.4 9.1.2	<p><b>Goal Alignment:</b> 1: Reduce the amount and duration of utility failures <b>Action Type:</b> Structure &amp; Infrastructure Projects</p> <p>Provide back-up generators for critical facilities, including shelters, which need to maintain continuous power to protect human health and life.</p> <p><b>Coordinating Agency:</b> Ashtabula County EMA <b>Support Agency(ies):</b> Administrators from the Applicable Jurisdictions <b>2019 Status:</b> Jefferson identified the need for auxiliary power at its police department (and the village hall) as well as Giddings Park Hall. This resource will support continued village operations as well as support emergency sheltering. Roaming Shores is currently working to obtain generators through a federal government excess program. The village recently used a generator to keep its lift station operational during a power outage. Pierpont Township added a similar project to the plan, which addresses the need for an emergency action plan for the township. Committee members felt this project is timely given recent power outages following severe weather events and decided to leave it in the current version of the plan. The Ashtabula County EMA can serve as a clearinghouse for potential funding opportunities and make interested jurisdictions aware of those opportunities as they arise. <b>Timeframe:</b> 5 years (as funding is available)</p> <ul style="list-style-type: none"> <li><b>Complementary Action (Jefferson):</b> Install a back-up generator for the police department and Giddings Park Hall for use as an evacuation center for the mobile home park and school system.</li> <li><b>Complementary Action (Roaming Shores):</b> Install a back-up generator on lift station #2E for power outages.</li> <li><b>Complementary Action (Pierpont Township):</b> Work with appropriate officials to create an emergency response plan that includes new sirens, safe shelter, preparedness supplies, etc.</li> </ul>	<ul style="list-style-type: none"> <li>Ashtabula County</li> <li>Jefferson Village</li> <li>Roaming Shores Village</li> <li>Pierpont Twp.</li> </ul>	HMGP, PDM, Local Funding	5



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3	9.2.1	<p><b>Goal Alignment:</b> 7: Reduce or avoid displacement of people and animals</p> <p><b>Action Type:</b> Preparedness &amp; Response Activities</p> <p>Identify existing sites that could serve as emergency shelters throughout Ashtabula County.</p> <p><b>Coordinating Agency:</b> Ashtabula County EMA</p> <p><b>Support Agency(ies):</b> (a) Administrators from the Applicable Jurisdictions, (b) Ashtabula County Health Department, (c) Ashtabula City Health Department, (d) Conneaut City Health Department, (e) American Red Cross, (f) Emergency Response Organizations</p> <p><b>2019 Status:</b> This project is an on-going effort. The county's radiological emergency preparedness includes an emergency shelters component. Further, several organizations have identified the need for "emergency shelters" in response to severe weather, infrastructure outages, etc. Specifically, Jefferson Village added this action due to the presence of a mobile home park in a hazard-prone area within the village. Roaming Shores used the clubhouse and the village hall association office as shelters during a 2018 power outage. Conneaut added a complementary initiative to this action because the construction of a new fire station could support emergency sheltering capabilities in the city.</p> <p><b>Timeframe:</b> 3 years</p>	<ul style="list-style-type: none"> <li>Ashtabula County</li> <li>Andover Village</li> <li>Ashtabula City</li> <li>Conneaut City</li> <li>Geneva City</li> <li>Geneva-on-the-Lake Village</li> <li>Jefferson Village</li> <li>North Kingsville Village</li> <li>Orwell Village</li> <li>Roaming Shores Village</li> <li>Rock Creek Village</li> <li>Andover Twp.</li> <li>Ashtabula Twp.</li> <li>Austinburg Twp.</li> <li>Cherry Valley Twp.</li> <li>Colebrook Twp.</li> <li>Denmark Twp.</li> <li>Dorset Twp.</li> <li>Geneva Twp.</li> <li>Harpersfield Twp.</li> <li>Hartsgrove Twp.</li> <li>Jefferson Twp.</li> <li>Kingsville Twp.</li> <li>Lenox Twp.</li> <li>Monroe Twp.</li> <li>Morgan Twp.</li> <li>New Lyme Twp.</li> <li>Orwell Twp.</li> <li>Pierpont Twp.</li> <li>Plymouth Twp.</li> <li>Richmond Twp.</li> <li>Saybrook Twp.</li> <li>Sheffield Twp.</li> <li>Trumbull Twp.</li> <li>Wayne Twp.</li> <li>Williamsfield Twp.</li> <li>Windsor Twp.</li> </ul>	Local Funding	2
<ul style="list-style-type: none"> <li><b>Complementary Action (Conneaut):</b> Consider the construction of a new fire station.</li> </ul>					

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4	5.1.1	<p><b>Goal Alignment:</b> 4: Proactively reduce the cost of recovery operations <b>Action Type:</b> Natural Systems Protection</p> <p>Undertake stream restoration projects; clean or dredge creeks and streams, clearing log jams, trees, shrubs, and sediment bars.</p> <p><b>Coordinating Agency:</b> Ashtabula Soil and Water Conservation District <b>Support Agency(ies):</b> (a) Administrators from the Applicable Jurisdictions, (b) Ashtabula Public Works Department <b>2019 Status:</b> This project appeared in earlier versions of the mitigation plan as dredging. For the 2019 update, committee members opted to broaden the strategy to include natural systems preservation, understanding how restored streams lead to more efficient water flow during weather events. Saybrook Township undertakes stream cleaning projects regularly. This action is new for Andover Village. Ashtabula City added a complementary initiative that aligns the city's effort to raze vacant structures with mitigation. In this case, the city can reduce the number of structure and infestation hazards in its corporate limits while increasing the available open areas to more naturally manage water. <b>Timeframe:</b> 5 years (as funding is available)</p>	<ul style="list-style-type: none"> <li>Ashtabula County</li> <li>Ashtabula City</li> <li>Andover Village</li> <li>Saybrook Twp.</li> </ul>	SWCD Watershed Program, Clean Water Act Section 319(h) Grants, Surface Water Improvement Fund, Local Funding	14
		<ul style="list-style-type: none"> <li><b>Complementary Action (Ashtabula City):</b> Continue razing vacant structures.</li> </ul>			

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5	5.4.2	<p><b>Goal Alignment:</b> 4: Proactively reduce the cost of recovery operations <b>Action Type:</b> Structure &amp; Infrastructure Projects</p> <p>Consider installing, re-routing, or increasing the capacity of existing storm drainage systems, which may involve detention and retention ponds. Seek funding to identify, map, and maintain existing critical culverts and storm drainage ditches near residential areas, roadways and low-lying areas throughout the county. Consider sewer infiltrations and inflow projects.</p> <p><b>Coordinating Agency:</b> Administrators for the Applicable Jurisdictions <b>Support Agency(ies):</b> Ashtabula County Community Services &amp; Planning <b>2019 Status:</b> This action appeared in earlier versions of the mitigation plan, but remains on-going for many jurisdictions. The Ashtabula SWCD integrated the community development block grant (CDBG) community development implementation strategy into this effort to recognize the importance of a functioning infrastructure. <b>Timeframe:</b> 5 years (as funding is available)</p>	<ul style="list-style-type: none"> <li>Ashtabula County</li> <li>Andover Village</li> <li>Ashtabula City</li> <li>Conneaut City</li> <li>Geneva City</li> <li>Jefferson Village</li> <li>Orwell Village</li> <li>Roaming Shores Village</li> <li>Pierpont Twp.</li> </ul>	CDBG, SWCD Watershed Program, Clean Water Act Section 319(h) Grants, Surface Water Improvement Fund, Alternative Stormwater Infrastructure Loan Program, Water Pollution Control Load Fund, Local Funding	7
		<ul style="list-style-type: none"> <li><b>Complementary Action (Ashtabula County Community Services &amp; Planning):</b> CDBG Community Development Implementation Strategy. <ul style="list-style-type: none"> <li>Conneaut – Harbor Street</li> <li>Conneaut – Rockwell Street storm drainage</li> <li>Geneva City – Waterline repair (waterline freezes)</li> <li>Pierpont Township – Sewer system and treatment plant</li> </ul> </li> <li><b>Complementary Action (Conneaut):</b> Upgrade and add to water and sewer lines.</li> <li><b>Complementary Action (Jefferson):</b> Replace remaining culverts on S. Poplar Street to facilitate stormwater removal and low-level flooding.</li> <li><b>Complementary Action (Jefferson):</b> Continue drainage work in Elliott Allotments to reduce flooding risk in those neighborhoods.</li> <li><b>Complementary Action (Roaming Shores):</b> Replace one lift station (#11W)</li> </ul>			

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6	2.1.5	<p><b>Goal Alignment:</b> N/A  <b>Action Type:</b> Local Plans &amp; Regulations</p> <p>Develop a method to regulate development in the hydraulic shadow of dams.</p> <p><b>Coordinating Agency:</b> Administrators for the Applicable Jurisdictions  <b>Support Agency(ies):</b> (a) Ashtabula County EMA, (b) Ohio DNR  <b>2019 Status:</b> This action appeared in previous versions of the mitigation plan, and when discussing it, committee members realized there is little information available on risk areas below dams. This action integrates Ohio DNR efforts to ensure the availability of updated emergency action plans for high-hazard dams in Ohio (as a means of determining downstream risk areas).  <b>Timeframe:</b> 3 years</p>	<ul style="list-style-type: none"> <li>Ashtabula County</li> <li>Roaming Shores Village</li> <li>Rock Creek Village</li> <li>Harpersfield Twp.</li> </ul>	Local Funding	14

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7	2.1.4	<p><b>Goal Alignment:</b> 6: Promote awareness and education <b>Action Type:</b> Preparedness &amp; Response Activities</p> <p>Encourage residents, critical facilities, etc. throughout Ashtabula County to sign-up for wireless emergency alerts disseminated by the Ashtabula County EMA.</p> <p><b>Coordinating Agency:</b> Ashtabula County EMA <b>Support Agency(ies):</b> Administrators for the Applicable Jurisdictions <b>2019 Status:</b> The planning committee revised the action to be broadly applicable to all hazards, and it supports an active initiative by the Ashtabula County EMA. Thus, the action has been completed, but it is on-going. The Ashtabula SWCD noted a project from the county's CDBG community development initiative that involves upgrading broadband access throughout the county to support notification, warning, and communication. <b>Timeframe:</b> 6 months (though the effort is on-going)</p>	<ul style="list-style-type: none"> <li>Ashtabula County</li> <li>Andover Village</li> <li>Ashtabula City</li> <li>Conneaut City</li> <li>Geneva City</li> <li>Geneva-on-the-Lake Village</li> <li>Jefferson Village</li> <li>North Kingsville Village</li> <li>Orwell Village</li> <li>Roaming Shores Village</li> <li>Rock Creek Village</li> <li>Andover Twp.</li> <li>Ashtabula Twp.</li> <li>Austinburg Twp.</li> <li>Cherry Valley Twp.</li> <li>Colebrook Twp.</li> <li>Denmark Twp.</li> <li>Dorset Twp.</li> <li>Geneva Twp.</li> <li>Harpersfield Twp.</li> <li>Hartsgrove Twp.</li> <li>Jefferson Twp.</li> <li>Kingsville Twp.</li> <li>Lenox Twp.</li> <li>Monroe Twp.</li> <li>Morgan Twp.</li> <li>New Lyme Twp.</li> <li>Orwell Twp.</li> <li>Pierpont Twp.</li> <li>Plymouth Twp.</li> <li>Richmond Twp.</li> <li>Saybrook Twp.</li> <li>Sheffield Twp.</li> <li>Trumbull Twp.</li> <li>Wayne Twp.</li> <li>Williamsfield Twp.</li> <li>Windsor Twp.</li> </ul>	Local Funding (mass notification), CDBG (broadband upgrades)	2
<ul style="list-style-type: none"> <li><b>Complementary Action (Ashtabula County Community Services &amp; Planning):</b> Upgrade broadband access throughout the county.</li> </ul>					

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8	1.3.2	<b>Goal Alignment:</b> 4: Proactively reduce the cost of recovery operations <b>Action Type:</b> Natural Systems Protection  Pursue funding sources/partnerships to strategically place groins, break walls, revetment structures, riparian buffers, and other appropriate structures to slow erosion.  <b>Coordinating Agency:</b> Ashtabula County Community Services & Planning Department <b>Support Agency(ies):</b> Ohio DNR, Office of Coastal Management <b>2019 Status:</b> Ashtabula County communities participated in the Great Lakes Coastal Flood Study in March 2013 (part of FEMA RiskMap activities). Geneva-on-the-Lake considers this action on-going (it appeared in earlier versions of the plan as a village action). Following GOTL's effort, the other coastal communities opted to support this action as an on-going effort. <b>Timeframe:</b> 5 years	<ul style="list-style-type: none"><li>Ashtabula County</li><li>Ashtabula City</li><li>Conneaut City</li><li>Geneva-on-the-Lake Village</li></ul>	<ul style="list-style-type: none"><li>North Kingsville Village</li><li>Ashtabula Twp.</li><li>Geneva Twp.</li><li>Saybrook Twp.</li></ul>	ODNR, Lake Erie Protection Fund, NOAA Office for Coastal Management, Local Funding	9
		<ul style="list-style-type: none"><li>Complementary Action (Geneva-on-the-Lake): Repair a groin which acts as a stormwater outfall.</li></ul>				
9	1.3.3	<b>Goal Alignment:</b> 4: Proactively reduce the cost of recovery operations <b>Action Type:</b> Natural Systems Protection  Pursue funding sources/partnerships to place revetment structures in the beach profile or along the base of bluffs to absorb the energy of incoming waves and reduce erosion.  <b>Coordinating Agency:</b> Ashtabula County Community Services & Planning Department <b>Support Agency(ies):</b> Ohio DNR, Office of Coastal Management <b>2019 Status:</b> Ashtabula County communities participated in the Great Lakes Coastal Flood Study in March 2013 (part of FEMA RiskMap activities). Given the compatibility of this project with Project 8, the committee opted to support this action as an on-going effort. <b>Timeframe:</b> 5 years	<ul style="list-style-type: none"><li>Ashtabula County</li><li>Ashtabula City</li><li>Conneaut City</li><li>Geneva-on-the-Lake Village</li></ul>	<ul style="list-style-type: none"><li>North Kingsville Village</li><li>Ashtabula Twp.</li><li>Geneva Twp.</li><li>Saybrook Twp.</li></ul>	ODNR, Lake Erie Protection Fund, NOAA Office for Coastal Management, Local Funding	9

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10	7.2.3	<p><b>Goal Alignment:</b> 1. Reduce the amount and duration of utility failures <b>Action Type:</b> Natural Systems Protection</p> <p>Develop a tree maintenance program for trimming and pruning trees to help prevent damage from falling limbs.</p> <p><b>Coordinating Agency:</b> Administrators for the Applicable Jurisdictions <b>Support Agency(ies):</b> Ohio DNR, Division of Forestry <b>2019 Status:</b> This action appeared in previous versions of the mitigation plan, and the committee opted to leave it in the 2019 version based on local success stories. Jefferson Village has a program for tree removal and re-planting and has aggressively managed trees for the Emerald Ash Borer and other dead and dying trees in electric line rights-of-way. <b>Timeframe:</b> 3 years</p>	<ul style="list-style-type: none"> <li>Ashtabula County</li> <li>Ashtabula City</li> <li>Geneva City</li> <li>Jefferson Village</li> </ul>	ODNR Division of Forestry Landowner Assistance, Local Funding	4
11	6.1.2	<p><b>Goal Alignment:</b> N/A <b>Action Type:</b> Local Plans &amp; Regulations</p> <p>Assess the feasibility of conducting a commodity flow study.</p> <p><b>Coordinating Agency:</b> Ashtabula County LEPC <b>Support Agency(ies):</b> Ashtabula County EMA <b>2019 Status:</b> The county LEPC routinely accepts, maintains, and considers data on the hazardous material risk in the county. By law, facilities using and storing reportable quantities of certain materials report to the LEPC; however, there are fewer reporting regulations for hazardous materials transport. To add to the body of knowledge regarding hazardous materials, the committee opted to list this project as on-going. <b>Timeframe:</b> 2 years</p> <p>• <b>Complementary Action (Ashtabula City):</b> Make a strategic plan to improve road conditions for evacuation.</p>	<ul style="list-style-type: none"> <li>Ashtabula County</li> </ul>	PUCO, Local Funding	6

ASHTABULA COUNTY HAZARD MITIGATION ACTIONS					
Number	Old Number	Action	Applicable Jurisdictions	Potential Funding Source	Priority
12	N/A	<p><b>Goal Alignment:</b> 4: Proactively reduce the cost of recovery operations</p> <p><b>Action Type:</b> Structure &amp; Infrastructure Projects</p> <p>Consider traditional flood mitigation projects such as acquisition and relocation, elevation, etc. of flood-prone properties.</p> <p><b>Coordinating Agency:</b> Ashtabula County Building Department</p> <p><b>Support Agency(ies):</b> (a) Administrators for the Applicable Jurisdictions, (b) Ashtabula County Land Reutilization Corporation (Land Bank), (c) Ashtabula County EMA, (d) Ashtabula County Community Services &amp; Planning</p> <p><b>2019 Status:</b> The committee added this project during the 2019 update. Jurisdictions complete similar projects through the land bank.</p> <p><b>Timeframe:</b> 5 years (as funding is available)</p>	<ul style="list-style-type: none"> <li>Ashtabula County</li> <li>Ashtabula City</li> <li>Conneaut City</li> <li>Geneva City</li> <li>Geneva-on-the-Lake Village</li> <li>Jefferson Village</li> <li>North Kingsville Village</li> <li>Roaming Shores Village</li> <li>Rock Creek Village</li> </ul>	PDM, HMGP, Local Funding	12



ASHTABULA COUNTY HAZARD MITIGATION ACTIONS					
Number	Old Number	Action	Applicable Jurisdictions	Potential Funding Source	Priority
13	N/A	<p><b>Goal Alignment:</b> 2: Protect vulnerable populations <b>Action Type:</b> Structure &amp; Infrastructure Projects</p> <p>Seek funding for and install residential and community storm shelters.</p> <p><b>Coordinating Agency:</b> Ashtabula County EMA <b>Support Agency(ies):</b> (a) Administrators for the Applicable Jurisdictions, (b) Ashtabula County Community Services &amp; Planning <b>2019 Status:</b> The committee added this project during the 2019 update. <b>Timeframe:</b> 5 years (as funding is available)</p>	<ul style="list-style-type: none"> <li>Ashtabula County</li> <li>Andover Village</li> <li>Ashtabula City</li> <li>Conneaut City</li> <li>Geneva City</li> <li>Geneva-on-the-Lake Village</li> <li>Jefferson Village</li> <li>North Kingsville Village</li> <li>Orwell Village</li> <li>Roaming Shores Village</li> <li>Rock Creek Village</li> <li>Andover Twp.</li> <li>Ashtabula Twp.</li> <li>Austinburg Twp.</li> <li>Cherry Valley Twp.</li> <li>Colebrook Twp.</li> <li>Denmark Twp.</li> <li>Dorset Twp.</li> <li>Geneva Twp.</li> <li>Harpersfield Twp.</li> <li>Hartsgrove Twp.</li> <li>Jefferson Twp.</li> <li>Kingsville Twp.</li> <li>Lenox Twp.</li> <li>Monroe Twp.</li> <li>Morgan Twp.</li> <li>New Lyme Twp.</li> <li>Orwell Twp.</li> <li>Pierpont Twp.</li> <li>Plymouth Twp.</li> <li>Richmond Twp.</li> <li>Saybrook Twp.</li> <li>Sheffield Twp.</li> <li>Trumbull Twp.</li> <li>Wayne Twp.</li> <li>Williamsfield Twp.</li> <li>Windsor Twp.</li> </ul>	HMGP, Local Funding	7
14	N/A	<p><b>Goal Alignment:</b> N/A <b>Action Type:</b> Local Plans &amp; Regulations</p> <p>Collect updated emergency action plans (EAPs) for Class I/II structures and create a GIS layer of inundation areas that appear in EAPs. Include downstream structures in the layer to support calculation of loss estimates.</p> <p><b>Coordinating Agency:</b> Ashtabula County EMA <b>Support Agency(ies):</b> Ashtabula County Auditor's Office <b>2019 Status:</b> The committee added this project during the 2019 update. <b>Timeframe:</b> 2 years</p>	<ul style="list-style-type: none"> <li>Ashtabula County</li> </ul>	Local Funding	13

ASHTABULA COUNTY HAZARD MITIGATION ACTIONS					
Number	Old Number	Action	Applicable Jurisdictions	Potential Funding Source	Priority
15	N/A	<p><b>Goal Alignment:</b> 1. Reduce the amount and duration of utility failures</p> <p><b>Action Type:</b> Structure &amp; Infrastructure Projects</p> <p>Rehabilitate high-hazard potential dams when those pose unacceptable risks to the public (to address those risks). Rehabilitation activities can include rehabilitation or removal of the structure, engineering activities, land use solutions, etc. County and state agencies should support these projects as appropriate by providing risk and other data as it is available.</p> <p><b>Coordinating Agency:</b> Dam Owners</p> <p><b>Support Agency(ies):</b> (a) Ashtabula County EMA, (b) Ohio DNR</p> <p><b>2019 Status:</b> The committee added this project during the 2019 update.</p> <p><b>Timeframe:</b> 5 years</p>	<ul style="list-style-type: none"> <li>Ashtabula County</li> <li>Roaming Shores Village</li> <li>Rock Creek Village</li> <li>Harpersfield Twp.</li> <li>Hartsgrove Twp.</li> </ul>	HHPD	11

Since this plan is multi-jurisdictional in scope, the following table lists which of the above projects apply to the municipal jurisdictions that will formally adopt this plan. It is significant to note that the projects that appear in the following table *also appear in the table above*. This table is for clarity only.

MITIGATION PROJECTS BY PARTICIPATING JURISDICTIONS	
<i>Jurisdiction</i>	<i>Project</i>
Andover Village	<ul style="list-style-type: none"> <li>• <b>Project 1:</b> Undertake periodic public awareness campaigns to educate the public on the benefits of mitigation and preparedness, as well as how to respond appropriately to myriad hazards.</li> <li>• <b>Project 3:</b> Identify existing sites that could serve as emergency shelters throughout Ashtabula County.</li> <li>• <b>Project 4:</b> Undertake stream restoration projects; clean or dredge creeks and streams, clearing log jams, trees, shrubs, and sediment bars.</li> <li>• <b>Project 5:</b> Consider installing, re-routing, or increasing the capacity of existing storm drainage systems, which may involve detention and retention ponds. Seek funding to identify, map, and maintain existing critical culverts and storm drainage ditches near residential areas, roadways and low-lying areas throughout the county. Consider sewer infiltrations and inflow projects.</li> <li>• <b>Project 7:</b> Encourage residents, critical facilities, etc. throughout Ashtabula County to sign-up for wireless emergency alerts disseminated by the Ashtabula County EMA.</li> <li>• <b>Project 13:</b> Seek funding for and install residential and community storm shelters.</li> </ul>
Ashtabula City	<ul style="list-style-type: none"> <li>• <b>Project 1:</b> Undertake periodic public awareness campaigns to educate the public on the benefits of mitigation and preparedness, as well as how to respond appropriately to myriad hazards.</li> <li>• <b>Project 3:</b> Identify existing sites that could serve as emergency shelters throughout Ashtabula County.</li> <li>• <b>Project 4:</b> Undertake stream restoration projects; clean or dredge creeks and streams, clearing log jams, trees, shrubs, and sediment bars.</li> <li>• <b>Project 5:</b> Consider installing, re-routing, or increasing the capacity of existing storm drainage systems, which may involve detention and retention ponds. Seek funding to identify, map, and maintain existing critical culverts and storm drainage ditches near residential areas, roadways and low-lying areas throughout the county. Consider sewer infiltrations and inflow projects.</li> <li>• <b>Project 7:</b> Encourage residents, critical facilities, etc. throughout Ashtabula County to sign-up for wireless emergency alerts disseminated by the Ashtabula County EMA.</li> <li>• <b>Project 8:</b> Pursue funding sources/partnerships to strategically place groins, break walls, revetment structures, riparian buffers, and other appropriate structures to slow erosion.</li> <li>• <b>Project 9:</b> Pursue funding sources/partnerships to place revetment structures in the beach profile or along the base of bluffs to absorb the energy of incoming waves and reduce erosion.</li> <li>• <b>Project 10:</b> Develop a tree maintenance program for trimming and pruning trees to help prevent damage from falling limbs.</li> <li>• <b>Project 12:</b> Consider traditional flood mitigation projects such as acquisition and relocation, elevation, etc. in Special Flood Hazard Areas (SFHAs).</li> <li>• <b>Project 13:</b> Seek funding for and install residential and community storm shelters.</li> </ul> <p><u>City-Specific Complementary Actions</u></p> <ul style="list-style-type: none"> <li>• Continue razing vacant structures.</li> <li>• Make a strategic plan to improve road conditions for evacuation.</li> </ul>

MITIGATION PROJECTS BY PARTICIPATING JURISDICTIONS	
<i>Jurisdiction</i>	<i>Project</i>
Conneaut City	<ul style="list-style-type: none"> <li>• <b>Project 1:</b> Undertake periodic public awareness campaigns to educate the public on the benefits of mitigation and preparedness, as well as how to respond appropriately to myriad hazards.</li> <li>• <b>Project 3:</b> Identify existing sites that could serve as emergency shelters throughout Ashtabula County.</li> <li>• <b>Project 5:</b> Consider installing, re-routing, or increasing the capacity of existing storm drainage systems, which may involve detention and retention ponds. Seek funding to identify, map, and maintain existing critical culverts and storm drainage ditches near residential areas, roadways and low-lying areas throughout the county. Consider sewer infiltrations and inflow projects.</li> <li>• <b>Project 7:</b> Encourage residents, critical facilities, etc. throughout Ashtabula County to sign-up for wireless emergency alerts disseminated by the Ashtabula County EMA.</li> <li>• <b>Project 8:</b> Pursue funding sources/partnerships to strategically place groins, break walls, revetment structures, riparian buffers, and other appropriate structures to slow erosion.</li> <li>• <b>Project 9:</b> Pursue funding sources/partnerships to place revetment structures in the beach profile or along the base of bluffs to absorb the energy of incoming waves and reduce erosion.</li> <li>• <b>Project 12:</b> Consider traditional flood mitigation projects such as acquisition and relocation, elevation, etc. in Special Flood Hazard Areas (SFHAs).</li> <li>• <b>Project 13:</b> Seek funding for and install residential and community storm shelters.</li> </ul> <p><u>City-Specific Complementary Actions</u></p> <ul style="list-style-type: none"> <li>• Consider the construction of a new fire station.</li> <li>• Upgrade and add to water and sewer lines.</li> </ul>
Geneva City	<ul style="list-style-type: none"> <li>• <b>Project 1:</b> Undertake periodic public awareness campaigns to educate the public on the benefits of mitigation and preparedness, as well as how to respond appropriately to myriad hazards.</li> <li>• <b>Project 3:</b> Identify existing sites that could serve as emergency shelters throughout Ashtabula County.</li> <li>• <b>Project 5:</b> Consider installing, re-routing, or increasing the capacity of existing storm drainage systems, which may involve detention and retention ponds. Seek funding to identify, map, and maintain existing critical culverts and storm drainage ditches near residential areas, roadways and low-lying areas throughout the county. Consider sewer infiltrations and inflow projects.</li> <li>• <b>Project 7:</b> Encourage residents, critical facilities, etc. throughout Ashtabula County to sign-up for wireless emergency alerts disseminated by the Ashtabula County EMA.</li> <li>• <b>Project 10:</b> Develop a tree maintenance program for trimming and pruning trees to help prevent damage from falling limbs.</li> <li>• <b>Project 12:</b> Consider traditional flood mitigation projects such as acquisition and relocation, elevation, etc. in Special Flood Hazard Areas (SFHAs).</li> <li>• <b>Project 13:</b> Seek funding for and install residential and community storm shelters.</li> </ul>
Geneva-on-the-Lake Village	<ul style="list-style-type: none"> <li>• <b>Project 1:</b> Undertake periodic public awareness campaigns to educate the public on the benefits of mitigation and preparedness, as well as how to respond appropriately to myriad hazards.</li> <li>• <b>Project 3:</b> Identify existing sites that could serve as emergency shelters throughout Ashtabula County.</li> <li>• <b>Project 7:</b> Encourage residents, critical facilities, etc. throughout Ashtabula County to sign-up for wireless emergency alerts disseminated by the Ashtabula County EMA.</li> <li>• <b>Project 8:</b> Pursue funding sources/partnerships to strategically place groins, break walls, revetment structures, riparian buffers, and other appropriate structures to slow erosion.</li> <li>• <b>Project 9:</b> Pursue funding sources/partnerships to place revetment structures in the beach profile or along the base of bluffs to absorb the energy of incoming waves and reduce erosion.</li> <li>• <b>Project 12:</b> Consider traditional flood mitigation projects such as acquisition and relocation, elevation, etc. in Special Flood Hazard Areas (SFHAs).</li> <li>• <b>Project 13:</b> Seek funding for and install residential and community storm shelters.</li> </ul> <p><u>Village-Specific Complementary Action</u></p> <ul style="list-style-type: none"> <li>• Repair a groin which acts as a stormwater outfall.</li> </ul>

MITIGATION PROJECTS BY PARTICIPATING JURISDICTIONS	
<i>Jurisdiction</i>	<i>Project</i>
Jefferson Village	<ul style="list-style-type: none"> <li>• <b>Project 1:</b> Undertake periodic public awareness campaigns to educate the public on the benefits of mitigation and preparedness, as well as how to respond appropriately to myriad hazards.</li> <li>• <b>Project 3:</b> Identify existing sites that could serve as emergency shelters throughout Ashtabula County.</li> <li>• <b>Project 5:</b> Consider installing, re-routing, or increasing the capacity of existing storm drainage systems, which may involve detention and retention ponds. Seek funding to identify, map, and maintain existing critical culverts and storm drainage ditches near residential areas, roadways and low-lying areas throughout the county. Consider sewer infiltrations and inflow projects.</li> <li>• <b>Project 7:</b> Encourage residents, critical facilities, etc. throughout Ashtabula County to sign-up for wireless emergency alerts disseminated by the Ashtabula County EMA.</li> <li>• <b>Project 10:</b> Develop a tree maintenance program for trimming and pruning trees to help prevent damage from falling limbs.</li> <li>• <b>Project 12:</b> Consider traditional flood mitigation projects such as acquisition and relocation, elevation, etc. in Special Flood Hazard Areas (SFHAs).</li> <li>• <b>Project 13:</b> Seek funding for and install residential and community storm shelters.</li> </ul> <p><u>Village-Specific Complementary Actions</u></p> <ul style="list-style-type: none"> <li>• Install a back-up generator for the police department and Giddings Park Hall for use as an evacuation center for the mobile home park and school system.</li> <li>• Replace remaining culverts on S. Poplar Street to facilitate stormwater removal and low-level flooding.</li> <li>• Continue drainage work in Elliott Allotments to reduce flooding risk in those neighborhoods.</li> </ul>
North Kingsville Village	<ul style="list-style-type: none"> <li>• <b>Project 1:</b> Undertake periodic public awareness campaigns to educate the public on the benefits of mitigation and preparedness, as well as how to respond appropriately to myriad hazards.</li> <li>• <b>Project 3:</b> Identify existing sites that could serve as emergency shelters throughout Ashtabula County.</li> <li>• <b>Project 7:</b> Encourage residents, critical facilities, etc. throughout Ashtabula County to sign-up for wireless emergency alerts disseminated by the Ashtabula County EMA.</li> <li>• <b>Project 8:</b> Pursue funding sources/partnerships to strategically place groins, break walls, revetment structures, riparian buffers, and other appropriate structures to slow erosion.</li> <li>• <b>Project 9:</b> Pursue funding sources/partnerships to place revetment structures in the beach profile or along the base of bluffs to absorb the energy of incoming waves and reduce erosion.</li> <li>• <b>Project 12:</b> Consider traditional flood mitigation projects such as acquisition and relocation, elevation, etc. in Special Flood Hazard Areas (SFHAs).</li> <li>• <b>Project 13:</b> Seek funding for and install residential and community storm shelters.</li> </ul>
Orwell Village	<ul style="list-style-type: none"> <li>• <b>Project 1:</b> Undertake periodic public awareness campaigns to educate the public on the benefits of mitigation and preparedness, as well as how to respond appropriately to myriad hazards.</li> <li>• <b>Project 3:</b> Identify existing sites that could serve as emergency shelters throughout Ashtabula County.</li> <li>• <b>Project 5:</b> Consider installing, re-routing, or increasing the capacity of existing storm drainage systems, which may involve detention and retention ponds. Seek funding to identify, map, and maintain existing critical culverts and storm drainage ditches near residential areas, roadways and low-lying areas throughout the county. Consider sewer infiltrations and inflow projects.</li> <li>• <b>Project 7:</b> Encourage residents, critical facilities, etc. throughout Ashtabula County to sign-up for wireless emergency alerts disseminated by the Ashtabula County EMA.</li> <li>• <b>Project 13:</b> Seek funding for and install residential and community storm shelters.</li> </ul>

MITIGATION PROJECTS BY PARTICIPATING JURISDICTIONS	
<i>Jurisdiction</i>	<i>Project</i>
Roaming Shores Village	<ul style="list-style-type: none"> <li>• <b>Project 1:</b> Undertake periodic public awareness campaigns to educate the public on the benefits of mitigation and preparedness, as well as how to respond appropriately to myriad hazards.</li> <li>• <b>Project 3:</b> Identify existing sites that could serve as emergency shelters throughout Ashtabula County.</li> <li>• <b>Project 5:</b> Consider installing, re-routing, or increasing the capacity of existing storm drainage systems, which may involve detention and retention ponds. Seek funding to identify, map, and maintain existing critical culverts and storm drainage ditches near residential areas, roadways and low-lying areas throughout the county. Consider sewer infiltrations and inflow projects.</li> <li>• <b>Project 6:</b> Develop a method to regulate development in the hydraulic shadow of dams.</li> <li>• <b>Project 7:</b> Encourage residents, critical facilities, etc. throughout Ashtabula County to sign-up for wireless emergency alerts disseminated by the Ashtabula County EMA.</li> <li>• <b>Project 12:</b> Consider traditional flood mitigation projects such as acquisition and relocation, elevation, etc. in Special Flood Hazard Areas (SFHAs).</li> <li>• <b>Project 13:</b> Seek funding for and install residential and community storm shelters.</li> </ul> <p><u>Village-Specific Complementary Actions</u></p> <ul style="list-style-type: none"> <li>• Install a back-up generator on lift station #2E for power outages.</li> <li>• Replace one lift station (#11W)</li> </ul>
Rock Creek Village	<ul style="list-style-type: none"> <li>• <b>Project 1:</b> Undertake periodic public awareness campaigns to educate the public on the benefits of mitigation and preparedness, as well as how to respond appropriately to myriad hazards.</li> <li>• <b>Project 3:</b> Identify existing sites that could serve as emergency shelters throughout Ashtabula County.</li> <li>• <b>Project 6:</b> Develop a method to regulate development in the hydraulic shadow of dams..2</li> <li>• <b>Project 7:</b> Encourage residents, critical facilities, etc. throughout Ashtabula County to sign-up for wireless emergency alerts disseminated by the Ashtabula County EMA.</li> <li>• <b>Project 12:</b> Consider traditional flood mitigation projects such as acquisition and relocation, elevation, etc. in Special Flood Hazard Areas (SFHAs).</li> <li>• <b>Project 13:</b> Seek funding for and install residential and community storm shelters.</li> </ul>

Appendix 3: Inactive Actions/Projects lists those that have been completed, deferred, or deleted.