

3.0 MITIGATION STRATEGIES

Lorain County’s planning team developed mitigation goals and strategies to address the identified risks and vulnerabilities for the county and individual jurisdictions. While there are similarities in the goals and strategies identified by each jurisdiction, each community included actions designed to address risks and vulnerabilities in their community.

3.1 STATUS OF PAST MITIGATION EFFORTS

The 2015 Lorain County Hazard Mitigation Plan included mitigation goals and strategies for the Lorain County, all cities and villages in the county, plus Carlisle Township. The current mitigation planning team reviewed these goals and activities to determine their current status, which is described in table 3-1.

Table 3-1: 2015 Mitigation Strategies

Strategy	Status
LORAIN COUNTY	
1. Lorain County will reduce the damages caused by flooding in all areas across the county.	
1.1. Lorain County will support land use regulation measures to minimize the effects of flooding.	Ongoing
1.1.1. Lorain County will sustain, support, adopt, and enforce building codes, floodplain regulations, zoning regulations, and other use and construction standards as applied to development of commercial and residential neighborhoods.	Ongoing
1.1.2. Lorain County will develop and adopt a countywide comprehensive land use plan.	Ongoing
1.1.3. Lorain County will educate and advocate for development practices across the county that take into consideration cross-jurisdictional consequences of development, and requires counter-measures to prevent negative effects on neighboring communities.	Ongoing
1.1.4. Lorain County will protect the floodplains from all development through adoption of flood maps and floodplains established by FEMA, and through enforcement of floodplain regulation.	Ongoing
1.2. Lorain County will educate residents and businesses about the need for casualty insurance to cover the cost of losses due to storms, disasters, and other emergency incidents.	Ongoing
1.2.1. Lorain County will support the NFIP program.	Ongoing
1.2.2. Lorain County will maintain adoption of FEMA flood mapping.	Ongoing
1.2.3. Lorain County will advocate for property owners’ utilization of adequate casualty insurance to reduce the individual cost of disaster related damages.	Ongoing
1.3. Lorain County will decrease the effects of flooding by managing storm water so that properties are not damaged by excessive runoff or storm water, especially during periods of heavy precipitation or snow melt.	Ongoing

Strategy	Status
1.3.1.Lorain County will facilitate, conduct, support, and complete a countywide storm water study that results in a storm water management plan for the whole county.	Ongoing
1.3.2.Lorain County will implement a countywide storm water management action plan as finances and jurisdictional participation allows.	Ongoing
1.3.3.Lorain County will support jurisdictions in the improvement and/or replacement of worn and inadequate storm water infrastructure.	Ongoing
1.3.4.Lorain County will educate, advocate, and facilitate effective waterway clearing and cleaning to remove built-up debris and sediment and to facilitate natural runoff for storm water	Ongoing
1.4. Lorain County will restore developed floodplains to a natural habitat state where repeated flooding occurs and causes damage to property.	Ongoing
1.4.1.Lorain County will utilize grant programs to fund the acquisition of properties and the restoration of natural habitat in areas where development has taken place on at-risk property.	Ongoing
1.4.2.Lorain County will support and advocate for the establishment of vegetative buffer zones, retention ponds, dams, levees, and other structural devices to manage storm water and flood water so it does not cause property damage.	Ongoing
1.4.3.Lorain County will support, encourage, and conduct projects to repair and maintain dams, levees, and other structures that control the flow of water and limit or prevent flooding in developed areas.	Ongoing
1.5. Lorain County will investigate, support, sustain, and/or conduct acquisition and relocation projects for properties with severe and/or repetitive flood losses.	Ongoing
1.5.1.Lorain County will identify properties with severe and repeated severe losses due to flooding.	Ongoing
1.5.2.Lorain County will participate in Pre-Disaster Mitigation programs that facilitate and implement acquisition and demolition with relocation of the occupants of such property.	Ongoing
1.5.3.Lorain County will conduct acquisition, relocation, and demolition projects as funding becomes available and property owners are willing to participate.	Ongoing
1.6. Lorain County will support and install modifications and improvements to county roadways that decrease flooding and erosion of those roadways, such as elevation of the roadway.	Ongoing
2. Lorain County will implement timely and effective pre-incident warning and notification of dangerous weather and emergency incidents, as well as timely dissemination of updated information during an incident.	
2.1. Lorain County will install and sustain a countywide warning and notification system that utilizes digital methods and traditional electronics to notify residents and workers of impending inclement weather and immediate dangers by as many means as is possible.	Ongoing
2.2. Lorain County will identify those areas most prone to flash flooding, and will support development of data that links weather events to flooding outcomes using GIS technology, floodplain mapping, and other technology; the County will	Ongoing

Strategy	Status
work to notify those affected populations in a rapid and effective manner when necessary.	
3. Lorain County will identify and utilize protective facilities that enable residents and others to take shelter from severe weather, including storms that include rotational or straight-line winds, and other life-threatening conditions such as hail, heavy precipitation, and dust.	
3.1. Lorain County will identify the need for and facilitate the construction of safe rooms for residents and workers who live or work in structures that lack basements or other structural protection during tornadoes or high wind incidents.	Ongoing
3.2. Lorain County will facilitate the development and equipping of shelters, comfort stations, and service centers to be used before, during, and after disasters to help the people of Lorain County recover rapidly and effectively from disaster losses.	Ongoing
3.2.1. Lorain County will help residents have access to information about the location of shelters, comfort stations and service centers as part of preparedness for disasters.	Ongoing
3.2.2. Lorain County will support volunteers and organizations to be utilized during disasters to provide, supplement, sustain, or expand sheltering and gathering services available to victims.	Ongoing
4. Lorain County will facilitate, support, and at times conduct public awareness campaigns about disaster preparedness, safety, response, and recovery to mitigate losses and casualties because of disasters.	
4.1. Lorain County will develop and make available to residents and others information regarding the dangerous weather and other emergent incidents that are typical to occur in the county, and will identify the actions and counter-measures that are effective in safely enduring those incidents.	Ongoing
4.2. Lorain County will develop and make available to residents information regarding response and safety during disasters uncommon to Lorain County, such as earthquakes and landslides.	Ongoing
5. Lorain County will harden utility service and supply to residents and businesses, especially during extreme heat or cold that intensifies dependency upon utility services.	
5.1. Lorain County will work to advocate for underground electrical service lines across the county.	Ongoing
5.2. Lorain County will advocate for capital improvements to the electrical distribution systems to harden electrical service across the county.	Ongoing
5.3. Lorain County will advocate for improved natural and propane gas availability and distribution to residents and businesses during times of excessive need.	Ongoing
5.4. Lorain County will advocate for improved water intake and availability for residents, including sustainment of redundancy in distribution and supply, for times of extreme weather conditions or needs.	Ongoing
5.5. Lorain County will identify and establish redundant emergency sources for all utility services and supplies during heavy use and disaster circumstances.	Ongoing
6. Lorain County will improve communications between all first responders and first receivers during disasters and emergencies.	

Strategy	Status
6.1. Lorain County will support two-way radio upgrades and improvements by individual jurisdictions.	Ongoing
6.2. Lorain County will advocate and facilitate interoperability of communication systems between jurisdictions, disciplines, and departments.	Ongoing
6.3. Lorain County will coordinate and support interoperability in the 911 centers and EOC facilities across the county.	Ongoing
7. Lorain County will sustain mitigation efforts.	
7.1. Lorain County will serve as the primary monitor of strategies across the county in order to facilitate and encourage accomplishment of the identified strategies in this plan.	Ongoing
AMHERST	
1. Amherst will reduce the negative effects of flooding on the residents and properties in Amherst.	
1.1. Amherst will maintain and support land use planning efforts to lessen the impact of disaster upon the community.	Ongoing
1.1.1. Amherst will support and enhance residential building codes.	Ongoing
1.1.2. Amherst will support and enhance floodplain regulation and participation in NFIP flood insurance programs.	Ongoing
1.2. Amherst will support land conservation and preservation of natural wetlands as a means to prevent development in areas that are prone to flooding.	Ongoing
1.3. Amherst will research and assess the effects of upstream and downstream development upon the city as well as the impact of city development on adjacent jurisdictions.	Ongoing
1.4. Amherst will work with the Ohio Turnpike Commission and the State of Ohio to utilize the Turnpike Mitigation Program to resolve issues with storm water runoff caused by roadway system development near the city.	Ongoing
1.5. Amherst will consider acquisition, demolition, and relocation projects to eliminate flood losses where property owners are willing and funds exist to complete such projects.	Ongoing
2. Amherst will improve and expand its public warning and notification systems for the purpose of preventing casualties and damages by natural disasters.	
2.1. Amherst will work with and implement a reverse calling system in collaboration with the Lorain County EMA.	Ongoing
2.2. Amherst will use and improve warning and notification systems that utilize local cable television, websites, and other electronic means of mass communication.	Ongoing
3. Amherst will enhance and improve communications between responders and others to effectively communicate before, during, and after incidents.	
3.1. Amherst will support and implement the digital MARCS radio system P-25 standards among first responders and other departments as appropriate.	Ongoing
3.2. Amherst will work to complete mapping and CAD interface software in city departments to aid in management of storm water and other utilities during storms.	Ongoing
4. Amherst will conduct a public information campaign directed at property owners to lessen the damages, including utility outages, due to storms.	
4.1. Amherst will advocate for the proper maintenance of trees on private property to lessen the damages from severe storms.	Ongoing

Strategy	Status
4.2. Amherst will advocate for the proper maintenance of public property regarding tree trimming and vegetation control around and about utility lines.	Ongoing
5. Amherst will decrease utility outages during disasters.	
5.1. Amherst will harden the power services to critical facilities by acquiring and installing alternate power sources at critical and key facilities.	Ongoing
AVON	
1. Avon will reduce the negative effects of flooding on its residents and properties.	
1.1. Avon will advocate and educate officials and residents about the need to develop countywide storm water management planning and regulation.	Ongoing
1.1.1. Avon will participate in studies and analysis of storm water in Lorain County.	Complete
1.1.2. Avon will support the development of retention ponds, detention structures, and vegetative buffers to lessen flooding in downstream areas.	Complete
1.1.3. Avon will establish and support economic development standards that utilize current building codes, zoning standards and other land use planning regulations that take into consideration the consequences of development on storm water and flooding effects.	Complete
1.1.4. Avon will advocate for the proper maintenance of streams, ditches, and rivers to reduce debris and vegetation that causes water to back up and flood areas inside the city and upstream from the city.	Ongoing
1.1.5. Avon will advocate for property owners in floodplains to carry flood insurance as a way to protect and mitigate flood losses.	Complete
1.1.6. Avon will adopt and support current FEMA floodplain mapping by federal, state, and local agencies.	Complete
1.1.7. Avon will identify, establish, and maintain erosion control measures along streams, ditches and rivers, as well as along the shoreline of Lake Erie.	Complete
1.2. Avon will support and implement the proper maintenance of storm sewers and water lines to minimize flooding and maximize the ability for the city to manage storm runoff.	Complete
1.3. Avon will identify, seek funding for, and complete projects that acquire, relocate, and demolish repetitive flood loss structures.	Complete
1.4. Avon will create retention ponds, vegetative buffer zones, natural habitats, and barriers where flooding waterways cause repeated damages to properties that cannot feasibly be relocated or otherwise protected.	Complete
2. The City of Avon will support improvements to notification and warning systems.	
2.1. Avon will support and participate in the development of warning and notification systems that include digital methods of contact including text messaging, emails, as well as outdoor sirens to warn residents and workers of immediate dangers and inclement weather conditions.	Complete
3. Avon will improve storm shelter options for residents of the city.	
3.1. Avon will identify, support, and/or construct safe rooms for residents who live in multi-family housing developments and mobile homes without shelters for tornadoes and other severe wind incidents.	Ongoing
4. Avon will improve public awareness and education outreach for its residents regarding warning, notification, and information sharing.	

Strategy	Status
4.1. Avon will conduct and promote educational programs for children and families regarding flood safety, fire safety and prevention, and weather awareness and safety during storms and disasters.	Ongoing
4.2. Avon will create information to be posted electronically for resident and worker safety during and after an earthquake.	Ongoing
4.3. Avon will educate the public about heat and cold emergencies and how to be safe during those times as a way to minimize the emergency needs of the city during temperature extremes, and to minimize how significantly safety forces are overwhelmed during those times.	Ongoing
5. Avon will improve utility services' reliability during storms.	
5.1. Avon will work with utility providers to improve and harden utility services by burying utility lines in new and renovated residential areas, and by replacing old worn supply lines in older neighborhoods.	Ongoing
AVON LAKE	
1. The City of Avon Lake will build community-wide resiliency by minimizing the negative effects of all natural disasters on the city's property and residents.	
1.1. The City of Avon Lake will sustain awareness and advocacy of good regular maintenance procedures such as ditch bank maintenance, retention basin maintenance, upkeep and trimming of trees on properties, and clearing of excessive vegetation from streams and waterways.	Ongoing
1.2. The City of Avon Lake will work with conservancy and soil conservation groups to develop and implement practices to conserve topsoil, prevent erosion, and maintain natural habitats for the purpose of reducing flood and erosion risks.	Ongoing
1.3. The City of Avon Lake will update the existing comprehensive plan for land use within the jurisdiction, taking into account the consequences of development and the effect of existing properties and businesses, as well as the consequences on the communities downstream.	Ongoing
1.4. The City of Avon Lake will maintain and sustain building standards for construction, including contractor-vendor approval, industry stands for construction and reasonable construction materials guidance.	Ongoing
1.5. The City of Avon Lake will follow the Ohio Basic Building Code as a reference for disaster-resistant construction standards.	Ongoing
1.6. The City of Avon Lake will maintain land use ordinances that protect and preserve the best use and least damaging use of properties within the jurisdiction.	Ongoing
1.7. The City of Avon Lake will sustain requirements that new development follow sustainable design in planning new structures and land uses.	Ongoing
2. The City of Avon Lake will develop projects to lessen the damages to property from flooding.	
2.1. The City of Avon Lake will conduct acquisition and demolition/relocation projects to remove severe and repetitive loss structures and to prevent further losses.	Ongoing
2.2. The City of Avon Lake will require construction of retention ponds to hold runoff water during periods of heavy precipitation. Retention ponds will be required to contain the 100-year frequency storm runoff.	Ongoing

Strategy	Status
2.3. The City of Avon Lake will improve storm sewer systems to more adequately manage runoff water for all areas and enhance prevention /minimization of flooding in residential and commercial areas.	Ongoing
2.3.1. The City of Avon Lake will complete efforts to revise the city’s storm water master plan to include computer modeling.	Ongoing
2.3.2. The City of Avon Lake will maintain/repair retention basins and structures that hold or contain water that otherwise may flood homes and other properties.	Ongoing
2.4. The City of Avon Lake will identify and develop elevation options for roadways, streets, and other infrastructure that is negatively affected by flooding on a regular basis.	Ongoing
3. The City of Avon Lake will educate the community about the notification system that warn them of impending disasters and the actions they should take immediately to protect themselves and their property.	
3.1. The City of Avon Lake will maintain the current Code Red communication system that enables the city to notify residents in numerous ways of impending danger and/or inclement weather risks.	Ongoing
3.2. The City of Avon Lake will improve the communication systems between first responders and other critical resources in the event of an emergency or disaster.	Ongoing
3.3. The City of Avon Lake will develop partnerships with Lorain County Emergency Management Agency and others to develop information dissemination capabilities that might include 2-1-1 and other community agencies that would enhance the community’s ability to communicate with all populations, including those with functional and special needs.	Ongoing
3.4. The City of Avon Lake will identify and communicate with special populations within the jurisdiction as it relates to disasters, warning and notification, and response.	Ongoing
3.5. The City of Avon Lake will educate the community about evacuation procedures and how to identify shelter locations, comfort stations, and service centers during disasters.	Ongoing
4. The City of Avon Lake will establish sites to be used as shelters, comfort stations, and service centers during disasters, and will strive to equip these sites with features necessary to adequately serve the community during storms, power outages, and other disasters.	
4.1. The City of Avon Lake will investigate and implement means to create and provide safe rooms for residents who live in homes built on concrete slabs, and other structures that lack storm shelters used as protection in wind and other severe storms.	Ongoing
5. The City of Avon Lake will work with utility providers to harden utility services and to prevent excessive outages during storms and inclement weather.	
5.1. The City of Avon Lake will bury power and utility lines in new neighborhoods, homes, and businesses.	Ongoing
5.2. The City of Avon Lake will replace deteriorating power, water, sewer, and other utility distribution systems.	Ongoing

Strategy	Status
5.3. The City of Avon Lake will develop protective actions to prevent or lessen the likelihood of damage to water treatment and/or distribution systems during disasters and inclement weather.	Ongoing
5.4. The City of Avon Lake will work with wireless service providers to establish dependable and resilient wireless service within the jurisdiction to improve the capability to communicate during inclement weather and disasters.	Ongoing
6. The City of Avon Lake will improve structure identification systems in the city.	
6.1. Avon Lake will improve GIS mapping and addressing within the community so that first responders and service providers can more easily locate and assist victims at particular residences and businesses.	Ongoing
7. The City of Avon Lake will develop a solid waste and debris management plan for the city to facilitate rapid storm clean-up.	
7.1. Avon Lake will identify and approve disposal sites for disaster debris, including segregated solid waste such as construction materials, wood and combustible waste, masonry and concrete waste, metal waste, paper and general garbage, and hazardous waste.	Ongoing
8. The City of Avon Lake will implement a redundant secondary water supply to be used for purposes such as firefighting.	
8.1 Avon Lake will identify and implement a water supply plan for emergencies that supports, supplements, or serves in place of the municipal or county water supply during large fires.	Ongoing
8.2 The City of Avon Lake will advocate and support construction of ponds with the capability of being used as an alternative water supply that are equipped with dry hydrants.	Ongoing
CARLISLE TOWNSHIP	
1. Carlisle Township will work to minimize the effects of flooding on residents and properties in the township.	Defer to Lorain County
1.1. Carlisle Township will improve storm sewer systems to more adequately manage runoff water for all areas thus preventing/lessening flooding in residential and/or commercial properties.	Defer to Lorain County
1.2. Carlisle Township will identify and develop elevation options for roadways, streets, and other infrastructure that is negatively affected by flooding on a regular basis.	Defer to Lorain County
1.3. Carlisle Township will construct retention ponds to hold runoff waters during periods of heavy precipitation.	Defer to Lorain County
1.4. Carlisle Township will maintain, repair, and replace dams, dikes, and reservoirs that hold or contain waters that otherwise might flood homes and other properties.	Defer to Lorain County
1.5. Carlisle Township will acquire, demolish and relocate families as a means to remove repetitive loss structures and prevent further losses.	Defer to Lorain County
1.6. Carlisle Township will work with conservancy and soil conservation groups to develop and implement practices to conserve topsoil, prevent erosion and maintain natural habitats to reduce flood and erosion risks and losses.	Defer to Lorain County
2. Carlisle Township will improve and harden utility services and infrastructure to improve the city's ability to manage storms, disasters, and other catastrophes without unnecessary loss.	Defer to Lorain County

Strategy	Status
2.1. Carlisle Township will replace aging and deteriorating power, sewer, and other utility distribution systems.	Defer to Lorain County
2.2. Carlisle Township will identify and implement a water supply plan for emergency purposes that support, supplement, or serve in place of a municipal or county water supply during large fires.	Defer to Lorain County
2.3. Carlisle Township will develop protective actions to lessen the likelihood of damage to water treatment and/or distribution systems during disasters and inclement weather.	Defer to Lorain County
2.4. Carlisle Township will acquire a backup generator for public safety facilities and shelters.	Defer to Lorain County
2.5. Carlisle Township will bury power and utility lines in new neighborhoods, homes, and businesses.	Defer to Lorain County
3. Carlisle Township will develop, improve, and sustain effective communications during disasters for the purpose of saving lives and preserving property.	Defer to Lorain County
3.1. Carlisle Township will improve communication between first responders and other Critical resources before, during, and after disaster incidents.	Defer to Lorain County
3.2. Carlisle Township will partner with Lorain County Emergency Management Agency and others to develop communications capabilities such as text messages, phone call systems, and others to notify the public of impending danger or inclement weather risks.	Defer to Lorain County
3.3. Carlisle Township will improve GIS mapping and addressing within the community so that first responders and service providers can more easily locate and assist victims at particular residences and businesses.	Defer to Lorain County
3.4. Carlisle Township will develop, expand, and/or maintain an outdoor warning siren system.	Defer to Lorain County
3.5. Carlisle Township will work with wireless service providers to establish dependable and resilient wireless service within the city to improve the capability to communicate during inclement weather and disasters.	Defer to Lorain County
3.6. Carlisle Township will identify and communicate with special populations including those with functional and special needs regarding disaster related needs and recovery needs.	Defer to Lorain County
4. Carlisle Township will inform and advocate preventive and sustainable actions of property owners to decrease the damages to property during disasters, and to foster rapid recovery from storms and floods.	Defer to Lorain County
4.1. Carlisle Township will advocate to property owners about regular maintenance practices that result in preventing excessive damage to structures during storms such as ditch bank maintenance, tree trimming and clearing excessive vegetation from streams and waterways.	Defer to Lorain County
5. Carlisle Township will develop a comprehensive plan for land use within the township, taking into account the consequences of development and the effect on existing properties and businesses, as well as consequences on communities downstream.	Defer to Lorain County
5.1. Carlisle Township will consider establishing land use ordinances that protect and preserve the best and least damaging property use within the city.	Defer to Lorain County
5.2. Carlisle Township will consider the creation of building standards for construction, including such practices as contractor-vendor approval,	Defer to Lorain County

Strategy	Status
acceptable industry standards for construction, and reasonable construction materials guidance.	
6. Carlisle Township will develop storm shelters, community rooms, and other protective measures for residents and visitors during severe storms.	Defer to Lorain County
6.1. Carlisle Township will investigate and implement safe rooms for residents who live in mobile homes, homes built on concrete slabs, and other structures that lack storm shelters used as protection in wind and other severe storms.	Defer to Lorain County
6.2. Carlisle Township will educate the community about evacuation procedures and how to identify shelters, comfort stations, and service centers.	Defer to Lorain County
6.3. Carlisle Township will update lists of sites to be used as shelters, comfort stations, and service centers during storms, power outages, and other disasters.	Defer to Lorain County
7. Carlisle Township will develop improved debris management to make recovery faster and more effective.	Defer to Lorain County
7.1. Carlisle Township will identify and approve disposal sites for disaster debris including segregated solid waste, construction materials, wood combustibles, masonry, concrete, and metal waste, paper, general garbage, and hazardous waste.	Defer to Lorain County
ELYRIA	
1. The City of Elyria will develop, improve, and sustain effective communications during disasters for the purpose of saving lives and preserving property.	
1.1. The City of Elyria will improve communication between first responders and other critical resources.	Ongoing
1.2. The City of Elyria will partner with Lorain County Emergency Management and other agencies to develop or acquire communications tools such as text messages phone call systems, and others to notify the public of impending danger or inclement weather risks.	Ongoing
1.3. The City of Elyria will educate the community about evacuation procedures and how to identify shelters, comfort stations, and service centers.	Ongoing
1.4. The City of Elyria will develop expand, and/or maintain an outdoor warning siren system.	Ongoing
1.5. The City of Elyria will identify and communicate with special populations including those with functional and special needs.	Ongoing
1.6. The City of Elyria will identify and communicate with special populations including those with functional and special needs.	Ongoing
2. The City of Elyria will engage in property and natural resources mitigation.	
2.1. The City of Elyria will educate and advocate to property owners about regular maintenance practices that result in preventing excessive damage to structures during storms such as ditch bank maintenance, tree trimming and clearing excessive vegetation from streams and waterways.	Ongoing
2.2. The City of Elyria will consider development of a comprehensive plan for land use within the city, taking into account the consequences of development and the effect on existing properties and businesses, as well as consequences on communities downstream.	Ongoing
2.3. The City of Elyria will investigate and implement means to create and provide safe rooms for residents who live in mobile homes, homes built on concrete	Ongoing

Strategy	Status
slabs, and other structures that lack storm shelters used as protection in wind and other severe storms.	
2.4. The City of Elyria will consider establishing land use ordinances that protect and preserve the best and least damaging property use within the city.	Ongoing
2.5. The City of Elyria will consider the creation of building standards for construction, including such practices as contractor-vendor approval, acceptable industry standards for construction, and reasonable construction materials guidance.	Ongoing
2.6. The City of Elyria will work with conservancy and soil conservation groups to develop and implement practices to conserve topsoil, prevent erosion and maintain natural habitats to reduce flood and erosion risks.	Ongoing
3. The City of Elyria will work to mitigate flood consequences.	
3.1. The City of Elyria will work to improve storm sewer systems to more adequately manage runoff water for all areas thus preventing/lessening flooding in residential and/or commercial properties.	Ongoing
3.2. The City of Elyria will identify and develop elevation options for roadways, streets, and other infrastructure that is negatively affected by flooding on a regular basis.	Ongoing
3.3. The City of Elyria will consider construction of retention ponds to hold runoff waters during periods of heavy precipitations.	Ongoing
3.4. The City of Elyria will work to maintain/repair/replace dams, dikes, and reservoirs that hold or contain waters that otherwise might flood homes and other properties.	Ongoing
3.5. The City of Elyria will consider acquisition and demolition projects to remove repetitive loss structures and prevent further losses.	Ongoing
4. The City of Elyria will protect utilities as part of the mitigation efforts.	
4.1. The City of Elyria will work to replace aging and deteriorating power, sewer, and other utility distribution systems.	Ongoing
4.2. The City of Elyria will work to develop protective actions to lessen the likelihood of damage to water treatment and/or distribution systems during disasters and inclement weather.	Ongoing
4.3. The City of Elyria will work with wireless service providers to establish dependable and resilient wireless service within the city to improve the capability to communicate during inclement weather and disasters.	Ongoing
4.4. The City of Elyria will work to bury power and utility lines in new neighborhoods, homes, and businesses.	Ongoing
5. The City of Elyria will take other actions to promote disaster mitigation and lessen damages due to storms and natural hazards.	
5.1. The City of Elyria will identify and implement a water supply plan for emergency purposes that supports, supplements, or serves in place of a municipal or county water supply during large fires.	Ongoing
5.2. The City of Elyria will improve GIS mapping and addressing within the community so that first responders and service providers can more easily locate and assist victims at particular residences and businesses.	Ongoing
5.3. The City of Elyria will acquire backup generators for public safety facilities and shelters.	Ongoing

Strategy	Status
5.4. The City of Elyria will update the list of sites to be used as shelters, comfort stations, and service centers during storms, power outages, and other disasters.	Ongoing
5.5. The City of Elyria will advocate and support the construction of ponds with the capability of being used as an alternative water supply and equip these with dry hydrants.	Ongoing
5.6. The City of Elyria will identify and approve disposal sites for disaster debris including segregated solid waste (construction materials, wood, combustibles, masonry, concrete, and metal), paper, general garbage and hazardous waste.	Ongoing
GRAFTON	
1. The Village of Grafton will maintain residential and commercial building codes to include a regular inspection program and contractor registration for work within the village.	
1.1. The Village of Grafton will establish and support a Fire Safety inspection Bureau at the fire department to enhance the enforcement and application of building codes in the village.	Ongoing
1.2. The Village of Grafton will provide special rescue and technical training to first responders to minimize the loss of life during disasters, and to facilitate the safe conduct of rescue operations during incidents.	Ongoing
2. The Village of Grafton will harden utility service in the village so that life-sustaining services are not interrupted during storms and disasters.	
2.1. The Village of Grafton will install upgrades and updates to the electrical and water supply systems.	Ongoing
2.2. The Village of Grafton will add a redundant water supply source to decrease dependency during disaster upon a single supply.	Ongoing
2.3. The Village of Grafton will install a replacement water tower with the purpose of hardening water supply to residents and businesses during disasters and inclement weather conditions.	Ongoing
2.4. The Village of Grafton will remove old and deteriorated utility systems equipment and facilities with the purpose of decreasing the likelihood of damage to property caused by these structures during a disaster or severe storm.	Ongoing
2.5. The Village of Grafton will identify and implement proactive maintenance procedures to decrease the incidence of failure during disasters and storms.	Ongoing
3. The Village of Grafton will improve emergency and crisis communications systems and interoperability.	
3.1. Grafton will improve emergency and crisis communications equipment for the purpose of interoperability with Lorain County and other jurisdictions during large scale and extended emergencies and disasters.	Ongoing
4. The Village of Grafton will reassess, improve, and identify shelters, community gathering rooms, and comfort stations for use during disasters and long-term power outages.	
4.1. The Village of Grafton will evaluate and plan for appropriate acquisition and installation of safe rooms as funding becomes available for those residents who live in mobile homes, homes built on concrete slabs, or those who live in buildings that lack subsurface shelters.	Ongoing
5. The Village of Grafton will inform residents about disaster preparedness.	

Strategy	Status
5.1. Grafton will conduct a public education campaign to educate the residents about disaster preparedness and response, including natural and transportation disaster risks.	Ongoing
6. The Village of Grafton will protect properties from flooding through acquisition, demolition, and relocation projects to eliminate flood losses where property owners are willing and funds exist to complete such projects.	Ongoing
KIPTON	
1. The Village of Kipton will improve notification and warning systems for residents of Kipton.	
1.1. Kipton will support and advocate for use of a countywide emergency notification system that utilizes various forms of technology to notify residents of impending danger or inclement weather.	Complete
2. The Village of Kipton will minimize the losses from flooding.	
2.1. Kipton will identify repetitive or severe loss structures for acquisition and demolition and relocation for the occupants and by applying for and using funds to complete these projects.	Ongoing
2.2. The Village of Kipton will support and participate in a countywide storm water assessment and implementation of a countywide plan to manage storm water to minimize flooding across the county.	Complete
3. The Village of Kipton will support improvement to individual sheltering options during severe storms in the village.	
3.1. Kipton will work to establish safe rooms for households that lack basements or other appropriate shelter during severe storms such as tornadoes.	Ongoing
LAGRANGE	
1. Lagrange will support and maintain land use planning efforts that lessen the effects of natural disasters on the properties located in the village.	
1.1. Lagrange will continue its contractor registration process to ensure high quality services are provided after storms have damaged properties.	Ongoing
1.2. Lagrange will maintain residential and commercial building codes, zoning regulations, flood plain regulations, and other standards intended to protect and preserve high quality construction, renovation, and repair.	Ongoing
2. Lagrange will support and maintain warning and notification systems.	
2.1. Lagrange will maintain a notification system that advise residents and workers of dangerous or critical situations, and that communicate weather alerts in a timely fashion.	Ongoing
3. Lagrange will support and construct projects that lessen the effects of flooding on the village.	
3.1. Lagrange will complete and sustain a storm water improvement project funded through user fees charged to property owners under an assessment program.	Ongoing
3.2. Lagrange will identify publicly owned locations in the village that flood repeatedly during or after heavy precipitation or runoff, and analyze the effects of that flooding on the community.	Ongoing
3.3. Lagrange will develop corrective actions to alleviate flooding that prevents access to specific properties during times of heavy rain or runoff.	Ongoing

Strategy	Status
3.4. Lagrange will participate in acquisition, demolition, and relocation projects for properties that have severe or repetitive flood loss and property owners are willing to take action.	Ongoing
4. Lagrange will identify service facilities for use by residents during storms and disasters.	
4.1. Lagrange will establish an approved overnight shelter within the village limits to be used during evacuations, extended power outages, and other emergency situations.	Ongoing
4.2. Lagrange will establish a community comfort station to be used during daytime emergencies for the purpose of feeding and hydration, communication, supply distribution, and social gathering.	Ongoing
LORAIN	
1. The City of Lorain will improve warning and notification systems that alert residents of impending dangers or inclement weather.	
1.1. Lorain will support and participate in a countywide warning and notification system that includes digital notification, social media, and reverse telephone notifications to warn residents about immediate dangers and inclement weather.	Ongoing
1.2. Lorain will assess the need for additional outdoor warning sirens, and will install additional devices in areas where current coverage is minimal or insufficient.	Ongoing
2. The City of Lorain will identify, establish, and utilize protective measures to shelter residents during dangerous weather or other inclement situations.	
2.1. Lorain will support the Lorain County EMA and American Red Cross in the identification of, support for and use of shelters during evacuations and extreme weather conditions, power outages, or other disasters.	Ongoing
2.2. Lorain will work with Lorain County to identify and establish comfort stations and service centers to be used to serve residents quickly and efficiently during disasters.	Ongoing
3. Lorain will restore natural habitat in areas prone to flooding, or those that have been developed and would best be returned to natural habitat due to flood risk.	
3.1. Lorain will work with conservancy and soil conservation groups to develop and implement practices to conserve topsoil, prevent erosion, and to maintain natural habitats for the purpose of reducing flood and erosion/beachfront erosion during weather incidents.	Ongoing
4. The City of Lorain will enforce, support, and enhance building codes, zoning regulations, and other land use regulation where disaster losses can be prevented by such actions.	
4.1. Lorain will improve and sustain a contractor registration process for work done inside the city with the purpose of preventing inadequate and improper construction practices during disaster response and recovery, and as a way to ensure compliance with current land use and building regulations.	Ongoing
4.2. Lorain will develop a comprehensive land use plan for the city, including sustainment of regulations that lessen the negative effects of disasters.	Ongoing
5. The City of Lorain will maintain, improve, and sustain adequate power lines, utility lines, and other infrastructure to prevent extreme losses during inclement weather and disasters.	

Strategy	Status
5.1. Lorain will utilize fees and assessments to property owners to fund the improvements to infrastructure for the purpose of constructing more resilient utilities.	Ongoing
5.2. Lorain will bury utilities in new neighborhoods or commercial developments.	Ongoing
6. The City of Lorain will improve location identification and communication for emergency responders.	
6.1. Lorain will improve GIS mapping and addressing in the city to facilitate rapid location and assistance to residents and businesses by public safety and public works during disasters, thus decreasing the loss and casualty occurrences during those incidents.	Ongoing
7. The City of Lorain will improve services to special populations during disasters to minimize loss of life and injuries.	
7.1. Lorain will work to identify, analyze, and establish critical services for the children of the city who are economically disadvantaged or considered in need of assistance for safety and security needs.	Ongoing
NORTH RIDGEVILLE	
1. The City of North Ridgeville will minimize the negative effects of flooding on its residents and properties.	
1.1. North Ridgeville will educate and advocate to property owners good regular maintenance practices that result in preventing excessive damages to structures during storms, such as ditch bank maintenance, trimming trees, and clearing excessive vegetation from streams and waterways.	Ongoing
1.2. North Ridgeville will support the construction of retention ponds to hold runoff waters during periods of heavy precipitation.	Ongoing
1.3. North Ridgeville will improve storm sewer systems to more adequately manage runoff water for all areas and thus prevent/lessen flooding in residential and/or commercial properties.	Ongoing
1.4. North Ridgeville will construct new storm sewers to adequately handle runoff and drainage loads where development, wear and tear, or lack of structures makes flooding likely.	Ongoing
1.5. North Ridgeville will reduce the impact of natural hazard by preserving or restoring natural areas and their mitigation functions through erosion and sediment control of waterways.	Ongoing
1.6. North Ridgeville will work with other conservancy and soil conservation groups to develop and implement practices to conserve topsoil, prevent erosion, and maintain natural habitats for the purpose of reducing flood and erosion risks.	Ongoing
1.7. North Ridgeville will participate in acquisition, demolition, and relocation projects for properties that have severe or repetitive losses and property owners are willing to participate.	Ongoing
2. North Ridgeville will improve warning and notification systems and will improve general communication with residents during disasters to more effectively recover from disasters.	
2.1. North Ridgeville will investigate and identify communication tools such as text messages, phone call systems, and others, perhaps as part of a countywide system, to effectively notify the community of impending danger and/or inclement weather risks.	Ongoing

Strategy	Status
3. North Ridgeville will conduct preparedness outreach and education programs for residents of the city.	
3.1. North Ridgeville will educate the community about evacuation procedures and how to identify shelter locations, comfort stations, and service centers during disasters.	Ongoing
4. The City of North Ridgeville will identify, establish, and utilize protective measures to shelter residents during dangerous weather or other inclement situations.	
4.1. North Ridgeville will support the Lorain County EMA and American Red Cross in the identification of, support for and use of shelters during evacuations and extreme weather conditions, power outages, or other disasters.	Ongoing
4.2. North Ridgeville will work with Lorain County to identify and establish comfort stations and service centers to be used to serve residents quickly and efficiently during disasters.	Ongoing
OBERLIN	
1. The City of Oberlin will reduce the negative effects of flooding on city residents and properties.	
1.1. Oberlin will support progressive storm water management by facilitating widespread development of countywide storm water planning to help prevent downstream flooding.	Ongoing
1.2. Oberlin will strive to install vegetative buffer zones and natural habitat restoration in areas that flood on a repeated basis, especially along Plum Creek, and will work with property owners to facilitate those conservation measures.	Ongoing
1.3. Oberlin will support residential and commercial building code enforcement, floodplain management, and zoning regulations in an attempt to minimize flooding and property loss due to flooding.	Ongoing
1.4. Oberlin will use, when funding is available, acquisition, relocation, and demolition projects for structures that incur repeated flooding and/or are located in a high-risk flood zone.	Ongoing
2. Oberlin will work to harden utilities within the city to foster rapid recovery from disasters.	
2.1. Oberlin will continue to search for a means to provide alternate power supplies for all critical facilities within the city to insure the continuation of life-saving services during severe weather, disasters, and long periods of power outages and other storms.	Ongoing
3. Oberlin will improve sheltering and protective measures available to residents during severe storms.	
3.1. Oberlin will support a countywide program for identification of safe rooms for residents and visitors in wind-resistant shelters.	Ongoing
4. Oberlin will improve emergency communications within the city and with all entities in Lorain County to lessen the loss of life and property during disasters.	
4.1. Oberlin will participate in a countywide interoperable communications system that includes tactical frequencies for public safety as well as city administration and other important service providers.	Ongoing
4.2. Oberlin will support the maintenance of its current notification system, and will consider support of a countywide emergency notification system that includes text messaging, mobile apps, emails, and other digital and social media.	Complete

Strategy	Status
5. Oberlin will identify and plan for emergency operations with all populations in order to protect the life and safety residents, visitors, and workers during natural disasters.	
5.1. Oberlin will strive to clarify and coordinate emergency efforts with special populations and groups so that those who reside in multi-family housing are adequately served during emergencies and disasters.	Ongoing
ROCHESTER	
1. The Village of Rochester will improve rapid warning and notification systems.	
1.1. Rochester will support and a countywide emergency notification system that utilizes various forms of technology to notify residents of impending danger or inclement weather.	Complete
2. The Village of Rochester will decrease the impact of flooding on village residents.	
2.1. Rochester will identify repetitive or severe loss structures for acquisition and demolition and relocation for the occupants and by applying for and using funds to complete these projects.	Ongoing
3. The Village of Rochester will support countywide flood mitigation studies.	
3.1. Rochester will participate in a countywide storm water assessment and implementation of a countywide plan to manage storm water to minimize flooding across the county.	Ongoing
SHEFFIELD VILLAGE	
1. Sheffield will advocate and educate officials and residents about the need to develop countywide storm water management planning and regulation.	
1.1. Sheffield will participate in storm water study in Lorain County, and will develop retention ponds, detention structures, and vegetative buffers to lessen flooding in downstream areas.	Ongoing
1.2. Sheffield will establish and support economic development standards that utilize current building codes, zoning standards, and other land use planning regulations that take into consideration the effect of development on storm water and flooding effects.	Ongoing
2. The Village of Sheffield will reduce the negative effects of flooding on village residents and properties.	
2.1. Sheffield will advocate for the proper maintenance of streams, ditches, and rivers to reduce debris and vegetation that causes water to back up and flood areas inside the city and upstream from the city.	Ongoing
2.2. Sheffield will advocate for property owners in floodplains to carry flood insurance as a way to protect and mitigate flood losses.	Ongoing
2.3. Sheffield support current FEMA floodplain mapping by federal, state, and local agencies.	Ongoing
2.4. Sheffield will identify, establish, and maintain erosion control measures along streams, ditches and rivers, as well as along the shoreline of Lake Erie.	Ongoing
2.5. Sheffield will implement the proper maintenance of storm sewers and water lines to minimize flooding and maximize the ability for the city to manage storm runoff.	Ongoing
2.6. Sheffield will identify and complete projects that acquire, relocate, and demolish repetitive flood loss structures.	Ongoing

Strategy	Status
2.7. Sheffield will create retention ponds, vegetative buffer zones, natural habitats, and barriers where flooding waterways cause repeated damages to properties that cannot feasibly be relocated or otherwise protected.	Ongoing
3. The Village of Sheffield will improve warning and notification for residents.	
3.1. Sheffield will participate in the development of warning and notification systems that include digital methods of contact including text messaging, emails, as well as outdoor sirens to warn residents and workers of immediate dangers and inclement weather conditions.	Ongoing
4. The Village of Sheffield will improve protective actions available during severe storms.	
4.1. Sheffield will provide safe room programs for residents who live in congregate housing developments and mobile homes without shelters for tornadoes and other severe wind incidents.	Ongoing
5. The Village of Sheffield will harden utility services during storms and disasters.	
5.1. Sheffield will collaborate with utility providers to improve and harden utility services by burying utility lines in new and renovated residential areas, and by replacing old worn supply lines in older neighborhoods.	Ongoing
6. The Village of Sheffield will conduct public outreach and education programs to minimize the loss of life and property during disasters.	
6.1. Sheffield will conduct educational programs for children and families regarding flood safety, fire safety and prevention, and weather awareness and safety during storms and disasters.	Ongoing
6.2. Sheffield will create information to be posted electronically for resident and worker safety during and after an earthquake.	Ongoing
6.3. Sheffield will educate the public about heat and cold emergencies and how to be safe and secure during those times as a way to minimize the emergency needs of the city during temperature extremes, and to minimize how badly safety forces are overwhelmed during those times.	Ongoing
SHEFFIELD LAKE	
1. The City of Sheffield Lake will educate the community about the notification systems that warn them of impending disasters and the actions they should take immediately to protect themselves and their property.	
1.1. Sheffield Lake will investigate and identify communication tools such as text messages, phone call systems, and others, perhaps as part of a countywide system, to effectively notify the community of impending danger and/or inclement weather risks.	Ongoing
1.2. Sheffield Lake will improve the communication systems between first responders and other critical resources in the event of an emergency or disaster.	Ongoing
1.3. Sheffield Lake will develop partnerships with Lorain County Emergency Management and other agencies to develop information dissemination capabilities that might include 2-1-1 and other community agencies, and would enhance the community's ability to communicate with all populations, including those with functional and special needs.	Ongoing

Strategy	Status
1.4. Sheffield Lake will effectively identify and communicate with special populations within the jurisdiction as it relates to disasters, warning and notification, and response.	Ongoing
1.5. Sheffield Lake will educate the community about evacuation procedures and how to identify shelter locations, comfort stations, and service centers during disasters.	Ongoing
2. The City of Sheffield Lake will improve protective options for residents during severe storms and disasters.	
2.1. Sheffield Lake will establish sites to be used as shelters, comfort stations, and service centers during disasters, and will strive to equip these sites with the features necessary to adequately serve the community during storms, power outages, and other disasters.	Ongoing
3. The City of Sheffield Lake will identify and implement a water supply plan for emergency purposes that support, supplement, or serve in place of a municipal or county water supply during large fires.	
3.1. Sheffield Lake will construct ponds with the capability of being used as an alternate water supply, and that are equipped with dry hydrants.	Ongoing
4. The City of Sheffield Lake will conduct public outreach and education for property owners to reduce the effects of disasters.	
4.1. Sheffield Lake will educate about and advocate to property owners good regular maintenance practices that result in preventing excessive damages to structures during storms, such as ditch bank maintenance, trimming trees, and clearing excessive vegetation from streams and waterways.	Ongoing
5. The City of Sheffield Lake will develop projects to lessen the damages to property from flooding.	
5.1. Sheffield Lake will use acquisition and demolition projects to remove repetitive loss structures and prevent further losses.	Ongoing
5.2. Sheffield Lake will construct retention ponds to hold runoff waters during periods of heavy precipitation.	Ongoing
5.3. Sheffield Lake will improve storm sewer systems to more adequately manage runoff water for all areas and thus prevent/lessen flooding in residential and/or commercial properties.	Ongoing
5.4. Sheffield Lake will identify and develop elevation options for roadways, streets, and other infrastructure that is negatively affected by flooding on a regular basis.	Ongoing
6. The City of Sheffield Lake will work with utility providers to harden utility services and to prevent excessive outages during storms and inclement weather.	
6.1. Sheffield Lake will bury power and utility lines in new neighborhoods, homes, and businesses.	Ongoing
6.2. Sheffield Lake will replace aging and deteriorating power, water, sewer, and other utility distribution systems.	Ongoing
6.3. Sheffield Lake will develop protective actions to prevent or lessen the likelihood of damage to water treatment and/or distribution systems during disasters and inclement weather.	Ongoing

Strategy	Status
6.4. Sheffield Lake will work with wireless service providers to establish dependable and resilient wireless service within the jurisdiction to improve the capability to communicate during inclement weather and disasters.	Ongoing
7. The City of Sheffield Lake will improve location identification capability to lower response times and increase accuracy in response.	
7.1. Sheffield Lake will improve GIS mapping and addressing within the community so that first responders and service providers can more easily locate and assist victims at particular residences and businesses.	Ongoing
8. The City of Sheffield Lake will improve recovery times by more effectively managing storm clean-up.	
8.1. Sheffield Lake will identify and approve disposal sites for disaster debris, including segregated solid waste such as construction materials, wood and combustible waste, masonry and concrete waste, metal waste, paper and general garbage, and hazardous waste.	Ongoing
SOUTH AMHERST	
1. The Village of South Amherst will support effective notification and warning systems.	
1.1. South Amherst will maintain an emergency notification system that utilizes various forms of technology to notify residents of impending danger or inclement weather.	Ongoing
2. The Village South Amherst will minimize the losses from flooding.	
2.1. South Amherst will participate in countywide planning to assess and manage storm water to minimize flooding across the county.	Ongoing
3. The Village of South Amherst will participate in a countywide storm water assessment.	
3.1. South Amherst will participate in countywide planning to assess and manage storm water to minimize flooding across the county.	Ongoing
4. The Village of South Amherst will harden utility supplies during disasters.	
4.1. South Amherst will bury utility lines for all new construction.	Ongoing
4.2. South Amherst will make improvements to the storm sewer system in the village to lessen flooding by facilitating good and rapid drainage capabilities.	Ongoing
4.3. South Amherst will develop a redundant water supply for the village with the purpose of lessening water outages when intake is impeded by extremely cold weather.	Ongoing
5. The Village of South Amherst will support improvements and clarity to emergency communications components.	
5.1. South Amherst will improve GIS mapping for the village to eliminate confusion when first responders must find specific locations.	Ongoing
5.2. South Amherst will improve communications interoperability between local first responders as well as between village responders and other adjacent and county departments.	Ongoing
6. The Village of South Amherst will improve shelter capacity in the village.	
6.1. South Amherst will facilitate placement of safe rooms on properties that lack wind-safe shelter.	Ongoing
VERMILION	
1. The City of Vermilion will lessen the negative effects of flooding within the city.	

Strategy	Status
1.1. Vermilion will use acquisition and relocation programs for repetitive flood loss properties.	Ongoing
1.2. Vermilion will educate property owners and advocate for flood insurance coverage for properties in locations where flood damage is likely.	Ongoing
1.3. Vermilion will acquire properties prone to flooding, and to restore the properties to a natural state, as appropriate, through cooperation with park and recreations groups, conservation groups, state agencies, and other appropriate resources.	Ongoing
1.4. Vermilion will improve storm sewer systems to more adequately manage runoff water for all areas and thus prevent or lessen flooding in residential and/or commercial properties.	Ongoing
2. The City of Vermilion will ensure the availability of potable drinking water for residents during extremely cold periods or extended cold periods.	
2.1. Vermilion will identify, design, and implement improvements to water supply intake systems to lessen the negative effect of ice jams on the water supply.	Ongoing
2.2. Vermilion will maintain relationships with water providers such as Erie County, Lorain, and Northern Ohio Rural Water to provide a redundant water supply when intake sources are not operational for the city's normal water system.	Ongoing
3. The City of Vermilion will develop and sustain resilient utility services through communication with property owners that advocate and educate them about responsible property ownership.	
3.1. Vermilion will advocate regular and effective tree trimming, debris management, and ditch maintenance for private property owners.	Ongoing
3.2. Vermilion will identify funding for and purchase alternate power supplies for critical facilities within the city.	Ongoing
3.3. Vermilion will identify funding for and purchase at least one large, portable generator to be used to sustain critical services on site during storms or aftermath.	Ongoing
4. The City of Vermilion will maintain public outreach efforts to lessen the effects of natural disasters on the residents of the city.	
4.1. Vermilion will maintain their municipal warning and notification system.	Ongoing
4.2. Vermilion will distribute educational materials about evacuation, shelters, and comfort stations to the residents for their use and safety during evacuations and severe storms.	Ongoing
WELLINGTON	
1. The Village of Wellington will improve warning and notification systems.	
1.1. Wellington will expand the outdoor warning siren system to harden and improve warning and notification capabilities. As the geographic footprint of the community has expanded, and development on the periphery of the village has occurred, the current central siren needs to be improved with the installation of outlying sirens to more effectively inform the public. The current system does not have a verbal warning capability, so that will be considered as a feature in a new system.	Ongoing
1.2. Wellington will install additional siren/voice notification nodes at strategic locations to improve warning capabilities.	Ongoing

Strategy	Status
2. Wellington, through its Electric Department, will create a redundant and separate electrical grid interconnection to harden utility services and to prevent excessive outages during storms and inclement weather.	
2.1. Wellington will build a new substation that will be a second interconnection to the grid power supply and will be fed by a separate distribution line from the area electrical transmission company. This will provide redundancy at both the local interconnection level and at the distribution level and should significantly harden the utility to storm impacts.	Ongoing

3.2 RISK PRIORITIES

The Hazard Identification and Risk Assessment provides a detailed explanation of the hazards and risks identified by Lorain County. This strategy section builds on that information by identifying mitigation strategies that would reduce vulnerability to the identified hazards.

Strategies were prioritized based on the hazard rank in the HIRA. The hazards were ranked using a comprehensive process that included frequency, response duration, speed of onset, magnitude, business impact, human impact, and property impact. Each set of strategies includes a goal statement related to the specific hazard. Under each goal, multiple mitigation strategies, or objectives, were created based on the proposed actions to reduce vulnerability.

The planning team considered actions that would benefit the greatest number of people and how the strategy would be funded. For some strategies, funding will come from the jurisdiction’s general budget while others will require special funding such as state or federal grants. Feasibility of the action and cost of implementation were also considered. In general, strategies that were less expensive or easier to implement were prioritized higher because they were more likely to be completed. Projects requiring state or federal grant funding, extensive multi-agency collaboration, or other more complicated processes were considered lower priority because they would take more time to complete.

At strategy review meetings and during the final plan review phase, jurisdictions and stakeholders had the opportunity to revise strategies and adjust the prioritization. The final strategies presented in this section reflect those adjustments and revisions.

3.3 MITIGATION GOALS AND STRATEGIES

Planning Team members and stakeholders worked by jurisdiction and collaboratively as a county to develop appropriate mitigation goals and strategies. Draft strategies were developed based on the input provided by the stakeholders and presented to the planning team and community for public review and comment. Strategies were revised accordingly to finalize the mitigation goals and strategies presented in this section. Strategies for specific jurisdictions vary from the countywide in priority of the problem and the potential solution.

Each strategy developed was assigned a priority, status, action type, funding source, project lead, and timeline, as described below. While these specific details may change prior to implementation of a strategy, the exercise of developing this information required stakeholders to consider the resources, staffing, and funding that would be necessary to implement mitigation strategies.

Priority

Priority identifies the order of importance jurisdictions assigned to each strategy. Strategies may not be addressed in this exact order, depending on availability of funds and other circumstances.

Status

Status identifies if the strategy is new to this mitigation plan or a strategy that was carried over from the previous plan.

- New: Strategy is new to the mitigation plan.
- Ongoing: Strategy is carried over from the previous mitigation plan but may be revised to better reflect the current need. Work has not been achieved in its entirety; more activity is necessary to complete this action.
- Unchanged: Strategy is carried over from the previous mitigation plan with no changes. The action is still necessary, but no progress has been made at this time.

Action Type

Action type describes the kind of activity described in the strategy.

- Natural Resource Protection – Reduce the impacts of natural hazard by preserving or restoring natural areas and their mitigation functions
- Prevention – Avoid hazard problems or stop impact from worsening
- Property Protection – Protect structures by modifying or strengthening building to withstand impact
- Public Information – Advise the public about hazards, hazardous areas, and mitigation techniques to protect people and property
- Structurally Engineered– Lessen the impact of a hazard by modifying the environment or progression of the hazard event through designed and engineered projects

Funding Source

Mitigation strategies can be funded through a variety of sources. Depending on the type and cost of the project, different funding sources will be available and appropriate. Each strategy identifies potential funding sources based on this list:

- HMA – Hazard Mitigation Assistance grants (includes HMPG, FMA, PDM, BRIC, and other federal mitigation grants)
- EMPG – Emergency Management Performance Grant
- HSGP – Homeland Security Grant Program
- ICC – Increased Cost of Compliance (including rate increases or premiums)
- Local – Local Funds
- State – State Funds (including Community Development Block Grants, Clean Ohio Grants, and other state funding source)
- Other– Other (including private funds and non-governmental agency funding)

Project Lead

The project lead is the individual or agency charged with championing the strategy and ensuring that jurisdiction officials look for opportunities to complete the strategy over the five-year planning cycle. The lead is responsible for coordinating the overall effort and/or is the entity most appropriate to lead project development at the initial state but may not necessarily be responsible for project oversight or completion should the strategy develop into an actionable and funded project.

Timeline

The timeline identifies the time frame in which a mitigation strategy could realistically be implemented. The actual time frame may vary from what is described in this plan, depending on funding, grant opportunities, or changes in priorities as other critical activities are adjusted to meet evolving community needs.

3.4 IMPLEMENTATION

The mitigation strategies are general actions to reduce the negative impact of disasters and large-scale emergencies. For a strategy to become an actionable item, it must be converted to a specific project with funding, action steps, timelines, and project goals. For example, a project to acquire and demolish a repetitive loss property begins by identifying the specific property to be acquired and securing funding for the project. The property owner must agree to participate in the program and the jurisdiction must accept its share of cost, planning responsibility, and project management roles. Only when all of these pieces are in place can the project become a reality. A similar process must be followed for any of the strategies identified here to become projects.

In some situations, an entity other than the jurisdiction may be the most appropriate organization to initiate, manage, or administer a mitigation project. These entities could include, but are not limited to, park districts, sewer district, water districts, school districts, colleges/universities, non-profit organizations, property owners' associations, and others. In these situations, the jurisdiction and alternate entity can work together to determine the best process to implement the mitigation project, from grant application through project completion. Throughout the project, all codes, requirements, and regulations will be followed

The EMA will monitor progress on these strategies through ongoing communication with jurisdiction officials and stakeholders. When mitigation grants or other funding sources become available, reasonable efforts will be made to notify stakeholders and jurisdiction officials of the funding opportunity so that applications can be submitted. Jurisdictions will also work to identify local funding sources that can be used to address disaster vulnerability. When funding is secured, a detailed project timeline will address the steps necessary to complete the project. Upon completion, the jurisdiction will evaluate project effectiveness and share that information with the EMA and planning team for consideration in developing future projects.

For stakeholders in Lorain County, the collaboration that occurred while developing these strategies was the most valuable part of the mitigation planning process. The planning process required stakeholders to evaluate hazards and risks in their community through extensive discussion and analysis. The mitigation goals and actions that resulted from these discussions were developed to maximize benefit to the community while minimizing cost. The process required whole community involvement so that all sectors of the community were represented in the planning process. Ultimately, Lorain County developed comprehensive, relevant, and effective solutions to their unique risks and vulnerabilities. Given the availability of funding, personnel, and support, Lorain County and its jurisdictions are positioned to move forward and implement these strategies and accomplish their goal of making the county more resilient.