

3.0 MITIGATION STRATEGIES

As Logan County's planning team and stakeholders developed mitigation goals and strategies for the county, their goal was to address the specific risks and vulnerabilities of each individual jurisdiction. As a result, the mitigation strategies in this plan are detailed and comprehensive. While some strategies are similar from jurisdiction to jurisdiction, each community's stakeholders expressed their unique circumstances and crafted strategies to address those specific issues. While similar in nature, not all jurisdictions included all strategies created, and each governmental body prioritized its selected strategies individually. The result is a set of comprehensive and customized mitigation goals and strategies that address the needs of Logan County and each jurisdiction.

3.1 STATUS OF PAST MITIGATION EFFORTS

In the 2017 Logan County Hazard Mitigation Plan, mitigation goals and strategies were established for the entire county. Under guidance at that time, the strategies were more like identified potential mitigation projects, and some even included addresses and identifying characteristics. The county and its incorporated jurisdictions worked together to identify actions that would reduce risk and vulnerability across Logan County. As part of the plan development process, the 2017 goals and strategies were discussed and evaluated by the EMA Director, and planning team and stakeholders during the jurisdictional meetings conducted in February 2023.

A survey was distributed to all jurisdictions after those discussions, and they were asked to share the status of each strategy in their section of the plan as well as thoughts regarding continuance of those strategies or addition of others. These surveys were completed as a group and/or by key leadership of the municipality so only one survey per jurisdiction was submitted in most cases.

Table 3-1 identifies these 2017 strategies and the current status of each. The current status is classified according to this list:

- **Completed:** Strategy was completed as written; item has not been included in new plan unless otherwise indicated on the survey or in discussions.
- **Cancelled:** Strategy was attempted and later eliminated because it would be ineffective or otherwise inappropriate.
- **On Schedule:** Strategy is continuing but not completed; efforts are progressing as anticipated and should be continued into the new plan.
- **Delayed:** The strategy has not been achieved but has encountered a specific problem that causes it to be delayed indefinitely; it may or may not be included in the updated plan according to jurisdiction input.
- **Deferred:** The strategy was determined to not be feasible, and it has been eliminated from the action for implementation at this time or assigned to another entity in another jurisdiction.

Table 3-1: Logan County 2017 Mitigation Goals and Strategies

GOAL 1: LOGAN COUNTY AND ITS JURISDICTIONS WILL EMPLOY MITIGATION ACTIONS TO REDUCE THE DAMAGES INCURRED FROM SEVERE WIND STORMS THAT INCLUDE STRAIGHT LINE WINDS AND TORNADOES.					
1.1 Logan County will advocate proper trimming of trees and vegetation to reduce damages caused by wind, especially where trees are infected with disease like Emerald Ash Borer.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.2 Logan County will support the construction of safe rooms for single and multi-family homes without basements or shelters.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.3 Logan County will implement a program to clear areas of debris after severe wind and flooding to keep crop fodder and other debris out of water treatment plants, sewers, transportation routes, and other infrastructure, and to keep roadways open and usable as soon as possible after storms.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.4 Logan County will enforce existing land use regulations (including zoning and development regulations and construction codes) in an effort to make properties as resistant to wind damage as possible.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
GOAL 2: LOGAN COUNTY WILL ENGAGE IN MITIGATION ACTIONS THAT REDUCE DAMAGES FROM FLOODING.					
2.1 Logan County will make improvements to road and infrastructure including an increase of bridge spans, repair of shoulders and berms, increase in culvert size, maintenance of bridge slopes and protection of roadways from storm and flood damage, to enhance the likelihood of open roadways even after severe flooding and rapid drainage.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
2.2 Logan County will maintain NFIP participation through regular review of flood maps and sustain local engagement to ensure accuracy of the maps, including advocacy for adoption of current maps as amended through the appeal process.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
2.3 Logan County will implement improvements to the ditch maintenance program, and will identify how to repair damage done to streams and ditches by storms and floods, such as removal of sedimentation and prevention of erosion.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
2.4 Logan County will remove debris and obstructions from waterways to facilitate the flow of water.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
2.5 Logan County will use federal and state grant programs to fund mitigation efforts, especially in flood mitigation and mitigation planning.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
2.6 Logan County will advocate and support flood insurance where required.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
2.7 Logan County will maintain existing building codes, zoning regulations, and other land use regulations that encourage sustainable disaster-resistant structures.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>

<p>2.8 Logan County will study countywide storm water to reduce flood damages to properties through improvement to wastewater systems and field tiling practices that prevent downstream damages from runoff water.</p> <p>Completed <input type="checkbox"/> Cancelled <input type="checkbox"/> On Schedule <input type="checkbox"/> Delayed <input checked="" type="checkbox"/> Deferred <input type="checkbox"/></p>
<p>2.9 Logan County will study the likelihood and potential impact of dam failure, including consideration of dam size, height, condition, elevation, floodgate management and other maintenance factors, whether the responsibility of the county, another jurisdiction, or an individual; and will incorporate the findings of the Ohio Department of Natural Resources regarding the dam in that analysis.</p> <p>Completed <input type="checkbox"/> Cancelled <input type="checkbox"/> On Schedule <input type="checkbox"/> Delayed <input checked="" type="checkbox"/> Deferred <input type="checkbox"/></p>
<p>2.10 Logan County will properly maintain dams, spillways, and up-ground reservoirs to lessen the likelihood of structural failure caused by poor maintenance through cooperative efforts of the entities responsible for upkeep.</p> <p>Completed <input type="checkbox"/> Cancelled <input type="checkbox"/> On Schedule <input checked="" type="checkbox"/> Delayed <input type="checkbox"/> Deferred <input type="checkbox"/></p>
<p>2.11 Logan County will require retention or detention ponds to contain runoff water in new development or expansion where surface runoff may cause flooding.</p> <p>Completed <input type="checkbox"/> Cancelled <input type="checkbox"/> On Schedule <input checked="" type="checkbox"/> Delayed <input type="checkbox"/> Deferred <input type="checkbox"/></p>
<p>2.12 Logan County will maintain, replace, or add storm sewers, wastewater pumping stations, water pumps and other devices or structures to protect property from flooding and to lessen flash flooding.</p> <p>Completed <input type="checkbox"/> Cancelled <input type="checkbox"/> On Schedule <input checked="" type="checkbox"/> Delayed <input type="checkbox"/> Deferred <input type="checkbox"/></p>
<p>2.13 Logan County will acquire and demolish properties that flood repeatedly to relocate the inhabitants out of flood risk areas, and will restore the property to a natural habitat maintained as such into perpetuity.</p> <p>Completed <input type="checkbox"/> Cancelled <input type="checkbox"/> On Schedule <input checked="" type="checkbox"/> Delayed <input type="checkbox"/> Deferred <input type="checkbox"/></p>
<p>2.14 Logan County will utilize elevation to protect critical infrastructure and property from flooding.</p> <p>Completed <input type="checkbox"/> Cancelled <input type="checkbox"/> On Schedule <input type="checkbox"/> Delayed <input checked="" type="checkbox"/> Deferred <input type="checkbox"/></p>
<p>2.15 Logan County will advocate maintenance on waterways in Logan County through cooperation with regional conservancy districts that work to remove debris, fallen or diseased trees, and excess sediment from the waterway.</p> <p>Completed <input type="checkbox"/> Cancelled <input type="checkbox"/> On Schedule <input checked="" type="checkbox"/> Delayed <input type="checkbox"/> Deferred <input type="checkbox"/></p>
<p>2.16 Logan County will create vegetative buffer zones, wetlands, and natural habitat in low-lying areas to hold excess runoff until it naturally drains downstream.</p> <p>Completed <input type="checkbox"/> Cancelled <input type="checkbox"/> On Schedule <input checked="" type="checkbox"/> Delayed <input type="checkbox"/> Deferred <input type="checkbox"/></p>
<p>2.17 Logan County will support farmers as they replace deteriorated tiles, implement conservation practices including the use of cover crops and conservation tillage, install tile control structures where feasible, and use filter strips for slope protection.</p> <p>Completed <input type="checkbox"/> Cancelled <input type="checkbox"/> On Schedule <input checked="" type="checkbox"/> Delayed <input type="checkbox"/> Deferred <input type="checkbox"/></p>
<p>2.18 Logan County will use channel modification and/or diversion to eliminate areas where flooding is highly destructive and no other option is feasible to decrease the flood damage.</p> <p>Completed <input type="checkbox"/> Cancelled <input type="checkbox"/> On Schedule <input type="checkbox"/> Delayed <input checked="" type="checkbox"/> Deferred <input type="checkbox"/></p>
<p>GOAL 3: LOGAN COUNTY AND ITS JURISDICTIONS WILL EMPLOY MITIGATION ACTIONS THE REDUCE DAMAGES DUE TO UTILITY OUTAGES AND SUPPLY SHORTAGES DUE TO SEVERE STORMS AND DISASTERS.</p>
<p>3.1 Logan County will identify and establish alternate heating fuels, potable water suppliers, water pump stations, alternate power sources, private water systems where needed, and other critical supplies necessary for sustaining life, business, and safety during power outages with emphasis upon continuity for livestock operations, industrial and manufacturing businesses, and government critical facilities.</p> <p>Completed <input type="checkbox"/> Cancelled <input type="checkbox"/> On Schedule <input type="checkbox"/> Delayed <input checked="" type="checkbox"/> Deferred <input type="checkbox"/></p>

3.2 Logan County will encourage collaboration between all levels of government and private contractors to clear roads and maintain electrical service during severe weather, especially ice, snow, wind, and floods and to protect business operations and assets from disaster related losses.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
3.3 Logan County will encourage the hardening of utilities through installation below grade, improvements to supply line and generation plants, and upgrade of poles, substations and transformers.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
GOAL 4: LOGAN COUNTY WILL CONDUCT MITIGATION ACTIONS TO REDUCE VULNERABILITY OF POPULATIONS TO DAMAGES AND CASUALTIES DUE TO ALL TYPES OF DISASTERS AND SEVERE STORMS.					
4.1 Logan County will implement a program to identify and remove dead or diseased trees along waterways, roadways, and in areas used by the public.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
4.2 Logan County will educate the public about digital warning and notification systems like reverse calling, weather radios, warning sirens, and digital resources that inform them of incoming life-threatening storms or emergency incidents.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
4.3 Logan County will maintain and improve hardware, software, and capital equipment (outdoor warning sirens) used to deliver warnings and notification of severe weather and other hazards to county residents.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
4.4 Logan County will implement a project to identify, respond to, and recover from farm losses after severe storms, power outages, or hazardous materials incident including facilitating generator availability during power outages, assisting during a severe livestock infestation, responding effectively to grain operations incident, clearing roads of snow and ice for ongoing ingress and egress to farms, and assisting with other issues of particular importance to agriculture.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
4.5 Logan County will assist and collaborate with farmers to identify ways to decrease losses after severe storms, including but not limited to management of rapid and excess runoff from fields or wherever manure management is necessary, helping develop protective measures for chemical storage tanks, feed silos, gran bins, and other farm structures and equipment, and other necessary protective measures common to agricultural operations.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
4.6 Logan County will improve capacity to implement rapid placement of temporary warning signs to indicate dangerous road conditions like flooding, wash-outs, hazardous materials incidents, and other safety issues or closures.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
4.7 Logan County will establish water conservation procedures to be implemented during water emergencies due to drought or contaminated supply.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
GOAL 5: LOGAN COUNTY WILL COMPLETE MITIGATION ACTIONS THAT ENABLE RAPID AND EFFECTIVE COMMUNICATION DURING A DISASTER INCIDENT FOR THE PURPOSE OF DIRECTING THE POPULATION TO TAKE PROTECTIVE ACTION AND FOLLOW OPERATIONAL PROCEDURES.					
5.1 Logan County will develop interoperable communication plans to coordinate life-saving efforts between all community partners during severe incidents.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>

5.2 Logan County will improve GIS mapping to include infrastructure and utility designations and expand the customization capability of county software to produce data that is useful in community response planning.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
5.3 Logan County will work to develop enhanced methods of cross-discipline and interjurisdictional planning efforts to create whole community efforts to improve communities and expand disaster resilience.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
5.4 Logan County will develop, utilize and maintain a communication plan to include mass media, social media, and direct contact before, during and after incidents.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
5.5 Logan County will educate the public about local disaster hazards and vulnerabilities, protective actions, available service, special populations and assistance, and emergency procedures using mass and social media, printed media, and other means of communication.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
5.6 Logan County develop a multi-part communication system to notify all communities of protective action orders, warnings and notification, and other critical information related to specific disaster incidents.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
5.7 Logan County will improve GIS mapping and addressing to facilitate location of specific parcels or properties during emergency and disaster response, and to facilitate the use of mutual aid resources when needed.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
GOAL 6: LOGAN COUNTY WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE THE EROSION OF TOPSOIL AND ROADWAYS DUE TO FLOODING, LAND USE OR HUMAN ACTION, AND TO PRESERVE NATURAL RESOURCES IN A WAY THAT LESSENS DISASTER DAMAGES.					
6.1 Logan County will protect roadways vulnerable to compromised structural integrity, damaged berms, washed away foundations or abutments, or other deterioration due to extreme runoff or highly vulnerable soil types caused by severe storms.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
6.2 Logan County will protect waterways by reducing slope erosion, land subsidence and wind damage through various conservations measures such as use of cover plants, vegetation, grassy waterways, filter strips, buffers and such.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
6.3 Logan County will protect open areas and fields from wind erosion due to storms through use of windbreaks, filter strips, cover crops, tree lines, and other vegetative buffers to protect topsoil during high wind events and heavy precipitation.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>

Table 3-2: City of Bellefontaine 2017 Mitigation Goals and Strategies

GOAL 1: BELLEFONTAINE WILL EMPLOY MITIGATION ACTIONS TO REDUCE DAMAGES INCURRED FROM SEVERE WINDSTORMS, INCLUDING STRAIGHT-LINE WINDS AND TORNADOES.					
1.1 Bellefontaine will advocate proper trimming of trees and vegetation to reduce damages caused by wind, especially where trees are infected with disease like Emerald Ash Borer.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.2 Bellefontaine will support the construction of safe rooms for single and multi-family homes without basements or shelters.					

	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.3 Bellefontaine will implement a program to clear areas of debris after severe wind and flooding to keep culverts and storm sewers free-running and clear.			<input checked="" type="checkbox"/>		
1.4 Bellefontaine will encourage damage resistant building materials and construction techniques so structures are as resistant as possible to wind damage.			<input checked="" type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
GOAL 2: BELLEFONTAINE WILL EMPLOY MITIGATION ACTIONS THAT REDUCE DAMAGES FROM UTILITY OUTAGES AND SUPPLY SHORTAGES.					
2.1 Bellefontaine will encourage the hardening of utilities through installation below grade, improvements to supply line and generations plants, and upgrade of poles, substations and transformers.			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2.2 Bellefontaine will identify and establish alternate heating fuels, potable water suppliers, alternate power sources, and other crucial supplies necessary for sustaining life, business, and safety during extended power outages, with emphasis upon continuity for critical operations.			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
GOAL 3: BELLEFONTAINE WILL COMPLETE MITIGATION ACTIONS THAT ENABLE RAPID AND EFFECTIVE COMMUNICATION DURING A DISASTER INCIDENT FOR THE PURPOSE OF DIRECTING THE POPULATION TO TAKE PROTECTIVE ACTIONS AND TO FOLLOW OPERATIONAL PROCEDURES AS WELL AS ENABLE RESPONDERS TO COMMUNICATE WITH ONE ANOTHER.					
3.1 Bellefontaine will develop a multi-part communication system to notify all residents of protective action orders, warnings and notifications, and other critical lifesaving information related to specific disaster incidents when necessary.			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.2 Bellefontaine will develop interoperable communication plans to coordinate life-saving efforts between all community partners during severe incidents.			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.3 Bellefontaine will educate the public about local disaster hazards, vulnerabilities, protective actions, services, vulnerable populations, available assistance, and emergency procedures using mass and social media, printed information and other options.			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.4 Bellefontaine will develop, utilize, and maintain a communication plan to include mass media, social media, and direct contact before, during and after incidents.			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.5 Bellefontaine will work to improve parcel location mapping to facilitate locating and responding to emergency and disaster calls in a rapid and effective way, as well as to facilitate the use of mutual aid resources, when necessary, as assistance to responders and dispatchers-			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.6 Bellefontaine will improve GIS mapping to include infrastructure and utility mapping, and expand the customization capability of software to produce data that is useful in community planning.			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.7 Bellefontaine will work to develop enhanced methods of cross-discipline and interjurisdictional planning efforts to create whole community efforts to improve communities and expand disaster resilience.			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

GOAL 4: BELLEFONTAINE WILL ENGAGE MITIGATION ACTIONS THAT REDUCE THE DAMAGES FROM FLOODING, WITH AN EMPHASIS UPON FLASH FLOODING.					
4.1 Bellefontaine will maintain NFIP participation through regular review of flood maps and sustain engagement to ensure accuracy of the maps, including advocacy for adoption of current maps as amended through the appeal process.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
4.2 Bellefontaine will advocate and support flood insurance where required by adopted federal flood maps.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
4.3 Bellefontaine will use financial aid for flood mitigation through grants, fees, and other special programs.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
4.4 Bellefontaine will adopt new and maintain existing local building codes, zoning regulations, and other land use regulations that encourage sustainable disaster resistant structures in all areas.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
4.5 Bellefontaine will maintain, replace, or add storm sewers, wastewater pumping stations, water pumps, and other devices or structures to protect property from flooding and to lessen flash flooding.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
4.6 Bellefontaine will remove debris and obstructions from waterways to facilitate drainage.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
4.7 Bellefontaine will make improvement to roads and infrastructure including increases in size of bridge spans and culverts, repair of shoulders and berms, maintenance of bridge slopes and protection of roadways from storms and flood damage, to enhance the likelihood of open roadways even after severe flooding and damaging storms.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
4.8 Bellefontaine will require retention and detention ponds to contain runoff water in new developments or expansions where surface runoff may cause flooding.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
4.9 Bellefontaine will utilize elevation to protect critical infrastructure and property from flooding.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
4.10 Bellefontaine will help study countywide storm water vulnerability to reduce flood damages to properties due to flooding through improvement to wastewater systems and wastewater management to prevent downstream flooding.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
4.11 Bellefontaine will remove debris fallen trees and excess sediment from waterways to improve their condition.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
4.12 Bellefontaine will study the likelihood of dam failure where it would have a negative effect on city property and residents.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
4.13 Bellefontaine will implement improvements to ditch maintenance to facilitate the natural drainage of storm water and to identify damages to streams and ditches such as sedimentation and erosion.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
4.14 Bellefontaine will properly maintain dams, spillways, and up-ground reservoirs to lessen the likelihood of structural failure and flooding due to poor maintenance.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
4.15 Bellefontaine will acquire and demolish properties that flood repeatedly to relocate residents out of flood risk areas, and to restore the property to a natural habitat maintained as such into perpetuity.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>

4.16 Bellefontaine will create vegetative buffer zones, wetlands, and natural habitat in low-lying areas to hold excess runoff until it drains downstream.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
GOAL 5: BELLEFONTAINE WILL CONDUCT MITIGATION ACTIONS TO REDUCE THE VULNERABILITY OF ITS POPULATION TO DAMAGES AND CASUALTY DUE TO ALL TYPES OF DISASTERS AND SEVERE STORMS.					
5.1 Bellefontaine will maintain and improve hardware, software, and capital equipment (outdoor warning sirens) used to deliver warnings and notifications of severe weather and other hazards.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
5.2 Bellefontaine will educate the public about local digital warning and notification systems like reverse calling, weather radios, warning sirens, and digital resources that inform them of incoming life-threatening storms or emergency incidents.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
5.3 Bellefontaine will implement a program to identify and remove dead or diseased trees along waterways and in the public domain.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
5.4 Bellefontaine will establish water conservation procedures to be implemented during a water emergency or drought.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
5.5 Bellefontaine will improve capacity to rapidly place temporary warning signs that indicate dangerous road conditions.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
GOAL 6: BELLEFONTAINE WILL ENGAGE MITIGATION ACTIONS THAT REDUCE THE EROSION OF TOPSOIL AND INFRASTRUCTURE DUE TO RAPID RUNOFF, LAND USE, OR HUMAN CAUSED INCIDENTS.					
6.1 Bellefontaine will protect roadways vulnerable to compromised structural integrity, damaged berms, washed away foundation or abutments, or other deterioration due to extreme runoff or highly vulnerable soil types.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
6.2 Bellefontaine will protect waterways by reducing slope erosion and sedimentation through conservation measure such as use of cover plants, grassy waterways, filter strips, and buffers.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input checked="" type="checkbox"/>	Deferred <input type="checkbox"/>
6.3 Bellefontaine will protect open areas and parks from wind erosion through use of windbreaks, buffers, tree lines, and other vegetation to protect topsoil during high wind events and after heavy precipitation.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>

Table 3-3: Village of Belle Center 2017 Mitigation Goals and Strategies

GOAL 1: BELLE CENTER WILL ENGAGE IN MITIGATION ACTIONS THAT REDUCE THE DAMAGES FROM RIVERINE AND FLASH FLOODING.					
1.1 Belle Center will consider joining NFIP as a way to make more flood protection available to the community and to prevent future damages through floodplain regulation.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.2 Belle Center will use financial aid for flood mitigation through grants, fees, and other special programs.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.3 Belle Center will advocate and support flood insurance where required.					

	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.4 Belle Center will maintain and enforce existing building codes, zoning regulations, and other land use regulations that encourage sustainable disaster-resistant structures in all areas.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.5 Belle Center will participate in countywide storm water vulnerability study to reduce flood damages to properties through better wastewater management.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.6 Belle Center will implement improvements to ditch maintenance in the village to ensure adequate drainage.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.7 Belle Center will maintain storm sewers, pumping stations, water pumps, and other devices to protect property from flooding.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.8 Belle Center will remove debris and obstructions from ditches and streams in the village.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.9 Belle Center will require retention and detention ponds to contain runoff water in new or expansion development where surface water may cause flooding.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.10 Belle Center will utilize elevation to protect critical infrastructure and property from flooding.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.11 Belle Center will acquire and demolish properties that flood repeatedly to relocate resident out of flood risk areas, and will restore property to a natural habitat maintained as such into perpetuity.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>
1.12 Belle Center will support efforts to replace deteriorated field tiles and will support conservation tillage and erosion protection measures.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
GOAL 2: BELLE CENTER WILL COMPLETE MITIGATION ACTIONS THAT ENABLE RAPID AND EFFECTIVE COMMUNICATION DURING A DISASTER INCIDENT FOR THE PURPOSE OF DIRECTING THE POPULATION TO TAKE PROTECTIVE ACTIONS AND TO FOLLOW OPERATIONAL PROCEDURES.					
2.1 Belle Center will advocate and support efforts to improve GIS mapping to include infrastructure and utility services, and to expand the customization capability of software to produce data that is useful in community planning.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
2.2 Belle Center will advocate and support improvement in parcel location mapping to facilitate locating and responding to emergency and disaster calls in a rapid and effective way, as well as to facilitate the use of mutual aid resources when necessary to assistance to responders and dispatchers.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
2.3 Belle Center will develop utilize and maintain a communication plan to include mass media, social media, and direct contact with residents before, during, and after incidents.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
2.4 Belle Center will develop a multi-part communication system to notify all residents of protective action orders, warnings and notifications, and other critical lifesaving information related to specific disaster incidents when necessary.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>

2.5 Belle Center will develop interoperable communications plans to coordinate life-saving efforts between all community partners during severe incidents.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
GOAL 3: BELLE CENTER WILL EMPLOY MITIGATION ACTIONS TO REDUCE THE DAMAGES INCURRED FROM SEVERE WIND STORMS THAT INCLUDE STRAIGHT LINE WINDS AND TORNADOES.					
3.1 Belle Center will advocate for proper trimming of trees and vegetation to reduce damages caused by wind, especially where trees are infected with disease like Emerald Ash Borer.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
3.2 Belle Center will implement a program to clear areas of crop debris and other debris after storms to keep obstructions out of storm sewers and culverts.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
3.3 Belle Center will support the construction of safe rooms for single and multi-family homes without basements or other shelters.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
3.4 Belle Center will identify and establish locations to be used as community centers during extended power outages or extreme conditions.					
GOAL 4: BELLE CENTER WILL EMPLOY MITIGATION ACTIONS THAT REDUCE DAMAGES FROM UTILITY OUTAGES AND SUPPLY SHORTAGES.					
4.1 Belle Center will encourage the hardening of utilities through installation below grade, improvements to supply lines and generation plants, and upgrade of poles, substations and transformers.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>
4.2 Belle Center will identify and establish alternate heating fuels, potable water suppliers, alternate power sources and other critical supplies necessary for sustaining life, business, and safety during power outages.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
GOAL 5: BELLE CENTER WILL ENGAGE IN MITIGATION ACTIONS THAT REDUCE THE EROSION OF TOPSOIL AND INFRASTRUCTURE DUE TO RAPID RUNOFF, LAND USE, OR HUMAN CAUSED INCIDENTS.					
5.1 Belle Center will protect roadways vulnerable to compromised structural integrity, damaged berms, washed away foundation or abutments, or other deterioration due to extreme runoff or highly vulnerable soil types.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
GOAL 6: BELLE CENTER WILL CONDUCT MITIGATION ACTIONS TO REDUCE THE VULNERABILITY OF ITS POPULATION TO DAMAGES AND CASUALTY DUE TO ALL TYPES OF DISASTERS AND SEVERE STORMS					
6.1 Belle Center will maintain and improve hardware, software, and capital equipment (outdoor warning sirens) used to deliver warnings and notifications of severe weather and other hazards.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
6.2 Belle Center will educate the public about local digital warning and notification systems like reverse calling, weather radios, warning sirens, and digital resources that inform them of incoming life-threatening storms or emergency incidents.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
6.3 Belle Center will remove dead or diseased trees along waterways and in the public domain.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
6.4 Belle Center will establish water conservation procedures to be implemented during water emergencies due to drought or contamination.					

Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
6.5 Belle Center will improve capacity to rapidly place temporary warning signs that indicate dangerous road conditions.				
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>

Table 3-4: Village of DeGraff 2017 Mitigation Goals and Strategies

GOAL 1: DEGRAFF WILL ENGAGE IN MITIGATION ACTIONS THAT REDUCE THE DAMAGES FROM RIVERINE AND FLASH FLOODING.				
1.1 DeGraff will maintain NFIP participation through regular review of flood maps and sustain engagement to ensure accuracy of the maps, including advocacy for adoption of current maps as amended through the appeal process.				
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.2 DeGraff will advocate and support flood insurance where required.				
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.3 DeGraff will maintain existing local building codes, zoning regulations, and other land use regulations that encourage sustainable disaster resistant structures in all areas.				
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.4 DeGraff will use financial aid for flood mitigation through grants, fees, and other special programs.				
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.5 DeGraff will advocate for removal of debris, fallen diseased trees, and excess sediment and to improve river maintenance.				
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.6 DeGraff will implement improvements to ditch maintenance to reduce sedimentation and erosion.				
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input checked="" type="checkbox"/>	Deferred <input type="checkbox"/>
1.7 DeGraff will maintain, replace or add storm sewers, wastewater pumping stations, water pumps, and other devices or structures to protect property from flooding and to less flash flooding.				
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.8 DeGraff will remove debris and obstructions from ditches and streams.				
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>
1.9 DeGraff will utilize elevation to protect critical infrastructure and property from flooding.				
Completed <input checked="" type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
GOAL 2: DEGRAFF WILL EMPLOY MITIGATION ACTIONS TO REDUCE THE DAMAGES FROM SEVERE WIND STORMS THAT INCLUDE STRAIGHT LINE WINDS AND TORNADOES.				
2.1 DeGraff will advocate proper trimming of trees and vegetation to include damages caused by wind, especially where trees are infected with disease like Emerald Ash Borer.				
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
2.2 DeGraff will support the construction of safe rooms for single and multi-family homes without basements or shelters.				
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input checked="" type="checkbox"/>	Deferred <input type="checkbox"/>
GOAL 3: DEGRAFF WILL CONDUCT MITIGATION ACTIONS TO REDUCE THE VULNERABILITY OF ITS POPULATION TO DAMAGES AND CASUALTY DUE TO ALL TYPES OF DISASTERS AND SEVERE STORMS.				
3.1 DeGraff educate the public about local digital warning and notification systems like reverse calling, weather radios, warning sirens, and digital resources that inform them of incoming life-threatening storms or emergency incidents.				

Completed <input type="checkbox"/> Cancelled <input type="checkbox"/> On Schedule <input checked="" type="checkbox"/> Delayed <input type="checkbox"/> Deferred <input type="checkbox"/>
3.2 DeGraff will maintain and improve hardware, software and capital equipment (outdoor warning sirens) used to deliver warnings and notifications.
Completed <input type="checkbox"/> Cancelled <input type="checkbox"/> On Schedule <input checked="" type="checkbox"/> Delayed <input type="checkbox"/> Deferred <input type="checkbox"/>
GOAL 4: DEGRAFF WILL EMPLOY MITIGATION ACTIONS THAT REDUCE DAMAGES FROM UTILITY OUTAGES AND SUPPLY SHORTAGES.
4.1 DeGraff will encourage the hardening of utilities through installation below grade, improvements to supply lines and generation plants, and upgrade of poles, substations, and transformers.
Completed <input type="checkbox"/> Cancelled <input type="checkbox"/> On Schedule <input type="checkbox"/> Delayed <input type="checkbox"/> Deferred <input checked="" type="checkbox"/>
GOAL 5: DEGRAFF WILL CONDUCT MITIGATION ACTIONS THAT ENABLE RAPID AND EFFECTIVE COMMUNICATION DURING A DISASTER FOR THE PURPOSE OF DIRECTING THE POPULATION TO TAKE PROTECTIVE ACTION AND FOLLOW OPERATIONAL PROCEDURES.
5.1 DeGraff will develop a multi-part communication system to notify all residents of protective action orders, warnings and notification, and other critical lifesaving information.
Completed <input type="checkbox"/> Cancelled <input type="checkbox"/> On Schedule <input checked="" type="checkbox"/> Delayed <input type="checkbox"/> Deferred <input type="checkbox"/>
5.2 DeGraff will develop interoperable communication plans to coordinate life-saving efforts between all community partners during severe incidents.
Completed <input type="checkbox"/> Cancelled <input type="checkbox"/> On Schedule <input checked="" type="checkbox"/> Delayed <input type="checkbox"/> Deferred <input type="checkbox"/>
5.3 DeGraff will educate the public about local disaster hazards, vulnerabilities, protective actions, services, vulnerable populations, available assistance and emergency procedures using mass and social media, printed information and other options.
Completed <input type="checkbox"/> Cancelled <input type="checkbox"/> On Schedule <input checked="" type="checkbox"/> Delayed <input type="checkbox"/> Deferred <input type="checkbox"/>
5.4 DeGraff will develop, utilize, and maintain a communication plan to include mass media, social media, and director contact with residents before, during and after incidents.
Completed <input type="checkbox"/> Cancelled <input type="checkbox"/> On Schedule <input checked="" type="checkbox"/> Delayed <input type="checkbox"/> Deferred <input type="checkbox"/>
GOAL 6: DEGRAFF WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE THE EROSION OF TOPSOIL DUE TO FLOODING, WIND, LAND USE OR HUMAN-CAUSED INCIDENTS.
6.1 DeGraff will protect roadways vulnerable to compromised structural integrity, damaged berms, washed away foundations or abutments, or other deterioration due to extreme runoff or specific highly vulnerable soil types.
Completed <input type="checkbox"/> Cancelled <input type="checkbox"/> On Schedule <input checked="" type="checkbox"/> Delayed <input type="checkbox"/> Deferred <input type="checkbox"/>

Table 3-5: Village of Huntsville 2017 Mitigation Goals and Strategies

GOAL 1: HUNTSVILLE WILL EMPLOY MITIGATION ACTIONS TO REDUCE THE DAMAGES INCURRED FROM SEVERE WIND STORMS THAT INCLUDE STRAIGHT LINE WINDS AND TORNADOES.
1.1 Huntsville will advocate proper trimming of trees and vegetation to reduce damages caused by wind, especially where trees are infected with disease like Emerald Ash Borer.
Completed <input type="checkbox"/> Cancelled <input type="checkbox"/> On Schedule <input type="checkbox"/> Delayed <input type="checkbox"/> Deferred <input type="checkbox"/>
1.2 Huntsville will support the construction of safe rooms for single and multi-family homes without basements or shelters.
Completed <input type="checkbox"/> Cancelled <input type="checkbox"/> On Schedule <input type="checkbox"/> Delayed <input type="checkbox"/> Deferred <input type="checkbox"/>
1.3 Huntsville will encourage damage-resistant building materials and techniques so structures are as resistant as possible to wind damage.
Completed <input type="checkbox"/> Cancelled <input type="checkbox"/> On Schedule <input type="checkbox"/> Delayed <input type="checkbox"/> Deferred <input type="checkbox"/>

GOAL 2: HUNTSVILLE WILL ENGAGE IN MITIGATION ACTIONS THAT REDUCE DAMAGES FROM FLOODING.					
2.1 Huntsville will consider joining NFIP as a way to make more flood protection available to the community and to prevent future damages through floodplain regulation.					
Completed <input type="checkbox"/>		Cancelled <input type="checkbox"/>		On Schedule <input type="checkbox"/>	
Delayed <input type="checkbox"/>		Deferred <input type="checkbox"/>			
2.2 Huntsville will advocate and support flood insurance where required.					
Completed <input type="checkbox"/>		Cancelled <input type="checkbox"/>		On Schedule <input type="checkbox"/>	
Delayed <input type="checkbox"/>		Deferred <input type="checkbox"/>			
2.3 Huntsville will maintain existing local building codes, zoning regulations, and other land use regulations that encourage sustainable disaster-resistant structures in all areas.					
Completed <input type="checkbox"/>		Cancelled <input type="checkbox"/>		On Schedule <input type="checkbox"/>	
Delayed <input type="checkbox"/>		Deferred <input type="checkbox"/>			
2.4 Huntsville will use financial aid for flood mitigation through grants, fees, and other special programs.					
Completed <input type="checkbox"/>		Cancelled <input type="checkbox"/>		On Schedule <input type="checkbox"/>	
Delayed <input type="checkbox"/>		Deferred <input type="checkbox"/>			
2.5 Huntsville will participate in countywide storm water vulnerability study to improve wastewater systems and field tiling practices to limit damage from runoff water.					
Completed <input type="checkbox"/>		Cancelled <input type="checkbox"/>		On Schedule <input type="checkbox"/>	
Delayed <input type="checkbox"/>		Deferred <input type="checkbox"/>			
2.6 Huntsville will maintain, replace, or add storm sewers, wastewater pumping stations, water pumps, and other devices or structures to protect property from flooding and to lessen flash flooding.					
Completed <input type="checkbox"/>		Cancelled <input type="checkbox"/>		On Schedule <input type="checkbox"/>	
Delayed <input type="checkbox"/>		Deferred <input type="checkbox"/>			
2.7 Huntsville will remove debris and obstructions from ditches and streams.					
Completed <input type="checkbox"/>		Cancelled <input type="checkbox"/>		On Schedule <input type="checkbox"/>	
Delayed <input type="checkbox"/>		Deferred <input type="checkbox"/>			
2.8 Huntsville will utilize elevation to protect critical infrastructure and property from flooding.					
Completed <input type="checkbox"/>		Cancelled <input type="checkbox"/>		On Schedule <input type="checkbox"/>	
Delayed <input type="checkbox"/>		Deferred <input type="checkbox"/>			
GOAL 3: HUNTSVILLE WILL EMPLOY MITIGATION ACTIONS THAT REDUCE DAMAGES FROM UTILITY OUTAGES AND SUPPLY SHORTAGES.					
3.1 Huntsville will encourage the hardening of utilities through installation below grade, improvements to supply lines and generation plants, and upgrade of poles, substations and transformers.					
Completed <input type="checkbox"/>		Cancelled <input type="checkbox"/>		On Schedule <input type="checkbox"/>	
Delayed <input type="checkbox"/>		Deferred <input type="checkbox"/>			
3.2 Huntsville will identify and establish alternate heating fuels, potable water suppliers, alternate power sources, and other critical supplies necessary for sustaining life, business, and safety during power outages.					
Completed <input type="checkbox"/>		Cancelled <input type="checkbox"/>		On Schedule <input type="checkbox"/>	
Delayed <input type="checkbox"/>		Deferred <input type="checkbox"/>			
GOAL 4: HUNTSVILLE WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE DAMAGES FROM ALL SEVERE STORMS, INCLUDING THUNDERSTORMS AND BLIZZARDS, AND OTHER NATURAL DISASTERS AND CAUSES.					
4.1 Huntsville will expand and improve its public warning and notification capability through additional or improved outdoor warning sirens, improvements to the software used in these systems, or enhanced public education regarding warning and notification of protection orders or warnings.					
Completed <input type="checkbox"/>		Cancelled <input type="checkbox"/>		On Schedule <input type="checkbox"/>	
Delayed <input type="checkbox"/>		Deferred <input type="checkbox"/>			
4.2 Huntsville will educate the public about local digital warning and notification systems that inform them of incoming severe weather and life-threatening incidents.					
Completed <input type="checkbox"/>		Cancelled <input type="checkbox"/>		On Schedule <input type="checkbox"/>	
Delayed <input type="checkbox"/>		Deferred <input type="checkbox"/>			
GOAL 5: HUNTSVILLE WILL COMPLETE MITIGATION ACTIONS THAT ENABLE RAPID AND EFFECTIVE COMMUNICATION DURING A DISASTER INCIDENT FOR THE PURPOSE OF DIRECTING THE POPULATION TO TAKE PROTECTIVE ACTION AND FOLLOW OPERATIONAL PROCEDURES.					

5.1 Huntsville will educate the public about all relevant disaster hazards and vulnerabilities, protective actions, available services, vulnerable populations and available assistance and other emergency procedures using a variety of means to include print and spoken media, digital resources, and other appropriate local resources.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
5.2 Huntsville will develop interoperable communication plans to coordinate life-saving efforts between all community partners during severe incidents.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
5.3 Huntsville will develop, utilize and maintain a communication plan to include mass media, social media, and direct contact with residents before, during and after incidents.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
GOAL 6: HUNTSVILLE WILL ENGAGE IN MITIGATION ACTIONS TO PRESERVE AND PROTECT NATURAL RESOURCES SUCH AS TOPSOIL AND WATERWAYS FROM EROSION					
6.1 Huntsville will protect roadways vulnerable to compromised structural integrity, damaged berms, washed away foundation or abutments, or other deterioration due to extreme runoff or highly vulnerable soil types.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>

Table 3-6: Village of Lakeview Mitigation Goals and Strategies

GOAL 1: LAKEVIEW WILL ENGAGE IN MITIGATION ACTIONS THAT REDUCE DAMAGES FROM FLOODING.					
1.1 Lakeview will maintain NFIP participation through regular review of flood maps and sustain engagement to ensure accuracy of the maps, including advocacy for adoption of current maps as amended through the appeal process.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.2 Lakeview will advocate and support flood insurance where required.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.3 Lakeview will maintain existing local building codes, zoning regulations, and other land use regulations that encourage sustainable disaster-resistant structures.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.4 Lakeview will use financial aid for flood mitigation through grants, fees, and other special programs.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.5 Lakeview will advocate removal of debris, fallen diseased trees, and excess sediment from rivers and to improve river maintenance.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.6 Lakeview will study the likelihood of potential impact of dam failure that may have negative outcomes on the community.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>
1.7 Lakeview will implement improvements to the ditch maintenance program to reduce sedimentation and erosion.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>
1.8 Lakeview will remove debris and obstructions from ditches and streams.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.9 Lakeview will acquire and demolish properties that flood repeatedly to relocate them out of the flood risk area, and to restore property to a natural habitat maintained as such into perpetuity.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>

	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.10 Lakeview will create vegetative buffer zones, wetlands, and natural habitat in low-lying areas to hold excess runoff until it drains downstream naturally.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.11 Lakeview will properly maintain dams and spillways to lessen the likelihood of structural failure and flooding due to poor maintenance.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>
1.12 Lakeview will maintain, replace or add storm sewers wastewater pumping stations, water pumps, and other devices or structures to protect property from flooding and to lessen flash flooding.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>
1.13 Lakeview will require retention/detention ponds to contain runoff water in new development or expansion where surface runoff may cause flooding.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
GOAL 2: LAKEVIEW WILL EMPLOY MITIGATION ACTIONS TO REDUCE DAMAGES INCURRED FROM SEVERE WINDSTORMS, INCLUDING STRAIGHT-LINE WINDS AND TORNADOES.					
2.1 Lakeview will advocate and support, and implement on village-owned property, the proper maintenance of trees and vegetation to reduce damages caused by high winds or tornadoes.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
2.2 Lakeview will advocate for and support the creation of safe rooms for vulnerable locations, including single and multi-family homes and neighborhoods without basements or shelters.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
2.3 Lakeview will maintain and enforce local land use regulations in an effort to reduce storm damages to properties.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
GOAL 3: LAKEVIEW WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE DAMAGES DUE TO UTILITY OUTAGES AND RESOURCE SHORTAGES FROM ALL CAUSES					
3.1 Lakeview will establish redundant suppliers of heating fuels, potable water, and other utility needs and will identify and facilitate availability and proper use of generators as an alternate power source.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
3.2 Lakeview will encourage the hardening of utilities through damage resistant installation below grade, improvements to supply lines and generations plants, and upgrade of substations and transformers.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
GOAL 4: LAKEVIEW WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE DAMAGES FROM ALL SEVERE STORMS, INCLUDING THUNDERSTORMS AND BLIZZARDS, AND OTHER NATURAL DISASTERS AND CAUSES					
4.1 Lakeview will improve capacity to rapidly place temporary warning signs that indicate dangerous road conditions.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>
4.2 Lakeview will establish water conservation procedures to be implemented during water emergencies due to drought or contamination.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
4.3 Lakeview will educate the public about local digital warning and notification systems like reverse calling, weather radios, warning sirens, and digital resources that inform them of incoming life-threatening storms or emergencies.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>

4.4 Lakeview will maintain and improve hardware, software, and capital equipment (outdoor warning sirens) used to deliver warnings and notifications.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
4.5 Lakeview will implement a program to identify and remove dead or diseased trees along waterways and in the public domain.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
GOAL 5: LAKEVIEW WILL ENGAGE IN MITIGATION ACTIONS THAT ENABLE THE PUBLIC TO OBTAIN AND USE DISASTER INFORMATION TO SAVE LIVES AND PRESERVE PROPERTY FOR ALL HAZARDS PRESENT IN LOGAN COUNTY					
5.1 Lakeview will educate the public about all relevant disaster hazards and vulnerabilities, protective actions, available services, vulnerable populations and available assistance and other emergency procedures using a variety of means to include print and spoken media, digital resources, and other appropriate local resources.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
5.2 Lakeview will develop a multi-part communication system to notify all residents of protective action orders, warning and notification, and other critical lifesaving information.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
5.3 Lakeview will develop interoperable communication plans to coordinate life-saving efforts between all community partners during severe incidents.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>
5.4 Lakeview will develop, utilize, and maintain a communication plan to include mass media, social media, and direct contact with residents before, during and after incidents.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>
GOAL 6: LAKEVIEW WILL ENGAGE IN MITIGATION ACTIONS TO PRESERVE AND PROTECT NATURAL RESOURCES SUCH AS TOPSOIL AND WATERWAYS FROM EROSION.					
6.1 Lakeview will protect shorelines and riverbanks from wind, water and other hazards that cause erosion or degradation through stabilization techniques like lining with rip-rap or large stone.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input checked="" type="checkbox"/>	Deferred <input type="checkbox"/>
6.2 Lakeview will protect roadways vulnerable to compromised structure integrity, damaged berms, washed away foundations or abutments, or other deterioration due to severe storms.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input checked="" type="checkbox"/>	Deferred <input type="checkbox"/>

Table 3-7: Village of Quincy 2017 Mitigation Goals and Strategies

GOAL 1: QUINCY WILL EMPLOY MITIGATION ACTIONS TO REDUCE DAMAGES INCURRED FROM SEVERE WINDSTORMS, INCLUDING STRAIGHT-LINE WINDS AND TORNADOES.					
1.1 Quincy will advocate and support, and implement on village-owned property, the proper maintenance of trees and vegetation to reduce damages caused by high winds or tornadoes	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.2 Quincy will advocate for and support the creation of safe rooms for vulnerable locations, including single and multi-family homes and neighborhoods without basements or shelters	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>

1.3 Quincy will implement a program to clear areas of debris after severe wind and flooding to keep crop fodder and debris out of water treatment plants, sewers, transportation routes, and other infrastructure, and to keep roadways open and usable as soon as possible after storms.

Completed Canceled On Schedule Delayed Deferred

1.4 Quincy will maintain and enforce land use regulations in an effort to reduce storm damages to properties.

Completed Canceled On Schedule Delayed Deferred

GOAL 2: QUINCY WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE DAMAGES DUE TO UTILITY OUTAGES AND RESOURCE SHORTAGES FROM ALL CAUSES

2.1 Quincy will encourage the hardening of utilities through damage resistant installation below grade, improvements to supply lines and generations plants, and upgrade of substations and transformers

Completed Canceled On Schedule Delayed Deferred

2.2 Quincy will establish redundant suppliers of heating fuels, potable water, and other utility needs and will identify and facilitate availability and proper use of generators as an alternate power source

Completed Canceled On Schedule Delayed Deferred

GOAL 3: QUINCY WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE DAMAGES FROM ALL SEVERE STORMS, INCLUDING THUNDERSTORMS AND BLIZZARDS, AND OTHER NATURAL DISASTERS AND CAUSES.

3.1 Quincy will educate the public about local digital warning and notification systems that inform them of incoming severe weather and life-threatening incidents

Completed Canceled On Schedule Delayed Deferred

3.2 Quincy will develop and implement a program to assist in the removal of dead or diseased trees along waterways and roadways that have been affected by Emerald Ash Borer and other invasive species.

Completed Canceled On Schedule Delayed Deferred

3.3 Quincy will help farms reduce losses after severe storms, power outages, or hazardous materials incidents by supporting farmer’s needs through clearing roads for ongoing ingress and egress to farms, and assisting with other issues of importance to agriculture.

Completed Canceled On Schedule Delayed Deferred

3.4 Quincy will help farms identify protective measures needed to protect equipment, facilities, and operations from storm damages.

Completed Canceled On Schedule Delayed Deferred

3.5 Quincy will maintain and improve hardware, software, and capital equipment (outdoor warning sirens) used to deliver warnings and notifications.

Completed Canceled On Schedule Delayed Deferred

3.6 Quincy will improve capacity to rapidly place temporary warning signs that indicate dangerous road conditions.

Completed Cancelled On Schedule Delayed Deferred

GOAL 4: QUINCY WILL ENGAGE IN MITIGATION ACTIONS THAT REDUCE DAMAGES FROM FLOODING

4.1 Quincy will maintain NFIP participation through regular review of flood maps and sustain engagement to ensure accuracy of the maps, including advocacy for adoption of current maps as amended through the appeal process.

Completed Cancelled On Schedule Delayed Deferred

4.2 Quincy will advocate and support flood insurance where required.

Completed Cancelled On Schedule Delayed Deferred

4.3 Quincy will maintain existing local building codes, zoning regulations, and other land use regulations that encourage sustainable disaster-resistant structures in all areas.

Completed Cancelled On Schedule Delayed Deferred

4.4 Quincy will use financial aid for flood mitigation through grants, fees, and other special programs.

Completed Cancelled On Schedule Delayed Deferred

4.5 Quincy will advocate removal of debris, fallen diseased trees, and excess sediment from rivers to improve river maintenance.

Completed Cancelled On Schedule Delayed Deferred

4.6 Quincy will participate in storm water vulnerability study to improve wastewater systems and field tiling practices to limit damages from runoff water.

Completed Cancelled On Schedule Delayed Deferred

4.7 Quincy will maintain, replace, or add storm sewers, wastewater pumping stations, water pumps, and other devices or structures to protect property from flooding and to lessen flash flooding.

Completed Cancelled On Schedule Delayed Deferred

4.8 Quincy will remove debris and obstructions from ditches and streams.

Completed Cancelled On Schedule Delayed Deferred

4.9 Quincy will require retention and detention ponds to contain runoff water in new development or expansion where surface runoff may cause flooding.

Completed Cancelled On Schedule Delayed Deferred

4.10 Quincy will utilize elevation to protect critical infrastructure and property from flooding.

Completed Cancelled On Schedule Delayed Deferred

4.11 Quincy will acquire and demolish properties that flood repeatedly to relocate residents out of flood risk areas, and restore property to a natural habitat maintained as such into perpetuity.

Completed Cancelled On Schedule Delayed Deferred

4.12 Quincy will create vegetative buffer zones, wetlands, and natural habitat in low-lying areas to hold excess runoff until it drains downstream naturally.

Completed Canceled On Schedule Delayed Deferred

4.13 Quincy will study the likelihood and potential impact of dam failure that may impact the village.

Completed Canceled On Schedule Delayed Deferred

4.14 Quincy will properly maintain dams, spillways, and up-ground reservoirs to lessen the likelihood of structural failure and flooding due to poor maintenance.

Completed Canceled On Schedule Delayed Deferred

4.15 Quincy will support improvement to roads and infrastructure including an increase in bridge spans, repair of shoulders and berms, increase in culvert size, maintenance of bridge slopes and protection of roadways from storm and flood damages, to enhance the likelihood of open roadways even after severe flooding and drainage.

Completed Canceled On Schedule Delayed Deferred

4.16 Quincy will support efforts to replace deteriorated tiles, plant cover crops, utilize conservation tillage, install tile control structures where feasible, and use filter strips for slope protection.

Completed Canceled On Schedule Delayed Deferred

GOAL 5: QUINCY WILL ENGAGE IN MITIGATION ACTIONS TO PRESERVE AND PROTECT NATURAL RESOURCES SUCH AS TOPSOIL AND WATERWAYS FROM EROSION.

5.1 Quincy will protect roadways vulnerable to compromised structure integrity, damaged berms, washed away foundations or abutments, or other deterioration due to severe storms

Completed Canceled On Schedule Delayed Deferred

5.2 Quincy will protect waterways by reducing slope erosion, land subsidence, and wind damage through cover plants, vegetation, grassy waterways, filter strips, buffers, and such.

Completed Canceled On Schedule Delayed Deferred

5.3 Quincy will establish conservation procedures to be used during water emergencies or shortages due to drought or contaminated water supplies

Completed Canceled On Schedule Delayed Deferred

GOAL 6: QUINCY WILL ENGAGE IN MITIGATION ACTIONS THAT ENABLE THE PUBLIC TO OBTAIN AND USE DISASTER INFORMATION TO SAVE LIVES AND PRESERVE PROPERTY FOR ALL HAZARDS PRESENT IN LOGAN COUNTY.

6.1 Quincy will educate the public about all relevant disaster hazards and vulnerabilities, protective actions, available services, vulnerable populations and available assistance and other emergency procedures using a variety of means to include print and spoken media, digital resources, and other appropriate local resources

Completed Canceled On Schedule Delayed Deferred

6.2 Quincy will develop a multi-part communication system to notify all residents of protective action orders, warnings and notification, and other critical lifesaving information.

	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
6.3 Quincy will develop interoperable communication plans to coordinate life-saving efforts between all community partners during severe incidents.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input checked="" type="checkbox"/>	Deferred <input type="checkbox"/>
6.4 Quincy will improve parcel location mapping to facilitate locating and responding to emergency and disaster calls in a rapid and effective way, as well as to facilitate the use of mutual aid resources, when necessary, as assistance to responders and dispatchers.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input checked="" type="checkbox"/>	Deferred <input type="checkbox"/>
6.5 Quincy will improve GIS mapping to include infrastructure and utility mapping, and expand the customizations capability of software to produce data that is useful in community planning.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input checked="" type="checkbox"/>	Deferred <input type="checkbox"/>
6.6 Quincy will work to develop enhanced methods of cross-discipline and interjurisdictional planning efforts to create whole community efforts to improve communities and expand disaster resilience.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input checked="" type="checkbox"/>	Deferred <input type="checkbox"/>
6.7 Quincy will develop, utilize, and maintain a communication plan to include mass media, social media, and direct contact with residents before, during, and after incidents.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>

Table 3-8: Village of Rushsylvania 2017 Mitigation Goals and Strategies

GOAL 1: RUSHSYLVANIA WILL EMPLOY MITIGATION ACTIONS TO REDUCE DAMAGES INCURRED FROM SEVERE WINDSTORMS, INCLUDING STRAIGHT-LINE WINDS AND TORNADOES					
1.1 Rushsylvania will advocate and support the proper maintenance of trees and vegetation to reduce damages caused by high winds or tornadoes.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>
1.2 Rushsylvania will advocate for and support the creation of safe rooms single and multi-family homes and neighborhoods without basements or shelters.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input checked="" type="checkbox"/>	Deferred <input type="checkbox"/>
GOAL 2: RUSHSYLVANIA WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE DAMAGES FROM ALL SEVERE STORMS, INCLUDING THUNDERSTORMS AND BLIZZARDS, AND OTHER NATURAL DISASTERS AND CAUSES					
2.1 Rushsylvania will educate the public about all relevant disaster hazards and vulnerabilities, protective actions, available services, vulnerable populations and available assistance and other emergency procedures using a variety of means to include print and spoken media, digital resources, and other appropriate local resources.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
2.2 Rushsylvania will maintain and improve hardware, software, and capital equipment (outdoor warning sirens) used to deliver warnings and notifications.	Completed <input checked="" type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
2.3 Rushsylvania will implement a program to identify and remove dead or diseased trees along waterways and in the public domain.					

	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
GOAL 3: RUSHSYLVANIA WILL ENGAGE IN MITIGATION ACTIONS THAT REDUCE DAMAGES FROM FLOODING					
3.1 Rushsylvania will consider joining NFIP as a way to make more flood protection available to the community and to prevent future damages through floodplain regulation.	Completed <input type="checkbox"/>	Cancelled <input checked="" type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
3.2 Rushsylvania will advocate and support flood insurance where required.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
3.3 Rushsylvania will maintain existing local building codes, zoning regulations, and other land use regulations that encourage sustainable disaster-resistant structures in all areas.	Completed <input checked="" type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
3.4 Rushsylvania will use financial aid for flood mitigation through grants, fees, and other special programs.	Completed <input checked="" type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
3.5 Rushsylvania will advocate for proper maintenance of dams and spillways to lessen the likelihood of structural failure and flooding due to poor maintenance.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
3.6 Rushsylvania will maintain, replace, or add storm sewers, wastewater pumping stations, water pumps, and other devices or structures to protect property from flooding and to lessen flash flooding.	Completed <input checked="" type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
3.7 Rushsylvania will remove debris and obstructions from ditches and streams.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>
3.8 Rushsylvania will require retention/detention ponds to contain runoff water in new development or expansion where surface runoff may cause flooding.	Completed <input type="checkbox"/>	Cancelled <input checked="" type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
3.9 Rushsylvania will utilize elevation to protect critical infrastructure and property from flooding.	Completed <input checked="" type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
3.10 Rushsylvania will acquire and demolish properties that flood repeatedly to relocate them out of flood risk areas and restore property to a natural habitat maintained as such into perpetuity.	Completed <input type="checkbox"/>	Cancelled <input checked="" type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
3.11 Rushsylvania will create vegetative buffer zones, wetlands, and natural habitat in low-lying areas to hold excess runoff until it drains downstream naturally.	Completed <input checked="" type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
GOAL 4: RUSHSYLVANIA WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE DAMAGES DUE TO UTILITY OUTAGES AND RESOURCE SHORTAGES FROM ALL CAUSES					
4.1 Rushsylvania will encourage the hardening of utilities through damage resistant installation below grade, improvements to supply lines and generations plants, and upgrade of substations and transformers.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>
4.2 Rushsylvania will establish redundant suppliers of heating fuels, potable water, and other utility needs and will identify and facilitate availability and proper use of generators as an alternate power source.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input checked="" type="checkbox"/>	Deferred <input type="checkbox"/>
GOAL 5: RUSHSYLVANIA WILL ENGAGE IN MITIGATION ACTIONS THAT ENABLE THE PUBLIC TO OBTAIN AND USE DISASTER INFORMATION TO SAVE LIVES AND PRESERVE PROPERTY FOR ALL HAZARDS PRESENT IN LOGAN COUNTY					

5.1 Rushsylvania will educate the public about all relevant disaster hazards and vulnerabilities, protective actions, available services, vulnerable populations and available assistance and other emergency procedures using a variety of means to include print and spoken media, digital resources, and other appropriate resources.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input checked="" type="checkbox"/>	Deferred <input type="checkbox"/>
5.2 Rushsylvania will develop a multi-part communication system to notify all communities of protective actions orders, warnings and notifications, and other critical lifesaving information.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input checked="" type="checkbox"/>	Deferred <input type="checkbox"/>
5.3 Rushsylvania will develop interoperable communication plans to coordinate life-saving efforts between all community partners during severe incidents.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input checked="" type="checkbox"/>	Deferred <input type="checkbox"/>
5.4 Rushsylvania will develop, utilize, and maintain a communication plan to include mass media, social media, and direct contact with residents before, during and after incidents.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>
GOAL 6: RUSHSYLVANIA WILL ENGAGE IN MITIGATION ACTIONS TO PRESERVE AND PROTECT NATURAL RESOURCES SUCH AS TOPSOIL AND WATERWAYS FROM EROSION					
6.1 Rushsylvania will protect waterways by reducing slope erosion, land subsidence and wind damage through cover plants, vegetation, grassy waterways, filter strips, buffers and such.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
6.2 Rushsylvania will establish conservation procedures to be used during water emergencies or shortages due to drought or contaminated water supplies.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>

Table 3-9: Village of Russells Point 2017 Mitigation Goals and Strategies

GOAL 1: RUSSELLS POINT WILL ENGAGE IN MITIGATION ACTIONS THAT REDUCE DAMAGES FROM FLOODING.					
1.1 Russells Point will maintain NFIP participation through regular review of flood maps and sustain engagement to ensure accuracy of the maps, including advocacy for adoption of current maps as amended through the appeal process.	Completed <input checked="" type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.2 Russells Point will advocate and support flood insurance where required.	Completed <input checked="" type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.3 Russells Point will maintain existing building codes, zoning regulations, and other land use regulations that encourage sustainable disaster-resistant structures in all areas.	Completed <input checked="" type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.4 Russells Point will use financial aid for flood mitigation through grants, fees, and other special programs.	Completed <input checked="" type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.5 Russells Point will advocate for removal of debris, fallen diseased trees, and excess sediment from rivers and to improve river maintenance.	Completed <input checked="" type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.6 Russells Point will study the likelihood and potential impact of dam failure that may impact the jurisdiction if it were to occur.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>
1.7 Russells Point will implement improvements to the ditch maintenance program to reduce sedimentation and erosion.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>

1.8 Russells Point will remove debris and obstructions from ditches and streams.	Completed ✘	Cancelled ☐	On Schedule ☐	Delayed ☐	Deferred ☐
1.9 Russells Point will require retention and detention ponds to contain runoff water in new development or expansion where surface runoff may cause flooding.	Completed ✘	Cancelled ☐	On Schedule ☐	Delayed ☐	Deferred ☐
1.10 Russells Point will utilize elevation to protect critical infrastructure and property from flooding.	Completed ✘	Cancelled ☐	On Schedule ☐	Delayed ☐	Deferred ☐
1.11 Russells Point will utilize channel modification and diversion to eliminate areas where flooding is highly destructive and no other option is feasible to decrease the flood damage.	Completed ☐	Cancelled ☐	On Schedule ☐	Delayed ☐	Deferred ✘
1.12 Russells Point will participate in storm water vulnerability study to improve wastewater systems and field tiling practices to limit damages from runoff water.	Completed ✘	Cancelled ☐	On Schedule ☐	Delayed ☐	Deferred ☐
1.13 Russells Point will properly maintain dams and spillways to lessen the likelihood of failure and flooding due to poor maintenance.	Completed ☐	Cancelled ☐	On Schedule ☐	Delayed ☐	Deferred ✘
1.14 Russells Point will maintain, replace, or add storm sewers, wastewater pumping stations, water pumps, and other devices or structures to protect property from flooding and to lessen flash flooding.	Completed ✘	Cancelled ☐	On Schedule ☐	Delayed ☐	Deferred ☐
1.15 Russells Point will support efforts to replace deteriorated tiles, plant cover crops, utilize conservation tillage, install tile control structures where feasible and use filter strips for slope protection.	Completed ✘	Cancelled ☐	On Schedule ☐	Delayed ☐	Deferred ☐
GOAL 2: RUSSELLS POINT WILL EMPLOY MITIGATION ACTIONS TO REDUCE DAMAGES INCURRED FROM SEVERE WINDSTORMS, INCLUDING STRAIGHT-LINE WINDS AND TORNADOES					
2.1 Russells Point will advocate and support, and implement on village-owned property, the proper maintenance of trees and vegetation to reduce damages caused by high winds or tornadoes.	Completed ✘	Cancelled ☐	On Schedule ☐	Delayed ☐	Deferred ☐
2.2 Russells Point will advocate for and support the creation of safe rooms for vulnerable locations, including single and multi-family homes and neighborhoods without basements or shelters.	Completed ✘	Cancelled ☐	On Schedule ☐	Delayed ☐	Deferred ☐
2.3 Russells Point will clear areas of debris after severe wind and flooding to keep debris out of water treatment plants, sewers, transportation routes, and other infrastructure, and to keep roadways open and usable as soon as possible after storms.	Completed ✘	Cancelled ☐	On Schedule ☐	Delayed ☐	Deferred ☐
GOAL 3: RUSSELLS POINT WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE DAMAGES DUE TO UTILITY OUTAGES AND RESOURCE SHORTAGES FROM ALL CAUSES.					
3.1 Russells Point will establish redundant suppliers of heating fuels, potable water, and other utility needs and will identify and facilitate availability and proper use of generators as an alternate power source.	Completed ✘	Cancelled ☐	On Schedule ☐	Delayed ☐	Deferred ☐
3.2 Russells Point will encourage the hardening of utilities through damage resistant installation below grade, improvements to supply lines and generations plants, and upgrade of substations and transformers.	Completed ☐	Cancelled ☐	On Schedule ☐	Delayed ☐	Deferred ✘
3.3 Russells Point will establish conservation procedures to be used during water emergencies or shortages due to drought or contamination.	Completed ☐	Cancelled ☐	On Schedule ☐	Delayed ☐	Deferred ☐

GOAL 4: RUSSELLS POINT WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE DAMAGES FROM ALL SEVERE STORMS, INCLUDING THUNDERSTORMS AND BLIZZARDS, AND OTHER NATURAL DISASTERS AND CAUSES.					
4.1 Russells Point will improve capacity to rapidly place temporary warning signs that indicate dangerous road conditions.					
Completed <input checked="" type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>	
4.2 Russells Point will educate the public about local digital warning and notification systems like reverse calling, weather radios, warning sirens, and digital resources that inform them of incoming life-threatening storms or emergency incidents.					
Completed <input checked="" type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>	
4.3 Russells Point will maintain and improve hardware, software, and capital equipment (outdoor warning sirens) used to deliver warnings and notifications.					
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>	
4.4 Russells Point will identify and remove dead or diseased trees along waterways and in the public domain.					
Completed <input checked="" type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>	
GOAL 5: RUSSELLS POINT WILL ENGAGE IN MITIGATION ACTIONS THAT ENABLE THE PUBLIC TO OBTAIN AND USE DISASTER INFORMATION TO SAVE LIVES AND PRESERVE PROPERTY FOR ALL HAZARDS PRESENT IN LOGAN COUNTY.					
5.1 Russells Point will educate the public about all relevant disaster hazards and vulnerabilities, protective actions, available services, vulnerable populations and available assistance and other emergency procedures using a variety of means to include print and spoken media, digital resources, and other appropriate local resources.					
Completed <input checked="" type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>	
5.2 Russells Point will develop a multi-part communication system to notify all residents of protective action orders, warnings and notifications, and other critical lifesaving information.					
Completed <input checked="" type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>	
5.3 Russells Point will develop interoperable communication plans to coordinate life-saving efforts between all community partner during severe incidents.					
Completed <input checked="" type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>	
5.4 Russells Point will develop utilize, and maintain a communication plan to include mass media, social media, and direct contact with residents before, during and after incidents.					
Completed <input checked="" type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>	
GOAL 6: RUSSELLS POINT WILL ENGAGE IN MITIGATION ACTIONS TO PRESERVE AND PROTECT NATURAL RESOURCES SUCH AS TOPSOIL AND WATERWAYS FROM EROSION.					
6.1 Russells Point will protect roadways vulnerable to compromised structural integrity, damaged berms, washed away foundations or abutments, or other deterioration due to extreme runoff or specific highly vulnerable soils or slopes.					
Completed <input checked="" type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>	
6.2 Russells Point will protect waterways by reducing slope erosion, land subsidence and wind damage through cover plants, vegetation, grassy waterways, filter strips, buffers, and other engineered options.					
Completed <input checked="" type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>	

Table 3-10: Village of Valley Hi 2017 Mitigation Goals and Strategies

GOAL 1: VALLEY HI WILL EMPLOY MITIGATION ACTIONS THAT REDUCE DAMAGES FROM SEVERE WIND STORMS THAT INCLUDE STRAIGHT-LINE WINDS AND TORNADOES.

1.1 Valley Hi will advocate proper trimming of trees and vegetation to reduce damages caused by wind, especially where trees are infected with disease like Emerald Ash Borer.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.2 Valley Hi will support the construction of safe rooms for single and multi-family homes without basements or shelters.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>
GOAL 2: VALLEY HI WILL EMPLOY ACTIONS TO LESSEN THE DAMAGES FROM SEVERE WINTER STORMS, WITH AN EMPHASIS UPON DAMAGE BY ICE AND SNOW.					
2.1 Valley Hi will clear roads of ice and fallen trees to prevent blockages and make roads usable as soon as possible after storms.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
2.2 Valley Hi will study the pre-positioning of emergency apparatus, pre-deployment of necessary resources, and the stockpiling of critical supplies to sustain the community during a long-term isolating incident.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
2.3 Valley Hi will work to identify, develop, and supply a community center to serve residents and visitors during a severe storm that isolates people from the outside area due to ingress and egress issues.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>
2.4 Valley Hi will work to identify and acquire permanently installed or portable generator(s) to use for the community’s protection and welfare during storms that bring power outages.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>
GOAL 3: VALLEY HI WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE THE EROSION OF TOPSOIL AND ROADS DUE TO FLOODING, LAND USE, OR HUMAN CAUSED INCIDENTS.					
3.1 Valley Hi will protect its roadways and streets that are extremely vulnerable to compromised structural integrity, damaged berms, washed away foundation or abutments, or other deterioration due to extreme runoff and vulnerable soil types as well as incline.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
GOAL 4: VALLEY HI WILL EMPLOY MITIGATION ACTION THAT REDUCE DAMAGES FROM UTILITY OUTAGES AND SUPPLY SHORTAGES.					
4.1 Valley Hi will identify and establish alternate heating fuels, potable water suppliers, alternate power sources, and other critical supplies necessary for sustaining life, business, and safety during power outages.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>
GOAL 5: VALLEY HI WILL COMPLETE MITIGATION ACTIONS THT ENABLE RAPID AND EFFECTIVE COMMUNICATION DURING A DISASTER INCIDENT FOR THE PUPOSE OF DIRECTING THE POPULATION TO TAKE PROTECTIVE ACTIONS AND TO FOLLOW OPERATIONAL PROCEDURES.					
5.1 Valley Hi will develop a multi-part communication system to notify community member of protective action orders, warnings and notifications, and other critical lifesaving information.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>
5.2 Valley Hi will develop interoperable communication plans to coordinate life-saving efforts between all community partners during severe incidents.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>
5.3 Valley Hi will develop, utilize, and maintain a communication plans to include mass media, social media, and direct contact with residents and businesses before, during and after incidents.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>

5.4 Valley Hi will work to improve parcel location mapping to facilitate locating and responding to emergency and disaster calls in a rapid and effective way, as well as to facilitate the use of mutual aid resources, when necessary, as assistance to responders and dispatchers.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>
5.5 Valley Hi will work to educate the public about local disaster hazards, vulnerabilities protective actions, services, vulnerable populations, available assistance and emergency procedure using mass and social media, printed information, and other options.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>
GOAL 6: VALLEY HI WILL CONDUCT MITIGATION ACTIONS TO REDUCE THE VULNERABILITY OF ITS POPULATION TO DAMAGES AND CASUALTY DUE TO ALL TYPES OF DISASTERS AND SEVERE STORMS.					
6.1 Valley Hi will educate the public about local digital warning and notification systems like reverse calling, weather radios, warning sirens, and digital resources that inform them on incoming life-threatening storms or emergency incidents.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>
6.2 Valley Hi will identify and remove dead or diseased trees along waterways, roadways and other public property.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
6.3 Valley Hi will maintain and improve hardware, software, and capital equipment (outdoor warning sirens) used to deliver warnings and notifications.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>
GOAL 7: VALLEY HI WILL WORK TO PREVENT DAMAGE AND CASUALTY DUE TO FLASH FLOODING.					
7.1 Valley Hi will consider joining NFIP as a way to make more flood protection available to the community and to prevent future damages through floodplain regulation.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>
7.2 Valley Hi will advocate and support flood insurance where appropriate.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>
7.3 Valley Hi will maintain existing local building codes, zoning regulations, and other land use regulations that encourage sustainable disaster-resistant structures in all areas.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>
7.4 Valley Hi will use financial aid for flood mitigation through grants, fees, and other special programs.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
7.5 Valley Hi will implement improvements to ditch and stream maintenance to reduce sedimentation and erosion.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
7.6 Valley Hi will make improvements to roads and infrastructure including increases in bridge spans, repair of shoulders and berms, increases in culvert sizes, maintenance of bridge slopes and protection of roadways from storms and flood damages, to enhance the likelihood of open roadways during and after storms.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
7.7 Valley Hi will remove debris and obstructions from ditches and streams.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
7.8 Valley Hi will participate in countywide study of storm water vulnerability to improve wastewater systems and field tiling practices to limit damages from runoff water.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>
7.9 Valley Hi will require the installation of retention or detention ponds to contain runoff that might become the cause of flooding.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>

7.10 Valley Hi will utilize elevation to protect critical infrastructure and property from flooding.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>
7.11 Valley Hi will maintain, replace, or add storm sewers, wastewater pumping stations, water pumps, and other devices or structures to protect property from flooding and to lessen flash flooding.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>

Table 3-11: Village of West Liberty 2017 Mitigation Goals and Strategies

GOAL 1: WEST LIBERTY WILL EMPLOY MITIGATION ACTIONS TO REDUCE DAMAGES INCURRED FROM SEVERE WINDSTORMS, INCLUDING STRAIGHT-LINE WINDS AND TORNADOES					
1.1 West Liberty will advocate proper trimming of trees and vegetation to reduce damages caused by wind, especially where trees are infected with disease like Emerald Ash Borer.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.2 West Liberty will clear areas of crop debris after severe wind and flooding to keep fodder out of culverts and sewer systems.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.3 West Liberty will support the construction of safe rooms for single and multi-family homes without basements or shelters.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
GOAL 2: WEST LIBERTY WILL ENGAGE IN MITIGATION ACTIONS THAT ENABLE THE PUBLIC TO OBTAIN AND USE DISASTER INFORMATION TO SAVE LIVES AND PRESERVE PROPERTY FOR ALL HAZARDS PRESENT IN LOGAN COUNTY.					
2.1 West Liberty will develop a multi-part communication system to notify all resident of protective action orders, warnings and notification, and other critical lifesaving information.	Completed <input checked="" type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
2.2 West Liberty will develop interoperable communication plans to coordinate life-saving efforts between all community partners during severe incidents.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
2.3 West Liberty will develop, utilize and maintain a communication plan to include mass media, social media, and direct contact with residents before, during, and after incidents.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
2.4 West Liberty will improve parcel location mapping to facilitate locating and responding to emergency and disaster calls in a rapid and effective way, as well as to facilitate the use of mutual aid resources, when necessary, as assistance to responders and dispatchers.	Completed <input checked="" type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
2.5 West Liberty will improve GIS mapping to include infrastructure and utility mapping, and expand the customization capability of software to produce data that is useful in community planning.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
2.6 West Liberty will work to develop enhanced methods of cross-discipline and interjurisdictional planning efforts to create whole community efforts to improve communities and expand disaster resilience.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
2.7 West Liberty will educate the public about local disaster hazards, vulnerabilities, protective actions, services, vulnerable populations, available assistance, and emergency procedures using mass and social media, printed information and other options.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>

GOAL 3: WEST LIBERTY WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE DAMAGES DUE TO UTILITY OUTAGES AND RESOURCE SHORTAGES FROM ALL CAUSES.					
3.1 West Liberty will encourage the hardening of utilities through damage resistant installation below grade, improvements to supply lines and generations plants, and upgrade of substations and transformers.					
Completed	Cancelled	On Schedule	Delayed	Deferred	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.2 West Liberty will establish redundant suppliers of heating fuels, potable water, and other utility needs and will identify and facilitate availability and proper use of generators as an alternate power source.					
Completed	Cancelled	On Schedule	Delayed	Deferred	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
GOAL 4: WEST LIBERTY WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE DAMAGES FROM ALL SEVERE STORMS, INCLUDING THUNDERSTORMS AND BLIZZARDS, AND OTHER NATURAL DISASTERS AND CAUSES.					
4.1 West Liberty will identify and remove dead or diseased trees along waterways and in the public domain.					
Completed	Cancelled	On Schedule	Delayed	Deferred	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.2 West Liberty will maintain and improve hardware, software, and capital equipment (outdoor warning sirens) used to deliver warnings and notifications.					
Completed	Cancelled	On Schedule	Delayed	Deferred	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.3 West Liberty will educate the public about local digital warning and notification systems like reverse calling, weather radios, warning sirens, and digital resources that inform them of incoming life-threatening storms or emergency incidents.					
Completed	Cancelled	On Schedule	Delayed	Deferred	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.4 West Liberty establish water conservation procedures to be implemented during water emergencies due to drought or contamination.					
Completed	Cancelled	On Schedule	Delayed	Deferred	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
GOAL 5: WEST LIBERTY WILL ENGAGE IN MITIGATION ACTIONS THAT REDUCE DAMAGES FROM FLOODING					
5.1 West Liberty will maintain NFIP participation through regular review of flood maps and sustain local engagement to ensure accuracy of the maps, including advocacy for adoption of current maps as amended through the appeal process.					
Completed	Cancelled	On Schedule	Delayed	Deferred	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5.2 West Liberty will advocate and support flood insurance where required.					
Completed	Cancelled	On Schedule	Delayed	Deferred	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5.3 West Liberty will maintain existing local building codes, zoning regulations, and other land use regulations that encourage sustainable disaster-resistant structures in all areas.					
Completed	Cancelled	On Schedule	Delayed	Deferred	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5.4 West Liberty will use financial aid for flood mitigation through grants, fees, and other special programs.					
Completed	Cancelled	On Schedule	Delayed	Deferred	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5.5 West Liberty will maintain, replace, or add storm sewers, wastewater pumping stations, water pumps, and other devices or structures to protect property from flooding and to lessen flash flooding.					
Completed	Cancelled	On Schedule	Delayed	Deferred	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5.6 West Liberty will remove debris and obstructions from ditches and streams.					
Completed	Cancelled	On Schedule	Delayed	Deferred	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5.7 West Liberty will advocate removal of debris fallen diseased trees and excess sediment and to improve river maintenance.					
Completed	Cancelled	On Schedule	Delayed	Deferred	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5.8 West Liberty study countywide storm water vulnerability to improve wastewater systems and field tiling practices to limit damages from runoff water.					

Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
5.9 West Liberty will implement improvements to the ditch maintenance to reduce sedimentation and erosion.				
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
5.10 West Liberty will utilize elevation to protect critical infrastructure and property from flooding.				
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input checked="" type="checkbox"/>	Deferred <input type="checkbox"/>
5.11 West Liberty will create vegetative buffer zones, wetlands, and natural habitat in low-lying areas to hold excess runoff until it drains downstream naturally.				
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input checked="" type="checkbox"/>	Deferred <input type="checkbox"/>
5.12 West Liberty will require retention/detention ponds to contain runoff water in new development or expansion where surface runoff may cause flooding.				
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
GOAL 6: WEST LIBERTY WILL ENGAGE IN MITIGATION ACTIONS TO PRESERVE AND PROTECT NATURAL RESOURCES SUCH AS TOPSOIL AND WATERWAYS FROM EROSION.				
6.1 West Liberty will protect roadway vulnerable to compromised structural integrity, damaged berms, washed away foundations or abutments, or other deterioration due to extreme runoff or specific highly vulnerable soil types.				
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>

Table 3-12: Village of West Mansfield 2017 Mitigation Goals and Strategies

GOAL 1: WEST MANSFIELD WILL ENGAGE IN MITIGATION ACTIONS THAT REDUCE DAMAGES FROM FLOODING.				
1.1 West Mansfield will establish or maintain NFIP participation through regular review of flood maps and sustain local engagement to ensure accuracy of the maps, including advocacy for adoption of current maps as amended through the appeal process.				
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.2 West Mansfield will advocate and support flood insurance where required.				
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.3 West Mansfield will maintain existing local building codes, zoning regulation, and other land use regulations that encourage sustainable disaster-resistant structures in all areas.				
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.4 West Mansfield will use financial aid for flood mitigation through grants, fees, and other special programs.				
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.5 West Mansfield will advocate for removal of debris, fallen diseased trees and excess sediment from rivers, and for improvement of river maintenance.				
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.6 West Mansfield will participate in countywide storm water vulnerability study to improve wastewater systems and field tiling practices to limit damages from runoff water.				
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.7 West Mansfield will improve ditch maintenance to reduce sedimentation and erosion.				
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.8 West Mansfield will maintain, replace, or add storm sewers, wastewater pumping stations, water pumps, and other devices or structures to protect property from flooding and to lessen flash flooding.				
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>

1.9 West Mansfield will remove debris and obstructions from waterways in the village.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.10 West Mansfield will advocate for replacement of deteriorated tiles, planting of cover crops, utilizing conservation tillage, installation of tile control structures where feasible, and use of filter strips for slope protection to assist farmers with disaster resiliency.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.11 West Mansfield will require retention or detention ponds to contain runoff water in new development or expansion where surface runoff may cause flooding.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.12 West Mansfield will make improvements to road and infrastructure including increase of bridge spans, repair of shoulders and berms, increase in culvert size, maintenance of bridge slopes and protection of roadways from storm and flood damage, to enhance the likelihood of open roadways even after severe flooding and drainage.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.13 West Mansfield will utilize elevation to protect critical infrastructure and property from flooding.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.14 West Mansfield will acquire and demolish properties that flood repeatedly to relocate resident out of flood risk areas, and to restore property to a natural habitat maintained as such into perpetuity.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
GOAL 2: WEST MANSFIELD WILL EMPLOY MITIGATION ACTIONS TO REDUCE DAMAGES INCURRED FROM SEVERE WINDSTORMS, INCLUDING STRAIGHT-LINE WINDS AND TORNADOES					
2.1 West Mansfield will advocate and support, and implement on village-owned property, the proper maintenance of trees and vegetation to reduce damages caused by high winds or tornadoes.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
2.2 West Mansfield will advocate for and support the creation of safe rooms for vulnerable locations, including single and multi-family homes and neighborhoods without basements or shelters.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
2.3 West Mansfield will encourage damage-resistant building materials and techniques so structures are as resistant as possible to wind damage.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
2.4 West Mansfield will clear roads and streets of debris after severe wind and flooding to keep crop fodder and other debris out of water treatment plants, sewers, transportation routes, and other infrastructure, and to keep roadways open and usable as soon as possible after storms.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
GOAL 3: WEST MANSFIELD WILL ENGAGE IN MITIGATION ACTIONS THAT ENABLE THE PUBLIC TO OBTAIN AND USE DISASTER INFORMATION TO SAVE LIVES AND PRESERVE PROPERTY FOR ALL HAZARDS PRESENT IN LOGAN COUNTY					
3.1 West Mansfield will develop interoperable communication plans to coordinate life-saving efforts between all community partners during severe incidents.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
3.2 West Mansfield will develop, utilize and maintain a communication plan to include mass media, social media, and direct contact with residents before, during and after incidents.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
3.3 West Mansfield will improve parcel location mapping to facilitate locating and responding to emergency and disaster calls in a rapid and effective way, as well as to facilitate the use of mutual aid resources, when necessary, as assistance to responders and dispatchers.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>

Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
3.4 West Mansfield will improve GIS mapping to include infrastructure and utility mapping, and expand the customization capability of software to produce data that is useful in community planning.				
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
3.5 West Mansfield will work to develop enhanced methods of cross-discipline and interjurisdictional planning efforts to create whole community efforts to improve communities and expand disaster resilience.				
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
3.6 West Mansfield will educate the public about local disaster hazards, vulnerabilities, protective actions, services, vulnerable populations, available assistance, and emergency procedures using mass and social media, printed information and other options.				
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>

GOAL 4: WEST MANSFIELD WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE DAMAGES DUE TO UTILITY OUTAGES AND RESOURCE SHORTAGES FROM ALL CAUSES

4.1 West Mansfield will encourage the hardening of utilities through installation below grade, improvements to supply line and generation plants, and upgrade of poles, substations and transformers.				
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
4.2 West Mansfield will identify and establish alternate heating fuels, potable water suppliers, alternate power sources, and other critical supplies necessary for sustaining life, business, and safety during power outages.				
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>

GOAL 5: WEST MANSFIELD WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE DAMAGES FROM ALL SEVERE STORMS, INCLUDING THUNDERSTORMS AND BLIZZARDS, AND OTHER NATURAL DISASTERS AND CAUSES.

5.1 West Mansfield will establish water conservation procedures to be implemented during water emergencies due to drought or contamination.				
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
5.2 West Mansfield will educate the public about LOC digital warning and notification system like reverse calling, weather radios, warning sirens, and digital resources that inform them of incoming life-threatening storms or emergency incidents.				
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
5.3 West Mansfield will maintain and improve hardware, software, and capital equipment (outdoor warning sirens) used to deliver warnings and notifications.				
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
5.4 West Mansfield will identify and remove dead or diseased trees along waterways and in the public domain.				
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
5.5 West Mansfield will improve capacity to rapidly place temporary warning signs that indicate dangerous road conditions.				
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>

GOAL 6: WEST MANSFIELD WILL ENGAGE IN MITIGATION ACTIONS TO PRESERVE AND PROTECT NATURAL RESOURCES SUCH AS TOPSOIL AND WATERWAYS FROM EROSION

6.1 West Mansfield will protect roadways vulnerable to compromised structural integrity, damaged berms, washed away foundations or abutments, or other deterioration due to extreme runoff or specific highly vulnerable soil types.				
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>

Table 3-13: Village of Zanesfield 2017 Mitigation Goals and Strategies

GOAL 1: ZANESFIELD WILL EMPLOY MITIGATION ACTIONS TO REDUCE DAMAGES INCURRED FROM SEVERE WINDSTORMS, INCLUDING STRAIGHT-LINE WINDS AND TORNADOES.					
1.1 Zanesfield will advocate proper trimming of trees and vegetation to reduce damages caused by wind, especially where trees are infected with disease like Emerald Ash Borer.	Completed <input checked="" type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
1.2 Zanesfield will support the construction of safe rooms for single and multi-family homes without basements or shelters.	Completed <input checked="" type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
GOAL 2: ZANESFIELD WILL ENGAGE IN MITIGATION ACTIONS THAT ENABLE THE PUBLIC TO OBTAIN AND USE DISASTER INFORMATION TO SAVE LIVES AND PRESERVE PROPERTY FOR ALL HAZARDS PRESENT IN LOGAN COUNTY.					
2.1 Zanesfield will develop a multi-part communication system to notify all residents of protective action orders, warnings and notification, and other critical lifesaving information.	Completed <input checked="" type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
2.2 Zanesfield will educate the public about local disaster hazards, vulnerabilities, protective actions, services, vulnerable populations, available assistance, and emergency procedures using mass and social media, printed information, and other options.	Completed <input checked="" type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
2.3 Zanesfield will develop, utilize, and maintain a communication plan to include mass media, social media, and direct contact with residents before, during and after incidents.	Completed <input checked="" type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
GOAL 3: ZANESFIELD WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE DAMAGES DUE TO UTILITY OUTAGES AND RESOURCE SHORTAGES FROM ALL CAUSES.					
3.1 Zanesfield will encourage the hardening of utilities through damage resistant installation below grade, improvements to supply lines and generations plants, and upgrade of substations and transformers.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>
3.2 Zanesfield will establish redundant suppliers of heating fuels, potable water, and other utility needs and will identify and facilitate availability and proper use of generators as an alternate power source.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>
GOAL 4: ZANESFIELD WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE DAMAGES FROM ALL SEVERE STORMS, INCLUDING THUNDERSTORMS AND BLIZZARDS, AND OTHER NATURAL DISASTERS AND CAUSES.					
4.1 Zanesfield will establish water conservation procedures to be implemented during water emergencies due to drought or contamination.	Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>
4.2 Zanesfield will maintain and improve hardware, software, and capital equipment (outdoor warning sirens) used to deliver warnings and notifications.	Completed <input checked="" type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
4.3 Zanesfield will identify and remove dead or diseased trees along waterways and in the public domain.	Completed <input checked="" type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>
4.4 Zanesfield will educate the public about local digital warning and notification systems like reverse calling, weather radios, warning sirens, and digital resources that inform them of incoming life-threatening storms or emergency incidents.	Completed <input checked="" type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>

GOAL 5: ZANESFIELD WILL ENGAGE IN MITIGATION ACTIONS TO PRESERVE AND PROTECT NATURAL RESOURCES SUCH AS TOPSOIL AND WATERWAYS FROM EROSION.					
5.1 Zanesfield will protect roadways vulnerable to compromised structural integrity, damaged berms, washed away foundation or abutments, or other deterioration due to extreme runoff or specific highly vulnerable soil types.					
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>	
GOAL 6: ZANESFIELD WILL ENGAGE IN MITIGATION ACTIONS THAT REDUCE DAMAGES FROM FLOODING.					
6.1 Zanesfield will maintain NFIP participation through regular review of flood maps and sustain local engagement to ensure accuracy of the maps, including advocacy for adoption of current maps as amended through the appeal process.					
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>	
6.2 Zanesfield will advocate and support flood insurance where required.					
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>	
6.3 Zanesfield will maintain existing local building codes, zoning regulations, and other land use regulations that encourage sustainable disaster-resistant structures in all areas.					
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>	
6.4 Zanesfield will use financial aid for flood mitigation through grants, fees, and other special programs.					
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>	
6.5 Zanesfield will implement improvements to the ditch maintenance program to reduce sedimentation and erosion.					
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>	
6.6 Zanesfield will remove debris and obstructions from waterways.					
Completed <input checked="" type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>	
6.7 Zanesfield will study the likelihood and potential impact of dam failure for dams that may impact the jurisdiction under failure.					
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>	
6.8 Zanesfield will participate in countywide storm water vulnerability study to improve wastewater systems and field tiling practices to limit damages from runoff water.					
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>	
6.9 Zanesfield will advocate for proper maintenance of dams to lessen the likelihood of structural failure and flooding due to poor maintenance.					
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input checked="" type="checkbox"/>	
6.10 Zanesfield will make improvements to roads and infrastructure including increases of bridge spans, repair of shoulders and berms, increase in culvert size, maintenance of bridge slopes and protection of roadways from storm and flood damage, to enhance the likelihood of open roadways even after severe flooding and damage.					
Completed <input type="checkbox"/>	Cancelled <input type="checkbox"/>	On Schedule <input checked="" type="checkbox"/>	Delayed <input type="checkbox"/>	Deferred <input type="checkbox"/>	

3.2 RISK PRIORITIES

The Hazard Identification and Risk Assessment explains in detail the identification of hazards and evaluation of risks in Logan County. That section of the plan considers numerous naturally occurring possibilities, cites the historical frequency and severity of past incidents, and considers the damages that would occur should that type incident strike a jurisdiction within Logan County. As a result of this assessment, the planning team determined that relevant

hazards and applicable risks for Logan County overall are as follows, prioritized from comprehensively most-concerning to least-concerning: [windstorm](#), [tornado](#), [severe thunderstorm](#), [flood \(primarily flash flood\)](#), [severe winter storm](#), [earthquake](#), [land subsidence](#), [invasive species](#), [dam/levee failure](#), and [drought and extreme heat](#). Some of the individual municipalities ranked threats in a different order based upon the unique characteristics or history of their community, and some communities did not feel specific hazards were a threat. For example, if there were no high-hazard dams owned by or inside the jurisdiction, they did not include dam failure as a threat. The goals and actions are listed in order of priority determined by each work group, in the context of both historical damages and current threat assessment.

Logan County's most concerning threat is excessive wind. Considering the relatively rolling or flat terrain and impact of the Emerald Ash Borer in [the past](#), the exposure to high wind and the poor condition of many trees makes wind a threatening hazard. Add to that the presence of buildings with no windbreak protection by tree lines or forested land, and the number of wind vulnerable structures (conventionally roofed structures, grain bins, legs and elevators, and many older buildings like barns, homes, and churches), the worst havoc could be caused by another derecho or significant wind event. Tornado ranks second because rotational winds are less frequent than straight-line or sustained high wind events, but the threat is similar.

Strategies for wind focus on elimination of debris potential, hardening of utility distribution systems, and use of wind-resistant building materials and wind-wise construction practices. Severe thunderstorms and blizzards are disruptive and expensive in their worst form, and were ranked fourth in Logan County concerns. Both cause roads to become impassable. These storms cause accessibility problems across the county, and are especially damaging to the livestock farms that depend upon transportation services daily and the industries that rely upon open access for shipping and receiving operations. If roads are blocked and snow covered, power outages occur due to the ice and/or wind associated with the storms, and farms and businesses cannot operate. Livestock operations are dependent upon utilities and transportation support. Small industries and manufacturing are crippled by lack of access to transportation, and power outages cause shut-downs that require a complex process to restart and resume production. These storms also bring the damage of high winds and heavy precipitation, sometimes causing flooding and structural damages. Hail can damage roofs and vehicles, and anything else that is in its path. The storms are damaging because they combine several factors into a comprehensive path of destruction. In Ohio, the combination of wind, water, and extreme temperature of any direction causes havoc and destruction.

Logan County ranked [general storm damages such as](#) utility outages, generally due to wind, ice, and snow, as their third concern. This is due to the level of disruption utility outages cause, based upon industrial and agricultural dependency upon electricity for the most part. Also, included in this category were resource shortages, such as alternate power sources and fuel shortages

Severe thunderstorms and blizzards are disruptive and expensive in their worst form, and were ranked fourth in Logan County concerns. Both cause roads to become impassable. These storms cause accessibility problems across the county, and are especially damaging to the livestock farms that depend upon transportation services daily and the industries that rely upon open access for shipping and receiving operations. If roads are blocked and snow covered, power outages occur due to the ice and/or wind associated with the storms, and farms and businesses cannot operate. Livestock operations are dependent upon utilities and transportation support. Small industries and manufacturing are crippled by lack of access to transportation, and power outages cause shut-downs that require a complex process to restart and resume production. These storms also bring the damage of high winds and heavy precipitation, sometimes causing flooding and structural damages. Hail can damage roofs and vehicles, and anything else that is in its path. The storms are damaging because they combine several factors into a comprehensive path of destruction. In Ohio, the combination of wind, water, and extreme temperature of any direction causes havoc and destruction

Strategies for severe storms include enhanced capacity to clear roads and bridges from debris and snow; elimination of debris potential; hardening of utilities; and improved warning and notification systems.

Logan County stakeholders felt that mitigation strategies to facilitate communication and public information release were important actions they could take to reduce damages from storms. Those strategies are distributed throughout the storm-related strategies.

Flooding is the **fourth highest** concern, and the threat is flash flooding inside the municipalities where streets and highways are inundated with rapid precipitation. While some of the ditches and streams flood under heavy rain or combined rain and snowmelt conditions, the primary threat of flooding is when precipitation is heavy and sustained and man-made drainage systems cannot handle the water load. Under those conditions, when sewers and natural drainage cannot keep up with the pace of the rainfall, streets and parking lots in municipalities flood. If accompanied by wind in fall when crops are being harvested, fodder can wash into the drainage systems and clog storm sewers, challenging drainage systems to work effectively. Trees that fall during wind storms can clog sewer systems as well. Generally, most flooding is short-term because Logan County sits at the highest elevations in the entire state, so water drains in a reasonably short period of time. However, at times, it can leave a path of damage as its legacy where flash flooding has occurred. For Logan County to have a major riverine flood, it would require extremely unusual rainfall, and there is no history of that kind of flood taking place. [Flooding experienced in 2019 showed Logan County, especially those in West Liberty and Bellefontaine, how absolutely devastating floods can be.](#)

Strategies for flooding focus on structural options such as retention and detention of water, elevation of structures, and water management systems and practices as a good neighbor to communities downstream. Land use regulation is used to prevent unwise construction inside flood zones. Actions can also include facilitation of drainage through system improvements and waterway maintenance. Acquisition, demolition, and relocation projects are a likely solution

for some structures that are not mitigated by other means, but these are rare examples in Logan County.

The last priority for Logan County was erosion and conservation of natural resources. Because flooding is not predominant in riverine form, sedimentation is minimal. At the top of the watershed, rivers and ditches are generally small and narrow and do not roar through the county taking everything possible along with them. Therefore, while erosion and conservation of natural resources is a concern, overall, in the county it ranked lower on the list of threats.

Drought and extreme heat are possible but do not occur frequently in Ohio. Drought tends to be more of a “dry spell” than an extended drought. When Ohio is considered “in drought”, Logan County is generally in less distress than most of the state due to its terrain and robust water supply. When Ohio, in general, experienced drought in 1988 and 2012, Logan County was not one of the most affected counties. Grain crops are more resilient than vegetable and fruit crops when drought strikes. The water supply through both aquifers and water systems is robust, and the effects on Logan County are rare and minimal.

Mitigation strategies for drought and extreme heat include additional public information, enhanced warning and notification, and hardening of the water supply through emergency planning and capital improvements. Threat to water supply would more likely be contamination of some sort, and therefore an emergency procedure action was included for most communities that have water treatment systems. Some communities use individual well systems, and for those, an emergency procedure is a personal preparedness issue.

Dam failure is a risk but there are only three high-hazard dams, including the dam at Indian Lake, Pine Lake Dam and Briarwood Sportsman’s Club No. 11 Dam. The Indian Lake dam and spillway have recently undergone significant repair and replacement by ODNR in 2021, and it is considered to be in excellent condition. It is not due for reinspection by authorities for several years. No emergency action plan has been shared with Logan County to date, however. The other two dams are privately owned and are located in townships; the county will work with the owners to create emergency action plans. There are no levees in Logan County or other water retention structures such as dikes or floodwalls.

Mitigation of dam failure concentrates on monitoring the condition of dams and taking appropriate action if necessary. There is no history of dam failure, so maintenance and repair took a higher priority than response to failure. The recent repairs at Indian Lake make this a relatively lower concern in that geographic area.

Earthquake is a similar possibility but low-ranked vulnerability. Buildings are single or two-story structures in most of the county with just a few higher buildings, mostly in the downtown sections of the Bellefontaine. Few bridges have long spans over water; most are as wide as two highway lanes or a county road. Most earthquakes are expected to be low on the intensity scale, and damages would be limited to fragile building contents or already-compromised structures. There are no skyscrapers in the county; buildings top out at three stories and there

are few of those. Infrastructure, such as roads, bridges, utility distribution lines, and treatment facilities could be damaged by a fairly weak earthquake because some of them are old and in need of repair. Even those that are new could be damaged by earthquakes. The strategies for earthquake include robust warning and notification systems and public information, and ensuring that emergency action plans are in place.

The strategies in this plan are intended to provide general options to lessen the vulnerabilities in Logan County. During the planning process, the planning team and stakeholders determined what hazards strike most frequently, which cause the most disruption, and which consequences feasibly can be prevented or lessened. With limited money and staff available to conduct mitigation projects, the planning team weighed every potential effort by measuring the benefit against the resources realistically available to conduct the activity. The planning team endeavored to prioritize strategies that could realistically be accomplished and result in actual reduction in potential and real losses.

Considerations of cost, identifiable funding to support the strategy, actual benefit to the community, prevention of loss of life, and overall feasibility were all discussed. Strategies were rated against one another and ranked from most to least important. While it is impossible to plan for or foresee every potential hazard, Logan County attempted to identify the incidents that might realistically impact their community. These goals and strategies are an outcome of that assessment.

3.3 MITIGATION GOALS AND STRATEGIES

Planning Team members and stakeholders from each jurisdiction worked individually and collaboratively countywide to develop fitting mitigation goals and strategies, and later to prioritize them and assign a champion, timeline, and a potential funding source. The Contractor drafted the strategies based on the input provided by these stakeholders, and their input was the basis for prioritization, assignment, and funding. The draft strategies were presented to the planning team and community for public review and comment, and modified accordingly. This section identifies the mitigation goals and strategies for each jurisdiction and the priority level, action type lead agency, timeline, and potential funding source assigned to each action. Strategies for specific municipalities vary from the countywide in priority of the problem and the potential solution.

3.3.1 Logan County

Logan County's mitigation strategies are intended to reduce vulnerability to damage from wind (tornado and straight line as well as high winds and derecho), water (rain and snow of all forms), severe storms (thunderstorms, lightning, hail, and ice), drought (with extreme heat or extended dry periods), dam failure (pertaining to dams located in the county; there are no levees), [invasive species](#), [land subsidence](#), and [earthquake](#). The identified goals and strategies include all non-incorporated areas of the county, such as townships and census areas or neighborhoods. These strategies will be considered as economic development and growth occurs, as regulations are written and revised, and as codes and guidance is enforced and

approved. These strategies will be reflected in local building codes, land use regulations, economic development goals and strategies, capital improvement plans, and budgetary management. Stakeholders attempted to take a pro-active approach to strategies and consider what development may take place in the coming five years as they developed a plan of action. Projects will be conducted as funding is available, and daily practices will be adjusted to include modifications of work to implement strategies when feasible.

Although Logan County does not own or lease the three high-hazard dams in Logan County, they will work with ODNR and the private party that owns these dams in an effort to protect township property and the property and lives of county residents and visitors should one of these dams fail. They have no actual authority to mandate maintenance measures or the development of emergency action plans, but they will work to collaboratively accomplish this.

As Logan County Commissioners and other elected officials will represent the townships in mitigation efforts, they will communicate with one another, and especially the township trustees whose jurisdictions are affected. The county and townships will work together to implement mitigation projects that are selected for action.

This partnership between levels of local government is not new nor is collaboration with private entities or state government new. Logan County commissioners have worked with jurisdictions in this way for many years. This collaboration will continue. Today's efforts to better include hazard mitigation in community development and in serving all populations are another effort of this local teamwork.

More information on how the various county entities work together in development is included and detailed in Section 04 Plan Maintenance and Implementation.

(Note: Descriptors for categories in this table are explained in Section 3.3.11.)

Table 3-2: Logan County 2023 Mitigation Goals and Strategies

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
GOAL 1: LOGAN COUNTY AND ITS JURISDICTIONS WILL EMPLOY MITIGATION ACTIONS TO REDUCE THE DAMAGES INCURRED FROM SEVERE WIND STORMS THAT INCLUDE WIND, STRAIGHT LINE WINDS AND TORNADOES.					
1.1 Logan County will advocate proper trimming of trees and vegetation to reduce damages caused by wind, especially where trees are infected with disease.					
1	Property Protection	County Engineer	7-1-23	6-30-28	LOC/ST
1.2 Logan County will support the construction of safe rooms for single and multi-family homes without basements or shelters.					
2	Property Protection	EMA Director	7-1-23	6-30-28	LOC PDM BRIC

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
1.3 Logan County will implement a program to clear areas of debris after severe wind and flooding to keep crop fodder and other debris out of water treatment plants, sewers, transportation routes, and other infrastructure, and to keep roadways open and usable as soon as possible after storms.					
3	Property Protection	EMA Director Solid Waste District	7-1-23	6-30-28	LOC
1.4 Use existing construction regulation and guidance to help property owners improve their property's resistance to storm damage through the use of storm-resistant construction materials and high-quality workmanship in construction and renovation projects.					
4	Property Protection	County Building Official	7-1-23	6-30-28	LOC
GOAL 2: LOGAN COUNTY WILL ENGAGE IN MITIGATION ACTIONS THAT REDUCE DAMAGES FROM FLOODING INCLUDING LAND SUBSIDENCE AND EROSION AS A RESULT OF FLOODS.					
2.1 Logan County will make improvements to road and infrastructure including an increase of bridge spans, repair of shoulders and berms, increase in culvert size, maintenance of bridge slopes and protection of roadways from storm and flood damage, to enhance the likelihood of open roadways even after severe flooding and rapid drainage.					
5	Property Protection	County Engineer	7-1-23	6-30-28	LOC PDM/FMA BRIC HMGP
2.2 Logan County will maintain NFIP participation so property owners have access to flood insurance, and will regularly review flood risk maps and regulations to ensure compliance with regulations and implementation of improvement strategies.					
6	Prevention	Floodplain Manager	7-1-23	6-30-28	LOC
2.3 Logan County will implement improvements to the ditch maintenance program, and will identify how to repair damage done to these designated ditches by storms and floods, such as removal of sedimentation and prevention of erosion.					
7	Natural Resource Protection	County Engineer	7-1-23	6-30-28	LOC
2.4 Logan County will remove debris and obstructions from waterways included in the county ditch maintenance program to facilitate the flow of water.					
8	Property Protection	County Engineer	7-1-23	6-30-28	LOC
2.5 Logan County will use federal and state grant programs to fund mitigation efforts, especially in flood mitigation and mitigation planning.					
9	Prevention	EMA Director	7-1-23	6-30-28	PDM/FMA BRIC HMGP
2.6 Logan County will advocate and support flood insurance where required.					
10	Property Protection	EMA Director	7-1-23	6-30-28	LOC
2.7 Logan County will maintain existing building codes, fire codes, and other construction regulations that encourage sustainable disaster-resistant structures.					
11	Property Protection	County Building Authority	7-1-23	6-30-28	LOC CDBG Other

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
2.8 Logan County will maintain development guidance and regulations that help with land use planning and implementation, such as land use plans, comprehensive plans, zoning regulations, and special use permits and regulations.					
12	Prevention	LUC Regional Planning Director	7-1-23	6-30-28	LOC
2.9 Logan County will study countywide storm water to reduce flood damages to properties through improvement to wastewater systems and field tiling practices that prevent downstream damages from runoff water.					
13	Nat. Resource Protection	Water Pollution Control Officer	7-1-23	12-31-22	LOC
2.10 Logan County will identify and quantify the potential impact of dam failure for three high-hazard dams in Logan County, including consideration of the dam's documented condition when inspected, and the population, key resources, and critical facilities within the inundation zone or otherwise affected areas.					
14	Prevention	EMA Director	7-1-23	12-31-22	LOC
2.11 Logan County will facilitate and assist with the development of effective emergency action plans for all high-hazard dams to protect the people and property that would be negatively impacted if the dam were to fail, and ensure that those plans adequately include prevention measures and proper maintenance of the structure.					
15	Structurally Engineered	SWCD Director EMA Director	7-1-23	12-31-22	LOC
2.12 Logan County will require retention or detention ponds to contain runoff water in new development or expansion where surface runoff may cause flooding.					
16	Structurally Engineered	County Engineer	7-1-23	6-30-28	LOC
2.13 Logan County will maintain, replace, or add storm sewers, wastewater pumping stations, water pumps and other devices or structures to protect property from flooding and to lessen flash flooding in any subdivisions or areas outside incorporation limits that may have this infrastructure.					
17	Prevention	Water Pollution Control Officer	7-1-23	6-30-28	LOC
2.14 Logan County will work with owners of repetitive flood loss properties who want to relocate by supporting programs that use mitigation grants to accomplish this.					
18	Prevention	Floodplain Manager EMA Director	7-1-23	6-30-28	LOC HMGP PDM BRIC
2.15 Logan County will utilize elevation to protect critical infrastructure and property from flooding.					
19	Property Protection	County Engineer	7-1-23	6-30-28	LOC PDM/FMA BRIC
2.16 Logan County will advocate maintenance on waterways in Logan County through cooperation with regional conservancy districts that work to remove debris, fallen or diseased trees, and excess sediment from the waterway.					
20	Nat. Resource Protection	SWCD Director	7-1-23	6-30-28	LOC/ICC
2.17 Logan County will create vegetative buffer zones, wetlands, and natural habitat in low-lying areas to hold excess runoff until it naturally drains downstream.					
21	Nat. Resource Protection	SWCD Director	7-1-23	6-30-28	LOC

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
2.18 Logan County will support farmers as they replace deteriorated tiles, implement conservation practices including the use of cover crops and conservation tillage, install tile control structures where feasible, and use filter strips for slope protection.					
22	Nat. Resource Protection	SWCD Director	7-1-23	6-30-28	LOC
2.19 Logan County will use channel modification and/or diversion to eliminate areas where flooding is highly destructive and no other option is feasible to decrease the flood damage.					
23	Structurally Engineered	County Engineer	7-1-23	6-30-28	LOC PDM/FMA BRIC HMGP

GOAL 3: LOGAN COUNTY AND ITS JURISDICTIONS WILL EMPLOY MITIGATION ACTIONS THE REDUCE DAMAGES DUE TO UTILITY OUTAGES AND SUPPLY SHORTAGES DUE TO SEVERE STORMS AND DISASTERS.

3.1 Logan County will identify alternate heating fuels, potable water suppliers, water pump stations, alternate power sources, private water systems where needed, and other critical supplies necessary for sustaining life, business, and safety during power outages with emphasis upon continuity for livestock operations, industrial and manufacturing businesses, and government critical facilities.					
24	Property Protection	EMA Director	7-1-23	6-30-28	LOC
3.2 Logan County will encourage collaboration between all levels of government and private contractors to clear roads and maintain electrical service during severe weather, especially ice, snow, wind, and floods and to protect business operations and assets from disaster related losses.					
25	Property Protection	EMA Director	7-1-23	6-30-28	LOC
3.3 Logan County will encourage the hardening of utilities through installation below grade, improvements to supply line and generation plants, and upgrade of poles, substations and transformers.					
26	Property Protection	County Engineer	7-1-23	6-30-28	LOC ICC

GOAL 4: LOGAN COUNTY WILL CONDUCT MITIGATION ACTIONS TO REDUCE VULNERABILITY OF POPULATIONS TO DAMAGES AND CASUALTIES DUE TO ALL TYPES OF DISASTERS AND SEVERE STORMS.

4.1 Logan County will implement a program to identify and remove dead or diseased trees along waterways, roadways, and in areas used by the public.					
27	Property Protection	County Engineer	7-1-23	6-30-28	LOC
4.2 Logan County will educate the public about digital warning and notification systems like reverse calling, weather radios, warning sirens, and digital resources that inform them of incoming life-threatening storms or emergency incidents.					
28	Public Information	EMA Director	7-1-23	6-30-28	LOC HSGP/EMPG
4.3 Logan County will maintain and improve hardware, software, and capital equipment (outdoor warning sirens) used to deliver warnings and notification of severe weather and other hazards to county residents.					
29	Public Information	EMA Director	7-1-23	6-30-28	LOC HSGP/EMPG
4.4 Logan County will implement a project to identify, respond to, and recover from farm losses after severe storms, power outages, or hazardous materials incident including facilitating generator availability during power outages, assisting during a severe livestock infestation, responding effectively to grain operations incident, clearing roads of snow and ice for ongoing ingress and egress to farms, and assisting with other issues of particular importance to agriculture.					
30	Property Protection	EMA Director	7-1-23	6-30-28	LOC

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
4.5 Logan County will assist and collaborate with farmers to identify ways to decrease losses after severe storms, including but not limited to management of rapid and excess runoff from fields or wherever manure management is necessary, helping develop protective measures for chemical storage tanks, feed silos, gran bins, and other farm structures and equipment, and other necessary protective measures common to agricultural operations.					
31	Property Protection	SWCD Director	7-1-23	6-30-28	LOC
4.6 Logan County will improve capacity to implement rapid placement of temporary warning signs to indicate dangerous road conditions like flooding, wash-outs, hazardous materials incidents, and other safety issues or closures.					
32	Property Protection	County Engineer	7-1-23	6-30-28	LOC
4.7 Logan County will coordinate water conservation procedures to be implemented during water emergencies due to drought or contaminated supply.					
33	Nat. Resource Protection	EMA Director	7-1-23	6-30-28	LOC
4.8 <i>Develop a just-in-time plan of action to identify and support families and individuals with functional needs, relevant disadvantages, or other characteristics that cause them to be more vulnerable to damage or injury during or after a significant storm event, and as a result may be less resilient than the typical county resident.</i>					
34	Property Protection	EMA Director Health Commissioner Board of DD Director	7-1-23	6-30-28	LOC
4.9 <i>Logan County will provide information to county residents about preparing for a severe storm, including information about power and utility outages, family or individual storm preparation, and how to obtain travel or business information before and during a severe winter storm.</i>					
35	Property Protection	EMA Director	7-1-23	6-30-28	LOC
4.10 <i>Create a database of cultural sites, including cemeteries, mausoleums, Indian burial sites, and other graves to easily locate historical and cultural areas that need to be protected from flooding, wind, ice, and other storm damage; and to identify the entities responsible for repairing gravestones and other property.</i>					
36	Property Protection	Historical Society Director	7-1-23	6-30-28	LOC
4.11 <i>Maintain and update, as needed, countywide response plans that include services to unique populations and enhancement of community resilience factors that can have a positive effect on people affected by severe storms and disasters when rapid and effective response is initiated and implemented.</i>					
37	Property Protection	EMA Director	7-1-23	6-30-28	LOC
GOAL 5: LOGAN COUNTY WILL COMPLETE MITIGATION ACTIONS THAT ENABLE RAPID AND EFFECTIVE COMMUNICATION DURING A DISASTER INCIDENT FOR THE PURPOSE OF DIRECTING THE POPULATION TO TAKE PROTECTIVE ACTION AND FOLLOW OPERATIONAL PROCEDURES.					
5.1 Logan County will develop interoperable communication plans to coordinate life-saving efforts between all community partners during severe incidents.					
38	Public Information	EMA Director Sheriff	7-1-23	6-30-28	LOC EMPG/HSGP
5.2 Logan County will improve GIS mapping to include infrastructure and utility designations and expand the customization capability of county software to produce data that is useful in community response planning.					
39	Public Information	County Auditor	7-1-23	6-30-28	LOC
5.3 Logan County will work to develop enhanced methods of cross-discipline and interjurisdictional planning efforts to create whole community efforts to improve communities and expand disaster resilience.					

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
40	Property Protection	EMA Director	7-1-23	6-30-28	LOC
5.4 Logan County will develop, utilize and maintain a communication plan to include mass media, social media, and direct contact before, during and after incidents, including development of materials that will reach individuals with functional needs or language barriers					
41	Public Information	EMA Director Sheriff	7-1-23	6-30-28	LOC
5.5 Logan County will provide information for the public about local disaster hazards and vulnerabilities, protective actions, available service, special populations and assistance, and emergency procedures using mass and social media, printed media, and other means of communication.					
42	Public Information	EMA Director	7-1-23	6-30-28	LOC EMPG/HSPG
5.6 Logan County maintain a multi-part communication system to notify all communities of protective action orders, warnings and notification, and other critical information related to specific disaster incidents.					
43	Public Information	EMA Director	7-1-23	6-30-28	LOC EMPG/HSPG
5.7 Logan County will improve GIS mapping and addressing to facilitate location of specific parcels or properties during emergency and disaster response, and to facilitate the use of mutual aid resources when needed.					
44	Public Information	County Auditor County Engineer Sewer District Dir.	7-1-23	6-30-28	LOC

GOAL 6: LOGAN COUNTY WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE THE EROSION OF TOPSOIL AND ROADWAYS DUE TO FLOODING, LAND USE OR HUMAN ACTION, AND TO PRESERVE NATURAL RESOURCES IN A WAY THAT LESSENS DISASTER DAMAGES.

6.1 Logan County will protect roadways vulnerable to compromised structural integrity, damaged berms, washed away foundations or abutments, or other deterioration due to extreme runoff or highly vulnerable soil types caused by severe storms.

45	Property Protection	County Engineer	7-1-23	6-30-28	LOC
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6.2 Logan County will protect waterways by reducing slope erosion, land subsidence and wind damage through various conservations measures such as use of cover plants, vegetation, grassy waterways, filter strips, buffers and such.

46	Nat. Resource Protection	SWCD Director	7-1-23	6-30-28	LOC
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6.3 Logan County will protect open areas and fields from wind erosion due to storms through use of windbreaks, filter strips, cover crops, tree lines, and other vegetative buffers to protect topsoil during high wind events and heavy precipitation.

47	Nat. Resource Protection	SWCD Director	7-1-23	6-30-28	LOC
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6.4 Logan County will monitor areas vulnerable to land subsidence and/or severe erosion loss of topsoil and embankments for changes or damages from heavy or rapid rainfall or other significant windstorm incidents.

48	Nat. Resource Protection	SWCD Director	7-1-23	6-30-28	LOC
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GOAL 7 LOGAN COUNTY WILL MONITOR AND REPORT, IF NECESSARY, THE LOCAL PRESENCE OF DAMAGING INSECTS, PLANT OR ANIMAL DISEASES, NOXIOUS WEEDS, OR NUISANCE WILDLIFE UNDER SURVEILLANCE BY THE OHIO DEPARTMENT OF AGRICULTURE OR OHIO DEPARTMENT ON NATURAL RESOURCES.

7.1 Logan County will work with appropriate local agencies to provide information to the general public about protecting themselves and their property from damages due to invasive species.

49	Nat. Resource Protection	SWCD Director	7-1-23	6-30-28	LOC
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Priority	Action Type	Lead Agency	Start Date	End Date	Funding
GOAL 8 LOGAN COUNTY WILL MONITOR ANY CHANGES TO THE COUNTY'S VULNERABILITY TO EARTHQUAKE, AND WILL TAKE APPROPRIATE ACTION IF AN EARTHQUAKE BECOMES LIKELY OR OCCURS.					
8.1 Logan County will monitor earthquake incidents in the county and near-by counties, and will release appropriate information and warnings to the public should that become necessary.					
50	Property Protection	EMA Director	7-1-23	6-30-28	LOC
8.2 Logan County will identify any significant properties or infrastructure that would be vulnerable to earthquake damage, and will have a plan to support critical services if an earthquake were to damage that property or infrastructure.					
51	Property Protection	EMA Director	7-1-23	6-30-28	LOC
8.3 Logan County will encourage residents, landlords, and renters to consider carrying earthquake coverage to protect them from property losses should an earthquake occur.					
52	Property Protection	EMA Director	7-1-23	6-30-28	LOC

3.3.2 Belle Center

Belle Center is a small village in the far north central part of Logan County. The village suffers from flooding, mostly flash flooding when rain falls rapidly and lack of effective drainage when ditches are full or clogged. The village can be isolated from county resources because it is small in size. Windstorms and utility outages are concerning, and to some degree they are vulnerable to erosion, mostly due to flooding or lack of soil conservation practices. General storm damage can occur and cause havoc for residents. They have developed the strategies that follow.

Table 3-3: Belle Center Mitigation Goals and Strategies

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
GOAL 1: BELLE CENTER WILL ENGAGE IN MITIGATION ACTIONS THAT REDUCE THE DAMAGES FROM RIVERINE AND FLASH FLOODING.					
1.1 Belle Center will consider joining NFIP as a way to make more flood protection available to the community and to prevent future damages through floodplain regulation.					
1	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC
1.2 Belle Center will use financial aid for flood mitigation through grants, fees, and other special programs.					
2	Prevention	Mayor Administrator	7-1-23	6-30-28	LOC
1.3 Belle Center will advocate and support flood insurance where required.					
3	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC
1.4 Belle Center will maintain and enforce existing building codes, zoning regulations, and other land use regulations that encourage sustainable disaster-resistant structures in all areas.					
4	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC
1.5 Belle Center will participate in countywide storm water vulnerability study to reduce flood damages to properties through improved wastewater management.					
5	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
1.6 Belle Center will work to enhance ditch maintenance in the village, as well as advocate for ditch cleaning and maintenance between the village and the lake, to ensure adequate drainage.					
6	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC
1.7 Belle Center will maintain storm sewers, pumping stations, water pumps, and other devices to protect property from flooding.					
7	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC
1.8 Belle Center will remove debris and obstructions from ditches and streams in the village.					
8	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC
1.9 Belle Center will require retention and detention ponds to contain runoff water in new or expansion development where surface water may cause flooding.					
9	Structurally Engineered	Mayor Administrator	7-1-23	6-30-28	LOC PDM/HMGP
1.10 Belle Center will utilize elevation to protect critical infrastructure and property from flooding.					
10	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC PDM
1.11 Belle Center will assist and collaborate with owners of repeated loss properties in using acquisition and relocation grant programs to help them relocate to a less vulnerable property.					
11	Prevention	Mayor Administrator	7-1-23	6-30-28	PDM/HMGP
1.12 Belle Center will support efforts to replace deteriorated field tiles and will support conservation tillage and erosion protection measures.					
12	Natural Resource Protection	Mayor Administrator	7-1-23	6-30-28	LOC

GOAL 2: BELLE CENTER WILL COMPLETE MITIGATION ACTIONS THAT ENABLE RAPID AND EFFECTIVE COMMUNICATION DURING A DISASTER INCIDENT FOR THE PURPOSE OF DIRECTING THE POPULATION TO TAKE PROTECTIVE ACTIONS AND TO FOLLOW OPERATIONAL PROCEDURES.

2.1 Belle Center will advocate and support efforts to improve GIS mapping to include infrastructure and utility services, and to expand the customization capability of software to produce data that is useful in community planning and disaster preparedness for threats against infrastructure.					
13	Public Information	Mayor Administrator	7-1-23	6-30-28	LOC EMPG/HSGP
2.2 Belle Center will advocate and support improvement in parcel location mapping to facilitate locating and responding to emergency and disaster calls in a rapid and effective way, as well as to facilitate the use of mutual aid resources when necessary to assistance to responders and dispatchers.					
14	Public Information	Mayor Administrator	7-1-23	6-30-28	LOC EMPG/HSGP
2.3 Belle Center will develop utilize and maintain a communication plan to include mass media, social media, and direct contact with residents before, during, and after severe weather and other incidents.					
15	Public Information	Mayor Administrator	7-1-23	6-30-28	LOC
2.4 Belle Center will develop a multi-part communication system to notify all residents of protective action orders, warnings and notifications, and other critical lifesaving information related to specific disaster incidents when necessary.					

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
16	Public Information	Mayor Administrator	7-1-23	6-30-28	LOC
2.5 Belle Center will develop interoperable communications plans to coordinate life-saving efforts between all community partners during severe incidents.					
17	Public Information	Mayor Administrator	7-1-23	6-30-28	LOC HSGP/EMPG

GOAL 3: BELLE CENTER WILL EMPLOY MITIGATION ACTIONS TO REDUCE THE DAMAGES INCURRED FROM WIND AND SEVERE WIND STORMS THAT INCLUDE STRAIGHT LINE WINDS AND TORNADOES.

3.1 Belle Center will advocate for proper trimming of trees and vegetation to reduce damages caused by wind, especially where trees are infected with disease like Emerald Ash Borer.

18	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC
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3.2 Belle Center will implement a program to clear areas of crop debris and other debris after storms to keep obstructions out of storm sewers and culverts.

19	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC
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3.3 Belle Center will support the construction of safe rooms for single and multi-family homes without basements or other shelters.

20	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC PDM
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3.4 Belle Center will identify and establish locations to be used as community centers during extended power outages or extreme conditions.

21	Public Information	Mayor Administrator	7-1-23	6-30-28	LOC
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GOAL 4: BELLE CENTER WILL EMPLOY MITIGATION ACTIONS THAT REDUCE DAMAGES FROM UTILITY OUTAGES AND SUPPLY SHORTAGES.

4.1 Belle Center will identify and establish alternate heating fuels, potable water suppliers, alternate power sources and other critical supplies necessary for sustaining life, business, and safety during power outages or if outages occur due to earthquake and resulting damage to distribution systems.

23	Prevention	Mayor Administrator	7-1-23	6-30-28	PDM HMGP
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GOAL 5: BELLE CENTER WILL ENGAGE IN MITIGATION ACTIONS THAT REDUCE THE EROSION OF TOPSOIL AND INFRASTRUCTURE DUE TO RAPID RUNOFF, LAND USE, OR HUMAN CAUSED INCIDENTS.

5.1 Belle Center will protect roadways vulnerable to compromised structural integrity, damaged berms, washed away foundations or abutments, or other deterioration due to extreme runoff or highly vulnerable soil types.

24	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC
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GOAL 6: BELLE CENTER WILL CONDUCT MITIGATION ACTIONS TO REDUCE THE VULNERABILITY OF ITS POPULATION TO DAMAGES AND CASUALTY DUE TO ALL TYPES OF DISASTERS AND SEVERE STORMS

6.1 Belle Center will maintain and improve hardware, software, and capital equipment (outdoor warning sirens) used to deliver warnings and notifications of severe weather and other hazards.

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
25	Public Information	Mayor Administrator	7-1-23	6-30-28	LOC HSGP/EMPG
6.2 Belle Center will educate the public about local digital warning and notification systems like reverse calling, weather radios, warning sirens, and digital resources that inform them of incoming life-threatening storms or emergency incidents.					
26	Public Information	Mayor Administrator	7-1-23	6-30-28	LOC
6.3 Belle Center will remove dead or diseased trees along waterways and in the public domain.					
27	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC
6.4 Belle Center will establish water conservation procedures to be implemented during water emergencies due to drought or contamination.					
28	Natural Resource Protection	Mayor Administrator	7-1-23	6-30-28	LOC
6.5 Belle Center will improve capacity to rapidly place temporary warning signs that indicate dangerous road conditions.					
29	Prevention	Mayor Administrator	7-1-23	6-30-28	LOC

3.3.3 Bellefontaine

Bellefontaine is the county seat of Logan County, and the only city in the county. It is centrally located on some of the highest elevations in not only Logan County, but the entire state of Ohio. Therefore, it is vulnerable to wind damage, including both straight-line and rotational winds, and that was determined to be the most significant threat. The city is slightly hilly, and therefore is vulnerable to some flash flooding in low spots, although residents did not rank floods as any of their top concerns. They do experience flash flooding when rain comes fast and for an extended time period. This affects mostly streets, parking lots, and low-lying areas where the precipitation cannot drain away as fast as it comes. The city endures great difficulty during power outages due to storms because business and industry as well as retail businesses must close, and start up afterwards is not instantaneous. Shut downs are economically expensive and disruptive, oftentimes requiring a lengthy time period to re-start. Communication with the public can be challenging because many residents work at automotive plants outside the county, and because communication systems are not all interoperable or common. There are locations in the community that are not adequately covered by digital infrastructure. The rolling topography in some areas makes rapid runoff damaging as it erodes berms and undercuts foundations and roads. Additional highways, widened existing roadways, and large paved areas have increased the runoff amounts, and therefore some flash flooding and additional washouts of berms, culverts, and other infrastructure is not uncommon. There have been some land subsidence issues develop recently, including deterioration of ditch banks and widening of the ditch as soils erode away, and the development of some sink holes in the northeast part of the city. There is suspected karst inside city limits, but this area has not been verified or field visited to date. They also considered the impact of invasive species on the well-landscaped properties and land, dam failure because they own a dam located in the city, and drought and extreme temperatures due to an elderly and vulnerable population segment.

Table 3-4: Bellefontaine Mitigation Goals and Strategies

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
GOAL 1: BELLEFONTAINE WILL EMPLOY MITIGATION ACTIONS TO REDUCE DAMAGES INCURRED FROM SEVERE WINDSTORMS, INCLUDING WIND, STRAIGHT-LINE WINDS AND TORNADOES.					
1.1 Bellefontaine will advocate proper trimming of trees and vegetation to reduce damages caused by wind, especially where trees are infected with disease like Emerald Ash Borer.					
1	Nat. Resource Protection	City Engineer	7-1-23	6-30-28	LOC
1.2 Bellefontaine will support the construction of safe rooms for single and multi-family homes without basements or shelters.					
2	Property Protection	Safety Service Dir.	7-1-23	6-30-28	LOC PDM BRIC
1.3 Bellefontaine will implement a program to clear areas of debris after severe wind and flooding to keep culverts and storm sewers free-running and clear.					
3	Prevention	City Engineer	7-1-23	6-30-28	LOC
1.4 Bellefontaine will encourage damage resistant building materials and construction techniques so structures are as resistant as possible to wind damage.					
4	Property Protection	City Engineer	7-1-23	6-30-28	LOC ICC
GOAL 2: BELLEFONTAINE WILL EMPLOY MITIGATION ACTIONS THAT REDUCE DAMAGES FROM UTILITY OUTAGES AND SUPPLY SHORTAGES.					
2.1 Bellefontaine will encourage the hardening of utilities through installation below grade, improvements to supply line and generations plants, and upgrade of poles, substations and transformers.					
5	Property Protection	City Engineer	7-1-23	6-30-28	LOC
2.2 Bellefontaine will identify and establish alternate heating fuels, potable water suppliers, alternate power sources, shelters, comfort stations, and other crucial facilities and supplies necessary for sustaining life, business, and safety during extended power outages, with emphasis upon continuity for critical operations.					
6	Property Protection	City Engineer	7-1-23	6-30-28	LOC HSGP/EMPG
GOAL 3: BELLEFONTAINE WILL COMPLETE MITIGATION ACTIONS THAT ENABLE RAPID AND EFFECTIVE COMMUNICATION DURING A DISASTER INCIDENT FOR THE PURPOSE OF DIRECTING THE POPULATION TO TAKE PROTECTIVE ACTIONS AND TO FOLLOW OPERATIONAL PROCEDURES AS WELL AS ENABLE RESPONDERS TO COMMUNICATE WITH ONE ANOTHER.					
3.1 Bellefontaine will develop a multi-part communication system to notify all residents of protective action orders, warnings and notifications, and other critical lifesaving information related to specific disaster incidents when necessary.					
7	Public Information	Safety Service Dir.	7-1-23	6-30-28	LOC HSGP/EMPG PDM BRIC
3.2 Bellefontaine will develop interoperable communication plans to coordinate life-saving efforts between all community partners during severe incidents.					

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
8	Public Information	Safety Service Dir.	7-1-23	6-30-28	LOC HSGP/EMPG
3.3 Bellefontaine will educate the public about local disaster hazards, vulnerabilities, protective actions, services, vulnerable populations, available assistance, and emergency procedures using mass and social media, printed information and other options.					
9	Public Information	Safety Service Dir.	7-1-23	6-30-28	LOC HSGP/EMPG
3.4 Bellefontaine will develop, utilize, and maintain a communication plan to include mass media, social media, and direct contact before, during and after incidents.					
10	Public Information	Safety Service Dir.	7-1-23	6-30-28	LOC EMGP/HSGP
3.5 Bellefontaine will work to improve parcel location mapping to facilitate locating and responding to emergency and disaster calls in a rapid and effective way, as well as to facilitate the use of mutual aid, when necessary, as assistance to responders and dispatchers.					
11	Public Information	City Engineer	7-1-23	6-30-28	LOC
3.6 Bellefontaine will improve GIS mapping to include infrastructure and utility mapping, and expand the customization capability of software to produce data that is useful in community planning.					
12	Public Information	City Engineer	7-1-23	6-30-28	LOC
3.7 Bellefontaine will work to develop enhanced methods of cross-discipline and interjurisdictional planning efforts to create whole community efforts to improve communities and expand disaster resilience.					
13	Public Information	Safety Service Dir.	7-1-23	6-30-28	LOC

GOAL 4: BELLEFONTAINE WILL ENGAGE MITIGATION ACTIONS THAT REDUCE THE DAMAGES FROM FLOODING, WITH AN EMPHASIS UPON FLASH FLOODING AND SEVERE EROSION OR LAND SUBSIDENCE AS A RESULT OF RAPID SURFACE DRAINAGE OR FLOODING.

4.1 Bellefontaine will maintain NFIP participation so property owners have access to flood insurance, and will regularly review flood maps to ensure implementation of floodplain regulations and improvement strategies.					
14	Property Protection	Mayor	7-1-23	6-30-28	LOC
4.2 Bellefontaine will advocate and support flood insurance where required by adopted federal flood maps.					
15	Property Protection	Safety Service Dir.	7-1-23	6-30-28	LOC
4.3 Bellefontaine will use financial aid for flood mitigation through grants, fees, and other special programs.					
16	Prevention	Safety Service Dir.	7-1-23	6-30-28	LOC
4.4 Bellefontaine will adopt new and maintain existing local building codes, zoning regulations, and other land use regulations that encourage sustainable disaster resistant structures in all areas.					
17	Prevention	City Engineer	7-1-23	6-30-28	LOC
4.5 Bellefontaine will maintain, replace, or add storm sewers, wastewater pumping stations, water pumps, and other devices or structures to protect property from flooding and to lessen flash flooding.					
18	Property Protection	City Engineer	7-1-23	12-31=22	LOC Other
4.6 Bellefontaine will remove debris and obstructions from waterways to facilitate drainage.					
19	Property Protection	City Engineer	7-1-23	6-30-28	LOC
4.7 Bellefontaine will make improvement to roads and infrastructure including increases in size of bridge spans and culverts, repair of shoulders and berms, maintenance of bridge slopes and protection of roadways from storms and flood damage, to enhance the likelihood of open roadways even after severe flooding and damaging storms.					
20	Property Protection	City Engineer	7-1-23	6-30-28	LOC

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
4.8 Bellefontaine will require retention and detention ponds to contain runoff water in new development or expansion where surface runoff may cause flooding.					
21	Structurally Engineered	City Engineer	7-1-23	6-30-28	LOC PDM BRIC
4.9 Bellefontaine will utilize elevation to protect critical infrastructure and property from flooding.					
22	Property Protection	City Engineer	7-1-23	6-30-28	LOC PDM BRIC
4.10 Bellefontaine will help study countywide storm water vulnerability to reduce flood damages to properties due to flooding through improvement to wastewater systems and wastewater management to prevent downstream flooding.					
23	Property Protection	City Engineer	7-1-23	6-30-28	LOC
4.11 Bellefontaine will remove debris fallen trees and excess sediment from waterways to improve their condition.					
24	Property Protection	City Engineer	7-1-23	6-30-28	LOC ICC
4.12 Bellefontaine will study the likelihood of failure of Appleseed Ridge Lake #1 Dam and will determine how it would affect critical resources, key facilities, other city property and residents by developing an emergency action plan for the facility.					
25	Property Protection	Safety Service Dir.	7-1-23	6-30-28	LOC
4.13 Bellefontaine will implement improvements to ditch maintenance to facilitate the natural drainage of storm water and to identify damages to streams and ditches such as sedimentation and erosion.					
26	Natural Resource Protection	City Engineer	7-1-23	6-30-28	LOC
4.14 Bellefontaine will properly maintain Applewood Ridge Lake #1 Dam to lessen the likelihood of structural failure and flooding due to poor maintenance.					
27	Property Protection	City Engineer	7-1-23	6-30-28	LOC
4.15 Bellefontaine will acquire and demolish properties that flood repeatedly to relocate residents out of flood risk areas, and to restore the property to a natural habitat maintained as such into perpetuity.					
28	Prevention	City Engineer	7-1-23	6-30-28	LOC PDM/HMGP BRIC FMA/SRL CDBG
4.16 Bellefontaine will create vegetative buffer zones, wetlands, and natural habitat in low-lying areas to hold excess runoff until it drains downstream.					
29	Property Protection	City Engineer	7-1-23	6-30-28	LOC
GOAL 5: BELLEFONTAINE WILL CONDUCT MITIGATION ACTIONS TO REDUCE THE VULNERABILITY OF ITS POPULATION TO DAMAGES AND CASUALTY DUE TO ALL TYPES OF DISASTERS AND SEVERE STORMS.					
5.1 Bellefontaine will maintain and improve hardware, software, and capital equipment (outdoor warning sirens) used to deliver warnings and notifications of severe weather and other hazards.					
30	Public Information	Safety Service Dir.	7-1-23	6-30-28	HSGP/EMPG PDM BRIC

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
5.2 Bellefontaine will educate the public about local digital warning and notification systems like reverse calling, weather radios, warning sirens, and digital resources that inform them of incoming life-threatening storms or emergency incidents.					
31	Public Information	Safety Service Dir.	7-1-23	6-30-28	LOC HSGP/EMPG
5.3 Bellefontaine will implement a program to identify and remove dead or diseased trees along waterways and in the public domain.					
32	Property Protection	City Engineer	7-1-23	6-30-28	LOC
5.4 Bellefontaine will establish water conservation procedures to be implemented during a water emergency or drought.					
33	Natural Resource Protection	City Engineer	7-1-23	6-30-28	LOC
5.5 Bellefontaine will improve capacity to protect and preserve historical sites, cemeteries, and other facilities and structures of cultural or historical significance from damages due to storms.					
34	Prevention	Safety Service Dir.	7-1-23	6-30-28	LOC

GOAL 6: BELLEFONTAINE WILL ENGAGE MITIGATION ACTIONS THAT REDUCE THE EROSION OF TOPSOIL AND INFRASTRUCTURE DUE TO RAPID RUNOFF, LAND USE, OR HUMAN CAUSED INCIDENTS.

6.1 Bellefontaine will protect roadways vulnerable to compromised structural integrity, damaged berms, washed away foundation or abutments, or other deterioration due to extreme runoff or highly vulnerable soil types, and will be able to mark these quickly and effectively after storms.					
35	Natural Resource Protection	City Engineer	7-1-23	6-30-28	LOC
6.2 Bellefontaine will protect waterways and embankments and slopes by reducing erosion and sedimentation through conservation measures such as use of cover plants, grassy waterways, filter strips, and buffers.					
36	Natural Resource Protection	City Engineer	7-1-23	6-30-28	LOC
6.3 Bellefontaine will protect open areas and parks from wind erosion through use of windbreaks, buffers, tree lines, and other vegetation to protect topsoil during high wind events and after heavy precipitation.					
37	Natural Resource Protection	Park Superintendent	7-1-23	6-30-28	LOC

GOAL 7 THE CITY OF BELLEFONTAINE WILL ASSESS ITS VULNERABILITY TO EARTHQUAKES, TAKING INTO CONSIDERATION THE BUILDINGS AND INFRASTRUCTURE AT RISK.

7.1 Bellefontaine will assess its vulnerability to earthquake damages by identifying any critical facilities or key resources that may be negatively affected by an earthquake of a 5.0 magnitude or higher.					
38	Property Protection	City Administrator	7-1-23	6-30-28	LOC

3.3.4 DeGraff

This small village sits in the southwest corner of Logan County, and many residents work in area factories and industries. It is vulnerable to flooding and wind, and can become isolated from the rest of the county due to distance and priorities based upon population. This self-sufficient community has developed and ranked the strategies that follow, prioritizing water and wind as the most destructive forces.

Table 3-5: DeGraff Mitigation Goals and Strategies

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
GOAL 1: DEGRAFF WILL ENGAGE IN MITIGATION ACTIONS THAT REDUCE THE DAMAGES FROM RIVERINE AND FLASH FLOODING.					

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
1.1 DeGraff will maintain NFIP participation so property owners have access to flood insurance, and will regularly review flood maps to ensure implementation of floodplain regulations and improvement strategies.					
1	Prevention	Mayor	7-1-23	6-30-28	LOC
1.2 DeGraff will advocate and support flood insurance where required.					
2	Property Protection	Mayor	7-1-23	6-30-28	LOC
1.3 DeGraff will maintain existing local building codes, zoning regulations, and other land use regulations that encourage sustainable disaster resistant structures in all areas.					
3	Property Protection	Mayor	7-1-23	6-30-28	LOC
1.4 DeGraff will use financial aid for flood mitigation through grants, fees, and other special programs.					
4	Prevention	Mayor	7-1-23	6-30-28	LOC PDM/FMA BRIC HMGP
1.5 DeGraff will advocate for removal of debris, fallen diseased trees, and excess sediment and to improve river maintenance.					
5	Natural Resource Protection	Mayor	7-1-23	6-30-28	LOC ICC
1.6 DeGraff will maintain, replace or add storm sewers, wastewater pumping stations, water pumps, and other devices or structures to protect property from flooding and to cause less flash flooding.					
6	Property Protection	Mayor	7-1-23	6-30-28	LOC ICC
1.7 DeGraff will protect critical infrastructure and key resources from flood damages, including protection of pump stations, through elevation, relocation, or other means, and will increase bridge spans and culvert sizes to protect the same.					
7	Property Protection	Mayor	7-1-23	6-30-28	LOC PDM BRIC ICC

GOAL 2: DEGRAFF WILL EMPLOY MITIGATION ACTIONS TO REDUCE THE DAMAGES FROM SEVERE WIND STORMS THAT INCLUDE WIND, STRAIGHT LINE WINDS AND TORNADOES.

2.1 DeGraff will advocate proper trimming of trees and vegetation to include damages caused by wind, especially where trees are infected with disease like Emerald Ash Borer.

8	Property Protection	Mayor	7-1-23	6-30-28	LOC
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2.2 DeGraff will support the construction of safe rooms by property owners for single and multi-family homes without basements or shelters, and the development of local shelters for residents who are evacuated.

9	Property Protection	Mayor	7-1-23	6-30-28	LOC PDM BRIC
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GOAL 3: DEGRAFF WILL CONDUCT MITIGATION ACTIONS TO REDUCE THE VULNERABILITY OF ITS POPULATION TO DAMAGES AND CASUALTY DUE TO ALL TYPES OF DISASTERS AND SEVERE STORMS.

3.1 DeGraff educate the public about local digital warning and notification systems like reverse calling, weather radios, warning sirens, and digital resources that inform them of incoming life-threatening storms or emergency incidents.

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
10	Public Information	Mayor	7-1-23	6-30-28	LOC HSGP/EMPG
3.2 DeGraff will maintain and improve hardware, software and capital equipment (outdoor warning sirens) used to deliver warnings and notifications.					
11	Public Information	Mayor	7-1-23	6-30-28	LOC HSGP/EMPG

GOAL 4: DEGRAFF WILL CONDUCT MITIGATION ACTIONS THAT ENABLE RAPID AND EFFECTIVE COMMUNICATION DURING A DISASTER FOR THE PURPOSE OF DIRECTING THE POPULATION TO TAKE PROTECTIVE ACTION AND FOLLOW OPERATIONAL PROCEDURES.

4.1 DeGraff will develop a multi-part communication system to notify all residents of protective action orders, warnings and notification, comfort stations and shelters, and other critical lifesaving information.

12	Public Information	Mayor	7-1-23	6-30-28	LOC
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4.2 DeGraff will develop interoperable communication plans to coordinate life-saving efforts between all community partners during severe incidents.

13	Public Information	Mayor	7-1-23	6-30-28	LOC
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4.3 DeGraff will educate the public about local disaster hazards, vulnerabilities, protective actions, services, vulnerable populations, available assistance and emergency procedures using mass and social media, printed information and other options.

14	Public Information	Mayor	7-1-23	6-30-28	LOC
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4.4 DeGraff will develop, utilize, and maintain a communication plan to include mass media, social media, and director contact with residents before, during and after incidents.

15	Public Information	Mayor	7-1-23	6-30-28	LOC
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GOAL 5: DEGRAFF WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE THE EROSION OF TOPSOIL DUE TO FLOODING, WIND, LAND USE OR HUMAN-CAUSED INCIDENTS.

5.1 DeGraff will protect roadways vulnerable to compromised structural integrity, damaged berms, washed away foundations or abutments, or other deterioration due to extreme runoff or specific highly vulnerable soil types.

16	Property Protection	Mayor	7-1-23	6-30-28	LOC
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GOAL 6; DEGRAFF WILL ASSESS ITS VULNERABILITY TO EARTHQUAKES, TAKING INTO CONSIDERATION THE HISTORY OF INCIDENT SEVERITY AND THE BUILDINGS OR INFRASTRUCTURE AT RISK.

6.1 DeGraff will assess its vulnerability to earthquake damages by identifying any critical facilities or key resources that may be negatively affected by an earthquake of 5.0 magnitude or higher.

17	Property Protection	Mayor	7-1-23	6-30-28	LOC
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3.3.5 Huntsville

This village is located northwest of Bellefontaine in the north central part of Logan County. As a small rural community, it can get isolated from resources and overlooked because of its small size. The village is prone to damage from wind and flooding, and preparedness in general is very important. In an effort to protect its residents and properties, they have developed the mitigation strategies that follow.

Table 3-6: Huntsville Mitigation Goals and Strategies

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
GOAL 1: HUNTSVILLE WILL EMPLOY MITIGATION ACTIONS TO REDUCE THE DAMAGES INCURRED FROM SEVERE WIND STORMS THAT INCLUDE WIND, STRAIGHT LINE WINDS AND TORNADOES.					
1.1 Huntsville will advocate proper trimming of trees and vegetation to reduce damages caused by wind, especially where trees are infected with disease like Emerald Ash Borer.					
1	Property Protection	Mayor	7-1-23	6-30-28	LOC
1.2 Huntsville will support the construction of safe rooms for single and multi-family homes without basements or shelters.					
2	Property Protection	Mayor	7-1-23	6-30-28	LOC PDM
1.3 Huntsville will encourage damage-resistant building materials and techniques so structures are as resistant as possible to wind damage.					
3	Property Protection	Mayor	7-1-23	6-30-28	LOC
GOAL 2: HUNTSVILLE WILL ENGAGE IN MITIGATION ACTIONS THAT REDUCE DAMAGES FROM FLOODING.					
2.1 Huntsville will consider joining NFIP as a way to make more flood protection available to the community and to prevent future damages through floodplain regulation.					
4	Property Protection	Mayor	7-1-23	6-30-28	LOC
2.2 Huntsville will advocate and support flood insurance where required.					
5	Property Protection	Mayor	7-1-23	6-30-28	LOC
2.3 Huntsville will maintain existing local building codes, zoning regulations, and other land use regulations that encourage sustainable disaster-resistant structures in all areas.					
6	Property Protection	Mayor	7-1-23	6-30-28	LOC ICC
2.4 Huntsville will use financial aid for flood mitigation through grants, fees, and other special programs.					
7	Property Protection	Mayor	7-1-23	6-30-28	LOC PDM
2.5 Huntsville will participate in countywide storm water vulnerability study to improve wastewater systems and field tiling practices to limit damage from runoff water.					
8	Property Protection	Mayor	7-1-23	6-30-28	LOC ICC
2.6 Huntsville will maintain, replace, or add storm sewers, wastewater pumping stations, water pumps, and other devices or structures to protect property from flooding and to lessen flash flooding.					
9	Property Protection	Mayor	7-1-23	6-30-28	LOC ICC
2.7 Huntsville will remove debris and obstructions from ditches and streams.					
10	Natural Resource Protection	Mayor	7-1-23	6-30-28	LOC
2.8 Huntsville will utilize elevation to protect critical infrastructure and property from flooding.					
11	Property Protection	Mayor	7-1-23	6-30-28	LOC PDM
GOAL 3: HUNTSVILLE WILL EMPLOY MITIGATION ACTIONS THAT REDUCE DAMAGES FROM UTILITY OUTAGES AND SUPPLY SHORTAGES.					
3.1 Huntsville will encourage the hardening of utilities through installation below grade, improvements to supply lines and generation plants, and upgrade of poles, substations and transformers.					
12	Property Protection	Mayor	7-1-23	6-30-28	LOC ICC

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
13	Property Protection	Mayor	7-1-23	6-30-28	LOC

GOAL 4: HUNTSVILLE WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE DAMAGES FROM ALL SEVERE STORMS, INCLUDING THUNDERSTORMS AND BLIZZARDS, AND OTHER NATURAL DISASTERS AND CAUSES.

4.1 Huntsville will expand and improve its public warning and notification capability through additional or improved outdoor warning sirens, improvements to the software used in these systems, or enhanced public education regarding warning and notification of protection orders or warnings.

16	Public Information	Fire Chief	7-1-23	6-30-28	LOC HSGP EMPG
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4.2 Huntsville will educate the public about local digital warning and notification systems that inform them of incoming severe weather and life-threatening incidents.

17	Public Information	Fire Chief	7-1-23	6-30-28	LOC HSGP/EMPG
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GOAL 5: HUNTSVILLE WILL COMPLETE MITIGATION ACTIONS THAT ENABLE RAPID AND EFFECTIVE COMMUNICATION DURING A DISASTER INCIDENT FOR THE PURPOSE OF DIRECTING THE POPULATION TO TAKE PROTECTIVE ACTION AND FOLLOW OPERATIONAL PROCEDURES.

5.1 Huntsville will educate the public about all relevant disaster hazards and vulnerabilities, protective actions, available services, vulnerable populations and available assistance and other emergency procedures using a variety of means to include print and spoken media, digital resources, and other appropriate local resources.

18	Public Information	Fire Chief	7-1-23	6-30-28	LOC HSGP/EMPG
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5.2 Huntsville will develop interoperable communication plans to coordinate life-saving efforts between all community partners during severe incidents.

19	Public Information	Fire Chief	7-1-23	6-30-28	LOC
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5.3 Huntsville will develop, utilize and maintain a communication plan to include mass media, social media, and direct contact with residents before, during and after incidents.

20	Public Information	Fire Chief	7-1-23	6-30-28	LOC
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GOAL 6: HUNTSVILLE WILL ENGAGE IN MITIGATION ACTIONS TO PRESERVE AND PROTECT NATURAL RESOURCES SUCH AS TOPSOIL AND WATERWAYS FROM EROSION

6.1 Huntsville will protect roadways vulnerable to compromised structural integrity, damaged berms, washed away foundation or abutments, or other deterioration due to extreme runoff or highly vulnerable soil types.

21	Property Protection	Mayor	7-1-23	6-30-28	LOC
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3.3.6 Lakeview

Lakeview sits in the far northwest of Logan County on the western shore of Indian Lake. It is a tourist area during warmer months, bringing thousands of tourists to the area to enjoy the recreation opportunities. The community is vulnerable to flooding, heavy rain, and severe winter storms as well as power outages. The population grows considerably during warmer months at the same time of year as severe storms are on the increase. [The Indian Lake Dam is](#)

just south of Lakeview on Indian Lake, located in Washington Township; the lake is a recreational lake that grows in population during the warm months of the year, but is modestly populated during the winter months. There is reasonable concern over the dam and the risk of dam failure, but Lakeview has no authority or responsibility for the dam. Lakeview is concerned about public information as a transient population brings difficulty in notifying them of impending severe weather. The village is governed by a council and mayor. The mayor will lead mitigation efforts.

Table 3-7: Lakeview Mitigation Goals and Strategies

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
GOAL 1: LAKEVIEW WILL ENGAGE IN MITIGATION ACTIONS THAT REDUCE DAMAGES FROM FLOODING.					
1.1 Lakeview will maintain NFIP participation so property owners have access to flood insurance, and will regularly review flood maps to ensure implementation of floodplain regulations and improvement strategies.					
1	Property Protection	Mayor Zoning Inspector	7-1-23	6-30-28	PDM/FMA BRIC LOC
1.2 Lakeview will advocate and support flood insurance where required.					
2	Property Protection	Mayor	7-1-23	6-30-28	LOC
1.3 Lakeview will maintain existing local building codes, zoning regulations, and other land use regulations that encourage sustainable disaster-resistant structures.					
3	Prevention	Mayor Zoning Inspector	7-1-23	6-30-28	LOC
1.4 Lakeview will use financial aid for flood mitigation through grants, fees, and other special programs.					
4	Prevention	Mayor Administrator	7-1-23	6-30-28	LOC PDM/FMA BRIC
1.5 Lakeview will advocate removal of debris, fallen diseased trees, and excess sediment from rivers and to improve river maintenance.					
5	Nat. Resource Protection	Mayor Administrator	7-1-23	6-30-28	LOC ICC
1.6 Lakeview will study the likelihood of potential impact of dam failure that may have negative outcomes on the community, and will identify property and population protection actions that are feasible.					
6	Property Protection	Mayor	7-1-23	6-30-28	LOC ICC
1.7 Lakeview will remove debris and obstructions from ditches and streams.					
7	Nat. Resource Protection	Mayor	7-1-23	6-30-28	LOC
1.8 Lakeview will acquire and demolish properties that flood repeatedly to relocate residents out of the flood risk area, and to restore property to a natural habitat maintained as such into perpetuity when the property owner wants public assistance with flood mitigation assistance.					
8	Prevention	Mayor	7-1-23	6-30-28	LOC FMA/PDM BRIC
1.9 Lakeview will maintain, replace or add storm sewers wastewater pumping stations, water pumps, and other devices or structures to protect property from flooding and to lessen flash flooding.					

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
9	Structurally Engineered	Mayor Administrator	7-1-23	6-30-28	LOC
1.10 Lakeview will require retention/detention ponds to contain runoff water in new development or expansion where surface runoff may cause flooding, where feasible.					
10	Property Protection	Mayor Zoning Inspector	7-1-23	6-30-28	LOC

GOAL 2: LAKEVIEW WILL EMPLOY MITIGATION ACTIONS TO REDUCE DAMAGES INCURRED FROM SEVERE WINDSTORMS, INCLUDING WIND, STRAIGHT-LINE WINDS AND TORNADES.

2.1 Lakeview will advocate and support, and implement on village-owned property, the proper maintenance of trees and vegetation to reduce damages caused by high winds or tornadoes.

11	Property Protection	Mayor Administrator Utility Supt.	7-1-23	6-30-28	LOC
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2.2 Lakeview will advocate for and support the creation of safe rooms for vulnerable locations, including single and multi-family homes and neighborhoods without basements or shelters.

12	Property Protection	Mayor	7-1-23	6-30-28	LOC PDM BRIC
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2.3 Lakeview will maintain and enforce local land use regulations in an effort to reduce storm damages to properties.

13	Prevention	Mayor Zoning Inspector	7-1-23	6-30-28	LOC ICC
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GOAL 3: LAKEVIEW WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE DAMAGES DUE TO UTILITY OUTAGES AND RESOURCE SHORTAGES FROM ALL CAUSES

3.1 Lakeview will establish redundant suppliers of heating fuels, potable water, and other utility needs and will identify and facilitate availability and proper use of generators as an alternate power source.

14	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC ICC
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3.2 Lakeview will encourage the hardening of utilities through review of current utility rules and regulations, damage resistant installation below grade, improvements to supply lines and generations plants, and upgrade of substations and transformers.

15	Property Protection	Mayor	7-1-23	6-30-28	LOC ICC
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GOAL 4: LAKEVIEW WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE DAMAGES FROM ALL SEVERE STORMS, INCLUDING THUNDERSTORMS AND BLIZZARDS, AND OTHER NATURAL DISASTERS AND CAUSES

4.1 Lakeview will establish water conservation procedures to be implemented during water emergencies due to drought or contamination.

16	Nat. Resource Protection	Mayor Administrator	7-1-23	6-30-28	LOC
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4.2 Lakeview will educate the public about local digital warning and notification systems like reverse calling, weather radios, warning sirens, and digital resources that inform them of incoming life-threatening storms or emergencies.

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
17	Public Information	Mayor	7-1-23	6-30-28	LOC HSGP/EMPG
4.3 Lakeview will maintain and improve hardware, software, and capital equipment (outdoor warning sirens) used to deliver warnings and notifications.					
18	Public Information	Fire Chief	7-1-23	6-30-28	LOC Other
4.4 Lakeview will implement a program to identify and remove dead or diseased trees along waterways and in the public domain.					
19	Property Protection	Mayor Administrator Electrical Supt.	7-1-23	6-30-28	LOC

GOAL 5: LAKEVIEW WILL ENGAGE IN MITIGATION ACTIONS THAT ENABLE THE PUBLIC TO OBTAIN AND USE DISASTER INFORMATION TO SAVE LIVES AND PRESERVE PROPERTY FOR ALL HAZARDS PRESENT IN LOGAN COUNTY

5.1 Lakeview will educate the public about all relevant disaster hazards and vulnerabilities, protective actions, available services, vulnerable populations and available assistance and other emergency procedures using a variety of means to include print and spoken media, digital resources, and other appropriate local resources.

20	Public Information	Fire Chief	7-1-23	6-30-28	LOC HSGP/EMPG
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5.2 Lakeview will develop a multi-part communication system to notify all residents of protective action orders, warning and notification, and other critical lifesaving information.

21	Public Information	Fire Chief	7-1-23	6-30-28	LOC HSGP/EMPG
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5.3 Lakeview will develop interoperable communication plans to coordinate life-saving efforts between all community partners during severe incidents.

22	Public Information	Fire Chief	7-1-23	6-30-28	LOC HSGP/EMPG
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5.4 Lakeview will develop, utilize, and maintain a communication plan to include mass media, social media, and direct contact with residents before, during and after incidents.

23	Public Information	Fire Chief	7-1-23	6-30-28	LOC EMPG/HSGP
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GOAL 6: LAKEVIEW WILL ENGAGE IN MITIGATION ACTIONS TO PRESERVE AND PROTECT NATURAL RESOURCES SUCH AS TOPSOIL AND WATERWAYS FROM EROSION.

6.1 Lakeview will protect shorelines and riverbanks from wind, water and other hazards that cause erosion or degradation through stabilization techniques like lining with rip-rap or large stone.

24	Nat. Resource Protection	Mayor	7-1-23	6-30-28	LOC/PDM BRIC
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6.2 Lakeview will protect roadways vulnerable to compromised structure integrity, damaged berms, washed away foundations or abutments, or other deterioration due to severe storms.

25	Property Protection	Mayor	7-1-23	6-30-28	LOC
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GOAL 7 THE VILLAGE OF LAKEVIEW WILL ASSESS ITS VULNERABILITY TO EARTHQUAKE, TAKING INTO CONSIDERATION THE HISTORY OF INCIDENT SEVERITY AND THE BUILDINGS AND INFRASTRUCTURE AT RISK.

7.1 Lakeview will assess its vulnerability to earthquake damages by identifying any critical facilities or key resources that may be negatively affected by an earthquake of 5.0 magnitude or higher.

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
26	Property Protection	Mayor	7-1-23	6-30-28	LOC

3.3.7 Quincy

This small village situated in the far southwest corner of Logan County, close to the Champaign and Shelby County lines. This small community is home to residents who work in area businesses and industries, and take pride in their quiet self-sufficient community. Quincy is governed by a mayor and council, assisted by a small staff. Mitigation actions will be championed and implemented by the mayor and administrator with council’s assistance.

Table 3-8: Quincy Mitigation Goals and Strategies

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
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GOAL 1: QUINCY WILL EMPLOY MITIGATION ACTIONS TO REDUCE DAMAGES INCURRED FROM SEVERE WINDSTORMS, INCLUDING WIND, STRAIGHT-LINE WINDS AND TORNADOES.

1.1 Quincy will advocate and support, and implement on village-owned property, the proper maintenance of trees and vegetation to reduce damages caused by high winds or tornadoes

1	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC
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1.2 Quincy will advocate for and support the creation of safe rooms for vulnerable locations, including single and multi-family homes and neighborhoods without basements or shelters

2	Property Protection	Mayor Administrator	7-1-23	6-30-28	PDM LOC
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1.3 Quincy will implement a program to clear areas of debris after severe wind and flooding to keep crop fodder and debris out of water treatment plants, sewers, transportation routes, and other infrastructure, and to keep roadways open and usable as soon as possible after storms.

3	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC
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1.4 Quincy will maintain and enforce land use regulations in an effort to reduce storm damages to properties.

4	Prevention	Mayor Administrator	7-1-23	6-30-28	LOC
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GOAL 2: QUINCY WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE DAMAGES DUE TO UTILITY OUTAGES AND RESOURCE SHORTAGES FROM ALL CAUSES

2.1 Quincy will encourage the hardening of utilities through damage resistant installation below grade, improvements to supply lines and generations plants, and upgrade of substations and transformers

5	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC ICC Other
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2.2 Quincy will establish redundant suppliers of heating fuels, potable water, and other utility needs and will identify and facilitate availability and proper use of generators as an alternate power source

6	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC
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GOAL 3: QUINCY WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE DAMAGES FROM ALL SEVERE STORMS, INCLUDING THUNDERSTORMS AND BLIZZARDS, AND OTHER NATURAL DISASTERS AND CAUSES.

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
3.1 Quincy will educate the public about local digital warning and notification systems that inform them of incoming severe weather and life-threatening incidents					
7	Public Information	Fire Chief	7-1-23	6-30-28	LOC HSGP/EMPG
3.2 Quincy will develop and implement a program to assist in the removal of dead or diseased trees along waterways and roadways that have been affected by Emerald Ash Borer and other invasive species.					
8	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC ICC
3.3 Quincy will help farms reduce losses after severe storms, power outages, or hazardous materials incidents by supporting farmer's needs through clearing roads for ongoing ingress and egress to farms, and assisting with other issues of importance to agriculture.					
9	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC Other
3.4 Quincy will help farms identify protective measures needed to protect equipment, facilities, and operations from storm damages.					
10	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC ICC
3.5 Quincy will maintain and improve hardware, software, and capital equipment (outdoor warning sirens) used to deliver warnings and notifications.					
11	Public Information	Mayor Administrator	7-1-23	6-30-28	LOC EMPG/HSGP
3.6 Quincy will improve capacity to rapidly place temporary warning signs that indicate dangerous road conditions.					
12	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC

GOAL 4: QUINCY WILL ENGAGE IN MITIGATION ACTIONS THAT REDUCE DAMAGES FROM FLOODING

4.1 Quincy will Shelby County consider resolving an NFIP sanction and establishing participation as a way to make more flood protection available to the community and to prevent future damages through floodplain regulation					
13	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC
4.2 Quincy will advocate and support flood insurance where required.					
14	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC ICC
4.3 Quincy will maintain existing local building codes, zoning regulations, and other land use regulations that encourage sustainable disaster-resistant structures in all areas.					
15	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC
4.4 Quincy will use financial aid for flood mitigation through grants, fees, and other special programs.					
16	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC PDM
4.5 Quincy will advocate removal of debris, fallen diseased trees, and excess sediment from rivers to improve river maintenance.					

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
17	Nat. Resource Protection	Mayor Administrator	7-1-23	6-30-28	LOC ICC
4.6 Quincy will participate in storm water vulnerability study to improve wastewater systems and field tiling practices to limit damages from runoff water.					
18	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC
4.7 Quincy will maintain, replace, or add storm sewers, wastewater pumping stations, water pumps, and other devices or structures to protect property from flooding and to lessen flash flooding.					
19	Structurally Engineered	Mayor Administrator	7-1-23	6-30-28	LOC ICC
4.8 Quincy will remove debris and obstructions from ditches and streams.					
20	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC
4.9 Quincy will require retention and detention ponds to contain runoff water in new development or expansion where surface runoff may cause flooding.					
21	Structurally Engineered	Mayor Administrator	7-1-23	6-30-28	LOC PDM
4.10 Quincy will utilize elevation to protect critical infrastructure and property from flooding.					
22	Structurally Engineered	Mayor Administrator	7-1-23	6-30-28	LOC PDM
4.11 Quincy will acquire and demolish properties that flood repeatedly to relocate residents out of flood risk areas, and restore property to a natural habitat maintained as such into perpetuity.					
23	Prevention	Mayor Administrator	7-1-23	6-30-28	LOC PDM/FMA
4.12 Quincy will create vegetative buffer zones, wetlands, and natural habitat in low-lying areas to hold excess runoff until it drains downstream naturally.					
24	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC PDM
4.13 Quincy will study the likelihood and potential impact of dam failure that may impact the village.					
25	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC
4.14 Quincy will properly maintain dams, spillways, and up-ground reservoirs to lessen the likelihood of structural failure and flooding due to poor maintenance.					
26	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC
4.15 Quincy will support improvement to roads and infrastructure including an increase in bridge spans, repair of shoulders and berms, increase in culvert size, maintenance of bridge slopes and protection of roadways from storm and flood damages, to enhance the likelihood of open roadways even after severe flooding and drainage.					
27	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC
4.16 Quincy will support efforts to replace deteriorated tiles, plant cover crops, utilize conservation tillage, install tile control structures where feasible, and use filter strips for slope protection.					
28	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
GOAL 5: QUINCY WILL ENGAGE IN MITIGATION ACTIONS TO PRESERVE AND PROTECT NATURAL RESOURCES SUCH AS TOPSOIL AND WATERWAYS FROM EROSION.					
5.1 Quincy will protect roadways vulnerable to compromised structure integrity, damaged berms, washed away foundations or abutments, or other deterioration due to severe storms					
29	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC
5.2 Quincy will protect waterways by reducing slope erosion, land subsidence, and wind damage through cover plants, vegetation, grassy waterways, filter strips, buffers, and such.					
30	Nat. Resource Protection	Mayor Administrator	7-1-23	6-30-28	LOC PDM
5.3 Quincy will establish conservation procedures to be used during water emergencies or shortages due to drought or contaminated water supplies					
31	Nat. Resource Protection	Mayor Administrator	7-1-23	6-30-28	LOC
GOAL 6: QUINCY WILL ENGAGE IN MITIGATION ACTIONS THAT ENABLE THE PUBLIC TO OBTAIN AND USE DISASTER INFORMATION TO SAVE LIVES AND PRESERVE PROPERTY FOR ALL HAZARDS PRESENT IN LOGAN COUNTY.					
6.1 Quincy will educate the public about all relevant disaster hazards and vulnerabilities, protective actions, available services, vulnerable populations and available assistance and other emergency procedures using a variety of means to include print and spoken media, digital resources, and other appropriate local resources					
32	Public Information	Mayor Administrator	7-1-23	6-30-28	LOC EMPG/HSGP
6.2 Quincy will develop a multi-part communication system to notify all residents of protective action orders, warnings and notification, and other critical lifesaving information.					
33	Public Information	Mayor Administrator	7-1-23	6-30-28	LOC EMPG/HSGP
6.3 Quincy will develop interoperable communication plans to coordinate life-saving efforts between all community partners during severe incidents.					
34	Public Information	Mayor Administrator	7-1-17	6-30-28	LOC
6.4 Quincy will improve parcel location mapping to facilitate locating and responding to emergency and disaster calls in a rapid and effective way, as well as to facilitate the use of mutual aid resources, when necessary, as assistance to responders and dispatchers.					
35	Public Information	Mayor Administrator	7-1-17	6-30-28	LOC
6.5 Quincy will improve GIS mapping to include infrastructure and utility mapping, and expand the customizations capability of software to produce data that is useful in community planning.					
36	Public Information	Mayor Administrator	7-1-23	6-30-28	LOC
6.6 Quincy will work to develop enhanced methods of cross-discipline and interjurisdictional planning efforts to create whole community efforts to improve communities and expand disaster resilience.					
37	Public Information	Mayor Administrator	7-1-23	6-30-28	LOC
6.7 Quincy will develop, utilize, and maintain a communication plan to include mass media, social media, and direct contact with residents before, during, and after incidents.					

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
38	Public Information	Mayor Administrator	7-1-23	6-30-28	LOC
6.8 Quincy will identify potential damages and losses from an earthquake, and will establish a way to locate village residents who would require assistance in this kind of incident.					
39	Property Protection	Mayor Administrator Fire Chief	7-1-23	6-30-28	LOC

3.3.8 Rushsylvania

Rushsylvania sites in the northeast quadrant of Logan County, and is surrounded by farms in Rushcreek Township. The small village is concerned about windstorms and general storm damage, and is exposed to some flooding, especially flash flooding, after heavy precipitation. The slightly rolling terrain is subject to some utility outages and erosion. Rushsylvania is governed by a mayor and council form of government, and the mayor will take on mitigation strategies as part of her duties.

Table 3-9: Rushsylvania Mitigation Goals and Strategies

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
GOAL 1: RUSHSYLVANIA WILL EMPLOY MITIGATION ACTIONS TO REDUCE DAMAGES INCURRED FROM SEVERE WINDSTORMS, INCLUDING WIND, STRAIGHT-LINE WINDS AND TORNADOES					
1.1 Rushsylvania will advocate and support the proper maintenance of trees and vegetation to reduce damages caused by high winds or tornadoes.					
1	Property Protection	Mayor	7-1-23	6-30-28	LOC ICC
1.2 Rushsylvania will advocate for and support the creation of safe rooms single and multi-family homes and neighborhoods without basements or shelters.					
2	Property Protection	Mayor	7-1-23	6-30-28	LOC PDM BRIC
GOAL 2: RUSHSYLVANIA WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE DAMAGES FROM ALL SEVERE STORMS, INCLUDING THUNDERSTORMS AND BLIZZARDS, AND OTHER NATURAL DISASTERS AND CAUSES					
2.1 Rushsylvania will maintain and improve hardware, software, and capital equipment (outdoor warning sirens) used to deliver warnings and notifications.					
4	Public Information	Mayor	7-1-23	6-30-28	LOC EMPG/HSGP
2.3 Rushsylvania will implement a program to identify and remove dead or diseased trees along waterways and in the public domain.					
5	Property Protection	Mayor	7-1-23	6-30-28	LOC ICC

GOAL 3: RUSHSYLVANIA WILL ENGAGE IN MITIGATION ACTIONS THAT REDUCE DAMAGES FROM FLOODING

3.1 Rushsylvania will consider joining NFIP as a way to make more flood protection available to the community and to prevent future damages through floodplain regulation.

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
6	Property Protection	Mayor	7-1-23	6-30-28	LOC
3.2 Rushsylvania will advocate and support flood insurance where required.					
7	Property Protection	Mayor	7-1-23	6-30-28	LOC ICC
3.3 Rushsylvania will remove debris and obstructions from ditches and streams.					
8	Property Protection	Mayor	7-1-23	6-30-28	LOC ICC

GOAL 4: RUSHSYLVANIA WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE DAMAGES DUE TO UTILITY OUTAGES AND RESOURCE SHORTAGES FROM ALL CAUSES

4.1 Rushsylvania will identify and facilitate availability and proper use of generators as an alternate power source.

9	Property Protection	Mayor	7-1-23	6-30-28	LOC Other
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GOAL 5: RUSHSYLVANIA WILL ENGAGE IN MITIGATION ACTIONS THAT ENABLE THE PUBLIC TO OBTAIN AND USE DISASTER INFORMATION TO SAVE LIVES AND PRESERVE PROPERTY FOR ALL HAZARDS PRESENT IN LOGAN COUNTY

5.1 Rushsylvania will educate the public about all relevant disaster hazards and vulnerabilities, protective actions, available services, vulnerable populations and available assistance and other emergency procedures using a variety of means to include print and spoken media, digital resources, and other appropriate resources.

10	Public Information	Mayor	7-1-23	6-30-28	LOC
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5.2 Rushsylvania will develop a multi-part communication system to notify all communities of protective actions orders, warnings and notifications, and other critical lifesaving information.

11	Public Information	Mayor	7-1-23	6-30-28	LOC
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5.3 Rushsylvania will develop interoperable communication plans to coordinate life-saving efforts between all community partners during severe incidents.

12	Public Information	Mayor	7-1-23	6-30-28	LOC
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GOAL 6: RUSHSYLVANIA WILL ENGAGE IN MITIGATION ACTIONS TO PRESERVE AND PROTECT NATURAL RESOURCES SUCH AS TOPSOIL AND WATERWAYS FROM EROSION

6.1 Rushsylvania will establish conservation procedures to be used during water emergencies or shortages due to drought or contaminated water supplies.

14	Nat. Resource Protection	Mayor	7-1-23	6-30-28	LOC ICC
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6.2 Rushsylvania will monitor developing information and data from ODNR that identifies and verifies Karst areas in the village, and will react appropriately as threats to structures or infrastructure develop.

15	Natural Resource Protection	Mayor	7-1-23	6-30-28	LOC
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GOAL 7 THE VILLAGE OF RUSHSYLVANIA WILL ASSESS ITS VULNERABILITY TO EARTHQUAKES, TAKING INTO ACCOUNT THE BUILDINGS OR INFRASTRUCTURE AT RISK.

7.1 Rushsylvania will assess its vulnerability to earthquake damages by identifying any critical facilities or key resources that may be negatively affected by an earthquake of 5.0 magnitude or higher.

15	Property Protection	Mayor	7-1-23	6-30-28	LOC
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3.3.9 Russells Point

Russells Point is part of an inland lake community in the far northwest of Logan County. Sitting at the mid-southern edge of Indian Lake, these residents welcome thousands of tourists in warmer months to enjoy boating, swimming and fishing on the man-made body of water. As such, there are many roads and streets on the waterfront and hundreds of cottages and cabins, as well as mobile and recreational vehicle homes, on the shores of the lake. Indian Lake Dam sits in a small area on the east side of the village that is part of Washington Township, and the dam is owned by ODNR. Therefore, Russells Point has no authority or responsibility for the dam, but likely could be in the inundation zone if the dam were to fail. When the lake fills with water after heavy rains and can accept no more, the ditches that lead to the lake back up in Russells Point and cause flooding. This community, along with Lakeview and the unincorporated areas circling Indian Lake, make up a neighborhood of resilient and hard-working people who live on the edge of a productive agricultural township or two. They are most concerned about flooding, wind, and utilities, although generally severe storms, communication with the rest of the county as well as their transient population, and erosion round out their concerns.

Russells Point is governed by a village mayor and council, and the mayor will assume responsibility for championing the mitigation strategies.

Table 3-10 Russells Point Mitigation Goals and Strategies

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
GOAL 1: RUSSELLS POINT WILL ENGAGE IN MITIGATION ACTIONS THAT REDUCE DAMAGES FROM FLOODING.					
1.1 Russells Point will maintain NFIP participation so property owners have access to flood insurance, and will regularly review flood maps to ensure implementation of floodplain regulations and improvement strategies.					
1	Property Protection	Mayor	7-1-23	6-30-28	LOC
1.2 Russells Point will advocate and support flood insurance where required.					
2	Property Protection	Mayor	7-1-23	6-30-28	LOC ICC
1.3 Russells Point will maintain existing building codes, zoning regulations, and other land use regulations that encourage sustainable disaster-resistant structures in all areas.					
3	Property Protection	Mayor	7-1-23	6-30-28	LOC ICC
1.4 Russells Point will use financial aid for mitigation through grants, fees, and other special programs.					
4	Property Protection	Mayor	7-1-23	6-30-28	PDM BRIC FMA/SRL LOC
1.5 Russells Point will advocate for removal of debris, fallen diseased trees, and excess sediment from rivers and to improve river maintenance.					
5	Nat. Resource Protection	Mayor	7-1-23	6-30-28	LOC ICC

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
1.6 Russells Point will advocate for ODNR to develop an Emergency Action Plan for the Indian Lake Dam that ODNR owns, and will work with them to assess the potential impact of dam failure on the jurisdiction if it were to occur.					
6	Property Protection	Mayor	7-1-23	6-30-28	LOC ICC
1.7 Russells Point will remove debris and obstructions from ditches and streams where waterways are village responsibility.					
7	Nat. Resource Protection	Mayor	7-1-23	6-30-28	LOC
1.8 Russells Point will participate in storm water vulnerability study to improve wastewater systems and field tiling practices to limit damages from runoff water.					
8	Property Protection	Mayor	7-1-23	6-30-28	LOC ICC
1.9 Russells Point will maintain, replace, or add right-sized storm sewers, manholes, wastewater pumping stations, water pumps, and other devices or structures to protect property from flooding and to lessen flash flooding.					
9	Property Protection	Mayor	7-1-23	6-30-28	LOC
1.10 Russells Point will support efforts to replace deteriorated tiles, plant cover crops, utilize conservation tillage, install tile control structures where feasible and use filter strips for slope protection.					
10	Property Protection	Mayor	7-1-23	6-30-28	LOC
1.11 Russells Point will use elevation to remove components of systems, structures, or infrastructure out of the areas that flood.					
11	Structurally engineered project	Mayor	7-1-23	6-30-23	LOC PDM BRIC FMA
1.12 Russells Point will use acquisition and relocation grants and programs to mitigation repetitive loss properties and prevent future flooding when the property owner is agreeable to that option.					
12	Prevention	Mayor	7-1-23	6-30-28	
1.13 Russells Point will emphasize and support the creation of water retention and detention as a method of controlling floods.					
13	Property Protection	Mayor	7-1-23	6-30-28	LOC BRIC PDM FMP

GOAL 2: RUSSELLS POINT WILL EMPLOY MITIGATION ACTIONS TO REDUCE DAMAGES INCURRED FROM SEVERE WINDSTORMS, INCLUDING WIND, STRAIGHT-LINE WINDS AND TORNADOES

2.1 Russells Point will advocate and support, and implement on village-owned property, the proper maintenance of trees and vegetation to reduce damages caused by high winds or tornadoes.

11	Property Protection	Mayor	7-1-23	6-30-28	PDM BRIC
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2.2 Russells Point will advocate for and support the creation of safe rooms for vulnerable locations, including single and multi-family homes and neighborhoods without basements or shelters.

12	Property Protection	Mayor	7-1-23	6-30-28	LOC PDM BRIC
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Priority	Action Type	Lead Agency	Start Date	End Date	Funding
2.3 Russells Point will clear areas of debris after severe wind and flooding to keep debris out of water treatment plants, sewers, transportation routes, and other infrastructure, and to keep roadways open and usable as soon as possible after storms.					
13	Property Protection	Mayor	7-1-23	6-30-28	LOC ICC

GOAL 3: RUSSELLS POINT WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE DAMAGES DUE TO UTILITY OUTAGES AND RESOURCE SHORTAGES FROM ALL CAUSES.

3.1 Russells Point will identify alternate suppliers of heating fuels, potable water, and other utility needs and will identify and facilitate availability and proper use of generators as an alternate power source.					
14	Property Protection	Mayor	7-1-23	6-30-28	LOC ICC Other

3.2 Russells Point will establish conservation procedures to be used during water emergencies or shortages due to drought or contamination.

15	Nat. Resource Protection	Mayor	7-1-23	6-30-28	LOC ICC
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3.3 Russells Point will advocate for buried utility lines wherever possible, with an emphasis upon new construction and major renovation projects.

16. Russells Point will advocate for and support regulation that guides development in a disaster-safe manner, such as building codes, fire codes, zoning, and floodplain regulation that encourages disaster-smart practices.

GOAL 4: RUSSELLS POINT WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE DAMAGES FROM ALL SEVERE STORMS, INCLUDING THUNDERSTORMS AND BLIZZARDS, AND OTHER NATURAL DISASTERS AND CAUSES.

4.1 Russells Point will support local fire district efforts to maintain and improve hardware (radios and consoles, etc.), software, and capital equipment (outdoor warning sirens) used to deliver warnings and notifications, or for communication between responders and key village departments.					
16	Public Information	Mayor	7-1-23	6-30-28	LOC HSGP/EMPG
4.2 Russells Point will identify and develop agreements to use existing areas for comfort stations when there are heat or cooling outages, community information centers are needed, or sheltering is necessary.					
17	Property Protection	Mayor	7-1-23	6-30-28	LOC
4.3 Russells Point will advocate for all property owners and renters to purchase the proper insurance policies for their property, based upon their individual situation and circumstance.					
18	Property Protection	Mayor	7-1-232	6-30-28	LOC

GOAL 5: RUSSELLS POINT WILL ENGAGE IN MITIGATION ACTIONS THAT ENABLE THE PUBLIC TO OBTAIN AND USE DISASTER INFORMATION TO SAVE LIVES AND PRESERVE PROPERTY FOR ALL HAZARDS PRESENT IN LOGAN COUNTY.

5.1 Russells Point will educate the public about all relevant disaster hazards and vulnerabilities, protective actions, available services, vulnerable populations and available assistance and other emergency procedures using a variety of means to include print and spoken media, digital resources, and other appropriate local resources, and will support the Logan County Emergency Operations Center as it works to serve all populations.

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
17	Public Information	Mayor	7-1-23	6-30-28	LOC ICC
5.2 Russells Point will develop a multi-part communication system to notify all residents of protective action orders, warnings and notifications, and other critical lifesaving information, and will advocate for all residents to sign up for the alerts that convey this information.					
18	Public Information	Mayor	7-1-23	6-30-28	LOC EMPG/HSGP
5.3 Russells Point will develop utilize, and maintain a communication plan to include mass media, social media, and direct contact with residents before, during and after incidents.					
19	Public Information	Mayor	7-1-23	6-30-28	LOC

GOAL 6: RUSSELLS POINT WILL ENGAGE IN MITIGATION ACTIONS TO PRESERVE AND PROTECT NATURAL RESOURCES SUCH AS TOPSOIL AND WATERWAYS FROM EROSION.

6.1 Russells Point will protect roadways vulnerable to compromised structural integrity, damaged berms, washed away foundations or abutments, or other deterioration due to extreme runoff or specific highly vulnerable soils or slopes.

20	Property Protection	Mayor	7-1-23	6-30-28	LOC ICC Other
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6.2 Russells Point will protect waterways by reducing slope erosion, land subsidence and wind damage through cover plants, vegetation, grassy waterways, filter strips, buffers, and other engineered options.

21	Nat. Resource Protection	Mayor	7-1-23	6-30-28	LOC ICC Other
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GOAL 7 THE VILLAGE OF RUSSELLS POINT WILL ASSESS ITS VULNERABILITY TO EARTHQUAKES, TAKING INTO CONSIDER THE INCIDENT SEVERITY AND THE BUILDINGS OR INFRASTRUCTURE AT RISK.

7.1 Russells Point will assess its vulnerability to earthquake damages by identifying any critical facilities or key resources that may be negatively affected by an earthquake of 5.0 magnitude or higher.

22	Property Protection	Mayor	7-1-23	6-30-28	LOC
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3.3.10 Valley Hi

Valley Hi sits atop the highest peak in Logan County and while the year-round population is very small, many tourists come to the village to enjoy snow skiing and other winter sports in a winter wonderland kind of atmosphere. The peak that is home to Valley Hi is steep, and the village can be isolated very easily, due to ice and snow causing the one road in – one road out to be closed, or due to wind and storms causing trees to fall and block the roadway. Fortunately, due to elevation and the steep incline leading to the hilltop village, Valley Hi is not vulnerable to flooding, but it is vulnerable to flash flooding that seriously erodes and damages roads, driveways, and bridges or culverts. The village's financial challenges have prevented them from developing resources like alternators to generate electricity when power is out, or development of secondary access and emergency vehicle access when the road is blocked. The village is vulnerable to an array of predicaments due to the access problem. As residents and village commission members talked through mitigation actions, they developed the following list to start enabling Valley Hi to lessen risks and become a resilient, sustainable community. The

village commissioners will share responsibility for implementation; there are no employees and only a clerk and a solicitor to advise them.

Table 3-11: Valley Hi Mitigation Goals and Strategies

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
GOAL 1: VALLEY HI WILL EMPLOY MITIGATION ACTIONS THAT REDUCE DAMAGES FROM SEVERE WIND STORMS THAT INCLUDE WIND, STRAIGHT-LINE WINDS AND TORNADOES.					
1.1 Valley Hi will advocate proper trimming of trees and vegetation to reduce damages caused by wind, especially where trees are infected with disease like Emerald Ash Borer.					
1	Prevention	Commissioners	7-1-23	6-30-28	LOC
GOAL 2: VALLEY HI WILL EMPLOY ACTIONS TO LESSEN THE DAMAGES FROM SEVERE WINTER STORMS, WITH AN EMPHASIS UPON DAMAGE BY ICE AND SNOW.					
2.1 Valley Hi will clear roads of ice and fallen trees to prevent blockages and make roads usable as soon as possible after storms.					
2	Property Protection	Commissioners	7-1-23	6-30-28	LOC ICC
2.2 Valley Hi will study the pre-positioning of emergency apparatus, pre-deployment of necessary resources, and the stockpiling of critical supplies to sustain the community during a long-term isolating incident, including bulk or bottled water during an outage or drought.					
3	Property Protection	Commissioners	7-1-23	6-30-28	LOC
GOAL 3: VALLEY HI WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE THE EROSION OF TOPSOIL AND ROADS DUE TO FLOODING, LAND USE, OR HUMAN CAUSED INCIDENTS.					
3.1 Valley Hi will protect its roadways and streets that are extremely vulnerable to compromised structural integrity, damaged berms, washed away foundation or abutments, landslide or mudslide, or other deterioration due to extreme runoff and vulnerable soil types as well as incline.					
4	Property Protection	Commissioners	7-1-23	6-30-28	LOC ICC
GOAL 4: VALLEY HI WILL CONDUCT MITIGATION ACTIONS TO REDUCE THE VULNERABILITY OF ITS POPULATION TO DAMAGES AND CASUALTY DUE TO ALL TYPES OF DISASTERS AND SEVERE STORMS.					
4.1 Valley Hi will identify and remove dead or diseased trees along waterways, roadways and other public property.					
5	Property Protection	Commissioners	7-1-23	6-30-28	LOC
4.2 Valley Hi will identify any exceptionally vulnerable infrastructure that would be damaged by an earthquake.					
6	Property Protection	Commissioners	7-1-23	6-30-28	LOC
GOAL 5: VALLEY HI WILL WORK TO PREVENT DAMAGE AND CASUALTY DUE TO FLASH FLOODING.					
5.1 Valley Hi will use financial aid for flood mitigation through grants, fees, and other special programs.					
7	Prevention	Commissioners	7-1-23	6-30-28	LOC PDM/FMA
5.2 Valley Hi will implement improvements to ditch and stream maintenance to reduce sedimentation and erosion.					

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
8	Nat. Resource Protection	Commissioners	7-1-23	6-30-28	LOC PDM
5.3 Valley Hi will make improvements to roads and infrastructure including increases in bridge spans, repair of shoulders and berms, increases in culvert sizes, maintenance of bridge slopes and protection of roadways from storms and flood damages, to enhance the likelihood of open roadways during and after storms.					
9	Property Protection	Commissioners	7-1-23	6-30-28	LOC ICC
5.4 Valley Hi will remove debris and obstructions from ditches and streams.					
10	Property Protection	Commissioners	7-1-23	6-30-28	LOC ICC

3.3.11 West Liberty

West Liberty is a small community in central southern Logan County. Residents work in area industry, and this small community sits atop some of the higher elevations of Logan County. They are most concerned about **flooding**, wind and communications, followed by general storm damages, utility outages, general storm damage, and erosion. The community is governed by a mayor and council, and the mayor will take on implementation of the mitigation strategies.

Table 3-12: West Liberty Mitigation Goals and Strategies

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
GOAL 1: WEST LIBERTY WILL EMPLOY MITIGATION ACTIONS TO REDUCE DAMAGES INCURRED FROM SEVERE WINDSTORMS, INCLUDING WIND, STRAIGHT-LINE WINDS AND TORNADOES					
1.1 West Liberty will advocate proper trimming of trees and vegetation to reduce damages caused by wind, especially where trees are infected with disease like Emerald Ash Borer.					
1	Property Protection	Mayor Street Dept. Sup.	7-1-23	6-30-28	LOC
1.2 West Liberty will clear areas of crop debris after severe wind and flooding to keep fodder out of culverts and sewer systems.					
2	Property Protection	Mayor Street Dept. Sup.	7-1-23	6-30-28	LOC ICC
1.3 West Liberty will support the construction of safe rooms for single and multi-family homes without basements or shelters.					
3	Property Protection	Mayor	7-1-23	6-30-28	LOC PDM BRIC

GOAL 2: WEST LIBERTY WILL ENGAGE IN MITIGATION ACTIONS THAT ENABLE THE PUBLIC TO OBTAIN AND USE DISASTER INFORMATION TO SAVE LIVES AND PRESERVE PROPERTY FOR ALL HAZARDS PRESENT IN LOGAN COUNTY.

2.1 West Liberty will maintain interoperable communication plans and warning systems to coordinate life-saving efforts between all community partners and residents during severe incidents.

4	Public Information	Mayor Public Safety Services	7-1-23	6-30-28	LOC HSGP/EMPG
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Priority	Action Type	Lead Agency	Start Date	End Date	Funding
2.2 West Liberty will develop, utilize and maintain a communication plan to include mass media, social media, and direct contact with residents before, during, and after incidents.					
5	Public Information	Mayor	7-1-23	6-30-28	LOC
2.3 West Liberty will improve GIS mapping to include infrastructure and utility mapping, and expand the customization capability of software to produce data that is useful in community planning.					
6	Public Information	Mayor Water/Wastewater Sup.	7-1-23	6-30-28	LOC ICC
2.4 West Liberty will work to develop enhanced methods of cross-discipline and interjurisdictional planning efforts to create whole community efforts to improve communities and expand disaster resilience.					
7	Public Information	Mayor Public Safety Services	7-1-23	6-30-28	LOC
2.5 West Liberty will educate the public about local disaster hazards, vulnerabilities, protective actions, services, vulnerable populations, available assistance, and emergency procedures using mass and social media, printed information and other options.					
8	Public Information	Mayor	7-1-23	6-30-28	LOC

GOAL 3: WEST LIBERTY WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE STORM DAMAGES DUE TO UTILITY OUTAGES AND RESOURCE SHORTAGES FROM ALL CAUSES.

3.1 West Liberty will encourage the hardening of utilities through damage resistant installation below grade, improvements to supply lines and generations plants, and upgrade of substations and transformers.					
9	Property Protection	Mayor	7-1-23	6-30-28	LOC ICC Other
3.2 West Liberty will establish redundant suppliers of heating fuels, potable water, and other utility needs and will identify and facilitate availability and proper use of generators as an alternate power source.					
10	Property Protection	Mayor Public Safety Services	7-1-23	6-30-28	LOC Other

GOAL 4: WEST LIBERTY WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE DAMAGES FROM ALL SEVERE STORMS, INCLUDING THUNDERSTORMS AND BLIZZARDS, AND OTHER NATURAL DISASTERS AND CAUSES.

4.1 West Liberty will identify and remove dead or diseased trees along waterways and in the public domain.					
11	Property Protection	Mayor Street Supervisor	7-1-23	6-30-28	LOC
4.2 West Liberty will maintain and improve hardware, software, and capital equipment (outdoor warning sirens) used to deliver warnings and notifications.					
12	Public Information	Mayor Village Council	7-1-23	6-30-28	LOC EMPG/HSGP
4.3 West Liberty will educate the public about local digital warning and notification systems like reverse calling, weather radios, warning sirens, and digital resources that inform them of incoming life-threatening storms or emergency incidents.					
13	Public Information	Mayor Village Council Co. EMA Director	7-1-23	6-30-28	LOC HSGP/EMPG

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
4.4 West Liberty establish water conservation procedures to be implemented during water emergencies due to drought or contamination.					
14	Nat. Resource Protection	Mayor Water Dept. Sup.	7-1-23	6-30-28	LOC ICC

GOAL 5: WEST LIBERTY WILL ENGAGE IN MITIGATION ACTIONS THAT REDUCE DAMAGES FROM FLOODING

5.1 West Liberty will maintain NFIP participation so property owners have access to flood insurance, and will regularly review flood maps to ensure implementation of floodplain regulations and improvement strategies.

15	Property Protection	Mayor Village Council	7-1-23	6-30-28	LOC
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5.2 West Liberty will advocate and support flood insurance where required.

16	Property Protection	Mayor Village Council	7-1-23	6-30-28	LOC ICC
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5.3 West Liberty will maintain existing local building codes, zoning regulations, and other land use regulations that encourage sustainable disaster-resistant structures in all areas.

17	Prevention	Mayor Code Enf./Zoning	7-1-23	6-30-28	LOC ICC
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5.4 West Liberty will use financial aid for flood mitigation through grants, fees, and other special programs.

18	Prevention	Mayor Village Council	7-1-23	6-30-28	LOC PDM
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5.5 West Liberty will maintain, replace, or add storm sewers, wastewater pumping stations, water pumps, and other devices or structures to protect property from flooding and to lessen flash flooding.

19	Property Protection	Mayor Water/Sewer Sup.	7-1-23	6-30-28	LOC ICC PDM BRIC
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5.6 West Liberty will remove debris and obstructions from ditches and streams.

20	Property Protection	Mayor Street Sup.	7-1-23	6-30-28	LOC ICC
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5.7 West Liberty study countywide storm water vulnerability to improve wastewater systems and field tiling practices to limit damages from runoff water.

21	Property Protection	Mayor Water Sup.	7-1-23	6-30-28	LOC
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5.8 West Liberty will implement improvements to the ditch maintenance to reduce sedimentation and erosion.

22	Property Protection	Mayor Village Council	7-1-23	6-30-28	LOC ICC
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5.9 West Liberty will utilize elevation to protect critical infrastructure and property from flooding.

23	Prevention	Mayor Village Council	7-1-23	6-30-28	LOC PDM BRIC
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5.10 West Liberty will create vegetative buffer zones, wetlands, and natural habitat in low-lying areas to hold excess runoff until it drains downstream naturally.

24	Property Protection	Mayor Village Council	7-1-23	6-30-28	LOC PDM BRIC
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Priority	Action Type	Lead Agency	Start Date	End Date	Funding
5.11 West Liberty will require retention/detention ponds to contain runoff water in new development or expansion where surface runoff may cause flooding.					
25	Structurally Engineered	Mayor Code Enforcement Zoning	7-1-23	6-30-28	LOC PDM/FMA BRIC

GOAL 6: WEST LIBERTY WILL ENGAGE IN MITIGATION ACTIONS TO PRESERVE AND PROTECT NATURAL RESOURCES SUCH AS TOPSOIL AND WATERWAYS FROM EROSION.

6.1 West Liberty will protect roadway vulnerable to compromised structural integrity, damaged berms, washed away foundations or abutments, or other deterioration due to extreme runoff or specific highly vulnerable soil types.

26	Property Protection	Mayor Street Dept. Sup.	7-1-23	6-30-28	LOC ICC
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GOAL 7 THE VILLAGE OF WEST LIBERTY WILL ASSESS ITS VULNERABILITY TO EARTHQUAKES, TAKING INTO CONSIDERATION THE BUILDINGS OR INFRASTRUCTURE AT RISK.

7.1 West Liberty will assess its vulnerability to earthquake damages by identifying any critical facilities or key resources that may be affected by an earthquake of 5.0 magnitude or greater.

27	Property Protection	Mayor Fire Chief	7-1-23	6-30-28	LOC
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3.3.12 West Mansfield

This village sits on the far eastern side of Logan County, just a hop away from Union County. Near the manufacturing giant, Honda of America, many residents work in the automotive facilities and live in West Mansfield. Replacement of the 100-year-old clay tile storm sewer system is a priority as tree roots clogs drainage almost daily. This makes it impossible for low-lying areas to drain, and surface flooding is common in certain sections of town. Flash flooding of ditch banks causes wash-away that they constantly maintain with placement of rip-rap. Residents are most concerned about flash flooding, what seems like constant wind and being able to communicate internally and with other communities during a disaster. Rounding out their main concerns are utility outages, general bad storms, and erosion. The village is governed by a council and mayor, and the mayor and administrator will take on implementation of the mitigation strategies.

Table 3-13: West Mansfield Mitigation Goals and Strategies

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
GOAL 1: WEST MANSFIELD WILL ENGAGE IN MITIGATION ACTIONS THAT REDUCE DAMAGES FROM FLOODING.					
1.1 West Mansfield will maintain NFIP participation so property owners have access to flood insurance, and will regularly review flood maps to ensure implementation of floodplain regulations and improvement strategies.					
1	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC

1.2 West Mansfield will advocate and support flood insurance where required or practically necessary.

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
2	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC
1.3 West Mansfield will maintain existing local building codes, zoning regulation, and other land use regulations that encourage sustainable disaster-resistant structures in all areas.					
3	Prevention	Mayor Administrator	7-1-23	6-30-28	LOC ICC
1.4 West Mansfield will use financial aid for flood mitigation through grants, fees, and other special programs.					
4	Prevention	Mayor Administrator	7-1-23	6-30-28	PDM FMA/SRL LOC
1.5 West Mansfield will advocate for removal of debris, fallen diseased trees and excess sediment from rivers, and for improvement of river maintenance.					
5	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC Other
1.6 West Mansfield will participate in countywide storm water vulnerability study to improve wastewater systems and field tiling practices to limit damages from rapid or excessive runoff water.					
6	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC ICC
1.7 West Mansfield will improve ditch maintenance to reduce sedimentation and erosion.					
7	Nat. Resource Protection	Mayor Administrator	7-1-23	6-30-28	LOC Other
1.8 West Mansfield will maintain, replace, or add storm sewers, wastewater pumping stations, water pumps, and other devices or structures to protect property from flooding and to lessen flash flooding.					
8	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC
1.9 West Mansfield will remove debris and obstructions from waterways in the village.					
9	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC ICC
1.10 West Mansfield will advocate for replacement of deteriorated tiles, planting of cover crops, utilizing conservation tillage, installation of tile control structures where feasible, and use of filter strips for slope protection to assist near-by or adjacent farmers with disaster resiliency.					
10	Nat. Resource Protection	Mayor Administrator	7-1-23	6-30-28	LOC ICC
1.11 West Mansfield will require retention or detention ponds to contain runoff water in new development, expansion, or anywhere surface runoff may cause flooding.					
11	Structurally Engineered	Mayor Administrator	7-1-23	6-30-28	LOC PDM
1.12 West Mansfield will make improvements to road and infrastructure including increase of bridge spans, repair of shoulders and berms, increase in culvert size, replacement of clay tiles, maintenance of bridge slopes and protection of roadways from storm and flood damage, to enhance the likelihood of open roadways even after severe flooding and drainage.					
12	Structurally Engineered	Mayor Administrator	7-1-23	12-31 22	LOC PDM
1.13 West Mansfield will utilize elevation to protect critical infrastructure, key resources, and property from flooding.					

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
13	Structurally Engineered	Mayor Administrator	7-1-23	6-30-28	LOC PDM
1.14 West Mansfield will acquire and demolish properties that flood repeatedly to relocate resident out of flood risk areas, and to restore property to a natural habitat maintained as such into perpetuity.					
14	Prevention	Mayor Administrator	7-1-23	6-30-28	LOC PDM
1.15 West Mansfield will maintain and modify as needed an emergency plan for its wastewater treatment lagoon that identifies critical information such as the inundation zone, potentially affected properties, loss estimations and emergency procedures, as well as evaluation and maintenance of the structure to maintain safe operations.					
15	Prevention	Mayor Administrator	7-1-23	6-30-28	LOC

GOAL 2: WEST MANSFIELD WILL EMPLOY MITIGATION ACTIONS TO REDUCE DAMAGES INCURRED FROM SEVERE WINDSTORMS, INCLUDING WIND, STRAIGHT-LINE WINDS AND TORNADOES

2.1 West Mansfield will advocate and support, and implement on village-owned property, the proper maintenance of trees and vegetation to reduce damages caused by high winds or tornadoes.					
15	Property Protection	Mayor Administrator	7-1-23	6-30-28	PDM
2.2 West Mansfield will advocate for and support the creation of safe rooms for vulnerable locations, including single and multi-family homes and neighborhoods without basements or shelters.					
16	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC PDM
2.3 West Mansfield will encourage damage-resistant building materials and techniques so structures are as resistant as possible to wind damage.					
17	Prevention	Mayor Administrator	7-1-23	6-30-28	LOC ICC
2.4 West Mansfield will clear roads and streets of debris after severe wind and flooding to keep crop fodder and other debris out of water treatment plants, sewers, transportation routes, and other infrastructure, and to keep roadways open and usable as soon as possible after storms.					
18	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC ICC

GOAL 3: WEST MANSFIELD WILL ENGAGE IN MITIGATION ACTIONS THAT ENABLE THE PUBLIC TO OBTAIN AND USE DISASTER INFORMATION TO SAVE LIVES AND PRESERVE PROPERTY FOR ALL HAZARDS PRESENT IN LOGAN COUNTY

3.1 West Mansfield will develop interoperable communication equipment and operational plans to coordinate life-saving efforts between all internal and external community partners during severe incidents.					
19	Public Information	Mayor Administrator	7-1-23	6-30-28	LOC EMPG/HSGP
3.2 West Mansfield will develop, utilize and maintain a communication plan to include mass media, social media, and direct contact with residents before, during and after incidents.					
20	Public Information	Mayor Administrator	7-1-23	6-30-28	LOC EMPG/HSGP
3.3 West Mansfield will improve parcel location mapping to facilitate locating and responding to emergency and disaster calls in a rapid and effective way, as well as to facilitate the use of mutual aid resources, when necessary, as assistance to responders and dispatchers.					

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
21	Public Information	Mayor Administrator	7-1-23	6-30-28	LOC ICC
3.4 West Mansfield will improve GIS mapping to include infrastructure and utility mapping, and expand the customization capability of software to produce data that is useful in community planning.					
22	Public Information	Mayor Administrator	7-1-23	6-30-28	LOC ICC
3.5 West Mansfield will work to develop enhanced methods of cross-discipline and interjurisdictional planning efforts to create whole community efforts to improve communities and expand disaster resilience.					
23	Public Information	Mayor Administrator	7-1-23	6-30-28	LOC
3.6 West Mansfield will educate the public about local disaster hazards, vulnerabilities, protective actions, services, vulnerable populations, available assistance, and emergency procedures using mass and social media, printed information and other options.					
24	Public Information	Mayor Administrator	7-1-23	6-30-28	LOC

GOAL 4: WEST MANSFIELD WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE DAMAGES DUE TO UTILITY OUTAGES AND RESOURCE SHORTAGES FROM ALL CAUSES

4.1 West Mansfield will encourage the hardening of utilities through installation below grade, improvements to supply line and generation plants, and upgrade of poles, substations and transformers.					
25	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC ICC
4.2 West Mansfield will identify and establish alternate heating fuels, potable water suppliers, alternate power sources, and other critical supplies necessary for sustaining life, business, and safety during power outages or an earthquake that damages distribution systems, as well as the operational plans to distribute these critical resources under austere conditions.					
26	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC ICC

GOAL 5: WEST MANSFIELD WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE DAMAGES FROM ALL SEVERE STORMS, INCLUDING THUNDERSTORMS AND BLIZZARDS, AND OTHER NATURAL DISASTERS AND CAUSES.

5.1 West Mansfield will establish water conservation procedures to be implemented during water emergencies due to drought or contamination.					
27	Nat. Resource Protection	Mayor Administrator	7-1-23	6-30-28	LOC ICC
5.2 West Mansfield will educate the public about LOC digital warning and notification system like reverse calling, weather radios, warning sirens, and digital resources that inform them of incoming life-threatening storms or emergency incidents.					
28	Public Information	Mayor Administrator	7-1-23	6-30-28	LOC
5.3 West Mansfield will maintain and improve hardware, software, and capital equipment (outdoor warning sirens) used to deliver warnings and notifications, and will inform the public of these systems and how to use them.					
29	Public Information	Mayor Administrator	7-1-23	6-30-28	LOC HSGP/EMPG

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
5.4 West Mansfield will identify and remove dead or diseased trees along waterways and in the public domain, and other effects of invasive species that cause vulnerability to damages.					
30	Property Protection	Mayor Administrator	7-1-23	6-30-28	LOC
5.5 West Mansfield will improve capacity to rapidly place temporary warning signs that indicate dangerous road conditions.					
31	Public Information	Mayor Administrator	7-1-23	6-30-28	LOC

GOAL 6: WEST MANSFIELD WILL ENGAGE IN MITIGATION ACTIONS TO PRESERVE AND PROTECT NATURAL RESOURCES SUCH AS TOPSOIL AND WATERWAYS FROM EROSION

6.1 West Mansfield will protect roadways vulnerable to compromised structural integrity, damaged berms, washed away foundations or abutments, or other deterioration due to extreme runoff or specific highly vulnerable soil types.					
32	Nat. Resource Protection	Mayor Administrator	7-1-23	6-30-28	LOC

3.3.13 Zanesfield

Zanesfield sits high atop the hills of Logan County, and is home to many residents who work in business and industry in several counties that join together near the village. This quaint collection of historic homes sits in a peaceful setting with wooded areas, ample vegetation, and natural surroundings. This self-sufficient community is mostly concerned about wind storms, communicating with other entities in Logan County after disasters, and utility outages. Flooding and erosion are of only minor concern as they occupy some of the highest elevations in all of Ohio. Dam failure is not a concern for Zanesfield.

Table 3-14: Zanesfield Mitigation Goals and Strategies

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
GOAL 1: ZANESFIELD WILL EMPLOY MITIGATION ACTIONS TO REDUCE DAMAGES INCURRED FROM SEVERE WINDSTORMS, INCLUDING WIND, STRAIGHT-LINE WINDS AND TORNADOES.					
1.1 Zanesfield will advocate proper trimming of trees and vegetation to reduce damages caused by wind, especially where trees are infected with disease like Emerald Ash Borer.					
1	Property Protection	Mayor	7-1-23	6-30-28	LOC
1.2 Zanesfield will support the construction of safe rooms for single and multi-family homes without basements or shelters.					
2	Property Protection	Mayor	7-1-23	6-30-28	LOC PDM BRIC

GOAL 2: ZANESFIELD WILL ENGAGE IN MITIGATION ACTIONS THAT ENABLE THE PUBLIC TO OBTAIN AND USE DISASTER INFORMATION TO SAVE LIVES AND PRESERVE PROPERTY FOR ALL HAZARDS PRESENT IN LOGAN COUNTY.

2.1 Zanesfield will develop a multi-part communication system to notify all residents of protective action orders, warnings and notification, and other critical lifesaving information.					
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3	Public Information	Mayor	7-1-23	6-30-28	LOC HSGP/EMPG
2.2 Zanesfield will educate the public about local disaster hazards, vulnerabilities, protective actions, services, vulnerable populations, available assistance, and emergency procedures using mass and social media, printed information, and other options.					
4	Public Information	Mayor	7-1-23	6-30-28	LOC HSGP/EMPG
GOAL 3: ZANESFIELD WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE DAMAGES FROM ALL SEVERE STORMS, INCLUDING THUNDERSTORMS AND BLIZZARDS, AND OTHER NATURAL DISASTERS AND CAUSES.					
3.1 Zanesfield will establish water conservation procedures to be implemented during water emergencies due to drought or contamination.					
5	Nat. Resource Protection	Mayor	7-1-23	6-30-28	LOC ICC
3.2 Zanesfield will maintain and improve hardware, software, and capital equipment (outdoor warning sirens) used to deliver warnings and notifications.					
6	Public Information	Mayor	7-1-23	6-30-28	LOC EMPG/HSGP
3.3 Zanesfield will identify and remove dead or diseased trees along waterways and in the public domain.					
7	Property Protection	Mayor	7-1-23	6-30-28	LOC ICC
3.4 Zanesfield will educate the public about local digital warning and notification systems like reverse calling, weather radios, warning sirens, and digital resources that inform them of incoming life-threatening storms or emergency incidents.					
8	Public Information	Mayor	7-1-23	6-30-28	LOC EMPG/HSGP
GOAL 4: ZANESFIELD WILL ENGAGE IN MITIGATION ACTIONS TO PRESERVE AND PROTECT NATURAL RESOURCES SUCH AS TOPSOIL AND WATERWAYS FROM EROSION.					
4.1 Zanesfield will protect roadways vulnerable to compromised structural integrity, damaged berms, washed away foundation or abutments, or other deterioration due to extreme runoff or specific highly vulnerable soil types.					
9	Property Protection	Mayor	7-1-23	6-30-28	LOC ICC
GOAL 5: ZANESFIELD WILL ENGAGE IN MITIGATION ACTIONS THAT REDUCE DAMAGES FROM FLOODING.					
5.1 Zanesfield will maintain NFIP participation so property owners have access to flood insurance, and will regularly review flood maps to ensure implementation of floodplain regulations and improvement strategies.					
10	Property Protection	Mayor	7-1-23	6-30-28	LOC
5.2 Zanesfield will advocate and support flood insurance where required.					
11	Prevention	Mayor	7-1-23	6-30-28	LOC
5.3 Zanesfield will maintain existing local building codes, zoning regulations, and other land use regulations that encourage sustainable disaster-resistant structures in all areas.					
12	Property Protection	Mayor	7-1-23	6-30-28	LOC ICC
5.4 Zanesfield will use financial aid for flood mitigation through grants, fees, and other special programs.					

13	Property Protection	Mayor	7-1-23	6-30-28	LOC PDM BRIC
5.5 Zanesfield will implement improvements to the ditch maintenance program to reduce sedimentation and erosion.					
14	Nat. Resource Protection	Mayor	7-1-23	6-30-28	LOC ICC
5.6 Zanesfield will remove debris and obstructions from waterways.					
15	Property Protection	Mayor	7-1-23	6-30-28	LOC ICC
5.7 Zanesfield will make improvements to roads and infrastructure including increases of bridge spans, repair of shoulders and berms, increase in culvert size, maintenance of bridge slopes and protection of roadways from storm and flood damage, to enhance the likelihood of open roadways even after severe flooding and damage.					
16	Property Protection	Mayor	7-1-23	6-30-28	LOC
GOAL 6 THE VILLAGE OF ZANESFIELD WILL ASSESS ITS VULNERABILITY TO EARTHQUAKE, TAKING INTO CONSIDERATION THE HISTORY OF INCIDENT SEVERIETY AND THE BUILDIGNS OR INFRASTRUCTURE AT RISK IN THE VILLAGE.					
6.1 Zanesfield will assess it vulnerability to earthquake by identifying any critical facilities or key resources that may be negatively affected by an earthquake of a 5.0 magnitude.					
17	Property Protection	Mayor	7-1-23	6-30-28	LOC

3.3.11 Strategy Descriptors

Each strategy developed by the jurisdictions, and explained in the previous section, is assigned a priority, action type, lead agency, timeline, and potential funding source. These elements are described below. While the specific information in this chart may change prior to implementation of a strategy, the exercise of assigning time lines required stakeholders to evaluate current resources and support programs to determine how to best reduce the effects of disaster. Public information campaigns, plan enhancements, and the establishment of emergency protective measures are often a high priority and generally not significantly expensive, so they may be accomplished more quickly than other actions. Upgrading communication and notification/warning systems is more difficult because the acquisition of equipment involves procurement and budget process, therefore taking at least one budget year. Collaboration with other groups and comprehensive actions, due to the need to build trust and association between groups, takes longer to accomplish because it involves a two-phase action plan. Last on the completion list are likely to be structural projects due to design time requirements, budget needs, and dependence upon outside funding sources through applications. The priorities of life safety, incident containment, and property conservation combined with budget and procurement needs were factors in determining the priority of goals and strategies.

Priority

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

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 normal functions
- Prevention – Avoid hazard problems or stop impact from worsening
- Property Protection – Protect property or 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 as well as inform them of protective actions, impending impact, and other critical information unique to a specific incident
- Structurally Engineered Project – Lessen the impact of a hazard by modifying the environment or by stopping progression of the hazard event through designed and engineered projects that modify natural or man-made structures

Lead Agency

The lead agency (official or worker) is the entity charged with championing the strategy and ensuring that jurisdiction officials look for opportunities to complete the strategy over the five-year planning cycle. This agency may not have the authority or power to convert a strategy into a project, nor would they necessarily be responsible for project oversight or completion should the strategy develop into an actionable and funded project. Rather, the lead agency is responsible for coordinating the overall planning effort and plays a key role in advocating that the project be considered, or, by default, is the entity most appropriate to lead project development at the initial stage. If the strategy becomes a feasible project, this agency is not the only entity that would be involved in its execution, nor is it the only entity involved in keeping the strategy on the jurisdiction's radar. When the strategy becomes a project, the jurisdiction would identify a project manager who may or may not represent the lead agency assigned in this plan. In some cases, the lead agency may utilize more than one person to serve as the champion of the strategy.

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 when a timeline is identified as only part of the plan validity period, depending on funding, grant opportunities, or changes in priorities as other critical activities are adjusted to meet evolving community needs. Most actions were considered to be valid for the entire period of the plan validity and could be done at any time, or done multiple times in multiple locations. At the time of plan development, the community representatives were not ready to assign varying time lines to the various projects, and felt that by assigning the entire validity period of the plan as the timeframe, they would allow for the greatest success. As Logan County reviews this mitigation plan annually, the timelines will be reviewed, adjusted, and modified as appropriate. Many will be accomplished as funding allows and as grant opportunities occur.

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.

- CDBG – Community Development Block Grants
- FMA – Flood Mitigation Assistance Grant
- PDM – Pre-Disaster Mitigation Grant
- BRIC – Building Resilient Infrastructure in Communities program
- HMGP – Hazard Mitigation Grant Program
- SRL – Severe Repetitive Loss Grant
- RFC – Repetitive Flood Claims Program
- COG – Clean Ohio Grant
- ICC – Increased Cost of Compliance (including rate increases or premiums)
- LOC – Local Funds, including county, municipal, and township
- ST – State Funds
- OTH – Other (including private funds and non-governmental agency funding)

3.3.12 Strategy-Risk Correlation

Hazard mitigation efforts must address the identified threats in each community. Not all communities validated the same threats due to differences in historical impact, population characteristics, community resources available to respond, and an array of other factors. Changes in the perception of risk took into consideration the human tendency to over-value recent incidents and not recall significant events in past years, especially those not experienced by current community members. There was significant effort made to objectively assess and apply all past incidents to the findings for this plan without an emphasis upon any historical event.

The following chart shows which strategies address each identified hazard in Logan County communities. Some strategies address more than one threat or address a consequence, such as a power outage, that is due to an identified threat. Some hazards produce the same threats as others, and for ease of implementation, these were listed as strategies one time.

Table 3-15: Strategy–Hazard Correlation Chart

	Logan County	Bellefontaine	Belle Center	DeGraff	Huntsville	Lakeview	Quincy	Rushsylvania	Russells Point	Valley Hi	West Liberty	West Mansfield	Zanesfield
Windstorm	1.1-6 3.1-3 4.2-6 4.8 4.10 5.1-7	1.1-4 2.1-2 3.1-7 5.1,2,5	2.1-5 3.1-4 6.3	2.1-2 3.1-2 4.1-4*		2.1-3 3.1-2 4.5 5.1-4	1.1-4 2.1 3.1 3.3-6 6.1-7	1.1-2 2.1-2 5.1-3	2.1-3 4.1 5.1-3	1.1 4.1	1.1-3 2.1-5 3.1	2.1-4 4.1-2	1.1-2 3.2, 4

Tornado	1.1-6 3.1-3 4.2-6 4.8 4.10 5.1-7	2.1-2 3.1-7 5.1-2, 5	2.1-5 3.1-4 6.3	2.1-2 3.1-2 4.1-4*		2.1-3 3.1-2 5.1-4	1.1-4 2.1 3.1 3.3-6 6.1-7	1.1-2 2.1-2 5.1-3	2.1-3 4.1 5.1-3	1.1 4.1	1.1-3 2.1-5	2.1-4 4.1-2	1.1-2 2.1-2 3.2, 4
Severe Thunderstorm	1.1-6 3.1-3 4.2-6 4.8 4.10 5.1-7	1.1-4 2.1-2 3.1-7	2.1-5 3.1-4 6.3	3.1-2 4.1-4*		3.1-2 4.5 5.1-4	2.1 3.1 3.3-6 6.1-7	2.1-2 5.1-3	4.1 5.1-3	1.1 4.1	2.1-5 4.1-4	2.1-4 4.1-2	2.1-2 3.2, 4
Flood	2.1-19 3.1-3 5.1-7	1.3 2.1-2 3.1-7 4.1-16	1.1-12 2.1-5 6.5	1.1-7 3.1-2 4.1-4*		1.1-10 3.1-2 5.1-4	3.1 3.3-6 4.1-12 4.15	2.1-2 3.1-3 5.1-3	1.1-10 4.1 5.1-3	5.1 5.3 5.4	2.1-5 5.1-11	1.1-15	2.1-2 3.2, 4 5.1-7
Winter Storm	1.1 3.1-3 4.2-4 4.8-10 5.1-7	1.1-4 2.1-2 3.1-7	2.1-5 3.1-4 4.1 6.1-2	3.1-2 4.1-4*		3.1-2 4.5 5.1-4	2.1-2 3.1 3.3-6	2.1 4.1 5.1-3	4.1 5.1-3	1.1 2.1-2 4.1	2.1-5 3.1-2 4.1-4	3.1,2,6 4.1-2	2.1-2 3.2, 4
Earthquake	4.2 5.1,4, 5 8.1-3	7.1	2.1, 4 2.5 6.5	7.1		7.1	6.1-8	7.1	7.1	4.2	7.1	4.2	6.1
Land Subsidence	2.3 2.17 6.1-4	6.1-3	5.1	1.12 6.1		6.1-2	4.16 5.1-3	6.2	1.10 6.1-2	3.1 5.2-3	6.1	1.10 6.1	4.1
Invasive Species	1.1 2.15 4.1 7.1	5.3,2	3.1, 2 6.3	2.1		1.5	3.2	2.2	1.5, 8	1.1 4.1	4.1 5.6	5.4	3.3
Dam/Levee Failure	2.9,10	n/a	n/a	n/a		1.6	4.13-14	n/a	1.6	n/a	n/a	1.15	n/a
Drought & Ext. Heat	3.1-3 4.7	2.2 3.1-7 5.4	6.4	n/a		4.2	2.2	n/a	3.1, 3		4.4	4.2 5.1	3.1

3.4 IMPLEMENTATION

The identified mitigation strategies are general actions that could be taken to reduce the negative impact of disasters and large-scale emergencies. For any given strategy to become an actionable item, it must be converted to a specific project with funding, action steps, timelines, and project goals. For example, if a repetitive loss property is to be acquired and demolished and the property owner relocated, that project must begin with the identification of the specific

property to be acquired and the funding to be utilized for the project. The property owner must agree to accept the buy-out and use the money to purchase another home. The jurisdiction must accept its share of cost, planning responsibility, and project management roles. Only then can the actual project be executed. A similar process must be followed for any of the strategies identified here to become projects that reduce disaster loss in Logan County.

The EMA will monitor the implementation of these strategies through ongoing communication with officials and stakeholders. Not all actions are championed by the EMA because the details of the strategy align more closely with another agency. When grant opportunities arise, reasonable efforts will be made to secure funding by whatever agency is most appropriate to apply for the funding. For strategies that must be funded through local budgets, jurisdictions will work diligently to identify local funding sources that can be used to address disaster vulnerability. Some may be dependent upon an assessment or fee, or increased service rates. When funding is secured, a detailed project timeline will be developed and actionable steps taken to complete the project. Upon completion, effectiveness will be evaluated by the jurisdiction and findings shared with the EMA and planning team for consideration in developing future projects.

The greatest value in these strategies is the process, knowledge, and reasoning stakeholders utilized during their development. The mitigation planning process required stakeholders to collaborate to evaluate hazards and risks in their community. They were required to examine the local community, predict where and under what conditions damages would occur, and identify how to reduce or eliminate potential damages. The solutions, in the form of mitigation goals and actions that will ultimately develop into projects, had to be developed to maximize benefit to the community while minimizing cost. This process required whole community involvement so that the community was appropriately represented in the planning process.

Ultimately, Logan County developed a set of comprehensive, thoroughly considered, relevant, and effective solutions to problems that are likely to arise. As stakeholders considered how to solve potential problems, they utilized a collaborative spirit to address community-wide problems. These strategies were original thoughts to reduce disaster vulnerability and loss at the local level. The participants adopted an assertive approach to mitigation actions, and did not allow financial constraints or past experiences negate ideas that could potentially solve a problem. While their approach may be considered highly optimistic, all participants realized that not all actions will be achieved or completed, but that their assertive approach brought as many ideas to the table as possible and would open mitigation doors to them to truly prevent and lessen damages in the future.

Given the availability of funding, personnel, and support, Logan County and its jurisdictions are positioned to move forward and implement these strategies to the best of their ability to accomplish their goals. Whatever mitigation activities are achieved will be well thought out, logical, and reasonable because of the community-wide hazard mitigation planning process.