

3.0 MITIGATION STRATEGIES

As the Champaign County hazard mitigation planning developed mitigation goals and strategies, their intention was to address the identified risks and vulnerabilities for the county and individual jurisdictions. Because of this approach, these mitigation goals and strategies are more comprehensive and jurisdiction-specific than those developed in the 2004 plan. While there are similarities in the goals and strategies identified by each jurisdiction, each community included actions designed to address risks and vulnerabilities in their community.

3.1 STATUS OF PAST MITIGATION EFFORTS

The 2004 Champaign County Hazard Mitigation Plan identified mitigation goals and activities by hazards and jurisdiction. The current mitigation planning team reviewed these goals and activities to determine their current status, which is described in table 3-1.

Table 3-1: Status of 2004 Mitigation Goals and Actions

Action Item	Status
ACTIONS BY HAZARD	
Severe Storms	
<i>Goal: To increase awareness of severe storms, save lives, and reduce property damages.</i>	
Evaluate centralizing 911 systems.	Not Complete
Evaluate Champaign County EOP	Continue; EOP has not been updated.
Seek funding for better, more reliable interoperable communication between incorporated and unincorporated areas within Champaign County.	Partially Complete; MARCS is being implemented.
Enhance communication efforts between Champaign County and its municipalities with surrounding counties and other agencies within the State of Ohio.	Partially Complete; MARCS is being implemented.
Flooding	
<i>Goal: To save lives and property, reduce damage and increase education (awareness) of community.</i>	
Evaluate existing emergency operations and equipment within the county and determine the needs across the county for handling a severe storm disaster.	Partially Complete; Continue as ongoing effort.
Educate public about NFIP and reducing uninsured loss.	Complete; Continue because it is an ongoing activity.
Increase public awareness of high hazard areas, such as floodplains, through educational outreach.	Partially Complete; Continue because it is an ongoing activity.
Work with the county engineer to determine flood-prone properties and designate them as flood-prone properties utilizing GIS.	Complete; GIS includes more details
Tornadoes	
<i>Goal: To save lives, reduce potential damage, and increase awareness of the hazards of tornadoes.</i>	
Evaluate needs of shelter to have back-up generators.	Not Complete; Continue because generators are still needed.

Action Item	Status
Need to establish Tornado Shelter Network throughout the county.	Not Complete
Evaluate procedures for verifying tornado sightings.	Not Complete
Evaluate location of current shelter locations and determine needs.	Partially Complete; Continue as ongoing effort.
Conduct study to determine existing facilities; determine where the gaps are as it relates to shelters.	Partially Complete; Continue as ongoing effort.
Drought	
<i>Goal: To reduce potential damage and to increase awareness of drought occurrences through Champaign County by increased preparedness.</i>	
Increase awareness of urban/rural interface and the damage potential of such interface.	Not Complete
Increase public awareness of how droughts can lead to wildfires.	Not Complete; Continue as ongoing effort.
Earthquake	
<i>Goal: To reduce the potential loss of lives and damage to property as well as increase awareness.</i>	
Increase public awareness by developing an Innovative Public Service Announcement (PSA)	Not Complete
Evaluate infrastructure and coordinate with agencies responsible to determine areas of concern.	Not Complete; Continue as ongoing effort.
ACTIONS BY JURISDICTION	
Christiansburg	
Provide an alternate power source, such as back-up generators, for critical facilities serving as shelters that must have continuous power to preserve and protect human life.	Not Complete; Continue as ongoing effort.
Provide an alternate power source, such as back-up generators, for the community's water and wastewater work stations.	Not Complete; Continue as ongoing effort.
Curb, gutter, and storm drain replacement and improvements to alleviate flooding conditions.	Not Complete; Continue as ongoing effort.
Woodstock	
Provide an alternate power source, such as back-up generators, for critical facilities serving as shelters that must have continuous power to preserve and protect human life.	Not Complete; Continue as ongoing effort.
Mutual	
Provide an alternate power source, such as back-up generators, for critical facilities serving as shelters that must have continuous power to preserve and protect human life.	Not Complete; Continue as ongoing effort.
Urbana	
Implement an equalizing basin to control excessive flow to waste treatment plant due to severe storms/flooding SS/F.	Complete
Replace aging infrastructure at waste treatment plant and in the process increase capacity to better manage increased flows during SS/F.	Complete
Implement a (CMOM) Capacity, Management, Operation and Maintenance program ahead of state requirements to oversee the entire sewage network.	Partially Complete; Continue because there is additional work to be done.

Action Item	Status
Provide back-up SCADA (Supervisory Control and Data Acquisition) communications in case SS/F knock out primary systems. Water department uses this system to monitor/control water plant, towers and wells.	Complete
Purchase new backhoes and dump trucks that would serve as backups for water main repairs that happen periodically. The number of repairs could grow exponentially given the occurrence of a very severe cold spell or an earthquake, in which case backups would be utilized.	Complete
Improve preventive maintenance program for storm sewer lines that plug/limit flow during SS/F.	Complete
Plan development for reducing flooding in different areas of Urbana.	Continue; this is an ongoing effort.
Once major flood-reduction projects are finished, coordinate a study to reestablish the 100-year base flood elevations in Urbana and submit any changes to FEMA, who in turn will update the Flood Insurance Rate Maps. (FIRM)	Complete
Maintain a list of right-of-way trees. Those rated poorly should be removed to minimize damage from SS/T.	Partially Complete; Continue because this is an ongoing effort.
North Lewisburg	
Provide emergency shelter-operations center in the village.	Partially Complete; Continue as ongoing effort.
Mechanicsburg	
Provide an alternate power source, such as back-up generators, for critical facilities serving as shelters that must have continuous power to preserve and protect human life.	Not Complete; Continue because this is still a need.
St. Paris	
Funding for removal of hazardous trees would enable the village to continue the acquisition and planting of young, healthy trees which the community can enjoy for years to come.	Partially Complete; Continue because it is an ongoing activity.

3.2 RISK PRIORITIES

The Hazard Identification and Risk Assessment provides a detailed explanation of the hazards and risks in Champaign County through a discussion of the frequency and severity of past hazards and potential damages from future incidents. Building on that hazard information, this section identifies mitigation strategies that could reduce vulnerability to the identified hazards. When developing and prioritizing strategies, participants considered actions that would benefit the greatest number of people and considered how the strategy would be funded. In some cases, funding would come from the jurisdiction's general budget while others would require special funding, including state and federal grants. Ultimately, the planning team determined that strategies should be prioritized according to the hazard rank in the HIRA. The hazards were ranked using a comprehensive process that included frequency, response duration, speed of onset, magnitude, business impact, human impact, and property impact.

For each jurisdiction, a goal related to each specific hazard was developed. Within each goal, multiple mitigation strategies, or objectives, were created based on the proposed actions to reduce vulnerability. When prioritizing the strategies, the planning team considered cost of implementation and feasibility in completing the action. In general, strategies that were less expensive or easier to implement were prioritized higher because they were more likely to be completed. Projects requiring state or federal grant funding, extensive multi-agency collaboration, or other more complicated processes were considered lower priority because they would take more time to complete.

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

3.3 MITIGATION GOALS AND STRATEGIES

Mitigation strategies were developed based on the input from planning team members, jurisdiction representatives, and a variety of stakeholders, including various forms of established districts (school, utility, service, and conservation), non-profit organizations, and institutions (universities, churches). These strategies were presented to the broad community for review and comment prior to completion of the plan. This section identifies the mitigation goals and strategies for the county and each incorporated jurisdiction, along with the priority, action type, lead agency, timeline, and potential funding source for to each. While strategies are listed according to the authority having jurisdiction, including county and municipality, it may be most appropriate to delegate project administration and implementation to another party at the time a strategy becomes an actionable project. It is not possible to foresee which districts, nonprofit organizations, or other entities might be that appropriate party at the time this plan is developed; therefore, other entities may actually be selected to apply for mitigation grants, administer the grants, implement the projects, and evaluate the results.

A variety of grant programs will be utilized to fund projects, as those grants become available. Pre-Disaster Mitigation and Flood Mitigation Assistance are grant programs that typically cycle annually, and funding is made available through local jurisdictions like counties, cities, villages and townships. Hazard Mitigation Grant Program funds become available after an incident, and these are available to jurisdictions and special districts, nonprofit organizations, watershed coalitions, and conservancy districts as well. Champaign County will work to establish the most effective method of application, as well as the most logical administrative entity for each application and project when grants are awarded.

At the time of this plan development, one private nonprofit property owner expressed interest in using mitigation funding to reduce losses at a multi-family residential property that experiences frequent flooding.

Other grant programs may be utilized as well as those mentioned above. This might include Community Development Block Grants, Clean Ohio grants, or Ohio Public Works funding as well as many other federal, state and private grant programs and low interest loan options. With new funding programs on the horizon, it was not possible to name all potential funding sources at the time this plan was developed.

Strategy Descriptors

When developing strategies, the planning team considered who would be responsible for leading mitigation efforts, how the work would be funded, and in what order jurisdictions would address potential actions. These elements are defined in table 3-2 and identified for each strategy. Some of this information may change over the five-year life of this plan and as strategies are implemented. For the planning process, the exercise of assigning timelines required stakeholders to evaluate current resources and determine how to best reduce the effects of disasters.

Table 3-2: Strategy Descriptors

Element	Definition
<i>Priority</i>	Each jurisdiction ranked hazards according to their jurisdiction’s priorities; that result is expressed in a table in the HIRA under each municipality’s vulnerability statement. In this section, all goals and strategies are expressed alphabetically according to hazard for ease of comparison and review and use of the plan. The jurisdictions will address strategies in order of priorities as established in their individual jurisdiction. If the #1 hazard in a community is flood, then the flood strategies will be addressed as the highest priority.
<i>Action Type</i>	The kind of activity described in the strategies Includes these types of actions; <ul style="list-style-type: none"> • Natural Resource Protection – Reduce the impacts of natural hazard by preserving or restoring natural areas and their mitigation functions • Prevention – Avoid hazard problems or stop impact from worsening • Property Protection – Protect structures by modifying or strengthening building to withstand impact • Public Information – Advise the public about hazards, hazardous areas, and mitigation techniques to protect people and property • Structurally Engineered Project – Lessen the impact of a hazard by modifying the environment or progression of the hazard event through designed and engineered projects • Public Safety Enhancement – These actions will improve, enhance, update or expand the services or support of services provided by law enforcement, fire departments and/or emergency medical services
<i>Lead Agency</i>	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 execute a strategy or be responsible for project oversight or completion. Rather, the lead agency is responsible for coordinating the overall effort, plays a key role in championing the project 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. For accountability purposes, the strategy is assigned to a single entity. 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.
<i>Timeline</i>	The timeframe in which a mitigation strategy could realistically be implemented. The actual time frame may vary from what is described in this plan, depending on funding, grant opportunities, or changes in priorities as other critical activities are adjusted to meet evolving community needs. At the time of plan development, these timelines fit logically within each jurisdiction’s resources and support programs.
<i>Funding Source</i>	The potential funding source(s) for the strategy. Potential funding sources include; <ul style="list-style-type: none"> • CDBG – Community Development Block Grants • FMA – Flood Mitigation Assistance Grant • PDM – Pre-Disaster Mitigation Grant • HMGP – Hazard Mitigation Grant Program • SRL – Severe Repetitive Loss Grant • RFC – Repetitive Flood Claims Program • COG – Clean Ohio Grant

Element	Definition
	<ul style="list-style-type: none">• ICC – Increased Cost of Compliance (including rate increases or premiums)• LOC – Local Funds• ST – State Funds• Other (including private funds and non-governmental agency funding)

3.3.1 Champaign County

The Champaign County mitigation goals and strategies address countywide mitigation issues and those in the unincorporated areas of the county. County officials will oversee implementation of these strategies. These mitigation strategies will be managed by county government officials, including the EMA Director, County Engineer, and Soil and Water Conservation District Manager. The County Engineer is responsible for road maintenance and floodplain management; Soil and Water Conservation District works with natural resources. The EMA Director works with jurisdictions and officials across the county to promote and implement disaster and emergency preparedness measures.

Many of the identified strategies will be funded through the county's budget. These local funds come from a variety of sources, including tax revenue, user fees, and others. Some of the larger natural resource preservation, property protection, and structurally engineered projects will require funding through special sources. These can include federal mitigation programs such as Pre-Disaster Mitigation and Hazard Mitigation Grant Program or other state and federal grant programs that may become available.

Table 3-3: Champaign County Mitigation Strategies

Priority	Action Type	Lead	Start Date	End Date	Funding
Goal 1 – Dam Failure: Champaign County will work to ensure all dams and reservoirs are well maintained and limit the risk to the community.					
1.1 The County will ensure that dams have emergency plans that identify inundation areas and facilitate for emergency actions in the case of a serious failure.					
53	Property Protection	EMA Director	09/01/2019	08/31/2024	LOC; Other
Goal 2 – Drought/Extreme Heat: Champaign County will assess the reliability of water supplies during drought and extreme heat.					
2.1 The County will advocate and support the hardening of water supply infrastructure to include alternate sources of water and protection of treatment plants and distribution systems.					
40	Property Protection	EMA Director	09/01/2019	08/31/2024	LOC
2.2 The County will establish water conservation procedures for implementation in drought conditions.					
41	Natural Resource Protection	EMA Director	09/01/2019	08/31/2024	LOC
Goal 3 - Earthquake: Champaign County will assess damage potential from earthquakes and establish a safety plan for residents.					
3.1 The County will identify the structures and infrastructure that would likely be damaged or destroyed in an earthquake of moderate to severe magnitude.					
42	Property Protection	EMA Director	09/01/2019	08/31/2024	LOC
Goal 4 – Flood: Champaign County will work to reduce flooding and limit loss of life or injury and property damage caused by flooding.					
4.1 The County will require construction of water control structures (reservoirs, retention/detention ponds, dams, levees, dikes, floodwalls, etc.) to prevent flooding of properties.					
17	Structurally Engineered Projects	County Engineer	09/01/2019	08/31/2024	LOC; PDM; HMGP; CDBG; ICC
4.2 The County will acquire, demolish, and/or retrofit flood-prone structures.					

Priority	Action Type	Lead	Start Date	End Date	Funding
18	Prevention	EMA Director	09/01/2019	08/31/2024	PDM; HMGP; SRL; FMA; RFC; Other
4.3 The County will clear debris, fallen trees, excess sediment, and other obstructions from waterways to improve flow.					
19	Natural Resource Protection	County Engineer	09/01/2019	08/31/2024	LOC; ICC; Other
4.4 The County will work with watershed or conservancy districts and other jurisdictions that share an interest in waterways to facilitate cleaning, maintaining, and eliminating problems.					
20	Natural Resource Protection	Soil & Water Conservation Director	09/01/2019	08/31/2024	LOC; ICC; Other
4.5 The County will utilize natural habitat creation and/or use of vegetative buffers inside waterways to slow the rapid flow of floodwater and/or hold excess storm water.					
21	Natural Resource Protection	County Engineer	09/01/2019	08/31/2024	LOC; ICC; Other
4.6 The County will maintain and enforce floodplain, zoning, and building regulations to manage development in flood-prone areas.					
22	Prevention	Chief Building Official	09/01/2019	08/31/2024	LOC
4.7 The County will maintain participation in NFIP and engage in floodplain management activities to support flood prevention.					
23	Prevention	County Engineer	09/01/2019	08/31/2024	LOC
4.8 The County will conduct a public awareness campaign for individual flood insurance awareness.					
24	Public Information	EMA Director	09/01/2019	08/31/2024	LOC
4.9 The County will procure adequate temporary or changeable signs to mark flooded roadways quickly.					
25	Public Information	County Engineer	09/01/2019	08/31/2024	LOC
4.10 The County will improve and repair roadways and berms damaged by rapid runoff and heavy precipitation.					
26	Property Protection	County Engineer	09/01/2019	08/31/2024	CDBG; LOC
4.11 The County will work with railroads to identify a means to repair and improve railroad owned bridges, culverts, and abandoned tracks and keep them clear of debris and abandoned equipment.					
27	Property Protection	County Engineer	09/01/2019	08/31/2024	LOC
4.12 The County will identify and implement methods to collect debris in runoff water before it clogs ditches, streams, culverts, and other waterways.					
28	Natural Resource Protection	County Engineer	09/01/2019	08/31/2024	LOC
4.13 The County will protect banks and land near waterways from deterioration due to rapid or excessive flow by planting stream bank vegetation, installing dormant woody stakes and posts, planting trees, shrubs and grasses along banks and berms, or using deflectors to prevent deterioration, or other similar methods to accomplish the same.					
29	Natural Resource Protection	Soil & Water Conservation Director	09/01/2019	08/31/2024	LOC; Other

Priority	Action Type	Lead	Start Date	End Date	Funding
4.14 The County will utilize biotechnical methods (placement of willow posts, hardwood tree plantings, fascines, brush layering, evergreen revetments, log revetments, tree kickers, lunger structures, or placed rocks as examples) to minimize the deterioration or destruction of stream banks due to excessive flow.					
30	Natural Resource Protection	Soil & Water Conservation Director	09/01/2019	08/31/2024	LOC; Other
4.15 The County will manage stream flow through channel, sedimentation, debris and obstruction, and stream ecology management practices.					
31	Natural Resource Protection	Soil & Water Conservation Director	09/01/2019	08/31/2024	LOC; ICC; Other
4.16 The County will utilize stream bank protection measures such as gabion revetments, riprap revetments, and crib walls, and other structural methods to protect the banks and berms.					
32	Natural Resource Protection	Soil & Water Conservation Director	09/01/2019	08/31/2024	LOC; ICC; Other
4.17 The County will require developers and/or construction crews in urban development zones to use tools such as chemical stabilization, compost blankets, geotextiles to control soil deterioration, mulching of new plantings, seeding and sodding of areas highly vulnerable to rapid surface runoff, installation of grass lined channels, slope diversion for surface runoff, and other methods to reduce the damages to land and property due to heavy and rapid surface runoff or drainage from rainfall or other precipitation or draining water.					
33	Natural Resource Protection	Soil & Water Conservation Director	09/01/2019	08/31/2024	LOC; ICC; Other
4.18 The County will encourage the use of eco-friendly green materials and practices in development, such as green parking policies, green roof materials, and alternate paving materials that promote absorption instead of runoff.					
34	Property Protection	County Engineer	09/01/2019	08/31/2024	LOC; Other
4.19 The County will protect soil quality by advocating for crop rotation, crop residue management, contour buffer strips, contour farming and strip-cropping, use of cover crops, installation of field borders, rotation grazing, pasture planting, establishment of grassy waterways, grade stabilization structures, water and sediment control basins, critical area planting, diversion, terracing, manure storage and runoff control, nutrient management, pest management, well abandonment, riparian buffers, wetland restoration, windbreaks, woodlot management, tree planting, and creation of upland wildlife habitat on farmland inside, adjacent to, or near incorporated County property.					
35	Natural Resource Protection	Soil & Water Conservation Director	09/01/2019	08/31/2024	LOC; Other
4.20 The County will encourage management of surface runoff and chemical residue through techniques such as installation of grassy waterways, creation of infiltration basins and trenches, porous pavement installation, filtration techniques like use of catch basin inserts, sand and organic filters, rain gardens and vegetated filter strips.					
36	Natural Resource Protection	Soil & Water Conservation Director	09/01/2019	08/31/2024	LOC; ICC; Other

Priority	Action Type	Lead	Start Date	End Date	Funding
Goal 5 – Hazardous Materials Incident: Champaign County will work to lessen both the number of spills, leaks, and releases from hazardous materials sources, as well as lessen the damages from such incidents.					
5.1 The County will ensure signage on highways and roadways is clear and easy to follow to decrease the likelihood of vehicle accidents due to unsure routes of travel.					
37	Public Information	County Engineer	09/01/2019	08/31/2024	LOC; ST
5.2 The County will advocate for funding for and conduct of additional first responder training to prepare responders for highway hazardous materials incidents and pipeline and rail incidents.					
38	Public Safety	EMA Director	09/01/2019	08/31/2024	LOC; Other
5.3 The County will collaborate with entities that bring new hazardous substances to communities through construction of additional highways, railroads, or pipelines for first responder training.					
39	Public Safety	EMA Director	09/01/2019	08/31/2024	LOC; ST; Other
Goal 6 – Invasive Species: Champaign County will lessen the cost of plant debris caused by invasive species that weaken and destroy trees that cause large amounts of debris requiring removal after storms.					
6.1 The County will maintain trees and vegetation on public/jurisdiction property and advocate for the same on private property.					
52	Property Protection	County Engineer	09/01/2019	08/31/2024	LOC; Other
6.2 The County will work to clear public and private areas of dead or diseased trees that will easily be damaged by wind events and cause destruction of other property.					
16	Property Protection	County Engineer	09/01/2019	08/31/2024	LOC; Other
Goal 7 – Land Subsidence: Champaign County will reduce the risk of property damage due to land subsidence in at-risk areas.					
7.1 The County will support and conduct programs that reduce erosion and sedimentation along riverbanks, ditch banks, road berms, and areas that wash away after heavy or prolonged precipitation.					
15	Natural Resource Protection	County Engineer	09/01/2019	08/31/2024	LOC; Other
7.2 The County will encourage the development of more specific and accurate mapping of karst areas in Champaign County that interfaces the geologic characteristics with the soil types, as well as identifying abandoned and functioning wells and mines of various types, to more accurately identify karst locations and predict where sink holes or other structural problems are likely to occur.					
43	Property Protection	Chief Building Official	09/01/2019	08/31/2024	LOC; ST
7.3 The County will develop collaborative efforts with environmental and water quality advocates to more accurately determine risk to groundwater resources in the county, and work together to adequately and effectively prevent contamination of the groundwater.					
44	Natural Resource Protection	Public Health Commissioner	09/01/2019	08/31/2024	LOC
Goal 8 – Severe Thunderstorm, Tornado, and Windstorm: Champaign County will lessen the damages suffered from windstorms or severe thunderstorms, including heavy rain, wind, hail, and lightning.					
8.1 The County will advocate and support the construction of safe rooms for single- and multi-family homes and congregate facilities, including mobile home parks, apartment complexes, and mass gathering facilities.					
1	Property Protection	EMA Director	09/01/2019	08/31/2024	PDM; HMGP
8.2 The County will repair or retrofit public properties with wind-resistant materials (i.e. metal roofing, siding, etc.) to decrease damage due to wind.					
2	Property Protection	Chief Building Official	09/01/2019	08/31/2024	LOC; Other

Priority	Action Type	Lead	Start Date	End Date	Funding
8.3 The County will develop agreements for emergency shelters to be used for a variety of disaster-related purposes during severe storms and/or evacuations.					
3	Property Protection	EMA Director	09/01/2019	08/31/2024	LOC; Other
8.4 The County will research and identify resources for affordable debris disposal after storms, possibly through creation of special funding to pay for landfill fees or finding facilities that will receive debris for reduced rates.					
4	Property Protection	EMA Director	09/01/2019	08/31/2024	LOC
8.5 The County will establish, maintain, improve, and/or promote public warning and notification systems (reverse 911, opt-in systems, outdoor warning sirens, etc.).					
5	Public Information	EMA Director	09/01/2019	08/31/2024	LOC; PDM; Other
8.6 The County will provide community education about protective actions, evacuation procedures, and other disaster preparedness information.					
6	Public Information	EMA Director	09/01/2019	08/31/2024	LOC
8.7 The County will advocate for residents to maintain adequate insurance coverage (homeowners, renters, flood, etc.).					
7	Property Protection	EMA Director	09/01/2019	08/31/2024	LOC
8.8 The County will maintain building regulations and land-use planning practices that encourage responsible development in high-risk areas.					
8	Property Protection	Chief Building Official	09/01/2019	08/31/2024	LOC; ICC; Other
8.9 The County will work to develop a local, affordable and functional county-wide public safety communication system with the capability for multi-discipline and multi-jurisdictional communication.					
9	Public Safety	EMA Director	09/01/2019	08/31/2024	LOC; Other
8.10 The County will work to fill gaps in warning and notification systems by adding outdoor warning sirens, developing reverse 911 capabilities, and by enhancing public notification processes.					
10	Property Protection	EMA Director	09/01/2019	08/31/2024	LOC; ST; ICC; Other
8.11 The County will advocate and support the hardening of utilities (distribution lines, generating plants, and other system components).					
11	Property Protection	County Engineer	09/01/2019	08/31/2024	Other
8.12 The County will identify alternate/back-up utility resources for use when primary source is compromised (generators, redundant suppliers, etc.).					
12	Property Protection	EMA Director	09/01/2019	08/31/2024	Other
Goal 9 – Water Quality; Champaign County will work to improve the safety of the water supply whether it is sourced from private wells or public or privately-owned water treatment systems.					
9.1 The County will advocate for improvements to water treatment plants, including enhanced testing and monitoring and improved treatment capabilities.					
45	Natural Resource Protection	Public Health Commissioner	09/01/2019	08/31/2024	LOC
9.2 The County will advocate for additional research into root causes of water quality issues, including but not limited to runoff monitoring and analysis, contamination tracing, and conservation practice implementation.					
46	Natural Resource Protection	Public Health Commissioner	09/01/2019	08/31/2024	LOC

Priority	Action Type	Lead	Start Date	End Date	Funding
9.3 The County will advocate for study of runoff from residential properties, including but not limited to lawn chemicals and other incidental threats.					
47	Natural Resource Protection	Public Health Commissioner	09/01/2019	08/31/2024	LOC
9.4 The County will work for early and pro-active collaboration between jurisdictions regarding spills or leaks into the water supply through seepage into wells, aquifers, reservoirs or waterways that will eventually affect local water quality.					
48	Natural Resource Protection	Public Health Commissioner	09/01/2019	08/31/2024	LOC; COG
9.5 The County will advocate for and support the implementation of regulations and supportive programs that help farmers manage manure and waste from concentrated animal feeding facilities in the interest of protecting the groundwater and waterways from contamination.					
49	Natural Resource Protection	Soil & Water Conservation Director	09/01/2019	08/31/2024	LOC; Other
9.6 The County will support the implementation of measures to manage distressed watersheds in the county and advocate for support programs to help farmers implement these regulations and measures while maintaining the agricultural economic well-being.					
50	Natural Resource Protection	Soil & Water Conservation Director	09/01/2019	08/31/2024	LOC; Other
9.7 The County will support studies that identify the complete discovery of water resource contamination, including analysis of practices by industrial, personal use, manufacturing, and agricultural communities.					
51	Natural Resource Protection	Public Health Commissioner	09/01/2019	08/31/2024	LOC; Other
Goal 10 – Winter Storms: Champaign County will lessen damages suffered from severe winter storms and blizzards.					
10.1 The County will work to plow and clear county-maintained roadways to facilitate emergency traffic, necessary travel, and business access.					
13	Property Protection	County Engineer	09/01/2019	08/31/2024	LOC
10.2 The County will develop collaborative efforts with environmental and water quality advocates to more accurately determine risk to groundwater resources in the county and work together to adequately and effectively prevent contamination of the groundwater through snow removal and salting of icy roads.					
14	Natural Resource Protection	Public Health Commissioner	09/01/2019	08/31/2024	LOC

3.3.2 Christiansburg

For Christiansburg, mitigation strategies will be monitored and championed by the mayor, who will work with other community officials to identify mitigation opportunities and implement strategies. The majority of mitigation actions will be funded through local budgets. When possible, state and federal grants will be sought to help fund these efforts.

Table 3-4: Christiansburg Mitigation Strategies

Priority	Action Type	Lead	Start Date	End Date	Funding
Goal 1 – Drought/Extreme Heat: Christiansburg will assess the reliability of water supplies during drought and extreme heat.					
1.1 The Village will advocate and support the hardening of water supply infrastructure to include alternate sources of water and protection of treatment plants and distribution systems.					
25	Natural Resource Protection	Mayor	09/01/2019	08/31/2024	LOC
Goal 2 - Earthquake: Christiansburg will assess damage potential from earthquakes and establish a safety plan for residents.					
2.1 The Village will identify the structures and infrastructure that would likely be damaged or destroyed in an earthquake of moderate to severe magnitude.					
26	Property Protection	Mayor	09/01/2019	08/31/2024	LOC
Goal 3 – Flood: Christiansburg will work to reduce flooding and limit loss of life or injury and property damage caused by flooding.					
3.1 The Village will require construction of water control structures (reservoirs, retention/detention ponds, dams, levees, dikes, floodwalls, etc.) to prevent flooding of properties.					
3	Structurally Engineered Project	Mayor	09/01/2019	08/31/2024	LOC; PDM
3.2 The Village will acquire, demolish, and/or retrofit flood-prone structures.					
4	Prevention	Mayor	09/01/2019	08/31/2024	PDM; SRL; FMA; HMGP
3.3 The Village will clear debris, fallen trees, excess sediment, and other obstructions from waterways to improve flow.					
5	Property Protection	Mayor	09/01/2019	08/31/2024	LOC
3.4 The Village will utilize natural habitat creation and/or use of vegetative buffers inside waterways to slow the rapid flow of floodwater and/or hold excess storm water.					
6	Natural Resource Protection	Mayor	09/01/2019	08/31/2024	LOC
3.5 The Village will maintain and enforce floodplain, zoning, and building regulations to manage development in flood-prone areas.					
7	Prevention	Mayor	09/01/2019	08/31/2024	LOC
3.6 The Village will maintain participation in NFIP and engage in floodplain management activities to support flood prevention.					
8	Prevention	Mayor	09/01/2019	08/31/2024	LOC
3.7 The Village will improve and repair roadways and berms damaged by rapid runoff and heavy precipitation.					
9	Property Protection	Mayor	09/01/2019	08/31/2024	LOC
Goal 4 – Hazardous Materials Incident: Christiansburg will work to lessen both the number of spills, leaks, and releases from hazardous materials sources, as well as lessen the damages from such incidents.					

Priority	Action Type	Lead	Start Date	End Date	Funding
4.1 The Village will ensure signage on highways and roadways is clear and easy to follow to decrease the likelihood of vehicle accidents due to unsure routes of travel.					
19	Property Protection	Mayor	09/01/2019	08/31/2024	LOC
4.2 The Village will advocate for funding for and conduct of additional first responder training to prepare responders for highway hazardous materials incidents and pipeline and rail incidents.					
20	Public Safety	Mayor	09/01/2019	08/31/2024	LOC; Other
Goal 5 – Invasive Species: Christiansburg will lessen the cost of plant debris caused by invasive species that weaken and destroy trees that cause large amounts of debris requiring removal after storms.					
5.1 The Village will maintain trees and vegetation on public/jurisdiction property and advocate for the same on private property.					
21	Property Protection	Mayor	09/01/2019	08/31/2024	LOC
5.2 The Village will work to clear public and private areas of dead or diseased trees that will easily be damaged by wind events and cause destruction of other property.					
22	Property Protection	Mayor	09/01/2019	08/31/2024	LOC; Other
Goal 6 – Land Subsidence: Christiansburg will reduce the risk of property damage due to land subsidence in at-risk areas.					
6.1 The Village will encourage the development of more specific and accurate mapping of karst areas in Champaign County that interfaces the geologic characteristics with the soil types, as well as identifying abandoned and functioning wells and mines of various types, to more accurately identify karst locations and predict where sink holes or other structural problems are likely to occur.					
23	Prevention	Mayor	09/01/2019	08/31/2024	LOC
Goal 7 – Severe Thunderstorm, Tornado, and Windstorm: Christiansburg will lessen the damages suffered from windstorms or severe thunderstorms, including heavy rain, wind, hail, and lightning.					
7.1 The Village will advocate and support the construction of safe rooms for single- and multi-family homes and congregate facilities, including mobile home parks, apartment complexes, and mass gathering facilities.					
10	Property Protection	Mayor	09/01/2019	08/31/2024	PDM; Other
7.2 The Village will develop agreements for emergency shelters to be used for a variety of disaster-related purposes during severe storms and/or evacuations.					
11	Property Protection	Mayor	09/01/2019	08/31/2024	LOC
7.3 The Village will research and identify resources for affordable debris disposal after storms, possibly through creation of special funding to pay for landfill fees or finding facilities that will receive debris for reduced rates.					
12	Property Protection	Mayor	09/01/2019	08/31/2024	LOC; Other
7.4 The Village will establish, maintain, improve, and/or promote public warning and notification systems (reverse 911, opt-in systems, outdoor warning sirens, etc.).					
13	Public Information	Mayor	09/01/2019	08/31/2024	LOC; PDM; Other
7.5 The Village will provide community education about protective actions, evacuation procedures, and other disaster preparedness information.					
14	Public Information	Mayor	09/01/2019	08/31/2024	LOC
7.6 The Village will maintain building regulations and land-use planning practices that encourage responsible development in high-risk areas.					
15	Property Protection	Mayor	09/01/2019	08/31/2024	LOC; Other
7.7 The Village will work to develop a local, affordable and functional county-wide public safety communication system with the capability for multi-discipline and multi-jurisdictional communication.					
16	Public Safety	Mayor	09/01/2019	08/31/2024	LOC; Other

Priority	Action Type	Lead	Start Date	End Date	Funding
7.8 The Village will work to fill gaps in warning and notification systems by adding outdoor warning sirens, developing reverse 911 capabilities, and by enhancing public notification processes.					
17	Public Information	Mayor	09/01/2019	08/31/2024	LOC; Other
7.9 The Village will advocate and support the hardening of utilities (distribution lines, generating plants, and other system components).					
1	Prevention	Mayor	09/01/2019	08/31/2024	Other
7.10 The Village will identify alternate/back-up utility resources for use when primary source is compromised (generators, redundant suppliers, etc.).					
2	Property Protection	Mayor	09/01/2019	08/31/2024	LOC; PDM; HMGP; Other
Goal 8 – Water Quality: Christiansburg will work to improve the safety of the water supply whether it is sourced from private wells or public or privately-owned water treatment systems.					
8.1 The Village will advocate for additional research into root causes of water quality issues, including but not limited to runoff monitoring and analysis, contamination tracing, and conservation practice implementation.					
18	Natural Resource Protection	Mayor	09/01/2019	08/31/2024	LOC
Goal 9 – Winter Storms: Christiansburg will lessen damages suffered from severe winter storms and blizzards.					
9.1 The Village will work to plow and clear village-maintained roadways to facilitate emergency traffic, necessary travel, and business access.					
24	Property Protection	Mayor	09/01/2019	08/31/2024	LOC

3.3.3 Mechanicsburg

In Mechanicsburg, the Village Administrator will monitor mitigation strategies and collaborate with other village officials to identify mitigation opportunities and implement strategies. The majority of mitigation actions will be funded through local budgets. When possible, state and federal grants will be sought to help fund these efforts.

Table 3-5: Mechanicsburg Mitigation Strategies

Priority	Action Type	Lead	Start Date	End Date	Funding
Goal 1 – Drought/Extreme Heat: Mechanicsburg will assess the reliability of water supplies during drought and extreme heat.					
1.1 The Village will advocate and support the hardening of water supply infrastructure to include alternate sources of water and protection of treatment plants and distribution systems.					
38	Natural Resource Protection	Village Administrator	09/01/2019	08/31/2024	LOC
Goal 2 - Earthquake: Mechanicsburg will assess damage potential from earthquakes and establish a safety plan for residents.					
2.1 The Village will identify the structures and infrastructure that would likely be damaged or destroyed in an earthquake of moderate to severe magnitude.					
39	Property Protection	Village Administrator	09/01/2019	08/31/2024	LOC
Goal 3 – Flood: Mechanicsburg will work to reduce flooding and limit loss of life or injury and property damage caused by flooding.					
3.1 The Village will require construction of water control structures (reservoirs, retention/detention ponds, dams, levees, dikes, floodwalls, etc.) to prevent flooding of properties.					
36	Structurally Engineered Projects	Village Administrator	09/01/2019	08/31/2024	LOC; PDM; CDBG; Other
3.2 The Village will elevate structures (buildings, roadways, bridges, culverts etc.) where necessary to reduce flooding.					
37	Structurally Engineered Projects	Village Administrator	09/01/2019	08/31/2024	LOC; CDBG; PDM; HMGP
3.3 The Village will acquire, demolish, and/or retrofit flood-prone structures.					
26	Prevention	Village Administrator	09/01/2019	08/31/2024	LOC; PDM; SRL; FMA; Other
3.4 The Village will consider channel diversion or modification (deepening or widening) to re-route water or increase capacity and reduce flooding.					
28	Structurally Engineered Project	Village Administrator	09/01/2019	08/31/2024	LOC; CDBG; PDM; Other
3.5 The Village will clear debris, fallen trees, excess sediment, and other obstructions from waterways to improve flow.					
27	Property Protection	Village Administrator	09/01/2019	08/31/2024	LOC; Other
3.6 The Village will work with watershed or conservancy districts and other jurisdictions that share an interest in waterways to facilitate cleaning, maintaining, and eliminating problems.					
25	Property Protection	Village Administrator	09/01/2019	08/31/2024	LOC

Priority	Action Type	Lead	Start Date	End Date	Funding
3.7 The Village will utilize natural habitat creation and/or use of vegetative buffers inside waterways to slow the rapid flow of floodwater and/or hold excess storm water.					
29	Natural Resource Protection	Village Administrator	09/01/2019	08/31/2024	LOC; Other
3.8 The Village will maintain and enforce floodplain, zoning, and building regulations to manage development in flood-prone areas.					
24	Prevention	Village Administrator	09/01/2019	08/31/2024	LOC; ICC; Other
3.9 The Village will maintain participation in NFIP and engage in floodplain management activities to support flood prevention.					
23	Property Protection	Village Administrator	09/01/2019	08/31/2024	LOC
3.10 The Village will conduct a public awareness campaign for individual flood insurance awareness.					
42	Public Education	Village Administrator	09/01/2019	08/31/2024	LOC
3.11 The Village will maintain, repair, upgrade, and/or replace storm sewers and related systems and increase culvert sizes and bridge spans to improve drainage.					
30	Structurally Engineered Project	Village Administrator	09/01/2019	08/31/2024	LOC; CDBG; Other
3.12 The Village will improve and repair roadways and berms damaged by rapid runoff and heavy precipitation.					
31	Property Protection	Village Administrator	09/01/2019	08/31/2024	LOC; Other
3.13 The Village will identify and implement methods to collect debris in runoff water before it clogs ditches, streams, culverts, and other waterways.					
32	Natural Resource Protection	Village Administrator	09/01/2019	08/31/2024	LOC
3.14 The Village will require developers and/or construction crews in urban development zones to use tools such as chemical stabilization, compost blankets, geotextiles to control soil deterioration, mulching of new plantings, seeding and sodding of areas highly vulnerable to rapid surface runoff, installation of grass lined channels, slope diversion for surface runoff, and other methods to reduce the damages to land and property due to heavy and rapid surface runoff or drainage from rainfall or other precipitation or draining water.					
34	Natural Resource Protection	Village Administrator	09/01/2019	08/31/2024	LOC; Other
3.15 The Village will encourage the use of eco-friendly green materials and practices in development, such as green parking policies, green roof materials, and alternate paving materials that promote absorption instead of runoff.					
35	Property Protection	Village Administrator	09/01/2019	08/31/2024	LOC; Other
3.16 The Village will encourage management of surface runoff and chemical residue through techniques such as installation of grassy waterways, creation of infiltration basins and trenches, porous pavement installation, filtration techniques like use of catch basin inserts, sand and organic filters, rain gardens and vegetated filter strips.					
33	Natural Resource Protection	Village Administrator	09/01/2019	08/31/2024	LOC; Other

Priority	Action Type	Lead	Start Date	End Date	Funding
Goal 4 – Hazardous Materials Incident: Mechanicsburg will work to lessen both the number of spills, leaks, and releases from hazardous materials sources, as well as lessen the damages from such incidents.					
4.1 The Village will ensure signage on highways and roadways is clear and easy to follow to decrease the likelihood of vehicle accidents due to unsure routes of travel.					
16	Prevention	Village Administrator	09/01/2019	08/31/2024	LOC; Other
4.2 The Village will advocate for funding for and conduct of additional first responder training to prepare responders for highway hazardous materials incidents and pipeline and rail incidents.					
15	Public Safety	Fire Chief	09/01/2019	08/31/2024	LOC; ST; Other
4.3 The Village will collaborate with entities that bring new hazardous substances to communities through construction of additional highways, railroads, or pipelines for first responder training.					
17	Prevention	Fire Chief	09/01/2019	08/31/2024	LOC; Other
Goal 5 – Invasive Species: Mechanicsburg will lessen the cost of plant debris caused by invasive species that weaken and destroy trees that cause large amounts of debris requiring removal after storms.					
5.1 The Village will maintain trees and vegetation on public/jurisdiction property and advocate for the same on private property.					
4	Property Protection	Village Administrator	09/01/2019	08/31/2024	LOC
5.2 The Village will work to clear public and private areas of dead or diseased trees that will easily be damaged by wind events and cause destruction of other property.					
3	Property Protection	Village Administrator	09/01/2019	08/31/2024	LOC
Goal 6 – Land Subsidence: Mechanicsburg will reduce the risk of property damage due to land subsidence in at-risk areas.					
6.1 The Village will encourage the development of more specific and accurate mapping of karst areas in Champaign County that interfaces the geologic characteristics with the soil types, as well as identifying abandoned and functioning wells and mines of various types, to more accurately identify karst locations and predict where sink holes or other structural problems are likely to occur.					
40	Property Protection	Village Administrator	09/01/2019	08/31/2024	LOC; Other
6.2 The Village will develop collaborative efforts with environmental and water quality advocates to more accurately determine risk to groundwater resources in the county, and work together to adequately and effectively prevent contamination of the groundwater.					
41	Natural Resource Protection	Village Administrator	09/01/2019	08/31/2024	LOC; Other
Goal 7 – Severe Thunderstorm, Tornado, and Windstorm: Mechanicsburg will lessen the damages suffered from windstorms or severe thunderstorms, including heavy rain, wind, hail, and lightning.					
7.1 The County will advocate and support the construction of safe rooms for single- and multi-family homes and congregate facilities, including mobile home parks, apartment complexes, and mass gathering facilities.					
6	Property Protection	Village Administrator	09/01/2019	08/31/2024	LOC; PDM
7.2 The County will develop agreements for emergency shelters to be used for a variety of disaster-related purposes during severe storms and/or evacuations.					
7	Property Protection	Village Administrator	09/01/2019	08/31/2024	LOC; Other

Priority	Action Type	Lead	Start Date	End Date	Funding
7.3 The County will research and identify resources for affordable debris disposal after storms, possibly through creation of special funding to pay for landfill fees or finding facilities that will receive debris for reduced rates.					
12	Property Protection	Village Administrator	09/01/2019	08/31/2024	LOC; Other
7.4 The Village will establish, maintain, improve, and/or promote public warning and notification systems (reverse 911, opt-in systems, outdoor warning sirens, etc.).					
11	Public Information	Village Administrator	09/01/2019	08/31/2024	LOC; ST
7.5 The Village will provide community education about protective actions, evacuation procedures, and other disaster preparedness information.					
8	Property Protection	Village Administrator	09/01/2019	08/31/2024	LOC
7.6 The Village will advocate for residents to maintain adequate insurance coverage (homeowners, renters, flood, etc.).					
10	Property Protection	Village Administrator	09/01/2019	08/31/2024	Other
7.7 The Village will maintain building regulations and land-use planning practices that encourage responsible development in high-risk areas.					
13	Prevention	Village Administrator	09/01/2019	08/31/2024	LOC
7.8 The Village will work to develop a local, affordable and functional county-wide public safety communication system with the capability for multi-discipline and multi-jurisdictional communication.					
5	Public Safety	Police Chief	09/01/2019	08/31/2024	LOC; ST; Other
7.9 The Village will work to fill gaps in warning and notification systems by adding outdoor warning sirens, developing reverse 911 capabilities, and by enhancing public notification processes.					
9	Public Information	Village Administrator	09/01/2019	08/31/2024	LOC; ST
7.10 The Village will advocate and support the hardening of utilities (distribution lines, generating plants, and other system components).					
2	Property Protection	Village Administrator	09/01/2019	08/31/2024	ICC; Other
7.11 The Village will identify alternate/back-up utility resources for use when primary source is compromised (generators, redundant suppliers, etc.).					
1	Property Protection	Village Administrator	09/01/2019	08/31/2024	LOC; ICC; Other
Goal 8 – Water Quality: Mechanicsburg will work to improve the safety of the water supply whether it is sourced from private wells or public or privately-owned water treatment systems.					
8.1 The Village will advocate for improvements to water treatment plants, including enhanced testing and monitoring and improved treatment capabilities.					
21	Natural Resource Protection	Village Administrator	09/01/2019	08/31/2024	LOC; ST; Other
8.2 The Village will advocate for additional research into root causes of water quality issues, including but not limited to runoff monitoring and analysis, contamination tracing, and conservation practice implementation.					

Priority	Action Type	Lead	Start Date	End Date	Funding
22	Natural Resource Protection	Village Administrator	09/01/2019	08/31/2024	LOC; ST; Other
8.3 The Village will advocate for study of runoff from residential properties, including but not limited to lawn chemicals and other incidental threats.					
20	Natural Resource Protection	Village Administrator	09/01/2019	08/31/2024	LOC; Other
8.4 The Village will work for early and pro-active collaboration between jurisdictions regarding spills or leaks into the water supply through seepage into wells, aquifers, reservoirs or waterways that will eventually affect local water quality.					
18	Natural Resource Protection	Fire Chief	09/01/2019	08/31/2024	LOC; Other
8.5 The Village will support studies that identify the complete discovery of water resource contamination, including analysis of practices by industrial, personal use, manufacturing, and agricultural communities.					
19	Natural Resource Protection	Village Administrator	09/01/2019	08/31/2024	LOC; Other
Goal 9 – Winter Storms: Mechanicsburg will lessen damages suffered from severe winter storms and blizzards.					
9.1 The Village will work to plow and clear village-maintained roadways to facilitate emergency traffic, necessary travel, and business access.					
14	Property Protection	Village Administrator	09/01/2019	08/31/2024	LOC

3.3.4 Mutual

The Village of Mutual mitigation strategies will be monitored by the Mayor. The Mayor, along with village council and other community officials, will identify opportunities to implement appropriate mitigation actions. The majority of mitigation actions will be funded through the village's local budgets; state and federal grants will be sought when possible.

Table 3-6: Mutual Mitigation Strategies

Priority	Action Type	Lead	Start Date	End Date	Funding
Goal 1 – Drought/Extreme Heat: Mutual will assess the reliability of water supplies during drought and extreme heat.					
1.1 The Village will advocate and support the hardening of water supply infrastructure to include alternate sources of water and protection of treatment plants and distribution systems.					
20	Property Protection	Mayor	09/01/2019	08/31/2024	LOC; CDBG
Goal 2 - Earthquake: Mutual will assess damage potential from earthquakes and establish a safety plan for residents.					
2.1 The Village will identify the structures and infrastructure that would likely be damaged or destroyed in an earthquake of moderate to severe magnitude.					
21	Property Protection	Mayor	09/01/2019	08/31/2024	LOC; ST
Goal 3 – Flood: Mutual will work to reduce flooding and limit loss of life or injury and property damage caused by flooding.					
3.1 The Village will require construction of water control structures (reservoirs, retention/detention ponds, dams, levees, dikes, floodwalls, etc.) to prevent flooding of properties.					
13	Structurally Engineered Projects	Mayor	09/01/2019	08/31/2024	PDM; HMGP
3.2 The Village will acquire, demolish, and/or retrofit flood-prone structures.					
12	Prevention	Mayor	09/01/2019	08/31/2024	PDM; HMGP
3.3 The Village will clear debris, fallen trees, excess sediment, and other obstructions from waterways to improve flow.					
11	Property Protection	Mayor	09/01/2019	08/31/2024	LOC
3.4 The Village will utilize natural habitat creation and/or use of vegetative buffers inside waterways to slow the rapid flow of floodwater and/or hold excess storm water.					
14	Natural Resource Protection	Mayor	09/01/2019	08/31/2024	LOC; Other
3.5 The Village will maintain and enforce floodplain, zoning, and building regulations to manage development in flood-prone areas.					
10	Prevention	Mayor	09/01/2019	08/31/2024	LOC
3.6 The Village will maintain participation in NFIP and engage in floodplain management activities to support flood prevention.					
9	Prevention	Mayor	09/01/2019	08/31/2024	LOC
3.7 The Village will improve and repair roadways and berms damaged by rapid runoff and heavy precipitation.					
15	Property Protection	Mayor	09/01/2019	08/31/2024	LOC; Other
Goal 4 – Hazardous Materials Incident: Mutual will work to lessen both the number of spills, leaks, and releases from hazardous materials sources, as well as lessen the damages from such incidents.					
4.1 The Village will advocate for funding for and conduct of additional first responder training to prepare responders for highway hazardous materials incidents and pipeline and rail incidents.					

Priority	Action Type	Lead	Start Date	End Date	Funding
16	Public Safety	Mayor	09/01/2019	08/31/2024	LOC; ST; Other
Goal 5 – Invasive Species: Mutual will lessen the cost of plant debris caused by invasive species that weaken and destroy trees that cause large amounts of debris requiring removal after storms.					
5.1 The Village will work to clear public and private areas of dead or diseased trees that will easily be damaged by wind events and cause destruction of other property.					
17	Property Protection	Mayor	09/01/2019	08/31/2024	LOC
Goal 6 – Land Subsidence: Mutual will reduce the risk of property damage due to land subsidence in at-risk areas.					
6.1 The Village will encourage the development of more specific and accurate mapping of karst areas in Champaign County that interfaces the geologic characteristics with the soil types, as well as identifying abandoned and functioning wells and mines of various types, to more accurately identify karst locations and predict where sink holes or other structural problems are likely to occur.					
18	Prevention	Mayor	09/01/2019	08/31/2024	LOC
Goal 7 – Severe Thunderstorm, Tornado, and Windstorm: Mutual will lessen the damages suffered from windstorms or severe thunderstorms, including heavy rain, wind, hail, and lightning.					
7.1 The Village will advocate and support the construction of safe rooms for single- and multi-family homes and congregate facilities, including mobile home parks, apartment complexes, and mass gathering facilities.					
3	Property Protection	Mayor	09/01/2019	08/31/2024	PDM; HMGP
7.2 The Village will develop agreements for emergency shelters to be used for a variety of disaster-related purposes during severe storms and/or evacuations.					
4	Property Protection	Mayor	09/01/2019	08/31/2024	LOC
7.3 The Village will research and identify resources for affordable debris disposal after storms, possibly through creation of special funding to pay for landfill fees or finding facilities that will receive debris for reduced rates.					
5	Property Protection	Mayor	09/01/2019	08/31/2024	LOC
7.4 The Village will establish, maintain, improve, and/or promote public warning and notification systems (reverse 911, opt-in systems, outdoor warning sirens, etc.).					
6	Public Information	Mayor	09/01/2019	08/31/2024	LOC; ST; Other
7.5 The Village will provide community education about protective actions, evacuation procedures, and other disaster preparedness information.					
7	Public Information	Mayor	09/01/2019	08/31/2024	LOC
7.6 The Village will advocate and support the hardening of utilities (distribution lines, generating plants, and other system components).					
2	Property Protection	Mayor	09/01/2019	08/31/2024	LOC; Other
7.7 The Village will identify alternate/back-up utility resources for use when primary source is compromised (generators, redundant suppliers, etc.).					
1	Property Protection	Mayor	09/01/2019	08/31/2024	LOC; HMGP; PDM; Other
Goal 8 – Water Quality: Mutual will work to improve the safety of the water supply whether it is sourced from private wells or public or privately-owned water treatment systems.					
8.1 The Village will advocate for additional research into root causes of water quality issues, including but not limited to runoff monitoring and analysis, contamination tracing, and conservation practice implementation.					
19	Natural Resource Protection	Mayor	09/01/2019	08/31/2024	LOC

Priority	Action Type	Lead	Start Date	End Date	Funding
Goal 9 – Winter Storms: Mutual will lessen damages suffered from severe winter storms and blizzards.					
9.1 The Village will work to plow and clear village-maintained roadways to facilitate emergency traffic, necessary travel, and business access.					
8	Property Protection	Mayor	09/01/2019	08/31/2024	LOC

3.3.5 North Lewisburg

In North Lewisburg, mitigation strategies will be monitored and championed by the Village Administrator. The Administrator will work with the mayor, council, other community officials to identify mitigation opportunities. The majority of mitigation actions will be funded through local budgets. When possible, state and federal grants will be sought to help fund these efforts.

Table 3-7: North Lewisburg Mitigation Strategies

Priority	Action Type	Lead	Start Date	End Date	Funding
Goal 1 – Drought/Extreme Heat: North Lewisburg will assess the reliability of water supplies during drought and extreme heat.					
1.1 The Village will advocate and support the hardening of water supply infrastructure to include alternate sources of water and protection of treatment plants and distribution systems.					
25	Property Protection	Village Administrator	09/01/2019	08/31/2024	LOC; ST; Other
Goal 2 - Earthquake: North Lewisburg will assess damage potential from earthquakes and establish a safety plan for residents.					
2.1 The Village will identify the structures and infrastructure that would likely be damaged or destroyed in an earthquake of moderate to severe magnitude.					
27	Property Protection	Village Administrator	09/01/2019	08/31/2024	LOC
Goal 3 – Flood: North Lewisburg will work to reduce flooding and limit loss of life or injury and property damage caused by flooding.					
3.1 The Village will add temporary or changeable signs to mark flooding roadways quickly.					
17	Structurally Engineered Projects	Village Administrator	09/01/2019	08/31/2024	LOC; HMGP; PDM; CDBG; Other
3.2 The Village will acquire, demolish, and/or retrofit flood-prone structures.					
15	Prevention	Village Administrator	09/01/2019	08/31/2024	LOC; PDM; HMGP; Other
3.3 The Village will clear debris, fallen trees, excess sediment, and other obstructions from waterways to improve flow.					
14	Property Protection	Village Administrator	09/01/2019	08/31/2024	LOC; Other
3.4 The Village will work with watershed or conservancy districts and other jurisdictions that share an interest in waterways to facilitate cleaning, maintaining, and eliminating problems.					
16	Natural Resource Protection	Village Administrator	09/01/2019	08/31/2024	LOC; Other
3.5 The Village will utilize natural habitat creation and/or use of vegetative buffers inside waterways to slow the rapid flow of floodwater and/or hold excess storm water.					
18	Natural Resource Protection	Village Administrator	09/01/2019	08/31/2024	LOC; ST; Other
3.6 The Village will maintain and enforce floodplain, zoning, and building regulations to manage development in flood-prone areas.					
13	Property Protection	Village Administrator	09/01/2019	08/31/2024	LOC

Priority	Action Type	Lead	Start Date	End Date	Funding
3.7 The Village will maintain participation in NFIP and engage in floodplain management activities to support flood prevention.					
11	Property Protection	Village Administrator	09/01/2019	08/31/2024	LOC
3.8 The Village will maintain, repair, upgrade, and/or replace storm sewers and related systems and increase culvert sizes and bridge spans to reduce flooding and improve drainage.					
19	Structurally Engineered Projects	Village Administrator	09/01/2019	08/31/2024	LOC; CDBG; Other
3.9 The Village will utilize channel diversion or modification including deepening and widening to re-route water or increase capacity and reduce flooding.					
10	Property Protection	Village Administrator	09/01/2019	08/31/2024	LOC; CDBG; Other
3.10 The Village will identify and implement methods to collect debris in runoff water before it clogs ditches, streams, culverts, and other waterways.					
21	Property Protection	Village Administrator	09/01/2019	08/31/2024	LOC; Other
3.11 The Village will protect banks and land near waterways from deterioration due to rapid or excessive flow by planting stream bank vegetation, installing dormant woody stakes and posts, planting trees, shrubs and grasses along banks and berms, or using deflectors to prevent deterioration, or other similar methods to accomplish the same.					
22	Natural Resource Protection	Village Administrator	09/01/2019	08/31/2024	LOC; ST; Other
3.12 The Village will utilize biotechnical methods (placement of willow posts, hardwood tree plantings, fascines, brush layering, evergreen revetments, log revetments, tree kickers, lunker structures, or placed rocks as examples) to minimize the deterioration or destruction of stream banks due to excessive flow.					
20	Natural Resource Protection	Village Administrator	09/01/2019	08/31/2024	LOC; Other
3.13 The Village will utilize stream bank protection measures such as gabion revetments, riprap revetments, and crib walls, and other structural methods to protect the banks and berms.					
24	Natural Resource Protection	Village Administrator	09/01/2019	08/31/2024	LOC; ST; Other
3.14 The Village will require developers and/or construction crews in urban development zones to use tools such as chemical stabilization, compost blankets, geotextiles to control soil deterioration, mulching of new plantings, seeding and sodding of areas highly vulnerable to rapid surface runoff, installation of grass lined channels, slope diversion for surface runoff, and other methods to reduce the damages to land and property due to heavy and rapid surface runoff or drainage from rainfall or other precipitation or draining water.					
23	Natural Resource Protection	Village Administrator	09/01/2019	08/31/2024	LOC; Other
Goal 4 – Hazardous Materials Incident: North Lewisburg will work to lessen both the number of spills, leaks, and releases from hazardous materials sources, as well as lessen the damages from such incidents.					
4.1 The Village will advocate for funding for and conduct of additional first responder training to prepare responders for highway hazardous materials incidents and pipeline and rail incidents.					
28	Public Safety	Fire Chief	09/01/2019	08/31/2024	LOC; ST; Other
Goal 5 – Invasive Species: North Lewisburg will lessen the cost of plant debris caused by invasive species that weaken and destroy trees that cause large amounts of debris requiring removal after storms.					

Priority	Action Type	Lead	Start Date	End Date	Funding
5.1 The Village will maintain trees and vegetation on public/jurisdiction property and advocate for the same on private property.					
26	Property Protection	Village Administrator	09/01/2019	08/31/2024	LOC; Other
5.2 The Village will work to clear public and private areas of dead or diseased trees that will easily be damaged by wind events and cause destruction of other property.					
12	Property Protection	Village Administrator	09/01/2019	08/31/2024	LOC
Goal 6 – Land Subsidence: North Lewisburg will reduce the risk of property damage due to land subsidence in at-risk areas.					
6.1 The Village will encourage the development of more specific and accurate mapping of karst areas in Champaign County that interfaces the geologic characteristics with the soil types, as well as identifying abandoned and functioning wells and mines of various types, to more accurately identify karst locations and predict where sink holes or other structural problems are likely to occur.					
29	Property Protection	Village Administrator	09/01/2019	08/31/2024	LOC; Other
Goal 7 – Severe Thunderstorm, Tornado, and Windstorm: North Lewisburg will lessen the damages suffered from windstorms or severe thunderstorms, including heavy rain, wind, hail, and lightning.					
7.1 The Village will advocate and support the construction of safe rooms for single- and multi-family homes and congregate facilities, including mobile home parks, apartment complexes, and mass gathering facilities.					
5	Property Protection	Village Administrator	09/01/2019	08/31/2024	LOC; PDM; Other
7.2 The Village will develop agreements for emergency shelters to be used for a variety of disaster-related purposes during severe storms and/or evacuations.					
6	Property Protection	Village Administrator	09/01/2019	08/31/2024	LOC; Other
7.3 The Village will research and identify resources for affordable debris disposal after storms, possibly through creation of special funding to pay for landfill fees or finding facilities that will receive debris for reduced rates.					
7	Property Protection	Village Administrator	09/01/2019	08/31/2024	LOC; Other
7.4 The Village will establish, maintain, improve, and/or promote public warning and notification systems (reverse 911, opt-in systems, outdoor warning sirens, etc.)					
4	Property Protection	Village Administrator	09/01/2019	08/31/2024	LOC; ST; Other
7.5 The Village will provide community education about protective actions, evacuation procedures, and other disaster preparedness information.					
8	Public Information	Village Administrator	09/01/2019	08/31/2024	LOC; Other
7.6 The Village will advocate and support the hardening of utilities (distribution lines, generating plants, and other system components).					
2	Property Protection	Village Administrator	09/01/2019	08/31/2024	LOC; ICC; Other
7.7 The Village will repair or retrofit public properties with wind-resistant materials (i.e. metal roofing, siding, etc.) to decrease damage due to wind.					

Priority	Action Type	Lead	Start Date	End Date	Funding
3	Property Protection	Village Administrator	09/01/2019	08/31/2024	LOC; Other
7.8 The Village will identify alternate/back-up utility resources for use when primary source is compromised (generators, redundant suppliers, etc.)					
1	Property Protection	Village Administrator	09/01/2019	08/31/2024	LOC; PDM; ST; Other
7.9 The Village will advocate for residents to maintain adequate insurance coverage (homeowners, renters, etc.)					
9	Property Protection	Village Administrator	09/01/2019	08/31/2024	LOC
Goal 8 – Water Quality: North Lewisburg will work to improve the safety of the water supply whether it is sourced from private wells or public or privately-owned water treatment systems.					
8.1 The Village will advocate for additional research into root causes of water quality issues, including but not limited to runoff monitoring and analysis, contamination tracing, and conservation practice implementation.					
33	Natural Resource Protection	Village Administrator	09/01/2019	08/31/2024	LOC; Other
8.2 The Village will advocate for county-wide water management strategies to develop a water-supply redundancy plan to help communities during an extended water emergency.					
32	Natural Resource Protection	Village Administrator	09/01/2019	08/31/2024	LOC
8.3 The Village will work for early and proactive collaboration between jurisdictions regarding spills or leaks into the water supply through seepage into wells, aquifers, reservoirs or waterways that will eventually affect local water quality.					
31	Natural Resource Protection	Village Administrator	09/01/2019	08/31/2024	LOC: Other
Goal 9 – Winter Storms: North Lewisburg will lessen damages suffered from severe winter storms and blizzards.					
9.1 The Village will work to plow and clear village-maintained roadways to facilitate emergency traffic, necessary travel, and business access.					
30	Property Protection	Village Administrator	09/01/2019	08/31/2024	LOC

3.3.6 St. Paris

The mitigation strategies for St. Paris will be monitored by the Mayor, who will coordinate with village council and other community officials to identify mitigation opportunities. Most of mitigation actions will be locally funded; state and federal grants will be sought to help fund these efforts when available.

Table 3-8: St. Paris Mitigation Strategies

Priority	Action Type	Lead	Start Date	End Date	Funding
Goal 1 – Drought/Extreme Heat: St. Paris will assess the reliability of water supplies during drought and extreme heat.					
1.1 The Village will advocate and support the hardening of water supply infrastructure to include alternate sources of water and protection of treatment plants and distribution systems.					
46	Property Protection	Mayor	09/01/2019	08/31/2024	LOC
1.2 The Village will establish water conservation procedures for implementation in drought conditions.					
47	Natural Resource Protection	Mayor	09/01/2019	08/31/2024	LOC
Goal 2 - Earthquake: St. Paris will assess damage potential from earthquakes and establish a safety plan for residents.					
2.1 The Village will identify the structures and infrastructure that would likely be damaged or destroyed in an earthquake of moderate to severe magnitude.					
45	Property Protection	Mayor	09/01/2019	08/31/2024	LOC
Goal 3 – Flood: St. Paris will work to reduce flooding and limit loss of life or injury and property damage caused by flooding.					
3.1 The Village will require construction of water control structures (reservoirs, retention/detention ponds, dams, levees, dikes, floodwalls, etc.) to prevent flooding of properties.					
10	Structurally Engineered Projects	Mayor	09/01/2019	08/31/2024	LOC; PDM
3.2 The Village will consider elevation of structures (buildings, roadways, bridges, culverts etc.) to reduce flooding.					
11	Property Protection	Mayor	09/01/2019	08/31/2024	LOC; PDM; HMGP; Other
3.3 The Village will acquire, demolish, and/or retrofit flood-prone structures.					
12	Prevention	Mayor	09/01/2019	08/31/2024	PDM; HMGP
3.4 The Village will consider channel diversion or modification (deepening or widening) to re-route water or increase capacity and reduce flooding.					
13	Structurally Engineered Project	Mayor	09/01/2019	08/31/2024	PDM
3.5 The Village will clear debris, fallen trees, excess sediment, and other obstructions from waterways to improve flow.					
9	Property Protection	Mayor	09/01/2019	08/31/2024	LOC
3.6 The Village will work with watershed or conservancy districts and other jurisdictions that share an interest in waterways to facilitate cleaning, maintaining, and eliminating problems.					
14	Natural Resource Protection	Mayor	09/01/2019	08/31/2024	LOC; Other

Priority	Action Type	Lead	Start Date	End Date	Funding
3.7 The Village will utilize natural habitat creation and/or use of vegetative buffers inside waterways to slow the rapid flow of floodwater and/or hold excess storm water.					
15	Natural Resource Protection	Mayor	09/01/2019	08/31/2024	LOC; Other
3.8 The Village will maintain and enforce floodplain, zoning, and building regulations to manage development in flood-prone areas.					
5	Property Protection	Mayor	09/01/2019	08/31/2024	LOC
3.9 The Village will maintain participation in NFIP and engage in floodplain management activities to support flood prevention.					
4	Prevention	Mayor	09/01/2019	08/31/2024	LOC
3.10 The Village will conduct a public awareness campaign for individual flood insurance awareness.					
16	Public Information	Mayor	09/01/2019	08/31/2024	LOC
3.11 The Village will maintain, repair, upgrade, and/or replace storm sewers and related systems and increase culvert sizes and bridge spans to reduce flooding and improve drainage.					
6	Structurally Engineered Project	Mayor	09/01/2019	08/31/2024	LOC; CDBG; Other
3.12 The Village will procure adequate temporary or changeable signs to mark flooded roadways quickly.					
7	Property Protection	Mayor	09/01/2019	08/31/2024	LOC
3.13 The Village will ensure that dams have emergency plans that identify inundation areas and facilitate for emergency actions in the case of a serious failure.					
17	Property Protection	Mayor	09/01/2019	08/31/2024	LOC
3.14 The Village will improve and repair roadways and berms damaged by rapid runoff and heavy precipitation.					
18	Property Protection	Mayor	09/01/2019	08/31/2024	LOC
3.15 The Village will work with railroads to identify a means to repair and improve railroad owned bridges, culverts, and abandoned tracks and keep them clear of debris and abandoned equipment.					
19	Property Protection	Mayor	09/01/2019	08/31/2024	Other
3.16 The Village will identify and implement methods to collect debris in runoff water before it clogs ditches, streams, culverts, and other waterways.					
8	Property Protection	Mayor	09/01/2019	08/31/2024	LOC; Other
3.17 The Village will protect banks and land near waterways from deterioration due to rapid or excessive flow by planting stream bank vegetation, installing dormant woody stakes and posts, planting trees, shrubs and grasses along banks and berms, or using deflectors to prevent deterioration, or other similar methods to accomplish the same.					
20	Natural Resource Protection	Mayor	09/01/2019	08/31/2024	LOC; Other
3.18 The Village will utilize biotechnical methods (placement of willow posts, hardwood tree plantings, fascines, brush layering, evergreen revetments, log revetments, tree kickers, lunker structures, or placed rocks as examples) to minimize the deterioration or destruction of stream banks due to excessive flow.					
21	Natural Resource Protection	Mayor	09/01/2019	08/31/2024	LOC; Other
3.19 The Village will manage stream flow through channel, sedimentation, debris and obstruction, and stream ecology management practices.					
22	Structurally Engineered Projects	Mayor	09/01/2019	08/31/2024	LOC; CDBG; Other

Priority	Action Type	Lead	Start Date	End Date	Funding
3.20 The Village will utilize stream bank protection measures such as gabion revetments, riprap revetments, and crib walls, and other structural methods to protect the banks and berms.					
23	Natural Resource Protection	Mayor	09/01/2019	08/31/2024	LOC; Other
3.21 The Village will require developers and/or construction crews in urban development zones to use tools such as chemical stabilization, compost blankets, geotextiles to control soil deterioration, mulching of new plantings, seeding and sodding of areas highly vulnerable to rapid surface runoff, installation of grass lined channels, slope diversion for surface runoff, and other methods to reduce the damages to land and property due to heavy and rapid surface runoff or drainage from rainfall or other precipitation or draining water.					
24	Property Protection	Mayor	09/01/2019	08/31/2024	LOC; ICC; Other
3.22 The Village will encourage the use of eco-friendly green materials and practices in development, such as green parking policies, green roof materials, and alternate paving materials that promote absorption instead of runoff.					
25	Natural Resource Protection	Mayor	09/01/2019	08/31/2024	LOC; ICC; Other
3.23 The Village will protect soil quality by advocating for crop rotation, crop residue management, contour buffer strips, contour farming and strip-cropping, use of cover crops, installation of field borders, rotation grazing, pasture planting, establishment of grassy waterways, grade stabilization structures, water and sediment control basins, critical area planting, diversion, terracing, manure storage and runoff control, nutrient management, pest management, well abandonment, riparian buffers, wetland restoration, windbreaks, woodlot management, tree planting, and creation of upland wildlife habitat on farmland inside, adjacent to, or near incorporated Village property.					
27	Natural Resource Protection	Mayor	09/01/2019	08/31/2024	LOC; Other
3.24 The Village will encourage management of surface runoff and chemical residue through techniques such as installation of grassy waterways, creation of infiltration basins and trenches, porous pavement installation, filtration techniques like use of catch basin inserts, sand and organic filters, rain gardens and vegetated filter strips.					
26	Natural Resource Protection	Mayor	09/01/2019	08/31/2024	LOC; Other
Goal 4 – Hazardous Materials Incident: St. Paris will work to lessen both the number of spills, leaks, and releases from hazardous materials sources, as well as lessen the damages from such incidents.					
4.1 The Village will ensure signage on highways and roadways is clear and easy to follow to decrease the likelihood of vehicle accidents due to unsure routes of travel.					
48	Property Protection	Mayor	09/01/2019	08/31/2024	LOC
4.2 The Village will advocate for funding for and conduct of additional first responder training to prepare responders for highway hazardous materials incidents and pipeline and rail incidents.					
49	Public Safety	Fire Chief	09/01/2019	08/31/2024	LOC; ST; Other
4.3 The Village will collaborate with entities that bring new hazardous substances to communities through construction of additional highways, railroads, or pipelines for first responder training.					
50	Public Safety	Fire Chief	09/01/2019	08/31/2024	Other
Goal 5 – Invasive Species: St. Paris will lessen the cost of plant debris caused by invasive species that weaken and destroy trees that cause large amounts of debris requiring removal after storms.					

Priority	Action Type	Lead	Start Date	End Date	Funding
5.1 The Village will maintain trees and vegetation on public/jurisdiction property and advocate for the same on private property.					
51	Property Protection	Mayor	09/01/2019	08/31/2024	LOC; Other
5.2 The Village will work to clear public and private areas of dead or diseased trees that will easily be damaged by wind events and cause destruction of other property.					
52	Property Protection	Mayor	09/01/2019	08/31/2024	LOC
Goal 6 – Land Subsidence: St. Paris will reduce the risk of property damage due to land subsidence in at-risk areas.					
6.1 The Village will support and conduct programs that reduce erosion and sedimentation along shorelines, riverbanks, ditch banks, road berms, and areas that wash away					
53	Natural Resource Protection	Mayor	09/01/2019	08/31/2024	LOC; Other
6.2 The Village will advocate for, support, and implement slope protection actions along waterways and other vulnerable areas where natural causes endanger property, structures, or other vulnerabilities exist.					
54	Natural Resource Protection	Mayor	09/01/2019	08/31/2024	LOC; Other; ODM
6.3 The Village will encourage the development of more specific and accurate mapping of karst areas in Champaign County that interfaces the geologic characteristics with the soil types, as well as identifying abandoned and functioning wells and mines of various types, to more accurately identify karst locations and predict where sink holes or other structural problems are likely to occur.					
55	Prevention	Mayor	09/01/2019	08/31/2024	LOC
6.4 The Village will develop collaborative efforts with environmental and water quality advocates to more accurately determine risk to groundwater resources in the village, and work together to adequately and effectively prevent contamination of the groundwater.					
56	Natural Resource Protection	Mayor	09/01/2019	08/31/2024	LOC
Goal 7 – Severe Thunderstorm, Tornado, and Windstorm: St. Paris will lessen the damages suffered from windstorms or severe thunderstorms, including heavy rain, wind, hail, and lightning.					
7.1 The Village will advocate and support the construction of safe rooms for single- and multi-family homes and congregate facilities, including mobile home parks, apartment complexes, and mass gathering facilities.					
28	Property Protection	Mayor	09/01/2019	08/31/2024	PDM; LOC; HMGP; Other
7.2 The Village will repair or retrofit public properties with wind-resistant materials (i.e. metal roofing, siding, etc.) to decrease damage due to wind.					
30	Property Protection	Mayor	09/01/2019	08/31/2024	LOC; Other
7.3 The Village will develop agreements for emergency shelters to be used for a variety of disaster-related purposes during severe storms and/or evacuations.					
3	Property Protection	Mayor	09/01/2019	08/31/2024	LOC
7.4 The Village will research and identify resources for affordable debris disposal after storms, possibly through creation of special funding to pay for landfill fees or finding facilities that will receive debris for reduced rates.					
29	Property Protection	Mayor	09/01/2019	08/31/2024	LOC; ICC; Other
7.5 The Village will establish, maintain, improve, and/or promote public warning and notification systems (reverse 911, opt-in systems, outdoor warning sirens, etc.).					

Priority	Action Type	Lead	Start Date	End Date	Funding
31	Public Information	Fire Chief	09/01/2019	08/31/2024	LOC; ST
7.6 The Village will provide community education about protective actions, evacuation procedures, and other disaster preparedness information.					
32	Public Information	Mayor	09/01/2019	08/31/2024	LOC
7.7 The Village will advocate for residents to maintain adequate insurance coverage (homeowners, renters, flood, etc.).					
34	Public Information	Mayor	09/01/2019	08/31/2024	LOC
7.8 The Village will maintain building regulations and land-use planning practices that encourage responsible development in high-risk areas.					
33	Prevention	Mayor	09/01/2019	08/31/2024	LOC
7.9 The Village will work to develop a local, affordable and functional county-wide public safety communication system with the capability for multi-discipline and multi-jurisdictional communication.					
35	Public Safety	Fire Chief	09/01/2019	08/31/2024	LOC; ST; Other
7.10 The Village will work to fill gaps in warning and notification systems by adding outdoor warning sirens, developing reverse 911 capabilities, and by enhancing public notification processes.					
36	Public Information	Fire Chief	09/01/2019	08/31/2024	LOC; ST
7.11 The Village will advocate and support the hardening of utilities (distribution lines, generating plants, and other system components).					
2	Property Protection	Mayor	09/01/2019	08/31/2024	LOC; ICC
7.12 The Village will identify alternate/back-up utility resources for use when primary source is compromised (generators, redundant suppliers, etc.).					
1	Property Protection	Mayor	09/01/2019	08/31/2024	LOC; PDM; HMGP; Other
Goal 8 – Water Quality: St. Paris will work to improve the safety of the water supply whether it is sourced from private wells or public or privately-owned water treatment systems.					
8.1 The Village will advocate for improvements to water treatment plants, including enhanced testing and monitoring and improved treatment capabilities.					
38	Natural Resource Protection	Mayor	09/01/2019	08/31/2024	LOC
8.2 The Village will advocate for additional research into root causes of water quality issues, including but not limited to runoff monitoring and analysis, contamination tracing, and conservation practice implementation.					
40	Natural Resource Protection	Mayor	09/01/2019	08/31/2024	LOC
8.3 The Village will advocate for study of runoff from residential properties, including but not limited to lawn chemicals and other incidental threats.					
39	Natural Resource Protection	Mayor	09/01/2019	08/31/2024	LOC
8.4 The Village will work for early and pro-active collaboration between jurisdictions regarding spills or leaks into the water supply through seepage into wells, aquifers, reservoirs or waterways that will eventually affect local water quality.					
41	Property Protection	Fire Chief	09/01/2019	08/31/2024	LOC
8.5 The Village will advocate for and support the implementation of regulations and supportive programs that help farmers manage manure and waste from concentrated animal feeding facilities in the interest of protecting the groundwater and waterways from contamination.					

Priority	Action Type	Lead	Start Date	End Date	Funding
42	Natural Resource Protection	Mayor	09/01/2019	08/31/2024	LOC; Other
8.6 The Village will support the implementation of measures to manage distressed watersheds in the county and advocate for support programs to help farmers implement these regulations and measures while maintaining the agricultural economic well-being.					
44	Natural Resource Protection	Mayor	09/01/2019	08/31/2024	LOC; Other
8.7 The Village will support studies that identify the complete discovery of water resource contamination, including analysis of practices by industrial, personal use, manufacturing, and agricultural communities.					
43	Natural Resource Protection	Mayor	09/01/2019	08/31/2024	LOC; Other
Goal 9 – Winter Storms: St. Paris will lessen damages suffered from severe winter storms and blizzards.					
9.1 The Village will work to plow and clear village-maintained roadways to facilitate emergency traffic, necessary travel, and business access.					
37	Property Protection	Mayor	09/01/2019	08/31/2024	LOC

3.3.7 Urbana

In Urbana, the Director of Administration will monitor progress on mitigation strategies and coordinate with other community officials to identify mitigation opportunities. The majority of mitigation actions will be funded through local budgets. When possible, state and federal grants will be sought to help fund these efforts. During the planning process county and city officials discussed the possibility of mitigation strategies being implemented by various entities other than the city, including private property owners such as non-profit organizations, institutions of higher learning, school districts, or other special interest districts. This could be especially relevant in mitigating damages to multi-family structures, institutional buildings, and other non-government owned critical facilities. These parties were involved in discussion during the planning process, and could be the most likely administrators of a project at the time of implementation.

Table 3-9: Urbana Mitigation Strategies

Priority	Action Type	Lead	Start Date	End Date	Funding
Goal 1 – Drought/Extreme Heat: Urbana will assess the reliability of water supplies during drought and extreme heat.					
1.1 The City will advocate and support the hardening of water supply infrastructure to include alternate sources of water and protection of treatment plants and distribution systems.					
39	Natural Resources Protection	Director of Administration	09/01/2019	08/31/2024	LOC; CDBG
Goal 2 - Earthquake: Urbana will assess damage potential from earthquakes and establish a safety plan for residents.					
2.1 The City will identify the structures and infrastructure in the city that would likely be damaged or destroyed in an earthquake of moderate to severe magnitude.					
38	Property Protection	City Engineer	09/01/2019	08/31/2024	LOC
Goal 3 – Flood: Urbana will work to reduce flooding and limit loss of life or injury and property damage caused by flooding.					
3.1 The City will require construction of water control structures (reservoirs, retention/detention ponds, dams, levees, dikes, floodwalls, etc.) to prevent flooding of properties.					
21	Structurally Engineered Projects	City Engineer	09/01/2019	08/31/2024	LOC; PDM; HMGP; FMA; CDBG; Other
3.2 The City will elevate structures and infrastructure (buildings, roadways, bridges, culverts etc.).					
32	Property Protection	City Engineer	09/01/2019	08/31/2024	LOC; PDM; HMGP; FMA; CDBG; Other
3.3 The City will acquire, demolish, and/or retrofit flood-prone structures.					
20	Prevention	City Engineer	09/01/2019	08/31/2024	PDM; FMA; SRL; HMGP
3.4 The City will consider channel modification (deepening or widening) to re-route water or increase flow capacity and reduce flooding.					
25	Structurally Engineered Project	City Engineer	09/01/2019	08/31/2024	PDM; FMA; HMGP; ST; CDBG; Other

Priority	Action Type	Lead	Start Date	End Date	Funding
3.5 The City will clear debris, fallen trees, excess sediment, and other obstructions from waterways to improve flow.					
22	Property Protection	City Engineer	09/01/2019	08/31/2024	LOC
3.6 The City will work with watershed or conservancy districts and other jurisdictions that share an interest in waterways to facilitate cleaning, maintaining, and eliminating problems.					
23	Natural Resource Protection	Director of Administration	09/01/2019	08/31/2024	LOC
3.7 The City will utilize natural habitat creation and/or use of vegetative buffers inside waterways to slow the rapid flow of floodwater and/or hold excess storm water.					
24	Natural Resource Protection	City Engineer	09/01/2019	08/31/2024	LOC; Other
3.8 The City will maintain and enforce floodplain, zoning, and building regulations to manage development in flood-prone areas.					
13	Prevention	Director of Administration	09/01/2019	08/31/2024	LOC
3.9 The City will maintain participation in NFIP and engage in floodplain management activities to support flood prevention.					
14	Prevention	Director of Administration	09/01/2019	08/31/2024	LOC
3.10 The City will maintain, repair, upgrade, and/or replace storm sewers and related systems and increase culvert sizes and bridge spans, as necessary, to reduce flood risk.					
15	Structurally Engineered Projects	City Engineer	09/01/2019	08/31/2024	LOC; ST; CDBG; Other
3.11 The City will improve and repair roadways and berms damaged by rapid runoff and heavy precipitation.					
16	Property Protection	City Engineer	09/01/2019	08/31/2024	LOC
3.12 The City will work with railroads to identify a means to repair and improve railroad owned bridges, culverts, and abandoned tracks and keep them clear of debris and abandoned equipment.					
30	Property Protection	Director of Administration	09/01/2019	08/31/2024	Other
3.13 The City will identify and implement methods to collect debris in runoff water before it clogs ditches, streams, culverts, and other waterways.					
17	Property Protection	City Engineer	09/01/2019	08/31/2024	LOC
3.14 The City will protect banks and land near waterways from deterioration due to rapid or excessive flow by planting stream bank vegetation, installing dormant woody stakes and posts, planting trees, shrubs and grasses along banks and berms, or using deflectors to prevent deterioration, or other similar methods to accomplish the same.					
26	Property Protection	City Engineer	09/01/2019	08/31/2024	LOC; Other
3.15 The City will utilize biotechnical methods (placement of willow posts, hardwood tree plantings, fascines, brush layering, evergreen revetments, log revetments, tree kickers, lunger structures, or placed rocks as examples) to minimize the deterioration or destruction of stream banks due to excessive flow.					
27	Natural Resource Protection	City Engineer	09/01/2019	08/31/2024	LOC; Other
3.16 The City will manage stream flow through channel, sedimentation, debris and obstruction, and stream ecology management practices.					
28	Natural Resource Protection	City Engineer	09/01/2019	08/31/2024	LOC; Other

Priority	Action Type	Lead	Start Date	End Date	Funding
3.17 The City will utilize stream bank protection measures such as gabion revetments, riprap revetments, and crib walls, and other structural methods to protect the banks and berms.					
29	Natural Resource Protection	City Engineer	09/01/2019	08/31/2024	LOC; Other
3.18 The City will require developers and/or construction crews in urban development zones to use tools such as chemical stabilization, compost blankets, geotextiles to control soil deterioration, mulching of new plantings, seeding and sodding of areas highly vulnerable to rapid surface runoff, installation of grass lined channels, slope diversion for surface runoff, and other methods to reduce the damages to land and property due to heavy and rapid surface runoff or drainage from rainfall or other precipitation or draining water.					
18	Property Protection	Director of Administration	09/01/2019	08/31/2024	LOC; ICC
3.19 The City will protect soil quality by advocating for crop rotation, crop residue management, contour buffer strips, contour farming and strip-cropping, use of cover crops, installation of field borders, rotation grazing, pasture planting, establishment of grassy waterways, grade stabilization structures, water and sediment control basins, critical area planting, diversion, terracing, manure storage and runoff control, nutrient management, pest management, well abandonment, riparian buffers, wetland restoration, windbreaks, woodlot management, tree planting, and creation of upland wildlife habitat on farmland inside, adjacent to, or near incorporated city property.					
31	Natural Resource Protection	Director of Administration	09/01/2019	08/31/2024	LOC; Other
3.20 The City will encourage management of surface runoff and chemical residue through techniques such as installation of grassy waterways, creation of infiltration basins and trenches, porous pavement installation, filtration techniques like use of catch basin inserts, sand and organic filters, rain gardens and vegetated filter strips.					
19	Natural Resource Protection	City Engineer	09/01/2019	08/31/2024	LOC; ICC; Other
Goal 4 – Hazardous Materials Incident: Urbana will work to lessen both the number of spills, leaks, and releases from hazardous materials sources, as well as lessen the damages from such incidents.					
4.1 The City will ensure signage on highways and roadways is clear and easy to follow to decrease the likelihood of vehicle accidents due to unsure routes of travel.					
33	Property Protection	Director of Administration	09/01/2019	08/31/2024	LOC; Other
4.2 The City will advocate for funding for and conduct of additional first responder training to prepare responders for highway hazardous materials incidents and pipeline and rail incidents.					
34	Property Protection	Fire Chief	09/01/2019	08/31/2024	LOC; ST; Other
4.3 The City will collaborate with entities that bring new hazardous substances to communities through development of first responder training.					
35	Property Protection	Fire Chief	09/01/2019	08/31/2024	LOC; Other
Goal 5 – Invasive Species: Urbana will lessen the cost of plant debris caused by invasive species that weaken and destroy trees that cause large amounts of debris requiring removal after storms.					
5.1 The City will maintain trees and vegetation on public/jurisdiction property and advocate for the same on private property.					
36	Property Protection	Director of Administration	09/01/2019	08/31/2024	LOC; Other

Priority	Action Type	Lead	Start Date	End Date	Funding
5.2 The City will work to clear public and private areas of dead or diseased trees that will easily be damaged by wind events and cause destruction of other property.					
37	Property Protection	Director of Administration	09/01/2019	08/31/2024	LOC; Other
Goal 6 – Land Subsidence: Urbana will reduce the risk of property damage due to land subsidence in at-risk areas.					
6.1 The City will support and conduct programs that reduce erosion and sedimentation along riverbanks, ditch banks, road berms, and areas that wash away after heavy or prolonged precipitation.					
44	Natural Resource Protection	Director of Administration	09/01/2019	08/31/2024	LOC; ST; Other
6.2 The City will advocate for, support, and implement slope protection actions along waterways and other vulnerable areas where natural causes endanger property, structures, or other vulnerabilities exist.					
45	Natural Resource Protection	Director of Administration	09/01/2019	08/31/2024	LOC; Other
6.3 The City will encourage the development of more specific and accurate mapping of karst areas in Champaign County that interfaces the geologic characteristics with the soil types, as well as identifying abandoned and functioning wells and mines of various types, to more accurately identify karst locations and predict where sink holes or other structural problems are likely to occur.					
46	Natural Resource Protection	Director of Administration	09/01/2019	08/31/2024	LOC
Goal 7 – Severe Thunderstorm, Tornado, and Windstorm: Urbana will lessen the damages suffered from windstorms or severe thunderstorms, including heavy rain, wind, hail, and lightning.					
7.1 The City will advocate and support the construction of safe rooms for single- and multi-family homes and congregate facilities, including mobile home parks, apartment complexes, and mass gathering facilities.					
6	Property Protection	Director of Administration	09/01/2019	08/31/2024	LOC; PDM
7.2 The City will repair or retrofit public properties with wind-resistant materials (i.e. metal roofing, siding, etc.) to decrease damage due to wind.					
7	Property Protection	City Engineer	09/01/2019	08/31/2024	LOC; Other
7.3 The City will develop agreements for emergency shelters to be used for a variety of disaster-related purposes during severe storms and/or evacuations.					
2	Property Protection	Director of Administration	09/01/2019	08/31/2024	LOC
7.4 The City will research and identify resources for affordable debris disposal after storms, possibly through creation of special funding to pay for landfill fees or finding facilities that will receive debris for reduced rates.					
1	Property Protection	City Engineer	09/01/2019	08/31/2024	LOC
7.5 The City will establish, maintain, improve, and/or promote public warning and notification systems (reverse 911, opt-in systems, outdoor warning sirens, etc.).					
3	Public Information	Director of Administration	09/01/2019	08/31/2024	LOC; ST; Other
7.6 The City will maintain building regulations and land-use planning practices that encourage responsible development in high-risk areas.					
8	Property Protection	Director of Administration	09/01/2019	08/31/2024	LOC; ICC

Priority	Action Type	Lead	Start Date	End Date	Funding
7.7 The City will work to develop a local, affordable and functional county-wide public safety communication system with the capability for multi-discipline and multi-jurisdictional communication.					
10	Public Safety	Fire Chief	09/01/2019	08/31/2024	LOC; Other
7.8 The City will work to fill gaps in warning and notification systems by adding outdoor warning sirens, developing reverse 911 capabilities, and by enhancing public notification processes.					
9	Public Information	Fire Chief	09/01/2019	08/31/2024	LOC; ST; Other
7.9 The City will advocate and support the hardening of utilities (distribution lines, generating plants, and other system components).					
4	Property Protection	Director of Administration	09/01/2019	08/31/2024	LOC; ICC; Other
7.10 The City will identify alternate/back-up utility resources for use when primary source is compromised (generators, redundant suppliers, etc.).					
5	Property Protection	City Engineer	09/01/2019	08/31/2024	LOC; Other
Goal 8 – Water Quality: Urbana will work to improve the safety of the water supply whether it is sourced from private wells or public or privately-owned water treatment systems.					
8.1 The City will advocate for improvements to water treatment plants, including enhanced testing and monitoring and improved treatment capabilities.					
40	Natural Resource Protection	Director of Administration	09/01/2019	08/31/2024	LOC; Other
8.2 The City will advocate for additional research into root causes of water quality issues, including but not limited to runoff monitoring and analysis, contamination tracing, and conservation practice implementation.					
43	Natural Resource Protection	Director of Administration	09/01/2019	08/31/2024	LOC; Other
8.3 The City will advocate for study of runoff from residential properties, including but not limited to lawn chemicals and other incidental threats.					
41	Property Protection	City Engineer	09/01/2019	08/31/2024	LOC; Other
8.4 The City will work for early and pro-active collaboration between jurisdictions regarding spills or leaks into the water supply through seepage into wells, aquifers, reservoirs or waterways that will eventually affect local water quality.					
42	Natural Resource Protection	Director of Administration	09/01/2019	08/31/2024	LOC; Other
Goal 9 – Winter Storms: Urbana will lessen damages suffered from severe winter storms and blizzards.					
9.1 The City will work to plow and clear city-maintained roadways to facilitate emergency traffic, necessary travel, and business access.					
11	Property Protection	City Engineer	09/01/2019	08/31/2024	LOC
9.2 The City will develop collaborative efforts with environmental and water quality advocates to more accurately determine risk to groundwater resources in the county and work together to adequately and effectively prevent contamination of the groundwater through snow removal and salting of icy roads.					
12	Natural Resource Protection	Director of Administration	09/01/2019	08/31/2024	LOC; Other

3.3.8 Woodstock

In Woodstock, the Mayor will monitor progress on the identified mitigation strategies and coordinate the execution of mitigation activities. While most mitigation strategies will be funded through the village budget, grants will be sought to fund projects when possible.

Table 3-10: Woodstock Mitigation Strategies

Priority	Action Type	Lead	Start Date	End Date	Funding
Goal 1 – Drought/Extreme Heat: Woodstock will assess the reliability of water supplies during drought and extreme heat.					
1.1 The Village will advocate and support the hardening of water supply infrastructure to include alternate sources of water and protection of treatment plants and distribution systems.					
15	Natural Resource Protection	Mayor	09/01/2019	08/31/2024	LOC
Goal 2 - Earthquake: Woodstock will assess damage potential from earthquakes and establish a safety plan for residents.					
2.1 The Village will identify the structures and infrastructure that would likely be damaged or destroyed in an earthquake of moderate to severe magnitude.					
19	Prevention	Mayor	09/01/2019	08/31/2024	LOC
Goal 3 – Flood: Woodstock will work to reduce flooding and limit loss of life or injury and property damage caused by flooding.					
3.1 The Village will require construction of water control structures (reservoirs, retention/detention ponds, dams, levees, dikes, floodwalls, etc.) to prevent flooding of properties.					
16	Structurally Engineered Projects	Mayor	09/01/2019	08/31/2024	PDM; HMGP; Other
3.2 The Village will acquire, demolish, and/or retrofit flood-prone structures.					
12	Prevention		09/01/2019	08/31/2024	PDM; HMGP
3.3 The Village will maintain and enforce floodplain, zoning, and building regulations to manage development in flood-prone areas.					
13	Prevention	Mayor	09/01/2019	08/31/2024	LOC
3.4 The Village will maintain participation in NFIP and engage in floodplain management activities to support flood prevention.					
2	Prevention	Mayor	09/01/2019	08/31/2024	LOC
3.5 The Village will improve and repair roadways and berms damaged by rapid runoff and heavy precipitation.					
14	Property Protection	Mayor	09/01/2019	08/31/2024	LOC
Goal 4 – Hazardous Materials Incident: Woodstock will work to lessen both the number of spills, leaks, and releases from hazardous materials sources, as well as lessen the damages from such incidents.					
4.1 The Village will advocate for funding for and conduct of additional first responder training to prepare responders for highway hazardous materials incidents and pipeline and rail incidents.					
17	Public Safety	Mayor	09/01/2019	08/31/2024	ST; Other
Goal 5 – Invasive Species: Woodstock will lessen the cost of plant debris caused by invasive species that weaken and destroy trees that cause large amounts of debris requiring removal after storms.					
5.1 The Village will maintain trees and vegetation on public/jurisdiction property and advocate for the same on private property.					
18	Property Protection	Mayor	09/01/2019	08/31/2024	LOC

Priority	Action Type	Lead	Start Date	End Date	Funding
Goal 6 – Land Subsidence: Woodstock will reduce the risk of property damage due to land subsidence in at-risk areas.					
6.1 The Village will encourage the development of more specific and accurate mapping of karst areas in Champaign County that interfaces the geologic characteristics with the soil types, as well as identifying abandoned and functioning wells and mines of various types, to more accurately identify karst locations and predict where sink holes or other structural problems are likely to occur.					
19	Property Protection	Mayor	09/01/2019	08/31/2024	LOC
Goal 7 – Severe Thunderstorm, Tornado, and Windstorm: Woodstock will lessen the damages suffered from windstorms or severe thunderstorms, including heavy rain, wind, hail, and lightning.					
7.1 The Village will advocate and support the construction of safe rooms for single- and multi-family homes and congregate facilities, including mobile home parks, apartment complexes, and mass gathering facilities.					
7	Property Protection	Mayor	09/01/2019	08/31/2024	PDM
7.2 The Village will develop agreements for emergency shelters to be used for a variety of disaster-related purposes during severe storms and/or evacuations.					
6	Public Information	Mayor	09/01/2019	08/31/2024	LOC
7.3 The Village will research and identify resources for affordable debris disposal after storms, possibly through creation of funds to pay for landfill fees or finding facilities that will receive debris for reduced rates.					
8	Property Protection	Mayor	09/01/2019	08/31/2024	LOC
7.4 The Village will establish, maintain, improve, and/or promote public warning and notification systems (reverse 911, opt-in systems, outdoor warning sirens, etc.).					
1	Public Information	Mayor	09/01/2019	08/31/2024	LOC; ST; Other
7.5 The Village will provide community education about protective actions, evacuation procedures, and other disaster preparedness information.					
3	Public Information	Mayor	09/01/2019	08/31/2024	LOC
7.6 The Village will maintain building regulations and land-use planning practices that encourage responsible development in high-risk areas.					
9	Prevention	Mayor	09/01/2019	08/31/2024	LOC
7.7 The Village will work to develop a local, affordable and functional county-wide public safety communication system with the capability for multi-discipline and multi-jurisdictional communication.					
4	Public Safety	Mayor	09/01/2019	08/31/2024	LOC; Other
7.8 The Village will work to fill gaps in warning and notification systems by adding outdoor warning sirens, developing reverse 911 capabilities, and by enhancing public notification processes.					
5	Public Information	Mayor	09/01/2019	08/31/2024	LOC; ST; Other
7.9 The Village will advocate and support the hardening of utilities (distribution lines, generating plants, and other system components).					
10	Property Protection	Mayor	09/01/2019	08/31/2024	LOC; Other
7.10 The Village will identify alternate/back-up utility resources for use when primary source is compromised (generators, redundant suppliers, etc.).					
11	Property Protection	Mayor	09/01/2019	08/31/2024	LOC; ST; Other
Goal 8 – Water Quality: Woodstock will work to improve the safety of the water supply whether it is sourced from private wells or public or privately-owned water treatment systems.					
8.2 The Village will advocate for additional research into root causes of water quality issues, including but not limited to runoff monitoring and analysis, contamination tracing, and conservation practice implementation.					

Priority	Action Type	Lead	Start Date	End Date	Funding
20	Natural Resource Protection	Mayor	09/01/2019	08/31/2024	LOC
Goal 9 – Winter Storms: Woodstock will lessen damages suffered from severe winter storms and blizzards.					
9.1 The Village will work to plow and clear village-maintained roadways to facilitate emergency traffic, necessary travel, and business access.					
21	Property Protection	Mayor	09/01/2019	08/31/2024	LOC

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 a strategy to become an actionable item, it must be converted to a specific project with funding, action steps, timelines, and project goals. For example, a project to acquire and demolish a repetitive loss property must begin with identification of the specific property to be acquired and funding 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.

The Champaign County EMA will monitor the implementation of these grant-based strategies through ongoing communication with jurisdiction officials and stakeholders. When mitigation grants or other funding sources become available, reasonable efforts will be made to secure 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. When funding is secured, a detailed project timeline will be developed and action steps taken to complete the project. Upon completion, the jurisdiction will evaluate project effectiveness and share that information with the EMA and planning team for consideration in developing future projects.

There may be instances where a mitigation project to be completed would most efficiently be initiated, managed, and administered by a property owner, special district, or a nonprofit organization. Examples might include a non-profit property owner or a property owners' association, an institution of higher learning, or a special district like a school district, utility district, or a service district. In such cases, the jurisdiction having authority might delegate grant application and administration directly to that entity in the interest of efficiency and effectiveness, bearing in mind that successful overall project implementation is the critical factor. They may delegate various rights and responsibilities to that entity, including, but not limited to, project oversight, vendor procurement, and construction. This delegation might be done in consideration of staffing and oversight capabilities, timeliness of work performance, or logistics. The authority having jurisdiction (county, city, or village) will require that all building codes, floodplain regulations, and other development and land use regulations be followed and will verify that compliance was enforced. Non-governmental and external entities performing this work will be required to comply with all rules, procedures, and grant terms and conditions. All permits will be reviewed and issued by the local authority that typically does so, and all inspections and final occupancy approvals will be given by the local or state party that typically issues those approvals. This delegation will be done in a way that does not compromise or reduce the collaborative efforts of mitigation planning, land use planning, or development regulations in Champaign County by various officials and jurisdictions.

The collaboration between stakeholders used to develop these strategies was the most valuable part of the mitigation planning process for Champaign County. Developing this plan required stakeholders to evaluate hazards and risks in their community through extensive

collaboration and conversation. They were required to examine the local community, predict where and under what conditions damages would occur, and identify opportunities to reduce or eliminate those potential damages. The solutions, currently 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 all sectors of the community were represented in the planning process.

Champaign County ultimately developed comprehensive, relevant, and effective solutions to their unique risks and vulnerabilities. Given the availability of funding, personnel, and support, Champaign County and its jurisdictions are positioned to move forward and implement these strategies and accomplish their goal of making the county more disaster resilient.