

3.0 MITIGATION STRATEGIES

As Paulding County's planning team and stakeholders developed mitigation goals and strategies for the county, their goal was to address the specific risks and vulnerabilities of each jurisdiction. As a result, the mitigation strategies in this plan are significantly more detailed and comprehensive than those developed for previous plans. While many strategies are similar from jurisdiction to jurisdiction, each community's stakeholders expressed their unique circumstances and crafted strategies to address those specific issues. The result is a set of comprehensive and customized mitigation goals and strategies that address the needs of Paulding County and its jurisdictions.

Strategies have been developed for the unincorporated parts of the county, and are listed under "Paulding County". The area covered by this section includes all of the townships, or rural areas that are primarily used for production agriculture on family or corporate farms, for agri-businesses services and sales, or feed production, or for rural residential homes. There are a few small businesses spattered about the rural areas, and sections where windmill farms have been built. Most of the small businesses serve the residents who live in Paulding County.

Villages have been grouped together because of such strong similarity with one another. There is no urban area in Paulding County, and all villages are small settlements of residents. Paulding is the county seat and the largest village in the county. Antwerp is the second-largest village in the county at 1,736 residents and Payne is third with 1,194 residents. Completing the municipal group are the very small villages with just a few hundred residents, with Oakwood at 608 residents being the largest of those. This entire group of very small villages are similar in disaster vulnerability, and very like one another in mitigation needs; therefore, they were grouped together to facilitate collaboration as they work to include disaster mitigation in typical planning efforts. Each of the eleven villages will formally adopt the mitigation plan, and their mayor will act as the champion of strategy promotion and annual review.

3.1 STATUS OF PAST MITIGATION EFFORTS

The immediately preceding Paulding County Hazard Mitigation Plan was developed and adopted by the Paulding County Commissioners on March 8, 2006. The plan expired on July 3, 2012. No currently approved and adopted hazard mitigation plan exists for Paulding County.

In the previous plan, the planning committee developed fifteen actions for implementation. They chose action items in consideration of past incidents, potential losses, and practical factors. Each action was applicable to the entire county, and they were categorized by general hazard group. It was noted that there were no earthquake strategies identified although earthquake was specifically listed.

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

- Completed: Strategy was completed as written; item has not been included in new plan
- Ongoing: Strategy has not been achieved in its entirety and is included in new plan
- Deleted: Strategy was determined to not be feasible or necessary and has been removed from consideration in the new plan, or the facts upon which the strategy was developed no longer exist or have changed significantly.

Table 3-1: 2006 Paulding County Mitigation Goals

Goal	Jurisdictions	Current Status
SEVERE STORMS		
Provide an alternate power source, such as back-up generators, for those sensitive populations and critical facilities that must have continuous power to preserve and protect human health.	County-wide	Ongoing <ul style="list-style-type: none"> • While some generators have been acquired, not all areas are covered adequately and some critical facilities still lack generator capability. This is an ongoing need across the entire county. Specific generator locations were not specified in the previous plan.
Provide an alternate power source such as back-up generators for wastewater treatment plants and water treatment plants to avoid sanitary sewers from backing up into homes and creating a health hazard, and to maintain a constant water supply to county residents.	County-wide	Ongoing <ul style="list-style-type: none"> • While some generators have been acquired, not all areas are covered adequately and some critical facilities still lack generator capability. This is an ongoing need across the entire county. Specific generator locations were not specified in the previous plan.
Provide post-hazard mitigation plan training for emergency staff and key personnel throughout the county to educate them on emergency preparedness and the purposes and goals of the county's all natural hazard mitigation plan.	County-wide	Completed
FLOODING		
Paulding County's residents and transient population are unaware of the roads that have become impassable by flood waters. Since ODOT does not have equipment in Paulding County, the county wants to obtain its own road sign for road closures.	County-wide	Completed

Goal	Jurisdictions	Current Status
Provide an alternate power source, such as back-up generators, for those sensitive populations and critical facilities that must have continuous power to preserve and protect human health.	County-wide	Ongoing <ul style="list-style-type: none"> While some generators have been acquired, not all areas are covered adequately and some critical facilities still lack generator capability. This is an ongoing need across the entire county. Specific generator locations were not specified in the previous plan.
Develop and provide public education flyer to distribute to county residents covering flood insurance, including what it is and a resident's right to purchase it.	County-wide	Completed
WINTER STORMS		
Provide an alternate power source, such as back-up generators, for those sensitive populations and critical facilities that must have continuous power to preserve and protect human health.	County-wide	Ongoing <ul style="list-style-type: none"> While some generators have been acquired, not all areas are covered adequately and some critical facilities still lack generator capability. This is an ongoing need across the entire county. Specific generator locations were not specified in the previous plan.
Develop and provide public education flyer to distribute to county residents covering the hazards of snow storms and cold temperatures and how to prepare before the winter months.	County-wide	Completed
Paulding County feels that there is a lack of communication between the utility companies and the county in terms of notifying the county of how long utility service will be disrupted. The county wants to develop a memorandum of understanding between the county and the utility companies establishing protocols to be followed in the event of a utility disruption.	County-wide	Deleted <ul style="list-style-type: none"> New methods of notification about outage repairs exist that were not an option in 2006; this is no longer necessary.

TORNADO		
Provide an alternate power sources, such as back-up generators, for those sensitive populations and critical facilities that must have continuous power to preserve and protect human health.	County-wide	Ongoing <ul style="list-style-type: none"> While some generators have been acquired, not all areas are covered adequately and some critical facilities still lack generator capability. This is an ongoing need across the entire county. Specific generator locations were not specified in the previous plan.
Provide an alternate power source, such as back-up generators, for wastewater treatment plants and water treatment plants to avoid sanitary sewer from backing up into homes creating a health hazard and to maintain a constant water supply to county residents.	County-wide	Ongoing <ul style="list-style-type: none"> While some generators have been acquired, not all areas are covered adequately and some critical facilities still lack generator capability. This is an ongoing need across the entire county. Specific generator locations were not specified in the previous plan.
The county lacks equipment for a mobile emergency operations center to serve the rural sections of the county. Therefore, the county wants to obtain a trailer for use as a mobile command post.	County-wide	Completed
DROUGHT		
Provide education concerning land management water use limitations for when water table is low since many residents rely on wells for water and those wells have the potential to run dry during a drought event.	County-wide	Completed
Mega-farms in the county typically have 600-700 head of cattle under one roof with no provision for caring for them in the event of an emergency. The county wants to develop an emergency preparedness program for mega-farms and provide education concerning the use of alternate water sources during droughts.	County-wide	Deleted
Paulding County's fire departments wet hydrants become inoperable in drought conditions. The county wants to provide additional dry hydrants throughout the county that do not depend on a water source for operability.	County-wide	Completed

3.2 RISK PRIORITIES

The HIRA (section 2.0 of this plan) explains in detail the assessment and analysis of natural hazards in Paulding County. The HIRA takes into account the total list of hazards possible in Paulding County, the frequency (probability) with which each occurs, the severity (magnitude) that each hazard displays upon impact in the county, and the outcomes (impact and damages) caused by the incidents. Those factors are all explained in the HIRA, as well as descriptions of the hazards and how each would impact various locations in the county.

As a result of that assessment and analysis of hazards, the Paulding County Mitigation Planning group established the following hazard priorities, listed from highest hazard to lesser hazards in descending order of threat: Flood, wind, tornado, severe thunderstorm, severe winter storm (or blizzard), dam failure, drought and extreme heat, and earthquake.

Flooding is the major concern in Paulding County. The flat terrain makes natural drainage slow and dependent upon storm sewer capacity, especially when heavy rain falls quickly, or significant snow melt occurs rapidly. Sometimes with Ohio's fluctuation in winter temperatures, both heavy rain and rapid snow melt are simultaneous, and that worsens flooding. In many cases of heavy or extended rainfall, flash flooding occurs because streets don't drain quickly, storm sewers are either non-existent or they are easily overwhelmed, or low-lying areas cannot drain without sunshine and the evaporation process to aid in removing standing water. The villages tend to deal with flooded streets on a regular basis, and homeowners have wet basements at the same time. The floodwaters are usually measured in inches, and damages are, for the most part, not significant when measured against FEMA damage assessment criteria. However, the damages are expensive for homeowners and disruptive for everyone.

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

Wind is the second concern. Again, the wide-open expanse of land without tree lines, wooded areas, and other windbreaks makes Paulding County properties prone to wind damage. The countryside is peppered with grain bins, feed silos, elevator legs on grain bins, and barns and storage buildings for farm equipment and livestock. This property is vulnerable to wind damage and is unprotected. Straight line high winds can easily reach 35-50 miles per hour in any given storm, perhaps happening multiple times each year. This kind of wind can topple trees, damage roofs and siding, destroy grain operations, and take out utility poles. Although rare, severe storms can include bursts of wind that are in excess of 50 miles per hour, and the damage can then include downed trees, fallen utility towers and poles, and destruction of farm buildings. Because this wind occurs in western Ohio when weather fronts move into the area, the wind can be associated with extreme changes in temperature, severe thunderstorms and tornadoes, or blizzards. However, a wind event that occurs by itself is not uncommon.

Strategies for wind focus on elimination of debris potential, hardening of utility distribution systems, and use of wind-resistant building materials and wind-wise construction practices

Tornado is the third hazard to concern Paulding County residents. The area experiences unstable storm fronts with changing temperatures ahead of and behind it. This situation can spawn tornadoes quite easily. As fronts form in the Midwest and move across Illinois and Indiana into Ohio, rotational winds develop. It is common for funnel clouds to form and cross Paulding County, and they frequently touch down in the area. While the county is not populated in any concentration, tornadoes do damage farmsteads, homes, and commercial property. There is rarely damage to sufficient property to declare an emergency and most losses are covered by property owners. Even the villages are small enough that a low number of homes are damaged even when the village is struck by a tornado. Only three of eleven villages have over one thousand residents; seven have less than five hundred residents. Due to this factor, not much national attention is drawn to tornado damage in Paulding County.

Severe thunderstorms and severe snowstorms were fourth and fifth on the Paulding County list of threats. When precipitation (rain or snow) combines with wind, and sometimes a tornado or a microburst, the storm can cause a lot of damage to county properties. Severe thunderstorms sometimes include hail that pelts vehicles and buildings and causes damage. A microburst can destroy a large barn, grain operation, or home without widespread consequences.

Severe thunderstorms and blizzards are disruptive and expensive in their worst form. Both cause roads to become impassable. These storms cause accessibility problems across the county, and are especially damaging to the livestock farms that depend upon transportation services daily. Roads are blocked and snow covered, power outages occur due to the ice and/or wind associated with the storms, and farms cannot operate. Livestock operations are dependent upon utilities and transportation support. These storms also bring the damage of high winds and heavy precipitation, sometimes causing flooding and structural damages. Hail can damage roofs and vehicles, and anything else that is in its path. The storms are damaging because they combine several factors into a comprehensive path of destruction.

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

Drought and extreme heat are possible but do not occur frequently in Ohio. Drought tends to be more of a “dry spell” than an extended drought. While Ohio, in general, experienced drought in 1988 and 2012, Paulding County was not one of the most affected counties. Grain crops are more resilient than vegetable and fruit crops when drought strikes.

Mitigation strategies for drought and extreme heat include additional public information, enhanced warning and notification, and hardening of the water supply through emergency planning and capital improvements.

Dam failure is a hazard for those areas in proximity to a dam and spillway or an upground reservoir. The Village of Paulding has one up-ground reservoir on the extreme south side of the village. It is located between County Road 107 and Fairground Drive. The structures in close proximity to the reservoir are commercial and government-owned structures and the county fairgrounds that is occupied for specific purposes during the fair. Flatrock Creek, a large drainage stream, is to the immediate north of the reservoir. The village lies north of Fairground Drive. While total failure, due to the size of the structure, could inundate properties on the south side of the village, maintenance of the reservoir is the village's responsibility. This threat ranked moderate as far as possibility but low as far as probability.

The other area vulnerable to dam failure is in Brown Township southeast of the Village of Oakwood. Situated out in the countryside away from structures, the Oakwood Wastewater Treatment lagoon lies east of Road 205, and west of Road 209 near the Auglaize River in Brown Township. There are few structures close to this facility and there is little risk of inundation of village residences. The dam is classified as such due to its size.

All other dams in Paulding County are small. They are classified as "other" by the Ohio Department of Natural Resources, and most are privately owned and pose little if any danger to surrounding areas.

The villages did not include dam failure in their hazards because the upground reservoirs are not close enough to pose significant threats the village and they are well maintained, checked for cracks or potential breaches on a regular basis, and have no history of failure. Paulding and Oakwood are close to upground reservoirs, but these actually are on township property and are maintained by the villages as part of their municipal water system. Therefore, due to location, dam failure is included as part of the countywide strategies. Strategies for dam failure focused on community awareness and advocacy for proper maintenance. Mitigation of dam failure concentrates on monitoring the condition of dams and taking appropriate action if necessary.

Paulding County has an extremely low incidence of earthquake activity. There is no historical data of an earthquake epicenter in or near Paulding County. There are no buildings in the county that are higher than three stories, and there are few of those. Only in the downtown of a few villages are there buildings that have any significant height. Grain operations on county farms are the most likely vulnerable locations should an earthquake strike, and those elevators and conveyors would cause little damage anyhow. Most damage would be to private property, and most of it agricultural grain-storage associated structures. Due to the lack of earthquake history, the planning group felt it was a very low risk, and therefore strategies focused on community awareness.

Strategies for earthquake include robust warning and notification systems and public information.

The strategies in this plan are intended to provide general options to lessen the vulnerabilities in Paulding County. During the planning process, the planning team and stakeholders

determined what hazards strike most frequently, which cause the most disruption, and which consequences feasibly can be prevented or lessened. With limited money and staff available to conduct mitigation projects, the planning team weighed every potential effort by measuring the benefit against the resources realistically available to conduct the activity. The planning team endeavored to prioritize strategies that could realistically be accomplished and result in actual reduction in potential and real losses.

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

3.3 MITIGATION GOALS AND STRATEGIES

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

3.3.1 Paulding County

Paulding County's mitigation strategies are intended to reduce vulnerability to damage from wind, water, severe storms, invasive species, drought, dam failure, and earthquake. The identified goals and strategies include all non-incorporated areas of the county, such as townships and census areas or neighborhoods. These strategies will be considered as economic development and growth is guided, as regulations are written and revised, and as codes and guidance is enforced and approved. These strategies will be reflected as local building codes are considered, land use regulations are enforced, economic development goals and strategies are planned and achieved, capital improvement plans are created, and budgets are managed. Projects will be conducted as funding is available, and daily practices will be adjusted to include modifications of work that include these strategies.

As the Paulding County Commissioners represent the townships in mitigation efforts, they will communicate with the township trustees whose jurisdictions are affected. As the county acts on behalf of the townships when it comes to mitigation efforts, as it does with other federal and state programs, the townships will fulfill their responsibility to enforce and comply with land use regulations and building codes. The county officials will work with township trustees to ensure that smart development takes place to create sustainable communities in these rural sections of the county.

This tiered partnership between levels of local government is not new and stems from statutory procedures. Paulding County and townships have worked together in this way for many years. For example, they work together now to recruit new business and industry, and to develop more housing for individuals and families. They worked together, for example, as they brought windmill power generation business to Paulding County, working with Amazon and others to establish construction goals, process, and completion that met the county's needs but also protected private and public property in the process. Recruitment and business incentives were all handled by the county, but the townships worked with the county to address wear and tear on township-maintained roads and bridges. Because township trustees are often volunteer officials, county commissioners take official action to benefit the townships as a cooperative effort with the trustees, especially where federal grants or requirements are concerned. Today's effort to include hazard mitigation in rural community development is another effort of collaboration.

Table 3-2: Paulding County Mitigation Goals and Strategies

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
GOAL 1: PAULDING COUNTY WILL EMPLOY MITIGATION ACTIONS TO REDUCE DAMAGES INCURRED FROM SEVERE WINDSTORMS, INCLUDING STRAIGHT-LINE WINDS AND TORNADOES.					
1.1 Paulding County will advocate for and support the creation of safe rooms for vulnerable locations, including single and multi-family homes and neighborhoods without basements or shelters.					
1	Property Protection	EMA Director	10-1-17	12-31- 22	Local PDM
1.2 Paulding County will advocate and support, and implement on county-owned property, the proper maintenance of trees and vegetation to reduce damages caused by high winds or tornadoes.					
2	Nat. Resource Protection	County Commissioners	10-1-17	12-31-22	Local
1.3 Paulding County will implement a program to clear both urban and rural areas of debris after severe wind and flooding to keep crop fodder and other debris out of water treatment plants, sewers, transportation routes, and other infrastructure, and to keep roadways open and usable as soon as possible after storms.					
3	Property Protection	County Engineer	10-1-17	12-31-22	Local
1.4 Paulding County will maintain and enforce land use regulations (including zoning and development regulations and construction codes) in an effort to reduce storm damages to properties.					
4	Prevention	County Engineer	10-1-17	12-31-22	Local
GOAL 2: PAULDING COUNTY WILL ENGAGE IN MITIGATION ACTIONS THAT REDUCE DAMAGES FROM FLOODING.					
2.1 Paulding County will utilize acquisition, demolition, and relocation programs for properties that have repeated or extremely severe damage from floods and flash floods.					
5	Prevention	EMA Director	10-1-17	12-31-22	Local PDM FMA HMGP

2.2 Paulding County will participate in NFIP and other federal flood mitigation programs that help the county reduce losses attributable to flooding and will regularly review flood maps through a process of public engagement to assure accuracy as necessary.

6	Prevention	Floodplain Manager	10-1-17	12-31-22	Local
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2.3 Paulding County will review and enforce existing land use regulations (zoning rules, building codes) to facilitate wise development, especially in areas with flood vulnerability.

7	Prevention	Floodplain Manager	10-1-17	12-31-22	Local
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2.4 Paulding County will advocate that renters, landowners, and others purchase and maintain reasonable casualty insurance, including flood insurance where appropriate, as mitigation against disaster losses.

8	Prevention	EMA Director	10-1-17	12-31-22	Local
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2.5 Paulding County will use federal and state grant programs to fund mitigation efforts, especially in flood mitigation and mitigation planning.

9	Prevention	EMA Director	10-1-17	12-31-22	PDM FMA HMGP
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2.6 Paulding County will require the use of retention and detention ponds where new or expanded construction, parking lots, streets, or other development may cause flooding to occur as a result of increased runoff or lack of natural watershed process.

10	Structurally Engineered	County Engineer	10-1-17	21-31-22	Local PDM CDGB Other
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2.7 Paulding County will maintain or replace, as needed, water control structures and systems, such as wastewater pumping stations, generators, water pumps, and other structures.

11	Structurally Engineered	County Engineer	10-1-17	12-31-22	Local
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2.8 Paulding County will clear county-maintained ditches of debris, sediment, and other obstructions that impede drainage and watershed.

13	Nat. Resource Protection	County Engineer	10-1-17	12-31-22	Local
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2.9 Paulding County will advocate for study of the impact of potential dam failure, including consideration of dam characteristics and threat details for any Class I, II, or III dam in the county.

14	Prevention	County Engineer	10-1-17	12-31-22	Local ODNR
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2.10 Paulding County will study countywide watershed and storm runoff in order to improve storm water practices that protect property and reduce damages from flooding.

15	Structurally Engineered	SWCD Director	10-1-17	12-31-22	Local
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2.11 Paulding County will use elevation and creation of buffer zones to contain floodwater where other means are ineffective, too costly, or not feasible.

16	Structurally Engineered	County Engineer	10-1-17	12-31-22	Local
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2.12 Paulding County will encourage individuals to mitigate personal flood loss through the use of simple prevention measures like sandbagging or not building on property that floods.

17	Prevention	EMA Director	10-1-17	12-31-22	Local
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2.13 Paulding County will consider improvements to roads that include increased bridge spans and elevation, repair of berms, maintenance of bridge slopes and protection of roadways from flooding.

18	Structurally Engineered	County Engineer	10-1-17	12-31-22	Local
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GOAL 3: PAULDING COUNTY WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE DAMAGES FROM ALL SEVERE STORMS, INCLUDING THUNDERSTORMS AND BLIZZARDS, AND OTHER NATURAL DISASTERS AND CAUSES.

3.1 Paulding County will expand its road sign warning program through increasing the number of signs available to mark dangerous road conditions like flooding, washouts, and other damages due to storms.

19	Property Protection	County Engineer	10-1-17	12-31-22	Local
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3.2 Paulding County will expand and improve its public warning and notification capability through additional or improved outdoor warning sirens, improvements to the software used in these systems, or enhanced public education regarding warning and notification of protection orders or warnings.

20	Public Information	EMA Director	10-1-17	12-31-22	Local HSGP EMPG
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3.3 Paulding County will develop and implement a program to assist in the removal of dead or diseased trees along county maintenance waterways and roadways that have been affected by Emerald Ash Borer and other invasive species

21	Nat. Resource Protection	County Engineer	10-1-17	12-31-22	Local
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3.4 Paulding County will advocate for the agriculture industry to have emergency preparations in place and access to generators and other critical resources during extended power outages, to goods and services that are unique to livestock disease or infestation incidents, to services and supplies used in repair of specialized farm equipment damaged by storms and wind, and to other measures needed after disasters.

22	Property Protection	EMA Director	10-1-17	12-31-22	Local
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3.5 Paulding County will develop methods for the agriculture community to collaborate with appropriate agencies immediately after storms to identify storm caused consequences, such as excessive runoff and downstream flooding, manure management challenges, grain and chemical storage issues, equipment and commodity damages, and livestock casualties.

23	Property Protection	EMA Director	10-1-17	12-31-22	Local
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GOAL 4: PAULDING COUNTY WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE DAMAGES DUE TO UTILITY OUTAGES AND RESOURCE SHORTAGES FROM ALL CAUSES.

4.1 Paulding County will encourage quick action and collaboration between all levels of government and private contractors to clear roads and maintain utilities sure and after severe weather, especially ice, snow and floods to protect livestock operations from disaster related losses.

24	Property Protection	EMA Director	10-1-17	12-31-22	Local
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4.2 Paulding County will advocate and encourage the hardening of utilities through damage resistant installation below grade, improvements to supply lines and generations plants, and upgrade of substations and transformers.

25	Structurally Engineered	County Engineer	10-1-17	12-31-22	Local Private
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4.3 Paulding County will advocate for identification of redundant suppliers of heating fuels, potable water, and other utility needs and will identify and facilitate availability and proper use of generators as an alternate power source.

26	Property Protection	EMA Director	10-1-17	12-31-22	Local
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GOAL 5: PAULDING COUNTY WILL ENGAGE IN MITIGATION ACTIONS TO PRESERVE AND PROTECT NATURAL RESOURCES SUCH AS TOPSOIL AND WATERWAYS FROM THE CUMULATIVE EFFECTS OF STORMWATER.

5.1 Paulding County will support, and participate in when feasible, efforts to maintain and clear county maintenance rivers in the county of debris, excessive sediment, and other obstructions that prevent the natural and effective watershed process.

27	Nat. Resource Protection	County Engineer	10-1-17	12-31-22	Local Conservancy
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5.2 Paulding County will participate in regional watershed management programs when feasible to create additional wetlands, and to reduce the use of phosphorus and nitrogen in agricultural, residential, and commercial settings.

28	Nat. Resource Protection	SCWD Director	10-1-17	12-31-22	Local Conservancy
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5.3 Paulding County will facilitate collaboration with farmers and agri-businesses to adopt conservation procedures that protect agricultural assets during and after severe storms, including land, facilities, crops, and other assets.

29	Property Protection	SWCD Director	10-1-17	12-31-22	Local
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5.4 Paulding County will encourage agricultural conservation processes that protect topsoil, slopes and waterway banks from wind or water abrasion through the use of windbreaks, filter strips, cover crops, grassy buffers, tree lines, and other methods of preserving the soil.

30	Nat. Resource Protection	SWCD Director	10-1-17	12-31-22	Local
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5.5 Paulding County will protect roadways from compromised structural integrity, washed away abutments and bridges, degraded berms, or other damage through stabilization and reinforcement techniques.

31	Property Protection	County Engineer	10-1-17	12-31-22	Local
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5.6 Paulding County will support agricultural practices that pertain to conservation efforts that replace old and damaged field tiles and replace them with contemporary structures; and that advocate for the appropriate and feasible use of cover crops, filter strips, conservation tillage, and tile control structures to limit damage to topsoil and protect slopes and waterway banks.

32	Nat. Resource Protection	SWCD Director	10-1-17	12-31-22	Local
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5.7 Paulding County will implement improvements to the county ditch maintenance program to further improve the natural function of the watershed and to repair damage done to streams, creeks, and ditches by storms and floods.

33	Nat. Resource Protection	County Engineer	10-1-17	12-31-22	Local
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GOAL 6: PAULDING COUNTY WILL ENGAGE IN MITIGATION ACTIONS THAT ENABLE THE PUBLIC TO OBTAIN AND USE DISASTER INFORMATION TO SAVE LIVES AND PRESERVE PROPERTY FOR ALL HAZARDS PRESENT IN PAULDING COUNTY.

6.1 Paulding County will develop a multi-part communication system to engage the community in protective action procedures, warnings and notifications, and other critical lifesaving information related to all disaster incidents when necessary.

36	Public Information	EMA Director	10-1-17	12-31-22	Local HSGP EMPG
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6.2 Paulding County will develop interoperable communication plans to coordinate life-saving efforts with community partners and others during severe storms and other disasters.

37	Public Information	EMA Director	10-1-17	12-31-22	Local HSGP EMPG
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6.3 Paulding County will educate the public about all relevant disaster hazards and vulnerabilities, protective actions, available services, vulnerable populations and available assistance and other emergency procedures using a variety of means to include print and spoken media, digital resources, and other appropriate local sources.

38	Public Information	EMA Director	10-1-17	12-31-22	Local HSGP EMPG
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6.4 Paulding County will develop, utilize and maintain a communications plan with the public to include mass media, social media, digital resources, and direct contact for emergency management information before, during, and after incidents that result from any hazard relevant to Paulding County.

39	Public Information	EMA Director	10-1-17	12-31-22	Local HSGP EMPG
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6.5 Paulding County will identify locations and establish agreements with owners for facilities to be used as community centers during evacuations, extended power outages, or other disasters for general community use or shelters, as needed.

40	Public Information	EMA Director	10-1-17	12-31-22	Local
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3.3.2 Paulding County Municipalities

**Includes Villages of Antwerp, Broughton, Cecil, Grover Hill, Haviland, Latty, Melrose, Oakwood, Paulding, Payne, and Scott.*

The villages in Paulding County are all very similar, and each one is populated by a very small number of residents. Populations range from 120 in Broughton to 3,600 in Paulding. Seven of eleven villages have less than 500 residents, and only one is over 2,000 residents. Their elected officials are volunteers who, for the most part, work outside the village. There are only three main school districts in the county, and one in the far northeast corner that covers just a few homes. This draws individuals out of the small communities for both work and school activities. The communities are collections of residences with a few pieces of infrastructure (streets and bridges for the most part); most do not have utilities or infrastructure with the exception of Antwerp and Payne who do have utility departments that include storm sewers and water distribution.

The terrain is very flat and across the entire county, the homes and commercial properties are similar in age and type, and the risks are almost identical from village to village. The sharing of resources is very important, and there has been a great deal of success in the county attributed to cooperation and collaboration. Residents believe that mitigation efforts are one more area where the small towns can work together to best achieve success.

Paulding is the county seat, and is the largest municipality at just over 3,600 residents. Paulding sits in the center of county, and is the central retail center for local individuals and businesses.

The county government offices are in Paulding and the surrounding area. The second largest village in this group is Antwerp, a community of just over seventeen hundred residents located in the far northwest of the county, very near the Indiana state line. Other villages include, with population following in parentheses, Broughton (120), Cecil (188), Grover Hill (402), Haviland (215), Latty (193), Melrose (275), Oakwood (608), Payne (1,194) and Scott (286).

All municipalities are most concerned about preventing wind damage and utility outages from windstorms and tornado, and in preventing flash flooding. Debris management and storm water management are concerns as crop fodder and fallen trees can interfere with drainage and access to the village and homes. Severe storms can isolate them, especially when combined with utility issues due to tree damage and downed poles, and as roads are closed due to blockages or flooding. The major area retail center is in Defiance, about 20 miles away in Defiance County. Making sure residents can get to Defiance is important for many reasons.

Each village's mayor acts as the chief officer of the community. Paulding and Antwerp have Village Administrators, but the other villages have minimal staff. Mayors meet as a group on a regular basis, and consider all development and contemporary issues and concerns, and when they have village employees, they work closely with them to achieve goals. Mayors can add mitigation actions to their existing meeting agenda, and by sharing the same goals and actions, can share resources to accomplish mitigation goals.

The following strategies apply to the entire list of villages above, and each village is named in each goal as a participant in that activity. The last goal pertains only to Paulding and Oakwood, and that is indicated in the verbiage.

Table 3-3: Municipal Mitigation Goals and Strategies

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
GOAL 1: THE VILLAGES OF ANTWERP, BROUGHTON, CECIL, GROVER HILL, HAVILAND, LATTY, MELROSE, OAKWOOD, PAULDING, PAYNE AND SCOTT WILL EMPLOY MITIGATION ACTIONS TO REDUCE DAMAGES INCURRED FROM SEVERE WINDSTORMS, INCLUDING STRAIGHT-LINE WINDS AND TORNADOES					
1.1 The villages will advocate for and support the creation of safe rooms for vulnerable locations, including single and multi-family homes and neighborhoods without basements or shelters.					
1	Property Protection	Mayor	10-1-17	12-31-22	Local PDM
1.2 The villages will implement a program to clear the village of debris after severe wind and flooding to keep crop fodder and other debris out of sewer lines and catch basins, transportation routes, and streets.					
2	Property Protection	Mayor	10-1-17	12-31-22	Local
1.3 The villages will maintain and enforce land use regulations (including zoning and development regulations and construction codes) in an effort to reduce storm damages to properties					
3	Prevention	Village Administrator	10-1-17	12-31-22	Local
1.4 The villages will advocate and support, and implement on village-owned property, the proper maintenance of trees and vegetation to reduce damages caused by high winds or tornadoes.					
4	Property Protection	Mayor	10-1-17	12-31-22	Local

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
GOAL 2: THE VILLAGES OF ANTWERP, BROUGHTON, CECIL, GROVER HILL, HAVILAND, LATTY, MELROSE, OAKWOOD, PAULDING, PAYNE AND SCOTT WILL ENGAGE IN MITIGATION ACTIONS THAT REDUCE DAMAGES FROM FLOODING.					
2.1 The villages will establish and/or maintain NFIP participation and will support other federal flood mitigation programs that help the county reduce losses attributable to flooding, and will regularly review flood maps through a process of public engagement to assure accuracy as necessary.					
5	Prevention	Mayor	10-1-17	12-31-22	Local
2.2 The villages will maintain or replace, as needed, water control structures and systems, such as storm sewers, wastewater pumping stations, generators, water pumps, and other structures that control watershed and/or protect specific areas from flooding					
6	Structurally Engineered	Mayor	10-1-17	12-31-22	Local
2.3 The villages will clear village-maintained ditches of debris, sediment, and other obstructions that impede drainage and watershed					
7	Nat. Resource Protection	Mayor	10-1-17	12-31-22	Local
2.4 The villages will use federal and state grant programs to fund mitigation efforts, especially in flood mitigation and mitigation planning					
8	Prevention	Mayor	10-1-17	12-31-22	PDM FMA HSGP EMPG
2.5 The villages will review and enforce existing land use regulations (zoning rules, building codes) to facilitate wise development, especially in areas with flood vulnerability.					
9	Property Protection	Mayor	10-1-17	12-31-22	Local
2.6 The villages will require the use of retention and detention ponds where new or expanded construction, parking lots, streets, or other development may cause flooding to occur as a result of increased runoff or lack of natural watershed process					
10	Structurally Engineered	Mayor	10-1-17	12-31-22	Local
2.7 The villages will utilize acquisition, demolition, and relocation programs for properties that have repeated or extremely severe damage from floods and flash floods					
11	Prevention	Mayor	10-1-17	12-31-22	PDM FMA HMGP
2.8 The villages will advocate that renters, landowners, and others purchase and maintain reasonable casualty insurance, including flood insurance where appropriate, as mitigation against disaster losses					
12	Prevention	Mayor	10-1-17	12-31-22	Local
GOAL 3: THE VILLAGES OF ANTWERP, BROUGHTON, CECIL, GROVER HILL, HAVILAND, LATTY, MELROSE, OAKWOOD, PAULDING, PAYNE AND SCOTT WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE DAMAGES FROM ALL SEVERE STORMS, INCLUDING THUNDERSTORMS AND BLIZZARDS, AND OTHER NATURAL DISASTERS AND CAUSES.					
3.1 The villages will expand and improve its public warning and notification capability through additional or improved outdoor warning sirens, improvements to the software used in these systems, or enhanced public education regarding warning and notification of protection orders or warnings					
13	Public Information	Mayor	10-1-17	12-31-22	HSGP EMPG PDM

Priority	Action Type	Lead Agency	Start Date	End Date	Funding
GOAL 4: THE VILLAGES OF ANTWERP, BROUGHTON, CECIL, GROVER HILL, HAVILAND, LATTY, MELROSE, OAKWOOD, PAULDING, PAYNE AND SCOTT WILL ENGAGE IN MITIGATION ACTIONS TO REDUCE DAMAGES DUE TO UTILITY OUTAGES AND RESOURCE SHORTAGES FROM ALL CAUSES					
4.1 The villages will encourage the hardening of utilities through damage resistant installation below grade, improvements to supply lines and generations plants, and upgrade of substations and transformers					
14	Prevention	Mayor	10-1-17	12-31-22	Local
4.2 The villages will establish redundant suppliers of heating fuels, potable water, and other utility needs and will identify and facilitate availability and proper use of generators as an alternate power source					
15	Property Protection	Mayor	10-1-17	12-31-22	PDM HSGP
GOAL 5: THE VILLAGES OF ANTWERP, BROUGHTON, CECIL, GROVER HILL, HAVILAND, LATTY, MELROSE, OAKWOOD, PAULDING, PAYNE AND SCOTT WILL ENGAGE IN MITIGATION ACTIONS TO PRESERVE AND PROTECT NATURAL RESOURCES SUCH AS TOPSOIL AND WATERWAYS FROM THE CUMULATIVE EFFECTS OF STORMWATER.					
5.1 The villages will protect roadways from compromised structural integrity, washed away abutments and bridges, degraded berms, or other damage through stabilization and reinforcement techniques					
16	Structurally Engineered	Mayor	10-1-17	12-31-22	PDM
5.2 The villages will encourage agricultural conservation processes that protect topsoil, slopes and waterway banks from damage through the use of windbreaks, filter strips, cover crops, grassy buffers, tree lines, and other methods of preserving the soil					
17	Nat. Resource Protection	Mayor	10-1-17	12-31-22	Local
GOAL 6: THE VILLAGES OF ANTWERP, BROUGHTON, CECIL, GROVER HILL, HAVILAND, LATTY, MELROSE, OAKWOOD, PAULDING, PAYNE AND SCOTT WILL ENGAGE IN MITIGATION ACTIONS THAT ENABLE THE PUBLIC TO OBTAIN AND USE DISASTER INFORMATION TO SAVE LIVES AND PRESERVE PROPERTY FOR ALL HAZARDS PRESENT IN PAULDING COUNTY					
6.1 The villages will develop, utilize and maintain a communications plan with the public to include mass media, social media, digital resources, and direct contact for emergency management information before, during, and after incidents that result from any hazard relevant to Paulding County					
18	Public Information	Mayor	10-1-17	12-31-22	Local
6.2 The villages will educate the public about all relevant disaster hazards and vulnerabilities, protective actions, available services, vulnerable populations and available assistance and other emergency procedures using a variety of means to include print and spoken media, digital resources, and other appropriate local resources					
19	Public Information	Mayor	10-1-17	12-31-22	HSGP EMPG Local
GOAL 7: THE VILLAGES OF PAULDING AND OAKWOOD WILL REDUCE VULNERABILITY TO DAM FAILURE IN THEIR VILLAGE AND SURROUNDING AREAS.					
7.1 The villages of Paulding and Oakwood will identify risk and vulnerability from upground reservoirs that are located in or near their jurisdiction that threaten people and property should a failure occur in the form of structural compromise or water running over the top of the structure.					
20	Property Protection	Mayor	10-1-17	12-31-22	Local

7.2 The villages each will develop emergency plans to manage a failure of the upground reservoirs in their village.

21	Property Protection	Mayor	10-1-17	12-31-22	Local
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3.3.11 Strategy Descriptors

Each strategy developed is assigned a priority, action type, lead agency, timeline, and potential funding source. These elements are described below. While specific information in this chart may change prior to the implementation of a strategy, the exercise of assigning time lines required stakeholders to evaluate current resources and support programs to determine how to best reduce the effects of disaster. They had to bear in mind that many of the villages are so small they have few resources, financial and otherwise. Officials from Paulding County had to consider throughout this process that county leaders generally hold the responsibility of multiple jobs, sometimes in multiple jurisdictions, as they do their work. Officials are both paid employee and volunteer in many cases. Public information campaigns, plan enhancements, and the establishment of emergency protective measures were the highest priority and generally not significantly expensive. Upgrading communication and notification/warning systems was second because the acquisition of equipment involves procurement and budget process, therefore taking at least one budget year. These systems are exceptionally important to small, rural communities. Collaboration with other groups and comprehensive actions, due to the need to build trust and association between groups, would take longer to accomplish goals because it involved a two-phase action plan. Last on the completion list were structural projects due to design time requirements, budget needs, and dependence upon outside funding sources through applications. The priorities of life safety, incident containment, and property conservation combined with budget and procurement needs were major factors in determining the priority of goals and strategies.

Priority

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

Action Type

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

- Natural Resource Protection – Reduce the impacts of natural hazard by preserving or restoring natural areas and their 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

Lead Agency

The lead agency is the entity charged with championing the strategy and ensuring that jurisdiction officials consider opportunities to implement the strategy over the five-year planning cycle. This agency may not have the authority or power to make a strategy into a project, nor would they necessarily be responsible for project oversight or completion should the strategy develop into an actionable and funded project. Rather, the lead agency is responsible for coordinating the overall 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.

Timeline

The timeline identifies the time frame in which a mitigation strategy could realistically be implemented. The actual time frame may vary from what is described in this plan, depending on funding, grant opportunities, or changes in priorities as other critical activities are adjusted to meet evolving community needs. At the time of plan development, these timelines fit logically within each jurisdiction's resources and support programs. As Paulding County reviews this mitigation plan annually, the timelines will be reviewed, adjusted, and modified as appropriate.

Funding Source

Mitigation strategies can be funded through a variety of sources. Depending on the type and cost of the project, different funding sources will be available and appropriate.

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

3.4 IMPLEMENTATION

The identified mitigation strategies are general actions that could be taken to reduce the negative impact of disasters and large-scale emergencies. For any given strategy to become an actionable item, it must be converted to a specific project with funding, action steps, timelines,

and project goals. For example, if a property is to be acquired and demolished and the property owner relocated, that project must begin with the identification of the specific property to be acquired and the funding to be utilized for the project. The property owner must agree to accept the buy-out and use the money to purchase another home. The jurisdiction must accept its share of cost, planning responsibility, and project management roles. Only then can the actual project be executed. A similar process must be followed for any of the strategies identified here to become projects that reduce disaster loss in Paulding County.

The EMA will monitor the implementation of these strategies through ongoing communication with officials and stakeholders. When grant opportunities arise, 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 actionable steps taken to complete the project. Upon completion, effectiveness will be evaluated by the jurisdiction and findings shared with the EMA and planning team for consideration in developing future projects.

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

Ultimately, Paulding County developed a set of comprehensive, thoroughly considered, relevant, and effective solutions to problems that are likely to arise. As stakeholders considered how to solve potential problems, they utilized a collaborative spirit to address community-wide problems. These strategies were original thoughts to reduce disaster vulnerability and loss at the local level.

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