



## MITIGATION ACTIONS SCORING MATRIX

### Purpose

As part of the hazard mitigation planning process, communities are asked to identify specific projects and activities (mitigation actions) that will help their communities achieve the long-term outcomes related to specific hazards. The status of each previously identified mitigation action is reviewed during the Hazard Mitigation Planning Process to determine the progress being made towards the County's hazard-specific goals. New mitigation projects and actions are also identified in this process.

The purpose of the Mitigation Actions Scoring Matrix is to determine which mitigation actions are relevant to each of the communities within Miami County and to develop a corresponding action plan that describes how the mitigation actions will be implemented. Scores collected from this Mitigation Actions Scoring Matrix will be used to decide how the mitigation actions will be prioritized, administered, and incorporated into Miami County's existing planning mechanisms.

### Instructions

To complete this matrix, please review each proposed mitigation action and indicate if it is applicable to your jurisdiction. If it is applicable, score it from 1-5 for each category described below. For each category, a rating of 1 is the lowest score, a rating of 3 is neutral/unsure, and a rating of 5 is the highest score.

1. **Applicable to your jurisdiction? – Write Yes or No** – to indicate if you think this mitigation action is applicable to your community or jurisdiction. If Yes, fill out the remaining columns; if No, do not fill out the remaining columns.
2. **Cost Effective – Rank 1 – 5** – the cost effectiveness of each proposed mitigation action, with 5 being the most cost effective and 1 being the least cost effective.
3. **Technically Feasible – Rank 1 – 5** – the feasibility of each proposed mitigation action, with 5 being the most feasible and 1 being the least feasible.
4. **Environmentally Sound – Rank 1 – 5** – the proposed mitigation action in terms of how environmentally sound it seems, with 5 being the most sound and 1 being the least sound.
5. **Immediate Need – Rank 1 – 5** – whether each proposed mitigation action is needed immediately, with 5 being the most immediate need and 1 being not an immediate need.
6. **Risk Reduction – Rank 1 – 5** – the proposed mitigation action on the extent to which it will reduce the total risk of the associated hazard, with 5 being the greatest contribution to risk reduction and 1 being the least contribution to risk reduction.

In addition, if there are any mitigation actions that are not listed that should be included, please add them and score them on the last page. We encourage you to consider regularly occurring problems for each hazard listed below and suggest mitigation actions for these problems. You may also list regularly occurring problems within your community without suggesting a mitigation action.



Each action is associated with a goal of the hazard mitigation plan. These goals are listed below for your reference:

- Minimize property damage, economic loss, injury, and loss of human life – to achieve the Plan’s main goal of reducing the impact of natural and manmade hazards on the County’s economy and the well-being of its citizens.
- Enhance public awareness and education – to widen the public’s understanding of natural and manmade hazards and how they might affect public health and safety, the environment, the local economy, and basic day-to-day operations.
- Coordinate inter-jurisdictional preparedness measures – to encourage and ensure multi-jurisdictional cooperation in County-wide mitigation actions and programs so that they may be implemented efficiently and effectively.
- Provide decision-making tools for interested stakeholders – to formulate a comprehensive, updated analysis of Miami County’s vulnerability to hazards so that decision-makers can better prepare for natural and manmade disasters.



**NAME:** \_\_\_\_\_ **JURISDICTION:** \_\_\_\_\_

#	Hazard & Associated Mitigation Action	New or previous mitigation action	Applicable to your jurisdiction? (Y/N)	Cost Effective (1-5)	Technically Feasible (1-5)	Environmentally Sound (1-5)	Immediate Need (1-5)	Risk Reduction (1-5)	Comments
<i>Multiple Hazards</i>									
1	Complete special needs assessment of the County.	Previous							
2	Promote public awareness of manmade and natural hazards at public events and hold workshops to educate the public. Distribute appropriate mitigation publications.	Previous							
3	Provide power line for emergency backup power generator for the Village of Laura from the wastewater treatment facilities to the water treatment facilities.	Previous							
4	Adopt the International Building Code (IBC) and International Residential Code (IRC).	New							
5	Distribute information and locations of public shelters with utility bills and other mailings.	New							
6	Create a database to identify the regions where individuals at high risk of death and injury, such as the elderly or homeless reside in high concentrations.	New							
7	Increase canopy coverage in the area by planting more trees.	New							
8	Install backup generators in public buildings and critical facilities.	New							



<b>Dam &amp; Levee Failure</b>									
9	Promote continued maintenance and improvement. Ongoing levee system maintenance.	Previous							
10	Levee repairs along Miami River within City of Tipp City (Phase 2).	Previous							
11	Map inundation areas for all Class I and Class II dams.	New							
12	Rehabilitate high hazard potential dams.	New							
<b>Drought</b>									
13	Identify local drought indicators, such as precipitation, temperature, surface water levels, soil moisture, etc.	New							
14	Establish a regular schedule to monitor and report conditions on at least a monthly basis.	New							
15	Regularly (monthly, bimonthly, twice annually, annually, etc.) check for leaks in the water supply to minimize losses.	New							
16	Hold a regular meeting (annual or as needed) with local farmers to identify potential drought issues.	New							
<b>Earthquakes</b>									
17	Educate homeowners on safety techniques to follow during and after an earthquake.	New							
<b>Epidemic/Pandemic</b>									
18	Complete a plan with the Public Health Department to better prepare for an epidemic or pandemic.	New							



<i>Flooding</i>									
19	Increase communication, coordination, and collaboration between community leaders, property owners, local and county building regulations, floodplain managers and zoning authorities to address risk and to provide uniformity and consistency in implementing sound mitigation practices.	Previous							
20	Buyout of additional flood prone residences, businesses, and structures in Concord Township, north of Troy along scenic Great Miami River.	Previous							
21	Improve the Kerns/Alexander ditch along Fenner Road west of Barnhart Road to eliminate flooding of the land around the homes in that area.	Previous							
22	Preserve floodplain areas along river corridors as natural open space areas. Provide for wetlands and woodlands protection.	Previous							
23	Improve the Schaurer and Ziegenfelder ditches along State Route 718 (west and east of Washington Road) and McKaig Road to eliminate continued standing surface water issues around homes and on agriculture land and to eliminate periodic flooding of other land in the area.	Previous							
24	Update and complete an inventory of buildings and building data within the 100-year flood plain boundaries of Miami County. Coordinate with recently completed GIS flood plain maps.	Previous							
25	Improve the Clayton ditch in and around Beechwood Drive in the Lakeshore subdivision to eliminate flooding of homes and land in this area.	Previous							
26	Identify and reduce the impact of urban and small stream flooding. General storm water evaluation for the Covington community.	Previous							
27	Ensure that all communities that fall within a FEMA designated floodway participate in the National Flood Insurance Program.	New							
28	Prohibit or limit floodplain development through regulatory and/or incentive-based measures.	New							
29	Avoid or limit the density of development in the floodplain.	New							



30	Require that floodplains be kept as open space.	New							
31	Limit the percentage of allowable impervious surface within developed parcels.	New							
32	Prepare and adopt a community-wide stormwater management master plan.	New							
33	Require a drainage study with new development.	New							
34	Complete a stormwater drainage study for known problem areas.	New							
35	Raise utilities or other mechanical devices above expected flood levels.	New							
36	Routinely clean and repair stormwater drains	New							
37	Require all critical facilities to meet requirements of Executive Order 11988 and be built 1 foot above the 500-year flood elevation.	New							
38	Develop an open space acquisition, reuse, and preservation plan targeting hazard areas.	New							
39	Encourage homeowners to purchase flood insurance.	New							
<b>Hazardous Materials</b>									
40	Complete a commodity flow study.	New							



<i>Invasive Species</i>									
41	Compile a list of known active invasive species within Miami County (or appropriate jurisdiction).	New							
42	Maintain a countywide report on impacts from invasive species.	New							
43	Map or otherwise identify ash trees.	New							
44	Identify and apply the appropriate Emerald Ash Borer treatment method.	New							
<i>Severe Summer Weather</i>									
45	Post warning signage at local parks, county fairs, and other outdoor venues about the dangers of hail, severe wind, and lightning.	New							
46	Teach school children about the dangers of hail, severe wind, and lightning and how to take safety precautions.	New							
47	Review building codes and structural policies to ensure they are adequate to protect older structures from hail, lightning, and wind damage.	New							
48	Install lightning protection devices and methods, such as lightning rods and grounding, on communications infrastructure and other critical facilities.	New							
<i>Severe Winter Weather</i>									
49	Educate elderly residents on the dangers of snow shoveling and available resources to reach out for assistance.	New							
50	Identify at risk communities, particularly the elderly, and prioritize these communities for snow removal.	New							
51	Install heating units in public shelters.	New							
52	Work with places of worship, schools, hotels, and other large buildings to serve as public heating stations during extreme cold events.	New							



53	Use snow fences or “living snow fences” (e.g., rows of trees or other vegetation) to limit blowing and drifting of snow over critical roadway segments.	New							
<b><i>Terrorism</i></b>									
54	Coordinate with law enforcement, fire, EMS, and the Ohio Department of Public Safety to identify potential risks (including cyberterrorism risks).	New							
55	Create a jurisdiction-wide response plan for cyber-attacks, active shooters, and other identified potential risks.	New							
<b><i>Tornadoes</i></b>									
56	Encourage the construction and use of safe rooms in critical facilities, schools, hospitals, and government buildings.	New							
57	Require mobile home parks to have a designated tornado safe room or shelter.	New							
58	Conduct tornado drills in schools and public buildings and encourage private entities also.	New							
<b><i>Mass Transportation Incidents</i></b>									
59	Identify at risk properties along rail lines.	New							
60	Coordinate with law enforcement, fire, and EMS, to create an emergency response plan for train derailments.	New							
61	Develop and implement an emergency response plan for transportation hazards (road, rail, and air).	New							





### Additional Mitigation Actions

Mitigation Action	Hazard	Cost-Effective	Technically Feasible	Environmentally Sound	Immediate Need	Risk Reduction