



MITIGATION ACTION SCORING MATRIX

Step One:

In the following tables, enter your name and position and select one of the following status options for each mitigation action in your jurisdiction:

- **Completed** (Use this if the action was completed)
- **Deleted** (Use this if you would like to remove the action from your new plan)
- **Ongoing** (Use this if you would like the action to carry through to your next plan)

Step two:

By marking the actions as Ongoing the action will be added to the new plan. In order to rank them effectively we ask that you score each of the following:

6. **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.
7. **Technically Feasible** – Rank 1 – 5 – the feasibility of each proposed mitigation action, with 5 being the most feasible and 1 being the least feasible.
8. **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.
9. **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.
10. **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.

If you have any additional comments for a mitigation action, please leave them below each action.



Name:	Title and Organization:
-------	-------------------------

Village of Castalia

Mitigation Action (Strategy)	Risk	Status	Ranking					
Assess and inventory problems with undersized culverts within Erie County.	Flooding	<input type="checkbox"/> Completed <input type="checkbox"/> Deleted <input type="checkbox"/> Ongoing	Cost Effective	1	2	3	4	5
			Technically Feasible	1	2	3	4	5
			Environmentally Sound	1	2	3	4	5
			Immediate Need	1	2	3	4	5
			Risk Reduction	1	2	3	4	5
Develop and provide educational information and promotion of urban and agricultural impacts of stormwater.	Flooding	<input type="checkbox"/> Completed <input type="checkbox"/> Deleted <input type="checkbox"/> Ongoing	Cost Effective	1	2	3	4	5
			Technically Feasible	1	2	3	4	5
			Environmentally Sound	1	2	3	4	5
			Immediate Need	1	2	3	4	5
			Risk Reduction	1	2	3	4	5
Construct designated safe shelters that would provide protection from severe weather throughout the County.	Multiple Hazards	<input type="checkbox"/> Completed <input type="checkbox"/> Deleted <input type="checkbox"/> Ongoing	Cost Effective	1	2	3	4	5
			Technically Feasible	1	2	3	4	5
			Environmentally Sound	1	2	3	4	5
			Immediate Need	1	2	3	4	5
			Risk Reduction	1	2	3	4	5



Name:	Title and Organization:
-------	-------------------------

Village of Castalia

Mitigation Action (Strategy)	Risk	Status	Ranking					
Develop and provide outreach program for County residents and those in the sensitive and/or special needs population covering the dangers associated with severe storms.	Multiple Hazards	<input type="checkbox"/> Completed <input type="checkbox"/> Deleted <input type="checkbox"/> Ongoing	Cost Effective	1	2	3	4	5
			Technically Feasible	1	2	3	4	5
			Environmentally Sound	1	2	3	4	5
			Immediate Need	1	2	3	4	5
			Risk Reduction	1	2	3	4	5
Identify high risk areas and evaluate land-use planning techniques to mitigate future events.	Multiple Hazards	<input type="checkbox"/> Completed <input type="checkbox"/> Deleted <input type="checkbox"/> Ongoing	Cost Effective	1	2	3	4	5
			Technically Feasible	1	2	3	4	5
			Environmentally Sound	1	2	3	4	5
			Immediate Need	1	2	3	4	5
			Risk Reduction	1	2	3	4	5
Create a public education campaign targeted at landowners to encourage ECO-Farming techniques aimed at reducing nutrient loads in Lake Erie.	Natural Biohazards	<input type="checkbox"/> Completed <input type="checkbox"/> Deleted <input type="checkbox"/> Ongoing	Cost Effective	1	2	3	4	5
			Technically Feasible	1	2	3	4	5
			Environmentally Sound	1	2	3	4	5
			Immediate Need	1	2	3	4	5
			Risk Reduction	1	2	3	4	5



Name:	Title and Organization:
-------	-------------------------

Village of Castalia

Mitigation Action (Strategy)	Risk	Status	Ranking					
Create a public education campaign encouraging homeowners and private businesses to install safe rooms and provide information about Ohio's Safe Room Rebate Program.	Tornadoes and Waterspouts	<input type="checkbox"/> Completed	Cost Effective	1	2	3	4	5
		<input type="checkbox"/> Deleted	Technically Feasible	1	2	3	4	5
		<input type="checkbox"/> Ongoing	Environmentally Sound	1	2	3	4	5
			Immediate Need	1	2	3	4	5
			Risk Reduction	1	2	3	4	5



MITIGATION ACTION SCORING MATRIX

Instructions

To complete this matrix, please write in each mitigation action applicable to your jurisdiction. Please 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. **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.
2. **Technically Feasible – Rank 1 – 5** – the feasibility of each proposed mitigation action, with 5 being the most feasible and 1 being the least feasible.
3. **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.
4. **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.
5. **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.

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.

Every jurisdiction (County, City, and Village) must have one mitigation action for each hazard they scored on their hazard priority. The following pages include four new FEMA-required actions for you to score. If an action is applicable, please score the action. If it is not applicable to your jurisdiction (i.e. your jurisdiction doesn't have any dams) please skip (don't score) the action.

Following the required new actions, you will have the space to draft new mitigation actions that are applicable to your jurisdiction and score them. Please list the applicable hazard for each new drafted action. Any new actions must correspond with the county's hazard priorities as follows: Severe Winter Weather and Extreme Cold, Tornadoes and Waterspouts, Coastal Flooding and Erosion, Flooding and Streambank Erosion, Severe Summer Weather, Drought and Extreme Heat, Natural Biohazards (Invasive Species and Algae Blooms), Earthquakes, Dam/Levee Failure, Wildfire, and Landslides/Land Subsidence.



Drafting Mitigation Actions:

Actions below are examples that you can either use or gather inspiration from when drafting your own actions. You can use the actions below as written or localize them for your jurisdiction. If you are unsure of how to draft an action, please write a problem statement (ex: Main Street floods if it rains for more than 2 hours.). Our team of experts will draft action(s) based on your problem statement.

Risk	Mitigation Action
Coastal Flooding and Erosion	Use GIS to identify and map erosion hazard areas.
	Implement nature-based shoreline stabilization and flood-resilient infrastructure along vulnerable Lake Erie coastlines to reduce erosion, limit storm surge impacts, and protect adjacent communities.
Drought and Extreme Temperatures	Develop a drought communication plan and early warning system to facilitate timely communication of relevant information to officials, decision makers, emergency managers, and the general public.
	Create a database to track those individuals at high risk of death, such as the elderly, homeless, etc.
Earthquake	Adopt the International Building Code (IBC) and International Residential Code (IRC).
	Collect geologic information on seismic sources, soil conditions, and related potential hazards.
Flooding and Erosion:	Establish a "green infrastructure" program to link, manage, and expand existing parks, preserves, greenways, etc.
	Require developers to construct on-site retention basins for excessive stormwater and as a firefighting water source.
	Prevent erosion with proper bank stabilization, sloping or grading techniques, planting vegetation on slopes, terracing hillsides, or installing riprap boulders or geotextile fabric.
Natural Biohazards:	Coordinate with local experts, such as colleges, and/or State officials to create an invasive species mitigation plan.
	Identify all invasive species that are currently impacting the county and neighboring counties.
	Reduce harmful algal blooms in Lake Erie by decreasing nutrient runoff through agricultural best management practices, improved stormwater controls, and community education.
Landslides and Land Subsidence	Define steep slope/high risk areas in land use and comprehensive plans and create guidelines or restrict new development in those areas.
	Prohibit development in areas that have been identified as at-risk to subsidence.



Risk	Mitigation Action
Severe Summer Weather	Upgrade overhead utility lines (e.g., adjust utility pole sizes, utility pole span widths, and/or line strength).
	Develop a lightning brochure for distribution by recreation equipment retailers or outfitters.
Severe Winter Weather and Extreme Cold	Enhance community resilience to severe winter weather and extreme cold by improving emergency sheltering, hardening critical infrastructure, and expanding public warning and preparedness programs.
	Install roadway/sidewalk/bike path, etc. heating technology to prevent ice/snow buildup.
Tornadoes and Waterspouts	Conduct tornado drills in schools and public buildings.
	Install and maintain community safe rooms, strengthen early warning systems, and promote public education to reduce loss of life and property from tornado events.
Wildfire	Reduce wildfire risk by increasing defensible space, removing hazardous vegetation, and conducting public education for homeowners in vulnerable wildland-urban interface areas.
	Improve wildfire preparedness by enhancing firefighter training, expanding firebreaks and access routes, and upgrading equipment needed for rapid response in rural and parkland areas.



Name:	Title and Organization:	Jurisdiction:
-------	-------------------------	---------------

Mitigation Action (Strategy)	Risk	Ranking					
Required: Work with all jurisdictions on filling in gaps and strengthening capabilities in enacting mitigation strategies.	Multiple Hazards	Cost Effective	1	2	3	4	5
		Technically Feasible	1	2	3	4	5
		Environmentally Sound	1	2	3	4	5
		Immediate Need	1	2	3	4	5
		Risk Reduction	1	2	3	4	5
Required: Ensure all eligible jurisdictions are participating in the NFIP.	Flooding	Cost Effective	1	2	3	4	5
		Technically Feasible	1	2	3	4	5
		Environmentally Sound	1	2	3	4	5
		Immediate Need	1	2	3	4	5
		Risk Reduction	1	2	3	4	5
Required: Ensure all high-hazard potential dams have updated Emergency Action Plans (EAPs) in place.	Dam and Levee Failure	Cost Effective	1	2	3	4	5
		Technically Feasible	1	2	3	4	5
		Environmentally Sound	1	2	3	4	5
		Immediate Need	1	2	3	4	5
		Risk Reduction	1	2	3	4	5



Name:	Title and Organization:	Jurisdiction:
-------	-------------------------	---------------

Mitigation Action (Strategy)	Risk	Ranking					
Required: Obtain or create inundation maps for all dams.	Dam and Levee Failure	Cost Effective	1	2	3	4	5
		Technically Feasible	1	2	3	4	5
		Environmentally Sound	1	2	3	4	5
		Immediate Need	1	2	3	4	5
		Risk Reduction	1	2	3	4	5
		Cost Effective	1	2	3	4	5
		Technically Feasible	1	2	3	4	5
		Environmentally Sound	1	2	3	4	5
		Immediate Need	1	2	3	4	5
		Risk Reduction	1	2	3	4	5
		Cost Effective	1	2	3	4	5
		Technically Feasible	1	2	3	4	5
		Environmentally Sound	1	2	3	4	5
		Immediate Need	1	2	3	4	5
		Risk Reduction	1	2	3	4	5



Name:	Title and Organization:	Jurisdiction:
-------	-------------------------	---------------

Mitigation Action (Strategy)	Risk	Ranking					
		Cost Effective	1	2	3	4	5
		Technically Feasible	1	2	3	4	5
		Environmentally Sound	1	2	3	4	5
		Immediate Need	1	2	3	4	5
		Risk Reduction	1	2	3	4	5
		Cost Effective	1	2	3	4	5
		Technically Feasible	1	2	3	4	5
		Environmentally Sound	1	2	3	4	5
		Immediate Need	1	2	3	4	5
		Risk Reduction	1	2	3	4	5
		Cost Effective	1	2	3	4	5
		Technically Feasible	1	2	3	4	5
		Environmentally Sound	1	2	3	4	5
		Immediate Need	1	2	3	4	5
		Risk Reduction	1	2	3	4	5



Name:	Title and Organization:	Jurisdiction:
-------	-------------------------	---------------

Mitigation Action (Strategy)	Risk	Ranking					
		Cost Effective	1	2	3	4	5
		Technically Feasible	1	2	3	4	5
		Environmentally Sound	1	2	3	4	5
		Immediate Need	1	2	3	4	5
		Risk Reduction	1	2	3	4	5
		Cost Effective	1	2	3	4	5
		Technically Feasible	1	2	3	4	5
		Environmentally Sound	1	2	3	4	5
		Immediate Need	1	2	3	4	5
		Risk Reduction	1	2	3	4	5
		Cost Effective	1	2	3	4	5
		Technically Feasible	1	2	3	4	5
		Environmentally Sound	1	2	3	4	5
		Immediate Need	1	2	3	4	5
		Risk Reduction	1	2	3	4	5



Name:	Title and Organization:	Jurisdiction:
-------	-------------------------	---------------

Mitigation Action (Strategy)	Risk	Ranking					
		Cost Effective	1	2	3	4	5
		Technically Feasible	1	2	3	4	5
		Environmentally Sound	1	2	3	4	5
		Immediate Need	1	2	3	4	5
		Risk Reduction	1	2	3	4	5
		Cost Effective	1	2	3	4	5
		Technically Feasible	1	2	3	4	5
		Environmentally Sound	1	2	3	4	5
		Immediate Need	1	2	3	4	5
		Risk Reduction	1	2	3	4	5
		Cost Effective	1	2	3	4	5
		Technically Feasible	1	2	3	4	5
		Environmentally Sound	1	2	3	4	5
		Immediate Need	1	2	3	4	5
		Risk Reduction	1	2	3	4	5



Name:	Title and Organization:	Jurisdiction:
-------	-------------------------	---------------

Mitigation Action (Strategy)	Risk	Ranking					
		Cost Effective	1	2	3	4	5
		Technically Feasible	1	2	3	4	5
		Environmentally Sound	1	2	3	4	5
		Immediate Need	1	2	3	4	5
		Risk Reduction	1	2	3	4	5
		Cost Effective	1	2	3	4	5
		Technically Feasible	1	2	3	4	5
		Environmentally Sound	1	2	3	4	5
		Immediate Need	1	2	3	4	5
		Risk Reduction	1	2	3	4	5
		Cost Effective	1	2	3	4	5
		Technically Feasible	1	2	3	4	5
		Environmentally Sound	1	2	3	4	5
		Immediate Need	1	2	3	4	5
		Risk Reduction	1	2	3	4	5