

APPENDIX 2: PROJECT PRIORITIZATION

The appendix contains the calculations that determined prioritization criteria weighting and a project scoring matrix. It also contains a copy of the key for hazard frequency and severity calculations (based on the number and severity of hazard occurrences noted in the risk assessment).

CRITERIA WEIGHTING CALCULATIONS

Criteria	Member 1	Member 2	Member 3	Member 4	Member 5	Member 6	Member 7	Member 8	Member 9	Member 10	Sum	Average	Priority	Points
The project attempts to reduce the negative impacts of frequent hazards	3	10	2	2	3	1	7	1	3	5	37	3.7	1	10
The project attempts to reduce the negative impacts of severe hazards	4	6	1	3	4	2	6	10	1	1	38	3.8	2	9
The project addresses more than one hazard at once	7	5	10	1	5	4	1	5	4	9	51	5.1	3	8
The project aims to protect the most vulnerable populations	1	4	7	4	7	3	8	4	5	10	53	5.3	4	7
The project is easily paid for with local funds or attainable grants	2	1	6	10	8	5	10	7	2	3	54	5.4	5	6
The project promotes partnerships within the county	8	8	4	5	6	6	2	3	8	7	57	5.7	6	5
The project is easy to implement (most of the population agrees with the project and it doesn't have negative political ramifications)	5	3	8	6	10	7	9	2	6	4	60	6	7	4
The project directly aligns with one or more of the goals set by the committee	9	2	3	9	1	9	3	9	9	8	62	6.2	8	3
The project protects the environment	6	9	9	8	2	8	5	8	10	2	67	6.7	9	2
The project is already scheduled to start or is in process	10	7	5	7	9	10	4	6	7	6	71	7.1	10	1

COMPOSITE PROJECT SCORING MATRIX¹

Project	Total Score	Resultant Priority
Undertake periodic public awareness campaigns to educate the public on the benefits of mitigation and preparedness, as well as how to respond appropriately to myriad hazards. Topics could include the following. <ul style="list-style-type: none"> • Causes and prevention of wildfires • Coastal erosion signs and impacts • Constructing a 72-hour kit • Family disaster plans • Natural hazards that could contribute to water shortages • Specific hazards associated with severe weather 	55	1
Provide back-up generators for critical facilities, including shelters, which need to maintain continuous power to protect human health and life.	42	5
Identify existing sites that could be used as emergency shelters throughout Ashtabula County.	53	2
Undertake stream restoration projects; clean or dredge creeks and streams, clearing log jams, trees, shrubs, and sediment bars.	15	14
Consider installing, re-routing, or increasing the capacity of existing storm drainage systems, which may involve detention and retention ponds. Seek funding to identify, map, and maintain existing critical culverts and storm drainage ditches near residential areas, roadways and low-lying areas throughout the county. Consider sewer infiltrations and inflow projects.	30	7
Develop a method to regulate development in the hydraulic shadow of dams.	15	14
Encourage residents, critical facilities, etc. throughout Ashtabula County to sign-up for wireless emergency alerts disseminated by the Ashtabula County EMA.	53	2
Pursue funding sources/partnerships to strategically place groins, break walls, revetment structures, riparian buffers, and other appropriate structures to slow erosion.	28	9
Pursue funding sources/partnerships to place revetment structures in the beach profile or along the base of bluffs to absorb the energy of incoming waves and reduce erosion.	28	9
Develop a tree maintenance program for trimming and pruning trees to help prevent damage from falling limbs.	44	4
Assess the feasibility of conducting a commodity flow study.	34	6
Consider traditional flood mitigation projects such as acquisition and relocation, elevation, etc. in Special Flood Hazard Areas (SFHAs).	20	12
Seek funding for and install residential and community storm shelters. ²	30	7

¹ See slide copies for scores by project.

² ACEMA added this project, per OEMA recommendation, during the review phase. ACEMA staff validated the prioritization scoring.


Project	Total Score	Resultant Priority
Collect updated emergency action plans (EPAs) for Class I/II structures and create a GIS layer of inundation areas that appear in EAPs. Include downstream structures in the layer to support calculation of loss estimates. ²	16	13
Rehabilitate high-hazard potential dams when those pose unacceptable risks to the public (to address those risks). Rehabilitation activities can include rehabilitation or removal of the structure, engineering activities, land use solutions, etc. County and state agencies should support these projects as appropriate by providing risk and other data as it is available. ²	23	11


ASHTABULA COUNTY HMP HAZARD FREQUENCY CALCULATIONS


Hazard	Occurrences	Years	Est. per Annum
Winter Storm	184	23	8.00
Hazardous Materials	89	18	4.94
Thunderstorm	262	57	4.60
Flood	43	22	1.95
Wind/Tornado	82	63	1.30
Coastal Erosion	11	11	1.00
Earthquake	49	68	0.72
Drought	7	22	0.32
Health-Related Emergencies	2	10	0.20
Terrorism/Civil Disturbance	2	11	0.18
Dam/Levee	1	60	0.02
Fires	0	23	0.00


ASHTABULA COUNTY HMP HAZARD SEVERITY CALCULATIONS


Hazard	Response	Onset	Magnitude	Business	Human	Property	Total	St. Dev. (Ties)
Flood	3	3	5	1	2	2	16	
Wind/Tornado	3	4	1	2	2	1	13	1.06719
Terrorism/Civil Disturbance	5	1	1	2	3	1	13	1.46249
Health-Related Emergencies	5	1	1	2	2	1	12	
Winter Storm	3	1	2	1	1	3	11	0.89753
Hazardous Materials	2	4	1	1	2	1	11	1.06719
Fires	4	1	2	1	1	1	10	1.10554
Earthquake	2	5	1	1	1	1	11	1.46249
Coastal Erosion	5	1	1	1	1	1	10	1.49071
Drought	1	1	3	1	1	1	8	
Thunderstorm	1	2	1	1	1	1	7	
Dam/Levee	1	1	1	1	1	1	6	


PROJECT 1	CRITERION	POINTS
Undertake periodic public awareness campaigns to educate the public on the benefits of mitigation and preparedness, as well as how to respond appropriately to myriad hazards. Topics could include the following. <ul style="list-style-type: none"> • Causes and prevention of wildfires • Coastal erosion signs and impacts • Constructing a 72-hour kit • Family disaster plans • Natural hazards that could contribute to water shortages • Specific hazards associated with severe weather 	Reduce impacts, frequent haz.	10
	Reduce impacts, severe haz.	9
	More than one haz.	8
	Protect vulnerable pops.	7
	Easily paid w/ local or grant \$	6
	Promotes partnerships	5
	Easy to implement	4
	Directly aligns with goals	3
	Protects the environment	2
	Already scheduled or started	1
		

PROJECT 2	CRITERION	POINTS
Provide back-up generators for critical facilities, including shelters, which need to maintain continuous power to protect human health and life.	Reduce impacts, frequent haz.	10
	Reduce impacts, severe haz.	9
	More than one haz.	8
	Protect vulnerable pops.	7
	Easily paid w/ local or grant \$	0
	Promotes partnerships	0
	Easy to implement	4
	Directly aligns with goals	3
	Protects the environment	0
	Already scheduled or started	1
		


PROJECT 3	CRITERION	POINTS
Identify existing sites that could be used as emergency shelters throughout Ashtabula County.	Reduce impacts, frequent haz.	10
	Reduce impacts, severe haz.	9
	More than one haz.	8
	Protect vulnerable pops.	7
	Easily paid w/ local or grant \$	6
	Promotes partnerships	5
	Easy to implement	4
	Directly aligns with goals	3
	Protects the environment	0
	Already scheduled or started	1
		

PROJECT 4	CRITERION	POINTS
Undertake stream restoration projects; clean or dredge creeks and streams, clearing log jams, trees, shrubs, and sediment bars.	Reduce impacts, frequent haz.	0
	Reduce impacts, severe haz.	9
	More than one haz.	0
	Protect vulnerable pops.	0
	Easily paid w/ local or grant \$	0
	Promotes partnerships	0
	Easy to implement	0
	Directly aligns with goals	3
	Protects the environment	2
	Already scheduled or started	1
		


PROJECT 5	CRITERION	POINTS
Consider installing, re-routing, or increasing the capacity of existing storm drainage systems, which may involve detention and retention ponds. Seek funding to identify, map, and maintain existing critical culverts and storm drainage ditches near residential areas, roadways and low-lying areas throughout the county. Consider sewer infiltrations and inflow projects.	Reduce impacts, frequent haz.	0
	Reduce impacts, severe haz.	9
	More than one haz.	8
	Protect vulnerable pops.	7
	Easily paid w/ local or grant \$	0
	Promotes partnerships	0
	Easy to implement	0
	Directly aligns with goals	3
	Protects the environment	2
	Already scheduled or started	1
		


PROJECT 6	CRITERION	POINTS
Develop a method to regulate development in the hydraulic shadow of dams.	Reduce impacts, frequent haz.	0
	Reduce impacts, severe haz.	0
	More than one haz.	0
	Protect vulnerable pops.	7
	Easily paid w/ local or grant \$	0
	Promotes partnerships	5
	Easy to implement	0
	Directly aligns with goals	0
	Protects the environment	2
	Already scheduled or started	1
		


PROJECT 7	CRITERION	POINTS
Encourage residents, critical facilities, etc. throughout Ashtabula County to sign-up for wireless emergency alerts disseminated by the Ashtabula County EMA.	Reduce impacts, frequent haz.	10
	Reduce impacts, severe haz.	9
	More than one haz.	8
	Protect vulnerable pops.	7
	Easily paid w/ local or grant \$	6
	Promotes partnerships	5
	Easy to implement	4
	Directly aligns with goals	3
	Protects the environment	0
	Already scheduled or started	1




PROJECT 8	CRITERION	POINTS
Pursue funding sources/partnerships to strategically place groins, break walls, revetment structures, riparian buffers, and other appropriate structures to slow erosion.	Reduce impacts, frequent haz.	10
	Reduce impacts, severe haz.	0
	More than one haz.	0
	Protect vulnerable pops.	7
	Easily paid w/ local or grant \$	0
	Promotes partnerships	5
	Easy to implement	0
	Directly aligns with goals	3
	Protects the environment	2
	Already scheduled or started	1



PROJECT 9	CRITERION	POINTS
Pursue funding sources/partnerships to place revetment structures in the beach profile or along the base of bluffs to absorb the energy of incoming waves and reduce erosion.	Reduce impacts, frequent haz.	10
	Reduce impacts, severe haz.	0
	More than one haz.	0
	Protect vulnerable pops.	7
	Easily paid w/ local or grant \$	0
	Promotes partnerships	5
	Easy to implement	0
	Directly aligns with goals	3
	Protects the environment	2
	Already scheduled or started	1
		

PROJECT 10	CRITERION	POINTS
Develop a tree maintenance program for trimming and pruning trees to help prevent damage from falling limbs.	Reduce impacts, frequent haz.	10
	Reduce impacts, severe haz.	9
	More than one haz.	8
	Protect vulnerable pops.	7
	Easily paid w/ local or grant \$	0
	Promotes partnerships	0
	Easy to implement	4
	Directly aligns with goals	3
	Protects the environment	2
	Already scheduled or started	1
		

PROJECT 11	CRITERION	POINTS
Assess the feasibility of conducting a commodity flow study.	Reduce impacts, frequent haz.	10
	Reduce impacts, severe haz.	0
	More than one haz.	0
	Protect vulnerable pops.	7
	Easily paid w/ local or grant \$	6
	Promotes partnerships	5
	Easy to implement	4
	Directly aligns with goals	0
	Protects the environment	2
	Already scheduled or started	0



PROJECT 12	CRITERION	POINTS
Consider traditional flood mitigation projects such as acquisition and relocation, elevation, etc. in Special Flood Hazard Areas (SFHAs).	Reduce impacts, frequent haz.	0
	Reduce impacts, severe haz.	9
	More than one haz.	0
	Protect vulnerable pops.	0
	Easily paid w/ local or grant \$	0
	Promotes partnerships	5
	Easy to implement	0
	Directly aligns with goals	3
	Protects the environment	2
	Already scheduled or started	1

