

2021 Beaver County Mitigation Actions		MITIGATION ACTION EVALUATION CRITERIA CONSIDERATIONS (+) highly effective or feasible (-) ineffective or not feasible (N) Neutral or Not applicable										TOTAL SCORE
Action #	Action	Life Safety	Property Protection	Technical	Political	Legal	Environmental	Social	Administrative	Local Champion	Other Community Objectives	
1.1.1	Maintain compliance with and good standing in the NFIP, including adoption and enforcement of floodplain management requirements (e.g., regulating all new and substantially improved construction in special-hazard flood areas), floodplain identification and mapping, and flood insurance outreach to the community. Further meet and/or exceed the minimum NFIP standards and criteria through the following NFIP-related continued compliance actions identified in subsequent initiatives.	+	+	+	+	+	N	+	+	+	+	9 (+) 0 (-) 1 (N)
1.1.2	Applicable municipalities will communicate with property owners or renters within the special flood hazard area regarding potential flood hazards. Letters may include the following information: local flood hazard, flood safety, flood insurance information, property protection measures, natural and beneficial functions of the local floodplain, a map of the local flood hazard area, information about hazard notification systems, floodplain development permit requirements, and substantial improvement/damage requirements.	+	+	+	+	+	N	+	+	+	+	9 (+) 0 (-) 1 (N)
1.1.3	Support the mitigation of vulnerable structures via retrofit (e.g. elevation, flood-proofing) or acquisition/relocation to protect them from future damage; repetitive loss and severe repetitive loss properties should be a priority, when applicable.	+	+	+	+	+	N	+	+	+	+	9 (+) 0 (-) 1 (N)
1.1.4	Municipalities will collect or update information on the number and location of all severe repetitive loss properties and provide it to Beaver County.	+	+	+	+	+	N	+	-	+	+	8 (+) 1 (-) 1 (N)
1.1.5	Remove blight/abandoned buildings in Beaver County.	+	+	+	+	+	N	+	+	+	+	9 (+) 0 (-) 1 (N)
1.2.1	Beaver County and municipalities will continue to work with PennDOT/SPC/DEP to improve roads that are highly susceptible to flooding.	+	+	+	+	+	N	+	+	+	+	9 (+) 0 (-) 1 (N)
1.2.2	Work with county and power companies to identify roads within the Township/Borough considered "critical;" these would be the first priority for clearing after an event involving downed power lines.	+	+	+	+	+	N	+	+	+	+	9 (+) 0 (-) 1 (N)
1.2.3	Perform studies on high-risk roadways to ensure they are adequate for travel.	+	+	+	+	+	N	+	+	+	+	9 (+) 0 (-) 1 (N)

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1.2.4	Encourage municipalities to work with businesses and developers to ensure proper traffic patterns/flow.	+	+	+	+	+	N	+	+	+	+	9 (+) 0 (-) 1 (N)
1.2.5	Encourage municipalities to participate in Transportation Improvement Program (TIP).	+	+	+	+	+	N	+	+	+	+	9 (+) 0 (-) 1 (N)
1.3.1	Encourage municipalities to prepare and enact stormwater management ordinances consistent with Act 167 Stormwater Management Plans.	+	+	+	+	+	N	+	+	N	+	8 (+) 0 (-) 2 (N)
1.3.2	Conduct regular maintenance on stormwater management structures in compliance with MS4 guidelines. Encourage regular maintenance on stormwater management structures and replace as needed.	+	+	+	+	+	N	+	+	-	+	8 (+) 1 (-) 1 (N)
1.3.3	Encourage non MS4 communities to perform regular maintenance on stormwater management structures and replace as needed.	+	+	+	+	+	N	+	-	+	+	8 (+) 1 (-) 1 (N)
1.3.4	Maintain stormwater management plans and/or pollutant reduction plans.	+	+	+	+	+	+	+	+	+	+	10 (+) 0 (-) 0 (N)
1.3.5	Where feasible, separate combined stormwater and sanitary sewer systems to reduce flooding and the negative impacts of overflows. For instance, 75% of Rochester Borough has combined sewers or no storm sewers at all, making this project highly needed.	+	+	+	+	+	+	+	+	+	+	10 (+) 0 (-) 0 (N)
1.4.1	Continue to map potential natural gas and petroleum transmission lines.	+	+	+	+	+	N	+	+	+	+	9 (+) 0 (-) 1 (N)
1.4.2	Follow up with any reported concerns on drinking water contamination, especially when associated with fracking and environmental hazards.	+	+	+	+	+	+	+	+	+	+	10 (+) 0 (-) 0 (N)
2.1.1	The Beaver County Planning Commission will work with DCED, other State agencies, and the municipalities to provide model zoning regulations for floodplain restrictions that comply with the PA MPC.	+	+	+	+	+	N	+	+	+	+	9 (+) 0 (-) 1 (N)
2.1.2	Develop and maintain a comprehensive list of relevant regional agencies, including Council of Governments, River Basin Commissions, and MPOs.	+	+	+	+	+	N	+	+	+	+	9 (+) 0 (-) 1 (N)

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Action #	Action	Life Safety	Property Protection	Technical	Political	Legal	Environmental	Social	Administrative	Local Champion	Other Community Objectives	
2.1.3	Collaborate with partnering agencies to promote awareness of invasive species (i.e. spotted lantern fly, emerald ash borer.)	+	+	+	+	+	+	+	+	+	+	10 (+) 0 (-) 0 (N)
2.1.4	Encourage residents to follow recommendations made by the Center for Disease Control (CDC), PA Health Department, and local health authorities to protect themselves from current/future risks.	+	+	+	+	+	N	+	+	+	+	9 (+) 0 (-) 1 (N)
2.1.5	Continue to collaborate with local law enforcement and authorities to promote awareness of the prevention of drug abuse in Beaver County.	+	N	+	+	+	N	+	+	+	+	8 (+) 0 (-) 2 (N)
2.1.6	Continue to regularly meet with Beaver County Drug Coalition to further mitigate against drug abuse.	+	N	+	+	+	N	+	+	+	+	8 (+) 0 (-) 2 (N)
2.1.7	Continue use in Narcan program and use of Dropbox locations in Beaver County.	+	N	+	+	+	N	+	+	+	+	8 (+) 0 (-) 2 (N)
2.2.1	Establish all-hazard resource centers located in the County Courthouse and all municipal buildings. Centers could serve as repositories for information such as flyers, maps, factsheets...etc for all hazards listed in the HMP. Using flooding as an example, centers would display literature about the NFIP; FIRMs; books about mitigation for homeowners; and copies of "Are You Ready Guide," "Protecting Building Utilities from Flood Damage," and "Seeking Shelter from the Storm."	+	+	+	+	+	+	+	+	+	+	10 (+) 0 (-) 0 (N)
2.3.1	Support equipment needs for local public works departments to ensure readiness for sudden onset hazard events.	+	+	+	+	+	N	+	+	+	+	9 (+) 0 (-) 1 (N)
3.1.1	Participate in emergency planning for applicable hazard and emergency response events. Specific types of planning relevant to the county and its municipalities include EAPs for dams, radiological emergency plans for nuclear incidents, winter preparedness plans, evacuation signage plans, Phase II Act 167 Stormwater Management Plan, and commodity flow studies. Additionally, other plans should be reviewed to ensure coordination with hazard mitigation planning techniques.	+	+	+	+	+	+	+	+	+	+	10 (+) 0 (-) 0 (N)
3.1.2	Planning Commission and applicable municipal offices will review their comprehensive plans to ensure that designated growth areas are not within high-hazard areas identified in this plan.	+	+	+	+	+	N	+	+	+	+	9 (+) 0 (-) 1 (N)

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Action #	Action	Life Safety	Property Protection	Technical	Political	Legal	Environmental	Social	Administrative	Local Champion	Other Community Objectives	
3.1.3	Encourage all critical government facilities to have COOP and COG plans and to begin implementing appropriate backup systems.	+	+	+	+	+	N	+	+	+	+	9 (+) 0 (-) 1 (N)
3.1.4	Continue to use and improve GIS capability to identify and prioritize hazards and critical infrastructure for mitigation.	+	+	+	+	+	N	+	+	+	+	9 (+) 0 (-) 1 (N)
3.2.1	Support participation in the NFIP/ CRS program by attending CRS workshop(s) if offered within the County. Join the CRS program if adequate resources to support long-term participation can be dedicated.	+	+	+	+	+	N	+	+	+	+	9 (+) 0 (-) 1 (N)
4.1.1	Participate and seek further education about hazard mitigation through FEMA's Emergency Management Institute (EMI).	+	+	+	+	+	+	+	+	+	+	10 (+) 0 (-) 0 (N)
4.2.1	Promote or adopt higher regulatory and zoning standards to manage flood hazard risk; specifically, through updates to the building codes, flood ordinances, and subdivision and land development ordinances. Goals of increased standards are to ensure new buildings and infrastructure are discouraged or prohibited in high-hazard areas in their jurisdiction.	+	+	+	+	+	N	+	+	+	+	9 (+) 0 (-) 1 (N)
4.2.2	Implement a building- hardening program for critical facilities and infrastructure to protect against terrorism.	+	+	+	+	+	N	+	+	+	+	9 (+) 0 (-) 1 (N)
4.2.3	Municipalities will aggressively enforce building and safety codes for all buildings, including industrial uses.	+	+	+	+	+	N	+	+	+	+	9 (+) 0 (-) 1 (N)
4.3.1	Seek funding and/or grants to enhance emergency management functions and improve overall public safety in Beaver County.	+	+	+	+	+	N	+	+	+	+	9 (+) 0 (-) 1 (N)
4.3.2	Investigate the possibility of a county burn building to assist the training of volunteer fire departments.	+	+	+	+	+	N	+	+	+	+	9 (+) 0 (-) 1 (N)
4.3.3	Support residents and local businesses in testing properties for radon exposure.	+	+	+	+	+	+	+	+	+	+	10 (+) 0 (-) 0 (N)
5.1.1	Identify insurable county and municipal-owned, flood-prone buildings and infrastructure, and take appropriate mitigation methods if located in a SFHA. Continually monitor and update, as necessary.	+	+	+	+	+	N	+	+	+	+	9 (+) 0 (-) 1 (N)

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Action #	Action	Life Safety	Property Protection	Technical	Political	Legal	Environmental	Social	Administrative	Local Champion	Other Community Objectives	
5.2.1	Develop and implement an enhanced all-hazards, public outreach / education / mitigation information program on natural hazard risks, and outline the ways in which the program(s) can strengthen community mitigation and preparedness efforts.	+	+	+	+	+	+	+	+	+	+	10 (+) 0 (-) 0 (N)
5.2.2	Assess and update emergency operations center equipment to improve communication. Targeted needs include repeaters to strengthening radio signals, providing base ration station and replacement portable radio batteries, and installing PEMARS radio antennae, as well as generators/ backup power in municipal buildings, police stations, and public works garages.	+	+	+	+	+	N	+	+	+	+	9 (+) 0 (-) 1 (N)
5.2.3	Promote reverse notification systems in high-hazard areas.	+	+	+	+	+	N	+	+	+	+	9 (+) 0 (-) 1 (N)
5.3.1	Utilize social media to disseminate preparedness tips to the public.	+	+	+	+	+	N	+	+	+	+	9 (+) 0 (-) 1 (N)
5.4.1	Disseminate information to Beaver County property owners about the importance of creating an emergency kit and being prepared for a 2-week period without supplies.	+	+	+	+	+	N	+	+	+	+	9 (+) 0 (-) 1 (N)
5.5.1	Encourage municipalities to attend the PA Association of Floodplain Managers yearly training.	+	+	+	+	+	N	+	+	+	+	9 (+) 0 (-) 1 (N)
5.5.2	Hold annual meetings to ensure that mitigation, planning, preparedness, and response personnel are (1) cross-trained in each other's area of expertise, (2) aware of ongoing activities, and (3) fostering increased communication.	+	+	+	+	+	N	+	+	+	+	9 (+) 0 (-) 1 (N)
5.5.3	Reinstate the Beaver County CERT program to recruit and train interested citizens in Beaver County to assist first responders at specified emergencies throughout the County.	+	+	+	+	+	N	+	+	+	+	9 (+) 0 (-) 1 (N)
6.1.1	Hold educational workshops to educate Beaver County residents about FEMA's HHPD program.	+	+	+	+	+	+	+	+	+	+	10 (+) 0 (-) 0 (N)
6.1.2	Review, update and exercise high-hazard dam plans.	+	+	+	+	+	+	+	+	+	+	10 (+) 0 (-) 0 (N)

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6.1.3	Utilize County social media pages to educate Beaver County residents about FEMA's HHPD program.	+	+	+	+	+	+	+	+	+	+	10 (+) 0 (-) 0 (N)

2021 Beaver County Mitigation Actions		Multi-objective mitigation action prioritization criteria					Priority
Action #	Action	Effectiveness	Efficiency	Multi-Hazard Mitigation	Addresses High Risk Hazard	Addresses Critical Communications/Critical Infrastructure	
1.1.1	Maintain compliance with and good standing in the NFIP, including adoption and enforcement of floodplain management requirements (e.g., regulating all new and substantially improved construction in special-hazard flood areas), floodplain identification and mapping, and flood insurance outreach to the community. Further meet and/or exceed the minimum NFIP standards and criteria through the following NFIP-related continued compliance actions identified in subsequent initiatives.	3	2	2	3	2	2.35
1.1.2	Applicable municipalities will communicate with property owners or renters within the special flood hazard area regarding potential flood hazards. Letters may include the following information: local flood hazard, flood safety, flood insurance information, property protection measures, natural and beneficial functions of the local floodplain, a map of the local flood hazard area, information about hazard notification systems, floodplain development permit requirements, and substantial improvement/damage requirements.	2	2	2	3	2	2.15
1.1.3	Support the mitigation of vulnerable structures via retrofit (e.g. elevation, flood-proofing) or acquisition/relocation to protect them from future damage; repetitive loss and severe repetitive loss properties should be a priority, when applicable.	2	2	2	3	2	2.15
1.1.4	Municipalities will collect or update information on the number and location of all severe repetitive loss properties and provide it to Beaver County.	2	2	2	3	2	2.15
1.1.5	Remove blight/abandoned buildings in Beaver County.	3	2	2	2	2	2.2
1.2.1	Beaver County and municipalities will continue to work with PennDOT/SPC/DEP to improve roads that are highly susceptible to flooding.	2	2	2	3	3	2.3
1.2.2	Work with county and power companies to identify roads within the Township/Borough considered "critical;" these would be the first priority for clearing after an event involving downed power lines.	2	2	2	3	3	2.3
1.2.3	Perform studies on high-risk roadways to ensure they are adequate for travel.	2	2	2	3	2	2.15
1.2.4	Encourage municipalities to work with businesses and developers to ensure proper traffic patterns/flow.	2	2	1	3	3	2.1
1.2.5	Encourage municipalities to participate in Transportation Improvement Program (TIP).	3	2	1	3	2	2.15
1.3.1	Encourage municipalities to prepare and enact stormwater management ordinances consistent with Act 167 Stormwater Management Plans.	2	2	2	3	2	2.15
1.3.2	Conduct regular maintenance on stormwater management structures in compliance with MS4 guidelines. Encourage regular maintenance on stormwater management structures and replace as needed.	2	2	2	3	2	2.15
1.3.3	Encourage non MS4 communities to perform regular maintenance on stormwater management structures and replace as needed.	2	2	2	3	2	2.15
1.3.4	Maintain stormwater management plans and/or pollutant reduction plans.	2	2	3	3	2	2.35
1.3.5	Where feasible, separate combined stormwater and sanitary sewer systems to reduce flooding and the negative impacts of overflows. For instance, 75% of Rochester Borough has combined sewers or no storm sewers at all, making this project highly needed.	2	2	2	2	2	2
1.4.1	Continue to map potential natural gas and petroleum transmission lines.	2	2	2	1	2	1.85
1.4.2	Follow up with any reported concerns on drinking water contamination, especially when associated with fracking and environmental hazards.	2	2	2	2	2	2

2021 Beaver County Mitigation Actions		Multi-objective mitigation action prioritization criteria					Priority
Action #	Action	Effectiveness	Efficiency	Multi-Hazard Mitigation	Addresses High Risk Hazard	Addresses Critical Communications/Critical Infrastructure	
2.1.1	The Beaver County Planning Commission will work with DCED, other State agencies, and the municipalities to provide model zoning regulations for floodplain restrictions that comply with the PA MPC.	2	3	2	2	2	2.3
2.1.2	Develop and maintain a comprehensive list of relevant regional agencies, including Council of Governments, River Basin Commissions, and MPOs.	2	3	2	2	2	2.3
2.1.3	Collaborate with partnering agencies to promote awareness of invasive species (i.e. spotted lantern fly, emerald ash borer.)	3	3	2	3	2	2.65
2.1.4	Encourage residents to follow recommendations made by the Center for Disease Control (CDC), PA Health Department, and local health authorities to protect themselves from current/future risks.	3	3	3	3	2	2.85
2.1.5	Continue to collaborate with local law enforcement and authorities to promote awareness of the prevention of drug abuse in Beaver County.	3	3	2	3	2	2.65
2.1.6	Continue to regularly meet with Beaver County Drug Coalition to further mitigate against drug abuse.	3	3	2	3	2	2.65
2.1.7	Continue use in Narcan program and use of Dropbox locations in Beaver County.	3	3	2	3	2	2.65
2.2.1	Establish all-hazard resource centers located in the County Courthouse and all municipal buildings. Centers could serve as repositories for information such as flyers, maps, factsheets...etc for all hazards listed in the HMP. Using flooding as an example, centers would display literature about the NFIP; FIRMS; books about mitigation for homeowners; and copies of "Are You Ready Guide," "Protecting Building Utilities from Flood Damage," and "Seeking Shelter from the Storm."	2	2	2	2	2	2
2.3.1	Support equipment needs for local public works departments to ensure readiness for sudden onset hazard events.	2	2	2	2	3	2.15
3.1.1	Participate in emergency planning for applicable hazard and emergency response events. Specific types of planning relevant to the county and its municipalities include EAPs for dams, radiological emergency plans for nuclear incidents, winter preparedness plans, evacuation signage plans, Phase II Act 167 Stormwater Management Plan, and commodity flow studies. Additionally, other plans should be reviewed to ensure coordination with hazard mitigation planning techniques.	3	2	3	2	3	2.55
3.1.2	Planning Commission and applicable municipal offices will review their comprehensive plans to ensure that designated growth areas are not within high-hazard areas identified in this plan.	2	2	2	3	3	2.3
3.1.3	Encourage all critical government facilities to have COOP and COG plans and to begin implementing appropriate backup systems.	2	2	2	2	2	2
3.1.4	Continue to use and improve GIS capability to identify and prioritize hazards and critical infrastructure for mitigation.	2	2	2	2	3	2.15
3.2.1	Support participation in the NFIP/ CRS program by attending CRS workshop(s) if offered within the County. Join the CRS program if adequate resources to support long term participation can be dedicated.	2	2	2	2	2	2
4.1.1	Participate and seek further education about hazard mitigation through FEMA's Emergency Management Institute (EMI).	3	3	3	3	3	3
4.2.1	Promote or adopt higher regulatory and zoning standards to manage flood hazard risk; specifically, through updates to the building codes, flood ordinances, and subdivision and land development ordinances. Goals of increased standards are to ensure new buildings and infrastructure are discouraged or prohibited in high-hazard areas in their jurisdiction.	2	2	2	2	3	2.15
4.2.2	Implement a building- hardening program for critical facilities and infrastructure to protect against terrorism.	2	2	2	3	3	2.3
4.2.3	Municipalities will aggressively enforce building and safety codes for all buildings, including industrial uses.	3	2	2	2	2	2.2
4.3.1	Seek funding and/or grants to enhance emergency management functions and improve overall public safety in Beaver County.	3	2	3	3	2	2.55

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4.3.2	Investigate the possibility of a county burn building to assist the training of volunteer fire departments.	3	2	3	2	2	2.4
4.3.3	Support residents and local businesses in testing properties for radon exposure.	3	2	2	3	1	2.2
5.1.1	Identify insurable county and municipal-owned, flood-prone buildings and infrastructure, and take appropriate mitigation methods if located in a SFHA. Continually monitor and update, as necessary.	2	2	2	3	1	2
5.2.1	Develop and implement an enhanced all-hazards, public outreach / education / mitigation information program on natural hazard risks, and outline the ways in which the program(s) can strengthen community mitigation and preparedness efforts.	3	2	3	3	2	2.55
5.2.2	Assess and update emergency operations center equipment to improve communication. Targeted needs include repeaters to strengthening radio signals, providing base ration station and replacement portable radio batteries, and installing PEMARS radio antennae, as well as generators/ backup power in municipal buildings, police stations, and public works garages.	2	2	2	3	3	2.3
5.2.3	Promote reverse notification systems in high-hazard areas.	2	2	2	3	2	2.15
5.3.1	Utilize social media to disseminate preparedness tips to the public.	3	2	3	3	2	2.55
5.4.1	Disseminate information to Beaver County property owners about the importance of creating an emergency kit and being prepared for a 2-week period without supplies.	2	2	3	2	2	2.2
5.5.1	Encourage municipalities to attend the PA Association of Floodplain Managers yearly training.	2	2	2	3	2	2.15
5.5.2	Hold annual meetings to ensure that mitigation, planning, preparedness, and response personnel are (1) cross-trained in each other's area of expertise, (2) aware of ongoing activities, and (3) fostering increased communication.	2	3	3	2	3	2.65
5.5.3	Reinstate the Beaver County CERT program to recruit and train interested citizens in Beaver County to assist first responders at specified emergencies throughout the County.	2	2	3	3	3	2.5
6.1.1	Hold educational workshops to educate Beaver County residents about FEMA's HHPD program.	3	3	1	3	2	2.45
6.1.2	Review, update and exercise high-hazard dam plans.	3	2	2	3	3	2.5
6.1.3	Utilize County social media pages to educate Beaver County residents about FEMA's HHPD program.	3	3	2	3	2	2.65