

C. MITIGATION STRATEGY

2023 NORTHERN KENTUCKY HAZARD MITIGATION GOALS

Goal 1: To reduce loss of life, injury, and disruptions to essential public services and infrastructure by reducing the vulnerability to critical facilities during hazard events that could result in loss of life or injury.

Objective 1.1: Minimize the disruption to and enhance rapid restoration of systems and services.

Objective 1.2: Minimize the disruption and enhance rapid restoration of utility systems. Assure Ensure that all emergency facilities have temporary backup power capabilities.

Objective 1.3: Minimize the damages to groundwater and the environment as a result of damages caused by hazards.

Objective 1.4: Minimize damage to roads, bridges, culverts and other infrastructure through relocation, rebuilding and other means in order to reduce damage from natural hazard events.

Goal 2: Protect each jurisdiction's most vulnerable populations, buildings, and critical facilities through the implementation of cost-effective and technically feasible mitigation projects.

Objective 2.1: Reduce the numbers of critical Infrastructure and facilities in identified hazard areas.

Objective 2.2: Minimize risk to vulnerable populations through the construction of community shelters.

Goal 3: Enhance existing or design new jurisdictional policies that will reduce the potential damaging effects of hazards without hindering other community goals.

Objective 3.1: Enforce and enhance existing policies and authorities.

Objective 3.2: Develop new policies such as ordinances and building codes that will require new structures meet standards for hazard areas.

Objective 3.3: Integrate Hazard Mitigation Plan into Other Community Plans.

Objective 3.4: Encourage Policies and Programs That Prevent Slips, Slides and Erosion On Slopes And Land, Particularly Where Roads And Vulnerable Populations Are Concerned.

Goal 4: Protect public health, safety, and welfare by increasing the public awareness of existing hazards and by fostering both individual and public responsibility in mitigating risks due to those hazards.

Objective 4.1: Educate the Public about hazards prevalent in their jurisdictions.

Goal 5: Increase the technical capabilities of local jurisdictions to reduce potential losses.

Objective 5.1: Improve each jurisdictions capability to identify and map vulnerable structures and critical facilities in hazard areas.

Objective 5.2: Increase the jurisdictions' ability to communicate and direct emergency services and resources to the appropriate hazard areas.

Goal 6: Build local support and commitment to continuously become less vulnerable to Hazards.

Objective 6.1: Train volunteers and staff to support and implement mitigation activities that will enhance the response capabilities of the local jurisdictions.

Suggested New Hazard Mitigation Goals

Goal 7: Promote Economic Recovery and Continuity Following Hazard Events

Objective 7.1: Develop and implement post-disaster recovery plans to restore essential services and support local businesses.

Objective 7.2: Establish a community recovery fund to assist with immediate post-disaster needs and long-term economic recovery.

Goal 8: Encourage Collaboration and Partnerships with Private Sector and Non-Governmental Organizations

Objective 8.1: Foster public-private partnerships to leverage resources and expertise for mitigation efforts.

Objective 8.2: Engage local non-governmental organizations in community awareness and preparedness campaigns.

Goal 9: Support Sustainability and Environmental Mitigation within Hazard Planning

Objective 9.1: Assess and address the impacts of environmental change on local hazard vulnerabilities.

Objective 9.2: Encourage sustainable practices and renewable energy solutions within community planning and response efforts.

Goal 10: Enhance Accessibility and Equity in Hazard Preparedness and Response

Objective 10.1: Ensure that hazard planning and response are accessible to all community members, including those with disabilities or language barriers.

Objective 10.2: Promote equity in resource allocation, ensuring that vulnerable and underserved populations are prioritized.

Goal 11: Establish Continuous Evaluation and Improvement Processes

Objective 11.1: Implement regular reviews and updates to the hazard mitigation plan to ensure alignment with evolving community needs and global best practices.

Objective 11.2: Encourage community input and feedback in evaluation processes to maintain transparency and relevance.

NORTHERN KENTUCKY ACTION PLAN

Hazard	Action	Jurisdiction(s)	Priority	STAPLEE	Responsible Entities	Potential Funding Sources	CRS Action Category	Completion Timeframe
Goal 1: To reduce loss of life, injury, and disruptions to essential public services and infrastructure by reducing the vulnerability to critical facilities during hazard events that could result in loss of life or injury.								
Objective 1.1: Minimize the disruption to and enhance rapid restoration of systems and services.								
Flood	Remove debris from streams that cause damages to bridges, culverts, and transportation facilities.	All; especially in Pendleton County and along Fourmile Creek in Campbell County				Local Funds, Prevention Grants & Natural Resources Grants	Prevention	
All	Develop a coordinated, sustained interagency debris removal plan.	All				Pre-Disaster Mitigation Grants, Local Match, & Flood Control Grants	Prevention, Property Protection	
Objective 1.2: Minimize the disruption and enhance rapid restoration of utility systems. Ensure that all emergency facilities have temporary backup power capabilities.								
Severe Thunderstorms	Trim trees and debris away from overhead power lines and roads.	All				Local Funds	Prevention	
Severe Winter Storms	Trim trees and debris away from overhead power lines and roads.	All				Local Funds	Prevention	
Tornados	Trim trees and debris away from overhead power lines and roads.	All				Local Funds	Prevention	
Flooding	Trim trees and debris away from overhead power lines and roads.	All				Local Funds	Prevention	
All	Encourage all critical facilities, including utilities and planning agencies, to acquire temporary or fixed backup power capabilities.	All				Emergency Service Grants, Local Sources	Emergency Services	
All	Encourage residents to have the ability to be self-sufficient for up to 72 hours in the event there is a loss of utility services.	All				Prevention Grants, Local Funds	Prevention	
All	Place new utilities underground where feasible.	All				Prevention Grants, Local Funds	Prevention	
All	Encourage fuel sources/suppliers to have back-up power.	All				Private	Emergency Services	
Objective 1.3: Minimize the damages to groundwater and the environment as a result of damages caused by hazards.								

Hazard	Action	Jurisdiction(s)	Priority	STAPLEE	Responsible Entities	Potential Funding Sources	CRS Action Category	Completion Timeframe
Flooding	Develop and continue to improve a Stormwater Management Plan that reduces flooding, erosion, and damage caused to the environment.	All				Pre-Disaster Mitigation Funds, HMGP Funds, Local Matches, Flood Control Grants	Prevention	
Objective 1.4: Minimize damage to roads, bridges, culverts and other infrastructure through relocation, rebuilding and other means in order to reduce damage from natural hazard events.								
Flooding	Develop policies and a plan for reducing or eliminating damage to roads and culverts from natural hazards, particularly flooding.	All				Pre-Disaster Mitigation Funds, HMGP Funds, Local Matches, Flood Control Grants	Prevention, Structural Projects	
Dam Failure	Develop policies and a plan for reducing or eliminating damage to roads and culverts from natural hazards, particularly flooding.	All				Pre-Disaster Mitigation Funds, HMGP Funds, Local Matches, Flood Control Grants	Prevention, Structural Projects	
Wind	Develop and implement plans to clear dead or vulnerable trees from near roads and power lines.	All				Pre-Disaster Mitigation Funds, HMGP Funds, Local Matches	Prevention	
Goal 2: Protect each jurisdiction's most vulnerable populations, buildings and critical facilities through the implementation of cost-effective and technically feasible mitigation projects.								
Objective 2.1: Reduce the numbers of critical Infrastructure and facilities in identified hazard areas.								
All	Adopt recognized building code standards for the State of Kentucky for each jurisdiction within the region and encourage the use of adoption of property and maintenance codes.	All				Local Government	Property Protection	
Flooding	Direct that development and installation of new critical facilities be out of hazard areas. Also relocate any critical facilities currently in special flood hazard area above that area.	All; specifically relocate fire stations in Mentor, Melbourne, Silver Grove and Camp Springs				local funds, HMGP, PDM, flood control grant	Property Protection, Emergency Services	
Landslide	Direct that development and installation of new critical facilities be out of hazard areas.	All; specifically relocate fire stations in Mentor, Melbourne, Silver				local funds, HMGP, PDM, flood control grant	Property Protection, Emergency Services	

Hazard	Action	Jurisdiction(s)	Priority	STAPLEE	Responsible Entities	Potential Funding Sources	CRS Action Category	Completion Timeframe
	Also relocate any critical facilities currently in special flood hazard area above that area.	Grove and Camp Springs						
Minimize risk to vulnerable populations through the construction of community shelters.								
All	Build severe weather shelters for vulnerable populations, including but not limited to tornado safe rooms.	All				local funds, HMGP, PDM	Emergency Services	
Goal 3: Enhance existing or design new jurisdictional policies that will reduce the potential damaging effects of hazards without hindering other community goals.								
Objective 3.1: Enforce and enhance existing policies and authorities.								
Flood	Adopt and maintain current FIRMs (Flood Insurance Rate Maps) and local flood protection ordinances.	All				Local Revenue	Prevention, Awareness	
Flood	Encourage participation in the Risk MAP program.	All				Local Revenue	Prevention, Awareness	
Objective 3.2: Develop new policies such as ordinances and building codes that will require new structures meet standards for hazard areas.								
All	Improve the enforcement of current building codes to include mitigation objectives.	All				Developers, Property owners	Prevention, Awareness	
All	Develop and continue with zoning and land use ordinances that will regulate development in hazard areas. (this will only apply to jurisdictions that currently undertake land use planning and zoning activities)	Boone, Campbell, Gallatin, Grant, Kenton, & Pendleton				Local Revenue	Prevention	
Flooding	Eliminate repetitive loss structures through property acquisition.	Boone, Campbell, Carroll, Gallatin, Kenton, & Pendleton; especially along Ohio River in Campbell County				HMGP, PDM, other grant sources, local funds	Prevention	
Flooding	Conduct pre-disaster mitigation activities for residential structures in the floodway.	All				HMGP, PDM, other grant sources, local funds	Prevention	
Objective 3.3: Integrate Hazard Mitigation Plan Into Other Community Plans.								
All	Continue to reference the Hazard Mitigation Plan in other plans and grant applications.	All				HMGP, PDM, other grant sources, local funds	All	

Hazard	Action	Jurisdiction(s)	Priority	STAPLEE	Responsible Entities	Potential Funding Sources	CRS Action Category	Completion Timeframe
All	Encourage communities, developers, and other organizations to consult the hazard mitigation plan for future developments, capital improvement programs, and other actions that have community-wide impacts	All					Education and Awareness	
Flooding	Encourage communities to participate in the Community Rating System (CRS).	All				Local Funds	Prevention	
Objective 3.4: Encourage Policies And Programs That Prevent Slips, Slides And Erosion On Slopes And Land, Particularly Where Roads And Vulnerable Populations Are Concerned.								
Landslide	Encourage communities to coordinate with KYTC, County road departments, and utilities in order to create policies and plans that prevent slips, slides and other land erosion problems that affect roadways. Examples of this include but are not limited to improving drainage systems, culverts, and road re-location.	All				local funds, HMGP, PDM, other grants	Prevention	
Goal 4: Protect public health, safety and welfare by increasing the public awareness of existing hazards and by fostering both individual and public responsibility in mitigating risks due to those hazards.								
Objective 4.1: Educate the Public about hazards prevalent in their jurisdictions.								
All	Educate residents of the location of hazard areas by providing maps and hazard information.	All				Local Revenues, Prevention Grants	Awareness	
All	Educate the public about early warning systems and promote the use of NOAA "All Hazards" radios, and outdoor warning sirens for early warning and post event information.	All				Local Funds	Awareness	
Flooding	Educate the public about the Floodplain Ordinance.	Boone, Campbell, Carroll, Gallatin, Grant, Kenton, Owen, Pendleton				Local Funds	Prevention	
All	Educate citizens about evacuation plans, policies, and procedures for all hazards.	All				Grants, Local Funds	Prevention	
All	Educate the public about measures that can be taken to reduce damages caused by natural hazards to homes and personal property.	All				Grants, Local Funds	Prevention	

Hazard	Action	Jurisdiction(s)	Priority	STAPLEE	Responsible Entities	Potential Funding Sources	CRS Action Category	Completion Timeframe
All	Encourage community resilience by educating residents about 72-hour emergency plans and kits.	All				Grants, Local Funds	Prevention	
Goal 5: Increase the technical capabilities of local jurisdictions to reduce potential losses.								
Objective 5.1: Improve each jurisdictions capability to identify and map vulnerable structures and critical facilities in hazard areas.								
All	Create and maintain a GIS database inventory of all critical facilities and structures in each hazard area.	All				Pre-Disaster Mitigation, local funds	Prevention, Awareness	
All	Update local mapping system capabilities including hardware and software.	All				Pre-Disaster Mitigation, local funds	Prevention, Awareness	
Objective 5.2: Increase the jurisdictions ability to communicate and direct emergency services and resources to the appropriate hazard areas.								
All	Upgrade Emergency Services communication equipment and general technology and create redundancy.	All				Homeland Security Grants, First Responder, Grants, FEMA Fire Act Grants, CDBG Disaster Relief Grants	Emergency Services	
All	Design and Implement a protection program for critical information systems and infrastructure and ensure survivability of the region's communication system. (Ex. E-911 dispatch, communications, etc.)	All				Pre-Disaster Mitigation, CDBG Disaster Relief Grants	Emergency Services	
Thunderstorms	Expand warning and notification systems such as outdoor warning sirens and NOAA/All-Hazard/weather radios.	All				Pre-Disaster Mitigation, CDBG Disaster Relief Grants	Emergency Services	
Tornados	Expand warning and notification systems such as outdoor warning sirens and NOAA/All-Hazard/weather radios.	All				Pre-Disaster Mitigation, CDBG Disaster Relief Grants	Emergency Services	
All	To ensure continuity of operation at Emergency Operations Centers, implement infrastructure and technology improvements.	All				Pre-Disaster Mitigation, CDBG Disaster Relief Grants	Emergency Services	
All	Encourage the use of the Integrated Public Alert and Warning System (IPAWS), social media, and other mass notification tools.	All				Pre-Disaster Mitigation, CDBG Disaster Relief Grants	Emergency Services	
Goal 6: Build local support and commitment to continuously become less vulnerable to Hazards.								

Hazard	Action	Jurisdiction(s)	Priority	STAPLEE	Responsible Entities	Potential Funding Sources	CRS Action Category	Completion Timeframe
Objective 6.1: Train volunteers and staff to support and implement mitigation activities that will enhance the response capabilities of the local jurisdictions.								
All	Recruit and Train volunteers to serve on Citizen Corps, CERT, American Red Cross and other volunteer programs.	All				Pre-Disaster Mitigation	Prevention	
All	Encourage more coordination between jurisdictions on hazard mitigation issues.	All				Pre-Disaster Mitigation	Prevention	
All	Train staff and disaster responders for hazard events, ensuring responders are qualified. Specifically, require NIMS training.	All					Prevention, Education	
Goal 7: Promote Economic Recovery and Continuity Following Hazard Events								
Objective 7.1: Develop and implement post-disaster recovery plans to restore essential services and support local businesses.								
Objective 7.2: Establish a community recovery fund to assist with immediate post-disaster needs and long-term economic recovery.								
Goal 8: Encourage Collaboration and Partnerships with Private Sector and Non-Governmental Organizations								
Objective 8.1: Foster public-private partnerships to leverage resources and expertise for mitigation efforts.								
Objective 8.2: Engage local non-governmental organizations in community awareness and preparedness campaigns.								
Goal 9: Support Sustainability and Environmental Mitigation within Hazard Planning								
Objective 9.1: Assess and address the impacts of environmental change on local hazard vulnerabilities.								
Objective 9.2: Encourage sustainable practices and renewable energy solutions within community planning and response efforts.								
Goal 10: Enhance Accessibility and Equity in Hazard Preparedness and Response								
Objective 10.1: Ensure that hazard planning and response are accessible to all community members, including those with disabilities or language barriers.								
Objective 10.2: Promote equity in resource allocation, ensuring that vulnerable and underserved populations are prioritized.								

Hazard	Action	Jurisdiction(s)	Priority	STAPLEE	Responsible Entities	Potential Funding Sources	CRS Action Category	Completion Timeframe
Goal 11: Establish Continuous Evaluation and Improvement Processes								
Objective 11.1: Implement regular reviews and updates to the hazard mitigation plan to ensure alignment with evolving community needs and global best practices.								
Objective 11.2: Encourage community input and feedback in evaluation processes to maintain transparency and relevance.								

DRAFT