

MITIGATION ACTIONS/MEASURES VERBATIM FROM AREA DEVELOPMENT DISTRICTS' (ADDs') LOCAL HAZARD MITIGATION PLANS

Appendix 4-5

Standard Portion: Mitigation Strategy

Commonwealth of Kentucky Enhanced Hazard Mitigation Plan: 2013 Version

Kentucky Emergency Management (KYEM)

University of Kentucky, Martin School of Public Policy and Administration

Hazard Mitigation Grants Program (UK-HMGP)

The mitigation measures cited by the Commonwealth of Kentucky for its 2013 update of its hazard mitigation plan primarily derived from the mitigation measures of its local jurisdictions. Thus, to back up the result of the Commonwealth's attempt to categorize its local jurisdictions' mitigation measures in order to use them for its mitigation actions, the Commonwealth of Kentucky cites verbatim the mitigation measures articulated in each of its local jurisdictions' hazard mitigation plans.

BLUEGRASS AREA DEVELOPMENT DISTRICT (BGADD)

- “Develop and implement a plan that would educate and inform local citizenry of the dangers of particular natural hazards and identify ways to protect them from the apparent dangers of these hazards. Continually locate and clearly make areas less prone to natural hazards.”
- “Develop and implement a plan and upgrade natural hazard warning systems (including sirens and weather alert radios) to warn the community of imminent hazards.”
- “Develop new or use past countywide assessments to determine warning system type and placement.”
- “Develop and implement a plan to provide safety shelters (storm and/or tornado) in designated areas with special consideration for especially vulnerable groups of citizenry.”
- “Develop systems to maintain adequate water supply for individuals during times of drought, with special consideration for especially vulnerable groups of citizenry.”
- “Conduct a study to identify and analyze effects of natural hazards on a community and propose potential actions that would reduce or eliminate property losses caused by these hazards.”
- “Implement a plan that would manage, minimize or eliminate significant structural damage cause by natural hazards.”
- “Plan appropriately and implement measures to protect areas that have repetitive losses and/or as flood prone areas.”
- “Prohibit or regulate building construction in areas highly susceptible to the effects of karst and sinkholes.”
- “Implement a monitoring and maintenance plan to assure that water systems will function at high levels during a storm.”
- “Implement a plan to reduce or eliminate storm water run-off damages by planting vegetation and use other means to slow down the collection and movement of storm waters.”
- “Maintain adequate water supply for area farms during times of drought conditions.”

- “Develop and implement a plan to identify and remove, regulate, or retrofit buildings in hazard-vulnerable areas or situations.”
- “Identify natural hazard vulnerable buildings in downtown areas which could be detrimental to the community during a hazard event and implement a plan to hazard-proof or eliminate these structures.”
- “Evaluate the vulnerability of critical and essential services buildings and determine how to hazard-protect the facilities, its personnel, and key pieces of equipment.”
- “Develop and implement a plan to assure that all emergency operations will be delivered effectively and in a timely fashion during natural hazard response and recovery operations.”
- “Plan/prepare for alternate sources of critical and essential services in the event primary sources are disrupted.”
- “Ensure that roadway culverts and bridges are of a proper size and stable in order to accommodate the flow of additional water during periods of wet weather and/or flooding.”
- “Inventory existing fire department and law enforcement equipment to determine what additional natural hazard-related equipment is needed and purchase the required equipment utilizing available grant sources.”
- “Do a study to upgrade damage prevention ordinances.”
- “Develop and implement a planning and zoning ordinance that would address issues related to new construction in hazard-prone areas.”
- “Develop, revise, and/or upgrade policies, planning and zoning guidelines, regulations, ordinances, and/or authorities regarding new building codes which could lessen or eliminate the effects of significant natural hazards.”
- “Establish a committee or team to determine [with the help of the Kentucky Division of Water (DOW)/NFIP staff] the procedure for updating the county’s FIRMs.”
- “Develop and utilize brochures, public announcements, newspaper and magazine articles, and public information meetings and educate the public about safety during various hazards (including also natural hazard education programs in schools).”

- “Inform and educate the local citizenry about evacuation plans and routes in the event of a significant natural hazard utilizing public announcement, brochures, and signage at the hazard site areas.”
- “Inform and educate the local citizenry about the availability of National Flood Insurance Program (NFIP) options.”
- “Identify and map natural hazard prone roads that could impact entryways and evacuation routes.”
- Identify alternative routes for First Responders and the community in the event that roads are impassable during a disaster.”
- “List and map the river/stream gage reading that results in flooding in low-lying areas. Identify and map areas in the community that are the first to be flooded. Additionally, identify and map areas that flood at specific gauge readings, if known.”
- “Develop a volunteer force (possibility of mostly retired persons) under the authority of a local official, which can gather data and have the expertise to develop a local jurisdiction Hazard Planning, Mitigation, and Response database.”
- “Establish a network of federal, state, and local stakeholders for hazard mitigation planning and implementation of activities.”
- “Develop a standing Natural Hazard Response Planning Support.”
- “Committee that will continually review and address local Hazard Response and Mitigation issues. One of their tasks would be to inform and include the community at large in hazard issues.”

BARREN RIVER AREA DEVELOPMENT DISTRICT (BRADD)

- “Remove debris from streams that cause damage to bridge and transportation facilities.”
- “Develop a coordinated, interagency sustained debris removal plan.”
- “Work with utility companies to trim trees away from overhead power lines.”
- “Provide Generators at Critical facilities with emergency services.”
- “Encourage homeowners to have backup power sources or alternate sources of heating.”
- “Direct and installation of new critical facilities out of hazard areas.”
- “Develop storm water Management plan to reduce flooding and erosion and damages.”
- “Relocate critical facilities in the flood hazard zone.”
- “Purchase and remove homes damaged by landslides. Acquire land for new projects.”
- Adoption of the 2005 International Building Codes Standards for the region
- “Enforce the county NFIP flood ordinances.”
- “Improve the enforcement of current building codes.”
- “Develop zoning and land use ordinances to regulate development in Hazard areas.”
- “Educate residents of their location in the Hazard areas by providing maps and information.”
- “Promote the use of NOAA 'all hazards' radios for early warning and post event information.”
- “Educate the Public on the dangers of natural hazards and advise them on their safety.”
- “Develop evacuation plans, policies, and procedures for all hazards.”
- “Educate residents on the availability and importance of Flood Insurance.”

- “Create a GIS database inventory of all critical facilities and structures in each hazard area.”
- “Create new maps of the 100-Year Flood Hazard Areas.”
- “Identify and map bridges that need to be elevated to prevent damage from flooding.”
- “Create a GIS database inventory of repetitive loss structures in each flood hazard area.”
- “Upgrade the emergency services communication equipment.”
- “Design and implement a protection program for critical information systems.”
- “Recruit and train 30 volunteers to serve on the Community Emergency Response Team.”

BIG SANDY AREA DEVELOPMENT DISTRICT (BSADD)

RE: Non-Flood Events

- “Formalizing Hazard Mitigation Planning Committee”
- “Promoting partnerships between government, private nonprofits, business, and educational entities”
- “Promotion of development structures designed to better withstand the identified hazards”
- “Incorporate mitigation goals and objectives into existing regulations, orders, and policies.”
- “Incorporate better early warning systems where feasible.”
- “Develop better communications between agencies.”
- “Promoting partnerships with neighboring communities”
- “Development of coordination procedures between intra-governmental departments”
- “Familiarize officials with National Dam Safety Program Managed by FEMA.”
- “Communications Development/Early Warning System”
- “Education of Citizens”
- “Alternative Heating Methods training for elderly and disabled”
- “Public awareness campaign”

RE: Flood Events

- “Repair various road slides throughout the county.”
- “Replace inadequate culverts and bridges at various locations in county.”
- “Develop policies and procedures for floodplain development ordinance.”
- “Address inadequate channel width and depth by dredging various creeks in county.”
- “Evaluate current dams/levees. Review specifications for dams. Periodic review of new and existing dams. Review EOP plans of Dam owners/overseers.”
- Address Severe Repetitive Loss structures as identified by FEMA.”
- “Provide Public Education.”
- Relocate a city out of the flood zone: City of Martin
- “Development of educational material for information on hazards of constructing in the floodplain”

BUFFALO TRACE AREA DEVELOPMENT DISTRICT (BTADD)

- “Remove debris from streams that cause damage to bridge and transportation facilities.”
- “Develop a coordinated, interagency sustained debris removal plan.”
- “Work with utility companies to trim trees away from overhead power lines.”
- “Provide Generators at Critical facilities with emergency services.”
- “Encourage homeowners to have backup power sources or alternate sources of heating.”
- “Direct and installation of new critical facilities out of hazard areas.”
- “Develop Storm Water Management Plan to reduce flooding and erosion and damages.”
- “Relocate critical facilities in the flood hazard zone.”
- “Purchase and remove homes damaged by landslides. Acquire land for new projects.”
- Adoption of the 2005 International Building Codes Standards for the region
- “Enforce the county NFIP flood ordinances.”
- “Develop zoning and land use ordinances that will regulate development in Hazard areas.”
- “Educate residents of their location in the Hazard areas by providing maps and information.”
- “Promote the use of NOAA 'all hazards' radios for early warning and post event information.”
- “Educate the Public on the dangers of natural hazards and advise them on their safety.”
- “Develop evacuation plans, policies, and procedures for all hazards.”
- “Educate residents on the availability and importance of Flood Insurance.”

- “Create a GIS database inventory of all critical facilities and structures in each hazard area.”
- “Identify and map bridges that need to be elevated to prevent damage from flooding.”
- “Create a GIS database inventory of repetitive loss structures in each flood hazard area.”
- “Upgrade the emergency services communication equipment.”
- “Design and implement a protection program for critical information systems.”

CUMBERLAND VALLEY AREA DEVELOPMENT DISTRICT (CVADD)

RE: Severe Storms/Hailstorms/Tornadoes

- “The placement of alert radios in schools, nursing homes, hospitals, county resident homes, etc.”
- “The placement of alert radios in county residents’ homes”
- “The devising of a house identification system in order to expedite the arrival of emergency personnel in times of hazard”
- “The development of an information campaign that would inform the public about what to do in the event of a tornado (e.g., Leave all mobile homes; go to the center room or to the lowest level of your home; etc.)”
- “The ensuring that the Emergency Operations Center of a county is adequately staffed and that personnel can respond after a tornado or other severe storm in the County in order to carry out proper response actions”
- “The evaluation of the number of designated recovery shelters throughout all counties within the CVADD’s region in order to serve the public in the aftermath of a tornado or severe storm”
- “The evaluation of the comprehensive storm siren plan for all of the counties within the CVADD’s region and the ensuring that all sirens are in proper working order.
 - The seeking of funds for the installation of new storm sirens in the cities where needed”
- “The continuance with the progress of the early warning notification systems (e.g., SkyWarn, City Watch, Reverse 911, et al.) in order to give residents an even earlier warning of dangerous storm approaches”
- “The encouragement of builders to utilize truss straps and other construction techniques that would presumably lessen the amount of destruction and flying debris in the event of a tornado or of high winds”
- “The development of ordinances to require tornado shelters for new mobile home concentrations”
- “The establishment of potential recovery shelters in order to mitigate loss of life and injury after the hazard occurs”

- “The seeking of a solution to the problem lack of radio signal(s) throughout the county in order to ensure that emergency response and recovery personnel are able to communicate with each other in the event of a tornado or of other severe storms”
- “The advertisement of the availability, proximity, and routes to tornado shelters throughout a county”
- “The evaluation of the number of shelters currently in place and the subsequent looking to establish more throughout a county
 - The ensuring that shelters will be open to the public when needed”

RE: Winter Storms

- “The encouragement of better trimming of right-of-way”
- “The devising of a house identification system in order to expedite the arrival of emergency personnel in times of hazard”
- “The continuance and/or development of a public information campaign (i.e., printing brochures, pamphlets, booklets) in all counties within the CVADD’s region that would inform denizens of the counties of the dangers and risks associated with severe winter storms”
- “The encouragement of the burying of residential utility service(s)”
- “The planning to identify a way to assist special-needs populations during winter storm events”
- “The seeking of funding to equip emergency response personnel in order to keep critical transportation routes passable”
- “The acquisition of vehicles to be used for road-clearing and maintenance during winter storms in order to mitigate the number of accidents and injuries on the roadways”

RE: Floods

- “The devising of a house identification system in order to expedite the arrival of emergency personnel in times of hazard”
- “The promotion of the comprehensive updating of Flood Insurance Rate Map (FIRM) floodplain maps throughout the counties of the CVADD region”
- “The continuance of looking at the possibility of a flood control project in a county or city within the CVADD’s region”
- “The encouragement for the improvement of drainage and retention areas in counties and cities throughout the CVADD’s region”
- “The continuance to monitor conditions in order to ensure that culverts throughout a county within CVADD’s region are free of debris or other restrictions that stifled flow”
- “The establishment of a vegetative management program in non-vegetative areas along waterways”
- “The monitoring of erosion problems and the active pursuance of a project to maintain the creek banks”
- “The development and implementation of a localized evacuation planning and management program in order to ensure that a county’s residents can safely seek higher ground in the case of flash flooding”
- “The seeking of funding to acquire homes in identified flood-prone areas of a county within the CVADD’s region”
- “The identification of a county and city’s most at-risk critical facilities and the evaluation of the potential mitigation techniques for protecting each facility to the maximum extent feasible”
- “The conducting of storm sewer and storm drain surveys to determine future needs and upgrades
 - Subsequent upgrading of storm sewer and storm drainage system”
- “The continuance to encourage the placement, the usage of, and the purchase of flood gauges for a Cumberland Valley city/county’s waterways”
- “The establishment and/or enforcement of county/city ordinances that restrict the construction of homes and businesses in the floodplain”

- “The development of an information strategy to educate the public about the flood-prone areas in a Cumberland Valley county, thus informing it of the regulation in place related to flooding and the importance of not constructing homes and other facilities in the floodplain”

RE: Landslides

- “The ensuring that county roadwork crews have the necessary personnel and equipment to respond to county landslides on roadways”
- “The beginning/continuing to educate the public through an information campaign about the dangers of unstable land and constructing homes and businesses on landslide-prone areas”
- “The continuance to ensure that areas susceptible to landslides/rock-slides in a city or county within the CVADD region are properly maintained in order to prevent loss of life and property in the event of a landslide”
- “The encouragement of the proper management of timbered areas throughout a county within the CVADD region in order to prevent the improper deforestation of these lands, which leads to topsoil erosion and land sliding”
- “The seeking of funding and the development of strategies to address landslides that affect county roads”
- “The seeking of funds to repair, replace, or relocate structures affected by landslides”

FIVE COUNTIES AREA DEVELOPMENT DISTRICT (FIVCO)

- “Remove debris from streams that cause damage to bridges and transportation facilities.”
- “Reduce identified major reoccurring flooding hazards by creating engineered studies/databases addressing mitigation actions needed to correct or elevate those situations.”
- “Develop a coordinated, interagency sustained debris removal plan.”
- “Establish emergency disaster relief warehouses/stations.”
- “Work with utility companies to trim trees and haul debris away from overhead power lines.”
- “Provide generators at critical facilities such as fire departments, police departments, EOC and dispatch centers, hospitals, city buildings, water pump stations, utility departments and emergency shelters.”
- “Develop drought proof security links.”
- “Direct development and installation of new critical facilities out of hazard areas.”
- “Develop a Storm-water Management Plan that identifies, reduces flooding, erosion and damages caused to well water and the environment.”
- “Develop or continue the Well-Head Protection Plan for the jurisdictions.”
- “Reduce the numbers of critical facilities in identified hazard areas.”
- “Purchase and remove 24 homes damaged by flooding.”
- “Start Fire Wise program in each FIVCO county to address ice storm debris and reduce wild fire hazards.”
- “Develop an Earthquake study to address this hazard in the FIVCO service area.”
- “Enforce the county NFIP flood ordinances.”
- “Improve the enforcement of current building codes to include mitigation activities.”

- “Develop zoning and land use ordinances that will regulate development in hazard areas particularly pre-disaster mitigation flooding clean-up ordinances.”
- “Educate residents of their location in the Hazard areas by providing maps and hazard information.”
- “Educate the public about such programs as Well-Head Protection, Fire Wise, and Earthquake plan where such programs exist.”
- “Continue Promoting use of NOAA “ALL HAZARDS” radios for early warning & post event information.”
- “Develop supplemental plans to be included in each county’s EOP.”
- “Educate residents on the availability and importance of Flood Insurance.”
- “Create a GIS database inventory of all critical facilities and structures in each hazard area.”
- “Floodplain and 100-year Special Flood Hazard areas in the jurisdictions that do not have flood maps.”
- “Create a GIS database inventory of repetitive loss structures in each flood hazard area.”
- “Creating an engineered database addressing mitigation actions needed to correct or elevate those situations.”
- “Upgrade Emergency Services communication equipment to allow easier communication among all agencies.”
- “Design and Implement a protection program for critical information systems and infrastructure (example: E-911 dispatch, communications, etc.).”
- “Recruit and Train 30 volunteers to serve on the Community Emergency Response Team.”
- “Recruit and train medical response teams.”

GREEN RIVER AREA DEVELOPMENT DISTRICT (GRADD)

- “Educate the public on dangers that natural hazards pose in the GRADD region.”
- “Advise the public on taking personal responsibility for their safety and property protection.”
- “Facilitate public contributions to the community with the organization of volunteer opportunities and events.”
- “Provide public officials with information regarding hazard mitigation grants, programs, and actions that the community can take to improve public health and safety.”
- “Reevaluate and enforce established building codes.”
- “Develop land use planning for all jurisdictions.”
- “Encourage participation in the National Flood Insurance Program.”
- “Maintain lifeline utilities.”
- “Enhance emergency services through increased training and improved communications.”
- “Improve the system of community warning devices.”
- “Limit development in particularly hazardous areas unless proper mitigation strategies are in place and enforced.”
- “Urge communities to update comprehensive plans per the guidelines and regulations set forth in KRS Chapter 100.00.”
- “Promote continued National Flood Insurance Program affiliation and compliance for current participating communities.”
- “Promote long-range planning.”

- “Minimize development in floodplains and other well-known hazardous areas unless proper mitigation measures are in place and enforced.”
- “Utilize FEMA cost/benefit analysis to select and prioritize mitigation projects.”
- “Promote interagency and inter-local cooperation.”
- “Pursue all avenues of potential funding including hazard mitigation grant programs.”

GATEWAY AREA DEVELOPMENT DISTRICT (GWADD)

General Goals, Objectives, and Actions

<i>Goal</i>	<i>Objective</i>	<i>Action #</i>	<i>Action</i>
Goal 1: To Reduce Disruptions to Essential Public Services and Infrastructure by Reducing the Vulnerability to Critical Facilities During Hazard Events.	<i>1.1: Minimize Disruption to and Enhance Rapid Restoration of Transportation Systems</i>	1.1.1	Remove Debris from Streams that Cause Damages to Bridges and Transportation Facilities.
		1.1.2	Perform Hazard Mitigation Projects, Such as Replacing Low, Flat, or Wooden Bridges; Raising Roads; Installing Rail/Cribbage to Lessen the Effects of Landslides and Flooding.
		1.1.3	Purchase New Equipment for Cleaning Roads During Severe Winter Storms/Landslides.
		1.1.4	Develop a Coordinated, Interagency-Sustained Stream Debris Removal Plan and Ditch Maintenance Plan.
	<i>1.2: Minimize the Disruption and Enhance Rapid Restoration of Utility Systems. Assure that All Emergency Facilities Have Temporary Backup Power Capabilities.</i>	1.2.1	Work with Utility Companies to Continue the Trimming of Trees and Debris Away from Overhead Power Lines.
		1.2.2	Provide Generators at Critical Facilities, Such as Police/Fire Departments, Dispatch Centers, Hospitals, Water Pump Stations, and Emergency Shelters.
		1.2.3	Encourage Homeowners to Have Backup Power Sources or Alternate Sources of Heating.

Goal	Objective	Action #	Action
Goal 1: To Reduce Disruptions to Essential Public Services and Infrastructure by Reducing the Vulnerability to Critical Facilities During Hazard Events.	<i>1.3: To the Greatest Extent Possible, Reduce the Number of Critical Facilities within Hazard Areas.</i>	1.3.1	Direct Development and Installation of New Critical Facilities Out of Hazard Areas.
	<i>1.4: Minimize the Damages to Groundwater and the Environment that Are the Result of Damages Caused by Hazards</i>	1.4.1	Develop or Strengthen a Storm-water Management Plan that Identifies and Reduces Flooding, Erosion, and Damages Caused to the Environment.
		1.4.2	Construct Detention Basins to Alleviate Flooding in Downtown Mt. Sterling.
		1.4.3	Build Wetlands in Flood-Prone Areas.
Goal 2: Protect Each Jurisdiction's Most Vulnerable Populations, Buildings, and Critical Facilities through the Implementation of Cost-Effective and Technically Feasible Mitigation Projects.	<i>2.1: Reduce the Number of Critical Facilities in Identified Hazard Areas</i>	N/A	N/A
	<i>2.2: Utilize Available Mitigation Measures to Reduce the Number of Vulnerable Structures in the Hazard Areas.</i>	2.2.1	Implement Mitigation-Related Activities to Already Existing Critical Facilities in Flooding or Landslide Areas.
		2.2.2	Acquire or Retrofit Homes and Properties Damaged by Flooding and Landslides.
	<i>2.3: Improve the Resistance of Structures in the Community to Natural Hazards.</i>	2.3.1	Adopt the Latest Kentucky or International Building Codes Standards for the Gateway Area Development District Region and for Each of Its Jurisdictions.

Goal	Objective	Action #	Action
Goal 3: Enhance Existing or Design New Policies and Ordinances that Will Reduce the Potential Damaging Effects of Hazards without Hindering Other Community Goals.	<i>3.1: Enforce and Enhance Existing Policies and Authorities.</i>	3.1.1	Enforce the County NFIP Flood Ordinances.
	<i>3.2: Develop and/or Strengthen New Policies, Such as Ordinances and Building Codes that Will Require New Structures to Meet Standards for Hazard Areas.</i>	3.2.1	Improve the Enforcement of Current Building Codes to Include Mitigation Activities.
		3.2.2	Develop or Strengthen Zoning and Land-Use Ordinances that Will Regulate Development in Hazard Areas.
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.	<i>4.1: Educate the Public About Hazards Prevalent within Their Jurisdiction.</i>	4.1.1	Educate Residents of Their Location within the Hazard Areas by Providing Maps and Other Hazard Information.
		4.1.2	Promote the Use and Development of NOAA (National Oceanic and Atmospheric Administration) "All Hazards" Radios, and Outdoor Warning Sirens for Early Warning and Post-Event Information.
		4.1.3	Participate in the National Weather Service's (NWS) StormReady Program.
	<i>4.2: Develop, Maintain, and Publicize Evacuation Routes.</i>	4.2.1	Develop Evacuation Plans, Policies, and Procedures for All Hazards.
	<i>4.3: Construct Infrastructure, Such as Emergency Shelters and Early Warning Systems, to Prevent the Loss of Life During a Hazard Event.</i>	4.3.1	Construct Emergency Warning Systems, Emergency Water Towers, and Emergency Shelters (Safe Rooms).
		4.3.2	Purchase an Aerial-Ladder Fire Truck for the City of West Liberty.
	<i>4.4: Educate the Citizenry about the Availability of Insurance Options.</i>	4.4.1	Educate Residents on the Availability and Importance of Flood and Earthquake Insurance.

Goal	Objective	Action #	Action
Goal 5: Increase the Technical Capabilities of Local Jurisdictions in Order to Reduce Potential Losses.	<i>5.1: Improve Each Jurisdiction's Capability to Identify and Map Vulnerable Structures and Critical Facilities within Hazard Areas.</i>	5.1.1	Create a GIS Database Inventory of All Critical Facilities and Residential Structures within Each Hazard Area.
		5.1.2	Identify and Map Bridges that Need to Be Elevated to Prevent Damage from Flooding.
	<i>5.2: Reduce Vulnerability of Future Development Structures by Creating Databases that Identify Risk Areas and Loss Potentials in Order to Mitigate During Development.</i>	5.2.1	Create a GIS Database Inventory of Repetitive Loss Structures within Each Hazard Area.
	<i>5.3: Increase the Jurisdictions' Abilities to Communicate and Direct Emergency Services and Resources to the Appropriate Hazard Areas.</i>	N/A	N/A
Goal 6: Build Local Support and Commitment to Continuously Become Less Vulnerable to Hazards.	<i>6.1: Construct Signage Concerning County and State Open Burning Laws.</i>	N/A	N/A

KENTUCKIANA
(REGIONAL)
PLANNING AND DEVELOPMENT AGENCY
(KIPDA)

- “Remove Debris from Streams that cause damages to bridge and transportation facilities.”
- “Develop a coordinated, interagency sustained debris removal plan.”
- “Work with utility companies to trim trees and debris away from overhead power lines.”
- “Provide Generators at Critical facilities that provide emergency services.”
- “Encourage homeowners to have backup power sources or alternate sources of heating.”
- “Direct development and installation of new critical facilities out of hazard areas.”
- “Enforce the County's NFIP flood ordinances.”
- “Educate residents of their location in the Hazard areas by providing maps and information.”
- “Promote the use of NOAA 'all hazards' radios for early warning and post event information.”
- “Develop evacuation plans, policies, and procedures for all hazards.”
- “Educate residents on the availability and importance of Flood Insurance.”
- “Create a GIS database inventory of all critical facilities and structures in each hazard area.”
- “Identify and map bridges that need to be elevated to prevent damage and flooding.”
- “Create a GIS database inventory of repetitive loss structures in each flood hazard area.”
- “Upgrade the emergency services communication equipment.”

KENTUCKY RIVER AREA DEVELOPMENT DISTRICT (KRADD)

RE: Flood Events: Whole Region

- “Eliminate Severe Repetitive Loss Structures.”
- “Formalizing Hazard Mitigation Planning Committee”
- “Promoting partnerships between government, private nonprofits, business, and educational entities”
- “Promotion of development outside of identified hazard areas”
- “Incorporate mitigation goals and objectives into existing regulations, orders, and policies.”
- “Replacing undersized culverts, and bridges where feasible”
- “Purchase of flood-prone properties where feasible and economical.”
- “Promoting private acquisitions by conservation groups of flood prone areas”
- “Development of floodplain management policies and procedures”

RE: Flood Events: Individual Counties

- “Mitigate Severe Repetitive Loss structures as identified by FEMA.”
- “Develop long term SRLP Action Plan.”
- “Replace inadequate culverts and bridges at various locations in county.”
- “Continue to put into place policies and procedures to assist with floodplain ordinance enforcement.”
- “Address structures in the flood plain where feasible.”
- “Repair slide areas.”
- “Address inadequate channel width and depth by dredging.”

- “Assist homeowners in six locations with elevating homes and flood-proofing measures.”
- “Development of educational material for information on hazards of constructing in the floodplain”
- “Address sewer system flood water infiltration.”
- “Address road elevations.”
- “Address structures in the floodplain. Replace with green space.”
- “Relocation of City Hall/City”
- Park structures away from flood prone area:
 - (Applies to Beattyville, specifically)
- “Mitigate various road breaks/slides.”
- “Early Warning Siren for tornado/severe thunderstorm/hail”
 - (KRADD put this under the flood section of their plan.)

RE: Non-Flood Events: Whole Region

- “Formalizing Hazard Mitigation Planning Committee”
- “Promoting partnerships between government, private nonprofits, business, and educational entities”
- “Promotion of development of structures designed to better withstand the identified hazards”
- “Incorporate mitigation goals and objectives into existing regulations, orders and policies.”
- “Incorporate better early warning systems were feasible.”
- “Develop better communications between agencies.”
- “Promoting partnerships with neighboring communities”
- “Development of coordination procedures between intra-governmental departments”

RE: Non-Flood Events: County/City Level

- “Early Warning sirens”
- “Education of Citizens”
- “Alternative heating methods training for elderly and disabled”
- “Public Awareness Campaign”
- “Communications development”

LAKE CUMBERLAND AREA DEVELOPMENT DISTRICT (LCADD)

RE: Hailstorms

- “Review current zoning regulations for amendment of/or addition of regulations to mitigate community hazards.” (Zoning Review)

RE: Land Subsidence

- “Explore and examine possibilities of combining current GIS projects to a regional GIS database.” (Mapping)
- “Review annually inter-local agreements that cover disaster assistance and update as needed.” (Planning)
- “Review current zoning regulations for amendment of/or addition of regulations to mitigate community hazards.” (Zoning Review)
- “Provide sinkhole location maps.” (Mapping)
- “Incorporate information on available alternate energy sources into hazard preparedness programs.” (Education Campaign)
- “Incorporate information on NOAA ‘All Hazards’ radios and outdoor warning sirens into hazard preparedness programs.” (Education Campaign)
- “Examine need for additional community warning sirens and/or encourage all residents to have NOAA ‘All Hazard’ radios.” (Weather Radios)
- “Continue severe weather public education programs and expand audience where funding is available.” (Education Campaign)
- “Local emergency managers to pre-record public service announcements for winter storms, extreme summer weather and flooding.” (Education Campaign; PSA)

RE: Landslides

- “Explore and examine possibilities of combining current GIS projects to a regional GIS database.” (Mapping)
- “Review annually inter-local agreements that cover disaster assistance and update as needed.” (Planning)
- “Review current zoning regulations for amendment of/or addition of regulations to mitigate community hazards.” (Zoning Review)
- “Incorporate information on available alternate energy sources into hazard preparedness programs.” (Education Campaign)
- “Incorporate information on NOAA ‘All Hazards’ radios and outdoor warning sirens into hazard preparedness programs.” (Education Campaign)
- “Examine need for additional community warning sirens and/or encourage all residents to have NOAA ‘All Hazard’ radios.” (Weather Radios)
- “Continue severe weather public education programs and expand audience where funding is available.” (Education Campaign)
- “Local emergency managers to pre-record public service announcements for winter storms, extreme summer weather and flooding.” (Education Campaign; PSA)

RE: Droughts/Extreme Summer Weather

- “Explore and examine possibilities of combining current GIS projects to a regional GIS database.” (Mapping)
- “Review annually inter-local agreements that cover disaster assistance and update as needed.” (Planning)
- “Review current zoning regulations for amendment of/or addition of regulations to mitigate community hazards.” (Zoning Review)
- “Submit project profile to LCADD Regional Water Supply/Management Planning Council for funding review and needs evaluation.” (Planning/Review of Projects)
- “Incorporate information on available alternate energy sources into hazard preparedness programs.” (Education Campaign)
- “Incorporate information on NOAA ‘All Hazards’ radios and outdoor warning sirens into hazard preparedness programs.” (Education Campaign)
- “Examine need for additional community warning sirens and/or encourage all residents to have NOAA ‘All Hazard’ radios.” (Weather Radios)
- “Continue severe weather public education programs and expand audience where funding is available.” (Education campaign)
- “Local emergency managers to pre-record public service announcements for winter storms, extreme summer weather and flooding.” (Education Campaign; PSA)

RE: Wildfires

- “Explore and examine possibilities of combining current GIS projects to a regional GIS database.” (Mapping/GIS ID of Locations)
- “Review annually inter-local agreements that cover disaster assistance and update as needed.” (Planning)
- “Continue participation in Fire Wise program and obtain additional grant funding for dead timber removal.” (Fire Wise/Timber Removal)
- “Review current zoning regulations for amendment of/or addition of regulations to mitigate community hazards.” (Zoning Review)
- “Incorporate information on available alternate energy sources into hazard preparedness programs.” (Education Campaign)
- “Incorporate information on NOAA ‘All Hazards’ radios and outdoor warning sirens into hazard preparedness programs.” (Education Campaign)
- “Continue severe weather public education programs and expand audience where funding is available.” (Education campaign)
- “Local emergency managers to pre-record public service announcements for winter storms, extreme summer weather and flooding.” (Education Campaign; PSA)

RE: Floods

- “Work with utility companies to trim trees and debris away from overhead power lines.” (Debris Removal/Tree Trimming)
- “Explore and examine possibilities of combining current GIS projects to a regional GIS database.” (Mapping/GIS ID of Locations)
- “Develop an inventory of bridges and other road structures that cause flash flooding.” (Inventory)
- “Once identified, bridges and other road structures will be included in city, county, and state roadway maintenance plans.” (Other/Not Really a Mitigation Action/Plan Incorporation)
- “Develop a replacement schedule as funding becomes available and perform an annual review of flash flooding-susceptible roadway locations and availability of signs and traffic control devices needed.” (Monitor Infrastructure)
- “Review annually inter-local agreements that cover disaster assistance and update as needed.” (Planning)
- “NFIP participants will review program requirements annually with Floodplain Manager or appropriate personnel to ensure compliance.” (Education Campaign – NFIP Updates)
- “Local officials will encourage mapping/updating of all jurisdictions that do not currently have floodplain maps.” (FIRM Updates)
- “Review current zoning regulations for amendment of/or addition of regulations to mitigate community hazards.” (Zoning Review)
- “Identify structures that would qualify for relocation.” (Acquisition)
- “Apply for funding to relocate identified structures.” (Acquisition)
- “Incorporate information on available alternate energy sources into hazard preparedness programs.” (Education Campaign)
- “Incorporate information on NOAA ‘All Hazards’ radios and outdoor warning sirens into hazard preparedness programs.” (Education Campaign)
- “Examine need for additional community warning sirens and/or encourage all residents to have NOAA ‘All Hazard’ radios.” (Weather Radios)

- “Continue severe weather public education programs and expand audience where funding is available.” (Education Campaign)
- “Local emergency managers to pre-record public service announcements for winter storms, extreme summer weather and flooding.” (Education Campaign; PSA)

RE: Winter Storms

- “Work with utility companies to trim trees and debris away from overhead power lines.” (Debris Removal/Tree Trimming)
- “Explore and examine possibilities of combining current GIS projects to a regional GIS database.” (Mapping/GIS ID of Locations)
- “Review annually inter-local agreements that cover disaster assistance and update as needed.” (Planning)
- “Review current zoning regulations for amendment of/or addition of regulations to mitigate community hazards.” (Zoning Review)
- “Incorporate information on available alternate energy sources into hazard preparedness programs.” (Education Campaign)
- “Incorporate information on NOAA ‘All Hazards’ radios and outdoor warning sirens into hazard preparedness programs.” (Education Campaign)
- “Examine need for additional community warning sirens and/or encourage all residents to have NOAA ‘All Hazard’ radios.” (Weather Radios)
- “Continue severe weather public education programs and expand audience where funding is available.” (Education Campaign)
- “Local emergency managers to pre-record public service announcements for winter storms, extreme summer weather and flooding.” (Education Campaign; PSA)

RE: Thunderstorms/Lightning Storms/Windstorms

- “Work with utility companies to trim trees and debris away from overhead power lines.” (Debris Removal/Tree Trimming)
- “Explore and examine possibilities of combining current GIS projects to a regional GIS database.” (Mapping/GIS ID of Locations)
- “Review annually inter-local agreements that cover disaster assistance and update as needed.” (Planning)
- “Encourage the construction of safe rooms in all public buildings.” (Safe Rooms)
- “Review current zoning regulations for amendment of/or addition of regulations to mitigate community hazards.” (Zoning Review)
- “Incorporate information on available alternate energy sources into hazard preparedness programs.” (Education Campaign)
- “Incorporate information on NOAA ‘All Hazards’ radios and outdoor warning sirens into hazard preparedness programs.” (Education Campaign)
- “Examine need for additional community warning sirens and/or encourage all residents to have NOAA ‘All Hazard’ radios.” (Weather Radios)
- “Continue severe weather public education programs and expand audience where funding is available.” (Education Campaign)
- “Local emergency managers to pre-record public service announcements for winter storms, extreme summer weather and flooding.” (Education Campaign; PSA)

RE: Earthquakes

- “Explore and examine possibilities of combining current GIS projects to a regional GIS database” (Mapping/GIS ID of Locations)
- “Review annually inter-local agreements that cover disaster assistance and update as needed.” (Planning)
- “Review current zoning regulations for amendment of/or addition of regulations to mitigate community hazards.” (Zoning Review)
- “Incorporate information on available alternate energy sources into hazard preparedness programs.” (Education Campaign)
- “Incorporate information on NOAA ‘All Hazards’ radios and outdoor warning sirens into hazard preparedness programs.” (Education Campaign)
- “Examine need for additional community warning sirens and/or encourage all residents to have NOAA ‘All Hazard’ radios.” (Weather Radios)
- “Continue severe weather public education programs and expand audience where funding is available.” (Education Campaign)
- “Local emergency managers to pre-record public service announcements for winter storms, extreme summer weather and flooding.” (Education Campaign; PSA)

RE: Tornadoes

- “Work with utility companies to trim trees and debris away from overhead power lines.” (Debris Removal/Tree Trimming)
- “Explore and examine possibilities of combining current GIS projects to a regional GIS database.” (Mapping/GIS ID of Locations)
- “Review annually inter-local agreements that cover disaster assistance and update as needed.” (Planning)
- “Encourage the construction of safe rooms in all public buildings.” (Safe Rooms)
- “Review current zoning regulations for amendment of/or addition of regulations to mitigate community hazards.” (Zoning Review)
- “Incorporate information on available alternate energy sources into hazard preparedness programs.” (Education Campaign)
- “Incorporate information on NOAA ‘All Hazards’ radios and outdoor warning sirens into hazard preparedness programs.” (Education Campaign)
- “Examine need for additional community warning sirens and/or encourage all residents to have NOAA ‘All Hazard’ radios.” (Weather Radios)
- “Continue severe weather public education programs and expand audience where funding is available.” (Education Campaign)
- “Local emergency managers to pre-record public service announcements for winter storms, extreme summer weather and flooding.” (Education Campaign; PSA)

RE: Dams/Levees

- “Review dam emergency evacuation plans with emergency response agencies annually.” (Develop Evac Plans)
- “Explore and examine possibilities of combining current GIS projects to a regional GIS database.” (Mapping/GIS ID of Locations)
- “Review annually inter-local agreements that cover disaster assistance and update as needed.” (Planning)
- “Review current zoning regulations for amendment of/or addition of regulations to mitigate community hazards.” (Zoning Review)
- “Incorporate information on available alternate energy sources into hazard preparedness programs.” (Education Campaign)
- “Incorporate information on NOAA ‘All Hazards’ radios and outdoor warning sirens into hazard preparedness programs.” (Education Campaign)
- “Examine need for additional community warning sirens and/or encourage all residents to have NOAA ‘All Hazard’ radios.” (Weather Radios)
- “Continue severe weather public education programs and expand audience where funding is available.” (Education Campaign)
- “Local emergency managers to pre-record public service announcements for winter storms, extreme summer weather and flooding.” (Education Campaign; PSA)

LINCOLN TRAIL AREA DEVELOPMENT DISTRICT (LTADD)

- “Obtain from the National Climate and Data Center (NCDC) their criteria and procedures for gathering and reporting natural hazard event data.”
- “Identify within each county the appropriate entity for collecting natural hazard related data.”
- “Incorporate a Geographic Information Systems (GIS) to map and track natural hazard event data.”
- “Encourage up to date mapping of existing flood plains and areas yet to be mapped across the region.”
- “Develop database of critical structures.”
- “Obtain from local and regional providers a list of services they offer in response to a natural hazard, (i.e: social services, the Red Cross, faith based organizations).”
- “Establish and train Citizen Emergency Response Teams (CERTs) across the region.”
- “Develop and encourage the use of a regional interagency agreement allowing the use of inventoried equipment in the event of an emergency.”
- “Purchase emergency equipment as necessary, when funds become available.”
- “Publicize the availability of documents associated with emergency response and mitigation.”
- “Advertise and promote the availability and benefits of flood insurance.”
- “Distribute educational materials on natural hazard preparedness and safety measures.”
- “Provide new home and property buyers with information on quality redevelopment and safe housing development.”
- “Develop, maintain and publicize evacuation routes.”

- “Adopt and support the goals of the Area Agency on Aging plan as follows: *‘The goal of the “IN TOUCH” plan is to help families establish a strategy that will assist older relatives in emergency situations as well as provide communications channels for family members about their safety all year long. Specifically focusing on minimizing safety issues for older Americans during major disasters as well as personal emergencies.’*”
- “Inform the public on ways to reduce the damage to vulnerable trees and nearby structures by exercising proper tree maintenance.”
- “Utilize media campaign efforts to inform residents of safety measures such as outdoor warning systems, potential shelter locations and personal safety guidelines.”
- “Post upcoming grant opportunities and application packages on ADD website.”
- “Use acquisition programs to expand open space and recreational opportunities.”
- “Protect natural resource through the development of policies that discourage growth in and around environmentally sensitive areas.”
- “Track and prioritize mitigation projects starting with vulnerable sites with the greatest threat to life, health, and property.”
- “Partner with utility companies to maintain proper utility easement maintenance.”
- “Require tornado safe shelters for new manufactured housing and mobile home parks.”
- “Reduce storm water runoff by requiring the utilization of various pervious surfaces within a floodplain by revising zoning and subdivision ordinances.”
- “Enforce building codes and zoning ordinances.”
- “Develop and adopt a ‘no rise’ (in base flood elevation) clause for inclusion in a jurisdiction’s Flood Plain Management Ordinance.”
- “Revise or develop Flood Prevention related ordinance to incorporate cumulative substantial damage or improvement requirements.”
- “Remove excess debris from streams that can potentially cause damage to bridges and transportation facilities.”

- “Prioritize the clearing and cleanup of primary roads during natural hazard events.”
- “Encourage homeowners, commercial property owners, schools, daycares, clinics, nursing homes, senior centers to purchase weather radios.”
- “Monitor and track population growth and development trends for placement of additional outdoor warning systems as necessary.”

NORTHERN KENTUCKY AREA DEVELOPMENT DISTRICT (NKADD)

- “Remove debris from streams that cause damages to bridges and transportation facilities.”
- “Develop a coordinated, sustained interagency debris removal plan.”
- “Encourage utility companies to trim trees and debris away from overhead power lines.”
- “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.”
- “Encourage all emergency facilities to acquire temporary backup power capabilities.”
- “Encourage that new utilities be placed underground where feasible.”
- “Direct that development and installation of new critical facilities be out of hazard areas.”
- “Develop a Stormwater Management Plan that reduces flooding, erosion, and damage caused to the environment.”
- “Adopt recognized building code standards such as the 2003 International Building Codes standards for each jurisdiction within the region.”
- “Enforce the County National Flood Insurance Program ordinances.”
- “Improve the enforcement of current building codes to include mitigation objectives.”
- “Develop zoning and land use ordinances that will regulate development in hazard areas.”
- “Educate residents of the location of Hazard areas by providing maps and hazard information.”
- “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.”
- “Educate the public about the County Floodplain Ordinance.”

- “Educate the public about measures that can be taken to reduce damage to personal property caused by natural hazards.”
- “Educate citizens about evacuation plans, policies, and procedures for all hazards.”
- “Create a GIS database inventory of all critical facilities and structures in each hazard area.”
- “Upgrade the Emergency Services communication equipment.”
- “Design and implement measures to protect and secure critical information systems and infrastructure.”
- “Expand warning and notification systems such as outdoor warning sirens and NOAA radios.”
- “Recruit and train volunteers to serve on Citizen Corps and other volunteer programs.”

(JACKSON) PURCHASE AREA DEVELOPMENT DISTRICT (PADD)

RE: Tornadoes

“Promote public education to individuals, businesses, and schools for hazard events that may include the following:

- “Develop a plan of action for a tornado event – include home, work, school, and outdoor situations.
- “Have tornado drills on a regular basis.
- “Encourage all households to maintain a disaster supply kit:
 - A three day supply of water (1 gallon per person per day)
 - Non-perishable food items
 - One change of clothing and shoes per person
 - One blanket or sleeping bag per person
 - A first-aid kit, including all prescription medicines
 - A battery-powered NOAA weather radio with warning alarm and extra batteries
 - A flashlight and extra batteries
 - Special items for infants, elderly or disabled individuals
- “Listen to the latest forecasts, especially when planning outdoor activities.
- “Publicize multi-media access to tornado watches and warnings.
- “Inspect designated tornado shelters for compliance with building codes to ensure their ability to withstand high winds.
- “Install warning systems that are not completely dependent upon electricity.
- “Pursue programs to provide or subsidize the provision of weather radios to low income populations.
- “Evaluate the need for tornado safe rooms, particularly for mobile home parks.
- “Analyze the shelter requirements for temporary residents/visitors to the County’s Elder Care facilities.
- “Evaluate the need for tornado safe rooms, particularly for mobile home parks.
- “Initiate mobile home anchoring program.
- “Build tornado safe room where deemed necessary.

- “Ensure all critical facilities have a backup source of power – generators.
- “Train, equip and maintain Storm Spotter cadre.”

RE: Floods

- “Enforce City and County Floodplain Ordinances.”
- “Participation in the National Flood Insurance Program (NFIP)”
- “Promote the purchase flood insurance.”
- “Continue to monitor and evaluate the vulnerability of repetitive loss properties to determine if Mitigation action is warranted.” If warranted, “[t]ake mitigation action” (elevation, acquisition, or other) “as required.”
- “Construct a levee or flood wall.”
- “Elevate the lowest floor level of existing structures above the floodplain.”
- “Elevate flood-prone roads.”
- “When feasible, relocate structures out of the floodplain.”
- “Acquire and demolish structures in the floodplain.”
- “Provide openings in foundation walls to allow water to flow in and out.”
- “Install backflow valves to drains, toilets, and other sewer connections.”
- “Maintain ditches and storm water drainage systems.”
- “Ensure all critical facilities have a backup source of power – generators.”
- “Sedimentation control (dredging)”
- “Wetland restoration”
- “Stream re-alignment”
- “Increase culvert cross section.”
- “Dredge existing channels to maintain current depths and flows.”
- “Identification and removal of stream blockages of tree limbs and trunks forming effective check dams and barrages, and resulting in the pooling of

water during flood events”

- “Plan, engineer, design, and execute restoration of the Paducah Floodwall.”
- “Work to enroll all eligible jurisdictions in the National Flood Insurance Program” (NFIP).

RE: Severe Thunderstorms/Hailstorms

- “Listen to the latest forecasts, especially when planning outdoor activities.”
- “Keep a NOAA weather radio with extra batteries nearby to listen for weather updates. Listen especially for severe thunderstorm watches and warnings.”
- “Pursue programs to provide or subsidize the provision of weather radios to low income populations.”
- “Practice lightning safety. Outdoor activities should not take place when lightning is present. Fully enclosed vehicles and large permanent buildings provide safe havens from lightning.”
- “Promote trimming of tree limbs and debris removal, particularly in areas close to critical facilities and infrastructure such as power lines.”
- “Ensure all critical facilities have a backup source of power – generators.”

RE: Earthquakes

- “Support, encourage, lobby for the continuing study of the threat of ground shaking from the Wabash and New Madrid Seismic Zones.”
- “Evaluate public critical facilities and infrastructure to determine their resistance to ground movement.”
- “Ensure that all homes and other structures are secured to their foundations.”
- “Enforce seismic building standards (current building code).”
- “Promote public education to individuals and families, business, and schools for hazard events that may include the following:
 - “Identify ‘safe places’ in structures that are vulnerable during an earthquake. A safe place might include space under a sturdy table or desk against an interior wall. Stay away from windows.
 - “Practice the ‘drop and cover’ technique in each identified safe place. Drop under your identified safe place, duck your head between your knees, and cover the back of your neck with your hands. Practice makes this process an automatic response in the event of an earthquake.
 - “Develop an action plan for an earthquake event – include home, work, school, and outdoor situations.”
- “Secure heavy furniture to walls. Brace or anchor high or top-heavy objects.”
- “Purchase earthquake insurance, if available.”
- “Install strong latches on all cabinet doors. This will prevent them from spilling their contents in the event of an earthquake.”
- “Secure items on shelves or bookcases that might fall and cause injury during an earthquake. Move large or heavy items to lower or bottom shelves.”
- “Store breakable or glass items in cabinets with latches.”
- “Brace overhead light fixtures.”
- “Ensure that all homes and other structures are secured to their foundations.”
- “Install flexible pipe fittings. These fittings are less likely to break and cause a gas or water leak.”
- “Consider earthquake resistant structural requirements for all capital projects.”

- “Recommend earthquake resistant engineering for all critical transportation access/chokepoint structures such as bridges and viaducts.”

RE: Severe Winter Storms/Ice Storms

- “Make sure critical facilities have a backup source of heat.”
- “Provide public education as to the safe use of back up heat sources.”
- “Promote trimming of tree limbs and debris, particularly in areas close to critical facilities and infrastructure such as power lines.”
- “Evaluate subdivision regulations for inclusion of underground utilities for new development.”
- “Promote public education to individuals and families, business, and schools for winter Storm Events and include the following:
 - “Insulate the walls and attic of your structure;
 - “Caulk and weather-strip doors and windows;
 - “Allow water to slowly drip from faucets to prevent pipes from freezing;
 - “Check the antifreeze and battery in your vehicle;
 - “Stay off snow or ice covered roads if possible;
 - “Keep a supply of non-perishable food and water.”
- “Ensure all critical facilities have a backup source of power – generators.”

RE: Wildfires

- “Each community to strive to be a ‘Firewise’ Community.”
 - <http://www.forestry.ky.gov/programs/firewise/>
- “Promote public education to individuals and families, business, and schools for Wildfire Threat include the following:
 - “Proper storage of flammables;
 - “Remove/reduce potential fuels in the vicinity of Critical Facilities;
 - “Tire amnesty;
 - “Amnesty programs for hazardous materials/storage vessels;
 - “Aggressively reduce available fuels in the vicinity of critical facilities.”
- “In consideration of the rapidly increasing forest fuel situation resulting from the 2009 Ice Storm, pursue the acquisition of equipment and training to rapidly respond to brush fires to mitigate their becoming wildfires.”
- Impose burn bans as required on the county level.”

RE: Extreme Heat and Droughts

“Promote public education to individuals and families, business, and schools for hazard events that may include the following:

- “Awareness Programs focused on at-risk populations, Senior Citizens, very young children;
- “Air conditioner/fan loan or subsidized purchase program;
- “Identification of cooling shelters;
- “Replacement of brittle water and waste water infrastructure specifically cast iron pipe.”

RE: Dam Failures

- “Access and analyze USACE and TVA inundation maps or models for the projected downstream impact of the catastrophic failure of the Kentucky Dam and Barkley Dam.”
- “Assess the structures at risk to inundation.”
- “Continue to participate in the State Department of Water [DOW] monitoring Program for the DOW identified dams in each county.”

PENNYRILE AREA DEVELOPMENT DISTRICT (PEADD)

RE: Floods

- “Participate in the National Flood Insurance Program (NFIP).”
- “Purchase flood insurance, if available.”
- “Construct a levee or flood wall.”
- “Elevate the lowest floor level of existing structures above the floodplain.”
- “Elevate flood-prone roads.”
- “When feasible, relocate structures out of the floodplain.”
- “Acquire and demolish structures in the floodplain.”
- “Provide openings in foundation walls to allow water to flow in and out.”
- “Install backflow valves to drains, toilets, and other sewer connections.”
- “Maintain ditches and storm-water drainage systems.”
- “Ensure all critical facilities have a backup source of power – generators.”

RE: Tornadoes

“Promote public education to individuals, businesses, and schools for hazard events that may include the following:

- “Develop a plan of action for a tornado event – include home, work, school, and outdoor situations.
- “Have tornado drills on a regular basis.
- “Maintain a disaster supply kit:
 - A three day supply of water (1 gallon per person per day)
 - Non-perishable food items
 - One change of clothing and shoes per person
 - One blanket or sleeping bag per person
 - A first-aid kit, including all prescription medicines
 - A battery-powered NOAA weather radio with warning alarm and extra batteries
 - A flashlight and extra batteries
 - Special items for infants, elderly or disabled individuals
 - Listen to the latest forecasts, especially when planning outdoor activities. Listen especially for tornado watches and warnings.
- “Ensure that every school has an action plan for tornado events.
- “Inspect designated tornado shelters for compliance with building codes to ensure their ability to withstand high winds.
- “Install warning systems that are not completely dependent upon electricity.
- “Evaluate the need for tornado safe rooms, particularly for mobile home parks.
- “Build tornado safe room where deemed necessary.
- “Ensure all critical facilities have a backup source of power – generators.”

RE: Severe Thunderstorms

“Promote public education to individuals and families for hazard events that may include the following:

- “Listen to the latest forecasts, especially when planning outdoor activities.
- “Keep a NOAA weather radio with extra batteries nearby to listen for weather updates. Listen especially for severe thunderstorm watches and warnings.
- “Practice lightning safety. Outdoor activities should not take place when lightning is present.
- “Fully enclosed vehicles and large permanent buildings provide safe havens from lightning.
- “Promote trimming of tree limbs and debris, particularly in areas close to critical facilities and infrastructure such as power lines.
- “Ensure all critical facilities have a backup source of power – generators.”

RE: Earthquakes

“Promote public education to individuals and families, business, and schools for hazard events that may include the following:

- “Identify ‘safe places’ in structures that are vulnerable during an earthquake. A safe place might include space under a sturdy table or desk against an interior wall. Stay away from windows.
- “Practice the ‘drop and cover’ technique in each identified safe place. Drop under your
 - identified safe place, duck your head between your knees, and cover the back of your neck with your hands. Practice makes this process an automatic response in the event of an earthquake.
- “Develop an action plan for an earthquake event – include home, work, school, and outdoor situations.
- “Purchase earthquake insurance, if available.
- “Secure heavy furniture to walls. Brace or anchor high or top-heavy objects.

- “Install strong latches on all cabinet doors. This will prevent them from spilling their contents in the event of an earthquake.
- “Secure items on shelves or bookcases that might fall and cause injury during an earthquake.
- “Move large or heavy items to lower or bottom shelves.
- “Store breakable or glass items in cabinets with latches.
- “Brace overhead light fixtures.
- “Secure water heater to wall studs.
- “Ensure that all homes and other structures are secured to their foundations.
- “Install flexible pipe fittings. These fittings are less likely to break and cause a gas or water leak.
- “Evaluate public critical facilities and infrastructure to determine their resistance to ground movement.
- “Follow or implement local seismic building standards and safe land use codes that regulate land use in fault areas.
- “Ensure all critical facilities have a backup source of power – generators.”

RE: Severe Winter Storms

“Promote public education to individuals and families, business, and schools for hazard events that may include the following:

- “Insulate the walls and attic of your structure.
- “Caulk and weather-strip doors and windows.
- “Allow water to slowly drip from faucets to prevent pipes from freezing.
- “Check the antifreeze and battery in your vehicle.
- “Stay off snow or ice covered roads if possible.
- “Keep a supply of non-perishable food and water.
- “Make sure critical facilities have a backup source of heat.
- “Promote trimming of tree limbs and debris, particularly in areas close to critical facilities and infrastructure such as power lines.
- “Evaluate subdivision regulations for inclusion of underground utilities for new development.
- “Ensure all critical facilities have a backup source of power – generators.”

LOUISVILLE METROPOLITAN SEWER DISTRICT (LOUISVILLE MSD)

- Develop Cellular Phone Service Emergency Warnings.
- Collect and Assemble Building Values.
- Collect Additional Enhanced Data for Publicly-Owned Buildings and Facilities .
- Develop All-Hazards Information Portal.
- Implement Public Education Campaign & Provide Standard Public Statements for All Hazards.
- Verify GIS Locations for Existing State Dams.
- Study Class C, High-Hazard Dams.
- Develop a Local Inventory of All Dams.
- Develop Inventory of Dams in Local Metro Parks.
- Develop Dam Inundation Models.
- Collect Types of Dam Materials.
- Develop Better Local Dam Construction and Inspections Criteria.
- Consider Requiring EOP for Class B Dams.
- Remove and Replace Unsafe Dams.
- Develop a Local Dam Permitting Process.
- Place a Benchmark or Similar Point on Dams to Determine if Movement is Occurring.
- Post a Sign/Landmark on Dams Specifying Classification Type (A, B, or C).
- Evaluate Damage to Levee and Flood-Protection System
- Need a central local agency or avenue to report and receive info

- Address and Educate About Drought Damage.
- Partner with State's Drought Task Force (Water Availability Committee).
- Provide Public Education Regarding Foundations Cracking During Extreme Drought.
- Develop Enhanced Soils Data to Determine Liquefaction.
- Collect Additional Enhanced Building Data.
- Implement Earthquake Preparedness and Public Outreach Regarding It.
- Locate of Existing Fault Lines.
- Inventory Hospital Underground Wells.
- Target Public Buildings for Retrofit.
- Establish a Central Local Agency or Avenue to Report and Receive Information Regarding Extreme Heat.
- Collect Standard Damage Reports.
- Enforce Floodplain Ordinance Regulations.
- Map Repetitive-Loss Properties.
- Address Woodland Manor Basin.
- Address Aganza Basin.
- Collect Building First-Floor Elevations (FFE).
- Implement Map Modernization and D-FIRM (Digital Flood Insurance Rate Map) Creation.
- Target Public Buildings Damaged by Flood for Retrofit.
- Review and Update High-Water Emergency Plans.
- Implement the Flood Warning and Emergency Evacuation Plans (FWEEPS).
- Determine If Additional FWEEPs Are Needed.

- Review Flood Warning Gauges and Effectiveness.
- Implement Outreach Projects.
- Develop Program for Nonprofit Retrofitting.
- Develop a Plan to Identify Potential Candidates for Buyouts or Assistance from Disaster Agencies.
- Stabilize Slopes.
- Develop Strategies and Solutions for Individual Properties with Flooding Problems.
- Establish a Central Local Agency or Avenue to Report and Receive Information Regarding Karst/Sinkholes.
- Define Plan Review Overlay Districts.
- Recommend Local Codes for Karst Regulations.
- Use Dye-Tracing in Sinkholes.
- Inventory Sinkholes within Louisville Metropolitan's Parks.
- Collect Better Karst/Sinkhole Soils Data.
- Collect Better Building/Facility Data in Karst Census Tracts.
- Research Hazard Disclosure Laws.
- Repair Public Park Lands and Facilities.
- Enforce Binding Elements.
- Define Landslide Plan Review Overlay Districts.
- Develop Soils Data for Landslides.
- Collect Better Building/Facility Data in Landslide Census Tracts.
- Recommend Local Codes for Landslide Regulations.
- Consider Hazard Disclosure Laws.

- Implement Repairs and Reforestation to Public Lands and Facilities.
- Reevaluate Outdoor Warning Sirens
- Require Outdoor Warning Sirens for New Subdivisions
- Promote and Distribute Weather Radios.
- Partner with the Home Builders' Association to Develop a Program for Built-In Weather Radios.
- Require, or At Least Encourage, Safe Rooms/Safe Places in Manufacture Housing Parks.
- Promote Safe Rooms.
- Engage in Public Outreach Regarding Retrofitting and Wind-Driven Building Techniques.
- Map Historical Tornado Paths.
- Partner with Insurance Companies.
- Install Hurricane Clips.
- Perform Assessment of Public Buildings.
- Research Minimum Shingle Type in Codes/Regulations.
- Develop a Grant for "Severe Storm Trailers."
- Expand Weather Spotter Program.
- Develop a Tree Ordinance.
- Trim Trees and Maintain Power Lines.
- Have Redundancy for Loss of Power.
- Develop Standards for Reporting Grass-, Wildfire, Etc.
- Acquire and Deed Restricted Forested Land.
- Develop Strategy for Fire Suppression.

LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT (LFUCG)

FIVE-YEAR PLAN

- **GOAL 1: ATTEMPT TO MINIMIZE THE LOSS OF LIFE AND INJURIES THAT COULD BE CAUSED BY NATURAL HAZARDS.**
 - *Objective 1.1: Facilitate the strengthening of public emergency and support agencies, including infrastructure, facilities, equipment, and personnel to natural and man-made hazards.*

Action	Time-Frame	Hazards Addressed	Description	Offices Responsible
1.1.1: Research	Annually	All-Hazards	Research and determine best practices, standard equipment, and human capital needed by the fire department and other public agencies to respond to, and recover from, natural hazard events.	Division of Fire and Emergency Services; Division of Police; All Other LFUCG Agencies
1.1.2: Inventory	Annually	All-Hazards	Inventory existing local and regional fire department, law enforcement, and equipment from other public agencies to determine which additional natural and man-made hazards related equipment and personnel is needed.	Division of Fire and Emergency Services; Division of Police; All Other LFUCG Agencies
1.1.3: Acquire and Train	1-5 Years	All-Hazards	Utilizing available grant sources, purchase the required fire department and law enforcement equipment and training needed for public agencies to respond to, and recover from, natural hazard events.	Division of Fire and Emergency Services; Division of Police
1.1.4: Train	Annually	All-Hazards	Ensure First Responders and Fayette County School District Staff have access to and are trained on how to use I-Speak Cards, telephone, and in-person interpreters for emergency purposes.	Fayette County Public Schools; First Responders; Communications ¹ ; Multicultural Affairs
1.1.5: Educate	Annually	All-Hazards	Provide cross-cultural communication training to First Responders to educate and assist with effectively communicating with the LEP ² population.	First Responders; LEP Experts, Support Groups; Multicultural Affairs
1.1.6: Upgrade	3-5 Years	All-Hazards	Upgrade existing DEM facilities for a stand-alone Emergency Operations Center (EOC).	Division of Emergency Management (DEM)

¹ Refers to government communications, e.g., LexCall 311, Government Television 3 (GTV3), Public Information Office

² LEP = Limited English Proficiency

Action	Time-Frame	Hazards Addressed	Description	Offices Responsible
1.1.7: Fund	Annually	Severe Storm; Tornado	Explore funding opportunities for community tornado safe-room construction in accordance with FEMA guidelines.	Division of Emergency Management (DEM)
1.1.8: Fund	Immediate to 3 Years	Severe Storm; Tornado	Obtain funding to maintain and upgrade existing outdoor warning systems.	Division of Emergency Management (DEM)
1.1.9: Fund	Annually	HAZMAT	Continue to seek and obtain funding through the Chemical Stockpile Emergency Preparedness Program (CSEPP) for planning, training, and exercising with the depot, surrounding counties, and the Commonwealth of Kentucky.	Division of Emergency Management (DEM); Division of Water Quality (DOWQ); First Responders

- *Objective 1.2: To build awareness of and inform citizens about areas or circumstances susceptible to hazards and having a great potential for loss of human life during a natural and man-made hazard event.*

Action	Time-Frame	Hazards Addressed	Description	Offices Responsible
1.2.1: Educate	Annually	All-Hazards	Conduct outreach to educate citizens on how to receive up-to-date evacuation instructions, shelter-in-place procedures, and information pertaining to hazardous materials exposure.	Division of Emergency Management (DEM); Lexington Emergency Planning Committee (LEPC)
1.2.2: Install	1-3 Years	Flooding	Install flood marker signs that include both a "Road May Flood" sign, as well as signage indicating water depth.	Division of Emergency Management (DEM); Division of Water Quality (DOWQ); Kentucky Department of Highways (KDOH)

- *Objective 1.3: Control factors or prevent losses to critical facilities and infrastructure from natural and man-made hazards.*

Action	Time-Frame	Hazards Addressed	Description	Offices Responsible
1.3.1: Assess	Annually	All-Hazards	Request that natural hazard mitigation assessments be conducted on the current utility and communication infrastructure and the conclusions to be provided to the Division of Emergency Management (DEM).	Division of Emergency Management (DEM); Kentucky Utilities ³
1.3.2: Assess	3-5 Years	All-Hazards	As resources permit, conduct mitigation assessments on LFUCG-owned and –operated buildings to ensure that they are resistant to natural and man-made hazard events.	Building Inspection, Code Enforcement agencies; Division of Emergency Management (DEM); Division of Water Quality (DOWQ); First Responders; Risk Management
1.3.3: Update, Maintain, and Train	Annually	All-Hazards	As resources permit, conduct updates, maintenance, and training on Emergency Plans of LFUCG-owned and –operated buildings.	Building Inspection, Code Enforcement agencies; Division of Emergency Management (DEM); Division of Water Quality (DOWQ); First Responders; Risk Management

³ Includes: LG&E-KU; KY American Water Company; Columbia Gas; Windstream; Clark Energy; Insight; AT&T; Spring

- **GOAL 2: FACILITATE A RESILIENT ECONOMY BY PROTECTING AGRICULTURE, BUSINESS, AND OTHER ECONOMIC ACTIVITIES FROM NATURAL AND MAN-MADE HAZARDS.**

- *Objective 2.1: Support efforts that will assist with the continuity of critical business operations.*

Action	Time-Frame	Hazards Addressed	Description	Offices Responsible
2.1.1: <i>Develop</i>	1-5 Years	All-Hazards	Promote, encourage, and participate in the development of a system of accessing and sharing local data on infrastructure, critical facilities, population, and hazardous material sites between private and public interests.	Division of Emergency Management (DEM); Division of Water Quality (DOWQ); LFUCG GIS and IT Staff; Hospitals
2.1.2: <i>Collect Data</i>	2-3 Years	All-Hazards	Identify consistent data sources for the creation of system LEP population data collection/dissemination protocol. Data collection from schools, universities, health providers, and refugee resettlement groups is critical and difficult to access.	Division of Emergency Management (DEM); LEP Experts, Support Groups; Multicultural Affairs

- *Objective 2.2: Identify problems and potential remedies regarding significant livestock and/or crop losses by natural and man-made hazards.*

Action	Time-Frame	Hazards Addressed	Description	Offices Responsible
2.2.1: <i>Inventory</i>	2-5 Years	All-Hazards	Develop inventory of farmland in order to build a business plan.	Division of Emergency Management (DEM); University of Kentucky College of Agriculture (UKAg)

- **Objective 2.3: Promote property protection by removing, hazard-proofing, or retro-fitting structures and property in areas vulnerable to natural and man-made hazards.**

Action	Time-Frame	Hazards Addressed	Description	Offices Responsible
2.3.1: Provide Information	Every 2 Years	Flooding	Provide information to the housing industry through publications and electronic resources about residential flood-proofing, tornado safe rooms, and community tornado shelters, as well as guidelines and criteria for construction.	Division of Emergency Management (DEM); Building Inspection, Code Enforcement; Division of Engineering; Communications
2.3.2: Acquisition	Annually	Flooding	As resources allow, implement an acquisition program that targets environmentally sensitive land and land located within a floodplain. Projects would include a cost-benefit analysis and purchases of development rights that offer financial incentives in exchange for removal of future development rights.	Chief Administrative Officer (CAO) Office; Division of Water Quality (DOWQ); Parks & Recreation; Purchase of Development Rights Program (PDR); Division of Planning
2.3.3: Acquisition	Annually	Flooding	When resources permit, work to purchase and demolish flood-prone structures that meet NFIP/CRS guidelines for repetitive loss or for having repeated or extensive flood damage.	Division of Engineering
2.3.4: Fund	Annually	Flooding	Seek and request consistent funding sources for the completion of prioritized storm-water projects in accordance with identified priority storm-water projects.	Division of Water Quality (DOWQ)
2.3.5: Implement	2 Years	Flooding	Review and implement proposed Greenway Manual in alignment with revisions to the Storm-Water Manuals and related regulations.	Division of Water Quality (DOWQ); Division of Planning

- **GOAL 3: DEVELOP A COMMUNITY-WIDE MITIGATION EFFORT BY BUILDING STRONGER PARTNERSHIPS BETWEEN GOVERNMENT, BUSINESS, AND THE GENERAL PUBLIC.**

- *Objective 3.1: Integrate the local pre- and post-disaster mitigation functions with the response and recovery functions of the region and the Commonwealth.*

Action	Time-Frame	Hazards Addressed	Description	Offices Responsible
3.1.1: Fund	Immediate to 3 Years	All-Hazards	Obtain funding to hire a planner for the Division of Emergency Management (DEM).	Urban County Council; Division of Emergency Management (DEM); Office of the Mayor
3.1.2: Integrate Information	Every 2 Years	All-Hazards	Better integrate ESF-5 and -14 into the planning process for the Emergency Operations Plan (EOP).	Division of Emergency Management (DEM)
3.1.3: Exercise	3-5 Years	All-Hazards	Conduct an exercise with a priority of focusing on mitigation and recovery.	Division of Emergency Management (DEM)
3.1.4: Integrate Information	3-5 Years	All-Hazards	Better incorporate regional and state assets/resources into pre-disaster planning programs.	Division of Emergency Management (DEM)
3.1.5: Integrate Information	1-3 Years	All-Hazards	Once available, explore the opportunity to participate in the Commonwealth Hazard Assessment Mitigation Planning System (CHAMPS) as advised by Kentucky Emergency Management (KYEM).	Division of Emergency Management (DEM)

- *Objective 3.2: Form local partnerships that leverage support and share resources for response to and recovery from natural and man-made hazards.*

Action	Time-Frame	Hazards Addressed	Description	Offices Responsible
3.2.1: Community Outreach	Annually	All-Hazards	Continue efforts to bring more neighborhoods, including LEPs, into the Neighborhood Emergency Network (NEN) and the Community Emergency Response Team (CERT). Develop a neighborhood ready-notification tree.	Division of Emergency Management (DEM)
3.2.2: Fund	Annually	All-Hazards	When available, obtain funding and support for CERT supplies and equipment, volunteer coordination, and recognition/appreciation events for volunteers.	Division of Emergency Management (DEM)
3.2.3: Partner	2-5 Years	All-Hazards	Develop LEP partnerships; invite LEP representatives to the table in planning and education efforts.	Division of Emergency Management (DEM); LEP Experts, Support Groups; Multicultural Affairs
3.2.4: Community Outreach	1-3 Years	All-Hazards	Increase business and private sector (i.e., the Lexington Chamber of Commerce) involvement in the emergency management system.	Chamber of Commerce; Division of Emergency Management (DEM)

- *Objective: 3.3: Review existing local agency programs, plans, and policies to determine their effectiveness and efficiency in reducing risk and vulnerabilities to natural and man-made hazards.*

Action	Time-Frame	Hazards Addressed	Description	Offices Responsible
3.3.1: Guide Policy	Every 2 Years	All-Hazards	Review, assess, and make recommendations on hazard-related laws, regulations, codes, policies, and other guidelines. Ensure LEP populations are included in said policies and guidelines.	Division of Emergency Management (DEM); Building Inspection, Code Enforcement agencies; Multicultural Affairs
3.3.2: Partner	Annually	All-Hazards	Combine and submit annual request for mitigation project updates and annual reporting for FMP and HMP.	Division of Emergency Management (DEM); Division of Planning

- **GOAL 4: INCREASE PUBLIC AND PRIVATE UNDERSTANDING OF NATURAL HAZARD MITIGATION THROUGH THE PROMOTION OF MITIGATION EDUCATION AND AWARENESS OF NATURAL AND MAN-MADE HAZARDS.**

- *Objective 4.1: Promote the use of early-warning systems to alert the public in advance of natural hazards.*

Action	Time-Frame	Hazards Addressed	Description	Offices Responsible
4.1.1: Provide Information	Annually	All-Hazards	Provide multi-lingual information to LFUCG agencies, media, and other LEP organizations, CERT, and the public at large through publications and electronic resources about emergency procedures.	Code Enforcement agencies; Division of Emergency Management (DEM); Lexington Emergency Planning Committee (LEPC); LEP Experts, Support Groups; Multicultural Affairs
4.1.2: Provide Information	3 Years	All-Hazards	Identify sources (such as FEMA) and disseminate educational information in top foreign (macro) languages like Spanish, French, Swahili, and Arabic (as funds allow).	Division of Emergency Management (DEM); Fayette-County Public Schools; LEP Experts, Support Groups; Multicultural Affairs

- *Objective 4.2: Disseminate useful information about local hazards to the general public, development professionals, and elected officials in order to assist in safe, appropriate development, particularly in hazard areas.*

Action	Time-Frame	Hazards Addressed	Description	Offices Responsible
4.2.1: Outreach	1-2 Years	All-Hazards	Develop an internal outreach program, targeting new members of the Planning Commission and Division of Planning staff for the purpose of educating and providing information materials about all-hazards planning, its importance when considering land-use planning, and existing and planned mitigation efforts by the Division of Emergency Management (DEM).	Division of Emergency Management (DEM); Division of Planning
4.2.2: Training	3-5 Years	All-Hazards	When funding permits, conduct hazard mitigation-related training seminars and workshops for local building code enforcement officials.	Building Inspection, Code Enforcement agencies; Division of Emergency Management (DEM)

- *Objective 4.3: As resources allow, develop and promote outreach strategies designed to educate residents – including LEP residents – about local hazards, their associated risks and vulnerabilities, and the applicable mitigation actions.*

Action	Time-Frame	Hazards Addressed	Description	Offices Responsible
4.3.1: Assess Cost	2-4 Years	All-Hazards	Assess feasibility and cost of providing Lexington-Fayette County's local Channel 3 to DirectTV and other satellite subscribers.	Division of Emergency Management (DEM); TV Station Providers
4.3.2: Educate	2-4 Years	All-Hazards	Encourage the incorporation of available hazard mitigation education and outreach programs/products into school programs, making sure to include LEP students and their families who are not culturally or linguistically prepared.	Division of Emergency Management (DEM); Fayette-County Public Schools; Private Schools; Multicultural Affairs
4.3.3: Integrate Information	1-3 Years	All-Hazards	Encourage and leverage national, state, and/or local resources already available in other languages to be made available to the general public and to LEP communities.	Communications; Fayette County Public Schools; Private Schools; Multicultural Affairs

- **GOAL 5: ENHANCE EXISTING OR DESIGN NEW COUNTY POLICIES AND TECHNICAL CAPABILITIES THAT WILL REDUCE THE EFFECTS OF NATURAL AND MAN-MADE HAZARDS.**

- *Objective 5.1: Reduce vulnerability from future hazards by collecting better hazard information and updating local databases to better identify areas at risk – including at-risk LEP areas – and calculate a comprehensive estimate of the county’s loss potentials.*

Action	Time-Frame	Hazards Addressed	Description	Offices Responsible
5.1.1: Methodology	1-3 Years	All-Hazards	<ul style="list-style-type: none"> a. Establish stakeholder taskforce quarterly meetings. b. Design a methodology and system to better archive and manage local data types after a natural and/or man-made hazard event. At-risk LEP populations will be considered. 	Building Inspection, Code Enforcement agencies; Division of Emergency Management (DEM); Division of Water Quality (DOWQ); Division of Engineering; Multicultural Affairs; Public Works and Development; Risk Management agencies
5.1.2: Collect Data	Annually	HAZMAT	Maintain the gathering and archiving of local data on infrastructure, critical facilities, population, and hazardous material sites as they pertain to the risk assessment section of [the LFUCG hazard mitigation plan].	Division of Emergency Management (DEM); Division of Water Quality (DOWQ); Hospitals; Kentucky Utilities; Railroad Carriers

- *Objective 5.2: Increase the communities’ involvement in the Community Rating System (CRS) and floodplain management programs.*

Action	Time-Frame	Hazards Addressed	Description	Offices Responsible
5.2.1: Distribute Information	Annually	Flooding	Share and distribute HMP and FMP CRS and annual reports to LFUCG agencies and other steering committee members for review as outlined in the plan maintenance timeline of [the LFUCG hazard mitigation plan].	Division of Water Quality (DOWQ); Division of Engineering; Division of Planning
5.2.2: Integrate Information	5 Years	Flooding	Merge future HMP annual progress reporting process with CRS FMP annual reporting process as outlined in the plan maintenance section of [the LFUCG hazard mitigation plan].	Division of Emergency Management (DEM); Division of Water Quality (DOWQ); Division of Planning

- *Objective 5.3: Support the development of and use of mitigation-related laws, building codes, and standards designed to reduce vulnerability and risk to all.*

Action	Time-Frame	Hazards Addressed	Description	Offices Responsible
5.3.1: Community Outreach	Annually	All-Hazards	Conduct outreach with the land-use planning and development community for the purpose of incorporating mitigative building and development best practices into existing plans, policies, and procedures.	Division of Emergency Management (DEM); Building Inspection, Code Enforcement agencies; Division of Planning; Homebuilders' Association
5.3.2: Map and Enhance	3-5 Years	Severe Storm; Tornado	Enhance and design a new outdoor warning system for the community with buffered areas demonstrating reach and at-risk populations. Map the current siren area.	Division of Emergency Management (DEM); Division of Fire and Emergency Services; Division of Police

STAND-ALONE PROJECTS

Title	Project Type	Hazards Addressed	Status
Derby Drive Storm-Water Improvement Project	Acquisition/Demolition	Flooding	<i>Complete</i>
Vaughns Branch Storm-Water Mitigation Project	Detention Basin; Culvert Replacement	Flooding	<i>Complete</i>
Whitemark Court/Lilydale Drive Storm-Water Improvement Project	Acquisition/Demolition	Flooding	<i>Complete</i>
Viley	Acquisition/Demolition	Flooding	<i>Complete</i>
Kilrush	Acquisition/Demolition	Flooding	<i>Complete</i>
McConnell Springs, Gainesway 319 Grant-Funded Projects	Wetland Establishment	Flooding	<i>Complete</i>
Mill Creek Stream and Wetland Restoration Project	Wetland Establishment	Flooding	<i>Complete</i>
Crimson King/Coldstream Court Storm-Water Project	Acquisition/Demolition	Flooding	<i>Complete</i>
Cabot/Shandon/Parkside and Ft. Sumter/Gayle	Acquisition/Demolition	Flooding	<i>Complete</i>
N/A (General)	DFIRM Production	Flooding	<i>On-Going</i>
N/A (General)	LOMR (Letters of Map Revisions)	Flooding	<i>On-Going (Complete for 16 areas within LFUCG jurisdiction)</i>
N/A (General)	RiskMAP	Flooding	<i>On-Going</i>
Anniston/Wickland Storm-Water Improvement Project	Detention Basin	Flooding	<i>In Progress</i>
University of Kentucky (UK) Nicholasville Road, Alumni Drive Intersection Project	Detention Basin; Culvert Replacement	Flooding	<i>In Progress</i>
Lafayette/Southbend	Acquisition/Demolition	Flooding	<i>In Progress</i>
Green Acres Neighborhood	Acquisition/Demolition	Flooding	<i>Planned/Future</i>
Ft. Sumter Drive	Acquisition/Demolition	Flooding	<i>Planned/Future</i>
CR-4, Parkside at Shandon	Acquisition/Demolition	Flooding	<i>Planned/Future</i>

Title	Project Type	Hazards Addressed	Status
Versailles Road Safe Room	Safe Rooms	Tornadoes	<i>In Progress and Planned/Future</i>
N/A (General)	Water Pipeline Construction	All-Hazards	<i>Complete</i>
University of Kentucky (UK) Emergency Generator and Warning Alert System	Generator; Sirens	All-Hazards	<i>Complete</i>
N/A (General)	Education	All-Hazards	<i>On-Going</i>
Preparedness Fair (at Mobile Home Parks)	Education	All-Hazards	<i>On-Going</i>
Critical Customer Identification and Updating	Identification	All-Hazards	<i>On-Going</i>
Critical Infrastructure Identification	Identification	All-Hazards	<i>On-Going</i>
EOC Generator	Generator	All-Hazards	<i>In Progress</i>