

S1.: Process Used to Develop the Commonwealth of Kentucky Enhanced Hazard Mitigation Plan for 2018

The planning process for this 2018 update of the Commonwealth of Kentucky Enhanced Hazard Mitigation Plan (CK-EHMP 2018) began in the first quarter of 2016 in anticipation of FEMA's (typically) annual Pre-Disaster Mitigation (PDM) nationally-competitive grant program: The University of Kentucky Hazard Mitigation Grants Program Office (UK-HMGP) developed the idea that the CK-EHMP 2018 would be used to highlight key integrations and coordination with other commonwealth agencies that allow the Commonwealth to maximize mitigation activity and administer a comprehensive mitigation program and effectively use mitigation funding. The CK-EHMP 2018 would illustrate the integration and coordination that underlies most sections comprising the Standard and Enhanced Plan Review Tools and much messaging regarding mitigation primarily through the CK-EHMP 2018's Risk Assessment. The implication was that it is through a Risk Assessment that agencies, with whom Kentucky Emergency Management (KYEM) and UK-HMGP work closely, would be able to advertise their expertise and showcase outcomes resulting from the day-to-day work they do on behalf of the Commonwealth and toward mitigation. Additionally, regarding one of Kentucky's coordinating partners to be mentioned below, it was decided to attempt application under the Fiscal Year 2016 PDM program for a separate commonwealth-wide hazard mitigation plan that would then be integrated in the CK-EHMP 2018.

Consequently, the planning process began in preparation to apply for a Pre-Disaster Mitigation (PDM) grant for Fiscal Year 2016 (FY 16) to develop the CK-EHMP 2018. UK-HMGP met, called, and e-mailed repeatedly with the Kentucky Division of Water (KDOW)¹, Kentucky Division of Forestry (KDF)², Kentucky Geological Survey (KGS)³, Kentucky's Division of State Risk and Insurance Services (DSRI)⁴, the National Weather Service (NWS), and the Area Development Districts (ADDs). Throughout the Fiscal Year 2016 PDM grant application period, this planning process continued. By the time of the FY 2016 PDM application, UK-HMGP had secured formal, contractual commitments from KDOW and KGS to conduct Risk Assessments for flooding, drought, and dam safety (KDOW) and for landslides, earthquakes, karst terrain-cum-sinkholes, and mine subsidence (KGS). UK-HMGP secured informal, non-contractual commitments from KDF, NWS, and DSRI to provide data and, where applicable, summary analysis that could be included by UK-HMGP's mitigation planner toward wildfires, the atmospheric hazards, and additional commonwealth asset identification.

¹ Kentucky Division of Water operates under the Department for Environmental Protection that is under Kentucky's Energy and Environment Cabinet.

² Kentucky Division of Forestry operates under the Department for Natural Resources that is under Kentucky's Energy and Environment Cabinet.

³ Kentucky Geological Survey is a department of the University of Kentucky (UK) and is a commonwealth-supported research center and public resource that serves as the primary source of geologic information about and for Kentucky.

⁴ The Division of State Risk and Insurance Services operates under Kentucky's Finance and Administration Cabinet.

Related, during both the application stage and the stage in preparation for it, UK-HMGP met with Kentucky Emergency Management (KYEM)⁵ to coordinate the abovementioned intended formal integration of commonwealth partners and to coordinate one additional partner, the Kentucky Department for Public Health (KDPH)⁶. Subsequent phone conversations and a meeting between UK-HMGP, KYEM, and KDPH produced the idea to develop an application under FY 2016 PDM for a commonwealth-wide hazard mitigation plan project that would develop a mitigation strategy from a planning process and all-hazards risk assessment toward the critical facilities and populations either reliant or potentially reliant upon Emergency Support Function #8 (ESF 8). This commonwealth-wide hazard mitigation plan would then be integrated into CK-EHMP 2018.

Upon approval of the FY 2016 PDM application for the development of CK-EHMP 2018, UK-HMGP continued its plan process with formal meetings between the two contractual partners to the CK-EHMP 2018, KDOW and KGS. At these meetings initializing the risk assessment work, elements of the risk assessment, expectations, the Plan Review Tool, and other relevant components of the hazard mitigation plan were discussed. Kentucky Geological Survey (KGS) would continue to meet with UK-HMGP throughout its development and drafting of its risk assessments on landslides, earthquakes, karst terrain-cum-sinkholes, and mine subsidence. Kentucky Division of Water (KDOW) would update periodically by phone and one meeting⁷ was arranged toward the end of its drafting of the risk assessments for flooding, drought, and dam safety. After the risk assessment was drafted, it was reviewed, phone conversations were conducted regarding revisions to be made, and a formal meeting⁸ was scheduled with KDOW elaborate on the revisions requested.

The above, then, describes a portion of the planning process reliant upon the relationships fostered between Kentucky Emergency Management (KYEM) and the University of Kentucky Hazard Mitigation Grants Program Office (UK-HMGP) and commonwealth (and federal) agencies. Continuing this description of the planning process that leveraged commonwealth and federal agency integration, KYEM and UK-HMGP met with the following agencies throughout 2017 and 2018. Each meeting was anchored in eliciting risk assessment advice and data, integration of planning initiatives, and input into the mitigation strategy of the Commonwealth:

⁵ Kentucky Emergency Management operates under the Department of Military Affairs (a General Government Cabinet).

⁶ Kentucky Department for Public Health operates under the Cabinet for Health and Family Services.

⁷ Meeting held on April 3, 2018

⁸ Meeting held on July 26, 2018

Table PP-1. Informal Planning Process Meetings with Agencies

Agency with Whom Met	Date of Meeting	Topic(s) Discussed
Division of State Risk and Insurance Services (DSRI) ⁹	October 16, 2017	Vulnerability of State-Owned Facilities; Data on State-Owned Facilities and their Values
Infrastructure Development and Recovery (IDR) ¹⁰ program	November 6, 2017	Kentucky planning Integration with IDR's Infrastructure Resilience Planning Framework (IRPF)
Infrastructure Development and Recovery (IDR) program	May 14-15, 2018	Kentucky planning integration with IDR's IRPF
Department of Housing, Buildings, and Construction (DHBC) ¹¹	June 2018	Meetings and Phone Conversations with SHMO regarding Building Codes and BCEGS mitigation strategies
National Weather Service (NWS)	July 11, 2018	Risk Assessment for Snowstorms, Severe Storms, and Tornadoes; Mitigation Strategy inclusions from NWS
United States Army Corps of Engineers (USACE)	July 11, 2018	Elaboration on Silver Jackets integration into commonwealth planning; Mitigation Strategy inclusions from USACE
City of London	July 18, 2018	Measuring Effects from Mitigation Measures
Kentucky Division of Forestry (KDF) ¹²	July 23, 2018	Risk Assessment for Wildfire data and analysis; Mitigation Strategy inclusions from KDF
National Weather Service (NWS)	August 16, 2018	Risk Assessment for Snowstorms, Severe Storms, and Tornadoes
University of Kentucky Gatton School of Business	September 6, 2018	Integration of Public Health, Economic Development, and other external forces into vulnerability assessments of commonwealth and regional mitigation plans.

Kentucky's formal planning process was two-pronged:

As discussed in other sections of this Standard and Enhanced Plan, Kentucky maintains a Kentucky Mitigation Council (KYMC) that holds regular meetings. The KYMC is comprised of the following agencies:

⁹ Division of State Risk and Insurance Services operates underneath Kentucky's Finance and Administration Cabinet.

¹⁰ Infrastructure Development and Recovery (IDR) program is a federal agency that operates under the Office of Infrastructure Protection (OIP) under the Department of Homeland Security (DHS)

¹¹ Department of Housing, Buildings, and Construction (DHBC) operates under Kentucky's Public Protection Cabinet.

¹² Kentucky Division of Forestry (KDF) operates under Kentucky's Department for Natural Resources under the Energy and Environment Cabinet.

- Department for Local Government (DLG) (2 Members)
 - o Economic Development Branch Representative
 - o Kentucky State Clearinghouse Representative
- Kentucky Transportation Cabinet (KYTC)
- Kentucky Council of Area Development Districts (KCADD)
- Kentucky Office of Homeland Security (KOHS)
- Kentucky Heritage Council (represented by State Historic Preservation Officer)
- National Weather Service (NWS)
- United States Army Corps of Engineers (USACE)
- Kentucky Association of Mitigation Managers (KAMM)
- Local Practitioners (4 Members)
- University and College Emergency Management representatives (2 Members)
 - o University of Kentucky (UK) Representative
 - o University of Louisville (UofL) Representative
- Kentucky Division of Water (KDOW) (2 Members)
 - o Agency Representative
 - o NFIP Coordinator
- Kentucky Emergency Management (KYEM) (7 Members)
 - o Division Director
 - o Assistant Director of Administration
 - o Recovery Branch Manager
 - o Area Managers (2 Representatives)
 - o Intergovernmental Liaison
 - o State Hazard Mitigation Officer (SHMO)

The KYMC meets regularly throughout any given year. Thus, the first prong of the planning process: Throughout 2017 and 2018, each KYMC meeting had a portion (or the entirety) of it devoted to the Commonwealth of Kentucky Enhanced Hazard Mitigation Plan for 2018 (CK-EHMP 2018). The members of the KYMC were updated and consulted on points of integration, on the risk assessment, on goals for the Commonwealth in pursuing mitigation, on commonwealth capabilities, and on the mitigation strategy. Many issues were discussed at these meetings and much coordination and the information such coordination provides derived from these meetings.

The second prong of the planning process began in 2018. Kentucky Emergency Management (KYEM) and the University of Kentucky Hazard Mitigation Grants Program Office (UK-HMGP) scheduled individual planning meetings at each of Kentucky's Area Development Districts (ADDs). The purpose of these meetings was to solicit input and advice for the plan from the regional entities that produce so much of the Commonwealth's mitigation; grants administration; economic development; and planning toward land-use, housing, infrastructure, natural and cultural resources, and social service distribution. At each of these ADD meetings, local stakeholders such as elected officials, emergency management professionals, infrastructure managers, etc. were invited. Local stakeholders would learn from KYEM and UK-HMGP about the general trend to increasingly identify and integrate all of their communities' planning mechanisms

and to elicit feedback regarding the risk assessment, state capabilities, and mitigation strategy.

The Area Development District (ADD) meetings were held at the following ADDs on the following dates:

Table PP-2. Planning Process Meetings Held at Area Development Districts (ADDs)

Bluegrass Area Development District (BGADD)	February 27, 2018
Cumberland Valley Area Development District (CVADD)	February 27, 2018
Kentuckiana (Regional) Planning and Development Agency (KIPDA)	March 6, 2018
Northern Kentucky Area Development District (NKADD)	March 6, 2018
Lincoln Trail Area Development District (LTADD)	March 13, 2018
Kentucky River Area Development District (KRADD)	April 17, 2018
Buffalo Trace Area Development District (BTADD)	April 19, 2018
Pennyrile Area Development District (PeADD)	May 17, 2018
Big Sandy Area Development District (BSADD)	May 23, 2018
Lake Cumberland Area Development District (LCADD)	June 26, 2018
Green River Area Development District (GRADD)	June 27, 2018
FIVCO (Five Counties Area Development District)	July 17, 2018
Barren River Area Development District (BRADD)	July 19, 2018
Gateway Area Development District (GWADD)	August 1, 2018

S2.: That Relevant Commonwealth Stakeholders Were Included in the Planning Process

To clarify that agencies involved with emergency management, economic development, land-use and development, housing, health and social services, infrastructure, and natural and cultural resources were involved in the Commonwealth of Kentucky Enhanced Hazard Mitigation Plan 2018 planning process, the following is restated:

Emergency Management was involved in that Kentucky Emergency Management (KYEM) and the University of Kentucky Hazard Mitigation Grants Program Office (UK-HMGP) spearheaded the Commonwealth planning process.

Economic development was involved through the participation primarily through the Kentucky Mitigation Council (KYMC) of Kentucky's Department for Local Government (DLG) that administers federal Economic Development Agency (EDA) rules and funding, and of the Kentucky Council of Area Development Districts (KCADD). The Area Development Districts (ADDs) also are instrumental in economic development planning and implementation for the counties and cities over which they preside. Facilitating commonwealth mitigation plan meetings with ADDs shows Economic Development's inclusion in the Commonwealth of Kentucky Enhanced Hazard Mitigation Plan 2018 (CK-EHMP 2018) plan process.

Land-use and development was involved through the development of risk assessments and contribution of risk assessment data by Kentucky's Division of Water (KDOW) and Kentucky's Division of Forestry (KDF) and by Kentucky Geological Survey (KGS) at the University of Kentucky (UK). Again, the inclusion of ADDs in the commonwealth mitigation planning process also was instrumental to include land-use and development input.

Housing was included through the Department for Local Government's (DLG) participation (through the KYMC, primarily) in the CK-EHMP 2018 planning process. Housing also was included through the ADDs' participation. Discussion of building codes and the Building Code Effectiveness Grading Schedule (BCEGS) and subsequent articulation of building code mitigation actions with both Kentucky Division of Housing, Buildings, and Construction (DHBC) and the ADDs also represent Housing's inclusion in the CK-EHMP 2018 planning process.

Health and Social Services was included through early discussions of commonwealth plan development-cum-plan integration with Kentucky's Department for Public Health (KDPH). Again, ADD participation also helped to include Health and Social Services input. Finally, meetings and calls between Kentucky Emergency Management (KYEM), University of Kentucky Hazard Mitigation Grants Program Office (UK-HMGP), and the University of Kentucky's Gatton School of Business solicited input for Health and Social Services. Specifically, the University of Kentucky's Gatton College of Business is developing a National Security Preparedness Index that is intended to be included in

commonwealth mitigation planning documents and heavily emphasizes health and social services and economic development.

Infrastructure was included through the KYMC and the Kentucky Transportation Cabinet's input to the CK-EHMP 2018. KYEM's and UK-HMGP's meetings with the U.S. Department of Homeland Security's Office of Infrastructure Protection's (DHS OIP) Infrastructure Development and Recovery (IDR) program also provided input and integrative elements affecting Infrastructure.

Natural and Cultural Resources were included in the CK-EHMP 2018 planning process through the solicitation of input (primarily through the KYMC) of Kentucky's State Historic Preservation Officer (SHPO). The risk assessment conducted by Kentucky's Division of Water (KDOW) and elicited from Kentucky Division of Forestry (KDF) also signifies input into the CK-EHMP 2018 from Natural and Cultural Resources.