

Commonwealth of Kentucky Enhanced Hazard Mitigation Plan: 2013 Version

PLAN MAINTENANCE

PART I:

Monitoring, Evaluating, and Updating the Plan

REQUIREMENT §201.4(c) (5) (i):

Commonwealth of Kentucky must include an established method and schedule for monitoring, evaluating, and updating the plan.

A. Describing the Method and Schedule for Monitoring the Commonwealth of Kentucky's Hazard Mitigation Plan

In its administrative role as facilitator and coordinator, it will be the primary responsibility of Kentucky Emergency Management (KYEM) and its agents, the University of Kentucky Martin School of Public Policy and Administration's Hazard Mitigation Grants Program (UK-HMGP) and the University of Louisville's Center for Hazards Research and Policy Development (CHR), to monitor the 2013 update of the Commonwealth of Kentucky's hazard mitigation plan.

Within KYEM, its staff and administrators and the Kentucky Mitigation Council (KYMC) (whose membership overlaps with the staff and administration of KYEM) will drive the monitoring process for the 2013 update of the Commonwealth's hazard mitigation plan. The monitoring process will incorporate three (3) methods:

- 1) Frequent reporting requirements
- 2) Local outreach
- 3) Community Hazard Assessment Mitigation Planning System (CHAMPS)

Frequent Reporting Requirements

KYEM is responsible for the implementation of FEMA's quarterly reporting requirement. This effective mitigation project monitoring tool gives KYEM legitimacy and authority in mandating that localities and local project managers (sub-applications) formally report on the status of their mitigation projects four (4) times a year. While KYEM cannot force reporting from local jurisdiction, as it has not express authority to do so: Federalism prevents formal authority; KYEM, however as an agency of the Commonwealth of Kentucky and the grantee of the federal funding, is responsible for the monitoring of subgrantee activities to ensure program compliance.

Kentucky law disallowing access to FEMA's funds without bilateral contracting also invokes informal authority as the contract language requires that subgrantees comply with the federal code (44 CFR) which defines mitigation program requirements – including quarterly reporting. KYEM does withhold funds from localities whose local project managers do not submit regular quarterly reports. While it is not KYEM's money to withhold, it is KYEM's responsibility to only distribute funds when program

compliance is apparent. The contacting process maintains the status of the money as being FEMA's money (rather than KYEM's money) that is accessible for disbursement by KYEM.

Federalism technically prevents FEMA from explicitly mandating reporting and monitoring requirements; it lacks that formal authority. However, FEMA does provide compelling informal authority in that it is money that is funding the projects and applications that require monitoring-via-reporting. Thus, KYEM and its staff, administrators, and the KYMC monitor the status of the Commonwealth of Kentucky's hazard mitigation plan via the Commonwealth's projects and applications intended to mitigation hazards by using federal regulations as a means to compel quarterly reporting from Kentucky's localities and local project managers.

KYEM does, however, have legitimacy and authority over its staff. This authority is both formal and informal: An administrative hierarchy within the agency established formal authority; paychecks, promotions, and various other sticks and carrots establish informal authority. It is KYEM staff (in KYEM's role as facilitator and coordinator) that manages the project files and oversees the individual projects applied for and implemented by localities and local project managers. KYEM and the agencies comprising the non-overlapping parts of the KYMC can compel its staff to frequently report on the status of the projects it oversees. This includes mandating reporting from UK-HMGP and CHR, who also oversee projects (UK-HMGP) or directly provide technical assistance to individual hazards mitigation projects (CHR). Such monitoring occurs at the request of KYEM and the KYMC, and is recorded in various formats.

One oft-used format for monitoring is the KYEM "Project Tracker," which is an interactive spreadsheet into which the staff of KYEM, of UK-HMGP, and of CHR (where relevant) must keep current the status of all open mitigation projects and applications. Screenshots from the "Project Tracker" is provided in **Appendix 6-1**. It is updated regularly, i.e. according to an as-needed schedule. Such documentation of mitigation measures is described below.

Related solely to planning, frequent reporting compelled from within KYEM (and UK-HMGP) also includes the "Statewide Time-Resource" form (**Appendix 6-2**) and "Trip Report" form (**Appendix 6-3**).

Both forms are related to local outreach (described below): They both compel documentation of local outreach. Further, both forms are related to each other so as to act as a system redundancy. The former ("Statewide Time-Resource") documents the *otherwise unaccounted for*¹ time spent on mitigation activities of those involved in mitigation besides KYEM (and UK-HMGP and CHR) staff and administration. The latter ("Trip Reports") document the time spent on local outreach for mitigation activity *by* KYEM (and UK-HMGP and CHR) staff and administration.

¹ Those participating in mitigation activity besides KYEM et al. staff (e.g. Sub-Applicants, locality representatives attending training, etc.) do regularly document time spent on said mitigation activity. When such documentation is not required or has been neglected, the "Statewide Time-Resource" form accounts (or can account) for *otherwise unaccounted for* time spent by mitigation activity participants on mitigation.

Local Outreach

De facto monitoring of the plan and of the projects and actions and applications that are integral to implementing the Commonwealth's plan occurs with KYEM, UK-HMGP, and CHR's outreach to localities, which beyond quotidian outreach includes: Deductive Planning and Geographic Specialization.

Deductive Planning

The stakeholder meetings described in the Planning Process section of this 2013 update of the Commonwealth's hazard mitigation plan are designed to be implemented regularly throughout the planning process. The continued scheduling and implementation of the stakeholder meetings will be the primary systematized vehicle for *deductive planning*. As addressed in the Mitigation Strategy section, even though KYEM's main administrative theme consists of the "bottom-up" (*inductive planning*) coordinating of localities' needs, there still is a need for KYEM and its coordinating agencies (UK-HMGP and CHR) to provide guidance that facilitates better planning and eventual mitigation action management from "the top down," so to speak. In practice, this means that while KYEM ultimately will be directing its administration toward the mitigation concerns of its localities, KYEM *can offer* the localities an increased array of mitigation options and considerations that localities could then use in their mitigation planning calculus. Presenting this "increased array of mitigation options and considerations," or, in other words, adding mitigation options and considerations to those conceived by the localities ensures that statewide mitigation administration goals are addressed and that the terms of the Commonwealth's plan are monitored.

Local outreach and deductive planning, of course, also considers outreach to the Commonwealth's executive agencies. Better ensuring that KYEM meets its overarching administrative goal of facilitation and coordination of mitigation actions implies working in partnership with other Kentucky agencies that have a stake in mitigation planning.

REMEMBER:

DEDUCTIVE PLANNING:

*Like "deductive reasoning":
Devising the general plan first
and using the general plan to
implement its components
downward toward those for
whom the plan was devised; the
"centrally-administered"
interpretation of planning.*

INDUCTIVE PLANNING:

*Like "inductive reasoning":
The general plan forms from the
aggregation of the planning
resulting from whom the general
plan is devised; the "ideal"
interpretation of planning.*

Such local outreach and de facto plan monitoring would most concretely occur through the *Public Good-Type project*. If the theme of a Commonwealth-wide mitigation plan is administration, then seeking and applying for resources to conduct studies and general research, develop more accurate and more efficient methodology, and collect better natural hazard data does also simultaneously involve monitoring the Commonwealth's hazard mitigation plan. Such initiatives would be implemented through Kentucky's agencies that have a stake in mitigation planning. Examples of such initiatives have been provided in discussing the Commonwealth's administrative hazard mitigation goals. Kentucky's Department of Water (KDOW) and Division of Forestry (KDF) have provided appendices (**Appendices 4-3** and **4-2**), respectively to this 2013 update of the Commonwealth hazard mitigation plan that convey success with past initiatives and thus provide evidence and guidance toward effective plan monitoring through local outreach.

The link, then, between outreach to Kentucky's state governmental agencies and outreach to localities involves this concept of *deductive planning*. If KYEM et al. can offer its localities a wider and more varied array of mitigation options, some of those options will derive from the work (via Public Good-Type project, for example) of Kentucky's agencies who have a stake in mitigation.

Finally, deductive planning not only involves KYEM et al. offering localities a larger, more varied array of mitigation options and not only partners with other Kentucky agencies to produce some of those options to be provided. Deductive planning and local outreach can also be directed specifically toward localities' individual (multi-jurisdictional) hazard mitigation plans.

All mitigation plans, whether local plans or statewide, share the needs of monitoring, evaluating, and updating. Thus far, KYEM and FEMA have been presented with a wide variety of mechanisms to monitor and evaluate plans that have been developed by, in Kentucky's case, the Area Development Districts (ADDs) responsible for planning for multiple jurisdictions within their respective regions. However, such monitoring and evaluating mechanisms are typically region-specific: For example, committee structures responsible for monitoring and evaluating their local multi-jurisdictional mitigation plans vary considerably in terms of how they are organized, how often they meet, how much power they possess, etc. Region specificity (i.e. lack of generalizability) also results because many monitoring and evaluating mechanisms, while systemized, are informal.

REMEMBER:

PUBLIC GOODS-TYPE PROJECT:

A mitigation action or objective devised by an administrative body. Its importance here is to differentiate between "mitigation" actions, objectives, and initiatives.

These are actions taken by an administrative body for the sake of better facilitating and coordinating the actions of the entities over which the administrative body is responsible. Such initiatives are animated by a "public good" motivation: These are actions or objectives that would benefit all and subsequently are not expected to be pursued by any one entity.

For a statewide hazard mitigation plan with an emphasis is on its localities, monitoring the Commonwealth's plan would involve helping the localities monitor their multi-jurisdictional plans. If "deductive planning" means offering a larger, more varied array of mitigation options from which localities could consider, then one of those "options" includes offering localities mechanisms toward monitoring and evaluating their local mitigation plans. Such provision would also accomplish the abovementioned "frequent reporting" element that is involved in successful monitoring and evaluation of the Commonwealth's hazard mitigation plan.

In fact, the Commonwealth has already implemented some systematizing of local plan monitoring and evaluation through the contracts that the University of Louisville's Center for Hazards Research and Policy Development (CHR) make with local jurisdictions to administer their local plan processes. Granted, as of the writing and submittal of this 2013 update of the Commonwealth hazard mitigation plan, CHR has not developed specific *multi-jurisdictional* plan monitoring and evaluating mechanisms, it has provided some initial insight regarding what monitoring and evaluating options KYEM and UK-HMGP can offer to the Commonwealth of Kentucky's localities that would aid in KYEM's goal of facilitation and coordination of mitigation planning.

KYEM has included in this 2013 update of the Commonwealth's hazard mitigation plan a sample *local* plan monitoring tool (**Appendix 6-4**) that will be refined to be provided to the Commonwealth's localities through outreach and that might, at the very least, universalize a plan monitoring and evaluating process for the localities. Such documentation allows localities to keep track of existing and new projects and provides a formal outlet for proposing plan amendments to both this statewide hazard mitigation plan and to local plans. Again, better and more efficient local plan monitoring and evaluating implies monitoring and evaluating the Commonwealth's hazard mitigation plan, as well.

Geographic Specialization

The Commonwealth of Kentucky's hazard mitigation plan will also be monitored through the KYEM and UK-HMGP organization of its staff toward geographic specialization. Such specialization is more relevant for monitoring the progress of mitigation activities (discussed below); but, in a system where local and regional needs direct the administration of KYEM and thusly underlie the Commonwealth's hazard mitigation plan, effective mitigation *activity* monitoring implies effective mitigation *plan* monitoring. Briefly, the point is individual KYEM and UK-HMGP staff members are responsible for and specialize in specific regions of Kentucky.

The regions of Kentucky (as specified previously and throughout) are organized via Area Development Districts (ADDs). Thus, individual KYEM and UK-HMGP staff specialize in the mitigation activity that derives from their assigned ADDs. This implies the monitoring efficiency that results from "unity in the executive": If the facilitation and coordination goals of KYEM (and the Commonwealth) is lacking within an area of

Kentucky, one individual is responsible and accountable to that area. Conversely, specialists for assigned regions are better able to collect, address, and articulate the mitigation needs of their regions. Such a feedback loop assures that the goal of the Commonwealth of Kentucky's mitigation plan is monitored and that the progress of mitigation activities is monitored.

Community Hazard Assessment Mitigation Planning System (CHAMPS)

Monitoring of the 2013 update of the Commonwealth of Kentucky's hazard mitigation plan occurs through its ever-evolving Community Hazard Assessment Mitigation Planning System (CHAMPS). The CHAMP System was the primary mechanism for plan and project monitoring and evaluation described in the 2010 update of the Commonwealth's hazard mitigation plan. Thus, the CHAMP System's current role will be discussed more fully when discussing updates from 2010 to 2013.

However, the point to be made here is that KYEM's CHAMP System is functional, has already aided in plan monitoring (via project monitoring), and is currently able (and thus being implemented at the time of this writing) to monitor and evaluate the Commonwealth hazard mitigation plan in similar fashion to the mechanisms aforementioned.

Specifically, the CHAMP System contains a "Planning Module," which uses the FEMA Mitigation Plan Review Tool (formerly "the Crosswalk") as the programming basis by which to present to localities the ability to build local and regional hazard mitigation plans. The "Planning Module" guides planners and plan-writers through the hazard mitigation planning process. Once entered into the CHAMP System, CHAMPS provides a tool for Kentucky's review of any local hazard mitigation plan before it is sent to FEMA for its review. The "Planning Module" is functional currently and does at the time of this writing contain the outlines of the 15 Kentucky Area Development District (ADD) multi-jurisdictional hazard mitigation plans. Thus, as it becomes increasingly functional, allows statewide, systematized, and constant monitoring of local hazard mitigation plans which, in turn, implies systematized and constant monitoring of the Commonwealth of Kentucky's hazard mitigation plan.

Beyond the "Planning Module" and in its most current implementable form and related solely to planning, CHAMPS allows the:

- Reporting of damage amounts, the identification and number of affected communities, and hazard types for specific incidents and disasters
- Reporting of threshold information for counties during and after a disaster;
- Standardization of guidance to assist in the development and maintenance of hazard mitigation plans

Finally, CHAMPS' primary efficiency enhancement and applicability involves its use as a statewide monitor of mitigation action and project activity. The purpose for a "Planning Module" within CHAMPS is necessary, but secondary to the goal of CHAMPS: Locality hazard mitigation plans serve as the foundation for mitigation actions for which CHAMPS primary utility is designed. At the time of this writing, CHAMPS houses more than 600 such mitigation actions, all ultimately deriving from localities' most current hazard mitigation plans. Thus, locality plan monitoring is performed on behalf of individual mitigation action monitoring which results in the monitoring the Commonwealth of Kentucky's hazard mitigation plan.

B. Describing the Method and Schedule for Evaluating the Commonwealth of Kentucky's Hazard Mitigation Plan

The mechanisms for evaluation of the 2013 update of the Commonwealth of Kentucky's hazard mitigation plan mirror the mechanisms for monitoring. The concepts, of course, are linked: Effective monitoring should yield effective evaluation.

KYEM (and the KYMC within), UK-HMGP, and CHR all will be primarily responsible for evaluating the Commonwealth's hazard mitigation plan. Evaluation will involve the same mechanisms as described above: Frequent reporting (to be further elaborated upon in the Enhanced Section of this plan), local outreach, and the CHAMP System. Beyond those necessary administrative reporting requirements (i.e. quarterly reports) and the quarterly KYMC meetings, there is no set schedule for the decentralized evaluation implied through such mechanisms. The schedule would be described vaguely as "regularly." The intent is that KYEM and its coordinating agencies are flexible and responsive to local needs. Localities suffer the effects of hazards, not KYEM or the Commonwealth of Kentucky as an abstract entity. KYEM's dynamism in locality and agency outreach and its implementation of a system (CHAMPS) that will compile the segmented mitigation strategies, actions, and needs deriving from each locality heretofore mutually exclusively implies a constant monitoring and evaluation of KYEM's and the Commonwealth of Kentucky's mitigation goals.

The grand idea is that, per the theme of this mitigation plan update, by localities maintaining their own mitigation plans (through their own mechanisms and through CHAMPS), by relevant Kentucky agencies continuing to improve mitigation activity either individually or through initiatives partnered with KYEM and FEMA, and by KYEM and its coordinating arms (UK-HMGP and CHR) taking full advantage of those limited areas where they have a locus of control (i.e. requiring reporting from its staff and in reaching out to localities to present them with fuller mitigation options and tools), the Commonwealth of Kentucky will be effectively monitoring its mitigation plan with effective and efficient facilitation of the needs of the localities comprising the Commonwealth. The constant feedback that such a system produces and documents provides evaluation of the Commonwealth's mitigation plan, which is, in function, an administrative plan. Alternatively stated, the Commonwealth of Kentucky's hazard mitigation plan is, in essence, little more than an administrative plan directed to aid the localities that suffer from the natural hazards produced within the state. Evaluation, then, is conducted through the localities successfully implementing their mitigation strategies and being provided access to the fullest set of mitigation options and tools for future strategizing against the harmful effects of hazards.

C. Describing the Method and Schedule for Updating the Commonwealth of Kentucky's Hazard Mitigation Plan

Despite the decentralized nature necessary of the monitoring and evaluation process, the updating process that comprises the interval of time between this 2013 update of the Commonwealth of Kentucky's hazard mitigation plan and its next iteration is concrete and centralized.

Kentucky Emergency Management (KYEM) will be responsible for any updates to this statewide hazard mitigation plan.

The need for updates (namely amendments) partially will be derived from the usage of the Commonwealth Hazard Assessment and Mitigation Planning System (CHAMPS) as it will facilitate constant monitoring and evaluating of localities' mitigation activities. Through the use of CHAMPS, plans become living documents rather than static thoughts.

However, KYEM also houses the Kentucky Mitigation Council (KYMC), which meets quarterly and after every disaster declaration. The KYMC Council is comprised of KYEM, UK-HMGP, and CHR administration and staff and representatives from many Kentucky state agencies, e.g. the Department of Local Governments (DLG), the Department of Water (KDOW), and the Department of Health. The quarterly meetings of this Council explicitly will address and approve proposed updates and amendments to the Commonwealth of Kentucky's hazard mitigation plan that occur in between the approval of this 2013 update of Kentucky's hazard mitigation plan and the approval of the Kentucky's next iteration.

Addressing what would be either the 2016 or 2018 update to the Commonwealth of Kentucky's hazard mitigation plan. Again, the primary responsibility belongs to KYEM. Related to the abovementioned discussions of local outreach and "deductive planning," KYEM (with its partnering agencies UK-HMGP and CHR) will continue to conduct and document "stakeholder meetings" and trainings that all comprise the overall planning process that would be documented in the 2016 or 2018 iteration of Kentucky's hazard mitigation plan.

Depending upon whether or not the future update of the Commonwealth of Kentucky's hazard mitigation plan will be required in 2016 or 2018, the following very general timeline/schedule is presented:

If Commonwealth Hazard Mitigation Plan is Due October 2016:	
KYMC Quarterly Overview/Assessment	Each quarterly meeting in 2014
Task:	Beginning:
KYMC Detailed Section Reviews	2015
Planning Process and Coordination of Local Plans	January 2015
Mitigation Strategy and Severe Repetitive Loss Strategy	April 2015
Risk Assessment	July 2015
Introduction and Plan Maintenance	October 2015
Stakeholder Meetings	October 2015
Development	October 2015
Drafting new plan	March 2016
Editing drafted plan	July 2016
Submission of the updated plan	October 2016

If Commonwealth Hazard Mitigation Plan is Due October 2019:	
KYMC Quarterly Overview/Assessment	Each quarterly meeting in 2017
Task:	Beginning:
KYMC Detailed Section Reviews	2018
Planning Process and Coordination of Local Plans	January 2018
Mitigation Strategy and Severe Repetitive Loss Strategy	April 2018
Risk Assessment	July 2018
Introduction and Plan Maintenance	October 2018
Stakeholder Meetings	October 2018
Development	October 2018
Drafting new plan	March 2019
Editing drafted plan	July 2019
Submission of the updated plan	October 2019

D. Including an Analysis of Whether the Previously Approved Plan’s Method and Schedule Worked, and Describing Which Elements or Processes Were Changed, If Applicable

The Commonwealth of Kentucky’s previous hazard mitigation plan update (2010²) (henceforth referred to as “2010 Update”) focused almost exclusively upon the Community Hazards Assessment and Mitigation Planning System (CHAMPS) role in monitoring, evaluating, and updating that iteration of Kentucky’s hazard mitigation plan. The format of the “Plan Maintenance” section in the 2010 Update traced the proposed monitoring, evaluating, and updating activities of CHAMPS across all areas of the planning process. For example, CHAMPS would monitor and evaluate coordination of local mitigation planning by providing “locals with the opportunity to search data, apply for grants, and to update their plans. The CHAMPS database structure was developed to create a synergized flow between local mitigation plans and state mitigation plans [2010, p. 263].”

² Kentucky Emergency Management (KYEM). [2010]. *Kentucky State Hazard Mitigation Plan: 2010 Edition*. Louisville and Frankfort, KY: Kentucky Emergency Management.

The following table summarizes the Plan Maintenance strategy of the 2010 Update that used CHAMPS as the fulcrum upon which all of plan maintenance turned:

<i>Section to Be Monitored</i>	<i>Primacy of CHAMPS in 2010</i>
Planning Process	<ul style="list-style-type: none"> • CHAMPS would record individual hazard mitigation plans. • CHAMPS would record (“capture”) and track the individuals responsible for monitoring their pre-assigned portions of the Commonwealth of Kentucky’s hazard mitigation plan. • CHAMPS would keep a database where coordination between agencies and individuals was similarly tracked and, thusly, kept current. • CHAMPS would link stakeholders et al. to the most current hazard mitigation planning programs and products. • Users of CHAMPS could update their plans in real-time as process changes and updates occurred.
Risk Assessment	<ul style="list-style-type: none"> • CHAMPS would capture real-time hazard occurrence and loss data. • CHAMPS would capture the data needed to produce more inclusive Benefit-Cost Analyses (BCAs). • CHAMPS would capture exposure data that would improve hazard vulnerability assessments and loss estimations. • Implicit in the capture of much-improved data is better, more efficient monitoring and evaluation.
Mitigation Strategy	<ul style="list-style-type: none"> • CHAMPS would house multiple database tables that planning stakeholders et al. would be able to populate with updated mitigation strategies, objectives, and actions in real time. If local-level planners are constantly updating their mitigation strategies, then the Commonwealth of Kentucky can constantly review and integrate localities’ strategies into its own, thus monitoring state strategies. • CHAMPS would introduce the Mitigation Action Form (MAF), which is essentially the form by which those applying for mitigation action and projects formally request review by KYEM before being submitted to FEMA for approval. MAFs imply a constant source of mitigation action that helps the Commonwealth of Kentucky monitor its mitigation actions. • CHAMPS would keep a database of state capabilities that, again, would and could be updated in real time. • CHAMPS could track avoided losses.
Coordination of Local Mitigation Planning	<ul style="list-style-type: none"> • The primary advantage of and motive for CHAMPS: With all of the abovementioned real-time data collection and database management, local jurisdictions would have more input into state planning activities and more ability to dynamically plan for themselves.
Plan Maintenance	<ul style="list-style-type: none"> • CHAMPS would offer a comprehensive planning system.

(For reference and further elaboration, the full Plan Maintenance portion of the 2010 Update has been provided as an appendix to this 2013 update of the Commonwealth of Kentucky's hazard mitigation plan. It is **Appendix 6-5**.)

While during the writing of the 2010 Update, CHAMPS was relatively new in terms of implementation (thus the reliance upon the future tense for verbiage in the 2010 Update in describing CHAMPS' intended role), by the time of this writing, much of CHAMPS has become fully implementable and focus regarding the system has evolved toward improving functionality and implementation and expanding the system's scope. Such improvement and expansion is identified through "versions" of the CHAMP System. Training throughout Kentucky in CHAMPS has been concluded successfully for Version 1.0, and training generally has been implemented across Kentucky regarding CHAMPS Version 2.0. **Appendix 6-6** provides a full report on CHAMPS' Version 1 training.

The point is that much of the proposed use of CHAMPS in terms of monitoring, evaluating, and updating Kentucky's hazard mitigation plans that was articulated in the 2010 Update has been implemented, even if in a limited sense that will become more functional and more usable in increasing "versions" of the CHAMP System.

The 2010 Update's approved method, schedule, and processes for monitoring, evaluating, and updating Kentucky's hazard mitigation plans, then, has worked. Even if some of the functions of CHAMPS are limited, localities trained in the system can use it in the methods described in the 2010 Update. CHAMPS is functional for monitoring, evaluating, and updating hazard mitigation plans.

However, changes to the method, schedule, and processes involved in monitoring, evaluating, and updating Kentucky's hazard mitigation plans have been made in planning and writing this 2013 update of the Commonwealth of Kentucky's hazard mitigation plan that are more general, more organizational than those specified to CHAMPS.

As described above, CHAMPS is not the sole system by which plan monitoring, evaluation, and updating will occur. CHAMPS is an important system and it is making and will make monitoring, evaluating, and updating more efficient and more transparent for localities and the Commonwealth. But, in articulating the focus that statewide hazard mitigation is largely an administrative function where the Commonwealth of Kentucky (through its executive agencies and relevant coordinating organizations) simply aims to facilitate and coordinate hazard mitigation activities for the localities that experience the hazards, it is necessary to include and to articulate that bureaucratic systems (i.e. the successful administration of agencies involved in hazard mitigation) primarily ensure monitoring, evaluation, and updating of hazard mitigation plans and subsequent mitigation activities. Again, as abovementioned, such monitoring et al. mechanisms rely upon frequent reporting requirements (both formal and informal) and the quotidian actions of project grant and planning grant managers, i.e., the results of local outreach (which keep project grant/planning grant managers apprised and updated of mitigation plan compliance and mitigation activity), the increase of mitigation options that results from “deductive planning,” and geographic specialization of staff (i.e., one person has responsibility as an expert in all mitigation activity for a region).

CHAMPS certainly better facilitates such quotidian activities, but people (agency employees, local mitigation managers, stakeholders, and individuals affected by hazards) comprise the primary mechanism for monitoring, evaluation, and improvements necessary for updates.

Commonwealth of Kentucky Enhanced Hazard Mitigation Plan: 2013 Version

PLAN MAINTENANCE

PART II:

Monitoring the Progress of Mitigation Activities

A. Describing How Mitigation Measures and Project Closeouts Will Be Monitored

Monitoring mitigation measures and project closeouts are obviously connected to the monitoring of the Commonwealth of Kentucky's hazard mitigation plan as a whole. A state's hazard mitigation plan can only formulate and describe administrative capacity. Such a statewide effort can only plan for and describe *how* it will facilitate the needs of the localities that comprise the actual state. Its goals can only be administrative goals; its actions are limited to the actions of the localities comprising the state. Thus, if mitigation actions and projects are the primary method for a locality to protect itself from future hazards, then the state properly monitoring and evaluating those actions implies that the state is properly monitoring and evaluating its hazard mitigation plan.

Consequently, the previous discussion of monitoring the Commonwealth of Kentucky's hazard mitigation plan applies here: Frequent reporting, local outreach through "deductive planning" and geographic specialization, and Kentucky's CHAMP System all are the primary mechanisms by which localities' mitigation actions and projects will be monitored.

To be sufficiently thorough, the mitigation measure monitoring through frequent reporting, local outreach, and CHAMPS will occur as follows:

REQUIREMENT §201.4 (c)(5)(ii):

The Commonwealth of Kentucky must include a system for monitoring implementation of mitigation measures and project closeouts.

Frequent Reporting Requirements:

Frequent reporting (whether through formal vehicles such as Quarterly Reports or through informal vehicles such as KYEM staff member accountability to a specific geographic area along with the internal document referred to as the “Project Tracker”) is, by definition, about mitigation measure/project management. KYEM, UK-HMGP, CHR, KYMC, FEMA et al. all request and require and submit themselves to reporting about mitigation measures. This was the connection between frequent reporting and monitoring of the Commonwealth of Kentucky’s plan itself: The argument is conveyed that monitoring mitigation measures *is* monitoring the Commonwealth’s hazard mitigation plan.

The following list specific reports that KYEM uses to monitor mitigation measure and project closeout activity:

- 1) FEMA’s Quarterly Report requirement
- 2) KYEM “Project Tracker” (**Appendix 6-1**)
- 3) KYEM “Individual Project Progress Report” (**Appendix 6-7**)
- 4) Period of Performance Extension Deadline Reminders (**Appendix 6-8** and **Appendix 6-9**)
- 5) Final Invoice Reminder (**Appendix 6-10**)
- 6) Periodic Site Visits

The FEMA Quarterly Report

The FEMA Quarterly Report monitors mitigation measures and project closeouts through its being the single mechanism that can formally compel localities to report about the status of their projects (as discussed previously). The FEMA Quarterly Report compels individual local project managers (“sub-applicants”) to report how much money has been spent toward a project in a given quarter, to specify the progress made on such a project, to project future progress toward the next quarter, and to consider project closeout dates.

KYEM “Project Tracker”

Kentucky Emergency Management’s (KYEM’s) “Project Tracker” is an internal document centrally held and administered by the State Hazard Mitigation Officer (SHMO). Using formal power within the agency, the SHMO is able to compel KYEM (and UK-HMGP) staff to report on the status of projects over which they manage. The “Project Tracker” is interactive and is updated regularly.

TERMINOLOGY:

PROJECT MANAGER VS. SUB-APPLICANT

PROJECT MANAGER:

As its name implies, an approved mitigation project will be administered (managed) by one or more project managers. This is a general term, then.

SUB-APPLICANT:

*Approved mitigation projects in Kentucky, though, typically have two (2) project managers: The local jurisdiction initially applies for a mitigation project. It applies first to Kentucky Emergency Management (KYEM) which, if approved by KYEM, is sent to the Federal Emergency Management Agency (FEMA) for approval (which allows for the funds used to partially reimburse the local jurisdiction for the project). This process means that an approved mitigation project will have a local project manager and a state-level (KYEM) project manager. As it is the state who formally submits a mitigation project to FEMA, it becomes the **applicant**. This makes the local jurisdiction’s project manager the **sub-applicant**.*

KYEM “Individual Project Progress Report”

The “Individual Project Progress Report” (IPPR) is another internal document to KYEM (and UK-HMGP and CHR, where applicable). It is similar in function to the FEMA Quarterly Report. The main difference between FEMA’s Quarterly Report and the KYEM “Individual Project Progress Report” lies with who is responsible for completing the reports. FEMA Quarterly Reports are to be completed by “sub-applicants.” “Individual Project Progress Reports” are to be completed by KYEM/UK-HMGP “project managers.” The link between the IPPR and the “Project Tracker” involves the IPPR simultaneously being a redundancy system and the individual data points that, in aggregate, comprise the “Project Tracker.”

Period of Performance Extension Deadline Reminders

The Period of Performance Extension Deadline Reminders (POP-EDR) simply are form statements sent from KYEM Project Managers to Sub-Applicants reminding the Sub-Applicants to request an extension of the Period of Performance (POP) if they think they will need it. The reminders are sent 180 and 90 days prior to the Period of Performance deadlines. One hundred eighty (180) days begins the timeline within which Project Managers can formally request extensions. Sixty (60) days before POP is the deadline after which POP extensions cannot be requested. Thirty (30) days before the 60-day deadline allows Project Managers ample time to fill out and submit a POP Extension Request Form (ERF) if the Sub-Applicant wishes to request a project POP extension.

Final Invoice Reminder

Like the POP-EDR, the Final Invoice Reminder (FIR) simply is a form statement sent from KYEM Project Managers to Sub-Applicants reminding the Sub-Applicants, essentially, of the Period of Performance deadline. The FIR is sent forty (40) days prior to the Period of Performance deadline. The purpose of the form statement is to remind Sub-Applicants to pay any remaining invoices from subcontractors (where relevant) so that the Sub-Applicant can prepare its final invoice for reimbursement that is sent to Kentucky Emergency Management to be paid using money awarded by FEMA. The 40-day prior to POP deadline is in acknowledgement that, while technically the Sub-Applicant has 90 days past the POP deadline to complete invoicing Kentucky Emergency Management for reimbursement of funds spent toward the mitigation measure, the Sub-Applicant cannot ask for reimbursement for work that was performed by subcontractors (that would then be partially reimbursed by KYEM through FEMA) past the Period of Performance deadline.

Local Outreach

Local outreach is and will be focused upon mitigation measures, projects, and subsequent project closeouts: “Deductive planning” involves presenting localities with a wider array of mitigation options, mainly mitigation measures and projects. Geographic specialization means a KYEM (or UK-HMGP) staff expert in one area, accountable to all mitigation measures, projects, and project closeouts in one area of Kentucky. Again, monitoring mitigation measures *is* monitoring the Commonwealth of Kentucky’s hazard mitigation plan.

CHAMPS:

The Community Hazard Assessment and Mitigation Planning System (CHAMPS) began as a means to monitor mitigation measures. This is still the System’s animus. Using the current system implemented at the time of this writing, specifically, CHAMPS simplifies, streamlines, and creates transparency for mitigation measure monitoring by allowing the:

- Reporting of damage amounts, number of affected communities, and hazard types for specific incidents and disasters;
- Reporting of threshold information for counties during and after a disaster;
- Reporting of project grant timelines for each federally-declared disaster;
- Reporting of mitigation funds available by project type for each disaster;
- Coordination of briefings before, during, and after disasters and project applications;
- Reviewing and tracking of Mitigation Action Forms (MAFs), project applications, and project work in a streamlined manner;
- Tracking of the cost-effectiveness of projects at both the state and community levels;
- Rendering of geospatial projects across the Commonwealth of Kentucky;
- Tracking of fund-usage and cost-effectiveness of mitigation funds and or losses avoided due to mitigation funding.

B. Identifying a System for Reviewing Progress on Achieving the Goals Articulated in the Commonwealth of Kentucky’s Hazard Mitigation Strategy

Kentucky Emergency Management (KYEM) and, thus, the Commonwealth of Kentucky as an entity separate from the localities which comprise it is (necessarily) directed by one goal regarding the mitigation of hazards that affect Kentucky’s localities: To facilitate and coordinate the individual mitigation activities of the localities that comprise the Commonwealth of Kentucky. The above discussion identifies the system for reviewing progress on achieving this overarching administrative goal: Through frequent reporting both from the localities themselves and through project managers overseeing locality mitigation measures via the abovementioned mechanisms, through local outreach where deductive planning is performed and in recognition of the efficiency of “unity in the executive” whereby project managers are assigned, accountable, and specialize in one geographic area of Kentucky, and through the CHAMP System progress toward effective facilitation and coordination of the mitigation goals of Kentucky’s localities will continually be reviewed.

With a mitigation goal defined broadly as facilitating and coordinating the mitigation actions of Kentucky’s local jurisdictions, one particularly useful method for reviewing the progress toward achieving that goal involves eliciting feedback.

Two examples of such feedback solicitation are provided in **Appendix 6-11** and **Appendix 6-12**. **Appendix 6-11** shows screenshots of an electronic survey sent via e-mail to a local project manager (sub-applicant) who has recently completed and closed out a Hazard Mitigation Grant Program (HMGP)-funded mitigation action.

Appendix 6-12 shows a similar survey soliciting feedback regarding the HMGP program from sub-applicants with open HMGP-funded projects. This survey is administered annually and, again, usually administered via e-mail to the local project manager/sub-applicant.

D. Identifying a System for Reviewing Progress on Implementing Activities and Projects of the Commonwealth of Kentucky's Hazard Mitigation Strategy

The 2013 Update of the Commonwealth of Kentucky's hazard mitigation plan does contain a mitigation strategy that aids in its overarching goal of facilitating and coordinating the mitigation strategies and subsequent measures of the localities that comprise the seemingly separate entity known as "the state." Such a statewide strategy involves *Public Good-Type projects*.

The *Public Good-Type project* refers to those measures whose results provide better tools and mechanisms to benefit mitigation activity universally. The *Public Good-Type project* is a local example of a general theory: The public good.

The public good is generally defined as a good that individuals desire but is not purchased by an individual because the individual cannot exclude others from using the good and because the good may be able to be used by more than one person without consumption of that good being affected. Thus, if the good, naturally, is consumable by more than one person and one person cannot exclude another person from using the good that can be consumed by more than one person simultaneously, then there is little to no incentive for one person to purchase that good.

The same concept underlies the *Public Good-Type project*. Better hazard data, better hazard assessment methodology, universal planning and reporting mechanisms, et al. benefit all of the localities within Kentucky. Better hazard data et al. can be consumed simultaneously by multiple localities without the effects being diminished and a locality cannot (feasibly) exclude other localities from the better hazard data et al. Thus, why should one locality take sole responsibility for information and process improvement that benefits all localities?

So, the Commonwealth of Kentucky (through KYEM) can offer strategies that will result in these *Public Good-Type projects* which are beneficial for all of Kentucky's localities.

Implementation and progress-review of *Public Good-Type projects* is conducted by KYEM. The nature of the *Public Good-Type project* ensures that KYEM track its progress: Essentially an *Public Good-Type project* is a mitigation project applied for *other Commonwealth agencies* through FEMA and administered by KYEM. For example, listed in Mitigation Strategy section of this 2013 update of Kentucky's hazard mitigation plan is an *Public Good-Type project* toward better identifying karst. Karst identification benefits all localities within Kentucky and, thusly, no one locality has the incentive to unitarily take responsibility for all karst identification. Consequently, a Kentucky agency—the Kentucky Geological Society (KGS)—will apply to FEMA to obtain resources that would allow KGS (and, thus, the Commonwealth of Kentucky) to implement a karst identification initiative. If FEMA approves the application, KYEM will oversee the mitigation project as it would oversee a mitigation measure project undertaken by a sub-applicant within a Kentucky locality.

It is implied, then: All mechanisms described above apply to the review of progress of the *Public Good-Type project* which, in essence, comprises the Commonwealth of Kentucky's Mitigation Strategy.

C. Addressing Modifications That Have Been Made to the System of Mitigation Activity Initiation, Status, and Completion Described in the 2010 Update

As previously stated, the 2010 update of the Commonwealth of Kentucky's hazard mitigation plan (2010 Update) relied solely upon the potential of the CHAMP System to monitor, evaluate, and update mitigation planning and to track the initiations, status, and completion of mitigation activities.

As aforementioned, while a hypothetical for the 2010 Update, all that was promised from CHAMPS in the 2010 Update is, at least in a limited sense, implementable. In other words, there is no change from the 2010 Update to this 2013 update about the intent and role of CHAMPS in monitoring the progress and completion of mitigation activity.

Rather, what has been modified for this 2013 update of Kentucky's hazard mitigation plan is the rhetorical relegation of CHAMPS to a role *within* the overall and explicitly articulated administrative structure of Kentucky Emergency Management (KYEM). CHAMPS is a tool that will provide efficiency and transparency to the overarching mitigation goal of KYEM (and, hence, the Commonwealth of Kentucky) to facilitate and coordinate the mitigation activity of the localities that comprise the Commonwealth.

E. Addressing That Mitigation Actions Defined in the 2010 Update Were Implemented As Planned

One relevant criticism of the 2010 update of the Commonwealth of Kentucky's hazard mitigation plan (2010 Update) involves its lack of clarity in distinguishing between mitigation actions over which Kentucky Emergency Management (KYEM) (and, hence, Kentucky) had direct control and, thus, could be directly accountable and those mitigation actions over which KYEM could only provide indirect aid.

This 2013 update of Kentucky's hazard mitigation plan limits the scope (and, hence, the imaginary locus of control over its localities) of Kentucky's direct mitigation activity role to implementing *Public Goods-Type* mitigation actions and providing direction, facilitation, and coordination to support to the localities that actually experience the natural hazards that affect Kentucky.

Provided in ***Appendix 4-1*** is a tabular assessment of the 2010 Update mitigation actions.

The gist of the assessment is that, generally and accounting for areas where KYEM would have had little direct authority or control, the 2010 Update's mitigation actions were implemented as planned.