

SECTION 5- Plan Maintenance Process

This section provides an overview of the overall strategy for plan maintenance and outlines the method and schedule for monitoring, updating, and evaluating the plan. The chapter also discusses the process of continued public involvement.

5.1 Monitoring, Evaluating, and Updating the Plan

44 CFR Requirement 201.6(c)(4): The plan maintenance process shall include a section describing the method and schedule of monitoring, evaluating, and updating the mitigation plan within a five-year cycle.

5.1.1 Hazard Mitigation Planning Committee

With adoption of this plan, the Warren County Hazard Mitigation Planning Committee (HMPC) will be tasked with monitoring, evaluating, and maintaining the plan. BRPC coordinates with the County Emergency management Director and the participating jurisdictions during the plan maintenance process. Therefore, as and when required, meetings will be held with the HMPC.

During the plan maintenance process, the committee will review each goal and objective to determine their relevance to changing situations in the county, as well as changes in State or Federal policy, and to ensure that they are addressing current and expected conditions. The committee also will review the risk assessment portion of the plan to determine if this information should be updated or modified. The parties responsible for the various implementation actions will report on the status of their projects and will include which implementation processes worked well, any difficulties encountered, how coordination efforts were proceeding, and which strategies should be revised.

5.1.2 Plan Maintenance Schedule

In conjunction with the other participating jurisdictions and additional jurisdictions that may choose to participate in the future, a five-year written update of the plan will be submitted to the State Emergency Management Agency, and FEMA Region VII per Requirement §201.6(c)(4)(i) of the Disaster Mitigation Act of 2000 and adopted by participating jurisdictions within a five-year period from the final approval of this plan unless disaster or other circumstances (e.g., changing regulations) require a change to this schedule.

5.1.3 Plan Maintenance Process

Plan maintenance will involve the following process:

- Consider changes in vulnerability due to action implementation
- Document any new hazards that may arise
- Incorporate growth and development-related changes to inventories
- Document areas where mitigation actions were not effective

Changes will be made to the plan to accommodate actions that have failed or are not considered feasible after a review of their adherence to established criteria, time frame, community priorities, and/or funding resources. Updating of the plan will be enacted through written changes and submissions, as BRPC deems appropriate and necessary, and as approved by the Warren County Board of Commissioners and the governing boards of the other participating jurisdictions.

The following table lists the recommendations for developing future plans.

Table 5.1 Recommended data for future plans

Hazard	Data limitations & Recommendations
Dam failure	Missouri DNR's Division of Dam Safety completed the dam inundation maps for the high hazard dams in Warren County. DNR employed LiDAR data extracted from ArcView using HEC-GeoRAS, hydraulic analysis using HEC-RAS, and mapping using ArcView. DNR conducted the analysis using the Rapid Assessment Method, and the Detailed Method. Both these methods employ several standard assumptions about the nature of the breach and flow conditions. Currently, the Warren County EMD and the County 911 are working to put together a list of the structures that would be inundated by the high-hazard dams. When these maps are available, a more accurate analysis of Dam failure and its effects on the jurisdictions represented in the plan will be possible.
Hazardous materials	Apart from the GIS mapping, detailed analysis on each and every hazardous material event from the County emergency operations plan; developing buffer maps for each of the hazard location; and estimated cost calculated for fixing the clean-ups per incident hazard would help in calculating the estimated losses for the future plan updates.
Utility interruptions/power failure	Apart from GIS mapping of the hazard location, loss estimates from the electric companies; engineering studies and plans on the water & wastewater system would help in calculating the estimated losses for the future plan updates.
Hailstorms	Apart from GIS mapping, the dollar values of estimated property loss; any crop insurance paid for the damages from USDA's Risk Management Agency would help in calculating the estimated losses for the future plan updates.

Hazard	Data limitations & Recommendations
Thunderstorms & high winds	USDA's Census for Agriculture, Claims data from USDA's Risk Management Agency along with the 2010 U.S. Census; HAZUS-MH data would help in calculating the estimated losses for the future plan updates.
Tornadoes	Apart from GIS mapping, the dollar values of estimated property loss values with the help of an engineer; loss estimates from the electric companies; and any other updates from the County emergency operations plan; and HAZUS-MH data would help in calculating the estimated losses for the future plan updates.
Severe winter weather	USDA's Census for Agriculture, Claims data from USDA's Risk Management Agency along with the 2010 U.S. Census; HAZUS-MH data would help in calculating the estimated losses for the future plan updates.
Transportation	As there no transportation studies conducted, any estimated costs of traffic crashes, cost per injury based on the severity can be used in calculating the estimated losses for the future plan updates.
Floods	<p>The information on the repetitive loss properties was the only information available for calculating the loss estimates. The HAZUS maps shared by SEMA and the locally available data was used to calculate the loss estimates. HAZUS-MH would help in modeling flood vulnerability and flood loss. As mentioned in the State Hazard Mitigation Plan 2010, by integrating the Digital Flood Insurance Rate Map (DFIRM) depth grids also might provide some enhanced flood vulnerability/loss estimate capability. The analysis would provide the number of buildings impacted, estimates of the building repair costs, and the associated loss of building contents and business inventory. These loss estimates along with the knowledge shared by the local planning and engineering staff would provide a detailed loss estimates for the flood hazard.</p> <p>Boonslick Regional Planning Commission recently received CDBG land use planning grant funding which will analyze the floodplain maps; levee boundaries; and other related hazards. This information would be helpful in the future updates of the plan.</p>
Levee failure	<p>There are several non-certified levees in the County apart from the levees located along the Missouri River</p> <p>The State of Missouri does not have a single comprehensive inventory of levee systems.</p> <p>HAZUS-MH would help in determining a detailed loss estimate for levee failures provided if all the levees can be detected on the computer terrain models.</p>
Earthquake	Apart from GIS mapping, HAZUS-MH generated losses and the estimated dollar values of losses with the help of an engineer would provide the vulnerability and estimated losses to earthquakes.
Terrorism	Information from the Regional Homeland Security Advisory Council's database on the past events.
Wildfire	The structures information needs to be overlayed along the Wildland Urban Interface maps to look at the potential impacts.

5.2 Incorporation into Existing Planning Mechanisms

44 CFR Requirement §201.6(c)(4)(ii): [The plan shall include a] process by which local governments incorporate the requirements of the mitigation plan into other planning mechanisms such as comprehensive or capital improvement plans, when appropriate.

Where possible, plan participants will use existing plans and/or programs to implement hazard mitigation actions. Based on the capability assessments of the participating jurisdictions, communities in Warren County will continue to plan and implement programs to reduce loss of life and property from hazards. This plan builds upon the momentum developed through previous related planning efforts and mitigation programs, and recommends implementing actions, where possible, through the following means:

- Warren County Comprehensive Plan 1995
- Warren County Emergency Operations Plan 2005
- Comprehensive Economic Development Strategy 2009
- Regional Transportation Plan 2009

The governing bodies of the jurisdictions adopting this plan will encourage all other relevant planning mechanisms under their authority to consult this plan to ensure minimization of risk to natural hazards as well as coordination of activities.

5.3 Continued Public Involvement

44 CFR Requirement §201.6(c)(4)(iii): [The plan maintenance process shall include a] discussion on how the community will continue public participation in the plan maintenance process.

The general public will be encouraged to attend Hazard Mitigation Planning Committee meetings through media coverage, published notices, reminders or announcements at civic meetings, and possibly public speaking engagements. Boonslick Regional Planning Commission will continue to host any hazard mitigation announcements or information, as well as a copy of the latest plan, on the BRPC website (www.boonslick.org).

A public hearing(s) to receive public comment on plan maintenance and updating will be held during the update period. When the HMPC reconvenes for the update, it will coordinate with all stakeholders participating in the planning process, including those who joined the HMPC after the initial effort, to update and revise the plan. Public notice will be posted and public

participation will be invited, at a minimum, through available website postings and press releases to local media outlets.