

## **Introduction**

Following the severe weather, tornado, and flood disaster that was declared in the spring of 2002 (DR-1412), Missouri's State Emergency Management Agency (SEMA) received flood buyout project proposals from 23 communities across the state. Fortunately, they were able to help some of these communities with federal mitigation grant funding provided through the Federal Emergency Management Agency (FEMA). After Nov. 1, 2004, communities like these will still be eligible for federal disaster public assistance and individual assistance, but will not be eligible for mitigation assistance unless they have an approved hazard mitigation plan on file.

Under the initiative set forth by SEMA, the Missouri Association of Councils of Government (MACOG) agreed to meet the challenge of developing plans for cities and counties throughout the state. SEMA's initiative further states that, due to time and funding limitations, the plans developed by Missouri's regional planning commissions should cover natural hazards only. Manmade and/or technological hazards are not addressed in this plan, except in the context of cascading damages.

The 19 regional planning commissions of MACOG provide an effective way for local governments to work together to share technical staff and address common problems in need of an area-wide approach. They also can effectively deliver programs that might be beyond the resources of an individual county or municipal government. The intent of the regional planning commissions in Missouri is to be of service to their member counties and municipalities and to bring an organized approach to addressing a broad cross-section of area-wide issues. They also are available to assist their member entities in coordinating the needs of the region with state and federal agencies or with private companies or other public bodies.

Most of the rural regional planning commissions in Missouri were formed under Chapter 251 of the Revised Statutes of the State of Missouri. All regional councils in Missouri operate as "quasi-governmental" entities. In Missouri, regional planning commissions are advisory in nature, and county and municipal governments hold membership on a voluntary basis.

The role of a regional planning commission varies across the state, depending upon the desires of the member counties and municipalities and their representatives. Nonetheless, the primary role of the regional planning commission is to provide a technical staff capable of providing sound advice to its membership and working for coordination of various planning and infrastructure needs among the various counties and municipalities, as appropriate.

The Pulaski County hazard mitigation plan was prepared by the staff of the Meramec Regional Planning Commission. MRPC, a member of MACOG, was created Jan. 23, 1969, by then Gov. Warren E. Hearnes. The commission serves the eight-county area of Crawford, Dent, Gasconade, Maries, Osage, Phelps, Washington and Pulaski counties as well as 33 municipalities.

Citizens and public organizations have participated in the process. This effort will be sustainable over the long term because it enjoys grassroots support that stems from a sense of local and individual ownership. Through SEMA's Scope of Work, Pulaski County contracted with Meramec Regional Planning Commission and participated fully in the preparation of the plan. Once this plan is approved, Pulaski County and its cities will be eligible for future mitigation assistance from FEMA and will be able to more effectively carry out mitigation activities to lessen the adverse impact of future disasters within the county.

## **Assurance statements of compliance with FEMA**

This city/county mitigation plan complies with SEMA's and FEMA's planning guidance; FEMA regulations, rules, guidelines and checklists; Code of Federal Regulations; and existing federal and state laws; and such other reasonable criterion as the president/governor, federal/state congresses and SEMA/FEMA may establish in consultation with city/county governments while the plan is being developed. This plan also meets the minimum planning requirements for all FEMA mitigation programs, such as the Flood Mitigation Assistance (FMA) Program, the Pre-Disaster Mitigation (PDM) Program, and the Hazard Mitigation Grant Program (HMGP), and where appropriate, other FEMA mitigation related programs such as the National Earthquake Hazards Reduction Program (NEHRP), the National Flood Insurance Program (NFIP) and the Community Rating System (CRS).

## **Basis for planning authority**

The basis for authority to create a natural hazard mitigation plan lies in Section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), 42 U.S.C. 5165. This act was enacted under Section 104 of the Disaster Mitigation Act of 2000 (DMA 2000), P.L. 106-390. Section 104 is the legal basis for FEMA's Interim Final Rule for 44 CFR Parts 201 and 206, published in the Federal Register on February 26, 2002.

## **Adoption by local governing bodies**

Participation of local governing bodies as stakeholders is critical to successful mitigation implementation. As former SEMA Deputy Director Beaufort C. "Buck" Katt writes:

"One thing we have learned over the years is that mitigation programs crumble unless locals, both private and public, have a stake in the process; they simply must feel a sense of ownership for the program to be successful. We strongly believe that this effort will be successful and sustainable over the long term only if it enjoys grassroots support that stems from a sense of local and individual ownership. For this reason, SEMA headquarters staff and Area Coordinators will support this initiative by providing training and technical assistance to the RPCs, but the grant funding will go to the participating counties/cities. The participating counties/cities will use SEMA's scope of work to contract with the RPCs and must participate fully in the preparation of the mitigation plan. Once the mitigation plans are completed and approved, these counties/cities will be eligible for future mitigation assistance and will be able to more effectively carry out mitigation activities to lessen the adverse impact of future disasters in those communities."

Therefore, MRPC has collaborated with each local government to assure participation and sense of ownership among local government officials.





## **Acknowledgements and special thanks**

The Missouri State Emergency Management Agency was exceptionally helpful in preparing this plan. SEMA staff answered a multitude of questions and provided information to all the RPCs in Missouri. Much of this information was available via the MACOG bulletin board website, with much thanks to Doug Hermes and MACOG for constantly posting new material to the site.

## **Planning process**

Pulaski County's hazard mitigation plan was developed by the Meramec Regional Planning Commission. MRPC formed a planning committee comprised of representatives from each of Pulaski County's cities, city and rural fire departments, ambulance districts, police departments, the county health department, local businesses, utility companies and the American Red Cross. This cross section of local representatives was chosen for their experience and expertise in emergency planning and community planning for Pulaski County.

Meramec Regional Planning Commission's Environmental Programs Department served as project manager for the Pulaski County Hazard Mitigation Plan. Two planning committee meetings were held over three weeks to develop ideas for hazard mitigation in Pulaski County. All meetings were advertised on MRPC's website, in local newspapers and at the MRPC office in St. James. The meetings were held at the Pulaski County Courthouse. Agendas, minutes and sign in sheets from each meeting are available at the Meramec Regional Planning Commission, 4 Industrial Drive in St. James, Missouri.

In accordance with Missouri's "Sunshine Law" (RSMo 610.010, 610.020, 610.023, and 610.024), the public was notified each time the plan, or sections of the plan, was presented for review. Input from each public official (city and county) was solicited by mailing an explanatory letter and a copy of the particular draft. All planning committee members were given a draft of each section as it became available. Members of the planning committee then reviewed the plan drafts and provided valuable input to MRPC staff. The planning committee performed a needs assessment, developed goals, objectives and recommendations and prioritized mitigation projects. Additionally, MRPC contacted many employees of the county and its cities to gain needed information concerning city services, plans and capabilities. Drafts were made available to any interested citizen.

MRPC staff sought public input at each of the planning committee meetings by posting notices in local media. Drafts of the Pulaski County Hazard Mitigation Plan were also available for download and review from MRPC's website.

## **Participants and jurisdictions invited to participate**

Bill Ransdall – Pulaski County Presiding Commissioner  
Bill Farnham – Pulaski County Associate Commissioner  
Dennis Thornsberry - Pulaski County Associate Commissioner  
Mayor James Morgan – City of Crocker  
Mayor Daryl French – City of Dixon  
Mayor Bob Wall – City of Richland  
Mayor George Sanders – City of St. Robert  
Mayor Cliff Hammock – City of Waynesville  
Sheriff J.B. King – Pulaski County Sheriff’s Department

## **Timeframe for preparation**

MRPC staff began researching and writing the Pulaski County Hazard Mitigation Plan in January 2, 2008. The planning committee met \_\_\_\_\_ and \_\_\_\_\_. Staff completed the plan draft in early August and sent it to all planning committee members for final review. The plan was submitted to SEMA in \_\_\_\_\_.

## **Executive Summary**

### **Plan Mission**

The mission of the Pulaski County Hazard Mitigation Plan is to substantially and permanently reduce the county’s vulnerability to natural hazards. The plan is intended to promote sound public policy designed to protect citizens, critical facilities, infrastructure, private property and the natural environment. This can be achieved by increasing public awareness, documenting resources for risk reduction and loss-prevention, and identifying activities to guide the community towards the development of a safer, more sustainable community.

### **Plan Organization**

The Pulaski County plan is developed and organized within the rules and regulations established under the 44 CFR 201.6. The plan contains a mitigation action listing, a discussion on the purpose and methodology used to develop the plan, a profile on Pulaski County, as well as, the hazard identification and vulnerability assessment of natural hazards. In addition, the plan offers a discussion of the community’s current capability to implement the goals, objectives and strategies identified herein. To assist in the explanation of the above-identified contents there are several appendices included which provide more detail on specific subjects. This plan is intended to improve the ability of Pulaski County to handle disasters and will document valuable local knowledge on the most efficient and effective ways to reduce loss.

## **Plan Financing**

The Pulaski County Hazard Mitigation Plan has been financed by Pulaski County.

## **Plan Participation**

The Pulaski County Hazard Mitigation Plan is developed as the result of a collaborative effort among Pulaski County, City of Crocker, Dixon, Waynesville, Richland, and St. Robert, public agencies, non-profit organizations, the private sector as well as regional, state and federal agencies. Interviews were conducted with stakeholders from the community, and several meetings were conducted during the plan development. Additionally, through public committee meetings, press releases and draft plan display, ample opportunity was provided for public participation. Any comments, questions and discussions resulting from these activities were given strong consideration in the development of this plan. A mitigation planning committee guided and assisted the Meramec Regional Planning Commission in the development of the plan.

## **Hazards Identified**

The criteria provided by FEMA for the development of the Hazard Mitigation Plan identifies 11 natural hazards that Pulaski County must address: winter storms/extreme cold, severe thunderstorms/tornadoes, hurricanes/coastal storms, floods, riverine/coastal erosion, drought/heat wave, landslides/sinkholes, earthquakes, tsunami events, volcanoes, wildfires, and dam/levee failure. However, four of these hazards were deemed not applicable to Pulaski County as it is not near a mountainous or coastal area. Therefore, hurricanes/coastal storms, riverine/coastal erosion, landslides/sinkholes, tsunami events, and volcanoes were not included. The vulnerability analysis identified the following hazards as being most prevalent and posing the most potential risk to Pulaski County:

- Riverine/flash flooding
- Severe thunderstorms
- Wildfires
- Tornadoes
- Winter storms
- Droughts
- Extreme heat
- Earthquakes
- Dam failure

## **Plan Goals**

In an effort to ensure the mission of the Pulaski County Hazard Mitigation Plan is met, the participants in the development of this plan defined and established a list of goals which are directly relevant to meeting the mission of the plan. The following is a list of the goals identified by the participants of this plan:

1. Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning and hazard mitigation activities.
2. Reduce the potential impact of natural disasters on new and existing properties and infrastructure and the local economy.

3. Promote education, outreach, research and development programs to improve the knowledge and awareness among the citizens and industry about hazards they may face, their vulnerability to identified hazards, and hazard mitigation alternatives that can reduce their vulnerabilities.
4. Strengthen communication and coordinate participation between public agencies, citizens, non-profit organizations, business, and industry to create a widespread interest in mitigation.
5. Establish priorities for reducing risks to the people and their property with emphasis on long-term and maximum benefits to the public rather than short-term benefit of special interests.
6. Secure resources for investment in hazard mitigation

### **Mitigation Goal, Objective and Strategy organization**

This plan has established a set of goals to assist the community in fulfilling the established purpose of this plan. In an effort to ensure the goals in this plan are met, each goal is broken down into a series of objectives, which are further broken down into a series of strategies. Each strategy identifies the hazard(s) addressed by said strategy, the type of strategy, responsible party/organization, monitoring and evaluation indicators, potential funding sources and a target completion date.

## **Plan Implementation**

### *Adoption*

City of Crocker resolution

City of Dixon resolution

City of Richland resolution

City of St. Robert resolution

City of Waynesville resolution

Pulaski County resolution

### *Monitoring, Evaluation, Update and Revision*

The Pulaski County Hazard Mitigation Plan will be evaluated by the emergency management director and the hazard mitigation planning committee bi-annually to assess how effective implemented mitigation strategies have been. Monitoring and evaluation involves the ongoing process of compiling information on the outcomes that result from implementing the hazard mitigation strategies contained in this plan or is a measure of success the planning area has seen through the implementation of each strategy. It also provides the planning area with an opportunity to make necessary revisions as local conditions change. Changes in development, technology or the capability of the planning area to implement the strategies adopted in the plan could necessitate the need for revisions in the plan itself. There are many issues that the monitoring and evaluation process should include:

- The adequacy of the planning areas resources to implement the strategies as adopted;
- Any redundancy among strategies that can be eliminated to free-up resources;
- Whether adequate funding is available for implementation of the strategies as adopted;
- Any technical, legal or coordination problems associated with implementation;
- Whether mitigation actions are being implemented according to the prioritization scope.

However, the primary issue that monitoring and evaluation should address is whether the vulnerability of the planning area has decreased as a result of the strategies adopted in the plan. Where vulnerability has decreased, the hazard mitigation planning committee should determine why and consider implementing successful mitigation strategies in other locations. Where vulnerability has remained constant or increased, the committee should identify whether additional measures might be more successful or whether revisions should be made to existing measures. As previously noted, changes in development, technology or the capability of the planning area to implement the strategies adopted in the plan could alter the ability of the planning area to implement the mitigation strategies identified and adopted in their plan or could necessitate the need for new strategies to be identified. As a result, update and revision is a necessary part of the Pulaski County hazard mitigation planning process. While monitoring and evaluation are ongoing processes, update and revision should occur at regularly scheduled intervals. The emergency management director and a mitigation update and revision committee will be responsible for updates and revisions to the Pulaski County Hazard Mitigation Plan every

five years and following every presidentially declared disaster to access how effective implemented mitigation strategies have been.

#### *Implementation Through Existing Programs*

Pulaski County and the cities of Crocker, Dixon, Richland, St. Robert and Waynesville address planning goals and legislative requirements through the Meramec Region's Comprehensive Economic Development Strategy (CEDS), floodplain management plans (where applicable), storm water management plans, zoning ordinances, comprehensive city plans and building codes. The Pulaski County Hazard Mitigation Plan provides a series of goals, objectives, and strategies that are closely related to the goals and objectives of these existing planning programs. Pulaski County and its cities will have the opportunity to implement adopted mitigation strategies through existing programs and procedures.

#### *Continued Public Involvement*

The development of this plan has involved the public throughout. In addition Pulaski County is dedicated to the continued involvement of the public during the bi-annual review and the five-year update, as well as in the interim. Pulaski County and its encompassing jurisdictions have established strategies herein which will provide opportunity for continued public involvement. These strategies include a copy of the adopted plan to be placed at the Pulaski County Courthouse and the city hall or municipal building of each jurisdiction for public review. In addition, a copy of the plan and any proposed revisions will be displayed on the MRPC website with a phone number for the public to direct questions or comments regarding the plan to the emergency management director.

#### **Mitigation Strategy Development**

Mitigation strategies were developed in a manner to accomplish each goal and objective identified in the Pulaski County Hazard Mitigation Plan. A strategy is listed for each goal and incorporates the objectives and action items developed by the hazard mitigation planning committee.

#### *Target Completion Date*

A target completion date is established to provide a timeline for completion of the strategies identified herein. The target completion date is the date established for the project to be fully complete. Many strategies, especially those that will take multiple years to complete, will require the project manager to establish an individual timeline where benchmarks can be used to monitor the progression of the strategy.

#### *Responsible Party/Organization*

The responsible party/organization will organize the implementation of the strategy, seek out appropriate funding, oversee strategy implementation, and be a liaison between the community and any other organization participating in the project. In addition the responsible party/organization will report back to the monitoring and evaluation party regarding the progress of the strategy implementation.

### *Potential Funding Source*

It is a well-known fact that many small communities lack the resources to implement strategies that will assist in reducing the community's vulnerability to hazards. Thus, this plan identifies potential funding sources for each strategy identified herein. The funding sources are those sources that are currently available to communities and may change from year to year. As a result, the responsible party/organization for each strategy should always research funding sources not listed in this document.

### *Monitoring and Evaluation Indicators*

Monitoring and evaluation indicators are benchmarks that will allow the monitoring and evaluating party to determine if a strategy has been completely implemented.

Additionally, they will identify if a strategy is achieving the goal it was intended for. If it is found that the strategy is not successful in the community, it may need to be altered or discontinued.