

## EXECUTIVE SUMMARY

The purpose of natural hazards mitigation is to reduce or eliminate long-term risk to people and property from natural hazards. Crawford County and participating jurisdictions developed this multi-hazard mitigation plan to reduce future losses to the County and its communities resulting from natural hazards. The plan was prepared pursuant to the requirements of the Disaster Mitigation Act of 2000 and to achieve eligibility for the Federal Emergency Management Agency (FEMA) Flood Mitigation Assistance, Pre-Disaster Mitigation and Hazard Mitigation Grant Programs.

The Crawford County Multi-Hazard Mitigation Plan is a multi-jurisdictional plan that covers the following local governments and organizations that participated in the planning process:

- Crawford County
- City of Bourbon
- City of Cuba
- Village of Leasburg
- Village of St. Cloud
- City of Steelville
- City of Sullivan
- Village of West Sullivan
- Bourbon R-I School District
- Cuba R-II School District
- Steelville R-III School District
- Sullivan C-2 School District

In addition to the local governments and school districts, several other entities participated in this effort providing support and contributing to the mitigation strategy:

- *Steelville Star*
- Crawford County 9-1-1

The County's planning process followed a methodology prescribed by FEMA, which began with the formation of a Hazard Mitigation Planning Committee (HMPC) comprised of key stakeholders from Crawford County, participating jurisdictions and state and federal agencies. The Crawford County HMPC was assisted in this planning effort by the Meramec Regional Planning Commission (MRPC). The MRPC was created January 23, 1969 by then Governor Warren E. Hearnes. The commission serves the eight-county area of Crawford, Dent, Crawford, Maries, Osage, Crawford, Pulaski and Washington counties as well as 33 municipalities.

Under the initiative set forth by the Missouri State Emergency Management Agency (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 MRPC assisted the Crawford County HMPC by providing professional staff to coordinate the committee's activities and prepare the planning document. MRPC staff took the input provided by the HMPC and incorporated it into the plan document. 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.

The HMPC assessed the risks, identifying and profiling hazards threatening the county. The HMPC then determined the County's vulnerability to the identified hazards and examined the County's capability to mitigate these hazards. The County is vulnerable to a number of potential hazards and those have been identified, profiled and analyzed in this plan. Tornadoes, floods, winter storms and thunderstorms are among the hazards that can have a significant impact on the County.

Based upon the risk assessment, the HMPC identified goals for reducing risk from hazards. The goals of this multi-hazard mitigation plan are to:

**Goal 1:** Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning and hazard mitigation activities.

**Goal 2:** Reduce the potential impact of natural disasters on new and existing properties and infrastructure and the local economy.

**Goal 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.

**Goal 4:** Strengthen communication and coordinate participation between public agencies, citizens, non-profit organizations, business and industry to create a widespread interest in mitigation.

**Goal 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.

**Goal 6:** Secure resources for investment in hazard mitigation.

To meet the identified goals, the plan recommends the mitigation actions summarized in the table on the follow page. The HMPC also developed an implementation plan for each action, which identifies priority level, background information, ideas for implementation, responsible agency, timeline, cost estimate, potential funding sources and more. These additional details are provided in Chapter 4.

The multi-hazard mitigation plan has been formally adopted by the Crawford County Commissioners and the governing bodies of each participating jurisdiction and will be updated within a five-year timeframe.

**Table 4.3 Summary of Mitigation Programs and Action items Developed for Crawford County and All Jurisdictions**

Jurisdiction	Action/Measure	Mitigation Program	Goal #	Priority	Hazard Addressed
Crawford County Bourbon Cuba Leasburg St. Cloud Steelville Sullivan West Sullivan	1. Implement an education program on personal emergency preparedness.	Reducing Vulnerability of the People	1	High	All Hazards
Crawford County Bourbon Cuba Leasburg St. Cloud Steelville Sullivan West Sullivan	2. Promote the development of emergency plans by businesses.			High	All Hazards
Crawford County Bourbon Cuba Leasburg St. Cloud Steelville Sullivan West Sullivan	3. Encourage cities to obtain early warning systems and improved communications systems to minimize loss of life.			High	All Hazards
Crawford County Bourbon Cuba Leasburg St. Cloud Steelville Sullivan West Sullivan	4. Promote the use of weather radios by local residents and schools to ensure advanced warning about threatening weather.			High	Severe Storms Tornados

Jurisdiction	Action/Measure	Mitigation Program	Goal #	Priority	Hazard Addressed
Crawford County Bourbon Cuba Leasburg St. Cloud Steelville Sullivan West Sullivan	5. Partner with local radio stations to assure that appropriate warning of impending disasters is provided to all residents in the countywide listening area.	Reducing Vulnerability of the People	1	High	All Hazards
Crawford County Bourbon Cuba Leasburg St. Cloud Steelville Sullivan West Sullivan	6. Encourage and continue tree trimming programs as well as dead tree removal program.			High	Severe Storms Tornados
Crawford County Bourbon Cuba Leasburg St. Cloud Steelville Sullivan West Sullivan	7. Examine potential road and bridge upgrades that would reduce danger to residents during occurrences of natural disasters.				Flood Earthquake
Crawford County Bourbon Cuba Leasburg St. Cloud Steelville Sullivan West Sullivan School Districts	8. Encourage the construction of tornado safe rooms and/or storm shelters in areas with high population densities such as schools and large employers.			High	Severe Storms Tornados

Jurisdiction	Action/Measure	Mitigation Program	Goal #	Priority	Hazard Addressed
Crawford County Bourbon Cuba Leasburg St. Cloud Steelville Sullivan West Sullivan	1. Encourage a self-inspection program at critical facilities to assure that the building infrastructure is earthquake and tornado resistant.	Property and Infrastructure Protection	2	High	Earthquake Tornado
Crawford County Bourbon Cuba Leasburg St. Cloud Steelville Sullivan West Sullivan	2. Educate residents about the dangers of floodplain development and the benefits the National Flood Insurance Program.			High	Flood
Crawford County Bourbon Cuba Leasburg St. Cloud Steelville Sullivan West Sullivan	3. Encourage minimum standards for building codes in all cities.			Medium	All Hazards
Crawford County Bourbon Cuba Leasburg St. Cloud Steelville Sullivan West Sullivan	4. Encourage local governments to develop and implement regulations for securing hazardous materials tanks and mobile homes.			Medium	Flood Severe Storms Tornado
Crawford County Bourbon Cuba	1. Distribute SEMA brochures at public facilities and events.	Outreach and Education	3	High	All Hazards

Jurisdiction	Action/Measure	Mitigation Program	Goal #	Priority	Hazard Addressed
Leasburg St. Cloud Steelville Sullivan West Sullivan		Outreach and Education	3		
Crawford County Bourbon Cuba Leasburg St. Cloud Steelville Sullivan West Sullivan	2. Distribute regular press releases from county and city EMD offices concerning hazards, where they strike, frequency and preparedness.			High	All Hazards
Crawford County Bourbon Cuba Leasburg St. Cloud Steelville Sullivan West Sullivan	3. Encourage local residents to purchase weather radios.			High	Severe Storms Tornados
Crawford County Bourbon Cuba Leasburg St. Cloud Steelville Sullivan West Sullivan	4. Ask SEMA mitigation specialists to present information to city councils, county commission and local planning organizations.			High	All Hazards
Crawford County Bourbon Cuba Leasburg St. Cloud	5. Re-evaluate the hazard mitigation plan and merge with other community planning			High	All Hazards

Jurisdiction	Action/Measure	Mitigation Program	Goal #	Priority	Hazard Addressed
Steelville Sullivan West Sullivan					
Crawford County Bourbon Cuba Leasburg St. Cloud Steelville Sullivan West Sullivan	6. Distribute press releases by cities/county regarding adopted mitigation measures.	Outreach and Education	3	Medium	All Hazards
Crawford County	7. Encourage county health department and Red Cross to implement education/awareness campaigns on individual preparedness.			High	All Hazards
Crawford County Bourbon Cuba Leasburg St. Cloud Steelville Sullivan West Sullivan	8. Publicize city and/or county drills.			Medium	All Hazards
Crawford County Bourbon Cuba Leasburg St. Cloud Steelville Sullivan West Sullivan School Districts	1. Encourage joint meetings of different organizations/ agencies for mitigation planning	Communication Enhancement	4	Medium	All Hazards
Crawford County Bourbon Cuba Leasbur St. Cloud	2. Joint training or drills between agencies, public and private entities including schools and businesses.			Medium	All Hazards

Jurisdiction	Action/Measure	Mitigation Program	Goal #	Priority	Hazard Addressed
Steelville Sullivan West Sullivan School Districts					
Crawford County Bourbon Cuba Leasburg St. Cloud Steelville Sullivan West Sullivan	3. Pool different agency resources to achieve widespread mitigation results.	Communication Enhancement	4	High	All Hazards
Crawford County Bourbon Cuba Leasburg St. Cloud Steelville Sullivan West Sullivan	4. Encourage meetings between EMD, city/county officials and SEMA to familiarize local officials with mitigation planning and implementation and budgeting for mitigation projects.			High	All Hazards
Bourbon Cuba Leasburg St. Cloud Steelville Sullivan West Sullivan	1. Encourage communities to budget for enhanced warning systems.	Long-Term Planning	5	High	All Hazards
Bourbon Cuba Leasburg St. Cloud Steelville Sullivan West Sullivan	2. Encourage all communities to develop stormwater management plans.			Low	Flood Severe Storms

Jurisdiction	Action/Measure	Mitigation Program	Goal #	Priority	Hazard Addressed
Crawford County Bourbon Cuba Leasburg St. Cloud Steelville Sullivan West Sullivan	3. Coordinate and integrate hazard mitigation activities, where appropriate, with emergency operations plans and procedures.	Long-Term Planning	5	Medium	All Hazards
Bourbon Cuba Leasburg St. Cloud Steelville Sullivan West Sullivan	4. Encourage cities to require contractor stormwater management plans in all new development.			Low	Flood Severe Storms
Crawford County Bourbon Cuba Leasburg St. Cloud Steelville Sullivan West Sullivan	5. Encourage local governments to purchase properties in the floodplain as funds become available and convert land into public space/recreation area.			Medium	Flood
Crawford County Bourbon Cuba Leasburg St. Cloud Steelville Sullivan West Sullivan	6. Encourage communities to discuss zoning repetitive loss properties in the floodplain as open space.			High	Flood
Crawford County Bourbon Cuba	1. Work with SEMA Region I coordinator to learn about new mitigation funding opportunities.	Finding Funding	6	High	All Hazards

Jurisdiction	Action/Measure	Mitigation Program	Goal #	Priority	Hazard Addressed
Leasburg St. Cloud Steelville Sullivan West Sullivan		Finding Funding	6		
Crawford County Bourbon Cuba Leasburg St. Cloud Steelville Sullivan West Sullivan	2. Structure grant proposals for road/bridge upgrades so that hazard mitigation concerns are also met.			Medium	Flood Earthquake
Crawford County Bourbon Cuba Leasburg St. Cloud Steelville Sullivan West Sullivan	3. Work with state/local/federal agencies to include mitigation in all economic and community development projects.			Medium	All Hazards
Crawford County Bourbon Cuba Leasburg St. Cloud Steelville Sullivan West Sullivan School Districts	4. Encourage local governments to budget for mitigation projects.			Medium	All Hazard
Crawford County Bourbon Cuba Leasburg	5. Encourage cities and county to implement cost-share programs with private landowners for hazard mitigation projects that benefit the community as a whole.			Medium	All Hazards

Jurisdiction	Action/Measure	Mitigation Program	Goal #	Priority	Hazard Addressed
St. Cloud Steelville Sullivan West Sullivan		Finding Funding	6		
Crawford County Bourbon Cuba Leasburg St. Cloud Steelville Sullivan West Sullivan	6. Implement public awareness program about the benefits of hazard mitigation projects, both public and private.			High	All Hazards
Crawford County Bourbon Cuba Leasburg St. Cloud Steelville Sullivan West Sullivan	7. Prioritize mitigation projects, based on cost-effectiveness and starting with those sites facing the greatest threat to life, health and property.			High	All Hazards

## PREREQUISITES

**44 CFR requirement 201.6(c)(5): The local hazard mitigation plan shall include documentation that the plan has been formally adopted by the governing body of the jurisdiction requesting approval of the plan. For multi-jurisdictional plans, each jurisdiction requesting approval of the plan must document that it has been formally adopted.**

*Note to Reviewers: When this plan has been reviewed and approved pending adoption by FEMA Region VII, the adoption resolutions will be signed by the participating jurisdictions and added to Appendix C. A model resolution is provided.*

The following jurisdictions participated in the development of this plan and have adopted the multi-jurisdictional plan. Resolutions of Adoptions are included in Appendix C.

- Crawford County
- City of Boubon
- City of Cuba
- City of Leasburg
- Village of St. Cloud
- City of Steelville
- City of Sullivan
- Village of West Sullivan
- Bourbon R-I School District
- Cuba R-II School District
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- Sullivan C-2 School District

Participation of local governing bodies as stakeholders is critical to successful mitigation implementation. As former SEMA Deputy Director Beauford 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.”

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, Crawford County contracted with the Meramec Regional Planning Commission and participated fully in the preparation of the plan. Once this plan is approved, Crawford County, its cities, school districts and local utilities will be eligible for future mitigation assistance from FEMA and will be able to more effectively carry out mitigation activities to less the adverse impact of future disasters in the county.

## Model Resolution

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### Resolution # \_\_\_\_\_ Adopting the Crawford County Multi-Hazard Mitigation Plan

**Whereas**, the \_\_\_\_\_ recognizes the threat that natural hazards pose to people and property within our community; and

**Whereas**, undertaking hazard mitigation actions will reduce the potential for harm to people and property from future hazard occurrences; and

**Whereas**, the U.S Congress passed the Disaster Mitigation Act of 2000 emphasizing the need for pre-disaster mitigation of potential hazards and made available hazard mitigation grants to state and local governments; and

**Whereas**, an adopted Multi-Hazard Mitigation Plan is required as a condition of future funding for mitigation projects under multiple FEMA pre- and post-disaster mitigation grant programs; and

**Whereas**, the \_\_\_\_\_ fully participated in the FEMA prescribed mitigation planning process to prepare this Multi-Hazard Mitigation Plan; and

**Whereas**, the Missouri State Emergency Management Agency and Federal Emergency Management Agency officials have reviewed the Crawford County Multi-Hazard Mitigation Plan and approved it contingent upon this official adoption of the participating governing body; and

**Whereas**, the \_\_\_\_\_ desire to comply with the requirements of the Disaster Mitigation Act and to augment its emergency planning efforts by formally adopting the Crawford County Multi-Hazard Mitigation Plan; and

**Whereas**, adoption by the governing body for the \_\_\_\_\_ demonstrates the jurisdiction's commitment to fulfilling the mitigation goals and objectives outlined in this Multi-Hazard Mitigation Plan; and

**Whereas**, adoption of this legitimizes the plan and authorizes responsible agencies to carry out their responsibilities under the plan;

**Now, therefore, be it resolved**, that the \_\_\_\_\_ adopts the Crawford County Multi-Hazard Mitigation Plan as an official plan and will submit this Adoption Resolution to the Missouri State Emergency Management Agency and the Federal Emergency Management Agency officials to enable the plan's final approval.

Passed on this date \_\_\_\_\_

Certifying Official Signature \_\_\_\_\_