

Christian County, Missouri

Multi-Jurisdictional Natural

Hazards Mitigation Plan



F-3 tornado damages along Zoller Road, May 5, 2003

Photo courtesy of Phil Amtower, Christian County Emergency Management Director

May 2011

Christian County, Missouri

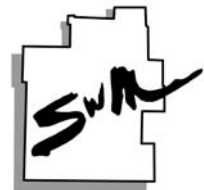
Multi-Jurisdictional Natural

Hazards Mitigation Plan

May 2011



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Executive Summary

Overview

Natural hazard mitigation is defined as actions or activities designed to reduce or eliminate losses resulting from natural disasters. Historical records indicate that natural disasters have affected Christian County, causing injury, death, damages to property, and economic loss. Tornadoes, high winds and floods in particular have adversely affected the county. One of the most destructive events occurred on May 4, 2003 when a series of tornadoes touched down across the Ozarks. In Christian County alone, one of these tornadoes caused one death and three injuries, destroyed 27 structures and damaged another 150, causing over \$5 million in property losses. Christian County has also experienced fatalities and economic loss from flood events. In September 1993 heavy rainfall throughout the region caused flash flooding along Finley Creek, resulting in \$5 million in damages to numerous businesses as the creek reached record levels. The effects of natural disasters are not isolated to only a portion of Christian County. Rather, hazard events have resulted in loss throughout urban and rural areas of the county.

As Christian County's population grows and development increases, so does the risk for natural hazards to affect more residents and property. However, the impacts of natural hazard events can be lessened and injuries, loss of life and damages to properties can be reduced through prudent actions taken before hazard events occur. The *Christian County Multi-Jurisdictional Natural Hazards Mitigation Plan* represents a collaborative effort between Christian County, its municipalities and districts to establish a guide for actions that can be undertaken to help reduce the adverse impacts of hazard events and make Christian County safer.

The Federal Disaster Mitigation Act of 2000 (DMA 2000) required, that as of November 1, 2004, all local governments must adopt a natural hazards mitigation plan to be eligible for federal hazard mitigation funding. The DMA 2000 provides for the preparation of multi-jurisdictional plans by local governments to meet these requirements. The DMA requires that plans be updated every five years. The *Christian County Multi-Jurisdictional Natural Hazards Mitigation Plan* is developed in conformance with the requirements of the DMA 2000 and is a multi-jurisdictional plan that has involved the participation of Christian County, incorporated communities and school districts.

This plan only addresses natural hazards that may affect Christian County; man-made or technological hazards are not discussed. The natural hazards addressed in the plan include:

- Tornado and severe thunderstorm
- Riverine and flash flood
- Severe winter weather
- Drought
- Heat wave
- Earthquake
- Dam failure
- Wildfire
- Land Subsidence (Sinkholes)

Plan Organization and Content

The *Christian County Multi-Jurisdictional Natural Hazards Mitigation Plan* is presented in seven parts including, Introduction, Community Profile, Risk Assessment, Capability Assessment, Mitigation, Plan Maintenance, and Appendices:

- Part I - Introduction: An overview of the plan's purpose and format, participating communities, assurances and authorities for development of the plan, and plan preparation timeline.
- Part II - Community Profile: The political, natural, cultural, demographic, socio-economic and developmental characteristics of Christian County and its municipalities, including identification of critical facilities and services and populations vulnerable to hazard events.
- Part III - Risk Assessment: An analysis of the natural hazards addressed in the plan, including review of historical disaster events, evaluation of future risk, and assessment of vulnerability to future hazard events.
- Part IV - Capability Assessment: The current capabilities of Christian County and its municipalities to mitigate disaster events.
- Part V – Mitigation: An overview on mitigation and presentation of the mitigation goals, objectives and strategies developed by Christian County and its municipalities.
- Part VI - Plan Maintenance: The process and procedures to review and monitor implementation of the plan's mitigation strategies.
- Part VII - Appendices. The resolutions of plan adoption by Christian County and the participating municipalities, repetitive losses to the National Flood Insurance Program, low water crossings inventory, acronyms, glossary, and references.

Participants in Plan Development

This plan was developed by the Southwest Missouri Council of Governments (SMCOG) under cooperative agreement with the Missouri State Emergency Management Agency and with the participation of local governments and public entities in Christian County. A Plan Advisory Committee was established to encourage community participation in the planning process and to provide oversight and review to the development of the hazard mitigation plan. The Plan Advisory Committee included elected officials and staff from the participating local governments, emergency services personnel at the county and municipal levels, school district administrators, and other community, governmental and educational outreach entities in the county.

Citizens were invited to advertised public meetings to participate in the development of mitigation goals, objectives and actions to address the identified natural hazards. A public open house was held on May 17th, 2010 to present the draft plan and to solicit additional review and comment from the public. The preliminary draft of *The Christian County Multi-Jurisdictional Natural Hazard Mitigation Plan* was further refined and updated after presentation to participating jurisdictions asking for reasonable assurance of adoption before the plan was

submitted to SEMA for approval. After FEMA approval, participating jurisdictions passed resolutions adopting the plan. Resolutions of local jurisdictions adopting the Plan are contained in Appendix A.

Plan Goals, Objectives and Mitigation Actions

The goals of the *Christian County Multi-Jurisdictional Natural Hazards Mitigation Plan* express the overall vision for mitigating the effects of hazard events on the Christian County community. The three goals of mitigation are:

- Protect the lives and livelihoods of all citizens,
- Reduce the potential impact of natural disasters on new and existing properties and infrastructure and the local economy, and
- Ensure continued operation of government and emergency functions in a disaster.

The mitigation actions determined through the planning process to achieve these goals fall within the following broad categories of mitigation:

- Prevention
- Property protection
- Natural resource protection
- Emergency services
- Structural projects
- Public awareness and education

A five-year action matrix is included in the Part V: Mitigation. This matrix summarizes the plan goals, objectives and mitigation actions; identifies the specific natural hazard(s) that would be addressed by the mitigation action; indicates the political subdivision to which the mitigation action might apply and lists the possible lead organizer for implementing the mitigation action. The matrix also sets forth priority ranking for each mitigation action and methods by which assessment of actual implementation of the mitigation actions would be made.

Implementation, Monitoring and Evaluation

Natural hazard mitigation planning is an on-going, dynamic process. The success of the plan is dependent on implementation, monitoring, and evaluation of the outcomes. The viability of the plan as an effective action guide will require that the plan be periodically reviewed and updated or revised as necessary. A method to ensure regular review and update of the plan is provided, including public participation in the planning process. Continued collaborative efforts, cooperation and communications between the county and local jurisdictions will enhance long term sustainability of the planning process and implementation activities to reduce the adverse impacts of natural disasters on Christian County, its municipalities and districts.