

## **INTRODUCTION**

### **Purpose of the Plan**

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 the people of Dunklin County, causing injury, death, damages to property and economic loss. The occurrence of natural disasters affects all areas of the county. There is no way to predict exactly where and when natural disasters may occur or to prevent hazard events from occurring. However, the impacts of natural hazard events such as the potential for injuries, loss of life, and property damage can be reduced through the application of prudent actions and strategies.

The 2011 Dunklin County Multi-Jurisdictional Natural Hazards Mitigation Plan represents a multi-jurisdictional effort between Dunklin County, its municipalities, and other public sector entities and organizations to establish a guide for actions that can be undertaken to help Dunklin County prepare for potential natural disasters. This plan only addresses natural hazards that may affect Dunklin County; man-made or technological hazards are not discussed, unless in reference to the cascade of damages that may result from a natural hazard event. All natural hazards, whether they affect Dunklin County or not will be discussed in Section 2 of the Plan.

The Dunklin County Multi-Jurisdictional Natural Hazard Mitigation Plan is an updated version of the original 2004 version of the plan developed in conformance with the requirements of Disaster Mitigation Act of 2000. The original Plan was adopted and approved by the Dunklin County Commission on July 8, 2004. This act required local governments to develop and approve a natural hazard mitigation plan by November 1, 2004 to be eligible for federally funded mitigation assistance in the future. Mitigation plans will be required to receive mitigation assistance for all federally declared disaster and must update the plan every 5 years. In accordance with this act, the Dunklin County Multi-Jurisdictional Natural Hazards Mitigation Plan was updated in 2011, thereby

ensuring that the county and other participated jurisdictions within the county continue to receive mitigation funding through 2015.

The Missouri State Emergency Management Agency (SEMA) provided funding for the development of the plan, matched by in-kind donations from Dunklin County, its municipalities, and private organizations. In Missouri, SEMA requested the regional planning commissions to work with local governments to develop the hazard mitigation plans. With the agreement of Dunklin County, SEMA contracted the hazard mitigation planning effort to the Bootheel Regional Planning and Economic Development Commission (BRPC). BRPC worked in collaboration with the county, municipalities and school districts to develop the Dunklin County Natural Hazards Mitigation Plan Update.

The primary duties and responsibilities of the Bootheel Regional Planning Commission in the review process are spelled out in the signed Memorandum of Agreement with SEMA. Hereafter referred to as consultant, the Regional Planning Commission agrees to the following:

- Consultant agrees that the Dunklin County Multi-Jurisdictional Hazard Mitigation Plan must meet the requirements of the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988.
- Consultant agrees to develop and produce a local government “Hazard Mitigation Plan” for SEMA in accordance with all terms contained in FEMA publications.
- Consultant agrees that the successful development of the Hazard Mitigation Plan must include the open public involvement of local units of government and other local and regional public or private sector bodies or agencies that influence hazard management or development policies within a local government.
- The Consultant must be prepared to participate and at times facilitate the development of the plan and conduct meetings necessary to include pertinent local entities that include public schools.
- Consultant agrees and understands that any and all services shall be performed only with the consent of SEMA.

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- Consultant agrees that the final product must be delivered in a timely fashion and shall include a paper and electronic copies of the finished product.
  - No part of this Plan will be subcontracted nor will external contributors be used.

### **Plan Organization and Content**

The plan includes elements and information prescribed by FEMA's July 1, 2008 publication Local Multi-Hazard Mitigation Planning Guide, a guide designed to assist municipalities in defining the requirements for both new and updated mitigation plans.

The plan includes the following contents:

- **Introduction:** The introduction provides an overview of the plan's format, assurance of compliance with regulations, authority for conduct of the plan, public involvement, participating jurisdictions and plan preparation methodology and schedule
- **Executive Summary:** Provides basic information relating to the development of the plan.
- **Section I:** Provides a description of the political, natural, cultural, demographic, socio-economic, and developmental characteristics of Dunklin County and its municipalities.
- **Section II:** Provides an analysis of the natural hazards addressed in the plan, a review of historical disaster events, evaluation of future risks and assessment of vulnerability by jurisdiction to future hazard events.
- **Section III:** Provides an analysis of county and city capabilities such as fire and police and mitigation management policies.
- **Section IV:** The Mitigation section describes the range of mitigation categories and activities that may be employed by a community. It also outlines the mitigation goals, actions, and strategies developed by Dunklin County and its' communities. Plan maintenance processes and procedures are outlined in this section.
- **Appendix:** The appendix includes county/city/school district adoption resolutions, government building/facility repetitive loss listings, maps, acronyms,
- **Definitions and multi-hazard mitigation resource directory and bibliography.**

## Plan Review and Update Process

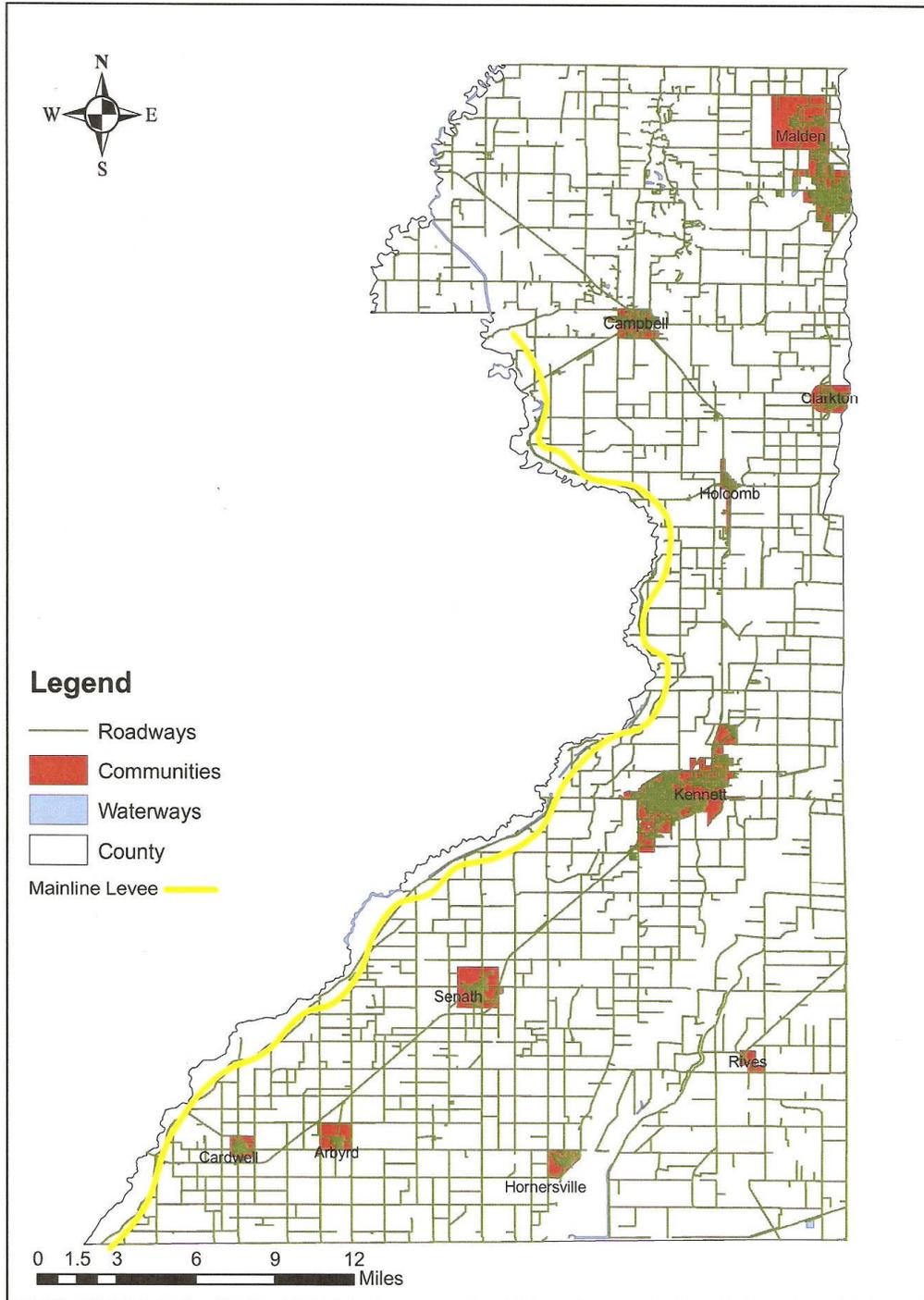
Jurisdictions requesting participation in the Plan include the following: Dunklin County, cities of Arbyrd, Campbell, Cardwell, Clarkton, Holcomb, Hornersville, Kennett, Malden, Rives, Senath and the following school districts and colleges: Campbell R-II, Clarkton C-4, Holcomb R-III, Kennett 39, Malden R-I, Senath-Hornersville C-8, Southland C-9, Southeast Missouri State University (Kennett and Malden), and Three Rivers Community College (Campbell, Kennett and Malden). (See map of Dunklin County-page 6)

The plan update process for all sections of the plan began with a review of each section from the 2004 Dunklin County Hazard Mitigation Plan by BRPC staff. The majority of revised and updated material in the plan was developed from local jurisdiction review and comment, information submitted by participating jurisdictions and Plan Advisory Committee meetings. The table below describes the revisions and updates incorporated into each section of the plan.

Plan Section	Updated Material
Introduction	<ul style="list-style-type: none"> <li>• Updated list of plan participants</li> <li>• Revised and expanded purpose of plan</li> <li>• Inserted map of county and listed municipalities</li> <li>• Added public involvement section describing public meetings and involvement of public agencies</li> <li>• Inserted chart to show specific involvement by communities in the planning process.</li> <li>• Inserted chart to show how public participants reviewed specific information and how that information was incorporated into the planning process</li> <li>• Revised timeframe for document preparation</li> </ul>
Executive Summary	<ul style="list-style-type: none"> <li>• Remained basically the same</li> </ul>
Section I	<ul style="list-style-type: none"> <li>• Updated county population</li> <li>• Expanded information concerning NFIP</li> <li>• Updated public school information and included information on high education</li> <li>• Updated information on city/town/village profiles</li> </ul>
Section II	<ul style="list-style-type: none"> <li>• Expanded information on Risk Assessment at</li> </ul>

	<p>beginning of section</p> <ul style="list-style-type: none"> <li>• Provided expanded description of natural hazards eliminated</li> <li>• Included information on disaster declarations in the Bootheel</li> <li>• Included events for each hazard that occurred from 2005-2009 or beyond</li> <li>• Expanded upon natural hazards such as hail, lightning, levee failure, and different types of flooding</li> <li>• Provided better mapping such as tornado touchdown incidents, levee maps, drought maps and expanded information on types of flooding in the county</li> <li>• Added likely location subsections for each hazard</li> <li>• Revised county hazard identification and analysis</li> </ul>
Section III	<ul style="list-style-type: none"> <li>• Reviewed city/county capabilities and made some changes on fire/police protection</li> <li>• Updated information on county/regional hospitals</li> <li>• Updated historical population trends and county/city/school district regulations</li> </ul>
Section IV	<ul style="list-style-type: none"> <li>• Expanded on public involvement section</li> <li>• Added and documented public involvement of school administrators</li> <li>• Provided better analysis of STAPLEE</li> <li>• Revised chart on Proposed Mitigation Evaluation</li> <li>• Revised Mitigation Process for the county/cities</li> <li>• Updated Plan Maintenance Process</li> <li>• Revised 5-year update of hazard mitigation plan</li> </ul>
Appendix	<ul style="list-style-type: none"> <li>• Revised resolution of intent to participate for counties/cities and added resolution for school districts.</li> <li>• Revised and updated floodplain maps</li> </ul>

# Dunklin County



Prepared by Bootheel Regional Planning and Economic Development Commission for Planning Purposes Only

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**Assurance statements of compliance with FEMA**

This county/city 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 criteria as the president/governor, federal/state congresses and SEMA/FEMA may establish in consultation with county/city governments while the plan is being developed. This plan also meets the minimum planning requirements for all SEMA 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.

**Sunshine Law**

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. These mailings were disbursed on a schedule that allowed officials sufficient time to review the draft prior to the next public county commission, city council, or board of aldermen meeting. Input for the general public was solicited through media outlets and various reminders at public gatherings.

**The Planning Process**

The planning and review process is important because it serves as a vehicle for participants to think about the future. The process is generally considered more important than the document, or "plan," that results from the process. Often, "plans" are put on the shelf, yet the thinking that went into the plans has significant influence. Planning may take a historic or futures orientation and be in response to opportunities or threats. There may be four types of local plans, depending on whether the plan was designed to take advantage of opportunities or respond to threats and whether the plan was reactive or proactive. Accordingly, a 2x2 matrix can be used to describe the types of local hazard plans.

		<u>In Response to</u>	
		<u>Opportunities</u>	<u>Threats</u>
Historic or Futures Orientation	<u>Reactive</u>	Emergency <u>Services Planning</u>	Impact <u>Planning</u>
	<u>Proactive</u>	Strategic <u>Planning</u>	Contingency <u>Planning</u>

Emergency Services planning represents efforts to take measures to minimize the impact of a hazard event on people and property. These commonly are actions taken immediately prior to, during, or in response to a hazard event.

Impact planning represents attempts to respond to a negative event such as structural mitigation projects that are intended to lessen the impact of a hazard by modifying the natural progression of the hazard event. The projects are usually designed by engineers and managed or maintained by public works staff.

Contingency planning involves developing appropriate responses to anticipated events.

Strategic planning is comprehensive and long range. It examines external opportunities and includes plans to take advantage of such opportunities.

The planning process described above was the model used for the review process. The Bootheel Regional Planning Commission, on behalf of Dunklin County invited many entities to participate in the review process for the Dunklin County Multi-Jurisdictional Hazard Mitigation Plan update. Those involved in the planning process included the county, cities, school districts, area colleges, emergency planners, police, fire chiefs, ambulance personnel, and general citizens. Notice of meetings and requests to respond was published in local newspapers serving Dunklin County and adjoining counties. Each participating jurisdiction was required to participate in the review process as defined below.

- Provide information to support plan update through at least one of the following methods:
- Completion of worksheets or questionnaires
- Review draft plan as presented
- Attend public meetings
- Communicate with Bootheel staff through phone calls or e-mail
- Provide comments on draft plan
- Formally adopt the mitigation plan

All jurisdictions listed as participants in the plan update met the minimum participation requirements as indicated in the table below. Documentation in the form of sign-in sheets for attendance at group meetings is documented in Section 4 of the plan.

The initial planning process began in February of 2010 when all jurisdictions were mailed a questionnaire asking specific information concerning the impact of the hazard mitigation plan and changes within their county/communities.

On April 8, 2010 Bootheel Staff met with Dunklin County Commissioners in Kennett to review a draft of the Hazard Mitigation Plan. Items of discussion include the following:

- Discussion of Plan updates
- Reviewed importance of Plan
- Reviewed Goals & Actions
- Discussed Pre-Mitigation Grant Program
- Discussed county jurisdictions involved in Plan

On November 18, 2009 Bootheel staff met with Dunklin County superintendents to discuss school district involvement in Hazard Mitigation Plan. Each superintendent was presented with a draft copy of the Plan and asked for comments concerning the proposed plan.

Bootheel staff met with a representative from Three Rivers Community College on April 29, 2010 to discuss the college's involvement in the planning process. A draft copy of the proposed plan was presented and comments were solicited.

On July 13, 2010 Bootheel staff met with a representative from Southeast Missouri State University in Kennett to discuss the college's involvement in the planning process. A draft copy of the proposed plan was presented and comments were solicited.

A meeting with the Mayor of Kennett was held on July 13, 2010. As a leader in Dunklin County, the Mayor was asked and agreed to co-ordinate with other jurisdictions and emergency management personnel information concerning the review process of the Dunklin County Hazard Mitigation Plan.

Final meetings were held on June 8 and June 15, 2010 at Bootheel Regional Planning Commission office in Dexter to discuss mitigation plans for all of the Bootheel counties. Officials of Dunklin County attended these meetings.

<b>Jurisdiction Participation in Five Year Update-Dunklin County</b>									
	Attended meetings or work sessions	Reviewed sections of the draft plan	Submitted hazard analysis data	Reviewed mitigation goals & actions	Reviewed plan draft	Formally adopted plan	New jurisdiction	Continuing jurisdiction	No longer participating
Arbyrd	X	X		X				X	
Campbell		X						X	
Cardwell		X	X	X	X			X	
Clarkton		X						X	
Holcomb	X	X	X	X	X			X	
Hornersville		X			X			X	
Kennett		X			X			X	
Malden	X	X			X			X	
New Madrid	X	X	X	X	X			X	
Senath		X						X	
Rives		X					X		
Dunklin Co.	X	X	X	X	X			X	
Campbell R-18	X	X		X	X		X		
Clarkton C-4		X		X	X		X		
Holcomb R-III	X	X		X	X		X		
Kennett 39		X		X	X		X		
Malden R-I	X	X		X	X		X		
Senath-Hornersville C-8	X	X		X	X		X		
Southland C-9		X		X	X		X		
TRCC-Campbell Malden, Kennett	X	X		X	X		X		
SEMO-Kennett Malden	X	X		X	X		X		

The review process is shown in the following steps:

1. Define review process to county and local officials
2. Schedule meetings and work sessions for county officials
3. Review sections of draft plan.
4. Analysis hazard data
5. Review mitigation goals and actions
6. Formally adopt updated plan

### **Participants and jurisdictions represented**

The list of primary participants in the **review** process is shown below. These participants were involved in all phases of the review process.

- Don Collins, Dunklin County Presiding Commissioner
- Patrick McHaney, Dunklin County Associate Commissioner
- Jeanie Herbst, Dunklin County Associate Commissioner
- Brenda Dicus, Dunklin County Assessor
- Carol Hinesly, County Clerk
- Lonnie Gibson, Mayor, City of Arbyd
- Raymond Gunter, Mayor, City of Campbell
- John Prince, Mayor, City of Cardwell
- Greg Reynolds, Mayor, City of Clarkton
- Max Clark, Mayor, City of Holcomb
- Richard Mara, Mayor, City of Honersville
- Roger Wheeler, Mayor, City Kennett
- Ray Santie, Mayor, Malden
- Alton Payne, Trustee of Rives
- Joe Lane, Mayor, City of Senath
- Emergency Management Personnel, Dunklin County
- Jay W. Thornton, Superintendent of School, Campbell R-II
- Philip L. Harrison, Superintendent of School, Clarkton C-4

- Jeff Bullock, Superintendent of Schools, Holcomb R-III
- Jerry Noble, Superintendent of Schools, Kennett 39
- Kenneth Cook, Superintendent of Schools, Malden R-I
- Larry Wood, Superintendent of Schools, Senath-Hornersville C-8
- Raymond Lasley, Superintendent of Schools, Southland C-9
- Marsha Blanchard, Southeast Missouri State University
- Bud Joiner, Three Rivers Community College

As part of the planning process, the chart below describes how participating jurisdictions reviewed existing plans, studies, reports, and technical documents and integrated them in the planning process. All jurisdictions have a copy of the draft document for review and is indicated in the columns marked “Does Jurisdiction have the document/Reviewed”

Jurisdiction	Comprehensive Plan	Growth Management Plan	Flood Damage Prevention Ord.	Flood Insurance Studies	Hazard Vulnerability Analysis	Emergency Management Plan	Zoning Ordinance	Building Code	Drainage Ordinance	Critical Facilities Maps	Existing Land Use Maps	Elevation Certificates	State Plan	HAZUS	Does Jurisdiction have this document? (Yes/No)	Reviewed (Yes/No)	Method of incorporation into the hazard mitigation plan
Dunklin Co.	x			x		x	x	x	x			x			Yes	Yes	
Arbyrd						x	x	x	x			x			Yes	Yes	
Campbell			x		x	x	x	x							Yes	Yes	
Clarkton				x	x	x		x	x						Yes	Yes	
Holcomb						x			x						Yes	Yes	
Hornersville	x		x	x	x	x	x	x		x	x				Yes	Yes	
Kennett					x	x	x	x	x	x					Yes	Yes	
Malden						x			x						Yes	Yes	
Senath	x				x		x								Yes	Yes	
Rives			x		x	x	x	x		x					Yes	Yes	
Campbell						x		x							Yes	Yes	
Clarkton C-4						x		x							Yes	Yes	
Holcomb R-III						x		x							Yes	Yes	
Kennett 39						x		x							Yes	Yes	
Malden R-I						x		x							Yes	Yes	
Senath-Hornersville C-8						x		x							Yes	Yes	
Southland C-9						x		x							Yes	Yes	
TRCC-Malden, Kennett, Campbell						x		x							Yes	Yes	
SEMO-Kennett Malden						x		x							Yes	Yes	

**Timeframe for preparation**

The plan review timeline includes the following:

- Define review process to county and local officials February, 2010
- Schedule meetings and work sessions February, 2010
- Review sections of draft plan March, 2010
- Analysis hazard data March, 2010
- Review mitigation goals and actions March, 2010
- Formally adopt updated plan August, 2012
- Plan submitted to SEMA August, 2012
- Finalized plan submitted to SEMA by August, 2012
- Plan approved by SEMA/FEMA by November, 2012