

TANEY COUNTY, MISSOURI

Multi-Jurisdictional Natural Hazard Mitigation Plan



August 2012

TANEY COUNTY, MISSOURI

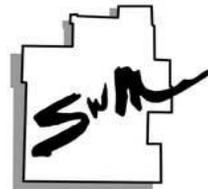
Multi-Jurisdictional Natural Hazard Mitigation Plan

*For Taney County, Missouri and its Incorporated Communities,
School and Other Special Districts*

Adopted January, 2013



Taney County Commission
Taney County Courthouse
P.O. Box 1086
Forsyth, MO 65653
(417) 546-7204



Southwest Missouri
Council of Governments

901 S. National Avenue
Springfield, MO 65897
(417) 836-6900
smcog.missouristate.edu



Emergency Management
221 Jefferson Road
Branson, MO 65616
(417) 334-3440

U.S. Department of Homeland Security
Region VII
9221 Ward Parkway, Suite 300
Kansas City, MO 64114-3372



FEMA

January 17, 2013

Mr. Donald King, Director
State Emergency Management Agency
P. O. Box 116
Jefferson City, Missouri 65102

Subject: Review of the Taney County, Missouri Local Hazard Mitigation Plan

Dear Mr. King:

The purpose of this letter is to provide the status of the above referenced Local Hazard Mitigation Plan, pursuant to the requirements of 44 CFR Part 201 - Mitigation Planning and the Local Multi-Hazard Mitigation Planning Guidance. The Local Hazard Mitigation Plan Review Crosswalk documents the Region's review and compliance with all required elements of 44 CFR Part 201.6, as well as identifies the jurisdictions participating in the planning process. FEMA's approval will be for a period of five years effective starting the date of this letter.

Prior to the expiration of the plan the communities will be required to review and revise their plan to reflect changes in development, progress in local mitigation efforts, and changes in priorities, and resubmit it for approval in order to continue to be eligible for mitigation project grant funding.

Local Jurisdiction	Date Adoptions Submitted	Date Completed	Date of Plan Adoption	Date of Plan Expiration	Review Status
Taney County	January 16, 2013	January 17, 2013	January 14, 2013	January 17, 2018	Approved

If you have any questions or concerns, please contact Joe Chandler, Planning Team Lead, at (816) 283-7071.

Sincerely,


Robert G. Bissell, Director
Mitigation Division

Table of Contents

Executive Summaryviii

Part 1: Introduction 1-1

Purpose of Plan..... 1-1

Basis for Planning Authority 1-2

Assurance Statements of Compliance with FEMA..... 1-3

Plan Organization and Contents..... 1-3

Public Involvement 1-4

Plan Adoption..... 1-5

Participating Jurisdictions and Participation Requirements..... 1-5

Plan Preparation Methodology and Schedule..... 1-7

Plan Review and Update Process 1-9

Acknowledgements 1-11

Part 2: Community Profile 2-1

Location 2-1

Development History 2-2

Form of Government 2-2

Physical Characteristics 2-3

 Physiography and Geography 2-3

 Hydrology and Drainage..... 2-4

 Climate and Weather 2-7

 Soils 2-7

 Significant Natural Communities..... 2-8

Demographics 2-9

 Population Trends 2-9

 Age Characteristics 2-11

 Race and Ethnicity..... 2-12

 Income Characteristics 2-12

 Educational Attainment..... 2-13

 Household Characteristics..... 2-14

Economy, Employment, and Industry 2-14

 Labor Force Characteristics..... 2-14

 Primary Industries 2-15

 Access to Employment: In-commuting and Out-commuting..... 2-16

Land Use..... 2-17

 Existing Land Use Patterns 2-17

 Public Land/Use Areas 2-18

Development Trends 2-20

Housing..... 2-20

Transportation Infrastructure 2-22

 Roads..... 2-22

 Airports..... 2-22

 Public Transportation..... 2-23

 Railroads 2-23

 MoDOT Maintenance Facilities..... 2-23

Utilities 2-25

 Water Supply/Services 2-25

Wastewater Treatment Systems	2-25
Solid Waste Disposal.....	2-26
Electric Service.....	2-26
Telephone Service.....	2-27
Natural Gas Service	2-27
Underground Utilities	2-27
Key Community Facilities and Services.....	2-28
Law Enforcement	2-28
Fire Protection.....	2-28
911 Emergency Communications	2-29
Medical Facilities	2-29
Ambulance District.....	2-30
Other Key Facilities/Services	2-31
Government Owned Buildings.....	2-33
Centers of Large Population Concentration	2-36
Schools	2-36
College of the Ozarks	2-36
Ozarks Technical College.....	2-39
Child Care Centers	2-40
Residential Care Facilities	2-41
Senior Centers	2-41
Commercial/Recreation Centers.....	2-41
Major Employers	2-42
Flood Plain Management/Wetlands.....	2-45
Wetlands	2-45
National Flood Insurance Program	2-45
Environmental Concerns	2-46
Hazardous Materials Sites.....	2-46
Endangered Species	2-46
Historic Properties and Archeological Sites	2-47
Ralph Foster Museum	2-48
Community Plans	2-48
Building and Fire Codes	2-49
Community Partnerships	2-51
Significant Cultural/Social Issues.....	2-51
Media Relations	2-52
City/Village Profiles	2-53
Part 3: Risk Assessment.....	3-1
Natural Hazard Identification/Elimination Process	3-1
Community-wide Hazard Profile and Hazards Identified	3-1
Hazards not Included and Reasons for Elimination	3-2
Hazard Profile Format	3-3
Tornado.....	3-3
Severe Thunderstorm.....	3-9
Flood.....	3-15
Severe Winter Weather	3-22
Drought	3-29
Heat Wave	3-33
Earthquake.....	3-37
Dam Failure	3-44

Wildfires 3-49

Sinkhole 3-55

Public Health Emergencies 3-60

Disaster Declarations 3-64

Geographic Specific Hazards Composite Maps by Jurisdiction 3-65

Multi-jurisdictional Risk Assessment..... 3-73

 Natural Hazards Risk Identification and Analysis by Jurisdiction..... 3-73

 Vulnerability Assessment and Estimates of Potential Loss by Jurisdiction..... 3-75

Area Wide Vulnerability Assessment Tables for Participating Jurisdictions 3-79

Local Area Hazard Vulnerability Tables for Participating Jurisdictions 3-84

Vulnerability Assessment Tables for Taney County School Districts 3-93

Vulnerability Assessment Tables for Special Districts..... 3-98

Part 4: City/County Capability Assessment 4-1

Mitigation Management Policies 4-1

Existing Plans..... 4-1

Mitigation Programs 4-3

Capabilities and Responsibilities 4-5

Assessment of Policies and Programs 4-12

Part 5: Mitigation 5-1

Introduction to Mitigation 5-1

 Definition of Mitigation 5-1

 Categories of Mitigation..... 5-1

 Prevention Measures..... 5-1

 Property Protection Measures 5-1

 Natural Resource Protection Measures 5-2

 Emergency Services Measures 5-2

 Structural Mitigation Measures 5-3

 Public Information Mitigation Measures 5-3

How Mitigation Differs from Preparedness, Response, and Recovery 5-4

Mitigation Plan Benefits..... 5-4

Goals, Objectives and Mitigation Actions..... 5-5

 Development Process 5-5

 Evaluation of Mitigation Actions from the 2005 Plan 5-5

 STAPLEE Cost-Benefit Review and Prioritization 5-9

Mitigation Program/Strategy Development 5-12

Analysis and Prioritization of Mitigation Actions..... 5-16

Part 6: Plan Maintenance 6-1

Part 7: Appendices

Appendix A: Adoption Resolutions A-1

Appendix B: Repetitive Losses..... B-1

Appendix C: Acronyms..... C-1

Appendix D: Glossary..... D-1

Appendix E: References..... E-1

Appendix F: Neighboring Jurisdictions F-1

Appendix G: Planning Process Documentation G-1

List of Tables

Table 1-1	Record of Participation	1-5
Table 1-2	Updates by Section of the 2010 Hazard Mitigation Plan	1-10
Table 1-3	Taney County Hazard Mitigation Plan Meeting Attendance	1-13
Table 2-1	Taney County Local Government	2-3
Table 2-2	Population Growth, 2000-2010	2-9
Table 2-3	Taney County Age Specific Population, 2010	2-11
Table 2-4	Taney County and Municipalities, Age, 2010	2-11
Table 2-5	Race and Hispanic Population, 2010	2-12
Table 2-6	Taney County Household Income and Benefits, 2010	2-12
Table 2-7	Educational Attainment, Population 25 Years and Older, 2010	2-13
Table 2-8	Taney County Household Characteristics, 2010	2-14
Table 2-9	Employment by Industry, Taney County, 2009	2-15
Table 2-10	Taney County Businesses and Employees, 2009	2-15
Table 2-11	Place of Employment, 2010	2-16
Table 2-12	Public Lands in Taney County	2-17
Table 2-13	Taney County Housing Characteristics, 2010	2-20
Table 2-14	Taney County Housing Units in Structure, 2010	2-21
Table 2-15	Taney County Mobile Home Parks and Subdivisions	2-21
Table 2-16	Taney County Utility Service Providers	2-27
Table 2-17	Medical Facilities in Taney County	2-29
Table 2-18	Ambulance Services in Taney County	2-30
Table 2-19	Government Buildings in Taney County	2-33
Table 2-20	Schools in Taney County	2-37
Table 2-21	Licensed and License Exempt Child Care Centers in Taney County ...	2-40
Table 2-22	Residential Care Facilities in Taney County	2-41
Table 2-23	Senior Centers in Taney County	2-41
Table 2-24	Taney County Major Employers	2-42
Table 2-25	National Flood Insurance Program Participation	2-45
Table 2-26	Taney County Flood Insurance Policies	2-45
Table 2-27	Threatened and Endangered Species in Taney County	2-47
Table 2-28	Adopted Codes in Taney County	2-50
Table 2-29	Media Resources Serving Taney County	2-52
Table 3-1	Cascading Hazards Resulting from Natural Disasters	3-2
Table 3-2	Fujita and Enhanced Fujita Tornado Damage Scale	3-5
Table 3-3	Enhanced Fujita Damage Indicators and Degrees of Damage	3-6
Table 3-4	Tornado History - Taney County, 1950-2012	3-8
Table 3-5	Probability of Future Tornado Occurrence by F-Scale	3-9
Table 3-6	Severity Rating of Tornado for Taney County by F-Scale	3-9
Table 3-7	National Weather Service Thunderstorm Wind Gust Legend	3-10
Table 3-8	Beaufort Wind Scale	3-11
Table 3-9	TORRO Hailstorm Intensity Scale	3-12
Table 3-10	Thunderstorm Winds History – Taney County, 1955-2012	3-13
Table 3-11	Hail History – Taney County, 1955-2012	3-14
Table 3-12	Lightning History – Taney County, 1993-2012	3-14
Table 3-13	High Wind, Hail and Lightning Severity Ratings	3-15
Table 3-14	Flood Related Watches and Warnings	3-19
Table 3-15	Flood History – Taney County, 1993-2012	3-20

Table 3-16	Flood Event by Month, 1993-2012	3-21
Table 3-17	Federal Disaster Declarations, Taney County Flood Events, 1993-2004.....	3-21
Table 3-18	Probability of Riverine and Flash Flood Events in Taney County.....	3-21
Table 3-19	Severity Rating for Riverine and Flash Flood Events in Taney County	3-22
Table 3-20	National Weather Service Extreme Cold Risk Legend.....	3-23
Table 3-21	Wind Chill Advisory and Warning Definitions.....	3-25
Table 3-22	Excessive Cold Threat Level.....	3-25
Table 3-23	Winter Storm History – Taney County, 1994-2011	3-26
Table 3-24	Severe Winter Weather History – Taney County, 1994-2011	3-26
Table 3-25	Probability of Severe Winter Weather Event Occurrence	3-28
Table 3-26	Stages of Drought	3-31
Table 3-27	Drought Events for Taney County from 1996 - 2012	3-32
Table 3-28	Risk Level for Possible Heat Disorders	3-34
Table 3-29	Heat Index/Heat Disorder	3-34
Table 3-30	Heat Wave Response Levels	3-35
Table 3-31	Regional Heat Waves, 1993-2011.....	3-36
Table 3-32	Earthquake Probable Severity.....	3-40
Table 3-33	Taney County Dams	3-47
Table 3-34	Classes of Downstream Environment Zone.....	3-47
Table 3-35	Missouri Fire Statistics 2010: Causes.....	3-49
Table 3-36	Land Cover in Taney County.....	3-50
Table 3-37	Classification of Wildland Urban Interface	3-51
Table 3-38	Taney County Wildfire Statistics by Cause 2002-2011	3-53
Table 3-39	Probability of Wildfire Occurrence by Danger Level.....	3-54
Table 3-40	Probability Rating for Sinkhole Occurrence in Taney County	3-59
Table 3-41	Pandemic Severity Index.....	3-61
Table 3-42	Community Strategies by Pandemic Flu Severity	3-61
Table 3-43	Disaster Declarations--Taney County 2002-2012	3-64
Table 3-44	Overall Summary of Hazard Vulnerability by Jurisdiction.....	3-75
Table 3-45	Critical Facilities, Definitions and Examples	3-78
Table 3-46	Inventory of Critical Infrastructure in Taney County	3-79
	Area Wide Hazard Potential Losses	
Table 3-47	Unincorporated Taney County.....	3-79
Table 3-48	City of Branson	3-80
Table 3-49	Village of Bull Creek.....	3-80
Table 3-50	City of Forsyth.....	3-81
Table 3-51	City of Hollister	3-81
Table 3-52	City of Kirbyville.....	3-82
Table 3-53	Village of Merriamwoods	3-82
Table 3-54	City of Rockaway Beach	3-83
Table 3-55	City of Taneyville.....	3-83
	Local Area Hazard Potential Losses	
Table 3-56	Unincorporated Taney County.....	3-84
Table 3-57	City of Branson	3-85
Table 3-58	Village of Bull Creek.....	3-86
Table 3-59	City of Forsyth.....	3-87
Table 3-60	City of Hollister	3-88
Table 3-61	City of Kirbyville.....	3-89
Table 3-62	Village of Merriam Woods	3-90
Table 3-63	City of Rockaway Beach	3-91

Table 3-64 Village of Taneyville 3-92

Potential Loss Estimate Tables for Taney County School Districts

Table 3-65 Asset Inventory for Taney County School Districts 3-93

Table 3-66 Bradleyville R-I School District Vulnerability Assessment 3-94

Table 3-67 Branson R-IV School District Vulnerability Assessment..... 3-94

Table 3-68 Forsyth R-III School District Vulnerability Assessment 3-95

Table 3-69 Hollister R-V School District Vulnerability Assessment 3-95

Table 3-70 Kirbyville R-IV School District Vulnerability Assessment..... 3-96

Table 3-71 Taneyville R-II School District Vulnerability Assessment 3-96

Table 3-72 Mark Twain R-VII School District Vulnerability Assessment 3-97

Potential Loss Estimation Tables for OTC and Special Districts

Table 3-73 Ozarks Technical Community College – Table Rock Campus..... 3-98

Table 3-74 Taney County Regional Sewer District 3-99

Table 3-75 Taney County Ambulance District 3-100

Table 3-76 Infectious Diseases Vulnerability Percentages 3-101

Table 3-77 Future Development Projection for Structures by Material Type and Jurisdiction 3-102

Table 4-1 City Plans and Regulations 4-15

Table 4-2 Taney County Capability Assessment 4-16

Table 5-1 Evaluation of Mitigation Actions from the 2005 Plan 5-6

Table 5-2 Definitions of STAPLEE Criteria 5-10

Table 5-3 Modified STAPLEE with Simple Scores 5-11

Table 5-4 Goals, Objectives and Actions..... 5-13

Table 5-5 Overview of Coded Mitigation Actions by Hazards Addressed 5-17

Table 5-6 Overview of Mitigation Actions for Taney County 5-21

Table 5-7 Overview of Mitigation Actions for the City of Branson 5-25

Table 5-8 Overview of Mitigation Actions for the Village of Bull Creek..... 5-29

Table 5-9 Overview of Mitigation Actions for the City of Forsyth..... 5-33

Table 5-10 Overview of Mitigation Actions for the City of Hollister..... 5-37

Table 5-11 Overview of Mitigation Actions for the Village of Kirbyville 5-41

Table 5-12 Overview of Mitigation Actions for the Village of Merriam Woods 5-44

Table 5-13 Overview of Mitigation Actions for the City of Rockaway Beach 5-48

Table 5-14 Overview of Mitigation Actions for Bradleyville R-I School District 5-52

Table 5-15 Overview of Mitigation Actions for Taneyville R-II School District 5-54

Table 5-16 Overview of Mitigation Actions for Forsyth R-III School District 5-56

Table 5-17 Overview of Mitigation Actions for Branson R-IV School District..... 5-58

Table 5-18 Overview of Mitigation Actions for Hollister R-V School District 5-60

Table 5-19 Overview of Mitigation Actions for Kirbyville R-VI School District..... 5-62

Table 5-20 Overview of Mitigation Actions for Mark Twain R-III School District..... 5-64

Table 5-21 Overview of Mitigation Actions for OTC 6-66

Table 5-22 Overview of Mitigation Actions for Taney Co. Regional Sewer District 6-68

Table 5-23 Overview of Mitigation Actions for Taney Co. Ambulance District..... 6-71

List of Figures

Figure 2-1 Taney County, Missouri..... 2-1

Figure 2-2 Regional Physiography 2-4

Figure 2-3 Taney County Watersheds 2-6

Figure 2-4 Taney County Population Density, 2010 2-10

Figure 2-5	Taney County Land Cover	2-19
Figure 2-6	Taney County Transportation System	2-24
Figure 2-7	Taney County Key Facilities	2-32
Figure 2-8	Taney County Government-Owned Buildings.....	2-35
Figure 2-9	Taney County School Districts	2-38
Figure 2-10	Artist Rendering of Planned OTC Table Rock Campus	2-39
Figure 2-11	Taney County Vulnerable Facilities	2-44
Figure 3-1	Wind Zones in the United States	3-7
Figure 3-2	Taney County 100-Year Floodplain	3-17
Figure 3-3	National Weather Service Windchill Chart.....	3-25
Figure 3-4	Palmer Drought Index	3-30
Figure 3-5	Heat Index Chart (Temperature & Relative Humidity).....	3-34
Figure 3-6	Earthquake Shock.....	3-37
Figure 3-7	Projected Earthquake Intensities, 7.6 Magnitude.....	3-40
Figure 3-8	Wabash Valley and New Madrid Earthquakes.....	3-42
Figure 3-9	Nemaha Uplift	3-43
Figure 3-10	Taney County Dam Locations	3-46
Figure 3-11	Erosion at Silver Creek Dam	3-48
Figure 3-12	Types of Wildfire	3-50
Figure 3-13	Wildfire Hazard Areas	3-52
Figure 3-14	Bowl Shaped Sinkhole	3-56
Figure 3-15	Formation of Collapse	3-56
Figure 3-16	Geologic Map Showing Locations of Sinkholes	3-57
Figure 3-17	Influenza Confirmed Cases	3-62
Figure 3-18	Cases of Norovirus by Date of Onset	3-63
Figure 3-19	Taney County Hazard Composite Map.....	3-66
Figure 3-20	Branson Hazard Composite Map	3-67
Figure 3-21	Forsyth Hazard Composite Map.....	3-68
Figure 3-22	Hollister Hazard Composite Map.....	3-69
Figure 3-23	Kirbyville Hazard Composite Map	3-70
Figure 3-24	Merriam Woods Hazard Composite Map.....	3-71
Figure 3-25	Rockaway Beach Hazard Composite Map	3-72
Figure 3-26	Taneyville Hazard Composite Map.....	3-73
Figure 3-27	Taney County Regional Sewer District Hazard Composite Map	3-74
Figure 4-1	NOAA Radio Transmission Area	4-11

Executive Summary

Overview

Natural hazard events in Taney County have historically caused injury, death, damages to property, and economic loss to the people and communities of Taney County. The *Taney County Natural Hazard Mitigation Plan* represents a collaborative effort between Taney County, its municipalities, and other public sector entities organizations to establish a guide for actions that can be undertaken to help reduce vulnerability to natural disasters and make Taney County safer.

The Federal Disaster Mitigation Act of 2000 (DMA 2000) requires, that as of November 1, 2004, all local governments must adopt a natural hazard 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 *Taney County Natural Hazard 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 Taney County and all incorporated communities.

This Plan only addresses natural hazards that may affect Taney 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

Plan Organization and Content

The *Natural Hazard Mitigation Plan* is presented in seven parts, including:

- Part 1: Introduction
- Part 2: Community Profile
- Part 3: Risk Assessment
- Part 4: Capability Assessment
- Part 5: Mitigation
- Part 6: Plan Maintenance
- Part 7: Appendices
 - Appendix A: Signed Adoption Resolutions
 - Appendix B: Repetitive Losses
 - Appendix C: Taney County Theatres
 - Appendix D: Acronyms
 - Appendix E: Glossary
 - Appendix F: References

Participants in Plan Development

This Plan was developed by the Southwest Missouri Council of Governments (SMCOG) with the assistance and participation of the local governments in Taney County. A Plan Advisory Committee was established to encourage community participation in the planning process and to provide review to the development of the Plan. The Plan Advisory Committee includes representatives from the participating jurisdictions and emergency services at the county and municipal levels. Representatives from medical services, utilities, businesses, and area residents also served on the Committee.

Information contained in the Plan was collected by both SMCOG and the participating jurisdictions and organizations through various formats, including survey forms that were distributed to all communities.

On January 20, 2004, citizens were invited to an advertised public hearing to review the draft plan and develop goals, objectives and mitigation actions to address the identified hazards. Following this meeting, the goals, objectives and mitigation actions developed through the public hearing process were further refined and distributed for review. The final Plan was further refined and updated for presentation to the participating jurisdictions for adoption. Copies of resolutions adopting the Plan are contained in Appendix A.

Plan Goals and Mitigation Actions

The goals of the Taney County Natural Hazard Mitigation Plan include:

1. Protect lives and livelihoods of all citizens.
2. Reduce the potential impact of natural disasters to property, infrastructure and the local economy.
3. Ensure and enhance continued operation of government, emergency functions and critical infrastructure in a disaster.

The objectives and mitigation actions to achieve these goals fall within the following broad categories of mitigation:

- Prevention
- Property Protection
- Emergency Services
- Natural Resource Protection
- Structural Mitigation
- Public Information

The goals, objectives and mitigation actions are outlined in Part 5, Mitigation, of this Plan. Part 5 includes a five-year action matrix that summarizes the following categories of information:

- Identified Hazard - The specific natural hazard addressed by each mitigation action is indicated in the matrix.
- Plan Goals and Objectives - Each goal and the objectives or specific desired result to achieve the goal is indicated.
- Mitigation Actions - Specific mitigation actions (steps, tasks, activities and/or projects) identified by the plan participants to mitigate the effects of natural hazards in their communities.
- Communities - The political subdivisions to which the objectives and specific mitigation actions apply.
- Lead Organizer - The lead organizer(s) are those entities with either the government responsibility or capability to initiate and manage the implementation of the hazard mitigation action.
- Priority Rank and Target Date - Mitigation actions are listed as high, medium or low priority. High priorities are those actions that generally should be implemented within two years. Medium priorities are those that may be implemented within two to four years, and low priority actions are those which can or may have to wait longer than four years. The degree of need and the capability of implementation were considered in determining priority rankings.
- Evaluation - Evaluation summarizes the review measure by which status of implementation of the mitigation action may be reviewed.

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. All of the Taney County political subdivisions participated in the development of the *Natural Hazard Mitigation Plan* and the county has developed a method to ensure regular review and update of the Plan. Continued collaborative efforts, cooperation and communications between the county and municipal governments will enhance long term sustainability of the planning process and implementation activities to reduce the impacts of natural disasters on the Taney County community.

Part 1: Introduction

Purpose of Plan

The *2012 Taney County Multi-Jurisdictional Natural Hazard Plan*, hereon referred to as the *Plan*, is an update of the original *2005 Taney County Natural Hazard Mitigation Plan*, hereon referred to as the *2005 Plan*. The mitigation planning regulation at 44 CFR §201.6(d)(3) states:

A local jurisdiction must review and revise its plan to reflect changes in development, progress in local mitigation efforts and changes in priorities and resubmit it for approval every five (5) years in order to continue to be eligible for mitigation project grant funding.

The *Plan* is a major rewrite of the *2005 Plan* that reflects changes in priorities and development but has also been written as a multi-jurisdictional plan. The *Plan*, represents a collaborative effort between Taney County, its municipalities, school districts and other public sector entities and organizations to establish a guide for actions that can be undertaken to help make Taney County safer.

Mitigation is action taken to reduce or eliminate long-term risk from hazards and their effects. The purpose of the *Plan* is to describe vulnerability of local governments and other public entities combined with probability and severity to assess the risk for each identified natural hazard that impacts the county and to each jurisdiction participating in the *Plan*. The risk assessment guided the development of goals, objectives and a comprehensive list of mitigation actions. All actions were prioritized based on a review of potential benefits and costs.

The *Plan* only addresses natural hazards that may affect Taney County; man-made or technological hazards are not discussed other than in reference to cascading damages that could result from a natural hazard event. During the planning process, Emerging Infectious Diseases were identified as a natural hazard due to the county's heightened vulnerability as a major tourism and recreation destination. The natural hazards addressed in the *Plan* include:

- Tornado and Severe Thunderstorm
- Flooding (Riverine and Flash)
- Drought
- Heat Wave
- Earthquake
- Dam Failure
- Wildfire
- Severe Land Subsidence (Sinkholes)
- Emerging Infectious Disease

Branson, Missouri, located in west-central Taney County, is a fourth class city with a permanent population of approximately 10,520 according to the 2010 Census. The Branson area is an internationally renowned tourist destination, being the number one motor coach destination for the past decade, number one tour bus destination in the continental United States for outlet mall shopping excursions, and the number two tour bus destination in the continental United States for music entertainment shows. The city of Branson includes over 200 restaurants, 50 theaters, three shopping malls, 200 lodging facilities and three recreational lakes.

Millions of guests per year visit this area. The average stay is four nights. Branson is within a one-day drive for 50 percent of the United States population. The summer is a very busy season for family visitation, with over 80% of visitation by personal automobile. The busiest tour bus time occurs in the fall and during the holiday season with shopping and Christmas music shows, lighting displays, and the Adoration parade (TCHD,2012).

On February 29, 2012, an EF-2 tornado touched down near Highway 76 in Branson and tracked through the strip of music entertainment theaters, restaurants, hotels and amusement establishments before hitting the downtown Branson Landing where it blew out or cracked windows in 219 of the 294 hotel rooms in the Hilton Branson Convention Center. This tornado impacted Kimberling City and Indian Point in Stone County destroying marinas and damaging over 170 watercraft before moving through Branson and continuing through Powersite and Kissee Mills in Taney County leaving 15,000 homes and businesses without power.

In Branson, this event resulted in \$900,000 in damages to public property and millions in damages to private businesses. Nine hotels and 70 other structures were heavily damaged. Estimates of the damages from the leap day tornado have yet to be fully determined although they should be considered quite great. There were a total of 33 injuries and no fatalities in the Branson area. These injuries and possible loss of life would have been much greater during peak spring and summer months when on any given night there may be 20,000 individuals in motels, theaters, restaurants and stores within this tornado's path.

Since 2005, there have been nine (9) federal disaster declarations that have included Taney County. The description of declarations includes: three (3) severe storm, flooding and tornado events; two (2) severe storm and flooding events; and four (4) severe winter storm events. Hazard events such as flooding, tornadoes, severe thunderstorms, and severe winter weather have resulted in losses throughout urban and rural areas of the county. These events will continue to occur in the future as well as other less severe hazards. However, the impacts of natural hazard events can be lessened and injuries, loss of life and damages to properties can be reduced through the application of prudent actions and strategies. The *Plan* is developed in conformance with the requirements of the Disaster Mitigation Act of 2000 which requires that local governments develop and approve a natural hazards mitigation plan to be eligible after November 1, 2004 for federally funded mitigation assistance. Mitigation plans will be required to receive mitigation assistance for all federally declared disasters.

Basis for Planning Authority

Section 322 of the Robert T. Stafford Relief and Emergency Assistance Act (Stafford Act), 42 U.S.C. 5165, as amended by the Disaster Mitigation Act of 2000 (DMA) (P.L. 106-390), provides for States, Tribes and local governments to undertake a risk-based approach to reducing risks to natural hazards through mitigation planning. FEMA has implemented the various hazard mitigation planning provisions through regulations at 44 CFR Part 201.

These reflect the need for States, Tribal and local governments to closely coordinate mitigation planning and implementation efforts and describes the requirement for a State Mitigation Plan as a condition of pre- and post-disaster assistance, as well as the mitigation plan requirement for local and Tribal governments as a condition of receiving FEMA hazard mitigation assistance.

The Missouri State Emergency Management Agency (SEMA) provided funding for the development of this Plan. SEMA requested the regional planning commissions in Missouri to work with local governments to develop the hazard mitigation plans. With the agreement of Taney County, SEMA contracted the hazard mitigation planning effort to the Southwest Missouri Council of Governments (SMCOG). SMCOG worked in collaboration with the county, municipalities, school districts, other special districts and community organizations to develop the *Plan*.

Assurance Statements of Compliance with FEMA

The regulations governing the mitigation planning requirements for local mitigation plans are published under 44 CFR §201.6. Under 44 CFR §201.6, local governments must have a FEMA approved Local Mitigation Plan in order to apply for and receive project grants under the following hazard mitigation assistance programs:

- Hazard Mitigation Grant Program (HMGP)
- Pre-Disaster Mitigation (PDM)
- Flood Mitigation Assistance (FMA)
- Severe Repetitive Loss (SRL)

FEMA may require a Local Mitigation Plan under the Repetitive Flood Claims (RFC) program. SMCOG staff relied on FEMA's July 1, 2008 publication Local Multi-Hazard Mitigation Planning Guidance to meet the mitigation planning requirements. The Local Multi-Hazard Mitigation Planning Guidance is an interpretation and explanation for the Local Mitigation Plan regulations at 44 CFR §201.6 and is FEMA's official source for defining the requirements of original and updated Local Mitigation Plans. Additional FEMA resources frequently consulted include State and Local Mitigation Planning How-to Guides (FEMA 386-1 through 8).

Plan Organization and Content

Following the Executive Summary, the Plan is divided into seven parts, including Introduction, Community Profile, Risk Assessment, Capability Assessment, Mitigation, Plan Maintenance, and Appendices:

- Part 1 - Introduction. The Introduction provides an overview of the *Plan's* planning process, public involvement, participating jurisdictions, a description of what was updated from the *2005 Plan* and list of meeting attendees.
- Part 2 - Community Profile. This element provides a description of the political, natural, cultural, demographic, socio-economic and developmental characteristics of Taney County and its municipalities. It also includes identification of critical facilities and infrastructures, vulnerable populations, and resources that may be affected by a natural hazard event.
- Part 3 - Risk Assessment. The Risk Assessment provides an analysis of the natural hazards addressed in the *Plan*, including past occurrences, vulnerability assessment and impact analysis estimating losses in dollar amounts.
- Part 4 - Capability Assessment. The Capability Assessment discusses the current capabilities of Taney County and its municipalities to mitigate disaster events.
- Part 5 - Mitigation. This part describes the range of mitigation categories and activities that may be employed by a community, outlines the mitigation goals, objectives and mitigation strategies developed by Taney County and its communities, and provides a matrix that summarizes the mitigation strategies, priorities, responsibilities for implementation, and assessment.
- Part 6 - Plan Maintenance. The Plan Maintenance section notes the process and procedures outlined by Taney County and its municipalities to review and monitor progress of plan implementation and actions taken to reduce the risks of future disaster events that may affect the county. It also contains provisions for update of the Plan.
- Part 7 - Appendices. The Appendices includes the resolutions of plan adoption by Taney County and each city, repetitive losses incurred by the National Flood Insurance Program, acronyms, glossary of terms, and references.

Public Involvement

In accordance with Missouri's "sunshine law" (RSMo §610.010, 610.020, 610.023, and 610.024), input from the general public was solicited through media outlets, including public meeting notices published in local newspapers and "Notice of Public Meeting" flyers distributed to county and city clerks to post in places visible to the public in government buildings. All meeting dates and times were posted on the SMCOG website. The public was notified of all but one Plan Review and Advisory Committee meetings subsequent to the Kick-Off meeting through a legal advertisement in the Branson Tri-Lakes News print publication. Documentation of the planning process is presented in Appendix G.

The preliminary draft of the plan was posted on the SMCOG and Taney County websites and the public was invited to comment on the draft plan through press release to local media, legal notice and “public flyers.” A paper copy of the draft Plan was made available for review at the Taney County Emergency Management Office in Forsyth. The comment period extended for a period of three weeks prior to being submitted to SEMA for approval. The draft was posted on the SMCOG website on July 7, 2012, where all meeting dates and the draft plan elements were posted for public viewing and comment. Input from city and county officials was solicited through distribution of drafts of plan elements for discussion and review at scheduled meetings and through meetings and other communications with individual community representatives and elected officials.

Neighboring jurisdictions were notified via email and letters. Notifications were sent to the Branson Convention and Visitors Bureau, Hollister, Forsyth and Rockaway Beach Chambers of Commerce and local and regional agencies, such as; OACAC, U.S. Army Corps of Engineers, Emergency Management Directors from neighboring counties and the University of Missouri Extension office. A complete listing of neighboring agencies invited to participate in the planning process and what meetings they were invited to attend is included in Appendix F.

Plan Adoption

To be eligible for mitigation funding, local governments must adopt the FEMA-approved update of the Plan. The participation of the local government stakeholders in the planning process is considered critical to successful implementation of this plan. Each jurisdiction that is seeking approval for the plan must have its governing body adopt the updated plan, regardless the degree of modifications. SMCOG collaborated with the local governments in Taney County to assure participation in the planning process and the development of a plan that represents the needs and interests of Taney County and its local jurisdictions. Appendix A contains sample resolutions for jurisdictions adopting the *Plan*.

Participating Jurisdictions and Participation Requirements

In order to be included in the plan as a participating jurisdiction each jurisdiction was required to send a representative to multiple mitigation planning meetings as a minimum requirement. If, however, a representative was not able to attend at least two meetings they were encouraged to arrange for a one-to-one meeting with SMCOG staff or contact the SMCOG offices to obtain information presented at any of the planning meetings. Although not required, a set of standards for participation were developed in order for each jurisdiction to participate in the planning process and account for the variability of resources within each jurisdiction. This set of standards included; reviewing and commenting on plan draft materials, submitting insured replacement values and information relating to critical facilities and completing community or district hazard mitigation surveys. Jurisdictions that met the minimum requirement and any combination of three standards are considered to have satisfactorily participated in the planning process. Table 1-1 provides a record of participation in the planning process.

Table 1-1: Record of Participation					
Jurisdiction	Plan Update Status	Nature of Participation			
		Attended Meetings	Review and Comment on Draft Materials	Submitted Asset Inventory	Completed Surveys
Taney County	Continuing	X	X		X
Municipalities					
Branson	Continuing	X	X	X	X
Bradleyville	Dissolved	-	-	-	-
Bull Creek	Continuing	X	X		
Forsyth	Continuing	X	X		X
Hollister	Continuing	X	X		X
Merriam Woods	Continuing	X		X	
Kirbyville	Continuing	X		X	
Rockaway Beach	Continuing	X	X		X
Taneyville	No Participation				
School Districts					
Bradleyville R-I	New	X	X		X
Taneyville R-II	New	X	X	X	X
Forsyth R-III	New	X			X
Branson R-IV	New	X			X
Hollister R-V	New	X	X	X	X
Kirbyville R-VI	New	X	X	X	X
Mark Twain R-VIII	New	X	X	X	X
Colleges & Other Special Districts					
OTC-Table Rock	New	X	X	X	X
Taney County Regional Sewer District	New	X	X	X	X
Taney County Ambulance District	New	X	X		X

The *Plan* is a multi-jurisdictional plan including the participation of the following local jurisdictions:

- Taney County
- City of Branson
- Village of Bull Creek
- City of Forsyth
- City of Hollister
- Village of Kirbyville
- Village of Merriam Woods
- City of Rockaway Beach
- Bradleyville R-I School District
- Taneyville R-II School District
- Forsyth R-III School District

- Hollister R-V School District
- Kirbyville R-VI School District
- Taney County Regional Sewer District
- Taney County Ambulance District
- Branson R-IV School District
- Mark Twain R-III School District
- Ozarks Technical College-Table Rock Campus

The following Jurisdictions did not participate:

- Taneyville
- Bradleyville

Bradleyville was an incorporated area at the time of the 2005 Plan and participated in its development. Since 2005, Bradleyville has dissolved its incorporation and is no included in unincorporated Taney County. The Village of Taneyville was contact several times by telephone and both the EMD and village clerk received invitations and information. Taneyville was not represented during the planning process and did not meet the minimum participation requirements.

Plan Preparation Methodology and Schedule

In February 2012, SMCOG entered into cooperative agreements with SEMA and Taney County to prepare this multi-jurisdictional plan for public entities in Taney County. Discussions on the development of the Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan began in early February of 2012 with a meeting attended by SMCOG staff and the County Emergency Management Director. This meeting was conducted to discuss the timeline for developing the hazard mitigation plan, the planning process, identification of stakeholders and community organizations to include in the planning process and a date for the Kick-Off meeting to initiate participation of jurisdictions and public entities in the planning process.

SMCOG began conducting research and updating demographic and community profile information in advance of the Kick-Off meeting on February 28. At the Kick-Off meeting the plan update process was discussed with representatives from the local jurisdictions and emergency services. Meeting attendees were informed of participation requirements for the Plan, in-kind match documentation and the online repository of Plan materials that could be viewed and downloaded from the SMCOG website; such as, the capability survey instruments and full version of the 2005 Taney County Natural Hazard Mitigation Plan. The distinction between the 2005 Plan and the updated version that requires that school districts in particular and other entities participate as stand-alone jurisdictions to maintain eligibility for FEMA mitigation grant programs was emphasized.

SMCOG staff led the development of the plan under the direction of the emergency management director and the Plan Review and Advisory Committee, which included local elected officials, municipal government staff, county government staff, emergency services personnel, school officials, and employees from the health and social services organizations in the county.

The Plan Review and Advisory Committee met with SMCOG on several occasions from February through June 2012 to collaborate on the development of the Plan update. Participants assisted in data collection; reviewed and revised the Plan's goals, objectives and mitigation strategies; and provided reviews and comments on the plan throughout the update process.

Significant dates in the planning process for preparation of the *Plan* are noted below:

February 2012	Initial meeting with Taney County Emergency Management and SMCOG staff: <ul style="list-style-type: none">• Prospective participants and stakeholders identified, EMD to prepare and review contact list• Schedule Kick-Off meeting date and venue• SMCOG staff to draft invitation letters and to begin update of community profiles and storm event data
February 2012	Agreements executed between the Taney County Commissioners, SMCOG and SEMA to update the Natural Hazard Mitigation Plan.
February 28, 2012	Plan Update Kick-Off Meeting: <ul style="list-style-type: none">• Presented information on the planning process and plan elements• Distributed community and district capability surveys• Discussed minimum participation requirements and project timeline• Plan review and advisory committee meeting schedule established
April 10, 2012	Plan Advisory Committee Meeting: <ul style="list-style-type: none">• Updated Community Profile Chapter distributed for review• Hazard profiles presented and vulnerability scales for probability, severity and functional loss distributed• Completed vulnerability assessment for each participating jurisdiction
May 8, 2012	Plan Advisory Committee Meeting: <ul style="list-style-type: none">• Updated Risk Assessment Chapter distributed for review• Review of Goals, Objectives and actions from the 2005 Plan• Assessed progress towards 2005 actions and discussed actions to be revised, deleted, deferred or added
May 22, 2012	Plan Advisory Meeting: <ul style="list-style-type: none">• Continued discussion and final review of actions for the Plan update

- Discussed STAPLEE criteria for cost/benefit review of revised action items
 - Discussion of lead agencies and funding sources for each of the action items, timelines for implementation and measurable outcomes
- June 12, 2012 STAPLEE Meeting:
- Revised actions ranked and prioritized according to STAPLEE with simple scores method
- July 7, 2012 Draft Plan posted on the SMCOG Website, paper copy delivered to Taney County EMA, public notified and public comment period begins
- July 28, 2012 Completed draft of the Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan submitted to SEMA for review

The individuals in Table 1-3 participated in the development of the *Plan*. Many of these individuals represented community and stakeholder interests on the Plan Review and Advisory Committee. Participation in the development of the plan was also accomplished through telephone, fax and email communications to individual communities and through meetings with community representatives.

Plan Review and Update Process

The plan update process for all sections of the plan began with a review of each section from the approved *2005 Plan* and updating information presented in the original plan. For example, demographic information was updated using data from the 2010 Census and data from the most recent American Community Survey. Original source material for the Community Profile and Risk Assessment sections were reviewed and or updated. For example, hypertext links for the Economic and Agricultural Census web pages and MDC wildfire statistics were tested to see if they were up to date and operational. In most cases they were and information available for the period between the *2005 Plan* preparation and the date of the 2012 update preparation was incorporated into tables and narratives.

A significant amount of information presented in the plan has been updated and revised based on the review and incorporation of existing plans, studies, reports and technical information. Appendix E contains a listing of references to plans, studies, reports and technical information to incorporate into hazard profiles, risk assessment and capability sections. A few examples of information incorporated from the review of existing plans, etc. include:

- National Climactic Data Center Storm Events updated to include events from 2006 to 2011
- Information describing the impacts of natural hazards from the *State of Missouri Hazard Analysis, 2011* was added to hazard profiles in the Plan update.

- The County Emergency Management Director incorporated information from the Emergency Operations Plan into revisions to the Capability Assessment.

In most cases, SMCOCG staff was responsible for the review and incorporation of revised and updated material in the Plan. As new information was incorporated into the Plan, updated draft materials were distributed for review and comment at Plan Review and Advisory Committee meetings.

The bulk of revised material was developed from local jurisdiction reviews of initial section drafts and community and school district mitigation surveys. Table 1-2 below describes the revisions and updates incorporated into each section of the plan.

Plan Section	Updated Material
Part I-Introduction	<ul style="list-style-type: none"> • Added public involvement section describing advertised public meetings and opportunity for neighboring communities and agencies to be involved in the planning process • Added minimum participation requirements for local jurisdictions • Included a record of participation describing how each jurisdiction participated in the process • Updated list of plan participants • Updated planning methodology and plan timeline • Added table of local officials who attended meetings • Added plan review and update process section
Part II-Community Profile	<ul style="list-style-type: none"> • Updated demographic information • Updated critical, vulnerable and government facilities information • Incorporated building code, ordinance and mitigation measures based on community surveys • Incorporated revisions to community profiles as draft sections were reviewed by local officials
Part III-Risk Assessment	<ul style="list-style-type: none"> • Included events for each hazard that occurred from 2006-2011 • Updated probability and severity rankings • wildland urban interface hazard area map for wildfire • Included new profile for sinkhole hazard and emerging infectious disease • Added likely locations subsections for each hazard • Added overall summary of hazard vulnerability by jurisdiction

Plan Section	Updated Material
Part III-Risk Assessment	<ul style="list-style-type: none"> Added vulnerability assessment tables for each hazard and each participating jurisdiction
Part IV-Capability Assessment	<ul style="list-style-type: none"> Incorporated new information from community surveys and reviews by local officials
Part V-Mitigation	<ul style="list-style-type: none"> Updated mitigation actions development process Included actions eliminated and reason for removal Updated progress made towards mitigation goals from earlier plan Updated cost benefit review method using STAPLEE and simple scores Discussed funding sources, lead agencies and status of continuing, revised and new actions
Part VI-Maintenance	<ul style="list-style-type: none"> Plan monitored at Emergency Managers Meeting every two months

Acknowledgements

Several county and municipal officials provided valuable assistance throughout the planning process. Special thanks to the Taney County Commission for their participation and guidance in establishing the Plan Advisory Committee. Thank you also to all the municipal and county officials, residents, and the representatives from local business, utilities, health care and other emergency management personnel who participated on the Plan Advisory Committee, reviewed and commented on the drafts of the Plan, and contributed their time and ideas to the county-wide workshop for developing the Mitigation component of the Plan. A special thank you also to the staff from the incorporated communities in Taney County and other public and private sector institutions and organizations that provided input, data, and other resource material used in the development of the Plan. A very special thank you goes to Chris Berndt, Taney County Emergency Management Director, for his leadership throughout the process of completing the *Plan*.

Table 1.3 Taney County Hazard Mitigation Plan Meeting Attendance

Organization	Representative	2/28/2012	4/10/2012	5/8/2012	5/22/2012	6/12/2012	Arranged
Taney County							
GIS Manager	Patsy Alexander	x	x				
Office of Emergency Management	Melissa Duckworth	x	x	x	x	x	
Taney County EMD	Chris Berndt	x	x	x	x	x	
Planning & Zoning Administrator	Bob Atchley	x	x			x	
City of Branson							
Mayor	Raeanne Presley	x	x				
Planning Director	Jim Lawson	x	x				
Planning and Development	Stephenie Schultz	x					
Branson Fire and Rescue Chief	Ted Martin	x		x	x	x	
Bull Creek Village							
Bull Creek Emergency Management	James Felton		x	x	x	x	
City of Forsyth							
Chief Building Inspector	Richard Melton	x	x				
Fire Department Chief	Nathan Bower	x	x				
City of Hollister							
Building Official	Trent Bowers	x	x	x	x	x	
EMD	Ed Zielonka		x				
Kirbyville							
Kirbyville Trustee	Richard Jones				x		5/17/2012
Merriam Woods							
Village Administrator	Angela Leist		x			x	
Police Department	Mark Trog				x		
City of Rockaway Beach							
Mayor	Lawrence Cline	x	x	x	x	x	

Table 1.3 Taney County Hazard Mitigation Plan Meeting Attendance							
Organization	Representative	2/28/2012	4/10/2012	5/8/2012	5/22/2012	6/12/2012	Arranged
Alderman	Gary Judd		x	x	x		
P & Z Commissioner	Judy Daniel		x				
P & Z Commissioner	Harriet Leenerts		x				
Alderman	Jerry Simms			x			
Branson R-IV School District							
Asst. Superintendent	Dr. Don Forrest						6/27/12
Kirbyville R-VI School District							
Superintendent	Carless Osbourn	x	x	x	x	x	
Kirbyville R-VI Schools	Gary Rickman	x					
Forsyth R-III School District							
Superintendent	Brent Belvins	x					
Asst. Superintendent	Jeff Mingus	x	x				
Bradleyville R-I School District							
Bradleyville R-I Schools	Bob Comer					x	
Hollister R-V School District							
Hollister R-V Schools	Debbie Redford	x	x	x	x	x	
Taneyville R-II School District							
Taneyville R-II Schools	Scott Ewing		x	x		x	
Mark Twain R-VIII School District							
Superintendent	Debbie Adams						8/21/12
Asst. Superintendent	Michelle Collijns						8/21/12
Ozarks Technical Community College							
Branson Education Center Director	Robert Griffith		x				
Director of Safety & Security	Pete Rothrock		x	x	x	x	
Staff	Bill Carpenter		x				
Staff	Bill Dowdy			x			

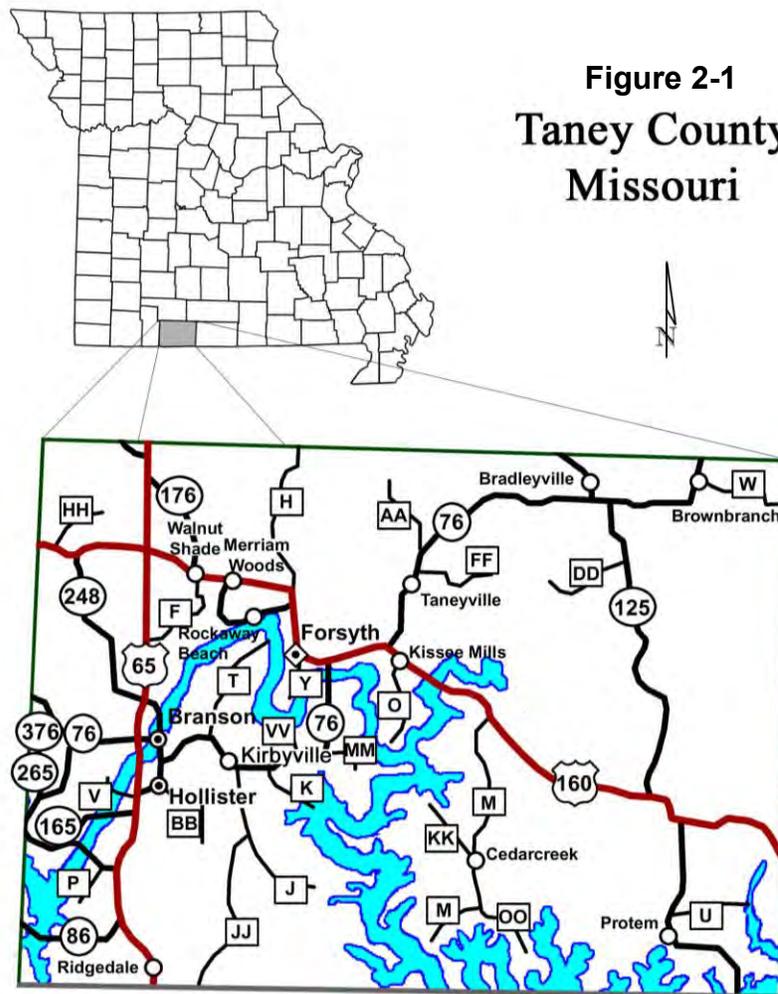
Table 1.3 Taney County Hazard Mitigation Plan Meeting Attendance							
Organization	Representative	2/28/2012	4/10/2012	5/8/2012	5/22/2012	6/12/2012	Arranged
Staff	JD Landon					x	
Taney County Regional Sewer District							
Administrator	Eddie Coxie		x	x		x	
Community Organizations							
Taney County Health Department	Robert Niezgoda	x	x		x	x	
Taney County Health Department	Kim Foster		x	x	x	x	
Taney County OACAC	Peggy Golden	x	x			x	
Taney County Ambulance District	Darryl Coontz	x		x			
White River Valley Electric Cooperative	Cindy Rains	x					

Part 2: Community Profile

Location

Taney County is located in Southwest Missouri and is bordered by Christian County to the north, Stone County to the west, Douglas and Ozark counties to the east, and the Arkansas counties of Boone and Marion to the south. Taney County covers 632 square miles. Of this territory, the county's incorporated cities and villages cover approximately 25 square miles.

Incorporated communities include the villages of Bull Creek, Kirbyville, Merriam Woods, and Taneyville and the cities of Branson, Forsyth, Hollister, and Rockaway Beach. There are also several unincorporated settlement areas in the county, including Bradleyville, Brown Branch, Kissee Mills, McClurg, Powersite, and Walnut Shade in the northern section of the county and Cedar Creek, Protem, Ridgedale, and Rueter in the southern portion. The City of Forsyth is the county seat.



Development History

Historically a rural, agrarian-based community, many changes have occurred since Taney County's organization as a Missouri county in 1837. The county has seen its primary economy change from one of labor intensive agricultural production of fruits, vegetables and other cash crops, lumbering, and manufacturing of goods from the area's natural resources to one heavily dependent on service and retail sector jobs created by the tourism industry.

The year 1909 brought about a proposal that would have long lasting impact on the economic future of Taney County. It was proposed that a dam be constructed across the White River for hydroelectric power generation. The Amhursen Hydraulic Construction Company began construction on the Powersite Dam in 1911. The dam was to be 70 feet tall and over 1000 feet in length and would inundate over 2,000 acres of prime farmland. The reservoir created was named Lake Taneycomo. The dam was completed in 1913 and provided power for Springfield, Joplin, Carthage, Forsyth, and many other towns. With the creation of Lake Taneycomo, the Hollister area quickly became an outdoor recreation destination, attracting vacationers from the St. Louis and Kansas City areas as well as throughout the region.

The evolution of the tourism industry was further spurred by the publication of Harold Bell Wright's book, *Shepherd of the Hills*, in 1907. Thousands of visitors from around the country traveled to the area to see the sites made famous in Wright's novel. The first Shepherd of the Hills pageant was held in 1960. Another important attraction contributing to tourism growth in Taney County was the opening of the Silver Dollar City theme park in neighboring Stone County in 1960.

By the early 1960s, the focus of the tourism activity in Taney County shifted to the Branson area, spurred by improvements to Highway 65, the creation of Table Rock Lake, and the growing popularity of attractions such as Silver Dollar City and the Shepherd of the Hills pageant. Branson's first music show, the Baldknobbers, opened in 1959. National recognition of the Branson area and the opening of many new music theatres in the early 1990s have made tourism the economic mainstay in Taney County. Today, Branson has over 45 theaters with more than 60,000 theater seats, over 200 lodging facilities with over 17,000 rooms and 200 restaurants with over 38,000 seats. In addition to lodging facilities there are another 5,000 condo/timeshare units plus campgrounds and day visitors who are not using lodging. Including employees and visitors, local economic development officials estimate a potential 70,000 to 75,000 people in the immediate area of Branson throughout the year.

Form of Government

Missouri is divided into 114 counties and the City of St. Louis by the Revised Statutes of Missouri (RSMo) §46.040. The Missouri legislature has established four classes of counties, based on the assessed valuation of real and personal property (Freyermuth, n.d.; RSMo §48.820). Taney County is classified as a first class county and is governed by a three-member Commission. Under the provisions of RSMo §49.010, counties are divided into two districts of nearly equal population (in Taney County, the eastern district and the western district). Each district elects one commissioner and the presiding commissioner is elected by the county as a whole. Commissioners serve four-year terms.

There are currently two classes of cities in Missouri--third and fourth class cities, as well as villages and home rule charter cities (Freyermuth, n.d.). Fourth class cities are those with populations greater than 500 but less than 3,000 inhabitants. Villages/towns are incorporations with less than 500 inhabitants (RSMo §72.050). There are eight incorporated communities in Taney County, four of which are fourth class cities and four which are villages. Bull Creek, Kirbyville, Merriam Woods, and Taneyville are villages and Branson, Forsyth, Hollister, and Rockaway Beach are fourth class cities.

Villages are regulated under RSMo §80 and are governed by a board of trustees. The board elects a presiding officer (chair) and a clerk, and appoints the village's officers. Fourth class cities are regulated by RSMo §79. Such cities may have the mayor/board of aldermen or mayor/city administrator/board of aldermen form of government. The mayor presides over the board but may vote only to break a tie. Table 2-1 lists the local governments in Taney County, Class of county/municipality, form of government, and regular meeting dates of the governing bodies.

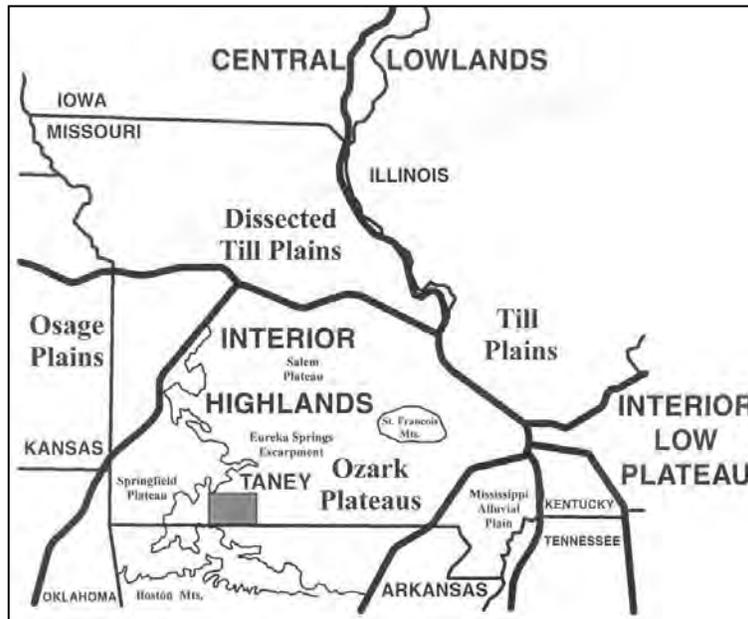
Local Government	Class	Form of Government	Meeting Schedule
Taney County	First	Commission	Monday
Branson	Fourth	Mayor/City Administrator/ Board of Aldermen	2 nd and 4 th Tues, 7:00 p.m.
Bull Creek	Village	Chair/Board of Trustees	1 st Tues, 7:00 p.m.
Forsyth	Fourth	Mayor/Board of Aldermen	3 rd Mon, 7:00 p.m.
Hollister	Fourth	Mayor/City Administrator/ Board of Aldermen	1 st and 3 rd Thurs, 7:00 p.m.
Kirbyville	Village	Chair/Board of Trustees	3 rd Thurs, 7:00 p.m.
Merriam Woods	Village	Chair/Board of Trustees	2 nd and 4 th Tues, 7:00 p.m.
Rockaway Beach	Fourth	Mayor/Board of Aldermen	2 nd Mon, 6:30 p.m.
Taneyville	Village	Chair/Board of Trustees	2 nd Tues, 7:00 p.m.

In addition to these incorporated communities, several smaller unincorporated settlements are scattered throughout the county. Some of these larger settlement areas include Protem, Kissee Mills and Walnut Shade. The county is also divided into eight townships including Branson, Beaver, Big Creek, Cedar Creek, Jasper, Oliver, Scott, and Swan.

Physical Characteristics

Physiography and Geography

Taney County is located in the southwestern Ozarks Plateau region of the Interior Highlands physiographic province. The county is situated on the Salem Plateau portion of the Ozarks Plateau. Rugged hills, steep ridges, and deep, narrowly entrenched stream valleys characterize the Salem Plateau. Topographic relief in Taney County is over 800 feet, ranging from high elevations of approximately 1,480 feet above mean sea level (msl) in the northeastern section of the county to 654 feet at Bull Shoals Lake (normal pool elevation). Much of the county is characterized by moderate to very steep slopes. Approximately 50 percent of the county has slopes of 10 percent or greater.

Figure 2-2: Regional Physiography

Source: Taney County Master Plan, 1999.

Taney County is primarily underlain by Mississippian and Ordovician age limestones and dolomites. The county's topographic surface features reflect an advanced stage of the geological erosion cycle. Surface features are primarily a result of the Ozark uplift and subsequent erosion of the limestone bedrock. Taney County is known for its panoramic vistas. Outliers, which are rock outcrops that have become detached from the main body of bedrock, extend in length from one to twelve miles and create long, panoramic vistas. Rock outcrops are found throughout the county and are particularly noticeable around the lakes areas (Dodd, J.A., and E.J. Dettman, 1996).

Karst topographic features are common throughout the county. Karst features develop in areas of bedrock with high carbonate content. The bedrock is easily dissolved by a dilute carbonic acid found in the atmosphere, vegetation, and shales. Water infiltrates the bedrock and is channelized through natural cracks, joints, faults, and bedding planes. The dissolution of the bedrock and channelization of water results in caves, sinkholes, losing streams, springs, and other karst features. Caves are particularly prevalent throughout Taney County (Southwest Missouri Council of Governments, *Taney County Master Plan*, p. 6.2).

Hydrology and Drainage

Taney County's water system is comprised of a complex and interconnected system of perennial and intermittent streams, impoundments, and subsurface water. The county is located in the White River Basin, which eventually flows to the Mississippi River. Taney County contains approximately 12,945 acres of surface water. One of the county's defining features and important economic resources is the surface reservoir system. Lake Taneycomo, Bull Shoals Lake, and Table Rock Lake, created from the construction of dams on the White River, account for approximately 10,480 acres of surface water in

the county. All three lakes provide for hydroelectric power generation and flood control as well as recreation.

Lake Taneycomo, located completely in Taney County, was created in 1913 by the construction of the Powersite Dam (Ozark Beach Dam) near Forsyth. Originally constructed for hydroelectric power generation, the lake's surface water covers approximately 2,080 acres (Branson USA Online, 1996). Lake Taneycomo is privately owned, but Bull Shoals and Table Rock Lakes are managed by the U.S. Army Corps of Engineers. Bull Shoals Lake was formed in 1952 by the construction of the Bull Shoals Dam on the White River, about 10 miles west of Mountain Home, Arkansas. Approximately 5,200 acres of the total surface water area at the conservation pool (45,440 acres) are located in Taney County.

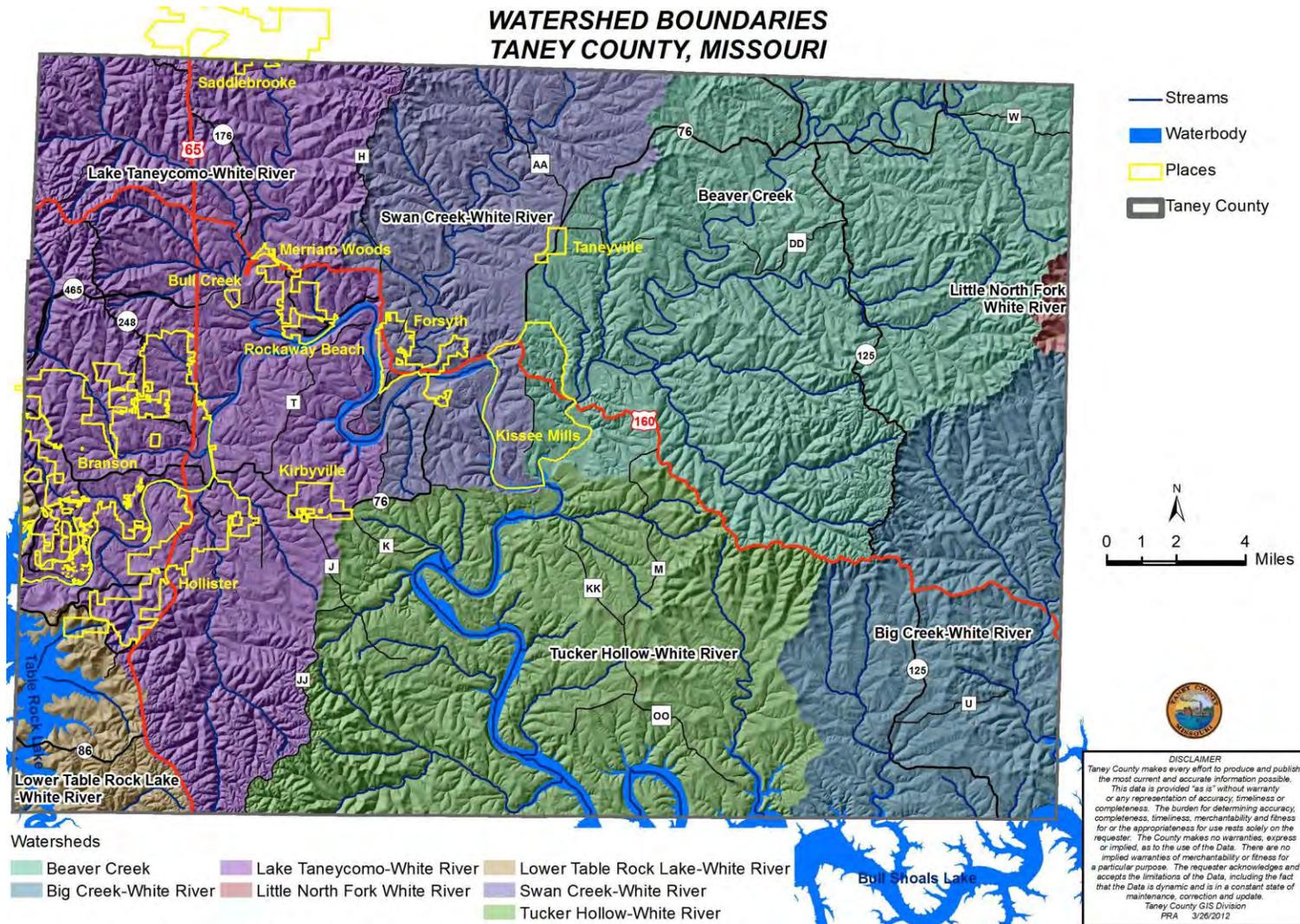
Table Rock Lake was formed in 1959 from the construction of the Table Rock Dam on the main stem of the White River, about six miles south of the City of Branson along the Stone County/Taney County line. Of the 43,100 acre conservation pool surface area of the lake, 3,200 acres are in Taney County. Table Rock Lake has a substantial influence on the county and region. Water released from Table Rock Dam into Lake Taneycomo comes from a depth of 140 feet below the surface of Table Rock Lake. This very cold water is ideal for trout. With the Missouri Department of Conservation's construction of the Shepherd of the Hills Hatchery on Lake Taneycomo, Lake Taneycomo is considered one of the best trout fishing lakes in the Mid-West (*Taney County Master Plan*, p. 6.5).

Taney County also has approximately 950 acres of ponds and 500 acres of perennial streams. All streams in the county either flow into Lake Taneycomo, Bull Shoals Lake, or Table Rock Lake. Most of Taney County lies within the Bull Shoals watershed which includes Lake Taneycomo and Bull Shoals Lake. The southwestern corner of the county, including Table Rock Lake, lies within the Beaver Reservoir watershed.

Major perennial streams originating outside of Taney County include Beaver, Swan and Bull Creeks. Beaver Creek, the largest perennial stream, originates in Douglas County. It drains eastern portions of the county and flows into Bull Shoals Lake. Swan Creek originates in Christian County and drains the central portion of Taney County before flowing into Bull Shoals Lake. Western portions of the county are drained by Bull Creek, which originates in Christian County and flows into Lake Taneycomo.

Bradleyville is located in the Beaver Creek sub-watershed, with Caney Creek to the east of the Village, and Beaver Creek located to the south. Branson, Hollister, Kirbyville, and Merriam Woods are located in the Taneycomo sub-watershed. Roark Creek flows to the north of Branson, and Lake Taneycomo is located to the south and east of Branson. Turkey Creek flows through the middle of Hollister and Coon Creek flows along the city's northeastern boundary. No creeks or rivers flow through Kirbyville or Merriam Woods. Bull Creek and Rockaway Beach are located in the Lower Bull Creek sub-watershed. Bull Creek runs along the western edge of the Village of Bull Creek. Bull Creek also runs along the southwestern boundary of Rockaway Beach. The Village of Taneyville is located in the Swan Creek sub-watershed, but contains no creeks or rivers

Figure 2-3: Taney County Watersheds



Groundwater is the primary source of water for human consumption in Taney County. With the exception of the City of Branson, which now draws most of its water supply from Lake Taneycomo, other water systems draw water from wells drilled in the Ozark aquifer. The Ozark aquifer consists of dolomites, limestones, and sandstones of late Cambrian through Devonian age (U.S. Department of the Interior, Water Resources Investigations Report 98-4164, 1998). Wells drilled in the Ozark aquifer generally produce good quality water and can yield more than 1,000 gallons per minute.

While the county generally has an abundant supply of groundwater, potential contamination of the groundwater from surface pollutants is a concern. Karst features, including sinkholes, caves, springs, losing streams and fractures in the bedrock, allow for the rapid movement of water between the surface water and groundwater systems. Surface pollutants, such as nitrates, phosphorus, and fecal coliform bacteria, can enter the groundwater system relatively easy with little filtration. The primary sources of these nutrient and bacterial contaminants are animal manure, wastewater treatment plants, septic tanks and fertilizers. In general, shallow wells (drilled to less than about 300 feet) and springs are more susceptible to contamination from surface pollutants (U.S. Department of the Interior, USGS Circular 1158, 1998).

There is growing concern for degradation of reservoir water quality due to nutrient loads, particularly nitrates and phosphorus, which can result in algae blooms, oxygen depletion and fish kills. Taney County's lakes are critical economic assets for water recreation, sport fishing, and the general tourism industry. The cities of Branson and Hollister have installed phosphorus removal systems at their wastewater treatment facilities on Lake Taneycomo to reduce nutrient loads; the Rockaway Beach Regional Treatment Facility also has stringent controls for phosphorous removal.

Climate and Weather

Taney County has a humid continental climate with mild winters and hot, humid summers. The climate data show that the average precipitation is about 40 inches per year. The average monthly rainfall is about three to five inches per month in the spring while it is only one to three inches per month in the late fall and winter. The mean annual air temperature is about 58° Fahrenheit, with average summer temperatures of 87° Fahrenheit and average winter temperatures of 34° Fahrenheit. The climate of Southwest Missouri, including Taney County, is characterized by thunderstorm events that are often sudden and intense in nature. Such storm events frequently result in flash flooding in low-lying areas.

Soils

The *Taney County Soil Survey* identifies twenty soils units in the county (Dodd, J.A., and E.J. Dettman, 1996). The soils are highly variable and range in thickness from thin to none on steep slopes to over 60 inches on ridge tops, foot slopes, stream terraces, and floodplains.

Of the approximate 19,100 acres classified as prime farmland soils, most are generally not suited to intensive crop cultivation due to severe flooding potential, slope, and susceptibility to erosion. Approximately 8,300 acres or 2.8 percent of the county's total acres are generally suited for more intensive crop cultivation. Soils suited for cultivated crops are found on the bottomlands, terraces, and a few gently to moderately sloping

upland areas. Actual acreage used for small grain crops and row crops in Taney County is quite limited. Stream terraces and the floodplains along the creeks and the lakes are used to produce winter wheat, grain sorghum and soybeans (*Taney County Master Plan*, p. 6.7). Most cleared areas in the county are used for pasture and hay production. The livestock industry includes dairy and beef cattle and the raising of hogs for the feeder pig market. Most of the county's soils have low soil fertility, requiring the addition of plant food for maximum production of crops and hays for the livestock industry.

Soil types and geologic features have a significant impact on the development of Taney County. Most soils have severe limitations for use of on-site sewage disposal systems. Conditions that affect the ability of the soils to adequately absorb the effluent discharge from septic systems include soil permeability, depth to bedrock, high water table, and flooding. Improperly designed, installed or maintained septic systems can result in the discharge of poorly treated or untreated wastes into the groundwater system through the underground conduits characteristic of karst topography.

Building site development in Taney County is also impacted by soils characteristics and geologic structure. Thin soils, depth to bedrock, wetness, slope, shrink-swell and low strength are common features of many of the soils associations which either severely restrict development or require increased building site preparation. Soil erosion in areas of thin soils and extreme slope is also a concern.

Significant Natural Communities

Significant natural communities in Taney County include chert savannas, dolomite and limestone glades, balds, caves, and creeks/small rivers. These natural communities provide habitats for several sensitive and endangered species, some of which are found only in Taney County. Glades and caves are predominant natural communities in Taney County. The Hercules Glades wilderness area and the Thorpe Creek Glade, located south of Hollister, are the largest and highest quality glades in the county. The Skaggs-Keeter Ranch, located near the Drury Refuge, is considered a significant savanna habitat. Other significant habitats in Taney County include the Hollister Tower Site and the White River Balds Natural Area, located in the Henning State Forest.

Both Hercules Glades and the White River Balds Natural Area are significant habitat-managed natural communities. The Hercules Glades Wilderness Area is designated by the U.S. Congress as a Wilderness Area. No motorized vehicles are allowed access and no timber harvesting or other similar type of environmental disturbance is allowed in Hercules Glades. The White River Balds is a state-designated Natural Area. The Missouri Department of Conservation and the Missouri Department of Natural Resources will not permit any use or diversion of this area for a use which is not compatible with the area's preservation objectives, unless there is a critical need and no other feasible alternative.

There are at least 130 known caves in Taney County (Missouri Speleological Survey, Inc., 1999). One of the more significant caves is Tumbling Creek Cave, located in the Protem area. Tumbling Creek Cave houses the Ozarks Underground Laboratory, the only such underground hydrogeology laboratory in the United States. This cave is also home to endangered species, including the Gray bat the Indiana bat, as well as *Antrobia culveri*, an aquatic snail which is a candidate for classification as a federally endangered

species. The *Antrobia culveri* is a unique species and genus found in no other place in the world. Tumbling Creek Cave is further noted as containing the greatest diversity of fauna in any cave located west of the Mississippi River. It has been designated as a Natural National Landmark by the Department of the Interior and is listed as a significant cave by the U.S. Forest Service.

Demographics

Population Trends

Taney County's population increased from 39,703 in 2000 to 51,675 in 2010 a 30 percent increase in ten years. This rapid population increase resulted from continued in-migration of persons attracted by employment opportunities in the booming Branson area entertainment industry as well as in-migration of retirees attracted by the area's lower cost of living and natural environment.

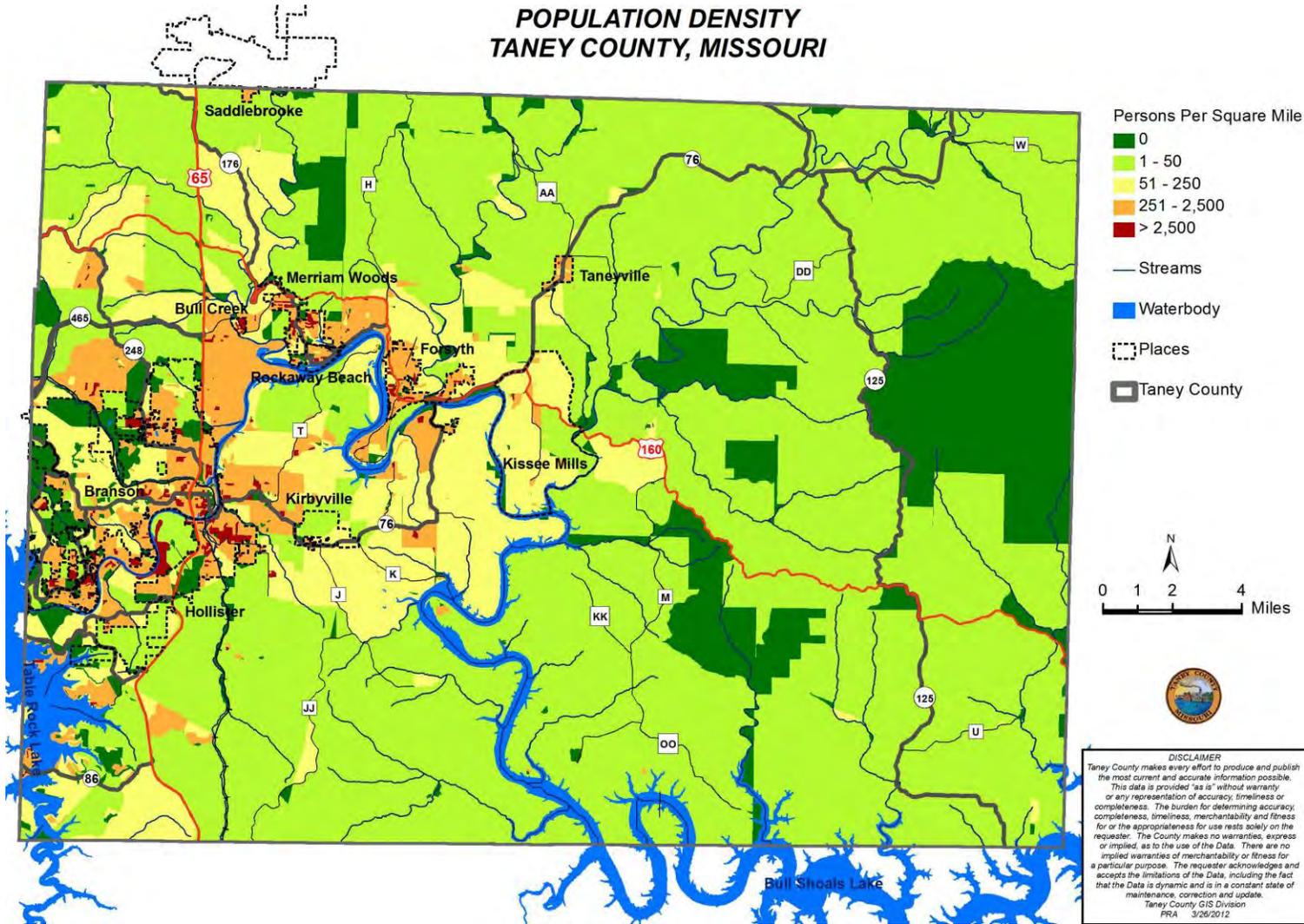
Although the percentage share of population living in the incorporated communities in Taney County has increased since the 1970s, the majority of the population resides in the unincorporated areas of the county. In 2010, 57% of the population lived in unincorporated areas. Two settlement areas have incorporated since the 2000 Census—Bradleyville and Kirbyville. Bradleyville has since unincorporated prior to the 2010 Census. In addition, Table Rock Village was incorporated into the City of Branson in 2004.

Jurisdiction	2000 Population	2010 Population	Change 2000-2010	% Change 2000-2010
Taney County Total	39,703	51,675	11,972	30.1%
Branson	6,050	10,520	4,470	73.8%
Bull Creek	225	603	378	168%
Forsyth	1,686	2,255	569	33.7%
Hollister	3,867	4,426	559	14.4%
Kirbyville	-	207	-	-
Merriam Woods	1,142	1,761	619	54.2%
Rockaway Beach	577	841	234	45.7%
Taneyville Village	359	396	37	10.3%
Incorporated Total	13,906	21,009	6,866	51%
Unincorporated Total	25,797	30,666	4,869	18.9%

Source: U.S. Census Bureau. 2010 Census

The spatial distribution of population is significantly influenced by the county's topography, lakes, highway network, and location of public lands. Population in Taney County is primarily concentrated in the west half of the county, located along the major transportation corridors and in proximity to the lakes. The cities of Branson and Hollister — bordering on Table Rock Lake and Lake Taneycomo— form the population center located in the western section of the county.

Figure 2-4: Taney County Population Density, 2010



Age Characteristics

Table 2-3 provides age specific data by five year age group for Taney County's population in 2010. Taney County's youth represented 22.1 percent of the total population in 2010, while working aged citizens (19-64 years) accounted for 60.2 percent of the population. The retirement-aged population (65 years and over) constitutes 17.7 percent.

Trends in the median age of the population for Taney County reflect the immigration of younger working aged adults and families and the increase in retirees to the region. Taney County's 2000 median age was 38.8 years. In 2010, the median age increased to 40.7 years.

Table 2-4 shows the percentage of population by age cohort and jurisdiction in Taney County. Forsyth has the largest percentage of people 65 years and older, while Bull Creek Village has the highest percentage of younger population (under 18 years).

Age Cohort	Population	% of Total
Under 5 years	3,175	6.1
5 to 9 years	3,012	5.8
10 to 14 years	3,279	6.3
15 to 19 years	3,489	6.8
20 to 24 years	3,537	6.8
25 to 29 years	3,026	5.9
30 to 34 years	2,934	5.7
35 to 39 years	2,983	5.8
40 to 44 years	3,173	6.1
45 to 49 years	3,542	6.9
50 to 54 years	3,563	6.9
55 to 59 years	3,396	6.6
60 to 64 years	3,416	6.6
65 to 69 years	3,111	6
70 to 74 years	2,388	4.6
75 to 79 years	1,689	3.3
80 to 84 years	1,090	2.1
85 years and over	872	1.7
Total	51,675	100

Source: U.S. Census Bureau, 2010 Census.

Jurisdiction	Total Population	Percent Under 18	Percent 19 - 64	Percent 65 and over	Median Age
Taney County	51,675	22.1	60.2	17.7	40.7
Branson	10,520	18.8	61.7	19.6	41.2
Bull Creek	603	43.3	53.1	3.6	21.5
Forsyth	2,255	16.4	51	32.6	51.7
Hollister	4,426	23.2	60.5	16.3	36.6
Kirbyville	207	28	60.4	11.6	38.8
Merriam Woods	1,761	27.8	59.3	12.9	34.7
Rockaway Beach	841	21	60.5	18.4	45.3
Taneyville	396	33.3	53.8	12.9	33.6

Source: U.S. Census Bureau. Profile of General Demographic Characteristics. Age Groups and Sex, QTP1. 2010.

Race and Ethnicity

Taney County’s population is primarily White, with minority populations representing 6.4 percent of the total population in 2010, a 2.6 percent increase from 2000. The Hispanic population has been growing rapidly in Southwest Missouri since 2010, particularly in counties located west of Taney County. Hispanics represented 4.8 percent of Taney County’s total population in 2010. The number of individuals identified as Hispanic increased from in 962 in 2000 to 2,494 in 2010, an increase of 259 percent.

Table 2-5: Race and Hispanic Population, 2010								
Jurisdiction	Percent of Total Population							
	One Race						Other	
	White	Black or African American	American Indian and Alaska Native	Asian	Native Hawaiian and Other Pacific Islander	Some Other Race	Two or More Races	Hispanic and Latino (any race)
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Taney County	93.6	0.9	0.8	0.7	0.1	1.8	2.2	4.8
Branson	89	2	0.9	1.5	0.1	3.9	2.6	8.8
Bull Creek	88.7	1.3	0.2	0.7	0.8	4.8	3.5	10.1
Forsyth	96.1	0.3	0.9	0.4	0	0.5	1.8	3
Hollister	92.5	0.9	1.2	0.5	0.2	2.8	1.9	6.4
Kirbyville	88.4	0.5	0	2.4	0	7.2	1.4	6.8
Kissee Mills CDP	97.1	0.1	0.6	0	0	0	2.2	1.1
Merriam Woods	94.1	0.3	1.2	0.1	0	1.1	3.2	3.4
Rockaway Beach	96.1	0.7	1	0	0.6	0.4	1.3	2
Taneyville	96.7	0	0	0	0	1.5	1.8	3

Source: U.S. Census Bureau. Race and Hispanic or Latino Origin. QTP3, Census 2010.

Income Characteristics

In 2010, 15 percent of the county’s households had incomes of less than \$15,000 per year; 75.4 percent between \$15,000 and \$99,999; and 9.6 percent had income of \$100,000 or more. Taney County’s 1009 median household income was \$39,026, lower than that of the State of Missouri (\$46,262) and the Nation (\$51,914). The 2009 per capita income for the Taney

Table 2-6: Taney County Household Income and Benefits, 2010			
Household Income	Number of Households	Margin of Error (MOE)	Percent of Total
Less than \$10,000	1,762	+/- 315	8.7
\$10,000 to \$14,999	1,283	+/- 249	6.3
\$15,000 to \$24,999	3,112	+/- 379	15.3
\$25,000 to \$34,999	3,029	+/- 378	14.9
\$35,000 to \$49,999	3,511	+/- 405	17.3
\$50,000 to \$74,999	3,750	+/- 394	18.5
\$75,000 to \$99,999	1,905	+/- 315	9.4
\$100,000 to \$149,999	1,233	+/- 226	6.1
\$150,000 to \$199,999	280	+/- 127	1.4
\$200,000 or more	416	+/- 175	2.1
Median household income	\$39,026	+/- \$ 1,933	--
Total households	20,281	+/- 617	100

Source: ACS 2006-2010. Selected Economic Characteristics. DP03.

County was also lower than the state and national figures. The actual poverty rate in the county decreased from 12.4 percent to 10.5 percent over the between 2000 and 2010. Poverty is most acute for children under the age of 18. In 2009 for persons for whom poverty level could be determined, 22.7 percent of children under the age of 18 lived below the poverty level.

Educational Attainment

The educational and skills level of the workforce is a critical factor influencing opportunities for attracting new business development to Taney County and achieving greater economic diversification. American Community Survey 2006-2010 indicates that 86.6 percent of the population 25 years and older are high school graduates or higher, an increase of 5.2 percent over 2000; 20 percent have a bachelor's degree or higher, an increase of 4.6 percent from 2000. The percentage of the county's adults with a high school diploma falls short of nearby Greene and Christian Counties however, is slightly above the State of Missouri according to the American Community Survey 2006-2010. Many of those who have not graduated from high school are older adults who completed their education a number of years ago when educational attainment rates were significantly lower overall.

Jurisdiction	Less than 9th grade	9th to 12th grade, no diploma	High school graduate, includes equivalency	Some college, no degree	Assoc. degree	Bachelor's degree or higher	Percent high school graduate or higher	Percent bachelor's degree or higher
Taney County	1,442 +/- 260	3,085 +/- 411	11,968 +/- 621	4,532 +/- 440	1,727 +/- 275	5,928 +/-700	86.6% N/A	20% N/A
Branson	3.7% +/-1.6	6.1% +/-2.8	33.1% +/-4.4	27.4% +/-4.3	7.0% +/-2.6	22.8% +/-6.1	90.2% +/-3.4	22.8% +/-4.4
Bull Creek	4.7% +/-6.7	19.7% +/-13.3	45.7% +/-15.2	13.4% +/-10.0	7.9% +/-8.7	8.7% +/-6.2	75.6% +/-14.2	8.7% +/-6.2
Forsyth	8.0% +/-6.5	8.7% +/-4.0	38.0% +/-5.6	26.3% +/-6.5	1.3% +/-1.5	17.7% +/-9.0	83.3% +/-8.0	17.7% +/-6.6
Hollister	7.6% +/-3.2	12.7% +/-4.4	44.2% +/-8.2	18.7% +/-5.3	5.8% +/-3.5	10.8% +/-7.1	79.6% +/-5.2	11.0% +/-5.6
Kirbyville	1.9% +/-3.9	15.1% +/-11.6	59.4% +/-16.2	13.2% +/-10.8	4.7% +/-9.0	5.7% +/-8.0	83.0% +/-11.5	5.7% +/-8.0
Kissee Mills CDP	0.8% +/-1.0	23.2% +/-13.4	40.3% +/-9.2	19.5% +/-7.4	3.7% +/-4.0	12.6% +/-10.6	76.0% +/-13.5	12.6% +/-7.6
Merriam Woods	1.9% +/-1.2	13.8% +/-5.1	44.5% +/-6.8	24.4% +/-5.7	3.5% +/-2.0	11.9% +/-5.4	84.3% +/-5.2	12.0% +/-4.3
Rockaway Beach	3.0% +/-3.6	14.7% +/-6.2	40.0% +/-9.1	28.8% +/-7.2	4.5% +/-3.3	8.9% +/-5.8	82.3% +/-7.7	8.9% +/-5.8
Taneyville	5.4% +/-5.2	15.7% +/-10.1	34.7% +/-10.8	26.9% +/-10.6	8.3% +/-4.8	9.1% +/-9.2	78.9% +/-11.5	9.1% +/-6.8

Source: ACS 5-Year Estimates, 2006-2010. Educational Attainment, S1501.

Household Characteristics

In 2010, the number of households in Taney County was 20,755. Of these, 67 percent were family households, and 33 percent were non-family households. The traditional married couple with children under 18 years represented only 17 percent of the total households in the county, while single person households represented 26 percent. The most populated areas of the county, Branson, Hollister, and Forsyth, had, in general, higher percentages of single person household and lower percentages of family households than other jurisdictions. The average household size for Taney County is 2.41 persons per household, which is lower than the State (2.45) and the nation (2.58).

Jurisdiction	Total Households	Family Households			Non-Family Household	Single Person Household	Average Household Size
		Total Family	Married Couple w/children under 18	Single Parent w/children under 18			
Taney County**	20,755	13,897	3,526	1,800	6,858	5,445	2.41
Branson	3,790	2,191	657	43	1,599	1,333	2.03
Bull Creek	75	35	19	2	40	30	2.28
Forsyth	852	526	154	61	326	309	2.18
Hollister	1,871	1,219	280	79	652	547	2.02
Kirbyville	52	29	3	5	23	19	2.31
Merriam Woods	713	503	95	111	210	140	2.26
Rockaway Beach	315	180	29	22	135	118	1.96
Taneyville	143	115	35	24	28	25	2.4

Source: U.S. Census Bureau. American Community Survey 2005-2009, 5-Year Estimates. DP02. Selected Social Characteristics in the United States.
 **U.S. Census Bureau. Summary File 1, Census

Economy, Employment, and Industry

Labor Force Characteristics

Taney County's continued population growth since the between 2000 and 2010 is reflected in the characteristics of its labor force. The county's civilian labor force increased from 20,927 persons in 2000 to approximately 27,938 persons in 2009, a 33.5 percent increase. This increase is less than that from 1990 to 2000 during which the labor force for Taney County increased by 43.3 percent. In 2009, 22,932 persons or 82 percent of the labor force were employed, an eight percent decrease since 2000.

The greatest numbers of Taney County's labor force are employed in the *Arts, Entertainment, & Recreation* industrial sector, accounting for 34 percent of the employed labor force in 2009. Data in Table 2-9 reflect employment of Taney County residents by industry and not by actual place of employment.

Industry	Number Employed	Percent of Total
Agriculture, Forestry, Fishing and Hunting, and Mining	44	1.2
Construction	728	3.2
Manufacturing	499	2.2
Wholesale Trade	240	1.0
Retail Trade	5,106	22.3
Transportation and Warehousing, and Utilities	290	1.3
Information	348	1.5
Finance, Insurance, Real Estate, and Rental and Leasing	2,069	9.0
Professional, Scientific, Mgmt., Admin., and Waste Mgmt. Services	2,022	8.8
Education, Health, and Social Services	1,299	5.7
Arts, Entertainment, Recreation, Accommodation, & Food Services	7,869	34.4
Other Services (except Public Administration)	944	4.1
Public Administration	--	--
Total	22,932	100.0

Source: U.S. Census Bureau. County Business Patterns, 2009.

Primary Industries

Table 2-10 lists businesses by industrial sector located in Taney County and the number of employees. *Retail* and *Accommodation and Food Services* industries account for the largest number of businesses and employees, reflecting the importance of the tourism industry to the county.

Business	Number of Businesses	% of Total	Number of Employees	% of Total
Agricultural Services	0	--	0	--
Mining	6	0.3	44	0.2
Utilities	6	0.3	--	--
Construction	143	7.8	728	3.2
Manufacturing	50	2.7	499	2.2
Transportation & Warehousing	28	1.5	290	1.3
Wholesale	38	2.1	240	1
Retail	421	23	5,106	22.3
Information	26	1.4	348	1.5
Finance	63	3.4	412	1.8
Real Estate	115	6.3	1,309	5.7
Professional	108	5.9	556	2.4
Management of Companies & Enterprises	6	0.3	--	--
Admin/Support, Waste Mgt/Remediation Svcs	107	5.9	1,466	6.4
Educational Services	14	0.8	--	--
Health Care and Social Assistance	120	6.6	1,299	5.7
Arts, Entertainment, and Recreation	105	5.7	1,919	8.4
Accommodation & Food Services	298	16.3	5,950	25.9
Other Services (except Public Admin)	156	8.5	944	4.1
Unclassified Establishments	17	0.8	--	--
Total	1,827	100	22,932	100

Source: U.S. Census Bureau. County Business Patterns, 2009.

Access to Employment: In-commuting and Out-commuting

Approximately 87.9 percent (20,341) of the county's workers older than 16 years work in Taney County. The remaining 10.4 percent of the workforce commutes outside of the county. The average travel time to work for Taney County residents decreased slightly from 21.7 minutes in 2000 to 20.3 minutes in 2010. However, travel time to work for county residents is still low when compared to other counties and the State, possibly because of the low percentage of out-commuting and better road development.

Taney County Employed	Number	Percent of Total
Work in County of Residence	20,341	87.9
Work Outside County of Residence	2,385	10.4
Work Outside of State	390	1.7
Total Employed	22,932	100.0
Source: American Community Survey 2006-2010. Means of Transportation to Work by Selected Characteristics. S0802.		

Land Use

Existing Land Use Patterns

The historical patterns of land development in Taney County have changed and intensified as a result of growth in the tourism industry and rapid in-migration of new population. The county's population is projected to increase by nearly 21,000 persons by the Year 2020, and if current land development trends continue, a majority of the population will reside in the incorporated communities.

The spatial distribution of land uses in Taney County are clearly influenced by the major transportation system, elements of the natural environment, and the substantial amount of land in federal and state ownership. Limited by the very steep topography throughout much of the county, development has occurred along the highways that tend to follow ridgelines. The major lakes also affect development patterns. Concentrations of residential and commercial development are located along Table Rock Lake and Lake Taneycomo and to a lesser extent along Bull Shoals Lake in eastern Taney County.

According to the *Taney County Master Plan*, adopted in 1999, developed land uses in Taney County account for over 14 percent of the county's total land area. This includes the incorporated cities and villages and developed uses in the unincorporated areas. Most residential development in Taney County is located in the cities, along the Highway 65, Highway 160 and Highway 76 corridors, and around the lakes in the western half of the county. Overall, residential land uses in the unincorporated area account for approximately 4.3 percent of total land area in the county. Single family residences are the primary residential use. Multi-family development, including duplexes, apartments, condominiums and time-share developments, are generally located in the urbanizing area of the county near the cities and in close proximity to the lakes.

The vast majorities of commercial land uses in Taney County are located in the cities or in the urbanizing areas along the major roads. Commercial strip development in the unincorporated areas is most pronounced in the western townships, particularly along (1) Highway 65 through and south of Hollister, (2) Highway 76 between Hollister and northeast of Forsyth, and (3) along Highway 160 between Highway 65 and Forsyth (*Taney County Master Plan*, 1999, p.7.5).

Industrial activity is one of the most underrepresented land use activities in the county, due in part to the historical rural nature of the area and the rugged terrain that limits suitable industrial sites and transportation access for shipment of raw materials and products. Rock quarries account for a significant majority of total industrial acreages. Most industrial uses and quarries are located near Branson and Hollister. Since 2000, there has been an increase in light industrial uses, particularly in the City of Hollister along the Highway 65 corridor.

Public and semi-public land uses in the unincorporated areas include schools, churches, government facilities and institutional uses. Most such uses are located in close proximity to the cities and in unincorporated settlement areas in the eastern section of the county.

Approximately 82,000 acres are designated as farmland, or 19.4 percent of the county. Most agricultural uses are located in the northern, eastern and southern sections of the county. The farmland acreage does not include the nearly 70,000 acres of farm woodlands. Of farm woodlands, approximately 48,000 acres are used for animal grazing (*Taney County Master Plan*, 1999, p.7.7). There has been a decrease in undeveloped forest lands in the county over the past decade, a trend that is expected to continue. The greatest loss in forest lands has occurred in the urbanizing areas in the western section of the county as land is cleared for new development.

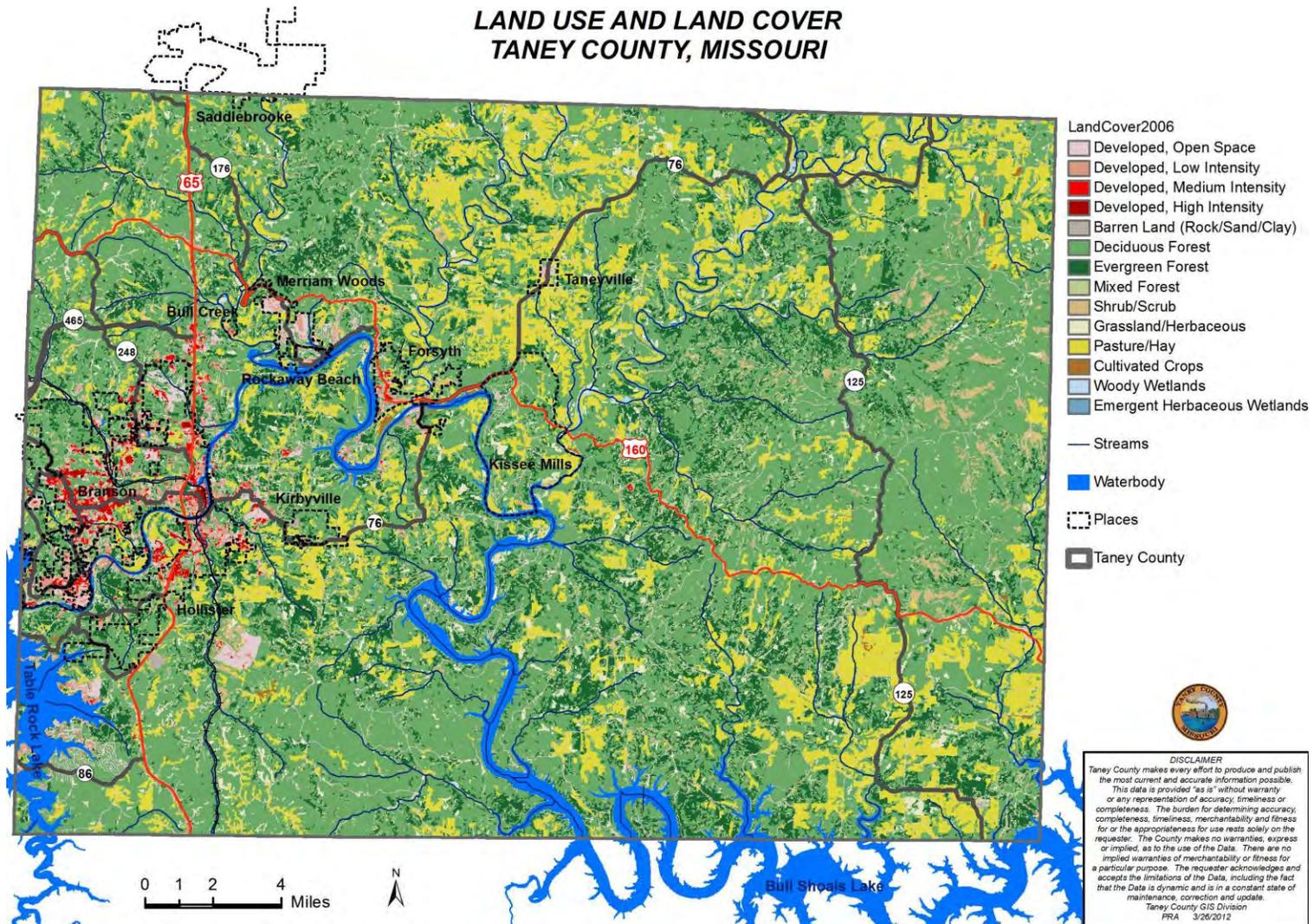
Public Lands/Use Areas

Taney County itself does not own or operate any parks and recreation areas. However, there are nearly 7,770 acres of state owned parks and recreation lands in the unincorporated areas of the county. These sites include Table Rock State Park, Drury Refuge, the Mincy Public Hunting Area, and the Henning Conservation Area. Table 2-12 lists State and Federal by agency and acreage of managed lands.

Table 2-12: Public Lands in Taney County		
Management Areas	Ownership	Acres
Boston Ferry Conservation Area	MDC	180.96
Branson Forestry Office	MDC	4
Cooper Creek Access	MDC	29.43
Drury-Mincy Conservation Area	MDC	4,089
Empire District Electric Company (Ozark Beach Recreation Area)	MDC	1
Henning Conservation Area	MDC	1,534
Hollister Towersite	MDC	177.08
Mark Twain National Forest	USFS	65,300
Rockaway Beach Access	MDC	1
Shepherd of the Hills Fish Hatchery	MDC	155
Table Rock/Taneycomo Lake Area	USACE	26,516
Source: Missouri Department of Conservation, U.S. Forestry Service, U.S. Army Corps of Engineers.		

A notable recreation area in the eastern section of Taney County is the Hercules Glade Wilderness area located in the Mark Twain National Forest. This 12,315-acre area allows for hiking, camping and horseback riding. Forested lands, most of which are undeveloped, represent the predominant land use in the unincorporated area of Taney County. Overall, forested land covers nearly 241,150 acres, representing 57.2 percent of land use in the county. Of these forest lands, the Mark Twain National Forest accounts for approximately 65,300 acres in the eastern and northeastern portion of the county and is the primary land use in Beaver Township.

Figure 2-5: Taney County Land Cover



Development Trends

The western Taney County area contains the greatest concentration and density of urbanized land uses, particularly in and around the larger cities of Branson and Hollister and the smaller communities of Bull Creek, Forsyth, Merriam Woods, and Rockaway Beach.

Substantial new development has occurred over the past decade along the major highway corridors in this part of the county, including U.S. Highway 65, Highway 76 and Highway 160. While most major commercial developments are located in the cities, much of the new development in the unincorporated areas is residential development, including both single family residential uses and multi-family. Condominium development is also included in the multi-family category.

Scattered residential uses are also located along the major and secondary roads, with increasing levels of development occurring in the Merriam Woods and Bull Creek areas as well as north of Branson.

Within the past few years, significant new commercial development has occurred in the City of Hollister, with many new retail and service businesses located along the Highway 65 corridor. Planned improvements to Highway 65 between Hollister and the Arkansas State line will increase development potential along this corridor. The Branson Landing, a mixed use developed that opened in 2006, includes a shorefront boardwalk, anchor stores, specialty shops, restaurants, a convention center, hotels, condominium residences, entertainment and recreation. Its popularity attracts thousands of people every day.

Today, Branson has over 40 theaters with more than 60,000 theater seats, 207 lodging facilities with over 18,000 rooms and 200 restaurants with over 38,000 seats. At any given night, there may be up to 20,000 visitors and employees located in the various hotels and theaters on Branson's main arterial road.

Housing

Taney County's housing stock increased from 19,699 units in 2000 to 29,255 units in 2010, a 49 percent increase over the decade. The continued growth of Branson area tourism during the 2000s served to promote new housing construction to meet the demands for new resident housing as well as seasonal housing for vacationers. Of the incorporated communities, Hollister in particular experienced a significant increase in new housing construction during the 1990s to serve the needs of the Branson tourism industry workforce.

	Estimate
Total housing units	29,255
Occupied housing units	20,755
Owner-occupied	13,259
Renter-occupied	7,496
Vacant housing units	8,500
For Sale	782
For Rent	1,715
For Seasonal, Recreational, or Occasional use	4,899
Population living in owned homes	32,051
Population living in rental homes	17,880
Source: Census 2010. Profile of General Population and Housing Characteristics, DP01.	

Vacancy rates provide an indicator of housing availability. The county's overall housing vacancy rate was up from 17.9 percent in 2000 to 29.1 percent in 2010, including vacant units for seasonal use. A large increase in the number of vacant seasonal units is the cause of this drastic change. The vacancy rate for owner-occupied units was 3.2 percent, indicating that there is a moderate availability of housing for purchase. In 2010, slightly over 50 percent of the housing units in Taney County were single family detached units. The second largest type of housing units in the county is mobile homes accounting for 15 percent of all housing units.

Housing units (including Vacant)	Estimate	Margin of Error
Total housing units**	29,255	
Single Family Units	15,425	+/- 577
Single Unit, detached	14,734	+/- 548
Single Unit, attached	691	+/- 182
Duplexes	448	+/- 168
3 or 4 units	858	+/- 267
5 to 9 units	1,611	+/- 355
10 to 19 units	2,816	+/- 410
20 or more units	1,640	+/- 432
Mobile home	4,373	+/- 395
Boat, RV, van, etc.	64	+/- 52

Source: American Community Survey 2006-2010. Selected Housing Characteristics, DP04.
 **Census 2010. Profile of General Population and Housing Characteristics, DP01.

The greatest concentrations of manufactured housing developments are located along the major highways, such as Highways 76 and 160, in close proximity to the cities. Individual mobile home lots or tracts are scattered along primary and secondary roads throughout the county, with clustering north of Branson, around Table Rock Lake, and in the fringe areas around Hollister, Merriam Woods, Taneyville, and Forsyth.

Name	Address	City	Telephone
Country Living Mobile Home Park	Hwy 248	Branson	417-334-3794
The Yacht Club	Yacht Club Lane	Branson	417-334-5594
Misty Mountain Acres Mobile Home Park	N Hwy 65	Branson	417-443-3357
Smokey Mountain Estates	220 Cedar Park Rd	Branson	417-335-8043
Branson View Estates	2543 State Hwy F	Branson	417-561-2255
Carsons Country Court	Hwy 248 & Expressway	Branson	417-334-3084
Hidden Ridges Estates	370 Salem Rd	Branson	417-334-4926
Lakeview Mobile Home Park	3147 State Hwy YY	Branson	417-858-2027
Northwoods Mobile Home Park	154 Wintergreen Rd	Branson	417-334-3232
Summit Ridge Mobile Home Park	3 Cardinal Course	Forsyth	417-546-2141
Wall Eye Haven Court & Mobile Homes Park		Forsyth	417-546-5142
Justmoore Inc. Rolling Meadows Park	241 Rolling Meadows Rd	Forsyth	417-546-5182
Rolling Meadows Mobile Home Park	241 Rolling Meadows Rd	Forsyth	417-546-5182
Gobblers Knob Mobile Home Park	237 Early Lane	Hollister	417-334-3753
Whispering Oaks Mobile Home Park	Hwy BB	Hollister	417-335-2370
Yacht Club		Hollister	417-334-0990

Transportation Infrastructure

Roads

Several key roads are responsible for moving traffic in Taney County. The primary north-south arterial is U.S. Highway 65. Highway 65 links Branson with Springfield to the north and Harrison, Arkansas to the south. Highway 65 is Taney County's primary access route for bringing tourists, goods, and services into the region. Highway 65 also provides a linkage with other major routes outside of the county, including Interstate 44 and Highway 60. Highway 65 is also a primary link between Southwest Missouri and Little Rock, Arkansas. Because of the tremendous increase in traffic on Highway 65 caused by a greater number of tourists and residents, the road has been expanded to a four-lane limited access highway between Branson and Springfield and has been expanded to a four-lane divided highway south to the Arkansas State line and further on to the city of Harrison, Arkansas.

Highway 76 serves as a primary east-west route for Taney County. Highway 76 enters Taney County on the western border near Branson, and exits the county's northeast corner near Brownbranch. Highway 76 has a major concentration of tourist attractions in the Branson area, and serves as the primary link from Branson to Forsyth. Another significant east-west highway is U.S. Highway 160. Highway 160 connects western Springfield with Stone County, and enters Taney County near its northwest corner. The road then intersects with Highway 65, proceeds through Forsyth, and provides the only major access to Ozark County to the east. Both Highway 160 and Highway 76 are two-lane facilities. These routes lack shoulders in most areas, especially where the terrain is uneven.

Taney County is divided into two road districts, each responsible for the county roads, with the Eastern and Western County Commissioners presiding over their own districts. Both districts are currently placing an emphasis on maintenance, road surfacing, and replacement of deteriorating bridges. In addition, the western district is redeveloping the road network for Branson and the surrounding area. The strain of maintaining the county road system is significant. Taney County has stopped accepting local roads for county maintenance.

Airports

There are three airports that serve Taney County. The M. Graham Clark Downtown Airport (general aviation), located west of U.S. Hwy 65 in the northwestern portion of Hollister, provides passenger services for smaller private planes and charter jets as well as limited freight shipment. Taney County recently took over operation of the M. Graham Clark Downtown Airport from the College of the Ozarks.

The Branson Airport (commercial airport) is located approximately six miles south of Hollister on Branson Creek Boulevard, off of Highway 65. The airport was opened in 2009 and serves general aviation as well as regular commercial passenger service. This limited service airport offers service with AirTran, Frontier, and Branson AirExpress.

The Springfield-Branson National Airport (commercial airport), located an hour away in Springfield, provides regular commercial air service for the region. Visitors to Branson rely on motor coaches, shuttle vans, or rental vehicles to get from the Springfield-

Branson National Airport to the Branson area. Taney County is also served by a seabase airport outside of Rockaway Beach as well as two private airstrips southwest of Kirbyville.

There are two heliports registered with the FAA (Federal Aviation Administration) in Taney County; one in the City of Branson at Skaggs Regional Medical Center and the other privately owned. There are other non-listed heliports throughout the county.

Public Transportation

Taney County is serviced by OATS, Inc. (Older Americans Transportation System) for public transportation needs. OATS transportation is available to anyone regardless of age or income. Days of the week and times of transit to specific towns are available through the internet or by calling an OATS driver in the county. There are two available vehicles in Taney County that run by caller demand. Appointments for pick-up may also be made by contacting the driver (<http://www.oatstransit.org>). Other transportation services are also provided by the Disabled American Veterans bus and Skaggs Regional Medical Center.

Railroads

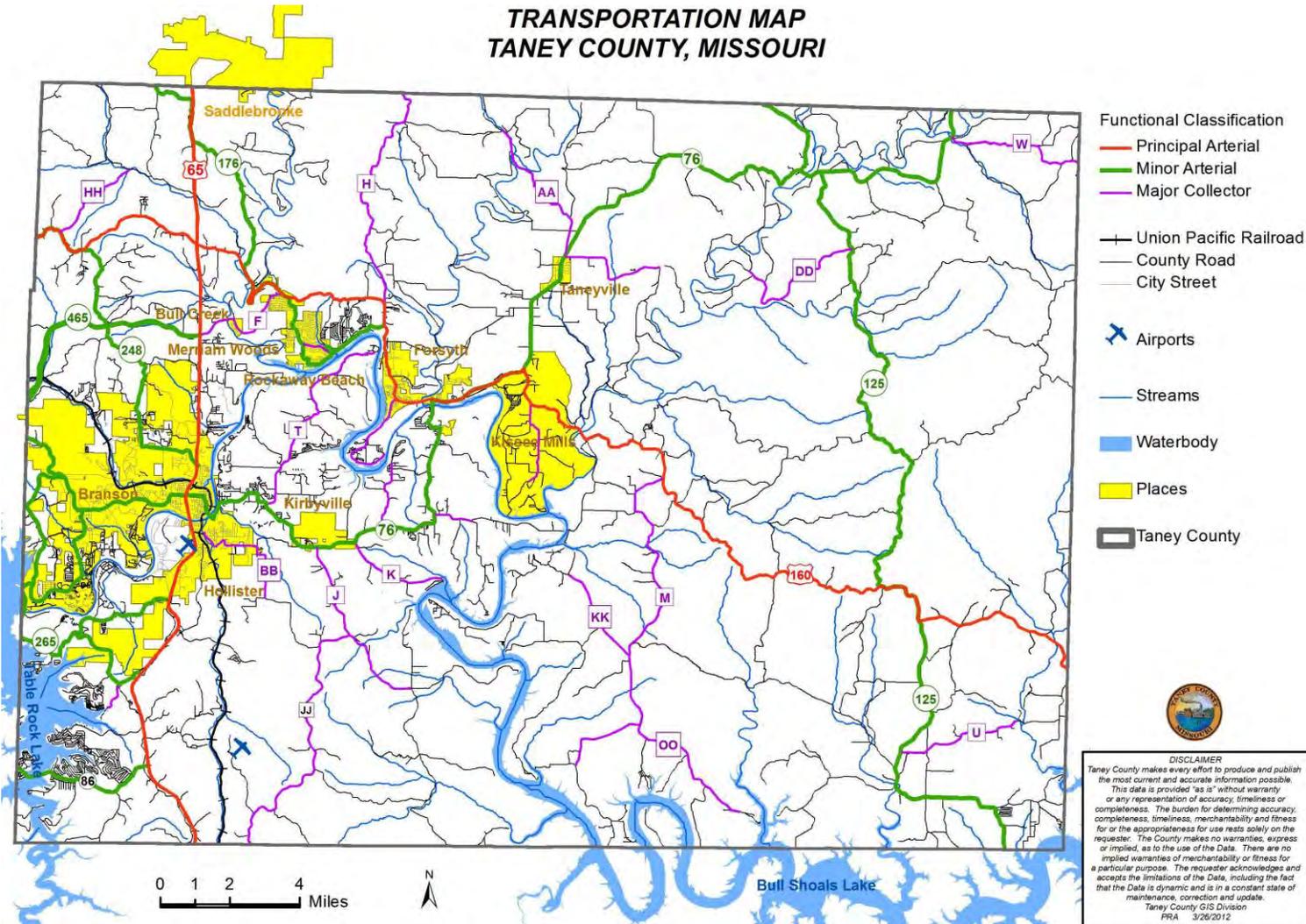
Freight rail service is provided by the Missouri and North Arkansas Railroad, which links Branson with Aurora and beyond. There is no passenger rail system in Taney County, although there is an excursion railway based in Branson. This is a 40-mile roundtrip tourist excursion route that runs through Branson, Reeds Spring and Galena, with return on the same track. The train currently does not stop at any of the communities along the route. There have also been trains chartered to the Branson area in past years.

MoDOT Maintenance Facilities

The Missouri Department of Transportation has four maintenance facilities in Taney County. One facility is located in Branson, at 275 West Outer Road, approximately 0.2 miles west of Highway 65. The second facility is located in Bradleyville at Route 76, 4.5 miles east of Route AA in Taneyville. The third facility is located in Reuter at Route 160, 2.75 miles west of 125, in Kissee Mills. The Hollister facility is located on Route 76, 1.25 miles east of Business 65.

The Branson facility includes two concrete block buildings (6 bays each), a salt shed and another out building. Major equipment for road maintenance includes five extra heavy duty trucks, three heavy duty trucks, one 1ton pickup, one ½ ton pickup, one front end loader, one road grater. The Bradleyville facility includes one concrete block structure (6 bays), two dump trucks, and one front end loader. The Hollister facility includes one concrete block building (5 bays), one metal storage shed, two dump trucks, two pickup trucks, and one front end loader. The Reuter facility includes one concrete block building (6 bays), two dump trucks, and one front end loader. All vehicles in these facilities have snow removal capabilities.

Figure 2-6: Taney County Transportation System



Utilities

Water Supply/Services

The communities of Branson, Bull Creek, Forsyth, Hollister, Merriam Woods, Rockaway Beach, and Taneyville all provide municipal water service. In addition to these community water systems operated by the municipalities, there are 52 other community water systems serving 32,802 people, 54 transient non-community water systems serving 8,653 people, and ten non-transient non-community water systems serving 2,902 people in Taney County. Almost all of these systems utilize ground water. The City of Branson and College of the Ozarks derive their water from surface water, and one private development serving 65 people derives its water from groundwater under the direct influence of surface water (UDI). In addition to these water systems, many residents in rural areas derive their water from private wells. See Appendix E for definitions of water systems listed in the MDNR's *Safe Drinking Water Information System*.

Maintaining the quality of groundwater is of particular concern for Taney County. Features of karst topography which allow for the relatively easy movement of surface contaminants into the groundwater system, along with soils characteristics which limit the functioning of septic tank systems, increase the potential for groundwater contamination. Also, several of the more rural systems do not provide adequate pressure and the fire districts must obtain water from other sources for fire fighting purposes (Missouri Department of Natural Resources, <http://www.dnr.mo.gov/wpscd/>).

Wastewater Treatment Systems

Wastewater treatment in Taney County is provided through numerous public wastewater treatment systems and individual on-site wastewater systems (septic tank systems). The communities of Branson, Forsyth, Hollister, Rockaway Beach, Merriam Woods, and Taneyville provide municipal wastewater treatment to their residents and businesses. The Rockaway Beach Regional Treatment facility also serves the Village of Bull Creek. Bradleyville is currently seeking funding to build a wastewater treatment plant. Septic tanks are the primary method of wastewater treatment in the rural areas of the county, as well as in Kirbyville.

Many of the larger developments, including hotels and resorts, are served by on-site wastewater treatment systems. The terrain is such in Taney County, that if the system was not on-site, the cost would likely be prohibitive due to the number of lift stations that would be required. Missouri Department of Natural Resources currently regulates 69 open discharge wastewater treatment facilities according to the Taney County Wastewater Master Plan, Addendum 1 (MDNR, Taney County Regional Sewer District, taneycounty.org).

Currently, the City of Branson has two wastewater treatment facilities. The facilities in Rockaway Beach and Hollister serve a larger regional area. The City of Hollister has a Sewer Services and Exclusive Territorial Agreement with the Taney County Sewer District, allowing the city to collect and treat wastewater for areas including Coon Creek, Table Rock, Turkey Creek, Short Creek, Poverty Point, Lake Shore, Long Beach, College of the Ozarks, and Oak Grove. The Rockaway Beach Regional Treatment

Facility provides wastewater treatment to Bull Creek, Merriam Woods, and will potentially serve unincorporated areas of the county.

Taney County Regional Sewer District

The Taney County Regional Sewer District is a body corporate and politic formed under Missouri Revised Statutes chapter 204 and was approved by a vote of the citizens of Taney County in 1986. The Taney County Regional Sewer District (District) Board of Trustees is the local approving authority of any proposed wastewater treatment system to be constructed in the unincorporated areas of the County. Any development in which connection to a District maintained collection system or construction of a private collection and treatment system is proposed, must be granted concept and final approval from the Board in order to comply with the requirements of the Taney County Planning and Zoning Department.

The Taney County Regional Sewer District's *Taney County Wastewater Master Plan*, last updated in 2007, addresses the current and projected wastewater treatment needs in sixteen of the twenty-one watersheds in Taney County, excluding the watershed areas within the cities of Branson, Hollister, and Forsyth. The Master Plan notes that Taney County's soils are generally not well suited for septic tank use. If Taney County is to maintain the quality of its water resources as population continues to grow over the next 20 years, the extension of centralized sanitary sewers and further regionalization of wastewater treatment facilities in the urbanizing area is considered essential.

Solid Waste Disposal

Taney County is a member of Solid Waste District "N" which also includes the counties of Stone, Barry, Lawrence, and Dade. American Disposal Company serves the cities of Branson, Forsyth, Hollister, and Rockaway Beach and the villages of Bradleyville, Bull Creek, and Kirbyville. Approximately 85 percent of the county's solid wastes are hauled by this company. The Village of Taneyville has its own disposal service. Solid waste disposal in other communities is provided by independent trash haulers located in the county and in Arkansas.

Taney County does not have a permitted solid waste landfill. An old landfill is located in the central section of the county, southeast of the Highway 76-Mildred area (T23N, R20W, and Sec22). This landfill has been closed for many years. Most solid wastes are taken to a permitted landfill in Kansas. The county has one solid waste transfer station, located outside of the City of Branson.

Taney County has two public recycling centers in operation. One is located at the county's maintenance facility in Forsyth, where tin, aluminum, glass and plastics are accepted. The other recycling center is operated by the City of Branson, which accepts a variety of fibers and can products, and is one of the highest volume recycling centers in Solid Waste District "N". Nearly 65 percent of the recycled materials handled at the Branson facility are brought in from county residents living outside of the City of Branson (*Taney County Master Plan*, p. 9.15; <http://www.co.taney.mo.us/TaneyCo/default.htm>).

Electric Service

Three companies provide electric service to Taney County: the White River Valley Electric Cooperative, the Empire District Electric Company, and the Carroll Electric Cooperative. The White River Valley Electric Cooperative serves residential and commercial customers from the communities of Bradleyville, Bull Creek, Kirbyville, Merriam Woods, Rockaway Beach and Taneyville. The Empire District Electric Company serves customers in the western communities of Branson, Forsyth, Hollister, and part of Kirbyville. Empire District owns one power generation facility on Lake Taneycomo. The Powersite Dam facility, located near Forsyth, generates approximately 16,000 kilowatts of power, or 2 percent of the company's power generation. The Carroll Electric Cooperative, headquartered in Berryville, Arkansas, serves the extreme southwestern corner of Taney County located between the Arkansas state line and the center line of Table Rock Lake.

Telephone Service

Telephone service in Taney County is provided by Century Tel. Century Tel provides internet access to areas of Taney County and the White River Valley Electric Cooperative is also using its infrastructure to run high-speed internet into many portions of the county. Currently, the age of the telephone system precludes many people from accessing medical care, internet services, as well as other important services because a call outside a person's prefix is automatically a long distance call. Cox Communications may soon be offering another alternative to the current phone service, but the benefits are yet undetermined.

Natural Gas Service

At the current time, Taney County does not have natural gas service.

Underground Utilities

Century Tel, the primary provider of telecommunications in Taney County, and White River Valley Electric Cooperative have underground lines in the county. For security purposes, the locations of utility lines are not disclosed in this Plan.

Table 2-16: Taney County Utility Service Providers		
Utility Provider	Address	Telephone
<i>Electric Service</i>		
Carroll Electric Cooperative Corporation	920 Hwy. 62 Spur Berryville, AR 72616	870-423-2161
Empire District Electric Company	215 W. Main Branson, MO 65615	800-206-2300
White River Valley Electric Cooperative	State Highway 14 Ozark, MO 65721	417-485-6012
<i>Natural Gas Service</i>		
None Available		
<i>Telephone Service</i>		
Century Tel of Missouri, LLC	Jefferson City, MO 65101	573-636-4261
Cox Communications	310 Walnut Extension Branson, MO 65616	417-334-7897

Key Community Facilities and Services

Law Enforcement

The Taney County Sheriff's Department provides law enforcement and protection services to the unincorporated areas of the county and to incorporated communities that do not have their own police departments, including Bull Creek, and Taneyville. The cities of Branson, Forsyth, Hollister, Rockaway Beach and the Village of Merriam Woods have police departments providing law enforcement services to their respective communities. The Sheriff's Department also provides assistance to the municipal police departments as needed.

The new \$27.2 million facility, funded with a 1/8th of one percent sales tax passed in November 2005, was completed in September of 2008 and approximately \$400,000 under budget. This much-needed facility consolidates the Sheriff's Office, the courts, and many of the county offices at one location, making it more convenient for the citizens. The Sheriff's Office and jail occupy approximately 54,400 square feet of the building providing for office space, interview rooms, evidence storage, and space for 268 inmates. In addition to law enforcement and protection services, the Department provides the DARE Program, K-9 units to search residences and schools, Neighborhood Watch Program, Cub Scout and Boy Scout drug education program, Children ID photo and fingerprinting, and participates in various community fundraising events.

Fire Protection

Fire protection services in Taney County are provided by six fire departments and two fire protection districts. All of the districts or fire departments have mutual aid agreements with nearby departments. In addition to basic fire prevention and fire protection services, many of the fire departments and districts also have rescue units and/or provide first responders for emergency care situations

The fire protection departments and districts with facilities in Taney County are listed below. For security purposes, information on the location of facilities, fire fighting vehicles, equipment, and number of firefighters is contained in the Taney County Emergency Management Director's Manual.

- Branson Fire and Rescue
- Bradleyville Rural Fire Department
- Cedar Creek Fire Protection District
- Central Taney County Fire Protection District
- Forsyth Fire Department
- Point Lookout Fire Department
- Protem Fire Protection District
- Western Taney County Fire Protection District

The Western Taney County Fire Protection District serves a 212 square mile area in the western section of the county, including unincorporated areas and the communities of Bull Creek, Hollister, Kirbyville, Merriam Wood and Rockaway Beach. The Central Taney County Fire Protection District serves unincorporated areas in the central portion of the county and the community of Taneyville.

911 Emergency Communications

The E-911 Service in Taney County is located in Forsyth and is dispatched through the Sheriff's Office. It is the main dispatcher of calls for the municipal law enforcement and fire departments/districts. All emergency calls placed within the city limits of Branson are answered at the Branson Police Department. Any call requiring medical assistance is forwarded to the Taney County Ambulance District Dispatch Center, also in Forsyth.

This office oversees all addressing within the County except for Merriam Woods and the City of Branson. These two entities are responsible for addressing their citizens. In addition, our office makes sure that road name signs are in place and assigns addresses to new developments (www.co.taney.mo.us).

Medical Facilities

Taney County is served by Skaggs Regional Medical Center located in Branson. Skaggs is a 132-bed facility offering a wide range of medical services to residents and visitors. Residents are also served by Mercy Regional Health Center and Cox Medical Center located in Springfield and North Arkansas Regional Medical Center in Harrison, Arkansas. Most medical clinics within Taney County are located in Branson, Forsyth, and Hollister, although a new medical clinic opened in May 2005 in Bradleyville in the northeastern section of the county. Medical facilities located in Taney County are listed in Table 2-17.

The Taney County Health Department, located in Forsyth, provides a wide range of public health services to Taney County residents, such as the WIC program, blood pressure clinics, influenza shots, school athletic physicals and various other health services.

Under cooperative agreement with the Taney County Health Department, the Branson Health Department provides environmental health services to the City of Branson and Taney County at large. Some of the services offered include environmental health and pollution control services, inspections of food preparation establishments, swimming pools, etc.

Facility Name	Address	City	Telephone
Branson Health Department	110 W. Maddux	Branson	417-334-3354
Burrell Behavioral Health	155 Corporate Place	Branson	417-269-2476
Cox Health Center	890 State Hwy 248	Branson	417-335-2299
Ferrell-Duncan Clinic	101 Skaggs Rd, Ste 102	Branson	417-875-3246
Skaggs Regional Medical Center	N. Bus 65 & Skaggs Rd	Branson	417-335-7733
Skaggs Family Health Clinic	545 N. Bus Hwy 65	Branson	417-335-7540
Skaggs Urgent Care	454 N. Bus. Hwy 65	Branson	417-335-7587
Skaggs Wound Care and Hyperbaric Medicine	101 Skaggs Rd, Ste 103	Branson	417-335-7792
Smith-Glynn-Callaway Clinic-Branson	101 Skaggs Rd, Ste 101	Branson	417-334-7647
Mercy Clinic	260 Terrace Rd	Branson	417-336-2273
Mercy Clinic	1065 State Hwy 248	Branson	417-337-9808
Mercy Clinic Urgent Care	1940 State Hwy 165	Branson	417-337-5000

Facility Name	Address	City	Telephone
Bridges Clinic	256 Hwy Y	Forsyth	417-546-4200
Forsyth Medical Center	517 Coy Blvd	Forsyth	417-546-2447
Skaggs Clinic	13852 State Hwy 160	Forsyth	417-546-3500
Taney County Health Department	15479 State Hwy 160	Forsyth	417-546-4725
Agape Primary Care	2331 S. Bus Hwy 65	Hollister	417-339-3033
Skaggs Community Hollister Clinic	590 Birch Rd	Hollister	417-239-3400
Skaggs Family Clinics	590 Birch Rd	Hollister	417-335-7726
Southside Family Clinic	590 Birch Rd	Hollister	417-239-3400
Mercy Hollister Medical Center	151 Birch Rd	Hollister	417-336-4355
Tri Lakes Primary Care	2460 S. Bus Hwy 65	Hollister	417-334-8271

Taney County Ambulance District

Emergency ground transportation service for all of Taney County is provided by the Taney County Ambulance District (TCAD). TCAD was established in 1976 as a publically approved special tax district. The first board of directors was instrumental in setting up operations in 1977. The dispatch center and headquarters are located in Hollister. In addition, TCAD maintains a fleet of 11 frontline ambulances stationed at four permanent stations and multiple staging posts throughout the county. TCAD ambulances are equipped with some of the most advanced medical equipment available to the prehospital setting. The ambulances all have Mobile Data Terminals, which provide wireless communication with a state of the art dispatch center. Each ambulance also has global positioning satellite devices that track the ambulance no matter where they go. GPS is used to provide the quickest, most efficient response for every emergency. One ambulance is a Critical Care Unit and the district has an MCI trailer that is used for Mass Casualty Incidents.

Over the last couple of years the district has worked with grants from Homeland security. The District has received over \$2,000,000.00 in equipment for disaster that is housed in the Hollister area. The district acquired a grant through SEMA for \$1 million to build a mobile medical hospital that will be available for the State of Missouri and kept in the Hollister area. Air ambulance services are available through Cox Air Care (Cox Health Systems) and Mercy EMS Life Line in Springfield.

Ambulance Service	Address	Telephone
<i>Ground Ambulance</i>		
Taney County EMS Ambulance District	18 Industrial Park Rd. Hollister	417-334-6586
<i>Air Ambulance</i>		
Cox Air Care	1423 N. Jefferson Springfield	800-333-5269
Mercy EMS Life Line	1235 E. Cherokee Springfield	417-820-2300 800-433-5433

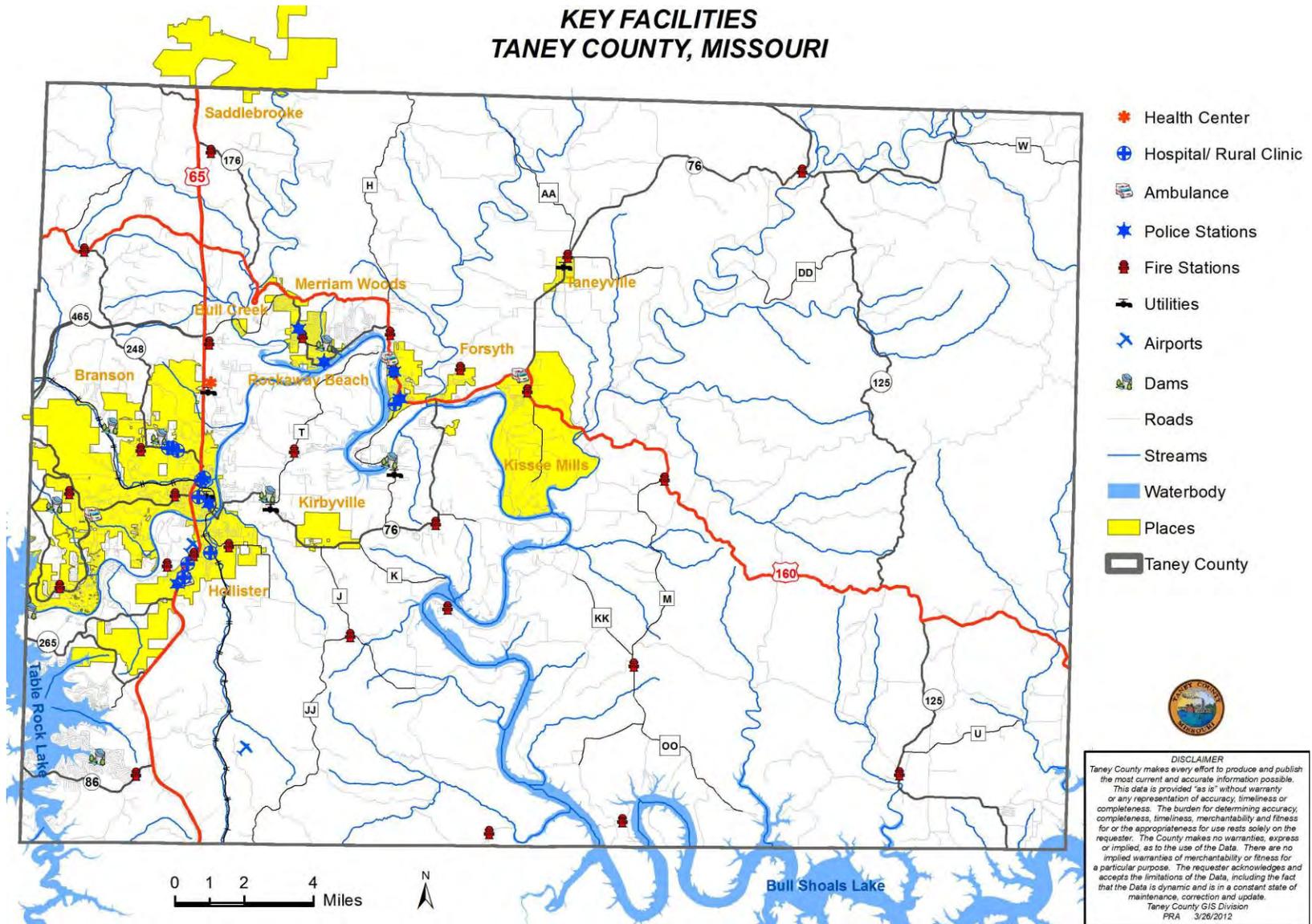
Other Key Facilities/Services

Other key services essential during natural disasters include the services provided by the American Red Cross-Greater Ozarks Chapter and Christian Associates of Table Rock Lake. Christian Associates, serving Stone County and part of Taney County, is located in the Kimberling City Shopping Center on Highway 13 in Stone County. Christian Associates provides various services that would assist in disaster recovery, including a domestic violence hotline, thrift shop, and assistance with rent and utilities. Individuals served through Christian Associates must first obtain possible assistance through the Red Cross.

The American Red Cross--Greater Ozarks Regional Chapter is located at 1545 N. West Bypass in Springfield, Missouri. The Chapter's Disaster Action Team is available 24 hours a day, every day, to respond to disasters. Disaster relief focuses on disaster-caused emergent needs of shelter, food, clothing, and health. The Greater Ozarks Chapter also works with city, county, and state emergency management agencies on disaster preparedness and training. The Chapter has ongoing efforts to recruit and train volunteers as well as secure resources for shelter, communications and supplies (American Red Cross, Greater Regional Ozarks Chapter, <http://www.redcross-ozarks.org/>).

To secure shelter resources, the Chapter maintains records of institutions and organizations in each county that would be willing to enter into an agreement for use of the facility for a designated need as determined by the Red Cross following a disaster event. These entities have completed and filed forms with the Chapter that provide information on the physical facility and capabilities to function as an emergency shelter. When a disaster occurs, the Red Cross contacts these entities as may be necessary to arrange for use of the facility.

Figure 2-7: Taney County Key Facilities



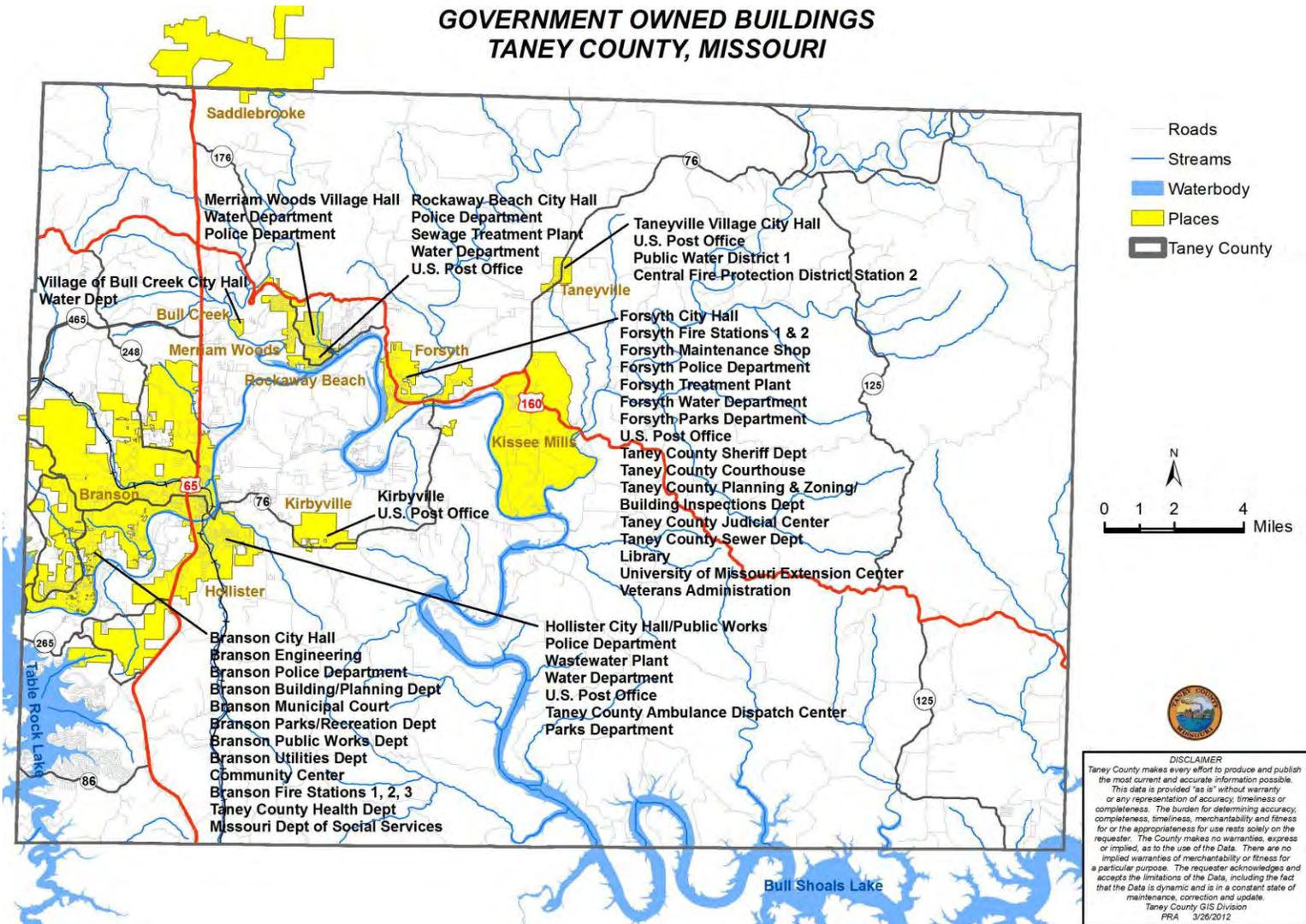
Government Owned Buildings

Government structures include county and municipal government facilities, judicial facilities, post offices, and state and federal facilities. The greatest concentration of government structures in Taney County is located in the county seat of Forsyth. The following table lists the locations of government facilities.

Table 2-19: Government Buildings in Taney County	
Structure	Location
Taney County	
Courthouse	132 David Street, Forsyth
County Commission	139 David Street, Forsyth
County Clerk's Office	266A Main Street, Forsyth
Animal Control	255 Critter Trail, Hollister
Health Department	15479 State Highway 160, Forsyth
Taney County Juvenile Office	211B Main Street, Forsyth
Road & Bridge #1/TS Station	274 Buchanan Road, Branson
Road & Bridge #2	195 Gilbert Lane, Hilda
Road & Bridge Superintendent	248 Main Street, Forsyth
Sheriff/Road & Bridge Storage (2), Salt Shed	3937 State Hwy F, Rockaway Beach
Salt Shed	865 Tate Road, Ridgedale
Salt Shed	15370 N. State Hwy 125, Bradleyville
Bradleyville	
Post Office	25856 State Highway 76
Fire Station	N. State Highway 125
Branson	
City Hall/Police Department	110 W Maddux
Fire Station #1	103 W. Hwy 76
Fire Station #2	251 Branson Meadow Dr
Fire Station #3	3500 Keeter Street
Community Center	210 Compton Dr.
RecPlex/Aquaplex	1500 Branson Hills Parkway
Branson Lakeside RV Park	300 S. Boxcar Willie Drive
Facilities Maintenance Building	625 Stockstill Lane
Public Works Garage	601 Compton Drive
Branson Recycle Center	601 Compton Drive
Utilities Office	616 W. Pacific Street
Cliff Drive Water Plant	521 Cliff Drive
Meadows Water Plant	3718 Fall Creek Road
Cooper Creek Wastewater Plant	2855 Fall Creek Road
Compton Wastewater Plant	601 Compton Drive
Post Office	320 S. Commercial
Health Department	125 Gateway Drive
Bull Creek	
City Hall	1886 State Highway F
Cedarcreek	
Post Office	6589 State Highway M
Forsyth	
City Hall/Police Station/Fire Station	15405 US Highway 160
Post Office	240 Main Street
City Shop	Blair Boulevard

Table 2-19: Government Buildings in Taney County	
Structure	Location
Community Building	Panther Road
Wastewater Treatment Plant	Hwy 76, Shoals Bin Property
Hollister	
City Hall	290 Esplanade
Police Station	14848 S State Highway 65
Post Office	1980 Business Highway 65
Post Office – Branson Annex	141e Industrial Park Drive
Public Works Department	1393 V Highway
Kirbyville	
Post Office	4202 E State Highway 76
Fire Station	8118 E State Highway 76
Kissee Mills	
Post Office	21423 US Highway 160
Merriam Woods	
City Complex	4417 State Hwy 176
Point Lookout	
Post Office	99980 Academic Avenue
Powersite	
Post Office	1885 State Highway Vv
Protem	
Post Office	5242 S State Highway 125
Ridgedale	
Post Office	3234 Ridgedale Road
Rockaway Beach	
City Hall	588 Boys Camp Road
Post Office	2578 State Highway 176
Rueter	
Post Office	149 N State Highway 125
Taneyville	
City Hall	227 Central Avenue
Post Office	310 Grand Avenue
Sewer Plant	485 Hulls Ford Road
Other	
MO Department of Social Services	2720 Shepherd of the Hills Expwy, Branson
MoDOT Maintenance Facility	20907 E. Hwy 76, Taneyville
MoDOT Maintenance Facility	33279 Hwy 160, Kissee Mills
MoDOT Maintenance Facility	275 West Outer Road, Branson
MoDOT Maintenance Facility	Hwy 76, Hollister

Figure 2-8: Taney County Government Buildings



Centers of Large Population Concentration

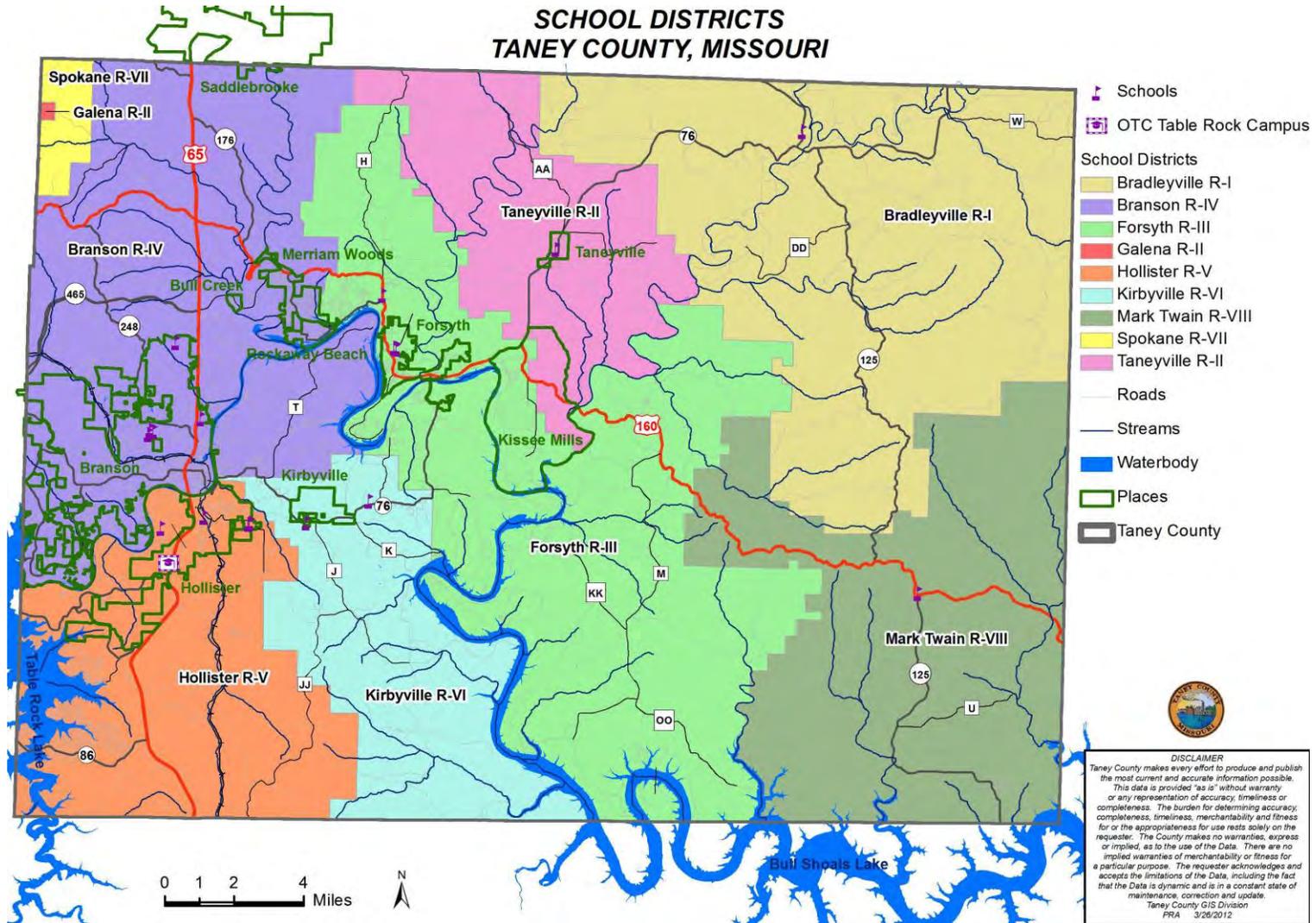
Facilities or other sites that concentrate large numbers of people within a defined area may require special attention for pre-disaster mitigation, advance notification of possible disaster, or disaster response. Examples of such facilities include schools, large employment centers, commercial centers, major recreation attractions, and facilities that serve special needs populations.

Schools

Nine public school districts serve Taney County. School districts with facilities in the county include Bradleyville R-I, Branson R-IV, Forsyth R-III, Hollister R-V, Kirbyville R-VI, Mark Twain R-VIII, and Taneyville R-II (Figure 2-10). The Branson School District serves the greatest number of students with a total enrollment of 4,471 during the 2010-2011 year. The remaining two school districts serving Taney County are Galena R-II and Spokane R-IV. These districts do not have school facilities in Taney County. There are also two private schools in Taney County. Riverview is a Baptist-affiliated K-12 school in Forsyth, and New Life Academy is a Pentecostal-affiliated K-12 school in Hollister.

Table 2-20: Schools in Taney County			
School Facility	Address	Staff	Enrollment
Public Schools			
Bradleyville R-I	16474 N. State Hwy 125	35	239
Bradleyville High	16474 N. State Hwy 125	18	156
Bradleyville Elementary	16474 N. State Hwy 125	17	83
Branson R-IV	400 Cedar Ridge Dr	343	4,470
Branson High	935 Buchanan Blvd	96	1,377
Branson Jr. High	308 Cedar Ridge Drive	50	677
Branson Elementary Schools		197	2,489
Branson Primary	402 Cedar Ridge Dr.		
Branson Elementary East	308 Cedar Ridge Dr.		
Branson Intermediate	766 Buchanan Rd.		
Branson Elementary West	396 Cedar Ridge Dr.		
Forsyth R-III	178 Panther St.	108	1,213
Forsyth High	178 Panther St.	36	396
Forsyth Middle	178 Panther St.	37	393
Forsyth Elementary	178 Panther St.	35	424
Hollister R-V	1798 State Hwy BB	209	1,477
Hollister High	2112 State Hwy BB	44	489
Hollister Middle	1798 State Hwy BB	35	293
Hollister Elementary	1794 State Hwy BB	48	404
Early Childhood Center	1792 State Hwy BB	50	195
Kirbyville R-VI	6225 State Hwy 76 E	39	321
Kirbyville Middle	6225 State Hwy 76 E	21	184
Kirbyville Elementary	4278 State Hwy 76	18	137
Mark Twain R-VIII	37707 US Hwy 160		
Mark Twain Elementary	37707 US Hwy 160	8	59
Taneyville R-II	302 Myrtle St.		
Taneyville Elementary	302 Myrtle St.	22	200
Private Schools			
Riverview Bible Baptist Christian School	13901 US Hwy 160	N/A	N/A
New Life Academy	P.O. Box 380	N/A	N/A
*Occupants include students and staff.			
Source: Missouri Department of Elementary and Secondary Education.			

Figure 2-9: Taney County School Districts



Ozarks Technical College

Ozarks Technical College (OTC) was founded in 1990 and operates primarily in Springfield, MO at the 40 acre main campus. As of 2012, fall enrollment reached over 15,000 students and continues to grow. To keep up with this growth OTC, has recently opened a temporary facility in the Meadows Shopping Center at 4440 Gretna Road, in Branson, MO. However, a new facility, OTC Table Rock Campus, is being constructed on State Highway 165, approximately one-half mile southwest of the College of the Ozarks campus. OTC purchased a total of 8.25 acres located between Highways 65 and 165, including the empty restaurant, in December of 2010. In addition to the purchased land, the City of Hollister donated a contiguous .83 acres, bringing the total land now owned by the College to 9.08 acres. Completion of the facility as depicted below is expected by fall of 2013, at which point the temporary facility will be closed. This new facility is estimated to cost around eight million dollars, will be fully insured, and includes one building with two anticipated safe rooms. The building itself is approximately 53,560 square feet.

Figure 2-10: Artist Rendering of Planned OTC Table Rock Campus



College of the Ozarks

The College of the Ozarks is located in Taney County at Point Lookout. Established in 1906, it is now a private, accredited four-year institution situated on 1,000 acres with a student enrollment of 1,500 and 280 faculty and staff. The college has a work program for its students, which has created a wide range of facilities on the campus including a farm, feed mill, sale barn, post office, chapel, power plant, firehouse, restaurant, motel, and a new conference center. During the tourist season, approximately a thousand visitors a day visit the college. It hosts the NAIA Division II National Basketball Tournament in March, which draws over 10,000 during the week. Each June, it sponsors the Honor America event for the Fourth of July, which draws over 2,000. The Ralph Foster Museum is also located at the college, which draws thousands of visitors each week.

Child Care Centers

Child care centers in Taney County are listed in the following table. The table includes only licensed and license-exempt child care centers. A general location listing of licensed family home care centers is also provided. In all probability, child care is also provided in many private residences in the county that have not been licensed by the State.

Name	Address	City	Telephone
1st General Baptist Church & Learning	5th and College	Branson	417-334-7124
First Baptist Learning Center	400 S Sunshine	Branson	417-336-2139
Frances Rittenhouse Learning Center	212 Hwy. T	Branson	417-334-0586
Head Start: Branson	829 S Falls Ave.	Branson	417-332-0003
Lambs for Life Learning Center	2193 State Highway F	Branson	417-561-2098
Little Ones Learning Center	414 Buchanan Rd.	Branson	417-334-5628
Our Shepherd's Child Care Center	221 Malone St.	Branson	417-332-1922
Presbyterian Preschool	420 W Main St.	Branson	417-334-3468
Prime Time: Branson	402 Cedar Ridge Rd.	Branson	417-336-1887
Prime Time: Branson East	396 Cedar Ridge Rd.	Branson	417-332-1909
Tree House Day Care	862 Lost Tree Dr.	Branson	417-334-7315
Prime Time: Forsyth	178 Panther St.	Forsyth	417-332-1909
Head Start: Hollister	178 Jessica St.	Hollister	417-334-7515
Prime Time: Hollister	1794 State Hwy BB	Hollister	417-335-4607
Head Start: Kisseee Mills	415 Staake Spur	Kisseee Mills	417-546-4635
College of the Ozarks Child Development Center	1 Opportunity Drive	Point Lookout	417-334-6411
Mark Twain Preschool	37707 US Highway 160	Reuter	417-785-4323
Source: Child Care Resource and Referral, Springfield, MO.			
* Child care centers in churches are license exempt.			

The number of licensed family home care centers in Taney County and general geographic location are listed below. Site specific location information is not disclosed here for security purposes.

- Branson 6
- Forsyth 4
- Hollister 2
- Taneyville 1

Residential Care Facilities

Residential care facilities serving special needs adults and seniors in Taney County are located in Branson, Forsyth, Hollister, and Walnut Shade. Two facilities provide adult day care. The DCO Senior Focus ADC of Taney County, located at 1533 E. State Highway 76 in Branson, is a free-standing adult day care facility with a capacity of 20. The Forsyth Care Center provides adult day care in addition to its main operation as a skilled nursing facility.

Table 2-22: Residential Care Facilities in Taney County			
Facility	Address	Telephone	Licensed Beds
Skilled Nursing Facility			
Golden Living Center	996 W. Highway 248, Branson	417-334-6431	100
Forsyth Care Center	477 Coy Blvd., Forsyth	417-546-6337	120
Point Lookout Nursing and Rehab	11103 Historic Highway 165, Hollister	417-334-4105	130
Residential Care Facility II			
Culpepper Place at Branson Meadows	5351 Gretna Rd., Branson	417-334-3336	104
Life Enhancement Village of Branson	421 Oakridge Rd., Walnut Shade	417-561-5395	18
Residential Care Facility I			
Summerhouse	2163 Round Mountain Rd Walnut Shade	417-561-4544	7
Lakeside Mountain Manor	238 Harmony Heights, Forsyth	417-546-5595	40
Source: Missouri Department of Health and Senior Services.			

Senior Centers

Two senior centers are located in Taney County. These facilities provide a wide range of services to the senior population, including caregiver assistance, congregate meals, enrichment classes, health screenings, and home delivered meals.

Table 2-23: Senior Centers in Taney County		
Senior Center	Address	Telephone
Branson Senior Center	201 Compton Drive Branson	417-335-4801
Forsyth Senior Friendship Center	13879 US Hwy 160 N Forsyth	417-546-6100

Commercial/Recreation Centers

The greatest concentrations of commercial activities in Taney County are in the downtown areas of Branson, Forsyth and Hollister and along the highways through these communities, including Highway 76, Highway 248 and Shepherd of the Hills Expressway in Branson, Highway 65 in Hollister and Highway 160 through Forsyth. These commercial clusters include retail and service establishments, hotels, resorts, shopping centers, theatres and other recreation and entertainment establishments. In

2006, a new mixed use shopping, entertainment and residential development opened along the Taneycomo waterfront in Branson. Branson Landing has become a highly dense commercial center.

Taney County offers numerous entertainment and recreation activities, such as caves, family entertainment centers, historical properties, lake cruises, miniature golf courses, movie theatres, museums, theme parks, tours, water rides, and several live entertainment shows. The tourism industry in the county draws millions of visitors each year. The busiest months are June, July, August, October and November.

There are 38 theaters open in Branson as of July 2012 with 45,058. The Mansion Theatre is the largest active theatre with 3,200 seats. The other largest Theatres are the Tri-Lakes Center with 2,600 seats and the Welk Resort Theatre with 2,300 seats. Several other theatre properties have capacities near or above 2,000 seats. These include the Moon River Theatre, the Oak Ridge Boys Theatre, the Dixie Stampede, Sight and Sound Theatre, RFD-TV Theatre, Shoji Tabuchi Theatre, the White House Theatre, and Presley's Country Jubilee. The average capacity for theatres in Branson is approximately 1,100 people.

From Taney County, visitors can also access three recreational lakes: Table Rock Lake, Lake Taneycomo, and Bull Shoals Lake. Recreation opportunities include hiking, sightseeing, water sports, hunting and fishing, camping, and picnicking.

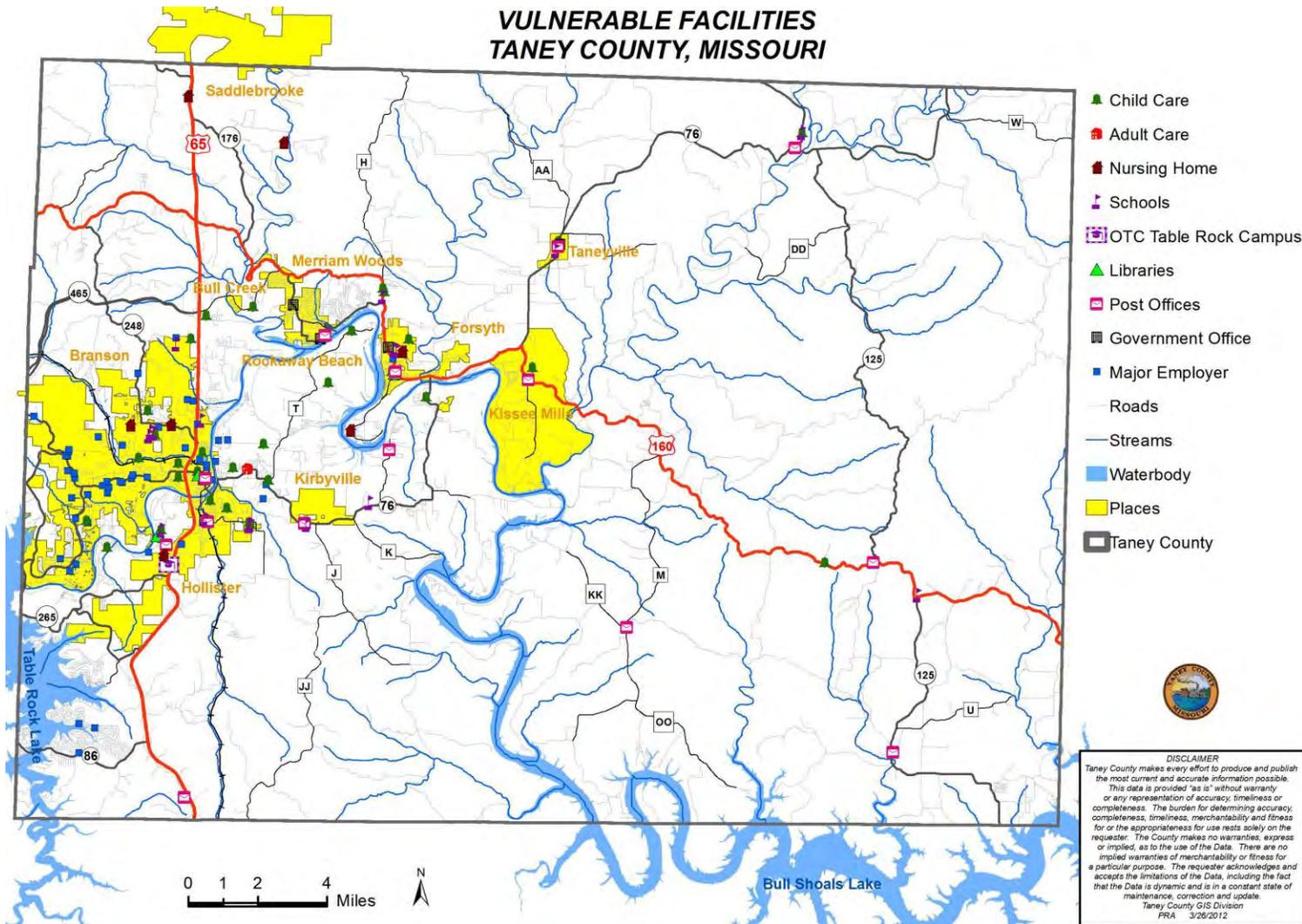
Major Employers

Industries and businesses in Taney County that employ 50 or more persons are listed in Table 2-24. The two largest employers in Taney County are located in Branson. These are Skaggs Regional Medical Center with 549 employees and Herschend Family Entertainment with approximately 1,993 employees located at three different tourist attractions in the Branson area.

Company Name	City	Number of Employees
127 Inc	Branson	250
Bass Pro Shops	Branson	300
Best Buy	Branson	125
Big Cedar Resort	Ridgedale	550
Big Cedar Wilderness Club	Ridgedale	300
Branson Variety Theater	Branson	100
Cantina Laredo	Branson	120
City of Branson	Branson	254
Chateau on the Lake	Taney	204
College Of The Ozarks	Point Lookout	266
Country Mart	Branson	200
Country Mart	Forsyth	200
Cracker Barrel Old Country Store	Branson	150
Days Inn	Branson	120
Dolly Parton's Dixie Stampede	Branson	250

Table 2-24: Major Employers		
Company Name	City	Number of Employees
Fall Creek Resort	Branson	100
Falls Village	Branson	100
Grand Country Market	Branson	200
Grand Country Music Hall	Branson	100
Herschend Family Entertainment	Branson	1,993
Hilton Hotels/Convention Center	Branson	180
Holiday Hills Resort & Golf Club	Branson	115
Hollister School District	Hollister	218
Home Depot	Branson	81
Jubilee Foods	Branson	100
K-Kountry-Branson	Branson	200
Kanakuk Kamps	Branson	1,000
Keeter Center	Point Lookout	200
Kohl's Department Store	Branson	130
Kriter Tracks LLC	Branson	100
Lodge Of The Ozarks	Branson	130
Lowe's Home Improvement	Hollister	130
Marriott's Willow Ridge Lodge	Branson	200
Myer Hotels	Branson	195
Olive Garden Italian Restaurant	Branson	120
Outback Steak & Oyster Bar	Branson	150
Ozark Mountain Bank	Branson	88
Pointe Lookout	Hollister	120
Radisson	Branson	165
Red Lobster	Branson	140
Shepherd Of The Hills Outdoor	Branson	200
Shorty Small's	Branson	100
Sight & Sound Theater	Branson	204
Skaggs Regional Medical Center	Branson	1,064
Stormy Point Village	Branson	100
Summerwinds Resort Svc LLC	Branson	400
Surrey Inn	Branson	1000
Table Rock Asphalt Co	Branson	130
Taney County	Forsyth	297
Target	Branson	141
Tom Boyce Excavating Inc	Branson	100
Tracks Family Fun Parks	Branson	120
Wal-mart	Branson	515
WELK Resort Hotel Branson	Branson	160
Westgate Resorts	Branson	228
White House Theater	Branson	97
White River Valley Electric	Branson	165
White Water	Branson	200
Wyndham Vacation Resorts	Branson	272

Figure 2-11: Taney County Vulnerable Facilities



Flood Plain Management/Wetlands

Wetlands

Wetlands are defined as “areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.” (U.S. EPA, Section 404). Wetlands are not a primary natural feature in Taney County. Wetland habitats that existed in the White River floodplain were inundated with the impoundment of Table Rock Lake. However, wetland habitat does exist along streams and their tributaries and in low-lying areas in the county. In general, there are areas of associated forested and emergent wetland habitat along Bull Creek, Bear Creek, Beaver Creek, Roark Creek and Swan Creek (Burns & McDonnell, 1995, p. 3-15).

National Flood Insurance Program

In 1968, Congress created the National Flood Insurance Program (NFIP) in response to the rising cost of taxpayer funded disaster relief for flood victims and the increasing amount of damage caused by floods. The NFIP is self-supporting for the average historical loss year, which means that operating expenses and flood insurance claims are not paid for by the taxpayer, but through premiums collected for flood insurance policies. Taney County and the communities of Branson, Bull Creek, Hollister, and Rockaway Beach participate in the NFIP. These jurisdictions have adopted floodplain management regulations as a requirement for participation in the NFIP.

Community	NFIP Participation	Date of Entry (Emergency or Regular)	Current Effective Map
Taney County	Yes	04/01/2004 (r)	03/15/2012
Branson	Yes	10/26/1976 (r)	03/15/2012
Bull Creek	Yes	09/30/1997 (r)	03/15/2012
Forsyth	Yes	09/29/2006	03/15/2012
Hollister	Yes	03/18/1985 (r)	03/15/2012
Kirbyville	No	-	-
Merriam Woods	Yes	09/26/2006 (r)	03/15/2012
Rockaway Beach	Yes	03/01/2000 (r)	03/15/2012
Taneyville	No	-	-

Source: Federal Emergency Management Agency, Federal Insurance Administration.

Table 2-26 notes the flood insurance policies in force in Taney County. Of the 573 policies currently in-force, nearly half are for properties located in the City of Branson.

Jurisdiction	Policies in-force
Taney County (Unincorporated)	206
Branson	266
Hollister	31
Rockaway Beach	55
Bull Creek	15
Total	573

Source: <http://bsa.nfipstat.com/reports/1011.htm>

Environmental Concerns

A primary environmental concern for Taney County is protection of its surface water resources. Taney County's economy is heavily dependent on not only its live performance entertainment industries, but also on its water-based recreation industries. Lake Taneycomo and Table Rock Lake in particular are nationally known for fishing and the environments provided for other outdoor recreation activities. Several actions have already been taken by the county and its municipalities to address degradation of water quality, including installation of phosphorus removal systems at wastewater treatment plants, development of regional wastewater treatment facilities and expansion of wastewater collection systems into urbanizing areas of the county.

Maintenance of groundwater quality is also a significant concern. The county's geologic structure and soils characteristics significantly impact the use of septic tanks for wastewater disposal. It is relatively easy for surface contaminants as well as materials from failing septic systems to enter the groundwater with little filtration. Groundwater and surface water quality is a concern for human health as well as the animal husbandry industry which contributes to the economy in eastern Taney County.

Water quality in the White River Basin is an economic and quality of life concern for Missouri, Arkansas, and numerous local governments throughout the region, as well as area businesses and residents. Numerous local governments, state agencies, private citizens, business organizations and educational research institutions in Missouri and Arkansas are already collaborating or engaging in discussion on strategies to maintain and improve water quality in the tri-lakes. Any natural hazard event which significantly impacts surface water quality in Taney County would have adverse effects beyond the borders of the county.

Hazardous Materials Sites

Records of the Missouri Department of Natural Resources indicate seven hazardous waste generators located in Taney County. Five of these waste generators are located in Branson and two are located in Hollister. All facilities are small quantity waste generators with the exception of one large quantity waste generator in Branson. The specific locations of these facilities are not provided here for security reasons.

Endangered Species

There are forty-five sensitive species listed on the Missouri Department of Conservation Heritage Program for Taney County. The sensitive species range from Critically Imperiled (< 5 occurrences) to Vulnerable (21 to 1000 occurrences). Three of these sensitive species, the Indiana Bat, the Gray Bat, and the Tumbling Creek Cavesnail, are designated as endangered by the federal government. Three more of these species are designated as endangered by the state government: the Bachman's Sparrow, Swainson's Warbler, and the Plains Spotted Skunk.

Common Name	Scientific Name	State	Federal
Gray Bat	<i>Myotis sodalis</i>	Endangered	Endangered
Indiana Bat	<i>Myotis grisescens</i>	Endangered	Endangered
Tumbling Creek Cavesnail	<i>Antrobia culveri</i>	Endangered	Endangered
Bachman's Sparrow	<i>Aimophila aestivalis</i>	Endangered	
Swainson's Warbler	<i>Limnothlypis swainsonii</i>	Endangered	
Plains Spotted Skunk	<i>Spilogale putorius interrupta</i>	Endangered	
Source: Missouri Dept of Conservation. Missouri Fish and Wildlife Information System, Natural Heritage Database. http://mdc.mo.gov/landwater-care/heritage-program/results/county/Taney			

Historic Properties and Archaeological Sites

There are 593 recorded archaeological sites in Taney County. Most of these sites are privately owned and are not identified to protect the physical location of the sites. Six properties in Taney County are listed on the National Register of Historic Places. These include:

- The Bonniebrook Homestead is located off of U.S. Highway 65 near Walnut Shade. It was added in 1997 and is privately owned. Its area of significance is in Literature and Art. The periods of significance are 1875-1899, 1900-1924, and 1925-1949. Its historic function was Domestic and Funerary, and its current function is Funerary and Landscape.
- The Downing Street Historic District is located at Downing Street, Hollister. It was added in 1978, and is owned privately, by local government, and Federal. Its area of significance is in Community Planning and Development, Commerce, and Architecture. The period of significance is 1900-1924. Its historic and current functions are Commerce/Trade, Government, and Religion.
- The John Ross House is located at Missouri Highway 76, Branson. It was added in 1983 and is privately owned. Its area of significance is Industry, Literature, Architecture, and Social History. The periods of significance are 1875-1899 and 1900-1924. Its historic function was Domestic and its current function is Recreation and Culture.
- The Swan Creek Bridge is located north of Forsyth. It was added in 1983 and is owned by the local government. Its area of significance is Architecture. The periods of significance are 1900-1924 and 1925-1949. Its historic and current functions are Transportation.

Ralph Foster Museum

The Ralph Foster Museum is located on the campus of the College of the Ozarks. Established by the president of the school in the 1920s, the museum has gradually increased in size and exhibit volume. It is now primarily focused on collecting and

preserving items connected to the Ozarks region. It contains 40,000 square feet of exhibits including antiques, weapons, dolls, etc. from the Ozarks and around the world, as well as 20,000 square feet used for offices, storage, and a research library.

Community Plans

Taney County Master Plan: Taney County adopted an updated *Master Plan* in December 1999. The Plan focuses on several elements that provide an overview of the characteristics and conditions of Taney County - its people, natural resources, economy, housing, public infrastructure, transportation and land development. Overall, the goals, objectives and recommendations set forth within these elements focus on protecting and maintaining the quality of the natural environment that is critical to the county's economic future, while recognizing private property rights.

Taney County Development Guidance Code: Adopted by the Taney County Commission in November 1984, the purpose of these codes is to manage the growth and development of the unincorporated areas of Taney County so as to achieve the objectives authorized by law according to RSMo 64.815, RSMo 64.825, and RSMo 64.850. The *Development Guide Code* is a performance-based zoning and subdivision regulation; the Code is reviewed on an annual basis and updated as determined necessary. The most recent update was in May 2012.

Taney County Emergency Operations Plan: The *Taney County Emergency Operations Plan* (EOP) establishes the organizations and procedures to enable Taney County and its municipalities to "save lives, minimize injuries, protect property, preserve functional civil governments and maintain economic activities essential to Taney County's survival and recovery from natural, technological, terrorism and war-related disasters" (Taney County EOP). The Plan establishes functional lines for operation and also identifies line of succession for continuity of government during a disaster.

Taney County Wastewater Master Plan (April 2007): The *Taney County Wastewater Master Plan*, developed for the Taney County Regional Sewer District, addresses the current and projected wastewater treatment needs in sixteen of the twenty-one watersheds in Taney County, excluding the watershed areas within the cities of Branson, Hollister, and Forsyth.

Community Health Assessment for Taney County (2008): The purpose of the 2008 assessment process was to provide a report to the community regarding progress that has been made on previously identified priorities and to review current trends that may require action to protect the health of the public. The previous health assessment, in 2005, identified three priority areas that were presented to the community to increase awareness and stimulate public health efforts. The priority areas focused on tobacco use, obesity and family/domestic violence. From these priorities, community meetings and groups met and early progress toward addressing these issues was observed.

State Transportation Improvement Plan (STIP): The STIP is the Missouri Department of Transportation's plan outline for transportation system improvements programmed for a five year period. Programmed improvements in the 2011-2015 relevant to Taney County include various pavement improvements on Rte. 76, at the Rte. 65/Rte. 160 interchange, and on the ramps at interchanges with Rtes. 106, F, Bee Creek Road, 248

and 76. There will be a replacement of interchange ramps at Rte. 248 (Shepherd of the Hills Expressway/ Branson Landing Blvd. as well as bridge improvements over Bull Shoals Lake.

Community Plans: Several of Taney County's incorporated communities have adopted comprehensive plans or master plans as guides for the future growth and development of their respective communities. The largest community with a comprehensive plan is Branson. The Branson board of alderman has approved the 2030 Comprehensive Plan in the summer of 2012. Forsyth also has a Comprehensive Plan that was adopted January 2003 and updated for 2010/2011. This plan is used as a guide and as a legal basis in making land use and zoning decisions. Rockaway Beach adopted a 2010 Comprehensive Plan in November. The purpose of the plan is to provide a policy guide for the growth and future development of the city. Hollister adopted their most recent Comprehensive Plan in 2005.

Building and Fire Codes

Table 2-28 lists building codes, fire codes and other codes adopted by municipalities within Taney County. The fire codes adopted by the Western Taney County Fire Protection District, the 2006 International Fire Prevention Code (IFC) for commercial buildings, are used within the unincorporated areas within the District's jurisdiction as well as some of the municipalities. The Central Taney County Fire Protection District also use the 2006 International Fire Prevention Codes for commercial building construction within its service area which is unincorporated areas only.

Community	Building Code	Fire Code	Mechanical Code	Plumbing Code	Other Codes																																				
Branson	2009 IBC/IRC	2009 IFC	2009 IMC	2009 IPC	2009 NEC 2009 IFGC 2009 IPMC IEEC IECC IEBC ICCEC																																				
Bull Creek	--	2006 IFC	--	--	--																																				
Forsyth	2006 IBC/IRC	2006 IFC	2006 IMC	2006 IPC	2006 NIEC 2006 IFGC 2006 ICC																																				
Hollister	2012 IBC/IRC	2012 IFC	2012 IMC	2012 IPC	2011 NEC 2012 IFGC 2012 IPMC																																				
Kirbyville	--	2006 IFC	--	--	--																																				
Merriam Woods	2008 IBC	2006 IFC	--	--	2008 IRC--1 & 2 Family Dwellings																																				
Rockaway Beach	2008 IBC	2008 NFC	2008 IMC	2008 IPC																																					
Taneyville	--	--	--	--	--																																				
<p>Codes:</p> <table border="0"> <tr> <td>IBC</td> <td>International Building Code</td> <td>IFGC</td> <td>International Fuel Gas Code</td> </tr> <tr> <td>ICC</td> <td>Electric Code</td> <td>IMC</td> <td>International Mechanical Code</td> </tr> <tr> <td>ICCEC</td> <td>International Code Council Administrative Provisions</td> <td>IPC</td> <td>International Plumbing Code</td> </tr> <tr> <td>IEBC</td> <td>International Existing Building Code</td> <td>IPMC</td> <td>International Property Maintenance Code</td> </tr> <tr> <td>IECC</td> <td>International Energy Conservation Code</td> <td>IRC</td> <td>International Residential Code</td> </tr> <tr> <td>IFC</td> <td>International Fire Prevention Code</td> <td>NEC</td> <td>National Electric Code</td> </tr> <tr> <td>ICC/ANSI A117.1</td> <td>Handicap Accessibility</td> <td></td> <td></td> </tr> <tr> <td>CTCFPD</td> <td>Central Taney County Fire Protection District</td> <td></td> <td>2000 IFC (Commercial Buildings only)</td> </tr> <tr> <td>WTCFPD</td> <td>Western Taney County Fire Protection District</td> <td></td> <td>1999 BOCA National Fire Prevention Code (Commercial Buildings only)</td> </tr> </table>						IBC	International Building Code	IFGC	International Fuel Gas Code	ICC	Electric Code	IMC	International Mechanical Code	ICCEC	International Code Council Administrative Provisions	IPC	International Plumbing Code	IEBC	International Existing Building Code	IPMC	International Property Maintenance Code	IECC	International Energy Conservation Code	IRC	International Residential Code	IFC	International Fire Prevention Code	NEC	National Electric Code	ICC/ANSI A117.1	Handicap Accessibility			CTCFPD	Central Taney County Fire Protection District		2000 IFC (Commercial Buildings only)	WTCFPD	Western Taney County Fire Protection District		1999 BOCA National Fire Prevention Code (Commercial Buildings only)
IBC	International Building Code	IFGC	International Fuel Gas Code																																						
ICC	Electric Code	IMC	International Mechanical Code																																						
ICCEC	International Code Council Administrative Provisions	IPC	International Plumbing Code																																						
IEBC	International Existing Building Code	IPMC	International Property Maintenance Code																																						
IECC	International Energy Conservation Code	IRC	International Residential Code																																						
IFC	International Fire Prevention Code	NEC	National Electric Code																																						
ICC/ANSI A117.1	Handicap Accessibility																																								
CTCFPD	Central Taney County Fire Protection District		2000 IFC (Commercial Buildings only)																																						
WTCFPD	Western Taney County Fire Protection District		1999 BOCA National Fire Prevention Code (Commercial Buildings only)																																						

Community Partnerships

Several community partnerships bring together the public sector, private sector and the citizens of Taney County. Although each of these partnerships has a specific mission and focus, all organizations engage in programs and activities supportive of quality of life and enhancement of the built and natural environment.

Taney County Business Development Partnership: The organization's goals are to retain existing businesses, help small businesses and startups, workforce development, market the county and attract new businesses. Its primary stated focus is on non-tourism-related industries.

Ozarks Regional Economic Partnership: Communities and Chambers of Commerce in Taney County are members of the Ozarks Regional Economic Partnership, an organization of the Springfield Area Chamber of Commerce, which focuses on activities to promote economic development opportunities and job creation in the region.

Southwest Missouri Council of Governments (SMCOG): Taney County and several communities are also members of the Southwest Missouri Council of Governments and the Council's economic development district as designated by the U.S. Economic Development Administration. SMCOG's mission is to provide a forum for local governments to discuss issues of regional concern and to provide services in community development and planning to its membership.

Upper White River Basin Foundation: This foundation, more commonly known as Ozarks Water Watch, works with many different public and private organizations in Southwest Missouri and Northwest Arkansas to reduce pollution on the Upper White River and therefore improve the water quality of Beaver, Table Rock, Taneycomo and Bull Shoals Lakes. Some of the activities include water quality monitoring in the watershed, identifying the most effective on-site wastewater treatment systems for the Ozarks, assisting willing communities to find the resources to design and install appropriate centralized wastewater treatment systems in order to eliminate standard septic tanks, and promoting programs to eliminate nutrient rich agricultural run-off (<http://www.whiteriverbasin.org/>).

Downtown Branson Merchants Association: This association sponsors six annual festivals in the historic business district and hosts two annual parades.

Significant Cultural/Social Issues

Taney County has historically been a rural county with a culture based on individualism and limited government control. The growth of the area's tourism industry and the rapid in-migration of population from outside of the region and the State have brought increased economic prosperity to Taney County. However, growth has changed the urban and rural landscape and brought substantial challenges to the county and its municipalities to meet the infrastructure and public services needs of the resident and tourist population. Preserving and protecting the quality of the natural environment, particularly the quality of the water reservoirs, is also a significant social and economic issue for the county. Balancing the interests of the various stakeholders and private investment with public interests and investments in Taney County is essential to Taney

County's on-going effort to maintain quality of life and ensure sustainable economic growth.

Media Relations

Several broadcast media serve the Taney County area. Television media routinely broadcast weather reports and warnings with detailed information on cities and counties at risk as well as news segments including information on actions to reduce risks to life and property. Weather reports and warnings are also broadcast from several radio stations in the area. Media resources that provide news and weather coverage in Taney County include:

Table 2-29: Media Resources Serving Taney County			
Media	Address	Telephone	Fax
Newspapers			
Branson Tri-Lakes News	PO Box 1900, Branson, MO 65615	417-334-3161	417-334-4299
Springfield News-Leader	651 Boonville, Springfield, MO 65806	417-836-1100	417-837-1381
Taney County Times	P.O. Box 220, Forsyth, MO 65653	417-334-2285	417-334-4789
Television			
KOZL 27 Independent KOLR 10 CBS	2650 E. Division, Spfld, MO 65801	417-862-6397	417-866-6397
KSPR 33 ABC	999 W. Sunshine, Spfld, MO 65808	417-831-1333	417-831-9358
KWMB 31 WB	118 State Drive, Hollister, MO 65672	417-336-0031	417-336-3199
KYTV 3 NBC	999 W. Sunshine, Spfld, MO 65808	417-268-3000	417-268-3364
KRBK 49 FOX	1701 S. Enterprise, Spfld, MO 65804	417-522-0020	--
Branson Visitor TV	566 Gretna Road Suite E, Branson, MO	417-334-4140	--
The Vacation Channel	225 Violyn Dr, Branson, MO 65616	417-334-1200	--
Radio			
KADI 99.5 FM	5431 W. Sunshine, Spfld, MO 65619	417-831-0995	417-831-4026
KHOZ 102.9 FM	752 S. Hwy 165, Branson, MO 65616	417-334-6750	417-334-6756
KLFC 88.1 FM	205 W. Atlantic, Branson, MO 65616	417-334-5532	417-335-2437
KOMC 1220 AM, 100.1 FM KRZK 106.3 FM	1220 Courtney, Branson, MO 65616	417-334-1200	417-334-7141
KTTS 94.7 FM KSPW 96.5 FM KSGS 104.1 FM	2330 W. Grand, Springfield MO 65802	417-865-6614	417-866-8537
KTOZ 95.5 FM	PO Box 3273, Springfield MO 65808	417-890-5555	417-890-5050
KTXR 101.3 FM	PO Box 3925, Springfield MO 65808	417-862-5600	417-869-7576
KOSP 105.1 FM	319-B. E. Battlefield, Spfld, MO 65807	417-886-5677	417-886-2155
KOZO 89.7 FM	Hollister, MO 65672	417-339-3388	

City/Village Profiles

The following list provides a summary profile of the characteristics of the incorporated communities in Taney County.

Branson

Total Population - 2010	10,520
Classification	City-fourth class
Leadership	Mayor/City Administrator/Board of Aldermen
Median household income, 1999	\$31,997
Total housing units	3,455
Housing unit, median year built	1983
Median gross rent	\$510
Median owner-occupied housing value	\$111,800
Master plan - land use plan only	Yes
Zoning regulations	Yes
Building regulations	Yes
Including earthquake design	No
Subdivision regulations	Yes
Stormwater regulations	Yes
Floodplain management regulations	Yes
Water service	City of Branson
Sewer service	City of Branson
Electric service	Empire District Electric Company
Law enforcement	City of Branson
Fire protection service	City of Branson
Ambulance service	Taney County Ambulance District
Solid waste disposal	American Disposal

Bull Creek

Total Population - 2010	603
Classification	Village
Leadership	Chair/Board of Trustees
Median household income, 1999	\$21,667
Total housing units	97
Housing unit, median year built	1988
Median gross rent	\$442
Median owner-occupied housing value	\$27,100
Master plan	No
Zoning regulations	No
Building regulations	No

Including earthquake design	No
Subdivision regulations	Yes
Stormwater regulations	No
Floodplain management regulations	Yes
Water service	Village of Bull Creek
Sewer service	Rockaway Regional Sewer District
Electric service	White River Valley Electric Cooperative
Law enforcement	Taney County Sheriff's Department
Fire protection service	Western Taney County Fire Protection District
Ambulance service	Taney County Ambulance
Solid waste disposal	American Disposal

Forsyth

Total Population - 2010	2,255
Classification	City-fourth Class
Leadership	Mayor/Board of Aldermen
Median household income, 1999	\$31,801
Total housing units	913
Housing unit, median year built	1977
Median gross rent	\$436
Median owner-occupied housing value	\$90,200
Master plan	Yes
Zoning regulations	Yes
Building regulations	Yes
Including earthquake design	No
Subdivision regulations	Yes
Stormwater regulations	Yes
Floodplain management regulations	Yes
Water service	City of Forsyth
Sewer service	City of Forsyth
Electric service	Empire District Electric Company
Law enforcement	City of Forsyth
Fire protection service	Forsyth Fire Department
Ambulance service	Taney County Ambulance
Solid waste disposal	American Disposal

Hollister

Total Population - 2010	4,426
Classification	City-fourth class
Leadership	Mayor/City Administrator/Board of Aldermen
Median household income, 1999	\$24,535
Total housing units	1,958
Housing unit, median year built	1986
Median gross rent	\$456
Median owner-occupied housing value	\$66,700
Master plan	Yes
Zoning regulations	Yes
Building regulations	Yes
Including earthquake design	No
Subdivision regulations	Yes
Stormwater regulations	Yes
Floodplain management regulations	Yes
Water service	City of Hollister
Sewer service	City of Hollister
Electric service	Empire District Electric Company
Law enforcement	City of Hollister
Fire protection service	Western Taney County Fire Protection District 2
Ambulance service	Taney County Ambulance Service
Solid waste disposal	American Disposal

Kirbyville

Total Population-2010	207
Classification	Village
Leadership	Chair/Board of Trustees
Median household income, 1999	N/A
Total housing units	N/A
Housing unit, median year built	N/A
Median gross rent	N/A
Median owner-occupied housing value	N/A
Master plan	No
Zoning regulations	Yes (adopted Taney County's regulations)
Building regulations	No
Including earthquake design	No
Subdivision regulations	Yes (adopted Taney County's regulations)
Stormwater regulations	No
Floodplain management regulations	No

Water service	Taney County Water (part), Private Wells (part)
Sewer service	Private Septic Tanks
Electric service	White River Valley Electric Cooperative and Empire District Electric Company
Law enforcement	Taney County Sheriff's Department
Fire protection service	Western and Central Taney County Fire Protection Districts
Ambulance service	Taney County Ambulance District
Solid waste disposal	American Disposal

* Kirbyville incorporated in 2002

Merriam Woods

Total Population - 2010	1,761
Classification	Village
Leadership	Chair/Board of Trustees
Median household income, 1999	\$24,132
Total housing units	600
Housing unit, median year built	1980
Median gross rent	\$462
Median owner-occupied housing value	\$42,200
Master plan	No
Zoning regulations	Yes
Building regulations	Yes
Including earthquake design	Yes
Subdivision regulations	No
Stormwater regulations	No
Floodplain management regulations	Yes
Water service	Village of Merriam Woods
Sewer service	Village of Merriam Woods
Electric service	White River Valley Electric Cooperative
Law enforcement	Village of Merriam Woods
Fire protection service	Western Taney County Fire Protection District
Ambulance service	Taney County Ambulance District
Solid waste disposal	Private haulers

Rockaway Beach

Total Population - 2010	841
Classification	City-fourth Class
Leadership	Mayor/Board of Aldermen
Median household income, 1999	\$33,359
Total housing units	356
Housing unit, median year built	1977

Median gross rent	\$442
Median owner-occupied housing value	\$69,200
Master plan	Yes
Zoning regulations	Yes
Building regulations	Yes
Including earthquake design	No
Subdivision regulations	Yes
Stormwater regulations	Yes
Floodplain management regulations	Yes
Water service	City of Rockaway Beach
Sewer service	City of Rockaway Beach
Electric service	White River Valley Electric Cooperative
Law enforcement	City of Rockaway Beach
Fire protection service	Western Taney County Fire Protection District
Ambulance service	Taney County Ambulance Service
Solid waste disposal	American Disposal

Taneyville

Total Population - 2010	396
Classification	Village
Leadership	Chair/Board of Trustees
Median household income, 1999	\$23,500
Total housing units	160
Housing unit, median year built	1972
Median gross rent	\$380
Median owner-occupied housing value	\$50,000
Master plan	No
Zoning regulations	Yes
Building regulations	No
Including earthquake design	No
Subdivision regulations	Yes
Stormwater regulations	No
Floodplain management regulations	No
Water service	Village of Taneyville
Sewer service	Village of Taneyville
Electric service	White River Valley Electric Cooperative
Law enforcement	Taney County Sheriff's Department
Fire protection service	Central Taney County Fire Protection District
Ambulance service	Taney County Ambulance District
Solid waste disposal	Village of Taneyville

Part 3: Risk Assessment

Natural Hazard Identification/Elimination Process

A variety of sources were researched for data on natural hazards. Primary sources included FEMA, SEMA, National Climate Data Center (NCDC) and National Oceanic and Atmospheric Administration (NOAA). The U.S. Geological Survey (USGS) and the Center for Earthquake Research and Information (CERI) were major sources for earthquake information. The Missouri Department of Natural Resources (MDNR) Dam Safety Division provided information concerning dams and the Missouri Department of Conservation (MDC) provided most of the wildfire information relevant to Taney County. Other information sources included county officials; existing city, county, regional and state plans; and information from local officials and residents.

Hazards relevant to Taney County were identified by researching the above noted data sources for incidences of natural hazards occurring in the county. In addition, hazards that are regional in scope and that have or may affect Taney County are also included in this risk assessment. The natural hazards that may affect Taney County identified in the *2005 Plan* remain unchanged and are included in the *Plan*, and are presented as follows:

- Tornado/Severe Thunderstorms
- Flood
- Severe Winter Weather
- Drought
- Heat Wave
- Earthquake
- Dam Failure
- Wildfire

In addition to those natural hazards identified in the *2005 Plan*, the *Plan* has been expanded to include the hazards of Land Subsidence (sinkholes) and Public Health Emergencies, specifically emerging infectious diseases. Sinkholes have been included based on underlying Karst topography throughout the county and the presence of a multitude of known sinkholes. Public Health Emergencies were identified during the planning process due to the county's unique vulnerability as a major tourist destination and past occurrence of individuals arriving on bus tours arriving in the county after onset of symptoms of infectious disease.

Community-wide Hazard Profile and Hazards Identified

Historical records indicate Taney County and its communities have been adversely affected by natural hazards. In September 1993, flash flooding along Bull Creek severely damaged or destroyed 150 mobile homes in the Rockaway Beach (Bull Creek) area, resulting in \$5 million in property damage. Taney County has also experienced loss from tornado and thunderstorm winds. In May 1957, an F2 tornado caused \$250,000 in property damages over a 15-mile long path through the county and in March 1996 thunderstorm winds damaged two boat docks and destroyed 20 boats on Lake Taneycomo in Rockaway Beach, resulting in \$200,000 in property loss.

A natural disaster can result in other hazards, such as interruption of water supply, power supply, business operation and transportation. These emergencies can trigger civil disturbance, a loss of records through computer failure, and health hazards resulting from water contamination and unsanitary conditions. Economic loss can affect the area in several ways, depending on the duration of interruption. A natural disaster may also trigger another natural hazard event. The following diagram provides an example of cascading natural hazards while Table 3-1 notes cascading hazards that may result from individual natural hazard events.

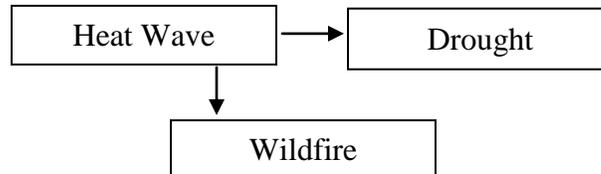


Table 3-1: Cascading Hazards Resulting from Natural Disasters

Natural Disaster	Power and Communications Interruption	Water Supply Interruption	Business Interruption	Civil Unrest	Computer Failure and/or Loss of Records	Transportation Interruption	Health and/or Environmental Hazards
Tornado/Storm	X	X	X	X	X	X	X
Flood	X	X	X		X	X	X
Severe Winter	X	X	X		X	X	X
Drought		X					X
Heat Wave		X		X			X
Earthquake	X	X	X	X	X	X	X
Dam Failure	X	X	X	X	X	X	X
Wildfire	X	X	X			X	X
Sinkholes	X	X				X	
Public Health			X	X			X

Hazards not Included and Reasons for Elimination

Landslides occur in all 50 states; however, this hazard is not likely to have much of a notable impact on Taney County due to soil profile, geology, and climate factors. Also, the risk of coastal storms, hurricanes, tsunamis, avalanche, and volcanic activity does not exist in Taney County due to the county’s location, geologic structure and soil profile. Additionally, Levee failure was omitted due to the fact that the National Levee Database, maintained by U.S.A.C.E, shows no federal levees located in the county and planning committee research revealed no records of levees within Taney County. Although it is likely that levees exist, such as low-head agricultural levees, no records indicate that a breach or overtopping of these levees would impact property other than that of the levee owner. Damage to residential structures is unlikely. Therefore, these hazards are not included in this risk assessment for Taney County.

Hazard Profile Format

The Hazard Profiles contained in this Risk Assessment are designed to better inform the reader of the natural hazards that affect the planning area, where those hazards occur, what damages those hazards might cause, past occurrences of the hazard, and the probability of the hazard occurring again. The Hazard Identification section contains a description of the hazard and a basic overview of how the event occurs in nature. The location section describes where the hazard is likely to occur, including a discussion of floodplains or Wildland-Urban Interface. The Extent section describes what damages officials can expect from each hazard as well as a discussion of the impact of the hazard on the planning area. The Past Occurrences section provides a discussion of recorded occurrences of the hazard as well as information on the severity of the events and the damages cause to property and life. The Probability section includes estimated probabilities for each hazard based on the frequency of past occurrences. Finally, probability and severity ratings are presented as summary information for each hazard. The rating in this section is not quantitative. Quantitative probabilities are explained within the narratives of each hazard profile. Probabilities are also quantitatively defined on page 3-74 and page 3-74. Quantitative severities are set forth in the loss estimates beginning on page 3-75.

Tornado

Hazard Identification

A tornado is air. It is a violently rotating column of air associated with the updraft of a severe thunderstorm. The visible appearance can vary greatly depending in its strength and what it is passing over. Many tornadoes often appear as a funnel shaped cloud that extends to the ground, although the cloud does not have to touch the ground. Many tornadoes are often identified by rotating debris under the funnel cloud. If there is no rotating debris under a funnel cloud, there is no tornado yet. There has to be rotating debris occurring to be called a tornado. Weather conditions which are conducive to tornadoes also often produce a wide range of other dangerous storm activities, including severe thunderstorms, downbursts, straight line winds, lightning, hail, and heavy rains.

Essentially, tornadoes are a rotating column of air with two components of winds. The first is the horizontal, rotational winds that can measure up to 300 miles an hour, and the second is an uplifting current. It is the force of the horizontal wind that is responsible for the majority of damage that occurs with tornadoes. Although tornadoes have been documented in all 50 states, most of them occur in the central United States. The unique geography of the central United States allows for the development of thunderstorms that can spawn tornadoes. Warm, moist air flowing north from the Gulf of Mexico collides with cold, dry air flowing south from Canada. This collision forces the warm, moist air to rise, often in concentrated currents called updrafts. These updrafts can become showers and thunderstorms.

Most tornadoes spawn from a thunderstorm know as a supercell. A supercell thunderstorm has a very strong updraft. The unique thing about the supercell is that the updraft also rotates in a counter clockwise direction. The rotation is caused by the change of the wind in speed and direction with height, which is called vertical wind

shear. On days that supercells can form, the surface wind is typically from the south, but as you go up in height, the wind changes to a more southwest or westerly direction and it increases in speed. It is this particular change of the wind in speed and direction with height that generates the rotating updraft in a supercell. While the supercell is responsible for most tornadoes in the United States, other types of thunderstorms also occasionally produce tornadoes. Multi-cell line storms, multi-cell cluster storms can also produce tornadoes, but it is not as common. (SEMA, *Missouri Hazard Analysis 2011*, p. A-1).

Location

There are no likely locations for future occurrences as the threat from this hazard is county-wide.

Extent (Magnitude/Severity)

The extent of damage caused by a tornado depends of the strength of the storm. Possible damage can vary from branches broken off of trees and sign boards being damaged to well built structures being blown off of their foundations and completely leveled and automobiles being thrown through the air for over 100 meters. The scale used to measure the strength and destructive power of tornadoes is the Enhanced Fujita Scale (EF-Scale), which is a revised version of the original Fujita Scale developed by Dr. Theodore Fujita in 1971.

The EF-Scale was developed by a group of engineers and meteorologists in 2007 to better depict the actual winds speeds and their degree of damage. The EF-Scale found that wind speeds necessary to cause a certain level of damage were slower than the original F-Scale. The F-Scale and the EF-scale rank tornadoes according to wind speed and the severity of damage caused (*A Recommendation for an Enhanced Fujita Scale EF-Scale*). These estimates vary with the height of the structure and exposure. Table 3-2 notes the F-Scale, Enhanced F-Scale, and examples of typical damage.

Table 3-2: Fujita and Enhanced Fujita Tornado Damage Scale					
FUJITA SCALE			OPERATIONAL EF SCALE		Typical Damage
F Number	Fastest 1/4-mile (mph)	3 Second Gust (mph)	EF Number	3 Second Gust (mph)	
0	40-72	45-78	0	65-85	<u>Light damage</u> - Some damage to chimneys; branches broken off trees; shallow-rooted trees pushed over; sign boards damaged.
1	73-112	79-117	1	86-110	<u>Moderate damage</u> - Peels surface off roofs; mobile homes pushed off foundations or overturned; moving autos blown off roads.
2	113-157	118-161	2	111-135	<u>Considerable damage</u> - Roofs torn off frame houses; mobile homes demolished; boxcars overturned; large trees snapped or uprooted; light-object missiles generated; cars lifted off ground.

Table 3-2: Fujita and Enhanced Fujita Tornado Damage Scale

FUJITA SCALE			OPERATIONAL EF SCALE		Typical Damage
F Number	Fastest 1/4-mile (mph)	3 Second Gust (mph)	EF Number	3 Second Gust (mph)	
3	158-207	162-209	3	136-165	Severe damage - Roofs and some walls torn off well-constructed houses; trains overturned; most trees in forest uprooted; heavy cars lifted off the ground and thrown.
4	208-260	210-261	4	166-200	Devastating damage - Well-constructed houses leveled; structures with weak foundations blown away some distance; cars thrown and large missiles generated.
5	261-318	262-317	5	Over 200	Incredible damage - Strong frame houses leveled off foundations and swept away; automobile-sized missiles fly through the air in excess of 100 meters (109 yds.); trees debarked; incredible phenomena will occur.

Source: Enhanced Fujita Tornado Damage Scale

Every tornado is a potential killer, and many are capable of great destruction. Tornadoes can topple buildings, roll mobile homes, uproot trees, hurl people and animals through the air for hundreds of yards, and fill the air with lethal, windblown debris. Sticks, glass, roofing material, and lawn furniture all become deadly missiles when driven by tornado winds. In 1975, a Mississippi tornado carried a home freezer for more than a mile. Once, a tornado in Broken Bow, Oklahoma, carried a motel sign 30 miles and dropped it in Arkansas. Tornadoes do their destructive work through the combined action of their strong rotary winds and the impact of windblown debris. In the simplest case, the force of the tornado’s winds pushes the windward wall of a building inward. The roof is lifted up, and the other walls fall outward. Until recently, this damage pattern led to the incorrect belief that the structure had exploded as a result of the atmospheric pressure drop associated with the tornado (SEMA, *Missouri Hazard Analysis 2011*, p. A-1).

The EF-scale takes an additional step by determining the tornado’s three-second gusts by estimating the point of damage based on a judgment of the amount of damage, or the degrees of damage (DOD), to 28 different types of structures, or damage indicators (DI), listed in table 3-3.

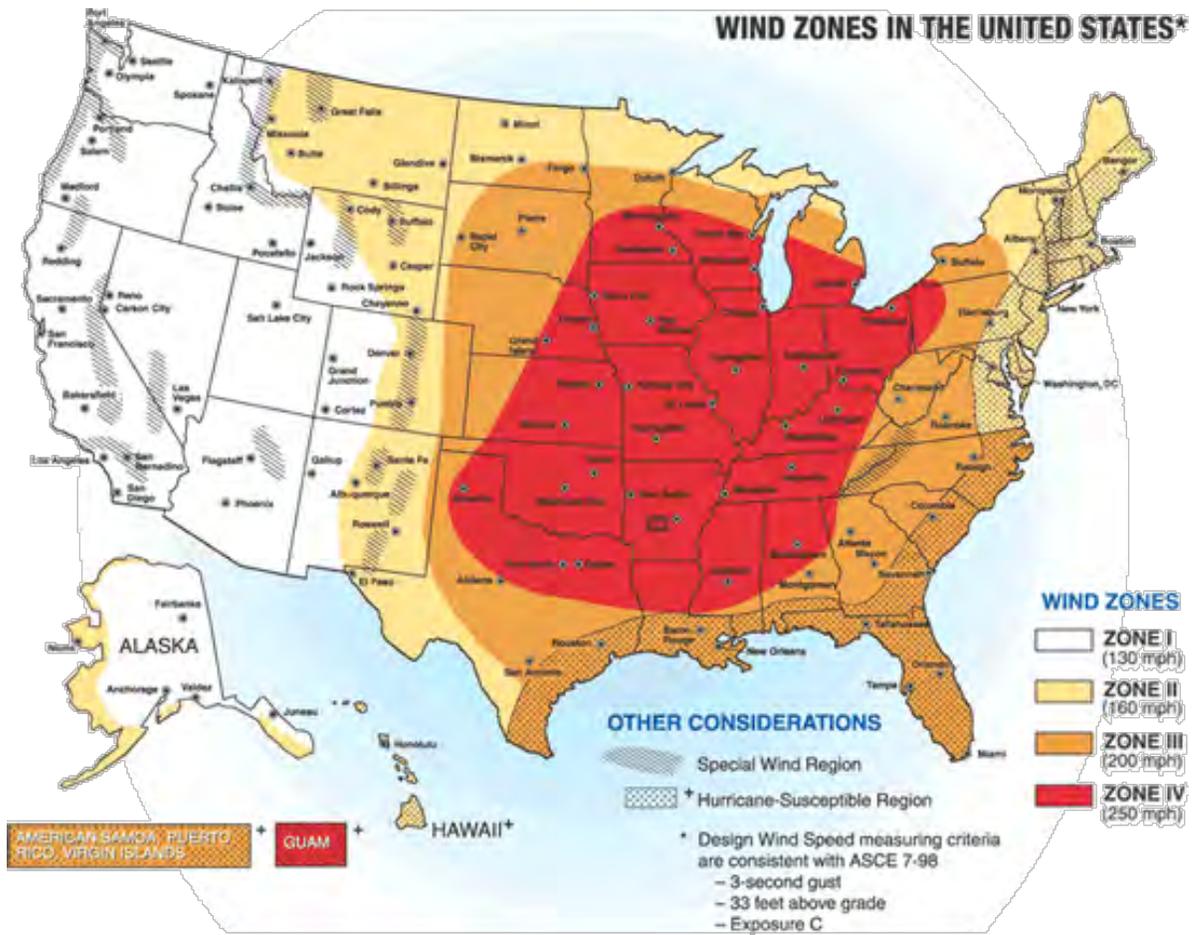
Table 3-3: Enhanced Fujita Damage Indicators and Degrees of Damage

DI No.	Damage Indicator (DI)	Degrees of Damage (DOD)	DI No.	Damage Indicator (DI)	Degrees of Damage (DOD)
1	Small Barns or Farm Outbuildings (SBO)	<u>8</u>	15	Elementary School [Single Story; Interior or Exterior Hallways] (ES)	<u>10</u>
2	One- or Two-Family Residences (FR12)	<u>10</u>	16	Junior or Senior High School (JHSH)	<u>11</u>
3	Manufactured Home – Single Wide (MHSW)	<u>9</u>	17	Low-Rise Building [1–4 Stories] (LRB)	<u>7</u>
4	Manufactured Home – Double Wide (MHDW)	<u>12</u>	18	Mid-Rise Building [5–20 Stories] (MRB)	<u>10</u>
5	Apartments, Condos, Townhouses [3 stories or less] (ACT)	<u>6</u>	19	High-Rise Building [More than 20 Stories] (HRB)	<u>10</u>
6	Motel (M)	<u>10</u>	20	Institutional Building [Hospital, Government or University Building] (IB)	<u>11</u>
7	Masonry Apartment or Motel Building (MAM)	<u>7</u>	21	Metal Building System (MBS)	<u>8</u>
8	Small Retail Building [Fast Food Restaurants] (SRB)	<u>8</u>	22	Service Station Canopy (SSC)	<u>6</u>
9	Small Professional Building [Doctor's Office, Branch Banks] (SPB)	<u>9</u>	23	Warehouse Building [Tilt-up Walls or Heavy-Timber Construction] (WHB)	<u>7</u>
10	Strip Mall (SM)	<u>9</u>	24	Electrical Transmission Lines (ETL)	<u>6</u>
11	Large Shopping Mall (LSM)	<u>9</u>	25	Free-Standing Towers (FST)	<u>3</u>
12	Large, Isolated Retail Building [K-Mart, Wal-Mart] (LIRB)	<u>7</u>	26	Free-Standing Light Poles, Luminary Poles, Flag Poles (FSP)	<u>3</u>
13	Automobile Showroom (ASR)	<u>8</u>	27	Trees: Hardwood (TH)	<u>5</u>
14	Automobile Service Building (ASB)	<u>8</u>	28	Trees: Softwood (TS)	<u>5</u>

Source: <http://www.depts.ttu.edu/weweb/Pubs/fscale/EFScale.pdf>

Figure 3-1 shows Wind Zones in the United States. All of Missouri is in Zone IV, and is therefore at risk for 250 mph winds. This wind speed is an important factor in the construction of tornado safe rooms.

Figure 3-1: Wind Zones in the United States



Source: http://www.fema.gov/plan/prevent/saferoom/tsfs02_wind_zones.shtml

Past Occurrences

During the 62 year period from 1950 through 2012, the National Climatic Data Center’s (NCDC) Storm Event database records 10 tornadoes affecting Taney County. The most costly event occurred on February 29, 2012. An EF-2 tornado hit the city of Branson. Damage occurred along the Hwy 76 Strip as well as the Branson Landing. Although, damages occurred in surrounding communities and unincorporated parts of the county, initial reports from the City of Branson included 37 properties that suffered major damages or were destroyed and another 41 that suffered minor to major damage. Hardest hit was the Hilton Branson Convention Center in the Branson Landing which had an estimated \$1,000,000 to \$1.5 million in damage. This event produced no fatalities, however, there were 33 injured countywide.

Another costly event occurred on May 8, 2009 when an F-1 tornado touched down in rural sections of the county and caused damage to a home and numerous outbuildings on Essray Road. Intense tree damage also occurred as the tornado tracked into southeastern Christian County (NCDC). The tornadoes caused approximately \$500,000 in property damage. Another major event occurred on May 21, 1957 when an F2 tornado

touched down, carving a 15-mile long path through the county. Although no specific damages are reported in the NCDL database, this event resulted in \$250,000 in property losses. Table 3-4 contains information for recorded tornado events in the NCDL storm events database.

Location	Date	Magnitude	Death	Injury	Property Damage
Taney	05/21/1957	F2	0	0	\$250,000
Taney	05/18/1960	F0	0	0	\$300
Taney	04/05/1965	F1	0	0	\$25,000
Forsyth	04/27/1994	F0	0	0	\$500
Forsyth	06/08/1995	F0	0	0	\$0
Branson	03/11/2006	F0	0	0	\$0
Branson Memorial Airport	01/08/2008	F0	0	0	\$75,000
Swan	05/08/2009	F1	0	0	\$500,000
Branson Memorial Airport	04/24/2010	F0	0	0	\$20,000
Day	5/22/2011	F1	0	0	\$50,000
Branson	2/29/2012	F2	0	0	\$1,500,000*
Total			0	0	\$2,420,800

Source: NCDL: <http://www4.ncdc.noaa.gov/cgi-win/wwcgl.dll?wwevent~storms>

Probability and Severity Rating

According to the NCDL storm event records there have been 11 tornado events from 1954 to 2012. Based on the past occurrence of tornadoes in Taney County, there is an 19 percent probability that the county will experience a tornado in any given year. Table 3-5 lists the probability of future tornado occurrence by F-Scale rating. Of the 11 recorded tornado events for Taney County, 6 are classified as F0 magnitude. The probability of occurrence for an F0 magnitude is roughly once every ten years and one in twenty years for an F1 magnitude tornado. Table 3-5 contains the risk percentages for probability of occurrence of a tornado event by F-Scale magnitude for Taney County.

The potential severity of effects from tornadoes will continue to be high. Taney County will continue to experience injuries, property damages and possible fatalities from tornadoes. However, technological advances will facilitate earlier warnings than previously available. This, combined with a vigorous public education program and improved construction techniques, provides the potential for significant reductions deaths and injuries, as well as reduced property damage. See Table 3-6 for severity rating of tornado in Taney County by F-Scale.

F Scale	# of Events	% Risk	Probability Rating
F0	6	10.3	High
F1	3	5.2	Moderate
F2	1	3.4	Moderate
F3	0	0.0	Low
F4	0	0.0	Low
F5	0	0.0	Low

F0	Low
F1	Moderate
F2	High
F3	High
F4	High
F5	High

Severe Thunderstorm (high wind, hail, lightning)

Hazard Identification

Tornadoes are usually associated with severe thunderstorms, which by themselves possess destructive potential. Such storms most often occur in the spring and summer, during the afternoon and evenings, but can occur at any time. In addition to tornadoes, other hazards associated with thunderstorms include the following (Heavy rain and flash flooding are discussed in the flood section):

- High winds
- Hail
- Lightning

The National Weather Service (NWS) considers a thunderstorm severe if it produces hail at least three-quarters of an inch in diameter, has winds of 58 miles per hour or higher, or produces a tornado. Thunderstorms may occur singly, in clusters or in lines. Some of the most severe weather occurs when a single thunderstorm affects one location for an extended time. Lightning is a major threat during a thunderstorm. Lightning is very unpredictable, which increases the risk to individuals and property. In the United States, 75 to 100 people are killed each year by lightning, although most lightning victims do survive (National Disaster Education Coalition, Talking About Disaster, p. TS-2).

High Winds

A severe thunderstorm can produce winds that can cause as much damage as a weak tornado and these winds can be life threatening. The damaging winds of thunderstorms include downbursts, microbursts, and straight-line winds. Downbursts are localized currents of air blasting down from a thunderstorm, which induce an outward burst of damaging wind on or near the ground. Microbursts are minimized downbursts covering an area of less than 2.5 miles across. They include a strong wind shear (a rapid change in the direction of wind over a short distance) near the surface. Microbursts may or may not include precipitation and can produce winds at speeds of more than 150 miles per

hour. Damaging straight-line winds are high winds across a wide area that can reach speeds of 140 miles per hour. (*State of Missouri Hazard Analysis*, November 2010)

The National Weather Service in Springfield, Mo uses the following scale, as represented in Table 3-7, to warn residents and emergency managers of thunderstorm wind risk.

Table 3-7: National Weather Service Thunderstorm Wind Gust Legend	
Risk Level	Definition
None	No thunderstorm wind risk
Limited	Risk for sub-severe wind gusts (less than 58 mph) Or Probability of severe wind gusts (58 mph or greater) within 25 miles of a point: Less than 15%
Elevated	Probability of severe wind gusts (58 mph or greater) within 25 miles of a point: Equal to or greater than 15%
Significant	Probability of severe wind gusts (58 mph or greater) within 25 miles of a point: Equal to or greater than 45%
Extreme	Probability of severe wind gusts (58 mph or greater) within 25 miles of a point: Equal to or greater than 60%
Source: National Weather Service	

Hail

Hail is precipitation in the form of lumps of ice that form in some storms. They are usually round and typically vary from .25 inch to 3 inches in diameter. Hail generally forms in thunderstorms between strong currents of rising air called updrafts and the current of air descending toward the ground or downdraft. Hail develops when updrafts carry water droplets to a height where freezing occurs. Ice particles grow in size, finally becoming too heavy to be supported by the updraft and fall to the ground. Large hailstones indicate strong updrafts in storms. Large hailstones fall at speeds faster than 100 mph and account for significant damage (*Denver Regional Natural Hazard Mitigation Plan*, 2010 Draft).

Lightning

Lightning is caused when turbulent air inside a thundercloud creates positively and negatively charged areas, with the negative charges clustering at the bottom of the cloud. Because opposite charges attract each other, positive charges on the ground collect beneath the cloud and follow it. When the positive and negative charges finally meet, they complete an electrical circuit, and create lightning. Not all lightning forms in the negatively charged area low in the thunderstorm cloud. Some lightning originates in the cirrus anvil at the top of the thunderstorm. This area carries a large positive charge. Lightning from this area is called positive lightning.

Location

All of Taney County is at equal risk for severe thunderstorm hazards.

Extent (Magnitude/Severity)

Thunderstorms frequently occur in the planning area and residents need to be prepared for the types of damages that each aspect of the hazard can cause.

High Winds

The Beaufort Wind Scale was developed in 1805 by Sir Francis Beaufort of England to better understand the effects of high winds not only over land but over water. Table 3-8 depicts the Beaufort Wind Scale. The scale classes wind speeds in knots or mph by 12 descriptions of conditions ranging from calm to hurricane. Descriptions of observable effects to land and water are defined for each class allowing for estimating wind speeds across a surface.

Force	Wind (MPH)	WMO Classification	Appearance of Wind Effects	
			On the Water	On Land
0	Less than 1	Calm	Sea surface smooth and mirror-like	Calm, smoke rises vertically
1	1-3	Light Air	Scaly ripples, no foam crests	Smoke drift indicates wind direction, still wind vanes
2	4-7	Light Breeze	Small wavelets, crests glassy, no breaking	Wind felt on face, leaves rustle, vanes begin to move
3	8-12	Gentle Breeze	Large wavelets, crests begin to break, scattered whitecaps	Leaves and small twigs constantly moving, light flags extended
4	13-18	Moderate Breeze	Small waves 1-4 ft. becoming longer, numerous whitecaps	Dust, leaves, and loose paper lifted, small tree branches move
5	19-24	Fresh Breeze	Moderate waves 4-8 ft taking longer form, many whitecaps, some spray	Small trees in leaf begin to sway
6	25-31	Strong Breeze	Larger waves 8-13 ft, whitecaps common, more spray	Larger tree branches moving, whistling in wires
7	32-38	Near Gale	Sea heaps up, waves 13-20 ft, white foam streaks off breakers	Whole trees moving, resistance felt walking against wind
8	39-46	Gale	Moderately high (13-20 ft) waves of greater length, edges of crests begin to break into spindrift, foam blown in streaks	Whole trees in motion, resistance felt walking against wind
9	47-54	Strong Gale	High waves (20 ft), sea begins to roll, dense streaks of foam, spray may reduce visibility	Slight structural damage occurs, slate blows off roofs
10	55-63	Storm	Very high waves (20-30 ft) with overhanging crests, sea white with densely blown foam, heavy rolling, lowered visibility	Seldom experienced on land, trees broken or uprooted, "considerable structural damage"
11	64-72	Violent Storm	Exceptionally high (30-45 ft) waves, foam patches cover sea, visibility more reduced	Extensive widespread damage
12	73+	Hurricane	Air filled with foam, waves over 45 ft, sea completely white with driving spray, visibility greatly reduced	Extreme destruction, devastation

Source: <http://www.spc.noaa.gov/faq/tornado/beaufort.html>, <http://www.orcadian.co.uk/weather/beaufort.htm>

Hail

The Tornado and Storm Research Organization (TORRO) has developed a scale to better understand the effects of various size hail stones. The TORRO Hail Storm

Intensity Scale in Table 3-9 is similar to the Beaufort scale and classifies hail events by intensity category, diameter and typical damage impacts.

	Intensity Category	Typical Hail Diameter (mm)*	Typical Damage Impacts
H0	Hard Hail	5	No damage
H1	Potentially Damaging	5-15	Slight general damage to plants, crops
H2	Significant	10-20	Significant damage to fruit, crops, vegetation
H3	Severe	20-30	Severe damage to fruit and crops, damage to glass and plastic structures, paint and wood scored
H4	Severe	25-40	Widespread glass damage, vehicle bodywork damage
H5	Destructive	30-50	Wholesale destruction of glass, damage to tiled roofs, significant risk of injuries
H6	Destructive	40-60	Bodywork of grounded aircraft dented, brick walls pitted
H7	Destructive	50-75	Severe roof damage, risk of serious injuries
H8	Destructive	60-90	(Severest recorded in the British Isles) Severe damage to aircraft bodywork
H9	Super Hailstorms	75-100	Extensive structural damage. Risk of severe or even fatal injuries to persons caught in the open
H10	Super Hailstorms	>100	Extensive structural damage. Risk of severe or even fatal injuries to persons caught in the open
*Approximate range (typical maximum size in bold), since other factors (e.g. number and density of hailstones, hail fall speed and surface wind speeds) affect severity.			

Lightning

Positive lightning is particularly dangerous for several reasons. It frequently strikes away from the rain core, either ahead or behind the thunderstorm. It can strike as far as five or 10 miles from the storm, in areas that most people do not consider to be a lightning risk area. The other problem with positive lightning is it typically has a longer duration, so fires are more easily ignited. Positive lightning usually carries a high peak electrical current, which increases the lightning risk to an individual. (*Denver Regional Natural Hazard Mitigation Plan, 2010 Draft*) Nationwide, lightning kills 75 to 100 people each year. During the period of 1992 through 1996, seven people died in Missouri as a result of lightning strikes, compared to two deaths from tornadoes during the same period (*State of Missouri Hazard Analysis, November 2010*)

Past Occurrence

High Winds

There are 103 thunderstorm wind events recorded in the NCDL database. Of those 103 events, thirty have resulted in a total of \$1,263,000 in damages. The most severe thunderstorm event occurred on May 08, 2009. Fifty to eighty mph gusts downed thousands of trees across much of Taney County. The northern half of the county experienced the greatest impact with structural damage occurring to a modular home in Forsyth after a large tree fell on the structure. Several power poles across the northern

half of the county were downed and resulted in power outages (NCDc). On March 24, 1996 in Rockaway Beach, thunderstorm winds damaged 2 boat docks and destroyed 20 boats, resulting \$200,000 in damages. Two events caused property damage totals of \$100,000 each. The first event occurred on April 15, 2001 three miles west of Branson when 70-90 mph winds damaged trees and two homes under construction, destroyed a boat dock, and knocked down power lines. The number of trees and power lines knocked down in southeast Taney County were so numerous that county roads were completely blocked for two days. The loss of power left 3,000 people without electricity for more than 18 hours. A woman was injured when the shed she occupied blew over. The second event occurred on July 4, 2004. Straight line winds damaged several structures in Branson and numerous trees and power lines were downed in the county Table 3-10 records those thunderstorm wind events that have resulted in damages.

Location	Date	Death	Injury	Property Damage
Taney	08/17/1988	0	1	\$0
Branson	09/13/1993	0	0	\$50,000
Branson	04/11/1994	0	0	\$50,000
Branson	06/08/1995	0	0	\$3,000
Rockaway Beach	03/24/1996	0	0	\$200,000
Chestnutridge	04/28/1996	0	0	\$2,000
Branson	07/22/1996	0	0	\$5,000
Rockaway Beach	07/09/1997	0	0	\$1,000
Hollister	03/27/1998	0	0	\$90,000
Forsyth	07/20/1998	0	0	\$5,000
Forsyth	07/22/1998	0	0	\$1,000
Branson	04/03/1999	0	0	\$30,000
Ridgedale	05/17/1999	0	0	\$3,000
Taneyville	08/11/1999	0	2	\$50,000
Protem	01/03/2000	0	0	\$5,000
Branson	03/26/2000	0	0	\$4,000
Kirbyville	07/28/2000	0	0	\$10,000
Branson	04/15/2001	0	1	\$100,000
Taney	07/04/2004	0	0	\$100,000
Ridgedale	06/06/2005	0	0	\$7,000
Forsyth	11/12/2005	0	0	\$5,000
Protem	06/22/2006	0	0	\$5,000
Rockaway Beach	06/01/2007	0	0	\$15,000
Branson	6/01/2007	0	0	\$2,000
Day	05/08/2009	0	0	\$500,000
Point Lookout Apartments	04/24/2010	0	0	\$1,000
Branson	08/08/2011	0	0	\$10,000
Forsyth	08/08/2011	0	0	\$2,000
Forsyth	08/20/2011	0	0	\$1,000
Hollister	08/20/2011	0	0	\$1,000
Totals		0	4	\$1,263,000
Source: NCDc, http://www4.ncdc.noaa.gov/cgi-win/wwcgi.dll?wwevent~storms				

Hail

The NCDC Storm Event database includes records of 128 hail events in Taney County since 1962, five of which reported property damages totaling \$555,100. The most damaging hail event occurred on March 12, 2006 when baseball size hail damaged roofs and vehicles in Branson. Damage from this event totaled \$500,000. On May 9, 1998, golf ball sized hail fell in an area from Table Rock State Park northeast to the Highway 76 strip in Branson, damaging numerous vehicles. This event resulted in \$50,000 in property damages. The second recorded hail event, resulting in \$100 in damages, occurred in the Forsyth area on April 4, 1994. In addition to these five events, a thunderstorm wind event five miles north of Taneyville on August 11, 1999 resulted in slight injuries to two people hit by golf ball size hail as they ran for shelter from the storm. Table 3-11 lists those events that resulted in damage or injuries.

Table 3-11: Hail History – Taney County, 1955-2012				
Location	Date	Death	Injury	Property Damage
Forsyth	04/15/1994	0	0	\$100
Branson	05/09/1998	0	0	\$50,000
Taneyville	08/11/1999	0	2	N/A
Branson	03/12/2006	0	0	\$500,000
Ridgedale	10/01/2009	0	0	\$5,000
Totals		0	2	\$555,100
Source: NCDC, http://www4.ncdc.noaa.gov/cgi-win/wwcgi.dll?wwevent~storms				

Lightning

There are 2 lightning events recorded in the NCDC Storm Events database. On July 4, 2001, a lightning strike caused a house fire northwest of Branson, near the old Shepherd of the Hills Lumber Company. The fire caused \$25,000 in damage. The most recent event occurred on November 14, 2005. Lightning struck a cupola on the roof of a four story condominium in Branson. The fire only caused damage to the cupola and did not spread to the building. Table 3-12 lists the two lightning strikes that have been recorded for Taney County.

Table 3-12: Lightning History – Taney County, 1993-2012				
Location	Date	Death	Injury	Property Damage
Branson	07/04/2001	0	0	\$25,000
Branson	11/14/2005	0	0	\$5,000
Totals		0	0	\$30,000
Source: NCDC, http://www4.ncdc.noaa.gov/cgi-win/wwcgi.dll?wwevent~storms				

Probability and Severity Rating

The county is highly likely to experience high wind, hail and lightning due to the frequency of severe thunderstorms in the spring and summer months in Taney County. The probability of occurrence for high wind, hail and lightning is extremely High and likely to occur several times in the same year. Table 3-13 notes the probable risk of hazards due to severe thunderstorm events.

Event	# of Events	% Risk	Probability Rating
High Winds	103	180.7	High
Hail	128	224.6	High
Lightning	2	10.5	Moderate

Source: NCDC: <http://www4.ncdc.noaa.gov/cgi-win/wwwcgi.dll?wwevent~storms>
 * Lightning events have occurred in Taney County but have not been tracked and recorded in the NCDC database. The actual probable risk of future occurrence is considered High.

Severe thunderstorms losses are usually attributed to associated hazards of hail, winds, lightning and heavy rains. The severity of high wind, hail and lightning is shown in Table 3-14.

Out of the 103 thunderstorm wind events, 30 have resulted in property damage and injury. A damaging wind event has the probability of occurring in one out of every two years in Taney County with average damages to property of \$42,100. The severity of thunderstorm winds will remain high for the county.

In terms of hail, of 128 recorded events only five occurrences have caused property damage. The probability for damaging hail occurrences are approximately once every eleven years with an average cost to property of \$111,020. The severity of hail events in the county is moderate. There is no record of a damaging lightning event in the NCDC storm event data; therefore, the severity rating from lightning damage is considered low.

Event	Severity Level
High Winds	High
Hail	Moderate
Lightning	Low

Flood (Riverine and Flash)

Hazard Identification

A flood is a partial or complete inundation of normally dry land areas. Riverine flooding is defined as the overflow of rivers, streams, drains, and lakes due to excessive rainfall, rapid melting of snow and/or ice. There are several types of riverine floods including headwater, backwater, interior drainage, and flash flooding. Flash flooding is the most common type of flooding that has affected Taney County.

Flash flooding is characterized by rapid accumulation or runoff of surface waters from any source. This type of flooding can occur within a few hours of a rain event, or after a dam or levee failure, or following a sudden release of water held by an ice or debris jam. Flash floods can catch people unprepared because they can develop in just a matter of hours. Most flood-related deaths result from this type of flood event.

The areas adjacent to rivers and stream banks that serve to carry excess floodwater during rapid runoff are called floodplains. A floodplain is defined as the lowlands and relatively flat areas adjoining rivers and streams. The term “base flood,” or 100-year flood, refers to the area in the floodplain that is subject to a one percent or greater

chance of flooding in any given year, based on historical records. Floodplains are a vital part of a larger entity called a basin which is defined as all the land drained by a river and its branches (SEMA, *Missouri Hazard Analysis 2011*, p. B-1).

Location

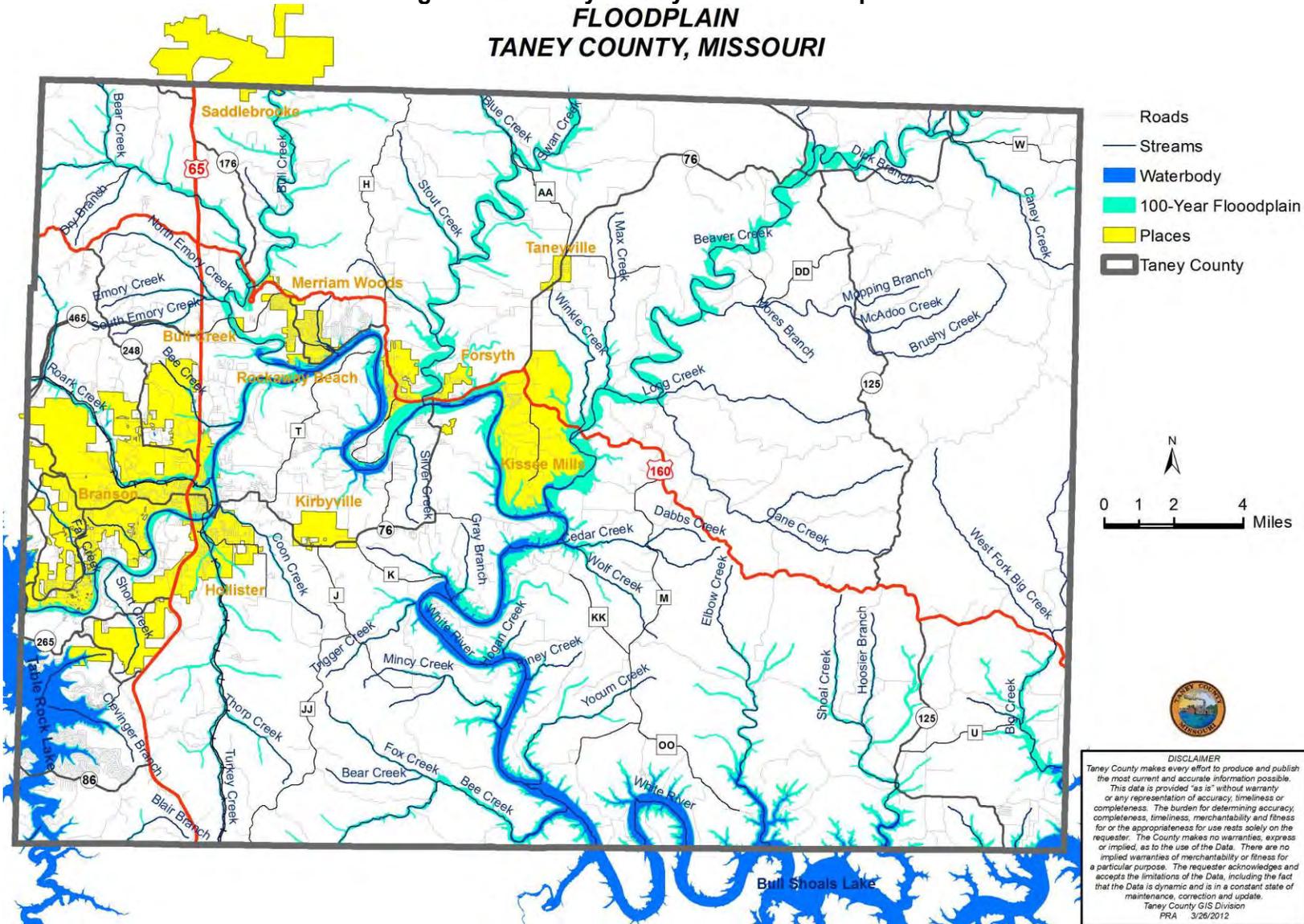
Taney County has 3 lakes and 25 rivers/creeks. This equates to 141 miles and 494 acres of stream as well as 11,853 acres of lake. Locations that were significantly affected by the most recent flood events in 2008 and 2011 include Sunset Park and Sunset Drive in Branson and Foggy River Road in Hollister.

The majority of incorporated jurisdictions within Taney County lie adjacent to Lake Taneycomo, specifically, Branson, Forsyth, Hollister, Kirbyville, Merriam Woods, and Rockaway Beach. Bull Creek is within the Lower Bull Creek watershed. Bradleyville and Taneyville are both in the Big Creek watershed. The Swan Creek watershed contains the City of Forsyth, as well as another portion of Taneyville. Historical records show Branson, Hollister, Rockaway Beach, and Bull Creek have been affected by flood events.

According to the data available on the NOAA website, many areas in Taney County are prone to experience flooding. The following is a list of locations identified in the NOAA event reports:

- Hwy F along Bull Creek
- Bull Creek in the Village of Bull Creek
- Hwy 176 and Hwy 160 near Rockaway Beach
- Honey Ln and Sundown Ln in Rockaway Beach
- Hwy 176 near Sundown Ln
- Hwy H north of Forsyth
- Middleton Rd near Taneyville and Bradleyville
- Hwy 125 north of Protem
- Hwy 176 and Molly Ln
- Hwy 160 east of Kissee Mills
- Old Cheese Plant Rd near Little Beaver Creek
- Hwy 76 in Bradleyville
- Hwy J northwest of Mincy
- Hwy K near Bull Shoals Lake
- Hwy H and Columbus Rd north of Forsyth
- Old Road in Hollister
- Hidden Valley Trailer Park in Hollister
- Kimberling Creek Rd
- Cedar Point Hill Rd
- Hwy 125 S of Hercules
- Shepard of the Hills Expressway near the charcoal plant in Branson
- Fall Creek Rd by the Thousand Creek Golf Course
- Stockstill Park in Branson
- Sycamore Church Rd 5 miles northwest of Branson
- Airport Rd near Hwy 248

Figure 3-2: Taney County 100-Year Floodplain
FLOODPLAIN
TANEY COUNTY, MISSOURI



Extent (Magnitude/Severity)

The Federal Emergency Management Agency estimates that more than 216,000 households are within designated floodplains in Missouri. In addition, thousands of other Missouri residents are at risk to the dangers of flash flooding from rapidly rising creeks and tributaries, storm water runoff, and other similar flooding events. Nationwide, most flood deaths are from flash floods, and nearly half of these fatalities are auto related, according to the National Weather Service. Of the 49 deaths recorded during the floods of 1993, 35 (71 percent) were from flash floods. In that same category, 20 deaths (77 percent) were related to motor vehicles caught in flash floods. Missouri's river flooding in 1993 claimed 14 lives, with 6 deaths (23 percent) attributed to motor vehicles.

Flash floods represent different forecast and detection challenges because they are not always caused by meteorological phenomena. Flash floods result when favorable meteorological *and* hydrological conditions exist together. Although heavy rainfall is necessary, a given amount and duration of rainfall may or may not result in a flash flood.

- how much water runs off (as well as where it runs to),
- how strong the stream is flowing,
- how wide an area is getting rain,
- how hard and fast it is raining,
- how long it has been raining in a particular drainage basin,
- where the storm is located and how it fast or slow it is moving,
- how porous the soil is and how much water it already holds,
- the amount of vegetation covering the soil,
- how much surface is paved,
- whether there are storm drains or closely space buildings,
- general geography and slope of the land.

Inundation is not the only risk of flooding. Floods can damage property but six inches of fast-moving water can knock you off your feet and water 24 inches deep can carry away most automobiles. Flash floods can roll boulders, tear out trees, destroy buildings, and obliterate bridges. Walls of water can reach heights of 10 to 20 feet and generally are accompanied by a deadly cargo of debris.(National Severe Storms Laboratory)

Urbanization further aggravates the flooding potential by increasing runoff two to six times over what would occur on natural terrain. As land is converted from fields or woodlands to urban uses, it loses its ability to absorb rainfall. During periods of urban flooding, streets can become swift moving rivers, while basements and viaducts can become death traps as they fill with water.

In order to warn residents about the many risks of flooding, the National Weather Service has created the following watches and warnings:

Type	Description
FLASH FLOOD or FLOOD WATCH	Flash flooding or flooding is possible within the designated watch area - be alert.
FLASH FLOOD or FLOOD WARNING:	Flash flooding or flooding has been reported or is imminent - take necessary precautions at once!
URBAN and SMALL STREAM ADVISORY	Flooding of small streams, streets and low-lying areas, such as railroad underpasses and urban storm drains is occurring.
FLASH FLOOD or FLOOD STATEMENT:	Follow-up information regarding a flash flood/flood event.

Past Occurrences

A total of 30 flood events are recorded by the NCDC for Taney County between September 1993 and December 2004. The majority of these floods represent flash flooding causing road closures and minimal property and crop damages in the county. However, the NCDC records indicate fourteen events which caused damage in Taney County. These events are listed in Table 3-10 and those more significant events for which specific damages are known are discussed below.

On September 24 of 1993, a flash flood affected the Rockaway Beach area and damaged or destroyed 150 mobile homes along Bull Creek, causing \$5 million in damages. Extensive flooding also occurred statewide in 1994. Taney County was affected by flash flooding, but the NCDC database contains no specific information on damages incurred in the county. Taney County was also impacted by flood events of May 2002 that caused over \$14 million in damages statewide. Flash flooding along Roark Creek on May 7, 2002 moved a large trailer 300 feet downstream and more than 30 homes were evacuated in the Village of Bull Creek as the creek overflowed its banks.

The spring of 2008 was extremely wet. In mid-February, the upper White River Basin received three and a half inches of rain in the overnight hours of February 16 into February 17. A second round of rain, up to four inches, came through the area on March 3-4. The area received a third major round of storms and another five to six inches rain on the 18th and 19th of March. In response to the large amounts of rain, the US Corps of Engineers began releasing large amounts of water from Table Rock Dam, flooding the downstream area. This band of showers resulted in \$4 million in damages. Another band of showers hit the county at the end of March. The Corps of Engineers were forced to open the flood gates even wider and release a record 48,000 CFS into Lake Taneycomo. As a result, even more flooding occurred along Lake Taneycomo and into Bull Shoals Lake. Nearly \$10 million in damage resulted from the release and the related flooding during the end of March. A fifth band a rain struck the county on the 10th of April, dropping three to four more inches of rain. The Corps of Engineers were still working to lower lake levels and were force to increase the flow to 46,500 CFS. During the spring of 2008, Table Rock Lake crested at a record 933.25 feet, 18.25 feet over power pool. All totaled an estimated \$14.01 million in damaged occurred during the spring.

The spring of 2011 was another very wet spring. By the end of April, lake levels were again very high. Then during the week of April 23, multiple bands of storms dropped nearly a foot on the region. As a result, Table Rock Lake crested at 935.5 feet. Because

of the rapid rise of lake levels, the Corps of Engineers were forced to release a record 68,000 CFS from the dam. Like the spring of 2008, massive flooding occurred downstream from Table Rock. Damages reach \$10 million during the spring of 2011.

Table 3-15: Flood History – Taney County, 1993-2012

Location	Date	Type	Death	Injury	Property Damage*	Crop Damage*
Rockaway Beach	09/24/1993	Flash Flood	0	0	\$5,000,000	\$0
Branson	11/13/1993	Flash Flood	0	0	\$50,000	\$0
Central and Southern MO	04/11/1994	River Flood	0	0	\$63,300 (\$5,000,000 79 Counties)	\$63,300 (\$5,000,000 79 Counties)
Southwest MO	05/07/2002	Flood	0	0	\$420,600 (\$14,300,000 34 Counties)	\$5,900 (\$200,000 34 Counties)
Southwest MO	05/12/2002	Flood	0	0	\$20,600 (\$700,000 34 Counties)	\$0
Branson	09/02/2005	Flash Flood	0	0	\$5,000	\$0
Taney County	03/18/2008	Flash Flood	0	0	\$4,000,000	\$0
Taney County	03/31/2008	Flash Flood	0	0	\$10,000,000	\$0
Taney County	04/10/2008	Flash Flood	0	0	\$10,000	\$0
Rockaway Beach	06/23/2008	Flash Flood	0	0	\$30,000	\$0
Taney County	06/28/2008	Flash Flood	0	0	\$5,000,000	\$0
Taney County	09/14/2008	Flash Flood	0	0	\$100,000	\$0
Taney County	04/25/2011	Flash Flood	0	0	\$10,000,000	\$0
Totals			0	0	\$34,699,500	\$69,200

Source: NCDC, <http://www4.ncdc.noaa.gov/cgi-win/wwcgi.dll?wwevent~storms>

* NCDC lists a total monetary value of damage caused in all affected counties, not for individual counties. In order to find an individual county level total damage estimate for each classification of winter weather events, a simple average was taken by dividing the total damage for each type of weather event by the largest number of affected counties in a single event.

Flood events occur most frequently in Taney County in the months of April, May, and June. Although flood events are less frequent during the rest of the year, there is the possibility of occurrence year round as at least one event has been recorded in every month except December, see Table 3-16.

January	3	July	5
February	2	August	4
March	8	September	4
April	14	October	2
May	9	November	2
June	9	December	1
Source: NCDC Storm Events-Missouri			

Date	DR#	Type of Assistance
April – June 2011	1980	Individual Assistance Public Assistance
September 2008	1809	Individual Assistance Public Assistance
June- August 2008	1773	Individual Assistance Public Assistance
March- May 2008	1749	Individual Assistance Public Assistance
March 2006	1631	Individual Assistance
May 2003	1463	Individual Assistance
May 2002	1412	Public Assistance
Summer and Fall 1993	995	Individual Assistance
Source: Federal Emergency Management Agency. Federally Declared Disasters by Calendar Year. http://www.fema.gov/library/drcys.shtm Missouri State Emergency Management Agency. Missouri Hazard Analysis.		

Probability and Severity Ratings

The probability that Taney County will experience a riverine flood event in any given year is 84% according to the NCDC storm event data. The probability of flash flood events is nearly three times greater and indicates a high probability for multiple events in any given year, see Table 3-17. Flood events have been a problem in Taney County in the past and will likely continue to be a problem in the future. As communities in Taney County grow, impermeable surfaces will increase the amount of runoff. Table 3-18 depicts the probable risk of occurrences for each type of flood event in the county.

Flood Type	Events	% Risk	Probability Rating
Riverine	16	84.2%	High
Flash	44	231.6%	High

The NCDC storm event data contain 14 records of damaging flood events for Taney County equaling a 74% probability of a damaging event occurring in any given year. Three of those events caused damage to many counties in the state of Missouri. Monetary damages for those three events are a combined total of damages suffered in affected counties. In order to calculate a reasonable, albeit flawed, estimate of damages occurring in only Taney County, a simple average was calculated based on the number of affected counties. Using those estimates along with the other totals provided in the

NCDC database, a damaging flood event resulted in an average of \$757,959 of property damage and \$4,897 of crop damage.

Flood Type	Hazard Severity Rating
Riverine	High
Flash	High

National Flood Insurance Program Participation and Repetitive Losses

Taney County as well as Branson, Bull Creek, Forsyth, Hollister, Merriam Woods, and Rockaway Beach belong to the National Flood Insurance Program. Forsyth and Merriam Woods joined the NFIP in 2006. All communities current effective map date is March 15, 2012 (see Part 2, Floodplain Management/Wetlands, page 2-42 for detailed information on NFIP participation). Information on repetitive losses to the NFIP in Taney County is listed in Appendix B. Figure 3-2 represents the 100-year floodplain areas within Taney County.

Severe Winter Weather

(snow, ice, extreme cold)

Hazard Identification

Severe winter weather, including winter storm, heavy snow, ice storms and extreme cold, can affect any area of Missouri. Severe weather, such as snow, ice storms and extreme cold can cause injuries, deaths and property/crop damage in a variety of ways. Winter storms are considered deceptive killers. This is because most deaths are indirectly related to the storm. Causes of death range from traffic accidents due to adverse driving conditions, to heart attacks caused by overexertion while shoveling snow and other related activities. Hypothermia or frostbite may be considered the most direct cause of death and injuries which can be attributed to winter storms and/or severe cold. Economic costs are difficult to measure.

Winter Storm

A winter storm can range from a moderate snow over a few hours to blizzard conditions with blinding wind-driven snow that lasts several days. Some winter storms may be large enough to affect several states, while others may affect only a single community. Many winter storms are accompanied by low temperatures and heavy and/or blowing snow, which can severely reduce visibility. Communications and power can be disrupted for days, and even small accumulations of ice may cause extreme hazards to motorists and pedestrians. A Winter Storm is a winter weather event containing a mixture of snow, cold, wind, sleet and freezing rain. They can cause driving to be dangerous and can cause power outages.

Heavy Snow

A heavy snow event contains large amount of just snowing falling over a period of time. Large amounts of snow can cause travel to become dangerous and the sheer weight of the snow can cause roofs and structures to collapse.

Sleet/Ice/ Freezing Rain

There are varying kinds of frozen precipitation during winter storms. Sleet is raindrops that freeze into ice pellets before reaching the ground. Sleet usually bounces when hitting a surface and does not stick to objects; however, it can accumulate like snow and cause a hazard to motorists. An ice storm occurs when freezing rain falls onto a surface with a temperature below freezing; this causes it to freeze to surfaces, such as trees, cars, and roads, forming a glaze of ice. Even small accumulations of ice can cause a significant hazard. Heavy accumulations of ice can bring down trees, electric power lines and poles, telephone lines and communications towers. Such power outages create an increased risk of fire, as home occupants seek the use of alternative fuel sources (wood, kerosene, etc. for heat, and fuel burning lanterns or candles for emergency lighting). Crops, trees and livestock can be killed or injured due to deep snow, ice or severe cold. Buildings and automobiles may be damaged from falling tree limbs, power lines and poles, or collapse. Local governments, home and business owners and power companies may be faced with spending millions of dollars for restoration of services, debris removal, and repair.

Extreme Cold

In addition to severe winter weather such as snow and ice, Wind Chill factor can also be dangerous for any community. Wind Chill is defined by National Weather Service as the temperature it “feels like” outside and is based on the rate of heat loss from exposed skin caused by the effects of wind and cold. As the wind increases, the body is cooled at a faster rate causing the skin temperature to drop. Wind Chill does not impact inanimate objects like car radiators and exposed water pipes, because these objects cannot cool below the actual air temperature. Table 3-20 shows the risk levels for extreme cold according to the National Weather Service in Springfield, MO.

Table 3-20: National Weather Service Extreme Cold Risk Legend	
Risk Level	Definition
None	Minimum <u>apparent temperature greater than or equal to 10 degrees F</u>
Limited	Minimum <u>apparent temperature -9 to 9 deg. F</u>
Elevated	Minimum <u>apparent temperature -10 to -24 deg. F</u>
Significant	Minimum <u>apparent temperature -25 to -34 deg. F</u>
Extreme	Minimum <u>apparent temperature less than or equal to -35 degrees F</u>
Source: National Weather Service	

Location

There are no likely locations for future occurrences of the severe winter weather hazards of ice storms, heavy snow and extreme cold as the onset of winter storms are a regional phenomenon and affect the entire county with little variability from place to place.

Extent (Magnitude/Severity)

All types of winter weather will affect Taney County. Although Taney County has experienced several severe winter weather events that caused significant damages and economic loss, the overall severity of events is limited. There has been no past loss of life in Taney County. Primary roads are generally not closed for more than 24 hours. Schools may close for several days, but are not critical to the day-to-day operations of the county or municipalities. Most major business and government offices/services essential for day to day life continue to function. Since severe winter weather typically

has not caused major disturbances in day to day life, future events statistically will not either. Types of the different watches and warnings during severe winter weather are listed below:

Winter Weather Advisory: Winter weather conditions are expected to cause significant inconveniences and may be hazardous. If caution is exercised, these situations should not become life-threatening. Often the greatest hazard is to motorists.

Winter Storm Watch: Severe winter conditions, such as heavy snow and/or ice are possible within the next day or two.

Winter Storm Warning: Severe winter conditions have begun or are about to begin.

Blizzard Warning: Snow and strong winds will combine to produce a blinding snow (near zero visibility), deep drifts and life threatening wind chill.

Source: NWS <http://www.erh.noaa.gov/er/iln/winter/PSA4.htm>

Prolonged exposure to Wind Chill conditions can cause frostbite or hypothermia for an individual. Frostbite, according to the Centers for Disease Control and Prevention is an injury to the body caused by freezing body tissue. The most susceptible parts of the body are the extremities such as fingers, toes, ear lobes, or the tip of the nose symptoms include a loss of feeling in the extremity and a white or pale appearance. Medical attention is needed immediately for frostbite. The area should be SLOWLY re-warmed. Figure 3-3 on the following page, shows possible wind and temperature conditions and the real temperature effect on the skin due to the heat loss from exposed skin. The chart includes three shaded areas of frostbite danger. Each shaded area shows how long (30, 10 and 5 minutes) a person can be exposed before frostbite develops.

Another possible condition of severe winter weather is Hypothermia. Hypothermia is defined as an abnormally low body temperature (below 95 degrees Fahrenheit) by the Centers for Disease Control and Prevention. Warning signs include uncontrollable shivering, memory loss, disorientation, incoherence, slurred speech, drowsiness, and apparent exhaustion. Medical attention is needed immediately. If it is not available, begin warming the body SLOWLY. Due to the danger of Wind Chill conditions, The National Weather Service will inform residents when Wind Chill conditions reach critical thresholds. A Wind Chill Warning is issued when wind chill temperatures are life threatening. A Wind Chill Advisory is issued when wind chill temperatures are potentially hazardous.

Table 3-20 provides information about wind chill advisory and warning definitions. The Excessive Cold Threat Level in Table 3-22 defines various levels of warnings of possible wind chill or extreme temperatures effect on a given area (NWS).

Table 3-21: Wind Chill Advisory and Warning Definitions	
Wind Chill Advisory:	Wind chills are expected to be between -20 and -34.
Wind Chill Warning:	Wind chills are expected to be 35 degrees below zero or colder.
Source: NWS http://www.erh.noaa.gov/er/ilm/winter/PSA4.htm	

Figure 3-3: National Weather Service Windchill Chart

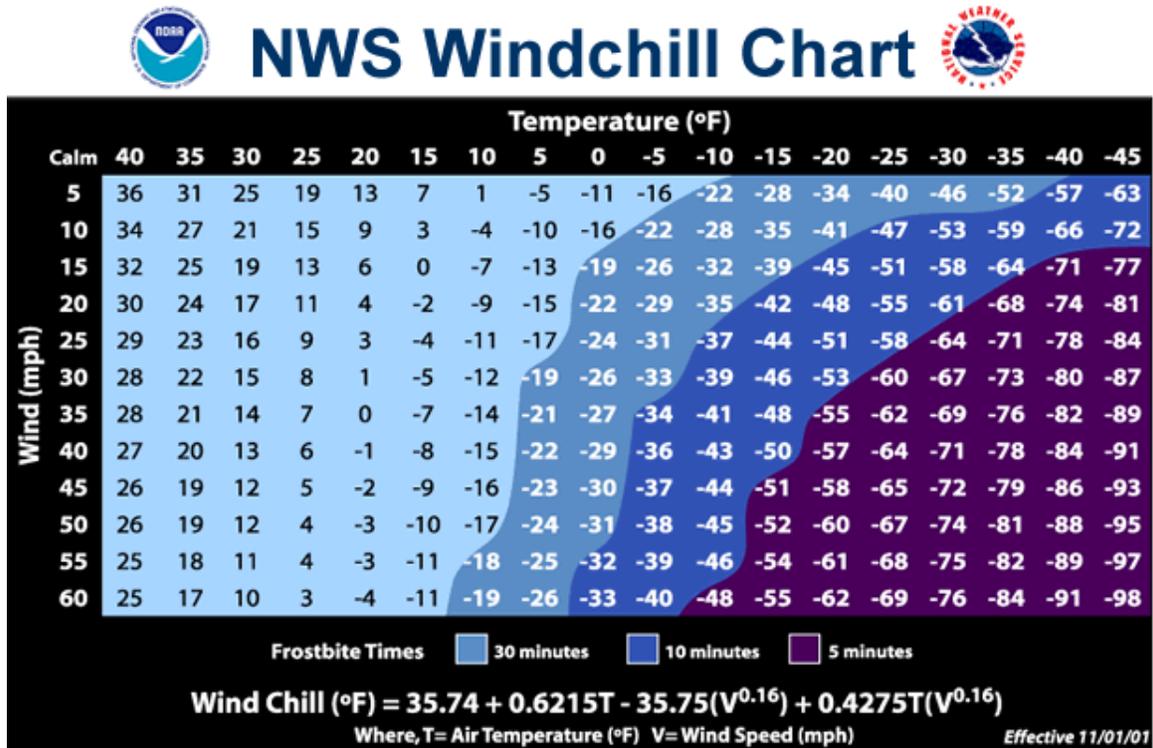


Table 3-22: Excessive Cold Threat Level	
Excessive Cold Threat Level	Threat Level Descriptions
Extreme	"An Extreme Threat to Life and Property from Excessive Cold." It is likely that wind chill values will drop to -35° F or below for 3 hours or more. Or, lowest air temperature less than or equal to -20° F.
High	"A High Threat to Life and Property from Excessive Cold." It is likely that wind chill values will drop to -28° F to -35° F for 3 hours or more. Or, lowest air temperature -15° to -20° F.
Moderate	"A Moderate Threat to Life and Property from Excessive Cold." It is likely that wind chill values will drop to -20° F to -28° F or below for 3 hours or more. Or, lowest air temperature -10° to -15° F.
Low	"A Low Threat to Life and Property from Excessive Cold." It is likely that wind chill values will drop to -15° F to -20° F or below for 3 hours or more. Or, lowest air temperature -5° to -10° F.
Very Low	"A Very Low Threat to Life and Property from Excessive Cold." It is likely that that wind chill values will drop to -10° F to -15° F or below for 3 hours or more. Or, lowest air temperature zero to -5° F.

Table 3-22: Excessive Cold Threat Level	
Excessive Cold Threat Level	Threat Level Descriptions
Non-Threatening	"No Discernable Threat to Life and Property from Excessive Cold." Cold season weather conditions are non-threatening.
Note: Cold season weather conditions become hazardous when the associated cold is considered to be "excessive" according to local standards. Cold temperatures may support the occurrence of a freeze, low wind chills, freezing/frozen precipitation, and/or frost.	

Past Occurrences

The NCDL Storm Events database contains a total of 20 winter weather events impacting Taney County. Table 3-23 contains a listing those winter weather events. Table 3-24 is a detailed listing of events that resulted in damages. Narratives describing the events can be found following the tables.

Table 3-23: Winter Storm History – Taney County, 1994-2011					
Event Type	# of Occurrences	Death	Injury	Property Damage	Crop Damage
Winter Storm	5	0	0	\$84,800	\$0
Heavy Snow	10	0	0	\$180,300	\$0
Ice Storm	3	0	0	\$400,000	\$0
Extreme Cold	2	0	0	\$3,700	\$3,100
Totals	20	0	0	\$668,800	\$3,100
Source: NCDL Storm Events Database. http://www.ncdc.noaa.gov/stormevents/					

Table 3-24: Severe Winter Weather History – Taney County, 1994-2011					
Event Type	Date	Death	Injury	Property Damage	Crop Damage
Winter Storm					
Southern Missouri	01/01/1999	0	0	\$84,800 (\$2,800,000 33 counties)	0
Heavy Snow					
Southern Missouri	03/08/1994	0	0	\$128,200 (\$5,000,000 39 counties)	0
Southwest Missouri	01/18/1995	0	0	\$4,500 (\$100,000 22 counties)	\$0
SW & Central MO	01/01/1996	0	0	\$800 (\$10,000 13 counties)	0
Central & Southern MO	01/08/1997	0	0	\$22,300 (\$670,000 30 counties)	0
SW & SC MO	03/13/1999	0	0	\$11,300 (\$260,000 23 counties)	0
Southern Missouri	12/12/2000	0	0	\$13,200 (\$450,000 34 counties)	0

Event Type	Date	Death	Injury	Property Damage	Crop Damage
Ice					
Taney County	11/24/96	0	0	\$400,000	0
Extreme Cold					
Southern Missouri	12/12/2000	0	0	\$3,700 (\$125,000 34 counties)	\$3,100 (\$105,000 34 counties)
Totals				\$668,800	\$3,100
Source: NCDC. Storm Events Database, http://www.ncdc.noaa.gov/stormevents/					

Winter Storm

Of the five winter storms, the most damaging event to affect the region and Taney County occurred on January 1, 1999. This winter storm covered the larger region with freezing rain, sleet and snow, causing \$2.8 million in property damages. The event's negative impact was mainly to downed power lines and trees from ice accumulation. Several counties were left without power and the more rural schools were closed for several days after the Christmas holiday. No deaths or injuries were directly related to these winter storm events.

Ice Storm

Two ice storm occurrences in Taney County are recorded in the NCDC database. Of these, the ice storm of November 24, 1996 caused substantial damages in the county (\$400,000 in property damages). This ice storm, the worst in 20 years, layered the ground with ice up to two inches thick, downed power lines and trees, created dangerous driving conditions, and closed schools and businesses in rural areas for up to a week.

Heavy Snow

The county has experienced 10 heavy snow events since 1994, six of which caused an estimated \$180,300 in damages. The three most damaging events are described below. The most costly even occurred on March 8, 1994. A major winter storm dumped heavy snow across much of southern Missouri. The city of Branson received 18 inches of snow. Several boat docks in the Branson area collapsed and damaged several houseboats. The damages total for this event was approximately \$128,200. Another costly event occurred on January 8, 1997 when 6 to 10 inches fell on Taney County. Damages related to this event reached an estimated \$22,300, mainly due to snow removal. The third most costly event occurred on December 12, 2000. A mixture of heavy snow, sleet and freezing rain fell on Taney County as a large storm moved across the Missouri Ozarks. Damages reached an estimated \$13,200.

Extreme Cold

Two extreme cold events occurred in recent years in Southwest Missouri counties, including Taney County. One event beginning on December 12, 2000 and lasting until December 31, 2000, was described as having temperatures 10 to 20 degrees below normal. Snow conditions and cold weather made it difficult for farmers to feed their animals, and several calves in southwest Missouri died due to the stress of the cold. Total recorded loss to agriculture around the region from this event was \$105,000.

Probability and Severity Rating

While severe winter weather is more prevalent north of the Missouri River, it frequently strikes all of Taney County during its seasonal pattern. No parts of the county are exempt from this natural hazard. Rural areas may see the effects of severe winter weather more than cities. For example, lower traffic volumes allow snow or ice to accumulate on rural roads, making it difficult to plow. It is highly likely that Taney County will experience a severe winter weather event in any year. The risk of individual severe weather events is shown in Table 3-25.

Event Type	# of Events	% Risk	Probability Rating
Winter Storm	5	27.7	High
Heavy Snow	10	55.6	High
Ice Storm	3	16.7	Moderate
Extreme Cold	2	11.1	Moderate

According to the 2011 Missouri Hazard Analysis, snowstorms, ice storms, and extreme cold can interact to cause many hazards. Only a few degrees may be the difference between rain, ice, or snow. Duration and intensity of any of these events will determine the overall impact of a particular event. Wind speed may be the difference between a minor snow and a blizzard.

The severity of severe winter weather events in Taney County is considered moderate. The topography in the county makes travel along the roadways extremely treacherous increasing the potential for injury and fatalities forcing school closings and the functional and economic loss for many businesses and entertainment venues in the Branson area.

Drought

Hazard Identification

Drought's impact on society results from the interplay between a natural event (less precipitation than expected resulting from natural climatic variability) and the demand development places on groundwater reservoirs. A drought situation often is exacerbated by development practices that decrease the percolation of surface water into groundwater reservoirs. Recent droughts in both developing and developed countries and resulting economic and environmental impacts underscore society's vulnerability to this hazard.

The dictionary defines drought as a period of prolonged dryness. The Missouri Drought Response Plan distinguishes between five "categories" of drought, as follows:

- **Agricultural Drought**, defined by soil moisture deficiencies
- **Hydrological Drought**, defined by declining surface and groundwater supplies
- **Meteorological Drought**, defined by precipitation deficiencies

- **Hydrological Drought & Land Use**, defined as a meteorological drought in one area that has hydrological impacts in another area
- **Socioeconomic Drought**, defined as drought that impacts supply and demand of some economic commodity.

Each of these definitions relates the occurrence of drought to water shortfall in some component of the hydrological cycle. Each affects patterns of water and land use, and each refers to a repetitive climatic condition. In urban areas, drought can affect those communities that depend on reservoirs for water, and decreased water levels due to insufficient rain can lead to restricted water use. In agricultural areas, drought during the planting and growing season can have a significant impact on yield.

Regardless of the specific definition, droughts are difficult to predict or forecast, both as to when they will occur and how long they will last. According to Dr. Grant Darkow, Department of Atmospheric Science, University of Missouri-Columbia, there is a recognizable “upper air-flow pattern and simultaneous surface pattern associated with abnormal dryness over Missouri.” When the upper air-flow pattern is typified by air flowing in a broad arc over the central plains with higher speeds in southern Canada than over the U.S., then the air over the southern plains will be “characterized by a weak clockwise circulation.” Storm systems coming off the Pacific Ocean will cross the extreme northwestern states and southern Canada, thus bypassing the midwestern states. When this flow pattern persists, the result can be a prolonged period of drought (Missouri Hazard Analysis, November 2010).

Location

There are no likely locations for future occurrences of drought as they are a regional phenomenon and affect the entire county with little variability from place to place.

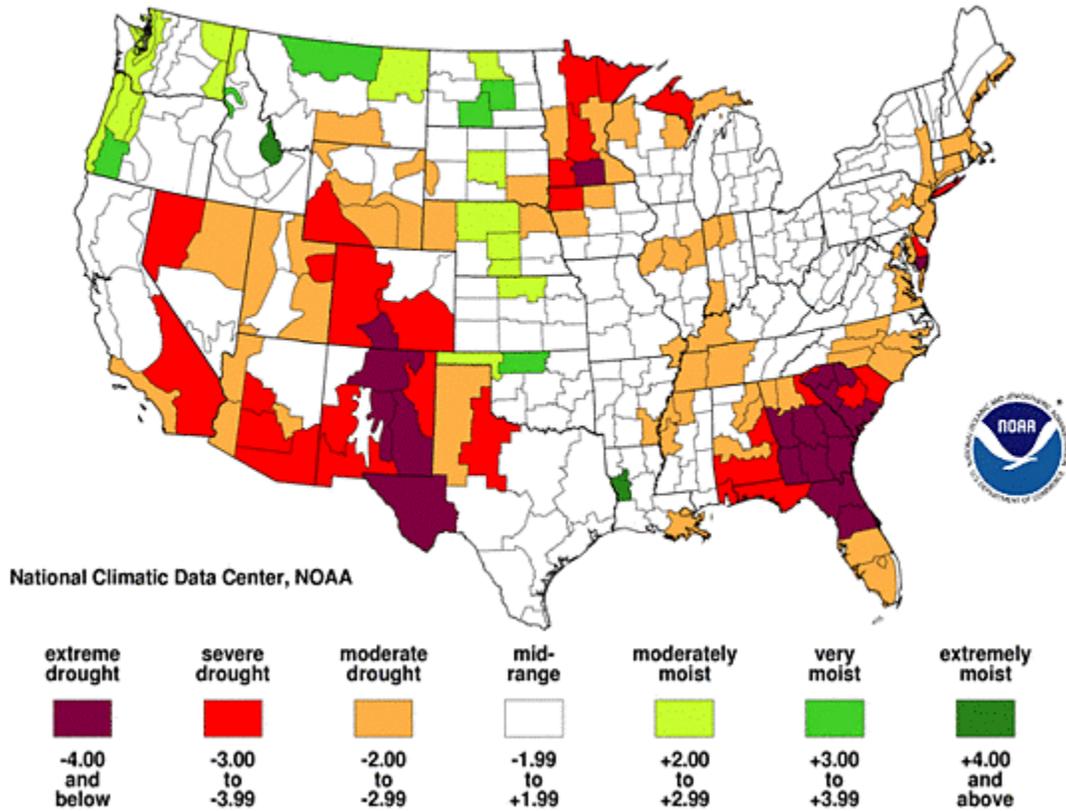
Extent (Magnitude/Severity)

Crops are the first to show the impact of drought. As drought increases, livestock water supplies become scarce and, finally, deep wells begin to fail. When good water becomes a scarce commodity and people must compete for the available supply, the importance of drought severity and duration increases dramatically.

The most commonly used indicator of drought and drought severity is the Palmer Drought Severity Index (PDSI), jointly published by NOAA and the U.S. Department of Agriculture. The PDSI measures the departure of water supply (in terms of precipitation and stored soil moisture) from demand (the amount of water required to recharge soil and keep rivers, lakes and reservoirs at normal levels). The result is a scale from +4 to -4, ranging from an extremely moist spell to extreme drought. By relating the PDSI number to a regional index, long-term wet or dry tendencies can be discerned.

**Figure 3-4: Palmer Drought Index
Palmer Drought Index
Long-Term (Meteorological) Conditions**

April 2012



Source: <http://www.ncdc.noaa.gov/oa/climate/research/prelim/drought/palmer.html>

Regional indicators such as the PDSI are limited in that they respond slowly to deteriorating conditions. However, observing surface conditions and groundwater measurements may provide only a snapshot of a very small area. Therefore, the use of a variety of drought indicators is essential for effective assessment of drought conditions, with the PDSI being the primary drought severity indicator. Figure 3-4 displays the PDSI for the month of April 2011.

Missouri's Drought Response System is divided into four phases:

- **Phase I: Advisory Phase**—Requires a drought monitoring and assessment system to provide enough lead time for state and local planners to take appropriate action;
- **Phase II: Drought Alert**—When the PDSI reads -1.0 to -2.0, and stream flows, reservoir levels, and groundwater levels are below normal over a several month period, or when the Drought Assessment Committee (DAC) determines that Phase II conditions exist based on other drought determination methods;

- **Phase III: Conservation Phase**—When the PDSI reads -2.0 to -4.0, and stream flows, reservoir levels, and groundwater levels continue to decline, along with forecasts indicating an extended period of below-normal precipitation, or when the DAC determines that Phase III conditions exist based on other drought determination models;
- **Phase IV: Drought Emergency**—When the PDSI is lower than -4.0, or when the DAC determines that Phase IV conditions exist based on other drought determination methods.

The American Water Works Association has outlined the phases of drought, see Table 3-26. This outline shows how severe Taney County's water shortage was during the droughts of 1999-2000 (Phase II). It also shows how a small percentage of a water shortage could have had an even larger affect on the economy.

Phase I – Watch	5-10 % shortage (voluntary reductions)
Phase II – Warning	10-20 % shortage (voluntary or mandatory reductions)
Phase III – Emergency	20-35% shortage (mandatory reductions)
Phase IV – Critical	35-50% shortage (mandatory reductions)
Source: http://www.drinktap.org/consumerdnn/Home/WaterInformation/Conservation/DroughtFactSheet/tabid/199/Default.aspx	

Precipitation-related impacts on time scales ranging from a few days to a few months can include effects on wildfire danger, non-irrigated agriculture, topsoil moisture, pasture conditions, and unregulated stream flows. Lack of precipitation over a period of several months or years adversely affects reservoir stores, irrigated agriculture, groundwater levels, and well water depth.

In addition to damage to crops, produce, livestock, and soil, and the resulting economic consequences, the arid conditions created by drought pose an increased risk of fire. The danger is especially high for brush fires, grass fires, and fires in wooded areas, which can threaten homes and other structures in their path. Lack of water resources in rural areas can complicate the firefighting efforts. During the spring 2000 drought, brush and wildfires erupted in numerous counties, resulting in a Governor's declared State of Emergency.

Past Occurrences

There are seven recorded drought events in the NCDC storm events data. The earliest instance recorded was in 1999. The query results from the NCDC indicate that the seven records for drought cover the period between January 1, 1950 and April 30, 2011. The drought record for the 1999 event states that this was the most severe drought since a 1980 drought; therefore, there were certainly instances of drought prior to 1999.

However, for the purposes of the drought hazard profile the NCDL storm event data will be used to rate probability and severity of drought in Taney County. The drought events from the NCDL storm data are presented in Table 3-27.

County	Date	Death	Injury	Property Damage	Crop Damage
Taney	10/01/1999	0	0	\$0	\$19,400 (\$660,000 34 counties)
Taney	08/10/2000	0	0	\$0	\$0
Taney	09/01/2000	0	0	\$0	\$0
Taney	01/01/2006	0	0	\$0	\$0
Taney	02/01/2006	0	0	\$0	\$0
Taney	03/01/2006	0	0	\$0	\$0
Taney	04/01/2006	0	0	\$0	\$0
Total		0	0	\$0	\$19,400
Source: http://www.ncdc.noaa.gov/stormevents/					

In Missouri, the 1999-2000 droughts began in July of 1999 and developed rapidly into a widespread drought just three months later. The entire state was placed under a Phase I Drought Advisory level by MDNR and the Governor declared an Agricultural Emergency. Agriculture reporting showed a 50 percent crop loss from 50 of Missouri's 114 counties, with severe damage to pastures for livestock, corn crops, and soybean. In October of 1999, the U.S. Agriculture Secretary declared a federal disaster, making low-interest loans available to farmers in Missouri and neighboring states. The drought intensity increased through autumn and peaked at the end of November 1999. That five-month period was the second driest period since 1895.

A wetter than normal winter diminished dry conditions in central and southern Missouri, but long-term moisture deficits continued. Overall dry conditions returned through much of the state in March 2000, and costly wildfires and brush fires (26 total Missouri wildfires were reported in 1999-2000, National Climatic Data Center) erupted in many counties. By May the entire state was under a Phase II Drought Alert level. By mid-July 2000, there was some relief for parts of the state but not enough. Several counties were still in a Phase II or were upgraded to Phase III Drought Conditions. Taney County was not upgraded to Phase III.

In 2006, a drought occurred over a four month period beginning in January of that year. This drought was classified as severe in Taney County. All time record dry conditions were experienced at both Springfield and Joplin in southwest Missouri. Although this drought was severe it did not result in reported damages as it occurred outside of the growing season.

Probability and Severity Rating

It is possible for Taney County and the State of Missouri to experience a drought at any time throughout any given year. The Missouri Department of Natural Resources rates Taney County for moderate drought susceptibility. Six of the seven recorded drought events for Taney County have had little to no impact on property, crops or people. However, the record for the 1999 drought indicates that \$19,400 crop damages occurred in Taney County during that event. Based on the NCDL storm event data, the probability

of a damaging drought event in Taney County equates to 6% or approximately one occurrence every fifteen years, which again would be moderate. The severity of drought should be considered moderate as well; albeit \$19,400 in crop damage is significant, there was no other associated harm to property or people.

Heat Wave

Hazard Identification

According to NOAA, heat is the number two killer among natural hazards. In contrast to the visible, destructive, and violent nature of floods, hurricanes, and tornadoes, a heat wave is a silent killer. Heat kills by overloading the human body’s capacity to cool itself. In the disastrous heat wave of 1980, more than 1,250 people died nationwide. In a normal year, about 175 Americans succumb to the bodily stresses of summer heat.

Air temperature is not the only factor to consider when assessing the likely effects of a heat wave. High humidity, which often accompanies heat in Missouri, can increase the harmful effects of heat. Relative humidity must also be considered, along with exposure, wind, and activity. The Heat Index devised by the NWS combines air temperature and relative humidity. Also known as the *apparent* temperature, the Heat Index is a measure of how hot it really feels. For example, if the air temperature is 102 degrees and the relative humidity is 55 percent then it feels like 130 degrees; 28 degrees hotter than the actual ambient temperature. A heat index chart is depicted in Figure 3-5. Table 3-27 defines the likelihood of heat disorders with prolonged exposure to heat index values in Figure 3-5.

Figure 3-5: Heat Index Chart (Temperature & Relative Humidity)

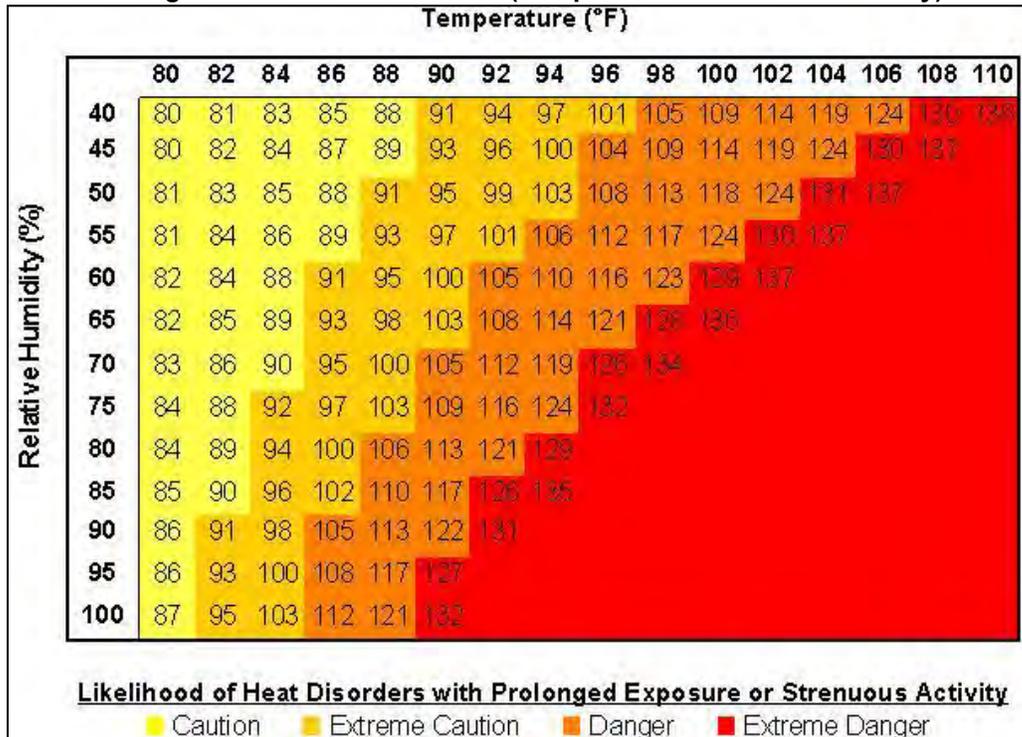


Table 3-28: Risk Level for Possible Heat Disorders	
Caution	Fatigue possible with prolonged exposure and physical activity.
Extreme Caution	Sunstroke, heat cramps and heat exhaustion possible.
Danger	Sunstroke, heat cramps, and heat exhaustion likely, and heat stroke possible.
Extreme Danger	Heat stroke highly likely with continued exposure.

Location

Heatwave is a regional event and its occurrence affects all jurisdictions within Taney County equally.

Extent (Magnitude/Severity)

Based on 30-year statistics from the National Weather Service indicating the state's mean number of days above 90 degrees during the summer months, Missouri is vulnerable to heat waves ranging from high to moderate risk in the July and August months. The NWS has developed a Heat Index/Heat Disorder Chart that relates ranges of Heat Index with specific disorders, particularly for people in higher risk groups presented in Table 3-29.

Table 3-29: Heat Index/Heat Disorder	
Heat Index (°F)	Heat Disorder
130° or higher	Heat stroke/sunstroke likely with continued exposure
105° to 129°	Sunstroke, heat cramps or heat exhaustion likely and heat stroke possible with prolonged exposure and/or physical activity
90° to 104°	Sunstroke, heat cramps and heat exhaustion possible with prolonged exposure and/or physical activity
80° to 89°	Fatigue possible with prolonged exposure and/or physical activity

Source: NWS: <http://www.nws.noaa.gov/om/heat/index.shtml>

The National Weather Service has designated three response levels, based upon the Heat Index, in order to alert the public to potential heat hazard presented in Table 3-30.

Table 3-30: Heat Wave Response Levels	
Heat Index	Response Level
Heat Index 115+ F for 3+ hours w/minimum Heat Index mid-70s F for 24 hours or Heat Index 105+ F w/minimum Heat Index mid-70s F for more than 3 days	Warning
Heat Index 105+ F for 3+ hours w/minimum Heat Index mid-70s F for 24 hours	Advisory
Potential for Excessive Heat Warning	Watch

Source: NOAA. National Weather Service Forecast Office-Springfield, MO.

There are several risk factors associated with heat-related death and illnesses, such as lack of air conditioning, age, or outdoor activities. Heat-related death and illness can occur with exposure to intense heat in just one afternoon, as well as continuous exposure. Heat stress caused by continuous exposure has a cumulative effect. In addition to the human toll, the MCC, in a paper on the 1999 heat wave, points out the other possible impacts on our environment. These impacts include infrastructure damage and failure, highway damage, electrical brownouts, crop damage, water

shortages, livestock deaths, fish kills, and lost productivity among outdoor-oriented businesses. Government authorities report that civil disturbances and riots are more likely to occur during heat waves, likely to occur during heat waves, as well as incidents of domestic violence and abuse. The extreme heat can also have an adverse impact on animals, including livestock and other farm animals.

According to the Missouri State Hazard Mitigation Plan, updated in July 2010, the following types of people are at risk for heat related illness and would be severely impacted:

- Those vulnerable to heat stress due to physical condition
 - Older people
 - Children
 - People overweight or underweight
- People with limited independence due to physical or mental disorders
 - People in institutional settings without air conditioning
 - People working in heat under stress (firefighters, police, emergency medical technicians)
 - People in urban environments where heat retention in asphalt, concrete, and masonry is a factor (heat island effect)
 - People with low income who lack resources for air conditioning, transportation, medical care, etc.
- Those with increased risk from work or leisure activities
 - People who work outdoors (utility crews, construction crews, etc.)
 - Military personnel and trainees
 - Athletes
- Those more difficult to reach through normal communications
 - People who live alone
 - People who are homeless
 - People who do not speak English
 - People who cannot read
 - People who are culturally, socially, or geographically isolated

The State Hazard Plan addresses warning signs that the heat is beginning to have an impact on animals. The warning signs are as listed below:

- Restlessness and crowding under shade or at water tanks/areas
- Open-mouthed breathing or panting and increased salivating
- Increased respiration rates
- Gasping and lethargic demeanor

Past Occurrences

Table 3-31 shows the most recent heat waves to hit in and around Taney County and their effects. These seven occurrences spanned several counties throughout southern Missouri. At least 120 people reported heat-related illnesses during these events. Although none of the 16 deaths occurred in Taney County, it is possible that death or illness from a heat wave event could occur in the future. The event of 1994 also caused \$50,000 in crop damages within the region. None of these heat waves have happened within the last nine years, but never the less they could still happen at any time.

Date	Heat Index (F)	Deaths
June 12, 1994	100+	4
July 23, 1999	105-115	6
August 1, 1999	100+	2
August 27, 2000	100-110	1
September 1, 2000	100	0
July 17, 2001	100-110	1
August 1, 2001	100-110	2
Source: http://www.ncdc.noaa.gov/stormevents/		

Probability and Severity Rating

The National Weather Service defines a heat wave as three consecutive days of 90°F plus temperatures. These high temperatures generally occur from June through September, but are most prevalent in the months of July and August. Missouri experiences about 40 days per year above 90 degrees, based on a 30-year average compiled by the NWS from 1961-1990. July leads this statewide mean with 15 days above 90 degrees, followed by August with an average of 12 days over 90. June and September average 6 days and 4 days respectively for temperatures above 90 during the same 30-year period. In the Southwest region of Missouri, including Taney County, days with temperatures of 90 degrees and above generally occur during the month of July. A review of the data for 1999-2002 shows Taney County could experience a brief heat wave every year. The probability of heat wave in Missouri is moderate and severity is moderate, but could be upgraded to severe.

Earthquake

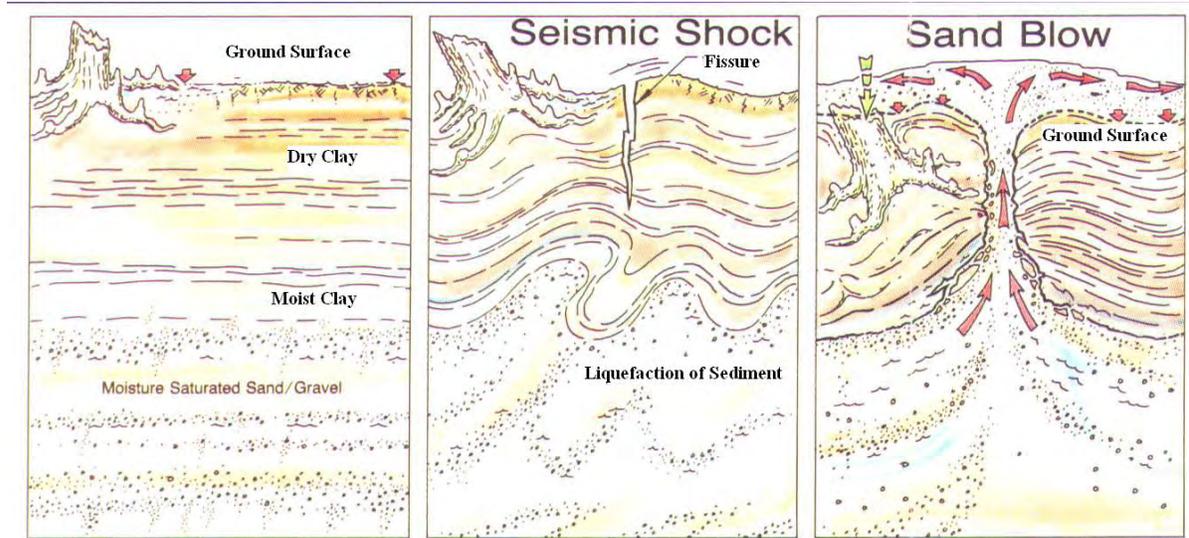
Hazard Identification

According to SEMA, earthquakes can be defined as shifts in the Earth's crust causing the surface to become unstable. This instability can manifest itself in intensity from slight tremors to large shocks. The duration can be from a few seconds up to five minutes. The period of tremors and shocks can last up to several months. The larger shocks can cause ground failure, landslides, uplifts, and liquefaction and sand blows. Figure 3-6 shows the ground as normal and how the shock of an earthquake can create liquefaction and sand blows.

The earth's crust is made up of gigantic plates, referred to as tectonic plates. These plates form the lithosphere and vary in thickness from 6¹/₂ miles (beneath oceans) to 40 miles (beneath mountain ranges) with an average thickness of 20 miles. These plates "float" over a partially melted layer of crust called the athenosphere. The plates are in motion and where a plate joins another, they form boundaries. Plates moving toward each other are called a convergent plate boundary. Plates moving away from each other are called a divergent plate boundary. The San Andreas Fault in California is a horizontal motion boundary, where the Pacific plate is moving north while the North American plate is moving west. These movements release built up energy in the form of earthquakes, tremors, and volcanism (volcanoes). Fault lines such as the San Andreas

come all the way to the surface and can be readily seen and identified. There are also fault lines that do not come all the way to the surface (subterranean faults), yet they can store and release energy when they adjust (SEMA, *Missouri Hazard Analysis*, F-1).

Figure 3-6: Earthquake Shock



Source: <http://www.gsa.state.al.us/gsa/EQ2/newmad.html>

The subterranean faults were formed many millions of years ago on or near the surface of the earth. Subsequent to that time, these ancient faults subsided, while the areas adjacent were pushed up. As this fault zone (also known as a rift) lowered, sediments filled in the lower areas. Under pressure, the sediments hardened into limestones, sandstones, and shales – thus burying the rifts. The pressures on the North American plate and the movements along the San Andreas Fault by the Pacific plate have reactivated the buried rift(s) in the Mississippi embayment. This rift system is called the Reelfoot Rift.

Location

The entire planning area is at risk for an earthquake occurring at New Madrid Fault, Wabash Valley Fault, Illinois Basin and the Nemaha Uplift.

Extent

Since Taney County is located a distance away from the New Madrid Fault, it is likely that the impacts of an earthquake will be negligible. However, many people are unaware of earthquake hazards and the possible damages that could occur from a higher magnitude earthquake. Including information on earthquake risk in education programs on natural hazards could be beneficial to Taney County residents.

In 2003, the United States Geological Survey (USGS) and the Center for Earthquake Research and Information at the University of Memphis (CERI) updated forecasts of earthquake probability in the New Madrid fault zone. The probability of a magnitude 6.0

or greater earthquake is 25 to 40 percent through the year 2053. The probability of a repeat of the 1811-1812 earthquakes, estimated at a 7.5 to 8.0 magnitude, is seven to 10 percent through the year 2053 (USGS, *Scientists Update New Madrid*). With almost 12.5 million people living in the area, steps are being taken to reduce the hazard to the citizens and property in the area. Based on the information from CERI, the probability of an earthquake is rated as moderate and the severity is rated high.

New Madrid earthquake damage covers over more than 20 times the area of the typical California earthquake because of the underlying geology in the Midwest. Ground shaking affects structures close to the earthquake epicenter but also can damage structures far away. Certain types of buildings at a significant distance from the earthquake epicenter, such as unreinforced masonry structures, tall structures without adequate lateral resistance, and poorly maintained structures are specifically susceptible to large earthquakes.

While the Richter Scale is a measurement of the energy released by an earthquake, the effects of an earthquake will vary from place to place. The Modified Mercalli Intensity Scale is used by seismologists to describe the effects of an earthquake, at a given place, on the natural environment, the built environment and people. An abbreviated description of the Modified Mercalli Intensity Scale is noted below:

- I. Not felt except by a very few under especially favorable conditions.
- II. Felt only by a few persons at rest, especially on upper floors of buildings.
- III. Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibrations similar to the passing of a truck. Duration estimated.
- IV. Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.
- V. Felt by nearly everyone; many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.
- VI. Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight.
- VII. Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken.
- VIII. Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned.
- IX. Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.
- X. Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent.
- XI. Few, if any (masonry) structures remain standing. Bridges destroyed. Rails bent greatly.
- XII. Damage total. Lines of sight and level are distorted. Objects thrown into the air.

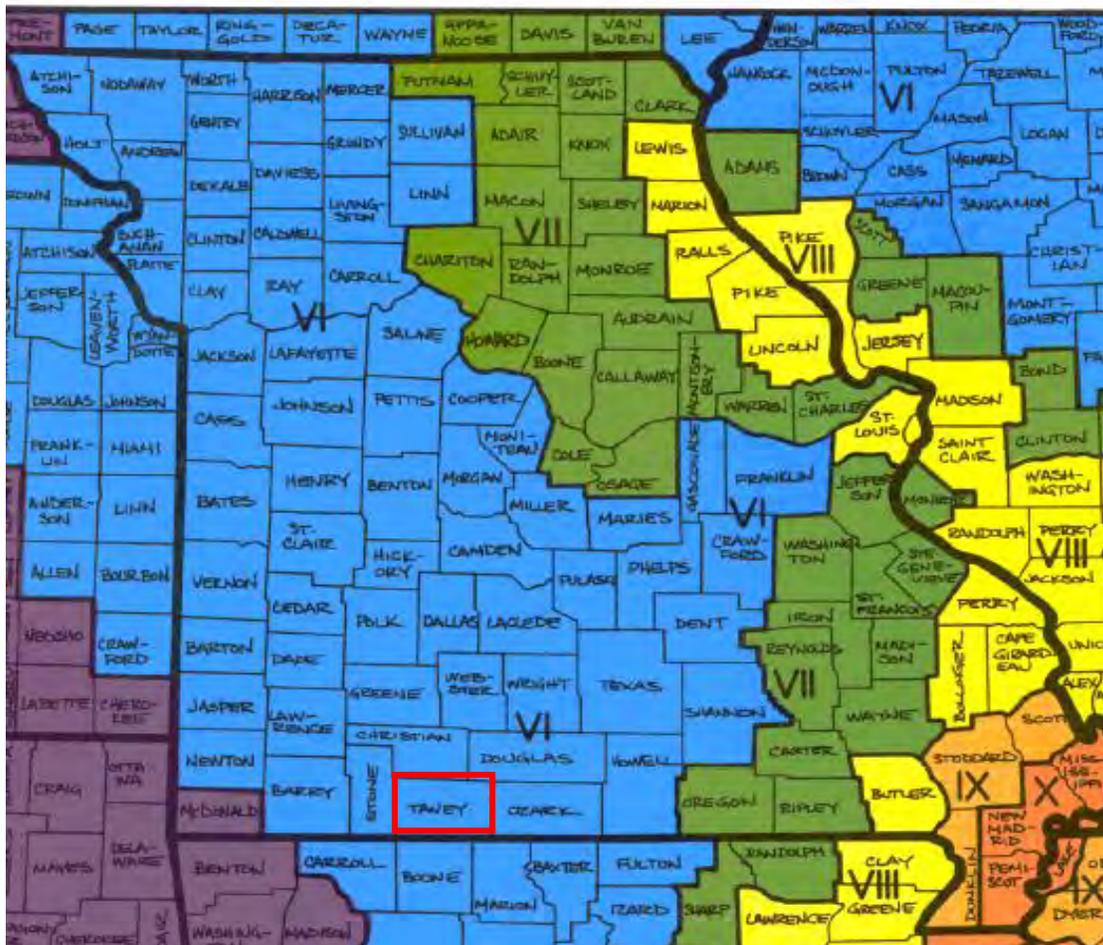
Source: Abridged from *The Severity of an Earthquake*. U. S. Geological Survey Series General Interest Publication. <http://pubs.usgs.gov/gip/earthq4/severitygip.html>

Indirect hazards may also occur at great distances from large earthquakes. Liquefaction (disintegration of alluvial soils), landslides and life-line disruptions will most affect areas closest to the epicenter, but may occur at significant distances. Secondary effects of such an earthquake could include fire, building collapse, utility disruption, flooding, hazardous materials release, environmental impacts and economic disruptions/losses.

SEMA’s Projected Earthquake Intensities indicate Taney County is at risk for a Level VI impact on the Modified Mercalli Intensity Scale from a 6.7 magnitude earthquake; Level VI from a 7.6 magnitude earthquake; or Level VII in the event of an 8.6 magnitude earthquake centered within the New Madrid Fault.

Figure 3-7 shows the highest projected Modified Mercalli intensities by county from a potential earthquake whose epicenter could be anywhere along the length of the New Madrid seismic zone.

Figure 3-7: Projected Earthquake Intensities, 7.6 Magnitude



The future probable severity for earthquakes at each level on the Modified Mercalli Scale is shown in Table 3-32.

Modified Mercalli Levels	Future Probable Severity
I-V	Low
VI	Low
VII	Moderate
VIII-XII	High

The impact on the general public, businesses, life-line services, and the infrastructure may be radically lessened if precautions are undertaken at multiple levels. Increased education and subsequent action can reduce the potential effects of earthquakes, and this can be done in conjunction with preparations for other natural hazards. A public information program that educates the public on the risks and potential impacts of earthquake would be the most beneficial to Taney County residents and businesses.

Individuals and all levels of government have roles in reducing risk to earthquake hazards. Individuals can reduce their own vulnerability by taking some simple and inexpensive actions within their own households. Local government can take action to lower the threat through the proper regulation of at risk sites, assuring that vital or important structures (police, fire, medical) resist hazards, and developing infrastructure in a way that decreases risk. State agencies and the legislature can assist other governmental levels by providing incentives for minimizing hazards.

Past Occurrences

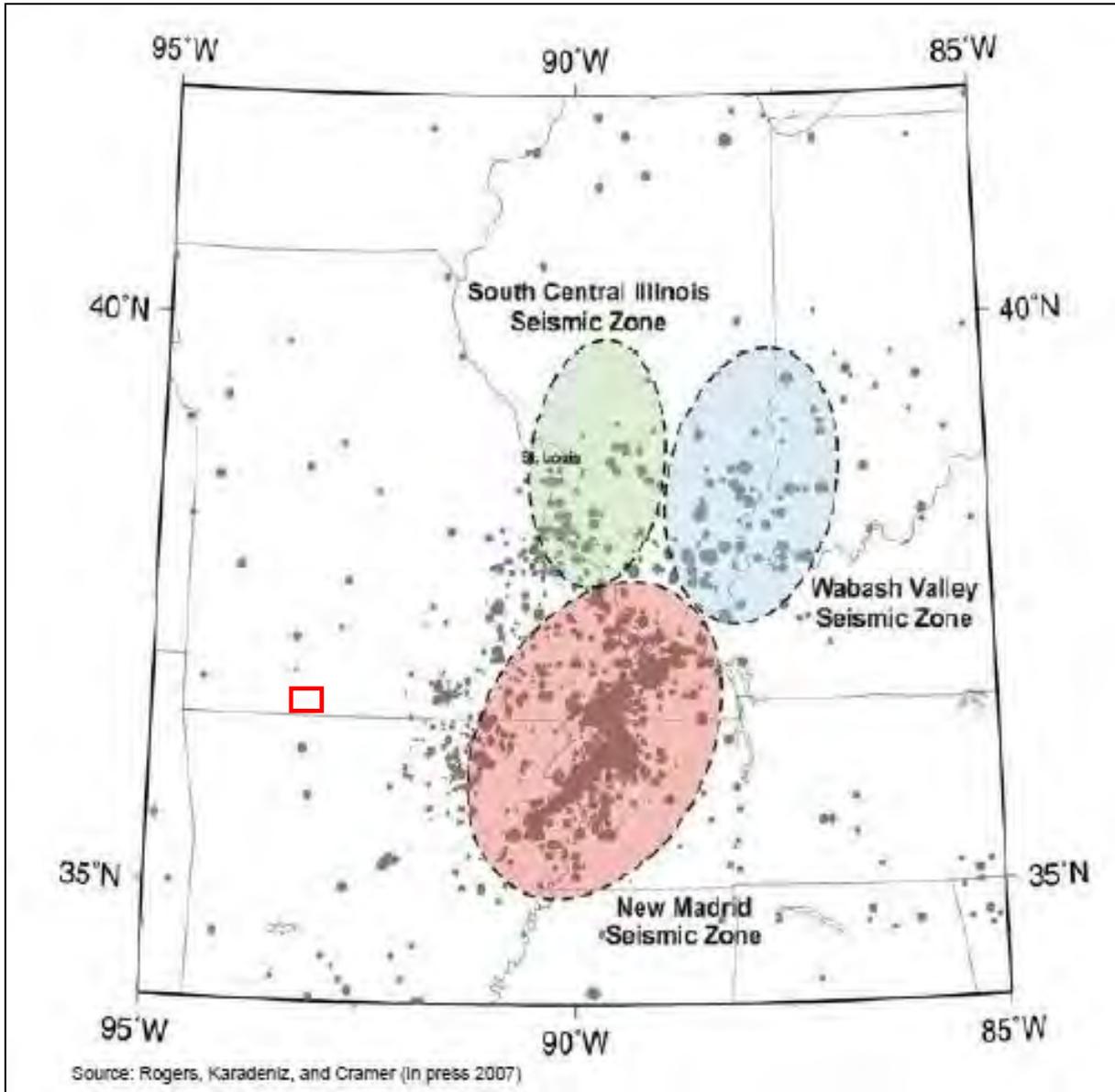
Four earthquake source zones -- the New Madrid Fault, the Wabash Valley Fault, the Illinois Basin and the Nemaha Uplift -- could affect Taney County because of their close proximity. The New Madrid fault poses the greatest threat and has the longest history of activity. This fault runs from north Arkansas through southeast Missouri, western Tennessee and Kentucky to the Illinois side of the Ohio River Valley. During the winter of 1811-1812, three earthquakes estimated to have been of a magnitude 7.5 or greater were centered on the New Madrid fault in southeast Missouri. Thousands of aftershocks continued for years. Since 1811, 35 events of magnitude 5.0 or greater have affected Missouri and several surrounding states.

Significant earthquakes, each about magnitude 6, occurred in 1843 near Marked Tree, Arkansas, and on October 31, 1895 near Charleston, Missouri. In November 1968, a magnitude 5.5 earthquake centered in southeastern Illinois caused moderate damage to chimneys and walls at Hermann, St. Charles, St. Louis, and Sikeston, Missouri. The afflicted areas included all or portions of 23 states. Smaller earthquakes have occurred throughout southeastern parts of Missouri. While the magnitude of the earthquakes may not be as great, they are still destructive and dangerous. Several smaller earthquakes can weaken structures and foundations, placing such structures in danger of collapse during an earthquake of greater magnitude.

The following figure was taken from the Missouri State Hazard Mitigation Plan and shows the Taney County's, the red star, geographical relationship to the Wabash Valley, South Central Illinois and the New Madrid Seismic zones. The dots represent historic seismic activity and the diameter of the dot represents the strength of the activity.

Figure 3-9 was taken from the Kansas Geological Survey and shows the location of the Nemaha Uplift. Although the location of Taney County is not depicted in the figure, the Nemaha uplift is prone to seismic activity, which may affect the planning area. The center of the Humbolt fault zone near the Nemaha Uplift is approximately 180 to 220 mile east northeast of Taney County in Missouri.

Figure 3-8: Wabash Valley, Central Illinois and New Madrid Earthquakes



Source: Missouri State Hazard Mitigation Plan, 2010

Figure 3-9: Nemaha Uplift

Source: <http://www.kgs.ku.edu/Publications/GeoRecord/2001/vol7.3/Page1.html>

Probability and Severity Rating

Earthquake hazards would be a non-historical event as there is no record of an earthquake occurrence in Taney County. In terms of the New Madrid fault, current estimates of the recurrence intervals of a 6.0 or greater magnitude earthquake is approximately 100 years and the recurrence interval for a higher magnitude earthquake similar to the 1811-1812 earthquakes is about 500 years. Small quakes along the New Madrid fault occur in Missouri about every eight days, but are usually not noticeable. The probability of an appreciable earthquake in Taney County is low.

Based on the history of seismic activity in the New Madrid Fault zone and the forecasts developed by the USGS and CERI, there is a 25-40 percent chance that an earthquake of magnitude 6.0 or greater will occur within the next 50 years. Taney County lies a distance from the New Madrid Fault, and the impact of a low level earthquake would be low. The more severe threat stems from an earthquake producing Modified Mercalli impact levels of VII-XII.

Dam Failure

Hazard Identification

A dam is defined by the National Dam Safety Act as an artificial barrier that impounds or diverts water and (1) is at least 6 feet high and stores at least 50 acre-feet of water, or (2) is at least 25 feet high and stores at least 15 acre-feet. Of the 80,000-plus dams in the United States, less than 5 percent are under the control of the federal government.

According to the Missouri Department of Natural Resources Dam and Reservoir Safety Program, Missouri had some 5,239 recorded dams in October 2009, the largest number of man-made dams of any state in the country. Missouri's topography allows lakes to be built easily and inexpensively, which accounts for the high number of dams. Despite such a large number, only about 620 Missouri dams (20 percent) fall under state regulations, while another 85 dams are federally controlled. A non-federal dam can be anything from a large farm pond to Bagnell Dam which created the Lake of the Ozarks. The great majority of non-federal dams are privately owned structures that were built either for agriculture or for recreational use. Missouri also has some 600 dams which were built as small watershed projects under Public Law-566 (Watershed Protection and Flood Prevention Act of 1953).

These dams serve many functions, including flood control, erosion control, recreation, fish and wildlife habitat, water supply, and water quality improvement. Many are nearing the end of their 50-year lifespan and are in need of repair. Another group of older dams in the state was originally built by railroads to create drinking water reservoirs for the towns where the railroads were built.

Within the State of Missouri, the Department of Natural Resources maintains a Dam and Safety Program within the Division of Geology and Land Survey. The objective is to ensure that the dams are safely constructed, operated, and maintained pursuant to Chapter 236 Revised Statutes of Missouri. Under state statute, a dam must be 35 feet or higher to be state regulated. These dams are surveyed by state inspectors at least every five years. However, the majority of Missouri dams are less than 35 feet high and thus, not regulated. While the State has for many years encouraged dam owners to do owner inspections for those dams not under the law, the condition of many of these dams is deteriorating.

The Department of Natural Resources Geological Survey and Resources Assessment Division resumed inspecting regulated dams effective July 1, 2004. Because of budget cuts in 2003, dam owners were required to hire private professional engineers to conduct dam surveys for required permits.

While the state has ultimate responsibility for public safety, dam owners have primary responsibility for the safe design, operation and maintenance of their dams. They are responsible for providing early warning of problems at the dam, for developing an effective emergency action plan, and for coordinating that plan with local officials. MDNR's Dam Safety Division maintains a database of all dams regardless of federal, state, local or private ownership.

Oversight is extremely valuable to the owners as well as those people living downstream of the dam who could be flooded in the event the dam should fail. Dams can fail for many reasons. The most common are:

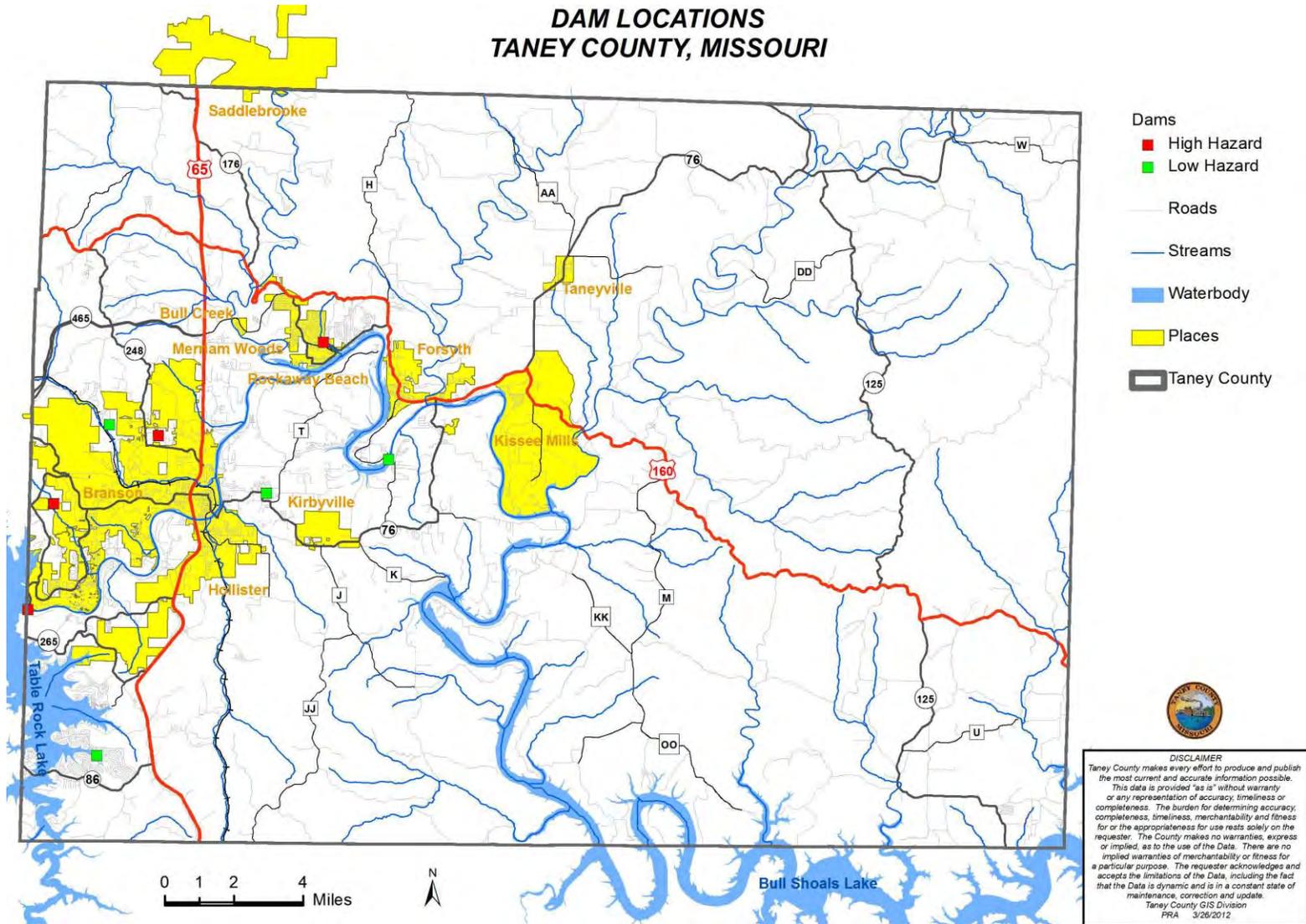
- Piping: internal erosion caused by embankment leakage, foundation leakage and deterioration of pertinent structures appended to the dam.
- Erosion: inadequate spillway capacity causing overtopping of the dam, flow erosion, and inadequate slope protection.
- Structure Failure: caused by an earthquake, slope instability or faulty construction.

These failure types often are interrelated. For example, erosion, either on the surface or internal, may weaken the dam or lead to structural failure. Additionally, a structural failure may shorten the seepage path and lead to a piping failure.

Location

There are eight dams in Taney County (see Figure 3-10 and Table 3-33). The most significant is the Table Rock Dam. Built in 1958, the dam created Table Rock Lake and is managed by the Corps of Engineers out of Little Rock, Arkansas. Dams over 35 feet high are regulated by the State. In Taney County, though 4 dams are higher than 35 feet, two are federally regulated while Silver Creek Lake Dam and Cross Creek Dam remain state regulated. The majority of the dams in Taney County are used for recreational purposes, though Table Rock and Ozark Beach are used for hydroelectric power. Table Rock Dam is also used for flood control.

Figure 3-10: Taney County Dam Location



Dam #	Official Name	River/Stream	Year Built	Ht.	Res. Area	State Reg.	Hazard Class
1	Oakmont Resort Dam	Tributary to White River	0	34	1	No	-
2	Fall Creek Dam	Fall Creek	0	32	20	No	1
3	Silver Creek Lake Dam	Silver Creek	1982	41	30	Yes	2
4	Shepard of the Hills Historical Society Dam	Roark Creek	1971	33	4	No	3
5	Rockwood Hills Lake Dam	Bee Creek	1972	25	3	No	1
6	Table Rock Dam	White River	1959	252	43,070	Federal	1
7	Ozark Beach Dam	White River	1913	58	3,020	Federal	3
8	Cross Creek Dam	Tributary to White River	2004	40	2.8	Yes	3

Source: http://dnr.mo.gov/env/wrc/damsft/Crystal_Reports/taney_dams.pdf

Extent

The Missouri Dam and Reservoir Safety Council Rules and Regulations uses three classes of downstream environmental zone used when considering permits. The downstream environment zone is the area below the dam that would become inundated should the dam fail. Inundation is defined as water two feet or more over the submerged ground outside of the stream channel. These classes are based on the number of structures and types of development contained within the inundation area as presented in Table 3-34. The downstream environment zone classification is also used to prescribe the frequency of inspection.

Class I	The area downstream from the dam that would be affected by inundation contains ten (10) or more permanent dwellings or any public building. Inspection of these dams must occur every two years
Class II	The area downstream from the dam that would be affected by inundation contains one to nine permanent dwelling, or one (1) or more campgrounds with permanent water, sewer and electrical services or one (1) or more industrial buildings. Inspection of these dams must occur once every three years.
Class III	The area downstream from the dam that would be affected by inundation does not contain any of the structures identified for Class I or Class II dams. Inspection of these dams must occur once every five years

Source: <http://floodplain.sema.dps.mo.gov/MitPlan/docs.aspx?link=modamreg94>

An example of the effect of a large scale dam failure occurred in 2005 when overtopping water at the AmerenUE's Taum Sauk Upper Storage Facility caused a massive dam failure during the pre-dawn hours of December 14th. More than a billion gallons of water rushed down Proffit Mountain and overwhelmed the east fork of the Black River and the lower ground of Johnson's Shut-Ins State Park. It swept the park superintendent's home and family at least a quarter-mile away and caused damage to several vehicles that were swept from Highway N into an adjacent field. According to local calculations the flow of the water at the time would have been nearly 150,000 cubic feet per second, which is the equivalent of the Mississippi River flowing at 7 feet in St. Louis.

According to a USGS assessment team the destruction at the site was incredible. All of the trees in the path of the flowing water were stripped off the earth's surface. What remained were large rocks and exposed bedrock surfaces. The flowing water removed soil from the valley floor, and created large scour holes. The large flowing debris piles created by downed trees came to rest throughout the park and up against the downstream side of the highway N bridge over the Black River. While the Johnson's Shut-Ins Park State Park received the most damage, private property located northwest of the Park became a debris field for trees and the Park Superintendent's home destroyed by the flowing water. (National Weather Service)

Past Occurrences

Dam failures in the United States have resulted in death, injuries and billions of dollars in property damage. Dam failure events in Missouri include dams in Lawrenceton in 1968, Washington County in 1975, Fredericktown in 1977, a near failure in Franklin County in 1978, and the Taum Sauk Dam failure in 2005.

Figure 3-11 is an image of the erosion and failure of the Silver Creek Dam near Rockaway Beach in 2004. The dam was identified both by SEMA and the Association of State Dam Safety Officials as unsafe and in need of immediate repair. The dam was heavily eroded due to an improperly located spillway discharge channel on the east end of the dam. The failure of this dam threatened the safety of one permanent residence; reduce property values of those residences located adjacent to the Lake Taneycomo, as well as take out a section of Missouri 176 while dumping tons of silt into Lake Taneycomo. One of the biggest barriers to repairing the Silver Creek Dam was its status as abandoned. Today there is new ownership of the dam that is working with state agencies to maintain Silver Creek Dam.

Figure 3-11: Erosion at Silver Creek Dam



Source: <http://www.damsafety.org/documents/pdf/Missouri.pdf>

Probability and Severity Rating

The age and ownership of dams are the most significant factors affecting risk of dam failure. The likelihood of a dam failure is always possible. However, the probability of dam failure is considered low for the federally maintained Ozark Beach and Table Rock Dams.

According to Stanford University's National Performance of Dams Program, between 1975 and 2001 there were 17 dam failures in Missouri. These data translate into a 65% probability that there will be a dam failure in any given year statewide. However, with over 5,000 dams across the state the probability that a dam failure would occur at one of the eight dams in Taney County is low despite the erosion of the Silver Creek Dam. The current owner of Silver Creek Dam is maintaining the dam under the Missouri Dam and Reservoir Safety Program; therefore, it is unlikely that an event of this type will recur in the county.

The severity of the failure of the class II and III dams in the county would be relatively low due to the amount of development in the downstream environment. The severity of the failure of the three class I dams in the county is would be much greater relative to the reservoir acres stored behind the dam. If the Table Rock Dam were to fail the severity would be catastrophic due to the amount of water stored by the dam and the intense development in the downstream environment, particularly the Branson Landing along Lake Taneycomo.

Wildfire

Hazard Identification

Forest and grassland fires can and have occurred on any day throughout the year. However, the majority of fires and the greatest acreage loss will occur during the spring fire season, which is normally between February 15 and May 10. The length and severity of this burning period depends on weather conditions. Spring in Missouri is noted for its low humidity and high winds. Spring is also the time of the year when rural residents normally burn their garden spots and brush piles. Many landowners believe it is necessary to burn the woods in the spring of the year in order to get more grass, kill ticks, and get rid of the brush. These conditions, together with below normal precipitation and high temperatures, result in extremely high fire danger. Depending on weather conditions, a sizable number of fires also can occur between mid-October and late November. In 2010, there were a total of 2,873 wildfires reported and a total of 26,791 acres burned. (MDC) Figure 3-12 notes types of wildfires that may occur.

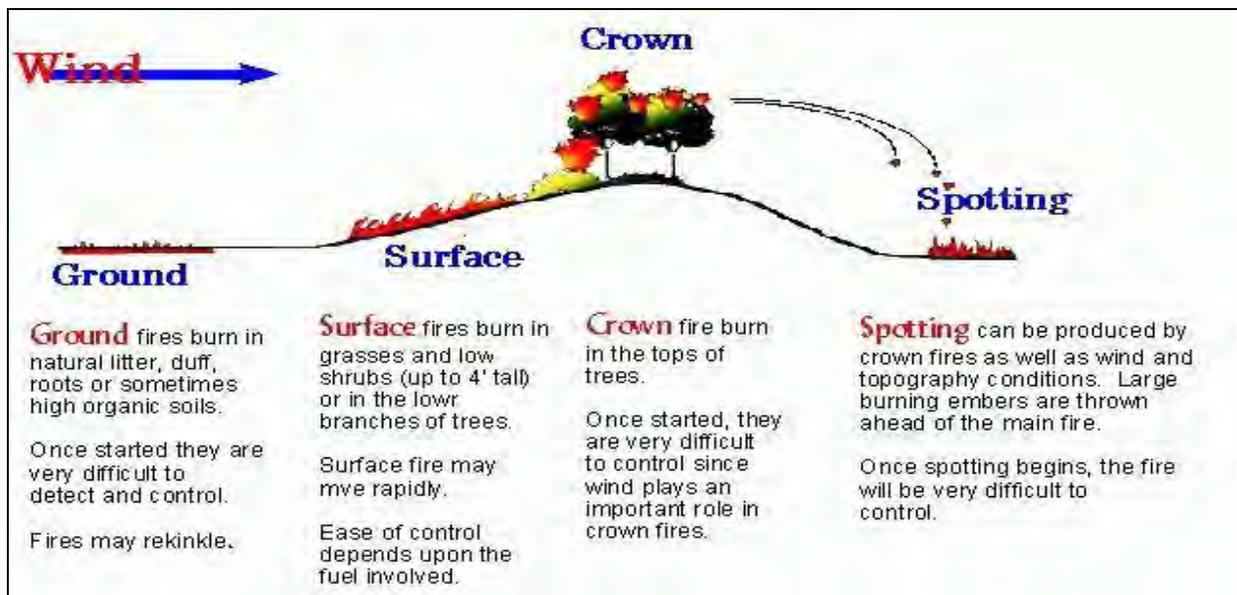
Table 3-35: Missouri Fire Statistics 2010: Causes	
Lightning	>1%
Camp Fire	1.5%
Smoking	1.7%
Debris Burning	41%
Arson	6.9%
Equipment Use	4.2%
Railroads	>1%
Children	>1%
Miscellaneous Causes	43%
Source: http://mdc.mo.gov/forest/fire/stats.htm	

While wild forest fires are not common in Taney County, it is possible for wildfires to occur due to drought, debris burning, and incendiary fires. Debris burning is consistently the number one cause of wildfires in Missouri. Fire caused by lightning is rare despite 50 to 70 thunderstorm days per year.

Wildfire fuel includes combustible material in the form of vegetation such as grass, leaves, ground litter, plants, shrubs and trees. Over 88 percent of the county’s land cover is grasslands and forests, increasing the risk for wildfire.

The Forestry Division of the Missouri Department of Conservation (MDC) is responsible for protecting privately owned and state-owned forests and grasslands from the destructive effects of wildfires. To accomplish this task, eight forestry regions have been established in the State to assist with the quick suppression of fires. The Forestry Division works closely with volunteer fire departments and federal partners to assist with fire suppression activities. Currently, a cooperative agreement between the Mark Twain National Forest and Taney County is renewed annually.

Figure 3-12: Types of Wildfire



Source: Missouri Department of Conservation.

Land Cover Type	Acres	% Coverage of County
Deciduous Forest	221,807	53.2
Native Warm Season and Non-Native Cool Season Grasses	84,953	20.4
Deciduous Woody/Herbaceous Open Woodland	25,746	6.2
Evergreen Forest	24,130	5.8
Land cover type - includes top four types of estimated land coverage.		
Source: MSDIS USGS 2005 Land Use Land Cover		

Location

Wildland Urban Interface

According to the SILVIS Lab, in the Department of Forest & Wildlife Ecology at the University of Wisconsin- Madison, the Wildland-Urban Interface (WUI) is defined as the area where structures and other human development meet and intermingle with undeveloped wildland. The SLVIS lab uses thresholds of housing density and a percent of vegetative coverage in an area to model where development and fuel meet and map the threat of wildfire events. The data used to create this model is gathered from the 2000 U.S. Census and the National Land Cover Dataset (NLCD), 1992/93 satellite imagery. Data from the NLCD is used to identify wildlands, which are defined as forests, native grasslands, shrubs, wetlands, and transitional lands, most often clear-cuts.

The SILVIS Lab then defines two types of Wildland-Urban classes; interface and intermix. The interface class is an area where housing is in the vicinity of contiguous vegetation. The area must have more than one house per 40 acres, have less than 50% vegetation, and be within 1.5 miles of an area over 1,325 acres that is more than 75% vegetated. The model specifies 1.5 miles because, according to the California Fire Alliance, that is the distance a firebrand can be blown from a wildland fire to a home and catch the home on fire. The intermix class is an area where housing and vegetation intermingle. The area must have at least one house per 40 acres, have continuous vegetation, and be more than 50% vegetation. For each type of WUI, there are three subtypes: low density, medium density and high density. Each subtype is defined in the Table 3-37.

Application of WUI

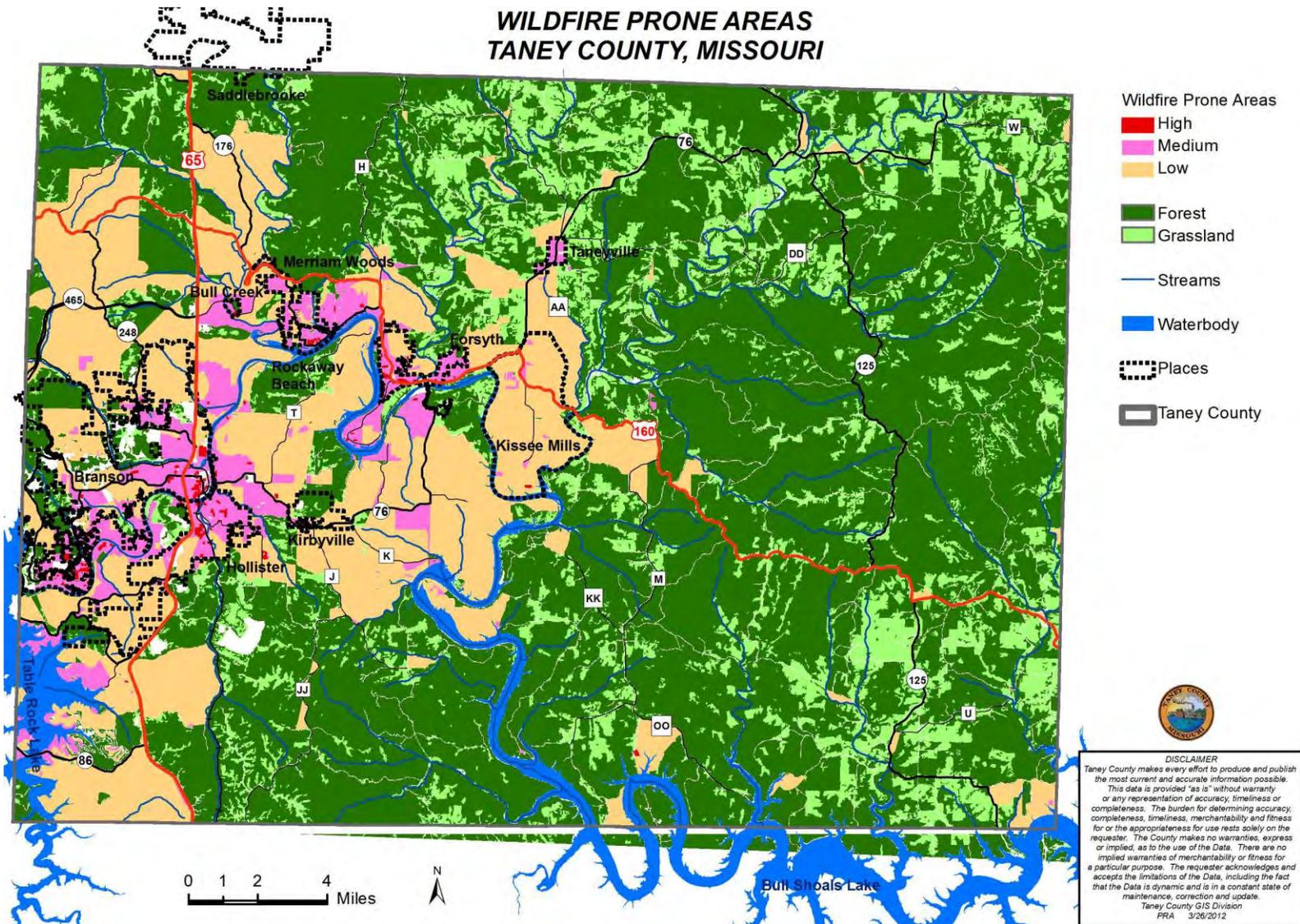
The map in Figure 3-13 is meant to illustrate the likely locations of wildfire in Taney County. The map is a combination of land classified as either forest or grassland in the 2005 USGS Land Use Land Cover 30 meter resolution grid and an overlay of 2000 census blocks classified by SILVIS Lab's Wildland Urban Interface methodology. Although the threat of wildfire is countywide, the WUI demonstrates where this hazard would most likely present a danger to people and property. The WUI classes of interface and intermix for each level were combined creating three levels of high, medium and low density development in largely vegetated areas.

Table 3-37: Classification of Wildland Urban Interface

Sub Type	Description
Low Density Interface	Housing Density ≥ 6.2 housing units/km ² and < 49.4 housing units /km ² Vegetation $\leq 50\%$ within 2.4km of an area with $\geq 75\%$ vegetation
Medium Density Interface	Housing Density ≥ 49.4 housing units/km ² and < 741.3 housing units /km ² Vegetation $\leq 50\%$ within 2.4km of an area with $\geq 75\%$ vegetation
High Density Interface	Housing Density ≥ 741.3 housing units/km ² Vegetation $\leq 50\%$ within 2.4km of an area with $\geq 75\%$ vegetation
Low Density Intermix	Housing Density ≥ 6.2 housing units/km ² and < 49.4 housing units /km ² Vegetation $> 50\%$
Medium Density Intermix	Housing Density ≥ 49.4 housing units/km ² and < 741.3 housing units /km ² Vegetation $> 50\%$
High Density Intermix	Housing Density ≥ 49.4 housing units/km ² and < 741.3 housing units /km ² Vegetation $> 50\%$

Source: <http://silvis.forest.wisc.edu/old/Library/WUIDefinitions.php>

Figure 3-13: Wildfire Hazard Areas



Extent (Magnitude/Severity)

Wildfires can flare out of control, often with catastrophic results. Grass grows back quickly with little damage, but fires in forests and croplands are costly. A major wildfire can leave large areas of scorched and barren land which may not return to pre-fire conditions for decades. If ground cover has been burned away, little is left to hold soil in place on steep slopes and hillsides and heavy rains could result in increased soil erosion and siltation of area streams and creeks. Fatalities occasionally can result from wildfires, usually due to overexertion or heart attack.

Past Occurrences

No Missouri fires are listed among the significant wildfires in the U.S. since 1825. Each year, about 3,700 wildfires burn more than 55,000 acres of forest and grassland on average in Missouri. On April 5, 2000, dry conditions and wind gusts carrying sparks from other wildfires resulted in the outbreak of 88 wildfires throughout several southwest Missouri counties, including Taney County. These wildfires caused \$5,000 in damages in the region; however, any specific damages in Taney County are not documented.

The Missouri Department of Conservation wildfire reporting data for Taney County contain records for 515 events from 2002 through 2011 that burned a total of 6,475 acres. The record indicates that on average there are 57 wildfires each year in Taney County. Of the 28 structures damaged or destroyed, 12 were the result of debris burning. There is no injury or fatality information associated with the data. Table 3-38 summarizes the MDC data by cause.

Cause	# of Fires	Structures Damaged Or Destroyed	Structures Threatened	Acres Burned
Arson	21	0	25	1,040
Campfire	6	0	2	5
Children	2	0	1	2
Debris	150	12	112	2,997
Equipment	10	0	4	43
Lightning	2	0	0	1
Miscellaneous	212	13	55	1,272
Not Reported	2	0	1	1
Railroad	1	0	0	5
Smoking	0	0	0	0
Unknown	109	3	73	1,109
Total	515	28	273	6,475

Source: <http://mdc4.mdc.mo.gov/applications/FireReporting/Report.aspx>

Probability and Severity Rating

Based on the MCD fire reporting data, the probability of wildfire and grass fire occurrence is extremely high with multiple events occurring in any given year. The risk percentage calculation for these events is equal to 2,837%. However the majority of these events have occurred between the months of November through March. The

likelihood of these events increases during extremely dry periods and tend to occur during certain periods, such as spring, late fall, or under conditions of excessive heat, dryness, and/or drought. Table 3-39 describes the probability of wildfire occurrence based on the Missouri Department of Conservation's fire danger index levels.

Danger Level	Probability Rating
Low Fire Danger	Low
Moderate Fire Danger	High
High Fire Danger	High
Extreme Fire Danger	High
Source: MDC: http://www.mdc.state.mo.us/forest/fire/adjec.htm	

Although the probability of wildfire is very great in Taney County, only 23 events have resulted in a damaged or destroyed structure. The severity of wildfire based on MDC records would be considered low in Taney County. However, as residential areas expand into relatively undeveloped rural lands, people living in these communities are increasingly threatened by wildfires. Protecting structures in isolated locations can stretch firefighting resources to the limit. The grasslands and forested areas in Taney County combined with certain weather conditions create the potential risk for a wildfire within the county.

Sinkhole Hazard

(bowl-shaped, collapse)

Hazard Identification

A sinkhole is an area of ground that has no natural external surface drainage—when it rains, all of the water stays inside the sinkhole and typically drains into the subsurface. Sinkholes can vary from a few feet to hundreds of acres and from less than 1 to more than 100 feet deep (USGS, Sinkhole Fact Sheet, p. 1). Some are shaped like shallow bowls whereas others have vertical walls; some hold water and form natural ponds, while others do not hold water. Typically, sinkholes form so slowly that little change is seen in one's lifetime, but they can form suddenly when a collapse occurs. Such a collapse can have a dramatic effect if it occurs in an urban setting.

Sinkholes form in karst terrain, which is a region where the bedrock can be dissolved by ground water. Bedrock in a karst area typically is composed of carbonate (limestone/dolomite) or evaporite (gypsum) rock. Topographic features such as springs, caves, and sinkholes all form because water that is slightly acidic, from absorbing carbon dioxide from the air and soil, dissolves the bedrock along horizontal and vertical cracks and crevices, and forms pathways and channels in the rock. These pathways are like underground plumbing that carries water from the surface to springs located in valleys. Eventually, these cracks and crevices, which are the beginning of a conduit system, become large enough to start transporting small soil particles, see Figure 3-14. As these small particles of soil are carried off, the surface of the soil above the conduit starts slumping down gradually, and a small depression forms on the surface of the ground. This small depression acts like a funnel and gathers even more water, which makes the conduit larger and washes more soil into the conduit, making the depression both wider and deeper.

There are two general types of sinkholes – collapse and bowl-shaped. Collapse sinkholes are much less common than the bowl-shaped type. Collapses form in essentially the same way as the more common bowl-shaped sinkholes. However, when the soil particles start washing into the conduit, the soil closer to the ground surface does not slump down, but starts forming a bridge, see Figure 3-15. A void forms where the soil keeps washing into the conduit and, eventually, several things can happen that can cause the bridge to collapse to form a sinkhole. One, the void can grow large enough that the soil above it can no longer bridge it. Two, the soil bridge dries out and collapses due to loss of cohesion. Three, the bridge collapses due to an excess load applied on top of it. Or four, vibration in the adjacent area due to traffic, construction, or even weather can loosen the soil in the bridge.

The process of forming a conduit and a soil bridge can take many years to decades to even centuries to form and can be aggravated by human activities. Since the process of forming a sinkhole depends on water to carry away soil particles, anything that increases the amount of water flowing into the subsurface can facilitate this process. Parking lots, streets, altered drainage from construction, and roof guttering are some things that can increase runoff; even weather can make a difference.

Between 1970 and 2007, MDNR examined more than 160 collapses statewide that were reported by the public. Most of these collapses were small—less than 10 feet in diameter and 10 feet deep (USGS, Sinkhole Fact Sheet, p. 1); some, however, are quite large and spectacular. Sinkhole collapses drained a lake in the St. Louis, Missouri, area (St. Louis Post Dispatch, June 11, 2004), drained the West Plains, Missouri, sewage lagoon (Gillman et al, 2007), partially drained the Springfield, Missouri, treated sewage lagoon (Vineyard and Feder, 1982), and another in Nixa, Missouri swallowed a car along with the garage it was parked in (Gouzie and Pendergrass, 2009).

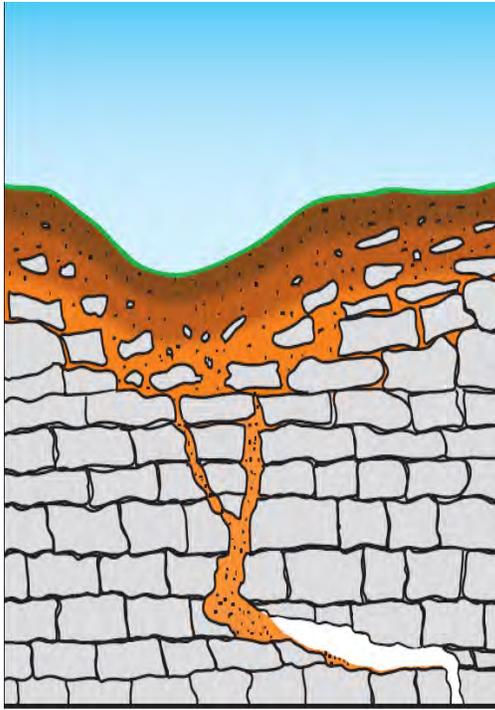


Figure 3-14: Bowl-shaped sinkhole

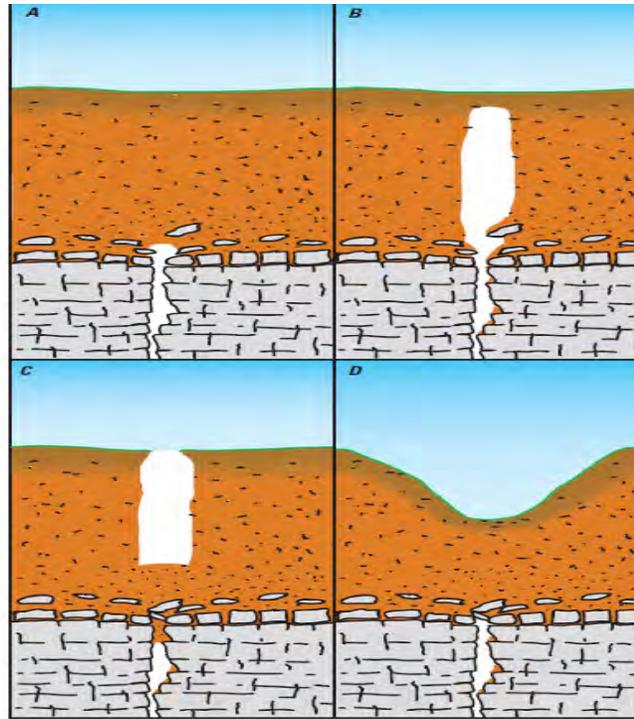
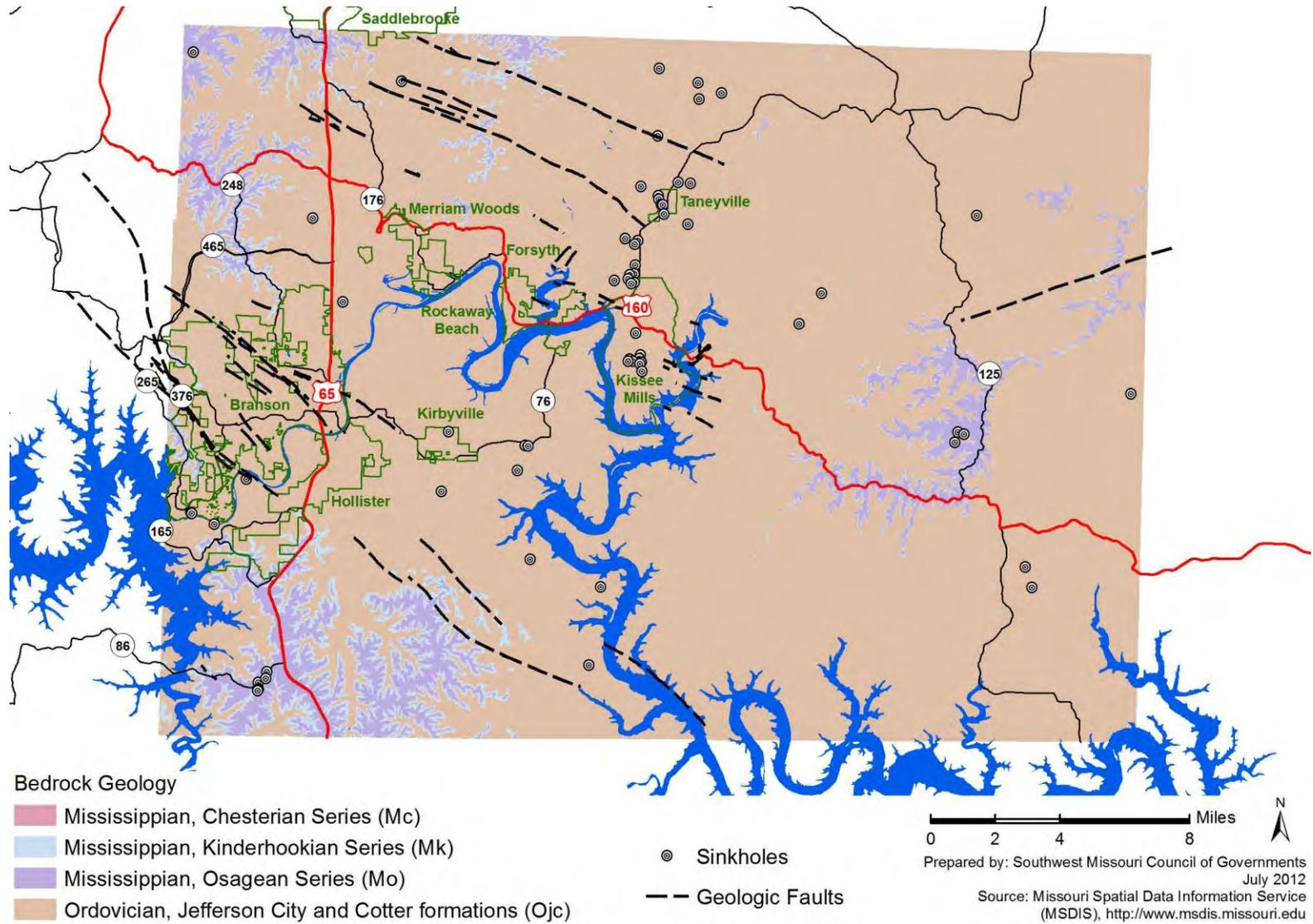


Figure 3-15: Formation of collapse—Soil bridges gap where sediment has been washing into a solution enlarged fracture, A. Over time, the void migrates upward through the soil, B. After the bridge thins, a sudden collapse, C, often plugs the drain and erosion will, after many years, transform the collapse into a more bowl-shaped sinkhole, D.

Location

Taney County is underlain primarily by carbonate rocks containing mainly limestone and some dolomite bedrock. These types of bedrock are extremely sensitive to water dissolution along joints and fractures within the rock. Areas along natural drainage paths tend to be more susceptible to sinkhole formation as well, due to increased water flow into the subsurface.

Figure 3-16: Taney County Geologic Map Showing Locations of Sinkholes



Extent (Magnitude/Severity)

Formation of sinkholes can and will affect Taney County. However, the impact of past sinkholes is statistically negligible. Since sinkhole formation occurs on a localized scale, property damage is limited to negligible depending on structures immediately within or adjacent to the sinkhole area.

An occurrence of a bowl-shaped sinkhole is unlikely to cause much damage, if any; to structures since it is a very slow process that occurs over many years. Structures can be altered or relocated as necessary during the formational process. However, an occurrence of a collapse sinkhole could cause significant damage to structures in the localized area.

Past Occurrences

Since 1879, when the USGS first began topographic mapping, there have been 64 sinkholes reported in Taney County. The sinkhole locations are widely scattered throughout the county, however, there seems to be a trend of sinkholes between the town of Taneyville and the unincorporated area of Kissee Mills along State Hwy 76. Many of these sinkholes may have been reported during the construction of the highway, which would explain their linear trend. But there are also a significantly higher number of sinkholes reported within Kissee Mills and Taneyville, as shown in Figure 3-16.

Probability and Severity Rating

Although Taney County has bedrock that is very conducive to sinkhole occurrence, the risk of sinkhole formation in Taney County is low based on the number of existing sinkholes reported throughout the county. Since map-based record keeping began, only 64 sinkholes have formed and have been mapped in Taney County according to the USGS. This means that over the past 133 years, there has been around 1 sinkhole report every 2 years.

In addition, using a buffer of 30 feet (9 meters) around existing reported sinkhole locations, this total buffer area currently comprises only around 0.00001% of the total land area in the county, which can be considered negligible. Therefore, the probability of sinkholes in Taney County can be considered relatively low. However, this doesn't mean that the severity of the existing sinkholes is low. An occurrence of a collapse sinkhole could cause significant localized damage.

Sinkhole formation in urban areas compared to rural areas has the potential to be expedited due to human interaction with the subsurface through construction of facilities and infrastructure. Natural drainage patterns are altered, which can increase water volume and flow to areas more susceptible to sinkhole formation, thus increasing the potential for mobilization of sediment in the subsurface or increasing amount of dissolution of the underlying bedrock.

A secondary problem that can arise once sinkhole formation has already occurred is flooding. During periods of excessive rainfall in the watershed of an existing sinkhole can cause water levels to rise faster than it can infiltrate into the ground through the soil of the sinkhole. When this happens, water can temporarily "back-up" to fill the sinkhole and may even "spill-over" into surrounding low-lying areas. In some cases, homes with

“walk-out” basements are built along the sides of a sinkhole and, in those cases, the walk-out basement may become the low-lying “spill-over” area. The likelihood of future sinkhole hazards is shown in Table 3-40.

Event Type	Future Occurrence
Bowl-shaped Sinkhole	Low
Collapse Sinkhole	Low

There have been no known reported occurrences of sinkholes that have caused property damage in Taney County.

Public Health Emergencies

Hazard Identification

Any alteration to the environment that creates or has potential to create increased morbidity and mortality either by unforeseen changes in the climate, air quality, soil quality and/or food quality that requires Public Health, EMS, and/or clinic and hospital services beyond status quo.

High profile events include but are not limited to: Excessive Heat Emergencies, Excessive Cold Emergencies, Extensive and long lasting power disruption, toxic chemical releases, landslides, mudslides, and / or polluted water runoff impacting water quality, wildfires affecting air quality, toxic chemical releases and pollution affecting air quality, contamination and recalls of food affecting food quality.

Public health emergencies have the potential to adversely impact a large number of people and those impacts can range from local disasters to worldwide epidemics. Specifically, public health emergencies can take the form of disease epidemics, food or water contamination, disruption of water and sewer services, or infestations of disease-carrying insects or rodents. They can occur as either stand-alone events or be the result of tornadoes, floods, or other incidents (MHA, 2011).

Approximately 1500 diseases can affect people and half of those diseases can be transmitted between animals and humans. These diseases are called zoonotic diseases or zoonoses. Zoonotic diseases are a growing concern for public health due to human and animal population living in closer proximity, climate change and advances in transportation.

Public health has begun to focus on two major causes of public health emergencies: biohazard terrorism and disease outbreaks (disease outbreaks will be the focus of this hazard profile). Disease outbreaks are of an area of concern because a virulent strain could quickly be spread around the world due to the interconnectedness of the global economy. Of particular interest is the risk of pandemic influenza, similar to the Spanish Flu epidemic of 1918-1919 which killed 20 million people worldwide. Influenza is not the only disease of concern to public health officials. Diseases such as small pox, meningitis, tick-borne illnesses, West Nile Virus, Tetanus and Severe Acute Respiratory Syndrome (SARS) are also monitored (MHA, 2011).

An influenza pandemic would be the result of a type A influenza virus that has mutated or shifted into a form to which the general population has no immunities. In order for a pandemic to occur, it is key that this new type A virus is easily transmitted from person to person. Because the general population has no immunity to this new virus, the virus will attack young and old, healthy and sick (MHA, 2011).

Public health agencies also monitor water and air for chemicals and pollutants that are known to cause illness, and track where hazardous chemicals are stored. Sources of these pollutants can range from routine industrial activities, automobile use, accidents, or natural disasters. Floods, for example, can overwhelm wastewater treatment facilities and result in the release of raw sewage. It is also important for emergency responders to know the locations of hazardous waste so they can be properly equipped and prepared during disaster responses (MHA, 2011).

Location

The entire County is at risk for a public health emergency. Specifically, Branson, Missouri is a Class IV city with a permanent population of approximately 10,000 located in the west-central area of Taney County. Taney County is located in the southwest portion of Missouri. The Branson area's predominant industry is tourism, being the Number one Motorcoach destination for the past decade, Number one tour bus destination in the continental United States for outlet mall shopping excursions, and the Number two tour bus destination in the continental United States for music entertainment shows. The city of Branson includes approximately 340 restaurants, 50 theaters, three shopping malls, 200 lodging facilities and three lakes.

Approximately 7 million guests per year visit this area. The average stay is 2.4 days. Branson is within a one-day drive for 50 percent of the United States population. The busiest tour bus time occurs during the last week in November, with the day after Thanksgiving for shopping and the first week in December with Christmas music shows, lighting displays, and the Adoration parade (TCHD,2012).

Extent (Magnitude/Severity)

For planning purposes, it is reasonable to assume a rapid movement of a pandemic flu virus from major metropolitan areas to rural areas of the county. The effect of a pandemic on individual communities would likely be relatively prolonged—weeks to months. The impact of the next pandemic could have a devastating effect on the health and well being of Taney County citizens and the American public. For such an outbreak in the future, if planning and preparations were inadequate, CDC estimates that in the U.S. alone:

- Up to 200 million persons will be infected.
- Between 40 and 100 million persons will become clinically ill.
- Between 18 and 45 million persons will require outpatient care.
- Between 300,000 and 800,000 persons will be hospitalized.
- Between 88,000 and 300,000 people will die nationwide.

- Effective preventive and therapeutic measures, including vaccines and antiviral agents, likely will be in short supply, as well as some antibiotics to treat secondary infections.
- Based on the CDC’s preliminary estimates, economic losses from the next pandemic may range from \$71 to \$166 billion, depending on the attack rate (MHA, 2011).

The US Center for Disease Control (CDC) has created a Pandemic Severity Index to help communicate with the general public. The index is based on 5 categories representing the percentage of those infected that die. The highest category of the index assumes that over 2% of those infected will die. Based on the US population in 2006, an estimated 1.8 million or more people would die during a category 5 pandemic.

Category	Case Fatality Ratio	Projected Number of Deaths, US Population, 2010*
Category 1	<0.1%	<92,624
Category 2	0.1% - <0.5%	92,625- <463,118
Category 3	0.5% - <1.0%	463,119 - <926,237
Category 4	1.0% - < 2.0%	926,238 - <1,852,473
Category 5	≥2.0%	≥1,852,473

Source: Center for Disease Control- <http://www.cdc.gov/media/pdf/MitigationSlides.pdf>
 * assumes 30% illness rate

The CDC also provides information that illustrated the types of actions that a community may need to enact during times of pandemic. These actions are based on the goal of reducing contact between individuals.

Interventions by Setting	Pandemic Severity Index		
	1	2 and 3	4 and 5
Home			
Voluntary isolation of ill at home; combine with use of antiviral treatments as available and indicated	Recommended	Recommended	Recommended
Voluntary quarantine of household members in homes with ill persons; consider combining with antiviral prophylaxis is effective, feasible, and quantities sufficient	Generally Not Recommended	Consider	Recommended
School: Child Social Distancing			
Dismissal of students from schools and school-based activities, and closure of child care programs	Generally Not Recommended	Consider: ≤ 4 weeks	Recommend: ≤ 12 weeks
Reduce out-of-school contacts and community mixing	Generally Not Recommended	Consider: ≤ 4 weeks	Recommend: ≤ 12 weeks
Workplace/Community: Adult Social Distancing			
Decrease number of social contacts (e.g., encourage teleconferences, alternatives to face-to-face meetings)	Generally Not Recommended	Consider	Recommended
Increase distance between persons (e.g., reduce density in public transit, workplace)	Generally Not Recommended	Consider	Recommended

Table 3-42: Community Strategies by Pandemic Flu Severity			
Interventions by Setting	Pandemic Severity Index		
	1	2 and 3	4 and 5
Modify, postpone, or cancel selected public gatherings to promote social distance (e.g., stadium events, theater performances)	Generally Not Recommended	Consider	Recommended
Modify workplace schedules and practices (e.g., telework, staggered shifts)	Generally Not Recommended	Consider	Recommended

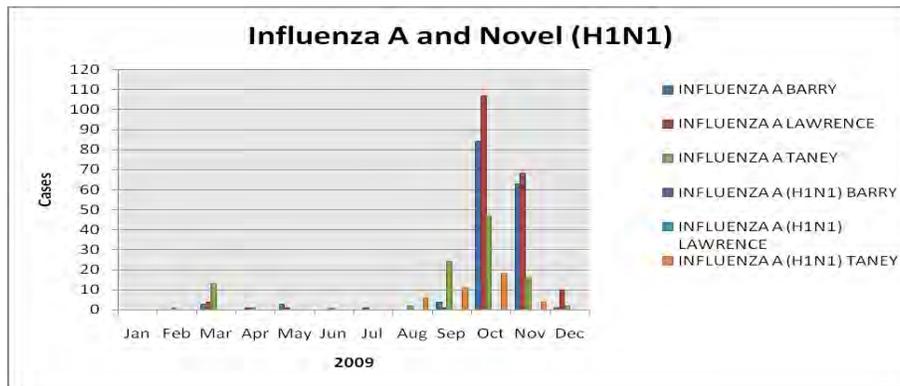
Source: Center for Disease Control- <http://www.cdc.gov/media/pdf/MitigationSlides.pdf>

Past Occurrences

Epidemic influenza, an age-old infectious disease, results in over 30,000 deaths in the United States every year and is a significant disease. Since the early 1900s, four influenza pandemics have swept the globe, although none have compared to the infamous Spanish Flu event of 1918-1919, which killed more than 20 million people. The 1957 Asian Flu, the 1968 Hong Kong Flu, and the 2009 H1N1 pandemics all saw increased illnesses and deaths compared to seasonal outbreaks, although they weren't nearly as virulent as the 1918 strain. The 1957 epidemic killed about 70,000 people in the United States, mostly the elderly and chronically ill. Another 34,000 Americans died from the 1968 epidemic. While both of these latter epidemics cost many lives, neither was as severe as the Spanish Flu of 1918, which claimed from 500,000 to 700,000 lives in the U.S alone. The impact from this pandemic was felt especially hard in society as its primary victims were mostly young, healthy adults. In addition to those three pandemics, several "pandemic scares" have occurred (MHA, 2011.)

H1N1, commonly known as the swine flu, is a new virus that was first detected in the United States in April of 2009 and declared a pandemic by the World Health Organization on June 11, 2009. This virus has been referred to as swine flu because laboratory testing showed that many of the genes in this new virus were very similar to flu viruses that normally occur in pigs. However, further study has shown that it is very different from the virus that normally circulates in pigs. It has two genes from flu viruses that normally circulate in pigs, but it also has genes from flu viruses that normally circulate in birds and other genes from flu viruses that normally afflict humans (TCHD,2010). Figure 3-17 below illustrates the confirmed cases of Influenza in three counties in 2010.

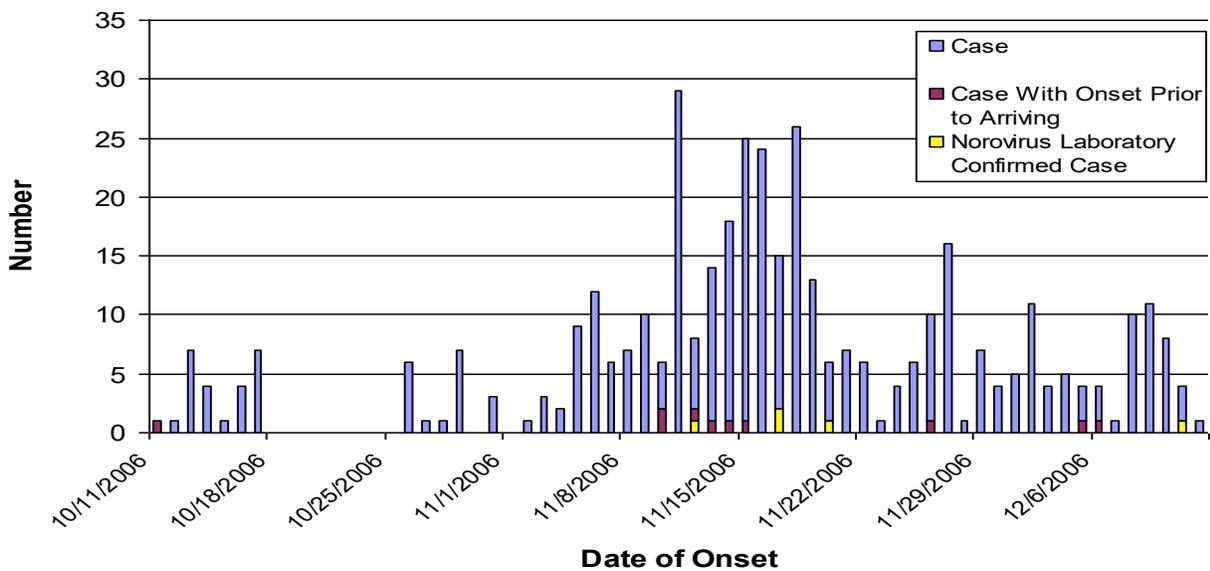
Figure 3-17: Influenza Confirmed Cases



Another communicable disease outbreak that commonly affects this community due to the influx of tourists from all around the world, is Norovirus. There have been numerous Norovirus outbreaks in Taney County within the last ten years that has impacted many other jurisdictions. For instance, in 2006, an outbreak of Norovirus sickened 524 individuals, an attack rate of 20.8 per 100 individuals. It involved 47 bus tour groups and 10 family tour groups. Among those ill, were local first responders, theater employees, hotel employees and attraction employees. Twelve bus groups reported illnesses prior to arriving in Branson. Ten different states and two Canadian provinces were affected by this outbreak (TCHD,2006).

Norovirus is a very contagious virus that can infect anyone. You can get it from an infected person, contaminated food or water, or by touching contaminated surfaces. The virus causes your stomach or intestines or both to get inflamed. This leads you to have stomach pain, nausea, and diarrhea and to throw up. These symptoms can be serious for some people, especially young children and older adults (CDC, 2012).

Figure 3-18: Cases of Norovirus by Date of Onset
Number of Cases By Date of Onset



Probability and Severity Rating

Health officials agree there is a high probability we will see another pandemic influenza virus emerge sometime in the future. In fact, a worldwide influenza outbreak on the scale and severity of the Spanish Flu is potentially possible. Should such a virulent virus strike today, the results in Missouri and elsewhere could be catastrophic without adequate planning and resources. Today, a much larger percentage of the world’s population is clustered in cities, making them ideal breeding grounds for epidemics. Additionally, the speed of air travel means the virus literally could be spread around the globe within hours. Under such unique conditions, there may be very little warning time. Most experts believe we will have just a few days, possibly a few weeks, between the time that a dangerous new influenza strain is identified and the time that outbreaks begin to occur in the U.S. Outbreaks are expected to occur simultaneously throughout much of the nation, preventing shifts in human and material resources that normally occur with other natural

disasters. These and many other aspects make influenza pandemic unlike any other public health emergency or community disaster (MHA, 2011).

Environmental concerns are also on the rise, with recent scientific data emphasizing the long-term impacts that air and water pollution can have on the ecology of the affected areas. With continued enforcement of regulatory standards for airborne releases and discharges to waterways, routine emissions by industrial facilities are relatively easy to monitor and control. However, the potential always remains for unauthorized dumping and releases, and for failure of systems to control industrial discharges, resulting in potential environmental emergencies (MHA, 2011).

Federal Disaster Declarations

Between 2002 and 2011 there were 12 disaster declarations in Taney County, see Table 3-43. Reviewing the disaster declarations allows the county to be better prepared for natural disasters in the future by learning what damage each event may cause. All of these declarations covered multiple counties; therefore, the damage assessment reflects damage done to all counties

Number	Type of Assistance	Description	Date Declared	Damage Assessment
1980	Individual and Public Assistance	Severe Storms, Tornadoes and Flooding	05/09/2011	<u>Damage Assessment</u>
<u>3317</u>	Public Assistance	Severe Winter Storms	02/03/2011	
<u>1822</u>	Public Assistance	Severe Winter Storms	02/17/2009	
<u>3303</u>	Public Assistance	Severe Winter Storms	01/30/2009	
<u>1809</u>	Individual and Public Assistance	Severe Storms, Flooding, & Tornadoes	11/13/2008	<u>Damage Assessment</u>
<u>1773</u>	Individual and Public Assistance	Severe Storms and Flooding	06/25/2008	<u>Damage Assessment</u>
<u>1749</u>	Individual and Public Assistance	Severe Storms & Flooding	03/19/2008	<u>Damage Assessment</u>
<u>3281</u>	Public Assistance	Severe Winter Storms	12/12/2007	
<u>1631</u>	Individual Assistance	Severe Storms, Tornadoes, & Flooding	03/16/2006	
<u>3232</u>	Public Assistance	Hurricane Katrina Evacuation	09/10/2005	
<u>1463</u>	Individual Assistance	Severe Storms, Tornadoes, & Flooding	05/06/2003	
<u>1412</u>	Individual and Public Assistance	Severe Storms & Tornadoes	05/06/2002	

Source: <http://www.fema.gov/femaNews/disasterSearch.do>

Figure 3-19: Taney County Hazard Composite Map
HAZARD COMPOSITE
TANEY COUNTY, MISSOURI

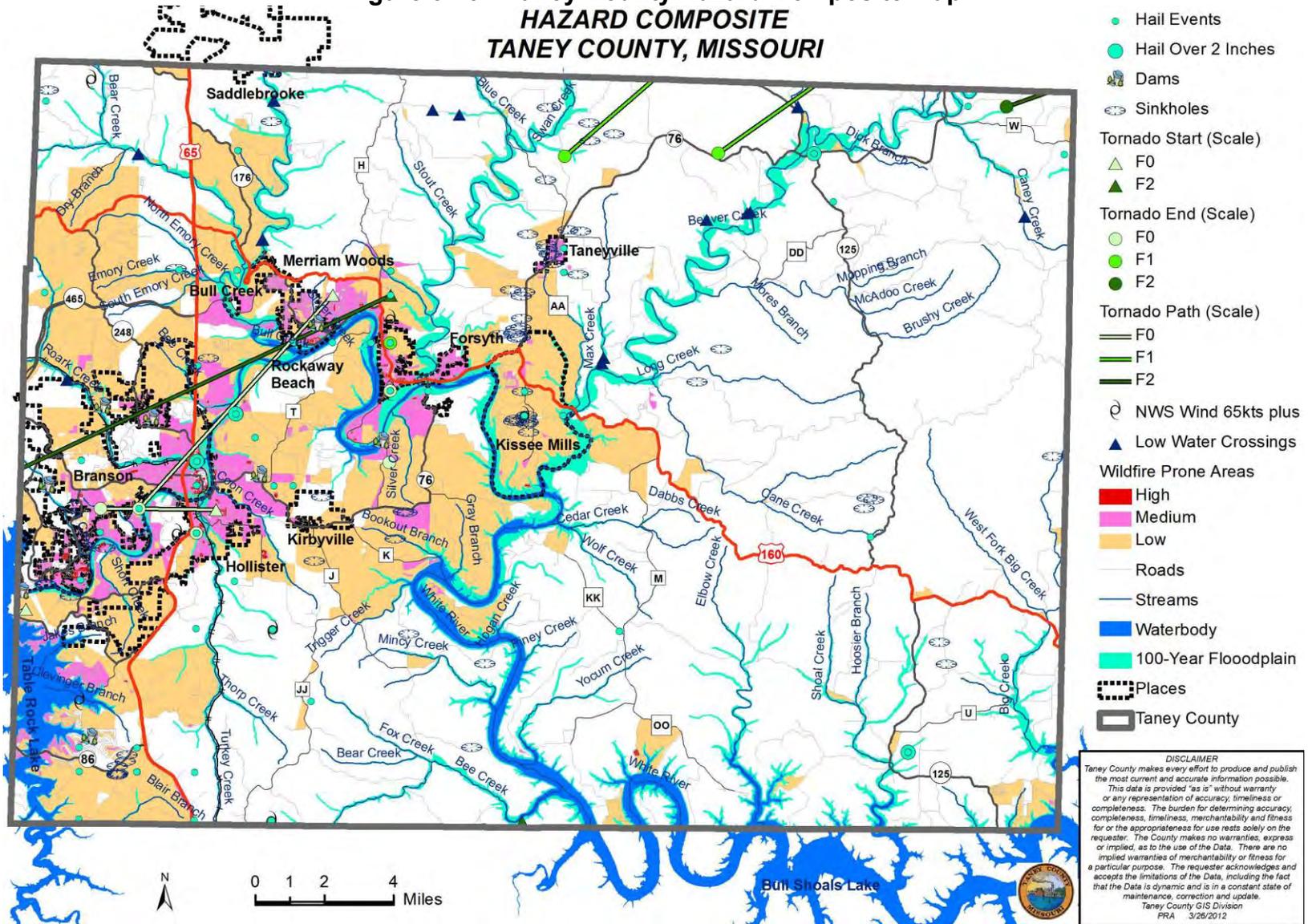


Figure 3-20: Branson Hazard Composite Map

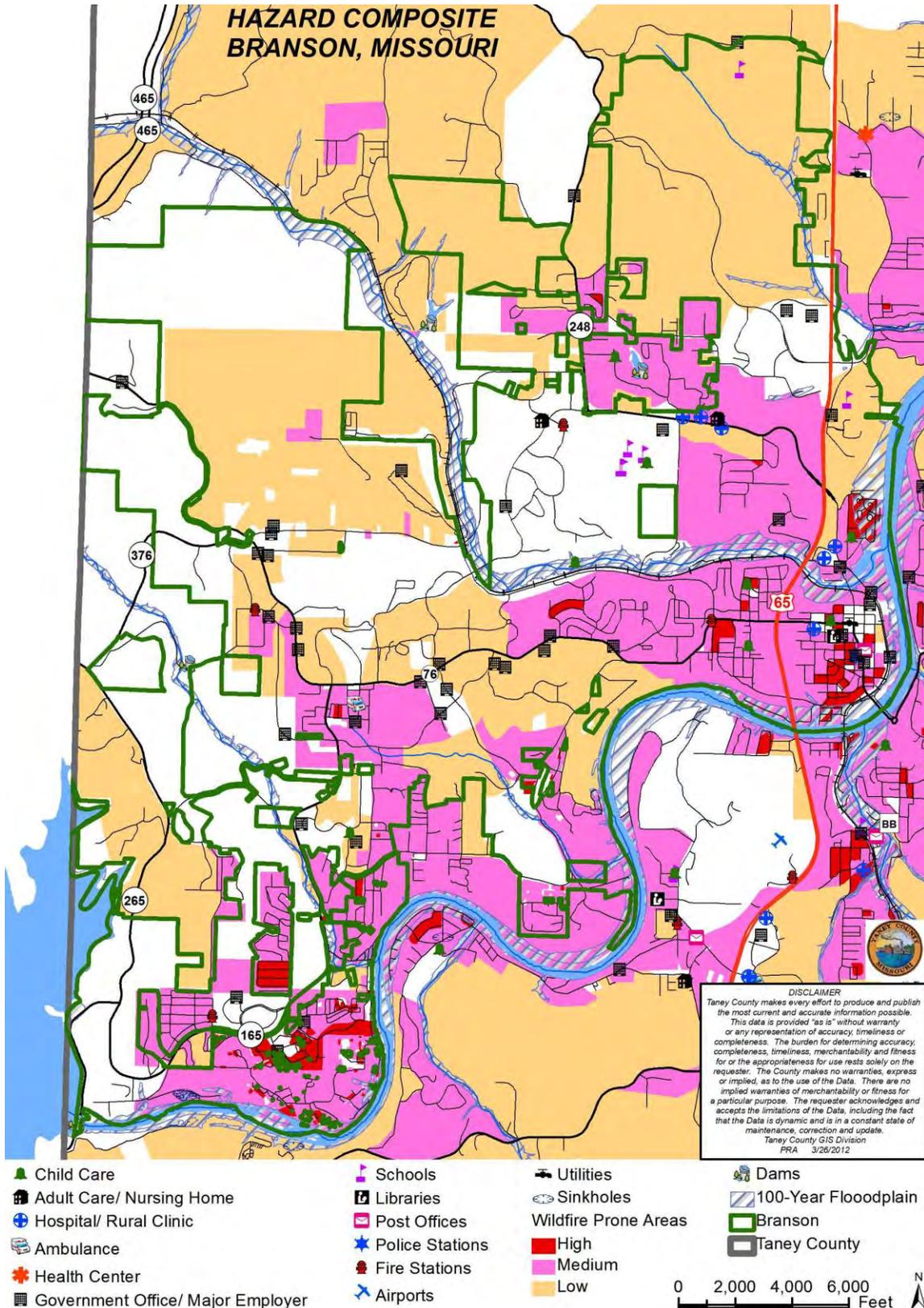
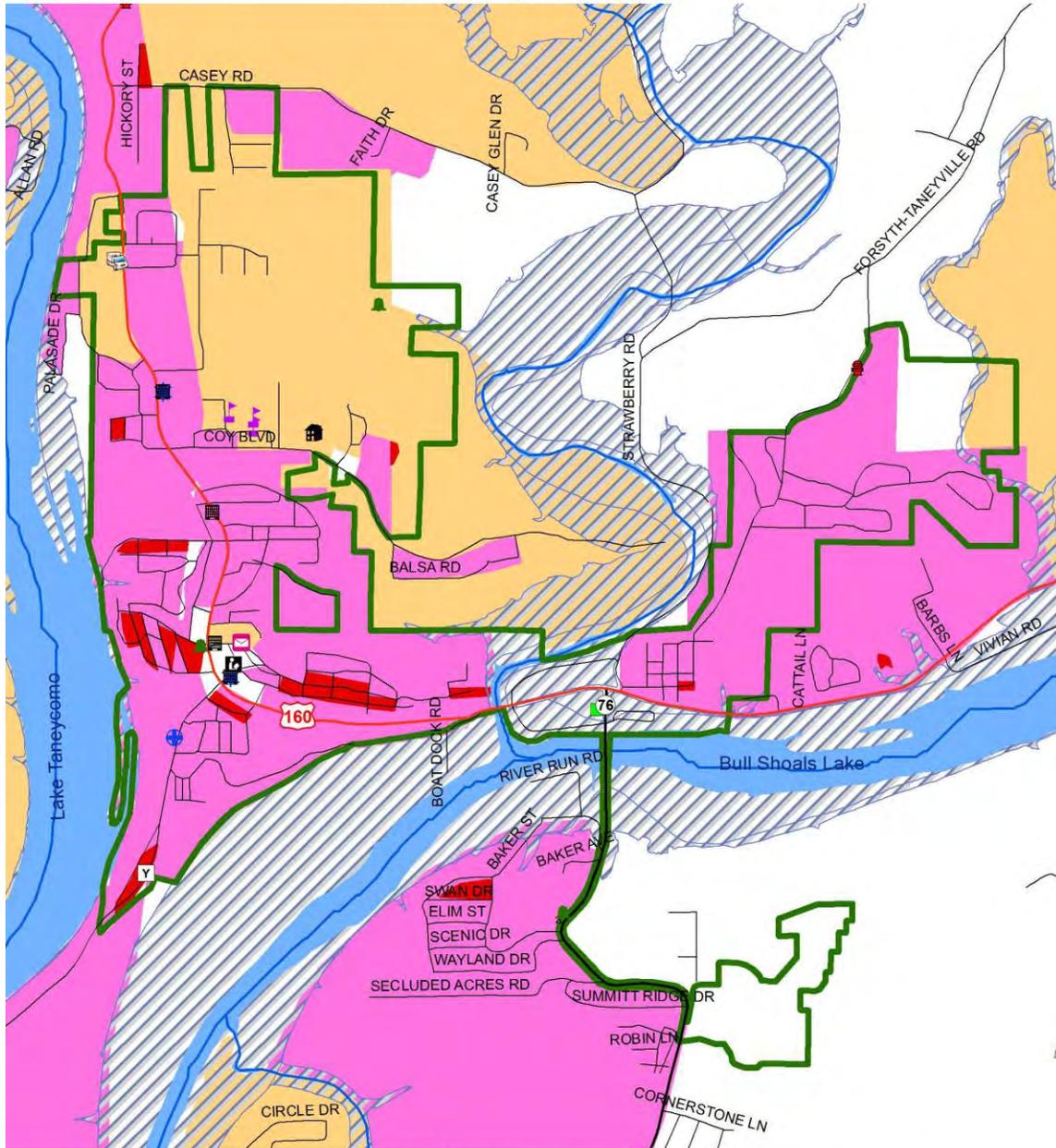


Figure 3-21: Forsyth Hazard Composite Map

**HAZARD COMPOSITE
FORSYTH, MISSOURI**



- | | |
|-----------------------------------|----------------------|
| Child Care | Streams |
| Adult Care/ Nursing Home | Waterbody |
| Government Office/ Major Employer | 100-Year Floodplain |
| Schools | Forsyth |
| Libraries | Wildfire Prone Areas |
| Post Offices | High |
| Arenas_ Fairgrounds | Medium |
| Police Stations | Low |
| Fire Stations | |
| Ambulance | |

DISCLAIMER
 Taney County makes every effort to produce and publish the most current and accurate information possible. This data is provided "as is" without warranty or any representation of accuracy, timeliness or completeness. The burden for determining accuracy, completeness, timeliness, merchantability and fitness for or the appropriateness for use rests solely on the requester. The County makes no warranties, express or implied, as to the use of the Data. There are no implied warranties of merchantability or fitness for a particular purpose. The requester acknowledges and accepts the limitations of the Data, including the fact that the Data is dynamic and is in a constant state of maintenance, correction and update.
 Taney County GIS Division
 PRA 3/26/2012



Figure 3-22: Hollister Hazard Composite Map

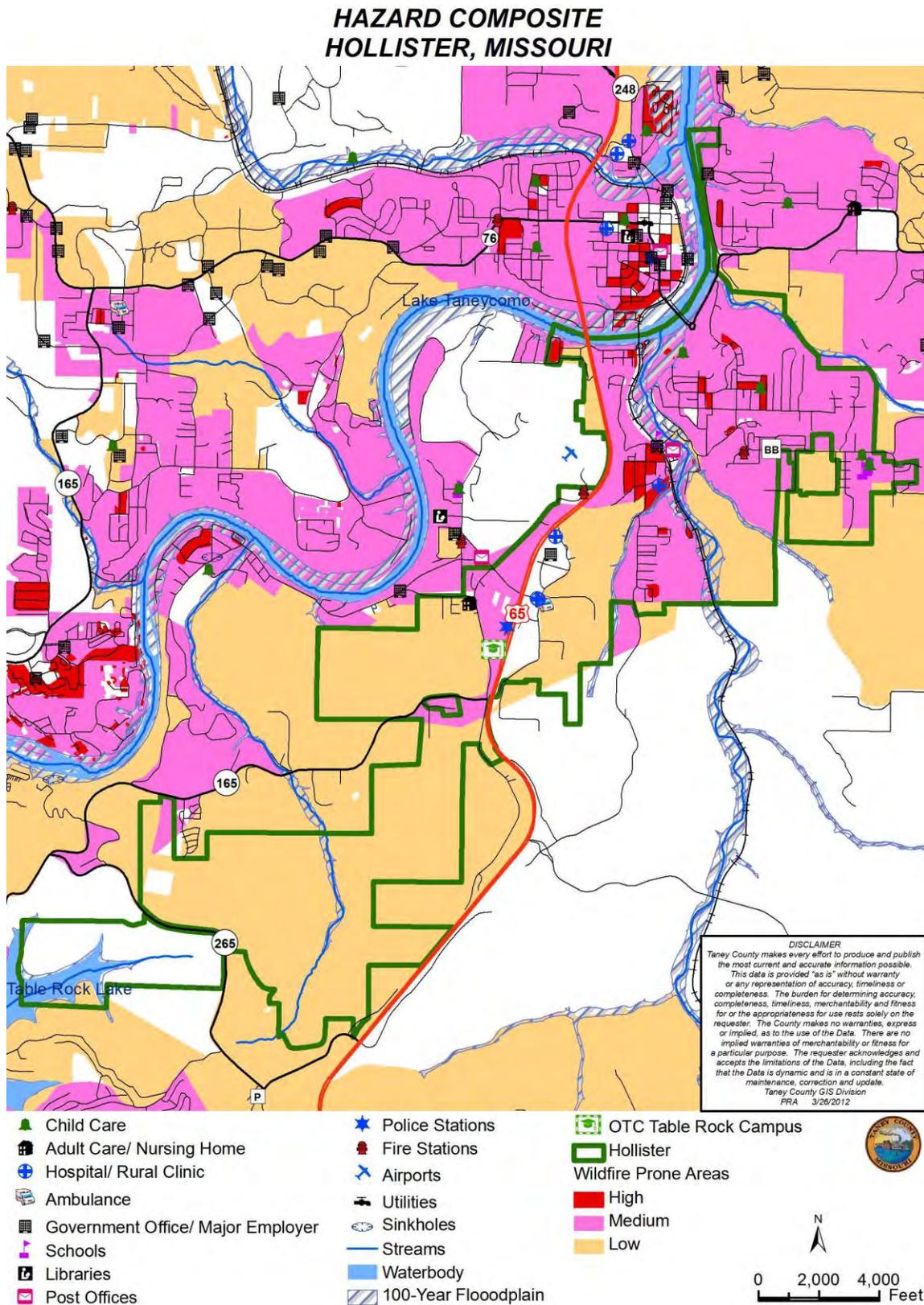


Figure 3-23: Kirbyville Hazard Composite Map

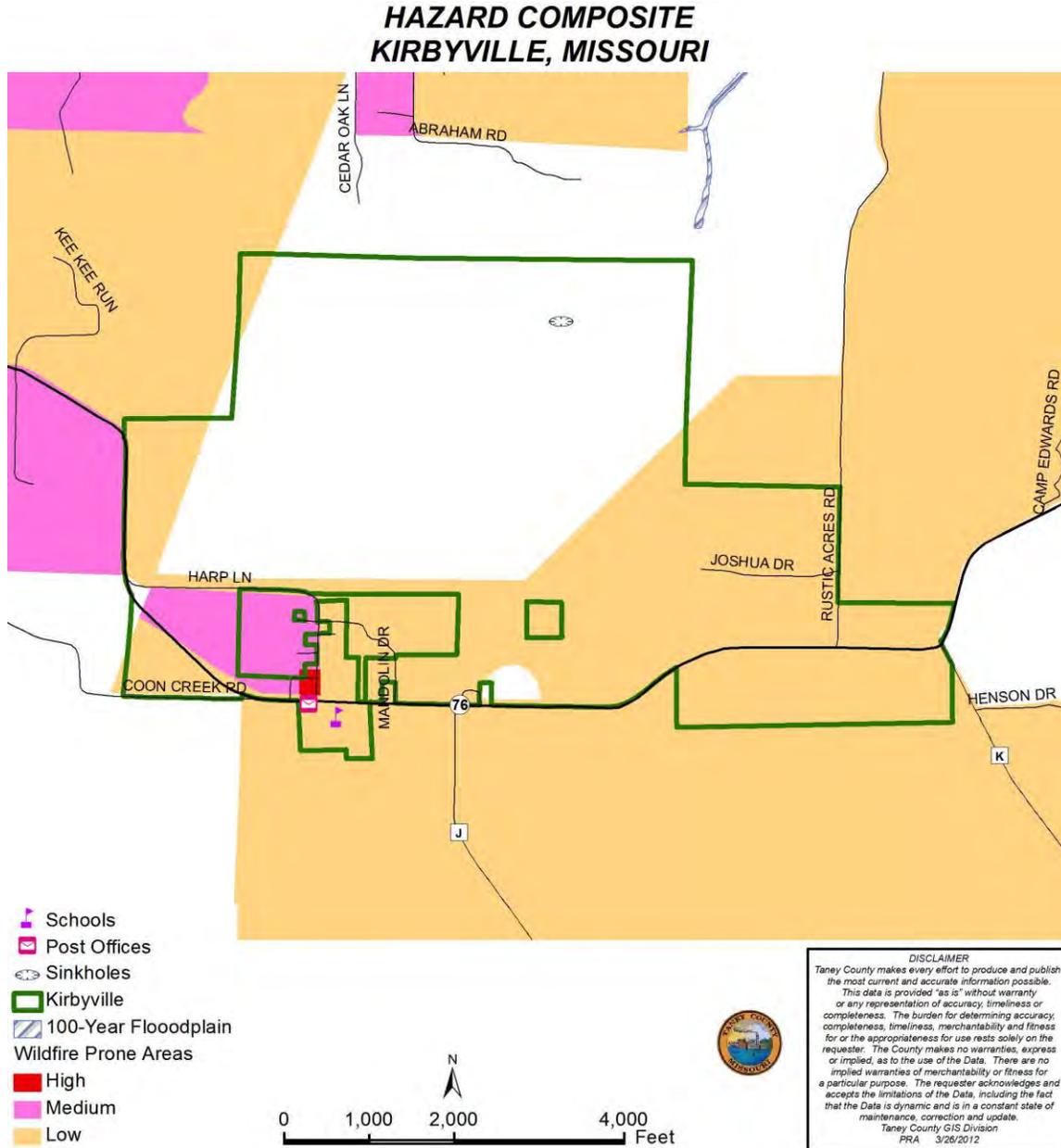


Figure 3-24: Merriam Woods Hazard Composite Map

**HAZARD COMPOSITE
MERRIAM WOODS, MISSOURI**

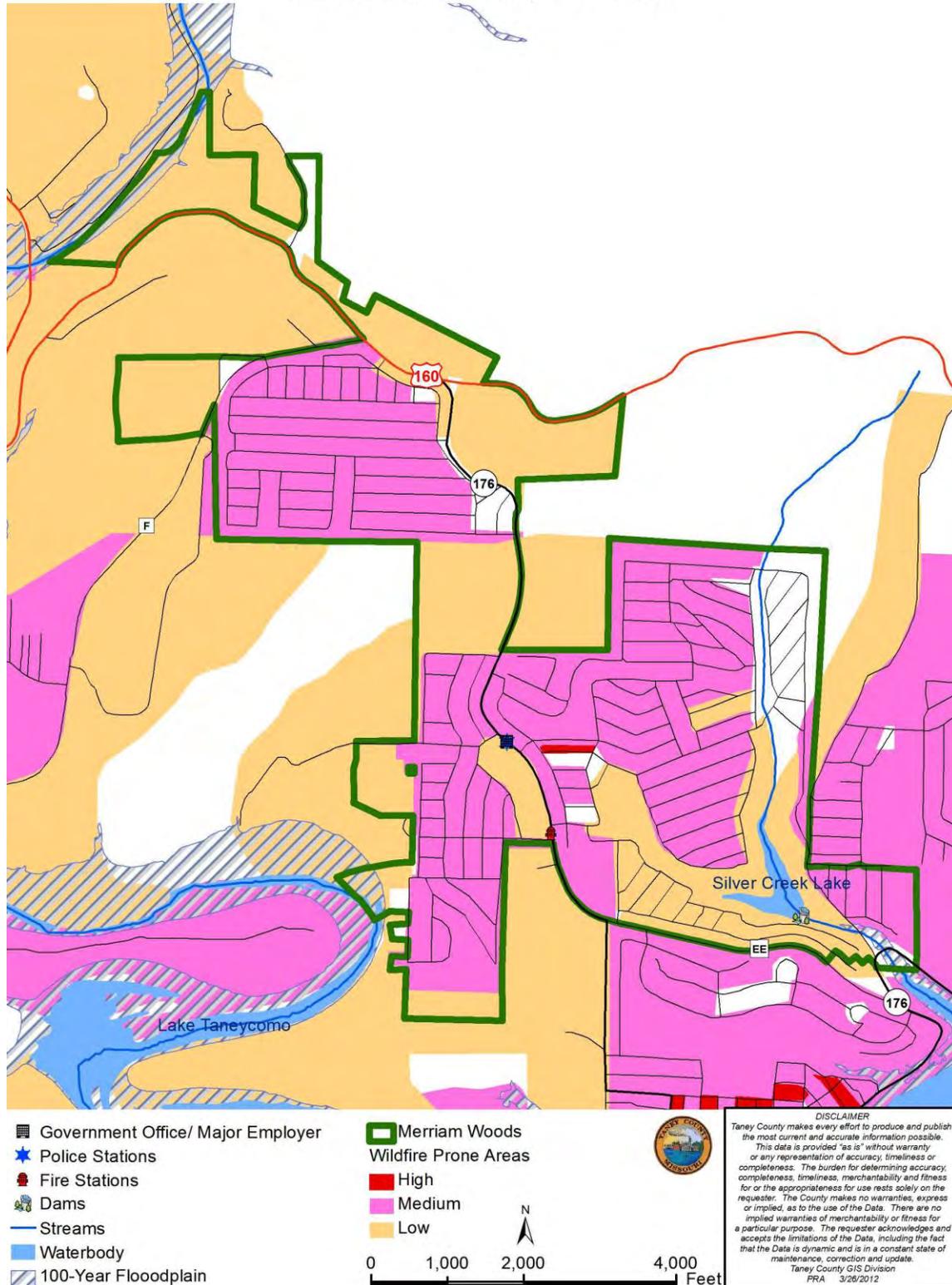
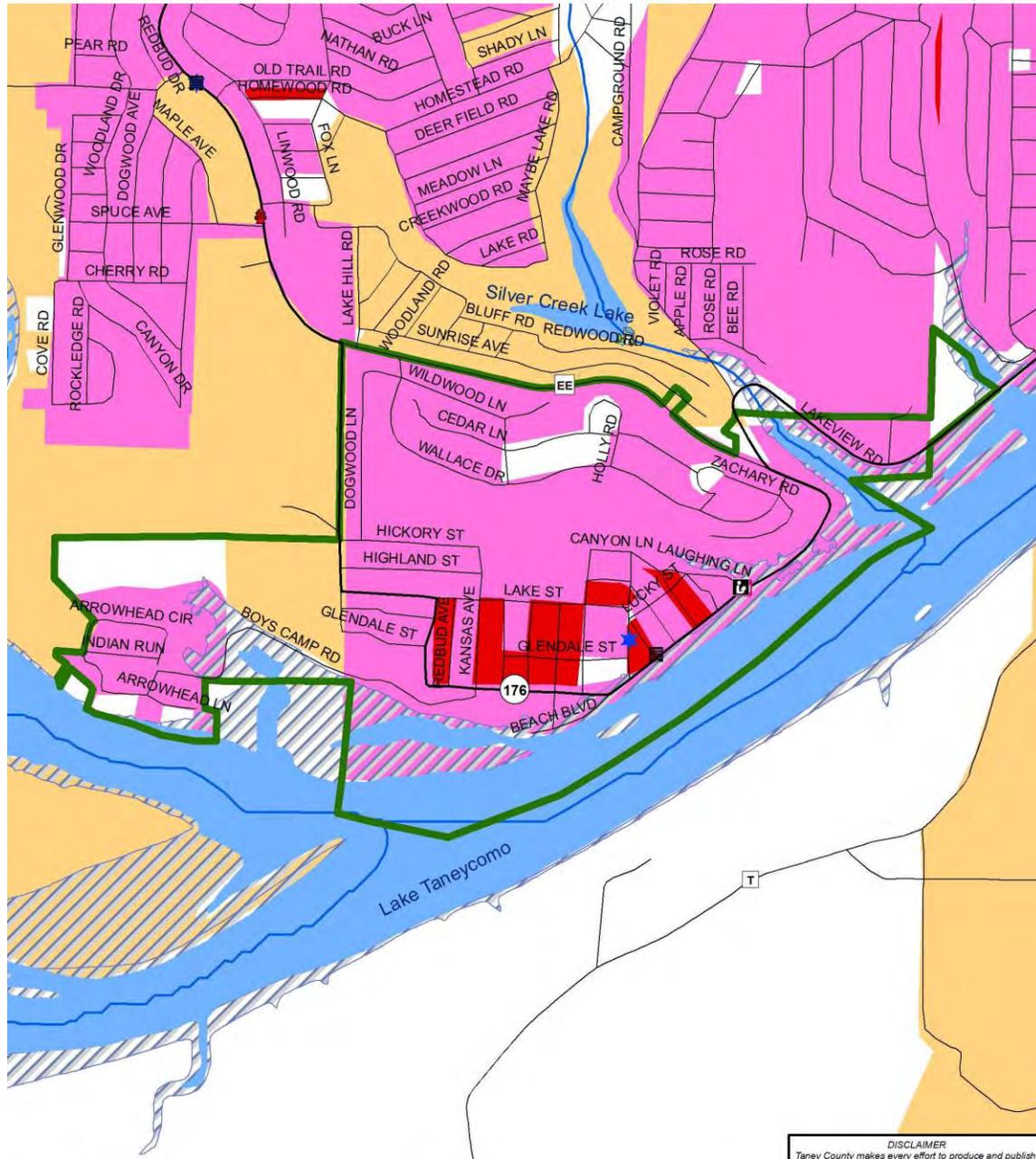


Figure 3-25: Rockaway Beach Hazard Composite Map

**HAZARD COMPOSITE
ROCKAWAY BEACH, MISSOURI**

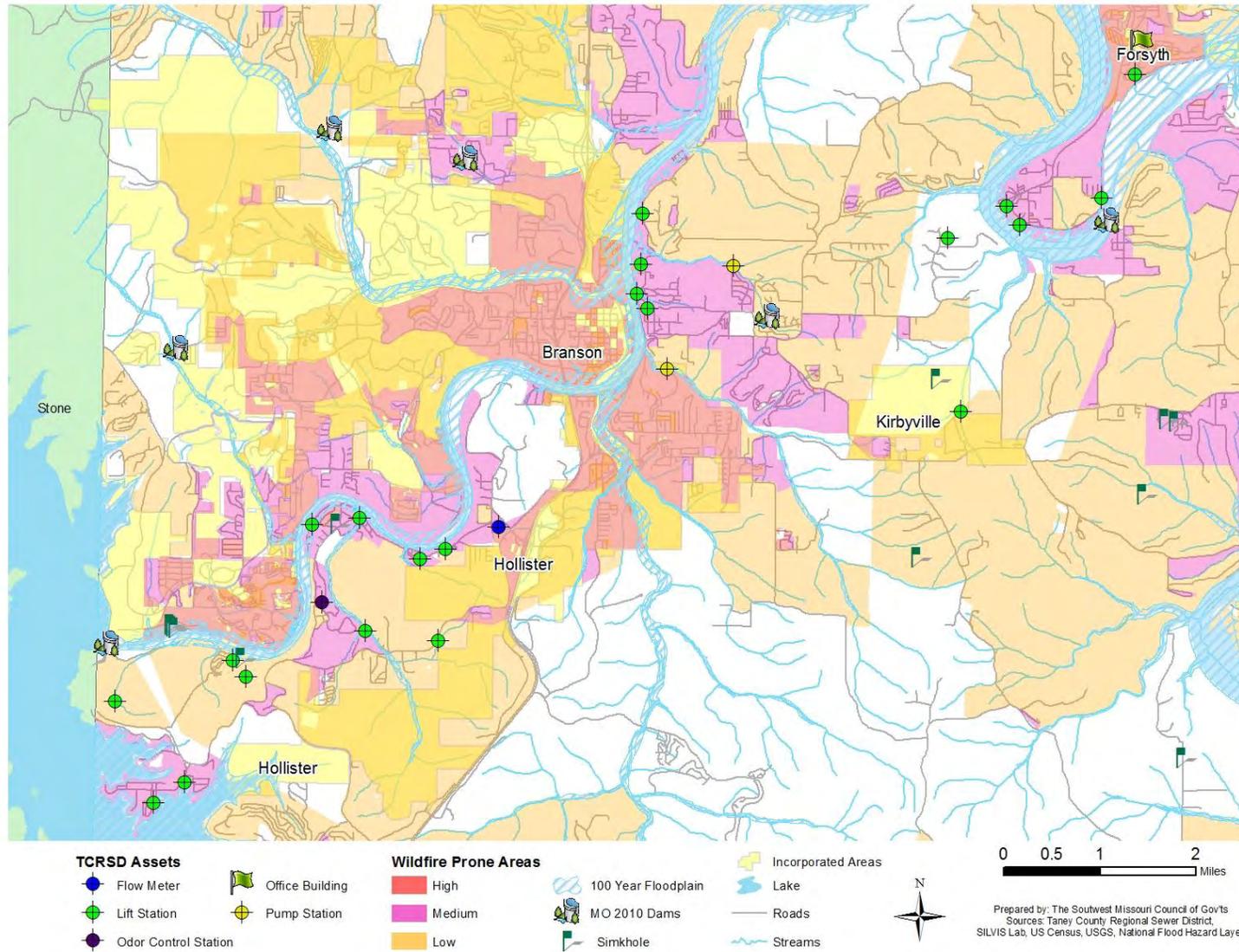


- Libraries
- Post Offices
- Government Office/ Major Employer
- Police Stations
- Fire Stations
- Dams
- Rockaway Beach
- Streams
- Waterbody
- 100-Year Floodplain
- Wildfire Prone Areas**
- High
- Medium
- Low

DISCLAIMER
 Taney County makes every effort to produce and publish the most current and accurate information possible. This data is provided "as is" without warranty or any representation of accuracy, timeliness or completeness. The burden for determining accuracy, completeness, timeliness, merchantability and fitness for or the appropriateness for use rests solely on the requester. The County makes no warranties, express or implied, as to the use of the Data. There are no implied warranties of merchantability or fitness for a particular purpose. The requester acknowledges and accepts the limitations of the Data, including the fact that the Data is dynamic and is in a constant state of maintenance, correction and update.
 Taney County GIS Division
 PRA 3/26/2012



Figure 3-27: Taney County Regional Sewer District Hazard Composite Map



Multi-jurisdictional Risk Assessment

Local hazard mitigation plans must include descriptions of each hazard that can affect the planning area, an overview of each participating jurisdiction's vulnerability to each identified hazard and an estimate of potential dollar losses to vulnerable structures, among other things to develop a multi-jurisdictional risk assessment. The hazard profiles presented in this chapter were used as a basis for the multi-jurisdictional vulnerability assessment. The vulnerability rating for all hazards was then used as a damage factor in estimating potential dollar losses for each respective jurisdiction. This analysis is an attempt to delineate the vulnerability and impact of all natural hazards that can affect each participating jurisdiction in Taney County. The results of the risk assessment were used in developing and prioritizing the comprehensive list of mitigation actions presented in Part 5: Mitigation. The next two sections describe the methods used for the vulnerability assessment and loss estimations in greater detail.

Multi-Jurisdictional Vulnerability Analysis

Vulnerability assessment was the primary focus of the plan advisory committee meeting held on April 10, 2012. Information on past occurrences of hazard events compiled from the hazard profiles, such as; property and crop damage, injuries and fatalities were presented to the meeting attendees of jurisdiction representatives. In addition, hazard composite maps for each incorporated area and county as a whole were on display during the meeting. These maps were meant to depict hazard prone areas for flooding, dam failure, wildfire and sinkholes in relation to critical facilities and schools.

Meeting attendees were also supplied with a an ordinal ranking scale that described vulnerability in three different categories; probability of occurrence, severity of impact and the functional loss of services created from down-time due to hazard occurrence. The evaluation ratings from the 2011 State Hazard Analysis, presented on pp. 3-2 and 3-3 were modified somewhat to measure probability as low, moderate or high. The severity scale is the same used in the 2011 State Hazard Analysis. In addition a scale measuring functional downtime as a number of days in terms of low, moderate and high was introduced as another measure of vulnerability for jurisdictions to consider as presented here:

Probability—The likelihood that the hazard will occur.

- **Low**—The hazard has little or no chance of happening (Less than 1 percent chance of occurrence in any given year.).
- **Moderate**—The hazard has a reasonable probability of occurring (Between 1 and 10 percent chance of occurrence in any given year).
- **High**—The probability is considered sufficiently high to assume that the event will occur (Between 10 and 100 percent chance of occurrence in any given year).

Severity—The deaths, injuries, or damage (property or environmental) that could occur

- **Low**—Few or minor damage or injuries are likely.
- **Moderate**—Injuries to personnel and damage to property and the environment is expected.
- **High**—Deaths and major injuries and damage will likely occur

Functional Loss – The down-time that occurs

- **Low**—Less than 24 hours
- **Moderate**—1 to 4 days
- **High**— 5 days or longer

During the meeting profile information for each hazard was presented and discussed at length. It was explained to the committee that the NOAA data may not be comprehensive, meaning that not all events may have been reported, and that there may be some issues in the method used and the definitions of the classes. Meeting attendees were asked to consider the nature of their entities assets in evaluating vulnerability and the built environment. For example, Taney County Regional Sewer District assets are comprised of lift stations and pump houses; whereas, school districts assets consisted of not only buildings but the students and staff as well. There was a great deal of discussion concerning each hazard and based on this information, jurisdictions were asked to rate the vulnerability of each hazard in their jurisdiction. Many regional hazards defy assigning variability to geographically dispersed communities, such as; severe winter weather, drought and heat wave. A consensus was reached at first to have the same vulnerability rating for all regional events per each jurisdiction; however, each jurisdiction was free to report any level of vulnerability using local knowledge of their assets and hazard occurrences in the community.

Not all jurisdictions had a representative present at the meeting. The plan advisory committee agreed to rate the vulnerability of these entities at the meeting using the information from the hazard profiles, hazard composite maps and local knowledge of jurisdiction characteristics. Representatives from jurisdictions not present were provided with a copy of the meeting presentation slides which was also posted on the SMOG website as well as the vulnerability scales and asked to review their jurisdictions vulnerability rating for each hazard. In some cases ratings were changed based on review and ultimately, all jurisdictions reported vulnerability to all hazards based on the vulnerability scales as low, moderate or high as depicted in the Overall Summary of Hazard Vulnerability by Jurisdiction in Table 3-44.

Table 3-44: Overall Summary of Hazard Vulnerability by Jurisdiction

Hazards	Tornado	Severe T-storm	Flood (Riverine and Flash)	Severe Winter Weather	Drought	Heat Wave	Earthquake	Dam Failure	Wildfire	Sinkhole	EID
Jurisdiction											
Taney County	H	H	H	M	L	M	L	L/H	H	L	M
Municipalities											
Branson	H	H	H	H	L	M	L	M	L	L	M
Bull Creek	M	H	H	M	L	M	L	L	H	L	M
Forsyth	H	H	H	M	L	M	L	L/H	M	L	M
Hollister	H	H	H	M	L	M	L	L	L	L	M
Merriam Woods	H	H	M	M	L	M	L	L	H	L	M
Kirbyville	H	H	L	M	L	M	L	L	L	L	M
Rockaway Beach	H	H	H	M	L	M	L	M	L	L	M
Taneyville	H	H	L	M	L	M	L	L	L	L	M
School Districts											
Bradleyville R-I	H	H	M	L	L	L	L	L	L	L	M
Taneyville R-II	H	H	L	M	L	M	L	L	L	L	M
Forsyth R-III	H	H	M	L	L	L	L	L	L	L	M
Branson R-IV	M	M	L	L	L	L	L	L	L	L	M
Hollister R-V	H/L	H	H	H	M	L	L	L	L	L	M
Kirbyville R-VI	H	H	M	M	L	M	L	M	L	L	M
Mark Twain R-VIII	H	H	M	H	L	L	L	L	M	L	M
Colleges and Other Special District											
OTC	H	H	L	M	L	L	M	L	L	L	M
Taney Co. Regional Sewer District	M	M	H	M	L	L	L	M	M	L	M
Taney Co. Ambulance District	M	M	L	M	L	M	L	L	L	L	M

The second component of the risk assessment is a vulnerability assessment based on estimates of potential loss by jurisdiction. This assessment defines vulnerability in terms of the general type and number of existing buildings and critical facilities located within each jurisdiction. The estimates of potential loss are based on a percentage of damage relating to the threat level developed in the risk identification and analysis by jurisdiction and summarized in the Overall Summary of Hazard Vulnerability by Jurisdiction in Table 3-44.

Vulnerability Assessment and Estimates of Potential Loss by Jurisdiction

Methodology

The vulnerability assessment further defines and quantifies populations, buildings, critical facilities, and other community assets at risk to natural hazards by jurisdiction. The vulnerability assessment for this plan is based on the methodology described in the FEMA publication *Understanding Your Risks—Identifying Hazards and Estimating*

Losses (2002). This section describes overall vulnerability and estimates potential losses for buildings, infrastructure and critical facilities located in identified hazard areas. The vulnerability assessment was conducted based on the best available data and the significance of the hazard by jurisdiction in Table 3-44. Data to support the vulnerability assessment was collected from the following sources:

- County Assessor's GIS parcel data (appraised valuations)
- Missouri United School Insurance Council
- FEMA's HAZUS-MH loss estimation software
- Insured replacement cost of assets provided by participating jurisdictions
- Existing plans and reports

The methods used to calculate potential losses in dollar amounts vary according to the natural hazard addressed and type of entity or jurisdiction. The methods used to estimate losses for local governments are not the same for school and other special districts. Local government loss estimates were first calculated for identified and profiled hazards that can affect the entire planning area. These hazards include drought, earthquake, extreme heat, tornado/thunderstorms and winter storms. The corresponding values of low, moderate and high for each jurisdiction in the Overall Summary of Hazard Vulnerability in Table 3-44 were converted from low, moderate and high to a damage factor or vulnerability percentage of 1%, %5 and 10% respectively.

The damage factors for individual jurisdictions were applied to a community's inventory of assets by building type. A GIS parcel file with improved residential, commercial and agricultural appraised valuation was the primary source used to create the total replacement costs for these building types and contents. Critical facilities included in the local government loss estimations are the essential facilities listed in Table 3-41, main government buildings public water and wastewater treatment systems. Schools are not included in the local government loss estimates because they are included in the loss estimates for school districts. Day care centers, nursing homes and medical clinics are assumed to have been captured in the total commercial appraised value in the jurisdiction that it is located.

Replacement values for local government critical facilities were based on insured replacement values for buildings and contents provided by local jurisdictions. The corresponding damage factor for each jurisdiction from the Overall Summary of Hazard Vulnerability in Table 3-44 was applied to that jurisdiction's inventory of assets replacement values to create a dollar value of potential losses. Drought and extreme heat are not likely to result in damage to structures but are more likely to affect the contents housed in buildings. Therefore, the damage factors for these two hazards were only applied to the contents values.

After the tables depicting loss estimations for area wide hazards for local governments, local area hazard loss estimates for each participating local government are presented. Local area hazards include dam failure, flooding (riverine and flash), sinkholes and wildfire where certain hazard prone areas can be defined. The loss estimates for local area hazards depict losses to structures in the hazard prone areas only. A brief description of the method used for these hazards is provided here:

- To estimate the losses from the failure of dams a thirty meter buffer of the floodplain up to five miles downstream of all dams was used as a likely

inundation area. Taney County parcels that intersected with the likely inundation areas were used to generate a building count within the hazard area. The numbers of parcels with improved appraised valuations for residential, commercial and agriculture were used to develop the potential dollar losses within affected jurisdictions for this hazard event. Parcel ownership was also used to identify critical facilities within the hazard area.

- Flood loss estimates were developed using a method similar to the one used for dam failure. All parcels situated within 100 feet of the 100 year floodplain were selected to compile building counts by type for each participating municipality and the unincorporated balance of Taney County. It is important to note that this method created building counts for areas well outside the 100 year floodplain but in an effort to depict losses from flash flooding as well. The summed improved valuations for all parcels within 100 feet of the 100 year floodplain would be more prone to flash flooding due to the proximity to natural drainage features in the area.
- Sinkhole loss estimates were established using GIS processes and appraised valuations. A sinkhole point shapefile acquired from MSDIS was used to generate a half-mile buffer around each feature. The buffer layer was designated as the hazard prone areas for sinkholes. The map layer of the sinkhole hazard prone areas was used as an overlay on the parcel data to generate the loss estimates from this hazard by jurisdiction.
- Wildfire loss estimates were created by overlaying the SILVIS lab Wildland Urban Interface census blocks over the parcel data. The WUI census blocks categorized as medium or high interface or intermix were used as the wildfire hazard prone areas. Improved appraised valuations were used to generate building counts and loss estimates for each local government jurisdiction.

School District Loss Estimates

Loss estimates for school districts in Tables 3-66 to 3-74 were developed using Missouri United School Insurance Council (MUSIC) replacement values for school district structures and contents. In a few cases, information for square footage replacement costs from the HAZUS-MH 2.0 software were applied. The Hazard Vulnerability to each identified hazard was self reported by each participating school district through a survey instrument and vulnerability analysis conducted at the plan advisory committee meeting on April 10, 2012. The hazard values were also applied to the number of people in each school district (enrolled students + employees), giving a total number of people affected by each hazard. Lastly, the hazard values were applied to functional downtime to illustrate the impact of school closures due to severe weather.

OTC and other Special Districts Loss Estimates

OTC's Table Rock Campus potential losses were estimated based on future assets being constructed in Hollister. Enrollment and staff have been estimated for the new construction and full operation of the Table Rock Campus. The OTC Table Rock Campus and Taney County Ambulance District and Taney County Regional Sewer District assets are fixed points. In these cases, the potential losses are for assets in the hazard prone areas for the local area hazards and are reflected in Tables 3-75, 3-76 and 3-77, respectively.

Emerging Infectious Disease Loss Estimate

The methodology for calculating the impact of emerging infectious diseases on the 2010 U.S. population totals for local governments and students and staff for school districts is as follows. First, a 30% illness rate was applied to the population. From here, the CDC’s moderate fatality rate was .5%. We applied this .5% fatality rate to the infected population, leaving a column that corresponds to the number of deaths from an illness outbreak. The functional downtime from a public health emergency was considered moderate because the fatality rate was also moderate, see Table 3-78. The vulnerability analysis was not applicable for the sewer or ambulance districts having mainly infrastructure and equipment asset types.

Vulnerability by Type and Number of Future Buildings

Table 3-79 Contains a projection for a future building count for Taney County and incorporated jurisdictions. This projection is based on the population percent change for all entities from 2000 to 2010. This was used as a growth rate for future build out of structures in each jurisdiction by type of material. The proportion each type of structure; wood, steel, masonry, concrete and manufactured, retrieved from HAZUS-MH 2.0 census blocks were used to develop the future estimate. The building material was selected to indicate which of these structure types are more vulnerable and where they are located within the county. The count of some structures may defy recognized development trends. Development regulations for manufactured housing may be more restrictive in the City of Branson that has updated codes and zoning than Taney County which has no adopted building codes.

Critical Facilities and Infrastructure

A critical facility may be defined as one that provides essential public safety or mitigation functions during response or recovery operations. Table 3-45 below gives examples of critical facilities, high potential loss facilities and transportation and lifelines as they are defined for the purposes of this analysis. Table 3-46 describes the number and types of these facilities by jurisdiction. Immediately following Table 3-46 are the potential loss estimates by hazard and by jurisdiction.

The loss estimates are based on the summary of hazard vulnerability by jurisdiction from Table 3-44. Structural loss and the number of people affected is defined as a percentage of the replacement value of buildings and contents or a percentage of the number of people assumed to be present in certain building types. Standard percentages of 1, 5 or 10 were used as damage factors as they correspond to the jurisdictions hazard vulnerability in Table 3-44.

Table 3-45: Critical Facilities, Definitions and Examples		
Essential Facilities	High Potential Loss Failure	Transportation and Lifelines
Hospital and other medical facilities	Power Plants	Railroad and facilities
Police Stations	Dams and Levees	Airports
Fire Stations	Hazardous material sites	Water Treatment facilities
	Schools	Natural gas facilities, Pipelines
	Day Care Centers	Communication facilities
	Nursing Homes	
	Main government buildings	

Source: FEMA HAZUS-MH MR

Table 3-46: Inventory of Critical Infrastructure in Taney County									
	Medical Clinics	Main Gov't. Buildings	Dams	Police Stations	Fire Stations	Schools	911 Station	Nursing Homes	Senior Centers
Bradleyville	1	2	0	0	1	2	0	0	0
Branson	12	8	1	1	7	6	1	2	1
Bull Creek	0	1	0	0	0	0	0	0	0
Forsyth	4	5	0	1	2	4	0	2	1
Hollister	6	5	0	1	2	4	0	1	0
Kirbyville	0	2	0	0	0	0	0	0	0
Merriam Woods	0	1	1	1	1	0	0	0	0
Rockaway Beach	0	2	0	1	0	0	0	0	0
Taneyville	0	0	0	0	1	1	0	0	0
Taney County	0	13	6	1	18	1	1	2	0
Total	23	42	8	6	28	18	0	7	2

Area Wide Vulnerability Assessment Tables for Participating Jurisdictions

Table 3-47		Area Wide Hazard Potential Losses				
Unincorporated Taney County	Hazard Value	Building Types				Totals
	%	Residential (Contents Valued at 50%)	Commercial (Contents Valued at 100%)	Agriculture (Contents Valued at 100%)	Critical Facilities (Contents Valued at 150%)	
Building Only	x	\$1,098,738,145	\$140,521,028	\$8,337,429	\$42,247,325	\$1,289,843,927
Contents	x	\$549,369,073	\$140,521,028	\$8,337,429	\$63,370,988	\$761,598,518
Building and Contents	x	\$1,648,107,218	\$281,042,056	\$16,674,858	\$105,618,312	\$2,051,442,444
Estimated Number of buildings		13,131	895	926	39	14,991
Hazard						
Drought	1%	\$5,493,691	\$1,405,210	\$83,374	\$633,709	\$7,615,984
Earthquake	1%	\$16,481,072	\$2,810,421	\$166,749	\$1,056,183	\$20,514,425
Heatwave	5%	\$27,468,454	\$7,026,051	\$416,871	\$3,168,549	\$38,079,925
Tornado/T-Storms	10%	\$164,810,722	\$28,104,206	\$1,667,486	\$10,561,831	\$205,144,245
Winter Storms	10%	\$164,810,722	\$28,104,206	\$1,667,486	\$10,561,831	\$205,144,245

Table 3-48		Area Wide Hazard Potential Losses				
City of Branson	Hazard Value	Building Types				Totals
	%	Residential (Contents Valued at 50%)	Commercial (Contents Valued at 100%)	Agriculture (Contents Valued at 100%)	Critical Facilities & Contents	
Building Only	x	\$1,034,384,448	\$831,337,013	\$841,569	\$134,550,813	\$1,546,716,599
Contents	x	\$517,192,224	\$831,337,013	\$841,569	\$6,482,707	\$1,105,856,736
Building and Contents	x	\$1,551,576,672	\$1,662,754,026	\$1,683,138	\$141,033,520	\$2,652,573,335
Estimated Number of buildings		5,493	1,787	4	111	7,284
Hazard						
Drought	1%	\$5,171,922	\$8,313,370	\$8,415	\$64,827	\$11,058,566
Earthquake	1%	\$15,515,766	\$16,627,540	\$16,831	\$1,410,335	\$26,525,733
Heatwave	5%	\$25,859,611	\$41,568,850	\$42,078	\$324,135	\$55,292,832
Tornado/T-Storms	10%	\$155,157,667	\$166,275,402	\$168,313	\$14,103,352	\$265,257,334
Winter Storms	10%	\$155,157,667	\$166,275,402	\$168,313	\$14,103,352	\$265,257,334

Table 3-49		Area Wide Hazard Potential Losses				
Village of Bull Creek	Hazard Value	Building Types				Totals
	%	Residential (Contents Valued at 50%)	Commercial (Contents Valued at 100%)	Agriculture (Contents Valued at 100%)	Critical Facilities (Contents Valued at 150%)	
Building Only	x	\$5,406,792	\$195,252	\$20,052	\$82,104	\$5,661,801
Contents	x	\$2,703,396	\$195,252	\$20,052	\$123,156	\$3,011,585
Building and Contents	x	\$8,110,188	\$390,504	\$40,104	\$205,260	\$8,673,386
Estimated Number of buildings		54	2	1	1	56
Hazard						
Drought	1%	\$27,033	\$1,952	\$200	\$1,232	\$30,116
Earthquake	1%	\$81,101	\$3,905	\$401	\$2,053	\$86,734
Heatwave	5%	\$135,169	\$9,762	\$1,002	\$6,160	\$150,578
Tornado/T-Storms	10%	\$811,018	\$39,050	\$4,010	\$20,526	\$867,339
Winter Storms	10%	\$811,018	\$39,050	\$4,010	\$20,526	\$867,339

Table 3-50		Area Wide Hazard Potential Losses				
City of Forsyth	Hazard Value	Building Types				Totals
	%	Residential (Contents Valued at 50%)	Commercial (Contents Valued at 100%)	Agriculture (Contents Valued at 100%)	Critical Facilities (Contents Valued at 150%)	
Building Only	x	\$136,760,023	\$22,246,214	\$857,153	\$11,331,657	\$90,154,842
Contents	x	\$68,380,011	\$22,246,214	\$857,153	\$16,997,485	\$64,032,388
Building and Contents	x	\$205,140,034	\$44,492,428	\$1,714,306	\$28,329,143	\$154,187,231
Estimated Number of buildings		891	119	1	17	1,011
Hazard						
Drought	1%	\$1,367,600	\$222,462	\$8,571	\$169,974	\$640,323
Earthquake	1%	\$2,051,400	\$444,924	\$17,143	\$283,291	\$1,541,871
Heatwave	5%	\$3,419,000	\$1,112,310	\$42,857	\$849,870	\$3,201,615
Tornado/T-Storms	10%	\$20,514,003	\$4,449,242	\$171,430	\$2,832,914	\$15,418,723
Winter Storms	10%	\$20,514,003	\$4,449,242	\$171,430	\$2,832,914	\$15,418,723

Table 3-51		Area Wide Hazard Potential Losses				
City of Hollister	Hazard Value	Building Types				Totals
	%	Residential (Contents Valued at 50%)	Commercial (Contents Valued at 100%)	Agriculture (Contents Valued at 100%)	Critical Facilities (Contents Valued at 150%)	
Building Only	x	\$298,825,504	\$59,915,135	\$437,155	\$11,625,663	\$137,259,799
Contents	x	\$149,412,752	\$59,915,135	\$437,155	\$17,438,495	\$101,918,676
Building and Contents	x	\$448,238,256	\$119,830,270	\$874,310	\$29,064,158	\$239,178,475
Estimated Number of buildings		1,249	157	1	19	1,407
Hazard						
Drought	1%	\$1,494,127	\$599,151	\$4,371	\$174,385	\$1,017,835
Earthquake	1%	\$4,482,382	\$1,198,302	\$8,743	\$290,642	\$2,391,786
Heatwave	5%	\$7,470,637	\$2,995,756	\$21,857	\$871,925	\$5,095,934
Tornado/T-Storms	10%	\$44,823,825	\$11,983,027	\$87,431	\$2,906,416	\$23,917,848
Winter Storms	10%	\$44,823,825	\$11,983,027	\$87,431	\$2,906,416	\$23,917,848

Table 3-52		Area Wide Hazard Potential Losses				
City of Kirbyville	Hazard Value	Building Types				Totals
	%	Residential (Contents Valued at 50%)	Commercial (Contents Valued at 100%)	Agriculture (Contents Valued at 100%)	Critical Facilities (Contents Valued at 150%)	
Building Only	x	\$57,082,895	\$5,084,884	\$706,847	\$0	\$3,630,529
Contents	x	\$28,541,447	\$8,084,884	\$706,847	\$0	\$2,338,021
Building and Contents	x	\$85,624,342	\$10,169,768	\$1,413,694	\$0	\$5,968,550
Estimated Number of buildings		58	20	4	0	62
Hazard						
Drought	1%	\$285,414	\$50,848	\$7,068	\$0	\$23,380
Earthquake	1%	\$856,243	\$101,697	\$14,136	\$0	\$59,685
Heatwave	5%	\$1,427,072	\$254,244	\$35,342	\$0	\$116,900
Tornado/T-Storms	10%	\$8,562,434	\$1,016,976	\$141,369	\$0	\$596,855
Winter Storms	10%	\$8,562,434	\$1,016,976	\$141,369	\$0	\$596,855

Table 3-53		Area Wide Hazard Potential Losses				
Village of Merriam Woods	Hazard Value	Building Types				Totals
	%	Residential (Contents Valued at 50%)	Commercial (Contents Valued at 100%)	Agriculture (Contents Valued at 100%)	Critical Facilities	
Building Only	x	\$30,510,679	\$3,965,360	\$4,047	\$10,674,507	\$45,670,335
Contents	x	\$15,255,339	\$3,965,360	\$4,047	\$2,510,725	\$22,013,475
Building and Contents	x	\$45,766,018	\$7,930,720	\$8,094	\$13,185,232	\$67,683,810
Estimated Number of buildings		827	9	1	11	850
Hazard						
Drought	1%	\$152,553	\$39,653	\$40	\$25,107	\$220,135
Earthquake	1%	\$457,660	\$79,307	\$81	\$131,852	\$676,838
Heatwave	5%	\$762,766	\$198,268	\$201	\$125,536	\$1,100,674
Tornado/T-Storms	10%	\$4,576,601	\$793,072	\$809	\$1,318,523	\$6,768,380
Winter Storms	10%	\$4,576,601	\$793,072	\$809	\$1,318,523	\$6,768,380

Table 3-54		Area Wide Hazard Potential Losses				
City of Rockaway Beach	Hazard Value	Building Types				Totals
	%	Residential (Contents Valued at 50%)	Commercial (Contents Valued at 100%)	Agriculture (Contents Valued at 100%)	Critical Facilities (Contents Valued at 150%)	
Building Only	x	\$29,599,224	\$2,910,445	\$49,499	\$4,118,373	\$25,986,459
Contents	x	\$14,799,612	\$2,910,445	\$49,499	\$6,177,559	\$18,290,843
Building and Contents	x	\$44,398,836	\$5,820,890	\$98,998	\$10,295,932	\$44,277,303
Estimated Number of buildings		424	40	1	4	465
Hazard						
Drought	1%	\$147,996	\$29,104	\$494	\$61,776	\$182,908
Earthquake	1%	\$443,988	\$58,208	\$989	\$102,959	\$442,772
Heatwave	5%	\$739,980	\$145,522	\$2,474	\$308,878	\$914,541
Tornado/T-Storms	10%	\$443,988	\$582,089	\$9,899	\$1,029,593	\$4,427,728
Winter Storms	10%	\$443,988	\$582,089	\$9,899	\$1,029,593	\$4,427,728

Table 3-55		Area Wide Hazard Potential Losses				
City of Taneyville	Hazard Value	Building Types				Totals
	%	Residential (Contents Valued at 50%)	Commercial (Contents Valued at 100%)	Agriculture (Contents Valued at 100%)	Critical Facilities (Contents Valued at 150%)	
Building Only	x	\$21,868,936	\$2,143,265	\$1,067,499	\$160,000	\$5,638,649
Contents	x	\$10,934,468	\$2,143,265	\$1,067,499	\$240,000	\$3,411,858
Building and Contents	x	\$32,803,404	\$4,286,530	\$2,134,998	\$400,000	\$9,050,507
Estimated Number of buildings		157	13	1	1	171
Hazard						
Drought	1%	\$109,344	\$21,432	\$10,674	\$2,400	\$34,119
Earthquake	1%	\$328,034	\$42,865	\$21,349	\$4,000	\$90,505
Heatwave	5%	\$546,723	\$107,163	\$53,374	\$12,000	\$170,593
Tornado/T-Storms	10%	\$3,280,340	\$428,653	\$213,499	\$40,000	\$905,050
Winter Storms	10%	\$3,280,340	\$428,653	\$213,499	\$40,000	\$905,050

Local Area Hazard Potential Losses for Participating Jurisdictions

Table 3-56		Local Area Hazard Potential Losses				
Unincorporated Taney County	Hazard Value	Building Types				Totals
	%	Residential (Contents Valued at 50%)	Commercial (Contents Valued at 100%)	Agriculture (Contents Valued at 100%)	Critical Facilities (Contents Valued at 150%)	
Hazard						
Dam Failure		1%				
Building Only	x	\$452,838	\$158,546	\$1,224	\$0	\$612,608
Contents	x	\$226,419	\$158,546	\$1,224	\$0	\$386,189
Building and Contents	x	\$679,257	\$317,092	\$2,448	\$0	\$998,797
Estimated Number of buildings		5	1	1	0	7
Flooding		10%				
Building Only	x	\$19,006,196	\$820,850	\$247,766	\$55,800	\$20,130,612
Contents	x	\$9,503,098	\$820,850	\$247,766	\$83,700	\$10,655,414
Building and Contents	x	\$28,509,294	\$1,641,701	\$495,532	\$139,500	\$30,786,027
Estimated Number of buildings		179	14	22	1	216
Sinkhole		1%				
Building Only	x	\$1,134,037	\$123,245	\$12,470	\$1,632	\$1,271,384
Contents	x	\$567,018	\$123,245	\$12,470	\$2,447	\$705,180
Building and Contents	x	\$1,701,055	\$246,490	\$24,940	\$4,079	\$1,976,564
Estimated Number of buildings		15	1	2	1	19
Wildfire		10%				
Building Only	x	\$46,715,752	\$3,909,449	\$9,303	\$758,285	\$51,392,789
Contents	x	\$23,357,876	\$3,909,449	\$9,303	\$1,137,427	\$28,414,055
Building and Contents	x	\$70,073,628	\$7,818,898	\$18,606	\$1,895,712	\$79,806,844
Estimated Number of buildings		558	25	1	1	585

Table 3-57		Local Area Hazard Potential Losses				
City of Branson	Hazard Value	Building Types				Totals
	%	Residential (Contents Valued at 50%)	Commercial (Contents Valued at 100%)	Agriculture (Contents Valued at 100%)	Critical Facilities	
Hazard						
Dam Failure		5%				
Building Only	x	\$3,769,375	\$2,874,582	\$19	\$3,048,688	\$9,692,664
Contents	x	\$1,884,687	\$2,874,582	\$19	\$92,542	\$4,851,830
Building and Contents	x	\$5,654,062	\$5,749,163	\$38	\$3,141,230	\$14,544,493
Estimated Number of buildings		25	8	1	2	36
Flooding		10%				
Building Only	x	\$8,399,700	\$7,526,619	\$186	\$714,918	\$16,641,423
Contents	x	\$4,199,850	\$7,526,619	\$186	\$173,177	\$11,899,832
Building and Contents	x	\$12,599,550	\$15,053,238	\$372	\$888,096	\$28,541,256
Estimated Number of buildings		61	22	1	3	87
Sinkhole		1%				
Building Only	x	\$480,017	\$210,290	\$0	\$0	\$690,307
Contents	x	\$240,008	\$210,290	\$0	\$0	\$450,298
Building and Contents	x	\$720,025	\$420,579	\$0	\$0	\$1,140,604
Estimated Number of buildings		6	2	0	0	8
Wildfire		1%				
Building Only	x	\$4,049,836.11	\$1,452,550.77	\$100	\$97,493	\$5,599,980
Contents	x	\$2,024,918.06	\$1,452,550.77	\$100	\$146,240	\$3,623,809
Building and Contents	x	\$6,074,754.17	\$2,905,101.53	\$201	\$243,733	\$9,223,790
Estimated Number of buildings		35	3	1	1	40

Table 3-58		Local Area Hazard Potential Losses				
Village of Bull Creek	Hazard Value	Building Types				Totals
	%	Residential (Contents Valued at 50%)	Commercial (Contents Valued at 100%)	Agriculture (Contents Valued at 100%)	Critical Facilities (Contents Valued at 150%)	
Hazard						
Dam Failure		1%				
Building Only	x	\$0	\$0	\$0	\$0	\$0
Contents	x	\$0	\$0	\$0	\$0	\$0
Building and Contents	x	\$0	\$0	\$0	\$0	\$0
Estimated Number of buildings		0	0	0	0	0
Flooding		10%				
Building Only	x	\$143,810	\$19,168	\$0	\$8,210	\$171,188
Contents	x	\$71,905	\$28,752	\$0	\$12,315	\$112,972
Building and Contents	x	\$215,715	\$47,920	\$0	\$20,526	\$284,161
Estimated Number of buildings		5	1	0	1	7
Sinkhole		1%				
Building Only	x	\$0	\$0	\$0	\$0	\$0
Contents	x	\$0	\$0	\$0	\$0	\$0
Building and Contents	x	\$0	\$0	\$0	\$0	\$0
Estimated Number of buildings		0	0	0	0	0
Wildfire		10%				
Building Only	x	\$1,330,400	\$361,460	\$0	\$0	\$1,691,860
Contents	x	\$665,200	\$361,460	\$0	\$0	\$1,026,660
Building and Contents	x	\$1,995,600	\$722,920	\$0	\$0	\$2,718,520
Estimated Number of buildings		13	2	0	0	15

Table 3-59		Local Area Hazard Potential Losses				
City of Forsyth	Hazard Value	Building Types				Totals
	%	Residential (Contents Valued at 50%)	Commercial (Contents Valued at 100%)	Agriculture (Contents Valued at 100%)	Critical Facilities (Contents Valued at 150%)	
Hazard						
Dam Failure		5%				
Building Only	x	\$0	\$0	\$0	\$0	\$0
Contents	x	\$0	\$0	\$0	\$0	\$0
Building and Contents	x	\$0	\$0	\$0	\$0	\$0
Estimated Number of buildings		0	0	0	0	0
Flooding		10%				
Building Only	x	\$348,501	\$29,842	\$0	\$0	\$378,343
Contents	x	\$174,250	\$29,842	\$0	\$0	\$204,092
Building and Contents	x	\$522,751	\$59,684	\$0	\$0	\$582,435
Estimated Number of buildings		5	1	0	0	6
Sinkhole		1%				
Building Only	x	\$0	\$0	\$0	\$0	\$0
Contents	x	\$0	\$0	\$0	\$0	\$0
Building and Contents	x	\$0	\$0	\$0	\$0	\$0
Estimated Number of buildings		0	0	0	0	0
Wildfire		5%				
Building Only	x	\$3,774,626	\$390,290	\$9,407	\$99,985	\$4,274,308
Contents	x	\$1,887,313	\$390,290	\$9,407	\$149,977	\$2,436,987
Building and Contents	x	\$5,661,939	\$780,580	\$18,814	\$249,962	\$6,711,295
Estimated Number of buildings		53	3	1	1	58

Table 3-60		Local Area Hazard Potential Losses				
City of Hollister	Hazard Value	Building Types				Totals
	%	Residential (Contents Valued at 50%)	Commercial (Contents Valued at 100%)	Agriculture (Contents Valued at 100%)	Critical Facilities (Contents Valued at 150%)	
Hazard						
Dam Failure		1%				
Building Only	x	\$36,497	\$36,708	\$0	\$1,384	\$74,589
Contents	x	\$18,249	\$36,708	\$0	\$2,077	\$57,034
Building and Contents	x	\$54,746	\$73,416	\$0	\$3,461	\$131,623
Estimated Number of buildings		1	1	0	1	3
Flooding		10%				
Building Only	x	\$767,867	\$768,418	\$0	\$265,483	\$1,801,768
Contents	x	\$393,933	\$768,418	\$0	\$398,224	\$1,560,575
Building and Contents	x	\$1,161,801	\$1,536,836	\$0	\$663,707	\$3,362,344
Estimated Number of buildings		12	5	0	1	18
Sinkhole		1%				
Building Only	x	\$0	\$0	\$0	\$0	\$0
Contents	x	\$0	\$0	\$0	\$0	\$0
Building and Contents	x	\$0	\$0	\$0	\$0	\$0
Estimated Number of buildings		0	0	0	0	0
Wildfire		1%				
Building Only	x	\$1,144,666	\$195,899	\$230	\$0	\$1,340,795
Contents	x	\$572,333	\$195,899	\$230	\$0	\$768,462
Building and Contents	x	\$1,716,999	\$391,798	\$460	\$0	\$2,109,257
Estimated Number of buildings		17	1	1	0	19

Table 3-61		Local Area Hazard Potential Losses				
City of Kirbyville	Hazard Value	Building Types				Totals
	%	Residential (Contents Valued at 50%)	Commercial (Contents Valued at 100%)	Agriculture (Contents Valued at 100%)	Critical Facilities (Contents Valued at 150%)	
Hazard						
Dam Failure		1%				
Building Only	x	\$0	\$0	\$0	\$0	\$0
Contents	x	\$0	\$0	\$0	\$0	\$0
Building and Contents	x	\$0	\$0	\$0	\$0	\$0
Estimated Number of buildings			0	0	0	0
Flooding		10%				
Building Only	x	\$0	\$0	\$0	\$0	\$0
Contents	x	\$0	\$0	\$0	\$0	\$0
Building and Contents	x	\$0	\$0	\$0	\$0	\$0
Estimated Number of buildings			0	0	0	0
Sinkhole		1%				
Building Only	x	\$917	\$0	\$69	\$0	\$986
Contents	x	\$459	\$0	\$69	\$0	\$528
Building and Contents	x	\$1,376	\$0	\$138	\$0	\$1,514
Estimated Number of buildings			1	0	1	0
Wildfire		1%				
Building Only	x	\$4,902	\$0	\$0	\$0	\$4,902
Contents	x	\$2,451	\$0	\$0	\$0	\$2,451
Building and Contents	x	\$7,353	\$0	\$0	\$0	\$7,353
Estimated Number of buildings			1	0	0	1

Table 3-62		Local Area Hazard Potential Losses				
Village of Merriam Woods	Hazard Value	Building Types				Totals
	%	Residential (Contents Valued at 50%)	Commercial (Contents Valued at 100%)	Agriculture (Contents Valued at 100%)	Critical Facilities (Contents Valued at 150%)	
Hazard						
Dam Failure		1%				
Building Only	x	\$0	\$0	\$0	\$0	\$0
Contents	x	\$0	\$0	\$0	\$0	\$0
Building and Contents	x	\$0	\$0	\$0	\$0	\$0
Estimated Number of buildings		0	0	0	0	0
Flooding		5%				
Building Only	x	\$6,676	\$0	\$0	\$0	\$6,676
Contents	x	\$3,338	\$0	\$0	\$0	\$3,338
Building and Contents	x	\$10,014	\$0	\$0	\$0	\$10,014
Estimated Number of buildings		1	0	0	0	1
Sinkhole		1%				
Building Only	x	\$0	\$0	\$0	\$0	\$0
Contents	x	\$0	\$0	\$0	\$0	\$0
Building and Contents	x	\$0	\$0	\$0	\$0	\$0
Estimated Number of buildings		0	0	0	0	0
Wildfire		10%				
Building Only	x	\$3,420,841	\$619,049	\$0	\$0	\$4,039,890
Contents	x	\$1,710,420	\$619,049	\$0	\$0	\$2,329,469
Building and Contents	x	\$5,131,262	\$1,238,099	\$0	\$0	\$6,369,361
Estimated Number of buildings		91	2	0	0	93

Table 3-63		Local Area Hazard Potential Losses				
City of Rockaway Beach	Hazard Value	Building Types				Totals
	%	Residential (Contents Valued at 50%)	Commercial (Contents Valued at 100%)	Agriculture (Contents Valued at 100%)	Critical Facilities (Contents Valued at 150%)	
Hazard						
Dam Failure		5%				
Building Only	x	\$250,379	\$69,219	\$0	\$111,000	\$430,598
Contents	x	\$125,189	\$69,219	\$0	\$166,500	\$360,908
Building and Contents	x	\$375,568	\$138,437	\$0	\$277,500	\$791,505
Estimated Number of buildings		4	1	0	1	6
Flooding		10%				
Building Only	x	\$657,790	\$178,558	\$0	\$240,000	\$1,076,348
Contents	x	\$328,895	\$178,558	\$0	\$360,000	\$867,453
Building and Contents	x	\$986,685	\$357,116	\$0	\$600,000	\$1,943,801
Estimated Number of buildings		10	3	0	1	14
Sinkhole		1%				
Building Only	x	\$0	\$0	\$0	\$0	\$0
Contents	x	\$0	\$0	\$0	\$0	\$0
Building and Contents	x	\$0	\$0	\$0	\$0	\$0
Estimated Number of buildings		0	0	0	0	0
Wildfire		1%				
Building Only	x	\$370,518	\$9,853	\$399	\$10,295	\$391,065
Contents	x	\$185,259	\$9,853	\$399	\$15,444	\$210,955
Building and Contents	x	\$555,777	\$19,707	\$798	\$25,739	\$602,021
Estimated Number of buildings		5	17	1	1	24

Table 3-64		Local Area Hazard Potential Losses				
Village of Taneyville	Hazard Value	Building Types				Totals
	%	Residential (Contents Valued at 50%)	Commercial (Contents Valued at 100%)	Agriculture (Contents Valued at 100%)	Critical Facilities (Contents Valued at 150%)	
Hazard						
Dam Failure		1%				
Building Only	x	\$0	\$0	\$0	\$0	\$0
Contents	x	\$0	\$0	\$0	\$0	\$0
Building and Contents	x	\$0	\$0	\$0	\$0	\$0
Estimated Number of buildings		0	0	0	0	0
Flooding		1%				
Building Only	x	\$0	\$0	\$0	\$0	\$0
Contents	x	\$0	\$0	\$0	\$0	\$0
Building and Contents	x	\$0	\$0	\$0	\$0	\$0
Estimated Number of buildings		0	0	0	0	0
Sinkhole		1%				
Building Only	x	\$46,136	\$8,634	\$17	\$1,600	\$56,387
Contents	x	\$23,068	\$8,634	\$17	\$2,400	\$34,119
Building and Contents	x	\$69,204	\$17,267	\$34	\$4,000	\$90,505
Estimated Number of buildings		2	1	1	1	4
Wildfire		1%				
Building Only	x	\$11,754	\$0	\$0	\$1,600	\$13,354
Contents	x	\$5,877	\$0	\$0	\$2,400	\$8,277
Building and Contents	x	\$17,631	\$0	\$0	\$4,000	\$21,631
Estimated Number of buildings		1	0	0	1	2

Potential Loss Estimate Tables for Taney County School Districts

Table 3-65 Asset Inventory for Taney County School Districts				
School District	# of Enrolled Students	# of Buildings	# of Employees	Approx Value
Bradleyville R-1	239	1	35	\$5,408,509
Branson R-IV	4,545	13	343	\$69,876,937
Forsyth R-III	1,213	5	108	\$21,236,000
Hollister R-V	1,439	11	209	\$50,800,367
Kirbyville R-IV	321	2	59	\$10,966,453
Taneyville R-II	200	3	22	\$5,532,494
Mark Twain R-VIII	59	2	8	\$2,341,937
TOTAL	8,016	37	629	\$166,162,697

Table 3-66		Bradleyville R-I School District Vulnerability Assessment			
Hazard	Hazard Value	# of People Affected*	# of Buildings	Property Damage	Functional Loss
Tornado	10%	27	1	\$540,851	> 5 days
Severe Thunder Storms	10%	27	1	\$540,851	> 5 days
Flood	5%	14	1	\$270,425	1 to 4 days
Severe Winter Weather	1%	3	1	\$54,085	< 24 hrs
Drought	1%	3	-	\$27,043	< 24 hrs
Heat Wave	1%	3	-	\$27,043	< 24 hrs
Earthquake	1%	3	1	\$54,085	< 24 hrs
Dam Failure	1%	3	1	\$54,085	< 24 hrs
Wild Fire	1%	3	1	\$54,085	< 24 hrs
Sink Hole	1%	3	1	\$54,085	< 24 hrs
* Enrollment plus staff from DESE Missouri School Directory					

Table 3-67		Branson R-IV School District Vulnerability Assessment			
Hazard	Hazard Value	# of People Affected*	# of Buildings	Property Damage	Functional Loss
Tornado	5%	244	1	\$3,493,847	1 to 4 days
Severe Thunder Storms	5%	244	1	\$3,493,847	1 to 4 days
Flood	1%	49	1	\$698,769	< 24 hrs
Severe Winter Weather	1%	49	1	\$698,769	< 24 hrs
Drought	1%	49	-	\$349,385	< 24 hrs
Heat Wave	1%	49	-	\$349,385	< 24 hrs
Earthquake	1%	49	1	\$698,769	< 24 hrs
Dam Failure	1%	49	1	\$698,769	< 24 hrs
Wild Fire	1%	49	1	\$698,769	< 24 hrs
Sink Hole	1%	49	1	\$698,769	< 24 hrs
* Enrollment plus staff from DESE Missouri School Directory					

Table 3-68		Forsyth R-III School District Vulnerability Assessment			
Hazard	Hazard Value	# of People Affected*	# of Buildings	Property Damage	Functional Loss
Tornado	10%	108	1	\$2,123,600	> 5 days
Severe Thunder Storms	10%	108	1	\$2,123,600	> 5 days
Flood	5%	66	1	\$1,061,800	1 to 4 days
Severe Winter Weather	1%	13	1	\$212,360	< 24 hrs
Drought	1%	13	-	\$106,180	< 24 hrs
Heat Wave	1%	13	-	\$106,180	< 24 hrs
Earthquake	1%	13	1	\$212,360	< 24 hrs
Dam Failure	1%	13	1	\$212,360	< 24 hrs
Wild Fire	1%	13	1	\$212,360	< 24 hrs
Sink Hole	1%	13	1	\$212,360	< 24 hrs
* Enrollment plus staff from DESE Missouri School Directory					

Table 3-69		Hollister R-V School District Vulnerability Assessment			
Hazard	Hazard Value	# of People Affected*	# of Buildings	Property Damage	Functional Loss
Tornado	10%	165	1	\$5,080,037	> 5 days
Severe Thunder Storms	10%	165	1	\$5,080,037	> 5 days
Flood	10%	165	1	\$5,080,037	> 5 days
Severe Winter Weather	10%	165	1	\$5,080,037	> 5 days
Drought	5%	82	-	\$1,270,009	1 to 4 days
Heat Wave	1%	16	-	\$254,001	< 24 hrs
Earthquake	1%	16	1	\$508,004	< 24 hrs
Dam Failure	1%	16	1	\$508,004	< 24 hrs
Wild Fire	1%	16	1	\$508,004	< 24 hrs
Sink Hole	1%	16	1	\$508,004	< 24 hrs
* Enrollment plus staff from DESE Missouri School Directory					

Table 3-70		Kirbyville R-IV School District Vulnerability Assessment			
Hazard	Hazard Value	# of People Affected*	# of Buildings	Property Damage	Functional Loss
Tornado	10%	38	1	\$1,096,645	> 5 days
Severe Thunder Storms	10%	38	1	\$1,096,645	> 5 days
Flood	5%	19	1	\$548,323	1 to 4 days
Severe Winter Weather	5%	19	1	\$548,323	1 to 4 days
Drought	1%	4	-	\$54,832	< 24 hrs
Heat Wave	5%	19	-	\$274,161	1 to 4 days
Earthquake	1%	4	1	\$109,665	< 24 hrs
Dam Failure	5%	19	1	\$548,323	1 to 4 days
Wild Fire	1%	4	1	\$109,665	< 24 hrs
Sink Hole	1%	4	1	\$109,665	< 24 hrs
* Enrollment plus staff from DESE Missouri School Directory					

Table 3-71		Taneyville R-II School District Vulnerability Assessment			
Hazard	Hazard Value	# of People Affected*	# of Buildings	Property Damage	Functional Loss
Tornado	10%	22	1	\$553,249	> 5 days
Severe Thunder Storms	10%	22	1	\$553,249	> 5 days
Flood	1%	2	1	\$55,325	< 24 hrs
Severe Winter Weather	5%	11	1	\$276,625	1 to 4 days
Drought	1%	2	-	\$54,832	< 24 hrs
Heat Wave	5%	11	-	\$138,312	1 to 4 days
Earthquake	1%	2	1	\$55,325	< 24 hrs
Dam Failure	1%	2	1	\$55,325	< 24 hrs
Wild Fire	1%	2	1	\$55,325	< 24 hrs
Sink Hole	1%	2	1	\$55,325	< 24 hrs
* Enrollment plus staff from DESE Missouri School Directory					

Table 3-72		Mark Twain R-VII School District Vulnerability Assessment			
Hazard	Hazard Value	# of People Affected*	# of Buildings	Property Damage	Functional Loss
Tornado	10%	7	1	\$234,194	> 5 days
Severe Thunder Storms	10%	7	1	\$234,194	> 5 days
Flood	5%	3	1	\$115,747	1 to 4 days
Severe Winter Weather	10%	7	1	\$234,194	> 5 days
Drought	1%	1	-	\$11,710	< 24 hrs
Heat Wave	1%	1	-	\$11,710	< 24 hrs
Earthquake	5%	3	1	\$115,747	1 to 4 days
Dam Failure	1%	1	1	\$23,419	< 24 hrs
Wild Fire	5%	3	1	\$115,747	1 to 4 days
Sink Hole	1%	1	1	\$23,419	< 24 hrs
* Enrollment plus staff from DESE Missouri School Directory					

Potential Loss Estimation Tables for OTC and Other Special Districts

Table 3-73		Ozarks Technical Community College – Table Rock Campus Vulnerability Assessment				
Hazard	Hazard Value	# of People Affected*	# of Buildings	Property Damage**	Functional Loss	
Tornado	10%	108	1	\$1,200,000	> 5 days	
Severe Thunder Storms	10%	108	1	\$1,200,000	> 5 days	
Flood	1%	0	-	\$0	< 24 hrs	
Severe Winter Weather	5%	54	1	\$400,000	1 to 4 days	
Drought	1%	11	-	\$40,000	< 24 hrs	
Heat Wave	1%	11	-	\$40,000	< 24 hrs	
Earthquake	5%	54	1	\$600,000	1 to 4 days	
Dam Failure	1%	0	-	\$0	< 24 hrs	
Wild Fire	1%	0	-	\$0	< 24 hrs	
Sink Hole	1%	11	1	\$120,000	< 24 hrs	
*Estimated based on double current enrollment of 502 and estimated staff of 75 full and part time employees. (OTC 2012)						
** Includes estimated contents at 50% of estimated construction cost of \$8,000,000.						

Table 3-74		Area Wide Hazard Vulnerability Percentages				
Taney County Regional Sewer District	Hazard Value	Asset Types				Totals
	%	Pump & Odor Control Stations*	Lift Station	Office Building & Contents	Functional Loss	
Building Only	x	\$531,674	\$1,546,914	\$220,500	-	\$2,299,088
Contents	x	-	-	\$70,000	-	\$70,000
Building and Contents	x	\$531,674	\$1,546,914	\$290,500	-	\$2,369,088
Estimated Number of buildings		4	21	1	-	26
Hazard		Area Wide				
Drought	1%	-	-	\$700	< 24 hrs	\$700
Earthquake	1%	\$5,316	\$15,469	\$2,905	< 24 hrs	\$23,690
Heatwave	1%	-	-	\$700	< 24 hrs	\$700
Tornado/T-Storms	5%	\$26,583	\$77,345	\$14,525	1 to 4 days	\$118,454
Winter Storms	5%	\$26,583	\$77,345	\$14,525	1 to 4 days	\$118,454
		Local Area				
Flooding	10%	\$43,450	\$21,519	\$0	> 5 days	\$64,969
Dam Failure	5%	\$21,725	\$25,510	\$0	1 to 4 days	\$47,235
Wildfire	5%	\$27,083	\$45,109	\$0	1 to 4 days	\$72,192
Sinkholes	1%	\$0	\$2,596	\$0	< 24 hrs	\$2,596

Table 3-75	Taney County Ambulance District Hazard Vulnerability Percentages					
Taney County Ambulance District	Hazard Value	Asset Types				Totals
	%	Ambulance Fleet	Stations (Contents valued at 50%)	Office Building & Contents (Contents valued at 150%)	Functional Loss	
Estimated Value	x	\$850,000	\$2,275,619	\$3,825,000	-	\$6,950,619
Contents	x	-	\$1,137,810	\$5,737,500	-	\$6,875,310
Building and Contents	x	-	\$3,413,429	\$9,562,500	-	\$12,975,929
Number of Assets		11	4	1	-	16
Hazard		Area Wide				
Drought	1%	\$0	\$11,378	\$57,375	< 24 hrs	\$68,753
Earthquake	1%	\$8,500	\$34,134	\$95,625	< 24 hrs	\$138,529
Heatwave	1%	\$0	\$11,378	\$57,375	< 24 hrs	\$68,753
Tornado/T-Storms	5%	\$42,500	\$170,671	\$478,125	1 to 4 days	\$691,296
Winter Storms	5%	\$42,500	\$170,671	\$478,125	1 to 4 days	\$691,296
		Local Area				
Flooding	10%	\$0	\$0	\$0	> 5 days	\$0
Dam Failure	5%	\$0	\$0	\$0	1 to 4 days	\$0
Wildfire	5%	\$0	\$34,483	\$0	1 to 4 days	\$34,483
Sinkholes	1%	\$0	\$0	\$0	< 24 hrs	\$0

Potential Impact for Emerging Infectious Diseases

Table 3-76: Infectious Diseases Loss Estimate				
Jurisdictions	Total Population	Illness Rate (30%)	Case Fatality Rate (.05%)	Functional Downtown
Unincorporated Taney County	30,666	9,200	46	1 to 4 days
Branson	10,520	3,156	16	1 to 4 days
Bull Creek	603	181	1	1 to 4 days
Forsyth	2,255	677	3	1 to 4 days
Hollister	4,426	1,328	7	1 to 4 days
Kirbyville	207	62	1	1 to 4 days
Merriam Woods	1,761	528	3	1 to 4 days
Rockaway Beach	841	252	1	1 to 4 days
Taneyville	396	119	1	1 to 4 days
School Districts				
Bradleyville R-1	274	82	1	1 to 4 days
Branson R-IV	4,888	1,466	7	1 to 4 days
Forsyth R-III	1,321	396	2	1 to 4 days
Hollister R-V	1,648	494	2	1 to 4 days
Kirbyville R-IV	380	114	1	1 to 4 days
Taneyville R-II	222	67	1	1 to 4 days
Mark Twain R-VIII	67	20	1	1 to 4 days
Ozark Technical Community College – Table Rock Campus	1,000*	300	2	1 to 4 days

*Estimated Fall 2012 enrollment and employees

Estimates for Types and Numbers of Future Buildings by Jurisdiction

Table 3-77 Future Development Projection for Structures by Material Type and Jurisdiction									
Jurisdiction	2012 Building Count	New Buildings	Total Structures	% Wood	% Steel	% Masonry	% Concrete	% Manufactured	Future Value
Taney County	14,991	2,833	17,824	9,796	290	3,356	122	4,261	\$1,922,096,140
Branson	7,284	5,376	12,660	7,618	584	3,021	237	1,199	\$3,369,120,989
Bull Creek	56	94	150	71	0	24	0	55	\$19,017,152
Forsyth	1,011	341	1,352	864	27	298	9	154	\$151,069,417
Hollister	1,407	203	1,610	863	28	298	14	407	\$196,800,171
Kirbyville	62	12	74	42	1	15	1	15	\$5,410,131
Merriam Woods	850	461	1,311	665	3	209	0	433	\$88,262,182
Rockaway Beach	465	213	678	348	11	116	2	200	\$47,452,898
Taneyville	171	18	189	102	3	29	0	54	\$7,794,380
Total	26,297	9,549	35,845	20,369	946	7,366	384	6,779	\$5,807,023,460

Part 4: City/County Capability Assessment

Mitigation Management Policies

The Taney County Emergency Management Agency is charged with preparing for disasters. This responsibility includes advising the Taney County Commission on mitigation measures and implementing those measures deemed appropriate by the commission. In general, the county's policies encourage cooperation between the various Taney County agencies and cooperation between county agencies and those of neighboring jurisdictions.

Existing Plans

Taney County Emergency Operations Plan

The *Taney County Emergency Operation Plan* (EOP) is approved by the County Commission and identifies facilities and resources that require special security during a disaster, promotes the development and maintenance of mutual aid agreements with nearby agencies, requires participation in drills and exercises, identifies vulnerabilities within the county, and includes an evacuation plan. The EOP includes all-hazard mitigation measures.

Taney County Master Plan

The *Taney County Master Plan*, developed and adopted by the county in 1999, sets forth goals, objectives and policies to better manage growth and development in the unincorporated areas of the county. One of the main goals is to encourage development in and around already-developed areas to provide more efficient access to adequate roadways, utilities, and emergency services.

Taney County Development Guidance Code

Adopted by the Taney County Commission in November 1984, the purpose of these codes is to manage the growth and development of the unincorporated areas of Taney County so as to achieve the objectives authorized by law according to RSMo 64.815, RSMo 64.825, and RSMo 64.850. The Development Guide Code is a performance-based zoning and subdivision regulation; the Code is reviewed on an annual basis and updated as determined necessary. The most recent update was in May 2012.

Community Health Assessment for Taney County

The purpose of the 2008 assessment process was to provide a report to the community regarding progress that has been made on previously identified priorities and to review current trends that may require action to protect the health of the public. The previous health assessment, in 2005, identified three priority areas that were presented to the community to increase awareness and stimulate public health efforts. The priority areas focused on tobacco use, obesity and family/domestic violence. From these priorities, community meetings and groups met and early progress toward addressing these issues was observed.

State Transportation Improvement Plan (STIP)

The STIP is the Missouri Department of Transportation's plan outline for transportation system improvements programmed for a five year period. Programmed improvements in the 2011-2015 relevant to Taney County include various pavement improvements on Rte. 76, at the Rte. 65/Rte. 160 interchange, and on the ramps at interchanges with Rtes. 106, F, Bee Creek Road, 248 and 76. There will be a replacement of interchange ramps at Rte. 248 (Shepherd of the Hills Expressway/ Branson Landing Blvd. as well as bridge improvements over Bull Shoals Lake.

Taney County Wastewater Master Plan

The *Taney County Wastewater Master Plan*, developed for the Taney County Regional Sewer District in 1999, addresses the current and projected wastewater treatment needs in sixteen of the twenty-one watersheds in Taney County, excluding the watershed areas within the cities of Branson, Hollister, and Forsyth. The Taney County Regional Sewer District is also working on relocation and raising a sewer lift station that flooded in 2008 and 2011.

City of Branson Comprehensive Plan

As of March 2012, they are in the final review stage for their 2030 Comprehensive Plan.

City of Forsyth Comprehensive Plan

Forsyth adopted their Comprehensive Plan in January 2003 and updated for 2010/2011. This plan is used as a guide and as a legal basis in making land use and zoning decisions

City of Rockaway Beach Comprehensive Plan

Rockaway Beach adopted a 2010 Comprehensive Plan in November. The purpose of the plan is to provide a policy guide for the growth and future development of the city.

City of Hollister Comprehensive Plan

Hollister adopted their most recent Comprehensive Plan in 2005.

School Districts

Emergency procedures are in place for many of the school districts located within Taney County. They conduct regular emergency drills for tornadoes, fires, earthquakes, and other severe weather events. In addition, many districts have evacuation plans in place. Kirbyville RVI, Taneyville RII, and Forsyth RIII have district-wide automated messaging systems that can notify employees, students, and parents of any emergencies.

Mitigation Programs

The mitigation programs outlined below are primarily outlined in the *Taney County Emergency Operations Plan* (EOP). The county does have a floodplain ordinance, as required by the National Flood Insurance Program (NIFP). It is the intent of these mitigation programs to deal with hazards that can be potentially catastrophic to life and property and to attempt to minimize those losses.

Tornado

The National Weather Service monitors atmospheric conditions and issues weather forecasts. When threatening conditions are detected, the Weather Service will issue either a tornado watch to indicate when conditions are favorable for tornadoes to develop, or a tornado warning when a tornado is sighted or indicated by radar. The burden of heeding warnings and taking proper action rests with individual communities and citizens. Local Emergency Management Agencies have developed effective community warning systems.

Riverine Flooding

Taney County Emergency Management Operations has established a plan for the onset of floods. It contains an extensive plan and management practices for any flood hazards that may affect the entire county or smaller secluded areas.

- a. Protect human life and property.
- b. National Weather Service will give advanced notice of flooding conditions to the public to minimize loss of life and property.
- c. Establish and designate areas to be evacuated.
- d. Local authorities will take immediate steps to warn and evacuate citizens.
- e. Local authorities will commit available resources before requesting assistance from the next higher level of government.
- f. Establish a secure perimeter to limit access to looters and sightseers.
- g. Establish shelters and relief services for victims.
- h. Establish a support system for those victims, whom are returned and require assistance with the reestablishment of their homes.

Severe Winter Weather

Utility companies in Taney County engage in right of way tree trimming and brush removal programs to mitigate problems of downed lines and poles that may be caused by high winds or severe winter weather (ice and snow).

Heat Wave/Extreme Cold

The National Oceanic and Atmospheric Administration (NOAA) outlines safety measures that can be taken and are broadcast during times of excessive heat/cold from local and regional radio and television stations.

Drought

The National Oceanic and Atmospheric Administration provides the first warning to the onset of drought. During times of drought, the NOAA monitors precipitation conditions throughout the United States. The NOAA also issues guidelines for water conservation, agriculture, and livestock preservation. It is the responsibility of local and regional governmental agencies to alert the public to the onset of drought and conservation practices to alleviate further water depletion.

Earthquake

The overall organization and emergency responsibilities for Taney County Emergency Management operations are provided in the Emergency Operations Plan and its annexes. In the event of an earthquake emergency such responses will be established:

- a. Save lives and eliminate hazards which pose an immediate threat.
- b. Establish reliable lines of communication between county and state emergency management agencies.
- c. Mobilize emergency medical services.
- d. Maintain access to and from damaged areas (i.e., debris removal).
- e. Establish procedures for resources management.
- f. Mobilize search and rescue operations.
- g. Evacuate hazardous structures (after inspection).
- h. Maintain public health (potable water and disease control).
- i. Establish and maintain public works (restore utilities).
- j. Open shelters and establish feeding centers for persons unable to return home.

Dam Failure

There are eight dams located in Taney County. The largest is Table Rock Dam, an earth and rock-fill embankment dam, which is maintained by the U.S. Army Corps of Engineers in Little Rock. A failure of the Table Rock Dam would cause a major flash flood along the White River basin west and south of the dam site. This could affect thousands of residents and visitors, depending on the season.

A second dam down river, Ozark Beach Dam (also known as Powersite Dam), owned and operated by the Empire District Electric Company, would also be affected if there is a failure from Table Rock Dam.

Because dam failure is seldom sudden, it is assumed that the residents in the inundation pathway along the river basin would receive adequate warning. The warning for Table Rock would come from the project office located above the dam or the 911 service at the Taney County Sheriff's Office in Forsyth. They, in turn, would notify the public in the danger area with the assistance of the rangers and local emergency responders. The Empire District Electric Company also has an Emergency Action Plan in place responsive to dam failure of the Ozark Beach or Table Rock dams.

There are also six earthen dams located in Taney County. The owners of the dams are responsible for providing early warnings of problems at their dams, for developing effective emergency action plans, and for coordinating these plans with local officials. The Water Resources Program within the MDNR provides technical assistance and informational resources for all dam owners.

Wildfire

The Missouri Department of Conservation works closely with each county by supplying support to prevent wildfires. This support is an outreach program mainly to private owners to carefully maintain their grounds. The program teaches safe practices for leaf and rubbish burning and the clearance of the ground around wooded areas. There are certain types of grasses and trees that are more resistant to fires and species diversity is encouraged.

Capabilities and Responsibilities

The *Taney County Emergency Operations Plan* has a specific outline of emergency functions for most of the departments within local government. This is in addition to their day-to-day duties. The emergency management organization has set up the following functional lines and definitions:

- **Direction and Control:** To direct and control emergency support personnel from a centralized facility in the event of an emergency.
- **Communications and Warning:** To provide information and guidance concerning available communications and warning capabilities.

- **Emergency Public Information:** To provide the timely release of accurate information in the event of a disaster or emergency.
- **Damage Assessment:** To organize existing personnel and communities so that repair, outside assistance, safety and mitigation efforts are carried out in a timely manner.
- **Law Enforcement:** To organize local law enforcement personnel and develop procedures that will enable Barry County and its municipalities to provide law enforcement services regardless of the situation.
- **Fire and Rescue:** To organize local firefighting resources and establish procedures that will enable these resources to meet demands of a disaster situation.
- **Resource and Supply:** To give local officials the ability to maintain a continuous inventory of resources and to allocate these resources in a prompt and orderly manner.
- **Public Works:** To organize public works resources so that they will be able to perform the many tasks essential to an effective emergency (disaster) response.
- **Evacuation:** To establish an organization and procedures for evacuation operations.
- **In-place Shelter:** To establish an option of sheltering residents in place to protect them from the effects of a disaster that threatens Barry County.
- **Reception and Care:** To provide for the temporary reception and care of people displaced or evacuated from their residence because of an emergency or disaster situation.
- **Health and Medical:** To establish an organization and procedure to provide needed health and medical services following a disaster of any type.

The EOP also has functions for Hazardous Materials Response and Terrorism that are not covered in this mitigation plan. The subsequent sections outline the responsibilities and capabilities of local governments and private and public organizations in Taney County.

County Commission/Mayor

The primary responsibility of the County Commission/Mayor is Direction and Control. Under Direction and Control, the Presiding Commissioner/Mayor implements the Emergency Operations Plan, activates response personnel, and directs emergency response operations. They are also responsible for Emergency Public Information. They either prepare and release public information themselves or designate a Public Information Officer to be responsible for public information.

Law Enforcement

The Sheriff's Department/Municipal Police have the primary responsibilities for Law Enforcement, Communications and Warning, and Evacuation. These include, but are not limited to, maintaining law and order, providing protection/security for critical facilities and resources (EOC) and at the disaster site (private and public property), limit access to the disaster scene and/or evacuated area, and provide law enforcement in reception centers, lodging and feeding facilities, and emergency shelters. Law enforcement must also provide communications and assist in the dissemination of warning to the public (mobile units), provide traffic and crowd control, and assist in the evacuation of disaster areas. Due to security reasons, the specific capabilities and staffing of law enforcement are detailed only in the Emergency Management Director's Manual.

Several organizations provide law enforcement in Taney County and share the burden of all of these tasks. These entities include:

- Taney County Sheriff's Department
- Missouri Highway Patrol
- Missouri Water Patrol
- Missouri Department of Conservation
- Branson Police Department
- Forsyth Police Department
- Rockaway Beach Police Department
- Merriam Woods Police Department
- Surrounding Law Enforcement Agencies: Stone County Sheriff's Office, Christian County Sheriff's Office, Ozark County Sheriff's Office, Douglas County Sheriff's Office

County Engineer

The County Engineer has the primary responsibility of Public Works. The responsibilities include, but are not limited to, overall administration of the Public Works service for Taney County, clearing roads and assisting in restoring utilities to facilitate emergency operations, participating in cleanup and recovery operations, and assisting in search and rescue operations. Due to security reasons, the specific capabilities of Public Works are detailed only in the Director's Manual.

Fire Departments/Districts

The Fire Departments/Districts have the primary responsibility for Fire and Rescue. This includes, but is not limited to, controlling fires during emergency operations, assisting as medical first responders, and directing search and rescue operations for victims. They should also participate in tests, exercises, and drills and develop fire safety programs, to include disaster situations, and present them to the public. The fire departments/districts are outlined with their specific capabilities and staffing in the Emergency Management Director's Manual.

Emergency Management Director

The Emergency Management Director (EMD) for Taney County has the primary responsibilities for Emergency Operations, In-place Shelter, and Reception and Care. The EMD is responsible for the coordination of all emergency management activities and EOC (emergency operations center) operations, ensuring proper functioning of the EOC during emergency operations, and acting as liaison with other local, state, and federal emergency management agencies.

In-place shelter responsibilities include, but are not limited to, conducting public awareness programs and working with local officials to develop in-place protective shelter plans. The EMD is responsible for seeing that necessary plans and procedures are developed to ensure a capability for Reception and Care operations, which will include coordinating Reception and Care operations with the American Red Cross.

County Health Department

The County Health Department has the primary responsibility of Health and Medical. This includes, but is not limited to, identifying clinics, nursing homes, and other facilities (i.e., school gyms) that could be expanded into emergency treatment centers for disaster victims, instituting public health measures in reception centers, public shelters, and at the disaster scene, and distributing antidotes, drugs, vaccines, etc., to shelters when opened to the public. They need to develop and conduct programs for the public on first-aid and public health practices and provide public health information to the PIO for dissemination to the public. They should also train health and medical personnel and volunteers in special procedures.

The Local Public Health Emergency Plan (LPHEP) outlines the actions to be taken by the Local Public Health Agency (LPHA) in conjunction with local government officials and cooperating private and volunteer organizations. A local public health emergency can best be described as an event, which threatens the safety and well being of a number of people in an area, i.e. bio-terrorism incident, anthrax, smallpox, pandemic influenza, etc. The plan has been developed to:

- Reduce the vulnerability of citizens to any disasters that creates a local public health emergency.
- Establish capabilities for protecting citizens from the effects of a local public health emergency.
- Respond effectively to the actual occurrence of disasters.
- Provide for recovery in the aftermath of any local public health emergency.

County/City Clerk

The County/City Clerk has the primary responsibility of Resource and Supply. This includes, but is not limited to, identifying potential resource needs, locating the required resources in the community or finding their nearest location, and maintaining these resource lists. They need to coordinate activities with other response agencies (i.e., Red Cross) to ensure a coordinated and efficient allocation and with the PIO (public information officer) in informing the public of the locations of available assistance. They

need to maintain records of services rendered, resources utilized and their costs, unused resources, etc. for the emergency.

County Assessor

The County Assessor has the primary responsibility of Damage Assessment. This includes, but is not limited to, maintaining a file of maps, pre-disaster photos, tax assessments, etc., conducting private and public damage assessments, accompanying/assisting state and federal damage assessment teams, and assisting in preparing damage repairs reports to receive federal aid.

County Coroner

The County Coroner has no primary responsibility but is to assist in the support of Health and Medical. The coroner must develop/maintain emergency mortuary plans and procedures, coordinate with the Missouri Funeral Directors Association, and provide a list of the deceased.

Ambulance Districts and Hospitals

The Taney County Ambulance District does not have a primary responsibility but is to aid in the support of Health and Medical by being responsible for first responder emergency medical care including initial triage, emergency medical treatment, and patient transport. Taney County is supported by one hospital, Skaggs Community Health Center located in Branson. This hospital has developed emergency plans in accordance with state and federal regulations. Such plans are tested and exercised regularly.

The ambulance district operates two mass casualty trailers to provide large scale medical support. Both trailers are equipped to provide treatment for potentially 100 patients in a large scale accident. The district also maintains a Mobile Medical Hospital, modular and scalable for rapid response to support any hospital within the state.

Utility Companies

The utility companies do not have a primary responsibility but help in the support of Public Works. The private utility companies are responsible for the direction and control of the services they provide to their customers. The utility companies serving Taney County do maintain their own emergency plans.

American Red Cross

The Red Cross responds and provides emergency assistance to evacuees, disaster victims and emergency workers involved in a disaster or threatened by a disaster. Assistance may be in the form of fixed or mobile feeding stations, clothing, mass or individual shelter, cleaning supplies, comfort kits, first aid, supplementary medical care or blood and blood products. As soon as families are able to resume living as families rather than in shelters, they are assisted with their verified urgent needs—rent, beds and bedding, necessary furniture, fuel, cooking and eating utensils, health needs,

Outdoor Warning sirens

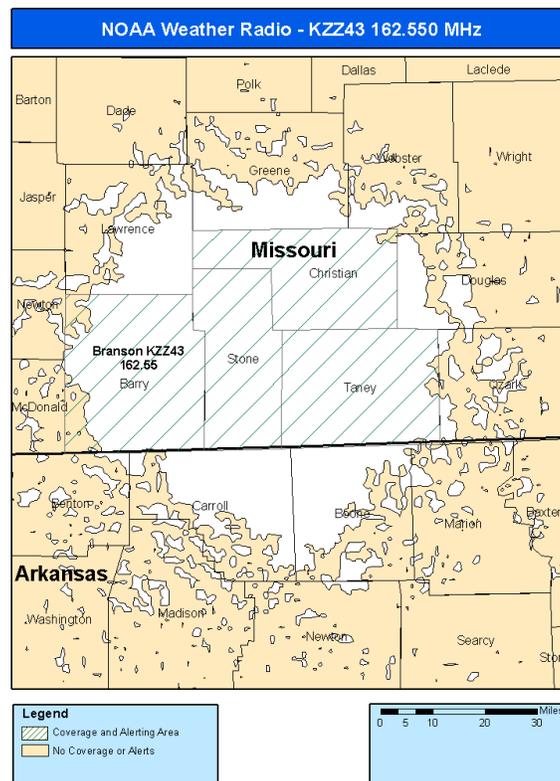
There are presently 31 outdoor warning sirens in Taney County. These sirens can be activated on the authority of the Fire or Police Chief of the community, the Taney County Sheriff, or the Emergency Management Director. Warning in these communities and the remaining areas of Taney County will be supplemented with mobile public address operations by the Sheriff's Office, municipal police and local fire departments. Radio and television stations will also broadcast warnings.

- The City of Branson has 23 sirens that are radio activated by the fire and police departments.
- The City of Forsyth has four (4) sirens that are radio activated by the fire and police departments.
- The City of Rockaway Beach has one siren that is manually activated.
- The Village of Taneyville has one siren that is manually activated.
- College of the Ozarks (Point Lookout) has one siren that is manually activated.
- Merriam Woods has one radio activated by Forsyth.

NOAA Weather Radios

Figure 4-1 shows the NOAA weather radio coverage and alerting areas for the NOAA transmission station in Branson. The coverage statistics and maps are calculated using a computer model that is sensitive to antenna performance in local conditions. The white area in the figure includes nearly all of Taney County. The cross hatching indicates alerting areas.

Figure 4-1: NOAA Radio Transmission Area



Source: <http://www.nws.noaa.gov/nwr/Maps/PHP/site.php?State=MO&Site=KZZ43>

Weather Spotters

Taney County has approximately 100 weather spotters, including firefighters from the various fire protection districts or departments, law enforcement, EMTs, ham radio operators, and citizens within the county. Weather spotter training is conducted annually. Information on weather spotters is included in the Director's Manual.

Assessment of Policies and Programs

Commitments to a Comprehensive Mitigation Program

Taney County and incorporated areas executed resolutions adopting the *2005 Plan* as a commitment to the mitigation. This commitment was demonstrated when the cities of Forsyth and Merriam Woods joined the NFIP. Participation in the NFIP requires adoption of flood plain management regulations. The only communities yet to join the NFIP are Kirbyville and Taneyville where there are no special flood hazard areas. All county and municipal floodplain management ordinances, and land development codes reduce some of the county's vulnerability to natural disasters. Branson, Hollister and Rockaway Beach have updated or adopted comprehensive plans since 2005. All communities that maintained building codes in the *2005 Plan* updated to more recently published standards. However, Taney County, Kirbyville and Bull Creek have not adopted buildings codes. Taney County is highly vulnerable to tornadoes, severe thunderstorms, flooding and severe winter weather. Participation in the NFIP and restrictions on flood plain development are certainly the greatest mitigation actions in protecting the lives of county residents. Taney County has made progress towards mitigation and is continuing efforts to decrease the impact of a natural hazard. School districts and other special districts have been added as participants in the *Plan* expanding the commitment to the mitigation program.

Laws, Regulations and Policies Relating to Development in Hazard-Prone Areas

The Taney County Commission has established a floodplain management program to maintain the community's eligibility for participation in the National Flood Insurance Program. The county contracts with the Planning and Zoning Administrator to administer the program. The county's floodplain management ordinance specifies the requirements for development in the identified special flood hazard areas. It states that anyone building in the flood hazard area must first obtain a floodplain permit. It also sets forth penalties for violation of the ordinance.

Taney County does require building permits. When a permit is requested the Planning and Zoning Department is contacted and asked to survey the land. While conducting the survey the administrator has the opportunity to review the building's location in, near, or around a floodplain. Once that has been established, the administrator can make recommendations as to whether the proposed building meets the requirements of the Floodplain Management ordinance.

Laws, Regulations and Policies Related to Hazard Mitigation in General

Taney County's Development Guidance Code, which are reviewed and amended as determined necessary on an annual basis, provide for general regulation of land development location and intensity of development in the unincorporated portions of the county, including requirements for stormwater drainage and other infrastructure. Several of the incorporated communities have adopted zoning and subdivision regulations which contain general provisions related to hazard mitigation. Communities such as Merriam Woods are in the process of updating their land development codes to better manage the demands of growth.

How the County Determines Cost-Effectiveness and Manages/Implements Programs

Cost-effectiveness is considered on a case-by-case basis, dependent upon the scope of damages, estimated savings in future hazard events, the type of mitigation project, and the probable hazard to human life in future events. For example, FEMA-funded mitigation projects must meet the benefit/cost analysis criteria required by FEMA.

Current Criteria Used to Prioritize Mitigation Funding

Mitigation funding priority is primarily based upon a combination of anticipated damage and injury/death impacts. It is a county priority to enable access to infrastructures and emergency measures in areas of higher population concentration.

Integration of Hazard Mitigation with the City/County Department's Plans

The *Taney County Emergency Operations Plan* outlines the departments and entities responsible for implementing plans, actions and specific duties prescribed in the EOP. The Taney County Commission has overall responsibility for integration of hazard mitigation into county plans. The Taney County Emergency Management Director advises the Commission on hazard mitigation. Several communities have emergency management coordinators that are responsible for advising their governing boards on hazard mitigation. In addition, the Local Emergency Planning Committee (LEPC) meets bi-monthly. The Taney County EMA committee includes representatives from the fire district, law enforcement, emergency medical and health organizations. The cities rely on the county's EOP.

Mitigation Funding Options Including Federal, State, Local, and Private Sources

Taney County and the municipalities have historically relied upon federal disaster declarations in cases of heavy widespread damages. Funding sources have included FEMA, SEMA, the Missouri Department of Natural Resources and Department of Economic Development (DED), and various other grant programs. In addition, investments in infrastructures that have mitigating effects have been funded from sources such as local tax revenues.

How County Government Meets Requirements for Mitigation Funding

Taney County primarily meets requirements for hazard mitigation funding through its participation in the National Flood Insurance Program. The county's *Emergency Operations Plan*, floodplain management ordinance, and Development Guidance Code (zoning and subdivision regulations) include various measures addressing floodplain development, sewer and water installations, roadway construction, and stormwater management.

City/Town/Village Policies and Development Trends

Table 4-1 notes the plans and regulations related to hazard mitigation that have been adopted by the municipalities in Taney County. Of the nine communities in the county, all but two have adopted subdivision regulations. Branson, Forsyth, Hollister, Kirbyville, Merriam Woods, Rockaway Beach, and Taneyville have adopted other regulations as well, including building codes, zoning regulations, and stormwater regulations. The Village of Merriam Woods also has earthquake design regulations. The communities of Branson, Forsyth, Hollister, Merriam Woods, and Rockaway Beach have adopted comprehensive plans. Branson, Bull Creek, Hollister, Rockaway Beach, Forsyth and Merriam Woods are all members of the NFIP as of July 2012.

Substantial new development has occurred over the past decade along the major highway corridors in Taney County, including U.S. Highway 65 and Missouri Highways 76 and 160. Most major commercial developments are located in or near the cities. Much of the new development in the unincorporated areas is residential development, including both single family residential uses and multi-family. Condominium development is also included in the multi-family category. Scattered residential uses are also located along the major and secondary roads, with increasing levels of development occurring in the Merriam Woods and Bull Creek areas, north of Branson and in the Hollister area along Highway 65.

National recognition of the Branson area and the opening of many new music theatres in the early 1990s have made tourism the economic mainstay in Taney County. Today, Branson has over 40 theaters with more than 60,000 theater seats, 207 lodging facilities with over 18,000 rooms and 200 restaurants with over 38,000 seats. At any given night, there may be up to 20,000 visitors and employees located in the various hotels and theaters on Branson's main arterial road.

How Local Risk Assessments are Incorporated into Local Planning

The Taney County Emergency Operations Plan outlines the departments and entities responsible for implementing plans, actions and specific duties prescribed in the EOP. The governing bodies of each participating jurisdiction are responsible for integration of hazard mitigation into local plans.

The most notable local planning mechanism is a community's comprehensive or master plan. The purpose of the comprehensive plan is goal oriented document that serves as a policy guide for the future growth and physical development of the community. The plan itself is not law but serves as the foundation for further ordinances and regulations necessary to implement the plan. The mechanisms for implementing the comprehensive

plan are zoning ordinances, subdivision regulations, building codes, storm water and floodplain management regulations and capital improvement programs.

The review, revision, update and adoption of local government land use controls, as listed above, serve as the process by which multi-jurisdictional risk assessments are integrated into local planning mechanisms that are ultimately administered through site plan review, evaluation of development and redevelopment proposals and resource allocation for local government. Table 4-1 and Table 4-2 list the plans and land development regulations adopted by the incorporated communities in Taney County.

The local government floodplain management ordinance and development code provide the primary means for incorporating risk assessment and mitigation into local planning. Storm water regulations and building codes are also in effect in the county and several of the incorporated communities. In terms of school districts, long-range strategic, facilities, storm sheltering and evacuation plans are the mechanisms through which jurisdictional risk assessments are incorporated.

Table 4-1: City Plans and Regulations

Jurisdiction	Master Plan	Zoning	Building Codes	Earthquake Design	Subdivision Regulations	Stormwater Regulations	Floodplain Regulations
Taney County	Yes	No	No	No	Yes	No	Yes
Branson	Yes	Yes	Yes	No	Yes	Yes	Yes
Bull Creek	No	No	No	No	Yes	No	Yes
Forsyth	Yes	Yes	Yes	No	Yes	Yes	Yes
Hollister	Yes	Yes	Yes	No	Yes	Yes	Yes
Kirbyville	No	Yes	No	No	Yes	No	No
Merriam Woods	Yes	Yes	Yes	Yes	No	No	Yes
Rockaway Beach	Yes	Yes	Yes	No	Yes	No	Yes
Taneyville	No	Yes	No	No	Yes	No	No

How Local Jurisdictions Have Incorporated Mitigation Strategies and Risk Assessment into Planning Mechanisms

Since the original *Taney County Natural Hazard Mitigation Plan* in 2005, several mitigation strategies and risk assessment have been incorporated into city planning mechanisms. Forsyth has implemented not only a Comprehensive Plan, but stormwater regulations and floodplain regulations. In addition, Rockaway Beach has gone from having no zoning, to having a Comprehensive Plan, Zoning Regulations, Subdivision Regulations, Stormwater Regulations, and Floodplain Regulations. Building Codes for Branson, Forsyth, Hollister, and Rockaway Beach have all been updated as well.

In addition to these new city plans and regulations, Merriam Woods and Forsyth have been added as members and participants in the NFIP, among the already participating Branson, Bull Creek, Hollister, and Rockaway Beach.

Table 4-2: Taney County Capability Assessment			
Policies and Programs (ex. Zoning Ordinance)	Document Reference (ex. Comprehensive Plan & page number)	Effectiveness for Mitigation (ex. low, medium, high)	Rationale for Effectiveness (ex. low because allows development in floodplain)
Floodplain Management	Taney County Floodplain Management Resolution/Ordinance No. 60.3b, 4/22/2002 No. 60.3b amended on 12/23/2002	High	New construction and improvements not allowed without requirements.
Flood Insurance	National Flood Insurance Program, #290435, joined 4/1/2002	High	The county administers and participates in the NFIP.
Stormwater Regulations	Some stormwater management regulation included in the Development Guidance Code.	Medium*	The county currently does not have separate stormwater regulations. The Development Guidance Code does provide some regulation for stormwater management in new developments.
Comprehensive Plan	Taney County Master Plan, adopted 12/27/1999	Medium	The Master Plan contains goals, objectives and strategies related to stormwater management.
Zoning and Subdivision Regulations	Taney County Development Guidance Code, adopted 11/1984	Medium*	Provides some regulation for stormwater management infrastructure in new development.
Building Regulations	N/A	Low*	The county does not have building regulations.
Right-of-way tree trimming/brush removal	Utility companies' programs	Medium	Removes tree limbs near power lines to prevent power outages caused by heavy winds and winter storms.

In Table 4-2, it is important to note that although the County's capability assessment of effectiveness for storm water regulations, building regulations, and zoning regulations may be low to medium, many of the cities within the county have taken positive preventative measures by implementing their own storm water, zoning, and building regulations.

Part 5: Mitigation

Introduction to Mitigation

Definition of Mitigation

Mitigation is defined by FEMA as "...sustained action that reduces or eliminates long-term risk to people and property from natural hazards and their effects" (FEMA, "Report on Costs and Benefits of Natural Hazard Mitigation"). The goal of mitigation is to reduce or eliminate loss of lives and property. Mitigation is a proactive effort to lessen the impact of disasters upon families, communities, and economy.

Categories of Mitigation

Mitigation includes any actions or measures that prevent an emergency, reduce the chance of an emergency occurring, or lessen the effects of a disaster. Federal, state and local governments can restrict or limit development in hazard-prone areas, direct development to less vulnerable areas, and promote ways to safeguard existing development in hazard-prone areas. Individuals and families also can participate by engaging in personal safety and property prevention activities.

There are six categories of mitigation that can produce safer environments including prevention, property protection, natural resource protection, emergency services, structural projects and public information.

Prevention Measures

Prevention measures are intended to keep a hazard risk problem from getting worse. They ensure that future development does not increase hazard losses. Communities can achieve significant progress toward hazard resistance through prevention measures. This is particularly true in areas that have not been developed or where capital investment has not been substantial. Using prevention measures, future development can be guided away from hazards, while maintaining other community goals such as economic development and quality of life. Some examples of prevention measures are:

- Planning
- Open space preservation
- Land use and land development regulations, including zoning and subdivision regulations
- Storm water management
- Erosion and sediment control regulations
- Engineered foundation standards

Property Protection Measures

Property protection measures are used to modify buildings subject to hazard risk, or their surroundings, rather than to prevent the hazard from occurring. A community may find these to be inexpensive measures because often they are implemented or cost-shared

with property owners. These measures directly protect people and property at risk. Protecting a building does not have to affect the building's appearance and is therefore a popular measure for historic and cultural sites. Some examples of property protection measures are:

- Acquisition – public procurement and management of lands that are vulnerable to damage from hazards
- Relocation – permanent evacuation of hazard-prone areas through movement of existing hazard-prone development and population to safer areas
- Rebuilding – modifying structures to reduce damage by future hazard events
- Floodproofing – protecting a flood-prone building using one or more of several different methods
- Elevation of existing buildings above the flood height
- Installation of saferooms for protection against tornadoes and severe storms
- Installation of backup power generators in the event of power outages due to severe weather conditions

Natural Resource Protection Measures

Natural resource protection measures are intended to reduce the intensity of hazard effects as well as to improve the quality of the environment and wildlife habitats. Parks, recreation, or conservation agencies or organizations usually implement these activities. Examples of natural resource protection include:

- Erosion and sediment control
- Wetlands protection
- Open space easements
- Acquisition of environmentally beneficial lands
- Hillside conservation
- Stream bank restoration
- Riparian zone protection
- Urban forestry and horticulture programs
- Watershed protection programs

Emergency Services Measures

Emergency services measures protect people before and after a hazard event. Most counties and many cities have emergency management offices to coordinate warning, response, and recovery during a disaster. Emergency services include:

- Warning
- Critical facilities protection
- Health and safety maintenance
- Distribution of weather alert radios to homes and businesses
- Emergency response and recovery support
- Community storm shelters
- Disaster relief centers
- Emergency housing shelters

Structural Mitigation Measures

Structural measures directly protect people and property at risk. These measures involve construction of man-made structures to control hazards. For example, structural projects for flood control may include:

- Reservoirs
- Levees, floodwalls and seawalls
- Diversions
- Channel modifications
- Storm sewers

Public Information Mitigation Measures

Public information activities inform and remind people about hazardous areas and the measures necessary to avoid potential damage and injury. Public information activities for mitigation are directed toward property owners, potential property owners, business owners and visitors. Examples of public information activities to achieve mitigation are:

- Providing hazard maps and other hazard information on a request basis
- Outreach programs that provide hazard and mitigation information to people when they have not asked for it

Public information activities might be accomplished through:

- Print media
- Radio/TV spots and interviews
- Videotape
- Mass mailings
- Notices to residents and property owners in a specific, hazard-prone area
- Displays in widely used facilities such as public buildings and malls
- Property owner handbook
- Presentations at meetings of neighborhood groups
- Real estate disclosure
- Information in the public library or a library developed specifically for mitigation information
- Available technical assistance
- School age and adult education

How Mitigation Differs from Preparedness, Response, and Recovery

Emergency management is divided into four phases, with each phase involving different types of organization, preparation, and activities. These four phases include: preparedness, response, recovery, and mitigation.

Preparedness focuses on building emergency response and management capabilities before a disaster occurs in order to respond to and recover from disaster events. Preparedness activities include programs for training emergency response personnel, exercising plans, and conducting public outreach programs. Preparedness also includes activities such as developing and maintaining warning systems, maintaining communications networks, and establishing procedures for mobilizing response personnel.

Response refers to the actions taken immediately before, during and after a disaster event to save lives, minimize property damage and aid in the recovery process. Response activities typically involve public warning, evacuation and sheltering, search and rescue, emergency medical care, and securing property. Other types of response activities depend on the type of disaster and may include activities such as supplying emergency water and power, removing debris from roads, attending to the needs of people with disabilities or special health concerns, closing roads, or fire fighting.

Recovery involves short term post disaster activities to restore vital services and longer term activities to return the community to normal or pre-disaster status. The first step of recovery is assessment of damages to determine needs and priorities. Typical recovery activities include debris removal, coordinating volunteers and donations of goods, delivering disaster aid to individuals and families, restoring vital community services, and repairing and reconstructing buildings and public infrastructure. Recovery can take from a few days to years, depending on the magnitude of the disaster and the resources available to address the community's needs.

Mitigation is the cornerstone of emergency management. Mitigation differs from preparedness, response and recovery in that it is an ongoing effort focused on activities and policies that will reduce or eliminate the community's vulnerability to damage from future hazard events. Mitigation measures generally are those that can be put in place before a disaster occurs.

Mitigation Plan Benefits

The planning process provides a method for communities to identify weaknesses and threats that affect quality of life as well as those strengths and opportunities that may contribute to achieving the future desired by the community. Planning further enables communities to establish goals and identify strategic actions that can be undertaken to preserve, protect, and enhance those resources that contribute to quality of life and long term economic prosperity. The hazard mitigation planning process likewise offers opportunities and benefits to communities to reduce injury and death, safeguard the natural and built environment, protect public and private investments, and reinforce long term economic viability and community livability. Hazard mitigation planning enables communities to:

- Reduce injury, death and property losses
- Identify specific problems and appropriate solutions
- Achieve multiple objectives in a sustainable manner
- Reduce future risks
- Prioritize post-disaster projects
- Enhance funding opportunities through federal, state and local programs
- Promote public participation and ownership of solutions

Goals, Objectives, and Mitigation Actions

Development Process

The development of the goals, objectives and actions for the *Plan* occurred over the course of the entire planning process, beginning with the distribution of the previous set of goals, objectives and action statements from the original *2005 Plan* at the Kick-Off Meeting. The primary focus at three of the plan advisory committee meetings on May 8, May 22 and June 12 of 2012 was updating strategies for the *Plan*. The public was invited to all meetings through advertisements in print publications, web postings and public flyers.

The development began with a review of the goals and objective statements from the previous plan at the May 8 plan advisory committee meeting. It was determined that the goals and objectives from the *2005 Plan* were too numerous and that many objectives were, in many cases, too broad and repetitive. It was decided that three main goals addressing vulnerability to people, property and functional loss of critical infrastructure, business and government functions would be sufficient to streamline the *Plan* and place emphasis on the mitigation actions. It was decided that SMCOG staff would revise the goal statements and structure objectives to add more clarity plan.

Subsequently, the meeting participants were provided with a “menu” of alternative actions drawn from plans of surrounding jurisdictions to consider for inclusion, based on the needs and values of participating entities. At this point, each action from the previous plan was evaluated and agreement was reached as whether to eliminate, revise, continue or include a better alternative from the actions menu. The meeting participants then addressed the specific needs of jurisdictions in Taney County and suggested actions or strategies to address each of the natural hazards that could affect the county. Due to the amount of input, not all 2005 actions were addressed and another meeting was set for May 22 to finalize mitigation actions for the *Plan*. During the period between these meetings a revised draft of goals, objectives and actions was distributed the plan advisory committee for comment. Further revisions were incorporated based on comments and concerns from committee members and further discussion at the May 22 plan advisory committee meeting whereupon it was agreed to finalize action statements before a review of the costs and benefits of the proposed actions.

Evaluation of Mitigation Actions from the 2005 Plan

Ultimately, several actions from the previous plan were removed from the updated set of action statements. The statements that could not be incorporated into revised actions were removed from the *Plan* for the reasons cited in Table 5-1.

Many actions were left unchanged (i.e. deferred) because there was no finite benchmark and it was determined that there was favorable benefit for continuing efforts towards implementation. Some actions were simply reworded and revised to add clarity and specificity to what was to be accomplished. For example, it was decided that “Distribute information to encourage citizens to retrofit their homes to become more energy efficient” should be replaced with: “Promote the establishment of Clean Energy Development Boards that enable cities and counties to provide upfront investment through Property Assessed Clean Energy (PACE) programs.” Finally, new actions were identified from the actions menu and other suggestions made by those in attendance. Consequently, there was a unanimous agreement on the resulting goals, objectives, and recommendations. All actions are identified as continuing, revised or new in the Mitigation Action Overview by Jurisdiction tables beginning on page 5-21.

Another important aspect of the update process was the review of projects undertaken by jurisdictions toward achieving the mitigation actions, objectives, and goals set forth in the *2005 Plan*. Table 5-1 also describes some of the progress made by Taney County and local jurisdictions in the interim years since the *2005 Plan* was developed.

Table 5-1: Evaluation of Mitigation Actions from the 2005 Plan		
Action	2012 Status	Evaluation
<i>Objective 1.1: Reduce risks and vulnerabilities of people in hazard-prone areas.</i>		
Strengthen emergency services preparedness and response by linking emergency services with hazard mitigation programs, and enhancing public education.	Deleted	Too broad for an action statement; No action taken, better alternatives identified
Continue the development of the Geographic Information System (GIS) for the county to further identify, analyze, and make sound decisions based upon data pertaining to the community.	Combined 2012 Action 3.3.3	GIS capabilities for Taney County and Branson have increased. Map hazard prone areas added.
Enhance data and mapping for floodplain information and flood-prone areas outside of designated floodplains.	Combined 2012 Action 3.3.3	GIS managers maintain updated flood insurance rate map data and locations of low water crossings.
<i>Objective 1.2: Provide adequate warning and communication systems to alert the population of imminent hazard events and ensure availability of shelters.</i>		
Promote the installation of additional radio controlled storm warning sirens throughout the county and make all existing sirens radio activated.	Revised 2012 Action 1.2.2	Seven radio activated sirens have been added; five (5) in Branson, one (1) in Forsyth and one (1) in Merriam Woods.
Provide for a NOAA weather radio in continuous operation in all facilities for public accommodation.	Revised 2012 Action 1.2.3	Revised from “Provide” to “Seek funding” for low cost radios. NOAA radio provided in schools and use increased since 2005.
Evaluate the need for tornado plans and shelters in essential facilities and other establishments serving the public (e.g., schools, hospitals, and critical facilities).	Combined 2012 Action 1.3.2	Storm preparedness plans in place.
Designate "safe places" in public buildings.	Combined 2012 Action 1.3.2	No action taken.

Table 5-1: Evaluation of Mitigation Actions from the 2005 Plan		
Action	2012 Status	Evaluation
Build tornado/severe wind shelter(s) in new and existing buildings, essential facilities and mobile home parks.	Revised 2012 Action 1.3.1	Shelters revised to “safe room”. Safe room currently under construction in Hollister.
Objective 2.1: Improve the efficiency, timing, and effectiveness of response and recovery efforts for natural hazard disasters.		
Continue to inventory alternative firefighting water sources and encourage the development of additional services.	Deferred 2012 Action 3.1.3	Western Taney FPD maintains inventory of water sources, dry hydrants and conducted water rescue trainings.
Enhance emergency services to increase the efficiency of wildfire response and recovery activities.	Deleted	Response and recovery distinct from mitigation
Enhance strategies for debris management for severe winter/ice storm events.	Revised 2012 Action 3.1.4	No action taken
Provide 911 curb addressing for residences.	Revised 2012 Action 3.1.2	Local ordinances in place for 911 address identification on residences, commercial and public structures
Objective 3.1: Promote education, outreach, research and development programs to improve knowledge and awareness among citizens and industry about hazard mitigation.		
Encourage the newspapers to publish a special section with emergency information on natural hazards.	Revised 2012 Action 1.1.1	Efforts in place and ongoing. Action revised to include social media applications.
Develop “tips” brochures for homeowners on how to halt or reduce the risks of natural hazards.	Revised 2012 Action 1.1.2	No action taken. Action revised to focus on wildfire prevention.
Develop public information programs to increase awareness of flood hazards.	Deleted	No action taken.
Establish a quarterly public education program in all schools on weather safety and upcoming weather dangers.	Revised 2012 Action 1.1.4	No quarterly programs established.
Objective 3.2: Strengthen communication and coordinate participation between public agencies, citizens, non-profit organizations, and business to create widespread interest in mitigation.		
Identify, review and implement mechanisms to foster collaboration among jurisdictions, agencies and special districts.	Deleted	Local Emergency Planning Committee established.
Develop public and private partnerships to implement mitigation actions.	Deleted	Lack of political support
Develop a program through the local school system to encourage children to think of those persons that require special assistance during severe weather conditions.	Deleted	Benefits are unclear
Distribute information to encourage citizens to retrofit their homes to become more energy efficient.	Revised 2012 Action 2.1.3	No action taken.

Table 5-1: Evaluation of Mitigation Actions from the 2005 Plan		
Action	2012 Status	Evaluation
Encourage local community organizations to continue and augment programs to provide fans, air conditioners, and winter weatherization for those at risk.	Deferred 2012 Action 1.3.5	Efforts in place and ongoing.
Objective 4.1: Increase the county's capabilities to mitigate the effects of a natural hazard in the county.		
Map and publicize locations around the county that have the highest incidence of extreme severe winter storms.	Deleted	No likely locations
Encourage collaborative planning and compatible regulatory controls between the county and incorporated communities to promote infrastructure development practices that reduce the potential for flooding.	Deferred 2012 Action 3.3.2	Taney County Road & Bridge elevation of Boys Camp road in Rockaway Beach.
Analyze repetitive flood property and identify feasible mitigation measures.	Deleted	One repetitive flood property in the county. No reported losses after 1992.
Provide Community Emergency Response Team (CERT) training.	Revised 2012 Action 1.1.3	Taney County CERT established. Trainings ongoing
Objective 4.2: Protect structures and their occupants and contents from the damaging effects of natural hazards.		
Identify water drainage obstructions and make improvements to lessen the potential for flooding.	Combined 2012 Action 2.1.1	No action taken.
Make improvements to bridges to avoid future repetitive damage.	Combined 2012 Action 2.1.1	No action taken.
Purchase emergency generators for critical water and sewer system facilities.	Deleted	Generators purchased and in place at all facilities.
Ensure that wastewater treatment plants in the communities will function during flooding events.	Deferred 2012 Action 2.1.4	Taney County Rural Sewer District has elevated lift stations in flood prone areas.
Install culverts to eliminate water flow restrictions.	Combined 2012 Action 2.1.1	Several culverts have been replaced throughout the county with regular maintenance.
Objective 4.3: Provide area small businesses with tools to properly prepare for business interruptions.		
Conduct "Open for Business: A Disaster Planning Toolkit for the Small Business Owner" seminar or similar program.	Deleted	No action taken.
Objective 5.1: Secure resources for investment in hazard mitigation.		
Identify funding from state and federal programs for hazard mitigation activities.	Deferred 2012 Action 3.3.1	Efforts in place and ongoing.

Table 5-1: Evaluation of Mitigation Actions from the 2005 Plan		
Action	2012 Status	Evaluation
Objective 5.2: Design, enhance, or amend county policies to limit the impact a natural hazard has on the county.		
The NFIP communities of Taney County, Branson, Bull Creek, Hollister and Rockaway Beach will maintain requirements for NFIP participation and work to reduce repetitive flood losses.	Revised 2012 Action 2.2.4	All NFIP communities in the 2005 Plan have maintained NFIP participation. Taney County and Branson have initiated flood buyouts to reduce repetitive flood losses.
Encourage jurisdictions that are not participants in the NFIP to join.	Deleted	Merriam Woods and Forsyth have participated in the NFIP since 2006. No Special Flood Hazard Areas in Kirbyville or Taneyville
Encourage electrical utilities to use underground construction methods where possible to reduce power outages from severe winter storms.	Revised 2012 Action 2.1.2	No action taken.
Encourage the adoption of building codes in incorporated areas that currently do not have such regulations.	Revised 2012 Action 2.2.2	No action taken.
Adopt measures to control runoff from developing areas outside the floodplain.	Revised 2012 Action 2.2.3	City of Forsyth adopted storm water management ordinance since 2005.

STAPLEE Cost-Benefit Review and Prioritization

The final plan advisory committee was a countywide workshop-style meeting that was advertised to engage community representatives and the public was held on June 12, 2012. The purpose of this meeting was to apply a prioritization method to the updated actions that was clear and logical and emphasized evaluating actions in terms of costs and benefits.

The Disaster Mitigation Act regulations state that benefit-cost review is the primary method by which mitigation projects should be prioritized. In advance of the meeting, the Plan Advisory Committee agreed upon a modified STAPLEE with simple scores method used in the Missouri State Hazard Mitigation Plan, July 2010. The STAPLEE and simple scores is a quantitative method for prioritizing mitigation actions from *How-To Guide (FEMA 386-5): Using Benefit-Cost Review in Mitigation Planning* using the. The STAPLEE criteria were used because of the clear emphasis on reviewing mitigation actions in terms of costs and benefits. The definition of each letter in the STAPLEE acronym, derived from *How-To Guide (FEMA 386-3): Developing the Mitigation Plan*, was distributed to meeting attendees and discussed prior to the scoring process. These definitions are presented in Table 5-3.

The meeting attendees were supplied a score sheet that listed all proposed actions coded by a value corresponding to its organization under the goals and objectives. The format of the score sheet allowed the attendees to consider whether each of the actions

represented an overall cost or benefit in terms of each of the STAPLEE criteria. The attendees were asked to apply an evaluation rating for each of the STAPLEE criterion as well as effectiveness in saving lives, reducing property damage and ease of implementation. A version of the score sheet with a definition of the rating scale is presented in Table 5-4.

Table 5-2: Definitions of STAPLEE Criteria		
Abbreviation	Criteria	Definition of the Criteria
S	Social	Mitigation actions are acceptable to the community if they do not adversely affect a particular segment of the population, do not cause relocation of lower income people, and if they are compatible with the community's social and cultural values.
T	Technical	Mitigation actions are technically most effective if they provide long-term reduction of losses and have minimal secondary adverse impacts.
A	Administrative	Mitigation actions are easier to implement if the jurisdiction has the necessary staffing and funding
P	Political	Mitigation actions can truly be successful if all stakeholders have been offered an opportunity to participate in the planning process and if there is public support of the action.
L	Legal	It is crucial that the jurisdiction or implementing agency have the legal authority to implement and enforce a mitigation action.
E	Economical	Budget constraints can significantly deter the implementation of mitigation actions. Hence, it is important to evaluate whether an action is cost-effective and possible to fund.
E	Environmental	Sustainable mitigation actions that do not have an adverse effect on the environment, that comply with Federal, State, and local environmental regulations, and are consistent with the community's environmental goals, have mitigation benefits while being environmentally sound.

Table 5-3: Modified STAPLEE with Simple Scores		
Action Code:		Jurisdiction:
STAPLEE Criteria	Evaluation Rating: Definitely YES = 3 Maybe YES = 2 Probably NO = 1 Definitely NO = 0	Score
S: Is it Socially acceptable?		
T: Is it technically feasible and potentially successful?		
A: Does the responsible entity have the administrative capacity to execute this action?		
P: Is it politically acceptable?		
L: Is there legal authority to implement?		
E: Is it economically beneficial?		
E: Will the project have a positive or neutral impact on the environment? (score a 3 if positive, 2 if neutral)		
Could it be implemented quickly?		

Mitigation Effectiveness Criteria	Evaluation Rating	Score
Will the implemented action result in saved lives?	Assign 0-5 points based on the likelihood that lives would be saved	
Will the implemented action result in a reduction of disaster damages?	Assign 0-5 points based on relative reduction of disaster damages	
Mitigation Effectiveness Score:		

All plan advisory committee scores were compiled and averaged. This method produced a ranking of actions relative to one another. The average priority scores for these actions were collapsed into three classes of high, medium and low. The quantified STAPLEE

priority ranks were then subjected to a qualitative common sense review during the plan advisory committee and public review period. The STAPLEE scores were used to prioritize mitigation actions. Actions with a high rank are actions to be implemented in the short-term (1 to 2 years), medium rank in the intermediate-term (2 to 4 years) and low ranked actions in the long-term (5 years or more).

This method for prioritizing and reviewing the revised actions placed a strong emphasis on evaluating the costs and benefits of mitigation projects. The STAPLEE and simple scores method was selected because of its clear emphasis on a cost-benefit review and strength in establishing a baseline for a more qualitative review. A complete list of the updated goals, objectives and actions with STAPLEE score and information as to whether it is intended to address existing or new structures is presented in Table 5-5.

Mitigation Program/Strategy Development

The development and implementation of the goals, objectives and mitigation actions includes the involvement of the county, individual communities, school and other special districts, community organizations, Taney County Health Department, chambers of commerce, large employers, and the emergency management team. The final mitigation recommendations were determined by informed consent through the discussion and evaluation process noted above. A mitigation planning committee comprised of members of these groups should be established to plan for and implement the activities and projects necessary to accomplish the goals and objectives identified during the planning process.

To help maintain a focus on the greater goal of the overall community well-being and to help ensure implementation, underlying operating principles such as those listed below should be utilized. These principles will improve fiscal and operational efficiency as well. Each action should be implemented according to the following principles:

- Promote and encourage collaboration between disparate agencies and departments to create a synergism that results in benefits that would not be possible through a single agency.
- Employ sustainable principles and techniques in the implementation of each objective to attain maximum benefits.
- Incorporate mitigation objectives into existing and future plans, regulations, programs and projects.
- Create and implement a prioritization process that includes monetary, environmental, and sociological considerations.

It is recommended that the *Plan* be implemented by all participating jurisdictions and community stakeholder groups. The implementation process will include coordination among county departments, coordination with other relevant agencies or districts throughout the county, and the municipalities.

Table 5-4: Goals, Objectives and Actions		
Action	STAPLEE Score	Type of Structure Addressed
Goal 1: Protect the lives and livelihoods of all citizens.		
<i>Objective 1.1: Promote education, outreach, research and development programs to improve knowledge and awareness among citizens and industry about hazard mitigation.</i>		
Encourage the media and leverage social media platforms to publish or broadcast information about natural hazard vulnerability, preparedness plans and mitigation efforts throughout the county.	28.65 (H)	N/A
Increase public awareness on techniques to reduce risk, such as the use of fire resistant materials in construction, landscaping techniques and planting materials that are more resistant to the spread of wildfire.	27.33 (H)	New/Existing
Increase, promote, establish and maintain participation in citizen preparedness activities, such as; Citizen Corps, CERT, Neighborhood Watch, Fire Corps, Amateur Radio, etc.	24.69 (M)	N/A
Continue to promote and expand educational programs regarding natural hazard mitigation and preparedness in school newsletters and seek to integrate information on natural hazards into school curriculum where feasible.	28 (H)	N/A
<i>Objective 1.2: Provide adequate warning and communications systems to alert the public to severe weather events.</i>		
Continue to maintain and operate outdoor warning sirens in areas that host large outdoor events and recreational activities throughout the county.	24.83 (M)	Existing
Improve effectiveness of outdoor warning sirens by making all existing sirens radio activated.	24 (L)	Existing
Seek and utilize funding mechanisms to establish and maintain programs enabling the distribution of low-cost NOAA all-hazard radios with S.A.M.E. technology for continuous operation in homes, businesses, schools, nursing homes and all facilities for public accommodation.	25.10 (M)	N/A
Promote the purchase and continued use of NOAA all-hazard radios with S.A.M.E technology through outreach and education that includes programming methods enabling the broadcast of county specific warnings.	25.82 (H)	N/A
Promote local severe weather alert applications for mobile communications devices, such as; Branson Severe Weather Alerts, KTTS, KSPR and KY3 Severe Weather Warnings. These should be in addition to, not in replace of NOAA all-hazard radios with S.A.M.E. technology.	25.12 (M)	N/A

Table 5-4: Goals, Objectives and Actions		
Action	STAPLEE Score	Type of Structure Addressed
Objective 1.3: Provide and promote safe refuge areas during weather extremes.		
Integrate safe room construction in new community buildings, schools, large facilities and other establishments serving the public in areas of population concentration where feasible.	24.18 (L)	New
Create and update tornado/severe storm plans and identify refuge areas (these do not comply with FEMA publication 361 safe room standards) in schools, large facilities and other establishments serving the public.	25.47 (M)	Existing
Identify and designate heating and cooling refuge areas in community buildings and make these locations available to the public in the event of extreme temperatures.	24 (L)	Existing
Promote and distribute FEMA publication 320 which provides information on construction plans and cost estimates for building safe rooms in homes or small business and cost estimates for construction.	24.20 (L)	New/Existing
Encourage local community organizations to continue and augment programs to provide fans, air conditioners, and winter weatherization for those at risk.	23.13 (L)	N/A
Goal 2: Reduce the potential impact of natural disasters to property, infrastructure and the local economy.		
Objective 2.1: Protect structures, contents and critical lifelines from the impacts of natural hazard occurrence.		
Acquire, elevate or flood-proof properties and critical infrastructure within flood hazard areas.	24.27 (L)	Existing
Encourage electrical utilities to use underground construction methods where possible to reduce disruptions of service due to natural hazard events.	22 (L)	New/Existing
Promote the establishment of Clean Energy Development Boards that enable cities and counties to provide upfront investment through Property Assessed Clean Energy (PACE) programs.	20.13 (L)	Existing
Ensure that wastewater treatment systems will function during flood and drought events.	25 (M)	New/Existing
Objective 2.2: Ensure that future development in the county is as "hazard proof" as possible.		
Ensure that new dams are constructed using methods and procedures that comply with the national dam safety hazard reduction initiative.	27.25 (H)	New
Encourage the adoption of updated building codes and compatible land development policies in incorporated and unincorporated areas.	25.90 (H)	New
Encourage the adoption of measures to control runoff from developing areas outside the floodplain where ordinances have not been enacted.	25.14 (M)	New

Table 5-4: Goals, Objectives and Actions		
Action	STAPLEE Score	Type of Structure Addressed
The NFIP communities of Taney County, Branson, Bull Creek, Forsyth, Hollister, Merriam Woods and Rockaway Beach will enforce floodplain management requirements, including regulating all new and substantially improved construction in the Special Flood Hazard Areas (SPFAs).	29 (H)	New/Existing
Goal 3: Ensure and enhance continued operation of government, emergency functions and critical infrastructure in a disaster.		
Objective 3.1: Improve the efficiency, timing, and effectiveness of response and recovery efforts for natural hazard disasters.		
Encourage all elected officials, public administrators, community stakeholders and responders to participate in National Incident Management System (NIMS) training and compliance programs.	25.18 (M)	N/A
Continue to enforce highly visible 911 addressing for residences and businesses through building and business permitting as well as public education of existing ordinances.	25.30 (M)	New/Existing
Continue to inventory alternative firefighting water sources and encourage additional services.	24.40 (L)	N/A
Identify debris disposal and burning locations in the county to facilitate recovery from large scale hazard events.	23.67 (L)	N/A
Objective 3.2: Design, enhance, or amend county policies that will work to limit the impact a natural hazard has on the county.		
Implement burn restrictions during time of weather conditions conducive to the spread of wildfire.	25.22 (M)	New/Existing
Integrate hazard mitigation into comprehensive and long range plans, capital improvement programs, zoning ordinances, subdivision and storm water management regulations.	25.71 (M)	New
Enhance strategies and coordinate with utility providers to manage encroachment of vegetation in easements and rights of way.	25.50 (H)	N/A
Objective 3.3: Increase the capabilities to mitigate the effects of a natural hazard in the county.		
Continue to monitor and identify funding from state and federal programs for hazard mitigation activities.	26.19 (H)	N/A
Continue to capitalize upon collaborative planning and compatible regulatory controls between the county and incorporated communities to promote infrastructure development practices that reduce the potential for flooding and property damage.	25.50 (H)	New/Existing
Continue development of Geographic Information Systems (GIS) to further identify, analyze and map hazard prone areas to enhance decision making and facilities management for agencies and stakeholders.	24.50 (M)	New/Existing

Analysis and Prioritization of Mitigation Actions

Taney County's mitigation actions promote and/or support the development of local hazard mitigation plans, projects and activities. With the exception of normal responsibilities of local government agents, this is a voluntary participation that in no way states nor implies the acceptance of any liability for the success or failure of the program, activities, events or projects undertaken to complete the program or any portions thereof.

Local government acceptance and approval through government resolution of the details of this mitigation program document in no way obligates the local government to actually carry out its provisions. Each individual action contained in this document that incurs a cost and/or liability must still be approved by separate governmental actions commensurate with the normal governmental proceedings for approving such actions, in accordance with local ordinances, laws and regulations.

Table 5-5 provides an overview of mitigation actions in the *Plan* and by the natural hazards addressed by each action to demonstrate a comprehensive set of strategies to mitigate the impact of all hazards identified in the *Plan*. Tables 5-6 through 5-23 are overviews of mitigation actions for each jurisdiction participating in the *Plan*. The overview tables for each jurisdiction categorize each action into one of the six categories of mitigation. In addition, the tables identify the position or department responsible for implementing and administering the action, potential sources of funding, expected timeframes for completion, and a benchmark for evaluating the results of the action for each participating jurisdiction.

Table 5-5: Overview of Coded Mitigation Actions by Hazards Addressed											
Action Codes	Actions	Tornado/TSstorm	Flood	Winter	Drought	Heat Wave	Earthquake	Dam Failure	Wildfire	Sinkhole	Infectious Disease
Goal #1: Protect the lives and livelihoods of all citizens.											
Objective 1.1 Promote education, outreach, research and development programs to improve knowledge and awareness among citizens and industry about hazard mitigation.											
1.1.1	Encourage the media and leverage social media platforms to publish or broadcast information about natural hazard vulnerability, preparedness plans and mitigation efforts throughout the county.	X	X	X	X	X	X	X	X	X	X
1.1.2	Increase public awareness on techniques to reduce risk, such as the use of fire resistant materials in construction, landscaping techniques and planting materials that are more resistant to the spread of wildfire.								X		
1.1.3	Increase, promote, establish and maintain participation in citizen preparedness activities, such as; Citizen Corps, CERT, Neighborhood Watch, Fire Corps, Amateur Radio, etc.	X	X	X		X	X	X	X		
1.1.4	Continue to promote and expand educational programs regarding natural hazard mitigation and preparedness in school newsletters and seek to integrate information on natural hazards into school curriculum where feasible.	X	X	X	X	X	X	X	X	X	X
Objective 1.2 Provide adequate warning and communication systems to alert the population to severe weather events.											
1.2.1	Continue to maintain and operate outdoor warning sirens in areas that host large outdoor events and recreational activities throughout the county.	X									
1.2.2	Improve effectiveness of outdoor warning sirens by making all existing sirens radio activated.	X									
1.2.3	Seek and utilize funding mechanisms to establish and maintain programs enabling the distribution of low-cost NOAA all-hazard radios with S.A.M.E. technology for continuous operation in homes, businesses, schools, nursing homes and all facilities for public accommodation.	X	X	X	X	X					
1.2.4	Promote the purchase and continued use of NOAA all-hazard radios with S.A.M.E technology through outreach and education that includes programming methods enabling the broadcast of county specific warnings.	X	X	X	X	X					
1.2.5	Promote local severe weather alert applications for mobile communications devices, such as; Branson Severe Weather Alerts, KTTS, KSPR and KY3 Severe Weather Warnings. These should be in addition to, not in replace of NOAA all-hazard radios with S.A.M.E. technology.	X	X	X	X	X					

Table 5-5: Overview of Coded Mitigation Actions by Hazards Addressed											
Action Codes	Actions	Tornado/Tstorm	Flood	Winter	Drought	Heat Wave	Earthquake	Dam Failure	Wildfire	Sinkhole	Infectious Disease
		Objective 1.3 Provide and promote safe refuge areas during weather extremes.									
1.3.1	Integrate safe room construction in new community buildings, schools, large facilities and other establishments serving the public in areas of population concentration where feasible.	X									
1.3.2	Create and update tornado/severe storm plans and identify refuge areas (these do not comply with FEMA publication 361 safe room standards) in schools, large facilities and other establishments serving the public.	X									
1.3.3	Identify and designate heating and cooling refuge areas in community buildings and make these locations available to the public in the event of extreme temperatures.			X		X					
1.3.4	Promote and distribute FEMA publication 320 which provides information on construction plans and cost estimates for building safe rooms in homes or small business and cost estimates for construction.	X									
1.3.5	Encourage local community organizations to continue and augment programs to provide fans, air conditioners, and winter weatherization for those at risk.			X	X	X					
Goal #2: Reduce the potential impact of natural disasters to property, infrastructure and the local economy.											
Objective 2.1 Protect structures, contents and critical lifelines from the impacts of natural hazard occurrence.											
2.1.1	Acquire, elevate or flood-proof properties and critical infrastructure within flood hazard areas.		X							X	
2.1.2	Encourage electrical utilities to use underground construction methods where possible to reduce disruptions of service due to natural hazard events.	X		X							
2.1.3	Promote the establishment of Clean Energy Development Boards that enable cities and counties to provide upfront investment through Property Assessed Clean Energy (PACE) programs.			X	X	X					
2.1.4	Ensure that wastewater treatment systems will function during flood and drought events.		X		X			X			X
Objective 2.2 Ensure that the future development in the county is as hazard proof as possible.											
2.2.1	Ensure that new dams are constructed using methods and procedures that comply with the national dam safety hazard reduction initiative.							X			
2.2.2	Encourage the adoption of updated building codes and compatible land development policies in incorporated and unincorporated areas.	X	X	X			X	X	X	X	
2.2.3	Encourage the adoption of measures to control runoff from developing areas outside the floodplain where ordinances have not been enacted.	X	X								

Table 5-5: Overview of Coded Mitigation Actions by Hazards Addressed											
Action Codes	Actions	Tornado/TStorm	Flood	Winter	Drought	Heat Wave	Earthquake	Dam Failure	Wildfire	Sinkhole	Infectious Disease
2.2.4	The NFIP communities of Taney County, Branson, Bull Creek, Forsyth, Hollister, Merriam Woods and Rockaway Beach will enforce floodplain management requirements, including regulating all new and substantially improved construction in the Special Flood Hazard Areas (SPFAs).		X								
Goal #3: Ensure and enhance continued operation of government, emergency functions and critical infrastructure in a disaster											
Objective 3.1 Improve the efficiency, timing and effectiveness of response and recovery efforts for natural disasters											
3.1.1	Encourage all elected officials, public administrators, community stakeholders and responders to participate in National Incident Management System (NIMS) training and compliance programs.	X	X	X	X	X	X	X	X		X
3.1.2	Continue to enforce highly visible 911 addressing for residences and businesses through building and business permitting as well as public education of existing ordinances.	X	X	X	X	X	X	X	X		
3.1.3	Continue to inventory alternative firefighting water sources and enhance water rescue capabilities.		X								
3.1.4	Identify debris disposal and burning locations in the county to facilitate recovery from large scale hazard events	X	X	X		X	X	X	X		
Objective 3.2 Design, enhance or amend policies that will work to limit the impact of natural hazards											
3.2.1	Implement burn restrictions during time of weather conditions conducive to the spread of wildfire.				X				X		
3.2.2	Integrate hazard mitigation into comprehensive and long range plans, capital improvement programs, zoning ordinances, subdivision and storm water management regulations.	X	X	X	X	X	X	X	X	X	X
3.2.3	Enhance strategies and coordinate with utility providers to manage encroachment of vegetation in easements and rights of way.	X		X					X		
Objective 3.3 Increase capabilities to mitigate the effects of natural hazard occurrences											
3.3.1	Continue to monitor and identify funding from state and federal programs for hazard mitigation activities.	X	X	X	X	X	X	X	X	X	X
3.3.2	Continue to capitalize upon collaborative planning and compatible regulatory controls between the county and incorporated communities to promote infrastructure development practices that reduce the potential for flooding and property damage.	X	X	X				X	X	X	

Table 5-5: Overview of Coded Mitigation Actions by Hazards Addressed

Action Codes	Actions	Tornado/TSstorm	Flood	Winter	Drought	Heat Wave	Earthquake	Dam Failure	Wildfire	Sinkhole	Infectious Disease
3.3.3	Continue development of Geographic Information Systems (GIS) to further identify, analyze and map hazard prone areas to enhance decision making and facilities management for agencies and stakeholders.	X	X	X	X	X	X	X	X	X	X

Table 5-6: Overview of Mitigation Actions for Taney County

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer (Partners)	Potential Funding Sources	Evaluation
1.1.1	Encourage the media and leverage social media platforms to publish or broadcast information about natural hazard vulnerability, preparedness plans and mitigation efforts throughout the county.	Emergency Services/ Public Information	Revised	High 2012 & Continuing	EMA, (Health Dept, Public Safety Admin.)	Existing Budget & Personnel	Maintain media relationships and encourage the continued awareness and preparedness for all hazards.
1.1.2	Increase public awareness on techniques to reduce risk, such as the use of fire resistant materials in construction, landscaping techniques and planting materials that are more resistant to the spread of wildfire.	Public Information/ Natural Resource Protection	New	High 2012 & continuing	Emergency Manager, (Fire Safety Personnel, P&Z Dept.)	Existing Budget & Personnel	Information developed and distributed with building permits or development proposals. Use of materials and landscaping increased.
1.1.3	Increase, promote, establish and maintain participation in citizen preparedness activities, such as; Citizen Corps, CERT, Neighborhood Watch, Fire Corps, Amateur Radio, etc.	Emergency Services	New	Medium 2013/2015	EMA (Public Safety Admin, RHSOC)	Grants, Internal funds	Citizen groups sustained and developed, participation increased above 2012 levels.
1.2.3	Seek and utilize funding mechanisms to establish and maintain programs enabling the distribution of low-cost NOAA all-hazard radios with S.A.M.E. technology for continuous operation in homes, businesses, schools, nursing homes and all facilities for public accommodation.	Emergency Services	Revised	Medium 2014/2015	EMA, (Public Safety Admin, Facilities Managers)	Grants, Foundations, Private Sector	Procure and distribute weather radios, increase the number of radios in use By 20%.
1.2.4	Promote the purchase and continued use of NOAA all-hazard radios with S.A.M.E technology through outreach and education that includes programming methods enabling the broadcast of county specific warnings.	Public Information	New	High 2012 & Continuing	EMA, (Health Dept, Public Safety Admin.)	Existing Budget & Personnel	Programmed weather radios in continuous use increased and maintained
1.2.5	Promote local severe weather alert applications for mobile communications devices, such as; Branson Severe Weather Alerts, KTTS, KSPR and KY3 Severe Weather Warnings. These should be in addition to, not in replace of NOAA all-hazard radios with S.A.M.E. technology.	Emergency Services	New	Medium 2014/2015	EMA, (Health Dept, Public Safety Admin, County Commission)	Existing Budget & Personnel	Weather alerts posted and promoted on local government and community organization websites

Table 5-6: Overview of Mitigation Actions for Taney County

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer (Partners)	Potential Funding Sources	Evaluation
1.3.1	Integrate safe room construction in new community buildings, schools, large facilities and other establishments serving the public in areas of population concentration where feasible.	Property Protection	Revised	Low 2017	Public Administrator, Facility Manager	HMGP, Internal funds	Community safe room locations completed increased above 2012 levels.
1.3.2	Create and update tornado/severe storm plans and identify refuge areas (these do not comply with FEMA publication 361 safe room standards) in schools, large facilities and other establishments serving the public.	Emergency Services	Revised	Medium 2014/2015	EMA, Public Administrator, Facility Managers	Existing Budget & Personnel, Grants, Foundations	Number of facilities with updated storm plans including best identified safe refuge area checklist increased by 25%
1.3.3	Identify and designate heating and cooling refuge areas in community buildings and make these locations available to the public in the event of extreme temperatures.	Emergency Services	New	Medium 2014/2015	EMA, (Health Dept, Public Safety Admin,)	Existing Budget & Personnel	Weather alerts posted and promoted on local government and community organization websites
1.3.4	Promote and distribute FEMA publication 320 which provides information on construction plans and cost estimates for building safe rooms in homes or small business and cost estimates for construction.	Property Protection	New	Low 2017	EMA, P & Z Admin.	Existing Budget & Personnel, Private Sector	FEMA publication made available to the public on websites and social media.
1.3.5	Encourage local community organizations to continue and augment programs to provide fans, air conditioners, and winter weatherization for those at risk.	Emergency Services	Ongoing	Low 2017	EMA, (OACAC, Health Dept.)	Grants, Foundations, Private Sector	Program sustained, donations and distribution supported.
2.1.1	Acquire, elevate or flood-proof properties and critical infrastructure within flood hazard areas.	Property Protection	New	Low 2017	Flood Plain Manager, Road & Bridge Dept, Building & Grounds Dept	HMGP, FMA Internal funds	Property and infrastructure flood damage reduced by 10%.
2.1.2	Encourage electrical utilities to use underground construction methods where possible to reduce disruptions of service due to natural hazard events.	Emergency Services	Ongoing	Low 2017	EMA (P & Z Commission, WRVEC, Carrol Electric, Empire Electric)	Existing Budget & Personnel	Utility lines buried where feasible. Reduce outages due to natural hazards by 5%.

Table 5-6: Overview of Mitigation Actions for Taney County

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer (Partners)	Potential Funding Sources	Evaluation
2.1.3	Promote the establishment of Clean Energy Development Boards that enable cities and counties to provide upfront investment through Property Assessed Clean Energy (PACE) programs.	Property Protection	Revised	Low 2017	County Commission	Existing Budget & Personnel	Ensure that at least 75% of property owners are eligible for clean energy improvement programs.
2.2.2	Encourage the adoption of updated building codes and compatible land development policies in incorporated and unincorporated areas.	Prevention	Ongoing	High 2012 and continuing	County Commission	Existing Budget & Personnel	Building codes are updated or adopted.
2.2.4	The NFIP communities of Taney County, Branson, Bull Creek, Forsyth, Hollister, Merriam Woods and Rockaway Beach will enforce floodplain management requirements, including regulating all new and substantially improved construction in the Special Flood Hazard Areas (SPFAs).	Property Protection	Revised	High 2012 & Continuing	County Commission, Floodplain Manager	Existing Budget & Personnel	NFIP compliance maintained.
3.1.1	Encourage all elected officials, public administrators, community stakeholders and responders to participate in National Incident Management System (NIMS) training and compliance programs.	Emergency Services	New	Medium 2014/2015	EMA, Elected Officials, Dept. Heads Public Safety Officials	Government program funds, Internal funds	Increase number of trained officials and stakeholders by 50%.
3.1.2	Continue to enforce highly visible 911 addressing for residences and businesses through building and business permitting as well as public education of existing ordinances.	Emergency Services	Revised	Medium 2014/2015	P&Z Admin. (911 Admin. Sheriff's Office)	Existing Budget & Personnel	95% of structures are identified with highly visible 911 addresses.
3.1.3	Continue to inventory alternative firefighting water sources and enhance water rescue capabilities.	Emergency Services	Ongoing	Low 2017	EMA, (Fire District)	Existing Budget & Personnel	Inventory and capabilities maintained and updated as needed.
3.1.4	Identify debris disposal and burning locations in the county to facilitate recovery from large scale hazard events	Emergency Services	Revised	Low 2017	LEPC, GIS Manager	Existing Budget & Personnel	Possible locations identified and updated as needed.
3.2.1	Implement burn restrictions during time of weather conditions conducive to the spread of wildfire.	Prevention	New	Medium 2014/2015	County Commission (EMA)	Internal funds	Burn restrictions implemented and enforced.

Table 5-6: Overview of Mitigation Actions for Taney County

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer (Partners)	Potential Funding Sources	Evaluation
3.2.2	Integrate hazard mitigation into comprehensive and long range plans, capital improvement programs, zoning ordinances, subdivision and storm water management regulations.	Prevention/ Natural Resource Protection	New	Medium 2014/2015	P&Z Admin. Public Admin. Road & Bridge Dept.	Internal funds	Integrate elements of the mitigation plan during plan updates and ordinance amendments.
3.2.3	Enhance strategies and coordinate with utility providers to manage encroachment of vegetation in easements and rights of way.	Prevention	Revised	High 2012 & Continuing	Road & Bridge Dept. MoDOT, Carrol Electric, WRVEC	Internal funds	Local utility management programs and cycles coordinated with local efforts.
3.3.1	Continue to monitor and identify funding from state and federal programs for hazard mitigation activities.	Prevention	Ongoing	High 2012 & Continuing	EMA, Public Admin, Road & Bridge	Existing Budget & Personnel	Funding programs researched and identified.
3.3.2	Continue to capitalize upon collaborative planning and compatible regulatory controls between the county and incorporated communities to promote infrastructure development practices that reduce the potential for flooding and property damage.	Prevention/ Natural Resource Protection	Revised	High 2012 & Continuing	County Commission Road & Bridge, P & Z Admin	Government program funds, Internal funds	Inter-jurisdictional collaboration increased and compatible development increased.
3.3.3	Continue development of Geographic Information Systems (GIS) to further identify, analyze and map hazard prone areas to enhance decision making and facilities management for agencies and stakeholders.	Prevention/ Public Information	Revised	Medium 2014/2015	GIS Manager (SMCOG, Information Systems Dept)	Existing Budget & Personnel, Internal funds	Hazard prone areas identified and mapped and published on paper maps and websites.

Table 5-7: Overview of Mitigation Actions for City of Branson

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer (Partners)	Potential Funding Sources	Evaluation
1.1.1	Encourage the media and leverage social media platforms to publish or broadcast information about natural hazard vulnerability, preparedness plans and mitigation efforts throughout the county.	Emergency Services/ Public Information	Revised	High 2012 & Continuing	Local EMD, (Health Dept, Public Information Dept.)	Existing Budget & Personnel	Maintain media relationships and encourage the continued awareness and preparedness for all hazards.
1.1.2	Increase public awareness on techniques to reduce risk, such as the use of fire resistant materials in construction, landscaping techniques and planting materials that are more resistant to the spread of wildfire.	Public Information/ Natural Resource Protection	New	High 2012 & continuing	Local EMD (Planning Director, Fire Chief)	Existing Budget & Personnel	Information developed and distributed with building permits or development proposals. Use of materials and landscaping increased.
1.1.3	Increase, promote, establish and maintain participation in citizen preparedness activities, such as; Citizen Corps, CERT, Neighborhood Watch, Fire Corps, Amateur Radio, etc.	Emergency Services	New	Medium 2013/2015	Local EMD, (Public Safety Admin, County EMA)	Government program funds, Internal funds	Citizen groups sustained and developed, participation increased above 2012 levels.
1.2.1	Continue to maintain and operate outdoor warning sirens in areas that host large outdoor events and recreational activities throughout the county.	Emergency Services	New	Medium 2014/2015	Local EMD, (Public Safety Admin)	Existing Budget & Personnel	All warning sirens maintained and operational through 2017.
1.2.3	Seek and utilize funding mechanisms to establish and maintain programs enabling the distribution of low-cost NOAA all-hazard radios with S.A.M.E. technology for continuous operation in homes, businesses, schools, nursing homes and all facilities for public accommodation.	Emergency Services	Revised	Medium 2014/2015	Local EMD, (Public Safety Admin, Community Orgs, County EMA)	Grants, Foundations, Private Sector	Procure and distribute weather radios, increase the number of radios in use By 20%.
1.2.4	Promote the purchase and continued use of NOAA all-hazard radios with S.A.M.E technology through outreach and education that includes programming methods enabling the broadcast of county specific warnings.	Public Information	New	High 2012 & Continuing	Local EMD (Health Dept, Public Safety Admin, County EMA)	Existing Budget & Personnel	Programmed weather radios in continuous use increased and maintained

Table 5-7: Overview of Mitigation Actions for City of Branson

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer (Partners)	Potential Funding Sources	Evaluation
1.2.5	Promote local severe weather alert applications for mobile communications devices, such as; Branson Severe Weather Alerts, KTTS, KSPR and KY3 Severe Weather Warnings. These should be in addition to, not in replace of NOAA all-hazard radios with S.A.M.E. technology.	Emergency Services	New	Medium 2014/2015	Local EMD, Health Dept, Public Safety Admin, Public Information	Existing Budget & Personnel	Weather alerts posted and promoted on local government and community organization websites
1.3.1	Integrate safe room construction in new community buildings, schools, large facilities and other establishments serving the public in areas of population concentration where feasible.	Property Protection	Revised	Low 2017	Engineering/ Public Works Dept. Planning and Development	Government program funds, Internal funds	Community safe room locations completed, increased above 2012 levels.
1.3.2	Create and update tornado/severe storm plans and identify refuge areas (these do not comply with FEMA publication 361 safe room standards) in schools, large facilities and other establishments serving the public.	Emergency Services	Revised	Medium 2014/2015	Local EMD Engineering/ Public Works Dept. Planning and Development, Facility Operators	Existing Budget & Personnel, Grants, Foundations, Private Sector	Number of facilities with updated storm plans including best identified safe refuge area checklist increased by 25%
1.3.3	Identify and designate heating and cooling refuge areas in community buildings and make these locations available to the public in the event of extreme temperatures.	Emergency Services	New	Medium 2014/2015	Local EMD, (Health Dept, LEPC)	Existing Budget & Personnel	Weather alerts posted and promoted on local government and community organization websites
1.3.4	Promote and distribute FEMA publication 320 which provides information on construction plans and cost estimates for building safe rooms in homes or small business and cost estimates for construction.	Property Protection	New	Low 2017	Local EMD, (Planning and Development, Public Information)	Existing Budget & Personnel,	FEMA publication made available to the public on websites and social media.
1.3.5	Encourage local community organizations to continue and augment programs to provide fans, air conditioners, and winter weatherization for those at risk.	Emergency Services	Ongoing	Low 2017	Local EMD, (OACAC, Health Dept. Community Orgs, County EMA)	Existing Budget & Personnel, Grants, Foundations,	Program sustained, donations and distribution supported.

Table 5-7: Overview of Mitigation Actions for City of Branson

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer (Partners)	Potential Funding Sources	Evaluation
2.1.1	Acquire, elevate or flood-proof properties and critical infrastructure within flood hazard areas.	Property Protection	New	Low 2017	Flood Plain Manager, Public Works Planning and Development, Utilities Dept.	HMGP, Internal funds	Property and infrastructure flood damage reduced by 10%.
2.1.2	Encourage electrical utilities to use underground construction methods where possible to reduce disruptions of service due to natural hazard events.	Emergency Services	Ongoing	Low 2017	Engineering/ Public Works Utilities Dept. WRVEC, Empire Electric	Government program funds, Internal funds	Utility lines buried where feasible. Reduce outages due to natural hazards by 5%.
2.1.3	Promote the establishment of Clean Energy Development Boards that enable cities and counties to provide upfront investment through Property Assessed Clean Energy (PACE) programs.	Property Protection	Revised	Low 2017	Mayor, Board of Alderman	Existing Budget & Personnel	Ensure that at least 75% of property owners are eligible for clean energy improvement programs.
2.1.4	Ensure that wastewater treatment systems will function during flood and drought events.	Structural	Ongoing	Medium 2014/2015	Utilities Director (Engineering/ Public Works)	Government program funds, Internal funds	System functions maintained during hazard events.
2.2.4	The NFIP communities of Taney County, Branson, Bull Creek, Forsyth, Hollister, Merriam Woods and Rockaway Beach will enforce floodplain management requirements, including regulating all new and substantially improved construction in the Special Flood Hazard Areas (SPFAs).	Property Protection	Revised	High 2012 & Continuing	Planning and Development	Existing Budget & Personnel	NFIP compliance maintained.
3.1.1	Encourage all elected officials, public administrators, community stakeholders and responders to participate in National Incident Management System (NIMS) training and compliance programs.	Emergency Services	New	Medium 2014/2015	Local EMD (Elected Officials and Staff & Stakeholders)	Government program funds, Internal funds	Increase number of trained officials and stakeholders by 100%.

Table 5-7: Overview of Mitigation Actions for City of Branson

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer (Partners)	Potential Funding Sources	Evaluation
3.1.2	Continue to enforce highly visible 911 addressing for residences and businesses through building and business permitting as well as public education of existing ordinances.	Emergency Services	Revised	Medium 2014/2015	Building & Development Dept.	Existing Budget & Personnel	95% of structures are identified with highly visible 911 addresses.
3.2.1	Implement burn restrictions during time of weather conditions conducive to the spread of wildfire.	Prevention	New	Medium 2014/2015	Elected Officials, Public Safety Admin.	Internal funds	Burn restrictions implemented and enforced.
3.2.2	Integrate hazard mitigation into comprehensive and long range plans, capital improvement programs, zoning ordinances, subdivision and storm water management regulations.	Prevention/ Natural Resource Protection	New	Medium 2014/2015	Engineering/ Public Works Planning and Development	Internal funds	Integrate elements of the mitigation plan during plan updates and ordinance amendments.
3.2.3	Enhance strategies and coordinate with utility providers to manage encroachment of vegetation in easements and rights of way.	Prevention	Revised	High 2012 & Continuing	Engineering/ Public Works Utilities Dept. (WRVEC, Empire Electric)	Internal funds	Local utility management programs and cycles coordinated with local efforts.
3.3.1	Continue to monitor and identify funding from state and federal programs for hazard mitigation activities.	Prevention	Ongoing	High 2012 & Continuing	City Administrator, Engineering/ Public Works	Existing Budget & Personnel	Funding programs researched and identified.
3.3.2	Continue to capitalize upon collaborative planning and compatible regulatory controls between the county and incorporated communities to promote infrastructure development practices that reduce the potential for flooding and property damage.	Prevention/ Natural Resource Protection	Revised	High 2012 & Continuing	Engineering/ Public Works, Planning and Development Utilities Dept.	Government program funds, Internal funds	Inter-jurisdictional collaboration increased and compatible development increased.
3.3.3	Continue development of Geographic Information Systems (GIS) to further identify, analyze and map hazard prone areas to enhance decision making and facilities management for agencies and stakeholders.	Prevention/ Public Information	Revised	Medium 2014/2015	GIS Coordinator (SMCOG, County GIS Manager)	Existing Budget & Personnel, Internal funds	Hazard prone areas identified and mapped and published on paper maps and websites.

Table 5-8: Overview of Mitigation Actions for the Village of Bull Creek

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer	Potential Funding Sources	Evaluation
1.1.1	Encourage the media and leverage social media platforms to publish or broadcast information about natural hazard vulnerability, preparedness plans and mitigation efforts throughout the county.	Emergency Services/ Public Information	Revised	High 2012 & Continuing	Local EMD (County EMA)	Existing Budget & Personnel	Maintain media relationships and encourage the continued awareness and preparedness for all hazards.
1.1.3	Increase, promote, establish and maintain participation in citizen preparedness activities, such as; Citizen Corps, CERT, Neighborhood Watch, Fire Corps, Amateur Radio, etc.	Emergency Services	New	Medium 2013/2015	Local EMD (County EMA)	Government program funds, Internal funds	Citizen groups sustained and developed, participation increased above 2012 levels.
1.2.3	Seek and utilize funding mechanisms to establish and maintain programs enabling the distribution of low-cost NOAA all-hazard radios with S.A.M.E. technology for continuous operation in homes, businesses, schools, nursing homes and all facilities for public accommodation.	Emergency Services	Revised	Medium 2014/2015	Local EMD, (Business Owners, County EMA)	Grants, Foundations, Private Sector	Procure and distribute weather radios, increase the number of radios in use By 20%.
1.2.4	Promote the purchase and continued use of NOAA all-hazard radios with S.A.M.E technology through outreach and education that includes programming methods enabling the broadcast of county specific warnings.	Public Information	New	High 2012 & Continuing	Local EMD (County EMA)	Existing Budget & Personnel	Programmed weather radios in continuous use increased and maintained
1.3.1	Integrate safe room construction in new community buildings, schools, large facilities and other establishments serving the public in areas of population concentration where feasible.	Property Protection	Revised	Low 2017	Village Chair/ Board of Trustees	Government program funds, Internal funds	Community safe room locations completed increased above 2012 levels.
1.3.2	Create and update tornado/severe storm plans and identify refuge areas (these do not comply with FEMA publication 361 safe room standards) in schools, large facilities and other establishments serving the public.	Emergency Services	Revised	Medium 2014/2015	Local EMD (Business Owners) Village Chair/ Board of Trustees	Existing Budget & Personnel, Grants, Foundations, Private Sector	Number of facilities with updated storm plans including best identified safe refuge area checklist increased by 25%

Table 5-8: Overview of Mitigation Actions for the Village of Bull Creek

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer	Potential Funding Sources	Evaluation
1.3.3	Identify and designate heating and cooling refuge areas in community buildings and make these locations available to the public in the event of extreme temperatures.	Emergency Services	New	Medium 2014/2015	Local EMD (Chair, Board of Trustees)	Existing Budget & Personnel	Weather alerts posted and promoted on local government and community organization websites
1.3.4	Promote and distribute FEMA publication 320 which provides information on construction plans and cost estimates for building safe rooms in homes or small business and cost estimates for construction.	Property Protection	New	Low 2017	Village Clerk (Local EMD, County EMA)	Existing Budget & Personnel, Private Sector	FEMA publication made available to the public on websites and social media.
1.3.5	Encourage local community organizations to continue and augment programs to provide fans, air conditioners, and winter weatherization for those at risk.	Emergency Services	Ongoing	Low 2017	Local EMD (County EMA, OACAC, Health Dept.)	Existing Budget & Personnel, Grants, Foundations, Private Sector	Program sustained, donations and distribution supported.
2.1.1	Acquire, elevate or flood-proof properties and critical infrastructure within flood hazard areas.	Property Protection	New	Low 2017	Village Chair/ Board of Trustees, Village Clerk, Public Works	Government program funds, Internal funds	Property and infrastructure flood damage reduced by 10%.
2.1.2	Encourage electrical utilities to use underground construction methods where possible to reduce disruptions of service due to natural hazard events.	Emergency Services	Ongoing	Low 2017	Public Works (WRVEC)	Government program funds, Internal funds	Utility lines buried where feasible. Reduce outages due to natural hazards by 5%.
2.1.3	Promote the establishment of Clean Energy Development Boards that enable cities and counties to provide upfront investment through Property Assessed Clean Energy (PACE) programs.	Property Protection	Revised	Low 2017	Village Chair/ Board of Trustees	Existing Budget & Personnel	Ensure that at least 75% of property owners are eligible for clean energy improvement programs.
2.2.2	Encourage the adoption of updated building codes and compatible land development policies in incorporated and unincorporated areas.	Prevention	Ongoing	High 2012 and continuing	Village Chair/ Board of Trustees	Existing Budget & Personnel	Building codes are updated or adopted.

Table 5-8: Overview of Mitigation Actions for the Village of Bull Creek

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer	Potential Funding Sources	Evaluation
2.2.3	Encourage the adoption of measures to control runoff from developing areas outside the floodplain where ordinances have not been enacted.	Prevention	Revised	Medium 2014/2015	Village Chair/ Board of Trustees	Existing Budget & Personnel	Storm water management regulations adopted
2.2.4	The NFIP communities of Taney County, Branson, Bull Creek, Forsyth, Hollister, Merriam Woods and Rockaway Beach will enforce floodplain management requirements, including regulating all new and substantially improved construction in the Special Flood Hazard Areas (SPFAs).	Property Protection	Revised	High 2012 & Continuing	Village Chair/ Board of Trustees	Existing Budget & Personnel	NFIP compliance maintained.
3.1.1	Encourage all elected officials, public administrators, community stakeholders and responders to participate in National Incident Management System (NIMS) training and compliance programs.	Emergency Services	New	Medium 2014/2015	Village Chair/ Board of Trustees/ Clerk	Government program funds, Internal funds	Increase number of trained officials and stakeholders by 50%.
3.1.2	Continue to enforce highly visible 911 addressing for residences and businesses through building and business permitting as well as public education of existing ordinances.	Emergency Services	Revised	Medium 2014/2015	Village Clerk (Taney county 911)	Existing Budget & Personnel	95% of structures are identified with highly visible 911 addresses.
3.2.1	Implement burn restrictions during time of weather conditions conducive to the spread of wildfire.	Prevention	New	Medium 2014/2015	Village Chair/ Board of Trustees	Internal funds	Burn restrictions implemented and enforced.
3.2.2	Integrate hazard mitigation into comprehensive and long range plans, capital improvement programs, zoning ordinances, subdivision and storm water management regulations.	Prevention/ Natural Resource Protection	New	Medium 2014/2015	Village Chair/ Board of Trustees (Public Works)	Internal funds	Integrate elements of the mitigation plan during plan updates and ordinance amendments.
3.2.3	Enhance strategies and coordinate with utility providers to manage encroachment of vegetation in easements and rights of way.	Prevention	Revised	High 2012 & Continuing	Local Public Works Dept.	Internal funds	Local utility management programs and cycles coordinated with local efforts.

Table 5-8: Overview of Mitigation Actions for the Village of Bull Creek

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer	Potential Funding Sources	Evaluation
3.3.1	Continue to monitor and identify funding from state and federal programs for hazard mitigation activities.	Prevention	Ongoing	High 2012 & Continuing	Village Clerk, Local EMD	Existing Budget & Personnel	Funding programs researched and identified.
3.3.2	Continue to capitalize upon collaborative planning and compatible regulatory controls between the county and incorporated communities to promote infrastructure development practices that reduce the potential for flooding and property damage.	Prevention/ Natural Resource Protection	Revised	High 2012 & Continuing	Village Chair/ Board of Trustees (Public Works)	Government program funds, Internal funds	Inter-jurisdictional collaboration increased and compatible development increased.

Table 5-9: Overview of Mitigation Actions for City of Forsyth

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer (Partners)	Potential Funding Sources	Evaluation
1.1.1	Encourage the media and leverage social media platforms to publish or broadcast information about natural hazard vulnerability, preparedness plans and mitigation efforts throughout the county.	Emergency Services/ Public Information	Revised	High 2012 & Continuing	Local EMD, (Health Dept, County EMA)	Existing Budget & Personnel	Maintain media relationships and encourage the continued awareness and preparedness for all hazards.
1.1.2	Increase public awareness on techniques to reduce risk, such as the use of fire resistant materials in construction, landscaping techniques and planting materials that are more resistant to the spread of wildfire.	Public Information/ Natural Resource Protection	New	High 2012 & continuing	Local EMD (Building & Planning Director, Fire Chief)	Existing Budget & Personnel	Information developed and distributed with building permits or development proposals. Use of materials and landscaping increased.
1.1.3	Increase, promote, establish and maintain participation in citizen preparedness activities, such as; Citizen Corps, CERT, Neighborhood Watch, Fire Corps, Amateur Radio, etc.	Emergency Services	New	Medium 2013/2015	Local EMD, (Public Safety Admin, County EMA)	Government program funds, Internal funds	Citizen groups sustained and developed, participation increased above 2012 levels.
1.2.1	Continue to maintain and operate outdoor warning sirens in areas that host large outdoor events and recreational activities throughout the county.	Emergency Services	New	Medium 2014/2015	Local EMD, (Public Safety Admin)	Existing Budget & Personnel	All warning sirens maintained and operational through 2017.
1.2.3	Seek and utilize funding mechanisms to establish and maintain programs enabling the distribution of low-cost NOAA all-hazard radios with S.A.M.E. technology for continuous operation in homes, businesses, schools, nursing homes and all facilities for public accommodation.	Emergency Services	Revised	Medium 2014/2015	Local EMD, (Public Safety Admin, Community Orgs, County EMA)	Grants, Foundations, Private Sector	Procure and distribute weather radios, increase the number of radios in use By 20%.
1.2.4	Promote the purchase and continued use of NOAA all-hazard radios with S.A.M.E technology through outreach and education that includes programming methods enabling the broadcast of county specific warnings.	Public Information	New	High 2012 & Continuing	Local EMD (Health Dept, Public Safety Admin, County EMA)	Existing Budget & Personnel	Programmed weather radios in continuous use increased and maintained

Table 5-9: Overview of Mitigation Actions for City of Forsyth

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer (Partners)	Potential Funding Sources	Evaluation
1.2.5	Promote local severe weather alert applications for mobile communications devices, such as; Branson Severe Weather Alerts, KTTS, KSPR and KY3 Severe Weather Warnings. These should be in addition to, not in replace of NOAA all-hazard radios with S.A.M.E. technology.	Emergency Services	New	Medium 2014/2015	Local EMD, (Health Dept, Public Safety Admin,)	Existing Budget & Personnel	Weather alerts posted and promoted on local government and community organization websites
1.3.1	Integrate safe room construction in new community buildings, schools, large facilities and other establishments serving the public in areas of population concentration where feasible.	Property Protection	Revised	Low 2017	Public Works Dept. Building & Planning	Government program funds, Internal funds	Community safe room locations completed, increased above 2012 levels.
1.3.2	Create and update tornado/severe storm plans and identify refuge areas (these do not comply with FEMA publication 361 safe room standards) in schools, large facilities and other establishments serving the public.	Emergency Services	Revised	Medium 2014/2015	Local EMD Engineering/ Public Works Dept. Building & Planning, Facility Operators	Existing Budget & Personnel, Grants, Foundations, Private Sector	Number of facilities with updated storm plans including best identified safe refuge area checklist increased by 25%
1.3.3	Identify and designate heating and cooling refuge areas in community buildings and make these locations available to the public in the event of extreme temperatures.	Emergency Services	New	Medium 2014/2015	Local EMD, (Health Dept, LEPC)	Existing Budget & Personnel	Weather alerts posted and promoted on local government and community organization websites
1.3.4	Promote and distribute FEMA publication 320 which provides information on construction plans and cost estimates for building safe rooms in homes or small business and cost estimates for construction.	Property Protection	New	Low 2017	Local EMD, (Building & Planning)	Existing Budget & Personnel,	FEMA publication made available to the public on websites and social media.
1.3.5	Encourage local community organizations to continue and augment programs to provide fans, air conditioners, and winter weatherization for those at risk.	Emergency Services	Ongoing	Low 2017	Local EMD, (OACAC, Health Dept. Community Orgs, County EMA)	Existing Budget & Personnel, Grants, Foundations,	Program sustained, donations and distribution supported.

Table 5-9: Overview of Mitigation Actions for City of Forsyth

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer (Partners)	Potential Funding Sources	Evaluation
2.1.1	Acquire, elevate or flood-proof properties and critical infrastructure within flood hazard areas.	Property Protection	New	Low 2017	Flood Plain Manager, Public Works Building & Planning Dept.	HMGP, Internal funds	Property and infrastructure flood damage reduced by 10%.
2.1.2	Encourage electrical utilities to use underground construction methods where possible to reduce disruptions of service due to natural hazard events.	Emergency Services	Ongoing	Low 2017	Public Works (Building & Planning Empire Electric)	Government program funds, Internal funds	Utility lines buried where feasible. Reduce outages due to natural hazards by 5%.
2.1.3	Promote the establishment of Clean Energy Development Boards that enable cities and counties to provide upfront investment through Property Assessed Clean Energy (PACE) programs.	Property Protection	Revised	Low 2017	Mayor, Board of Alderman	Existing Budget & Personnel	Ensure that at least 75% of property owners are eligible for clean energy improvement programs.
2.1.4	Ensure that wastewater treatment systems will function during flood and drought events.	Structural	Ongoing	Medium 2014/2015	Public Works	Government program funds, Internal funds	System functions maintained during hazard events.
2.2.4	The NFIP communities of Taney County, Branson, Bull Creek, Forsyth, Hollister, Merriam Woods and Rockaway Beach will enforce floodplain management requirements, including regulating all new and substantially improved construction in the Special Flood Hazard Areas (SPFAs).	Property Protection	Revised	High 2012 & Continuing	Mayor, Board of Alderman (Building & Planning Dept.)	Existing Budget & Personnel	NFIP compliance maintained.
3.1.1	Encourage all elected officials, public administrators, community stakeholders and responders to participate in National Incident Management System (NIMS) training and compliance programs.	Emergency Services	New	Medium 2014/2015	Local EMD (Elected Officials and Staff & Stakeholders)	Government program funds, Internal funds	Increase number of trained officials and stakeholders by 100%.

Table 5-9: Overview of Mitigation Actions for City of Forsyth

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer (Partners)	Potential Funding Sources	Evaluation
3.1.2	Continue to enforce highly visible 911 addressing for residences and businesses through building and business permitting as well as public education of existing ordinances.	Emergency Services	Revised	Medium 2014/2015	Building & Planning Dept.	Existing Budget & Personnel	95% of structures are identified with highly visible 911 addresses.
3.2.1	Implement burn restrictions during time of weather conditions conducive to the spread of wildfire.	Prevention	New	Medium 2014/2015	Elected Officials, Public Safety Admin.	Internal funds	Burn restrictions implemented and enforced.
3.2.2	Integrate hazard mitigation into comprehensive and long range plans, capital improvement programs, zoning ordinances, subdivision and storm water management regulations.	Prevention/ Natural Resource Protection	New	Medium 2014/2015	Mayor, Board of Alderman Public Works, Building & Planning	Internal funds	Integrate elements of the mitigation plan during plan updates and ordinance amendments.
3.2.3	Enhance strategies and coordinate with utility providers to manage encroachment of vegetation in easements and rights of way.	Prevention	Revised	High 2012 & Continuing	Public Works (Empire Electric)	Internal funds	Local utility management programs and cycles coordinated with local efforts.
3.3.1	Continue to monitor and identify funding from state and federal programs for hazard mitigation activities.	Prevention	Ongoing	High 2012 & Continuing	Local EMD, City Clerk, Public Works	Existing Budget & Personnel	Funding programs researched and identified.
3.3.2	Continue to capitalize upon collaborative planning and compatible regulatory controls between the county and incorporated communities to promote infrastructure development practices that reduce the potential for flooding and property damage.	Prevention/ Natural Resource Protection	Revised	High 2012 & Continuing	Mayor, Board of Alderman Public Works, Building & Planning Local EMD	Government program funds, Internal funds	Inter-jurisdictional collaboration increased and compatible development increased.

Table 5-10: Overview of Mitigation Actions for City of Hollister

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer (Partners)	Potential Funding Sources	Evaluation
1.1.1	Encourage the media and leverage social media platforms to publish or broadcast information about natural hazard vulnerability, preparedness plans and mitigation efforts throughout the county.	Emergency Services/ Public Information	Revised	High 2012 & Continuing	Local EMD, (Health Dept, County EMA)	Existing Budget & Personnel	Maintain media relationships and encourage the continued awareness and preparedness for all hazards.
1.1.2	Increase public awareness on techniques to reduce risk, such as the use of fire resistant materials in construction, landscaping techniques and planting materials that are more resistant to the spread of wildfire.	Public Information/ Natural Resource Protection	New	High 2012 & continuing	Local EMD (Building & Planning Director, Fire Chief)	Existing Budget & Personnel	Information developed and distributed with building permits or development proposals. Use of materials and landscaping increased.
1.1.3	Increase, promote, establish and maintain participation in citizen preparedness activities, such as; Citizen Corps, CERT, Neighborhood Watch, Fire Corps, Amateur Radio, etc.	Emergency Services	New	Medium 2013/2015	Local EMD, (Public Safety Admin, County EMA)	Government program funds, Internal funds	Citizen groups sustained and developed, participation increased above 2012 levels.
1.2.3	Seek and utilize funding mechanisms to establish and maintain programs enabling the distribution of low-cost NOAA all-hazard radios with S.A.M.E. technology for continuous operation in homes, businesses, schools, nursing homes and all facilities for public accommodation.	Emergency Services	Revised	Medium 2014/2015	Local EMD, (Public Safety Admin, Community Orgs, County EMA)	Grants, Foundations, Private Sector	Procure and distribute weather radios, increase the number of radios in use By 20%.
1.2.4	Promote the purchase and continued use of NOAA all-hazard radios with S.A.M.E technology through outreach and education that includes programming methods enabling the broadcast of county specific warnings.	Public Information	New	High 2012 & Continuing	Local EMD (Health Dept, Public Safety Admin, County EMA)	Existing Budget & Personnel	Programmed weather radios in continuous use increased and maintained
1.2.5	Promote local severe weather alert applications for mobile communications devices, such as; Branson Severe Weather Alerts, KTTS, KSPR and KY3 Severe Weather Warnings. These should be in addition to, not in replace of NOAA all-hazard radios with S.A.M.E. technology.	Emergency Services	New	Medium 2014/2015	Local EMD, (Health Dept, Public Safety Admin,)	Existing Budget & Personnel	Weather alerts posted and promoted on local government and community organization websites

Table 5-10: Overview of Mitigation Actions for City of Hollister

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer (Partners)	Potential Funding Sources	Evaluation
1.3.1	Integrate safe room construction in new community buildings, schools, large facilities and other establishments serving the public in areas of population concentration where feasible.	Property Protection	Revised	Low 2017	Public Works Dept. Building & Planning	Government program funds, Internal funds	Community safe room locations completed, increased above 2012 levels.
1.3.2	Create and update tornado/severe storm plans and identify refuge areas (these do not comply with FEMA publication 361 safe room standards) in schools, large facilities and other establishments serving the public.	Emergency Services	Revised	Medium 2014/2015	Local EMD Engineering/ Public Works Dept. Building & Planning, Facility Operators	Existing Budget & Personnel, Grants, Foundations, Private Sector	Number of facilities with updated storm plans including best identified safe refuge area checklist increased by 25%
1.3.3	Identify and designate heating and cooling refuge areas in community buildings and make these locations available to the public in the event of extreme temperatures.	Emergency Services	New	Medium 2014/2015	Local EMD, (Health Dept, LEPC)	Existing Budget & Personnel	Weather alerts posted and promoted on local government and community organization websites
1.3.4	Promote and distribute FEMA publication 320 which provides information on construction plans and cost estimates for building safe rooms in homes or small business and cost estimates for construction.	Property Protection	New	Low 2017	Local EMD, (Building & Planning)	Existing Budget & Personnel,	FEMA publication made available to the public on websites and social media.
1.3.5	Encourage local community organizations to continue and augment programs to provide fans, air conditioners, and winter weatherization for those at risk.	Emergency Services	Ongoing	Low 2017	Local EMD, (OACAC, Health Dept. Community Orgs, County EMA)	Existing Budget & Personnel, Grants, Foundations, Private Sector	Program sustained, donations and distribution supported.
2.1.1	Acquire, elevate or flood-proof properties and critical infrastructure within flood hazard areas.	Property Protection	New	Low 2017	Flood Plain Manager, Public Works Building & Planning Dept.	HMGP, Internal funds	Property and infrastructure flood damage reduced by 10%.

Table 5-10: Overview of Mitigation Actions for City of Hollister

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer (Partners)	Potential Funding Sources	Evaluation
2.1.2	Encourage electrical utilities to use underground construction methods where possible to reduce disruptions of service due to natural hazard events.	Emergency Services	Ongoing	Low 2017	Public Works (Building & Planning Empire Electric)	Government program funds, Internal funds	Utility lines buried where feasible. Reduce outages due to natural hazards by 5%.
2.1.3	Promote the establishment of Clean Energy Development Boards that enable cities and counties to provide upfront investment through Property Assessed Clean Energy (PACE) programs.	Property Protection	Revised	Low 2017	Mayor, Board of Alderman	Existing Budget & Personnel	Ensure that at least 75% of property owners are eligible for clean energy improvement programs.
2.1.4	Ensure that wastewater treatment systems will function during flood and drought events.	Structural	Ongoing	Medium 2014/2015	Public Works	Government program funds, Internal funds	System functions maintained during hazard events.
2.2.4	The NFIP communities of Taney County, Branson, Bull Creek, Forsyth, Hollister, Merriam Woods and Rockaway Beach will enforce floodplain management requirements, including regulating all new and substantially improved construction in the Special Flood Hazard Areas (SPFAs).	Property Protection	Revised	High 2012 & Continuing	Mayor, Board of Alderman (Building & Planning Dept.)	Existing Budget & Personnel	NFIP compliance maintained.
3.1.1	Encourage all elected officials, public administrators, community stakeholders and responders to participate in National Incident Management System (NIMS) training and compliance programs.	Emergency Services	New	Medium 2014/2015	Local EMD (Elected Officials and Staff & Stakeholders)	Government program funds, Internal funds	Increase number of trained officials and stakeholders by 100%.
3.1.2	Continue to enforce highly visible 911 addressing for residences and businesses through building and business permitting as well as public education of existing ordinances.	Emergency Services	Revised	Medium 2014/2015	Building & Planning Dept.	Existing Budget & Personnel	95% of structures are identified with highly visible 911 addresses.

Table 5-10: Overview of Mitigation Actions for City of Hollister

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer (Partners)	Potential Funding Sources	Evaluation
3.2.1	Implement burn restrictions during time of weather conditions conducive to the spread of wildfire.	Prevention	New	Medium 2014/2015	Elected Officials, Public Safety Admin.	Internal funds	Burn restrictions implemented and enforced.
3.2.2	Integrate hazard mitigation into comprehensive and long range plans, capital improvement programs, zoning ordinances, subdivision and storm water management regulations.	Prevention/ Natural Resource Protection	New	Medium 2014/2015	Mayor, Board of Alderman Public Works, Building & Planning	Internal funds	Integrate elements of the mitigation plan during plan updates and ordinance amendments.
3.2.3	Enhance strategies and coordinate with utility providers to manage encroachment of vegetation in easements and rights of way.	Prevention	Revised	High 2012 & Continuing	Public Works (Empire Electric)	Internal funds	Local utility management programs and cycles coordinated with local efforts.
3.3.1	Continue to monitor and identify funding from state and federal programs for hazard mitigation activities.	Prevention	Ongoing	High 2012 & Continuing	Local EMD, City Clerk, Public Works	Existing Budget & Personnel	Funding programs researched and identified.
3.3.2	Continue to capitalize upon collaborative planning and compatible regulatory controls between the county and incorporated communities to promote infrastructure development practices that reduce the potential for flooding and property damage.	Prevention/ Natural Resource Protection	Revised	High 2012 & Continuing	Mayor, Board of Alderman Public Works, Building & Planning Local EMD	Government program funds, Internal funds	Inter-jurisdictional collaboration increased and compatible development increased.

Table 5-11: Overview of Mitigation Actions for the Village of Kirbyville

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer	Potential Funding Sources	Evaluation
1.1.1	Encourage the media and leverage social media platforms to publish or broadcast information about natural hazard vulnerability, preparedness plans and mitigation efforts throughout the county.	Emergency Services/ Public Information	Revised	High 2012 & Continuing	Local EMD (County EMA)	Existing Budget & Personnel	Maintain media relationships and encourage the continued awareness and preparedness for all hazards.
1.1.3	Increase, promote, establish and maintain participation in citizen preparedness activities, such as; Citizen Corps, CERT, Neighborhood Watch, Fire Corps, Amateur Radio, etc.	Emergency Services	New	Medium 2013/2015	Local EMD (County EMA)	Government program funds, Internal funds	Citizen groups sustained and developed, participation increased above 2012 levels.
1.2.3	Seek and utilize funding mechanisms to establish and maintain programs enabling the distribution of low-cost NOAA all-hazard radios with S.A.M.E. technology for continuous operation in homes, businesses, schools, nursing homes and all facilities for public accommodation.	Emergency Services	Revised	Medium 2014/2015	Local EMD, (Business Owners, County EMA)	Grants, Foundations, Private Sector	Procure and distribute weather radios, increase the number of radios in use By 20%.
1.2.4	Promote the purchase and continued use of NOAA all-hazard radios with S.A.M.E technology through outreach and education that includes programming methods enabling the broadcast of county specific warnings.	Public Information	New	High 2012 & Continuing	Local EMD (County EMA)	Existing Budget & Personnel	Programmed weather radios in continuous use increased and maintained
1.2.5	Promote local severe weather alert applications for mobile communications devices, such as; Branson Severe Weather Alerts, KTTS, KSPR and KY3 Severe Weather Warnings. These should be in addition to, not in replace of NOAA all-hazard radios with S.A.M.E. technology.	Emergency Services	New	Medium 2014/2015	Local EMD (Chair, Board of Trustees)	Existing Budget & Personnel	Weather alerts posted and promoted through local government functions.
1.3.1	Integrate safe room construction in new community buildings, schools, large facilities and other establishments serving the public in areas of population concentration where feasible.	Property Protection	Revised	Low 2017	Village Chair/ Board of Trustees	Government program funds, Internal funds	Community safe room locations completed increased above 2012 levels.

Table 5-11: Overview of Mitigation Actions for the Village of Kirbyville

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer	Potential Funding Sources	Evaluation
1.3.2	Create and update tornado/severe storm plans and identify refuge areas (these do not comply with FEMA publication 361 safe room standards) in schools, large facilities and other establishments serving the public.	Emergency Services	Revised	Medium 2014/2015	Local EMD (Business Owners) Village Chair/ Board of Trustees	Existing Budget & Personnel, Grants, Foundations, Private Sector	Number of facilities with updated storm plans including best identified safe refuge area checklist increased by 25%.
1.3.3	Identify and designate heating and cooling refuge areas in community buildings and make these locations available to the public in the event of extreme temperatures.	Emergency Services	New	Medium 2014/2015	Local EMD (Chair, Board of Trustees)	Existing Budget & Personnel	Weather alerts posted and promoted through local government functions.
1.3.4	Promote and distribute FEMA publication 320 which provides information on construction plans and cost estimates for building safe rooms in homes or small business and cost estimates for construction.	Property Protection	New	Low 2017	Village Clerk (Local EMD, County EMA)	Existing Budget & Personnel, Private Sector	FEMA publication made available to the public on websites and social media.
1.3.5	Encourage local community organizations to continue and augment programs to provide fans, air conditioners, and winter weatherization for those at risk.	Emergency Services	Ongoing	Low 2017	Local EMD (County EMA, OACAC, Health Dept.)	Existing Budget & Personnel, Grants, Foundations,	Program sustained, donations and distribution supported.
2.1.2	Encourage electrical utilities to use underground construction methods where possible to reduce disruptions of service due to natural hazard events.	Emergency Services	Ongoing	Low 2017	Village Chair/ Board of Trustees	Government program funds, Internal funds	Utility lines buried where feasible. Reduce outages due to natural hazards by 5%.
2.1.3	Promote the establishment of Clean Energy Development Boards that enable cities and counties to provide upfront investment through Property Assessed Clean Energy (PACE) programs.	Property Protection	Revised	Low 2017	Village Chair/ Board of Trustees	Existing Budget & Personnel	Ensure that at least 75% of property owners are eligible for clean energy improvement programs.
2.2.2	Encourage the adoption of updated building codes and compatible land development policies in incorporated and unincorporated areas.	Prevention	Ongoing	High 2012 and continuing	Village Chair/ Board of Trustees	Existing Budget & Personnel	Building codes are updated or adopted.

Table 5-11: Overview of Mitigation Actions for the Village of Kirbyville

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer	Potential Funding Sources	Evaluation
2.2.3	Encourage the adoption of measures to control runoff from developing areas outside the floodplain where ordinances have not been enacted.	Prevention	Revised	Medium 2014/2015	Village Chair/ Board of Trustees	Existing Budget & Personnel	Storm water management regulations adopted
3.1.1	Encourage all elected officials, public administrators, community stakeholders and responders to participate in National Incident Management System (NIMS) training and compliance programs.	Emergency Services	New	Medium 2014/2015	Village Chair/ Board of Trustees/ Clerk	Government program funds, Internal funds	Increase number of trained officials and stakeholders by 50%.
3.1.2	Continue to enforce highly visible 911 addressing for residences and businesses through building and business permitting as well as public education of existing ordinances.	Emergency Services	Revised	Medium 2014/2015	Village Chair/ Board of Trustees/ Clerk	Existing Budget & Personnel	95% of structures are identified with highly visible 911 addresses.
3.2.1	Implement burn restrictions during time of weather conditions conducive to the spread of wildfire.	Prevention	New	Medium 2014/2015	Village Chair/ Board of Trustees	Internal funds	Burn restrictions implemented and enforced.
3.2.2	Integrate hazard mitigation into comprehensive and long range plans, capital improvement programs, zoning ordinances, subdivision and storm water management regulations.	Prevention/ Natural Resource Protection	New	Medium 2014/2015	Village Chair/ Board of Trustees	Internal funds	Integrate elements of the mitigation plan during plan updates and ordinance amendments.
3.2.3	Enhance strategies and coordinate with utility providers to manage encroachment of vegetation in easements and rights of way.	Prevention	Revised	High 2012 & Continuing	Village Chair/ Board of Trustees	Internal funds	Local utility management programs and cycles coordinated with local efforts.
3.3.1	Continue to monitor and identify funding from state and federal programs for hazard mitigation activities.	Prevention	Ongoing	High 2012 & Continuing	Village Clerk, Local EMD	Existing Budget & Personnel	Funding programs researched and identified.
3.3.2	Continue to capitalize upon collaborative planning and compatible regulatory controls between the county and incorporated communities to promote infrastructure development practices that reduce the potential for flooding and property damage.	Prevention/ Natural Resource Protection	Revised	High 2012 & Continuing	Village Chair/ Board of Trustees	Government program funds, Internal funds	Inter-jurisdictional collaboration increased and compatible development increased.

Table 5-12: Overview of Mitigation Actions for the Village of Merriam Woods

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer	Potential Funding Sources	Evaluation
1.1.1	Encourage the media and leverage social media platforms to publish or broadcast information about natural hazard vulnerability, preparedness plans and mitigation efforts throughout the county.	Emergency Services/ Public Information	Revised	High 2012 & Continuing	Local EMD (County EMA)	Existing Budget & Personnel	Maintain media relationships and encourage the continued awareness and preparedness for all hazards.
1.1.3	Increase, promote, establish and maintain participation in citizen preparedness activities, such as; Citizen Corps, CERT, Neighborhood Watch, Fire Corps, Amateur Radio, etc.	Emergency Services	New	Medium 2013/2015	Local EMD (County EMA)	Government program funds, Internal funds	Citizen groups sustained and developed, participation increased above 2012 levels.
1.2.1	Continue to maintain and operate outdoor warning sirens in areas that host large outdoor events and recreational activities throughout the county.	Emergency Services	New	Medium 2014/2015	Public Safety Admin. (County EMA)	Existing Budget & Personnel	All warning sirens maintained and operational through 2017.
1.2.3	Seek and utilize funding mechanisms to establish and maintain programs enabling the distribution of low-cost NOAA all-hazard radios with S.A.M.E. technology for continuous operation in homes, businesses, schools, nursing homes and all facilities for public accommodation.	Emergency Services	Revised	Medium 2014/2015	Local EMD, (Business Owners, County EMA)	Grants, Foundations, Private Sector	Procure and distribute weather radios, increase the number of radios in use By 20%.
1.2.4	Promote the purchase and continued use of NOAA all-hazard radios with S.A.M.E technology through outreach and education that includes programming methods enabling the broadcast of county specific warnings.	Public Information	New	High 2012 & Continuing	Local EMD (County EMA)	Existing Budget & Personnel	Programmed weather radios in continuous use increased and maintained
1.2.5	Promote local severe weather alert applications for mobile communications devices, such as; Branson Severe Weather Alerts, KTTS, KSPR and KY3 Severe Weather Warnings. These should be in addition to, not in replace of NOAA all-hazard radios with S.A.M.E. technology.	Emergency Services	New	Medium 2014/2015	Local EMD (Chair, Board of Trustees)	Existing Budget & Personnel	Weather alerts posted and promoted through local government functions.

Table 5-12: Overview of Mitigation Actions for the Village of Merriam Woods

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer	Potential Funding Sources	Evaluation
1.3.1	Integrate safe room construction in new community buildings, schools, large facilities and other establishments serving the public in areas of population concentration where feasible.	Property Protection	Revised	Low 2017	Village Chair/ Board of Trustees	Government program funds, Internal funds	Community safe room locations completed increased above 2012 levels.
1.3.2	Create and update tornado/severe storm plans and identify refuge areas (these do not comply with FEMA publication 361 safe room standards) in schools, large facilities and other establishments serving the public.	Emergency Services	Revised	Medium 2014/2015	Local EMD (Business Owners) Village Chair/ Board of Trustees	Existing Budget & Personnel, Grants, Foundations	Number of facilities with updated storm plans including best identified safe refuge area checklist increased by 25%
1.3.3	Identify and designate heating and cooling refuge areas in community buildings and make these locations available to the public in the event of extreme temperatures.	Emergency Services	New	Medium 2014/2015	Local EMD (Chair, Board of Trustees)	Existing Budget & Personnel	Weather alerts posted and promoted through local government functions.
1.3.4	Promote and distribute FEMA publication 320 which provides information on construction plans and cost estimates for building safe rooms in homes or small business and cost estimates for construction.	Property Protection	New	Low 2017	Village Clerk (Local EMD, County EMA)	Existing Budget & Personnel, Private Sector	FEMA publication made available to the public on websites and social media.
1.3.5	Encourage local community organizations to continue and augment programs to provide fans, air conditioners, and winter weatherization for those at risk.	Emergency Services	Ongoing	Low 2017	Local EMD (County EMA, OACAC, Health Dept.)	Existing Budget & Personnel, Grants, Foundations, Private Sector	Program sustained, donations and distribution supported.
2.1.1	Acquire, elevate or flood-proof properties and critical infrastructure within flood hazard areas.	Property Protection	New	Low 2017	Village Chair/ Board of Trustees, Village Clerk, Public Works	Government program funds, Internal funds	Property and infrastructure flood damage reduced by 10%.

Table 5-12: Overview of Mitigation Actions for the Village of Merriam Woods

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer	Potential Funding Sources	Evaluation
2.1.2	Encourage electrical utilities to use underground construction methods where possible to reduce disruptions of service due to natural hazard events.	Emergency Services	Ongoing	Low 2017	Public Works (WRVEC)	Government program funds, Internal funds	Utility lines buried where feasible. Reduce outages due to natural hazards by 5%.
2.1.3	Promote the establishment of Clean Energy Development Boards that enable cities and counties to provide upfront investment through Property Assessed Clean Energy (PACE) programs.	Property Protection	Revised	Low 2017	Village Chair/ Board of Trustees	Existing Budget & Personnel	Ensure that at least 75% of property owners are eligible for clean energy improvement programs.
2.2.2	Encourage the adoption of updated building codes and compatible land development policies in incorporated and unincorporated areas.	Prevention	Ongoing	High 2012 and continuing	Village Chair/ Board of Trustees	Existing Budget & Personnel	Building codes are updated or adopted.
2.2.3	Encourage the adoption of measures to control runoff from developing areas outside the floodplain where ordinances have not been enacted.	Prevention	Revised	Medium 2014/2015	Village Chair/ Board of Trustees	Existing Budget & Personnel	Storm water management regulations adopted
2.2.4	The NFIP communities of Taney County, Branson, Bull Creek, Forsyth, Hollister, Merriam Woods and Rockaway Beach will enforce floodplain management requirements, including regulating all new and substantially improved construction in the Special Flood Hazard Areas (SPFAs).	Property Protection	Revised	High 2012 & Continuing	Village Chair/ Board of Trustees	Existing Budget & Personnel	NFIP compliance maintained.
3.1.1	Encourage all elected officials, public administrators, community stakeholders and responders to participate in National Incident Management System (NIMS) training and compliance programs.	Emergency Services	New	Medium 2014/2015	Village Chair/ Board of Trustees/ Clerk	Government program funds, Internal funds	Increase number of trained officials and stakeholders by 50%.
3.1.2	Continue to enforce highly visible 911 addressing for residences and businesses through building and business permitting as well as public education of existing ordinances.	Emergency Services	Revised	Medium 2014/2015	Public Safety Admin.	Existing Budget & Personnel	95% of structures are identified with highly visible 911 addresses.

Table 5-12: Overview of Mitigation Actions for the Village of Merriam Woods

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer	Potential Funding Sources	Evaluation
3.2.1	Implement burn restrictions during time of weather conditions conducive to the spread of wildfire.	Prevention	New	Medium 2014/2015	Village Chair/ Board of Trustees	Internal funds	Burn restrictions implemented and enforced.
3.2.2	Integrate hazard mitigation into comprehensive and long range plans, capital improvement programs, zoning ordinances, subdivision and storm water management regulations.	Prevention/ Natural Resource Protection	New	Medium 2014/2015	Village Chair/ Board of Trustees (Public Works)	Internal funds	Integrate elements of the mitigation plan during plan updates and ordinance amendments.
3.2.3	Enhance strategies and coordinate with utility providers to manage encroachment of vegetation in easements and rights of way.	Prevention	Revised	High 2012 & Continuing	Village Clerk Public Works (WRVEC)	Internal funds	Local utility management programs and cycles coordinated with local efforts.
3.3.1	Continue to monitor and identify funding from state and federal programs for hazard mitigation activities.	Prevention	Ongoing	High 2012 & Continuing	Village Clerk, Local EMD	Existing Budget & Personnel	Funding programs researched and identified.
3.3.2	Continue to capitalize upon collaborative planning and compatible regulatory controls between the county and incorporated communities to promote infrastructure development practices that reduce the potential for flooding and property damage.	Prevention/ Natural Resource Protection	Revised	High 2012 & Continuing	Village Chair/ Board of Trustees (Public Works)	Government program funds, Internal funds	Inter-jurisdictional collaboration increased and compatible development increased.

Table 5-13: Overview of Mitigation Actions for City of Rockaway Beach

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer (Partners)	Potential Funding Sources	Evaluation
1.1.1	Encourage the media and leverage social media platforms to publish or broadcast information about natural hazard vulnerability, preparedness plans and mitigation efforts throughout the county.	Emergency Services/ Public Information	Revised	High 2012 & Continuing	Local EMD, (Health Dept, County EMA)	Existing Budget & Personnel	Maintain media relationships and encourage the continued awareness and preparedness for all hazards.
1.1.2	Increase public awareness on techniques to reduce risk, such as the use of fire resistant materials in construction, landscaping techniques and planting materials that are more resistant to the spread of wildfire.	Public Information/ Natural Resource Protection	New	High 2012 & continuing	Local EMD (Building & Planning Director, Fire Chief)	Existing Budget & Personnel	Information developed and distributed with building permits or development proposals. Use of materials and landscaping increased.
1.1.3	Increase, promote, establish and maintain participation in citizen preparedness activities, such as; Citizen Corps, CERT, Neighborhood Watch, Fire Corps, Amateur Radio, etc.	Emergency Services	New	Medium 2013/2015	Local EMD, (Public Safety Admin, County EMA)	Government program funds, Internal funds	Citizen groups sustained and developed, participation increased above 2012 levels.
1.2.1	Continue to maintain and operate outdoor warning sirens in areas that host large outdoor events and recreational activities throughout the county.	Emergency Services	New	Medium 2014/2015	Local EMD, (Public Safety Admin)	Existing Budget & Personnel	All warning sirens maintained and operational through 2017.
1.2.2	Improve effectiveness of outdoor warning sirens by making all existing sirens radio activated.	Emergency Services	Revised	Low 2017	Local EMD (County EMA)	Existing Budget & Personnel	Sirens upgraded to radio activated.
1.2.3	Seek and utilize funding mechanisms to establish and maintain programs enabling the distribution of low-cost NOAA all-hazard radios with S.A.M.E. technology for continuous operation in homes, businesses, schools, nursing homes and all facilities for public accommodation.	Emergency Services	Revised	Medium 2014/2015	Local EMD, (Public Safety Admin, Community Orgs, County EMA)	Grants, Foundations, Private Sector	Procure and distribute weather radios, increase the number of radios in use By 20%.
1.2.4	Promote the purchase and continued use of NOAA all-hazard radios with S.A.M.E technology through outreach and education that includes programming methods enabling the broadcast of county specific warnings.	Public Information	New	High 2012 & Continuing	Local EMD (Health Dept, Public Safety Admin, County EMA)	Existing Budget & Personnel	Programmed weather radios in continuous use increased and maintained

Table 5-13: Overview of Mitigation Actions for City of Rockaway Beach

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer (Partners)	Potential Funding Sources	Evaluation
1.2.5	Promote local severe weather alert applications for mobile communications devices, such as; Branson Severe Weather Alerts, KTTS, KSPR and KY3 Severe Weather Warnings. These should be in addition to, not in replace of NOAA all-hazard radios with S.A.M.E. technology.	Emergency Services	New	Medium 2014/2015	Local EMD, Local EMD (Health Dept, Public Safety Admin,)	Existing Budget & Personnel	Weather alerts posted and promoted on local government and community organization websites
1.3.1	Integrate safe room construction in new community buildings, schools, large facilities and other establishments serving the public in areas of population concentration where feasible.	Property Protection	Revised	Low 2017	Public Works Dept. Building & Planning	Government program funds, Internal funds	Community safe room locations completed increased above 2012 levels.
1.3.2	Create and update tornado/severe storm plans and identify refuge areas (these do not comply with FEMA publication 361 safe room standards) in schools, large facilities and other establishments serving the public.	Emergency Services	Revised	Medium 2014/2015	Local EMD , Facility Operators	Existing Budget & Personnel, Grants, Foundations,	Number of facilities with updated storm plans including best identified safe refuge area checklist increased by 25%
1.3.3	Identify and designate heating and cooling refuge areas in community buildings and make these locations available to the public in the event of extreme temperatures.	Emergency Services	New	Medium 2014/2015	Local EMD, (Health Dept, LEPC)	Existing Budget & Personnel	Information posted and promoted on local government and community organization websites
1.3.4	Promote and distribute FEMA publication 320 which provides information on construction plans and cost estimates for building safe rooms in homes or small business and cost estimates for construction.	Property Protection	New	Low 2017	Local EMD, (Building & Planning)	Existing Budget & Personnel,	FEMA publication made available to the public on websites and social media.
1.3.5	Encourage local community organizations to continue and augment programs to provide fans, air conditioners, and winter weatherization for those at risk.	Emergency Services	Ongoing	Low 2017	Local EMD, (OACAC, Health Dept. Community Orgs, County EMA)	Existing Budget & Personnel, Grants, Foundations	Program sustained, donations and distribution supported.
2.1.1	Acquire, elevate or flood-proof properties and critical infrastructure within flood hazard areas.	Property Protection	New	Low 2017	Flood Plain Manager, Public Works	HMGP, Internal funds	Property and infrastructure flood damage reduced by 10%.

Table 5-13: Overview of Mitigation Actions for City of Rockaway Beach

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer (Partners)	Potential Funding Sources	Evaluation
2.1.2	Encourage electrical utilities to use underground construction methods where possible to reduce disruptions of service due to natural hazard events.	Emergency Services	Ongoing	Low 2017	Public Works (Building & Planning Empire Electric)	Government program funds, Internal funds	Utility lines buried where feasible. Reduce outages due to natural hazards by 5%.
2.1.3	Promote the establishment of Clean Energy Development Boards that enable cities and counties to provide upfront investment through Property Assessed Clean Energy (PACE) programs.	Property Protection	Revised	Low 2017	Mayor, Board of Alderman	Existing Budget & Personnel	Ensure that at least 75% of property owners are eligible for clean energy improvement programs.
2.1.4	Ensure that wastewater treatment systems will function during flood and drought events.	Structural	Ongoing	Medium 2014/2015	Mayor, Board of Alderman, Public Works	Government program funds, Internal funds	System functions maintained during hazard events.
2.2.4	The NFIP communities of Taney County, Branson, Bull Creek, Forsyth, Hollister, Merriam Woods and Rockaway Beach will enforce floodplain management requirements, including regulating all new and substantially improved construction in the Special Flood Hazard Areas (SPFAs).	Property Protection	Revised	High 2012 & Continuing	Mayor, Board of Alderman (Building & Planning Dept.)	Existing Budget & Personnel	NFIP compliance maintained.
3.1.1	Encourage all elected officials, public administrators, community stakeholders and responders to participate in National Incident Management System (NIMS) training and compliance programs.	Emergency Services	New	Medium 2014/2015	Local EMD (Elected Officials and Staff & Stakeholders)	Government program funds, Internal funds	Increase number of trained officials and stakeholders by 100%.
3.1.2	Continue to enforce highly visible 911 addressing for residences and businesses through building and business permitting as well as public education of existing ordinances.	Emergency Services	Revised	Medium 2014/2015	Building & Planning Dept.	Existing Budget & Personnel	95% of structures are identified with highly visible 911 addresses.

Table 5-13: Overview of Mitigation Actions for City of Rockaway Beach

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer (Partners)	Potential Funding Sources	Evaluation
3.2.1	Implement burn restrictions during time of weather conditions conducive to the spread of wildfire.	Prevention	New	Medium 2014/2015	Elected Officials, Public Safety Admin.	Internal funds	Burn restrictions implemented and enforced.
3.2.2	Integrate hazard mitigation into comprehensive and long range plans, capital improvement programs, zoning ordinances, subdivision and storm water management regulations.	Prevention/ Natural Resource Protection	New	Medium 2014/2015	Mayor, Board of Alderman Public Works, Building & Planning	Internal funds	Integrate elements of the mitigation plan during plan updates and ordinance amendments.
3.2.3	Enhance strategies and coordinate with utility providers to manage encroachment of vegetation in easements and rights of way.	Prevention	Revised	High 2012 & Continuing	Public Works (Empire Electric)	Internal funds	Local utility management programs and cycles coordinated with local efforts.
3.3.1	Continue to monitor and identify funding from state and federal programs for hazard mitigation activities.	Prevention	Ongoing	High 2012 & Continuing	Local EMD, City Clerk, Public Works	Existing Budget & Personnel	Funding programs researched and identified.
3.3.2	Continue to capitalize upon collaborative planning and compatible regulatory controls between the county and incorporated communities to promote infrastructure development practices that reduce the potential for flooding and property damage.	Prevention/ Natural Resource Protection	Revised	High 2012 & Continuing	Mayor, Board of Alderman Public Works, Building & Planning Local EMD	Government program funds, Internal funds	Inter-jurisdictional collaboration increased and compatible development increased.

Table 5-14: Overview of Mitigation Actions for Bradleyville R-I School District

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer	Potential Funding Sources	Evaluation
1.1.1	Encourage the media and leverage social media platforms to publish or broadcast information about natural hazard vulnerability, preparedness plans and mitigation efforts throughout the county.	Emergency Services/ Public Information	Revised	High 2012 & Continuing	School Admin & Faculty (County EMA)	Existing Budget & Personnel	Maintain media relationships and encourage the continued awareness and preparedness for all hazards.
1.1.3	Increase, promote, establish and maintain participation in citizen preparedness activities, such as; Citizen Corps, CERT, Neighborhood Watch, Fire Corps, Amateur Radio, etc.	Emergency Services	New	Medium 2013/2015	School Admin & Faculty (County EMA)	Government program funds, Internal funds	Citizen groups sustained and developed, participation increased above 2012 levels.
1.1.4	Continue to promote and expand educational programs regarding natural hazard mitigation and preparedness in school newsletters and seek to integrate information on natural hazards into school curriculum where feasible.	Public Information	New	High 2012 & Continuing	School Admin & Faculty (County EMA)	Grants, Foundations, Internal funds	Programs expanded from severe weather to all hazards that impact the county.
1.2.3	Seek and utilize funding mechanisms to establish and maintain programs enabling the distribution of low-cost NOAA all-hazard radios with S.A.M.E. technology for continuous operation in homes, businesses, schools, nursing homes and all facilities for public accommodation.	Emergency Services	Revised	Medium 2014/2015	School Admin. (Board of Education)	Grants, Foundations, Private Sector	Procure and distribute weather radios, increase the number of radios in use By 20%.
1.2.4	Promote the purchase and continued use of NOAA all-hazard radios with S.A.M.E technology through outreach and education that includes programming methods enabling the broadcast of county specific warnings.	Public Information	New	High 2012 & Continuing	School Admin (County EMA)	Existing Budget & Personnel	Programmed weather radios in continuous use increased and maintained

Table 5-14: Overview of Mitigation Actions for Bradleyville R-I School District

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer	Potential Funding Sources	Evaluation
1.2.5	Promote local severe weather alert applications for mobile communications devices, such as; Branson Severe Weather Alerts, KTTS, KSPR and KY3 Severe Weather Warnings. These should be in addition to, not in replace of NOAA all-hazard radios with S.A.M.E. technology.	Emergency Services	New	Medium 2014/2015	School Admin (County EMA, Health Dept, Public Safety Admin)	Existing Budget & Personnel	Weather alerts posted and promoted on local government and community organization websites
1.3.1	Integrate safe room construction in new community buildings, schools, large facilities and other establishments serving the public in areas of population concentration where feasible.	Property Protection	Revised	Low 2017	School Admin. (Board of Education)	Government program funds, Internal funds	Community safe room locations completed increased above 2012 levels.
1.3.2	Create and update tornado/severe storm plans and identify refuge areas (these do not comply with FEMA publication 361 safe room standards) in schools, large facilities and other establishments serving the public.	Emergency Services	Revised	Medium 2014/2015	School Admin. (County EMA, School Safety Officers)	Existing Budget & Personnel, Grants	Number of facilities with updated storm plans including best identified safe refuge area checklist increased by 25%
1.3.5	Encourage local community organizations to continue and augment programs to provide fans, air conditioners, and winter weatherization for those at risk.	Emergency Services	Ongoing	Low 2017	School Admin. (County EMA, OACAC, Health Dept.)	Existing Budget & Personnel, Grants	Program sustained, donations and distribution supported.
3.1.1	Encourage all elected officials, public administrators, community stakeholders and responders to participate in National Incident Management System (NIMS) training and compliance programs.	Emergency Services	New	Medium 2014/2015	School Admin. (Board of Education)	Government program funds, Internal funds	Increase number of trained officials and stakeholders by 100%.
3.2.2	Integrate hazard mitigation into comprehensive and long range plans, capital improvement programs, zoning ordinances, subdivision and storm water management regulations.	Prevention/ Natural Resource Protection	New	Medium 2014/2015	School Admin. (Board of Education)	Internal funds	Integrate elements of the mitigation plan during plan updates and ordinance amendments.
3.3.1	Continue to monitor and identify funding from state and federal programs for hazard mitigation activities.	Prevention	Ongoing	High 2012 & Continuing	School Admin.	Existing Budget & Personnel	Funding programs researched and identified.

Table 5-15: Overview of Mitigation Actions for Taneyville R-II School District

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer	Potential Funding Sources	Evaluation
1.1.1	Encourage the media and leverage social media platforms to publish or broadcast information about natural hazard vulnerability, preparedness plans and mitigation efforts throughout the county.	Emergency Services/ Public Information	Revised	High 2012 & Continuing	School Admin & Faculty (County EMA)	Existing Budget & Personnel	Maintain media relationships and encourage the continued awareness and preparedness for all hazards.
1.1.3	Increase, promote, establish and maintain participation in citizen preparedness activities, such as; Citizen Corps, CERT, Neighborhood Watch, Fire Corps, Amateur Radio, etc.	Emergency Services	New	Medium 2013/2015	School Admin & Faculty (County EMA)	Government program funds, Internal funds	Citizen groups sustained and developed, participation increased above 2012 levels.
1.1.4	Continue to promote and expand educational programs regarding natural hazard mitigation and preparedness in school newsletters and seek to integrate information on natural hazards into school curriculum where feasible.	Public Information	New	High 2012 & Continuing	School Admin & Faculty (County EMA)	Grants, Foundations, Internal funds	Programs expanded from severe weather to all hazards that impact the county.
1.2.3	Seek and utilize funding mechanisms to establish and maintain programs enabling the distribution of low-cost NOAA all-hazard radios with S.A.M.E. technology for continuous operation in homes, businesses, schools, nursing homes and all facilities for public accommodation.	Emergency Services	Revised	Medium 2014/2015	School Admin. (Board of Education)	Grants, Foundations, Private Sector	Procure and distribute weather radios, increase the number of radios in use By 20%.
1.2.4	Promote the purchase and continued use of NOAA all-hazard radios with S.A.M.E technology through outreach and education that includes programming methods enabling the broadcast of county specific warnings.	Public Information	New	High 2012 & Continuing	School Admin (County EMA)	Existing Budget & Personnel	Programmed weather radios in continuous use increased and maintained

Table 5-15: Overview of Mitigation Actions for Taneyville R-II School District

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer	Potential Funding Sources	Evaluation
1.2.5	Promote local severe weather alert applications for mobile communications devices, such as; Branson Severe Weather Alerts, KTTS, KSPR and KY3 Severe Weather Warnings. These should be in addition to, not in replace of NOAA all-hazard radios with S.A.M.E. technology.	Emergency Services	New	Medium 2014/2015	School Admin (County EMA, Health Dept, Public Safety Admin)	Existing Budget & Personnel	Weather alerts posted and promoted on local government and community organization websites
1.3.1	Integrate safe room construction in new community buildings, schools, large facilities and other establishments serving the public in areas of population concentration where feasible.	Property Protection	Revised	Low 2017	School Admin. (Board of Education)	Government program funds, Internal funds	Community safe room locations completed increased above 2012 levels.
1.3.2	Create and update tornado/severe storm plans and identify refuge areas (these do not comply with FEMA publication 361 safe room standards) in schools, large facilities and other establishments serving the public.	Emergency Services	Revised	Medium 2014/2015	School Admin. (County EMA, School Safety Officers)	Existing Budget & Personnel, Grants	Number of facilities with updated storm plans including best identified safe refuge area checklist increased by 25%
1.3.5	Encourage local community organizations to continue and augment programs to provide fans, air conditioners, and winter weatherization for those at risk.	Emergency Services	Ongoing	Low 2017	School Admin. (County EMA, OACAC, Health Dept.)	Existing Budget & Personnel, Grants	Program sustained, donations and distribution supported.
3.1.1	Encourage all elected officials, public administrators, community stakeholders and responders to participate in National Incident Management System (NIMS) training and compliance programs.	Emergency Services	New	Medium 2014/2015	School Admin. (Board of Education)	Government program funds, Internal funds	Increase number of trained officials and stakeholders by 100%.
3.2.2	Integrate hazard mitigation into comprehensive and long range plans, capital improvement programs, zoning ordinances, subdivision and storm water management regulations.	Prevention/ Natural Resource Protection	New	Medium 2014/2015	School Admin. (Board of Education)	Internal funds	Integrate elements of the mitigation plan during plan updates and ordinance amendments.
3.3.1	Continue to monitor and identify funding from state and federal programs for hazard mitigation activities.	Prevention	Ongoing	High 2012 & Continuing	School Admin.	Existing Budget & Personnel	Funding programs researched and identified.

Table 5-16: Overview of Mitigation Actions for Forsyth R-III School District

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer	Potential Funding Sources	Evaluation
1.1.1	Encourage the media and leverage social media platforms to publish or broadcast information about natural hazard vulnerability, preparedness plans and mitigation efforts throughout the county.	Emergency Services/ Public Information	Revised	High 2012 & Continuing	School Admin & Faculty (County EMA)	Existing Budget & Personnel	Maintain media relationships and encourage the continued awareness and preparedness for all hazards.
1.1.3	Increase, promote, establish and maintain participation in citizen preparedness activities, such as; Citizen Corps, CERT, Neighborhood Watch, Fire Corps, Amateur Radio, etc.	Emergency Services	New	Medium 2013/2015	School Admin & Faculty (County EMA)	Government program funds, Internal funds	Citizen groups sustained and developed, participation increased above 2012 levels.
1.1.4	Continue to promote and expand educational programs regarding natural hazard mitigation and preparedness in school newsletters and seek to integrate information on natural hazards into school curriculum where feasible.	Public Information	New	High 2012 & Continuing	School Admin & Faculty (County EMA)	Grants, Foundations, Internal funds	Programs expanded from severe weather to all hazards that impact the county.
1.2.3	Seek and utilize funding mechanisms to establish and maintain programs enabling the distribution of low-cost NOAA all-hazard radios with S.A.M.E. technology for continuous operation in homes, businesses, schools, nursing homes and all facilities for public accommodation.	Emergency Services	Revised	Medium 2014/2015	School Admin. (Board of Education)	Grants, Foundations, Private Sector	Procure and distribute weather radios, increase the number of radios in use By 20%.
1.2.4	Promote the purchase and continued use of NOAA all-hazard radios with S.A.M.E technology through outreach and education that includes programming methods enabling the broadcast of county specific warnings.	Public Information	New	High 2012 & Continuing	School Admin (County EMA)	Existing Budget & Personnel	Programmed weather radios in continuous use increased and maintained

Table 5-16: Overview of Mitigation Actions for Forsyth R-III School District

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer	Potential Funding Sources	Evaluation
1.2.5	Promote local severe weather alert applications for mobile communications devices, such as; Branson Severe Weather Alerts, KTTS, KSPR and KY3 Severe Weather Warnings. These should be in addition to, not in replace of NOAA all-hazard radios with S.A.M.E. technology.	Emergency Services	New	Medium 2014/2015	School Admin (County EMA, Health Dept, Public Safety Admin)	Existing Budget & Personnel	Weather alerts posted and promoted on local government and community organization websites
1.3.1	Integrate safe room construction in new community buildings, schools, large facilities and other establishments serving the public in areas of population concentration where feasible.	Property Protection	Revised	Low 2017	School Admin. (Board of Education)	Government program funds, Internal funds	Community safe room locations completed increased above 2012 levels.
1.3.2	Create and update tornado/severe storm plans and identify refuge areas (these do not comply with FEMA publication 361 safe room standards) in schools, large facilities and other establishments serving the public.	Emergency Services	Revised	Medium 2014/2015	School Admin. (County EMA, School Safety Officers)	Existing Budget & Personnel, Grants	Number of facilities with updated storm plans including best identified safe refuge area checklist increased by 25%
1.3.5	Encourage local community organizations to continue and augment programs to provide fans, air conditioners, and winter weatherization for those at risk.	Emergency Services	Ongoing	Low 2017	School Admin. (County EMA, OACAC, Health Dept.)	Existing Budget & Personnel, Grants	Program sustained, donations and distribution supported.
3.1.1	Encourage all elected officials, public administrators, community stakeholders and responders to participate in National Incident Management System (NIMS) training and compliance programs.	Emergency Services	New	Medium 2014/2015	School Admin. (Board of Education)	Government program funds, Internal funds	Increase number of trained officials and stakeholders by 100%.
3.2.2	Integrate hazard mitigation into comprehensive and long range plans, capital improvement programs, zoning ordinances, subdivision and storm water management regulations.	Prevention/ Natural Resource Protection	New	Medium 2014/2015	School Admin. (Board of Education)	Internal funds	Integrate elements of the mitigation plan during plan updates and ordinance amendments.
3.3.1	Continue to monitor and identify funding from state and federal programs for hazard mitigation activities.	Prevention	Ongoing	High 2012 & Continuing	School Admin.	Existing Budget & Personnel	Funding programs researched and identified.

Table 5-17: Overview of Mitigation Actions for Branson R-IV School District

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer	Potential Funding Sources	Evaluation
1.1.1	Encourage the media and leverage social media platforms to publish or broadcast information about natural hazard vulnerability, preparedness plans and mitigation efforts throughout the county.	Emergency Services/ Public Information	Revised	High 2012 & Continuing	School Admin & Faculty (County EMA)	Existing Budget & Personnel	Maintain media relationships and encourage the continued awareness and preparedness for all hazards.
1.1.3	Increase, promote, establish and maintain participation in citizen preparedness activities, such as; Citizen Corps, CERT, Neighborhood Watch, Fire Corps, Amateur Radio, etc.	Emergency Services	New	Medium 2013/2015	School Admin & Faculty (County EMA)	Government program funds, Internal funds	Citizen groups sustained and developed, participation increased above 2012 levels.
1.1.4	Continue to promote and expand educational programs regarding natural hazard mitigation and preparedness in school newsletters and seek to integrate information on natural hazards into school curriculum where feasible.	Public Information	New	High 2012 & Continuing	School Admin & Faculty (County EMA)	Grants, Foundations, Internal funds	Programs expanded from severe weather to all hazards that impact the county.
1.2.3	Seek and utilize funding mechanisms to establish and maintain programs enabling the distribution of low-cost NOAA all-hazard radios with S.A.M.E. technology for continuous operation in homes, businesses, schools, nursing homes and all facilities for public accommodation.	Emergency Services	Revised	Medium 2014/2015	School Admin. (Board of Education)	Grants, Foundations, Private Sector	Procure and distribute weather radios, increase the number of radios in use By 20%.
1.2.4	Promote the purchase and continued use of NOAA all-hazard radios with S.A.M.E technology through outreach and education that includes programming methods enabling the broadcast of county specific warnings.	Public Information	New	High 2012 & Continuing	School Admin (County EMA)	Existing Budget & Personnel	Programmed weather radios in continuous use increased and maintained

Table 5-17: Overview of Mitigation Actions for Branson R-IV School District

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer	Potential Funding Sources	Evaluation
1.2.5	Promote local severe weather alert applications for mobile communications devices, such as; Branson Severe Weather Alerts, KTTS, KSPR and KY3 Severe Weather Warnings. These should be in addition to, not in replace of NOAA all-hazard radios with S.A.M.E. technology.	Emergency Services	New	Medium 2014/2015	School Admin (County EMA, Health Dept, Public Safety Admin)	Existing Budget & Personnel	Weather alerts posted and promoted on local government and community organization websites
1.3.1	Integrate safe room construction in new community buildings, schools, large facilities and other establishments serving the public in areas of population concentration where feasible.	Property Protection	Revised	Low 2017	School Admin. (Board of Education)	Government program funds, Internal funds	Community safe room locations completed increased above 2012 levels.
1.3.2	Create and update tornado/severe storm plans and identify refuge areas (these do not comply with FEMA publication 361 safe room standards) in schools, large facilities and other establishments serving the public.	Emergency Services	Revised	Medium 2014/2015	School Admin. (County EMA, School Safety Officers)	Existing Budget & Personnel, Grants	Number of facilities with updated storm plans including best identified safe refuge area checklist increased by 25%
1.3.5	Encourage local community organizations to continue and augment programs to provide fans, air conditioners, and winter weatherization for those at risk.	Emergency Services	Ongoing	Low 2017	School Admin. (County EMA, OACAC, Health Dept.)	Existing Budget & Personnel, Grants	Program sustained, donations and distribution supported.
3.1.1	Encourage all elected officials, public administrators, community stakeholders and responders to participate in National Incident Management System (NIMS) training and compliance programs.	Emergency Services	New	Medium 2014/2015	School Admin. (Board of Education)	Government program funds, Internal funds	Increase number of trained officials and stakeholders by 100%.
3.2.2	Integrate hazard mitigation into comprehensive and long range plans, capital improvement programs, zoning ordinances, subdivision and storm water management regulations.	Prevention/ Natural Resource Protection	New	Medium 2014/2015	School Admin. (Board of Education)	Internal funds	Integrate elements of the mitigation plan during plan updates and ordinance amendments.
3.3.1	Continue to monitor and identify funding from state and federal programs for hazard mitigation activities.	Prevention	Ongoing	High 2012 & Continuing	School Admin.	Existing Budget & Personnel	Funding programs researched and identified.

Table 5-18: Overview of Mitigation Actions for Hollister R-V Public School District

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer	Potential Funding Sources	Evaluation
1.1.1	Encourage the media and leverage social media platforms to publish or broadcast information about natural hazard vulnerability, preparedness plans and mitigation efforts throughout the county.	Emergency Services/ Public Information	Revised	High 2012 & Continuing	School Admin & Faculty (County EMA)	Existing Budget & Personnel	Maintain media relationships and encourage the continued awareness and preparedness for all hazards.
1.1.3	Increase, promote, establish and maintain participation in citizen preparedness activities, such as; Citizen Corps, CERT, Neighborhood Watch, Fire Corps, Amateur Radio, etc.	Emergency Services	New	Medium 2013/2015	School Admin & Faculty (County EMA)	Government program funds, Internal funds	Citizen groups sustained and developed, participation increased above 2012 levels.
1.1.4	Continue to promote and expand educational programs regarding natural hazard mitigation and preparedness in school newsletters and seek to integrate information on natural hazards into school curriculum where feasible.	Public Information	New	High 2012 & Continuing	School Admin & Faculty (County EMA)	Grants, Foundations, Internal funds	Programs expanded from severe weather to all hazards that impact the county.
1.2.3	Seek and utilize funding mechanisms to establish and maintain programs enabling the distribution of low-cost NOAA all-hazard radios with S.A.M.E. technology for continuous operation in homes, businesses, schools, nursing homes and all facilities for public accommodation.	Emergency Services	Revised	Medium 2014/2015	School Admin. (Board of Education)	Grants, Foundations, Private Sector	Procure and distribute weather radios, increase the number of radios in use By 20%.
1.2.4	Promote the purchase and continued use of NOAA all-hazard radios with S.A.M.E technology through outreach and education that includes programming methods enabling the broadcast of county specific warnings.	Public Information	New	High 2012 & Continuing	School Admin (County EMA)	Existing Budget & Personnel	Programmed weather radios in continuous use increased and maintained

Table 5-18: Overview of Mitigation Actions for Hollister R-V Public School District

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer	Potential Funding Sources	Evaluation
1.2.5	Promote local severe weather alert applications for mobile communications devices, such as; Branson Severe Weather Alerts, KTTS, KSPR and KY3 Severe Weather Warnings. These should be in addition to, not in replace of NOAA all-hazard radios with S.A.M.E. technology.	Emergency Services	New	Medium 2014/2015	School Admin (County EMA, Health Dept, Public Safety Admin)	Existing Budget & Personnel	Weather alerts posted and promoted on local government and community organization websites
1.3.1	Integrate safe room construction in new community buildings, schools, large facilities and other establishments serving the public in areas of population concentration where feasible.	Property Protection	Revised	Low 2017	School Admin. (Board of Education)	Government program funds, Internal funds	Community safe room locations completed increased above 2012 levels.
1.3.2	Create and update tornado/severe storm plans and identify refuge areas (these do not comply with FEMA publication 361 safe room standards) in schools, large facilities and other establishments serving the public.	Emergency Services	Revised	Medium 2014/2015	School Admin. (County EMA, School Safety Officers)	Existing Budget & Personnel, Grants	Number of facilities with updated storm plans including best identified safe refuge area checklist increased by 25%
1.3.5	Encourage local community organizations to continue and augment programs to provide fans, air conditioners, and winter weatherization for those at risk.	Emergency Services	Ongoing	Low 2017	School Admin. (County EMA, OACAC, Health Dept.)	Existing Budget & Personnel, Grants	Program sustained, donations and distribution supported.
3.1.1	Encourage all elected officials, public administrators, community stakeholders and responders to participate in National Incident Management System (NIMS) training and compliance programs.	Emergency Services	New	Medium 2014/2015	School Admin. (Board of Education)	Government program funds, Internal funds	Increase number of trained officials and stakeholders by 100%.
3.2.2	Integrate hazard mitigation into comprehensive and long range plans, capital improvement programs, zoning ordinances, subdivision and storm water management regulations.	Prevention/ Natural Resource Protection	New	Medium 2014/2015	School Admin. (Board of Education)	Internal funds	Integrate elements of the mitigation plan during plan updates and ordinance amendments.
3.3.1	Continue to monitor and identify funding from state and federal programs for hazard mitigation activities.	Prevention	Ongoing	High 2012 & Continuing	School Admin.	Existing Budget & Personnel	Funding programs researched and identified.

Table 5-19: Overview of Mitigation Actions for Kirbyville R-VI School District

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer	Potential Funding Sources	Evaluation
1.1.1	Encourage the media and leverage social media platforms to publish or broadcast information about natural hazard vulnerability, preparedness plans and mitigation efforts throughout the county.	Emergency Services/ Public Information	Revised	High 2012 & Continuing	School Admin & Faculty (County EMA)	Existing Budget & Personnel	Maintain media relationships and encourage the continued awareness and preparedness for all hazards.
1.1.3	Increase, promote, establish and maintain participation in citizen preparedness activities, such as; Citizen Corps, CERT, Neighborhood Watch, Fire Corps, Amateur Radio, etc.	Emergency Services	New	Medium 2013/2015	School Admin & Faculty (County EMA)	Government program funds, Internal funds	Citizen groups sustained and developed, participation increased above 2012 levels.
1.1.4	Continue to promote and expand educational programs regarding natural hazard mitigation and preparedness in school newsletters and seek to integrate information on natural hazards into school curriculum where feasible.	Public Information	New	High 2012 & Continuing	School Admin & Faculty (County EMA)	Grants, Foundations, Internal funds	Programs expanded from severe weather to all hazards that impact the county.
1.2.3	Seek and utilize funding mechanisms to establish and maintain programs enabling the distribution of low-cost NOAA all-hazard radios with S.A.M.E. technology for continuous operation in homes, businesses, schools, nursing homes and all facilities for public accommodation.	Emergency Services	Revised	Medium 2014/2015	School Admin. (Board of Education)	Grants, Foundations, Private Sector	Procure and distribute weather radios, increase the number of radios in use By 20%.
1.2.4	Promote the purchase and continued use of NOAA all-hazard radios with S.A.M.E technology through outreach and education that includes programming methods enabling the broadcast of county specific warnings.	Public Information	New	High 2012 & Continuing	School Admin (County EMA)	Existing Budget & Personnel	Programmed weather radios in continuous use increased and maintained

Table 5-19: Overview of Mitigation Actions for Kirbyville R-VI School District

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer	Potential Funding Sources	Evaluation
1.2.5	Promote local severe weather alert applications for mobile communications devices, such as; Branson Severe Weather Alerts, KTTS, KSPR and KY3 Severe Weather Warnings. These should be in addition to, not in replace of NOAA all-hazard radios with S.A.M.E. technology.	Emergency Services	New	Medium 2014/2015	School Admin (County EMA, Health Dept, Public Safety Admin)	Existing Budget & Personnel	Weather alerts posted and promoted on local government and community organization websites
1.3.1	Integrate safe room construction in new community buildings, schools, large facilities and other establishments serving the public in areas of population concentration where feasible.	Property Protection	Revised	Low 2017	School Admin. (Board of Education)	Government program funds, Internal funds	Community safe room locations completed increased above 2012 levels.
1.3.2	Create and update tornado/severe storm plans and identify refuge areas (these do not comply with FEMA publication 361 safe room standards) in schools, large facilities and other establishments serving the public.	Emergency Services	Revised	Medium 2014/2015	School Admin. (County EMA, School Safety Officers)	Existing Budget & Personnel, Grants	Number of facilities with updated storm plans including best identified safe refuge area checklist increased by 25%
1.3.5	Encourage local community organizations to continue and augment programs to provide fans, air conditioners, and winter weatherization for those at risk.	Emergency Services	Ongoing	Low 2017	School Admin. (County EMA, OACAC, Health Dept.)	Existing Budget & Personnel, Grants	Program sustained, donations and distribution supported.
3.1.1	Encourage all elected officials, public administrators, community stakeholders and responders to participate in National Incident Management System (NIMS) training and compliance programs.	Emergency Services	New	Medium 2014/2015	School Admin. (Board of Education)	Government program funds, Internal funds	Increase number of trained officials and stakeholders by 100%.
3.2.2	Integrate hazard mitigation into comprehensive and long range plans, capital improvement programs, zoning ordinances, subdivision and storm water management regulations.	Prevention/ Natural Resource Protection	New	Medium 2014/2015	School Admin. (Board of Education)	Internal funds	Integrate elements of the mitigation plan during plan updates and ordinance amendments.
3.3.1	Continue to monitor and identify funding from state and federal programs for hazard mitigation activities.	Prevention	Ongoing	High 2012 & Continuing	School Admin.	Existing Budget & Personnel	Funding programs researched and identified.

Table 5-20: Overview of Mitigation Actions for Mark Twain R-VIII School District

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer	Potential Funding Sources	Evaluation
1.1.1	Encourage the media and leverage social media platforms to publish or broadcast information about natural hazard vulnerability, preparedness plans and mitigation efforts throughout the county.	Emergency Services/ Public Information	Revised	High 2012 & Continuing	School Admin & Faculty (County EMA)	Existing Budget & Personnel	Maintain media relationships and encourage the continued awareness and preparedness for all hazards.
1.1.3	Increase, promote, establish and maintain participation in citizen preparedness activities, such as; Citizen Corps, CERT, Neighborhood Watch, Fire Corps, Amateur Radio, etc.	Emergency Services	New	Medium 2013/2015	School Admin & Faculty (County EMA)	Government program funds, Internal funds	Citizen groups sustained and developed, participation increased above 2012 levels.
1.1.4	Continue to promote and expand educational programs regarding natural hazard mitigation and preparedness in school newsletters and seek to integrate information on natural hazards into school curriculum where feasible.	Public Information	New	High 2012 & Continuing	School Admin & Faculty (County EMA)	Grants, Foundations, Internal funds	Programs expanded from severe weather to all hazards that impact the county.
1.2.3	Seek and utilize funding mechanisms to establish and maintain programs enabling the distribution of low-cost NOAA all-hazard radios with S.A.M.E. technology for continuous operation in homes, businesses, schools, nursing homes and all facilities for public accommodation.	Emergency Services	Revised	Medium 2014/2015	School Admin. (Board of Education)	Grants, Foundations, Private Sector	Procure and distribute weather radios, increase the number of radios in use By 20%.
1.2.4	Promote the purchase and continued use of NOAA all-hazard radios with S.A.M.E technology through outreach and education that includes programming methods enabling the broadcast of county specific warnings.	Public Information	New	High 2012 & Continuing	School Admin (County EMA)	Existing Budget & Personnel	Programmed weather radios in continuous use increased and maintained

Table 5-20: Overview of Mitigation Actions for Mark Twain R-VIII School District

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer	Potential Funding Sources	Evaluation
1.2.5	Promote local severe weather alert applications for mobile communications devices, such as; Branson Severe Weather Alerts, KTTS, KSPR and KY3 Severe Weather Warnings. These should be in addition to, not in replace of NOAA all-hazard radios with S.A.M.E. technology.	Emergency Services	New	Medium 2014/2015	School Admin (County EMA, Health Dept, Public Safety Admin)	Existing Budget & Personnel	Weather alerts posted and promoted on local government and community organization websites
1.3.1	Integrate safe room construction in new community buildings, schools, large facilities and other establishments serving the public in areas of population concentration where feasible.	Property Protection	Revised	Low 2017	School Admin. (Board of Education)	Government program funds, Internal funds	Community safe room locations completed increased above 2012 levels.
1.3.2	Create and update tornado/severe storm plans and identify refuge areas (these do not comply with FEMA publication 361 safe room standards) in schools, large facilities and other establishments serving the public.	Emergency Services	Revised	Medium 2014/2015	School Admin. (County EMA, School Safety Officers)	Existing Budget & Personnel, Grants	Number of facilities with updated storm plans including best identified safe refuge area checklist increased by 25%
1.3.5	Encourage local community organizations to continue and augment programs to provide fans, air conditioners, and winter weatherization for those at risk.	Emergency Services	Ongoing	Low 2017	School Admin. (County EMA, OACAC, Health Dept.)	Existing Budget & Personnel, Grants	Program sustained, donations and distribution supported.
3.1.1	Encourage all elected officials, public administrators, community stakeholders and responders to participate in National Incident Management System (NIMS) training and compliance programs.	Emergency Services	New	Medium 2014/2015	School Admin. (Board of Education)	Government program funds, Internal funds	Increase number of trained officials and stakeholders by 100%.
3.2.2	Integrate hazard mitigation into comprehensive and long range plans, capital improvement programs, zoning ordinances, subdivision and storm water management regulations.	Prevention/ Natural Resource Protection	New	Medium 2014/2015	School Admin. (Board of Education)	Internal funds	Integrate elements of the mitigation plan during plan updates and ordinance amendments.
3.3.1	Continue to monitor and identify funding from state and federal programs for hazard mitigation activities.	Prevention	Ongoing	High 2012 & Continuing	School Admin.	Existing Budget & Personnel	Funding programs researched and identified.

Table 5-21: Overview of Mitigation Actions for Ozarks Technical Community College

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer	Potential Funding Sources	Evaluation
1.1.1	Encourage the media and leverage social media platforms to publish or broadcast information about natural hazard vulnerability, preparedness plans and mitigation efforts throughout the county.	Emergency Services/ Public Information	Revised	High 2012 & Continuing	College Admin & Faculty (County EMA)	Existing Budget & Personnel	Maintain media relationships and encourage the continued awareness and preparedness for all hazards.
1.1.3	Increase, promote, establish and maintain participation in citizen preparedness activities, such as; Citizen Corps, CERT, Neighborhood Watch, Fire Corps, Amateur Radio, etc.	Emergency Services	New	Medium 2013/2015	College Admin & Faculty (County EMA)	Government program funds, Internal funds	Citizen groups sustained and developed, participation increased above 2012 levels.
1.1.4	Continue to promote and expand educational programs regarding natural hazard mitigation and preparedness in school newsletters and seek to integrate information on natural hazards into school curriculum where feasible.	Public Information	New	High 2012 & Continuing	College Admin & Faculty (County EMA)	Grants, Foundations, Internal funds	Programs expanded from severe weather to all hazards that impact the county.
1.2.5	Promote local severe weather alert applications for mobile communications devices, such as; Branson Severe Weather Alerts, KTTS, KSPR and KY3 Severe Weather Warnings. These should be in addition to, not in replace of NOAA all-hazard radios with S.A.M.E. technology.	Emergency Services	New	Medium 2014/2015	College Admin (County EMA, Health Dept, Public Safety Admin)	Existing Budget & Personnel	Weather alerts posted and promoted on local government and community organization websites
1.3.1	Integrate safe room construction in new community buildings, schools, large facilities and other establishments serving the public in areas of population concentration where feasible.	Property Protection	Revised	Low 2017	College Admin. (Board of Trustees)	Government program funds, Internal funds	Community safe room locations completed increased above 2012 levels.
1.3.2	Create and update tornado/severe storm plans and identify refuge areas (these do not comply with FEMA publication 361 safe room standards) in schools, large facilities and other establishments serving the public.	Emergency Services	Revised	Medium 2014/2015	College Admin. (County EMA, Public Safety Officer)	Existing Budget & Personnel, Grants	Number of facilities with updated storm plans including best identified safe refuge area checklist increased by 25%

Table 5-21: Overview of Mitigation Actions for Ozarks Technical Community College

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer	Potential Funding Sources	Evaluation
1.3.5	Encourage local community organizations to continue and augment programs to provide fans, air conditioners, and winter weatherization for those at risk.	Emergency Services	Ongoing	Low 2017	College Admin. (County EMA, OACAC, Health Dept.)	Existing Budget & Personnel, Grants	Program sustained, donations and distribution supported.
3.1.1	Encourage all elected officials, public administrators, community stakeholders and responders to participate in National Incident Management System (NIMS) training and compliance programs.	Emergency Services	New	Medium 2014/2015	College Admin. (Board of Trustees)	Government program funds, Internal funds	Increase number of trained officials and stakeholders by 100%.
3.2.2	Integrate hazard mitigation into comprehensive and long range plans, capital improvement programs, zoning ordinances, subdivision and storm water management regulations.	Prevention/ Natural Resource Protection	New	Medium 2014/2015	College Admin. (Board of Trustees)	Internal funds	Integrate elements of the mitigation plan during plan updates and ordinance amendments.
3.3.1	Continue to monitor and identify funding from state and federal programs for hazard mitigation activities.	Prevention	Ongoing	High 2012 & Continuing	College Admin.	Existing Budget & Personnel	Funding programs researched and identified.

Table 5-22: Overview of Mitigation Actions for Taney County Regional Sewer District

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer	Potential Funding Sources	Evaluation
1.1.1	Encourage the media and leverage social media platforms to publish or broadcast information about natural hazard vulnerability, preparedness plans and mitigation efforts throughout the county.	Emergency Services/ Public Information	Revised	High 2012 & Continuing	Administrator (Board of Trustees, County EMA)	Existing Budget & Personnel	Maintain media relationships and encourage the continued awareness and preparedness for all hazards.
1.1.2	Increase public awareness on techniques to reduce risk, such as the use of fire resistant materials in construction, landscaping techniques and planting materials that are more resistant to the spread of wildfire.	Public Information/ Natural Resource Protection	New	High 2012 & continuing	Utilities Operations Manager (County EMA)	Existing Budget & Personnel	Information developed and distributed with building permits or development proposals. Use of materials and landscaping increased.
1.1.3	Increase, promote, establish and maintain participation in citizen preparedness activities, such as; Citizen Corps, CERT, Neighborhood Watch, Fire Corps, Amateur Radio, etc.	Emergency Services	New	Medium 2013/2015	Administrator (Board of Trustees, County EMA)	Government program funds, Internal funds	Citizen groups sustained and developed, participation increased above 2012 levels.
1.2.3	Seek and utilize funding mechanisms to establish and maintain programs enabling the distribution of low-cost NOAA all-hazard radios with S.A.M.E. technology for continuous operation in homes, businesses, schools, nursing homes and all facilities for public accommodation.	Emergency Services	Revised	Medium 2014/2015	Administrator (Board of Trustees)	Grants, Foundations, Private Sector	Procure and distribute weather radios, increase the number of radios in use By 20%.
1.2.4	Promote the purchase and continued use of NOAA all-hazard radios with S.A.M.E technology through outreach and education that includes programming methods enabling the broadcast of county specific warnings.	Public Information	New	High 2012 & Continuing	Administrator (Board of Trustees)	Existing Budget & Personnel	Programmed weather radios in continuous use increased and maintained
1.2.5	Promote local severe weather alert applications for mobile communications devices, such as; Branson Severe Weather Alerts, KTTS, KSPR and KY3 Severe Weather Warnings. These should be in addition to, not in replace of NOAA all-hazard radios with S.A.M.E. technology.	Emergency Services	New	Medium 2014/2015	Administrator (Board of Trustees)	Existing Budget & Personnel	Weather alerts posted and promoted on local government and community organization websites

Table 5-22: Overview of Mitigation Actions for Taney County Regional Sewer District

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer	Potential Funding Sources	Evaluation
1.3.1	Integrate safe room construction in new community buildings, schools, large facilities and other establishments serving the public in areas of population concentration where feasible.	Property Protection	Revised	Low 2017	Administrator (Utilities Operations Manager)	Government program funds, Internal funds	Community safe room locations completed, increased above 2012 levels.
1.3.2	Create and update tornado/severe storm plans and identify refuge areas (these do not comply with FEMA publication 361 safe room standards) in schools, large facilities and other establishments serving the public.	Emergency Services	Revised	Medium 2014/2015	Administrator (Utilities Operations Manager)	Existing Budget & Personnel, Grants, Foundations	Number of facilities with updated storm plans including best identified safe refuge area checklist increased by 25%
1.3.5	Encourage local community organizations to continue and augment programs to provide fans, air conditioners, and winter weatherization for those at risk.	Emergency Services	Ongoing	Low 2017	Administrator (Board of Trustees, County EMA, OACAC, Health Dept.)	Existing Budget & Personnel, Grants, Foundations	Program sustained, donations and distribution supported.
2.1.1	Acquire, elevate or flood-proof properties and critical infrastructure within flood hazard areas.	Property Protection	New	Low 2017	Utilities Operations Manager (Admin)	Government program funds, Internal funds	Property and infrastructure flood damage reduced by 10%.
2.1.2	Encourage electrical utilities to use underground construction methods where possible to reduce disruptions of service due to natural hazard events.	Emergency Services	Ongoing	Low 2017	Utilities Operations Manager (Admin)	Government program funds, Internal funds	Utility lines buried where feasible. Reduce outages due to natural hazards by 5%.
2.1.4	Ensure that wastewater treatment systems will function during flood and drought events.	Structural	Ongoing	Medium 2014/2015	Utilities Operations Manager (Admin)	Government program funds, Internal funds	System functions maintained during hazard events.

Table 5-22: Overview of Mitigation Actions for Taney County Regional Sewer District

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer	Potential Funding Sources	Evaluation
3.1.1	Encourage all elected officials, public administrators, community stakeholders and responders to participate in National Incident Management System (NIMS) training and compliance programs.	Emergency Services	New	Medium 2014/2015	Administrator (Board of Trustees)	Government program funds, Internal funds	Increase number of trained officials and stakeholders by 100%.
3.2.2	Integrate hazard mitigation into comprehensive and long range plans, capital improvement programs, zoning ordinances, subdivision and storm water management regulations.	Prevention/ Natural Resource Protection	New	Medium 2014/2015	Administrator (Board of Trustees)	Internal funds	Integrate elements of the mitigation plan during plan updates and ordinance amendments.
3.2.3	Enhance strategies and coordinate with utility providers to manage encroachment of vegetation in easements and rights of way.	Prevention	Revised	High 2012 & Continuing	Administrator (Utility Operations Manager)	Internal funds	Local utility management programs and cycles coordinated with local efforts.
3.3.2	Continue to capitalize upon collaborative planning and compatible regulatory controls between the county and incorporated communities to promote infrastructure development practices that reduce the potential for flooding and property damage.	Prevention/ Natural Resource Protection	Revised	High 2012 & Continuing	Administrator (Board of Trustees)	Government program funds, Internal funds	Inter-jurisdictional collaboration increased and compatible development increased.

Table 5-23: Overview of Mitigation Actions for Taney County Ambulance District

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer	Potential Funding Sources	Evaluation
1.1.1	Encourage the media and leverage social media platforms to publish or broadcast information about natural hazard vulnerability, preparedness plans and mitigation efforts throughout the county.	Emergency Services/ Public Information	Revised	High 2012 & Continuing	EMS Chief (Board of Directors, County EMA)	Existing Budget & Personnel	Maintain media relationships and encourage the continued awareness and preparedness for all hazards.
1.1.3	Increase, promote, establish and maintain participation in citizen preparedness activities, such as; Citizen Corps, CERT, Neighborhood Watch, Fire Corps, Amateur Radio, etc.	Emergency Services	New	Medium 2013/2015	EMS Chief (County EMA)	Government program funds, Internal funds	Citizen groups sustained and developed, participation increased above 2012 levels.
1.2.5	Promote local severe weather alert applications for mobile communications devices, such as; Branson Severe Weather Alerts, KTTS, KSPR and KY3 Severe Weather Warnings. These should be in addition to, not in replace of NOAA all-hazard radios with S.A.M.E. technology.	Emergency Services	New	Medium 2014/2015	EMS Chief (Board of Directors, County EMA)	Existing Budget & Personnel	Weather alerts posted and promoted on local government and community organization websites
1.3.1	Integrate safe room construction in new community buildings, schools, large facilities and other establishments serving the public in areas of population concentration where feasible.	Property Protection	Revised	Low 2017	EMS Chief (Board of Directors)	Government program funds, Internal funds	Community safe room locations completed, increased above 2012 levels.
1.3.2	Create and update tornado/severe storm plans and identify refuge areas (these do not comply with FEMA publication 361 safe room standards) in schools, large facilities and other establishments serving the public.	Emergency Services	Revised	Medium 2014/2015	EMS Chief (Board of Directors)	Existing Budget & Personnel, Grants, Foundations, Private Sector	Number of facilities with updated storm plans including best identified safe refuge area checklist increased by 25%
1.3.5	Encourage local community organizations to continue and augment programs to provide fans, air conditioners, and winter weatherization for those at risk.	Emergency Services	Ongoing	Low 2017	EMS Chief (County EMA, OACAC, Health Dept.)	Existing Budget & Personnel, Grants, Foundations,	Program sustained, donations and distribution supported.

Table 5-23: Overview of Mitigation Actions for Taney County Ambulance District

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer	Potential Funding Sources	Evaluation
3.1.1	Encourage all elected officials, public administrators, community stakeholders and responders to participate in National Incident Management System (NIMS) training and compliance programs.	Emergency Services	New	Medium 2014/2015	EMS Chief (Board of Directors)	Government program funds, Internal funds	Increase number of trained officials and stakeholders by 100%.
3.2.2	Integrate hazard mitigation into comprehensive and long range plans, capital improvement programs, zoning ordinances, subdivision and storm water management regulations.	Prevention/ Natural Resource Protection	New	Medium 2014/2015	EMS Chief (Board of Directors)	Internal funds	Integrate elements of the mitigation plan during plan updates and ordinance amendments.
3.3.1	Continue to monitor and identify funding from state and federal programs for hazard mitigation activities.	Prevention	Ongoing	High 2012 & Continuing	EMS Chief (Board of Directors)	Existing Budget & Personnel	Funding programs researched and identified.

Part 6: Plan Maintenance

Taney County has developed a method to ensure regular review and update of the *Natural Hazard Mitigation Plan*. The County's Hazard Mitigation Planning Committee consists of the County Commissioners, municipal officials, members of the Taney County Emergency Management Committee (fire, law enforcement, emergency medical, and public health officers), officials responsible for various objectives in the Plan, and the County EMD. Hazard mitigation objectives will be an agenda item, as needed, at bi-monthly meetings of Local Emergency Planning Committee (LEPC).

The County EMD shall be responsible for contacting all Hazard Mitigation Planning Committee members and organizing the annual meeting. The County Commission, the EMD, and the participating municipalities will be responsible for monitoring and evaluating the progress of the mitigation strategies in the Plan. They 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. They 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, including which implementation processes worked well, any difficulties encountered, how coordination efforts were proceeding, and which strategies should be revised.

Following the annual review, the County EMD will have three months to update and make changes to the Plan as determined necessary before submitting it to the Committee members and the State Hazard Mitigation Officer. If no changes are necessary, the State Hazard Mitigation Officer will be given a justification for this determination.

The general public will be encouraged to attend Hazard Mitigation Planning Committee meetings through published notices, reminders or announcements at civic meetings, and possibly public speaking engagements. The Southwest Missouri Council of Governments will host announcements as well as a copy of the latest Plan on the SMOG website at www.smcog.missouristate.edu.

Part 7: Appendices

Appendix A: Sample Adoption Resolutions

Appendix B: Repetitive Losses

Appendix C: Acronyms

Appendix D: Glossary

Appendix E: References

Appendix F: Neighboring Jurisdictions

Appendix G: Planning Process Documentation

Appendix A: Adoption Resolutions

Appendix A contains executed resolutions by the governing boards of all participating jurisdictions that have adopted the 2012 Taney County Multi-Jurisdictional Natural Hazards Mitigation Plan. Signed resolutions for each jurisdiction adopting the Plan follow in the order listed below:

Local Governments

The County of Taney
The City of Branson
The Village of Bull Creek
The City of Forsyth
The City of Hollister
The Village of Kirbyville
The Village of Merriam Woods
The City of Rockaway Beach

School Districts

Bradleyville R-I
Taneyville R-II
Forsyth R-III
Branson R-IV
Hollister R-V
Kirbyville R-VI
Mark Twain R-VIII

Other Special Districts

OTC-Table Rock Campus
Taney County Regional Sewer District
Taney County Ambulance District

RESOLUTION NO. 13-0211

A RESOLUTION OF INTENT TO PARTICIPATE IN NATURAL HAZARD MITIGATION AND TO WORK TOWARD BECOMING A SAFER COMMUNITY.

WHEREAS, the County of Taney, Missouri recognizes that no community is immune from natural hazards whether it be tornado/severe thunderstorm, flood, severe winter weather, drought, heat wave, earthquake, dam failure, wildfire or sinkholes and recognizes the importance enhancing its ability to withstand natural hazards as well as the importance of reducing the human suffering, property damage, interruption of public services and economic losses caused by those hazards; and

WHEREAS, the County of Taney may have previously pursued measures such as building codes, fire codes, floodplain management regulations and storm water management regulations to minimize the impact of natural hazards; and

WHEREAS, the Federal Emergency Management Agency and the State Emergency Management Agency have developed a natural hazard mitigation program that assists communities in their efforts to become Disaster-Resistant Communities which are sustainable communities after a natural disaster that focus, not just on disaster relief, but also on recovery and reconstruction that brings the community to at least pre-disaster conditions in an accelerated, orderly and preplanned manner; and

WHEREAS, by participating in the Natural Hazard Mitigation program, the County of Taney will be eligible to apply for hazard mitigation funds; and

WHEREAS, the County of Taney desires to commit to working with government partners and community partners to implement the Natural Hazard Mitigation Plan; and

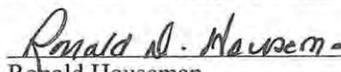
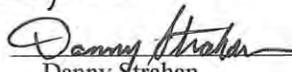
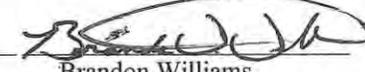
WHEREAS, the County of Taney will implement pertinent precepts of the mitigation plan by incorporation into other community plans and mechanisms where appropriate; and

WHEREAS, the County of Taney will participate in the evaluation and review of the Plan after a disaster as well as complete a mandated five-year update submitted to the State Emergency Management Agency and the Federal Emergency Management Agency for review and approval; and

NOW, THEREFORE BE IT RESOLVED BY the County Commission of the County of Taney, Missouri AS FOLLOWS:

The County of Taney, Missouri hereby adopts the Taney County Multi-Jurisdictional Natural Hazards Mitigation Plan attached hereto for the purpose of building a safer community by reducing natural hazard vulnerability.

ADOPTED this 11 day of February, 2013

		
Ronald Houseman Presiding Commissioner	Danny Strahan Eastern Dist. Commissioner	Brandon Williams Western Dist. Commissioner

ATTEST: 

RESOLUTION NO. 2013-R004**A RESOLUTION OF INTENT TO PARTICIPATE IN NATURAL HAZARD MITIGATION AND TO WORK TOWARD BECOMING A SAFER COMMUNITY.**

WHEREAS, the City of Branson, Missouri recognizes that no community is immune from natural hazards whether it be tornado/severe thunderstorm, flood, severe winter weather, drought, heat wave, earthquake, dam failure, wildfire or sinkholes and recognizes the importance enhancing its ability to withstand natural hazards as well as the importance of reducing the human suffering, property damage, interruption of public services and economic losses caused by those hazards; and

WHEREAS, the City of Branson may have previously pursued measures such as building codes, fire codes, zoning ordinances, and stormwater management regulations to minimize the impact of natural hazards; and

WHEREAS, the Federal Emergency Management Agency and the State Emergency Management Agency have developed a natural hazard mitigation program that assists communities in their efforts to become Disaster-Resistant Communities which are sustainable communities after a natural disaster that focus, not just on disaster relief, but also on recovery and reconstruction that brings the community to at least pre-disaster conditions in an accelerated, orderly and preplanned manner; and

WHEREAS, by participating in the Natural Hazard Mitigation program, the City of Branson will be eligible to apply for hazard mitigation funds; and

WHEREAS, the City of Branson desires to commit to working with government partners and community partners to implement the Natural Hazard Mitigation Plan; and

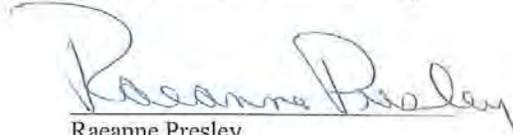
WHEREAS, the City of Branson will implement pertinent precepts of the mitigation plan by incorporation into other community plans and mechanisms where appropriate; and

WHEREAS, the City of Branson will participate in the evaluation and review of the Plan after a disaster as well as complete a mandated five-year update submitted to the State Emergency Management Agency and the Federal Emergency Management Agency for review and approval; and

NOW, THEREFORE BE IT RESOLVED BY THE BOARD OF ALDERMEN OF THE CITY OF BRANSON, MISSOURI AS FOLLOWS:

Section 1: The City of Branson hereby adopts the Taney County Multi-Jurisdictional Natural Hazards Mitigation Plan attached hereto as Exhibit "1" for the purpose of building a safer community by reducing natural hazard vulnerability.

ADOPTED by the Board of Aldermen of the City of Branson, Missouri, this 22nd day of January, 2013.


Raeanne Presley
Mayor

ATTEST:


Lisa K. Westfall
City Clerk

APPROVED AS TO FORM:


William T. Duston
City Attorney

Resolution adopted by the Village of Bull Creek, Missouri on January, 2013.

RESOLUTION NO. 0802 2013

A RESOLUTION OF INTENT TO PARTICIPATE IN NATURAL HAZARD MITIGATION AND TO WORK TOWARD BECOMING A SAFER COMMUNITY

WHEREAS, the Village of Bull Creek recognizes that no community is immune from natural hazards whether it be tornado/severe thunderstorm, flood, severe winter weather, drought, heat wave, earthquake, dam failure or wildfire and recognizes the importance enhancing its ability to withstand natural hazards as well as the importance of reducing the human suffering, property damage, interruption of public services and economic losses caused by those hazards; and

WHEREAS, the Village of Bull Creek may have previously pursued measures such as building codes, fire codes, floodplain management regulations, zoning ordinances, and stormwater management regulations to minimize the impact of natural hazards; and

WHEREAS, the Federal Emergency Management Agency and the State Emergency Management Agency have developed a natural hazard mitigation program that assists communities in their efforts to become Disaster-Resistant Communities which are sustainable communities after a natural disaster that focus, not just on disaster relief, but also on recovery and reconstruction that brings the community to at least pre-disaster conditions in an accelerated, orderly and preplanned manner; and

WHEREAS, by participating in the Natural Hazards Mitigation program, the Village of Bull Creek will be eligible to apply for post-disaster mitigation funds; and

WHEREAS, the Village of Bull Creek desires to commit to working with government partners and community partners to develop a local Natural Hazards Mitigation Plan; and

WHEREAS, the Village of Bull Creek will implement pertinent precepts of the mitigation plan by incorporation into other community plans and mechanisms where appropriate; and

WHEREAS, all aspects pertaining to the Village of Bull Creek in the Taney County Multi-Jurisdictional Hazard Mitigation Plan attached hereto and incorporated by reference herein be approved; and

WHEREAS, the Village of Bull Creek will evaluate and review the Plan regularly or after a disaster as well as complete a mandated five-year update submitted to the State Emergency Management Agency and the Federal Emergency Management Agency for review; and

NOW, THEREFORE BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE VILLAGE OF BULL CREEK MISSOURI AS FOLLOWS:

The Village of Bull Creek will use its best efforts to become a safer community by participating in hazard identification and risk assessment to implement mitigation practices that can reduce vulnerability for residents and businesses.

Risë Long
Risë Long, Acting Chairman

Jan. 2013
Date

Sherrie Anderson
ATTEST: Sherrie Anderson, Administrator

Jan 2013
Date

RESOLUTION NO. 02-4-13

A RESOLUTION OF INTENT TO PARTICIPATE IN NATURAL HAZARD MITIGATION AND TO WORK TOWARD BECOMING A SAFER COMMUNITY.

WHEREAS, the City of Forsyth, Missouri recognizes that no community is immune from natural hazards whether it be tornado/severe thunderstorm, flood, severe winter weather, drought, heat wave, earthquake, dam failure, wildfire or sinkholes and recognizes the importance enhancing its ability to withstand natural hazards as well as the importance of reducing the human suffering, property damage, interruption of public services and economic losses caused by those hazards; and

WHEREAS, the City of Forsyth may have previously pursued measures such as building codes, fire codes, zoning ordinances, and stormwater management regulations to minimize the impact of natural hazards; and

WHEREAS, the Federal Emergency Management Agency and the State Emergency Management Agency have developed a natural hazard mitigation program that assists communities in their efforts to become Disaster-Resistant Communities which are sustainable communities after a natural disaster that focus, not just on disaster relief, but also on recovery and reconstruction that brings the community to at least pre-disaster conditions in an accelerated, orderly and preplanned manner; and

WHEREAS, by participating in the Natural Hazard Mitigation program, the City of Forsyth will be eligible to apply for hazard mitigation funds; and

WHEREAS, the City of Forsyth desires to commit to working with government partners and community partners to implement the Natural Hazard Mitigation Plan; and

WHEREAS, the City of Forsyth will implement pertinent precepts of the mitigation plan by incorporation into other community plans and mechanisms where appropriate; and

WHEREAS, the City of Forsyth will participate in the evaluation and review of the Plan after a disaster as well as complete a mandated five-year update submitted to the State Emergency Management Agency and the Federal Emergency Management Agency for review and approval; and

NOW, THEREFORE BE IT RESOLVED BY THE Board of Alderman of the City of Forsyth, Missouri AS FOLLOWS:

The City of Forsyth hereby adopts the Taney County Multi-Jurisdictional Natural Hazards Mitigation Plan attached hereto for the purpose of building a safer community by reducing natural hazard vulnerability.

Michael Chy
(Type Name), Mayor

2-4-13
Date

ATTEST: Chesma Beasley
(Type Name), City Clerk

RESOLUTION NO 022113**A RESOLUTION OF INTENT TO PARTICIPATE IN NATURAL HAZARD MITIGATION AND TO WORK TOWARD BECOMING A SAFER COMMUNITY.**

WHEREAS, the City of Hollister, Missouri recognizes that no community is immune from natural hazards whether it be tornado/severe thunderstorm, flood, severe winter weather, drought, heat wave, earthquake, dam failure, wildfire or sinkholes and recognizes the importance enhancing its ability to withstand natural hazards as well as the importance of reducing the human suffering, property damage, interruption of public services and economic losses caused by those hazards; and

WHEREAS, the City of Hollister may have previously pursued measures such as building codes, fire codes, zoning ordinances, and stormwater management regulations to minimize the impact of natural hazards; and

WHEREAS, the Federal Emergency Management Agency and the State Emergency Management Agency have developed a natural hazard mitigation program that assists communities in their efforts to become Disaster-Resistant Communities which are sustainable communities after a natural disaster that focus, not just on disaster relief, but also on recovery and reconstruction that brings the community to at least pre-disaster conditions in an accelerated, orderly and replanned manner; and

WHEREAS, by participating in the Natural Hazard Mitigation program, the City of Hollister will be eligible to apply for hazard mitigation funds; and

WHEREAS, the City of Hollister desires to commit to working with government partners and community partners to implement the Natural Hazard Mitigation Plan; and

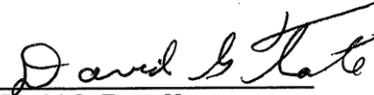
WHEREAS, the City of Hollister will implement pertinent precepts of the mitigation plan by incorporation into other community plans and mechanisms where appropriate; and

WHEREAS, the City of Hollister will participate in the evaluation and review of the Plan after a disaster as well as complete a mandated five-year update submitted to the State Emergency Management Agency and the Federal Emergency Management Agency for review and approval; and

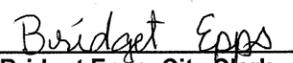
NOW, THEREFORE BE IT RESOLVED BY THE BOARD OF ALDERMEN OF THE CITY OF HOLLISTER, MISSOURI AS FOLLOWS:

The City of Hollister hereby adopts the Taney County Multi-Jurisdictional Natural Hazards Mitigation Plan attached hereto for the purpose of building a safer community by reducing natural hazard vulnerability.

PASSED AND APPROVED BY THE BOARD OF ALDERMEN OF THE CITY OF HOLLISTER, MISSOURI THIS 21st DAY OF FEBRUARY, 2013.


David G. Tate, Mayor

ATTEST:


Bridget Epps, City Clerk

RESOLUTION NO. 2013-100

A RESOLUTION OF INTENT TO PARTICIPATE IN NATURAL HAZARD MITIGATION AND TO WORK TOWARD BECOMING A SAFER COMMUNITY.

WHEREAS, the Village of Kirbyville, Missouri recognizes that no community is immune from natural hazards whether it be tornado/severe thunderstorm, flood, severe winter weather, drought, heat wave, earthquake, dam failure, wildfire or sinkholes and recognizes the importance enhancing its ability to withstand natural hazards as well as the importance of reducing the human suffering, property damage, interruption of public services and economic losses caused by those hazards; and

WHEREAS, the Village of Kirbyville may have previously pursued measures such as building codes, fire codes, zoning ordinances, and stormwater management regulations to minimize the impact of natural hazards; and

WHEREAS, the Federal Emergency Management Agency and the State Emergency Management Agency have developed a natural hazard mitigation program that assists communities in their efforts to become Disaster-Resistant Communities which are sustainable communities after a natural disaster that focus, not just on disaster relief, but also on recovery and reconstruction that brings the community to at least pre-disaster conditions in an accelerated, orderly and preplanned manner; and

WHEREAS, by participating in the Natural Hazard Mitigation program, the Village of Kirbyville will be eligible to apply for hazard mitigation funds; and

WHEREAS, the Village of Kirbyville desires to commit to working with government partners and community partners to implement the Natural Hazard Mitigation Plan; and

WHEREAS, the Village of Kirbyville will implement pertinent precepts of the mitigation plan by incorporation into other community plans and mechanisms where appropriate; and

WHEREAS, the Village of Kirbyville will participate in the evaluation and review of the Plan after a disaster as well as complete a mandated five-year update submitted to the State Emergency Management Agency and the Federal Emergency Management Agency for review and approval; and

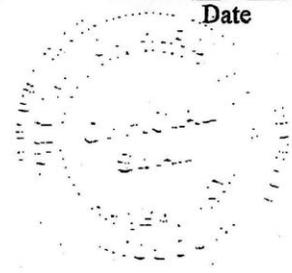
NOW, THEREFORE BE IT RESOLVED BY THE Board of Trustees of the Village of Kirbyville, Missouri AS FOLLOWS:

The Village of Kirbyville hereby adopts the Taney County Multi-Jurisdictional Natural Hazards Mitigation Plan attached hereto for the purpose of building a safer community by reducing natural hazard vulnerability.

Bobby Fausett
Bobby Fausett, Chairman

2-25-13
Date

ATTEST: Amy Chamberlin
Amy Chamberlin, Village Clerk



Resolution 2013-2

A RESOLUTION OF INTENT TO PARTICIPATE IN NATURAL HAZARD MITIGATION AND TO WORK TOWARD BECOMING A SAFER COMMUNITY

WHEREAS, the Village of Merriam Woods, Missouri, recognizes that no community is immune from natural hazards, whether it be tornado/severe thunderstorm, flood, severe winter weather, drought, heat wave, earthquake, dam failure, wildfire, or sinkholes, and recognizes the importance of enhancing its ability to withstand natural hazards as well as the importance of reducing human suffering, property damage, interruption of public services, and economic losses caused by those hazards; and

WHEREAS, the Village of Merriam Woods may have previously pursued measures such as building codes, fire codes, zoning ordinances, and stormwater management regulations to minimize the impact of natural hazards; and

WHEREAS, the Federal Emergency Management Agency and the State Emergency Management Agency have developed a natural hazard mitigation program that assists communities in their efforts to become Disaster-Resistant Communities which are sustainable communities after a natural disaster that focus, not just on disaster relief, but also on recovery and reconstruction that brings the community to at least pre-disaster conditions in an accelerated, order and pre-planned manner; and

WHEREAS, by participating in the Natural Hazard Mitigation program, the Village of Merriam Woods will be eligible to apply for hazard mitigation funds; and

WHEREAS, the Village of Merriam Woods desires to commit to working with government partners and community partners to implement the Natural Hazard Mitigation Plan; and

WHEREAS, the Village of Merriam Woods will implement pertinent precepts of the mitigation plan by incorporation into other community plans and mechanisms where appropriate; and

WHEREAS, the Village of Merriam Woods will participate in the evaluation and review of the Plan after a disaster as well as complete a mandated five-year update submitted to the State Emergency Management Agency and the Federal Emergency Management Agency for review and approval; and

NOW, THEREFORE, be it resolved by the Board of Trustees of the Village of Merriam Woods, Missouri, as follows:

Section 1. The Village of Merriam Woods hereby adopts the Taney County Multi-Jurisdictional Natural Hazards Mitigation Plan attached hereto for the purpose of building a safer community by reducing natural hazard vulnerability.

Section 2. This resolution approved this 12th day of February, 2013.



ATTEST:


Susan Braden, Village Clerk


David Pendleton, Chairman
Board of Trustees
Merriam Woods, Missouri

RESOLUTION NO. R301-213

A RESOLUTION OF INTENT TO PARTICIPATE IN NATURAL HAZARD MITIGATION AND TO WORK TOWARD BECOMING A SAFER COMMUNITY.

WHEREAS, the City of Rockaway Beach, Missouri recognizes that no community is immune from natural hazards whether it be tornado/severe thunderstorm, flood, severe winter weather, drought, heat wave, earthquake, dam failure, wildfire or sinkholes and recognizes the importance enhancing its ability to withstand natural hazards as well as the importance of reducing the human suffering, property damage, interruption of public services and economic losses caused by those hazards; and

WHEREAS, the City of Rockaway Beach may have previously pursued measures such as building codes, fire codes, zoning ordinances, and stormwater management regulations to minimize the impact of natural hazards; and

WHEREAS, the Federal Emergency Management Agency and the State Emergency Management Agency have developed a natural hazard mitigation program that assists communities in their efforts to become Disaster-Resistant Communities which are sustainable communities after a natural disaster that focus, not just on disaster relief, but also on recovery and reconstruction that brings the community to at least pre-disaster conditions in an accelerated, orderly and replanned manner; and

WHEREAS, by participating in the Natural Hazard Mitigation program, the City of Rockaway Beach will be eligible to apply for hazard mitigation funds; and

WHEREAS, the City of Rockaway Beach desires to commit to working with government partners and community partners to implement the Natural Hazard Mitigation Plan; and

WHEREAS, the City of Rockaway Beach will implement pertinent precepts of the mitigation plan by incorporation into other community plans and mechanisms where appropriate; and

WHEREAS, the City of Rockaway Beach will participate in the evaluation and review of the Plan after a disaster as well as complete a mandated five-year update submitted to the State Emergency Management Agency and the Federal Emergency Management Agency for review and approval; and

NOW, THEREFORE BE IT RESOLVED BY THE Board of Alderman of the City of Rockaway Beach, Missouri AS FOLLOWS:

The City of Rockaway Beach hereby adopts the Taney County Multi-Jurisdictional Natural Hazards Mitigation Plan attached hereto for the purpose of building a safer community by reducing natural hazard vulnerability.


Michael McCabe, Mayor

03-11-2013
Date

ATTEST: 
Susan Kettlekamp, City Clerk

RESOLUTION NO. _____

A RESOLUTION OF INTENT TO PARTICIPATE IN NATURAL HAZARD MITIGATION AND TO WORK TOWARD BECOMING A SAFER COMMUNITY.

WHEREAS, the Bradleyville R-I School District recognizes that no community is immune from natural hazards whether it be tornado/severe thunderstorm, flood, severe winter weather, drought, heat wave, earthquake, dam failure, wildfire or sinkholes and recognizes the importance enhancing its ability to withstand natural hazards as well as the importance of reducing the human suffering, property damage, interruption of public services and economic losses caused by those hazards; and

WHEREAS, the Bradleyville R-I School District may have previously pursued measures such as building modifications, storm water management, or educational instruction and safety drills to minimize the impact of natural hazards; and

WHEREAS, the Federal Emergency Management Agency and the State Emergency Management Agency have developed a natural hazard mitigation program that assists communities in their efforts to become Disaster-Resistant Communities which are sustainable communities after a natural disaster that focus, not just on disaster relief, but also on recovery and reconstruction that brings the community to at least pre-disaster conditions in an accelerated, orderly and preplanned manner; and

WHEREAS, by participating in the Natural Hazard Mitigation program, the Bradleyville R-I School District will be eligible to apply for post-disaster mitigation funds; and

WHEREAS, the Bradleyville R-I School District desires to commit to working with government partners and community partners to implement the Natural Hazard Mitigation Plan; and

WHEREAS, the Bradleyville R-I School District will implement pertinent precepts of the mitigation plan by incorporation into other plans and mechanisms where appropriate; and

WHEREAS, the Bradleyville R-I School District will participate in the evaluation and review of the Plan after a disaster as well as complete a mandated five-year update submitted to the State Emergency Management Agency and the Federal Emergency Management Agency for review and approval; and

NOW, THEREFORE BE IT RESOLVED BY THE Board of Education of the Bradleyville R-I School District AS FOLLOWS:

The Bradleyville R-I School District hereby adopts the Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan attached hereto for the purpose of building a safer community by reducing natural hazard vulnerability.

ADOPTED this 26th day of Feb, 2013



Bob Case, President

Attest: 

Jackie Adams, Secretary

RESOLUTION NO. _____

A RESOLUTION OF INTENT TO PARTICIPATE IN NATURAL HAZARD MITIGATION AND TO WORK TOWARD BECOMING A SAFER COMMUNITY.

WHEREAS, the Taneyville R-II School District recognizes that no community is immune from natural hazards whether it be tornado/severe thunderstorm, flood, severe winter weather, drought, heat wave, earthquake, dam failure, wildfire or sinkholes and recognizes the importance enhancing its ability to withstand natural hazards as well as the importance of reducing the human suffering, property damage, interruption of public services and economic losses caused by those hazards; and

WHEREAS, the Taneyville R-II School District may have previously pursued measures such as building modifications, storm water management, or educational instruction and safety drills to minimize the impact of natural hazards; and

WHEREAS, the Federal Emergency Management Agency and the State Emergency Management Agency have developed a natural hazard mitigation program that assists communities in their efforts to become Disaster-Resistant Communities which are sustainable communities after a natural disaster that focus, not just on disaster relief, but also on recovery and reconstruction that brings the community to at least pre-disaster conditions in an accelerated, orderly and preplanned manner; and

WHEREAS, by participating in the Natural Hazard Mitigation program, the Taneyville R-II School District will be eligible to apply for post-disaster mitigation funds; and

WHEREAS, the Taneyville R-II School District desires to commit to working with government partners and community partners to implement the Natural Hazard Mitigation Plan; and

WHEREAS, the Taneyville R-II School District will implement pertinent precepts of the mitigation plan by incorporation into other plans and mechanisms where appropriate; and

WHEREAS, the Taneyville R-II School District will participate in the evaluation and review of the Plan after a disaster as well as complete a mandated five-year update submitted to the State Emergency Management Agency and the Federal Emergency Management Agency for review and approval; and

NOW, THEREFORE BE IT RESOLVED BY THE Board of Education of the Taneyville R-II School District AS FOLLOWS:

The Taneyville R-II School District hereby adopts the Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan attached hereto for the purpose of building a safer community by reducing natural hazard vulnerability.

ADOPTED this 28th day of January, 2017


Matthew Smith, Board President

Attest: 
Katie Hodges, Board Secretary

RESOLUTION NO. _____

A RESOLUTION OF INTENT TO PARTICIPATE IN NATURAL HAZARD MITIGATION AND TO WORK TOWARD BECOMING A SAFER COMMUNITY.

WHEREAS, the Forsyth R-III School District recognizes that no community is immune from natural hazards whether it be tornado/severe thunderstorm, flood, severe winter weather, drought, heat wave, earthquake, dam failure, wildfire or sinkholes and recognizes the importance enhancing its ability to withstand natural hazards as well as the importance of reducing the human suffering, property damage, interruption of public services and economic losses caused by those hazards; and

WHEREAS, the Forsyth R-III School District may have previously pursued measures such as building modifications, storm water management, or educational instruction and safety drills to minimize the impact of natural hazards; and

WHEREAS, the Federal Emergency Management Agency and the State Emergency Management Agency have developed a natural hazard mitigation program that assists communities in their efforts to become Disaster-Resistant Communities which are sustainable communities after a natural disaster that focus, not just on disaster relief, but also on recovery and reconstruction that brings the community to at least pre-disaster conditions in an accelerated, orderly and preplanned manner; and

WHEREAS, by participating in the Natural Hazard Mitigation program, the Forsyth R-III School District will be eligible to apply for post-disaster mitigation funds; and

WHEREAS, the Forsyth R-III School District desires to commit to working with government partners and community partners to implement the Natural Hazard Mitigation Plan; and

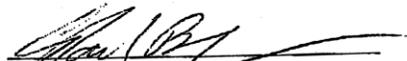
WHEREAS, the Forsyth R-III School District will implement pertinent precepts of the mitigation plan by incorporation into other plans and mechanisms where appropriate; and

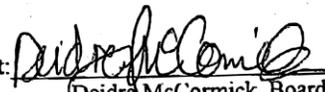
WHEREAS, the Forsyth R-III School District will participate in the evaluation and review of the Plan after a disaster as well as complete a mandated five-year update submitted to the State Emergency Management Agency and the Federal Emergency Management Agency for review and approval; and

NOW, THEREFORE BE IT RESOLVED BY THE Board of Education of the Forsyth R-III School District AS FOLLOWS:

The Forsyth R-III School District hereby adopts the Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan attached hereto for the purpose of building a safer community by reducing natural hazard vulnerability.

ADOPTED this 17 th day of January, 2013


Jack Baker, Board President

Attest: 
Deidra McCormick, Board Secretary

Branson Schools

RESOLUTION NO. _____

A RESOLUTION OF INTENT TO PARTICIPATE IN NATURAL HAZARD MITIGATION AND TO WORK TOWARD BECOMING A SAFER COMMUNITY.

WHEREAS, the Hollister R-V School District recognizes that no community is immune from natural hazards whether it be tornado/severe thunderstorm, flood, severe winter weather, drought, heat wave, earthquake, dam failure, wildfire or sinkholes and recognizes the importance enhancing its ability to withstand natural hazards as well as the importance of reducing the human suffering, property damage, interruption of public services and economic losses caused by those hazards; and

WHEREAS, the Hollister R-V School District may have previously pursued measures such as building modifications, storm water management, or educational instruction and safety drills to minimize the impact of natural hazards; and

WHEREAS, the Federal Emergency Management Agency and the State Emergency Management Agency have developed a natural hazard mitigation program that assists communities in their efforts to become Disaster-Resistant Communities which are sustainable communities after a natural disaster that focus, not just on disaster relief, but also on recovery and reconstruction that brings the community to at least pre-disaster conditions in an accelerated, orderly and preplanned manner; and

WHEREAS, by participating in the Natural Hazard Mitigation program, the Hollister R-V School District will be eligible to apply for post-disaster mitigation funds; and

WHEREAS, the Hollister R-V School District desires to commit to working with government partners and community partners to implement the Natural Hazard Mitigation Plan; and

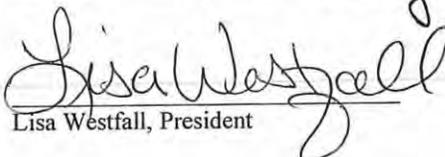
WHEREAS, the Hollister R-V School District will implement pertinent precepts of the mitigation plan by incorporation into other plans and mechanisms where appropriate; and

WHEREAS, the Hollister R-V School District will participate in the evaluation and review of the Plan after a disaster as well as complete a mandated five-year update submitted to the State Emergency Management Agency and the Federal Emergency Management Agency for review and approval; and

NOW, THEREFORE BE IT RESOLVED BY THE Board of Education of the Hollister R-V School District AS FOLLOWS:

The Hollister R-V School District hereby adopts the Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan attached hereto for the purpose of building a safer community by reducing natural hazard vulnerability.

ADOPTED this 14th day of January, 2013


Lisa Westfall, President

Attest: 
John Rousselot, Secretary

RESOLUTION NO. _____

**A RESOLUTION OF INTENT TO PARTICIPATE IN NATURAL HAZARD MITIGATION AND TO
WORK TOWARD BECOMING A SAFER COMMUNITY.**

WHEREAS, the Kirbyville R-VI School District recognizes that no community is immune from natural hazards whether it be tornado/severe thunderstorm, flood, severe winter weather, drought, heat wave, earthquake, dam failure, wildfire or sinkholes and recognizes the importance enhancing its ability to withstand natural hazards as well as the importance of reducing the human suffering, property damage, interruption of public services and economic losses caused by those hazards; and

WHEREAS, the Kirbyville R-VI School District may have previously pursued measures such as building modifications, storm water management, or educational instruction and safety drills to minimize the impact of natural hazards; and

WHEREAS, the Federal Emergency Management Agency and the State Emergency Management Agency have developed a natural hazard mitigation program that assists communities in their efforts to become Disaster-Resistant Communities which are sustainable communities after a natural disaster that focus, not just on disaster relief, but also on recovery and reconstruction that brings the community to at least pre-disaster conditions in an accelerated, orderly and preplanned manner; and

WHEREAS, by participating in the Natural Hazard Mitigation program, the Kirbyville R-VI School District will be eligible to apply for post-disaster mitigation funds; and

WHEREAS, the Kirbyville R-VI School District desires to commit to working with government partners and community partners to implement the Natural Hazard Mitigation Plan; and

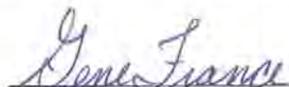
WHEREAS, the Kirbyville R-VI School District will implement pertinent precepts of the mitigation plan by incorporation into other plans and mechanisms where appropriate; and

WHEREAS, the Kirbyville R-VI School District will participate in the evaluation and review of the Plan after a disaster as well as complete a mandated five-year update submitted to the State Emergency Management Agency and the Federal Emergency Management Agency for review and approval; and

NOW, THEREFORE BE IT RESOLVED BY THE Board of Education of the Kirbyville R-VI School District AS FOLLOWS:

The Kirbyville R-VI School District hereby adopts the Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan attached hereto for the purpose of building a safer community by reducing natural hazard vulnerability.

ADOPTED this 14th day of February, 2013


Gene France, Board President

Attest: 
Christy Copeland, Board Secretary

RESOLUTION NO. _____

A RESOLUTION OF INTENT TO PARTICIPATE IN NATURAL HAZARD MITIGATION AND TO WORK TOWARD BECOMING A SAFER COMMUNITY.

WHEREAS, the Mark Twain R-VIII School District recognizes that no community is immune from natural hazards whether it be tornado/severe thunderstorm, flood, severe winter weather, drought, heat wave, earthquake, dam failure, wildfire or sinkholes and recognizes the importance enhancing its ability to withstand natural hazards as well as the importance of reducing the human suffering, property damage, interruption of public services and economic losses caused by those hazards; and

WHEREAS, the Mark Twain R-VIII School District may have previously pursued measures such as building modifications, storm water management, or educational instruction and safety drills to minimize the impact of natural hazards; and

WHEREAS, the Federal Emergency Management Agency and the State Emergency Management Agency have developed a natural hazard mitigation program that assists communities in their efforts to become Disaster-Resistant Communities which are sustainable communities after a natural disaster that focus, not just on disaster relief, but also on recovery and reconstruction that brings the community to at least pre-disaster conditions in an accelerated, orderly and preplanned manner; and

WHEREAS, by participating in the Natural Hazard Mitigation program, the Mark Twain R-VIII School District will be eligible to apply for post-disaster mitigation funds; and

WHEREAS, the Mark Twain R-VIII School District desires to commit to working with government partners and community partners to implement the Natural Hazard Mitigation Plan; and

WHEREAS, the Mark Twain R-VIII School District will implement pertinent precepts of the mitigation plan by incorporation into other plans and mechanisms where appropriate; and

WHEREAS, the Mark Twain R-VIII School District will participate in the evaluation and review of the Plan after a disaster as well as complete a mandated five-year update submitted to the State Emergency Management Agency and the Federal Emergency Management Agency for review and approval; and

NOW, THEREFORE BE IT RESOLVED BY THE Board of Education of the Mark Twain R-VIII School District AS FOLLOWS:

The Mark Twain R-VIII School District hereby adopts the Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan attached hereto for the purpose of building a safer community by reducing natural hazard vulnerability.

ADOPTED this 13th day of Feb., 2012



Tony Cowden, Board President

Attest: 

Michelle Collins, Board Secretary
DAVID CLARK

RESOLUTION NO. _____

A RESOLUTION OF INTENT TO PARTICIPATE IN NATURAL HAZARD MITIGATION AND TO WORK TOWARD BECOMING A SAFER COMMUNITY.

WHEREAS, the Ozarks Technical Community College-Table Rock Campus recognizes that no community is immune from natural hazards whether it be tornado/severe thunderstorm, flood, severe winter weather, drought, heat wave, earthquake, dam failure, wildfire or sinkholes and recognizes the importance enhancing its ability to withstand natural hazards as well as the importance of reducing the human suffering, property damage, interruption of public services and economic losses caused by those hazards; and

WHEREAS, the Ozarks Technical Community College-Table Rock Campus may have previously pursued measures such as building modifications, storm water management, or educational instruction and safety drills to minimize the impact of natural hazards; and

WHEREAS, the Federal Emergency Management Agency and the State Emergency Management Agency have developed a natural hazard mitigation program that assists communities in their efforts to become Disaster-Resistant Communities which are sustainable communities after a natural disaster that focus, not just on disaster relief, but also on recovery and reconstruction that brings the community to at least pre-disaster conditions in an accelerated, orderly and preplanned manner; and

WHEREAS, by participating in the Natural Hazard Mitigation program, the Ozarks Technical Community College-Table Rock Campus will be eligible to apply for post-disaster mitigation funds; and

WHEREAS, the Ozarks Technical Community College-Table Rock Campus desires to commit to working with government partners and community partners to implement the Natural Hazard Mitigation Plan; and

WHEREAS, the Ozarks Technical Community College-Table Rock Campus will implement pertinent precepts of the mitigation plan by incorporation into other plans and mechanisms where appropriate; and

WHEREAS, the Ozarks Technical Community College-Table Rock Campus will participate in the evaluation and review of the Plan after a disaster as well as complete a mandated five-year update submitted to the State Emergency Management Agency and the Federal Emergency Management Agency for review and approval; and

NOW, THEREFORE BE IT RESOLVED BY THE Board of the Ozarks Technical Community College-Table Rock Campus AS FOLLOWS:

The Ozarks Technical Community College-Table Rock Campus hereby adopts the Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan attached hereto for the purpose of building a safer community by reducing natural hazard vulnerability.

ADOPTED this 1st day of March, 2013.


Mr. Larry Snyder, Board President



Attest: 
Dr. Maryellen Stratmann, Board Secretary

RESOLUTION NO. 001-2013**A RESOLUTION OF INTENT TO PARTICIPATE IN NATURAL HAZARD MITIGATION AND TO WORK TOWARD BECOMING A SAFER COMMUNITY.**

WHEREAS, the Taney County Regional Sewer District recognizes that no community is immune from natural hazards whether it be tornado/severe thunderstorm, flood, severe winter weather, drought, heat wave, earthquake, dam failure, wildfire or sinkholes and recognizes the importance enhancing its ability to withstand natural hazards as well as the importance of reducing the human suffering, property damage, interruption of public services and economic losses caused by those hazards; and

WHEREAS, the Taney County Regional Sewer District may have previously pursued measures such as flood proofing modifications, storm water system planning and management, or installation of equipment for emergency power generation to minimize the impact of natural hazards; and

WHEREAS, the Federal Emergency Management Agency and the State Emergency Management Agency have developed a natural hazard mitigation program that assists communities in their efforts to become Disaster-Resistant Communities which are sustainable communities after a natural disaster that focus, not just on disaster relief, but also on recovery and reconstruction that brings the community to at least pre-disaster conditions in an accelerated, orderly and preplanned manner; and

WHEREAS, by participating in the Natural Hazard Mitigation program, the Taney County Regional Sewer District will be eligible to apply for post-disaster mitigation funds; and

WHEREAS, the Taney County Regional Sewer District desires to commit to working with government partners and community partners to implement the Natural Hazard Mitigation Plan; and

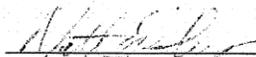
WHEREAS, the Taney County Regional Sewer District will implement pertinent precepts of the mitigation plan by incorporation into other plans and mechanisms where appropriate; and

WHEREAS, the Taney County Regional Sewer District will participate in the evaluation and review of the Plan after a disaster as well as complete a mandated five-year update submitted to the State Emergency Management Agency and the Federal Emergency Management Agency for review and approval; and

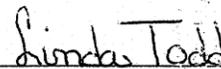
NOW, THEREFORE BE IT RESOLVED BY THE Board of Trustees of the Taney County Regional Sewer District AS FOLLOWS:

The Taney County Regional Sewer District hereby adopts the Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan attached hereto for the purpose of building a safer community by reducing natural hazard vulnerability.

ADOPTED this 15th day of January, 2013



Nathan Easley, Chairman

Attest: 

Linda Todd, Secretary

RESOLUTION NO. 2013-01

A RESOLUTION OF INTENT TO PARTICIPATE IN NATURAL HAZARD MITIGATION AND TO WORK TOWARD BECOMING A SAFER COMMUNITY.

WHEREAS, the Taney County Ambulance District recognizes that no community is immune from natural hazards whether it be tornado/severe thunderstorm, flood, severe winter weather, drought, heat wave, earthquake, dam failure, wildfire or sinkholes and recognizes the importance enhancing its ability to withstand natural hazards as well as the importance of reducing the human suffering, property damage, interruption of public services and economic losses caused by those hazards; and

WHEREAS, the Taney County Ambulance District may have previously pursued measures such as flood proofing modifications, storm water system planning and management, or installation of equipment for emergency power generation to minimize the impact of natural hazards; and

WHEREAS, the Federal Emergency Management Agency and the State Emergency Management Agency have developed a natural hazard mitigation program that assists communities in their efforts to become Disaster-Resistant Communities which are sustainable communities after a natural disaster that focus, not just on disaster relief, but also on recovery and reconstruction that brings the community to at least pre-disaster conditions in an accelerated, orderly and preplanned manner; and

WHEREAS, by participating in the Natural Hazard Mitigation program, the Taney County Ambulance District will be eligible to apply for post-disaster mitigation funds; and

WHEREAS, the Taney County Ambulance District desires to commit to working with government partners and community partners to implement the Natural Hazard Mitigation Plan; and

WHEREAS, the Taney County Ambulance District will implement pertinent precepts of the mitigation plan by incorporation into other plans and mechanisms where appropriate; and

WHEREAS, the Taney County Ambulance District will participate in the evaluation and review of the Plan after a disaster as well as complete a mandated five-year update submitted to the State Emergency Management Agency and the Federal Emergency Management Agency for review and approval; and

NOW, THEREFORE BE IT RESOLVED BY THE Board of Directors of the Taney County Ambulance District AS FOLLOWS:

The Taney County Ambulance District hereby adopts the Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan attached hereto for the purpose of building a safer community by reducing natural hazard vulnerability.

ADOPTED this 15th day of January, 2013


Steve Dalton, President

Attest: 
Dale Sanders, Secretary

Appendix B: Repetitive Losses

Table B-1 shows repetitive losses to the National Flood Insurance Program (NFIP) in Taney County as of 2009. Information is shown concerning whether mitigation actions were previously taken, whether the property was insured at the time of the flood, total payments made by the NFIP for building losses and contents losses, the number of times the property has been claimed to the NFIP, total claims paid on the property, and average claim payment.

Table B-1: Taney County Repetitive Losses as of 2009	
Community	City of Branson
State	Missouri
Zip Code	65616-3600
Type	Single Family
Mitigated?	No
Insured?	No
Total Building Payment	-
Total Contents Payment	-
Losses	2 (1984 and 1982)
Total Paid	-
Average Paid	-
Source: Federal Emergency Management Agency, Region VII.	

Appendix C: Acronyms

• ASM	Archaeological Survey of Missouri
• BFE	Base Flood Elevation
• BLM	Bureau of Land Management
• CDBG	Community Block Development Program
• CEDS	Comprehensive Economic Development Strategy
• CERl	Center for Earthquake Research and Information
• CPC	Climate Prediction Center
• CRS	Community Rating System
• CTCFPD	Central Taney County Fire Protection District
• DMA 2000	Disaster Mitigation Act of 2000
• EDA	Economic Development Administration
• EMD	Emergency Management Director
• EOC	Emergency Operations Center
• EOP	Emergency Operations Plan
• EPA	Environmental Protection Agency
• FEMA	Federal Emergency Management Agency
• FIRM	Flood Insurance Rate Map
• FMA	Flood Management Assistance (FEMA Program)
• GIS	Geographic Information System
• HMGP	Hazard Mitigation Grant Program
• HMST	Hazard Mitigation Survey Team
• HUD	Housing and Urban Development (United States, Department of)
• ICC	Increased Cost of Compliance
• LMI	Labor Market Information
• MCC	Midwestern Climate Center
• MDC	Missouri Department of Conservation
• MDNR	Missouri Department of Natural Resources
• MoDOT	Missouri Department of Transportation
• NCDC	National Climatic Data Center
• NEHRP	National Earthquake Hazards Reduction Program
• NFIP	National Flood Insurance Program
• NFPA	National Fire Protection Association
• NHMP	Natural Hazard Mitigation Plan
• NOAA	National Oceanic and Atmospheric Administration
• NRHP	National Register of Historic Places
• NRCS	Natural Resources Conservation Service
• NWS	National Weather Service
• OEDP	Overall Economic Development Program (see CEDS)
• PDM	Pre-Disaster Mitigation Program
• PDSI	Palmer Drought Severity Index
• SBA	Small Business Administration
• SEMA	Missouri State Emergency Management Agency
• SHMO	State Hazard Mitigation Officer
• SMCOG	Southwest Missouri Council of Governments
• SPC	Storm Prediction Center

- USACE United States Army Corps of Engineers
- USDA United States Department of Agriculture
- USFA United States Fire Administration
- USFS United States Forest Service
- USFWS United States Fish and Wildlife Service
- USGS United States Geological Survey
- WTCFPD Western Taney County Fire Protection District

Appendix E: Glossary

Acquisition: Local governments can acquire lands in high hazard areas through conservation easements, purchase of development rights, or outright purchase of property.

Acquisition of Hazard-prone structures: Local governments can acquire lands in high hazard areas through conservation easements, purchase of development rights, or outright purchase of property.

Asset: Any manmade or natural feature that has value, including, but not limited to people; buildings; infrastructure like bridges, roads, and sewer and water systems; lifelines like electricity and communication resources; or environmental, cultural, or recreational features like parks, dunes, wetlands, or landmarks.

Benefit: Net project outcomes, usually defined in monetary terms. Benefits may include direct and indirect effects. For the purposes of conducting a benefit-cost analysis of proposed mitigation measures, benefits are limited to specific, measurable risk reduction factors, including a reduction in expected property losses (building, contents, and function) and protection of human life.

Benefit-Cost Analysis (BCA): A systematic method of comparing the projected benefits to projected costs of a project or policy. It is used as a measure of cost-effectiveness.

Building: A structure that is walled and roofed, principally above ground and permanently affixed to a site. The term includes a manufactured home on a permanent foundation on which the wheels and axles carry no weight.

Capability Assessment: An assessment that provides a description and analysis of a community or state's current capacity to address the threats associated with hazards. The capability assessment attempts to identify and evaluate existing policies, regulations, programs, and practices that positively or negatively affect the community or state's vulnerability to hazards or specific threats.

Community Emergency Response Team (CERT): CERT is the mechanism to establish, train, and maintain a local cadre of residents to act as first responders in the event of an emergency. A CERT team is especially critical in the first three days following a disaster when conditions may prevent access by emergency response personnel.

Community Rating System (CRS): CRS is a program that provides incentives for National Flood Insurance Program communities to complete activities that reduce flood hazard risk. When the community completes specified activities, the insurance premiums of the policyholders in those communities are reduced.

Comprehensive Plan: A document, also known as a "general plan," covering the entire geographic area of a community and expressing community goals and objectives. The plan lays out the vision, policies, and strategies for the future of the community, including all to the physical elements that will determine the community's future development. This plan may discuss the community's desired physical development, desired rate and quantity of growth, community character, transportation service, location of growth, and siting of public facilities and transportation. In most states, the comprehensive plan has no authority in and of itself, but serves as a guide for community decision-making.

Cost-effectiveness: Cost-effectiveness is a key evaluation criterion for federal grant programs. Cost-effectiveness has several possible definitions, although for grant-making

purposes FEMA defines a cost-effective project as one whose long-term benefits exceed its cost. That is, a project should prevent more expected damages than it cost initially to fund the effort. This is done to ensure that limited public funds are used in the most efficient manner possible. Benefit-cost analysis is one way to illustrate that a project is cost-effective.

Critical facilities: Facilities vital to the health, safety, and welfare of the population and that are especially important following hazard events. Critical facilities include, but are not limited to, shelters, police and fire stations, and hospitals.

Debris: The scattered remains of assets broken or destroyed in a hazard event. Debris caused by a wind or water hazard event can cause additional damage to other assets.

Disaster Mitigation Act of 2000 (DMA 2000): DMA 2000 (Public Law 106-390) is the latest legislation to improve the planning process. It was signed into law on October 10, 2000. This new legislation reinforces the importance of mitigation planning and emphasizes planning for disasters before they occur.

Earthquake: A sudden motion or trembling that is caused by a release of strain accumulated within or along the edge of earth's tectonic plates.

Elevation of Structures: Raising structures above the base flood elevation to protect structures located in areas prone to flooding.

Emergency Response Services: The actions of first responders such as firefighters, police, and other emergency service personnel at the scene of a hazard event. The first responders take appropriate actions to contain the hazard, protect property, conduct search and rescue operations, provide mass care, and ensure public safety.

Erosion: Wearing away of the land surface by detachment and movement of soil and rock fragments, during a flood or storm or over a period of years, through the action of wind, water, or other geologic processes.

Extent: The size of an area affected by a hazard or hazard event.

Fault: A fracture in the continuity of a rock formation caused by a shifting or dislodging of the earth's crust, in which adjacent surfaces are differentially displaced parallel to the plane of fracture.

Federal Emergency Management Agency (FEMA): Independent agency created in 1979 to provide a single point of accountability for all federal activities related to disaster mitigation and emergency preparedness, response, and recovery.

Flood Depth: Height of the flood water surface above the ground surface.

Flood Hazard Area: The area shown to be inundated by a flood of a given magnitude on a map.

Flood Insurance Rate Map (FIRM): Map of a community, prepared by FEMA, shows both the special flood hazard areas and the risk premium zones applicable to the community under the National Flood Insurance Program.

Flood Mitigation Assistance (FMA) Program: A program created as part of the National Flood Insurance Reform Act of 1994. FMA provides funding to assist communities and states in implementing actions that reduce or eliminate the long-term risk of flood damage to buildings, manufactured homes, and other NFIP insurable structures, with a focus on repetitive loss properties.

Floodplain: Any land area, including watercourse, susceptible to partial or complete inundation by water from any source.

Flood-proofing: Actions that prevent or minimize future flood damage. Making the areas below the anticipated flood level watertight or intentionally allowing flood-waters to enter the interior to equalize flood pressures are examples of flood-proofing.

Flood Zone: A geographical area shown on a FIRM that reflects the severity or type of flooding in the area.

Goals: General guidelines that explain what you want to achieve. They are usually broad policy-type statements, long term in nature, and represent global visions.

Hazard: A source of potential danger or adverse condition.

Hazard Event: A specific occurrence of a particular type of hazard.

Hazard Identification: The process of identifying hazards that threaten an area.

Hazard Mitigation: Sustained actions taken to reduce or eliminate long-term risk from hazards and their effects.

Hazard Mitigation Grant Program (HMGP): authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, HMGP is administrated by FEMA and provides grants to states, tribes, and local governments to implement hazard mitigation actions after a major disaster declaration. The purpose of the program is to reduce the loss of life and property due to disasters and to enable mitigation activities to be implemented as community recovers from a disaster.

Hazard Profile: A description of the physical characteristics of hazards and a determination of various descriptions, including magnitude, duration, frequency, probability, and extent. In most cases, a community can most easily use these descriptors when they are recorded and displayed as maps.

HAZUS (Hazards U.S.): A GIS-based, nationally standardized, loss estimation tool developed by FEMA.

Infrastructure: Refers to the public services of a community that have a direct impact on the quality of life. Infrastructure includes communication technology such as phone lines or Internet access, vital services such as public water supplies and sewer treatment facilities, and includes an area's transportation system such as airports, heliports, highways, bridges, tunnels, roadbeds, overpasses, railways, bridges, rail yards, depots; and waterways, canals, locks, seaports, ferries, harbors, dry docks, piers, and regional dams.

Landslide: Downward movement of a slope and materials under the force of gravity.

Loss Estimation: Forecast of and economic impacts and property damage from future hazard events, based on current scientific and engineering knowledge.

Local Emergency Planning Committee (LEPC): LEPCs consist of community representatives and are appointed by the State Emergency Response Commissions (SERCs), as required by Superfund Amendments and Reauthorization Act (SARA), Title III. They develop an emergency plan to prepare for and respond to chemical emergencies. They are also responsible for coordinating with local facilities to find out what they are doing to reduce hazards, prepare for accidents, and reduce hazardous inventories and releases. The LEPC serves as a focal point in the community for

information and discussions about hazardous substances, emergency planning, and health and environmental risks.

Magnitude: A measure of the strength of a hazard event. The magnitude (also referred to as severity) of a given hazard event is usually determined using technical measures specific to the hazard.

Memorandum of Agreement: A non-binding statement that defines the duties, responsibilities, and commitment of the different parties or individuals; provides a clear statement of values, principles, and goals; and establishes an organizational structure to assist in measuring and evaluating progress.

Mitigate: To cause something to become less harsh or hostile, to make less severe or painful.

Mitigation Actions: Activities or projects that help achieve the goals and objectives of a mitigation plan.

Mitigation Plan: Systematically evaluating community policies, actions, and tools, and setting goals for implementation over the long term that will result in a reduction in risk and minimize future losses community-wide.

National Flood Insurance Program (NFIP): Federal program created by Congress in 1968 that makes flood insurance available in communities that enact minimum floodplain management regulations as indicated in 44 CFR §60.3.

National Weather Service (NWS): Prepares and issues flood, severe weather, and coastal storm warnings and can provide technical assistance to federal and state entities in preparing weather and flood warning plans.

Objectives: Objectives define strategies or implementation steps to attain the identified goals. Unlike goals, objectives are specific and measurable.

Open Space Preservation: Preserving undeveloped areas from development through any number of methods, including low-density zoning, easements, or public or private acquisition. Open space preservation is a technique that can be used to prevent flood damage in flood-prone areas, land failures on steep slopes or liquefaction-prone soils, and can enhance that nature and beneficial functions of floodplains.

Ordinance: A term for a law or regulation adopted by a local government.

Planning: The act or process of making or carrying out plans; the establishment of goals, policies, and procedures for a social or economic unit.

Policy: A course of action or specific rule of conduct to be followed in achieving goals and objectives.

Post-Disaster Mitigation: An ordinance authorizing certain governmental actions to be taken during the immediate aftermath of a hazard event to expedite implementation of recovery and reconstruction actions identified in a pre-event plan.

Post-Disaster Recovery Planning: The purpose of planning those steps the jurisdiction will take to implement long-term reconstruction with a primary goal of mitigating its exposure to future hazards. The post-disaster recovery planning process can also involve coordination with other types of plans and agencies, but it is distinct from planning for emergency operations.

Preparedness: Actions that strengthen the capability of government, citizens, and communities to respond to disasters.

Probability: A statistical measure of the likelihood that a hazard event will occur.

Public Education and Outreach Programs: A campaign to make the public more aware of hazard mitigation programs, including hazard information centers, mailings, public meetings, etc.

Recovery: The actions taken by an individual or community after a catastrophic event to restore order and lifelines in a community.

Regulatory Power: Local jurisdictions have the authority to regulate certain activities in their jurisdiction. With respect to mitigation planning, the focus is on such things as regulating land use development and construction through zoning, subdivision regulations, design standards, and floodplain regulations.

Relocation out of Hazard Areas: A mitigation technique that features the process of demolishing or moving a building to a new location outside the hazard area.

Resources: Resources include the people, materials, technologies, money, etc., required to implement strategies or processes. The costs of these resources are often included in a budget.

Response: The actions taken during an event to address immediate life and safety needs and to minimize further damage to properties.

Risk: The estimated impact that a hazard would have on people, services, facilities, and structures in a community; the likelihood of a hazard event resulting in an adverse condition that causes injury or damage. Risk is often expressed in relative terms such as a high, moderate, or low likelihood of sustaining damage above a particular threshold due to a specific type of hazard event. It also can be expressed in terms of potential monetary losses associated with the intensity of the hazard.

Stafford Act: The Robert T. Stafford Disaster Relief and Emergency Assistance Act, PL 100-107 was signed into law November 23, 1988 and amended the Disaster Relief Act of 1974, PL 93-288. The Stafford Act is the statutory authority for most federal disaster response activities, especially as they pertain to FEMA and its programs.

Stakeholder: Individual or group that will be affected in any way by an action or policy. They include businesses, private organizations, and citizens.

State Hazard Mitigation Officer (SHMO): The representative of state government who is the primary point of contact with FEMA, other state and federal agencies, and local units of government in the planning and implementation of pre- and post-disaster mitigation activities.

Structural Retrofitting: Modifying existing buildings and infrastructure to protect them from hazards.

Subdivision: The division of a tract of land into two or more lots for sale or development.

Subdivision Regulations: Regulations and standards governing the division of land for development or sale. Subdivision regulations can control the configuration of parcels, set standards for developer-built infrastructure, and set standards for minimizing runoff, impervious surfaces, and sediment during development. They can be used to minimize exposure of buildings and infrastructure to hazards.

Substantial Damage: Damage of any origin sustained by a structure in a Special Flood Hazard Area whereby the cost of restoring the structure to its before-damaged condition

would equal or exceed 50 percent of the market value of the structure before the damage.

Tectonic Plate: Torsionally rigid, thin segments of the earth's lithosphere that may be assumed to move horizontally and adjoin other plates. It is the friction between plate boundaries that cause seismic activity.

Topographic: Characterizes maps that show manmade features and indicate the physical shape of the land using contour lines.

Tornado: A violently rotating column of air extending from a thunderstorm to the ground.

Vulnerability: Describes how exposed or susceptible to damage an asset is. Vulnerability depends on an asset's construction, contents, and the economic value of its functions. Like indirect damages, the vulnerability of one element of the community is often related to the vulnerability of another. For example, since many businesses depend on uninterrupted electrical power, if an electric substation is flooded it will affect not only the substation itself, but a number of businesses as well. Often, indirect effects can be much more widespread and damaging than direct ones.

Vulnerability Assessment: The extent of injury and damage that may result from a hazard event of a given intensity in a given area. The vulnerability assessment should address impacts of hazard events on the existing and future built environment.

Water Systems: Information about drinking water systems in Missouri is maintained by the Missouri Department of Natural Resources. Water systems in Taney County listed in the Safe Drinking Water Information System are defined as:

Community Water Systems. Water systems that serve the same people year around, such as homes and businesses.

Non-Transient Non-Community Water Systems. Water systems that serve the same people, but not year around, such as schools or lodges that have their own systems.

Transient Non-Community Water Systems. Water systems that do not consistently serve the same people, such as rest stops, gas stations and campgrounds.

Wildfire: An uncontrolled fire spreading through vegetative fuels, exposing and possibly consuming structures.

Zoning: The division of land within a local jurisdiction by local legislative regulation into zones of allowable types and intensities of land uses.

Appendix E: References

American Red Cross. *Greater Ozarks Chapter*. <<http://www.redcross-ozarks.org>>

American Water Works Association. Fact Sheets. *4 Stages of Drought*. <<http://www.awwa.org/Advocacy/pressroom/drought.cfm>> (6 August 2004).

Branson USA Online. *Lake Taneycomo - The Mid West's Premier Rainbow Trout Fishing Lake*. 1996. <<http://www.branson.com/branson/lakes/taney.htm>>.

Burns & McDonnell. September 1995. *Intermodal Transportation Study for Stone County, Taney County and the City of Branson*.

Center for Earthquake Research and Information. *Earthquake Information*. <<http://www.ceri.memphis.edu/>>

Center for Disease Control. *Pandemic Severity Index, 2012*. <<http://www.cdc.gov/media/pdf/MitigationSlides.pdf>>

Denver Regional Natural Hazard Mitigation Plan, 2010 Draft.

Dodd, J.A., and E.J. Dettman. U.S. Department of Agriculture. *Soil Survey of Taney County, Missouri*. Washington, D.C.: U.S. Government Printing Office. 1996. <<http://soils.missouri.edu/soils.html>> (22 July 2004).

Department of Civil and Environmental Engineering. Stanford University. *National Performance of Dams Program, 2012*. <<http://npdp.stanford.edu/index.html>>

Empire District Electric Co. 1999. <<http://www.empiredistrict.com/>> (6 September 2004).

Federal Emergency Management Agency. Federal Insurance Administration. *Community Status Book*. <<http://www.fema.gov>> (10 February 2005).

Federal Emergency Management Agency. *Federally Declared Disasters by Calendar Year*. <<http://www.fema.gov/library/drcys.shtm>> (20 January 2005).

Federal Emergency Management Agency. National Flood Insurance Program (NFIP). *Policy Statistics by State as of 7/6/2012*. <<http://bsa.nfipstat.com/reports/1011.htm>> (6 July 2012).

Federal Emergency Management Agency. September 1993. *Wildland Fires*. Washington, D.C.: Federal Emergency Management Agency. <<http://www.fema.gov/pdf/hazards/wlfrls.pdf>> (7 June 2004).

Federal Emergency Management Agency. August 2010. *Wind Zones in the United States*. (7 June 2012). <http://www.fema.gov/plan/prevent/saferoom/tsfs02_wind_zones.shtm>

Freyermuth, R. Wilson. *The Structure of Missouri Local Government: A (Brief) Overview*. Columbia, MO: University of Missouri-Columbia School of Law.
<<http://www.law.missouri.edu/freyermuth/locgov/structure.htm>> (3 August 2004).

Geological Survey of Alabama. *Soils Profile, Liquefaction of Sediment*.
<<http://www.gsa.state.al.us/gsa/EQ2/newmad.html>> (13 October 2004)

Gillman, Joe., Palmer, Jim., Young, Glen., and Prewett, Jerry. 2007, Soil-Cover Karst Collapse: A Geologic Hazard in Missouri, National Cave and Karst Management Symposium, p. 175-185.
http://www.utexas.edu/tmm/sponsored_sites/biospeleology/nckms2007/Papers/gillman%20collapse.pdf

Gouzie, Douglas and Pendergrass, Gary, 2009, Investigation and Remediation of the 2006 Nixa, Missouri, Collapse Sinkhole, Environmental and Engineering Geoscience, Vol. XV, No. 1, February 2009, p. 13-27.

Midwestern Regional Climate Center. Historical Climate Data. Snowfall Summary Station: Ozark Beach, MO 1971-2000. <http://mcc.sws.uiuc.edu/Snow/MO/236460_ssum.html>
Missouri Census Data Center. Office of Social and Economic Data Analysis. *Primary Industries*.

Missouri Department of Conservation. *Conservation Atlas Online*. <<http://mdc.mo.gov/cgi-bin/atlas/search.cgi>> (28 October 2004).

Missouri Department of Conservation. *Fire Danger Index*.
<<http://www.mdc.state.mo.us/forest/fire/adject.htm>> (7 October 2004).

Missouri Department of Conservation. *Fire Reporting: Wildfire Data Search*.
<<http://mdc4.mdc.mo.gov/applications/FireReporting/Report.aspx>> (2011).

Missouri Department of Conservation. *Forest Fire Statistics: Causes*.
<<http://www.conservation.state.mo.us/forest/fire/stats.html>> (7 October 2004).

Missouri Department of Conservation. Missouri Fish and Wildlife Information System. *Natural Heritage Database*. <<http://mdc.mo.gov/landwater-care/heritage-program/results/county/Taney>> (6 June 2012)

Missouri Department of Conservation. *Public Lands/Use Areas*.
<<http://www.conservation.state.mo.us>> (15 September 2004).

Missouri Department of Elementary and Secondary Education. *Missouri School Directory 2004-2005*. <<http://www.dese.state.mo.us/directory>> (20 September 2004).

Missouri Department of Health and Senior Services. *Show Me Long Term Care in Missouri*. <<http://www.health.state.mo.us/showmelongtermcare/longtermcare.html>> (15 November 2004).

Missouri Department of Natural Resources. Geological Survey and Resources Assessment Division. *Dam Safety Program*.
<<http://www.damsafety.org/documents/pdf/Missouri.pdf>>

Missouri Department of Natural Resources. Geological Survey and Resources Assessment Division. *Physiographic Map, Geologic Map*. DNR/GSRAD Fact Sheet No. 2. 2002.

Missouri Department of Natural Resources. Missouri Drought Plan. Water Resources Report No. 69. 2002. <<http://www.dnr.state.mo.us/geology/wrp/WR69.pdf>>.

Missouri Department of Natural Resources. Water Protection Program. January 12, 2005. *State Operating Permits*. <<http://www.dnr.state.mo.us/wpscd/wpcp/permits/reports/wpcpermits-reports.htm>>

Missouri Department of Natural Resources. Department of Waste Management. *Hazardous Waste Program* <<http://www.dnr.mo.gov/alpd/hwp/index.html>>.

MISSOURI Manufactured Housing Communities. *Mobile Home Information*. <<http://www.mobilehome.net/communities/mo/>>

Missouri Secretary of State. *Missouri History*. <<http://www.sos.mo.gov/archives/history/counties.asp>> (16 December 2004).

Missouri Speleological Survey Inc. 1999. *Caves in Taney County Missouri*.

Missouri State Emergency Management Agency. *General Information*. <<http://www.sema.state.mo.us/semapage.htm>> (7 May 2004).

Missouri State Emergency Management Agency. *Missouri Hazard Analysis*. November 2011. Jefferson City, MO: Missouri State Emergency Management Agency. <<http://www.sema.state.mo.us/hazard.htm>> (June 2012).

Missouri State Emergency Management Agency. 2011. *Regional Planning Commission Hazard Mitigation Planning Guide*. Jefferson City, MO: SEMA.

Missouri State Legislature. *Missouri State Statute RSMo 44.227, 44.229, 44.231, 44.233, 44.235, 46.040, 48,820, 49,010, 72,050, 79, 80*.

Missouri United School Insurance Council (MUSIC). June 2012.

Missouri Watershed Information Network. *Land Cover in Taney County*. <<http://outreach.missouri.edu/mowin/counties2/taney.html>>

National Disaster Education Coalition. July 2004. *Talking About Disaster: Guide for Standard Messages*. Washington, D.C.: National Disaster Education Coalition. <<http://www.disastereducation.org>> (August 2004).

National Oceanic and Atmospheric Administration. National Climatic Data Center. *Storm Events Database*, <<http://www.ncdc.noaa.gov/stormevents/>> (June 2012).

National Oceanic and Atmospheric Administration. National Weather Service. National Climate Prediction Center. *Climate of 2012 - May U.S. Palmer Drought Indices*. <<http://www.ncdc.noaa.gov/oa/climate/research/prelim/drought/palmer.html>> (May 2012).

- National Oceanic and Atmospheric Administration. National Weather Service. NOAA *Weather Radio Coverage Maps*. <<http://www.nws.noaa.gov/nwr/mo/branson.gif>>
- National Oceanic and Atmospheric Administration. National Weather Service. *Heat Index*. <<http://www.nws.noaa.gov/om/heat/index.shtml>> (1 March 2005).
- National Oceanic and Atmospheric Administration. National Weather Service Forecast Office-Springfield, Missouri. *Heat Wave Response Levels*. Telephone interview with Bill Davis.
- National Oceanic and Atmospheric Administration. National Weather Service. Live Weather Images. *Heat Index Chart*. <<http://www.weatherimages.org/data/heatindex.html>> (August 2004).
- National Oceanic and Atmospheric Administration. National Weather Service Forecast Office - Springfield, Missouri. 10 November 2003. *Natural Hazard Risk*
- National Oceanic and Atmospheric Administration. Storm Prediction Center *Fujita Tornado Damage Scale*. <<http://www.spc.noaa.gov/faq/tornado/f-scale.html>>
- National Oceanic and Atmospheric Administration. *Assessment Information for Taney County, Missouri*. <<http://www.crh.noaa.gov/sgf/RA/Taney/index.shtml>> (15 November 2004).
- National Register of Historic Places. *Historic Site Information*. <<http://www.nationalregisterofhistoricplaces.com/mo/state.html>>
- Southwest Missouri Council of Governments. 1998. *Southwest Missouri Overall Economic Development Program (CEDS)*. Springfield, Missouri: SMOG.
- Southwest Missouri Council of Governments. *Taney County Master Plan*. Adopted by the Taney County Commission, December 27, 1999. Springfield: Southwest Missouri State University. <<http://www.co.taney.mo.us/TaneyCo/default.htm>>.
- Southwest Missouri Office on Aging. 2003. *2003 Information Directory*. Springfield, MO: SMOA. <<http://www.swmoa.com>>.
- Spatial Analysis for Conservation and Sustainability . University of Wisconsin- Madison. *The Wildland-Urban Interface (WUI) Defined*, June 2012.
- St. Louis Post Dispatch, June 11, 2004. <http://www.msnbc.msn.com/id/5191079> (July 30, 2009).
- Taney County Regional Sewer District. 1999. *Taney County Wastewater Master Plan*.
- Taney County Health Department, 2012.
- U.S. Bureau of the Census. *County Business Patterns*, 2009.

- U.S. Bureau of the Census. *Profile of General Demographic Characteristics*. QTP1, Age Groups and Sex, 2010.
- U.S. Bureau of the Census. *Summary File 1*, 2010.
- U.S. Bureau of the Census. *Selected Economic Characteristics*. DP03, ACS 2006-2010.
- U.S. Bureau of the Census. *Educational Attainment*. S1501, ACS 2006-2010.
- U.S. Bureau of the Census. *Selected Social Characteristics in the United States*. DP02, ACS 2006-2010.
- U.S. Bureau of the Census. *Race and Hispanic or Latino Origin*. QTP3, ACS 2006-2010.
- U.S. Bureau of the Census. *Means of Transportation to Work by Selected Characteristics*. S0802, ACS 2006-2010.
- U.S. Department of the Interior. U.S. Geological Survey. Our Science. *Natural Hazards*. <<http://www.usgs.gov/science.html>> (29 July 2004).
- U.S. Department of the Interior. U.S. Geological Survey. *Measuring Earthquakes*. <<http://pubs.usgs.gov/gip/earthq1/measure.html>> (16 April 2004).
- U.S. Department of the Interior. U.S. Geological Survey. News Release. 13 January 2003. *Scientists Update New Madrid Earthquake Forecasts*. <http://www.usgs.gov/newsroom/article_pf.asp?ID=215>
- U.S. Department of the Interior. U.S. Geological Survey. U.S. Geological Survey Fact Sheet FS-131-02. October 2002. *Earthquake Hazard in the Heart of the Homeland*. <<http://pubs.usgs.gov/fs/fs-131-02/fs-131-02.pdf>> (20 September 2004).
- U.S. Department of the Interior. U.S. Geological Survey. 2000. *The Severity of an Earthquake*. U.S. Geological Survey Series General Interest Publication. <<http://pubs.usgs.gov/gip/earthq4/severitygip.html>> (August 2004).
- U.S. Department of the Interior. U.S. Geological Survey Interest Publication. *Twelve Levels of Modified Mercalli Intensity*. <<http://pubs.usgs.gov/gip/earthq1/measure.html>>
- U.S. Department of the Interior, U.S. Geological Survey. Circular 1158, 1998
- U.S. Department of the Interior, U.S. Geological Survey. *Sinkhole Fact Sheet*, 1998
- U.S. Department of the Interior. U.S. Geological Survey. *Water Resources Investigations*. Report 98-4164, 1998.
- U.S. Environmental Protection Agency. Safe Drinking Water Information System. *List of Water Systems in SDWIS*. <<http://oaspub.epa.gov/enviro>> (10 January 2005).

Wind Science and Engineering Center. November 2006. *A Recommendation for an Enhanced Fujita Scale (EF-Scale)*.

<http://www.depts.ttu.edu/weweb/Pubs/fscale/EFScale.pdf>

Vineyard, Jerry D. and Feder, Gerald L., 1982, Springs of Missouri: Missouri Geological Survey and Water Resources WR-29, 212 p.

Appendix F: Neighboring Agency Invitation List

Contact	Agency	How Contacted	Added to List	Invited to Attend
Peggy Golden	OACAC	Mail/Email	4/10/ 2012	All meetings
	Forsyth Chamber of Commerce	Mail/Email	4/10/2012	All meetings
	Hollister Chamber of Commerce	Mail/Email	4/10/2012	All meetings
	Rockaway Beach Chamber of Commerce	Mail/Email	4/10/2012	All meetings
	Branson Lakes Area Chamber of Commerce and Convention Visitors' Bureau	Mail/Email	4/10/2012	All meetings
Wayne Dietrich	University of Missouri Extension	Mail/Email	4/10/2012	All meetings
Cy Murray	White River Valley Electric Co-Operative	Mail/Email	4/10/2012	All meetings
Debi Meeds	Ozarks Regional American Red Cross	Mail/Email	4/10/2012	All meetings
Tom Martin	Stone County Office of Emergency Management	Email	3/29/2012	All meetings After Kick-Off
Phil Amtower	Christian County Office of Emergency Management	Email	3/29/2012	All meetings After Kick-Off

Appendix G: Planning Process Documentation

Planning Process Documentation included in appendices in PDF version of the plan in the following order:

Affidavits of Publication for Meeting Notices and Notice of Public Comment

Meeting invitations and emails

Meeting sign-in sheets

Internet Postings of Meeting Dates and Notices

AFFIDAVIT OF PUBLICATION

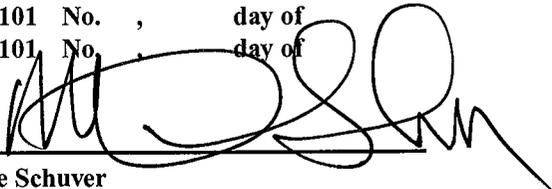
STATE OF MISSOURI)

ss

COUNTY OF TANEY)

I, Mike Schuver, being duly sworn according to law, state that I am the Publisher of the Branson Tri-Lakes News, a newspaper published twice a week of general circulation in the Counties of Taney and Stone, State of Missouri, the city of publication; which newspaper has been published regularly and consecutively for a period of three years and has a list of bona fide subscribers, voluntarily engaged as such who have paid or agreed to pay a stated price for a subscription for a definite period of time, and that such newspaper has complied with the provisions of Section 493.050, Revised Statutes of Missouri 2000, and Section 59.310 Revised Statutes of Missouri 2000. The affixed notice appeared in said newspaper in the following consecutive times:

1st Insertion	Vol. 101	No. 16,	25th day of	February, 2012
2nd Insertion	Vol. 101	No. ,	day of	
3rd Insertion	Vol. 101	No. ,	day of	
4th Insertion	Vol. 101	No. ,	day of	



Mike Schuver

Subscribed and sworn to before me on the 25th day of February, 2012



Christine K. Michael

Notary Public

Publisher's Fee	44.00
Affidavit	2.00
TOTAL	46.00

CHRISTINE K. MICHAEL Notary Public - Notary Seal STATE OF MISSOURI Taney County - Comm#09439372 My Commission Expires Dec. 28, 2013

continued on page 2

Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update
Notice of Public Meeting
 There will be a kick-off meeting for the Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update held at the Taney County Courthouse, 1st floor Commissioners Hearing Room on Tuesday February 28th at 9:30 a.m. in Forsyth. The public is invited to attend this meeting and encouraged to comment and provide input throughout the planning process.
 Taney County, its incorporated communities, school districts, higher education institutions and other special districts are invited to participate in the Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update. The Plan updates strategies developed to reduce the vulnerability of people and property in the county from the impacts of natural hazard events and enables the participating jurisdictions to be eligible for mitigation funding programs from the Federal Emergency Management Agency (FEMA).
 Topics to be discussed at the kickoff meeting will include; greater detail on the update process, necessary participants and their responsibilities, elements of the natural hazard mitigation plan and update items, a timeline for completion, approval, and adoption of the plan update. For further information contact: Dave Faucett, Community Planner, Southwest Missouri Council of Governments at 417-836-6901 or davefaucett@missouristate.edu.

B16/11



AFFIDAVIT OF PUBLICATION

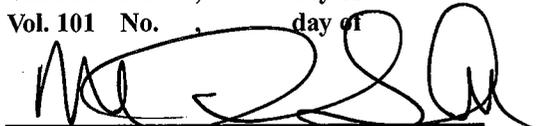
STATE OF MISSOURI)

ss

COUNTY OF TANEY)

I, Mike Schuver, being duly sworn according to law, state that I am the Publisher of the Branson Tri-Lakes News, a newspaper published twice a week of general circulation in the Counties of Taney and Stone, State of Missouri, the city of publication; which newspaper has been published regularly and consecutively for a period of three years and has a list of bona fide subscribers, voluntarily engaged as such who have paid or agreed to pay a stated price for a subscription for a definite period of time, and that such newspaper has complied with the provisions of Section 493.050, Revised Statutes of Missouri 2000, and Section 59.310 Revised Statutes of Missouri 2000. The affixed notice appeared in said newspaper in the following consecutive times:

1st Insertion	Vol. 101	No. 26,	31st day of	March, 2012
2nd Insertion	Vol. 101	No. ,	day of	
3rd Insertion	Vol. 101	No. ,	day of	
4th Insertion	Vol. 101	No. ,	day of	


Mike Schuver

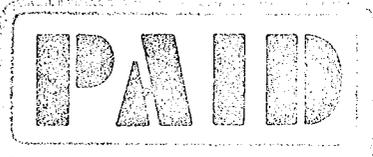
Subscribed and sworn to before me on the ^{31st} day of March, 2012


Notary Public

Publisher's Fee	48.00
Affidavit	2.00
TOTAL	50.00

CHRISTINE K. MICHAEL Notary Public - Notary Seal STATE OF MISSOURI Taney County - Comm#09439372 My Commission Expires Dec. 28, 2013

continued on page 2



Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan

Notice of Public Meeting

There will be a plan advisory meeting for the Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update held at the Leonard Stevens Community Center, 2762 State Highway 176, in Rockaway Beach on Tuesday April 10 at 9:30 a.m. The public is invited to attend this meeting and encouraged to comment and provide input throughout the planning process.

Taney County, its incorporated communities, school districts, higher education institutions and other special districts are invited to participate in the Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update. The Plan updates strategies developed to reduce the vulnerability of people and property in the county from the impacts of natural hazard events and enables the participating jurisdictions to be eligible for mitigation funding programs from the Federal Emergency Management Agency (FEMA).

Topics to be discussed at the meeting will include hazard profile information for tornadoes, severe thunderstorm, flood, extreme winter weather, heat wave, drought, dam failure, wildfire and sink-holes. This information and meeting discussion will form a risk assessment for each local government, school district and other special district participating in the Plan Update. For further information contact: Dave Faucett, Community Planner, Southwest Missouri Council of Governments at 417-836-6901 or davefaucett@missouristate.edu.

B26/1

AFFIDAVIT OF PUBLICATION

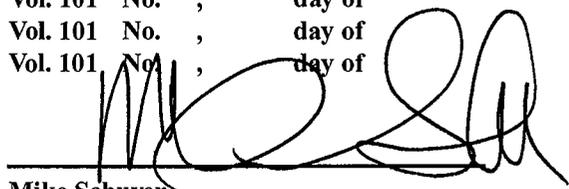
STATE OF MISSOURI)

ss

COUNTY OF TANEY)

I, Mike Schuver, being duly sworn according to law, state that I am the Publisher of the Branson Tri-Lakes News, a newspaper published twice a week of general circulation in the Counties of Taney and Stone, State of Missouri, the city of publication; which newspaper has been published regularly and consecutively for a period of three years and has a list of bona fide subscribers, voluntarily engaged as such who have paid or agreed to pay a stated price for a subscription for a definite period of time, and that such newspaper has complied with the provisions of Section 493.050, Revised Statutes of Missouri 2000, and Section 59.310 Revised Statutes of Missouri 2000. The affixed notice appeared in said newspaper in the following consecutive times:

1st Insertion	Vol. 101	No. 36,	5th day of	May, 2012
2nd Insertion	Vol. 101	No. ,	day of	
3rd Insertion	Vol. 101	No. ,	day of	
4th Insertion	Vol. 101	No. ,	day of	



Mike Schuver

Subscribed and sworn to before me on the ^{5th} day of May, 2012

Christine K Michael
Notary Public

Publisher's Fee	48.00
Affidavit	2.00
TOTAL	50.00

CHRISTINE K. MICHAEL
Notary Public - Notary Seal
STATE OF MISSOURI
Taney County - Comm#09439372
My Commission Expires Dec. 28, 2013

continued on page 2

PAID

**Taney County Multi-Jurisdictional
Natural Hazard Mitigation Plan
Notice of Public Meeting**

There will be a plan advisory meeting for the Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update held at the Leonard Stevens Community Center, 2762 State Highway 176, in Rockaway Beach on Tuesday, May 8 at 9:30 a.m. The public is invited to attend this meeting and encouraged to comment and provide input throughout the planning process.

Taney County, its incorporated communities, school districts, higher education institutions and other special districts are invited to participate in the Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update. The Plan updates strategies developed to reduce the vulnerability of people and property in the county from the impacts of natural hazard events and enables the participating jurisdictions to be eligible for mitigation funding programs from the Federal Emergency Management Agency (FEMA).

Topics to be discussed at the meeting will include a review of the goals, objectives and strategies from the Taney County 2005 Natural Hazard Mitigation Plan. There will be an opportunity to assess progress towards these goals as well as revise, delete, and add strategies if needed. The plan must include strategies that address each hazard profiled and an action item for each jurisdiction participating in the Plan update. For further information contact: Dave Faucett, Community Planner, Southwest Missouri Council of Governments at 417-836-6901 or davefaucett@missouristate.edu. B36/11

AFFIDAVIT OF PUBLICATION

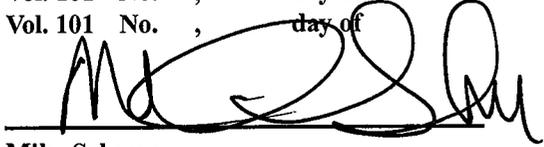
STATE OF MISSOURI)

ss

COUNTY OF TANEY)

I, Mike Schuver, being duly sworn according to law, state that I am the Publisher of the Branson Tri-Lakes News, a newspaper published twice a week of general circulation in the Counties of Taney and Stone, State of Missouri, the city of publication; which newspaper has been published regularly and consecutively for a period of three years and has a list of bona fide subscribers, voluntarily engaged as such who have paid or agreed to pay a stated price for a subscription for a definite period of time, and that such newspaper has complied with the provisions of Section 493.050, Revised Statutes of Missouri 2000, and Section 59.310 Revised Statutes of Missouri 2000. The affixed notice appeared in said newspaper in the following consecutive times:

1st Insertion	Vol. 101	No. 45,	6th day of	June, 2012
2nd Insertion	Vol. 101	No. ,	day of	
3rd Insertion	Vol. 101	No. ,	day of	
4th Insertion	Vol. 101	No. ,	day of	


Mike Schuver

Subscribed and sworn to before me on the 6th day of June, 2012


Christine K. Michael

Notary Public

Publisher's Fee	48.00
Affidavit	2.00
TOTAL	50.00

continued on page 2

CHRISTINE K. MICHAEL Notary Public - Notary Seal STATE OF MISSOURI Taney County - Comm#09439372 My Commission Expires Dec. 28, 2013



Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Notice of Public Meeting

There will be a plan advisory meeting for the Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update held at the Leonard Stevens Community Center, 2762 State Highway 176, in Rockaway Beach on Tuesday, June 12 at 9:30 a.m. The public is invited to attend this meeting and encouraged to comment and provide input throughout the planning process.

Taney County, its incorporated communities, school districts, higher education institutions and other special districts are invited to participate in the Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan. The Plan updates strategies developed to reduce the vulnerability of people and property in the county from the impacts of natural hazard events and enables the participating jurisdictions to be eligible for mitigation funding programs from the Federal Emergency Management Agency (FEMA).

Topics to be discussed at the meeting will include a prioritization and cost/benefit review of the updated strategies for the Taney County 2012 Natural Hazard Mitigation Plan. The plan must include strategies that address each hazard profiled and an action item for each jurisdiction participating in the Plan update. For further information contact Dave Faucett, Community Planner, Southwest Missouri Council of Governments at 417-836-6901 or davefaucett@missouristate.edu

B45/1t

AFFIDAVIT OF PUBLICATION

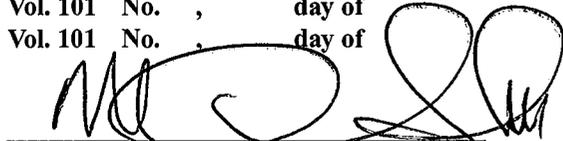
STATE OF MISSOURI)

SS

COUNTY OF TANEY)

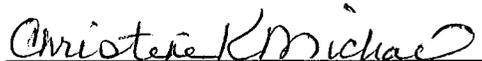
I, Mike Schuver, being duly sworn according to law, state that I am the Publisher of the Branson Tri-Lakes News, a newspaper published twice a week of general circulation in the Counties of Taney and Stone, State of Missouri, the city of publication; which newspaper has been published regularly and consecutively for a period of three years and has a list of bona fide subscribers, voluntarily engaged as such who have paid or agreed to pay a stated price for a subscription for a definite period of time, and that such newspaper has complied with the provisions of Section 493.050, Revised Statutes of Missouri 2000, and Section 59.310 Revised Statutes of Missouri 2000. The affixed notice appeared in said newspaper in the following consecutive times:

1st Insertion	Vol. 101	No. 56,	14th day of	July, 2012
2nd Insertion	Vol. 101	No. ,	day of	
3rd Insertion	Vol. 101	No. ,	day of	
4th Insertion	Vol. 101	No. ,	day of	



 Mike Schuver

Subscribed and sworn to before me on the 14th day of July, 2012



 Notary Public

Publisher's Fee	44.00
Affidavit	2.00
TOTAL	46.00

CHRISTINE K. MICHAEL Notary Public - Notary Seal STATE OF MISSOURI Taney County - Comm#09439372 My Commission Expires Dec. 28, 2013

continued on page 2

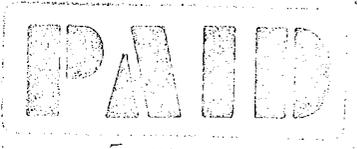
**2012 Taney County
 Multi-Jurisdictional Natural Hazard
 Mitigation Plan**

Public Comment Notice

Taney County, its incorporated communities, school districts, higher education institutions and other special districts have been working together to update the 2005 Taney County Natural Hazard Mitigation Plan. The Plan Advisory Committee consisting of representatives of local governments has been conducting planning activities at several meetings from February through June of 2012. The plan updates strategies developed to reduce the vulnerability of people and property in the county from the impacts of natural hazard events and enables the participating jurisdictions to be eligible for mitigation funding programs from the Federal Emergency Management Agency (FEMA).

The public is invited to comment on a draft of the 2012 Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan. Electronic versions of the draft plan can be accessed at <http://smcog.missouristate.edu> and Taney County website on the Emergency Management Department page. A paper copy of the plan is available at the Taney County Emergency Management Office by appointment only, 417-546-7233. For further information contact: Dave Faucett, Community Planner, Southwest Missouri Council of Governments at 417-836-6901 or davefaucett@missouristate.edu.

B56/11



Company	First Name	Last Name
Bradleyville Rural Fire Department	Tom	Todd
Branson Fire and Rescue	Ted	Martin
Cedarcreek Fire Protection District	Richard	Paegel
Central Taney County Fire Protection District	Charles	Allgood
Forsyth Fire Department	Nathan	Bower
Point Lookout Fire Department	Chandler	Holt
Pro Tem Fire Protection District	Kenny	Nave
Taney County Emergency Management	Chris	Berndt
Branson Emergency Management	Kent	Crutcher
Branson Emergency Management	Carl	Sparks
Bull Creek Emergency Management	James	Felton
Forsyth Emergency Management	Nathan	Bower
Hollister Emergency Management	Preston	Schimdt
Merriam Woods Emergency Management	James	Eaton
Rockaway Beach Emergency Management	David	Flora
Forsyth Public Works Department	Chris	Robertson
Forsyth Building and Planning	Richard	Melton
City of Forsyth	Ron	Potter
Taney County Commission	Ron	Houseman
Taney County Commission	Jim	Strafuss
Taney County Commission	Danny	Strahan
Taney County Ambulance District	Darryl	Coontz
Bradleyville R-I School District	Joe	Combs
Taneyville R-II School District	Tim	Crawley
Forsyth R-III School District	Brent	Blevins
Branson R-IV School District	Doug	Hayter
Hollister R-V School District	Timothy	Taylor
Kirbyville R-VI School District	Jerold	Osbourne
Mark Twain R-VIII School District	Debbie	Adams
Forsyth R-III School District	Jeff	Mingus
Kirbyville R-VI School District	Leanne	West
OTC Branson Education Center	Robert	Griffith
University of Missouri Extension	Wayne	Dietrich
USACE Table Rock Project Office	Allen	Oller
Ozarks Area Community Action Corporation	Carl	Rosencranz
American Red Cross Greater Ozarks Chapter	Debi	Meeds
Village of Bull Creek	Jody	LeMaster
Village of Bull Creek	Sherrie	Anderson
Village of Kirbyville	Bobby	Fausett
Village of Kirbyville	Amy	Chamberlin
Village of Merriam Woods	David	Pendelton
Village of Merriam Woods	Andela	Leist
Village of Merriam Woods	Joyce	Harpster
Village of Taneyville	Joe	Collins
Village of Taneyville	Donna	Riggs
City of Hollister	David	Tate

City of Hollister
City of Hollister
City of Hollister
City of Hollister
City of Forsyth
City of Rockaway Beach
City of Rockaway Beach
City of Branson
City of Branson
City of Branson
City of Branson
Branson/ Lakes Area Chamber of Commerce and CVB
Hollister Chamber of Commerce
Rockaway Beach Chamber of Commerce
Forsyth Chamber of Commerce
White River Valley Electric Cooperative
White River Valley Electric Cooperative
Taney County Planning & Zoning
Taney County Geographic IS
Taney County Regional Sewer District
Taney County Health Department
Taney County Water District #3
Taney County Water District #2

Rick
Bridget
Trent
Terry
Ruth
Lawrence
Susan
Dean
Jim
David
Raeanne
Ross

Chris
Cy
Bob
Patsy
John
Jerry

Ziegenfuss
Epps
Bowers
Brashear
Whitley
Cline
Kettlekamp
Kruithof
Lawson
Miller
Presley
Summers

Harmon
Murray
Atchley
Alexander
Soutee
Berry



Southwest Missouri
Council of Governments

Taney County Emergency Management
221 Jefferson Road
Branson, MO 65616

February 15, 2012

RE: Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update

Dear EMD Berndt,

The State Emergency Management Agency (SEMA) has entered into an agreement with the Southwest Missouri Council of Governments (SMCOG) to assist with the required update to the 2005 Taney County Natural Hazard Mitigation Plan in compliance with the Disaster Mitigation Act of 2000 (Stafford Act amendments). The Act requires communities and other local public jurisdictions to have an approved, adopted hazard mitigation plan on file with the Federal Emergency Management Agency (FEMA) to be eligible to apply for and receive Hazard Mitigation Grant Program and other Federal mitigation program assistance. The hazard mitigation plan must be updated every five years to maintain eligibility for funding. The updated plan developed for Taney County and its jurisdictions will meet the minimum planning requirements for all FEMA mitigation programs.

Community involvement in the development of the updated hazard mitigation plan for Taney County is critical to this effort and is a required element of the planning process. Any and all jurisdictions that may consider hazard mitigation projects in the next five years **must** participate in the plan update process to be eligible to apply for FEMA hazard mitigation project assistance grants.

The intent of the mitigation plan is to identify and evaluate the participating jurisdictions' vulnerability to natural disasters and to develop strategies and actions that can be undertaken to reduce or eliminate the negative effects of future disasters on people and property. Some examples of mitigation actions include the construction of safe rooms to reduce injury or loss of life in the event of a tornado, improvements to low water crossings, and flood hazard area buyouts.

You and/or a representative from your jurisdiction or organization are invited to attend the kickoff information meeting on the update of the Taney County Natural Hazard Mitigation Plan:

Taney County Natural Hazard Mitigation Plan Update Kickoff Meeting
Taney County Courthouse
132 David Street, 1st Floor Commissioner's Hearing Room
Forsyth, MO 65653
Tuesday, February 28, 2012
9:30 a.m.

Topics to be discussed at the kickoff meeting will include greater detail on the update process; necessary participants and their responsibilities; elements of the natural hazard mitigation plan and update items; and a timeline for completion, approval, and adoption of the plan update.

A plan advisory committee will also be established, comprised of representatives from the county, local jurisdictions, and other key stakeholders. This committee will provide input, review, and recommendations on the various sections of the mitigation plan as they are addressed.

We look forward to the participation of your jurisdiction in the plan update process and encourage your questions, comments, and input at all stages of this process.

If you have any questions about the meetings or the plan update process, or are unable to attend the kickoff meeting, please contact me by phone at 417-836-6901 or at davefaucett@missouristate.edu.

Sincerely,

Dave Faucett
Community Planner

Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update

Notice of Public Meeting

There will be a kick-off meeting for the Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update held at the Taney County Courthouse, 1st floor Commissioners Hearing Room on Tuesday February 28th at 9:30 a.m. in Forsyth. The public is invited to attend this meeting and encouraged to comment and provide input throughout the planning process.

Taney County, its incorporated communities, school districts, higher education institutions and other special districts are invited to participate in the Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update. The Plan updates strategies developed to reduce the vulnerability of people and property in the county from the impacts of natural hazard events and enables the participating jurisdictions to be eligible for mitigation funding programs from the Federal Emergency Management Agency (FEMA).

Topics to be discussed at the kickoff meeting will include; greater detail on the update process, necessary participants and their responsibilities, elements of the natural hazard mitigation plan and update items, a timeline for completion, approval, and adoption of the plan update. For further information contact: Dave Faucett, Community Planner, Southwest Missouri Council of Governments at 417-836-6901 or davefaucett@missouristate.edu.

Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan

Notice of Public Meeting

There will be a plan advisory meeting for the Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update held on:

Tuesday, April 10 at 9:30 a.m.
The Leonard Stevens Community Center
2762 State Highway 176
Rockaway Beach, Mo

The public is invited to attend this meeting and encouraged to comment and provide input throughout the planning process.

Taney County, its incorporated communities, school districts, higher education institutions and other special districts are invited to participate in the Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update. The Plan updates strategies developed to reduce the vulnerability of people and property in the county from the impacts of natural hazard events. Topics to be discussed at the meeting will include hazard profile information for:

- Tornadoes
- Severe Thunderstorm
- Flood
- Extreme Winter Weather
- Heat Wave
- Drought
- Earthquake
- Dam Failure
- Wildfire
- Sinkholes

This information and meeting discussion will form a risk assessment for each local government, school district and other special district participating in the Plan Update. For further information contact: Dave Faucett, Community Planner, Southwest Missouri Council of Governments at 417-836-6901 or davefaucett@missouristate.edu.

Faucett, David B

From: Faucett, David B
Sent: Wednesday, April 04, 2012 10:49 AM
To: Amy Chamberlin; 'Amy Lynne Coibion (amyc@taney.mo.us)'; Angela Leist; Donna Neeley; Lisa Westfall; Ruth Whitley; Sherry Anderson; Susan Kettlekamp; Taneyville Clerk
Subject: Taney County Multi-jurisdictional Natural Hazard Mitigation Plan
Attachments: Taney NHMP Meeting Notice April 10.pdf

Good morning,

The planning process for the Taney County Multi-jurisdictional Natural Hazard Mitigation Plan is underway. Local Natural Hazard Mitigation plans are a prerequisite of eligibility for FEMA Hazard Mitigation Grant Programs. Public involvement is a necessary component of the plan which must be approved by FEMA. I've attached a "public flyer" for a public meeting to be held in Rockaway Beach on April 10. In an effort to help meet the public involvement requirement for the plan, I respectfully ask that the flyer be posted in government offices in a place that is visible to the public and on websites.

Please be advised that once reviewed and approved by FEMA, the plan must be adopted by resolution by the governing body of each jurisdiction participating in the plan. Please feel free to contact me with questions or concerns.

Thank you,

Dave Faucett

Community Planner

Southwest Missouri Council of Governments c/o

Missouri State University

901 S. National

Springfield, MO 65897

Ph: 417 836-6901

Fx: 417 836-4146

Faucett, David B

From: Faucett, David B
Sent: Thursday, March 29, 2012 11:39 AM
To: 'Allen Oller'; 'Amy Chamberlin'; 'Angela Leist'; 'Bob Atchley'; 'Brent Blevins'; 'Charles Allgood'; 'Charles Osbourn'; 'Chris Berndt'; 'Cindy Rains'; 'Darrel Cornelius'; 'Darryl Coontz'; 'Debbie Adams'; 'Debbie Redford'; 'Debi Meeds'; 'Doug Hayter'; 'Forsyth Chamber of Commerce'; 'Hollister Area Chamber of Commerce'; 'Jeff Mingus'; 'Jim Lawson'; 'Joe Combs'; 'John Soutee'; 'Kenny Nave'; 'Larry Cline'; 'Melissa Duckworth'; 'Nathan Bower'; 'Patsy Alexander'; 'Peggy Golden'; 'Phil Amtower'; 'Raeanne Presley'; 'Richard Melton'; 'Robert Griffith'; 'Robert Niezgoda'; 'Rockaway Beach Chamber'; 'Ron Potter'; 'Ross Summers'; 'Sherry Anderson'; 'Stephanie Schultz'; 'Taneyville'; 'Ted Martin'; 'Tim Crawley'; 'Tom Martin'; 'Tom Todd'; 'Trent Bowers'; 'Wayne Dietrich'
Subject: Taney Co. Hazard Mitigation Plan Advisory Meeting
Importance: High

Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan

Plan Advisory Meeting

Tuesday, April 10 at 9:30 a.m.

The Leonard Stevens Community Center

2762 State Highway 176

Rockaway Beach, Mo

Taney County, its incorporated communities, school districts, higher education institutions and other special districts are invited to participate in the Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update. The Plan updates strategies developed to reduce the vulnerability of people and property in the county from the impacts of natural hazard events. Topics to be discussed at the meeting will include hazard profile information for:

- Tornadoes
- Severe Thunderstorm
- Flood
- Extreme Winter Weather
- Heat Wave
- Drought
- Earthquake
- Dam Failure
- Wildfire
- Sinkholes

This information and meeting discussion will form a risk assessment for each local government, school district and other special district participating in the Plan Update. Information and materials

from the previous kick-off meeting will be available at this meeting as well for representatives that were unable to attend. They are also available on the [Southwest Missouri Council of Governments Hazard Mitigation Webpage](#) (click here). Please contact me if you have any questions or will be unable to attend.

Sincerely,

Dave Faucett

Community Planner

Southwest Missouri Council of Governments c/o

Missouri State University

901 S. National

Springfield, MO 65897

Ph: 417 836-6901

Fx: 417 836-4146

Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan

Notice of Public Meeting

There will be a plan advisory meeting for the Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update held on:

Tuesday, May 8 at 9:30 a.m
The Leonard Stevens Community Center
2762 State Highway 176
Rockaway Beach, MO

The public is invited to attend this meeting and encouraged to comment and provide input throughout the planning process.

Taney County, its incorporated communities, school districts, higher education institutions and other special districts are invited to participate in the Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update. The Plan updates strategies developed to reduce the vulnerability of people and property in the county from the impacts of natural hazard events and enables the participating jurisdictions to be eligible for mitigation funding programs from the Federal Emergency Management Agency (FEMA).

Topics to be discussed at the meeting will include:

- A review of the goals, objectives and strategies from the Taney County 2005 Natural Hazard Mitigation Plan
- There will be an opportunity to assess progress towards these goals as well as revise, delete, and add strategies if needed

The plan must include strategies that address each hazard profiled and an action item for each jurisdiction participating in the Plan update. For further information contact: Dave Faucett, Community Planner, Southwest Missouri Council of Governments at 417-836-6901 or davefaucett@missouristate.edu.

Faucett, David B

From: Faucett, David B
Sent: Tuesday, May 01, 2012 11:45 AM
To: 'kirbyvilleclerk@gmail.com'; 'amyc@taney.mo.us'; 'merriamwoods@centurytel.net';
'CountyClerk@co.taney.mo.us'; 'lwestfall@bransonmo.gov';
'cityclerk@cityofforsythmo.com'; 'bullcreek@suddenlinkmail.com';
'rockawaycity@suddenlinkmail.com'; 'brnigrls@yahoo.com'
Subject: Taney County Multi-jurisdictional Natural Hazard Mitigation Plan
Attachments: Taney County Notice of Public Meeting May 8 (flyer).doc; Taney County Notice of Public Meeting May 8 (flyer).pdf

Good morning,

There will be a plan advisory meeting for the Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan update. I've attached a "public flyer" for a public meeting to be held in Rockaway Beach on May 8. In an effort to help meet FEMA's public involvement requirement for the plan, I respectfully ask that the flyer be posted in government offices in a place that is visible to the public and or websites.

Thank you,

Dave Faucett

Community Planner

Southwest Missouri Council of Governments c/o

Missouri State University

901 S. National

Springfield, MO 65897

Ph: 417 836-6901

Fx: 417 836-4146

Faucett, David B

From: Faucett, David B
Sent: Tuesday, May 01, 2012 1:27 PM
To: Allen Oller; Amy Chamberlin; Angela Leist; Bill Carpenter; 'Bob Atchley'; Bradleyville Fire; 'Brent Blevins'; Charles Allgood; 'Charles Osbourn'; 'Chris Berndt'; 'Cindy Rains'; Darrel Cornelius; 'Darryl Coontz'; 'Debbie Adams'; 'Debbie Redford'; Debi Meeds; 'Doug Hayter'; Eddie Coxie; Forsyth Chamber of Commerce (info@forsythmissouri.net); Gary Judd; Harriet Leenerts; Hollister Area Chamber of Commerce; 'Jeff Mingus'; 'Jim Lawson'; 'Joe Combs'; John Soutee; Judy Daniel; Kenny Nave; Kim Foster; 'Larry Cline'; 'Melissa Duckworth'; 'Nathan Bower'; 'Patsy Alexander'; 'Peggy Golden'; Pete Rothrock; Phil Amtower; 'Raeanne Presley'; 'Richard Melton'; 'Robert Griffith'; 'Robert Niezgod'; Rockaway Beach Chamber; 'Ron Potter'; Ross Summers; Scott Ewing; Sherry Anderson; 'Stephanie Schultz'; Taneyville Clerk; 'Ted Martin'; 'Tim Crawley'; Tom Martin; 'Trent Bowers'; Wayne Dietrich
Subject: Taney County Hazard Mitigation Plan Advisory Meeting

Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan

Plan Advisory Meeting

Tuesday, May 8 at 9:30 a.m
The Leonard Stevens Community Center
2762 State Highway 176
Rockaway Beach, MO

Topics to be discussed at the meeting will include:

- A review of the goals, objectives and strategies from the Taney County 2005 Natural Hazard Mitigation Plan
- There will be an opportunity to assess progress towards these goals as well as revise, delete, and add strategies if needed

The plan must include strategies that address each hazard profiled and an action item for each jurisdiction participating in the Plan update. The Plan updates a comprehensive set of strategies developed to reduce the vulnerability of people and property in the county from the impacts of natural hazard events and enables the participating jurisdictions to be eligible for mitigation funding programs from FEMA.

Sincerely,

Dave Faucett

Community Planner

Southwest Missouri Council of Governments c/o

Missouri State University

901 S. National

Springfield, MO 65897

Ph: 417 836-6901

Fx: 417 836-4146

Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan

Notice of Public Meeting

There will be a plan advisory meeting for the Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update held on:

Tuesday, May 22 at 9:30 a.m
The Leonard Stevens Community Center
2762 State Highway 176
Rockaway Beach, MO

The public is invited to attend this meeting and encouraged to comment and provide input throughout the planning process.

Taney County, its incorporated communities, school districts, higher education institutions and other special districts are invited to participate in the Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update. The Plan updates strategies developed to reduce the vulnerability of people and property in the county from the impacts of natural hazard events and enables the participating jurisdictions to be eligible for mitigation funding programs from the Federal Emergency Management Agency (FEMA).

Topics to be discussed at the meeting will include:

- A final review of the goals, objectives and strategies for the Taney County Natural Hazard Mitigation Plan Update
- The importance of providing clear and measurable strategies to increase resilience in the event of natural hazards that will impact people and property in the county

The plan must include strategies that address each hazard profiled and an action item for each jurisdiction participating in the Plan update. For further information contact: Dave Faucett, Community Planner, Southwest Missouri Council of Governments at 417-836-6901 or davefaucett@missouristate.edu.

Faucett, David B

From: Faucett, David B
Sent: Thursday, May 10, 2012 1:35 PM
To: 'kirbyvilleclerk@gmail.com'; 'amyc@taney.mo.us'; 'merriamwoods@centurytel.net';
'CountyClerk@co.taney.mo.us'; 'lwestfall@bransonmo.gov';
'cityclerk@cityofforsythmo.com'; 'bullcreek@suddenlinkmail.com';
'rockawaycity@suddenlinkmail.com'; 'brnigrls@yahoo.com'
Subject: Taney County Multi-jurisdictional Natural Hazard Mitigation Plan
Attachments: Taney County Notice of Public Meeting May 22 (flyer).doc; Taney County Notice of
Public Meeting May 22 (flyer).pdf

Good afternoon,

There will be a plan advisory meeting for the Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan update. I've attached a "public flyer" for a public meeting to be held in Rockaway Beach on May 22. In an effort to help meet FEMA's public involvement requirement for the plan, I respectfully ask that the flyer be posted in government offices in a place that is visible to the public and or websites.

Thank you,

Dave Faucett

Community Planner

Southwest Missouri Council of Governments c/o

Missouri State University

901 S. National

Springfield, MO 65897

Ph: 417 836-6901

Fx: 417 836-4146

Faucett, David B

From: Faucett, David B
Sent: Thursday, May 10, 2012 1:21 PM
To: Allen Oller; Amy Chamberlin; Angela Leist; Bill Carpenter; 'Bob Atchley'; Bradleyville Fire; 'Brent Blevins'; Charles Allgood; 'Charles Osbourn'; 'Chris Berndt'; 'Cindy Rains'; Darrel Cornelius; 'Darryl Coontz'; 'Debbie Adams'; 'Debbie Redford'; Debi Meeds; 'Doug Hayter'; Eddie Coxie; Forsyth Chamber of Commerce (info@forsythmissouri.net); Gary Judd; Harriet Leenerts; Hollister Area Chamber of Commerce; 'Jeff Mingus'; 'Jim Lawson'; 'Joe Combs'; John Soutee; Judy Daniel; Kenny Nave; Kim Foster; 'Larry Cline'; 'Melissa Duckworth'; 'Nathan Bower'; 'Patsy Alexander'; 'Peggy Golden'; Pete Rothrock; Phil Amtower; 'Raeanne Presley'; 'Richard Melton'; 'Robert Griffith'; 'Robert Niezgodá'; Rockaway Beach Chamber; 'Ron Potter'; Ross Summers; Scott Ewing; Sherry Anderson; 'Stephanie Schultz'; Taneyville Clerk; 'Ted Martin'; 'Tim Crawley'; Tom Martin; 'Trent Bowers'; Wayne Dietrich
Subject: May 22 Taney Co. NHMP Plan Advisory Meeting
Importance: High

Good afternoon,
Our next plan advisory meeting has been scheduled for:

Tuesday, May 22 at 9:30a.m.
The Leonard Stevens Community Center
2762 State Highway 176
Rockaway Beach, MO

I hope as many as possible will be able to attend. This meeting will be a continuation of the review and revision of the goals, objectives and actions for the Hazard Mitigation Plan Update. Many ideas were discussed and more specific actions were developed at the meeting on May 8. I am working on a draft proposal of actions for the plan based on the last meeting and will provide it via email no later than early next week. Hopefully this will make it easier to finalize this element of the plan and provide more direction for the next five years.

Thank you,
Dave Faucett
Community Planner
Southwest Missouri Council of Governments c/o
Missouri State University
901 S. National
Springfield, MO 65897
Ph: 417 836-6901
Fx: 417 836-4146

Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan

Notice of Public Meeting

The final plan advisory meeting for the Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update held on:

Tuesday, June 12th at 9:30 a.m
The Leonard Stevens Community Center
2762 State Highway 176
Rockaway Beach, MO

The public is invited to attend this meeting and encouraged to comment and provide input throughout the planning process.

Taney County, its incorporated communities, school districts, higher education institutions and other special districts are invited to participate in the Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update. The Plan updates strategies developed to reduce the vulnerability of people and property in the county from the impacts of natural hazard events and enables the participating jurisdictions to be eligible for mitigation funding programs from the Federal Emergency Management Agency (FEMA).

Topics to be discussed at the meeting will include:

- A prioritization and cost/benefit review of the updated strategies for the Taney County 2012 Natural Hazard Mitigation Plan
- The updated strategies for each jurisdiction will be prioritized using STAPLEE criteria and simple scores, STAPLEE is an acronym used to evaluate the costs and benefits of mitigation actions according to; Social, Technical, Administrative, Political, Legal, Economic and Environmental impact or feasibility

The plan must include strategies that address each hazard profiled and an action item for each jurisdiction participating in the Plan update. For further information contact: Dave Faucett, Community Planner, Southwest Missouri Council of Governments at 417-836-6901 or davefaucett@missouristate.edu.

Faucett, David B

From: Faucett, David B
Sent: Monday, June 04, 2012 10:08 AM
To: 'kirbyvilleclerk@gmail.com'; Amy Lynne Coibion (amyc@co.taney.mo.us); Angela Leist; Donna Neeley; Lisa Westfall; 'cityclerk@cityofforsythmo.com'; Sherry Anderson; Susan Kettlekamp; Taneyville Clerk
Subject: Taney County Multi-jurisdictional Natural Hazard Mitigation Plan
Attachments: Taney County Notice of Public Meeting June 12 (flyer).doc; Taney County Notice of Public Meeting June 12 (flyer).pdf
Importance: High

Good morning,

The final plan advisory meeting for the Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan update will be held in Rockaway Beach on June 12. In an effort to help meet FEMA's public involvement requirement for the plan, I've attached a "public flyer" that I respectfully ask be posted in government offices in a place that is visible to the public and or websites.

Thank you,

Dave Faucett

Community Planner

Southwest Missouri Council of Governments c/o

Missouri State University

901 S. National

Springfield, MO 65897

Ph: 417 836-6901

Fx: 417 836-4146

Faucett, David B

From: Faucett, David B
Sent: Monday, June 04, 2012 9:58 AM
To: Allen Oller; Amy Chamberlin; Angela Leist; Bill Carpenter; 'Bob Atchley'; Bradleyville Fire; 'Brent Blevins'; Charles Allgood; 'Charles Osbourn'; 'Chris Berndt'; 'Cindy Rains'; Darrel Cornelius; 'Darryl Coontz'; 'Debbie Adams'; 'Debbie Redford'; Debi Meeds; 'Doug Hayter'; Ed Zielonka; Eddie Coxie; Forsyth Chamber of Commerce (info@forsythmissouri.net); Gary Judd; Harriet Leenerts; Hollister Area Chamber of Commerce; 'Jeff Mingus'; 'Jim Lawson'; 'Joe Combs'; John Souttee; Judy Daniel; Kenny Nave; Kim Foster; 'Larry Cline'; 'Melissa Duckworth'; 'Nathan Bower'; 'Patsy Alexander'; 'Peggy Golden'; Pete Rothrock; Phil Amtower; 'Raeanne Presley'; 'Richard Melton'; 'Robert Griffith'; 'Robert Niezgod'; Rockaway Beach Chamber; 'Ron Potter'; Ross Summers; Scott Ewing; Sherry Anderson; 'Stephanie Schultz'; Taneyville Clerk; 'Ted Martin'; 'Tim Crawley'; Tom Martin; 'Trent Bowers'; Wayne Dietrich
Subject: Taney Co. June 12 Final Plan Advisory Committee Meeting
Importance: High

Good Morning,

The final plan advisory meeting for the Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update held on:

Tuesday, June 12th at 9:30 a.m
The Leonard Stevens Community Center
2762 State Highway 176
Rockaway Beach, MO

Topics to be discussed at the meeting will include:

- A prioritization and cost/benefit review of the updated strategies for the Taney County 2012 Natural Hazard Mitigation Plan
- Updated strategies for each jurisdiction will be prioritized using STAPLEE criteria and simple scores, STAPLEE is an acronym used to evaluate the costs and benefits of mitigation actions according to; Social, Technical, Administrative, Political, Legal, Economic and Environmental impact or feasibility

Barring any unfinished business, this meeting will conclude the planning process for updating the Multi-Jurisdictional NHMP for all participating local governments, school districts and other special districts within Taney County.

Sincerely,

Dave Faucett
Community Planner
Southwest Missouri Council of Governments c/o
Missouri State University
901 S. National
Springfield, MO 65897
Ph: 417 836-6901
Fx: 417 836-4146

2012 Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan

Public Comment Notice

Taney County, its incorporated communities, school districts, higher education institutions and other special districts have been working together to update the 2005 Taney County Natural Hazard Mitigation Plan. The Plan Advisory Committee consisting of representatives of local governments has been conducting planning activities at several meetings from February through June of 2012.

The public is invited to comment on a draft of the 2012 Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan. The plan updates strategies developed to reduce the vulnerability of people and property in the county from the impacts of natural hazard events and enables the participating jurisdictions to be eligible for mitigation funding programs from the Federal Emergency Management Agency (FEMA).

Electronic versions of the draft plan can be accessed at <http://smcog.missouristate.edu> and Taney County website on the Emergency Management Department page. A paper copy of the plan is available at the Taney County Emergency Management Office by appointment only, 417-546-7233. For further information contact: Dave Faucett, Community Planner, Southwest Missouri Council of Governments at 417-836-6901 or davefaucett@missouristate.edu.

Faucett, David B

From: Faucett, David B
Sent: Tuesday, July 10, 2012 11:01 AM
To: Allen Oller; Amy Chamberlin; Angela Leist; Bill Carpenter; 'Bob Atchley'; Bradleyville Fire; 'Brent Blevins'; Charles Allgood; 'Charles Osbourn'; 'Chris Berndt'; 'Cindy Rains'; Darrel Cornelius; 'Darryl Coontz'; 'Debbie Adams'; 'Debbie Redford'; Debi Meeds; 'Doug Hayter'; Ed Zielonka; Eddie Coxie; Forsyth Chamber of Commerce (info@forythmissouri.net); Gary Judd; Harriet Leenerts; Hollister Area Chamber of Commerce; 'Jeff Mingus'; 'Jim Lawson'; 'Joe Combs'; John Soutee; Judy Daniel; Kenny Nave; Kim Foster; 'Larry Cline'; 'Melissa Duckworth'; 'Michelle Silvey'; 'Nathan Bower'; 'Patsy Alexander'; 'Peggy Golden'; Pete Rothrock; Phil Amtower; 'Raeanne Presley'; 'Richard Melton'; 'Robert Comer'; 'Robert Griffith'; 'Robert Niezgoda'; Rockaway Beach Chamber; 'Ron Potter'; Ross Summers; Scott Ewing; Sherry Anderson; 'Stephanie Schultz'; Taneyville Clerk; 'Ted Martin'; 'Tim Crawley'; Tom Martin; 'Trent Bowers'; Wayne Dietrich
Subject: Taney Co. Draft 2012 NHMP & Public Comment Period

Good morning,

I have posted a full version draft of the hazard mitigation plan update on the SMCOG website:

<http://smcog.missouristate.edu/>. All are encouraged to review the plan and provide comments and or corrections. The public will be invited to comment on the plan for a period extending through the last week of July. For your convenience I've posted links to all plan chapters here:

[Table of Contents & Executive Summary](#)

[Part 1: Introduction](#)

[Part 2: Community Profile](#)

[Part 3: Risk Assessment](#)

[Part 4: Capability Assessment](#)

[Part 5: Mitigation](#)

[Part 6: Plan Maintenance](#)

[Part 7: Appendices](#)

There are still areas that need to be improved and some blanks that need to be filled. Part 5 describes the updated actions and how they were prioritized, the matrix that provides detailed information on all actions begins on p. 5-15. I will continue to improve the plan during the public comment period and welcome any and all questions or concerns.

Thank you,

Dave Faucett

Community Planner

Southwest Missouri Council of Governments c/o

Missouri State University

901 S. National

Springfield, MO 65897

Ph: 417 836-6901

Fx: 417 836-4146

Faucett, David B

From: Faucett, David B
Sent: Tuesday, July 10, 2012 1:31 PM
To: Amy Chamberlin; Amy Lynne Coibion (amyc@co.taney.mo.us); Angela Leist; Donna Neeley; Lisa Westfall; Ruth Whitley; Sherry Anderson; Susan Kettlekamp; Taneyville Clerk
Subject: 2012 Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan
Attachments: Taney County Public Comment Notice July 10 (flyer).pdf; Taney County Public Comment Notice July 10 (flyer).doc

Good morning,

The public is invited to comment on a draft of the 2012 Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan. In an effort to help meet FEMA's public involvement requirement for the plan, I've attached a "public flyer" that I respectfully ask be posted in government offices in a place that is visible to the public and or websites.

Thank you,

Dave Faucett

Community Planner

Southwest Missouri Council of Governments c/o

Missouri State University

901 S. National

Springfield, MO 65897

Ph: 417 836-6901

Fx: 417 836-4146

Taney County Multi-Jurisdictional Hazard Mitigation Plan Update
Kick-Off Meeting
 Taney County Courthouse
 February 28, 2012 9:30 a.m.
 Sign-in (Please Print)

Name	Jurisdiction/Organization	Email/Telephone
Melissa Dunkworth	Taney County DEM	melissad@co.taney.mo.us 417-546-7233
Trent Bowers	CITY OF HOLLISTER	Mbofficial@cityofhollister.com 417 337-9756
Patsy Alexander	TANEY COUNTY GIS	patsya@co.taney.mo.us 417-546-7210
Robert Mezgale	Taney County Health Dept.	mezgale@pl.mopublic.org 417-425-3119
SARAH CLINE	ROCKAWAY BRACK	rockawaycity@csdls.winkmail.com
Nathan Baser	CITY OF FORSYTH	ForsFire@PentkyTel.net
Carless Osbourn	Kirbyville R-VI Schools	carless.osbourn@kirbyville.k12.mo.us
Peggy Golden	Taney County OACAC	taney@oacac-caa.org 417-239-1882
Richard Melton	City of Forsyth	forsythbuilding@courtytel.net
Linda Yanna	COAD-WRECA	craius@whikeriver.org 335-9233
Brent Blewins	Forsyth Schools	blewins@forsyth.k12.mo.us 546-6384
Jeff Mingsus	Forsyth Schools	jmingsus@forsyth.k12.mo.us 546-6384

Taney County Multi-Jurisdictional Hazard Mitigation Plan Update
Kick-Off Meeting
Taney County Courthouse
February 28, 2012 9:30 a.m.
Sign-in (Please Print)

Name	Jurisdiction/Organization	Email/Telephone
Chris Bernick	Taney County OET Western Taney County Fire District	417-324-3440 chris.bernick@westerntaneyfire.com
TED MARTIN	CITY OF BRANSON FIRE/EMERGENCY MGMT.	417-243-2790 TMARTIN@BRANSONMO.GOV 417 334 6586
Darryl Coontz	TCAD	vcoontz@TCAD.net
Barbara Pooler	City of Branson Mayor	417-334-4129 417-546-7225 1570 @ BRANSON Mayor.com
Bob Atchley	Taney County Planning	417-243-4180 bob@co.taney.mo.us
Debbie Redford	Hollister Chamber Hollister School District	417-243-4180 dredford@hollister.k12.mo.us
JIM LAUSON	CITY OF BRANSON PLANNING/DEVELOPMENT	jlauson@bransonmo.gov / 337-8549
STEPHENIE SCHULTZ	CITY OF BRANSON PLANNING/DEVELOPMENT	sschultz@bransonmo.gov / 337-8535

[Handwritten signature]

Taney County Multi-Jurisdictional Hazard Mitigation Plan Update

Plan Advisory Meeting

Leonard Stevens Community Center, Rockaway Beach, MO

April 10, 2012 9:30 a.m.

Sign-in (Please Print)

Name	Jurisdiction/Organization	Email/Telephone
PATSY ALEXANDER	TANEY CO GIS	patasy@co.taney.mo.us 417-546-7510
PETA ROTHROCK	OTC	rothrock@otc.edu
BILL CARPENTER	OTC	carpenter@otc.edu
ROBERT GRIFFITH	OTC	griffith@otc.edu
Carless Osborn	Kirbyville PIII School	330-8913 carless.osborn@kirbyville.k12.mo.us
Gary Judd	Rockaway Beach	gary133@centurytel.net
FRANK BOWEN	CITY OF HOLICHER	417 337 9756
ED ZIANKA	" "	417-259-0141 EZGZ@Suddenlink.net
Jeff Minges	Forsyth R-III Schools	jminges@forsythr3.k12.mo.us 541-6384
Steve Coak	TCRSD	eddie@co.taney.mo.us
Bob Atchley	Taney County Planning	boba@co.taney.mo.us
Jim Lawson	City of Brewer	jlawson@brewer.mo.gov

Taney County Multi-Jurisdictional Hazard Mitigation Plan Update
 Plan Advisory Meeting
 Leonard Stevens Community Center, Rockaway Beach, MO
 April 10, 2012 9:30 a.m.
 Sign-in (Please Print)

Name	Jurisdiction/Organization	Email/Telephone
Angela List	Village of Merriam Woods	(417) 521-4321 merriamwoods@centurytel.net
Chris Berndt	Taney County DEH	417-334-3440 chris.berndt@westtaneyfire.com
Melissa DeKuwert	Taney Co. DEH	417-546-7933 melissad@co.taney.mo.us
Reanne Branson	City of Branson	417-334-4129 info@bransonmo.gov
Dallas Redford	Hollister Schools	417-243-4080 dredford@hollister.k12.mo.us
Jarry Clinis	Rockaway Beach	419-561-4424
Jody Daniel	Rockaway Beach	417-699-2102 danieljt@branson.112.mn.us
Abus Nezgol	Taney County Health Dept	417-334-4544 Nezgo@alpha.mopublic.org
Kurt Foster	Taney County Health	417-334-4544 kfoster1@alpha.mopublic.org
Peggy Colbern	Taney County OCHC	417-239-1882 taney@oacc-caa.org
Harriet Levents	Rockaway Beach	417-553-4850 harriet@RockawayBeachAssoc.com
James ZETTON	Rue Creek Village	417-561-1111

Taney County Multi-Jurisdictional Hazard Mitigation Plan Update
 Plan Advisory Meeting
 Leonard Stevens Community Center, Rockaway Beach, MO
 April 10, 2012 9:30 a.m.
 Sign-in (Please Print)

Name	Jurisdiction/Organization	Email/Telephone
Nathan Bover	City of Forsyth Fire Dept - EMD	Forsyth Fire Department 417-546-3074
Richard Melton	City of Forsyth City Inspector	Forsyth Blvd 109 @ Courtyard 417-546-4763
Scott Ewing	Taneyville School	Scott.Ewing@Taneyville.k12.mo.us 417-546-5803

APR 17 2012

Taney County Multi-Jurisdictional Hazard Mitigation Plan Update
 Plan Advisory Meeting
 Leonard Stevens Community Center, Rockaway Beach, MO
 May 8, 2012 9:30 a.m.
 Sign-in (Please Print)

Name	Jurisdiction/Organization	Email/Telephone
DAVE FARCETT	SMCOG	(417) 836 4901
PETE ROTHROCK	OTC	rothrock@ote.edu (417) 447-6985
Melissa DUCKWORTH	Taney County DEM	melissad@dem.taney.mo.us 417-546-7233
Chris Bernick	Taney County DEM	chris.bernick@westerntaneyfire.com
Scott Eusing	Taneyville R-11 School	Scott.Eusing@Taneyville.k12.mo.us
DARRY CLINE	ROCKAWAY BEACH CITY	dcl@cityofrockaway.com 417 337 9756
Trent Bowers	CITY OF HOLLISTER	trent@cityofhollister.com 417 337 9756
TED MARTIN	BRANSON	tmartin@bransonmo.gov 417-243-2790
Kim Foster	Taney County Health	fosterk@tchea.mopublic.org 417 334-4544
TERRY SIMMS	ROCKAWAY	jsimms2@centurytel.net
Debbie Redford	Hollister School	dredford@hollister.k12.mo.us
JAMES FELTON	Ball Creek Village	(417) 561-1111

Taney County Multi-Jurisdictional Hazard Mitigation Plan Update
 Plan Advisory Meeting
 Leonard Stevens Community Center, Rockaway Beach, MO
 May 8, 2012 9:30 a.m.
 Sign-in (Please Print)

Name	Jurisdiction/Organization	Email/Telephone
Carless Osborn	Kirbyville RIF	carless.osborn@kirbyville.k12.mo.us 337-8913
Jenny Simms	Rockaway	jsimms2@earthlink.net
Darryl Coontz	TCAD	Dcoontz@TCAD.NET 284-1565
Eddie Cox	TCASD	edlee@co.taney.mo.us 417-546-7221
James Felton	Ball Creek Village	(417) 561-1111
Birc Dowdy	Ozarks Technical Community College	bdowdy@otc.edu (417) 447-6911

Taney County Multi-Jurisdictional Hazard Mitigation Plan Update

Plan Advisory Meeting

Leonard Stevens Community Center, Rockaway Beach, MO

May 22, 2012 9:30 a.m.

Sign-in (Please Print)

Name	Jurisdiction/Organization	Email/Telephone
Dave Foreest	SMCOG	only if I don't already have it.
Pete Rothrock	OTE	
Chris Bernick	Taney County OEM	chris.bernick@westerntaneyfire.com
Richard Jones	KIRBYVILLE BOARD	bidj70@CENTURYTEL.NET
MARK TEOG	MERIAM WOODS POLICE.	
JERRY CLINE	ROCKAWAY BEACH	
Trent Bowlers	CITY OF HOLLISTER	
Melissa Duckworth	Taney County DEM	
Paul Foster	THTD	fosterk2@opra.wopublic.org
Charles Osborn	Kirbyville Mt Schools	
James Felton	Bull Creek Village	
Robert Nezgut	Taney County Health Dept.	Nezgut@opra.wopublic.org

Taney County Multi-Jurisdictional Hazard Mitigation Plan Update

Plan Advisory Meeting

Leonard Stevens Community Center, Rockaway Beach, MO

June 12, 2012 9:30 a.m.

Sign-in (Please Print)

Name	Jurisdiction/Organization	Email/Telephone
Eddie Coxie	TCRSD	eddie@co.taney.mo.us
Bob Atchley	Taney County Planning	boba@co.taney.mo.us
JD Landon	OTC	landonj@otc.edu
Chris Bendt	TC OEM	chris.bendt@western.taney.mo.us
PETE RATHROCK	OTC	rothrockp@otc.edu
Scott Ewing	Taneyville School	Scott.Ewing@taneyville.k12.mo.us
Bob Comer	Bradleyville School	bcomer@bradleyville.k12.mo.us
Melissa Dickworth	Taney County OEM	melissad@co.taney.mo.us
Trent Bowers	HOLLISTER	bldg.official@cityofhollister.com
TED MARTIN	BRANSON	T.MARTIN@BRANSONMO.GOV
Angela Leist	Merriam Woods	merriamwoods@centurytel.net
LARRY CLINE	ROCKAWAY BEACH	CITY HALL

Taney County Multi-Jurisdictional Hazard Mitigation Plan Update

Plan Advisory Meeting

Leonard Stevens Community Center, Rockaway Beach, MO

June 12, 2012 9:30 a.m.

Sign-in (Please Print)

Name	Jurisdiction/Organization	Email/Telephone
Dale Redford	Holliston School	243-4080 dredford@hollister.k12.mo.us
Jim Foster	Taney County Health Dept	fosterj1@tpha.mopublic.org 417-942-7188
Robert Alving	Taney County Health Dept	niezgr@tpha.mopublic.org 334-4544
Carless Osborn	Kirbyville RJE School Dist.	
Peggy Golden	OACAC-Taney Co.	taney@oacac-caa.org
James Felton	Bull Creek Millage	417-561-1111

Meeting set to discuss county's emergency plan

By Tyler Francke | Posted: Friday, February 17, 2012 3:50 pm

FORSYTH — The first stakeholders' meeting in the lengthy process of updating Taney County's hazard mitigation plan has been scheduled for the end of this month.

It will be held at 9:30 a.m. Feb. 28 at the Taney County Courthouse. Representatives have been invited from the county's incorporated areas, as well as fire, ambulance and school districts.

"At that meeting, we'll be going over more information about participation, the elements of the plan and how we're going to go about doing the update," said Dave Faucett, community planner for the Southwest Missouri Council of Governments.

Faucett said the council has either completed or is working on plan updates in eight counties in southwest Missouri, including Taney and Stone.

The process has a number of requirements set by the Federal Emergency Management Agency, one of the biggest ones being that the public be as involved as possible. Faucett said he will be organizing several meetings to inform the public and solicit input throughout the Tri-Lakes Area, but those dates have not yet been set.

Taney County Emergency Management Director Chris Berndt — who, along with Faucett, met with county commissioners this week to discuss the process — said the plan is required to be updated every five years. Taney County's current plan expired last month, but the county was given an extension until Nov. 15.

Berndt said having an up-to-date plan is important because it makes the county eligible for grants as well as funding during emergencies that it otherwise would be unable to receive.

"It also helps the public be able to receive federal funds in the event of an emergency," Berndt said. "Basically, it shows the federal government that Taney County is making efforts to minimize the impact of disasters."

Berndt said FEMA will pay 75 percent of the cost of hiring the council to help update the plan, with the county responsible for the rest. However, he said the county could likely cover its share with in-kind labor, such as office work or the use of equipment and resources.

Faucett said the entire process will probably take until the end of July, after which the proposed plan will be sent to the State Emergency Management Agency. If those officials approve it, they will forward it to FEMA.

Once Taney County has FEMA approval, the plan will have to be adopted as a resolution by all of its incorporated townships before the November deadline expires.



[Home](#)

[About SMCOG](#)

[Our Region](#)

[Services & Programs](#)

[Publications](#)

[RPC Resources](#)

[Links](#)

[News and Press](#)

[Calendar](#)

[Contact Us](#)

Taney County Natural Hazard Mitigation Plan

Plan Update Meetings:

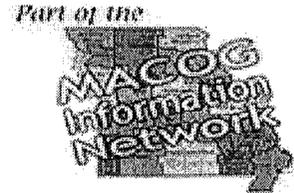
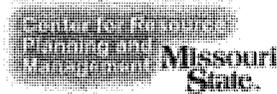
Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update Kick-off meeting

February 28, 2012

9:30 am

Taney County Courthouse
Forsyth, MO

Southwest Missouri Council of Governments
 901 South National Avenue
 Springfield, MO 65897
 Phone (417) 836-6900
 Fax (417) 836-4146
 Email: Diane May



[Missouri State University](#)

Copyright ©2009 Missouri State University Board of Governors
This page last modified February 22, 2012



The Southwest Missouri Council of Governments

Enhancing the quality of our communities through regional cooperation

About

Members

Directory

Staff

Contact

Home

Publications

Programs

Hazard Mitigation

Transportation

RPC Resources

Links

Calendar

Click on a title to expand.

Hazard Mitigation

The Federal Emergency Management Agency (FEMA) defines hazard mitigation as "Any sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards." It has been demonstrated that hazard mitigation is most effective when based on an inclusive, comprehensive, long-term plan that is developed before a disaster occurs.

The Disaster Mitigation Act of 2000 (DMA 2000), for the first time, required state and local governments to prepare and adopt hazard mitigation plans approved by FEMA as a condition of eligibility for receiving hazard mitigation grants under several programs. The State Emergency Management Agency (SEMA) relies on a partnership with regional planning commissions throughout the state to help local jurisdictions develop and adopt countywide, multi-jurisdictional, multi-hazard mitigation plans.

In 2004 and 2005, SMCOG assisted many counties in the region with developing their first mitigation plans. DMA 2000 also requires that these plans be updated every five years in order for state and local jurisdictions to maintain eligibility for Hazard Mitigation Assistance. The update process is currently underway at the county level for many communities in the region. Below is a summary of each jurisdiction's hazard mitigation plan update status and a link to that community's plan update page on the SMCOG website.

Select a plan to view details

- Barry County Plan
- Christian County Plan
- Dade County Plan
- Dallas County Plan
- Lawrence County Plan
- Polk County Plan
- Shell Knob Road District NHMP Addition
- Stone County Plan
- Taney County Plan
- Webster County Plan

[Taney County Natural Hazard Mitigation Plan Update](#)

Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update Kick-off

Meeting:

February 28, 2012

9:30 am

Taney County Courthouse

Forsyth, MO

Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update Meeting:

April 10, 2012

9:30 am

The Leonard Stevens Community Center

2762 State Highway 176

Rockaway Beach, MO

Relevant Documents:

[In-Kind Match Timesheet](#)

[Taney County NHMP Kick Off Meeting Slideshow](#)

School Districts, OTC and Other Special Districts Capabilities Survey: [PDF](#) [DOC](#)

Local Government Capabilities Survey: [PDF](#) [DOC](#)

Taney County NHMP Meeting 2 Slide Show: [PDF](#)

Taney County 2012 Community Profile Draft: [PDF](#)

Archived Plan:

Regional Images



Buffalo Golf Course

Affiliates



Missouri State
UNIVERSITY





The Southwest Missouri Council of Governments

Enhancing the quality of our communities through regional cooperation

About

Members

Directory

Staff

Contact

Home

Publications

Programs

Hazard Mitigation

Transportation

RPC Resources

Links

Calendar

Click on a title to expand.

Hazard Mitigation

The Federal Emergency Management Agency (FEMA) defines hazard mitigation as "Any sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards." It has been demonstrated that hazard mitigation is most effective when based on an inclusive, comprehensive, long-term plan that is developed before a disaster occurs.

The Disaster Mitigation Act of 2000 (DMA 2000), for the first time, required state and local governments to prepare and adopt hazard mitigation plans approved by FEMA as a condition of eligibility for receiving hazard mitigation grants under several programs. The State Emergency Management Agency (SEMA) relies on a partnership with regional planning commissions throughout the state to help local jurisdictions develop and adopt countywide, multi-jurisdictional, multi-hazard mitigation plans.

In 2004 and 2005, SMCOG assisted many counties in the region with developing their first mitigation plans. DMA 2000 also requires that these plans be updated every five years in order for state and local jurisdictions to maintain eligibility for Hazard Mitigation Assistance. The update process is currently underway at the county level for many communities in the region. Below is a summary of each jurisdictions hazard mitigation plan update status and a link to that community's plan update page on the SMCOG website.

Select a plan to view details

- Bary County Plan
- Christian County Plan
- Dade County Plan
- Dallas County Plan
- Lawrence County Plan
- Polk County Plan
- Shell Knob Road District NHMP Addition
- Stone County Plan
- Taney County Plan
- Webster County Plan

[Taney County Natural Hazard Mitigation Plan Update](#)

Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update Kick-off Meeting:

February 28, 2012
 9:30 am
 Taney County Courthouse
 Forsyth, MO

Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update Meeting:

April 10, 2012
 9:30 am
 The Leonard Stevens Community Center
 2762 State Highway 176
 Rockaway Beach, MO

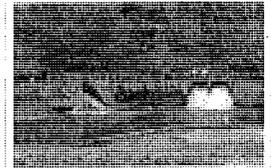
Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update Meeting:

May 8, 2012
 9:30 am
 The Leonard Stevens Community Center
 2762 State Highway 176
 Rockaway Beach, MO

Relevant Documents:

[In-Kind Match Timesheet](#)

Regional Images



Roaring River State Park

Affiliates



Missouri State
 UNIVERSITY





The Southwest Missouri Council of Government

Enhancing the quality of our communities through regional cooperation

[About](#)
[Members](#)
[Directory](#)
[Staff](#)
[Home](#)
[Publications](#)
[Programs](#)
[Hazard Mitigation](#)
[Transportation](#)
[RPC Resources](#)
[Links](#)
[Calendar](#)

Click on a title to expand.

Hazard Mitigation

The Federal Emergency Management Agency (FEMA) defines hazard mitigation as "Any sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards." It has been demonstrated that hazard mitigation is most effective when based on an inclusive, comprehensive, long-term plan that is developed before a disaster occurs.

The Disaster Mitigation Act of 2000 (DMA 2000), for the first time, required state and local governments to prepare and adopt hazard mitigation plans approved by FEMA as a condition of eligibility for receiving hazard mitigation grants under several programs. The State Emergency Management Agency (SEMA) relies on a partnership with regional planning commissions throughout the state to help local jurisdictions develop and adopt countywide, multi-jurisdictional, multi-hazard mitigation plans.

In 2004 and 2005, SMCOG assisted many counties in the region with developing their first mitigation plans. DMA 2000 also requires that these plans be updated every five years in order for state and local jurisdictions to maintain eligibility for Hazard Mitigation Assistance. The update process is currently underway at the county level for many communities in the region. Below is a summary of each jurisdictions hazard mitigation plan update status and a link to that community's plan update page on the SMCOG website.

Select a plan to view details

- [Barry County Plan](#)
- [Christian County Plan](#)
- [Dade County Plan](#)
- [Dallas County Plan](#)
- [Lawrence County Plan](#)
- [Polk County Plan](#)
- [Shell Knob Road District NHMP Addition](#)
- [Stone County Plan](#)
- [Taney County Plan](#)
- [Webster County Plan](#)

[Taney County Natural Hazard Mitigation Plan Update](#)

[Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update Kick-off](#)

Meeting :

February 28, 2012

9:30 am

Taney County Courthouse

Forsyth, MO

[Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update Kick-off](#)

Meeting :

April 10, 2012

9:30 am

The Leonard Stevens Community Center

2762 State Highway 176

Rockaway Beach, MO

[Region](#)


Roaring Ri

[All](#)


Missouri State University



Center for Planning & Management

Relevant Documents:

[In-Kind Match Timesheet](#)[Taney County NHMP Kick Off Meeting Slideshow](#)School Districts, OTC and Other Special Districts Capabilities Survey: [PDF DOC](#)Local Government Capabilities Survey: [PDF DOC](#)

Archived Plan:

[Taney County 2005](#)[Electric Coop Local Hazard Mitigation Plans](#)[Archived Natural Hazards Mitigation Plans](#)

Southwest Missouri Council of Governments | 901 South National Avenue | Springfield, MO 65897
Phone: (417) 836-6900 | Fax: (417) 836-4146 | Email: SMCOG



The Southwest Missouri Council of Governments

Enhancing the quality of our communities through regional cooperation

About

Members

Directory

Staff

Contact

Home

Publications

Programs

Hazard Mitigation

Transportation

RPC Resources

Links

Calendar

Click on a title to expand.

Hazard Mitigation

The Federal Emergency Management Agency (FEMA) defines hazard mitigation as "Any sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards." It has been demonstrated that hazard mitigation is most effective when based on an inclusive, comprehensive, long-term plan that is developed before a disaster occurs.

The Disaster Mitigation Act of 2000 (DMA 2000), for the first time, required state and local governments to prepare and adopt hazard mitigation plans approved by FEMA as a condition of eligibility for receiving hazard mitigation grants under several programs. The State Emergency Management Agency (SEMA) relies on a partnership with regional planning commissions throughout the state to help local jurisdictions develop and adopt countywide, multi-jurisdictional, multi-hazard mitigation plans.

In 2004 and 2005, SMCOG assisted many counties in the region with developing their first mitigation plans. DMA 2000 also requires that these plans be updated every five years in order for state and local jurisdictions to maintain eligibility for Hazard Mitigation Assistance. The update process is currently underway at the county level for many communities in the region. Below is a summary of each jurisdiction's hazard mitigation plan update status and a link to that community's plan update page on the SMCOG website.

Select a plan to view details

- Barry County Plan
- Christian County Plan
- Dade County Plan
- Dallas County Plan
- Lawrence County Plan
- Polk County Plan
- Shell Knob Road District NHMP Addition
- Stone County Plan
- Taney County Plan
- Webster County Plan

Taney County Natural Hazard Mitigation Plan Update

Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update Kick-off Meeting:

February 28, 2012
9:30 am
Taney County Courthouse
Forsyth, MO

Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update Meeting:

April 10, 2012
9:30 am
The Leonard Stevens Community Center
2762 State Highway 176
Rockaway Beach, MO

Relevant Documents:

[In-Kind Match Timesheet](#)

[Taney County NHMP Kick Off Meeting Slideshow](#)

School Districts, OTC and Other Special Districts Capabilities Survey: [PDF](#) [DOC](#)

Local Government Capabilities Survey: [PDF](#) [DOC](#)

Taney County NHMP Meeting 2 Slide Show: [PDF](#)

Taney County 2012 Community Profile Draft: [PDF](#)

Archived Plan:

Regional Images



Buffalo Golf Course

Affiliates



Missouri State
UNIVERSITY





The Southwest Missouri Council of Governments

Enhancing the quality of our communities through regional cooperation

About

Members

Directory

Staff

Contact

Home

Publications

Programs

Hazard Mitigation

Transportation

RPC Resources

Links

Calendar

Click on a title to expand.

Hazard Mitigation

The Federal Emergency Management Agency (FEMA) defines hazard mitigation as "Any sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards." It has been demonstrated that hazard mitigation is most effective when based on an inclusive, comprehensive, long-term plan that is developed before a disaster occurs.

The Disaster Mitigation Act of 2000 (DMA 2000), for the first time, required state and local governments to prepare and adopt hazard mitigation plans approved by FEMA as a condition of eligibility for receiving hazard mitigation grants under several programs. The State Emergency Management Agency (SEMA) relies on a partnership with regional planning commissions throughout the state to help local jurisdictions develop and adopt countywide, multi-jurisdictional, multi-hazard mitigation plans.

In 2004 and 2005, SMCOG assisted many counties in the region with developing their first mitigation plans. DMA 2000 also requires that these plans be updated every five years in order for state and local jurisdictions to maintain eligibility for Hazard Mitigation Assistance. The update process is currently underway at the county level for many communities in the region. Below is a summary of each jurisdictions hazard mitigation plan update status and a link to that community's plan update page on the SMCOG website.

Select a plan to view details

- Barry County Plan
- Christian County Plan
- Dade County Plan
- Dallas County Plan
- Lawrence County Plan
- Polk County Plan
- Shell Knob Road District NHMP Addition
- Stone County Plan
- Taney County Plan
- Webster County Plan

[Taney County Natural Hazard Mitigation Plan Update](#)

Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update Kick-off

Meeting:

February 28, 2012

9:30 am

Taney County Courthouse

Forsyth, MO

Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update Meeting:

April 10, 2012

9:30 am

The Leonard Stevens Community Center

2762 State Highway 176

Rockaway Beach, MO

Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update Meeting:

May 8, 2012

9:30 am

The Leonard Stevens Community Center

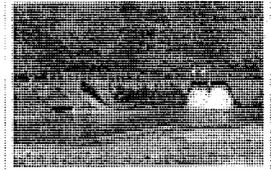
2762 State Highway 176

Rockaway Beach, MO

Relevant Documents:

[In-Kind Match Timesheet](#)

Regional Images

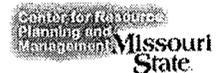


Roaring River State Park

Affiliates



Missouri State
UNIVERSITY



[Taney County NHMP Kick Off Meeting Slideshow](#)

School Districts, OTC and Other Special Districts Capabilities Survey: [PDF DOC](#)

Local Government Capabilities Survey: [PDF DOC](#)

Taney County NHMP Meeting 2 Slide Show: [PDF](#)

Taney County 2012 Community Profile Draft: [PDF](#)

Archived Plan:

[Taney County 2005](#)

[Electric Coop Local Hazard Mitigation Plans](#)

[Archived Natural Hazards Mitigation Plans](#)

Southwest Missouri Council of Governments | 901 South National Avenue | Springfield, MO 65897
Phone: (417) 836-6900 | Fax: (417) 836-4146 | Email: SMCOG



The Southwest Missouri Council of Governments

Enhancing the quality of our communities through regional cooperation

[About](#)

[Members](#)

[Directory](#)

[Staff](#)

[Contact](#)

[Home](#)

[Publications](#)

[Programs](#)

[Hazard Mitigation](#)

[Transportation](#)

[RPC Resources](#)

[Links](#)

[Calendar](#)

Click on a title to expand.

Hazard Mitigation

The Federal Emergency Management Agency (FEMA) defines hazard mitigation as "Any sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards." It has been demonstrated that hazard mitigation is most effective when based on an inclusive, comprehensive, long-term plan that is developed before a disaster occurs.

The Disaster Mitigation Act of 2000 (DMA 2000), for the first time, required state and local governments to prepare and adopt hazard mitigation plans approved by FEMA as a condition of eligibility for receiving hazard mitigation grants under several programs. The State Emergency Management Agency (SEMA) relies on a partnership with regional planning commissions throughout the state to help local jurisdictions develop and adopt countywide, multi-jurisdictional, multi-hazard mitigation plans.

In 2004 and 2005, SMCOG assisted many counties in the region with developing their first mitigation plans. DMA 2000 also requires that these plans be updated every five years in order for state and local jurisdictions to maintain eligibility for Hazard Mitigation Assistance. The update process is currently underway at the county level for many communities in the region. Below is a summary of each jurisdictions hazard mitigation plan update status and a link to that community's plan update page on the SMCOG website.

Select a plan to view details

- [Barry County Plan](#)
- [Christian County Plan](#)
- [Dade County Plan](#)
- [Dallas County Plan](#)
- [Lawrence County Plan](#)
- [Polk County Plan](#)
- [Shell Knob Road District NHMP Addition](#)
- [Stone County Plan](#)
- [Taney County Plan](#)
- [Webster County Plan](#)

[Taney County Natural Hazard Mitigation Plan Update](#)

[Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update Kick-off Meeting:](#)

February 28, 2012
 9:30 am
 Taney County Courthouse
 Forsyth, MO

[Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update Meeting:](#)

April 10, 2012
 9:30 am
 The Leonard Stevens Community Center
 2762 State Highway 176
 Rockaway Beach, MO

[Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update Meeting:](#)

May 8, 2012
 9:30 am
 The Leonard Stevens Community Center
 2762 State Highway 176
 Rockaway Beach, MO

[Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update Meeting:](#)

May 22, 2012

Regional Images



Buffalo Golf Course

Affiliates



Missouri State
UNIVERSITY



9:30 am
The Leonard Stevens Community Center
2762 State Highway 176
Rockaway Beach, MO

Relevant Documents:

- [In-Kind Match Timesheet](#)
- [Taney County NHMP Kick Off Meeting Slideshow](#)
- [School Districts, OTC and Other Special Districts Capabilities Survey: PDF DOC](#)
- [Local Government Capabilities Survey: PDF DOC](#)
- [Taney County NHMP Meeting 2 Slide Show: PDF](#)
- [Taney County 2012 Community Profile Draft: PDF](#)

Archived Plan:

- [Taney County 2005](#)

Electric Coop Local Hazard Mitigation Plans

Archived Natural Hazards Mitigation Plans

Southwest Missouri Council of Governments | 901 South National Avenue | Springfield, MO 65897
Phone: (417) 836-6900 | Fax: (417) 836-4146 | Email: SMCOG



The Southwest Missouri Council of Governments

Enhancing the quality of our communities through regional cooperation

[About](#)
[Members](#)
[Directory](#)
[Staff](#)
[Contact](#)
[Home](#)
[Publications](#)
[Programs](#)
[Hazard Mitigation](#)
[Transportation](#)
[RPC Resources](#)
[Links](#)
[Calendar](#)

Click on a title to expand.

Hazard Mitigation

The Federal Emergency Management Agency (FEMA) defines hazard mitigation as "Any sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards." It has been demonstrated that hazard mitigation is most effective when based on an inclusive, comprehensive, long-term plan that is developed before a disaster occurs.

The Disaster Mitigation Act of 2000 (DMA 2000), for the first time, required state and local governments to prepare and adopt hazard mitigation plans approved by FEMA as a condition of eligibility for receiving hazard mitigation grants under several programs. The State Emergency Management Agency (SEMA) relies on a partnership with regional planning commissions throughout the state to help local jurisdictions develop and adopt countywide, multi-jurisdictional, multi-hazard mitigation plans.

In 2004 and 2005, SMCOG assisted many counties in the region with developing their first mitigation plans. DMA 2000 also requires that these plans be updated every five years in order for state and local jurisdictions to maintain eligibility for Hazard Mitigation Assistance. The update process is currently underway at the county level for many communities in the region. Below is a summary of each jurisdiction's hazard mitigation plan update status and a link to that community's plan update page on the SMCOG website.

Select a plan to view details

- [Barry County Plan](#)
- [Christian County Plan](#)
- [Dade County Plan](#)
- [Dallas County Plan](#)
- [Lawrence County Plan](#)
- [Polk County Plan](#)
- [Shell Knob Road District NHMP Addition](#)
- [Stone County Plan](#)
- [Taney County Plan](#)
- [Webster County Plan](#)

[Taney County Natural Hazard Mitigation Plan Update](#)

[Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update Kick-off Meeting:](#)

February 28, 2012

9:30 am

Taney County Courthouse

Forsyth, MO

[Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update Meeting:](#)

April 10, 2012

9:30 am

The Leonard Stevens Community Center

2762 State Highway 176

Rockaway Beach, MO

[Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update Meeting:](#)

May 8, 2012

9:30 am

The Leonard Stevens Community Center

2762 State Highway 176

Rockaway Beach, MO

[Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update Meeting:](#)

May 22, 2012

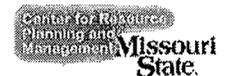
Regional Images



Buffalo Golf Course



Missouri State
UNIVERSITY



9:30 am
The Leonard Stevens Community Center
2762 State Highway 176
Rockaway Beach, MO

Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update Meeting :

June 12, 2012

9:30 am
The Leonard Stevens Community Center
2762 State Highway 176
Rockaway Beach, MO

Relevant Documents:

In-Kind Match Timesheet

Taney County NHMP Kick Off Meeting Slideshow

School Districts, OTC and Other Special Districts Capabilities Survey: PDF DOC

Local Government Capabilities Survey: PDF DOC

Taney County NHMP Meeting 2 Slide Show: PDF

Taney County 2012 Community Profile Draft: PDF

Archived Plan:

Taney County 2005

Electric Coop Local Hazard Mitigation Plans

Archived Natural Hazards Mitigation Plans

Southwest Missouri Council of Governments | 901 South National Avenue | Springfield, MO 65897
Phone: (417) 836-6900 | Fax: (417) 836-4146 | Email: SMCOG



The Southwest Missouri Council of Governments

Enhancing the quality of our communities through regional cooperation

[About](#)
[Members](#)
[Directory](#)
[Staff](#)
[Contact](#)
[Home](#)
[Publications](#)
[Programs](#)
[Hazard Mitigation](#)
[Transportation](#)
[RPC Resources](#)
[Links](#)
[Calendar](#)

Click on a title to expand.

Hazard Mitigation

The Federal Emergency Management Agency (FEMA) defines hazard mitigation as "Any sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards." It has been demonstrated that hazard mitigation is most effective when based on an inclusive, comprehensive, long-term plan that is developed before a disaster occurs.

The Disaster Mitigation Act of 2000 (DMA 2000), for the first time, required state and local governments to prepare and adopt hazard mitigation plans approved by FEMA as a condition of eligibility for receiving hazard mitigation grants under several programs. The State Emergency Management Agency (SEMA) relies on a partnership with regional planning commissions throughout the state to help local jurisdictions develop and adopt countywide, multi-jurisdictional, multi-hazard mitigation plans.

In 2004 and 2005, SMCOG assisted many counties in the region with developing their first mitigation plans. DMA 2000 also requires that these plans be updated every five years in order for state and local jurisdictions to maintain eligibility for Hazard Mitigation Assistance. The update process is currently underway at the county level for many communities in the region. Below is a summary of each jurisdiction's hazard mitigation plan update status and a link to that community's plan update page on the SMCOG website.

Select a plan to view details

- [Bary County Plan](#)
- [Christian County Plan](#)
- [Dade County Plan](#)
- [Dallas County Plan](#)
- [Lawrence County Plan](#)
- [Polk County Plan](#)
- [Shell Knob Road District NHMP Addition](#)
- [Stone County Plan](#)
- [Taney County Plan](#)
- [Webster County Plan](#)

[Taney County Natural Hazard Mitigation Plan Update](#)

Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan July 2012

Public Comment Draft:

[Table of Contents & Executive Summary](#)

[Part 1: Introduction](#)

[Part 2: Community Profile](#)

[Part 3: Risk Assessment](#)

[Part 4: Capability Assessment](#)

[Part 5: Mitigation](#)

[Part 6: Plan Maintenance](#)

[Part 7: Appendices](#)

[Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update Kick-off Meeting:](#)

February 28, 2012

9:30 am

Taney County Courthouse

Forsyth, MO

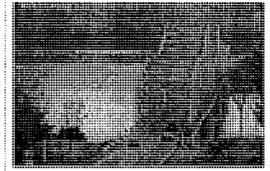
[Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update Meeting:](#)

April 10, 2012

9:30 am

The Leonard Stevens Community Center

Regional Images



Kimberling City Bridge

Affiliates



Missouri State
UNIVERSITY



2762 State Highway 176
Rockaway Beach, MO

Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update Meeting:

May 8, 2012

9:30 am

The Leonard Stevens Community Center

2762 State Highway 176

Rockaway Beach, MO

Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update Meeting:

May 22, 2012

9:30 am

The Leonard Stevens Community Center

2762 State Highway 176

Rockaway Beach, MO

Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Update Meeting:

June 12, 2012

9:30 am

The Leonard Stevens Community Center

2762 State Highway 176

Rockaway Beach, MO

Relevant Documents:

In-Kind Match Timesheet

Taney County NHMP Kick Off Meeting Slideshow

School Districts, OTC and Other Special Districts Capabilities Survey: PDF DOC

Local Government Capabilities Survey: PDF DOC

Taney County NHMP Meeting 2 Slide Show: PDF

Archived Plan:

Taney County 2005

Electric Coop Local Hazard Mitigation Plans

Archived Natural Hazards Mitigation Plans

Southwest Missouri Council of Governments | 901 South National Avenue | Springfield, MO 65897

Phone: (417) 836-6900 | Fax: (417) 836-4140 | Email: SMCOG

Emergency Management -

Wednesday July 11, 2012

- HOME
- DEPARTMENTS
- DOCUMENTS
- CALENDAR
- HISTORY
- HEALTH DEPT

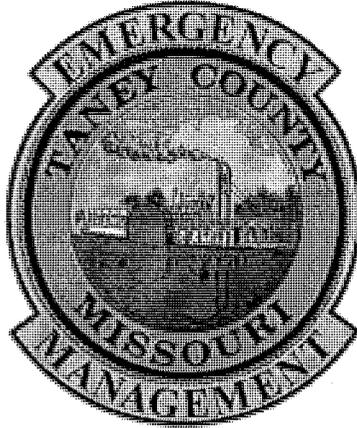
EMERGENCY MANAGEMENT HOME	DISASTER PREPAREDNESS LINKS
LAKE / FLOOD INFORMATION	LOCAL EMERGENCY PLANNING COMMITTEE
SAFETY - HEAT	SAFETY - LIGHTNING

- Local Cities**
- BRANSON
 - FORSYTH
 - HOLLISTER
 - ROCKAWAY BEACH

- Local Chambers**
- BRANSON
 - FORSYTH
 - HOLLISTER

- Missouri Links**
- TANEY COUNTY AIRPORT
 - GOVERNMENT
 - HOUSE OF REPRESENTATIVES
 - SENATE
 - MISSOURI CAREER ASSOCIATION OF COUNTIES
 - MISSOURI DEPT. OF CONS.
 - MISSOURI DNR
 - UofM EXTENSION TANEY COUNTY

- News**
- KRZK / KOMC
 - BRANSON DAILY
 - KY3
 - KOLR10
 - KSPR33
 - KLFC



WELCOME TO THE OFFICE OF EMERGENCY MANAGEMENT WEB PAGE

Leap Day Tornado- Post-Disast
 March 1 at 02:00 PM

Leap Day Tornado - Post-disaster Informatic

Starting 8 a.m. tomorrow, burnable vegetativ residents can be delivered to Forsyth Shoals Birmingham Road in Forsyth. Commercial h should use the Birmingham Road entrance available 7-day a week until March 11th from between Taney County and the City of Forsy Taney County Transfer Station on Buchanan

EMERGENCY MANAGEMENT
 221 Jefferson Road - Branson, MO 65616
 132 David Street - Forsyth, MO 65653
 (417) 546-7233 | Fax: (417) 546-7218
 Email: melissad@co.taney.mo.us

CHRIS BERNDT
 Administrator

MELISSA DUCKWORTH
 Administrative Support

2012 Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Public Comment Notice

Taney County, its incorporated communities, school districts, higher education institutions and other special districts have been working together to update the 2005 Taney County Natural Hazard Mitigation Plan. The Plan Advisory Committee consisting of representatives of local governments has been conducting planning activities at several meetings from February through June of 2012. The public is invited to comment on a draft of the 2012 Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan.

The plan updates strategies developed to reduce the vulnerability of people and property in the county from the impacts of natural hazard events and enables the participating jurisdictions to be eligible for mitigation funding programs from the Federal Emergency Management Agency (FEMA).

Full details can be found at <http://smcog.missouristate.edu/hazardMitigation.html>. A hardcopy of the plan may be viewed in the Office of Emergency Management by appointment. Please call 417.546.7233.

- Hazard Mitigation Plan Draft 2012:
Table of Contents & Executive Summary
 Part 1: Introduction
 Part 2: Community Profile
 Part 3: Risk Assessment
 Part 4: Capability Assessment
 Part 5: Mitigation
 Part 6: Plan Maintenance
 Part 7: Appendices



Lake / Flood Information
 Updated 2012-04-16 14:00:00

Emergency Management Meetings are held the third Thursday of every even numbered month.

Meetings are at 10:00 a.m. at a selected restaurant in Taney County and are followed by the County LEPC meeting.

For weather radios at varying prices, check with Radio Shack and discount retailers such as Wal-Mart, Target, or K-Mart.

Major Hazards in Taney County include:

- Tornadoes
- Flash Floods
- Earthquakes
- Chemical Spills / Releases
- Winter Storms
- Dam Failure

Jan 30, 2006 - Taney County Natural Hazard Mitigation Plan

About FEMA Multi-Hazard Mitigation Planning

The 4 phases of Emergency Management are:

- Mitigation
- Preparedness
- Response
- Recovery

Storm Sirens

Sirens are designed to be heard when citizens are outside their home or business, so they may take immediate shelter. People inside of homes or businesses will not always hear them. People indoors should rely on radio, television, cable override, and alert radios to keep them informed and let the sirens inform those out of doors.

The City of Branson is covered by seventeen (17) sirens and conducts tests the second Wednesday of the month at 10:00 a.m.; unless there is questionable weather then it is the third Wednesday. The City of Springfield also conducts siren tests at this time.

The City of Forsyth is covered by three (3) sirens and also tests on the second Wednesday of each month at 10:00 a.m.

Taneyville and Rockaway Beach are covered by one (1) siren each.

The Office of Emergency Management maintains and annually updates the Local Emergency Operations Plan outlining multiple agencies responsibilities during a disaster.

Taney County houses a Homeland Security Response Team funded through Federal Department of Homeland Security Grant money.

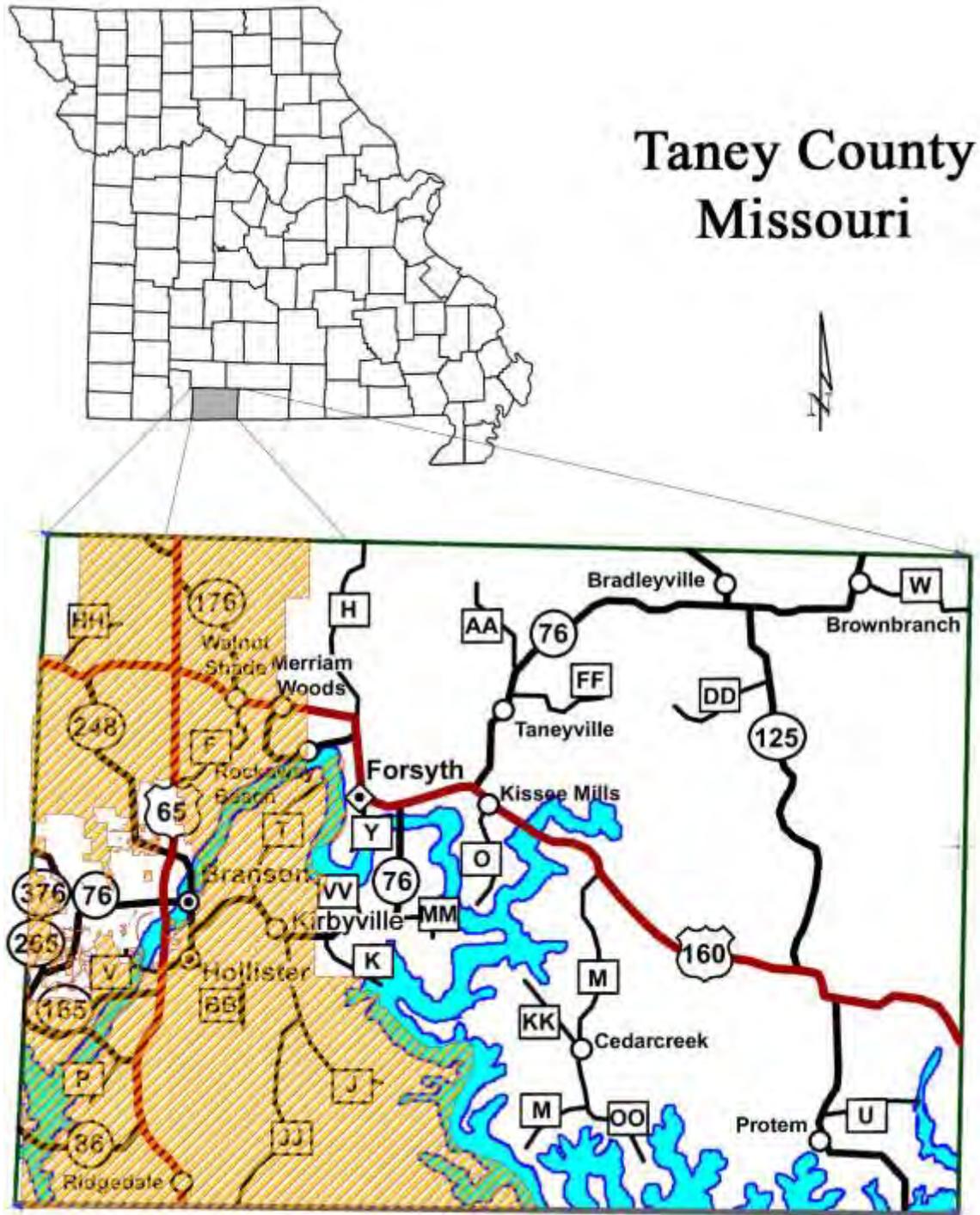
Documents associated with the office of the Emergency Management

Informational Literature

- Jul 11, 2012 - 2012 Taney County Natural Hazard Mitigation Plan Draft
- Mar 05, 2012 - 2012 Leap Day Tornado Informational Flyer
- Jan 30, 2006 - Taney County Natural Hazard Mitigation Plan

Copyright 2004 - 2012 Taney County Missouri. . . . County Email Docuware

Appendix H: Western Taney County Fire District Addendum



U.S. Department of Homeland Security
Region VII
9221 Ward Parkway, Suite 300
Kansas City, MO 64114-3772



FEMA

September 19, 2013

Mr. Timothy A. Diemler, Acting Director
State Emergency Management Agency
P. O. Box 116
Jefferson City, Missouri 65102

Subject: Amendment to the Taney County, Missouri Hazard Mitigation Plan

Dear Mr. Diemler:

The purpose of this letter is to provide the status of the above referenced Local Hazard Mitigation Plan, pursuant to the requirements of 44 CFR Part 201 - Mitigation Planning and the Local Multi-Hazard Mitigation Planning Guidance. The amendment to the plan to incorporate the Taney County Western Fire District is approved. It should be noted that this is an amendment to the original plan and does not affect the date of expiration.

Fire districts, because they are defined as local governments, are required to have an approved plan or demonstrate their participation as a separate government entity in a local hazard mitigation plan, in order to receive FEMA Mitigation project grants. Therefore the District is encouraged to participate in the update of the Taney County plan, which is due to expire on January 17, 2018, if they wish to remain eligible for future project grants.

Prior to the expiration of the plan the jurisdictions will be required to review and revise their plan to reflect changes in development, progress in local mitigation efforts, and changes in priorities, and resubmit it for approval in order to continue to be eligible for mitigation project grant funding.

Local Jurisdiction	Date Adoptions Submitted	Date Completed	Date of Adoption	Date of Plan Expiration	Review Status
Taney County	September 18, 2013	September 19, 2013	January 14, 2013	January 17, 2018	Approved

If you have any questions or concerns, please contact Joe Chandler, Planning Team Lead, at (816) 283-7071.

Sincerely,


Michael Scott, Director
Mitigation Division

Part H-1: Introduction

Introduction

The *Taney County Multi-Jurisdictional Natural Hazards Mitigation Plan* is an updated version of the original 2005 *Taney County Natural Hazards Mitigation Plan* developed in conformance with the requirements of the Disaster Mitigation Act of 2000. Planning activities for the plan update were completed for Taney County, municipalities and school and other special districts throughout 2012. The *Taney County Multi-Jurisdictional Natural Hazards Mitigation Plan* was adopted by *Plan* participants and received final approval from FEMA on January 17, 2013.

All fire protection districts were invited to participate in the *Plan* update process. However, no representatives from any of the county's fire protection districts attended any meetings or participated in the planning process apart from Western Taney Chief Chris Berndt who was also serving as Taney County Emergency Management Director at the time. Chief Berndt indicated to SMCOG staff on numerous occasions that he was representing the Western Taney Fire District as well as the county during the planning process. Chief Berndt attended all planning meetings and was instrumental in coordination of the planning effort. SMCOG was responsible for the oversight which led to the omission of the Western Taney County Fire District as a participating jurisdiction in the draft *Taney County Multi-Jurisdictional Natural Hazards Mitigation Plan* submissions for approval to SEMA and FEMA and the final approved Plan. After the oversight was brought to the Plan author's attention, Chief Berndt suggested that the Fire District be added to the Plan through the addendum process in order not to delay the approval and adoption of the plan as it was a time sensitive matter for other jurisdictions in the planning area.

The Western Taney County Fire District entered an agreement with SMCOG to develop a local natural hazard plan in May 2013. The Plan for the district will be included as an addendum to the *Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan* for the Western Taney County Fire District. The addendum will allow the Western Taney County Fire District to be a recognized participating jurisdiction in the Plan; thereby, making the jurisdiction eligible for FEMA hazard mitigation grants funding and demonstrate the District's commitment to mitigation activities.

Planning Process

The *Plan* addendum for the Western Taney County Fire District follows the format presented in Part 1: Introduction of the *Taney County Multi-Jurisdictional Natural Hazards Mitigation Plan*. This section of the Plan describes the public involvement process and participation requirements for jurisdictions included in the *Plan*.

Public Involvement

Input from the public was solicited through media outlets and posting of the Western Taney County Fire District Board meeting agenda at the District offices in Branson that served as the venue for the plan advisory meeting on June 12, 2013. In addition, the June 12 public meeting notice was emailed to the original distribution list of neighboring jurisdictions and jurisdiction representatives for the *Taney County Multi-Jurisdictional Natural Hazards Mitigation Plan*. The June 12 meeting was advertised in the Branson Tri-Lakes News. The meeting notice was also posted on the SMCOG website.

The preliminary draft of the *Plan* addendum was posted on the Southwest Missouri Council of Governments website for comment. The public was invited to comment on the draft addendum through advertisements in the Branson Tri-Lakes News. An email was sent to the original distribution list of *Plan* participants and neighboring jurisdictions soliciting comment.

Participation Requirements

The Western Taney County Fire District met the same participation requirements for inclusion in the *Taney County Multi-Jurisdictional Natural Hazards Mitigation Plan*. These requirements are discussed on page 1-5 of the Part 1 Introduction section in the main body of the *Plan*. Table H-1 describes the nature of participation and records the District’s fulfillment thereof.

Table H1-1: Record of Participation					
Jurisdiction	Plan Update Status	Nature of Participation			
		Attended Meetings	Review and Comment on Draft Materials	Submitted Critical Facilities Summary	Completed Surveys
Western Taney County Fire District	New	X	X	X	X

Plan Preparation Methodology and Schedule

On May 22, 2013, SMCOG staff met with Western Taney County Fire District Chief Chris Berndt to discuss information about District assets needed for a risk assessment and profile sections of the addendum. In addition, a timeline for plan completion and the need for at least two opportunities for public comment were discussed. At this meeting, the time, place and agenda for a public meeting were determined.

On June 12, 2013 a public meeting was held at the Western Taney County Fire District office in Branson. Items that were discussed at this meeting included; an assessment of the District’s vulnerability to all natural hazards that may affect the planning area, an assessment of the impact of each hazard to District roads and assets and a discussion of strategies to mitigate the impact of natural hazards on the jurisdiction. Please see Table H-2 for a listing of meeting attendees.

Table H1-2: Hazard Mitigation Plan Meeting Attendance			
Organization	Representative	5/22/2013	6/12/2013
WTCFD			
Chief	Chris Berndt	X	X
Vice President	Robert Dixon		X
President	David Waters		X
Sec'y/Treasurer	John White		X
Administration	Krista Hunt		X
Volunteer	J.K. Ash		X
Volunteer	Michael Majors		X
Volunteer	Michael Ahart		X
Volunteer	Kayla Ahart		X
Volunteer	Jared Clayton		X
Volunteer	Charles Jassel		X
Volunteer	Mike Schultze		X
Volunteer	Tyler Nevins		X
Volunteer	Stephanie Single		X
Volunteer	Joshua Single		X
Volunteer	Bobby Reeves		X

The public and neighboring agencies were provided a second opportunity for comment after the draft of the addendum was posted on the SMCOG website and a print copy was made available at the District office for review. Notice of public comment were placed in the Branson Tri-Lakes News and posted on the SMCOG website. Notice for comment was also emailed to the participants and neighboring agencies of the *Plan*.

Part H-2: Community Profile

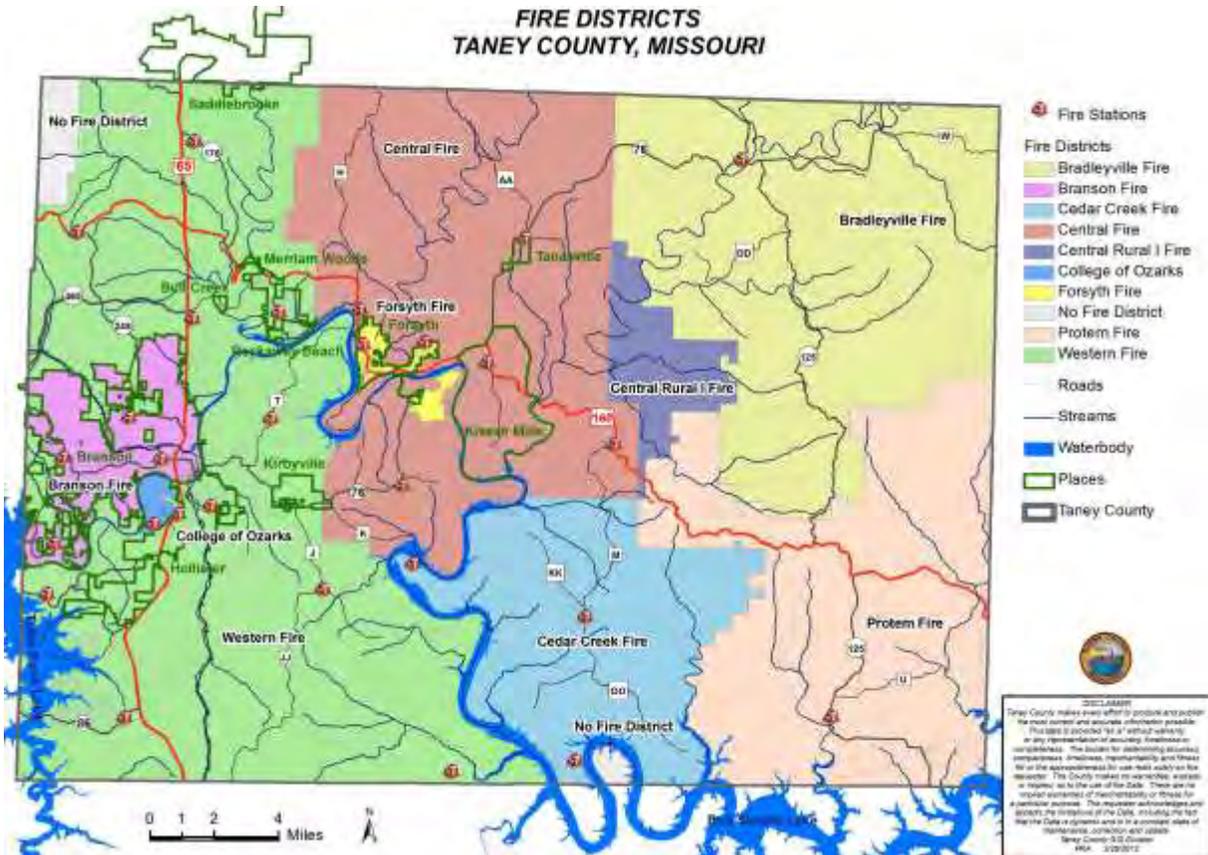
On November 4, 1982 the voters formed the Western Taney County Fire District, protecting the majority of the western third of Taney County, which was a merger of the Branson-Rockaway and Oakmont Fire Districts, excluding the Cities of Branson and Hollister and some Hollister Rural area. The District officially started to operate on January 1st in 1983.

On April 7, 1998 the fire district annexed a large area including the areas of Hwy J and JJ from the Hollister Rural area, which added an additional 50 sq. miles to the southwest corner of the fire district. In 2000 the fire district annexed the area of Acacia Club road adding an additional 10 sq. miles to the district, which was the remaining Hollister Rural area. On October 15, 2003 the Fire District merged with the Hollister Fire Department, now making the Fire District also Hollister's Fire Department. Today the District covers 210 square miles from 12 fire stations.

The Western Taney County Fire District serves the communities of Bull Creek, Hollister, Kirbyville, Merriam Woods and Rockaway Beach as well as unincorporated areas in western Taney County. Figure H2-1 is a map of fire

districts in Taney County and depicts the boundaries of the Western Taney County Fire District.

Figure H2-1: Western Taney County Fire District Location in Taney County



The District provides fire protection as well as search and rescue services to approximately 28,000 people and for an estimated 17,500 structures in the more densely populated western portion of the county. Table H2-1 contains an inventory of assets for the District.

	Asset Type			Totals
	Fire Station	Building Contents	Vehicles	
Total Assets	12	-	45	57
Total Replacement Cost	\$3,760,000	\$362,000	\$7,640,800	\$11,762,800

Part H3: Risk Assessment

Hazard Profiles

This addendum to the *Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan* addresses natural hazards that may affect the Western Taney County Fire District; man-made or technological hazards are not discussed other than in reference to cascading damages that could result from a natural hazard event. Part 3: Risk Assessment in the main body of the *Plan* contains hazard profiles for all identified natural hazards that can affect the county. The hazard profiles are organized under subsections for hazard identification, location, extent, past occurrences and probability and severity ratings. The profiles for each hazard can be found on the following pages of Part 3 in the main body of the *Plan*:

Tornado: pp. 3-3 to 3-9.

Severe Thunderstorms (High Winds/Hail/Lightning): pp. 3-9 to 3-15.

Flood (Riverine and Flash): pp. 3-15 to 3-22.

Severe Winter Weather: pp. 3-22 to 3-28.

Drought: pp. 3-28 to 3-33.

Heat Wave: pp. 3-33 to 3-36.

Earthquake: pp. 3-36 to 3-42.

Dam Failure: pp. 3-43 to 3-49.

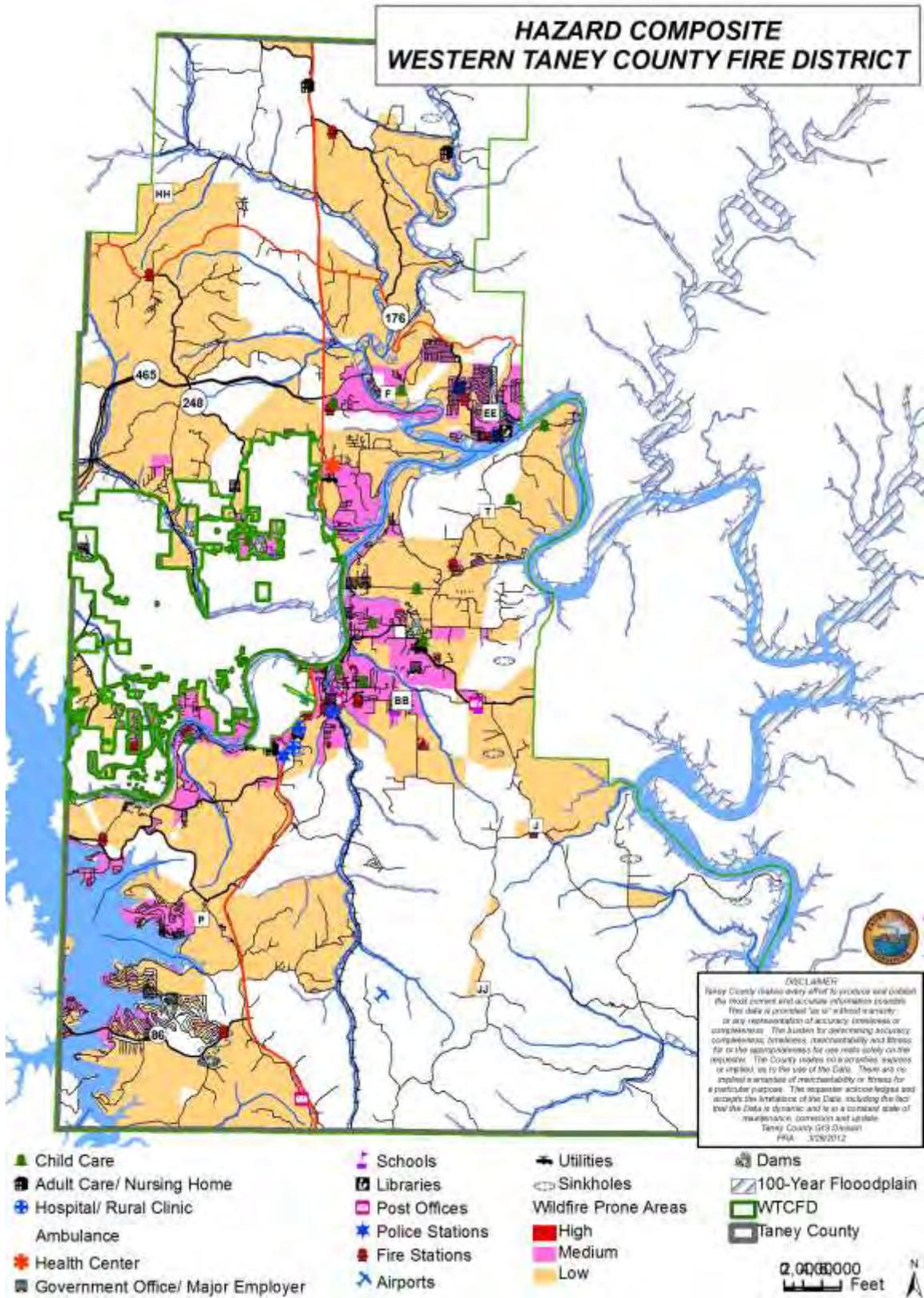
Wildfire: pp. 3-49 to 3-54.

Sinkhole (Bowl-shaped, collapse): 3-54 to 3-59.

Public Health Emergencies: 3-59 to 3-64

The hazards presented here are those that have been experienced by, or pose a potential threat to, the Western Taney County Fire District. No additional hazards have been included in the addendum for the District. Most of the hazards profiled are regional events and have no defined hazard prone areas; however, flood, dam failure, wildfire and sinkholes are more geographic specific and can be mapped. Figure H3-1 is a map of geographic specific hazards and critical facilities for the District.

Figure H3-1: Western Taney County Fire District Geographic Specific Hazards



Multi-Jurisdictional Risk Assessment

The Multi-Jurisdictional Risk Assessment section in the main body of the *Plan* on p. 3-73, discusses the method used to summarize hazards by jurisdiction. The method varied for local governments and school or other special districts. Special districts; such as schools, were surveyed and self-reported the threat of each of these hazards based on specialized knowledge of their own facilities and boundaries. The risk assessment for Western Taney County Fire District was completed at the public meeting on June 12, 2013. Meeting attendees were asked to consider the threat of each hazard on a scale of high, medium and low for both probability of occurrence, severity and functional down-time as presented on pp. 3-73 and 3-74 in the main body of the *Plan*.

Natural Hazards Risk Identification and Analysis for the Western Taney County Fire District is summarized in Table H3-1.

Table H3-1: Overall Summary of Hazard Vulnerability

Hazards	Tornado	Severe T-storm	Flood (Riverine and Flash)	Severe Winter Weather	Drought	Heatwave	Earthquake	Dam Failure	Wildfire	Sinkhole	EID
Jurisdiction											
Western Taney County Fire District.	H	H	H	H	L	L	L	M	H	L	

Vulnerability Assessment and Estimates of Potential Loss by Jurisdiction

The methodology described for estimating losses in the main body of the *Plan* used to calculate potential losses in dollar amounts vary according to the natural hazard addressed and type of entity or jurisdiction. The methods used to estimate losses for local governments are not the same for school or other special districts.

The methods used for applying a damage percentage to jurisdiction assets based on the overall summary of hazard vulnerability; where, the corresponding values of low, medium and high for each jurisdiction in the Overall Summary of Hazard Vulnerability in the table located on p. 3-76 in the main body of the *Plan*. These were converted to a damage factor or vulnerability percentage of 1%, %5 and 10% respectively.

The processes used to determine geographic specific hazard prone areas were used to estimate potential losses for the Western Taney County Fire District

described on p. 3-77 under the heading OTC and Other Special District Loss Estimates. In addition, the inapplicability of the vulnerability analysis for emerging infectious disease for special districts is described on p. 3-78 in the main body of the *Plan*. Tables H3-2 and H3-3 provide potential loss estimates to the District for area wide and geographic specific hazards.

Table H3-2		Vulnerability Percentages				
Western Taney County Fire District	Hazard Value	Asset Types				Totals
	%	Fire Station	Building Contents	Vehicles	Functional Loss (Days)	
	x	12	-	45	x	57
Replacement Cost	x	\$3,760,000	\$362,000	\$7,640,800	x	\$11,762,800
Hazard	Area Wide					
Drought	1%	-	\$3,620	-	< 24 hrs	\$3,620
Earthquake	5%	\$188,000	\$18,100	\$382,040	1-4 days	\$588,140
Heatwave	1%	-	\$3,620	-	< 24 hrs	\$3,620
Tornado/T-Storms	10%	\$376,000	\$36,200	\$764,080	5 or >	\$1,176,280
Winter Storms	10%	\$376,000	\$36,200	\$764,080	5 or >	\$1,176,280
	Local Area					
Flooding	10%	\$0	\$0	\$0	5 or >	\$0
Dam Failure	1%	\$0	\$0	\$0	< 24 hrs	\$0
Wildfire	10%	\$341,000	\$31,000	\$573,060	5 or >	\$945,060
Sinkholes	1%	\$1,750	\$200	\$6,367	< 24 hrs	\$8,317

Part H4: Capability Assessment

Fire District Capabilities are discussed in the main body of the *Plan* on p. 4-7. The District protects a diverse area of beautiful hills and lakes in the "Ozarks" plateau. Unique protection and response challenges are posed in this area along with regular fire responses, including protecting densely populated areas with condos, water emergencies on one of the three lakes, wildland interface issues and very rural coverage areas. The District's fleet of emergency response vehicles includes: engines' tankers, rescue engines, boats, brush trucks and other specialty vehicles.

The fire codes adopted by the Western Taney County Fire Protection District, the 2012 International Fire Prevention Code (IFC) for commercial buildings, are used within the unincorporated areas within the District's jurisdiction as well as some of the municipalities. The Central Taney County Fire Protection District also use the 2012 International Fire Prevention Codes for commercial building construction within its service area which is unincorporated areas only.

Part 5H: Mitigation

Goals, Objectives, and Mitigation Actions

The development process for a comprehensive range of mitigation actions to address each of the hazards identified in the *Plan* is described in the main body of the *Plan* beginning on p. 5-5 of Part 5. The Western Taney County Fire District has made progress and is continuing to work towards mitigation activities listed in the *Plan* that specifically address fire districts. These actions are listed in Table 5H-1.

Action	2012 Status	Progress Made
Continue to inventory alternative firefighting water sources and encourage the development of additional services.	Deferred 2012 Action 3.1.3	Western Taney FPD maintains inventory of water sources, dry hydrants and conducted water rescue trainings.
Develop “tips” brochures for homeowners on how to halt or reduce the risks of natural hazards.	Revised 2012 Action 1.1.2	The Western Taney County Fire District posts fire prevention tips on its website and publishes a newsletter providing fire hazard information.

The goals, actions, and strategies listed in the main body of the *Plan* beginning on p. 5-11 were presented and reviewed at the June 12, 2013 public meeting. A consensus was reached by the Fire District Board and all in attendance that the structure of goals and objectives in the *Plan* were a satisfactory framework for the local mitigation plan for the district. Chief Berndt, the Taney County EMD who was present at all meetings throughout the planning process for the *Plan*, described the development process for actions for the *Plan* and prioritization using the STAPLEE with simple scores method presented on p. 5-7 in Part 5: Mitigation within the main body of the *Plan*. This method was used because of its emphasis on a cost benefit review. Definitions of the STAPLEE criteria are presented on p. 5-10 in the main body of the *Plan*. A sample of the STAPLEE score sheet is included on p. 5-11 of Part 5 in the main body of the plan.

SMCOG staff supplied a listing of applicable mitigation actions from the *Plan* for the District for all meeting attendees. All in attendance were asked to review the mitigation actions and STAPLEE scores with priority ranks. There was concurrence that these actions and priority ranks were accurate in terms of the District’s vulnerability and resources. At this point SMCOG staff asked meeting attendees if there were any other actions that should be discussed and considered. No other actions were discussed or brought up.

Although the District lacks the capability to pursue some of the mitigation actions developed in the main body of the *Plan*, the District board fully endorsed the range of actions developed and will work mitigation activities whenever possible.

Analysis and Prioritization of Mitigation Actions

Tables 5-6 through 5-23 beginning on p. 5-21 are overviews of mitigation actions for each jurisdiction participating in the *Plan*. The overview tables for each jurisdiction categorize each action into one of the six categories of mitigation. In addition, the tables identify the position or department responsible for implementing and administering the action, potential sources of funding, expected timeframes for completion, and a benchmark for evaluating the results of the action for each participating jurisdiction.

Table 5H-3 is an overview of mitigation actions for the Western Taney County Fire District. The overview table for each jurisdiction categorizes each action into one of the six categories of mitigation listed on pp. 5-1 thru 5-3 in the main body of the *Plan*. In addition, the table identifies the position or department responsible for implementing and administering the action, potential sources of funding, expected timeframes for completion, and a benchmark for evaluating the results of the action.

Table 5-6: Overview of Mitigation Actions for The Western Taney County Fire District

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer (Partners)	Potential Funding Sources	Evaluation
1.1.1	Encourage the media and leverage social media platforms to publish or broadcast information about natural hazard vulnerability, preparedness plans and mitigation efforts throughout the county.	Emergency Services/ Public Information	Revised	High 2012 & Continuing	Fire Chief, Admin. Asst, (County EMA.)	Existing Budget & Personnel	Maintain media relationships and encourage the continued awareness and preparedness for all hazards.
1.1.2	Increase public awareness on techniques to reduce risk, such as the use of fire resistant materials in construction, landscaping techniques and planting materials that are more resistant to the spread of wildfire.	Public Information/ Natural Resource Protection	New	High 2012 & continuing	Fire Chief, (County EMA.)	Existing Budget & Personnel	Information developed and distributed with building permits or development proposals. Use of materials and landscaping increased.
1.2.5	Promote local severe weather alert applications for mobile communications devices, such as; Branson Severe Weather Alerts, KTTS, KSPR and KY3 Severe Weather Warnings. These should be in addition to, not in replace of NOAA all-hazard radios with S.A.M.E. technology.	Emergency Services	New	Medium 2014/2015	Fire Chiefs, (County EMA)	Existing Budget & Personnel	Weather alerts posted and promoted on local government and community organization websites
1.3.1	Integrate safe room construction in new community buildings, schools, large facilities and other establishments serving the public in areas of population concentration where feasible.	Property Protection	Revised	Low 2017	Fire District Board, Admin. Asst.	HMGP, Internal funds	Community safe room locations completed increased above 2012 levels.
3.1.1	Encourage all elected officials, public administrators, community stakeholders and responders to participate in National Incident Management System (NIMS) training and compliance programs.	Emergency Services	New	Medium 2014/2015	Fire Chiefs, (Fire District Board)	Government program funds, Internal funds	Increase number of trained officials and stakeholders by 50%.
3.1.3	Continue to inventory alternative firefighting water sources and enhance water rescue capabilities.	Emergency Services	Ongoing	Low 2017	Fire Chief, (RHSOC Region D)	Existing Budget & Personnel	Inventory and capabilities maintained and updated as needed.
3.1.4	Identify debris disposal and burning locations in the county to facilitate recovery from large scale hazard events	Emergency Services	Revised	Low 2017	Fire Chief, (County EMA)	Existing Budget & Personnel	Possible locations identified and updated as needed.

Table 5-6: Overview of Mitigation Actions for The Western Taney County Fire Distict

Action Codes	Actions	Category	New Ongoing Revision	Priority Rank and Estimated Target Date	Probable Lead Organizer (Partners)	Potential Funding Sources	Evaluation
3.2.1	Implement burn restrictions during time of weather conditions conducive to the spread of wildfire.	Prevention	New	Medium 2014/2015	Fire District Board (EMA)	Internal funds	Burn restrictions implemented and enforced.
3.2.2	Integrate hazard mitigation into comprehensive and long range plans, capital improvement programs, zoning ordinances, subdivision and storm water management regulations.	Prevention/ Natural Resource Protection	New	Medium 2014/2015	Frie District Board, Fire Chief	Internal funds	Integrate elements of the mitigation plan during plan updates and ordinance amendments.
3.3.1	Continue to monitor and identify funding from state and federal programs for hazard mitigation activities.	Prevention	Ongoing	High 2012 & Continuing	Fire Chiefs, Administrative Asst.	Existing Budget & Personnel	Funding programs researched and identified.

Part H6: Plan Maintenance

The method for continued public involvement, evaluating, monitoring and updating the *Plan* is described on p. 6-1 of Part 6: Plan Maintenance in the main body of the *Plan*. The Western Taney County Fire District will participate in the process described in the main body of the *Plan*.



Southwest Missouri
Council of Governments

Ms. Heidi Carver
State Emergency Management Agency
PO Box 116
Jefferson City, MO 65101

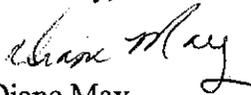
June 28, 2013

RE: Western Taney County Fire District Addendum to the Taney County Multi-Jurisdictional
NHMP

Ms. Carver,

The Southwest Missouri Council of Governments fully supports the Western Taney County Fire District's efforts to be included in the Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan which received final approval from FEMA on January 17, 2013. SMCOG was responsible for developing the Taney County plan that was subsequently adopted by jurisdictions that participated in the planning process. SMCOG worked with the Western Taney County Fire District in developing its addendum to the plan and concurs that they have met all requirements of jurisdictions that participated in approved multi-jurisdictional local mitigation plan for Taney County. SMCOG supports the inclusion of the fire district as a participating jurisdiction in the Taney County Multi-Jurisdictional NHMP. Upon approval of the addendum from SEMA and FEMA, the district will adopt the addendum and the Taney County Multi-Jurisdictional NHMP in its entirety.

Sincerely,


Diane May
Executive Director

**A RESOLUTION OF INTENT TO PARTICIPATE IN NATURAL HAZARD MITIGATION
AND TO WORK TOWARD BECOMING A SAFER COMMUNITY.**

WHEREAS, the Western Taney County Fire District recognizes that no community is immune from natural hazards whether it be tornado/severe thunderstorm, flood, severe winter weather, drought, heat wave, earthquake, dam failure, wildfire or sinkholes and recognizes the importance enhancing its ability to withstand natural hazards as well as the importance of reducing the human suffering, property damage, interruption of public services and economic losses caused by those hazards; and

WHEREAS, the Western Taney County Fire District may have previously pursued measures such as flood proofing modifications, storm water system planning and management, or installation of equipment for emergency power generation to minimize the impact of natural hazards; and

WHEREAS, the Federal Emergency Management Agency and the State Emergency Management Agency have developed a natural hazard mitigation program that assists communities in their efforts to become Disaster-Resistant Communities which are sustainable communities after a natural disaster that focus, not just on disaster relief, but also on recovery and reconstruction that brings the community to at least pre-disaster conditions in an accelerated, orderly and preplanned manner; and

WHEREAS, by participating in the Natural Hazard Mitigation program, the Western Taney County Fire District will be eligible to apply for post-disaster mitigation funds; and

WHEREAS, the Western Taney County Fire District desires to commit to working with government partners and community partners to implement the Natural Hazard Mitigation Plan; and

WHEREAS, the Western Taney County Fire District will implement pertinent precepts of the mitigation plan by incorporation into other plans and mechanisms where appropriate; and

WHEREAS, the Western Taney County Fire District will participate in the evaluation and review of the Plan after a disaster as well as complete a mandated five-year update submitted to the State Emergency Management Agency and the Federal Emergency Management Agency for review and approval; and

NOW, THEREFORE BE IT RESOLVED BY THE Board of Directors of the Western Taney County Fire District AS FOLLOWS:

The Western Taney County Fire District hereby adopts the Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan attached hereto for the purpose of building a safer community by reducing natural hazard vulnerability.

ADOPTED this 11th day of September, 2013


David Waters, President

Attest: 
Robert Dixon, Vice-President

**Exhibit H-A: Planning Process and Public
Involvement Documentation**

Western Taney County Fire District Taney County Multi-Jurisdictional NHMP Addendum
 Fire District Board/Plan Advisory Meeting
 Western Taney Fire Office
 June 12, 2013 5:30 p.m.
 Sign-in (Please Print)

Name	Jurisdiction/Organization	Email/Telephone
Dane Fawcett	SMCOG	—
[Signature]	WTC FPD	
[Signature]	WTFPD	
Daniel Waters	WTFPD	
[Signature]	WTFPD	
Knoth Hunt	WTC FPD	
Chris Berndt	WTC FPD	chris.berndt@westerntaneyfire.com
[Signature]	WTC FPD	
Michael Majors	WTC FPD	
Michael Abart	WTC FPD	
Kayla Abart	WTC FPD	Countrygirl0942@yahoo.com
Janet Clayton	WTC FPD	

Western Taney County Fire District Taney County Multi-Jurisdictional NHMP Addendum
Fire District Board/Plan Advisory Meeting
Western Taney Fire Office
June 12, 2013 5:30 p.m.
Sign-in (Please Print)

Name	Jurisdiction/Organization	Email/Telephone
Charles Jassei	WTCFPD	
Mike Schultz	WTCFPD	mschultz67@yahoo.com
Tyler Nevins	WTCFPD	Tnevins@hotmail.com
Stephanie Single	WTCFPD	stephanie.a.single@gmail.com
Joshua Single	WTCFPD	jsingle@tcad.net
Bobby Reeves	WTCFPD	jrjcr88in@gmail.com

AFFIDAVIT OF PUBLICATION

STATE OF MISSOURI)

SS

COUNTY OF TANEY)

I, Mike Schuver, being duly sworn according to law, state that I am the Publisher of the Branson Tri-Lakes News, a newspaper published twice a week of general circulation in the Counties of Taney and Stone, State of Missouri, the city of publication; which newspaper has been published regularly and consecutively for a period of three years and has a list of bona fide subscribers, voluntarily engaged as such who have paid or agreed to pay a stated price for a subscription for a definite period of time, and that such newspaper has complied with the provisions of Section 493.050, Revised Statutes of Missouri 2000, and Section 59.310 Revised Statutes of Missouri 2000. The affixed notice appeared in said newspaper in the following consecutive times:

1st Insertion	Vol. 102	No. 46,	8th day of	June, 2013
2nd Insertion	Vol. 102	No. ,	day of	
3rd Insertion	Vol. 102	No. ,	day of	
4th Insertion	Vol. 102	No. ,	day of	

Mike Schuver

Subscribed and sworn to before me on the _____ day of
June, 2013

Notary Public

Publisher's Fee	48.00
Affidavit	2.00
TOTAL	50.00

continued on page 2

**Western Taney County Fire
Protection District
Taney County Multi-Jurisdictional
Natural Hazard Mitigation
Plan Addition
Notice of Public Meeting**

The Western Taney County Fire Protection District is working with the Southwest Missouri Council of Governments to develop a local natural hazard plan. The project will create an addendum to the Taney County Multi-Jurisdictional Natural Hazard Mitigation for the Western Taney County Fire Protection District. The addendum will allow the Western Taney County Fire Protection District to be a recognized participating jurisdiction in the plan; thereby, making the jurisdiction eligible for FEMA hazard mitigation grant programs.

The Plan addendum will be discussed at a Board Meeting of the Western Taney County Fire Protection District, Wednesday, June 12 at 5:30 p.m. in Fire District Offices located at 221 Jefferson Rd. in Branson. The public is invited to attend and comment on the plan addendum. Items to be discussed include: an assessment of the District's vulnerability to all natural hazards that may affect the planning area; an assessment of the impact of each hazard to District assets and a discussion of strategies to mitigate the impact of natural hazards within the jurisdiction.

For further information contact: Dave Faucett, Community Planner, Southwest Missouri Council of Governments at 417-836-6901 or davefaucett@missouristate.edu.

B46/1t



The Southwest Missouri Council of Governments

Enhancing the quality of our communities through regional cooperation

About

Members

Directory

Staff

Contact

Home

Publications

Programs

Hazard Mitigation

Transportation

RPC Resources

Links

Calendar

Welcome to the SMCOG website!

Municipal Officials Training WorkShop--August 2, 2012

Municipal Officials Training Workshop scheduled for Thursday, August 2, 2012 from 5:00pm-9:00pm at the Springfield-Greene County Library Center, 4653 S. Campbell Ave., Springfield, MO. (Light meal 5:00pm-5:30pm.) Be sure to get your reservations in early as we have limited seating. Richard Sheets from the Missouri Municipal League will again lead the workshop. You do not need to be an elected official to attend.

[Flyer](#)

[Registration](#)

Edited: 2012-07

Upcoming Meetings and Events

- May 22, 2012 - Taney County Natural Hazards Mitigation Plan [Public Meeting](#)
- May 31, 2012 - Stone County Natural Hazards Mitigation Plan [Public Meeting](#)
- June 7, 2012 - Polk County Natural Hazards Mitigation Plan [Public Meeting](#)
- June 12, 2012 - Taney County Natural Hazards Mitigation Plan [Public Meeting](#)
- June 14, 2012 - Stone County Natural Hazards Mitigation Plan [Public Meeting](#)
- July 26, 2012 -Polk County Natural Hazards Mitigation Plan [Public Meeting](#)
- August 2, 2012 [Flyer](#)
[Registration Form](#)
- August 10, 2012 -Polk County Natural Hazards Mitigation Plan [Public Meeting](#)
- October 18, 2012 - Polk County Natural Hazards Mitigation Plan [Public Meeting](#)
- October 24, 2012 -SMCOG Annual Breakfast Meeting [Invitation Flyer](#)
- November 8, 2012 -Polk County Natural Hazards Mitigation Plan [Public Meeting](#)
- January 11, 2013 -Polk County Natural Hazards Mitigation Plan [Public Meeting](#)
- June 12, 2013-Western Taney County Fire Protection District Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Addition
[-Notice of Public Meeting-](#)

Edited: 2012-05

Missouri Broadband Now Regional Technology Planning

[Final-SMCOG Broadband Strategic Plan](#)

- [Final-SMCOG Broadband Strategic Plan Appendices](#)

Edited: 2012-04

Natural Hazards Mitigation Plan Updates

The Christian, Webster, and Barry County Multi-Jurisdictional Natural Hazards Mitigation Plans have been approved. Click on the links below to view the final plans.

- [Barry County Multi-Jurisdictional Natural Hazards Mitigation Plan](#), Approved January 2011
- [Christian County Multi-Jurisdictional Natural Hazards Mitigation Plan](#), Approved June 2011
- [Lawrence County 2013 Multi-Jurisdictional Natural Hazards Mitigation Plan](#), Approved March 2013
- [Polk County 2005 Multi-Jurisdictional Natural Hazards Mitigation Plan Update - NEW](#)
- [Shell Knob Road District Natural Hazards Mitigation Plan Addition - NEW](#)
- [Stone County 2013 Multi-Jurisdictional Natural Hazards Mitigation Plan Update - NEW](#)
- [Taney County 2013 Multi-Jurisdictional Natural Hazards Mitigation Plan Update - NEW](#)
- [Webster County Multi-Jurisdictional Natural Hazards Mitigation Plan](#), Approved June 2011

Edited: 2012-04

Regional Images



Lake Taneycomo from Hollister

Affiliates



Missouri State UNIVERSITY



Faucett, David B

From: Faucett, David B
Sent: Monday, June 10, 2013 12:00 PM
To: Allen Oller; Amy Chamberlin; Angela Leist; Bill Carpenter; 'Bob Atchley'; Bradleyville Fire; 'Brent Blevins'; Charles Allgood; 'Charles Osbourn'; 'Chris Berndt'; 'Cindy Rains'; Darrel Cornelius; 'Darryl Coontz'; 'Debbie Adams'; 'Debbie Redford'; Debi Meeds; 'Doug Hayter'; Ed Zielonka; Eddie Coxie; Forsyth Chamber of Commerce (info@forsythmissouri.net); Gary Judd; Harriet Leenerts; Hollister Area Chamber of Commerce; 'Jeff Mingus'; 'Jim Lawson'; 'Joe Combs'; John Soutee; Judy Daniel; Kenny Nave; Kim Foster; 'Larry Cline'; 'Melissa Duckworth'; 'Michelle Silvey'; 'Nathan Bower'; 'Patsy Alexander'; 'Peggy Golden'; Pete Rothrock; Phil Amtower; 'Raeanne Presley'; 'Richard Melton'; 'Robert Comer'; 'Robert Griffith'; 'Robert Niezgodka'; Rockaway Beach Chamber; 'Ron Potter'; Ross Summers; Scott Ewing; Sherry Anderson; 'Stephanie Schultz'; Taneyville Clerk; 'Ted Martin'; Tom Martin; 'Trent Bowers'; Wayne Dietrich
Subject: Western Taney Fire-2012 Taney County HMP Addendum

Western Taney County Fire Protection District Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Addition

Notice of Public Meeting

The Western Taney County Fire Protection District is working with the Southwest Missouri Council of Governments to develop a local natural hazard plan. The project will create an addendum to the Taney County Multi-Jurisdictional Natural Hazard Mitigation for the Western Taney County Fire Protection District. The addendum will allow the Western Taney County Fire Protection District to be a recognized participating jurisdiction in the plan; thereby, making the jurisdiction eligible for FEMA hazard mitigation grant programs.

The Plan addendum will be discussed at a Board Meeting of the Western Taney County Fire Protection District, Wednesday, June 12 at 5:30 p.m. in Fire District Offices located at 221 Jefferson Rd in Branson. The public is invited to attend and comment on the plan addendum. Items to be discussed include; an assessment of the District's vulnerability to all natural hazards that may affect the planning area, an assessment of the impact of each hazard to District assets and a discussion of strategies to mitigate the impact of natural hazards within the jurisdiction.

For further information contact: Dave Faucett, Community Planner, Southwest Missouri Council of Governments at 417-836-6901 or davefaucett@missouristate.edu.

Thank you,
Dave Faucett
Community Planner
Southwest Missouri Council of Governments c/o
Missouri State University
901 S. National
Springfield, MO 65897
Ph: 417 836-6901
Fx: 417 836-4146

AFFIDAVIT OF PUBLICATION

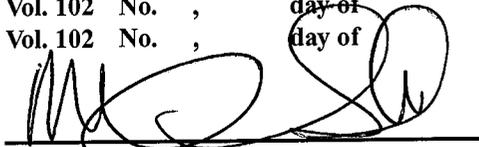
STATE OF MISSOURI)

ss

COUNTY OF TANEY)

I, Mike Schuver, being duly sworn according to law, state that I am the Publisher of the Branson Tri-Lakes News, a newspaper published twice a week of general circulation in the Counties of Taney and Stone, State of Missouri, the city of publication; which newspaper has been published regularly and consecutively for a period of three years and has a list of bona fide subscribers, voluntarily engaged as such who have paid or agreed to pay a stated price for a subscription for a definite period of time, and that such newspaper has complied with the provisions of Section 493.050, Revised Statutes of Missouri 2000, and Section 59.310 Revised Statutes of Missouri 2000. The affixed notice appeared in said newspaper in the following consecutive times:

1st Insertion	Vol. 102	No. 51,	26th day of	June, 2013
2nd Insertion	Vol. 102	No. ,	day of	
3rd Insertion	Vol. 102	No. ,	day of	
4th Insertion	Vol. 102	No. ,	day of	



Mike Schuver

Subscribed and sworn to before me on the 26th day of June, 2013



Christine K. Michael

Notary Public

Publisher's Fee	44.00
Affidavit	2.00
TOTAL	46.00

continued on page 2

CHRISTINE K. MICHAEL
Notary Public - Notary Seal
STATE OF MISSOURI
Taney County - Comm#09439372
My Commission Expires Dec. 28, 2013



**Taney County Western Fire District
Taney County Multi-Jurisdictional
Natural Hazard Mitigation
Plan Addendum
Notice of Public Comment**

The Western Taney County Fire District, in conjunction with the Southwest Missouri Council of Governments, has developed a local natural hazard plan. The project will be added as an addendum to the Taney County Multi-Jurisdictional Natural Hazard Mitigation. The addendum will allow the Western Taney County Fire District to be a recognized participating jurisdiction in the plan; thereby, making the jurisdiction eligible for FEMA hazard mitigation grants funding.

The preliminary draft is available for review and comment online at www.smcog.missouristate.edu until Friday, July 19, 2013. The public is strongly encouraged to comment on the plan and ensure that the needs and values of residents are being addressed by the Western Taney County Fire District in mitigating the potential damages to people and property in the event of natural hazards. A print copy of the plan is available at the Western Taney County Fire Station in Branson.

Please direct your comments to Dave Faucett, Community Planner, Southwest Missouri Council of Governments at 417-836-6901 or davefaucett@missouristate.edu.

B51/1t



The Southwest Missouri Council of Governments

Enhancing the quality of our communities through regional cooperation

About

Members

Directory

Staff

Contact

Home

Publications

Programs

Hazard Mitigation

Transportation

RPC Resources

Links

Calendar

Welcome to the SMCOG website!

Municipal Officials Training WorkShop--August 2, 2012

Municipal Officials Training Workshop scheduled for Thursday, August 2, 2012 from 5:00pm--9:00pm at the Springfield-Greene County Library Center, 4653 S. Campbell Ave., Springfield, MO. (Light meal 5:00pm-5:30pm.) Be sure to get your reservations in early as we have limited seating. Richard Sheets from the Missouri Municipal League will again lead the workshop. You do not need to be an elected official to attend.

[Flyer](#)

[Registration](#) Edited: 2012-07

Upcoming Meetings and Events

- June 12, 2013-Western Taney County Fire Protection District Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Addition
[-Notice of Public Meeting-](#)
- June 27, 2013-Dallas County Multi-Jurisdictional Natural Hazard Mitigation Plan-[Notice of Public Meeting](#)
- June 28, 2013-[Transportation Forum "How Small Communities Finance Transportation Projects"](#)
- Notice for Public Meeting and Comment: Western Taney County Fire District NHMP Addendum. [Click Here](#) for to Review the Plan.

Edited: 2012-05

Missouri Broadband Now Regional Technology Planning

[Final-SMCOG Broadband Strategic Plan](#)

- [Final-SMCOG Broadband Strategic Plan Appendices](#)

Edited: 2012-04

Natural Hazards Mitigation Plan Updates

The Christian, Webster, and Barry County Multi-Jurisdictional Natural Hazards Mitigation Plans have been approved. Click on the links below to view the final plans.

- [Barry County](#) Multi-Jurisdictional Natural Hazards Mitigation Plan, Approved January 2011
- [Christian County](#) Multi-Jurisdictional Natural Hazards Mitigation Plan, Approved June 2011
- [Dallas County](#) 2005 Multi-Jurisdictional Natural Hazards Mitigation Plan Update-NEW
- [Lawrence County](#) 2013 Multi-Jurisdictional Natural Hazards Mitigation Plan, Approved March 2013
- [Polk County](#) 2005 Multi-Jurisdictional Natural Hazards Mitigation Plan Update - NEW
- [Shell Knob Road District](#) Natural Hazards Mitigation Plan Addition - NEW
- [Stone County](#) 2013 Multi-Jurisdictional Natural Hazards Mitigation Plan Update - NEW
- [Taney County](#) 2013 Multi-Jurisdictional Natural Hazards Mitigation Plan Update - NEW
- [Webster County](#) Multi-Jurisdictional Natural Hazards Mitigation Plan, Approved June 2011

Edited: 2012-04

Regional Images



Webster County Courthouse

Affiliates




Missouri State
UNIVERSITY



Center for Urban Planning and Management **Missouri State**

Southwest Missouri Council of Governments | 901 South National Avenue | Springfield, MO 65897
Phone: (417) 836-6900 | Fax: (417) 836-4146 | Email: SMCOG

Faucett, David B

From: Faucett, David B
Sent: Friday, June 21, 2013 3:21 PM
To: Allen Oller; Amy Chamberlin; Angela Leist; Bill Carpenter; 'Bob Atchley'; Bradleyville Fire; 'Brent Blevins'; Charles Allgood; 'Charles Osbourn'; 'Chris Berndt'; 'Cindy Rains'; Darrel Cornelius; 'Darryl Coontz'; 'Debbie Adams'; 'Debbie Redford'; Debi Meeds; 'Doug Hayter'; Ed Zielonka; Eddie Coxie; Forsyth Chamber of Commerce (info@forsythmissouri.net); Gary Judd; Harriet Leenerts; Hollister Area Chamber of Commerce; 'Jeff Mingus'; 'Jim Lawson'; 'Joe Combs'; John Soutee; Judy Daniel; Kenny Nave; Kim Foster; 'Larry Cline'; 'Melissa Duckworth'; 'Michelle Silvey'; 'Nathan Bower'; 'Patsy Alexander'; 'Peggy Golden'; Pete Rothrock; Phil Amtower; 'Raeanne Presley'; 'Richard Melton'; 'Robert Comer'; 'Robert Griffith'; 'Robert Niezgodá'; Rockaway Beach Chamber; 'Ron Potter'; Ross Summers; Scott Ewing; Sherry Anderson; 'Stephanie Schultz'; Taneyville Clerk; 'Ted Martin'; Tom Martin; 'Trent Bowers'; Wayne Dietrich
Subject: Western Taney Fire-2012 Taney County HMP Addendum

**Taney County Western Fire District
Taney County Multi-Jurisdictional Natural Hazard Mitigation Plan Addendum**

Notice of Public Comment

The Western Taney County Fire District, in conjunction with the Southwest Missouri Council of Governments, has developed a local natural hazard plan. The project will be added as an addendum to the Taney County Multi-Jurisdictional Natural Hazard Mitigation. The addendum will allow the Western Taney County Fire District to be a recognized participating jurisdiction in the plan; thereby, making the jurisdiction eligible for FEMA hazard mitigation grants funding.

The preliminary draft is available for review and comment online at www.smcog.missouristate.edu until Friday, July 19, 2013. The public is strongly encouraged to comment on the plan and ensure that the needs and values of residents are being addressed by the Western Taney County Fire District in mitigating the potential damages to people and property in the event of natural hazards. A print copy of the plan is available at the Western Taney County Fire Station in Branson.

Please direct your comments to Dave Faucett, Community Planner, Southwest Missouri Council of Governments at 417-836-6901 or davefaucett@missouristate.edu.

Thank you,
Dave Faucett
Community Planner
Southwest Missouri Council of Governments c/o
Missouri State University
901 S. National
Springfield, MO 65897
Ph: 417 836-6901
Fx: 417 836-4146