

# 1 Introduction and Planning Process

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## 1.1 Purpose

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Pulaski County and 11 other jurisdictions prepared this local hazard mitigation plan to guide hazard mitigation planning for the purpose of better protecting the people and property of the county from the effects of natural hazard events. Hazard mitigation is defined by FEMA as “any sustained action taken to reduce or eliminate long-term risk to human life and property from a hazard event.” Hazard mitigation planning is the process through which hazards that threaten communities are identified, likely impacts of those hazards are determined, mitigation goals are set and appropriate strategies to lessen impacts are determined, prioritized and implemented.

The mission of the Pulaski County Hazard Mitigation Plan is to substantially and permanently reduce the county’s vulnerability to natural hazards. This plan demonstrates the communities’ commitment to reducing risks from hazards and serves as a tool to help decision makers direct mitigation activities and resources for the next five years. The plan is intended to promote sound public policy designed to protect citizens, critical facilities, infrastructure, private property and the natural environment. This can be achieved by increasing public awareness, documenting resources for risk reduction and loss prevention and identifying activities to guide the community towards the development of a safer, more sustainable community.

This plan was also developed to make Pulaski County and participating cities and school districts eligible for certain federal disaster assistance as required by the Robert T. Stafford Disaster Relief and Emergency Act (Public Law 93-288). Those programs include the Federal Emergency Management Agency’s (FEMA) Hazard Mitigation Grant Program, Pre-Disaster Mitigation Program and Flood Mitigation Assistance Program. The plan has been prepared in accordance with the requirements of the Disaster Mitigation Act of 2000 (Public Law 106-390) and developed and organized within the rules and regulations established under 44 CFR 201.6 published in the *Federal Register* on February 26, 2002 and finalized in October 31, 2007. Guidance for the development of this plan includes FEMA’s Local Mitigation Planning

Handbook, March 2013 and FEMA's Local Mitigation Plan review Guide, October 1, 2011. Those jurisdictions within Pulaski County that do not adopt the 2021 plan will not be eligible for funding through these grant programs.

Neither Pulaski County, nor any cities in Pulaski County participate in the NFIP Community Rating System (CRS).

## **1.2 Background and Scope**

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The 2021 Pulaski Hazard Mitigation Plan is an update of the original plan developed and approved in 2011. The first update of the 2011 plan was approved by FEMA on April 1, 2016. The revised document will be valid for five years from approval by FEMA. It is a multi-jurisdictional plan that covers the participating jurisdictions within the County's borders, all of whom adopted both the 2011 and 2016 plan, including the following:

- Pulaski County
- City of Crocker
- City of Dixon
- City of Richland
- City of St. Robert
- City of Waynesville
- Dixon R-I School District
- Crocker R-II School District
- Swedeborg R-III School District
- Richland R-IV School District
- Laquey R-V School District
- Waynesville R-VI School District

The information and guidance in this plan document will be used to help guide and coordinate mitigation activities and decisions for local jurisdictions and organizations. Proactive mitigation planning will help reduce the cost of disaster response and recover to local communities and residents by protecting critical infrastructure, reducing liability exposure and minimizing overall community impacts and disruptions. Pulaski County has been affected by natural disasters in the past and participating jurisdictions and organizations are committed to reducing the impacts of future incidents and becoming eligible for hazard mitigation-related funding opportunities.

## **1.3 Plan Organization**

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The plan contains a mitigation action listing, a discussion of the purpose and methodology used to develop the plan, a profile on Pulaski County, as well as the hazard identification and vulnerability assessment of natural hazards. In addition, the plan offers a discussion of the community's current capability to implement the goals, objectives and strategies identified through the planning process.

The plan is organized as follows:

- Executive Summary
- Chapter 1: Introduction and Planning Process
- Chapter 2: Planning Area Profile and Capabilities
- Chapter 3: Risk Assessment
- Chapter 4: Mitigation Strategy
- Chapter 5: Plan Implementation and Maintenance
- Appendices

To assist in the explanation of the above identified contents, there are several appendices included which provide more detail on specific subjects. This plan is intended to improve the ability of Pulaski County and the jurisdictions within to handle disasters and will document valuable local knowledge on the most efficient and effective ways to reduce loss.

## 1.4 Planning Process

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**44 CFR Requirement 201.6(c)(1): [The plan shall document] the planning process used to develop the plan, including how it was prepared, who was involved in the process and how the public was involved.**

The Pulaski County Hazard Mitigation Planning Committee (HMPC) first organized in 2019 when the Missouri State Emergency Management Agency (SEMA) provided grant funds and contracted with the Meramec Regional Planning Commission (MRPC) to develop a hazard mitigation plan for the county. MRPC is a council of local governments in south central Missouri serving Crawford, Dent, Gasconade, Maries, Osage, Phelps, Pulaski and Washington counties.

MRPC's role in developing and updating the Pulaski County Hazard Mitigation plan included assisting in the formation of the mitigation planning committee (MPC) and facilitating the planning meetings; soliciting public input; and producing the draft and final plan for review by the MPC, SEMA and FEMA. Staff carried out the research and documentation necessary for the planning process. In addition, MRPC compiled and presented the data for the plan, helped the HMPC with the prioritization process and insured that the final document met the DMA requirements established by federal regulations and the most current planning guidance.

In 2018, SEMA secured a grant to develop the Pulaski County Multi-Hazard Mitigation Plan and contracted with MRPC to facilitate the planning process for the plan development. MRPC staff has followed the most current planning guidance provided by FEMA for the purpose of insuring that the plan meets all of the requirements of the Disaster Mitigation Act as established by federal regulations.

The Pulaski County Multi-Hazard Mitigation Plan was developed as the result of a collaborative effort among Pulaski County, the City of Crocker, City of Dixon, City of Richland, City of St. Robert, City of Waynesville, Dixon R-I School District, Crocker R-II School District, Swedeborg R-III School District, Richland R-IV School District, Laquey R-V School District, Waynesville R-VI School District, public agencies, non-profit organizations, the private sector as well as regional, state and federal agencies. MRPC contacted and asked for volunteers to serve on the planning committee from the county and local city governments, school districts, the county health department, local businesses and utility companies. The mailing list is included in

**Appendix B: Planning Process.** This cross-section of local representatives was chosen for their experience and expertise in emergency planning and community planning in Pulaski County. Staff worked with the Pulaski County HMPC to collect and analyze information on hazards and disasters that have impacted the county as well as document mitigation activities that have occurred during the past five years.

Due to time and duty constraints, not all the jurisdictions that were invited to participate in the HMPC were able to attend meetings. However, all of the jurisdictions provided information to develop the document, reviewed the plan and provided input. Interviews were conducted with stakeholders from the community and several planning meetings were conducted during the plan development.

The 2021 planning process began with a meeting held at the Pulaski County Courthouse on February 20, 2020. MRPC staff provided an overview of the hazard mitigation planning process and review of the existing hazard mitigation plan. The group reviewed and discussed hazard mitigation goals and what progress had been made on hazard mitigation action items over the past four years. The group began the process of reviewing the list of action items - making note of those action items that had been accomplished, those that were no longer applicable and considered adding projects to the list. The group agreed to review plan chapters as they were completed through email or postings on the MRPC website. The second meeting was held on June 23, 2020 via Zoom and conference call. The HMPC received a report on the public survey and asked that the survey be promoted again in order to get more responses. They also completed their review and revision of the list of action items and applying the STAPLEE method (Social, Technical, Administrative, Political, Legal, Economic; Environmental) and applying cost benefit analysis to best determine priorities. A full description of the prioritization process is included in Chapter 4. The group agreed to review plan chapters as they were completed through email or postings on the MRPC website.

The final list of prioritized action items were mailed out to all jurisdictions and entities that had been invited to participate on the HMPC. Recipients were asked to review and provide feedback if they had concerns about how any of the projects were ranked, or if they had corrections or additions they wanted incorporated.

The third planning meeting was held via Zoom and conference call on September 29, 2020. The group reviewed and discussed the final results of the public survey and the first draft of the hazard mitigation plan. Chapters had been emailed out to jurisdictions and committee members for review and feedback. The HMPC were advised of the next steps – the public comment period and adoption of the plan document.

The draft plan was made available on-line and HMPC members were notified on where to find the document and asked to review and provide feedback.

All planning committee members were provided drafts of sections of the plan as they became available. Members of the planning committee reviewed the draft chapters and provided valuable input to MRPC staff. Additionally, through public committee meetings, press releases and draft plan posting on MRPC's website, ample opportunity was provided for public participation. An internet survey was provided for the public to provide input into the process. The results of that survey are included in the appendices. Jurisdictions in surrounding counties were also notified of where to view the revised plan and encouraged to provide input. Any comments, questions and discussions resulting from these activities were given strong consideration in the development of this plan.

Pulaski County further assisted in the planning process by issuing public notice of the planning meetings as well as scheduling meeting times at the County Courthouse in Waynesville and public notice of how to participate in Zoom/conference call meetings. County officials attended and participated in meetings.

The HMPC contributed to the planning process by:

- Attending and participating in meetings;
- Collecting data for the plan;
- Making decisions on plan content;
- Reviewing drafts of the plan document;
- Developing a list of needs;
- Prioritizing needs and potential mitigation projects; and
- Assisting with public participation and plan adoption

The HMPC did not formally meet on a regular basis as recommended in the plan due to COVID-19. However, mitigation has become a regular topic of discussion among the majority of jurisdictions included in the plan. A number of hazard mitigation projects have been completed in the county and hazard mitigation concepts are being incorporated into other planning projects. Table 1.2 provides information on who actively participated in the planning process and who they represented:

Opal Gibbs, Susan Alexander, Dana Turner, Dr. George Lauritson, Luge Hardman, Michele Brown, John Doyle, Bruce Harrill, Dan Cordova, Duane Doyle, Dr. Gary Doerhoff and Dr. Brian Henry all participated indirectly by providing information, completing the community questionnaire, participating in phone calls and email discussions, providing feedback on action items, reviewing plan chapters and assisting with adoption of the plan.

**Table 1.2 Jurisdictional Representatives Pulaski County Mitigation Planning Committee**

Name	Title	Department	Jurisdiction/Agency/Organization	Direct Participation	Indirect Participation
Gene Newkirk	Presiding Commissioner		Pulaski County	X	
David Ernst	County Clerk		Pulaski County	X	
Ryan Hicks	EMD	Office of Emergency Management	Pulaski County	X	
Glen Smith	Mayor		City of Crocker	X	
Opal Gibbs	City Clerk		City of Crocker		X
Mike Null	Mayor		City of Dixon		X
Glenda Pennington	City Clerk		City of Dixon		X
Susan Alexander	City Clerk		City of Richland		X
Dana Tanner	Mayor		City of Richland		X
Rick Hobbs	Fire Chief	Fire Department	City of Richland	X	
Dr. George Lauritson	Mayor		City of St. Robert		X
Anita Ivey	City Administrator		City of St. Robert	X	
Steve Long	Public Works Director	Public Works	City of St. Robert	X	

Name	Title	Department	Jurisdiction/Agency/ Organization	Direct Participation	Indirect Participation
Luge Hardman	Mayor		City of Waynesville		X
Michele Brown	City Clerk		City of Waynesville		X
Bruce Harrill	City Administrator		City of Waynesville		X
John Doyle	Asst. City Administrator		City of Waynesville		X
Dan Cordova	Police Chief		City of Waynesville		X
Doug Yurecko	Emergency Management Director	Office of Emergency Management/ Waynesville Rural Fire Protection District	City of Waynesville	X	
Ed Fowler		Waynesville Rural Fire Protection District		X	
Duane Doyle	Superintendent		Dixon R-I		X
Dr. Gary Doerhoff	Superintendent		Crocker R-II		X
Doug Jacobson	Superintendent		Swedeborg R-III	X	
Brian Lee	Superintendent		Richland R-IV	X	
Dr. Randy Caffey	Superintendent		Laquey R-V		
Dr. Brian Henry	Superintendent		Waynesville R-VI		X
Billy Cobb	Executive Director of Operations		Waynesville R-VI	X	
John Wright		Life Care of Waynesville		X	
Brett Hendrix	SEMA Region I Coordinator	MO SEMA		X	

## 1.5 Multi-Jurisdictional Participation

**44 CFR Requirement §201.6(a)(3): Multi-jurisdictional plans may be accepted, as appropriate, as long as each jurisdiction has participated in the process and has officially adopted the plan.**

Pulaski County invited incorporated cities, school districts, utility companies, medical facilities, nursing facilities, county health department, and not-for-profits to participate in the hazard mitigation planning process. Letters and/or emails were sent to each of the following:

- Pulaski County
- City of Crocker
- City of Dixon
- City of Richland
- City of St. Robert
- City of Waynesville
- Dixon R-I School District
- Crocker R-II School District
- Swedeborg R-III School District
- Richland R-IV School District
- Laquey R-V School District
- Waynesville R-VI School District
- Pulaski Co. Health Dept.
- Laclede Electric Co-Op, Inc.
- InterCounty Electric Co-Op, Inc.
- GascOsage Electric Co-Op, Inc.
- Pulaski County Public Water Supply District # 1
- Pulaski County Public Water Supply District # 2
- Pulaski County Public Water Supply District # 3
- Rosewood Manor Assisted Living
- Pulaski County Health Department
- Dixon Family Practice
- Mercy Clinic Family Medicine
- Pulaski Medical Clinic
- St. John's Clinic
- Phelps Health
- Sunset Village of the Ozarks, Inc.
- Life Care Center of Waynesville
- Dixon Nursing & Rehab
- Richland Care Center, Inc.
- Pulaski County Daily News
- Crocker Fire Protection District
- St. Robert Fire Department
- Pulaski County Growth Alliance
- MoDOT
- Missouri State Highway Patrol MO, SEMA

A copy of the mailing list and invitation letters are included in Appendix B: Planning Process.

The Disaster Mitigation Act requires that each jurisdiction must participate in the planning process and formally adopt the plan. There were a number of criteria established for participation. In order to be considered participating in the planning process, jurisdictions needed to do at least one of the following as well as adopt the plan:

- Providing a representative to serve on the planning committee;
- Participating in at least one or more meetings of the planning committee;
- Providing data for plan development through surveys and/or interviews;
- Identify goals and mitigation actions for the plan;
- Prioritize mitigation actions/projects for the plan;
- Review and comment on the draft plan document;
- Informing the public, local officials and other interested parties about the planning process and providing opportunities for them to comment on the plan;
- Provide in-kind match documentation; and
- Formally adopt the plan prior to submittal of the final draft to SEMA and FEMA for final approval.

Not all jurisdictions were able to attend the HMPC meetings. Most communities and school districts in Pulaski County are small and understaffed. It was not always feasible for representatives to travel to the meetings. However, all jurisdictions met at least one of the participation criteria. All jurisdictions were contacted by phone and asked to complete the data collection questionnaire. In some cases staff assisted jurisdictions with completion of the questionnaire. All jurisdictions were also contacted via email and phone regarding completion of in-kind match forms and if there were any questions regarding the information on the data collection questionnaires. The jurisdictions that participated in the process, as well as their level

of participation in the process are shown in Table 1.3. Documentation of meetings, including sign-in sheets are included in Appendix B: Planning Process.

**Table 1.3 Jurisdictional Participation in the Planning Process**

Jurisdiction	Meet-ing #1	Meet-ing #2	Meet-ing #3	Interviews	Data Collection Questionnaire/ Call	Update/Develop / Prioritize Mitigation Actions	Review/ Comment on Plan
Pulaski County	X	X	X	X	X	X	X
City of Crocker		X		X	X	X	X
City of Dixon			X		X	X	X
City of Richland	X	X		X	X	X	X
City of St. Robert	X	X	X	X	X	X	X
City of Waynesville	X	X		X	X	X	X
Dixon R-I					X	X	X
Crocker R-II					X	X	X
Swedeborg R-III	X				X	X	X
Richland R-IV	X	X	X		X	X	X
Laquey R-V					X	X	X
Waynesville R-VI	X		X		X	X	X

## 1.6 The Planning Steps

Pulaski County and MRPC worked together to develop the plan and based the planning process in FEMA’s *Local Mitigation Planning Handbook (March 2013)*, the *Local Mitigation Plan Review Guide (October 1, 2011)*, and *Integrating Hazard Mitigation Into Local Planning: Case Studies and Tools for Community Officials (March 1, 2013)*. The planning process has included organizing the county’s resources, assessing the risks to the county, developing the mitigation plan and implementing the plan and monitoring the progress of plan implementation.

The planning committee based their activities on the 10-step planning process adapted from FEMA’s Community Rating System (CRS) and Flood Mitigation Assistance programs. By following the 10-step planning process, the plan met funding eligibility requirements of the Hazard Mitigation Grant Program, Pre-Disaster Mitigation Program, Community Rating System and Flood Mitigation Assistance Program.

**Table 1.4 Pulaski County Planning Process**

Community Rating System (CRS) Planning Steps (Activity 510)	Local Mitigation Planning Handbook Tasks (44 CFR Part 201)
Step 1: Organize	Task 1: Determine the Planning Area and Resources Task 2: Build the Planning Team 44 CFR 201.6(c)(1)



<b>Community Rating System (CRS) Planning Steps (Activity 510)</b>	<b>Local Mitigation Planning Handbook Tasks (44 CFR Part 201)</b>
Step 2: Involve the public	Task 3: Create an Outreach Strategy 44 CFR 201.6(b)(2) & (3)
Step 3: Coordinate	Task 4: Review Community Capabilities 44 CFR 201.6(b)(2) & (3)
Step 4: Assess the hazard	Task 5: Conduct a Risk Assessment 44 CFR 201.6(c)(2)(i) 44 CFR 201.6(c)(2)(ii) & (iii)
Step 5: Assess the problem	
Step 6: Set goals	Task 6: Develop a Mitigation Strategy 44 CFR 201.6(c)(3)(i); 44 CFR 201.6(c)(3)(iii)
Step 7: Review possible activities	
Step 8: Draft an action plan	
Step 9: Adopt the plan	Task 8: Review and Adopt the Plan
Step 10: Implement, evaluate, revise	Task 7: Keep the Plan Current
	Task 9: Create a Safe and Resilient Community 44 CFR 201.6(c)(4)

### **Step 1: Organize the Planning Team (Handbook Tasks 1 & 2)**

The planning area was determined by the boundaries of Pulaski County. MRPC staff provided general information on the hazard mitigation plan review process at regular MRPC board meetings – providing both written and oral reports on the review process, schedules for the various plans; which ones had been funded; described match requirements; and asked mayors and commissioners to think about who should be included on the planning committees for each respective county.

The planning team was selected by contacting the leadership of each jurisdiction, explaining the process, and asking them to send appropriate representation to the planning meetings. In addition they were asked to provide input on who they wanted to include on the planning committee. Stakeholders such as electric cooperatives and sewer districts were also contacted and invited. In addition, it was suggested that representatives of some of the local critical facilities be included on the planning committee, such as medical clinics and nursing homes. All meetings were also publicized to allow additional interested parties to attend and participate. Pulaski County Commission offered to host the meetings at the courthouse. The first meeting was held on February 20, 2020 and due to COVID-19, the second meeting was delayed until June 23, 2020 and accomplished using Zoom and conference call. A third meeting was held on September 29, 2020 via Zoom and conference call for final review of the public survey and draft document.

At the first meeting on February 20, 2020, MRPC staff made introductions and provided an overview of the Pulaski County Hazard Mitigation plan. The group reviewed and discussed the goals and objectives. A good deal of the meeting was spent sharing information on what progress had been made in five years and discussing current and future needs and starting the review of action items. Staff offered to help those jurisdictions present with completion of their data collection surveys. Staff wrapped up the meeting by providing handouts on the current action items and asking the group to review them and come prepared to the next meeting to complete the review and update of action items. Staff also explained the process that would be used to prioritize the action items at the next meeting – using both the STAPLEE method and analyzing the cost benefit and provided handouts on both methods.

At the request of the committee, the second meeting was held via Zoom and conference call due to COVID-19. At the second meeting on June 23, 2020, the group reviewed, edited and prioritized the complete list of action items. MRPC staff shared the results of the public survey and after reviewing the results, the committee asked that it be publicized again and the members would also work to get additional responses. Staff went on to provide an explanation of the prioritization process using both the STAPLEE and cost benefit scoring. The committee then provided input on prioritizing each of the action items. Staff took those recommendations and developed a matrix of the action items with the STAPLEE and cost benefit scores. This matrix was emailed out to all of the individuals and organizations on the mailing list for the planning committee with a request for feedback. All suggestions for changes were incorporated into the plan. The group also reviewed the list of critical facilities in the plan and provided feedback on any changes or additions to that list. It was decided that staff would share plan chapters with the committee as they were completed. If necessary the group would meet again but no date was set.

The third meeting was held via Zoom and conference call on September 29, 2020 to review and discuss the results of the public survey and review the first draft of the plan document. Copies of the plan chapters had been shared with committee members over the course of several months as they were completed. MRPC staff also went over the public comment period and adoption process for the plan document.

Table 1.5 Schedule of Pulaski County Hazard Mitigation Planning Committee meetings outlines the dates that meetings were held and topics covered. Documentation of the planning process can be found in Appendix B: Planning Process.

**Table 1.5 Schedule of Pulaski County Hazard Mitigation Planning Committee Meetings**

Meeting	Topics	Date
Planning Meeting #1	Overview of hazard mitigation planning purpose and Pulaski County plan; grant programs linked to approved plan; participation requirements and public involvement; data collection questionnaires; discussion of hazards; critical facilities	February 20, 2020
Planning Meeting #2	Overview of hazard mitigation planning and Pulaski Co. HMP; discussion of action items for the next 5 years; prioritization of action items; road and bridge projects; integration of other data, reports, studies, and plans	June 23, 2020
Planning Meeting #3	Review and discussion of the public survey. Review of the first draft of the plan document. Overview of the public comment process and plan adoption process.	September 29, 2020

## Step 2: Plan for Public Involvement (Handbook Task 3)

**44 CFR Requirement 201.6(b): An open public involvement process is essential to the development of an effective plan. In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process shall include: (1) An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval.**

The HMPC followed the same process for public involvement and input as suggested by SEMA and FEMA and as was followed during earlier planning processes. The first planning committee meeting was held at the Pulaski County Courthouse. The second meeting was held via Zoom and conference call. Public notices were placed at the courthouse and the MRPC offices and press releases were done prior to the meeting to make the public aware. Meetings were also posted on the MRPC webpage. The public was notified each time the plan or sections of the plan were presented for review and discussion. A public survey was conducted and the results shared with the planning committee. A sample of the survey and the results of the survey are included in Appendix C: Public Survey. Planning committee members and public officials within the county as well as in surrounding counties were contacted, directed to the MRPC website ([www.meramecregion.org](http://www.meramecregion.org)) where a copy of the draft plan could be viewed or downloaded. The document was made available on the website on September 30, 2020. Hard copies of the final draft were placed at the Pulaski County Courthouse. A hard copy of the draft could be obtained directly from MRPC by request. Members of the local media, both radio, newspaper and online were invited to attend planning meetings. Information was shared by these media outlets with the public on the planning process and where to find draft copies of the plan. Copies of public notices and press release are included in Appendix B. Results of the public survey are included in Appendix C: Public Survey.

No comments were received from the public other than what was found in the public survey. Which are included in the Appendices.

## Step 3: Coordinate with Other Departments and Agencies and Incorporate Existing Information (Handbook Task 3)

**44 CFR Requirement 201.6(b): An open public involvement process is essential to the development of an effective plan. In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process shall include: (2) An opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia and other private and non-profit interests to be involved in the planning process. (3) Review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.**

Every effort was made to encourage input from stakeholders whose goals and interests interface with hazard mitigation in Pulaski County including:

- Neighboring communities
- Local and regional agencies involved in hazard mitigation activities
- Agencies with the authority to regulate development

- Businesses
- Academia
- Other private and non-profit interests

Stakeholders involved in the hazard mitigation planning process included Life Care Center of Waynesville, Phelps Health, Waynesville Fire Protection District and Region I Missouri State Emergency Management Agency area coordinator. No federal stakeholders were involved during the planning process. Lists of the people from the jurisdictions and stakeholders who were invited to participate in the planning process follows.

### Jurisdictional Representatives Invited to Participate in the Planning Process

Name	Title	Department	Jurisdiction/Agency/Organization
Gene Newkirk	Presiding Commissioner	County	Pulaski County
Lynn Sharp	Associate Commissioner	County	Pulaski County
Rick Zweerink	Associate Commissioner	County	Pulaski County
David Ernst	County Clerk	County	Pulaski County
Jimmy Bench	Sherriff	Sherriff's Dept.	Pulaski County
Ryan Hicks	EMD	Emergency Management	Pulaski County
Debra Baker	Admin.	Health Dept.	Phelps/Pulaski County Health Dept.
Glenn Smith	Mayor	City Admin.	City of Crocker
Opal Gibbs	City Clerk	City Admin.	City of Crocker
Nick Pappas	Police Chief	Police Dept.	City of Crocker
Don Theberge	Chief of Public Works	Public Works	City of Crocker
Mark Fancher	Fire Chief	Crocker Fire Protection District	City of Crocker
Dr. Gary Doerhoff	Superintendent	Administration	Crocker R-II
Mike Null	Mayor	Administration	City of Dixon
Glenda Pennington	City Clerk	Administration	City of Dixon
Gary Brankel	Marshal	Police Dept.	City of Dixon
Dr. Duane Doyle	Superintendent	Administration	Dixon R-I
Dana Turner	Mayor	Administration	City of Richland
Susan Alexander	City Clerk	Administration	City of Richland
Jaime Solis	Marshal	Police Dept.	City of Richland
Steve Alexander	Public Works Director	Public Works	City of Richland
Rick Hobbs	Fire Chief	Richland Fire Protection District	City of Richland
Brian Lee	Superintendent	Administration	Richland R-IV
Dr. Doug Jacobson	Superintendent	Administration	Swedeborg R-III
Dr. George Lauritson	Mayor	Administration	City of St. Robert
Anita Ivey	City Administrator	Administration	City of St. Robert
Mike Shempert		St. Robert Fire Dept.	City of St. Robert
Jerome Gordon	Land Use Admin.		City of St. Robert
Steve Long	Public Works Director	Public Works Dept.	City of St. Robert
Curtis Curenton	Police Chief	Police Dept.	City of St. Robert
Amy Smith/Leann Nutt	City Clerk	Administration	City of St. Robert
Luge Hardman/	Mayor	Administration	City of Waynesville

Name	Title	Department	Jurisdiction/Agency/Organization
Jerry Brown			
Bruce Harrill/John Doyle	City Administrator	Administration	City of Waynesville
Michele Brown	City Clerk	Administration	City of Waynesville
Mitch McDonald	Public Works Director	Public Works	City of Waynesville
Daniel Sheldon	Electric Superintendent	Public Works	City of Waynesville
Doug Yurecko	Fire Chief/EMD	Emergency Mgt.	City of Waynesville
Dan Cordova	Police Chief	Police Dept.	City of Waynesville
Brian Adams	Street Superintendent	Public Works	City of Waynesville
Jack Eldredge	Water/Sewer Superintendent	Public Works	City of Waynesville
Dr. Brian Henry	Superintendent	Administration	Waynesville R-VI
Chris Berger	Asst. Superintendent	Administration	Waynesville R-VI

### Stakeholder Invited to Participate in the Planning Process

Name	Title	Agency/Organization
John Wright		Life Care Center of Waynesville
-	Manager	Dixon Nursing & Rehab
-	Manager	Richland Care Center, Inc.
Darrell Todd Maurina	Owner/Editor	Pulaski County Daily News
Byron Dudley		Laclede Electric Cooperative
Doug Lane		Intercounty Electric Cooperative
Carmen Hartwell		GascOsage Electric Cooperative
Gene Williams		Pulaski County Public Water Supply District #1
Mark Tallent		Pulaski County Public Water Supply District #2
William Crawford		Pulaski County Public Water Supply District #3
Manager		Rosewood Manor Assisted Living
Preston Kramer	District Engineer	MoDOT
-		Dixon Family Practice
-		Mercy Clinic Family Medicine
-		Pulaski Medical Clinic
-		St. John's Clinic – Richland
-	Manager	Sunset Village of the Ozarks, Inc.
Brett Hendrix	Region I SEMA Area Coordinator	MO State Emergency Mgt. Agency
Randy Becht	Director	Pulaski County Growth Alliance

Jurisdictional representatives on the HMPC were asked to share and solicit information from within and outside of their jurisdictions. A broad spectrum of entities other than the jurisdictions named in the plan, were invited to participate in the planning process.

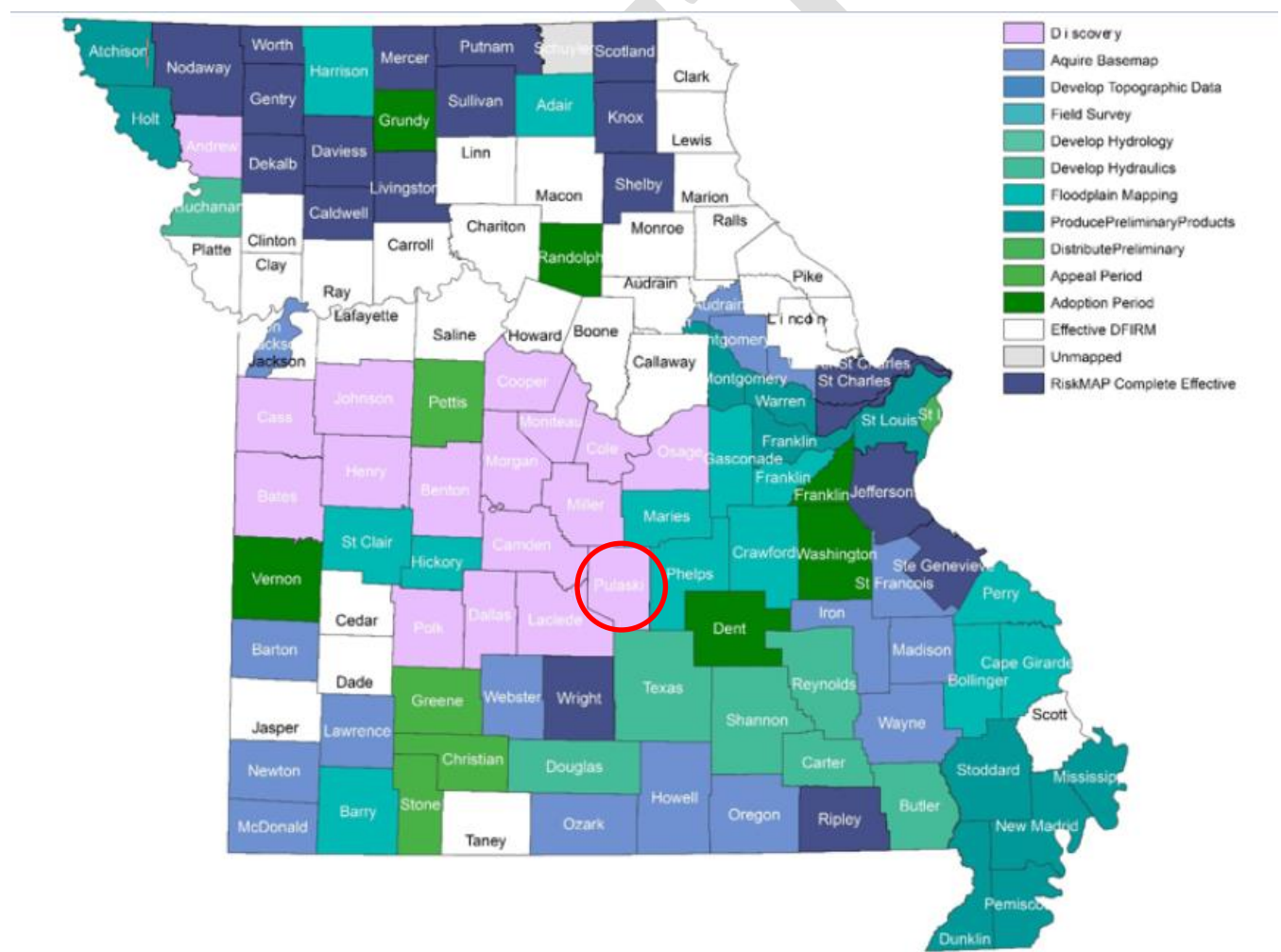
The questionnaire provided to every jurisdiction asked how mitigation actions were being incorporated into other planning documents. The county road and bridge department does a good job of incorporating mitigation projects into their regular maintenance program. Those projects have been incorporated into the plan document. Hazard mitigation goals and action items have also been incorporated, where applicable, in the Community Economic Development Strategy (CEDs).

## Coordination with FEMA Risk MAP Project

Risk mapping, assessment, and planning is a FEMA program which provides communities with flood information and tools to enhance their mitigation plan and take action to better protect their citizens. The Discovery meeting for RiskMAP in Pulaski County was held in February 2020. Project Initiation is anticipated to be conducted in the fall of 2020 with hydrologic and hydraulic modeling to begin in the winter. Draft models are anticipated to be available in the summer of 2021.

Figure 1.1 illustrates the current status of Missouri counties in regards to RiskMap projects.

**Figure 1.1. Map of RiskMAP Projects**



Source: [mosema.maps.acrgis.com/apps/MapJournal/index.html?appid=c95675c3892c4b1aa870f202158d3098](https://mosema.maps.acrgis.com/apps/MapJournal/index.html?appid=c95675c3892c4b1aa870f202158d3098)

## **Integration of Other Data, Reports, Studies and Plans**

The MPC researched available plans, studies, reports and technical information during development of the Update. The intent was to identify existing data and information, shared objectives and past and ongoing activities that would add to the Update. The goal was to identify the existing capabilities and planning mechanisms to implement the mitigation strategy. Pulaski County is a rural area with the largest community's population at approximately 5,365. Pulaski County is home to Fort Leonard Wood, an Army installation with an estimated population of 15,061<sup>1</sup> Not all of the participating communities have planning or zoning, subdivision regulations or other mechanisms for controlling the development of land. Some of the jurisdictions do have ordinances and planning documents. Following is a list of the documents that were reviewed:

- Local planning and zoning ordinances
- County EOP
- Crisis Plans (school districts)
- Comprehensive plans
- Economic development plans
- Capital improvement plans
- Regional Transportation Plan
- Floodplain management ordinances and flood Insurance Risk Maps (FIRMs)

In addition to information available from local jurisdictions, a number of data sources, reports, studies and plans were used in updating the plan. Every attempt was made to gather the best available data to develop the vulnerability assessment and identify assets in the county. The Missouri State Hazard Mitigation Plan (2018) was reviewed and referenced throughout the document. Other data sources included dam information from the Missouri Department of Natural Resources and National Inventory of Dams (NID); fire reports from state agencies; Wildland/Urban Interface and Intermix data from the SILVIS Lab – Department of Forest Ecology and Management – University of Wisconsin; the Community Economic Development Strategy (CEDS); capital improvement plans from the participating jurisdictions; historic weather data and damage estimates from the National Oceanic and Atmospheric Administration; the critical facilities inventory conducted by MRPC; and road and bridge department plans/budgets.

All documents were reviewed so that the MPC would have a broad foundation of data upon which to base the planning area's risk assessment. Information from these documents and data sources are incorporated into the plan as indicated throughout the document.

### **Step 4: Assess the Hazard: Identify and Profile Hazards (Handbook Task 5)**

The HMPC reviewed the hazards that affected Pulaski County at the first planning meeting on February 20, 2020 including discussions of any hazard events that occurred during the last twenty years and all of the hazards included in the Missouri Hazard Mitigation plan. A variety of sources were used to identify and profile hazards. These included U.S. Census data, GIS data, HAZUS, the Missouri Spatial Data Information Service (MSDIS), statewide datasets compiled by state and federal agencies, existing plans and reports, personal interviews with HMPC members and the questionnaire completed by each jurisdiction. Every effort was made to use the most

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<sup>1</sup> [www.city-data.com/city/Fort-Leonard-Wood-Missouri.html](http://www.city-data.com/city/Fort-Leonard-Wood-Missouri.html)

current and best data available. Additional information on the risk assessment and the conclusions drawn from the available data can be found in Chapter 3.

### **Step 5: Assess the Problem: Identify Assets and Estimate Losses**

Assets for each jurisdiction were identified based on responses to the data collection questionnaire distributed to all jurisdictions, interviews with MPC members and the critical facilities inventory conducted by MRPC. Additional sources included U.S. Census, GIS data, MSDIS and HAZUS.

Losses were calculated using HAZUS and the Missouri State Hazard Mitigation plan data and the most recent U.S. census data available. Values reflected in the plan are on structures only and do not include land values.

Jurisdictions provided information on their regulatory, personnel, fiscal and technical abilities by completing the data collection questionnaire. The vulnerability assessment was completed using estimates from the 2018 State plan. For more information on planning area profiles and capabilities, please see Chapter 2.

### **Step 6: Set Goals (Handbook Task 6)**

The goals from the initial hazard mitigation plan were reviewed at the first planning meeting on February 20, 2020. Those goals are as follows:

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

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

**Goal 3:** Promote education, outreach, research and development programs to improve the knowledge and awareness among the citizens and industry about hazards they may face, their vulnerability to identified hazards, and hazard mitigation alternatives that can reduce their vulnerabilities.

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

**Goal 5:** Establish priorities for reducing risks to the people and their property with emphasis on long-term and maximum benefits to the public rather than short-term benefit of special interests.

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

### **Step 7: Review Possible Mitigation Actions and Activities**

Mitigation strategy and specific action items were discussed at the first and second HMPC meetings. At the first HMPC meeting the group reviewed the list in the existing plan and decided which actions could be eliminated; what needed to remain on the list; and what needed to be added. It was emphasized that any mitigation actions in the plan that were not likely to be



accomplished, due to cost factors or that did not address the risks identified in the risk assessment, should be removed from the list.

Discussions also included mitigation activities that had been completed or were in process that had not been in the original plan document. Each jurisdiction and stakeholder group was asked to provide information about mitigation activities that were needed as well as those that had been accomplished over the past five years. Meeting facilitators offered to share ideas for mitigation projects from the FEMA publication *Mitigation Ideas: As Resource for Reducing Risk to Natural Hazards (January 2013)* to help stimulate ideas and discussion.

As RiskMAP has just begun the discovery process in Pulaski County, no projects have been identified through that process at this time.

In order to prioritize action items, the MPC was asked to use the STAPLEE method as well as assign a cost benefit to each activity. This allowed the group to consider a broad range of issues in order to decide which actions should be considered high, moderate or low priority. The prioritization process used by the MPC is explained as follows:

STAPLEE stands for the following:

- **Social:** Will the action be acceptable to the community? Could it have an unfair effect on a particular segment of the population?
- **Technical:** is the action technically feasible? Are there secondary impacts? Does it offer a long-term solution?
- **Administrative:** Are there adequate staffing, funding and maintenance capabilities to implement the project?
- **Political:** Will there be adequate political and public support for the project?
- **Legal:** Does your jurisdiction have the legal authority to implement the action?
- **Economic:** is the action cost-beneficial? Is there funding available: Will the action contribute to the local economy?
- **Environmental:** Will there be negative environmental consequences from the action? Does it comply with environmental regulations? Is it consistent with community environmental goals?

Each question was scored based on a 0 to 3 point value system:

- 3 = Definitely YES
- 2 = Maybe YES
- 1 = Probably NO
- 0 = Definitely NO

For the Benefit/Cost Review portion of the prioritization process, these two aspects were scored as follows:

Benefit – two (2) points were added for each of the following avoided damages (8 points maximum = highest benefit)

- Injuries and/or casualties
- Property damages
- Loss-of-function/displacement impacts
- Emergency management costs/community costs

Cost – points were subtracted according to the following cost scale (-5 points maximum = highest cost)

- (-1) = Minimal – little cost to the jurisdiction involved
- (-3) = Moderate – definite cost involved but could likely be worked into operating budget
- (-5) = Significant – cost above and beyond most operating budgets; would require extra appropriations to finance or to meet matching funds for a grant

Note: For the Benefit/Cost Review, the benefit and cost of actions which used the word “encourage” were evaluated as if the action or strategy being encouraged was actually to be carried out.

Total Score – The scores for the STAPLEE Review and Benefit/Cost Review were added to determine a Total Score for each action.

Priority Scale – To achieve an understanding of how a Total Score might be translated into a Priority Rating, a sample matrix was filled out for the possible range of ratings an action might receive on both the STAPLEE and Benefit/Cost Review. The possible ratings tested ranged between:

- A hypothetical action with “Half probably NO and half maybe YES” answers on STAPLEE (i.e. poor STAPLEE score) and Low Benefit/High Cost: Total Score = 7
- A hypothetical action with “All definitely YES” on STAPLEE and High Benefit/Little Cost: Total Score = 28

An inspection of the possible scores within this range led to the development of the following Priority Scale based on the Total Score in the STAPLEE- Benefit/Cost Review process:

20 – 28 points = High Priority  
14-19 points = Medium Priority  
13 points and below = Low Priority

The benefit portion of the prioritization process helped the MPC focus on long-term mitigation solutions that demonstrated the future cost savings that could be realized by completing mitigation projects that safeguard lives and protect property.

### **Step 8: Draft an Action Plan**

The HMPC reviewed the final list of action items at the June 23, 2020 meeting and completed the prioritization process. The final list was then mailed out to all jurisdictions and members of the HMPC for review and approval as everyone was not able to attend the meeting. Staff was directed by the HMPC to take the finalized list after allowing time for comments and draft an action plan for the group to review.

### **Step 9: Adopt the Plan (Handbook Task 8)**

When the first draft of the plan was completed, staff posted the document on the MRPC website and provided a hard copy to the county courthouse. All MPC members, jurisdictions and surrounding jurisdictions were notified on where to find a copy of the plan to review. If

requested, additional hard copies of the plan document were provided. After allowing time for comments, a letter was mailed out to all jurisdictions asking them to formally adopt the plan and providing a sample adoption resolution. A deadline was provided in order to insure receipt of adoption resolutions prior to submitting a final draft to FEMA for approval.

**Step 10: Implement, Evaluate, and Revise the Plan (Handbook Tasks 7 & 9)**

At all three planning meetings (February 20, 2020, June 23, 2020 and September 29, 2020) MRPC staff advised the HMPC and participating jurisdictions of the importance of continuing to meet periodically to discuss implementation of the plan as well as monitoring and maintaining the plan into the future. Chapter 5 provides details on Pulaski County's strategy for implementation, evaluation and revising the plan.

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