4	MIT	FIGATION STRATEGY	4.1
	4.1	Goals	4.1
	4.2	Identification and Analysis of Mitigation Actions	4.2
	4.3	Implementation of Mitigation Actions	4.6

44 CFR Requirement §201.6(c)(3): The plan shall include a mitigation strategy that provides the jurisdiction's blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs and resources, and its ability to expand on and improve these existing tools.

This section presents the mitigation strategy developed by the Mitigation Planning Committee (MPC). The mitigation strategy was developed through a collaborative group process. The process included review of general goal statements to guide the jurisdictions in lessening disaster impacts as well as specific mitigation actions to directly reduce vulnerability to hazards and losses. The following definitions are taken from FEMA's *Local Hazard Mitigation Review Guide (October 1, 2012)*.

- Mitigation Goals are general guidelines that explain what you want to achieve. Goals are long-term policy statements and global visions that support the mitigation strategy. The goals address the risk of hazards identified in the plan.
- Mitigation Actions are specific actions, projects, activities, or processes taken to reduce
 or eliminate long-term risk to people and property from hazards and their impacts.
 Implementing mitigation actions helps achieve the plan's mission and goals.

4.1 Goals

44 CFR Requirement §201.6(c)(3)(i): [The hazard mitigation strategy shall include a] description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.

This planning effort is an update to Phelps County's existing hazard mitigation plan originally approved by FEMA on May 23, 2005 and updated and approved by FEMA on June 25, 2011 and five years later on August 11, 2016. Therefore, the goals from the updated 2016 Phelps County Hazard Mitigation Plan were reviewed to see if they were still valid, feasible, practical, and applicable to the defined hazard impacts. The MPC conducted a discussion session during their first meeting to review and update the plan goals. To ensure that the goals developed for this update were comprehensive and supported State goals, the 2018 State Hazard Mitigation Plan goals were reviewed. As the existing goals were broad, still applicable, and supported the 2018 State Hazard Mitigation Plan goals, the MPC saw no reason to make any changes. The Phelps County 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.

4.2 Identification and Analysis of Mitigation Actions

44 CFR Requirement §201.6(c)(3)(ii): The mitigation strategy shall include a section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure.

During the first MPC meeting, the committee discussed what needed to be updated in the risk assessment. Changes in risk since adoption of the previously approved plan were discussed. Since the last update, there have been no deaths due to natural hazard events. Action items were reviewed and suggestions made for changes to address the changes in risk. Discussions from the actions from the previous plan included completed actions, on-going actions, and actions upon which progress had not been made. The MPC discussed SEMA's identified funding priorities and the types of mitigation actions generally recognized by FEMA.

The MPC determined to include problem statements in the plan update at the end of each hazard profile, which had not been done in the previously approved plan. The problem statements summarize the risk to the planning area presented by each hazard, and include possible methods to reduce that risk.

The focus of Meeting #2 was to review, prioritize and update the mitigation strategy. The MPC reviewed the list of actions proposed in the previous mitigation plan and proposed additional mitigation actions. Facilitators also provided suggestions for actions based on what some of the surrounding counties had included in their plans. Participants were also encouraged to refer to the current State Plan and provided a link to the FEMA's publication, *Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards (January 2013).* This document was developed by FEMA as a resource for identification of a range of potential mitigation actions for reducing risk to natural hazards and disasters.

During the review of the plan document, MPC members were encouraged to review the details of the risk assessment vulnerability analysis specific to their jurisdiction.

The MPC reviewed the actions from the previously approved plan for progress made since the plan had been adopted. Copies of the list of actions for each jurisdiction were provided to MPC members at planning meetings and were emailed out to all members. Action items were reviewed and the MPC provided updates on the status of action items during both planning meetings and the meeting with the road and bridge department. Each action item was reviewed and assigned one of the following:

- Completed, with a description of the progress,
- Not Started/Continue in Plan Update, with a discussion of the reasons for lack of progress,
- In Progress/Continue in Plan Update, with a description of the progress made to date or
- Deleted, with a discussion of the reasons for deletion.

Based on the status updates, there were 11 completed actions, six deleted actions, 12 actions that were combined with other, similar actions, and 26 continuing actions.

Table 4.1 provides a summary of the completed and deleted actions from the previous plan.

Table 4.1. Summary of Completed and Deleted Actions from the Previous Plan

Completed Actions	Completion Details (date, amount, funding source)
1.1.2 Promote development of emergency plans by businesses and public entities.	Public entities in the county have emergency plans in place. The MPC did not feel that promoting the development of emergency plans to business entities met the SMART criteria and was not a high priority and chose to remove that part of the action item from the plan.
1.1.5 Educate school staff on natural hazards and make sure all staff are familiar with school emergency plan including evacuation and safety procedures.	All school districts agree that this is currently implemented and is embedded in district's policy and procedures and requirements from the Missouri Department of Elementary and Secondary Education.
1.1.6 Schools need to continue to conduct emergency preparedness exercises on a regular basis.	All school districts agree that this is currently implemented and is embedded in district's policy and procedures and requirements from the Missouri Department of Elementary and Secondary Education.
1.1.7 Regularly review and update school emergency plans.	All school districts agree that this is currently implemented and is embedded in district's policy and procedures and requirements from the Missouri Department of Elementary and Secondary Education.
1.2.3 Continue to partner with local radio stations to ensure that appropriate warning of impending disasters is provided to all residents of impending disasters.	County and city EMDs state that this has been implemented and is embedded in policy and procedure.
3.1.1 Distribute SEMA brochures on natural disasters, preparedness and NFIP at public facilities and events.	Local emergency response agencies stated that this action item has been implemented and is embedded in policy and procedure.
3.1.3 Encourage and promote weather spotter classes throughout the county.	Local EMDs stated that this action item has been implemented and is embedded in policy and procedure. Classes are held regularly.
4.1.2 Continue to encourage joint training (and drills) between agencies, public and private entities (including schools/businesses).	Joint drills and trainings are regularly held in the county and cities. Rolla Fire & Rescue regularly does drills working with multiple agencies including Missouri University of Science & Technology, state agencies, etc. Region I SEMA conducts joint exercises annually. The Pipeline Association of Missouri also does joint exercises and trainings in the county and region. This action item has been completed and is embedded in policy and procedures.

Completed Actions	Completion Details (date, amount, funding source)
4.1.4 Maintain updated mutual aid agreements between emergency response agencies inside and outside the region.	This action item has been completed. Fire mutual aid agreements are in place throughout the state. Emergency Medical Services and the hospitals also have mutual aid agreements in place. Mutual aid agreements are also in place between cities for utility emergency assistance and with Missouri Public Utility Association for all utilities.
5.1.4 Coordinate and integrate hazard mitigation activities, where appropriate, with emergency operations plans and procedures.	EMDs and emergency response agencies stated that this had been completed.
6.3.1 Prioritize mitigation projects, based on cost- effectiveness and starting with those sites facing the greatest threat to life, health and property.	The MPC agreed that this was accomplished through the hazard mitigation planning process and documented in the plan.
Deleted Actions	Reason for Deletion
1.1.3 Provide information to citizens on individual mitigation activities such as building personal shelters and assuring that propane tanks are appropriately tied down.	Combined with 1.1.1.
1.1.4 Continue to educate residents about precautions that should be taken during threats of natural disasters such as heat waves and severe weather.	Combined with 1.1.1.
1.2.2 Continue to promote use of weather radios by local residents and schools to insure advanced warning about threatening weather.	Combined with 1.1.1.
1.2.4 & 2.3.3 Monitor developments in data availability concerning the impact of disasters such as dam failure, tornados, sinkholes, land subsidence and wildfire upon Phelps County and all jurisdictions through local, state and federal agencies for use in hazard mitigation planning.	Identical action items that have been removed due to SEMA reviewer stating that they do not meet SMART criteria. These action items were added at the request of SEMA/FEMA during a previous update. The MPC also determined these were not high priorities.
2.1.1 Continue to encourage a self-inspection program at critical facilities to assure that building infrastructure is earthquake and tornado resistant.	Upon review, due to not meeting the SMART criteria and falling to a low priority – this action item was deleted.
2.1.2 Continue to encourage business to develop and implement emergency plans.	The MPC determined that promoting the development of emergency plans to business entities did not meet the SMART criteria, was not a high priority and chose to remove the action item from the plan.
2.3.1 Encourage minimum standards for building codes in all cities.	The MPC determined that this action item did not meet the SMART criteria, was not a high priority and chose to remove it from the plan.
2.3.2 Encourage local governments to develop and implement regulations for securing hazardous materials tanks and mobile homes to reduce hazards during storms and flooding.	The MPC determined that this action item did not meet the SMART criteria, was not a high priority and chose to remove the action item from the plan.

Deleted Actions	Reason for Deletion
3.1.2 Distribute regular press releases from county and city EMD offices concerning hazards, where they strike, frequency, preparedness and how to mitigate.	Combined with 1.1.1.
3.2.1 Encourage local residents to purchase weather radios through press releases and brochures	Combined with 1.1.1.
3.3.2 Distribute press releases by cities/county regarding adopted mitigation measures to keep public abreast of changes and/or new regulations.	Combined with 1.1.1.
4.2.1 Encourage meetings between EMD, city/county and SEMA to familiarize officials with mitigation planning ad implementation and budgeting for mitigation projects.	Duplicate of 3.2.2.
4.2.2 Re-evaluate the hazard mitigation plan, merge with other community planning and coordinate and integrate hazard mitigation activities, where appropriate, with emergency operations plans and procedures.	Combined with 3.3.1.
5.1.2 Encourage communities to budget for enhanced warning systems.	Combined with 1.2.1.
5.1.3 Encourage all communities to develop stormwater management plans in all new development – both residential and commercial properties.	Combined with 2.2.2.
5.2.3 Encourage the construction of storm shelters, especially tornado safe rooms near schools and large employment centers that currently do not have access to safe rooms.	Combined with 1.3.5.
6.1.1 Work with SEMA Region I coordinator to learn about new mitigation funding opportunities.	The MPC agreed that this was being accomplished through other agencies and was no longer a high priority.
6.2.2 Implement public awareness program about the benefits of hazard mitigation projects, both public and private through press releases and brochures.	Combined with 1.1.1.

Source: Previously approved County Hazard Mitigation Plan; MPC committee; data collection questionnaires

4.3 Implementation of Mitigation Actions

44 CFR Requirement §201.6(c)(3)(ii): The mitigation strategy shall include an action strategy describing how the actions identified in paragraph (c)(2)(ii) will be prioritized, implemented, and administered by the local jurisdiction. Prioritization shall include a special emphasis on the extent to which benefits are maximized according to a cost benefits review of the proposed projects and their associated costs.

Jurisdictional MPC members were encouraged to meet with others in their community to discuss the actions to be included in the updated mitigation strategy. Throughout the MPC consideration and discussion, emphasis was placed on the importance of a benefit-cost analysis in determining project priority. The Disaster Mitigation Act requires benefit-cost review as the primary method by which mitigation projects should be prioritized. The MPC decided to pursue implementation according to when and where damage occurs, available funding, political will, jurisdictional priority, and priorities identified in the Missouri State Hazard Mitigation Plan. The benefit/cost review at the planning stage primarily consisted of a qualitative analysis, and was not the detailed process required grant funding application. For each action, the plan sets forth a narrative describing the types of benefits that could be realized from action implementation. The cost was estimated as closely as possible, with further refinement to be supplied as project development occurs.

FEMA's STAPLEE methodology was used to assess the costs and benefits, overall feasibility of mitigation actions, and other issues impacting project. During the prioritization process, the MPC worked together to review and assign scores. The process posed questions based on the STAPLEE elements as well as the potential mitigation effectiveness of each action. Scores were based on the responses to the questions as follows:

Definitely yes = 3 points Maybe yes = 2 points Probably no = 1 Definitely no = 0

The following questions were asked for each proposed action.

S: Is the action socially acceptable?

T: Is the action technically feasible and potentially successful?

A: Does the jurisdiction have the administrative capability to successfully implement this action?

P: Is the action politically acceptable?

L: Does the jurisdiction have the legal authority to implement the action?

E: Is the action economically beneficial?

E: Will the project have an environmental impact that is either beneficial or neutral? (score "3" if positive and "2" if neutral)

Will the implemented action result in lives saved?

Will the implanted action result in a reduction of disaster damage?

In addition to the STAPLEE process, each action item was also reviewed for Benefit/Cost. These two aspects of the prioritization process 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.

In addition, the group considered the cost of mitigation versus the long-term savings in relation to potential lives saved and property damage avoided.

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

<u>Priority Scale</u> – 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:

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20 – 28 points = High Priority
14-19 points = Medium Priority
13 points and below = Low Priority
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In addition to the STAPLEE and Benefit/Cost analysis, the committee was also asked to consider **SMART** – **S**pecific, **M**easurable, **A**chievable, **R**elevant, **T**ime-bound, per FEMA. All action items were reviewed with this criteria in mind. The results of the STAPLEE process and Benefit/Cost analysis were then mailed out to all MPC members for feedback and consensus.

The final scores are listed below in the analysis of each action. Correspondence regarding the STAPLEE process is included in Appendix C: A spreadsheet with the action items and final scores is illustrated in Table 4.3.

Jurisdictional Floodplain Management Programs

Phelps County and the cities of Doolittle, Edgar Springs, Newburg, Rolla and St. James are members of the NFIP and regulate development in the floodplain by reviewing permit applications for all development including new and existing structures. Elevation certificates are required for all new construction, and existing structures with 50% or more damage following a flood are required to elevate. Floodplain maps are available in hard copy at the city halls of each community and the

county's flood maps can be obtained from the floodplain coordinator - MRPC. Furthermore floodplain maps can be found online through FEMA's website https://msc.fema.gov/portal.

Table 4.2. Jurisdictional Floodplain Ordinance Adoption Date

Community Name	Ordinance Adoption Date
Phelps County	02/01/1987 Revised 03/17/16
Doolittle	01/08/2008
Edgar Springs	08/24/84
Newburg	04/03/1987
Rolla	09/30/77 Revised 04/01/2002
St. James	07/03/85 Revised 03/14/2016

Source: FEMA's Community Status Book Report¹; NSFHA (SEMA)

4.8

¹ www.fema.gov/cis/mo.html

Table	Table 4.3 Prioritization of Mitigation Actions			3 = Def YES 1 = Prob NO 2 = Maybe YES 0 = Def NO											
Action No.	Mitigation Actions	S	Т	Α	Р	L	E	E	STAPLEE Total	Losses Avoided (2 pts. Each)	Benefit	Cost	B/C Total	Total	Priority
1.1.1	Maintain a hazard mitigation public awareness program to include: benefits of hazard mitigation planning and projects; personal emergency preparedness; participation in emergency notification systems where available; information on individual hazard mitigation projects such as tying down hazardous materials tanks; how to shut off utilities; precautions to take during threatening weather events; etc.	3	3	3	3	3	2	3	20	IC, PD, LF, EMCC	8	-1	7	27	Н
1.1.8	Encourage the construction of tornado safe rooms in every school that does not have one.	3	3	3	3	3	2	3	20	IC, EMCC	3	-3	0	20	Н
1.2.1	Continue to encourage cities to budget for and obtain early warning systems and improved communications systems.	3	3	2	3	3	1	3	18	IC, PD, LF, EMCC	8	-3	5	23	Н
1.3.1	Continue to implement tree trimming and dead tree removal programs by utility companies and local government	3	3	3	3	3	2	2	19	IC, PD, LF, EMCC	8	-3	5	24	Н
1.3.2	Continue to examine road and bridge upgrades to improve drainage and reduce flooding and the risk to residents and property.	3	3	2	3	3	2	2	18	IC, PD, LF, EMCC	8	-1	7	25	Н
1.3.3	Establish designated shelters for residents to be used during tornado threats, as cooling centers during extreme heat or power outages and/or as shelters during other disasters.	3	3	3	3	3	3	3	21	IC, LF, EMCC	6	-1	5	26	Н
1.3.4	Facilities that house vulnerable populations such as disabled and elderly should review alternative locations for sheltering residents and MOUs with "sister" facilities.	3	2	2	3	3	2	3	18	IC, EMCC	4	-1	3	21	Н
1.3.5	Continue to work to increase availability (if necessary construction) of certified storm shelters for individual families and large groups, including near large employment centers and schools.	3	3	3	3	3	1	3	19	IC, EMCC	4	-5	-1	18	М
2.1.3	Encourage the installation of small renewable energy microgrids (solar, wind) and backup generators for critical infrastructure such as water/sewer systems and emergency services.	3	3	3	3	3	2	3	20	LF, EMCC	4	-3	1	21	Н

Table	Table 4.3 Prioritization of Mitigation Actions			3 = Def YES 1 = Prob NO 2 = Maybe YES 0 = Def NO											
Action No.	Mitigation Actions	S	Т	Α	Р	L	E	E	STAPLEE Total	Losses Avoided (2 pts. Each)	Benefit	Cost	B/C Total	Total	Priority
2.2.1	Educate residents, realtors and contractors about the dangers of floodplain development and the benefits of the NFIP.	2	3	3	2	3	2	3	18	IC, PD, LF, EMCC	8	-1	7	25	Н
2.2.2	Encourage development of storm water management plans in those jurisdictions that do not currently have them and in all new residential and commercial development.	3	2	2	2	3	2	3	18	IC, PD, LF, EMCC	8	-3	5	23	Н
2.2.3	Continue to enforce flood damage prevention/floodplain management ordinances in compliance with NFIP requirements.	2	3	3	2	3	2	3	18	IC, PD, LF, EMCC	8	-3	5	23	Н
2.2.4	Continue to look at ways to reduce vulnerabilities in the Beaver Creek area and along the Gasconade River including elevations and buyouts	2	2	2	2	3	2	3	15	IC, PD, EMCC	6	-5	1	16	М
3.1.4	Educate staff and parents on school safety protocols.	3	3	3	3	3	3	3	21	IC, LF, EMCC	6	-1	5	26	Н
3.2.2	Encourage meetings of EMD, city/county officials & SEMA to familiarize officials with mitigation planning, implementation & budgeting for mitigation projects.	3	3	3	2	3	2	3	19	IC, PD, LF, EMCC	8	-1	7	26	Н
3.3.1	Re-evaluate the hazard mitigation plan, merge with other community planning and coordinate and integrate hazard mitigation activities, where appropriate, with emergency operations plans and procedures.	3	2	2	2	3	1	3	16	IC, PD, LF, EMCC	8	-3	5	21	Н
3.4.3	Encourage the development of a county-wide CERT and/or VOAD program and educate the public on how they can benefit from these types of programs.	3	3	3	3	3	3	3	21	IC, PD, LF, EMCC	8	-1	7	28	Н
4.1.1	Continue to encourage joint meetings of different organizations/agencies for mitigation related planning	3	3	3	3	3	2	3	20	IC, PD, LF, EMCC	8	-1	7	27	Н

Table	rable ite i itematation of initigation receive						Prob Def N								
Action No.	Mitigation Actions	S	Т	Α	Р		E	E	STAPLEE Total	Loss Avoided (2 pts. Each)	Benefit	Cost	B/C Total	Total	Priority
4.1.3	Pool different agency resources to achieve widespread mitigation planning results.	3	2	2	2	3	2	3	17	IC, PD, LF, EMCC	8	-1	7	24	Н
5.1.1	Incorporate hazard mitigation into the long-range planning and development activities of the county and each jurisdiction.	3	3	3	3	3	3	3	21	IC, PD, LF, EMCC	8	-1	7	29	Н
5.2.1	Encourage local governments to purchase properties in the floodplain as funds become available and convert that land into public space/recreation area.	3	2	2	2	3	2	3	17	PD, EMCC	4	-3	1	18	М
5.2.2	Encourage communities to discuss zoning repetitive loss properties in the floodplain as open space.	2	2	2	1	2	1	3	13	PD, EMCC	4	-1	3	16	М
6.1.2	Structure grant proposals for road/bridge upgrades so that hazard mitigation concerns are also met	3	2	2	2	3	2	3	17	IC, PD, LF, EMCC	8	-1	7	24	Н
6.1.3	Work with state/local/federal agencies to include mitigation in all economic and community development projects.	3	2	2	2	3	2	2	16	IC, PD, LF, EMCC	8	-1	7	23	Н
6.1.4	Encourage local jurisdictions to budget for mitigation projects.	3	3	3	3	3	2	3	20	IC, PD, LF, EMCC	8	-5	3	23	Н
6.2.1	Encourage cities and counties to implement cost-share programs with private property owners for hazard mitigation projects that benefit the community as a whole.	2	1	1	1	2	2	2	11	IC, PD, LF, EMCC	8	-5	3	14	М

Phelps County

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

Action 1.1.1: Maintain a hazard mitigation public awareness program to include: benefits of hazard mitigation planning and projects; personal emergency preparedness; participation in emergency notification systems where available; information on individual hazard mitigation projects such as tying down hazardous materials tanks; how to shut off utilities; precautions to take during threatening weather events; etc.

Action Worksheet								
Name of Jurisdiction:	Phelps County							
	Risk / Vulnerability							
Problem being Mitigated:	Residents are not always prepared to manage on their own for 72 hours following an event. This action item will improve individual household preparedness and increase knowledge of mitigation activities.							
Hazard(s) Addressed: All Hazards								
	Action or Project							
Action/Project Number:	1.1.1							
Name of Action or Project:	Personal Preparedness Education/Awareness programs							
Action or Project Description:	County EMD and local emergency response agencies will promote Ready in 3 and other personal preparedness education programs through the distribution of brochures, press releases and presentations.							
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning, and hazard mitigation activities.							
Estimated Cost:	\$500 - \$3,500							
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.							
	Plan for Implementation							
Responsible Organization/Department:	County EMD							
Action/Project Priority:	27 – High Priority							
Timeline for Completion:	1 – 5 years - Ongoing							
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.							
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, Meramec Region Community Economic Development Strategy (CEDS) – includes Chapter 8 – Economic Recovery and Resiliency Strategy							
A () O()	Progress Report							
Action Status	Continuing in progress							
Report of Progress	Many emergency response agencies, the Health Dept. and the county EMD promote individual household preparedness & provide Ready in 3 brochures. SEMA distributes press releases periodically on personal preparedness. A more focused and coordinated effort would help to achieve comprehensive coverage in the county.							

Action 1.2.1: Budget for and obtain early warning systems and improved communications systems.

Action Worksheet							
Name of Jurisdiction:	Phelps County						
	Risk / Vulnerability						
Problem being Mitigated:	Risks and vulnerabilities associated with lack of early warning systems and communications systems in unincorporated areas.						
Hazard(s) Addressed: All hazards.							
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Action or Project						
Action/Project Number:	1.2.1						
Name of Action or Project:	Improving early warning and communications capabilities.						
Action or Project Description:	Need to budget for enhanced warning and communications systems to improve early warning capabilities for residents in Phelps County.						
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning, and hazard mitigation activities.						
Estimated Cost: Unknown							
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, loss-of-function/displacement impacts, and emergency management costs/community costs.						
	Plan for Implementation						
Responsible Organization/Department:	County EMD, County Commission						
Action/Project Priority:	23 – High Priority						
Timeline for Completion:	On-going On-going						
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.						
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP, County Budget						
Progress Report							
Action Status	Continuing and updated – in progress						
Report of Progress	An outdoor warning siren has been installed in Jerome – an unincorporated area of Phelps County. In addition, the county has a phone-based warning system – Everbridge – which can provide alerts to residents who sign up for it by text, cell phone, email and landline phone. This program could benefit from a more focused campaign to encourage residents to sign up for Everbridge.						

<u>Action 1.3.1:</u> Continue to implement tree trimming and dead tree removal programs by utility companies and local government.

	Action Worksheet						
Name of Jurisdiction: Phelps County							
	Risk / Vulnerability						
Problem being Mitigated: Risks and vulnerabilities associated with power outages fro trees interfering with power lines and/or blocking roads							
Hazard(s) Addressed: Tornadoes, severe winter weather, severe thunderstorm/high winds/lightning/hail							
	Action or Project						
Action/Project Number:	1.3.1						
Name of Action or Project:	Tree trimming and dead tree removal.						
Action or Project Description:	Continue to implement tree trimming and dead tree removal.						
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning, and hazard mitigation activities.						
Estimated Cost:	\$500 - \$1,500						
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damage, loss-of-function/displacement impacts, and emergency management costs/community costs.						
	Plan for Implementation						
Responsible Organization/Department:	County Commission						
Action/Project Priority:	24 – High Priority						
Timeline for Completion:	On-going Control of the control of t						
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.						
Local Planning Mechanisms to be Used in Implementation, if any: Hazard Mitigation Plan, LEOP							
	Progress Report						
Action Status	Continuing and updated – in progress						
Report of Progress	Phelps County has an aggressive tree trimming program in place along county-maintained roadways and contracts for the service.						

<u>Action 1.3.2:</u> Continue to examine road and bridge upgrades to improve drainage and reduce flooding and the risk to residents and property.

Action Worksheet								
Name of Jurisdiction:	Phelps County							
	Risk / Vulnerability							
Problem being Mitigated:	Risks/vulnerabilities associated with flooding and inadequate road/bridge structures and impacts on residents and their property.							
Hazard(s) Addressed:	Flood, Earthquake							
	Action or Project							
Action/Project Number:	1.3.2							
Name of Action or Project:	Improve drainage and reduce flooding through road and bridge improvements.							
Action or Project Description:	Continue to examine road and bridge upgrades to improve drainage and reduce flooding and the risk to residents and property.							
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning, and hazard mitigation activities.							
Estimated Cost: \$12,500								
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.							
	Plan for Implementation							
Responsible Organization/Department:	County Commission, local planners							
Action/Project Priority:	25 – High Priority							
Timeline for Completion:	On-going							
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services.							
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard mitigation plan, LEOP, floodplain ordinance, road and bridge budget, county road and bridge specifications							
	Progress Report							
Action Status	Continuing - in progress							
Report of Progress	Phelps County has completed the following projects in the past five years to reduce impacts from flooding: CR 3040 low water crossing – the county is moving forward with plans to replace the culverts to reduce flooding; flood prone bridge on CR 3330 was closed to traffic; and flood prone bridge on CR7530 was closed to traffic. Whenever possible, the county sizes up culverts when replacing them. The county also has specifications for roads and bridges if subdivisions are constructed and the developer wants the county to take over maintenance. The county maintains a list of high priority projects that will be completed as funding becomes available.							

<u>Action 1.3.3:</u> Establish designated shelters for residents to be used during tornado threats, as cooling centers during extreme heat or power outages and/or as shelters during other disasters.

Action Worksheet	
Name of Jurisdiction:	Phelps County
Risk / Vulnerability	
Problem being Mitigated:	Risks/vulnerabilities associated with lack of tornado shelters and warming and cooling centers during times of extreme heat and cold, and power outages
Hazard(s) Addressed:	Severe Weather, Winter Storms, Tornadoes, Extreme Heat
Action or Project	
Action/Project Number:	1.3.3
Name of Action or Project:	Establish and maintain designated storm shelters, as well as heating and cooling centers
Action or Project Description:	Establish designated shelters for residents to be used as shelters during tornado warnings, as well as heating and cooling centers during extreme heat or power outages.
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning, and hazard mitigation activities.
Estimated Cost:	\$5,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, loss-of-function/displacement impacts, and emergency management costs/community costs.
Plan for Implementation	
Responsible Organization/Department:	County EMD
Action/Project Priority:	26 –High Priority
Timeline for Completion:	5 years
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOPs
Progress Report	
Action Status	Continuing – in progress
Report of Progress	Shelters have been established in each community but as needs change it may be necessary to adjust the list of shelters or increase the number of facilities that can be used for sheltering.

<u>Action 1.3.4:</u> Facilities that house vulnerable populations such as disabled and elderly should review alternative locations for sheltering residents and MOUs with "sister" facilities.

Continue to work to increase communications between facilitie that house vulnerable populations and with local EMDs and agencies responsible for sheltering. Applicable Goal Statement:	Action Worksheet	
Problem being Mitigated: Hazard(s) Addressed: All hazards Action or Project Name of Action or Project Description: Applicable Goal Statement: Estimated Cost: Benefits: Estimated Cost: Benefits: County EMD, county health department: Action/Project Priority: Timeline for Completion: Problem being Mitigated: Risks/vulnerabilities associated with nonexistent/unavailable shelters for large groups such as hospitals, nursing homes and group homes. Action or Project Description: Reduce risks and vulnerabilities of people in hazard-prone are through current technology, better planning, and hazard mitigate activities. Estimated Cost: County EMD, county health department County EMD, county health department Cash, goods, or services. Revision Action With local EMDs and agencies responsible to sheltering. Responsible Organization/Department: Action/Project Priority: Timeline for Completion: Potential Fund Sources: Cash, goods, or services.	Jurisdiction: Ph	elps County
shelters for large groups such as hospitals, nursing homes and group homes. Action or Project Action or Project Number: Action or Project: Action or Project Description: Applicable Goal Statement: Estimated Cost: Estimated Cost: Benefits: Sample County EMD, county health department: Action/Project Planning County EMD, county health department Action/Project Planning Shelters for large groups such as hospitals, nursing homes and group homes. Action or Project Continue to work to increase communications between facilities that house vulnerable populations and with local EMDs and agencies responsible for sheltering. Reduce risks and vulnerabilities of people in hazard-prone are through current technology, better planning, and hazard mitigate activities. Estimated Cost: \$2,500 - \$5,000 Benefits: County EMD, county health department Action/Project Priority: 21 -High Priority Timeline for Completion: Potential Fund Sources: Crants, local general revenue funds, and private donations of cash, goods, or services.	1	Risk / Vulnerability
Action/Project Number: 1.3.4	being Mitigated: sh	elters for large groups such as hospitals, nursing homes and
Action or Project Action/Project Number: 1.3.4		
Name of Action or Project: Action or Project Description: Applicable Goal Statement: Estimated Cost: Benefits: County Employed Benefits: County EMD, county health department: Action/Project Priority: Timeline for Completion: Diagram Action or Project Description: Establish alternative shelters for facilities that house disabled a elderly populations such as hospitals, nursing homes and ground homes. Continue to work to increase communications between facilities that house vulnerable populations and with local EMDs and agencies responsible for sheltering. Reduce risks and vulnerabilities of people in hazard-prone are through current technology, better planning, and hazard mitigal activities. Estimated Cost: \$2,500 - \$5,000 Losses avoided by implementing this action include injuries an casualties, and emergency management costs/community cost plan for Implementation County EMD, county health department Action/Project Priority: 21 -High Priority Timeline for Completion: On-going Grants, local general revenue funds, and private donations of cash, goods, or services. Local Planning		Action or Project
Continue to work to increase communications between facilities that house vulnerable populations and with local EMDs and agencies responsible for sheltering. Applicable Goal Statement:	oject Number:	5.4
that house vulnerable populations and with local EMDs and agencies responsible for sheltering. Applicable Goal Statement: Estimated Cost: Benefits: County EMD, county health department Action/Project Priority: Timeline for Completion: Potential Fund Sources: that house vulnerable populations and with local EMDs and agencies responsible for sheltering. Reduce risks and vulnerabilities of people in hazard-prone are through current technology, better planning, and hazard mitigal activities. \$2,500 - \$5,000 Losses avoided by implementing this action include injuries an casualties, and emergency management costs/community cost plan for Implementation County EMD, county health department 21 -High Priority Timeline for Completion: On-going Grants, local general revenue funds, and private donations of cash, goods, or services. Local Planning	Action or eld	• • • • • • • • • • • • • • • • • • • •
through current technology, better planning, and hazard mitigate activities. Estimated Cost: \$2,500 - \$5,000 Benefits: Losses avoided by implementing this action include injuries and casualties, and emergency management costs/community costs. Plan for Implementation Responsible Organization/Department: County EMD, county health department Action/Project Priority: 21 -High Priority Timeline for Completion: On-going Potential Fund Sources: Grants, local general revenue funds, and private donations of cash, goods, or services. Local Planning	tha	t house vulnerable populations and with local EMDs and
Benefits: Losses avoided by implementing this action include injuries an casualties, and emergency management costs/community costs. Plan for Implementation Responsible Organization/Department: Action/Project Priority: Timeline for Completion: Potential Fund Sources: Grants, local general revenue funds, and private donations of cash, goods, or services. Local Planning	thr	ough current technology, better planning, and hazard mitigation
Casualties, and emergency management costs/community costs Plan for Implementation Responsible Organization/Department: Action/Project Priority: 21 –High Priority Timeline for Completion: On-going Potential Fund Sources: Grants, local general revenue funds, and private donations of cash, goods, or services. Local Planning	•	
Responsible Organization/Department: Action/Project Priority: Timeline for Completion: Potential Fund Sources: County EMD, county health department 21 –High Priority On-going Grants, local general revenue funds, and private donations of cash, goods, or services. Local Planning	ca	sualties, and emergency management costs/community costs.
Organization/Department: Action/Project Priority: 21 – High Priority Timeline for Completion: On-going Potential Fund Sources: Grants, local general revenue funds, and private donations of cash, goods, or services. Local Planning		Plan for Implementation
Timeline for Completion: On-going Potential Fund Sources: Grants, local general revenue funds, and private donations of cash, goods, or services. Local Planning	1 (. (unty EMD, county health department
Potential Fund Sources: Grants, local general revenue funds, and private donations of cash, goods, or services. Local Planning		
cash, goods, or services. Local Planning		
in Implementation, if any:	sms to be Used Hanentation, if any:	zard Mitigation Plan, LEOP,
Progress Report		
Action Status Continuing – in progress		
	f Progress ho ho ex ga	st. This action item would benefit from a focused effort to their that data and assist these private institutions with

<u>Action 1.3.5:</u> Increase availability (if necessary, construction) of storm shelters for individual families and large groups, including near large employment centers and schools.

Action Worksheet	
Name of Jurisdiction:	Phelps County
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with nonexistent/unavailable shelters for individual families and large groups.
Hazard(s) Addressed:	Tornados, severe storms
	Action or Project
Action/Project Number:	1.3.5
Name of Action or Project:	Increase the availability of storm shelters
Action or Project Description:	Increase availability (if necessary, construction) of storm shelters for individual families and large groups, including near large employment centers and schools.
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning, and hazard mitigation activities.
Estimated Cost:	\$2,500 - \$5,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	County EMD
Action/Project Priority:	18 – Medium Priority
Timeline for Completion:	On-going On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP,
Progress Report	
Action Status	Continuing – in progress
Report of Progress	A FEMA certified tornado shelter has been constructed at the Phelps County R-III schools. Tacony Manufacturing in St. James has a certified tornado shelter designated for all occupants of the St. James Industrial Park.

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

<u>Action 2.1.3:</u> Encourage the installation of small renewable energy microgrids (solar, wind) and backup generators for critical infrastructure such as water/sewer systems and emergency services.

Action Worksheet	
Name of Jurisdiction:	Phelps County
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with power outages for critical infrastructure/facilities
Hazard(s) Addressed:	All hazards
, ,	Action or Project
Action/Project Number:	2.1.3
Name of Action or Project:	Acquisition and installation of microgrids and backup generators for critical infrastructure.
Action or Project Description:	Encourage the installation of small renewable energy microgrids (solar, wind) and backup generators for critical infrastructure such as water/sewer systems and emergency services.
Applicable Goal Statement:	Reduce the potential impact of natural disasters on new and existing properties and infrastructure and the local economy.
Estimated Cost:	\$25,500 – \$100,000
Benefits:	Losses avoided by implementing this action include loss-of- function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible	County EMD, County Commission
Organization/Department:	County Commission
Action/Project Priority:	21 –High Priority
Timeline for Completion:	5 years
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	LEOP, County Budget, Hazard Mitigation Plan, Critical Facility Budgets
Progress Report	
Action Status	Revised – in progress
Report of Progress	The Phelps County Courthouse and Sheriff's Department building have generators in place. The Phelps Health county hospital also has generators in place.

<u>Action 2.2.1:</u> Educate residents, realtors and contractors on the dangers of floodplain development and the benefits of the NFIP.

Action Worksheet		
Name of Jurisdiction:	Phelps County	
	Risk / Vulnerability	
Problem being Mitigated:	Risks/vulnerabilities of property located in the floodplain during a flood event.	
Hazard(s) Addressed:	Flood	
	Action or Project	
Action/Project Number:	2.2.1	
Name of Action or Project:	Floodplain education/awareness.	
Action or Project Description:	Educate residents, realtors and contractors about the dangers of floodplain development and the benefits of the NFIP.	
Applicable Goal Statement:	Reduce the potential impact of natural disasters on new and existing properties and infrastructure and the local economy.	
Estimated Cost:	\$5,000-\$6,000	
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.	
	Plan for Implementation	
Responsible Organization/Department:	Floodplain manager/coordinator, County Commission	
Action/Project Priority:	25 –High Priority	
Timeline for Completion:	On-going Control of the control of t	
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services.	
Local Planning Mechanisms to be Used in Implementation, if any:	Floodplain management ordinance, LEOP, economic development plan, Hazard Mitigation Plan	
Progress Report		
Action Status	Continuing in progress	
Report of Progress	Information, brochures, etc. on floodplain development and the NFIP are available through the floodplain coordinator and periodically supplied to the courthouse for distribution. Phelps County also has floodplain information available on-line. A series of three press releases on floodplain management are distributed to area news media annually. This a program that requires ongoing activity as people move in and out of the county/cities. The county is currently going through the RiskMap process. As new floodplain maps are finalized, the county will be contacting all the people affected by the floodplain map changes.	

<u>Action 2.2.2:</u> Encourage development of storm water management plans in those jurisdictions that do not currently have them and in all new residential and commercial development.

Action Worksheet		
Name of Jurisdiction:	Phelps County	
	Risk / Vulnerability	
Problem being Mitigated:	Risks/vulnerabilities to property and communities in areas that do not possess adequate storm water management plans.	
Hazard(s) Addressed:	Flood, Severe Weather	
	Action or Project	
Action/Project Number:	2.2.2	
Name of Action or Project:	Encourage local governments to require contractor storm water management plans in all new development – both residential and commercial properties.	
Action or Project Description:	Encourage the development of stormwater management plans for all new development through the adoption of ordinances or other local government regulations and encourage the county to review and strengthen any subdivision ordinances to incorporate mitigation measures for stormwater management.	
Applicable Goal Statement:	Reduce the potential impact of natural disasters on new and existing properties and infrastructure and the local economy.	
Estimated Cost:	\$5,000-\$25,000	
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.	
Plan for Implementation		
Responsible Organization/Department:	County Commission, local planners	
Action/Project Priority:	23 – High Priority	
Timeline for Completion:	On-going	
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services.	
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, builder's plans, transportation plans	
Progress Report		
Action Status	Continuing - Not Started	
Report of Progress	There has been no progress in this area in Phelps County.	

<u>Action 2.2.3:</u> Continue to enforce flood damage prevention/floodplain management ordinances in compliance with NFIP requirements.

Action Worksheet	
Name of Jurisdiction:	Phelps County
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities of properties in the floodplain during a flood
	event.
Hazard(s) Addressed:	Flood
	Action or Project
Action/Project Number:	2.2.3
Name of Action or Project:	Floodplain management compliance enforcement.
Action or Project Description:	Continue to enforce flood damage prevention/floodplain management ordinances in compliance with NFIP requirements.
Applicable Goal	Reduce the potential impact of natural disasters on new and
Statement:	existing properties and infrastructure and the local economy.
Estimated Cost:	\$4,000 - \$10,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	Floodplain Manager/Coordinator, Phelps County Commission
Action/Project Priority:	23 – High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services
Local Planning Mechanisms to be Used in Implementation, if any:	Floodplain management ordinances, builder's plans, LEOP
	Progress Report
Action Status	Continuing in Progress
Report of Progress	The county is a member of the NFIP and works to ensure compliance with the county floodplain management ordinance. Education/awareness materials are widely distributed to make the public aware of what is required. Damage assessment inspections are conducted following flood events and homeowners notified of the requirements. The program could benefit from additional inspections of floodplain areas and additional more focused
	education efforts with builders, insurers, banks and residents.

<u>Action 2.2.4:</u> Continue to look at ways to reduce vulnerabilities in the Beaver Creek area and along the Gasconade River – including elevations and buyouts.

A ation Warks boot	
Action Worksheet	
Name of Jurisdiction:	Phelps County
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with flooding in flood prone areas such as Beaver Creek and Gasconade River
Hazard(s) Addressed:	Flood
	Action or Project
Action/Project Number:	2.2.4
Name of Action or Project:	Floodplain management compliance enforcement
Action or Project Description:	Continue to look at ways to reduce vulnerabilities in the Beaver Creek and Gasconade River areas including elevations and buyouts of flood prone properties.
Applicable Goal Statement:	Reduce the potential impact of natural disasters on new and existing properties and infrastructure and the local economy.
Estimated Cost:	\$4,000 - \$10,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	County EMD, Floodplain Manager, County Commission
Action/Project Priority:	16 – Medium Priority
Timeline for Completion:	On-going On-going
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, and services
Local Planning Mechanisms to be Used in Implementation, if any:	LEOP, Hazard Mitigation plan, floodplain ordinance
	Progress Report
Action Status	Continuing – in progress
Report of Progress	Phelps County has purchased four properties in the Jerome area on the Gasconade River and is still attempting to purchase an additional property if funding is available. Floodplain coordinator staff mail out letters and distribute press releases outlining floodplain ordinance requirements on an annual basis. Following flood events, floodplain management staff conduct damage assessments and provide brochures and information on floodplain ordinance requirements and potential grant programs that can help homeowners reach compliance. This is an on-going endeavor and could benefit from additional inspections of floodplain areas and additional education/awareness activities for builders and residents.

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.

<u>Action 3.2.2:</u> Encourage meetings of EMD, city/county officials and SEMA to familiarize officials with mitigation planning, implementation and budgeting for mitigation projects.

Action Worksheet	
Name of Jurisdiction:	Phelps County
	Risk / Vulnerability
Problem being Mitigated:	Lack of knowledge/information of officials in regards to mitigation planning, implementation, and budgeting for mitigation projects.
Hazard(s) Addressed:	All Hazards
	Action or Project
Action/Project Number:	3.2.2
Name of Action or Project:	Mitigation awareness/education meetings with local officials and SEMA
Action or Project Description:	Encourage meetings of EMD, city/county officials & SEMA to familiarize officials with mitigation planning, implementation & budgeting for mitigation projects.
Applicable Goal Statement:	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.
Estimated Cost:	\$0
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	County EMD, County Commission, SEMA Area Coordinator
Action/Project Priority:	26 - H
Timeline for Completion:	On-going On-going
Potential Fund Sources:	N/A
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan
Progress Report	
Action Status	Continuing - Ongoing
Report of Progress	The Region I SEMA area coordinator holds quarterly meetings in the region and discussions include a variety of topics, including mitigation. MRPC has provided information and presentations on mitigation at regular board meetings that included representatives from Phelps County and its jurisdictions. Due to changes in elected officials, this is an ongoing activity.

<u>Action 3.3.1:</u> Re-evaluate the hazard mitigation plan, merge with other community planning and coordinate and integrate hazard mitigation activities, where appropriate, with emergency operations plans and procedures.

Action Worksheet	
Name of Jurisdiction:	Phelps County
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with not regularly reviewing and updating the mitigation plan and incorporating mitigation activities into emergency operations plans and procedures.
Hazard(s) Addressed:	All Hazards
	Action or Project
Action/Project Number:	3.3.1
Name of Action or Project:	Re-evaluate the hazard mitigation plan and merge with other community planning activities.
Action or Project Description:	Re-evaluate the hazard mitigation plan, merge with other community planning and coordinate and integrate hazard mitigation activities, where appropriate, with emergency operations plans and procedures.
Applicable Goal Statement:	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
Estimated Cost:	\$3,500 - \$5,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
Deeneneible	Plan for Implementation
Responsible Organization/Department:	County EMD, Local Planners, MPC
Action/Project Priority:	21 – High Priority
Timeline for Completion: Potential Fund Sources:	On-going Grants, local general revenue funds, private donations of cash,
	goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	LEOP, Hazard Mitigation Plan, County Budget, Economic Development Plan, Transportation Plan, Floodplain Ordinances
Progress Report	
Action Status	Continuing – On-going
Report of Progress	Hazard mitigation goals and actions have been incorporated into the regional Community and Economic Development Strategy. The Phelps County Road & Bridge Department has incorporated mitigation activities into their regular maintenance program. Mitigation actions are part of the county LEOP. As more local officials become familiar with mitigation and understand how it fits within other planning activities, this action item will continue to expand.

<u>Action 3.4.3:</u> Encourage the development of a county-wide CERT and/or VOAD program and educate the public on how they can benefit from these types of programs.

Action Worksheet	
Name of Jurisdiction:	Phelps County
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with lack of information on and need for CERT and/or COAD/VOAD programs to help communities prepare for and plan for disasters.
Hazard(s) Addressed:	All Hazards
	Action or Project
Action/Project Number:	3.4.3
Name of Action or Project:	Promote the development of CERT, COAD and VOAD
Action or Project Description:	Encourage the development of a county-wide CERT and/or VOAD program and educate the public on how they can benefit from these types of programs.
Applicable Goal Statement:	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
Estimated Cost:	\$1,500 - \$5,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	County EMD
Action/Project Priority:	28 – High Priority
Timeline for Completion:	On-going On-going
Potential Fund Sources:	Local general revenue funds, private donations of cash, goods, or services.
Local Planning	
Mechanisms to be Used	Hazard Mitigation Plan, LEOP
in Implementation, if any:	
Progress Report	
Action Status	Continuing – on-going
Report of Progress	CERT trainings have been held in Phelps County at least once a year for the past five years. Phelps Health, the county hospital, has a CERT team in place.

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

<u>Action 4.1.1:</u> Continue to encourage joint meetings of different organizations/agencies for mitigation related planning.

Action Worksheet	
Name of Jurisdiction:	Phelps County
	Risk / Vulnerability
Problem being Mitigated:	Lack of synergy/communication among organizations/agencies for mitigation related planning.
Hazard(s) Addressed:	All hazards
	Action or Project
Action/Project Number:	4.1.1
Name of Action or Project:	Encourage joint meetings of different organizations/agencies and continued communication on mitigation.
Action or Project Description:	Continue to encourage joint meetings of different organizations/agencies for mitigation related planning.
Applicable Goal Statement:	Strengthen communication and coordinate participation between agencies, stakeholders, jurisdictions, and the public to create widespread interest in mitigation.
Estimated Cost:	\$500 - \$1,500
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	County Commission, County EMD
Action/Project Priority:	28 – High Priority
Timeline for Completion:	On-going Control of the control of t
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP, County Budget
	Progress Report
Action Status	Continuing – in progress
Report of Progress	This is an on-going activity. Region I Fire Chiefs meet regularly. The Region I SEMA area coordinator holds quarterly meetings throughout the six-county region, including in Phelps County. This program could benefit from a more coordinated, focused effort to bring different agencies together to discuss mitigation issues. When the Hwy 63 bridge over Beaver Creek was replaced, planning discussions included MoDOT, Phelps County, Missouri Dept. of Conservation, Missouri Department of Natural Resources and the Corps of Engineers.

Action 4.1.3: Pool different agency resources to achieve widespread mitigation results.

Action Worksheet	
Name of Jurisdiction:	Phelps County
Risk / Vulnerability	
Problem being Mitigated:	Lack of resources to carry out mitigation projects
Hazard(s) Addressed:	All hazards
Action or Project	
Action/Project Number:	4.1.3
Name of Action or Project:	Pool different agency resources to achieve widespread mitigation results.
Action or Project Description:	Bring together different agencies and organizations that have similar goals and work together to pool resources to move mitigation projects forward.
Applicable Goal Statement:	Strengthen communication and coordinate participation between agencies, stakeholders, jurisdictions, and the public to create widespread interest in mitigation.
Estimated Cost:	\$1,000 - \$4,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	County EMD, County Commission, Floodplain Manager/Coordinator
Action/Project Priority:	24 – High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, Floodplain Ordinance, LEOP, County Budget
	Progress Report
Action Status	Continuing – on-going
Report of Progress	This is an on-going activity. All jurisdictions reported that they are interested in finding ways to pool resources to accomplish mitigation projects. The county currently works with landowners to cost-share the installation of culverts. The city of Rolla, Phelps County, MoDOT, Federal Highway Administration all worked together to develop the incident by-pass route for I-44 and were able to secure a CDBG grant to fund the project. Rolla did the engineering, MoDOT made accommodations and FHA gave up right-of-way to get the project completed.

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.

<u>Action 5.1.1:</u> Incorporate hazard mitigation into the long-range planning and development activities of the county and each jurisdiction.

Action Worksheet	
Action worksneet	
Name of Jurisdiction:	Phelps County
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with not incorporating hazard mitigation in the long-term planning and development of activities by each jurisdiction.
Hazard(s) Addressed:	All Hazards
	Action or Project
Action/Project Number:	5.1.1
Name of Action or Project:	Incorporating hazard mitigation into all long-range planning and development activities
Action or Project Description:	Incorporate hazard mitigation into the long-range planning and development activities of the county and each jurisdiction.
Applicable Goal Statement:	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 benefits of special interests.
Estimated Cost:	\$2,500 - \$25,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss of function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	County EMD, local planners, MPC
Action/Project Priority:	29 – High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP, economic development plan, transportation plan, floodplain ordinance
	Progress Report
Action Status	Continuing – in progress
Report of Progress	Hazard mitigation goals and actions have been incorporated into the regional Community and Economic Development Strategy. The Phelps County Road & Bridge Dept. has incorporated mitigation activities into their regular maintenance program. Mitigation actions are part of the county LEOP. As more officials become familiar with mitigation and understand how it fits within other planning activities, this action item will continue to expand.

<u>Action 5.2.1</u>: Encourage local governments to purchase properties in the floodplain as funds become available and convert that land into public space/recreation area.

Action Worksheet	
Name of Jurisdiction:	Phelps County
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with floodplain properties
Hazard(s) Addressed:	Flood
	Action or Project
Action/Project Number:	5.2.1
Name of Action or Project:	Government purchase of properties in the floodplain
Action or Project Description:	Encourage local governments to purchase properties in the floodplain as funds become available and convert that land into public space/recreation area.
Applicable Goal Statement:	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 benefits of special interests.
Estimated Cost:	\$3,500 - \$500,000
Benefits:	Losses avoided by implementing this action include property damage, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	County Commission, County EMD, Floodplain Manager/ Coordinator
Action/Project Priority:	18 - M
Timeline for Completion:	N/A
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services
Local Planning Mechanisms to be Used in Implementation, if any:	Floodplain ordinance, Hazard Mitigation Plan
A 11 O1 1	Progress Report
Action Status Report of Progress	Continuing – progress Phelps County is currently working on a floodplain buyout of properties in the Jerome and Sporthaven areas on the Gasconade River. Four properties have been purchased with potential to purchase one more. The entire project has been funded through state and federal grants.

Goal 6: Secure resources for investment in hazard mitigation.

<u>Action 6.1.2:</u> Structure grant proposals for road/bridge upgrades so that hazard mitigation concerns are also met.

Action Worksheet	
Name of Jurisdiction:	Phelps County
	Risk / Vulnerability
Problem being Mitigated:	Roads and bridges in need of upgrades.
Hazard(s) Addressed:	Flood
	Action or Project
Action/Project Number:	6.1.2
Name of Action or Project:	Structuring grant proposals to meet mitigation needs.
Action or Project Description:	Structure grant proposals for road/bridge upgrades so that hazard mitigation concerns are also met.
Applicable Goal Statement:	Secure resources for investment in hazard mitigation.
Estimated Cost:	\$3,500 -\$4,500
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	County Engineer, County Commission, Local Planners, Local Grant Writers
Action/Project Priority:	24 – High Priority
Timeline for Completion:	On-going On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, County Budget, CEDS, Transportation Plan
	Progress Report
Action Status	Continuing in progress
Report of Progress	Phelps County's policy is to try to incorporate upgrades into all road and bridge projects to reduce vulnerabilities. This is an activity that would benefit from raising awareness of mitigation concerns and remedies. As more local officials become aware of the importance of mitigation and realize that grant applications can provide opportunities for funding those actions, this activity will become more integrated into local planning.

<u>Action 6.1.3:</u> Work with state/local/federal agencies to include mitigation in all economic and community development projects.

Action Worksheet		
Name of Jurisdiction:	Phelps County	
	Risk / Vulnerability	
Problem being Mitigated:	Lack of synergy/communication/coordination of mitigation in community development projects and integration of mitigation actions into economic and community development projects.	
Hazard(s) Addressed:	All hazards	
	Action or Project	
Action/Project Number:	6.1.3	
Name of Action or Project:	Coordination with state/local/federal agencies to integrate mitigation into economic and community development projects.	
Action or Project Description:	Work with state/local/federal agencies to include mitigation in all economic and community development projects.	
Applicable Goal Statement:	Secure resources for investment in hazard mitigation.	
Estimated Cost:	\$2,500 - \$9.500	
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.	
	Plan for Implementation	
Responsible Organization/Department:	County Commission, local economic developers, community development organizations	
Action/Project Priority:	23 – High Priority	
Timeline for Completion:	On-going On-going	
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.	
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, CEDS, Transportation Plan	
Action Status	Progress Report	
Action Status Report of Progress	Continuing in progress Hazard mitigation goals and actions have been incorporated into the regional Community Economic Development Strategy (CEDS). As mitigation awareness grows, additional efforts will be made to incorporate mitigation activities into economic and community development projects.	

Action 6.1.4: Encourage local jurisdictions to budget for mitigation projects.

Action Worksheet		
Name of Jurisdiction:	Phelps County	
	Risk / Vulnerability	
Problem being Mitigated:	Lack of funding for mitigation projects among local jurisdictions.	
Hazard(s) Addressed:	All Hazards	
	Action or Project	
Action/Project Number:	6.1.4	
Name of Action or Project:	Budgeting for mitigation projects.	
Action or Project Description:	Encourage local jurisdictions to budget for mitigation projects.	
Applicable Goal Statement:	Secure resources for investment in hazard mitigation.	
Estimated Cost:	\$500 - \$1,500	
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.	
	Plan for Implementation	
Responsible Organization/Department:	County EMD, County Commission	
Action/Project Priority:	23 - H	
Timeline for Completion:	On-going On-going	
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services	
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard mitigation plan, County Budget, CEDs, LEOP	
Progress Report		
Action Status	Continuing in Progress	
Report of Progress	As awareness of the importance of mitigation grows, more local jurisdictions are seeing the long-term benefits and working toward budgeting for mitigation activities.	

<u>Action 6.2.1:</u> Encourage cities and counties to develop and implement cost-share programs with private property owners for hazard mitigation projects that benefit the community as a whole.

Action Worksheet	
N. C.L. L. C.	
Name of Jurisdiction:	Phelps County
	Risk / Vulnerability
Problem being Mitigated:	Lack of cost-share programs with private property owners for
	hazard mitigation projects.
Hazard(s) Addressed:	All hazards
Action or Project	
Action/Project Number:	6.2.1
Name of Action or Project:	Encourage local mitigation cost-share programs.
_	Encourage cities and counties to develop and implement cost-
Action or Project	share programs with private property owners for hazard
Description:	mitigation projects that benefit the community as a whole.
A II 11 0 1	
Applicable Goal Statement:	Secure resources for investment in hazard mitigation.
Estimated Cost:	\$5,000 - \$500,000
Benefits:	Losses avoided by implementing this action include injuries
2011011101	and/or casualties, property damages, loss-of-
	function/displacement impacts, and emergency management
	costs/community costs.
	Plan for Implementation
Responsible	County EMD, County Commission, Local Planners, County
Organization/Department:	Engineers, MPC
Action/Project Priority:	14 – Medium Priority
Timeline for Completion:	5 – 10 years to implement and then on-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of
Lead Diamina	cash, goods, or services.
Local Planning Mechanisms to be Used	Hazard Mitigation Plan
in Implementation, if any:	Progress Report
Action Status	Continuing in progress
Report of Progress	In some situations the county will install a culvert if the individual
1.toport or i rogicos	property owner pays for the culvert in order to insure that
	installation is done correctly and the culvert is sized appropriately.
	This is a program that could benefit from more organized
	guidelines and focused efforts if additional funding could be
	secured.

Doolittle

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

Action 1.1.1: Maintain a hazard mitigation public awareness program to include: benefits of hazard mitigation planning and projects; personal emergency preparedness; participation in emergency notification systems where available; information on individual hazard mitigation projects such as tying down hazardous materials tanks; how to shut off utilities; precautions to take during threatening weather events; etc.

Action Worksheet		
Name of Jurisdiction:	Doolittle	
	Risk / Vulnerability	
Problem being Mitigated:	Residents are not always prepared to manage on their own for 72 hours following an event. This action item will improve individual household preparedness and increase knowledge of mitigation activities.	
Hazard(s) Addressed:	All Hazards	
Action or Project		
Action/Project Number:	1.1.1	
Name of Action or Project:	Personal Preparedness Education/Awareness programs	
Action or Project Description:	City EMD and local emergency response agencies will promote Ready in 3 and other personal preparedness education programs through the distribution of brochures, press releases and presentations.	
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning, and hazard mitigation activities.	
Estimated Cost:	\$500 - \$3,500	
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.	
	Plan for Implementation	
Responsible Organization/Department:	City EMD	
Action/Project Priority:	27 – High Priority	
Timeline for Completion:	1 – 5 years - Ongoing	
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.	
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, Meramec Region Community Economic Development Strategy (CEDS)	
	Progress Report	
Action Status	Continuing in progress	
Report of Progress	Many emergency response agencies promote individual household preparedness & provide Ready in 3 brochures. SEMA distributes press releases periodically on personal preparedness. A more focused and coordinated effort would help to achieve comprehensive coverage in the city.	

<u>Action 1.2.1:</u> Budget for and obtain early warning systems and improved communications systems.

Action Worksheet		
Name of Jurisdiction:	Doolittle	
	Risk / Vulnerability	
Problem being Mitigated:	Risks and vulnerabilities associated with lack of early warning	
	systems and communications systems in unincorporated areas.	
Hazard(s) Addressed:	All hazards.	
	Action or Project	
Action/Project Number:	1.2.1	
Name of Action or Project:	Improving early warning and communications capabilities.	
Action or Project Description:	Need to budget for enhanced warning and communications systems to improve early warning capabilities for residents in Doolittle.	
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning, and hazard mitigation activities.	
Estimated Cost:	Unknown	
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, loss-of-function/displacement impacts, and emergency management costs/community costs.	
	Plan for Implementation	
Responsible Organization/Department:	City EMD, Mayor, Board of Aldermen	
Action/Project Priority:	23 – High Priority	
Timeline for Completion:	On-going	
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.	
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP, City Budget	
	Progress Report	
Action Status	Continuing and updated – in progress	
Report of Progress	Doolittle has one outdoor warning siren. The county has a phone-based warning system – Everbridge – which can provide alerts to residents who sign up for it by text, cell phone, email and landline phone and is available to all residents of the county. This program could benefit from a more focused campaign to encourage	
	residents to sign up for Everbridge.	

<u>Action 1.3.1:</u> Continue to implement tree trimming and dead tree removal programs by utility companies and local government.

Action Worksheet	
N 61 11 61	
Name of Jurisdiction:	Doolittle
	Risk / Vulnerability
Problem being Mitigated:	Risks and vulnerabilities associated with power outages from trees interfering with power lines and/or blocking roads
Hazard(s) Addressed:	Tornadoes, severe winter weather, severe thunderstorm/high
Tiazaru(3) Addressed.	winds/lightning/hail
	Action or Project
Action/Project Number:	1.3.1
Name of Action or Project:	Tree trimming and dead tree removal.
Action or Project Description:	Continue to implement tree trimming and dead tree removal.
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning, and hazard mitigation activities.
Estimated Cost:	\$500 - \$1,500
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damage, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	Public Works, Mayor, Board of Aldermen
Action/Project Priority:	24 – High Priority
Timeline for Completion:	On-going On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning	
Mechanisms to be Used	Hazard Mitigation Plan, LEOP
in Implementation, if any:	
Progress Report	
Action Status	Continuing and updated – in progress
Report of Progress	Doolittle does not have a city operated tree trimming program. The electric coop that provides power for the community does tree trimming as needed for power lines.

<u>Action 1.3.3:</u> Establish designated shelters for residents to be used during tornado threats, as cooling centers during extreme heat or power outages and/or as shelters during other disasters.

Action Worksheet	
Name of Jurisdiction:	Doolittle
Risk / Vulnerability	
Problem being Mitigated:	Risks/vulnerabilities associated with lack of tornado shelters and warming and cooling centers during times of extreme heat and cold, and power outages
Hazard(s) Addressed:	Severe Weather, Winter Storms, Tornadoes, Extreme Heat
Action or Project	
Action/Project Number:	1.3.3
Name of Action or Project:	Establish and maintain designated storm shelters, as well as heating and cooling centers
Action or Project Description:	Establish designated shelters for residents to be used as shelters during tornado warnings, as well as heating and cooling centers during extreme heat or power outages.
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning, and hazard mitigation activities.
Estimated Cost:	\$5,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, loss-of-function/displacement impacts, and emergency management costs/community costs.
Plan for Implementation	
Responsible Organization/Department:	City EMD
Action/Project Priority:	26 –High Priority
Timeline for Completion:	5 years
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP
Progress Report	
Action Status	Continuing – no progress
Report of Progress	

<u>Action 1.3.4:</u> Facilities that house vulnerable populations such as disabled and elderly should review alternative locations for sheltering residents and MOUs with "sister" facilities.

Action Worksheet	
Name of Jurisdiction:	Doolittle
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with nonexistent/unavailable shelters for large groups such as hospitals, nursing homes and group homes.
Hazard(s) Addressed:	All hazards
, ,	Action or Project
Action/Project Number:	1.3.4
Name of Action or Project:	Establish alternative shelters for facilities that house disabled and elderly populations such as hospitals, nursing homes and group homes.
Action or Project Description:	Continue to work to increase communications between facilities that house vulnerable populations and with local EMDs and agencies responsible for sheltering.
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning, and hazard mitigation activities.
Estimated Cost:	\$2,500 - \$5,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD, county health department
Action/Project Priority:	21 –High Priority
Timeline for Completion:	On-going On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP
	Progress Report
Action Status	Continuing – no progress
Report of Progress	Data on what private nursing and group homes have for emergency plans and MOUs does not currently exist. This action item would benefit from a focused effort to gather that data and assist these private institutions with establishing alternative sheltering plans.

<u>Action 1.3.5:</u> Increase availability (if necessary, construction) of storm shelters for individual families and large groups, including near large employment centers and schools.

Action Worksheet	
Name of Jurisdiction:	Doolittle
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with nonexistent/unavailable shelters for individual families and large groups.
Hazard(s) Addressed:	Tornados, severe storms
	Action or Project
Action/Project Number:	1.3.5
Name of Action or Project:	Increase the availability of storm shelters
Action or Project Description:	Increase availability (if necessary, construction) of storm shelters for individual families and large groups, including near large employment centers and schools.
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning, and hazard mitigation activities.
Estimated Cost:	\$2,500 - \$5,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD
Action/Project Priority:	18 – Medium Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP
Progress Report	
Action Status	Continuing – no progress
Report of Progress	

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

<u>Action 2.1.3:</u> Encourage the installation of small renewable energy microgrids (solar, wind) and backup generators for critical infrastructure such as water/sewer systems and emergency services.

Action Worksheet	
Name of Jurisdiction:	Doolittle
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with power outages for critical infrastructure/facilities
Hazard(s) Addressed:	All hazards
	Action or Project
Action/Project Number:	2.1.3
Name of Action or Project:	Acquisition and installation of microgrids and backup generators for critical infrastructure.
Action or Project Description:	Encourage the installation of small renewable energy microgrids (solar, wind) and backup generators for critical infrastructure such as water/sewer systems and emergency services.
Applicable Goal Statement:	Reduce the potential impact of natural disasters on new and existing properties and infrastructure and the local economy.
Estimated Cost:	\$25,500 – \$80,000
Benefits:	Losses avoided by implementing this action include loss-of- function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD, Mayor, Board of Aldermen, Public Works
Action/Project Priority:	21 –High Priority
Timeline for Completion:	5 years
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	LEOP, City Budget, Hazard Mitigation Plan, Critical Facility Budgets
	Progress Report
Action Status	Revised – in progress
Report of Progress	The city of Doolittle has one portable generator. The Doolittle Fire Department has two portable generators and a fixed generator at the fire house.

<u>Action 2.2.1:</u> Educate residents, realtors and contractors on the dangers of floodplain development and the benefits of the NFIP.

Action Worksheet	
Name of Jurisdiction:	Doolittle
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities of property located in the floodplain during a flood event.
Hazard(s) Addressed:	Flood
	Action or Project
Action/Project Number:	2.2.1
Name of Action or Project:	Floodplain education/awareness.
Action or Project Description:	Educate residents, realtors and contractors about the dangers of floodplain development and the benefits of the NFIP.
Applicable Goal Statement:	Reduce the potential impact of natural disasters on new and existing properties and infrastructure and the local economy.
Estimated Cost:	\$5,000-\$6,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	Floodplain manager, Mayor, Board of Aldermen
Action/Project Priority:	25 –High Priority
Timeline for Completion:	On-going On-going
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Floodplain management ordinance, LEOP, CEDS, Hazard Mitigation Plan
Progress Report	
Action Status	Continuing - no progress
Report of Progress	

<u>Action 2.2.2:</u> Encourage development of storm water management plans in those jurisdictions that do not currently have them and in all new residential and commercial development.

Action Worksheet		
Name of Jurisdiction:	Doolittle	
	Risk / Vulnerability	
Problem being Mitigated:	Risks/vulnerabilities to property and communities in areas that do not possess adequate storm water management plans.	
Hazard(s) Addressed:	Flood, Severe Weather	
Action or Project		
Action/Project Number:	2.2.2	
Name of Action or Project:	Encourage local governments to require contractor storm water management plans in all new development – both residential and commercial properties.	
Action or Project Description:	Encourage the development of stormwater management plans for all new development through the adoption of ordinances or other local government regulations and encourage the county to review and strengthen any subdivision ordinances to incorporate mitigation measures for stormwater management.	
Applicable Goal Statement:	Reduce the potential impact of natural disasters on new and existing properties and infrastructure and the local economy.	
Estimated Cost:	\$5,000-\$25,000	
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.	
	Plan for Implementation	
Responsible Organization/Department:	Mayor, Board of Aldermen, local planners	
Action/Project Priority:	23 – High Priority	
Timeline for Completion:	On-going On-going	
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services.	
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, regional transportation plan	
Progress Report		
Action Status	Revised – in progress	
Report of Progress	The city of Doolittle has storm water ordinances in place but could benefit from reviewing and strengthening those ordinances.	

<u>Action 2.2.3:</u> Continue to enforce flood damage prevention/floodplain management ordinances in compliance with NFIP requirements.

Action Worksheet	
Name of Jurisdiction:	Doolittle
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities of properties in the floodplain during a flood event.
Hazard(s) Addressed:	Flood
·	Action or Project
Action/Project Number:	2.2.3
Name of Action or Project:	Floodplain management compliance enforcement.
Action or Project Description:	Continue to enforce flood damage prevention/floodplain management ordinances in compliance with NFIP requirements.
Applicable Goal Statement:	Reduce the potential impact of natural disasters on new and existing properties and infrastructure and the local economy.
Estimated Cost:	\$4,000 - \$10,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	Floodplain Manager, Mayor, Board of Aldermen
Action/Project Priority:	23 – High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services
Local Planning Mechanisms to be Used in Implementation, if any:	Floodplain management ordinances, builder's plans, LEOP
	Progress Report
Action Status	Continuing in Progress
Report of Progress	The city is a member of the NFIP and works to insure compliance with the city floodplain management ordinance. The ordinance requires a permit for any development in the floodplain. The program would benefit from more focused education efforts with
	builders, insurers, banks and residents.

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.

<u>Action 3.2.2:</u> Encourage meetings of EMD, city/county officials and SEMA to familiarize officials with mitigation planning, implementation and budgeting for mitigation projects.

	Action Worksheet	
Name of Jurisdiction:	Doolittle	
	Risk / Vulnerability	
Problem being Mitigated:	Lack of knowledge/information of officials in regards to mitigation	
	planning, implementation, and budgeting for mitigation projects.	
Hazard(s) Addressed:	All Hazards	
	Action or Project	
Action/Project Number:	3.2.2	
Name of Action or Project:	Mitigation awareness/education meetings with local officials and SEMA	
Action or Project Description:	Encourage meetings of EMD, city/county officials & SEMA to familiarize officials with mitigation planning, implementation & budgeting for mitigation projects.	
Applicable Goal Statement:	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.	
Estimated Cost:	\$0	
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.	
	Plan for Implementation	
Responsible Organization/Department:	City EMD, Mayor, Board of Aldermen, SEMA Area Coordinator	
Action/Project Priority:	26 - H	
Timeline for Completion:	On-going	
Potential Fund Sources:	N/A	
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan	
	Progress Report	
Action Status	Continuing - Ongoing	
Report of Progress	The Region I SEMA area coordinator holds quarterly meetings in the region and discussions include a variety of topics, including mitigation. MRPC has provided information and presentations on mitigation at regular board meetings that included representatives from Phelps County and its jurisdictions. Due to changes in elected officials, this is an ongoing activity.	

Action 3.3.1: Re-evaluate the hazard mitigation plan, merge with other community planning and coordinate and integrate hazard mitigation activities, where appropriate, with emergency operations plans and procedures.

operations plans and procedures.	
Action Worksheet	
Name of Jurisdiction:	Doolittle
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with not regularly reviewing and updating the mitigation plan and incorporating mitigation activities into emergency operations plans and procedures.
Hazard(s) Addressed:	All Hazards
	Action or Project
Action/Project Number:	3.3.1
Name of Action or Project:	Re-evaluate the hazard mitigation plan and merge with other community planning activities.
Action or Project Description:	Re-evaluate the hazard mitigation plan, merge with other community planning and coordinate and integrate hazard mitigation activities, where appropriate, with emergency operations plans and procedures.
Applicable Goal Statement:	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
Estimated Cost:	\$3,500 - \$5,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
Description	Plan for Implementation
Responsible Organization/Department:	City EMD, Local Planners, MPC
Action/Project Priority:	21 – High Priority
Timeline for Completion:	On-going Control of the control of t
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	LEOP, Hazard Mitigation Plan, County Budget, Economic Development Plan, Transportation Plan, Floodplain Ordinances
A -ti Ot 1	Progress Report
Action Status	Continuing – On-going
Report of Progress	Hazard mitigation goals and actions have been incorporated into the regional Community and Economic Development Strategy. The Phelps County Road & Bridge Department has incorporated mitigation activities into their regular maintenance program. Mitigation actions are part of the county LEOP. As more local officials become familiar with mitigation and understand how it fits within other planning activities, this action item will continue to expand.

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

<u>Action 4.1.1:</u> Continue to encourage joint meetings of different organizations/agencies for mitigation related planning.

Action Worksheet		
Action Worksheet		
Name of Jurisdiction:	Doolittle	
	Risk / Vulnerability	
Problem being Mitigated:	Lack of synergy/communication among organizations/agencies for mitigation related planning.	
Hazard(s) Addressed:	All hazards	
	Action or Project	
Action/Project Number:	4.1.1	
Name of Action or Project:	Encourage joint meetings of different organizations/agencies and continued communication on mitigation.	
Action or Project Description:	Continue to encourage joint meetings of different organizations/agencies for mitigation related planning.	
Applicable Goal Statement:	Strengthen communication and coordinate participation between agencies, stakeholders, jurisdictions, and the public to create widespread interest in mitigation.	
Estimated Cost:	\$500 - \$1,500	
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.	
	Plan for Implementation	
Responsible Organization/Department:	Mayor, Board of Aldermen, City EMD	
Action/Project Priority:	28 – High Priority	
Timeline for Completion:	On-going On-going	
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.	
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP, County Budget	
	Progress Report	
Action Status	Continuing – in progress	
Report of Progress	This is an on-going activity. Region I Fire Chiefs meet regularly. The Region I SEMA area coordinator holds quarterly meetings throughout the six-county region, including in Phelps County. This program could benefit from a more coordinated, focused effort to bring different agencies together to discuss mitigation issues.	

Action 4.1.3: Pool different agency resources to achieve widespread mitigation results.

Action Worksheet	
Name of Jurisdiction:	Doolittle
	Risk / Vulnerability
Problem being Mitigated:	Lack of resources to carry out mitigation projects
Hazard(s) Addressed:	All hazards
	Action or Project
Action/Project Number:	4.1.3
Name of Action or Project:	Pool different agency resources to achieve widespread mitigation results.
Action or Project Description:	Bring together different agencies and organizations that have similar goals and work together to pool resources to move mitigation projects forward.
Applicable Goal Statement:	Strengthen communication and coordinate participation between agencies, stakeholders, jurisdictions, and the public to create widespread interest in mitigation.
Estimated Cost:	\$1,000 - \$4,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD, Mayor, Board of Aldermen, Floodplain Manager
Action/Project Priority:	24 – High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, Floodplain Ordinance, LEOP, City Budget
Progress Report	
Action Status	Continuing – on-going
Report of Progress	This is an on-going activity. Doolittle reported that they are interested in finding ways to pool resources to accomplish mitigation projects.

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.

<u>Action 5.1.1:</u> Incorporate hazard mitigation into the long-range planning and development activities of the county and each jurisdiction.

Action Worksheet	
Name of Jurisdiction:	Doolittle
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with not incorporating hazard mitigation in the long-term planning and development of activities by each jurisdiction.
Hazard(s) Addressed:	All Hazards
, ,	Action or Project
Action/Project Number:	5.1.1
Name of Action or Project:	Incorporating hazard mitigation into all long-range planning and development activities
Action or Project Description:	Incorporate hazard mitigation into the long-range planning and development activities of the county and each jurisdiction.
Applicable Goal Statement:	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 benefits of special interests.
Estimated Cost:	\$2,500 - \$25,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss of function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD, local planners, MPC
Action/Project Priority:	29 – High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP, economic development plan, transportation plan, floodplain ordinance
	Progress Report
Action Status	Continuing – in progress
Report of Progress	Hazard mitigation goals and actions have been incorporated into the regional Community and Economic Development Strategy. Mitigation actions are part of the LEOP. As more officials become familiar with mitigation and understand how it fits within other planning activities, this action item will continue to expand.

<u>Action 5.2.1</u>: Encourage local governments to purchase properties in the floodplain as funds become available and convert that land into public space/recreation area.

Action Worksheet	
Name of Jurisdiction:	Doolittle
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with floodplain properties
Hazard(s) Addressed:	Flood
	Action or Project
Action/Project Number:	5.2.1
Name of Action or Project:	Government purchase of properties in the floodplain
Action or Project Description:	Encourage local governments to purchase properties in the floodplain as funds become available and convert that land into public space/recreation area.
Applicable Goal Statement:	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 benefits of special interests.
Estimated Cost:	\$3,500 - \$500,000
Benefits:	Losses avoided by implementing this action include property damage, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD, Mayor, Board of Aldermen, Floodplain Manager/ Coordinator
Action/Project Priority:	18 - M
Timeline for Completion:	N/A
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services
Local Planning Mechanisms to be Used in Implementation, if any:	Floodplain ordinance, Hazard Mitigation Plan
Progress Report	
Action Status	Continuing – no progress
Report of Progress	Doolittle has not had any requests from property owners for a buyout.

<u>Action 5.2.2</u>: Encourage communities to discuss zoning repetitive loss properties in the floodplain as open space.

Action Worksheet	
Name of Jurisdiction:	Doolittle
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with floodplain properties
Hanned (a) Address and	
Hazard(s) Addressed:	Flood
	Action or Project
Action/Project Number:	5.2.1
Name of Action or Project:	Government purchase of properties in the floodplain
Action or Project Description:	Encourage local governments to purchase properties in the floodplain as funds become available and convert that land into public space/recreation area.
Applicable Goal Statement:	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 benefits of special interests.
Estimated Cost:	\$3,500 - \$500,000
Benefits:	Losses avoided by implementing this action include property damage, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD, Mayor, Board of Aldermen, Floodplain Manager/ Coordinator
Action/Project Priority:	16 - M
Timeline for Completion:	N/A
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services
Local Planning Mechanisms to be Used in Implementation, if any:	Floodplain ordinance, Hazard Mitigation Plan
Progress Report	
Action Status	Continuing – no progress
Report of Progress	Doolittle does not currently have zoning or land use ordinances.

Goal 6: Secure resources for investment in hazard mitigation.

<u>Action 6.1.2:</u> Structure grant proposals for road/bridge upgrades so that hazard mitigation concerns are also met.

Action Worksheet	
Name of Jurisdiction:	Doolittle
	Risk / Vulnerability
Problem being Mitigated:	Roads and bridges in need of upgrades.
Hazard(s) Addressed:	Flood
	Action or Project
Action/Project Number:	6.1.2
Name of Action or Project:	Structuring grant proposals to meet mitigation needs.
Action or Project Description:	Structure grant proposals for road/bridge upgrades so that hazard mitigation concerns are also met.
Applicable Goal Statement:	Secure resources for investment in hazard mitigation.
Estimated Cost:	\$3,500 -\$4,500
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City Engineer, Mayor, Board of Aldermen, Local Planners, Local Grant Writers
Action/Project Priority:	24 – High Priority
Timeline for Completion:	On-going On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, City Budget, CEDS, Transportation Plan
	Progress Report
Action Status	Continuing no progress
Report of Progress	The city has not had any grant projects for roads and bridges in the past five years. This is an activity that would benefit from raising awareness of mitigation concerns and remedies. As more local officials become aware of the importance of mitigation and realize that grant applications can provide opportunities for funding those actions, this activity will become more integrated into local planning.

<u>Action 6.1.3:</u> Work with state/local/federal agencies to include mitigation in all economic and community development projects.

Action Worksheet		
Name of Jurisdiction:	Doolittle	
	Risk / Vulnerability	
Problem being Mitigated:	Lack of synergy/communication/coordination of mitigation in community development projects and integration of mitigation actions into economic and community development projects.	
Hazard(s) Addressed:	All hazards	
	Action or Project	
Action/Project Number:	6.1.3	
Name of Action or Project:	Coordination with state/local/federal agencies to integrate mitigation into economic and community development projects.	
Action or Project Description:	Work with state/local/federal agencies to include mitigation in all economic and community development projects.	
Applicable Goal Statement:	Secure resources for investment in hazard mitigation.	
Estimated Cost:	\$2,500 - \$9.500	
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.	
	Plan for Implementation	
Responsible Organization/Department:	Mayor, Board of Aldermen, local economic developers, community development organizations	
Action/Project Priority:	23 – High Priority	
Timeline for Completion:	On-going	
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.	
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, CEDS, Transportation Plan	
	Progress Report	
Action Status	Continuing in progress	
Report of Progress	Hazard mitigation goals and actions have been incorporated into the regional Community Economic Development Strategy (CEDS) and regional transportation plan. As mitigation awareness grows, additional efforts will be made to incorporate mitigation activities into economic and community development projects.	

Action 6.1.4: Encourage local jurisdictions to budget for mitigation projects.

Action Worksheet		
Name of Jurisdiction:	Doolittle	
	Risk / Vulnerability	
Problem being Mitigated:	Lack of funding for mitigation projects among local jurisdictions.	
Hazard(s) Addressed:	All Hazards	
	Action or Project	
Action/Project Number:	6.1.4	
Name of Action or Project:	Budgeting for mitigation projects.	
Action or Project Description:	Encourage local jurisdictions to budget for mitigation projects.	
Applicable Goal Statement:	Secure resources for investment in hazard mitigation.	
Estimated Cost:	\$500 - \$1,500	
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.	
Plan for Implementation		
Responsible Organization/Department:	City EMD, Mayor, Board of Aldermen	
Action/Project Priority:	23 - H	
Timeline for Completion:	On-going	
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services	
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard mitigation plan, City Budget, CEDs, LEOP	
A (; O) (Progress Report	
Action Status	Continuing in Progress	
Report of Progress	As awareness of the importance of mitigation grows, more local jurisdictions are seeing the long-term benefits and working toward budgeting for mitigation activities.	

<u>Action 6.2.1:</u> Encourage cities and counties to develop and implement cost-share programs with private property owners for hazard mitigation projects that benefit the community as a whole.

Action Worksheet	
Name of Jurisdiction:	Doolittle
	Risk / Vulnerability
Problem being Mitigated:	Lack of cost-share programs with private property owners for
	hazard mitigation projects.
Hazard(s) Addressed:	All hazards
	Action or Project
Action/Project Number:	6.2.1
Name of Action or Project:	Encourage local mitigation cost-share programs.
	Encourage cities and counties to develop and implement cost-
Action or Project	share programs with private property owners for hazard
Description:	mitigation projects that benefit the community as a whole.
Applicable Goal Statement:	Secure resources for investment in hazard mitigation.
Estimated Cost:	\$5,000 - \$500,000
Benefits:	Losses avoided by implementing this action include injuries
	and/or casualties, property damages, loss-of-
	function/displacement impacts, and emergency management
	costs/community costs.
	Plan for Implementation
Responsible	City EMD, Mayor, Board of Aldermen, Local Planners, City
Organization/Department:	Engineer, MPC
Action/Project Priority:	14 – Medium Priority
Timeline for Completion:	5 – 10 years to implement and then on-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of
Local Blanning	cash, goods, or services.
Local Planning Mechanisms to be Used	Hazard Mitigation Plan
in Implementation, if any:	
in implementation, it any.	Progress Report
Action Status	Continuing no progress
Report of Progress	The city does not currently have any cost-share programs in
	place.

Edgar Springs

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

Action 1.1.1: Maintain a hazard mitigation public awareness program to include: benefits of hazard mitigation planning and projects; personal emergency preparedness; participation in emergency notification systems where available; information on individual hazard mitigation projects such as tying down hazardous materials tanks; how to shut off utilities; precautions to take during threatening weather events; etc.

Action Worksheet		
Name of Jurisdiction:	Edgar Springs	
	Risk / Vulnerability	
Problem being Mitigated:	Residents are not always prepared to manage on their own for 72 hours following an event. This action item will improve individual household preparedness and increase knowledge of mitigation activities.	
Hazard(s) Addressed:	All Hazards	
	Action or Project	
Action/Project Number:	1.1.1	
Name of Action or Project:	Personal Preparedness Education/Awareness programs	
Action or Project Description:	City EMD and local emergency response agencies will promote Ready in 3 and other personal preparedness education programs through the distribution of brochures, press releases and presentations.	
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning, and hazard mitigation activities.	
Estimated Cost:	\$500 - \$3,500	
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.	
	Plan for Implementation	
Responsible Organization/Department:	City EMD	
Action/Project Priority:	27 – High Priority	
Timeline for Completion:	1 – 5 years - Ongoing	
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.	
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, Meramec Region Community Economic Development Strategy (CEDS)	
Action Status	Progress Report	
Action Status	Continuing in progress Many emergency response agencies promote individual bauschold	
Report of Progress	Many emergency response agencies promote individual household preparedness & provide Ready in 3 brochures. SEMA distributes press releases periodically on personal preparedness. A more focused and coordinated effort would help to achieve comprehensive coverage in the city.	

<u>Action 1.2.1:</u> Budget for and obtain early warning systems and improved communications systems.

Action Worksheet			
Name of Jurisdiction:	Edgar Springs		
	Risk / Vulnerability		
Problem being Mitigated:	Risks and vulnerabilities associated with lack of early warning		
	systems and communications systems in unincorporated areas.		
Hazard(s) Addressed:	All hazards.		
	Action or Project		
Action/Project Number:	1.2.1		
Name of Action or Project:	Improving early warning and communications capabilities.		
Action or Project Description:	Need to budget for enhanced warning and communications systems to improve early warning capabilities for residents in Edgar Springs.		
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning, and hazard mitigation activities.		
Estimated Cost:	Unknown		
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, loss-of-function/displacement impacts, and emergency management costs/community costs.		
Plan for Implementation			
Responsible Organization/Department:	City EMD, Mayor, Board of Aldermen		
Action/Project Priority:	23 – High Priority		
Timeline for Completion:	On-going		
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.		
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP, City Budget		
	Progress Report		
Action Status	Continuing and updated – in progress		
Report of Progress	Edgar Springs has one outdoor warning siren. The county has a phone-based warning system – Everbridge – which can provide alerts to residents who sign up for it by text, cell phone, email and landline phone and is available to all residents of the county. This program could benefit from a more focused campaign to		
	encourage residents to sign up for Everbridge.		

<u>Action 1.3.1:</u> Continue to implement tree trimming and dead tree removal programs by utility companies and local government.

Action Worksheet	
Name of Jurisdiction:	Edgar Springs
	Risk / Vulnerability
Problem being Mitigated:	Risks and vulnerabilities associated with power outages from trees interfering with power lines and/or blocking roads
Hazard(s) Addressed:	Tornadoes, severe winter weather, severe thunderstorm/high winds/lightning/hail
	Action or Project
Action/Project Number:	1.3.1
Name of Action or Project:	Tree trimming and dead tree removal.
Action or Project Description:	Continue to implement tree trimming and dead tree removal.
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning, and hazard mitigation activities.
Estimated Cost:	\$500 - \$1,500
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damage, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	Public Works, Mayor, Board of Aldermen
Action/Project Priority:	24 – High Priority
Timeline for Completion:	On-going On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning	
Mechanisms to be Used	Hazard Mitigation Plan, LEOP
in Implementation, if any:	
Progress Report	
Action Status	Continuing in progress
Report of Progress	Edgar Springs does not have a city operated tree trimming program. The electric coop that provides power for the community does tree trimming as needed for power lines.

<u>Action 1.3.3:</u> Establish designated shelters for residents to be used during tornado threats, as cooling centers during extreme heat or power outages and/or as shelters during other disasters.

Action Worksheet	
Name of Jurisdiction:	Edgar Springs
Risk / Vulnerability	
Problem being Mitigated:	Risks/vulnerabilities associated with lack of tornado shelters and warming and cooling centers during times of extreme heat and cold, and power outages
Hazard(s) Addressed:	Severe Weather, Winter Storms, Tornadoes, Extreme Heat
Action or Project	
Action/Project Number:	1.3.3
Name of Action or Project:	Establish and maintain designated storm shelters, as well as heating and cooling centers
Action or Project Description:	Establish designated shelters for residents to be used as shelters during tornado warnings, as well as heating and cooling centers during extreme heat or power outages.
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning, and hazard mitigation activities.
Estimated Cost:	\$5,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, loss-of-function/displacement impacts, and emergency management costs/community costs.
Plan for Implementation	
Responsible Organization/Department:	City EMD
Action/Project Priority:	26 –High Priority
Timeline for Completion:	5 years
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP
Progress Report	
Action Status	Continuing – no progress
Report of Progress	

<u>Action 1.3.4:</u> Facilities that house vulnerable populations such as disabled and elderly should review alternative locations for sheltering residents and MOUs with "sister" facilities.

Action Worksheet	
Name of Jurisdiction:	Edgar Springs
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with nonexistent/unavailable shelters for large groups such as hospitals, nursing homes and group homes.
Hazard(s) Addressed:	All hazards
	Action or Project
Action/Project Number:	1.3.4
Name of Action or Project:	Establish alternative shelters for facilities that house disabled and elderly populations such as hospitals, nursing homes and group homes.
Action or Project Description:	Continue to work to increase communications between facilities that house vulnerable populations and with local EMDs and agencies responsible for sheltering.
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning, and hazard mitigation activities.
Estimated Cost:	\$2,500 - \$5,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD, county health department
Action/Project Priority:	21 –High Priority
Timeline for Completion:	On-going On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP
Action Status	Progress Report
Action Status Report of Progress	Continuing – no progress Data on what private nursing and group homes have for emergency plans and MOUs does not currently exist. This action item would benefit from a focused effort to gather that data and assist these private institutions with establishing alternative sheltering plans.

<u>Action 1.3.5:</u> Increase availability (if necessary, construction) of storm shelters for individual families and large groups, including near large employment centers and schools.

Action Worksheet	
Name of Jurisdiction:	Edgar Springs
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with nonexistent/unavailable shelters for individual families and large groups.
Hazard(s) Addressed:	Tornados, severe storms
	Action or Project
Action/Project Number:	1.3.5
Name of Action or Project:	Increase the availability of storm shelters
Action or Project Description:	Increase availability (if necessary, construction) of storm shelters for individual families and large groups, including near large employment centers and schools.
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning, and hazard mitigation activities.
Estimated Cost:	\$2,500 - \$5,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD
Action/Project Priority:	18 – Medium Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP
Progress Report	
Action Status	Continuing – no progress
Report of Progress	

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

<u>Action 2.1.3:</u> Encourage the installation of small renewable energy microgrids (solar, wind) and backup generators for critical infrastructure such as water/sewer systems and emergency services.

Action Worksheet		
Name of Jurisdiction:	Edgar Springs	
	Risk / Vulnerability	
Problem being Mitigated:	Risks/vulnerabilities associated with power outages for critical infrastructure/facilities	
Hazard(s) Addressed:	All hazards	
	Action or Project	
Action/Project Number:	2.1.3	
Name of Action or Project:	Acquisition and installation of microgrids and backup generators for critical infrastructure.	
Action or Project Description:	Encourage the installation of small renewable energy microgrids (solar, wind) and backup generators for critical infrastructure such as water/sewer systems and emergency services.	
Applicable Goal Statement:	Reduce the potential impact of natural disasters on new and existing properties and infrastructure and the local economy.	
Estimated Cost:	\$25,500 – \$80,000	
Benefits:	Losses avoided by implementing this action include loss-of- function/displacement impacts, and emergency management costs/community costs.	
	Plan for Implementation	
Responsible	City EMD, Mayor, Board of Aldermen, Public Works	
Organization/Department:		
Action/Project Priority:	21 –High Priority	
Timeline for Completion:	5 years	
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.	
Local Planning Mechanisms to be Used in Implementation, if any:	LEOP, City Budget, Hazard Mitigation Plan, Critical Facility Budgets	
	Progress Report	
Action Status	Revised – in progress	
Report of Progress	The city of Edgar Springs has one fixed generator at the sewer plant.	

<u>Action 2.2.1:</u> Educate residents, realtors and contractors on the dangers of floodplain development and the benefits of the NFIP.

Action Worksheet	
Name of Jurisdiction:	Edgar Springs
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities of property located in the floodplain during a flood event.
Hazard(s) Addressed:	Flood
	Action or Project
Action/Project Number:	2.2.1
Name of Action or Project:	Floodplain education/awareness.
Action or Project Description:	Educate residents, realtors and contractors about the dangers of floodplain development and the benefits of the NFIP.
Applicable Goal Statement:	Reduce the potential impact of natural disasters on new and existing properties and infrastructure and the local economy.
Estimated Cost:	\$5,000-\$6,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	Floodplain manager, Mayor, Board of Aldermen
Action/Project Priority:	25 –High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Floodplain management ordinance, LEOP, CEDS, Hazard Mitigation Plan
Progress Report	
Action Status	Continuing - no progress
Report of Progress	

<u>Action 2.2.2:</u> Encourage development of storm water management plans in those jurisdictions that do not currently have them and in all new residential and commercial development.

Action Worksheet	
Name of Jurisdiction:	Edgar Springs
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities to property and communities in areas that do not possess adequate storm water management plans.
Hazard(s) Addressed:	Flood, Severe Weather
	Action or Project
Action/Project Number:	2.2.2
Name of Action or Project:	Encourage local governments to require contractor storm water management plans in all new development – both residential and commercial properties.
Action or Project Description:	Encourage the development of stormwater management plans for all new development through the adoption of ordinances or other local government regulations and encourage the county to review and strengthen any subdivision ordinances to incorporate mitigation measures for stormwater management.
Applicable Goal Statement:	Reduce the potential impact of natural disasters on new and existing properties and infrastructure and the local economy.
Estimated Cost:	\$5,000-\$25,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	Mayor, Board of Aldermen, local planners
Action/Project Priority:	23 – High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, regional transportation plan
Progress Report	
Action Status	Revised – no progress
Report of Progress	

<u>Action 2.2.3:</u> Continue to enforce flood damage prevention/floodplain management ordinances in compliance with NFIP requirements.

Action Worksheet	
Name of Jurisdiction:	
Name of Juristiction.	Edgar Springs
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities of properties in the floodplain during a flood event.
Hazard(s) Addressed:	Flood
	Action or Project
Action/Project Number:	2.2.3
Name of Action or Project:	Floodplain management compliance enforcement.
Action or Project Description:	Continue to enforce flood damage prevention/floodplain management ordinances in compliance with NFIP requirements.
Applicable Goal Statement:	Reduce the potential impact of natural disasters on new and existing properties and infrastructure and the local economy.
Estimated Cost:	\$4,000 - \$10,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	Floodplain Manager, Mayor, Board of Aldermen
Action/Project Priority:	23 – High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services
Local Planning Mechanisms to be Used in Implementation, if any:	Floodplain management ordinances, builder's plans, LEOP
A - 4' O4 - 4	Progress Report
Action Status	Continuing in Progress The situate a member of the NEID and works to incure compliance.
Report of Progress	The city is a member of the NFIP and works to insure compliance with the city floodplain management ordinance. The ordinance requires a permit for any development in the floodplain. The program would benefit from more focused education efforts with
	builders, insurers, banks and residents.

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.

<u>Action 3.2.2:</u> Encourage meetings of EMD, city/county officials and SEMA to familiarize officials with mitigation planning, implementation and budgeting for mitigation projects.

Action Worksheet	
Name of Jurisdiction:	Edgar Springs
	Risk / Vulnerability
Problem being Mitigated:	Lack of knowledge/information of officials in regards to mitigation planning, implementation, and budgeting for mitigation projects.
Hazard(s) Addressed:	All Hazards
	Action or Project
Action/Project Number:	3.2.2
Name of Action or Project:	Mitigation awareness/education meetings with local officials and SEMA
Action or Project Description:	Encourage meetings of EMD, city/county officials & SEMA to familiarize officials with mitigation planning, implementation & budgeting for mitigation projects.
Applicable Goal Statement:	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.
Estimated Cost:	\$0
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD, Mayor, Board of Aldermen, SEMA Area Coordinator
Action/Project Priority:	26 - H
Timeline for Completion:	On-going
Potential Fund Sources:	N/A
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan
,,	Progress Report
Action Status	Continuing - Ongoing
Report of Progress	The Region I SEMA area coordinator holds quarterly meetings in the region and discussions include a variety of topics, including mitigation. MRPC has provided information and presentations on mitigation at regular board meetings that included representatives from Phelps County and its jurisdictions. Due to changes in elected officials, this is an ongoing activity.

<u>Action 3.3.1:</u> Re-evaluate the hazard mitigation plan, merge with other community planning and coordinate and integrate hazard mitigation activities, where appropriate, with emergency operations plans and procedures.

	Action Worksheet	
Name of Jurisdiction:	Edgar Springs	
	Risk / Vulnerability	
Problem being Mitigated:	Risks/vulnerabilities associated with not regularly reviewing and updating the mitigation plan and incorporating mitigation activities into emergency operations plans and procedures.	
Hazard(s) Addressed:	All Hazards	
	Action or Project	
Action/Project Number:	3.3.1	
Name of Action or Project:	Re-evaluate the hazard mitigation plan and merge with other community planning activities.	
Action or Project Description:	Re-evaluate the hazard mitigation plan, merge with other community planning and coordinate and integrate hazard mitigation activities, where appropriate, with emergency operations plans and procedures.	
Applicable Goal Statement:	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	
Estimated Cost:	\$3,500 - \$5,000	
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.	
	Plan for Implementation	
Responsible Organization/Department:	City EMD, Local Planners, MPC	
Action/Project Priority:	21 – High Priority	
Timeline for Completion:	On-going	
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services.	
Local Planning Mechanisms to be Used in Implementation, if any:	LEOP, Hazard Mitigation Plan, County Budget, Economic Development Plan, Transportation Plan, Floodplain Ordinances	
	Progress Report	
Action Status	Continuing – On-going	
Report of Progress	Hazard mitigation goals and actions have been incorporated into the regional Community and Economic Development Strategy. Mitigation actions are part of the county LEOP. As more local officials become familiar with mitigation and understand how it fits within other planning activities, this action item will continue to expand.	

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

<u>Action 4.1.1:</u> Continue to encourage joint meetings of different organizations/agencies for mitigation related planning.

Action Worksheet	
Name of Jurisdiction:	Edgar Springs
	Risk / Vulnerability
Problem being Mitigated:	Lack of synergy/communication among organizations/agencies for mitigation related planning.
Hazard(s) Addressed:	All hazards
·	Action or Project
Action/Project Number:	4.1.1
Name of Action or Project:	Encourage joint meetings of different organizations/agencies and continued communication on mitigation.
Action or Project Description:	Continue to encourage joint meetings of different organizations/agencies for mitigation related planning.
Applicable Goal Statement:	Strengthen communication and coordinate participation between agencies, stakeholders, jurisdictions, and the public to create widespread interest in mitigation.
Estimated Cost:	\$500 - \$1,500
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	Mayor, Board of Aldermen, City EMD
Action/Project Priority:	28 – High Priority
Timeline for Completion:	On-going On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP, County Budget
	Progress Report
Action Status	Continuing – in progress
Report of Progress	This is an on-going activity. Region I Fire Chiefs meet regularly. The Region I SEMA area coordinator holds quarterly meetings throughout the six-county region, including in Phelps County. This program could benefit from a more coordinated, focused effort to bring different agencies together to discuss mitigation issues.

Action 4.1.3: Pool different agency resources to achieve widespread mitigation results.

Action Worksheet	
Name of Jurisdiction:	Edgar Springs
	Risk / Vulnerability
Problem being Mitigated:	Lack of resources to carry out mitigation projects
Hazard(s) Addressed:	All hazards
	Action or Project
Action/Project Number:	4.1.3
Name of Action or Project:	Pool different agency resources to achieve widespread mitigation results.
Action or Project Description:	Bring together different agencies and organizations that have similar goals and work together to pool resources to move mitigation projects forward.
Applicable Goal Statement:	Strengthen communication and coordinate participation between agencies, stakeholders, jurisdictions, and the public to create widespread interest in mitigation.
Estimated Cost:	\$1,000 - \$4,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD, Mayor, Board of Aldermen, Floodplain Manager
Action/Project Priority:	24 – High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, Floodplain Ordinance, LEOP, City Budget
	Progress Report
Action Status	Continuing – on-going
Report of Progress	This is an on-going activity. Edgar Springs reported that they are interested in finding ways to pool resources to accomplish mitigation projects.

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.

<u>Action 5.1.1:</u> Incorporate hazard mitigation into the long-range planning and development activities of the county and each jurisdiction.

Action Worksheet	
Name of Jurisdiction:	Edgar Springs
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with not incorporating hazard mitigation in the long-term planning and development of activities by each jurisdiction.
Hazard(s) Addressed:	All Hazards
	Action or Project
Action/Project Number:	5.1.1
Name of Action or Project:	Incorporating hazard mitigation into all long-range planning and development activities
Action or Project Description:	Incorporate hazard mitigation into the long-range planning and development activities of the county and each jurisdiction.
Applicable Goal Statement:	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 benefits of special interests.
Estimated Cost:	\$2,500 - \$25,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss of function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD, local planners, MPC
Action/Project Priority:	29 – High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP, economic development plan, transportation plan, floodplain ordinance
	Progress Report
Action Status	Continuing – in progress
Report of Progress	Hazard mitigation goals and actions have been incorporated into the regional Community and Economic Development Strategy. Mitigation actions are part of the LEOP. As more officials become familiar with mitigation and understand how it fits within other planning activities, this action item will continue to expand.

<u>Action 5.2.1</u>: Encourage local governments to purchase properties in the floodplain as funds become available and convert that land into public space/recreation area.

Action Worksheet	
Name of Jurisdiction:	Edgar Springs
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with floodplain properties
Hazard(s) Addressed:	Flood
	Action or Project
Action/Project Number:	5.2.1
Name of Action or Project:	Government purchase of properties in the floodplain
Action or Project Description:	Encourage local governments to purchase properties in the floodplain as funds become available and convert that land into public space/recreation area.
Applicable Goal Statement:	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 benefits of special interests.
Estimated Cost:	\$3,500 - \$500,000
Benefits:	Losses avoided by implementing this action include property damage, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD, Mayor, Board of Aldermen, Floodplain Manager/ Coordinator
Action/Project Priority:	18 - M
Timeline for Completion:	N/A
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services
Local Planning Mechanisms to be Used in Implementation, if any:	Floodplain ordinance, Hazard Mitigation Plan
Progress Report	
Action Status	Continuing – no progress
Report of Progress	Edgar Springs has not had any requests from property owners for a buyout.

<u>Action 5.2.2</u>: Encourage communities to discuss zoning repetitive loss properties in the floodplain as open space.

Action Worksheet	
Name of Jurisdiction:	Edgar Springs
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with floodplain properties
Hazard(s) Addressed:	Flood
	Action or Project
Action/Project Number:	5.2.1
Name of Action or Project:	Government purchase of properties in the floodplain
Action or Project Description:	Encourage local governments to purchase properties in the floodplain as funds become available and convert that land into public space/recreation area.
Applicable Goal Statement:	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 benefits of special interests.
Estimated Cost:	\$3,500 - \$500,000
Benefits:	Losses avoided by implementing this action include property damage, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD, Mayor, Board of Aldermen, Floodplain Manager/ Coordinator
Action/Project Priority:	16 - M
Timeline for Completion:	N/A
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services
Local Planning Mechanisms to be Used in Implementation, if any:	Floodplain ordinance, Hazard Mitigation Plan
Progress Report	
Action Status	Continuing – no progress
Report of Progress	Edgar Springs does not currently have zoning or land use ordinances.

Goal 6: Secure resources for investment in hazard mitigation.

<u>Action 6.1.2:</u> Structure grant proposals for road/bridge upgrades so that hazard mitigation concerns are also met.

Action Worksheet	
Name of Jurisdiction:	Edgar Springs
	Risk / Vulnerability
Problem being Mitigated:	Roads and bridges in need of upgrades.
Hazard(s) Addressed:	Flood
	Action or Project
Action/Project Number:	6.1.2
Name of Action or Project:	Structuring grant proposals to meet mitigation needs.
Action or Project Description:	Structure grant proposals for road/bridge upgrades so that hazard mitigation concerns are also met.
Applicable Goal Statement:	Secure resources for investment in hazard mitigation.
Estimated Cost:	\$3,500 -\$4,500
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City Engineer, Mayor, Board of Aldermen, Local Planners, Local Grant Writers
Action/Project Priority:	24 – High Priority
Timeline for Completion:	On-going On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, City Budget, CEDS, Transportation Plan
	Progress Report
Action Status	Continuing no progress
Report of Progress	The city has not had any grant projects for roads and bridges in the past five years. This is an activity that would benefit from raising awareness of mitigation concerns and remedies. As more local officials become aware of the importance of mitigation and realize that grant applications can provide opportunities for funding those actions, this activity will become more integrated into local planning.

<u>Action 6.1.3:</u> Work with state/local/federal agencies to include mitigation in all economic and community development projects.

Action Worksheet	
Name of Jurisdiction:	Edgar Springs
	Risk / Vulnerability
Problem being Mitigated:	Lack of synergy/communication/coordination of mitigation in community development projects and integration of mitigation actions into economic and community development projects.
Hazard(s) Addressed:	All hazards
	Action or Project
Action/Project Number:	6.1.3
Name of Action or Project:	Coordination with state/local/federal agencies to integrate mitigation into economic and community development projects.
Action or Project Description:	Work with state/local/federal agencies to include mitigation in all economic and community development projects.
Applicable Goal Statement:	Secure resources for investment in hazard mitigation.
Estimated Cost:	\$2,500 - \$9.500
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	Mayor, Board of Aldermen, local economic developers, community development organizations
Action/Project Priority:	23 – High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, CEDS, Transportation Plan
	Progress Report
Action Status	Continuing in progress
Report of Progress	Hazard mitigation goals and actions have been incorporated into the regional Community Economic Development Strategy (CEDS) and regional transportation plan. As mitigation awareness grows, additional efforts will be made to incorporate mitigation activities into economic and community development projects.

Action 6.1.4: Encourage local jurisdictions to budget for mitigation projects.

Action Worksheet	
Name of Jurisdiction:	Edgar Springs
	Risk / Vulnerability
Problem being Mitigated:	Lack of funding for mitigation projects among local jurisdictions.
Hazard(s) Addressed:	All Hazards
	Action or Project
Action/Project Number:	6.1.4
Name of Action or Project:	Budgeting for mitigation projects.
Action or Project Description:	Encourage local jurisdictions to budget for mitigation projects.
Applicable Goal Statement:	Secure resources for investment in hazard mitigation.
Estimated Cost:	\$500 - \$1,500
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD, Mayor, Board of Aldermen
Action/Project Priority:	23 - H
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard mitigation plan, City Budget, CEDs, LEOP
	Progress Report
Action Status	Continuing in Progress
Report of Progress	As awareness of the importance of mitigation grows, more local jurisdictions are seeing the long-term benefits and working toward budgeting for mitigation activities.

<u>Action 6.2.1:</u> Encourage cities and counties to develop and implement cost-share programs with private property owners for hazard mitigation projects that benefit the community as a whole.

Action Worksheet	
Name of Jurisdiction:	Edgar Springs
	Risk / Vulnerability
Problem being Mitigated:	Lack of cost-share programs with private property owners for
	hazard mitigation projects.
Hazard(s) Addressed:	All hazards
	Action or Project
Action/Project Number:	6.2.1
Name of Action or Project:	Encourage local mitigation cost-share programs.
	Encourage cities and counties to develop and implement cost-
Action or Project	share programs with private property owners for hazard
Description:	mitigation projects that benefit the community as a whole.
Applicable Goal Statement:	Secure resources for investment in hazard mitigation.
Estimated Cost:	\$5,000 - \$500,000
Benefits:	Losses avoided by implementing this action include injuries
	and/or casualties, property damages, loss-of-
	function/displacement impacts, and emergency management
	costs/community costs.
	Plan for Implementation
Responsible	City EMD, Mayor, Board of Aldermen, Local Planners, City
Organization/Department:	Engineer, MPC
Action/Project Priority:	14 – Medium Priority
Timeline for Completion:	5 – 10 years to implement and then on-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of
Lacal Diameira	cash, goods, or services.
Local Planning Mechanisms to be Used	Hazard Mitigation Plan
in Implementation, if any:	Progress Report
Action Status	Continuing no progress
Report of Progress	The city does not currently have any cost-share programs in
Report of Flogress	place.
	piaco.

Newburg

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

Action 1.1.1: Maintain a hazard mitigation public awareness program to include: benefits of hazard mitigation planning and projects; personal emergency preparedness; participation in emergency notification systems where available; information on individual hazard mitigation projects such as tying down hazardous materials tanks; how to shut off utilities; precautions to take during threatening weather events; etc.

Action Worksheet	
Name of Jurisdiction:	Newburg
	Risk / Vulnerability
Problem being Mitigated:	Residents are not always prepared to manage on their own for 72 hours following an event. This action item will improve individual household preparedness and increase knowledge of mitigation activities.
Hazard(s) Addressed:	All Hazards
Action or Project	
Action/Project Number:	1.1.1
Name of Action or Project:	Personal Preparedness Education/Awareness programs
Action or Project Description:	City EMD and local emergency response agencies will promote Ready in 3 and other personal preparedness education programs through the distribution of brochures, press releases and presentations.
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning, and hazard mitigation activities.
Estimated Cost:	\$500 - \$3,500
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD
Action/Project Priority:	27 – High Priority
Timeline for Completion:	1 – 5 years - Ongoing
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, Meramec Region Community Economic Development Strategy (CEDS)
Action Otatus	Progress Report
Action Status	Continuing in progress
Report of Progress	Many emergency response agencies promote individual household preparedness & provide Ready in 3 brochures. SEMA distributes press releases periodically on personal preparedness. A more focused and coordinated effort would help to achieve comprehensive coverage in the county.

<u>Action 1.2.1:</u> Budget for and obtain early warning systems and improved communications systems.

Action Worksheet	
Name of Jurisdiction:	Newburg
	Risk / Vulnerability
Problem being Mitigated:	Risks and vulnerabilities associated with lack of early warning
	systems and communications systems in unincorporated areas.
Hazard(s) Addressed:	All hazards.
	Action or Project
Action/Project Number:	1.2.1
Name of Action or Project:	Improving early warning and communications capabilities.
Action or Project Description:	Need to budget for enhanced warning and communications systems to improve early warning capabilities for residents in Newburg.
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning, and hazard mitigation activities.
Estimated Cost:	Unknown
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD, Mayor, Board of Aldermen
Action/Project Priority:	23 – High Priority
Timeline for Completion:	On-going On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP, City Budget
	Progress Report
Action Status	Continuing and updated – in progress
Report of Progress	Newburg has two outdoor warning sirens. The county has a phone-based warning system – Everbridge – which can provide alerts to residents who sign up for it by text, cell phone, email and landline phone and is available to all residents of the county. This program could benefit from a more focused campaign to
	encourage residents to sign up for Everbridge.

<u>Action 1.3.1:</u> Continue to implement tree trimming and dead tree removal programs by utility companies and local government.

Action Worksheet	
Name of Jurisdiction:	Newburg
	Risk / Vulnerability
Droblem being Mitigated	Risks and vulnerabilities associated with power outages from
Problem being Mitigated:	trees interfering with power lines and/or blocking roads
Hazard(s) Addressed:	Tornadoes, severe winter weather, severe thunderstorm/high winds/lightning/hail
	Action or Project
Action/Project Number:	
	1.3.1
Name of Action or Project:	Tree trimming and dead tree removal.
Action or Project Description:	Continue to implement tree trimming and dead tree removal.
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning, and hazard mitigation activities.
Estimated Cost:	\$500 - \$1,500
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damage, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	Public Works, Mayor, Board of Aldermen
Action/Project Priority:	24 – High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning	
Mechanisms to be Used	Hazard Mitigation Plan, LEOP
in Implementation, if any:	, ,
Progress Report	
Action Status	Continuing and updated – in progress
Report of Progress	Newburg does not have a city operated tree trimming program. The electric coop that provides power for the community does tree trimming as needed for power lines.

<u>Action 1.3.3:</u> Establish designated shelters for residents to be used during tornado threats, as cooling centers during extreme heat or power outages and/or as shelters during other disasters.

Action Worksheet	
Name of Jurisdiction:	Newburg
Risk / Vulnerability	
Problem being Mitigated:	Risks/vulnerabilities associated with lack of tornado shelters and warming and cooling centers during times of extreme heat and cold, and power outages
Hazard(s) Addressed:	Severe Weather, Winter Storms, Tornadoes, Extreme Heat
Action or Project	
Action/Project Number:	1.3.3
Name of Action or Project:	Establish and maintain designated storm shelters, as well as heating and cooling centers
Action or Project Description:	Establish designated shelters for residents to be used as shelters during tornado warnings, as well as heating and cooling centers during extreme heat or power outages.
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning, and hazard mitigation activities.
Estimated Cost:	\$5,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, loss-of-function/displacement impacts, and emergency management costs/community costs.
Plan for Implementation	
Responsible Organization/Department:	City EMD
Action/Project Priority:	26 –High Priority
Timeline for Completion:	5 years
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP
Progress Report	
Action Status	Continuing – no progress
Report of Progress	

<u>Action 1.3.4:</u> Facilities that house vulnerable populations such as disabled and elderly should review alternative locations for sheltering residents and MOUs with "sister" facilities.

Action Worksheet	
Name of Jurisdiction:	Newburg
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with nonexistent/unavailable shelters for large groups such as hospitals, nursing homes and group homes.
Hazard(s) Addressed:	All hazards
	Action or Project
Action/Project Number:	1.3.4
Name of Action or Project:	Establish alternative shelters for facilities that house disabled and elderly populations such as hospitals, nursing homes and group homes.
Action or Project Description:	Continue to work to increase communications between facilities that house vulnerable populations and with local EMDs and agencies responsible for sheltering.
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning, and hazard mitigation activities.
Estimated Cost:	\$2,500 - \$5,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD, county health department
Action/Project Priority:	21 –High Priority
Timeline for Completion:	On-going On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP
	Progress Report
Action Status	Continuing – no progress
Report of Progress	Data on what private nursing and group homes have for emergency plans and MOUs does not currently exist. This action item would benefit from a focused effort to gather that data and assist these private institutions with establishing alternative sheltering plans.

<u>Action 1.3.5:</u> Increase availability (if necessary, construction) of storm shelters for individual families and large groups, including near large employment centers and schools.

Action Worksheet	
Name of Jurisdiction:	
	Newburg
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with nonexistent/unavailable
Hazard(a) Addressed:	shelters for individual families and large groups. Tornados, severe storms
Hazard(s) Addressed:	Action or Project
Action/Project Number:	
Action/1 roject Number.	1.3.5
Name of Action or	Increase the availability of storm shelters
Project:	,
.	Increase availability (if necessary, construction) of storm shelters
Action or Project	for individual families and large groups, including near large
Description:	employment centers and schools.
	Deduce sixty and subservising of a code in based on a code
Applicable Goal	Reduce risks and vulnerabilities of people in hazard-prone areas
Statement:	through current technology, better planning, and hazard mitigation activities.
Estimated Cost:	\$2,500 - \$5,000
Estimated Cost.	Losses avoided by implementing this action include injuries and/or
Benefits:	casualties, and emergency management costs/community costs.
	Plan for Implementation
Responsible	
Organization/Department:	City EMD
Action/Project Priority:	18 – Medium Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of
	cash, goods, or services.
Local Planning	
Mechanisms to be Used	Hazard Mitigation Plan, LEOP
in Implementation, if any:	
Progress Report	
Action Status	Continuing – no progress
Report of Progress	

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

<u>Action 2.1.3:</u> Encourage the installation of small renewable energy microgrids (solar, wind) and backup generators for critical infrastructure such as water/sewer systems and emergency services.

Action Worksheet	
Name of Jurisdiction:	Newburg
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with power outages for critical infrastructure/facilities
Hazard(s) Addressed:	All hazards
	Action or Project
Action/Project Number:	2.1.3
Name of Action or Project:	Acquisition and installation of microgrids and backup generators for critical infrastructure.
Action or Project Description:	Encourage the installation of small renewable energy microgrids (solar, wind) and backup generators for critical infrastructure such as water/sewer systems and emergency services.
Applicable Goal Statement:	Reduce the potential impact of natural disasters on new and existing properties and infrastructure and the local economy.
Estimated Cost:	\$25,500 – \$80,000
Benefits:	Losses avoided by implementing this action include loss-of- function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible	City EMD, Mayor, Board of Aldermen, Public Works
Organization/Department:	
Action/Project Priority:	21 –High Priority
Timeline for Completion:	5 years
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	LEOP, City Budget, Hazard Mitigation Plan, Critical Facility Budgets
Progress Report	
Action Status	Revised – no progress
Report of Progress	

<u>Action 2.2.1:</u> Educate residents, realtors and contractors on the dangers of floodplain development and the benefits of the NFIP.

Action Worksheet	
Name of Jurisdiction:	Newburg
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities of property located in the floodplain during a flood event.
Hazard(s) Addressed:	Flood
	Action or Project
Action/Project Number:	2.2.1
Name of Action or Project:	Floodplain education/awareness.
Action or Project Description:	Educate residents, realtors and contractors about the dangers of floodplain development and the benefits of the NFIP.
Applicable Goal Statement:	Reduce the potential impact of natural disasters on new and existing properties and infrastructure and the local economy.
Estimated Cost:	\$5,000-\$6,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	Floodplain manager, Mayor, Board of Aldermen
Action/Project Priority:	25 –High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Floodplain management ordinance, LEOP, CEDS, Hazard Mitigation Plan
Progress Report	
Action Status	Continuing - no progress
Report of Progress	

<u>Action 2.2.2:</u> Encourage development of storm water management plans in those jurisdictions that do not currently have them and in all new residential and commercial development.

Action Worksheet	
Name of Jurisdiction:	Newburg
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities to property and communities in areas that do not possess adequate storm water management plans.
Hazard(s) Addressed:	Flood, Severe Weather
,	Action or Project
Action/Project Number:	2.2.2
Name of Action or Project:	Encourage local governments to require contractor storm water management plans in all new development – both residential and commercial properties.
Action or Project Description:	Encourage the development of stormwater management plans for all new development through the adoption of ordinances or other local government regulations and encourage the county to review and strengthen any subdivision ordinances to incorporate mitigation measures for stormwater management.
Applicable Goal Statement:	Reduce the potential impact of natural disasters on new and existing properties and infrastructure and the local economy.
Estimated Cost:	\$5,000-\$25,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	Mayor, Board of Aldermen, local planners
Action/Project Priority:	23 – High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, regional transportation plan
Progress Report	
Action Status	Continuing – no progress
Report of Progress	

<u>Action 2.2.3:</u> Continue to enforce flood damage prevention/floodplain management ordinances in compliance with NFIP requirements.

Action Worksheet	
Name of Jurisdiction:	Newburg
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities of properties in the floodplain during a flood event.
Hazard(s) Addressed:	Flood
	Action or Project
Action/Project Number:	2.2.3
Name of Action or Project:	Floodplain management compliance enforcement.
Action or Project Description:	Continue to enforce flood damage prevention/floodplain management ordinances in compliance with NFIP requirements.
Applicable Goal Statement:	Reduce the potential impact of natural disasters on new and existing properties and infrastructure and the local economy.
Estimated Cost:	\$4,000 - \$10,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	Floodplain Manager, Mayor, Board of Aldermen
Action/Project Priority:	23 – High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services
Local Planning Mechanisms to be Used in Implementation, if any:	Floodplain management ordinances, builder's plans, LEOP
	Progress Report
Action Status	Continuing in Progress
Report of Progress	The city is a member of the NFIP and works to insure compliance with the city floodplain management ordinance. The ordinance requires a permit for any development in the floodplain. The program would benefit from more focused education efforts with builders, insurers, banks and residents.

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.

<u>Action 3.2.2:</u> Encourage meetings of EMD, city/county officials and SEMA to familiarize officials with mitigation planning, implementation and budgeting for mitigation projects.

	Action Worksheet	
Name of Jurisdiction:	Newburg	
	Risk / Vulnerability	
Problem being Mitigated:	Lack of knowledge/information of officials in regards to mitigation	
	planning, implementation, and budgeting for mitigation projects.	
Hazard(s) Addressed:	All Hazards	
Action/Droiset Number	Action or Project	
Action/Project Number:	3.2.2	
Name of Action or Project:	Mitigation awareness/education meetings with local officials and SEMA	
Action or Project Description:	Encourage meetings of EMD, city/county officials & SEMA to familiarize officials with mitigation planning, implementation & budgeting for mitigation projects.	
Applicable Goal Statement:	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.	
Estimated Cost:	\$0	
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.	
	Plan for Implementation	
Responsible Organization/Department:	City EMD, Mayor, Board of Aldermen, SEMA Area Coordinator	
Action/Project Priority:	26 - H	
Timeline for Completion:	On-going On-going	
Potential Fund Sources:	N/A	
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan	
	Progress Report	
Action Status	Continuing - Ongoing	
Report of Progress	The Region I SEMA area coordinator holds quarterly meetings in the region and discussions include a variety of topics, including mitigation. MRPC has provided information and presentations on mitigation at regular board meetings that included representatives from Phelps County and its jurisdictions. Due to changes in elected officials, this is an ongoing activity.	

<u>Action 3.3.1:</u> Re-evaluate the hazard mitigation plan, merge with other community planning and coordinate and integrate hazard mitigation activities, where appropriate, with emergency operations plans and procedures.

Action Worksheet	
Name of Jurisdiction:	Newburg
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with not regularly reviewing and updating the mitigation plan and incorporating mitigation activities into emergency operations plans and procedures.
Hazard(s) Addressed:	All Hazards
	Action or Project
Action/Project Number:	3.3.1
Name of Action or Project:	Re-evaluate the hazard mitigation plan and merge with other community planning activities.
Action or Project Description:	Re-evaluate the hazard mitigation plan, merge with other community planning and coordinate and integrate hazard mitigation activities, where appropriate, with emergency operations plans and procedures.
Applicable Goal Statement:	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
Estimated Cost:	\$3,500 - \$5,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs. Plan for Implementation
Responsible Organization/Department:	City EMD, Local Planners, MPC
Action/Project Priority:	21 – High Priority
Timeline for Completion:	On-going On-going
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	LEOP, Hazard Mitigation Plan, County Budget, Economic Development Plan, Transportation Plan, Floodplain Ordinances
	Progress Report
Action Status	Continuing – On-going
Report of Progress	Hazard mitigation goals and actions have been incorporated into the regional Community and Economic Development Strategy. Mitigation actions are part of the county LEOP. As more local officials become familiar with mitigation and understand how it fits within other planning activities, this action item will continue to expand.

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

<u>Action 4.1.1:</u> Continue to encourage joint meetings of different organizations/agencies for mitigation related planning.

Action Worksheet	
Name of Jurisdiction:	Newburg
	Risk / Vulnerability
Problem being Mitigated:	Lack of synergy/communication among organizations/agencies for mitigation related planning.
Hazard(s) Addressed:	All hazards
•	Action or Project
Action/Project Number:	4.1.1
Name of Action or Project:	Encourage joint meetings of different organizations/agencies and continued communication on mitigation.
Action or Project Description:	Continue to encourage joint meetings of different organizations/agencies for mitigation related planning.
Applicable Goal Statement:	Strengthen communication and coordinate participation between agencies, stakeholders, jurisdictions, and the public to create widespread interest in mitigation.
Estimated Cost:	\$500 - \$1,500
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	Mayor, Board of Aldermen, City EMD
Action/Project Priority:	28 – High Priority
Timeline for Completion:	On-going On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP, County Budget
	Progress Report
Action Status	Continuing – in progress
Report of Progress	This is an on-going activity. Region I Fire Chiefs meet regularly. The Region I SEMA area coordinator holds quarterly meetings throughout the six-county region, including in Phelps County. This program could benefit from a more coordinated, focused effort to bring different agencies together to discuss mitigation issues.

Action 4.1.3: Pool different agency resources to achieve widespread mitigation results.

Action Worksheet	
Name of Jurisdiction:	Newburg
	Risk / Vulnerability
Problem being Mitigated:	Lack of resources to carry out mitigation projects
Hazard(s) Addressed:	All hazards
	Action or Project
Action/Project Number:	4.1.3
Name of Action or Project:	Pool different agency resources to achieve widespread mitigation results.
Action or Project Description:	Bring together different agencies and organizations that have similar goals and work together to pool resources to move mitigation projects forward.
Applicable Goal Statement:	Strengthen communication and coordinate participation between agencies, stakeholders, jurisdictions, and the public to create widespread interest in mitigation.
Estimated Cost:	\$1,000 - \$4,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD, Mayor, Board of Aldermen, Floodplain Manager
Action/Project Priority:	24 – High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, Floodplain Ordinance, LEOP, City Budget
Progress Report	
Action Status	Continuing – on-going
Report of Progress	This is an on-going activity. Newburg indicated that they are interested in finding ways to pool resources to accomplish mitigation projects.

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.

<u>Action 5.1.1:</u> Incorporate hazard mitigation into the long-range planning and development activities of the county and each jurisdiction.

Action Worksheet	
Name of Jurisdiction:	Newburg
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with not incorporating hazard mitigation in the long-term planning and development of activities by each jurisdiction.
Hazard(s) Addressed:	All Hazards
, ,	Action or Project
Action/Project Number:	5.1.1
Name of Action or Project:	Incorporating hazard mitigation into all long-range planning and development activities
Action or Project Description:	Incorporate hazard mitigation into the long-range planning and development activities of the county and each jurisdiction.
Applicable Goal Statement:	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 benefits of special interests.
Estimated Cost:	\$2,500 - \$25,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss of function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD, local planners, MPC
Action/Project Priority:	29 – High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP, economic development plan, transportation plan, floodplain ordinance
	Progress Report
Action Status	Continuing – in progress
Report of Progress	Hazard mitigation goals and actions have been incorporated into the regional Community and Economic Development Strategy. Mitigation actions are part of the LEOP. As more officials become familiar with mitigation and understand how it fits within other planning activities, this action item will continue to expand.

<u>Action 5.2.1</u>: Encourage local governments to purchase properties in the floodplain as funds become available and convert that land into public space/recreation area.

Action Worksheet	
Name of Jurisdiction:	Newburg
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with floodplain properties
Hazard(s) Addressed:	Flood
	Action or Project
Action/Project Number:	5.2.1
Name of Action or Project:	Government purchase of properties in the floodplain
Action or Project Description:	Encourage local governments to purchase properties in the floodplain as funds become available and convert that land into public space/recreation area.
Applicable Goal Statement:	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 benefits of special interests.
Estimated Cost:	\$3,500 - \$500,000
Benefits:	Losses avoided by implementing this action include property damage, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD, Mayor, Board of Aldermen, Floodplain Manager/ Coordinator
Action/Project Priority:	18 - M
Timeline for Completion:	N/A
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services
Local Planning Mechanisms to be Used in Implementation, if any:	Floodplain ordinance, Hazard Mitigation Plan
Progress Report	
Action Status	Continuing – no progress
Report of Progress	Newburg has not had any requests from property owners for a buyout.

<u>Action 5.2.2</u>: Encourage communities to discuss zoning repetitive loss properties in the floodplain as open space.

Action Worksheet	
Name of Jurisdiction:	Newburg
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with floodplain properties
Hazard(s) Addressed:	Flood
	Action or Project
Action/Project Number:	5.2.1
Name of Action or Project:	Government purchase of properties in the floodplain
Action or Project Description:	Encourage local governments to purchase properties in the floodplain as funds become available and convert that land into public space/recreation area.
Applicable Goal Statement:	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 benefits of special interests.
Estimated Cost:	\$3,500 - \$500,000
Benefits:	Losses avoided by implementing this action include property damage, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD, Mayor, Board of Aldermen, Floodplain Manager/ Coordinator
Action/Project Priority:	16 - M
Timeline for Completion:	N/A
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services
Local Planning Mechanisms to be Used in Implementation, if any:	Floodplain ordinance, Hazard Mitigation Plan
Progress Report	
Action Status	Continuing – no progress
Report of Progress	Newburg does not currently have zoning or land use ordinances.

Goal 6: Secure resources for investment in hazard mitigation.

<u>Action 6.1.2:</u> Structure grant proposals for road/bridge upgrades so that hazard mitigation concerns are also met.

Action Worksheet	
Name of Jurisdiction:	Newburg
	Risk / Vulnerability
Problem being Mitigated:	Roads and bridges in need of upgrades.
Hazard(s) Addressed:	Flood
	Action or Project
Action/Project Number:	6.1.2
Name of Action or Project:	Structuring grant proposals to meet mitigation needs.
Action or Project Description:	Structure grant proposals for road/bridge upgrades so that hazard mitigation concerns are also met.
Applicable Goal Statement:	Secure resources for investment in hazard mitigation.
Estimated Cost:	\$3,500 -\$4,500
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City Engineer, Mayor, Board of Aldermen, Local Planners, Local Grant Writers
Action/Project Priority:	24 – High Priority
Timeline for Completion:	On-going On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, City Budget, CEDS, Transportation Plan
	Progress Report
Action Status	Continuing no progress
Report of Progress	The city has not had any grant projects for roads and bridges in the past five years. This is an activity that would benefit from raising awareness of mitigation concerns and remedies. As more local officials become aware of the importance of mitigation and realize that grant applications can provide opportunities for funding those actions, this activity will become more integrated into local planning.

<u>Action 6.1.3:</u> Work with state/local/federal agencies to include mitigation in all economic and community development projects.

Action Worksheet		
Name of Jurisdiction:	Newburg	
	Risk / Vulnerability	
Problem being Mitigated:	Lack of synergy/communication/coordination of mitigation in community development projects and integration of mitigation actions into economic and community development projects.	
Hazard(s) Addressed:	All hazards	
	Action or Project	
Action/Project Number:	6.1.3	
Name of Action or Project:	Coordination with state/local/federal agencies to integrate mitigation into economic and community development projects.	
Action or Project Description:	Work with state/local/federal agencies to include mitigation in all economic and community development projects.	
Applicable Goal Statement:	Secure resources for investment in hazard mitigation.	
Estimated Cost:	\$2,500 - \$9.500	
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.	
	Plan for Implementation	
Responsible Organization/Department:	Mayor, Board of Aldermen, local economic developers, community development organizations	
Action/Project Priority:	23 – High Priority	
Timeline for Completion:	On-going On-going	
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.	
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, CEDS, Transportation Plan	
	Progress Report	
Action Status	Continuing in progress	
Report of Progress	Hazard mitigation goals and actions have been incorporated into the regional Community Economic Development Strategy (CEDS) and regional transportation plan. As mitigation awareness grows, additional efforts will be made to incorporate mitigation activities into economic and community development projects.	

Action 6.1.4: Encourage local jurisdictions to budget for mitigation projects.

Action Worksheet	
Name of Jurisdiction:	Newburg
	Risk / Vulnerability
Problem being Mitigated:	Lack of funding for mitigation projects among local jurisdictions.
Hazard(s) Addressed:	All Hazards
	Action or Project
Action/Project Number:	6.1.4
Name of Action or Project:	Budgeting for mitigation projects.
Action or Project Description:	Encourage local jurisdictions to budget for mitigation projects.
Applicable Goal Statement:	Secure resources for investment in hazard mitigation.
Estimated Cost:	\$500 - \$1,500
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD, Mayor, Board of Aldermen
Action/Project Priority:	23 - H
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard mitigation plan, City Budget, CEDs, LEOP
	Progress Report
Action Status	Continuing in Progress
Report of Progress	As awareness of the importance of mitigation grows, more local jurisdictions are seeing the long-term benefits and working toward budgeting for mitigation activities.

<u>Action 6.2.1:</u> Encourage cities and counties to develop and implement cost-share programs with private property owners for hazard mitigation projects that benefit the community as a whole.

Action Worksheet	
Name of Jurisdiction:	Newburg
	Risk / Vulnerability
Problem being Mitigated:	Lack of cost-share programs with private property owners for
	hazard mitigation projects.
Hazard(s) Addressed:	All hazards
	Action or Project
Action/Project Number:	6.2.1
Name of Action or Project:	Encourage local mitigation cost-share programs.
	Encourage cities and counties to develop and implement cost-
Action or Project	share programs with private property owners for hazard
Description:	mitigation projects that benefit the community as a whole.
Applicable Goal Statement:	Secure resources for investment in hazard mitigation.
Estimated Cost:	\$5,000 - \$500,000
Benefits:	Losses avoided by implementing this action include injuries
	and/or casualties, property damages, loss-of-
	function/displacement impacts, and emergency management
	costs/community costs.
	Plan for Implementation
Responsible	City EMD, Mayor, Board of Aldermen, Local Planners, City
Organization/Department: Action/Project Priority:	Engineer, MPC 14 – Medium Priority
Timeline for Completion:	5 – 10 years to implement and then on-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of
. 5.5	cash, goods, or services.
Local Planning	Hazard Mitigation Plan
Mechanisms to be Used	j v
in Implementation, if any:	
	Progress Report
Action Status	Continuing no progress
Report of Progress	The city does not currently have any cost-share programs in
	place.

Rolla

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

Action 1.1.1: Maintain a hazard mitigation public awareness program to include: benefits of hazard mitigation planning and projects; personal emergency preparedness; participation in emergency notification systems where available; information on individual hazard mitigation projects such as tying down hazardous materials tanks; how to shut off utilities; precautions to take during threatening weather events; etc.

Action Worksheet	
Name of Jurisdiction:	Rolla
	Risk / Vulnerability
Problem being Mitigated:	Residents are not always prepared to manage on their own for 72 hours following an event. This action item will improve individual household preparedness and increase knowledge of mitigation activities.
Hazard(s) Addressed:	All Hazards
Action or Project	
Action/Project Number:	1.1.1
Name of Action or Project:	Personal Preparedness Education/Awareness programs
Action or Project Description:	City EMD and local emergency response agencies will promote Ready in 3 and other personal preparedness education programs through the distribution of brochures, press releases and presentations.
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning, and hazard mitigation activities.
Estimated Cost:	\$500 - \$3,500
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD
Action/Project Priority:	27 – High Priority
Timeline for Completion:	1 – 5 years - Ongoing
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, Meramec Region Community Economic Development Strategy (CEDS)
Action Ctatus	Progress Report
Action Status	Continuing in progress
Report of Progress	Many emergency response agencies promote individual household preparedness & provide Ready in 3 brochures. SEMA distributes press releases periodically on personal preparedness. A more focused and coordinated effort would help to achieve comprehensive coverage in the county.

<u>Action 1.2.1:</u> Budget for and obtain early warning systems and improved communications systems.

Action Worksheet	
Name of Jurisdiction:	Rolla
	Risk / Vulnerability
Problem being Mitigated:	Risks and vulnerabilities associated with lack of early warning
	systems and communications systems in unincorporated areas.
Hazard(s) Addressed:	All hazards.
	Action or Project
Action/Project Number:	1.2.1
Name of Action or Project:	Improving early warning and communications capabilities.
Action or Project Description:	Need to budget for enhanced warning and communications systems to improve early warning capabilities for residents in Rolla.
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning, and hazard mitigation activities.
Estimated Cost:	Unknown
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD, Mayor, City Council
Action/Project Priority:	23 – High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP, City Budget
	Progress Report
Action Status	Continuing and updated – in progress
Report of Progress	Rolla has ten outdoor warning sirens. The county has a phone-based warning system – Everbridge – which can provide alerts to residents who sign up for it by text, cell phone, email and landline phone and is available to all residents of the county. Missouri University of Science and Technology used RAVE – a phone/text/email system. This program could benefit from a more focused campaign to encourage residents to sign up for Everbridge.

<u>Action 1.3.1:</u> Continue to implement tree trimming and dead tree removal programs by utility companies and local government.

Action Worksheet	
Name of Jurisdiction:	Rolla
	Risk / Vulnerability
Problem being Mitigated:	Risks and vulnerabilities associated with power outages from trees interfering with power lines and/or blocking roads
Hazard(s) Addressed:	Tornadoes, severe winter weather, severe thunderstorm/high winds/lightning/hail
	Action or Project
Action/Project Number:	1.3.1
Name of Action or Project:	Tree trimming and dead tree removal.
Action or Project Description:	Continue to implement tree trimming and dead tree removal.
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning, and hazard mitigation activities.
Estimated Cost:	\$500 - \$1,500
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damage, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	Public Works, Mayor, City Council, Rolla Municipal Utilities.
Action/Project Priority:	24 – High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP
Progress Report	
Action Status	Continuing– ongoing
Report of Progress	Rolla has an aggressive tree trimming and dead tree removal program in place.

<u>Action 1.3.3:</u> Establish designated shelters for residents to be used during tornado threats, as cooling centers during extreme heat or power outages and/or as shelters during other disasters.

Action Worksheet	
Name of Jurisdiction:	Rolla
Risk / Vulnerability	
Problem being Mitigated:	Risks/vulnerabilities associated with lack of tornado shelters and warming and cooling centers during times of extreme heat and cold, and power outages
Hazard(s) Addressed:	Severe Weather, Winter Storms, Tornadoes, Extreme Heat
Action or Project	
Action/Project Number:	1.3.3
Name of Action or Project:	Establish and maintain designated storm shelters, as well as heating and cooling centers
Action or Project Description:	Establish designated shelters for residents to be used as shelters during tornado warnings, as well as heating and cooling centers during extreme heat or power outages.
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning, and hazard mitigation activities.
Estimated Cost:	\$5,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, loss-of-function/displacement impacts, and emergency management costs/community costs.
Plan for Implementation	
Responsible Organization/Department:	City EMD
Action/Project Priority:	26 –High Priority
Timeline for Completion:	5 years
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning	
Mechanisms to be Used	Hazard Mitigation Plan, LEOP
in Implementation, if any:	
Progress Report	
Action Status	Continuing – in progress
Report of Progress	The city EMD does have some shelters designated – mostly in local churches - but they are not FEMA certified for tornados.

<u>Action 1.3.4:</u> Facilities that house vulnerable populations such as disabled and elderly should review alternative locations for sheltering residents and MOUs with "sister" facilities.

Action Worksheet	
Name of Jurisdiction:	Rolla
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with nonexistent/unavailable shelters for large groups such as hospitals, nursing homes and group homes.
Hazard(s) Addressed:	All hazards
	Action or Project
Action/Project Number:	1.3.4
Name of Action or Project:	Establish alternative shelters for facilities that house disabled and elderly populations such as hospitals, nursing homes and group homes.
Action or Project Description:	Continue to work to increase communications between facilities that house vulnerable populations and with local EMDs and agencies responsible for sheltering.
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning, and hazard mitigation activities.
Estimated Cost:	\$2,500 - \$5,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD, county health department
Action/Project Priority:	21 –High Priority
Timeline for Completion:	On-going On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP
	Progress Report
Action Status	Continuing – no progress
Report of Progress	Data on what private nursing and group homes have for emergency plans and MOUs does not currently exist. The city does have a list of facilities with vulnerable populations. This action item would benefit from a focused effort to gather that data and assist these private institutions with establishing alternative sheltering plans.

<u>Action 1.3.5:</u> Increase availability (if necessary, construction) of storm shelters for individual families and large groups, including near large employment centers and schools.

Action Worksheet	
Name of Jurisdiction:	Rolla
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with nonexistent/unavailable shelters for individual families and large groups.
Hazard(s) Addressed:	Tornados, severe storms
	Action or Project
Action/Project Number:	1.3.5
Name of Action or Project:	Increase the availability of storm shelters
Action or Project Description:	Increase availability (if necessary, construction) of storm shelters for individual families and large groups, including near large employment centers and schools.
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning, and hazard mitigation activities.
Estimated Cost:	\$2,500 - \$5,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD
Action/Project Priority:	18 – Medium Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP
Progress Report	
Action Status	Continuing – no progress
Report of Progress	

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

<u>Action 2.1.3:</u> Encourage the installation of small renewable energy microgrids (solar, wind) and backup generators for critical infrastructure such as water/sewer systems and emergency services.

Action Worksheet	
Name of Jurisdiction:	Rolla
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with power outages for critical infrastructure/facilities
Hazard(s) Addressed:	All hazards
	Action or Project
Action/Project Number:	2.1.3
Name of Action or Project:	Acquisition and installation of microgrids and backup generators for critical infrastructure.
Action or Project Description:	Encourage the installation of small renewable energy microgrids (solar, wind) and backup generators for critical infrastructure such as water/sewer systems and emergency services.
Applicable Goal Statement:	Reduce the potential impact of natural disasters on new and existing properties and infrastructure and the local economy.
Estimated Cost:	\$25,500 - \$80,000
Benefits:	Losses avoided by implementing this action include loss-of- function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD, Mayor, City Council, Public Works
Action/Project Priority:	21 –High Priority
Timeline for Completion:	5 years
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	LEOP, City Budget, Hazard Mitigation Plan, Critical Facility Budgets
	Progress Report
Action Status	Revised – in progress
Report of Progress	Phelps Health Hospital has three fixed generators. Rolla city hall, Rolla Municipal Utilities, and Rolla Municipal Utilities Service Center all have generator backup. There are 17 additional fixed generators for critical infrastructure through out the city. The Centre, Fire Station 1 & 2, Rolla Police Department, and Cedar Street Baptist Church (shelter) all have generators.

<u>Action 2.2.1:</u> Educate residents, realtors and contractors on the dangers of floodplain development and the benefits of the NFIP.

Action Worksheet	
Name of Jurisdiction:	Rolla
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities of property located in the floodplain during a flood event.
Hazard(s) Addressed:	Flood
	Action or Project
Action/Project Number:	2.2.1
Name of Action or Project:	Floodplain education/awareness.
Action or Project Description:	Educate residents, realtors and contractors about the dangers of floodplain development and the benefits of the NFIP.
Applicable Goal Statement: Estimated Cost:	Reduce the potential impact of natural disasters on new and existing properties and infrastructure and the local economy. \$5,000-\$6,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	Floodplain manager, Mayor, City Council
Action/Project Priority:	25 –High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Floodplain management ordinance, LEOP, CEDS, Hazard Mitigation Plan
	Progress Report
Action Status	Continuing - in progress
Report of Progress	The city has a robust education program on floodplain management, with information posted on the city website and information available through City Hall and the city floodplain manager.

<u>Action 2.2.2:</u> Encourage development of storm water management plans in those jurisdictions that do not currently have them and in all new residential and commercial development.

Action Worksheet	
Name of Jurisdiction:	Rolla
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities to property and communities in areas that do not possess adequate storm water management plans.
Hazard(s) Addressed:	Flood, Severe Weather
	Action or Project
Action/Project Number:	2.2.2
Name of Action or Project:	Encourage local governments to require contractor storm water management plans in all new development – both residential and commercial properties.
Action or Project Description:	Encourage the development of stormwater management plans for all new development through the adoption of ordinances or other local government regulations and encourage the county to review and strengthen any subdivision ordinances to incorporate mitigation measures for stormwater management.
Applicable Goal Statement:	Reduce the potential impact of natural disasters on new and existing properties and infrastructure and the local economy.
Estimated Cost:	\$5,000-\$25,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	Mayor, City Council, local planners
Action/Project Priority:	23 – High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, regional transportation plan, stormwater plan, stormwater ordinance.
	Progress Report
Action Status	Continuing – on-going
Report of Progress	Rolla has stormwater and drainage ordinances in place. There is also a stormwater management plan that is over 10 years old. The city just had an Integrated Management Plan (IMP) approved by both MDNR and EPA that also addresses stormwater.

<u>Action 2.2.3:</u> Continue to enforce flood damage prevention/floodplain management ordinances in compliance with NFIP requirements.

Action Worksheet	
Name of Jurisdiction:	Rolla
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities of properties in the floodplain during a flood event.
Hazard(s) Addressed:	Flood
	Action or Project
Action/Project Number:	2.2.3
Name of Action or Project:	Floodplain management compliance enforcement.
Action or Project Description:	Continue to enforce flood damage prevention/floodplain management ordinances in compliance with NFIP requirements.
Applicable Goal Statement:	Reduce the potential impact of natural disasters on new and existing properties and infrastructure and the local economy.
Estimated Cost:	\$4,000 - \$10,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	Floodplain Manager, Mayor, City Council
Action/Project Priority:	23 – High Priority
Timeline for Completion:	On-going On-going
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services
Local Planning Mechanisms to be Used in Implementation, if any:	Floodplain management ordinances, builder's plans, LEOP
	Progress Report
Action Status	Continuing in Progress
Report of Progress	The city is a member of the NFIP and works to ensure compliance with the city floodplain management ordinance. The ordinance requires a permit for any development in the floodplain. The program might benefit from more focused education efforts with
	builders, insurers, banks and residents.

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.

<u>Action 3.2.2:</u> Encourage meetings of EMD, city/county officials and SEMA to familiarize officials with mitigation planning, implementation and budgeting for mitigation projects.

Action Worksheet	
Name of Jurisdiction:	
Name of Jurisdiction:	Rolla
	Risk / Vulnerability
Problem being Mitigated:	Lack of knowledge/information of officials in regards to mitigation
	planning, implementation, and budgeting for mitigation projects.
Hazard(s) Addressed:	All Hazards
A (1 / 12 1 1 1 1	Action or Project
Action/Project Number:	3.2.2
Name of Action or Project:	Mitigation awareness/education meetings with local officials and SEMA
Action or Project Description:	Encourage meetings of EMD, city/county officials & SEMA to familiarize officials with mitigation planning, implementation & budgeting for mitigation projects.
Applicable Goal Statement:	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.
Estimated Cost:	\$0
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD, Mayor, City Council, SEMA Area Coordinator
Action/Project Priority:	26 - H
Timeline for Completion:	On-going
Potential Fund Sources:	N/A
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan
	Progress Report
Action Status	Continuing - Ongoing
Report of Progress	The Region I SEMA area coordinator holds quarterly meetings in the region and discussions include a variety of topics, including mitigation. MRPC has provided information and presentations on mitigation at regular board meetings that included representatives from Phelps County and its jurisdictions. Due to changes in elected officials, this is an ongoing activity.

<u>Action 3.3.1:</u> Re-evaluate the hazard mitigation plan, merge with other community planning and coordinate and integrate hazard mitigation activities, where appropriate, with emergency operations plans and procedures.

Action Worksheet		
Name of Jurisdiction:	Rolla	
	Risk / Vulnerability	
Problem being Mitigated:	Risks/vulnerabilities associated with not regularly reviewing and updating the mitigation plan and incorporating mitigation activities into emergency operations plans and procedures.	
Hazard(s) Addressed:	All Hazards	
	Action or Project	
Action/Project Number:	3.3.1	
Name of Action or Project:	Re-evaluate the hazard mitigation plan and merge with other community planning activities.	
Action or Project Description:	Re-evaluate the hazard mitigation plan, merge with other community planning and coordinate and integrate hazard mitigation activities, where appropriate, with emergency operations plans and procedures.	
Applicable Goal Statement:	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	
Estimated Cost:	\$3,500 - \$5,000	
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.	
	Plan for Implementation	
Responsible Organization/Department:	City EMD, Local Planners, MPC	
Action/Project Priority:	21 – High Priority	
Timeline for Completion:	On-going	
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services.	
Local Planning Mechanisms to be Used in Implementation, if any:	LEOP, Hazard Mitigation Plan, County Budget, Economic Development Plan, Transportation Plan, Floodplain Ordinances	
	Progress Report	
Action Status	Continuing – On-going	
Report of Progress	Hazard mitigation goals and actions have been incorporated into the regional Community and Economic Development Strategy. Mitigation actions are part of the county LEOP. As more local officials become familiar with mitigation and understand how it fits within other planning activities, this action item will continue to expand.	

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

<u>Action 4.1.1:</u> Continue to encourage joint meetings of different organizations/agencies for mitigation related planning.

Action Worksheet			
	Action Worksheet		
Name of Jurisdiction:	Rolla		
	Risk / Vulnerability		
Problem being Mitigated:	Lack of synergy/communication among organizations/agencies for mitigation related planning.		
Hazard(s) Addressed:	All hazards		
	Action or Project		
Action/Project Number:	4.1.1		
Name of Action or Project:	Encourage joint meetings of different organizations/agencies and continued communication on mitigation.		
Action or Project Description:	Continue to encourage joint meetings of different organizations/agencies for mitigation related planning.		
Applicable Goal Statement:	Strengthen communication and coordinate participation between agencies, stakeholders, jurisdictions, and the public to create widespread interest in mitigation.		
Estimated Cost:	\$500 - \$1,500		
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.		
	Plan for Implementation		
Responsible Organization/Department:	Mayor, City Council, City EMD		
Action/Project Priority:	28 – High Priority		
Timeline for Completion:	On-going On-going		
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.		
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP, County Budget		
	Progress Report		
Action Status	Continuing – in progress		
Report of Progress	This is an on-going activity. Region I Fire Chiefs meet regularly. The Region I SEMA area coordinator holds quarterly meetings throughout the six-county region, including in Phelps County. This program could benefit from a more coordinated, focused effort to bring different agencies together to discuss mitigation issues.		

Action 4.1.3: Pool different agency resources to achieve widespread mitigation results.

Action Worksheet		
Name of Jurisdiction:	Rolla	
	Risk / Vulnerability	
Problem being Mitigated:	Lack of resources to carry out mitigation projects	
Hazard(s) Addressed:	All hazards	
	Action or Project	
Action/Project Number:	4.1.3	
Name of Action or Project:	Pool different agency resources to achieve widespread mitigation results.	
Action or Project Description:	Bring together different agencies and organizations that have similar goals and work together to pool resources to move mitigation projects forward.	
Applicable Goal Statement:	Strengthen communication and coordinate participation between agencies, stakeholders, jurisdictions, and the public to create widespread interest in mitigation.	
Estimated Cost:	\$1,000 - \$4,000	
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.	
	Plan for Implementation	
Responsible Organization/Department:	City EMD, Mayor, City Council, Floodplain Manager	
Action/Project Priority:	24 – High Priority	
Timeline for Completion:	On-going	
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.	
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, Floodplain Ordinance, LEOP, City Budget	
	Progress Report	
Action Status	Continuing – on-going	
Report of Progress	In the last five years, Rolla worked with Phelps County, MoDOT, Federal Highway Administration on the North Outer Road Incident By-Pass Route for I-44, which was funded through a CDBG grant. Rolla did the engineering for the project; MoDOT made accommodations; and the FHA gave up right-of-way to get the	
	project completed.	

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.

<u>Action 5.1.1:</u> Incorporate hazard mitigation into the long-range planning and development activities of the county and each jurisdiction.

activities of the county and each jurisdiction.	
Action Worksheet	
Name of Jurisdiction:	Rolla
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with not incorporating hazard mitigation in the long-term planning and development of activities by each jurisdiction.
Hazard(s) Addressed:	All Hazards
	Action or Project
Action/Project Number:	5.1.1
Name of Action or Project:	Incorporating hazard mitigation into all long-range planning and development activities
Action or Project Description:	Incorporate hazard mitigation into the long-range planning and development activities of the county and each jurisdiction.
Applicable Goal Statement:	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 benefits of special interests.
Estimated Cost:	\$2,500 - \$25,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss of function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD, local planners, MPC
Action/Project Priority:	29 – High Priority
Timeline for Completion:	On-going On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP, economic development plan, transportation plan, floodplain ordinance
	Progress Report
Action Status	Continuing – in progress
Report of Progress	Hazard mitigation goals and actions have been incorporated into the regional Community and Economic Development Strategy. Mitigation actions are part of the LEOP. Rolla reports that hazard mitigation has been incorporated into the Comprehensive Plan, Capital Improvement Plan, Rolla Regional Economic Commission Economic Development Plan, and Integrated Management Plan. As more officials become familiar with mitigation and understand how it fits within other planning activities, this action item will continue to expand.

<u>Action 5.2.1</u>: Encourage local governments to purchase properties in the floodplain as funds become available and convert that land into public space/recreation area.

Action Worksheet	
Name of Jurisdiction:	Rolla
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with floodplain properties
Hazard(s) Addressed:	Flood
	Action or Project
Action/Project Number:	5.2.1
Name of Action or Project:	Government purchase of properties in the floodplain
Action or Project Description:	Encourage local governments to purchase properties in the floodplain as funds become available and convert that land into public space/recreation area.
Applicable Goal Statement:	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 benefits of special interests.
Estimated Cost:	\$3,500 - \$500,000
Benefits:	Losses avoided by implementing this action include property damage, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD, Mayor, City Council, Floodplain Manager/ Coordinator
Action/Project Priority:	18 - M
Timeline for Completion:	N/A
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services
Local Planning Mechanisms to be Used in Implementation, if any:	Floodplain ordinance, Hazard Mitigation Plan
	Progress Report
Action Status	Continuing
Report of Progress	Rolla has not done a buyout in the last five years but would certainly consider doing so if the need arises. The community has done a significant amount of work on stormwater management to reduce flooding in the community.

<u>Action 5.2.2</u>: Encourage communities to discuss zoning repetitive loss properties in the floodplain as open space.

Action Worksheet	
Name of Jurisdiction:	Rolla
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with floodplain properties
Hazard(s) Addressed:	Flood
	Action or Project
Action/Project Number:	5.2.1
Name of Action or Project:	Government purchase of properties in the floodplain
Action or Project Description:	Encourage local governments to purchase properties in the floodplain as funds become available and convert that land into public space/recreation area.
Applicable Goal Statement:	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 benefits of special interests.
Estimated Cost:	\$3,500 - \$500,000
Benefits:	Losses avoided by implementing this action include property damage, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD, Mayor, City Council, Floodplain Manager/ Coordinator
Action/Project Priority:	16 - M
Timeline for Completion:	N/A
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services
Local Planning Mechanisms to be Used in Implementation, if any:	Floodplain ordinance, Hazard Mitigation Plan
Progress Report	
Action Status	Continuing – no progress
Report of Progress	To date, Rolla has not rezoned any floodplain properties into open space.

Goal 6: Secure resources for investment in hazard mitigation.

<u>Action 6.1.2:</u> Structure grant proposals for road/bridge upgrades so that hazard mitigation concerns are also met.

Action Worksheet	
Name of Jurisdiction:	Rolla
	Risk / Vulnerability
Problem being Mitigated:	Roads and bridges in need of upgrades.
Hazard(s) Addressed:	Flood
	Action or Project
Action/Project Number:	6.1.2
Name of Action or Project:	Structuring grant proposals to meet mitigation needs.
Action or Project Description:	Structure grant proposals for road/bridge upgrades so that hazard mitigation concerns are also met.
Applicable Goal Statement:	Secure resources for investment in hazard mitigation.
Estimated Cost:	\$3,500 -\$4,500
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City Engineer, Mayor, City Council, Local Planners, Local Grant Writers
Action/Project Priority:	24 – High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, City Budget, CEDS, Transportation Plan
	Progress Report
Action Status	Continuing in progress
Report of Progress	The city has extensively integrated hazard mitigation into its plans and planning processes. Road and bridge projects are reviewed and designed to mitigate any on-going hazard problems. As more local officials become aware of the importance of mitigation and realize that grant applications can provide opportunities for funding those actions, this activity will become more integrated into local planning.

<u>Action 6.1.3:</u> Work with state/local/federal agencies to include mitigation in all economic and community development projects.

	Action Worksheet
Name of Jurisdiction:	
Name of Jurisdiction.	Rolla
	Risk / Vulnerability
Duchleys being Mitigated.	Lack of synergy/communication/coordination of mitigation in
Problem being Mitigated:	community development projects and integration of mitigation
	actions into economic and community development projects.
Hazard(s) Addressed:	All hazards
	Action or Project
Action/Project Number:	6.1.3
Name of Action or	Coordination with state/local/federal agencies to integrate
Project:	mitigation into economic and community development projects.
Action or Project	Work with state/local/federal agencies to include mitigation in all
Description:	economic and community development projects.
Applicable Goal	
Statement:	Secure resources for investment in hazard mitigation.
Estimated Cost:	\$2,500 - \$9.500
	Losses avoided by implementing this action include injuries
Benefits:	and/or casualties, property damages, loss-of-
	function/displacement impacts, and emergency management
	costs/community costs.
Responsible	Plan for Implementation Mayor, City Council, local economic developers, community
Organization/Department:	development organizations
Action/Project Priority:	23 – High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of
	cash, goods, or services.
Local Planning	
Mechanisms to be Used	Hazard Mitigation Plan, CEDS, Transportation Plan
in Implementation, if any:	Province Province
Action Status	Progress Report
Action Status	Continuing in progress
	Hazard mitigation goals and actions have been incorporated into the regional Community Economic Development Strategy
	(CEDS) and regional transportation plan. Two major
	developments – Ridgeview extension of Highway 72 and the
	West Side Development have been completed in the last five
Report of Progress	years. In both cases, stormwater accommodations to mitigate to
_	reduce run-off occurred before construction began. Both projects
	conformed to State and Federal regulations. As mitigation
	awareness grows, additional efforts will be made to incorporate
	mitigation activities into economic and community development
	projects.

Action 6.1.4: Encourage local jurisdictions to budget for mitigation projects.

Action Worksheet	
Name of Jurisdiction:	Rolla
	Risk / Vulnerability
Problem being Mitigated:	Lack of funding for mitigation projects among local jurisdictions.
Hazard(s) Addressed:	All Hazards
	Action or Project
Action/Project Number:	6.1.4
Name of Action or Project:	Budgeting for mitigation projects.
Action or Project Description:	Encourage local jurisdictions to budget for mitigation projects.
Applicable Goal Statement:	Secure resources for investment in hazard mitigation.
Estimated Cost:	\$500 - \$1,500
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD, Mayor, City Council
Action/Project Priority:	23 - H
Timeline for Completion:	On-going On-going
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash,
Lead Diamaina	goods, or services
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard mitigation plan, City Budget, CEDs, LEOP
,, ,,	Progress Report
Action Status	Continuing in Progress
Report of Progress	Rolla has incorporated hazard mitigation goals into its capital improvement plan and includes mitigation projects in its annual budget. As awareness of the importance of mitigation grows, more local jurisdictions are seeing the long-term benefits and working
	toward budgeting for mitigation activities.

<u>Action 6.2.1:</u> Encourage cities and counties to develop and implement cost-share programs with private property owners for hazard mitigation projects that benefit the community as a whole.

Action Worksheet	
Name of Jurisdiction:	Rolla
	Risk / Vulnerability
Problem being Mitigated:	Lack of cost-share programs with private property owners for hazard mitigation projects.
Hazard(s) Addressed:	All hazards
	Action or Project
Action/Project Number:	6.2.1
Name of Action or Project:	Encourage local mitigation cost-share programs.
Action or Project Description:	Encourage cities and counties to develop and implement cost- share programs with private property owners for hazard mitigation projects that benefit the community as a whole.
Applicable Goal Statement:	Secure resources for investment in hazard mitigation.
Estimated Cost:	\$5,000 - \$500,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	Mayor, City Council, Local Planners, City Engineer, MPC
Action/Project Priority:	14 – Medium Priority
Timeline for Completion:	5 – 10 years to implement and then on-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan
	Progress Report
Action Status	Continuing in progress
Report of Progress	The city works with developers to cost-share some projects that deal with stormwater run-off. In some cases the city will participate in installation of culverts to ensure the project is completed properly and to city standards.

St. James

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

<u>Action 1.1.1:</u> Maintain a hazard mitigation public awareness program to include: benefits of hazard mitigation planning and projects; personal emergency preparedness; participation in emergency notification systems where available; information on individual hazard mitigation projects such as tying down hazardous materials tanks; how to shut off utilities; precautions to take during threatening weather events; etc.

Action Worksheet		
Name of Jurisdiction:	St. James	
	Risk / Vulnerability	
Problem being Mitigated:	Residents are not always prepared to manage on their own for 72 hours following an event. This action item will improve individual household preparedness and increase knowledge of mitigation activities.	
Hazard(s) Addressed:	All Hazards	
	Action or Project	
Action/Project Number:	1.1.1	
Name of Action or Project:	Personal Preparedness Education/Awareness programs	
Action or Project Description:	City EMD and local emergency response agencies will promote Ready in 3 and other personal preparedness education programs through the distribution of brochures, press releases and presentations.	
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning, and hazard mitigation activities.	
Estimated Cost:	\$500 - \$3,500	
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.	
	Plan for Implementation	
Responsible Organization/Department:	City EMD	
Action/Project Priority:	27 – High Priority	
Timeline for Completion:	1 – 5 years - Ongoing	
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.	
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, Meramec Region Community Economic Development Strategy (CEDS)	
	Progress Report	
Action Status	Continuing in progress	
Report of Progress	Many emergency response agencies promote individual household preparedness & provide Ready in 3 brochures. SEMA distributes press releases periodically on personal preparedness. A more focused and coordinated effort would help to achieve comprehensive coverage in the county.	
	r country.	

Action 1.2.1: Budget for and obtain early warning systems and improved communications systems.

Action Worksheet	
Name of Jurisdiction:	St. James
	Risk / Vulnerability
Problem being Mitigated:	Risks and vulnerabilities associated with lack of early warning systems and communications systems in unincorporated areas.
Hazard(s) Addressed:	All hazards.
	Action or Project
Action/Project Number:	1.2.1
Name of Action or Project:	Improving early warning and communications capabilities.
Action or Project Description:	Need to budget for enhanced warning and communications systems to improve early warning capabilities for residents in St. James.
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning, and hazard mitigation activities.
Estimated Cost:	Unknown
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD, Mayor, City Council
Action/Project Priority:	23 – High Priority
Timeline for Completion:	On-going On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP, City Budget
	Progress Report
Action Status	Continuing and updated – in progress
Report of Progress	St. James has three outdoor warning sirens. The county has a phone-based warning system – Everbridge – which can provide alerts to residents who sign up for it by text, cell phone, email and landline phone and is available to all residents of the county. This program could benefit from a more focused campaign to encourage residents to sign up for Everbridge.

<u>Action 1.3.1:</u> Continue to implement tree trimming and dead tree removal programs by utility companies and local government.

Action Worksheet	
Name of Jurisdiction:	St. James
	Risk / Vulnerability
Problem being Mitigated:	Risks and vulnerabilities associated with power outages from trees interfering with power lines and/or blocking roads
Hazard(s) Addressed:	Tornadoes, severe winter weather, severe thunderstorm/high winds/lightning/hail
	Action or Project
Action/Project Number:	1.3.1
Name of Action or Project:	Tree trimming and dead tree removal.
Action or Project Description:	Continue to implement tree trimming and dead tree removal.
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning, and hazard mitigation activities.
Estimated Cost:	\$500 - \$1,500
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damage, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	Public Works, Mayor, City Council
Action/Project Priority:	24 – High Priority
Timeline for Completion:	On-going On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP
Progress Report	
Action Status Report of Progress	St. James contracts with a private company that does tree trimming around overhead lines and removes trees that are considered a hazard.

<u>Action 1.3.3:</u> Establish designated shelters for residents to be used during tornado threats, as cooling centers during extreme heat or power outages and/or as shelters during other disasters.

Action Worksheet		
Name of Jurisdiction:	St. James	
Risk / Vulnerability		
Problem being Mitigated:	Risks/vulnerabilities associated with lack of tornado shelters and warming and cooling centers during times of extreme heat and cold, and power outages	
Hazard(s) Addressed:	Severe Weather, Winter Storms, Tornadoes, Extreme Heat	
Action or Project		
Action/Project Number:	1.3.3	
Name of Action or Project:	Establish and maintain designated storm shelters, as well as heating and cooling centers	
Action or Project Description:	Establish designated shelters for residents to be used as shelters during tornado warnings, as well as heating and cooling centers during extreme heat or power outages.	
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning, and hazard mitigation activities.	
Estimated Cost:	\$5,000	
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, loss-of-function/displacement impacts, and emergency management costs/community costs.	
Plan for Implementation		
Responsible Organization/Department:	City EMD	
Action/Project Priority:	26 –High Priority	
Timeline for Completion:	5 years	
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.	
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP	
Progress Report		
Action Status	Continuing –in progress	
Report of Progress	St. James reported that it had no designated shelters or certified tornado safe rooms. However, in the past several churches have served as temporary shelters for the community. There is a FEMA certified tornado shelter located in the Tacony Manufacturing building in the city's industrial park. This action would benefit from the development of MOUs between the city and these entities to formalize sheltering options.	

<u>Action 1.3.4:</u> Facilities that house vulnerable populations such as disabled and elderly should review alternative locations for sheltering residents and MOUs with "sister" facilities.

	Action Worksheet	
Name of Jurisdiction:	St. James	
	Risk / Vulnerability	
Problem being Mitigated:	Risks/vulnerabilities associated with nonexistent/unavailable shelters for large groups such as hospitals, nursing homes and group homes.	
Hazard(s) Addressed:	All hazards	
	Action or Project	
Action/Project Number:	1.3.4	
Name of Action or Project:	Establish alternative shelters for facilities that house disabled and elderly populations such as hospitals, nursing homes and group homes.	
Action or Project Description:	Continue to work to increase communications between facilities that house vulnerable populations and with local EMDs and agencies responsible for sheltering.	
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning, and hazard mitigation activities.	
Estimated Cost:	\$2,500 - \$5,000	
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, and emergency management costs/community costs.	
	Plan for Implementation	
Responsible Organization/Department:	City EMD, county health department	
Action/Project Priority:	21 –High Priority	
Timeline for Completion:	On-going On-going	
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.	
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP	
	Progress Report	
Action Status	Continuing – in progress	
Report of Progress	The city participated in a pilot project in the last five years to identify vulnerable populations in the community and get them signed up with Everbridge. Data on what private nursing and group homes have for emergency plans and MOUs does not currently exist. This action item would benefit from a focused effort to gather that data and assist these private institutions with establishing alternative sheltering plans.	

<u>Action 1.3.5:</u> Increase availability (if necessary, construction) of storm shelters for individual families and large groups, including near large employment centers and schools.

Action Worksheet		
Name of Jurisdiction:	St. James	
	Risk / Vulnerability	
Problem being Mitigated:	Risks/vulnerabilities associated with nonexistent/unavailable	
	shelters for individual families and large groups.	
Hazard(s) Addressed:	Tornados, severe storms	
Action or Project		
Action/Project Number:	1.3.5	
Name of Action or Project:	Increase the availability of storm shelters	
Action or Project Description:	Increase availability (if necessary, construction) of storm shelters for individual families and large groups, including near large employment centers and schools.	
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning, and hazard mitigation activities.	
Estimated Cost:	\$2,500 - \$5,000	
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, and emergency management costs/community costs.	
	Plan for Implementation	
Responsible	City EMD	
Organization/Department:	·	
Action/Project Priority:	18 – Medium Priority	
Timeline for Completion:	On-going Control of the control of t	
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.	
Local Planning		
Mechanisms to be Used	Hazard Mitigation Plan, LEOP	
in Implementation, if any:		
	Progress Report	
Action Status	Continuing – in progress	
Report of Progress	There is a certified tornado saferoom located in the St. James industrial park in the Tacony Manufacturing building. Tacony has informed businesses in the industrial park that their employees can shelter there during a tornado warning. However, there is no MOU or agreement with the city for Tacony to open the shelter for the general public. The building is adjacent to a large residential area. This action would benefit from a focused effort to formalize an agreement for sheltering between the city and Tacony.	

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

<u>Action 2.1.3:</u> Encourage the installation of small renewable energy microgrids (solar, wind) and backup generators for critical infrastructure such as water/sewer systems and emergency services.

Action Worksheet		
Name of Jurisdiction:	St. James	
	Risk / Vulnerability	
Problem being Mitigated:	Risks/vulnerabilities associated with power outages for critical infrastructure/facilities	
Hazard(s) Addressed:	All hazards	
Action or Project		
Action/Project Number:	2.1.3	
Name of Action or Project:	Acquisition and installation of microgrids and backup generators for critical infrastructure.	
Action or Project Description:	Encourage the installation of small renewable energy microgrids (solar, wind) and backup generators for critical infrastructure such as water/sewer systems and emergency services.	
Applicable Goal Statement:	Reduce the potential impact of natural disasters on new and	
Estimated Cost:	existing properties and infrastructure and the local economy. \$25,500 – \$80,000	
Benefits:	Losses avoided by implementing this action include loss-of-function/displacement impacts, and emergency management costs/community costs.	
	Plan for Implementation	
Responsible	City EMD, Mayor, City Council, Public Works	
Organization/Department:		
Action/Project Priority:	21 –High Priority	
Timeline for Completion:	5 years	
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.	
Local Planning Mechanisms to be Used in Implementation, if any:	LEOP, City Budget, Hazard Mitigation Plan, Critical Facility Budgets	
	Progress Report	
Action Status	Revised – in progress	
Report of Progress	St. James has three portable generators and one fixed generator.	

<u>Action 2.2.1:</u> Educate residents, realtors and contractors on the dangers of floodplain development and the benefits of the NFIP.

Action Worksheet	
Name of Jurisdiction:	
	St. James
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities of property located in the floodplain during a flood event.
Hazard(s) Addressed:	Flood
	Action or Project
Action/Project Number:	2.2.1
Name of Action or Project:	Floodplain education/awareness.
Action or Project Description:	Educate residents, realtors and contractors about the dangers of floodplain development and the benefits of the NFIP.
Applicable Goal Statement:	Reduce the potential impact of natural disasters on new and existing properties and infrastructure and the local economy.
Estimated Cost:	\$5,000-\$6,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	Floodplain manager, Mayor, City Council
Action/Project Priority:	25 –High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Floodplain management ordinance, LEOP, CEDS, Hazard Mitigation Plan
Progress Report	
Action Status	Continuing – on going
Report of Progress	The city has floodplain brochures available at city hall.

<u>Action 2.2.2:</u> Encourage development of storm water management plans in those jurisdictions that do not currently have them and in all new residential and commercial development.

Action Worksheet		
Name of Jurisdiction:	St. James	
	Risk / Vulnerability	
Problem being Mitigated:	Risks/vulnerabilities to property and communities in areas that do not possess adequate storm water management plans.	
Hazard(s) Addressed:	Flood, Severe Weather	
	Action or Project	
Action/Project Number:	2.2.2	
Name of Action or Project:	Encourage local governments to require contractor storm water management plans in all new development – both residential and commercial properties.	
Action or Project Description:	Encourage the development of stormwater management plans for all new development through the adoption of ordinances or other local government regulations and encourage the county to review and strengthen any subdivision ordinances to incorporate mitigation measures for stormwater management.	
Applicable Goal Statement:	Reduce the potential impact of natural disasters on new and existing properties and infrastructure and the local economy.	
Estimated Cost:	\$5,000-\$25,000	
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.	
	Plan for Implementation	
Responsible Organization/Department:	Mayor, City Council, local planners	
Action/Project Priority:	23 – High Priority	
Timeline for Completion:	On-going	
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services.	
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, regional transportation plan	
	Progress Report	
Action Status	Continuing – in progress	
Report of Progress	St. James has storm water and drainage ordinances in place but could benefit from reviewing and strengthening those ordinances.	

<u>Action 2.2.3:</u> Continue to enforce flood damage prevention/floodplain management ordinances in compliance with NFIP requirements.

Action Worksheet	
Name of Jurisdiction:	St. James
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities of properties in the floodplain during a flood event.
Hazard(s) Addressed:	Flood
	Action or Project
Action/Project Number:	2.2.3
Name of Action or Project:	Floodplain management compliance enforcement.
Action or Project Description:	Continue to enforce flood damage prevention/floodplain management ordinances in compliance with NFIP requirements.
Applicable Goal Statement:	Reduce the potential impact of natural disasters on new and existing properties and infrastructure and the local economy.
Estimated Cost:	\$4,000 - \$10,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	Floodplain Manager, Mayor, City Council
Action/Project Priority:	23 – High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash,
Lead Diamaina	goods, or services
Local Planning Mechanisms to be Used in Implementation, if any:	Floodplain management ordinances, builder's plans, LEOP
	Progress Report
Action Status	Continuing in Progress
Report of Progress	The city is a member of the NFIP and works to insure compliance with the city floodplain management ordinance. The ordinance requires a permit for any development in the floodplain. The program could benefit from more focused education efforts with
	builders, insurers, banks and residents.

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.

<u>Action 3.2.2:</u> Encourage meetings of EMD, city/county officials and SEMA to familiarize officials with mitigation planning, implementation and budgeting for mitigation projects.

	Action Worksheet	
Name of Jurisdiction:	St. James	
	Risk / Vulnerability	
Problem being Mitigated:	Lack of knowledge/information of officials in regards to mitigation	
	planning, implementation, and budgeting for mitigation projects.	
Hazard(s) Addressed:	All Hazards	
	Action or Project	
Action/Project Number:	3.2.2	
Name of Action or Project:	Mitigation awareness/education meetings with local officials and SEMA	
Action or Project Description:	Encourage meetings of EMD, city/county officials & SEMA to familiarize officials with mitigation planning, implementation & budgeting for mitigation projects.	
Applicable Goal Statement:	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.	
Estimated Cost:	\$0	
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.	
	Plan for Implementation	
Responsible Organization/Department:	City EMD, Mayor, City Council, SEMA Area Coordinator	
Action/Project Priority:	26 - H	
Timeline for Completion:	On-going On-going	
Potential Fund Sources:	N/A	
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan	
	Progress Report	
Action Status	Continuing - Ongoing	
Report of Progress	The Region I SEMA area coordinator holds quarterly meetings in the region and discussions include a variety of topics, including mitigation. MRPC has provided information and presentations on mitigation at regular board meetings that included representatives from Phelps County and its jurisdictions. Due to changes in elected officials, this is an ongoing activity.	

<u>Action 3.3.1:</u> Re-evaluate the hazard mitigation plan, merge with other community planning and coordinate and integrate hazard mitigation activities, where appropriate, with emergency operations plans and procedures.

Action Worksheet	
Action Worksheet	
Name of Jurisdiction:	St. James
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with not regularly reviewing and updating the mitigation plan and incorporating mitigation activities into emergency operations plans and procedures.
Hazard(s) Addressed:	All Hazards
	Action or Project
Action/Project Number:	3.3.1
Name of Action or Project:	Re-evaluate the hazard mitigation plan and merge with other community planning activities.
Action or Project Description:	Re-evaluate the hazard mitigation plan, merge with other community planning and coordinate and integrate hazard mitigation activities, where appropriate, with emergency operations plans and procedures.
Applicable Goal Statement:	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
Estimated Cost:	\$3,500 - \$5,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD, Local Planners, MPC
Action/Project Priority:	21 – High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	LEOP, Hazard Mitigation Plan, County Budget, Economic Development Plan, Transportation Plan, Floodplain Ordinances
A () O()	Progress Report
Action Status	Continuing – On-going
Report of Progress	Hazard mitigation goals and actions have been incorporated into the regional Community and Economic Development Strategy. Mitigation actions are part of the LEOP. As more local officials become familiar with mitigation and understand how it fits within other planning activities, this action item will continue to expand.

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

<u>Action 4.1.1:</u> Continue to encourage joint meetings of different organizations/agencies for mitigation related planning.

Action Worksheet	
Name of Jurisdiction:	St. James
	Risk / Vulnerability
Problem being Mitigated:	Lack of synergy/communication among organizations/agencies for mitigation related planning.
Hazard(s) Addressed:	All hazards
,	Action or Project
Action/Project Number:	4.1.1
Name of Action or Project:	Encourage joint meetings of different organizations/agencies and continued communication on mitigation.
Action or Project Description:	Continue to encourage joint meetings of different organizations/agencies for mitigation related planning.
Applicable Goal Statement:	Strengthen communication and coordinate participation between agencies, stakeholders, jurisdictions, and the public to create widespread interest in mitigation.
Estimated Cost:	\$500 - \$1,500
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	Mayor, City Council, City EMD
Action/Project Priority:	28 – High Priority
Timeline for Completion:	On-going On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP, County Budget
	Progress Report
Action Status	Continuing – in progress
Report of Progress	This is an on-going activity. Region I Fire Chiefs meet regularly. The Region I SEMA area coordinator holds quarterly meetings throughout the six-county region, including in Phelps County. This program could benefit from a more coordinated, focused effort to bring different agencies together to discuss mitigation issues.

Action 4.1.3: Pool different agency resources to achieve widespread mitigation results.

Action Worksheet	
Name of Jurisdiction:	St. James
	Risk / Vulnerability
Problem being Mitigated:	Lack of resources to carry out mitigation projects
Hazard(s) Addressed:	All hazards
	Action or Project
Action/Project Number:	4.1.3
Name of Action or Project:	Pool different agency resources to achieve widespread mitigation results.
Action or Project Description:	Bring together different agencies and organizations that have similar goals and work together to pool resources to move mitigation projects forward.
Applicable Goal Statement:	Strengthen communication and coordinate participation between agencies, stakeholders, jurisdictions, and the public to create widespread interest in mitigation.
Estimated Cost:	\$1,000 - \$4,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD, Mayor, City Council, Floodplain Manager
Action/Project Priority:	24 – High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, Floodplain Ordinance, LEOP, City Budget
Progress Report	
Action Status	Continuing – on-going
Report of Progress	This is an on-going activity. St. James reported that they are interested in finding ways to pool resources to accomplish mitigation projects.

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.

<u>Action 5.1.1:</u> Incorporate hazard mitigation into the long-range planning and development activities of the county and each jurisdiction.

Action Worksheet	
Name of Jurisdiction:	St. James
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with not incorporating hazard mitigation in the long-term planning and development of activities by each jurisdiction.
Hazard(s) Addressed:	All Hazards
	Action or Project
Action/Project Number:	5.1.1
Name of Action or Project:	Incorporating hazard mitigation into all long-range planning and development activities
Action or Project Description:	Incorporate hazard mitigation into the long-range planning and development activities of the county and each jurisdiction.
Applicable Goal Statement:	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 benefits of special interests.
Estimated Cost:	\$2,500 - \$25,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss of function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD, local planners, MPC
Action/Project Priority:	29 – High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP, economic development plan, transportation plan, floodplain ordinance
	Progress Report
Action Status	Continuing – in progress
Report of Progress	Hazard mitigation goals and actions have been incorporated into the regional Community and Economic Development Strategy. Mitigation actions are part of the LEOP. As more officials become familiar with mitigation and understand how it fits within other planning activities, this action item will continue to expand.

<u>Action 5.2.1</u>: Encourage local governments to purchase properties in the floodplain as funds become available and convert that land into public space/recreation area.

Action Worksheet	
Name of Jurisdiction:	St. James
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with floodplain properties
Hazard(s) Addressed:	Flood
	Action or Project
Action/Project Number:	5.2.1
Name of Action or Project:	Government purchase of properties in the floodplain
Action or Project Description:	Encourage local governments to purchase properties in the floodplain as funds become available and convert that land into public space/recreation area.
Applicable Goal Statement:	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 benefits of special interests.
Estimated Cost:	\$3,500 - \$500,000
Benefits:	Losses avoided by implementing this action include property damage, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD, Mayor, City Council, Floodplain Manager/ Coordinator
Action/Project Priority:	18 - M
Timeline for Completion:	N/A
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services
Local Planning Mechanisms to be Used in Implementation, if any:	Floodplain ordinance, Hazard Mitigation Plan
	Progress Report
Action Status	Continuing – in progress
Report of Progress	St. James has not had any requests from property owners for a buyout. The city does not issue building permits for structures located in the floodplain.

<u>Action 5.2.2</u>: Encourage communities to discuss zoning repetitive loss properties in the floodplain as open space.

Action Worksheet	
Name of Jurisdiction:	St. James
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with floodplain properties
Hazard(s) Addressed:	Flood
	Action or Project
Action/Project Number:	5.2.1
Name of Action or Project:	Government purchase of properties in the floodplain
Action or Project Description:	Encourage local governments to purchase properties in the floodplain as funds become available and convert that land into public space/recreation area.
Applicable Goal Statement:	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 benefits of special interests.
Estimated Cost:	\$3,500 - \$500,000
Benefits:	Losses avoided by implementing this action include property damage, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD, Mayor, City Council, Floodplain Manager/ Coordinator
Action/Project Priority:	16 - M
Timeline for Completion:	N/A
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services
Local Planning Mechanisms to be Used in Implementation, if any:	Floodplain ordinance, Hazard Mitigation Plan
Progress Report	
Action Status	Continuing – no progress
Report of Progress	

Goal 6: Secure resources for investment in hazard mitigation.

<u>Action 6.1.2:</u> Structure grant proposals for road/bridge upgrades so that hazard mitigation concerns are also met.

Action Worksheet		
Name of Jurisdiction:	St. James	
	Risk / Vulnerability	
Problem being Mitigated:	Roads and bridges in need of upgrades.	
Hazard(s) Addressed:	Flood	
	Action or Project	
Action/Project Number:	6.1.2	
Name of Action or Project:	Structuring grant proposals to meet mitigation needs.	
Action or Project Description:	Structure grant proposals for road/bridge upgrades so that hazard mitigation concerns are also met.	
Applicable Goal Statement:	Secure resources for investment in hazard mitigation.	
Estimated Cost:	\$3,500 -\$4,500	
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.	
	Plan for Implementation	
Responsible Organization/Department:	City Engineer, Mayor, City Council, Local Planners, Local Grant Writers	
Action/Project Priority:	24 – High Priority	
Timeline for Completion:	On-going On-going	
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.	
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, City Budget, CEDS, Transportation Plan	
	Progress Report	
Action Status	Continuing - no progress	
Report of Progress	The city has not had any grant projects for roads and bridges in the past five years. This is an activity that would benefit from raising awareness of mitigation concerns and remedies. As more local officials become aware of the importance of mitigation and realize that grant applications can provide opportunities for funding those actions, this activity will become more integrated into local planning.	

<u>Action 6.1.3:</u> Work with state/local/federal agencies to include mitigation in all economic and community development projects.

Action Worksheet		
Name of Jurisdiction:	St. James	
	Risk / Vulnerability	
Problem being Mitigated:	Lack of synergy/communication/coordination of mitigation in community development projects and integration of mitigation actions into economic and community development projects.	
Hazard(s) Addressed:	All hazards	
	Action or Project	
Action/Project Number:	6.1.3	
Name of Action or Project:	Coordination with state/local/federal agencies to integrate mitigation into economic and community development projects.	
Action or Project Description:	Work with state/local/federal agencies to include mitigation in all economic and community development projects.	
Applicable Goal Statement:	Secure resources for investment in hazard mitigation.	
Estimated Cost:	\$2,500 - \$9.500	
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.	
	Plan for Implementation	
Responsible Organization/Department:	Mayor and City Council, local economic developers, community development organizations	
Action/Project Priority:	23 – High Priority	
Timeline for Completion:	On-going	
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.	
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, CEDS, Transportation Plan	
	Progress Report	
Action Status	Continuing in progress	
Report of Progress	Hazard mitigation goals and actions have been incorporated into the regional Community Economic Development Strategy (CEDS) and regional transportation plan. As mitigation awareness grows, additional efforts will be made to incorporate mitigation activities into economic and community development projects.	

Action 6.1.4: Encourage local jurisdictions to budget for mitigation projects.

Action Worksheet	
Name of Jurisdiction:	St. James
	Risk / Vulnerability
Problem being Mitigated:	Lack of funding for mitigation projects among local jurisdictions.
Hazard(s) Addressed:	All Hazards
	Action or Project
Action/Project Number:	6.1.4
Name of Action or Project:	Budgeting for mitigation projects.
Action or Project Description:	Encourage local jurisdictions to budget for mitigation projects.
Applicable Goal Statement:	Secure resources for investment in hazard mitigation.
Estimated Cost:	\$500 - \$1,500
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	City EMD, Mayor, City Council
Action/Project Priority:	23 - H
Timeline for Completion:	On-going On-going
Potential Fund Sources:	Grants, local general revenue funds, private donations of cash, goods, or services
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard mitigation plan, City Budget, CEDs, LEOP
	Progress Report
Action Status	Continuing in Progress
Report of Progress	The city is working to improve the city's water infrastructure – installing connecting lines between wells to make the system more resilient. The city is also replacing aging electric infrastructure and has implemented a policy of installing underground secondary electric for new construction. As awareness of the importance of mitigation grows, more local installing are assign the language baseling toward.
	jurisdictions are seeing the long-term benefits and working toward budgeting for mitigation activities.

<u>Action 6.2.1:</u> Encourage cities and counties to develop and implement cost-share programs with private property owners for hazard mitigation projects that benefit the community as a whole.

Action Worksheet		
Name of Jurisdiction:	St. James	
	Risk / Vulnerability	
Problem being Mitigated:	Lack of cost-share programs with private property owners for hazard mitigation projects.	
Hazard(s) Addressed:	All hazards	
	Action or Project	
Action/Project Number:	6.2.1	
Name of Action or Project:	Encourage local mitigation cost-share programs.	
Action or Project Description:	Encourage cities and counties to develop and implement cost- share programs with private property owners for hazard mitigation projects that benefit the community as a whole.	
Applicable Goal Statement:	Secure resources for investment in hazard mitigation.	
Estimated Cost:	\$5,000 - \$500,000	
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.	
	Plan for Implementation	
Responsible Organization/Department:	City EMD, Mayor, City Council, Local Planners, City Engineer, MPC	
Action/Project Priority:	14 – Medium Priority	
Timeline for Completion:	5 – 10 years to implement and then on-going	
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.	
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan	
	Progress Report	
Action Status	Continuing -in progress	
Report of Progress	The city will install a culvert purchased by a resident to ensure proper installation.	

St. James R-I

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

Action 1.1.8: Construct certified tornado safe rooms in every school that does not have one.

Action Worksheet	
Name of Jurisdiction:	St. James R-I
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with insufficient storm shelters and tornado safe rooms in schools that do not have them.
Hazard(s) Addressed:	Tornado, Severe Weather
	Action or Project
Action/Project Number:	1.1.8
Name of Action or Project:	Expansion of storm shelter availability and construction of certified tornado safe rooms.
Action or Project Description:	Construct certified tornado safe rooms to improve the safety for students and staff.
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning and hazard mitigation activities.
Estimated Cost:	Unknown
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	School Superintendent, School Board
Action/Project Priority:	20 –High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, School Emergency Plan, School Budget
Progress Report	
Action Status	Continuing – updated - no progress
Report of Progress	

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.

Action 3.1.4: Educate staff and parents on school safety protocols.

Action Worksheet	
Name of Jurisdiction:	St. James R-I
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with staff and parents not having adequate knowledge of school safety protocols.
Hazard(s) Addressed:	All Hazards
	Action or Project
Action/Project Number:	3.1.4
Name of Action or Project:	Educate staff and parents on school safety protocols.
Action or Project Description:	Actively engage staff and parents in relation to school safety protocols during natural hazard event.
Applicable Goal Statement:	Promote education, outreach, research and development programs to improve the knowledge and awareness among the district's staff and students about hazards they may face, their vulnerability to identified hazards, and hazard mitigation alternatives that can reduce their vulnerabilities
Estimated Cost:	\$500 - \$1,500
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	Superintendent, School Board, Local Planners, MPC
Action/Project Priority:	26 – High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Local general revenue funds, private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	LEOP, Hazard Mitigation Plan, School Budget, School Emergency Plan
	Progress Report
Action Status	Continuing – On-going
Report of Progress	School districts currently do education with staff and parents on school emergency procedures, but all agreed that they wanted this action item to remain in the plan for the purpose of improving those efforts.

<u>Action 3.3.1:</u> Re-evaluate the hazard mitigation plan, merge with other community planning and coordinate and integrate hazard mitigation activities, where appropriate, with emergency operations plans and procedures.

Action Worksheet	
Name of Jurisdiction:	St. James R-I
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with not regularly reviewing and updating the mitigation plan and incorporating mitigation activities into other community plans and emergency operations plans and procedures.
Hazard(s) Addressed:	All Hazards
	Action or Project
Action/Project Number:	3.3.1
Name of Action or Project:	Review hazard mitigation plan, merge with other community planning and coordinate and integrate activities with emergency plans and procedures.
Action or Project Description:	Re-evaluate the hazard mitigation plan, merge with other community planning and coordinate and integrate hazard mitigation activities, where appropriate, with emergency operations plans and procedures.
Applicable Goal Statement:	Promote education, outreach, research and development programs to improve the knowledge and awareness among school staff and students about hazards they may face, their vulnerability to identified hazards, and hazard mitigation alternatives that can reduce their vulnerabilities
Estimated Cost:	\$3,500 - \$4,500
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	School Superintendent, School Board
Action/Project Priority:	21 – High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Local general revenue funds, private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP, School Emergency Plan,
	Progress Report
Action Status	Continuing – on-going
Report of Progress	The district continues to work to incorporate hazard mitigation actions into school plans and procedures. Some work has been done with the update of the school emergency plan.

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

<u>Action 4.1.1:</u> Continue to encourage joint meetings of different organizations/agencies for mitigation related planning.

Action Worksheet	
N	
Name of Jurisdiction:	St. James R-I
	Risk / Vulnerability
Problem being Mitigated:	Lack of synergy/communication among organizations/agencies for mitigation related planning.
Hazard(s) Addressed:	All hazards
	Action or Project
Action/Project Number:	4.1.1
Name of Action or Project:	Encourage joint meetings of different organizations/agencies and continued communication on mitigation.
Action or Project Description:	Continue to encourage joint meetings of different organizations/agencies for mitigation related planning.
Applicable Goal Statement:	Strengthen communication and coordinate participation between agencies, stakeholders, jurisdictions, and the public to create widespread interest in mitigation.
Estimated Cost:	Unknown
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	School Superintendent, School Board
Action/Project Priority:	27 – High Priority
Timeline for Completion:	On-going On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP, School Emergency Plan, District Budget
	Progress Report
Action Status	Continuing – on-going
Report of Progress	This is an on-going activity. The Region I SEMA area coordinator holds quarterly meetings throughout the six-county region, including in Phelps County. This program could benefit from a more coordinated, focused effort to bring different agencies
	together – including school districts - to discuss mitigation issues.

<u>Action 4.1.3:</u> Whenever possible, pool different agency resources to achieve widespread mitigation results.

Action Worksheet	
Name of Jurisdiction:	St. James R-I
	Risk / Vulnerability
Problem being Mitigated:	Lack of resources to carry out mitigation projects
Hazard(s) Addressed:	All hazards
	Action or Project
Action/Project Number:	4.1.3
Name of Action or Project:	Pool different agency resources to achieve widespread mitigation results.
Action or Project Description:	Bring together different agencies and organizations that have similar goals and work together to pool resources to move mitigation projects forward.
Applicable Goal Statement:	Strengthen communication and coordinate participation between agencies, stakeholders, jurisdictions, and the public to create widespread interest in mitigation.
Estimated Cost:	Unknown
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	Superintendent, School Board
Action/Project Priority:	24 – High Priority
Timeline for Completion:	On-going Control of the control of t
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, Floodplain Ordinances, LEOP, District Budget, School Emergency Plan
Progress Report	
Action Status	Continuing – on-going
Report of Progress	This is an on-going activity. All jurisdictions reported that they are interested in finding ways to pool resources to accomplish mitigation projects.

<u>Action 5.1.1:</u> Incorporate hazard mitigation into the long-range planning and development activities of the county and each jurisdiction.

Action Worksheet	
Name of Jurisdiction:	St. James R-I
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with not incorporating hazard mitigation in the long-term planning and development of activities by each jurisdiction.
Hazard(s) Addressed:	All Hazards
	Action or Project
Action/Project Number:	5.1.1
Name of Action or Project:	Incorporating hazard mitigation into all long-range planning and development activities
Action or Project Description:	Incorporate hazard mitigation into the long-range planning and development activities of the county and each jurisdiction.
Applicable Goal Statement:	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 benefits of special interests.
Estimated Cost:	\$2,500 - \$25,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss of function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	School Superintendent, School Board
Action/Project Priority:	29 – High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP, economic development plan, transportation plan, floodplain ordinance
	Progress Report
Action Status	Continuing – in progress
Report of Progress	The school is working to incorporate hazard mitigation into more of the schools plans and planning processes. As more officials become familiar with mitigation and understand how it fits within other planning activities, this action item will continue to expand.

Action 6.1.4: Encourage local jurisdictions to budget for mitigation projects.

Action Worksheet	
Name of Jurisdiction:	St. James R-I
	Risk / Vulnerability
Problem being Mitigated:	Lack of funding for mitigation projects among local jurisdictions.
Hazard(s) Addressed:	All hazards
	Action or Project
Action/Project Number:	6.1.4
Name of Action or Project:	Budgeting for mitigation projects
Action or Project Description:	Encourage local jurisdictions to budget for mitigation projects.
Applicable Goal Statement:	Secure resources for investment in hazard mitigation.
Estimated Cost:	\$500 - \$1,500
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	School Board, Superintendent, MPC
Action/Project Priority:	23 – High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Local general revenue funds
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, District Budget
Progress Report	
Action Status	Continuing in progress
Report of Progress	As awareness of the importance of mitigation grows, more local jurisdictions are seeing the long-term benefits and are working toward budgeting for mitigation activities.

Newburg R-II

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

Action 1.1.8: Construct certified tornado safe rooms in every school that does not have one.

Action Worksheet		
Name of Jurisdiction:	Newburg R-II	
	Risk / Vulnerability	
Problem being Mitigated:	Risks/vulnerabilities associated with insufficient storm shelters and tornado safe rooms in schools that do not have them.	
Hazard(s) Addressed:	Tornado, Severe Weather	
	Action or Project	
Action/Project Number:	1.1.8	
Name of Action or Project:	Expansion of storm shelter availability and construction of certified tornado safe rooms.	
Action or Project Description:	Construct certified tornado safe rooms to improve the safety for students and staff.	
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning and hazard mitigation activities.	
Estimated Cost:	Unknown	
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, loss-of-function/displacement impacts, and emergency management costs/community costs.	
	Plan for Implementation	
Responsible Organization/Department:	School Superintendent, School Board	
Action/Project Priority:	20 –High Priority	
Timeline for Completion:	On-going On-going	
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.	
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, School Emergency Plan, School Budget	
Progress Report		
Action Status	Continuing – updated - no progress	
Report of Progress		

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.

Action 3.1.4: Educate staff and parents on school safety protocols.

Action Worksheet	
Name of Jurisdiction:	Newburg R-II
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with staff and parents not having adequate knowledge of school safety protocols.
Hazard(s) Addressed:	All Hazards
	Action or Project
Action/Project Number:	3.1.4
Name of Action or Project:	Educate staff and parents on school safety protocols.
Action or Project Description:	Actively engage staff and parents in relation to school safety protocols during natural hazard event.
Applicable Goal Statement:	Promote education, outreach, research and development programs to improve the knowledge and awareness among the district's staff and students about hazards they may face, their vulnerability to identified hazards, and hazard mitigation alternatives that can reduce their vulnerabilities
Estimated Cost:	\$500 - \$1,500
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	Superintendent, School Board, Local Planners, MPC
Action/Project Priority:	26 – High Priority
Timeline for Completion:	On-going On-going
Potential Fund Sources:	Local general revenue funds, private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	LEOP, Hazard Mitigation Plan, School Budget, School Emergency Plan
	Progress Report
Action Status	Continuing – On-going
Report of Progress	School districts currently do education with staff and parents on school emergency procedures, but all agreed that they wanted this action item to remain in the plan for the purpose of improving those efforts.

<u>Action 3.3.1:</u> Re-evaluate the hazard mitigation plan, merge with other community planning and coordinate and integrate hazard mitigation activities, where appropriate, with emergency operations plans and procedures.

Action Worksheet	
Name of Jurisdiction:	Newburg R-II
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with not regularly reviewing and updating the mitigation plan and incorporating mitigation activities into other community plans and emergency operations plans and procedures.
Hazard(s) Addressed:	All Hazards
	Action or Project
Action/Project Number:	3.3.1
Name of Action or Project:	Review hazard mitigation plan, merge with other community planning and coordinate and integrate activities with emergency plans and procedures.
Action or Project Description:	Re-evaluate the hazard mitigation plan, merge with other community planning and coordinate and integrate hazard mitigation activities, where appropriate, with emergency operations plans and procedures.
Applicable Goal Statement:	Promote education, outreach, research and development programs to improve the knowledge and awareness among school staff and students about hazards they may face, their vulnerability to identified hazards, and hazard mitigation alternatives that can reduce their vulnerabilities
Estimated Cost:	\$3,500 - \$4,500
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	School Superintendent, School Board
Action/Project Priority:	21 – High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Local general revenue funds, private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP, School Emergency Plan,
Progress Report	
Action Status Report of Progress	Continuing – on-going The district continues to work to incorporate hazard mitigation actions into school plans and procedures. Some work has been
Topoit of Flogress	done with the update of the school emergency plan.

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

<u>Action 4.1.1:</u> Continue to encourage joint meetings of different organizations/agencies for mitigation related planning.

Action Worksheet	
Name of Jurisdiction:	Newburg R-II
	Risk / Vulnerability
Problem being Mitigated:	Lack of synergy/communication among organizations/agencies for mitigation related planning.
Hazard(s) Addressed:	All hazards
,	Action or Project
Action/Project Number:	4.1.1
Name of Action or Project:	Encourage joint meetings of different organizations/agencies and continued communication on mitigation.
Action or Project Description:	Continue to encourage joint meetings of different organizations/agencies for mitigation related planning.
Applicable Goal Statement:	Strengthen communication and coordinate participation between agencies, stakeholders, jurisdictions, and the public to create widespread interest in mitigation.
Estimated Cost:	Unknown
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	School Superintendent, School Board
Action/Project Priority:	27 – High Priority
Timeline for Completion:	On-going On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP, School Emergency Plan, District Budget
	Progress Report
Action Status	Continuing – on-going
Report of Progress	This is an on-going activity. The Region I SEMA area coordinator holds quarterly meetings throughout the six-county region, including in Phelps County. This program could benefit from a more coordinated, focused effort to bring different agencies together – including school districts - to discuss mitigation issues.

<u>Action 4.1.3:</u> Whenever possible, pool different agency resources to achieve widespread mitigation results.

Action Worksheet	
Name of Jurisdiction:	Newburg R-II
	Risk / Vulnerability
Problem being Mitigated:	Lack of resources to carry out mitigation projects
Hazard(s) Addressed:	All hazards
	Action or Project
Action/Project Number:	4.1.3
Name of Action or Project:	Pool different agency resources to achieve widespread mitigation results.
Action or Project Description:	Bring together different agencies and organizations that have similar goals and work together to pool resources to move mitigation projects forward.
Applicable Goal Statement:	Strengthen communication and coordinate participation between agencies, stakeholders, jurisdictions, and the public to create widespread interest in mitigation.
Estimated Cost:	Unknown
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	Superintendent, School Board
Action/Project Priority:	24 – High Priority
Timeline for Completion:	On-going On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, Floodplain Ordinances, LEOP, District Budget, School Emergency Plan
Progress Report	
Action Status	Continuing – on-going
Report of Progress	This is an on-going activity. All jurisdictions reported that they are interested in finding ways to pool resources to accomplish mitigation projects.

<u>Action 5.1.1:</u> Incorporate hazard mitigation into the long-range planning and development activities of the county and each jurisdiction.

Action Worksheet	
Name of Jurisdiction:	Newburg R-II
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with not incorporating hazard mitigation in the long-term planning and development of activities by each jurisdiction.
Hazard(s) Addressed:	All Hazards
	Action or Project
Action/Project Number:	5.1.1
Name of Action or Project:	Incorporating hazard mitigation into all long-range planning and development activities
Action or Project Description:	Incorporate hazard mitigation into the long-range planning and development activities of the county and each jurisdiction.
Applicable Goal Statement:	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 benefits of special interests.
Estimated Cost:	\$2,500 - \$25,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss of function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	School Superintendent, School Board
Action/Project Priority:	29 – High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP, economic development plan, transportation plan, floodplain ordinance
	Progress Report
Action Status	Continuing – in progress
Report of Progress	The school district is working to incorporate hazard mitigation into more of the schools plans and planning processes. As more officials become familiar with mitigation and understand how it fits within other planning activities, this action item will continue to expand.

Action 6.1.4: Encourage local jurisdictions to budget for mitigation projects.

Action Worksheet	
Name of Jurisdiction:	Newburg R-II
	Risk / Vulnerability
Problem being Mitigated:	Lack of funding for mitigation projects among local jurisdictions.
Hazard(s) Addressed:	All hazards
	Action or Project
Action/Project Number:	6.1.4
Name of Action or Project:	Budgeting for mitigation projects
Action or Project Description:	Encourage local jurisdictions to budget for mitigation projects.
Applicable Goal Statement:	Secure resources for investment in hazard mitigation.
Estimated Cost:	\$500 - \$1,500
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	School Board, Superintendent, MPC
Action/Project Priority:	23 – High Priority
Timeline for Completion:	On-going On-going
Potential Fund Sources:	Local general revenue funds
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, District Budget
	Progress Report
Action Status	Continuing in progress
Report of Progress	As awareness of the importance of mitigation grows, more local jurisdictions are seeing the long-term benefits and are working toward budgeting for mitigation activities.

Phelps County R-III

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.

Action 3.1.4: Educate staff and parents on school safety protocols.

Action Worksheet	
Name of Jurisdiction:	Phelps County R-III
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with staff and parents not having adequate knowledge of school safety protocols.
Hazard(s) Addressed:	All Hazards
	Action or Project
Action/Project Number:	3.1.4
Name of Action or Project:	Educate staff and parents on school safety protocols.
Action or Project Description:	Actively engage staff and parents in relation to school safety protocols during natural hazard event.
Applicable Goal Statement:	Promote education, outreach, research and development programs to improve the knowledge and awareness among the district's staff and students about hazards they may face, their vulnerability to identified hazards, and hazard mitigation alternatives that can reduce their vulnerabilities
Estimated Cost:	\$500 - \$1,500
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	Superintendent, School Board, Local Planners, MPC
Action/Project Priority:	26 – High Priority
Timeline for Completion:	On-going On-going
Potential Fund Sources:	Local general revenue funds, private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	LEOP, Hazard Mitigation Plan, School Budget, School Emergency Plan
Progress Report	
Action Status	Continuing – On-going
Report of Progress	School districts currently do education with staff and parents on school emergency procedures, but all agreed that they wanted this action item to remain in the plan for the purpose of improving those efforts.

<u>Action 3.3.1:</u> Re-evaluate the hazard mitigation plan, merge with other community planning and coordinate and integrate hazard mitigation activities, where appropriate, with emergency operations plans and procedures.

Action Worksheet	
Name of Jurisdiction:	Phelps County R-III
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with not regularly reviewing and updating the mitigation plan and incorporating mitigation activities into other community plans and emergency operations plans and procedures.
Hazard(s) Addressed:	All Hazards
	Action or Project
Action/Project Number:	3.3.1
Name of Action or Project:	Review hazard mitigation plan, merge with other community planning and coordinate and integrate activities with emergency plans and procedures.
Action or Project Description:	Re-evaluate the hazard mitigation plan, merge with other community planning and coordinate and integrate hazard mitigation activities, where appropriate, with emergency operations plans and procedures.
Applicable Goal Statement:	Promote education, outreach, research and development programs to improve the knowledge and awareness among school staff and students about hazards they may face, their vulnerability to identified hazards, and hazard mitigation alternatives that can reduce their vulnerabilities
Estimated Cost:	\$3,500 - \$4,500
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	School Superintendent, School Board
Action/Project Priority:	21 – High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Local general revenue funds, private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP, School Emergency Plan,
	Progress Report
Report of Progress	Continuing – on-going The district continues to work to incorporate hazard mitigation actions into school plans and procedures. Some work has been done with the update of the school emergency plan.

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

<u>Action 4.1.1:</u> Continue to encourage joint meetings of different organizations/agencies for mitigation related planning.

Action Worksheet	
Name of Jurisdiction:	Phelps County R-III
	Risk / Vulnerability
Problem being Mitigated:	Lack of synergy/communication among organizations/agencies for mitigation related planning.
Hazard(s) Addressed:	All hazards
, ,	Action or Project
Action/Project Number:	4.1.1
Name of Action or Project:	Encourage joint meetings of different organizations/agencies and continued communication on mitigation.
Action or Project Description:	Continue to encourage joint meetings of different organizations/agencies for mitigation related planning.
Applicable Goal Statement:	Strengthen communication and coordinate participation between agencies, stakeholders, jurisdictions, and the public to create widespread interest in mitigation.
Estimated Cost:	Unknown
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	School Superintendent, School Board
Action/Project Priority:	27 – High Priority
Timeline for Completion:	On-going On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP, School Emergency Plan, District Budget
A (! O!)	Progress Report
Action Status	Continuing – on-going
Report of Progress	This is an on-going activity. The Region I SEMA area coordinator holds quarterly meetings throughout the six-county region, including in Phelps County. This program could benefit from a more coordinated, focused effort to bring different agencies together – including school districts - to discuss mitigation issues.

<u>Action 4.1.3:</u> Whenever possible, pool different agency resources to achieve widespread mitigation results.

Action Worksheet	
Name of Jurisdiction:	Phelps County R-III
	Risk / Vulnerability
Problem being Mitigated:	Lack of resources to carry out mitigation projects
Hazard(s) Addressed:	All hazards
	Action or Project
Action/Project Number:	4.1.3
Name of Action or Project:	Pool different agency resources to achieve widespread mitigation results.
Action or Project Description:	Bring together different agencies and organizations that have similar goals and work together to pool resources to move mitigation projects forward.
Applicable Goal Statement:	Strengthen communication and coordinate participation between agencies, stakeholders, jurisdictions, and the public to create widespread interest in mitigation.
Estimated Cost:	Unknown
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	Superintendent, School Board
Action/Project Priority:	24 – High Priority
Timeline for Completion:	On-going On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, Floodplain Ordinances, LEOP, District Budget, School Emergency Plan
Progress Report	
Action Status	Continuing – on-going
Report of Progress	This is an on-going activity. All jurisdictions reported that they are interested in finding ways to pool resources to accomplish mitigation projects.

<u>Action 5.1.1:</u> Incorporate hazard mitigation into the long-range planning and development activities of the county and each jurisdiction.

Action Worksheet	
Name of Jurisdiction:	Phelps County R-III
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with not incorporating hazard mitigation in the long-term planning and development of activities by each jurisdiction.
Hazard(s) Addressed:	All Hazards
	Action or Project
Action/Project Number:	5.1.1
Name of Action or Project:	Incorporating hazard mitigation into all long-range planning and development activities
Action or Project Description:	Incorporate hazard mitigation into the long-range planning and development activities of the county and each jurisdiction.
Applicable Goal Statement:	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 benefits of special interests.
Estimated Cost:	\$2,500 - \$25,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss of function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	School Superintendent, School Board
Action/Project Priority:	29 – High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP, economic development plan, transportation plan, floodplain ordinance
Progress Report	
Action Status	Continuing – in progress
Report of Progress	The school is working to incorporate hazard mitigation into more of the schools plans and planning processes. As more officials become familiar with mitigation and understand how it fits within other planning activities, this action item will continue to expand.

Action 6.1.4: Encourage local jurisdictions to budget for mitigation projects.

Action Worksheet	
Name of Jurisdiction:	Phelps County R-III
	Risk / Vulnerability
Problem being Mitigated:	Lack of funding for mitigation projects among local jurisdictions.
Hazard(s) Addressed:	All hazards
	Action or Project
Action/Project Number:	6.1.4
Name of Action or Project:	Budgeting for mitigation projects
Action or Project Description:	Encourage local jurisdictions to budget for mitigation projects.
Applicable Goal Statement:	Secure resources for investment in hazard mitigation.
Estimated Cost:	\$500 - \$1,500
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	School Board, Superintendent, MPC
Action/Project Priority:	23 – High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Local general revenue funds
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, District Budget
Progress Report	
Action Status	Continuing in progress
Report of Progress	As awareness of the importance of mitigation grows, more local jurisdictions are seeing the long-term benefits and are working toward budgeting for mitigation activities.

Rolla 31

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

Action 1.1.8: Construct certified tornado safe rooms in every school that does not have one.

Action Worksheet	
Name of Jurisdiction:	Rolla 31
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with insufficient storm shelters and tornado safe rooms in schools that do not have them.
Hazard(s) Addressed:	Tornado, Severe Weather
	Action or Project
Action/Project Number:	1.1.8
Name of Action or Project:	Expansion of storm shelter availability and construction of certified tornado safe rooms.
Action or Project Description:	Construct certified tornado safe rooms to improve the safety for students and staff.
Applicable Goal Statement:	Reduce risks and vulnerabilities of people in hazard-prone areas through current technology, better planning and hazard mitigation activities.
Estimated Cost:	Unknown
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	School Superintendent, School Board
Action/Project Priority:	20 –High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, School Emergency Plan, School Budget
Progress Report	
Action Status	Continuing – updated - no progress
Report of Progress	

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.

Action 3.1.4: Educate staff and parents on school safety protocols.

Action Worksheet	
Name of Jurisdiction:	Rolla 31
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with staff and parents not having adequate knowledge of school safety protocols.
Hazard(s) Addressed:	All Hazards
	Action or Project
Action/Project Number:	3.1.4
Name of Action or Project:	Educate staff and parents on school safety protocols.
Action or Project Description:	Actively engage staff and parents in relation to school safety protocols during natural hazard event.
Applicable Goal Statement:	Promote education, outreach, research and development programs to improve the knowledge and awareness among the district's staff and students about hazards they may face, their vulnerability to identified hazards, and hazard mitigation alternatives that can reduce their vulnerabilities
Estimated Cost:	\$500 - \$1,500
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	Superintendent, School Board, Local Planners, MPC
Action/Project Priority:	26 – High Priority
Timeline for Completion:	On-going On-going
Potential Fund Sources:	Local general revenue funds, private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	LEOP, Hazard Mitigation Plan, School Budget, School Emergency Plan
Progress Report	
Action Status	Continuing – On-going
Report of Progress	School districts currently do education with staff and parents on school emergency procedures, but all agreed that they wanted this action item to remain in the plan for the purpose of improving those efforts.

<u>Action 3.3.1:</u> Re-evaluate the hazard mitigation plan, merge with other community planning and coordinate and integrate hazard mitigation activities, where appropriate, with emergency operations plans and procedures.

Action Worksheet	
Name of Jurisdiction:	Rolla 31
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with not regularly reviewing and updating the mitigation plan and incorporating mitigation activities into other community plans and emergency operations plans and procedures.
Hazard(s) Addressed:	All Hazards
	Action or Project
Action/Project Number:	3.3.1
Name of Action or Project:	Review hazard mitigation plan, merge with other community planning and coordinate and integrate activities with emergency plans and procedures.
Action or Project Description:	Re-evaluate the hazard mitigation plan, merge with other community planning and coordinate and integrate hazard mitigation activities, where appropriate, with emergency operations plans and procedures.
Applicable Goal Statement:	Promote education, outreach, research and development programs to improve the knowledge and awareness among school staff and students about hazards they may face, their vulnerability to identified hazards, and hazard mitigation alternatives that can reduce their vulnerabilities
Estimated Cost:	\$3,500 - \$4,500
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	School Superintendent, School Board
Action/Project Priority:	21 – High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Local general revenue funds, private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP, School Emergency Plan,
Progress Report	
Report of Progress	Continuing – on-going The district continues to work to incorporate hazard mitigation actions into school plans and procedures. Some work has been done with the update of the school emergency plan.

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

<u>Action 4.1.1:</u> Continue to encourage joint meetings of different organizations/agencies for mitigation related planning.

Action Worksheet	
Name of Jurisdiction:	Rolla 31
	Risk / Vulnerability
Problem being Mitigated:	Lack of synergy/communication among organizations/agencies for mitigation related planning.
Hazard(s) Addressed:	All hazards
,	Action or Project
Action/Project Number:	4.1.1
Name of Action or Project:	Encourage joint meetings of different organizations/agencies and continued communication on mitigation.
Action or Project Description:	Continue to encourage joint meetings of different organizations/agencies for mitigation related planning.
Applicable Goal Statement:	Strengthen communication and coordinate participation between agencies, stakeholders, jurisdictions, and the public to create widespread interest in mitigation.
Estimated Cost:	Unknown
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	School Superintendent, School Board
Action/Project Priority:	27 – High Priority
Timeline for Completion:	On-going On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP, School Emergency Plan, District Budget
	Progress Report
Action Status	Continuing – on-going
Report of Progress	This is an on-going activity. The Region I SEMA area coordinator holds quarterly meetings throughout the six-county region, including in Phelps County. This program could benefit from a more coordinated, focused effort to bring different agencies together – including school districts - to discuss mitigation issues.

<u>Action 4.1.3:</u> Whenever possible, pool different agency resources to achieve widespread mitigation results.

Action Worksheet	
Name of Jurisdiction:	Rolla 31
	Risk / Vulnerability
Problem being Mitigated:	Lack of resources to carry out mitigation projects
Hazard(s) Addressed:	All hazards
	Action or Project
Action/Project Number:	4.1.3
Name of Action or Project:	Pool different agency resources to achieve widespread mitigation results.
Action or Project Description:	Bring together different agencies and organizations that have similar goals and work together to pool resources to move mitigation projects forward.
Applicable Goal Statement:	Strengthen communication and coordinate participation between agencies, stakeholders, jurisdictions, and the public to create widespread interest in mitigation.
Estimated Cost:	Unknown
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	Superintendent, School Board
Action/Project Priority:	24 – High Priority
Timeline for Completion:	On-going Control of the control of t
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, Floodplain Ordinances, LEOP, District Budget, School Emergency Plan
Progress Report	
Action Status	Continuing – on-going
Report of Progress	This is an on-going activity. All jurisdictions reported that they are interested in finding ways to pool resources to accomplish mitigation projects.

<u>Action 5.1.1:</u> Incorporate hazard mitigation into the long-range planning and development activities of the county and each jurisdiction.

Action Worksheet	
Name of Jurisdiction:	Rolla 31
	Risk / Vulnerability
Problem being Mitigated:	Risks/vulnerabilities associated with not incorporating hazard mitigation in the long-term planning and development of activities by each jurisdiction.
Hazard(s) Addressed:	All Hazards
	Action or Project
Action/Project Number:	5.1.1
Name of Action or Project:	Incorporating hazard mitigation into all long-range planning and development activities
Action or Project Description:	Incorporate hazard mitigation into the long-range planning and development activities of the county and each jurisdiction.
Applicable Goal Statement:	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 benefits of special interests.
Estimated Cost:	\$2,500 - \$25,000
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss of function/displacement impacts, and emergency management costs/community costs.
	Plan for Implementation
Responsible Organization/Department:	School Superintendent, School Board
Action/Project Priority:	29 – High Priority
Timeline for Completion:	On-going
Potential Fund Sources:	Grants, local general revenue funds, and private donations of cash, goods, or services.
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, LEOP, economic development plan, transportation plan, floodplain ordinance
Progress Report	
Action Status	Continuing – in progress
Report of Progress	The school is working to incorporate hazard mitigation into more of the schools plans and planning processes. As more officials become familiar with mitigation and understand how it fits within other planning activities, this action item will continue to expand.

Action 6.1.4: Encourage local jurisdictions to budget for mitigation projects.

Action Worksheet		
Name of Jurisdiction:	Rolla 31	
Risk / Vulnerability		
Problem being Mitigated:	Lack of funding for mitigation projects among local jurisdictions.	
Hazard(s) Addressed:	All hazards	
	Action or Project	
Action/Project Number:	6.1.4	
Name of Action or Project:	Budgeting for mitigation projects	
Action or Project Description:	Encourage local jurisdictions to budget for mitigation projects.	
Applicable Goal Statement:	Secure resources for investment in hazard mitigation.	
Estimated Cost:	\$500 - \$1,500	
Benefits:	Losses avoided by implementing this action include injuries and/or casualties, property damages, loss-of-function/displacement impacts, and emergency management costs/community costs.	
	Plan for Implementation	
Responsible Organization/Department:	School Board, Superintendent, MPC	
Action/Project Priority:	23 – High Priority	
Timeline for Completion:	On-going	
Potential Fund Sources:	Local general revenue funds	
Local Planning Mechanisms to be Used in Implementation, if any:	Hazard Mitigation Plan, District Budget	
Progress Report		
Action Status	Continuing in progress	
Report of Progress	As awareness of the importance of mitigation grows, more local jurisdictions are seeing the long-term benefits and are working toward budgeting for mitigation activities.	