4 MITIGATION STRATEGY

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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 updated by the Mitigation Planning Committee (MPC) based on the [updated] risk assessment. The mitigation strategy was developed through a collaborative group process. The process included review of [updated] 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 Ralls County's existing hazard mitigation plan approved by FEMA on April 26, 2017. Therefore, the goals from the 2017 Ralls 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 second 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. The MPC also reviewed the goals from current surrounding county plans.

- Goal 1: Protect the lives and livelihoods of all the citizens
- Goal 2: Decrease the impact of natural hazards
- Goal 3: Ensure continued operation of government and emergency function in a disaster

It was determined the broadly stated goals were still valid for the 2021 update.

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 second MPC meeting, the results of the risk assessment update were provided to the MPC members for review and the key issues were identified for specific hazards. Changes in risk since adoption of the previously approved plan were discussed. 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 included problem statements in the plan update at the end of each hazard profile. The problem statements summarize the risk to the planning area presented by each hazard and include possible methods to reduce that risk. Use of the problem statements allowed the MPC to recognize new and innovative strategies for mitigate risks in the planning area.

During the Planning Meeting the mitigation strategy was reviewed. For a comprehensive range of mitigation actions to consider, the MPC reviewed the following information during the Planning Meeting:

- A list of actions proposed in the previous mitigation plan, the current State Plan, and approved plans in surrounding counties,
- Key issues from the risk assessments, including the problem statements concluding each hazard profile and vulnerability analysis,
- State priorities established for HMA grants, and
- Public input during meetings, responses to data collection questionnaires, and other efforts to involve the public in the plan development process.

For the Planning Meeting, individual jurisdictions, including school and special districts, developed final mitigation strategy for submission to the MPC. They were encouraged to review the details of the risk assessment vulnerability analysis specific to their jurisdiction. They were also 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.

The MPC reviewed the actions from the previously approved plan for progress made since the plan had been adopted, using worksheets included in Appendix C of this plan. During the Planning Meeting, the list of actions for each jurisdiction was provided the jurisdiction's MPC representative along with the worksheets. Each jurisdiction was instructed to provide information regarding the "Action Status" with one of the following status choices:

- Completed, with a description of the progress;
- Ongoing, with a description of the progress made to date; or
- Not Yet Started, with a discussion of the reasons for lack of progress.

Additionally, the future inclusion of each mitigation action in the plan update was identified as either keep, delete, or modify. Based on the status updates, there were 2 completed actions, 0 continuing actions (either ongoing or modified), and 19 deleted actions.

Table 4.1. Action Status Summary

| Jurisdiction | Completed Actions | Continuing Actions (ongoing or modify) | Deleted Actions |
|--------------------|-------------------|--|-----------------|
| Ralls County | 2 | 0 | 6 |
| City of Center | 0 | 0 | 5 |
| City of New London | 0 | 0 | 4 |
| City of Perry | 0 | 0 | 4 |
| Ralls County R-II | 0 | 0 | 0 |

Table 4.2 provides a summary of the completed and deleted actions from the previous plan.

Table 4.2. Summary of Completed and Deleted Actions from the Previous Plan

| Completed Actions | Completion Details (date, amount, funding source) |
|---|--|
| Ralls County | |
| Obtain Generator | In Progress (2022), \$62,391.24, FEMA |
| Obtain Warning Siren – Mark Twain Lake Campgrounds | 2020, \$20,600, FEMA |
| Deleted Actions | Reason for Deletion |
| Ralls County | |
| Promote NOAA Radio Use | Action was determined to be an everyday item. |
| Enforce the Floodplain Ordinance | Action was determined to be an everyday item. |
| Education brochures provided to schools and citizens | Action was determined to be an everyday item. |
| Maintain, enforce, and update as needed- Floodplain and Land Ordinance- Planning and Zoning will consult floodplain maps before issuing building permit | Action was determined to be an everyday item. |
| Corp conducts Dam Safety exercise at Cannon Dam on Mark Twain Lake with all area sheriff departments, law enforcement and emergency personnel every three years. Update Flood emergency Plan update every 2 years. Water Control Plan is currently being updated with new inundation maps and evacuation plans within the next two years. | Action was determined to be an everyday item. Will not seek grant funding to complete the items. |
| Encourage landowners to inspect and maintain their dams according to Dept. of Natural Resources standards | Action was determined to be an everyday item. |
| City of Center | |
| Promote NOAA Radio Use | Action was determined to be an everyday item. |
| Encourage mobile home parks to have on-site storm shelter | Action was determined to be an everyday item. |
| Education brochures provided to schools and citizens | Action was determined to be an everyday item. |
| Building codes adopted in 2005, Building inspector hired as needed, Building permits required for new construction | Action was determined to be an everyday item. |

| Participate in regularly scheduled Table-Top exercises and mock emergency exercises | Action was determined to be an everyday item. |
|---|---|
| City of New London | |
| Promote NOAA Radio Use | Action was determined to be an everyday item. |
| Enforce the Floodplain Ordinance | Action was determined to be an everyday item. |
| Education brochures provided to schools and citizens | Action was determined to be an everyday item. |
| The area around the city pond in the southern portion of the city is in a sinkhole area. The building inspector will notify anyone requesting a building permit in this area. | Action was determined to be an everyday item. |
| City of Perry | |
| Promote NOAA Radio Use | Action was determined to be an everyday item. |
| Encourage mobile home parks to have on-site storm shelter | Action was determined to be an everyday item. |
| Education brochures provided to schools and citizens | Action was determined to be an everyday item. |
| Establish cooling centers | Action was determined to be an everyday item. |

Source: Previously approved County Hazard Mitigation Plan; 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 finalize the actions to be submitted for 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 2018 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^{7(a)}. During the prioritization process, the jurisdictions used worksheets to assign scores. The worksheets 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 points Definitely NO = 0 points

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?

The final scores are listed below in the analysis of each action. The STAPLEE final score for each action, absent other considerations, such as a localized need for a project, determined the priority. Low priority action items were those that had a total score of between 0 and 24. Moderate priority actions were those scoring between 25 and 29. High priority actions scored 30 or above. A blank STAPLEE worksheet is shown in Figure 4.1

Figure 4.1. Blank STAPLEE Worksheet

| STAPLEE Worksheet | | | |
|---|---|---------------------------|--|
| Name of Jurisdiction: | | | |
| | Action or Project | | |
| Action/Project Number: | Insert a unique action number for this action for This can be a combination of the jurisdiction nam number and action number (i.e. Joplin1.1) | | |
| Name of Action or Project: | | | |
| Mitigation Category: | Prevention; Structure and Infrastructure Projects Protection; Education and Outreach; Emergency | - | |
| STAI | PLEE Criteria | | |
| Eval Definitely YES : Probably NO = | Score | | |
| S: Is it Socially Acceptable | | | |
| T: Is it Technically feasible and potenti | ally successful? | | |
| A: Does the jurisdiction have the Admi | nistrative capacity to execute this action? | | |
| P: Is it Politically acceptable? | | | |
| L: Is there Legal authority to implemen | t? | | |
| E: Is it Economically beneficial? | | | |
| E: Will the project have either a neutral or positive impact on the natural Environment? | | | |
| Will historic structures be saved or prof | | | |
| Could it be implemented quickly? | | | |
| | STAPLEE SCORE | | |
| Mitigation Effectiveness Criteria | Evaluation Rating | Score | |
| Will the implemented action result in | Assign from 5-10 points based on the | | |
| lives saved? Will the implemented action result in | likelihood that lives will be saved. Assign from 5-10 points based on the relative | | |
| a reduction of disaster damages? | reduction of disaster damages. | | |
| | MITIGATION EFFECTIVENESS SCORE | | |
| | | | |
| High Priority (30+ points) | Medium Priority (25 - 29 points) | Low Priority (<25 points) | |
| Completed by (Name, Title, Phone Number) | | | |

ACTION WORKSHEET

| Action Worksheet | | | | |
|---|--|--|--|--|
| Name of Jurisdiction: | | | | |
| | Risk / Vulnerability | | | |
| Hazard(s) Addressed: | List the hazard or hazards that will be addressed by this action | | | |
| Problem being Mitigated: | Provide a brief description of the problem that the action will address. Utilize the problem statement developed in the risk assessment. | | | |
| | Action or Project | | | |
| Applicable Goal Statement: | Choose the goal statement that applies to this action | | | |
| Action/Project Number: | Insert a unique action number for this action for future tracking purposes. This can be a combination of the jurisdiction name, followed by the goal number and action number (i.e. Joplin1.1) | | | |
| Name of Action or Project: | | | | |
| Mitigation Category: | Prevention; Structure and Infrastructure Projects; Natural Systems Protection; Education and Outreach; Emergency Services | | | |
| Action or Project Description: | Describe the action or project. | | | |
| Estimated Cost: | Provide an estimate of the cost to implement this action. This can be accomplished with a range of estimated costs. | | | |
| Benefits: | Provide a narrative describing the losses that will be avoided by implementing this action. If dollar amounts of avoided losses are known, include them as well. | | | |
| | Plan for Implementation | | | |
| Responsible Organization/Department: | Which organization will be responsible for tracking this action? Be specific to include the specific department or position within a department. | | | |
| Supporting Organization/Department: | Which organization/department will assist in implementation of this action? | | | |
| Action/Project Priority: | Include the STAPLEE score and Priority (H, M, L) | | | |
| Timeline for Completion: | How many months/years to complete. | | | |
| Potential Fund Sources: | List specific funding sources that may be used to pay for the implementation of the action. | | | |
| Local Planning Mechanisms to be Used in Implementation, if any: | | | | |
| | Progress Report | | | |
| Action Status: | Indicate status as New, Continuing Not Started, or Continuing in Progress) | | | |
| Report of Progress: | For Continuing actions only, indicate the report on progress. If the action is not started, indicate any barriers encountered to initiate the action. If the action is in progress, indicate the activity that has occurred to date. | | | |

| Action Worksheet | | | |
|---|---|--|--|
| Name of Jurisdiction: | Ralls County | | |
| | Risk / Vulnerability | | |
| Hazard(s) Addressed: | Flooding | | |
| Problem being Mitigated: | NFIP Participation Continuation | | |
| | Action or Project | | |
| Applicable Goal Statement: | Goal 1: Protect the lives and livelihoods of all the citizens. Goal 2: Decrease the impact of natural hazards. | | |
| Action/Project Number: | Ralls County 2021.1 | | |
| Name of Action or Project: | NFIP Participation | | |
| Mitigation Category: | Natural Systems Protection, Emergency Services, Prevention, Structure and Infrastructure Projects, Education and Outreach | | |
| Action or Project Description: | Continue Ralls County participation and good standing in the National Flood Insurance Program by adoption and enforcement of floodplain management requirements | | |
| Estimated Cost: | \$50,000 | | |
| Benefits: | Protection of life and reduction of damages due to accessibility to citizens in times of need. | | |
| | Plan for Implementation | | |
| Responsible Organization/Department: | County Commission | | |
| Supporting Organization/Department: | Emergency Management Direct | | |
| Action/Project Priority: | High | | |
| Timeline for Completion: | 1 year | | |
| Potential Fund Sources: | County Funds | | |
| Local Planning Mechanisms to be Used in Implementation, if any: | N/A | | |
| | Progress Report | | |
| Action Status: | New | | |
| Report of Progress: | New | | |

| Action Worksheet | | | |
|---|---|--|--|
| Name of Jurisdiction: | Ralls County | | |
| | Risk / Vulnerability | | |
| Hazard(s) Addressed: | Severe Thunderstorms, Tornadoes or Wind Storms | | |
| Problem being Mitigated: | Lack of shelter for residents | | |
| | Action or Project | | |
| Applicable Goal Statement: | Goal 1: Protect the lives and livelihoods of all the citizens. Goal 2: Decrease the impact of natural hazards. Goal 3: Ensure continued operation of government and emergency function in a disaster. | | |
| Action/Project Number: | Ralls County 2021.2 | | |
| Name of Action or Project: | Safe Room and Storm Shelters | | |
| Mitigation Category: | Emergency Services, Prevention, Structure and Infrastructure Projects | | |
| Action or Project Description: | Build safe rooms and establish local ordinances requiring community storm shelters throughout the county. | | |
| Estimated Cost: | \$2M | | |
| Benefits: | The project protects citizens from harm due to tornados or severe thunderstorms. | | |
| | Plan for Implementation | | |
| Responsible Organization/Department: | Ralls County Commission | | |
| Supporting Organization/Department: | Emergency Management Director | | |
| Action/Project Priority: | High | | |
| Timeline for Completion: | 5 years | | |
| Potential Fund Sources: | Hazard Mitigation Grant Funds | | |
| Local Planning Mechanisms to be Used in Implementation, if any: | N/A | | |
| | Progress Report | | |
| Action Status: | New | | |
| Report of Progress: | New Project | | |

| Action Worksheet | | | |
|---|--|--|--|
| Name of Jurisdiction: | Ralls County | | |
| | Risk / Vulnerability | | |
| Hazard(s) Addressed: | All Hazards | | |
| Problem being Mitigated: | Provide early warning to visitors and residents | | |
| | Action or Project | | |
| Applicable Goal Statement: | Goal 1: Protect the lives and livelihoods of all the citizens. | | |
| Action/Project Number: | Ralls County 2021.3 | | |
| Name of Action or Project: | Installation of Warning Sirens covering Ralls County Campgrounds | | |
| Mitigation Category: | Emergency Services, Prevention, Structure, and Infrastructure Projects | | |
| Action or Project Description: | Installation or the upgrade of warning sirens in areas that house campgrounds surrounding the Mark Twain Lake | | |
| Estimated Cost: | \$100,000.00 | | |
| Benefits: | With adequate time for warning of storms, visitors and residents are able to seek cover to help minimize the loss of life. | | |
| | Plan for Implementation | | |
| Responsible Organization/Department: | County Commission | | |
| Supporting Organization/Department: | Emergency Management Director | | |
| Action/Project Priority: | High | | |
| Timeline for Completion: | 1-3 years | | |
| Potential Fund Sources: | Hazard Mitigation Grant Funds | | |
| Local Planning Mechanisms to be Used in Implementation, if any: | N/A | | |
| | Progress Report | | |
| Action Status: | Continued | | |
| Report of Progress: | Continuing to obtain coverage for campgrounds near the Mark Twain Lake | | |

| Action Worksheet | | | |
|---|---|--|--|
| Name of Jurisdiction: | Ralls County | | |
| | Risk / Vulnerability | | |
| Hazard(s) Addressed: | All Hazards | | |
| Problem being Mitigated: | Provide early warning to residents | | |
| | Action or Project | | |
| Applicable Goal Statement: | Goal 1: Protect the lives and livelihoods of all the citizens. | | |
| Action/Project Number: | Ralls County 2021.4 | | |
| Name of Action or Project: | Installation of Warning Sirens in Ralls County | | |
| Mitigation Category: | Emergency Services, Prevention, Structure, and Infrastructure Projects | | |
| Action or Project Description: | Installation or the upgrade of warning sirens in areas of the County needing a siren or the siren upgraded. | | |
| Estimated Cost: | \$200,000.00 | | |
| Benefits: | With adequate time for warning of storms, residents are able to seek cover to help minimize the loss of life. | | |
| | Plan for Implementation | | |
| Responsible Organization/Department: | County Commission | | |
| Supporting Organization/Department: | Emergency Management Director | | |
| Action/Project Priority: | High | | |
| Timeline for Completion: | 1-3 years | | |
| Potential Fund Sources: | Hazard Mitigation Grant Funds | | |
| Local Planning Mechanisms to be Used in Implementation, if any: | N/A | | |
| | Progress Report | | |
| Action Status: | New | | |
| Report of Progress: | New Project, Past projects covered campgrounds near the Mark Twain Lake | | |

| Action Worksheet | | | |
|---|---|--|--|
| Name of Jurisdiction: | City of New London | | |
| | Risk / Vulnerability | | |
| Hazard(s) Addressed: | Flooding | | |
| Problem being Mitigated: | NFIP Participation Continuation | | |
| | Action or Project | | |
| Applicable Goal Statement: | Goal 1: Protect the lives and livelihoods of all the citizens. Goal 2: Decrease the impact of natural hazards. | | |
| Action/Project Number: | New London 2021.1 | | |
| Name of Action or Project: | NFIP Participation | | |
| Mitigation Category: | Natural Systems Protection, Emergency Services, Prevention, Structure and Infrastructure Projects, Education and Outreach | | |
| Action or Project Description: | Continue New London participation and good standing in the National Flood Insurance Program by adoption and enforcement of floodplain management requirements | | |
| Estimated Cost: | \$50,000 | | |
| Benefits: | Protection of life and reduction of damages due to accessibility to citizens in times of need. | | |
| | Plan for Implementation | | |
| Responsible Organization/Department: | Mayor | | |
| Supporting Organization/Department: | City Council | | |
| Action/Project Priority: | High | | |
| Timeline for Completion: | 1 year | | |
| Potential Fund Sources: | City Funds | | |
| Local Planning Mechanisms to be Used in Implementation, if any: | N/A | | |
| | Progress Report | | |
| Action Status: | New | | |
| Report of Progress: | New | | |

| Action Worksheet | | |
|---|---|--|
| Name of Jurisdiction: | City of New London | |
| Risk / Vulnerability | | |
| Hazard(s) Addressed: | Severe Thunderstorms, Tornadoes or Wind Storms | |
| Problem being Mitigated: | Lack of shelter for residents | |
| | Action or Project | |
| Applicable Goal Statement: | Goal 1: Protect the lives and livelihoods of all the citizens. Goal 2: Decrease the impact of natural hazards. Goal 3: Ensure continued operation of government and emergency function in a disaster. | |
| Action/Project Number: | New London 2021.2 | |
| Name of Action or Project: | Safe Room and Storm Shelters | |
| Mitigation Category: | Emergency Services, Prevention, Structure and Infrastructure Projects | |
| Action or Project Description: | Build safe rooms and establish local ordinances requiring community storm shelters throughout the city. | |
| Estimated Cost: | \$2M | |
| Benefits: | The project protects citizens from harm due to tornados or severe thunderstorms. | |
| | Plan for Implementation | |
| Responsible Organization/Department: | Mayor | |
| Supporting Organization/Department: | City Council | |
| Action/Project Priority: | High | |
| Timeline for Completion: | 5 years | |
| Potential Fund Sources: | Hazard Mitigation Grant Funds | |
| Local Planning Mechanisms to be Used in Implementation, if any: | N/A | |
| | Progress Report | |
| Action Status: | New | |
| Report of Progress: | New Project | |

| Action Worksheet | | | | | | |
|--|--|--|--|--|--|--|
| Name of Jurisdiction: | City of New London | | | | | |
| Risk / Vulnerability | | | | | | |
| Hazard(s) Addressed: | Severe Winter Weather, Severe Thunderstorm, Tornado | | | | | |
| Problem being Mitigated: Drainage of excess amounts of rain | | | | | | |
| | Action or Project | | | | | |
| Applicable Goal Statement: | Goal 1: Protect the lives and livelihoods of all the citizens. Goal 2: Decrease the impact of natural hazards. | | | | | |
| Action/Project Number: | New London 2021.3 | | | | | |
| Name of Action or Project: | Flood Control | | | | | |
| Mitigation Category: | Prevention, Structure and Infrastructure Projects, Emergency Services | | | | | |
| Action or Project Description: Improve drainage for excess amounts of rain by replacing culverts and upgraddrainage along streets. | | | | | | |
| Estimated Cost: | \$100,000 | | | | | |
| Benefits: | Protect property from flood damage | | | | | |
| | Plan for Implementation | | | | | |
| Responsible Organization/Department: | Mayor | | | | | |
| Supporting Organization/Department: | City Council | | | | | |
| Action/Project Priority: | High | | | | | |
| Timeline for Completion: | 1 year | | | | | |
| Potential Fund Sources: | City Funds | | | | | |
| Local Planning Mechanisms to be Used in Implementation, if any: | N/A | | | | | |
| | Progress Report | | | | | |
| Action Status: | New | | | | | |
| Report of Progress: | New | | | | | |

| Action Worksheet | | | | | | |
|--|---|--|--|--|--|--|
| Name of Jurisdiction: | City of Center | | | | | |
| Risk / Vulnerability | | | | | | |
| Hazard(s) Addressed: | All Hazards | | | | | |
| Problem being Mitigated: | Provide early warning to residents | | | | | |
| | Action or Project | | | | | |
| Applicable Goal Statement: | Goal 1: Protect the lives and livelihoods of all the citizens. | | | | | |
| Action/Project Number: | Center 2021.1 | | | | | |
| Name of Action or Project: | Installation/Upgrade Siren | | | | | |
| Mitigation Category: | Emergency Services, Prevention, Structure and Infrastructure Projects | | | | | |
| Action or Project Description: Installation or the upgrade of warning sirens in areas of the City needing a siren of the siren upgraded. | | | | | | |
| Estimated Cost: | \$50,000 | | | | | |
| Benefits: | With adequate time for warning of storms, residents are able to seek cover to help minimize the loss of life. | | | | | |
| | Plan for Implementation | | | | | |
| Responsible Organization/Department: | Mayor | | | | | |
| Supporting Organization/Department: | City Council | | | | | |
| Action/Project Priority: | High | | | | | |
| Timeline for Completion: | 1 – 5 years | | | | | |
| Potential Fund Sources: | Hazard Mitigation Grant Funds | | | | | |
| Local Planning Mechanisms to be Used in Implementation, if any: | N/A | | | | | |
| | Progress Report | | | | | |
| Action Status: | New | | | | | |
| Report of Progress: | New | | | | | |

| Action Worksheet | | | | | | | |
|---|--|--|--|--|--|--|--|
| Name of Jurisdiction: | City of Center | | | | | | |
| Risk / Vulnerability | | | | | | | |
| Hazard(s) Addressed: | Severe Winter Weather, Severe Thunderstorm, Tornado | | | | | | |
| Problem being Mitigated: | Drainage of excess amounts of rain | | | | | | |
| | Action or Project | | | | | | |
| Applicable Goal Statement: | Goal 1: Protect the lives and livelihoods of all the citizens. Goal 2: Decrease the impact of natural hazards. | | | | | | |
| Action/Project Number: | Center 2021.2 | | | | | | |
| Name of Action or Project: | Flood Control | | | | | | |
| Mitigation Category: | Prevention, Structure and Infrastructure Projects, Emergency Services | | | | | | |
| Action or Project Description: | Description: Improve drainage for excess amounts of rain by replacing culverts and upgrading drainage along streets. | | | | | | |
| Estimated Cost: | \$100,000 | | | | | | |
| Benefits: | Protect property from flood damage | | | | | | |
| | Plan for Implementation | | | | | | |
| Responsible Organization/Department: | Mayor | | | | | | |
| Supporting Organization/Department: | City Council | | | | | | |
| Action/Project Priority: | High | | | | | | |
| Timeline for Completion: | 1 year | | | | | | |
| Potential Fund Sources: | City Funds | | | | | | |
| Local Planning Mechanisms to be Used in Implementation, if any: | N/A | | | | | | |
| | Progress Report | | | | | | |
| Action Status: | New | | | | | | |
| Report of Progress: | New | | | | | | |

| Action Worksheet | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|
| Name of Jurisdiction: | City of Perry | | | | | | | | |
| | Risk / Vulnerability | | | | | | | | |
| Hazard(s) Addressed: | Severe Thunderstorms, Tornadoes or Wind Storms | | | | | | | | |
| Problem being Mitigated: | Lack of shelter for residents | | | | | | | | |
| | Action or Project | | | | | | | | |
| Applicable Goal Statement: | Goal 1: Protect the lives and livelihoods of all the citizens. Goal 2: Decrease the impact of natural hazards. Goal 3: Ensure continued operation of government and emergency function in a disaster. | | | | | | | | |
| Action/Project Number: | Perry 2021.1 | | | | | | | | |
| Name of Action or Project: | Safe Room and Storm Shelters | | | | | | | | |
| Mitigation Category: | Emergency Services, Prevention, Structure and Infrastructure Projects | | | | | | | | |
| Action or Project Description: | Build safe rooms and establish local ordinances requiring community storm shelters throughout the city. | | | | | | | | |
| Estimated Cost: | \$2M | | | | | | | | |
| Benefits: | The project protects citizens from harm due to tornados or severe thunderstorms. | | | | | | | | |
| | Plan for Implementation | | | | | | | | |
| Responsible Organization/Department: | Mayor | | | | | | | | |
| Supporting Organization/Department: | City Council | | | | | | | | |
| Action/Project Priority: | High | | | | | | | | |
| Timeline for Completion: | 5 years | | | | | | | | |
| Potential Fund Sources: | Hazard Mitigation Grant Funds | | | | | | | | |
| Local Planning Mechanisms to be Used in Implementation, if any: | N/A | | | | | | | | |
| | Progress Report | | | | | | | | |
| Action Status: | New | | | | | | | | |
| Report of Progress: | New Project | | | | | | | | |

| Action Worksheet | | | | | | | |
|---|---|--|--|--|--|--|--|
| Name of Jurisdiction: | Ralls County R-II School District | | | | | | |
| Risk / Vulnerability | | | | | | | |
| Hazard(s) Addressed: | Extreme Temperature, Severe Thunderstorm, Severe Winter Weather, Tornado | | | | | | |
| Problem being Mitigated: Loss of electrical power to school | | | | | | | |
| | Action or Project | | | | | | |
| Applicable Goal Statement: | Goal 1: Protect the lives and livelihoods of all the faculty, staff, students, etc. | | | | | | |
| Action/Project Number: | Ralls R-II 2021.1 | | | | | | |
| Name of Action or Project: | Generator for Elementary school building | | | | | | |
| Mitigation Category: | Prevention, Structure and Infrastructure Projects, Emergency Services | | | | | | |
| Action or Project Description: | tion or Project Description: Obtain a generator for shelters as funds become available. | | | | | | |
| Estimated Cost: | \$65,000 | | | | | | |
| Benefits: | Generator will allow for continue use of school facilities in the event of an outage, this would be beneficial during any hazard. | | | | | | |
| | Plan for Implementation | | | | | | |
| Responsible Organization/Department: | Ralls County R-II Superintendent | | | | | | |
| Supporting Organization/Department: | School Board | | | | | | |
| Action/Project Priority: | High | | | | | | |
| Timeline for Completion: | 1 year | | | | | | |
| Potential Fund Sources: | Hazard Mitigation Grant Funds/RHSOC | | | | | | |
| Local Planning Mechanisms to be Used in Implementation, if any: | N/A | | | | | | |
| | Progress Report | | | | | | |
| Action Status: | New | | | | | | |
| Report of Progress: | New Project | | | | | | |

| Action Worksheet | | | | | | | |
|---|---|--|--|--|--|--|--|
| Name of Jurisdiction: | Ralls County R-II School District | | | | | | |
| Risk / Vulnerability | | | | | | | |
| Hazard(s) Addressed: | Extreme Temperature, Severe Thunderstorm, Severe Winter Weather, Tornado | | | | | | |
| Problem being Mitigated: | Additional communication mechanism between administration offices and buses out traveling on the roads | | | | | | |
| | Action or Project | | | | | | |
| Applicable Goal Statement: | Goal 1: Protect the lives and livelihoods of all faculty, staff, students, etc. | | | | | | |
| Action/Project Number: | Ralls R-II 2021.2 | | | | | | |
| Name of Action or Project: | Two-Way Radios | | | | | | |
| Mitigation Category: | Prevention, Structure and Infrastructure Projects, Emergency Services | | | | | | |
| Action or Project Description: | Obtain two-way radios for all administration offices (3) and school buses | | | | | | |
| Estimated Cost: | \$50,000 | | | | | | |
| Benefits: | Radios will be used to be notified of storm watches/warnings as a preventative measure to assist in getting everyone to the FEMA storm shelter in advance of hazar damages. | | | | | | |
| | Plan for Implementation | | | | | | |
| Responsible Organization/Department: | Ralls County R-II Superintendent | | | | | | |
| Supporting Organization/Department: | School Board | | | | | | |
| Action/Project Priority: | High | | | | | | |
| Timeline for Completion: | 1 year | | | | | | |
| Potential Fund Sources: | Hazard Mitigation Grant Funds/RHSOC | | | | | | |
| Local Planning Mechanisms to be Used in Implementation, if any: | N/A | | | | | | |
| | Progress Report | | | | | | |
| Action Status: | New | | | | | | |
| Report of Progress: | New Project | | | | | | |

Table 4.3. Mitigation Action Matrix

| # | Action | Jurisdiction | Priority | Goals Addressed | Hazards Addressed | Address Current Development | Address Future Development | Continued Compliance with NFIP |
|---------------------------|---------------------------------------|-----------------------|----------|--------------------|--|-----------------------------------|----------------------------------|--------------------------------------|
| | Prevention Public Education | | | | | | | |
| Ralls County 2021.2 | Storm Shelter/Safe Room | Ralls County | High | 1, 2, 3 | Severe Thunderstorms, Tornadoes, Wind Storms | ✓ | | |
| New London 2021.2 | Storm Shelter/Safe Room | City of New London | High | 1, 2, 3 | Severe Thunderstorms, Tornadoes, Wind Storms | ✓ | | |
| Perry 2021.1 | Storm Shelter/Safe Room | City of Perry | High | 1, 2, 3 | Severe Thunderstorms, Tornadoes, Wind Storms | ✓ | | |
| New London 2021.3 | Flood Control | City of New London | High | 1, 2 | Severe Winter Weather, Severe Thunderstorms, Tornadoes | ✓ | | |
| Ralls R-II 2021.1 | Generator for Elementary Building | Ralls County R-II | High | 1 | Extreme Temperature, Severe Thunderstorm, Severe Winter Weather, Tornado | ✓ | | |
| Ralls R-II 2021.2 | Two-Way Radios | Ralls County R-II | High | 1 | Extreme Temperature, Severe Thunderstorm, Severe Winter Weather, Tornado | √ | | |
| Center 2021.1 | Installation/Upgrade Sirens | City of Center | High | 1 | All Hazards | ✓ | | |
| Center 2021.2 | Flood Control | City of Center | High | 1, 2 | Severe Winter Weather, Severe Thunderstorms, Tornadoes | ✓ | | |
| | Structure and Infrastructure Projects | | | | | | | |
| Ralls County 2021.1 | NFIP Participation | Ralls County | High | 1, 2 | Flooding | ✓ | | ✓ |

| # | Action | Jurisdiction | Priority | Goals Addressed | Hazards Addressed | Address Current Development | Address Future Development | Continued Compliance with NFIP |
|---------------------------|-----------------------------------|-----------------------|----------|--------------------|--|-----------------------------------|----------------------------------|--------------------------------------|
| New London 2021.1 | NFIP Participation | City of New London | High | 1, 2 | Flooding | ✓ | | ✓ |
| New London 2021.3 | Flood Control | City of New London | High | 1, 2 | Severe Winter Weather, Severe Thunderstorms, Tornadoes | ✓ | | |
| Ralls County 2021.2 | Storm Shelter/Safe Room | Ralls County | High | 1, 2, 3 | Severe Thunderstorms, Tornadoes, Wind Storms | ✓ | | |
| New London 2021.2 | Storm Shelter/Safe Room | City of New London | High | 1, 2, 3 | Severe Thunderstorms, Tornadoes, Wind Storms | ✓ | | |
| Perry 2021.1 | Storm Shelter/Safe Room | City of Perry | High | 1, 2, 3 | Severe Thunderstorms, Tornadoes, Wind Storms | ✓ | | |
| Ralls R-II 2021.1 | Generator for Elementary Building | Ralls County R-II | High | 1 | Extreme Temperature, Severe Thunderstorm, Severe Winter Weather, Tornado | √ | | |
| Center 2021.1 | Installation/Upgrade Sirens | City of Center | High | 1 | All Hazards | ✓ | | |
| Center 2021.2 | Flood Control | City of Center | High | 1, 2 | Severe Winter Weather, Severe Thunderstorms, Tornadoes | ✓ | | |
| | Natural Systems Protection | | • | | - | | | |
| Ralls County 2021.1 | NFIP Participation | Ralls County | High | 1, 2 | Flooding | ✓ | | ✓ |
| New London 2021.1 | NFIP Participation | City of New London | High | 1, 2 | Flooding | ✓ | | ✓ |
| | Emergency Services | | | | | | | |
| Ralls County 2021.1 | NFIP Participation | Ralls County | High | 1, 2 | Flooding | ✓ | | √ |

| # | Action | Jurisdiction | Priority | Goals Addressed | Hazards Addressed | Address Current Development | Address Future Development | Continued Compliance with NFIP |
|---------------------------|-----------------------------------|-----------------------|----------|--------------------|--|-----------------------------------|----------------------------------|--------------------------------------|
| New London 2021.1 | NFIP Participation | City of New London | High | 1, 2 | Flooding | ✓ | | ✓ |
| Ralls County 2021.2 | Storm Shelter/Safe Room | Ralls County | High | 1, 2, 3 | Severe Thunderstorms, Tornadoes, Wind Storms | ✓ | | |
| New London 2021.2 | Storm Shelter/Safe Room | City of New London | High | 1, 2, 3 | Severe Thunderstorms, Tornadoes, Wind Storms | ✓ | | |
| Perry 2021.1 | Storm Shelter/Safe Room | City of Perry | High | 1, 2, 3 | Severe Thunderstorms, Tornadoes, Wind Storms | ✓ | | |
| New London 2021.3 | Flood Control | City of New London | High | 1, 2 | Severe Winter Weather, Severe Thunderstorms, Tornadoes | ✓ | | |
| Ralls R-II 2021.1 | Generator for Elementary Building | Ralls County R-II | High | 1 | Extreme Temperature, Severe Thunderstorm, Severe Winter Weather, Tornado | √ | | |
| Ralls R-II 2021.2 | Two-Way Radios | Ralls County R-II | High | 1 | Extreme Temperature, Severe Thunderstorm, Severe Winter Weather, Tornado | √ | | |
| Center 2021.1 | Installation/Upgrade Sirens | City of Center | High | 1 | All Hazards | ✓ | | |
| Center 2021.2 | Flood Control | City of Center | High | 1, 2 | Severe Winter Weather, Severe Thunderstorms, Tornadoes | ✓ | | |
| | Education and Outreach | | | | | | | |
| Ralls County 2021.1 | NFIP Participation | Ralls County | High | 1, 2 | Flooding | ✓ | | ✓ |

Hazard Mitigation Plan Ralls County, Missouri

| # | Action | Jurisdiction | Priority | Goals Addressed | Hazards Addressed | Address Current Development | Address Future Development | Continued Compliance with NFIP |
|-------------------------|--------------------|-----------------------|----------|--------------------|--|-----------------------------------|----------------------------------|--------------------------------------|
| New London 2021.1 | NFIP Participation | City of New London | High | 1, 2 | Flooding | ✓ | | ✓ |
| Ralls R-II 2021.2 | Two-Way Radios | Ralls County R-II | High | 1 | Extreme Temperature, Severe Thunderstorm, Severe Winter Weather, Tornado | √ | | |