

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 Hazard Mitigation Planning Committee (HMPC) based on the updated risk assessment. The mitigation strategy was developed through a collaborative group process and consists of updated general goal statements to guide the jurisdictions in efforts to lessen disaster impacts, as well as specific mitigation actions that can be put in place to directly reduce vulnerability to hazards and losses. The following definitions are based upon those found in the March 2013 *Local Mitigation Planning Handbook*:

- **Goals** are general guidelines that explain what the community wants to achieve with the plan. They are usually broad policy-type statements that are long-term, and they represent visions for reducing or avoiding losses from the identified hazards.
- **Mitigation Actions** are specific actions that help achieve 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 an existing hazard mitigation plan. Therefore, the goals from the *2013 Dallas County Hazard Mitigation Plan* were reviewed to determine if they are still valid. The HMPC participated in a facilitated discussion during their second meeting to review and update the plan goals. To ensure that the goals are comprehensive and support State goals, the *2013 State Hazard Mitigation Plan* goals were reviewed as well. The HMPC also reviewed common categories of mitigation goals from other plans.

The planning committee determined that all five previous goals from the previous plan remain valid. No changes were made to the plan goals. The validated plan goals for the Dallas County Hazard Mitigation Plan are below:

1. Protect critical facilities and infrastructure from natural hazards.

2. Create a disaster resistant community by improving public understanding of natural hazards and risk by providing public awareness, preparedness, and mitigation information through various channels of communication.
3. Improve capabilities to mitigate natural hazards by incorporating mitigation strategies in plans, policies, and programs.
4. Prevent or reduce the impact of natural hazards for the residents, businesses, and municipalities of Dallas County.
5. Strengthen communication among agencies and between agencies and the public.

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 meeting of the HMPC, sample results of the risk assessment update were provided to the HMPC members. To lay the framework for the impacts to be addressed by the updated mitigation strategy, the full draft of the Risk Assessment Chapter was also provided for review by the HMPC members. Also at Meeting #2, each jurisdiction was provided with a handout listing the actions they included in the previous hazard mitigation plan. The mitigation strategy of the previous plan consisted of 90 individual jurisdictional actions.

Jurisdictional representatives were instructed to work with others in their jurisdiction to update the status of each of the previous actions. The status updates were provided between Meeting #2 and Meeting #3. Of the 90 previous actions, 12 have been completed, 74 are continuing (33 Continue In-process and 41 Continue Not Started), and 4 were deleted (see **Table 4.1**). The list of the completed and deleted actions is provided in Appendix C with comments providing additional details, as available.

Table 4.1. Status of Previous Actions

Jurisdiction	Completed	Delete	Continue In-Progress	Continue Not Started	Grand Total
Dallas County	2		2	5	9
City of Adel			5	3	8
City of Bouton				2	2
City of Dallas Center			5	2	7
City of Dawson		3		1	4
City of DeSoto	1			1	2
City of Dexter	1		3	1	5
City of Granger	1		3	2	6
City of Linden				1	1
City of Minburn			1	2	3
City of Perry	2		4	6	12
City of Redfield		1	1	1	3

Jurisdiction	Completed	Delete	Continue In-Progress	Continue Not Started	Grand Total
City of Van Meter	2		2	1	5
City of Waukee			3		3
City of Woodward	1		2	3	6
Adel-DeSoto-Minburn Schools			1	1	2
Dallas Center-Grimes Schools				1	1
Perry Schools	1			2	3
Van Meter Schools				3	3
Waukee Schools			1		1
West Central Valley Schools				2	2
Woodward-Granger Schools	1			1	2
Grand Total	12	4	33	41	90

For a comprehensive range of mitigation actions to consider, the jurisdictions were provided relevant information and sources to be used in development of new mitigation actions including:

- Validated Plan Goals
- Previous Actions from 2013 Plan
- Key Issues from Risk Assessment
- FEMA's Mitigation Ideas booklet
- State Priorities for Hazard Mitigation Assistance Grants
- Public Opinion from Surveys

To facilitate discussion and ideas on new actions that jurisdictions may want to submit to the plan update, the planning committee reviewed the plan goals that were updated at Meeting #2. Key issues/problem statements for sample hazards in the risk assessment were also discussed, as well as the actions from the 2013 plan that were identified relative to each hazard. The discussion was geared toward identifying any gaps that may exist between the problems identified and actions already developed to address the problems to develop new actions. To provide consideration of a comprehensive range of alternatives, FEMA's Mitigation Ideas Booklet was also reviewed for additional ideas/alternatives for new actions. After the committee meeting, jurisdictions reviewed the materials to determine final mitigation actions to submit to the plan update.

The jurisdictions were encouraged to be comprehensive and include all appropriate actions to work toward becoming more disaster resistant. They were encouraged to maintain a realistic approach and were reminded that the hazard mitigation plan is a "living document". As capabilities, vulnerabilities, or the nature of hazards that threaten each jurisdiction change, the mitigation actions can and should be updated to reflect those changes, including addition or deletion of actions, as appropriate.

As part of the meeting discussion, jurisdictions were instructed to consider the potential cost of each project in relation to the anticipated future cost savings. This type of discussion allowed

the committee as a whole to understand the broad priorities and enable discussion of the types of projects most beneficial to all jurisdictions within Dallas County.

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 representatives worked with others in their community to finalize the actions to be submitted to the updated mitigation strategy. Throughout the discussion of the types of projects that the committee would include in the mitigation plan, emphasis was placed on the importance of a benefit-cost analysis in determining project priority. The Disaster Mitigation Act regulations state that benefit-cost review is the primary method by which mitigation projects should be prioritized. Recognizing the federal regulatory requirement to prioritize by benefit-cost, and the need for any publicly funded project to be cost-effective, the HMPC decided to pursue implementation according to when and where damage occurs, available funding, political will, jurisdictional priority, and priorities identified in the Iowa State Hazard Mitigation Plan. Due to many variables that must be examined during project development, the benefit/cost review at the planning stage primarily consisted of a qualitative analysis. For each action, the jurisdictions included a narrative describing the types of benefits that could be realized with implementation of the action. Where possible, the cost was estimated as closely as possible with further refinement to occur as project development occurs. Cost-effectiveness will be considered in additional detail if/when seeking FEMA Hazard Mitigation Assistance grant funding or other grant funding for eligible projects identified in this plan. At that time, additional information will be researched to provide for a quantitative benefit-cost analysis.

To provide a mechanism for jurisdictions to prioritize actions, a modified STAPLEE worksheet was completed by the jurisdictions for each new and continued action submitted for the updated mitigation strategy. The modified STAPLEE worksheet includes elements to consider protection of life and reduction of damages. Although a similar STAPLEE method was a component of the prioritization method utilized for the 2013 plan, the scoring elements were slightly different. For the plan update, the modified STAPLEE worksheet was chosen to re-evaluate all continuing and new actions, as this was deemed a more simplified approach and ensured a consistent methodology for all continuing and new actions.

The STAPLEE prioritization method in general is a tool used to assess the costs, benefits, and overall feasibility of mitigation actions. STAPLEE stands for the following:

- **Social:** Will the action be acceptable to the community? Could it have an unfair effect on a particular segment of the population?
- **Technical:** Is the action technically feasible? Are there secondary impacts? Does it offer a long-term solution?
- **Administrative:** Are there adequate staffing, funding, and maintenance capabilities to implement the project?

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- **Political:** Will there be adequate political and public support for the project?
 - **Legal:** Does your jurisdiction have the legal authority to implement the action?
 - **Economic:** Is the action cost-beneficial? Is there funding available? Will the action contribute to the local economy?
 - **Environmental:** Will there be negative environmental consequences from the action? Does it comply with environmental regulations? Is it consistent with community environmental goals?

Additional questions were added to the modified STAPLEE worksheet to include elements to consider mitigation effectiveness related to protection of life and reduction of damages as well as reduction in the need for response actions, and the potential for benefits to exceed the cost.

Figure 4.1 is a sample of the Action Plan worksheet. The Prioritization Section is at the bottom of the worksheet. There is a total possible prioritization score of 19. Those actions that scored 13 or higher were given a priority rating of “High”. Those actions that scored 7-12 were given a priority rating of “Medium”. And those actions that scored less than 7 were given a rating of “Low”.

Figure 4.1. Action Plan Worksheet

**Dallas County Multi-Jurisdictional Hazard Mitigation Plan
Mitigation Action Plan Worksheet**

Jurisdiction:	2017 Action Status <input type="checkbox"/> Continue Not Started <input type="checkbox"/> Continue In-Progress <input type="checkbox"/> New	Action ID: Refer to handout for continuing actions For new actions number with next sequential number after last action #.
Complete items 1-11 for ALL New Actions. For Continuing Actions, review handout/spreadsheet with previous information and either update or indicate "no change".		
1. Action Title/Description:		
2. Hazards Addressed: <input type="checkbox"/> Animal/Plant/Crop Disease <input type="checkbox"/> Dam /Levee Failure <input type="checkbox"/> Drought <input type="checkbox"/> Earthquake <input type="checkbox"/> Expansive Soils <input type="checkbox"/> Extreme Heat	Check all that apply <input type="checkbox"/> Flash Flood <input type="checkbox"/> Grass/Wildland Fire <input type="checkbox"/> Infrastructure Failure <input type="checkbox"/> Landslide <input type="checkbox"/> River Flooding <input type="checkbox"/> Severe Winter Storm	<input type="checkbox"/> Sinkholes <input type="checkbox"/> Terrorism <input type="checkbox"/> Thunderstorm/Lightning/Hail <input type="checkbox"/> Tornado/Windstorm <input type="checkbox"/> Transportation Incident
3. Applicable Goal Statement: (Check one)	<input type="checkbox"/> Goal 1 <input type="checkbox"/> Goal 2 <input type="checkbox"/> Goal 3 <input type="checkbox"/> Goal 4 <input type="checkbox"/> Goal 5	
4. Issue/Background: Why is this action needed? What is the problem?		
5. Ideas for Implementing		
6. Obstacles to Implementing?		
7. Responsible Office: Which department in Jurisdiction would implement/track?		
8. Partners: Who would help?		
9. Potential Funding Source: (Grants-specific if known, local funds, combination, etc.) Check all that may apply	<input type="checkbox"/> FEMA Hazard Mitigation Assistance Grant (HMGP, PDM, or FMA) <input type="checkbox"/> Local funds, <input type="checkbox"/> In-Kind (donated), <input type="checkbox"/> Private Non-Profit, <input type="checkbox"/> Other (specify)	
10. Cost Estimate:	<input type="checkbox"/> Little or no cost <input type="checkbox"/> Less than \$10,000 <input type="checkbox"/> \$10,000 to \$50,000 <input type="checkbox"/> \$50,000 to \$100,000 <input type="checkbox"/> \$100,000 to \$500,000 <input type="checkbox"/> \$500,000 to \$1,000,000 <input type="checkbox"/> Over \$1,000,000	
11. Benefits: (Describe Losses Avoided)		
12. Timeline: How many years to complete?	<input type="checkbox"/> 1 yr <input type="checkbox"/> 2-3 yrs <input type="checkbox"/> 3-5 yrs	<input type="checkbox"/> More than 5 yrs. <input type="checkbox"/> Other Completed by: (name/title/phone #)
Complete Prioritization and STAPLEE Rating boxes for ALL Continuing and New Actions		
Prioritization: Rate the questions from 0-3 0-unlikely, 1-maybe, 2-probably, or 3-definitely	If implemented, will the action result in lives saved? <input type="checkbox"/> 0, <input type="checkbox"/> 1, <input type="checkbox"/> 2, <input type="checkbox"/> 3 If implemented, will the action result in reduced property damages? <input type="checkbox"/> 0, <input type="checkbox"/> 1, <input type="checkbox"/> 2, <input type="checkbox"/> 3 If implemented, will the action reduce the need for response actions? <input type="checkbox"/> 0, <input type="checkbox"/> 1, <input type="checkbox"/> 2, <input type="checkbox"/> 3 If implemented, will the benefits exceed the cost? <input type="checkbox"/> 0, <input type="checkbox"/> 1, <input type="checkbox"/> 2, <input type="checkbox"/> 3	
STAPLEE Rating: Give the action a positive (+), neutral (0), or negative (-) rating for each element:	Socially Acceptable Technically Feasible Administrative Capability Politically Desirable Legal Authority Exists Economically Beneficial Environmentally Beneficial	<input type="checkbox"/> +, <input type="checkbox"/> 0, <input type="checkbox"/> - <input type="checkbox"/> +, <input type="checkbox"/> 0, <input type="checkbox"/> -

The mitigation action summary table presenting the summary of continuing and new mitigation actions for each jurisdiction is provided in **Table 4.2**. In addition to the 74 actions that were continued from the previous plan, 5 new actions were identified, for a combined total of 79 actions in this updated mitigation strategy.

The Action ID for each action has been carried over from the 2013 plan for continuing actions. As a result of completed and deleted actions, the Action ID does not follow a sequential order. New actions were assigned the next sequential Action ID for each jurisdiction. Following the action summary table, additional details are provided for each continuing and new action in **Table 4.3**. The detailed table serves as the action plan describing how each action will be implemented and administered by the local jurisdiction. The final table, **Table 4.4**, provides the results from the action prioritization.

Table 4.2. Mitigation Action Summary—Continuing and New Actions

Action ID	Action Title	2017 Action Status	2017 Action Status Comment	Hazards Addressed	Applicable Goal	Score	Priority
Dallas County-1	County Road System-200th St-B Ave.	Continue In-Progress		Flash Flood, River Flooding	4	12	Medium
Dallas County-3	County Road System-205th St-Pioneer Ave.	Continue Not Started		Flash Flood, River Flooding	4	12	Medium
Dallas County-4	County road System-210th St-V. Ave.	Continue Not Started		Flash Flood, River Flooding	4	12	Medium
Dallas County-5	County Road System 250th St-T. Ave.	Continue Not Started		Flash Flood, River Flooding	4	12	Medium
Dallas County-6	County Road System-Other	Continue Not Started		Flash Flood, River Flooding	4	12	Medium
Dallas County-8	Saferooms in New Dallas County Buildings	Continue Not Started		Tornado, Thunderstorm & Lightning, Windstorm, Severe Winter Storm, River Flooding	4	14	High
Dallas County-9*	Continued enforcement and Annual Review of Floodplain Management Ordinance to include utilizing current effective regulatory maps, issuing floodplain development permits, and monitoring substantial damage / improvements	Continue In-Progress	This is an ongoing action - accomplished annually.	Flash Flood, Riverine Flooding, Dam Failure, Levee Failure	3	9	Medium
Dallas County-10	Replace aging Generator system at County EOC North campus	New		Severe storms, to include Ice storms and power grid failure.	1	7	Medium
Dallas County-11	Move IT systems from present location to North Campus /County EOC	New		Move systems out of flood area	1	7	Medium
Adel-1	Expand/Improve Outdoor Warning Siren network	Continue In-Progress	Implementing a fee for new developments - for sirens	Thunderstorms & Lightning, Tornado, Windstorm	2	13	High
Bouton-1	Upgrade to Storm Drainage System	Continue Not Started	No funds	Flash Flood	4	15	High
Dallas Center-1	Construct Public Safety Facility that includes a Saferoom and Emergency Operations Center	Continue Not Started		All Hazards	4	12	Medium
Dexter-1	Tree Branch Clearing from Power Lines	Continue In-Progress	On-going. MidAmerica and Alliant evaluate every three years	Severe Winter Storm, Thunderstorms & Lightning, Windstorm, Tornado	2	7	Medium
Granger-1	500,000 Gallon Water Tower	Continue In-Progress	In design process with City Engineer	Drought	1	7	Medium

Action ID	Action Title	2017 Action Status	2017 Action Status Comment	Hazards Addressed	Applicable Goal	Score	Priority
Linden-1	Construct New City Hall/Fire Station/Library as a Community Saferoom	Continue Not Started		Tornado	4	12	Medium
Minburn-1	Safe Room	Continue Not Started	Still looking for a suitable location	Tornado, Thunderstorms & Lightning	4	14	High
Van Meter-1	Saferoom Construction for Schools and Public Buildings	Continue Not Started		Tornado, Thunderstorms & Lightning, Windstorm, Severe Winter Storm, Extreme heat	4	16	High
Waukee-1*	Continued enforcement and Annual Review of Floodplain Management Ordinance to include utilizing current effective regulatory maps, issuing floodplain development permits, and monitoring substantial damage / improvements	Continue In-Progress	Ongoing	Flash Flood, River Flooding	3	14	High
Adel-2	Saferoom Construction in Public Buildings and Near Outdoor Recreation Areas	Continue Not Started		Tornado, Thunderstorms & Lightning, Windstorm, hailstorm	4	10	Medium
Bouton-2	Construction of a Community Saferoom	Continue Not Started	No funds	Tornado	4	15	High
Dallas Center-2	Educate Citizens on Disasters	Continue In-Progress	Emails, FB, newsletter - ongoing	All Hazards	2	11	Medium
DeSoto-2*	National Flood Insurance Program Public Education and continued enforcement of Floodplain Management Ordinance to include utilizing current effective regulatory maps, issuing floodplain development permits, and monitoring substantial damage / improvements	Continue Not Started		Flash Flood, River Flooding	2	9	Medium
Dexter-2	Two Generators for Emergency Back up Power at Water Treatment Plant and Stand Pipe Pump	Continue Not Started	Reduce need to 1 generator	Severe Winter Storm, Thunderstorms & Lightning, Windstorm, Tornado	1	3	Low
Granger-2	Emergency Services Building	Continue Not Started		All Hazards	1	15	High
Minburn-2	Install Transfer Switch to Enable a Portable Generator to be Hooked up to City Hall	Continue Not Started		Tornado, Severe Winter Storm, Thunderstorm & Lightning, Windstorm	1	11	Medium
Perry-2	Cultural Severe Weather Education	Continue Not Started		All Hazards	2	13	High

Action ID	Action Title	2017 Action Status	2017 Action Status Comment	Hazards Addressed	Applicable Goal	Score	Priority
Redfield-2	Construct Community Saferoom	Continue Not Started	Last discussed with WCV School: 07-18-17	Tornado	4	11	Medium
Waukee-2	Construction of Tornado Saferooms in Public Areas	Continue In-Progress	Considering as part of a parks/trails comprehensive plan in 2019	Tornado, Windstorm	4	12	Medium
Woodward-2	Construction of Saferooms/Shelter	Continue Not Started		Tornado, Windstorm	4	12	Medium
Adel-3	Maintain/Upgrade levee System/Floodwalls	Continue In-Progress	Maintenance as necessary	Flash Flood, Levee Failure, River Flooding	1	15	High
Dallas Center-3	Upgrade/Expand/Improve Stormwater Management System	Continue In-Progress	Will be completed in 2017	Flash Flood, River Flooding	4	11	Medium
DeSoto-3	Generator for new WTP	New	New WTP will be completed in 2018	Winter Storm, Tornado & Windstorm, Thunderstorm, Lightning, Hail	1	9	Medium
Minburn-3	Public Education	Continue In-Progress		All Hazards	2	13	High
Perry-3	Bury Power Lines and Phone Lines Under Ground	Continue In-Progress	Alliant has built new substation at Hwy 141 and I Court. New poles have been installed but few changes were made to burying lines	Severe Winter Storms, Windstorms, and Tornadoes	1	15	High
Redfield-3*	Continued enforcement and Annual Review of Floodplain Management Ordinance to include utilizing current effective regulatory maps, issuing floodplain development permits, and monitoring substantial damage / improvements	Continue In-Progress	Ongoing	Flash Flood, River Flooding	3	11	Medium
Van Meter-3*	Continued enforcement of Floodplain Management Ordinance to include utilizing current effective regulatory maps, issuing floodplain development permits, and monitoring substantial damage / improvements	Continue In-Progress	Ongoing	Flash Flood, Dam Failure, Landslide, River Flooding, Levee Failure	3	13	High
Waukee-3	Drainage Improvements to Alleviate Flash Flooding in the area of LA Grant and Booth Drive	Continue In-Progress	Portions of the land in question are under development, others are several years off.	Flash Flood	4	11	Medium
Woodward-3	Install Second Warning Siren in Annexed Areas	Continue Not Started		Windstorm, Tornado	5	16	High
Adel-4	Purchase Floodprone Properties	Continue Not Started		River Flooding	4	5	Low

Action ID	Action Title	2017 Action Status	2017 Action Status Comment	Hazards Addressed	Applicable Goal	Score	Priority
Dallas Center-4	Back-up Power for Critical Facilities	Continue In-Progress	Will be completed in 2017	All Hazards	4	12	Medium
Dawson-4*	Public Information Regarding Availability of Flood Insurance and continued enforcement of Floodplain Management Ordinance to include utilizing current effective regulatory maps, issuing floodplain development permits, and monitoring substantial damage / improvements	Continue Not Started		Flash Flood, Riverine Flooding	2	9	Medium
Dexter-4	Educate residents about natural disasters.	Continue In-Progress	Fire Department will prepare posters and educational materials	Warning procedure in the event of an emergency	1	6	Low
Granger-4	Tornado Siren	Continue Not Started		Tornado, Windstorm	5	13	High
Van Meter-4	Public Education on Hazards	Continue In-Progress	Ongoing	All Hazards	2	19	High
Woodward-4	Repair/Replace/Upgrade Storm Sewer Program	Continue In-Progress	Ongoing	Flash Flood, River Flooding	4	19	High
Adel-5	Stream Corridor Restoration	Continue Not Started		Flash Flood	4	1	Low
Dallas Center-5	Expand/Improve Outdoor Warning Siren network	Continue Not Started		Tornado	5	14	High
Dexter-5	Inform citizens of tornado shelter location and maintain supply of water and first aid supplies.	Continue In-Progress	Designate emergency sites	Safety during storms	2	4	Low
Granger-5	All City Employees NIMS Certified	Continue In-Progress	Ongoing	All Hazards	5	5	Low
Perry-5	Designate Public Shelters	Continue Not Started		Tornadoes, Windstorms, Severe Winter Storms, Extreme Heat, River Flooding	4	13	High
Woodward-5	Install Transfer Switches and Connections on Critical Facilities to Enable Generator Hook Up	Continue Not Started		Winter Storm, Extreme Heat, Tornado, Flash Flood, Windstorm, Thunderstorms & Lightning	4	18	High
Adel-6	Back-up Power for Critical Facilities	Continue In-Progress	Generators are installed at sewer facilities. Generator will be installed with the new water plant install.	Severe Winter Storm, Thunderstorms & Lightning, Tornado, Windstorm	1	16	High
Dallas Center-6	Emerald Ash Borer Education	Continue In-Progress	Tree Board discussing and has traps	Animal/Plant/Crop Infestation	2	10	Medium

Action ID	Action Title	2017 Action Status	2017 Action Status Comment	Hazards Addressed	Applicable Goal	Score	Priority
Dexter-6	Additional Water Supply	New	Not started	Adequate warning system	1	5	Low
Granger-6*	Continued enforcement and Annual Review of Floodplain Management Ordinance to include utilizing current effective regulatory maps, issuing floodplain development permits, and monitoring substantial damage / improvements	Continue In-Progress	Ongoing	Flash Flood, Riverine Flooding	3	8	Medium
Woodward-6	Community Education Initiative	Continue In-Progress		Tornado, Windstorm	2	13	High
Adel-7	Upgrade/Expand/Improve Stormwater Management System	Continue In-Progress	Being built in all new developments	Flash Flood	4	15	High
Dallas Center-7*	Continued enforcement of Floodplain Management Ordinance to include utilizing current effective regulatory maps, issuing floodplain development permits, and monitoring substantial damage / improvements	Continue In-Progress	Info on the website - Floodplain info updated	Flash Flood, River Flooding	3	15	High
Granger-7	Stormwater Management & Soil Erosion & Sediment Control	New	Ongoing	Flash Flood, River Flooding	1	12	Medium
Adel-8*	Continued enforcement of Floodplain Management Ordinance to include utilizing current effective regulatory maps, issuing floodplain development permits, and monitoring substantial damage / improvements	Continue In-Progress	Ongoing	Flash Flood, River Flooding	2	10	Medium
Perry-11	Develop a Plan for Emergency Water Supply	Continue Not Started		Drought	4	12	Medium
Perry-15	Establish an Emergency Translation Team	Continue Not Started		All Hazards	5	9	Medium
Perry-19	Conduct an Earthquake Drill at Schools	Continue Not Started		Earthquake	2	9	Medium
Perry-21	Have all City Employees NIMS Certified	Continue Not Started		All Hazards	5	9	Medium
Perry-22*	Public Information Regarding Availability of Flood Insurance and continued enforcement of Floodplain Management Ordinance to include utilizing current effective regulatory maps, issuing floodplain development permits, and monitoring substantial damage / improvements	Continue In-Progress		Flash Flood, River Flooding	2	15	High

Action ID	Action Title	2017 Action Status	2017 Action Status Comment	Hazards Addressed	Applicable Goal	Score	Priority
Perry-23	Continue to Enforce Local Building Codes	Continue In-Progress	Building official is working on updating building codes	Windstorms, Expansive Soils, Landslide, River Flooding	3	15	High
Perry-24	Clear Brush from Frog Creek	Continue In-Progress	Parks Department has been working on clearing trees as time permits.	Flash Flood, River Flooding	4	12	Medium
Adel-DeSoto-Minburn Schools-1	Saferoom Construction	Continue Not Started		Tornado	4	13	High
Dallas Center Grimes Schools-1	Saferoom Construction	Continue Not Started	Difficult to line up design, funding, bond dollar amount and having FEMA dollars available at the time of possible project. May consider further on an addition to middle school as it is sales tax dollars.	Tornado	4	14	High
Perry Schools-1	Saferooms at HS/MS and Elementary Facilities	Continue Not Started	Notice of Interest to IA HSEMD rejected due to matching funds not being identified/secured	Tornado, Windstorm	4	14	High
Van Meter Schools-1	Saferoom Construction	Continue Not Started	Won't start this year.	Tornado	4	13	High
Waukee-1 Schools	Construction of Tornado Saferooms	Continue In-Progress	Construction of a saferoom is included in the upcoming high school construction project which is in early states of design. Project completion is scheduled for Spring 2019	Tornado	4	15	High
West Central Valley Schools-1	Dexter Elementary Saferoom Construction	Continue Not Started	No plans for construction are being considered at this time. It will be 2-3 years before any action is taken on such construction projects.	Tornado	4	14	High
Adel-DeSoto-Minburn Schools-2	Educate Students on Disasters	Continue In-Progress	Continue to use fire and tornado drills regularly.	All Hazards	2	11	Medium
Perry Schools-2	Back-up Power Generator	Continue Not Started		Tornado, Windstorm	1	13	High

Action ID	Action Title	2017 Action Status	2017 Action Status Comment	Hazards Addressed	Applicable Goal	Score	Priority
Van Meter Schools-2	Van Meter Schools Storm Water Drainage	Continue Not Started	Won't start this year.	Flash Flood, Riverine Flooding	4	13	High
West Central Valley Schools-2	Middle School in Redfield Saferoom Construction	Continue Not Started	No plans for construction are being considered at this time. It will be 2-3 years before any action is taken on such construction projects.	Tornado	4	14	High
Woodward-Granger Schools-2	Woodward-Granger Saferoom	Continue Not Started	Woodward-Granger opted not to put a safe room in its last building but in a growing school district and the need for a facility such as this in our communities we intend on moving forward with a project of this caliber in the future.	Tornado	4	15	High
Van Meter Schools-3	Purchase Generator	Continue Not Started	Won't start this year.	Tornado, Windstorm, Severe Winter Storm, Thunderstorms & Lightning	1	13	High

*Denotes Actions related to continued compliance with the NFIP; H=High, M=Medium, L=Low

Table 4.3. Mitigation Action Implementation Strategy—Continuing and New Actions

Action ID	Issue/Background	Ideas for Implementation	Obstacles	Responsible Office	Partners	Potential Funding Source(s)	Cost Estimate	Benefits	Timeline
Dallas County-1	Recurring damage from floods.	Place additional drainage structures and raise road profile.	Funding	Dallas County Road Department with day labor or contract labor.	None identified	Local funding as available.	\$22,000	Protects roadway - minimizes recurring damage and subsequent repair.	2 months
Dallas County-3	Recurring damage from floods.	Place larger drainage structure and raise road profile.	Funding	Dallas County Road Department with day labor or contract labor.	None identified	Local funding as available.	\$18,000	Protects roadway - minimizes recurring damage and subsequent repair.	2 months
Dallas County-4	Recurring damage from floods.	Place additional drainage structures and raise road profile.	Funding	Dallas County Road Department with day labor or contract labor.	None identified	Local funding as available.	\$15,000	Protects roadway - minimizes recurring damage and subsequent repair.	2 months
Dallas County-5	Recurring damage from floods.	Place additional drainage structures and raise road profile.	Funding	Dallas County Road Department with day labor or contract labor.	None identified	Local funding as available.	\$18,000	Protects roadway - minimizes recurring damage and subsequent repair.	2 months
Dallas County-6	Recurring damage from floods.	Place additional drainage structures and raise road profile.	Funding	Dallas County Road Department with day labor or contract labor.	None identified	Local funding as available.	\$250,000	Protects roadway - minimizes recurring damage and subsequent repair.	1 year
Dallas County-8	To prevent harm and shelter the public and employees of Dallas County during severe weather	Place safe rooms in new construction County public buildings.	Funding	Dallas County Board of Supervisors	None identified	Local Tax dollars if Available.	TBD	Prevents possible injury or loss of life to the public and employees of Dallas County.	3-5 years

Action ID	Issue/Background	Ideas for Implementation	Obstacles	Responsible Office	Partners	Potential Funding Source(s)	Cost Estimate	Benefits	Timeline
Dallas County-9*	To keep the Flood Plain management ordinance relevant to a fast-growing county, and to make sure that updates/modifications are made in a timely manner.	Annual Floodplain ordinance review.	none	Dallas County Planning & Zoning	None identified	Local Tax Dollars	TBD	Would allow for updates and modifications to plan and continue participation in NFIP program.	Annually
Dallas County-10	Replace 25+ year old generation system at county EOC with new generator that will power all of the EOC/North campus building	Remove and replace 25+year old generator with new generator that powers all EOC/North Campus	Funding	Dallas County Board of Supervisors	None identified	Local tax dollars or Hazard Mitigation grant funding	\$100,000 to \$500,000	Provides reliable power generation to County EOC/North Campus	2-3 years
Dallas County-11	Systems are located in in basement of an area that could easily flood from numerous water related incidents.	Move systems to County EOC/North Campus. Building is 25 to 30ft. Higher than present location	Funding	Dallas County Board of Supervisors	None identified	Local tax dollars or possible mitigation grant	\$100,000 to \$500,000	Moves County IT systems out of water or flood damage. Increase ability for county to recover from any type of flood or water incident	2-3 years
Adel-1	This action is needed to provide a comprehensive network of coverage of warning during times of severe weather. The current system does not encompass the annexation area of the city. A verbal communication warning system is needed for all hazards	Install additional outdoor warning siren locations within the annexation area. Upgrade the current outdoor warning system to provide direct communication to residents via an outdoor warning verbal communications	Lack of funding	City of Adel-City Hall	None identified	Local funds and FEMA Hazard Mitigation Assistance Grant if available	\$40,000	Avoid/minimize the loss of life from tornadoes and severe weather by being able to adequately warn all residents.	5 years

Action ID	Issue/Background	Ideas for Implementation	Obstacles	Responsible Office	Partners	Potential Funding Source(s)	Cost Estimate	Benefits	Timeline
Bouton-1	Existing drain tiles are insufficient for water capacity during intense rainfall events and drainage from farm field does not drain properly into existing stormwater drainage system. Upgrades to the system are needed to correct these problems. Approx. 10 homes get flooded due to the water going over the road and into houses. Additionally, roads are damaged and undermined during significant events.	Upgrade to the City's storm drain system	lack of funds	Maintenance Dept.	None identified	FEMA Hazard Mitigation Assistance Grants	\$60,000	Avoid damages to road washing out and being undermined.	4 years
Dallas Center-1	Prevent or reduce the impact of natural hazards for the residents and businesses of Dallas Center.	To protect Dallas Center citizens in the event of a tornado and provide a facility to run emergency operations from.	Construct a facility to provide shelter and emergency operations during a tornado.	Cost	Police Department and Fire Department	FEMA HMA Grant (HMGP, PDM, or FMA)	\$500,000 to \$1,000,000	life safety for residents	4-5 years
Dexter-1	Dallas	Contacting Mid America or a combination of contracting a tree service	n/a	City Superintendent	Mid America, City Council members?	In-Kind (donated)	Less than \$10,000	Decrease power outages during wind/tornado/winter storms due to limbs being the cause of outage.	1-3 years
Granger-1	Additional water capacity is needed due to population growth of the City of Granger	Construct additional water tower/storage	lack of funding	Water Department	City Engineer	Combination of Funds	Over \$1,000,000	Avoid shortage of water	2 years

Action ID	Issue/Background	Ideas for Implementation	Obstacles	Responsible Office	Partners	Potential Funding Source(s)	Cost Estimate	Benefits	Timeline
Linden-1	The existing city hall/fire station/library building is old. A new facility could house these important offices/departments as well as serve as a community saferoom for the town's 220 residents. Currently there is no saferoom for residents to take shelter.	Construct a facility to provide shelter to citizens and city/fire department and library staff in the event of a tornado.	lack of funds	City of Linden-City Hall/Library	Farmer's Co-Op, small businesses	FEMA Hazard Mitigation Assistance grants and local funds	\$500,000 to \$1,000,000	Avoid injury and death	5 years
Minburn-1	No storm shelter for residents and bikers using bike trail	Construct "safe room" by Depot (once moved to trail head position)	Funding	City Hall	None identified	FEMA	\$11,195 (for 8' X 8' per Iowa Safe Rooms)	Lives saved	6-12 months once Depot is moved
Van Meter-1	The City of Van Meter needs saferooms that can also serve as shelters/cooling centers. The city does not have adequate safety areas for citizens attending outside events.	Construct Tornado Saferooms/Shelters	lack of funding	City Administrator	None identified	FEMA HMA Grant (HMGP, PDM, or FMA)	\$500,000 to \$1,000,000	Prevent loss of life	2-3 years
Waukee-1*	The City of Waukee participates in the NFIP. Regular review of the floodplain management ordinance will ensure it is applicable and effective in management of floodplain areas.	The City should stay up-to-date with the ordinance and periodically review it to ensure its effectiveness. Enforcing this ordinance will also help to regulate new development as it occurs.	None	Public Works and Development Services	FEMA, National Flood Insurance Program, Iowa Department of Natural Resources	N/A	Little or No Cost	Ensure effective management of floodplain areas to minimize flood impacts.	1 year

Action ID	Issue/Background	Ideas for Implementation	Obstacles	Responsible Office	Partners	Potential Funding Source(s)	Cost Estimate	Benefits	Timeline
Adel-2	A saferoom is not available for the aquatic center. Residents attending the outdoor recreation area need a place of safety in the event of severe weather.	Construct a saferoom at the aquatic center.	Lack of funds	City of Adel-City Hall	City Engineer	Local Funds and FEMA Hazard Mitigation Assistance Grants	\$75,000 (estimated)	Decrease injury and/or loss of life from tornadoes, thunderstorms & lightning, windstorms, and hailstorm	5 years
Bouton-2	There is no existing community saferoom in Bouton.	Construct a community saferoom on city-owned property near existing community center for approx. 75 residents in 10 block area.	lack of funds	City Council	Memorial Trust out of Ogden	FEMA Hazard Mitigation Assistance Grants	TBD	Life safety for 75 residents	3-5 years
Dallas Center-2	To educate citizens on natural disasters and safety measures to increase safety.	Education and awareness of hazards and how to mitigate losses.	Time and personnel	Fire Department	Dallas Center-Grimes Community School District	Grants and local funds	Less than \$10,000	Avoid injury and death	1-2 years
DeSoto-2*	The City of DeSoto currently participates in the NFIP but all residents may not be aware of the availability of flood insurance.	Inform residents and businesses within DeSoto of the availability of flood insurance	lack of funding	Public Works	Administrative Staff	Local funds as available	Little or No Cost	Safety and well being of De Soto residents	ongoing
Dexter-2	There is no back-up power for the Water Treatment Plant or Stand Pipe Pump	Install Emergency Generators at Water Treatment Plant and Stand Pipe Pump	Lack of funding	Water Superintendent	Electric provider?	FEMA Hazard Mitigation Assistance Grants and local funds	\$7,000 ea. (\$14,000 total)	Avoid impacts/cost of loss of water to the town	2 years

Action ID	Issue/Background	Ideas for Implementation	Obstacles	Responsible Office	Partners	Potential Funding Source(s)	Cost Estimate	Benefits	Timeline
Granger-2	Due to the population growth, the City has outgrown the existing building. The building would be used to store vital city records and used as an EOC during/after a disaster.	Construct a new Emergency Services Building	lack of funding	Fire Department & Police Department	City Engineer	Combination of Funds	\$3.5 million	Better facility to hold educational meetings for the public and house better equipment to help after a disaster	2 years
Minburn-2	In the event a hazard brought a power outage to City Hall using a generator for power would enable City Hall to function as a heating/cooling center in extreme weather; and the building and equipment to be used as a base for emergency services after a hazard.	Have a qualified electrician come and install the switch	Funding	City Hall	City Hall and electrical contractor	Local Funds	Less than \$10,000	Citizens can avoid prolonged exposure to extreme heat/cold, oxygen users can plug in tanks in the event of power outage, response crews/city workers will have access to phones and other office equipment	1-6 months

Action ID	Issue/Background	Ideas for Implementation	Obstacles	Responsible Office	Partners	Potential Funding Source(s)	Cost Estimate	Benefits	Timeline
Perry-2	New residents of Perry that speak English as a second language may not know what the warning sirens mean, nor know how to react. An estimated twenty-one percent of citizens in Perry do not speak English "very well" according to the U.S. Census American Community Survey.	Schools provide education to students on these topics and newspapers run announcements about actions to take in severe weather. It is recommended that these outlets continue to distribute this type of public information. Additionally, a brochure or poster with various temperatures and types of weather-appropriate clothing could be developed in English and Spanish to help Hispanic citizens prepare for weather they are not familiar with.	language barrier	Perry Safety Committee	Perry Public Schools	available grants and local funding	Less than \$10,000	Citizens can be better prepared during emergencies and hazard events as well as know what action to take	6 months
Redfield-2	The City does not currently have a Tornado Saferoom.	Construct a community saferoom in accordance with FEMA standards-possibly at WCV MS	lack of funding	City of Redfield	WCV School Board, Iowa Homeland Security and Emergency Management	FEMA Hazard Mitigation Assistance Grants	\$50,000 to \$100,000	Save lives in the event of a tornado	2-3 years
Waukee-2	Outdoor Public areas do not have safe areas for visitors to take refuge in the event of severe weather.	Consider construction of tornado saferooms in public areas.	Lack of funding	City Council	Parks Dept, Racoon River Valley Trail Association	FEMA Hazard Mitigation Assistance Grants, local funds	\$100,000 to \$500,000	Life Safety	1 year

Action ID	Issue/Background	Ideas for Implementation	Obstacles	Responsible Office	Partners	Potential Funding Source(s)	Cost Estimate	Benefits	Timeline
Woodward-2	Tornadoes cause loss of life. It is important that there is a place for people to go that is safe. We have a new trail which is a high use recreational area. There is currently no place for those people to take shelter if there is an Emergency Weather situation.	Construction of an above ground storm shelter with 200-person capacity as well as retrofitting another structure as an underground shelter. Building a large capacity shelter, we can accommodate large numbers of people. Reducing the potential for loss of life. By retro-fitting an inground cement container as a shelter we can offer multiple venues for protection.	Financing/property location of new construction	City of Woodward Public Works and the City Engineer Veenstra & Kimm	City of Woodward, V & K Engineering	Available Grants, City funds	\$72,000 for new construction / \$35,000 for retrofit.	Avoidance of Loss of life.	12-24 months
Adel-3	The City of Adel is vulnerable to flooding during times of excessive precipitation in the watershed. The flooding puts the town's water supply at risk to damage and puts the town's residents in danger.	Provide a levee/floodwall system to permanently protect the residents of Adel from flooding.	lack of funding	City of Adel-City Hall	City Engineer	Local funds and available grant funds	\$150,000 (estimated)	Decrease the potential for loss of life as a result of flooding as well as add needed protection to ensure the water treatment plant does not flood.	5 years
Dallas Center-3	During heavy rains, several streets in town flood due to inadequate stormwater systems	Improve stormwater drainage throughout the city.	Cost	Public works	None identified	Grants and local funds	\$500,000 to \$1,000,000	Alleviate flooded streets	4-5 years
DeSoto-3	The City of DeSoto is constructing a new WTP and will need a standby generator in case of power failure	Purchase and install new standby generator	lack of funding	Public Works	Administrative Staff	FEMA HMA Grant (HMGP, PDM, or FMA)	\$10,000 to \$50,000	Avoid interruption of services in case of power outage	1 year
Minburn-3	To make sure the public is aware of actions to take to prevent and respond to hazards and disasters.	Through pamphlets and brochures, information on web page, etc.	funding	City Hall	Local civic organizations	grants, local funds	\$1,000 - 2,000 estimate	Damage to home and property, possible loss of life	1 year

Action ID	Issue/Background	Ideas for Implementation	Obstacles	Responsible Office	Partners	Potential Funding Source(s)	Cost Estimate	Benefits	Timeline
Perry-3	Ice, winds, and tornadoes can cause outages for above-ground utilities	Encourage Alliant Energy (electric provider) and Qwest (communications) to bury utility lines	The City does not own the utilities and does not have control of these efforts.	Building Official	Alliant energy and Qwest	Hazard Mitigation Grant Program	\$500,000 (estimated)	Avoid interruptions to power supply, Reduce risk of fire	10 years
Redfield-3*	The City currently participates in the National Flood Insurance Program and is committed to ensuring that the floodplain management ordinance remains current and effective.	Annually Review Floodplain Management Ordinance	None	City of Redfield	Iowa Department of Natural Resources	None	Little or No Cost	Updating and enforcing floodplain management ordinance will ensure construction in the floodplain is in accordance with requirements, minimizing risk to life and property	annually
Van Meter-3*	The City of Van Meter is a current participant in good standing with the National Flood Insurance Program with an adopted floodplain management ordinance to reduce the impact of flooding and financial impact on property owners.	Regularly review and continue enforcement of the City of Van Meter's floodplain management ordinance to ensure continued compliance with the National Flood Insurance Program.	None	City Administrator	Homeowners and FEMA	Local Funds	Little or No Cost	Continue management of Van Meter's floodplain to prevent flood losses as well as continue to make flood insurance available to Van Meter residents.	1 year

Action ID	Issue/Background	Ideas for Implementation	Obstacles	Responsible Office	Partners	Potential Funding Source(s)	Cost Estimate	Benefits	Timeline
Waukee-3	Water runoff from adjacent properties causes this area to repetitively flood during periods of intense rain. This situation requires the road to be closed. Additionally, costly cleanup is required due to debris that washes onto the roadway and nearby houses get water in basements due to this problem.	Improve Stormwater Drainage in this area.	Lack of funding, landowner participation	Public Works Department	Landowners	FEMA Hazard Mitigation Assistance Grants, local funds	\$500,000 to \$1,000,000	Road closure would not be necessary, avoid costly clean-up	1 year
Woodward-3	Recently annexed areas have no early warning system in places and are outside the perimeter of the current warning system	Purchase and install at least one warning siren	financing	City of Woodward, Woodward Fire Department	City of Woodward, Woodward Fire Department	Grant funding/ City funds.	\$30,053 each.	Early warning systems give those outdoors the opportunity to seek shelter and safety.	12 months
Adel-4	Several businesses are located within the floodprone areas. These properties become flooded during times of severe flooding on a regular basis	Purchase and remove the structures from the flood prone area	lack of funding	City of Adel-City Hall	None identified	Local funds and FEMA Hazard Mitigation Assistance Grant funds	\$250,000 (estimated)	Reduce repetitive damages to floodprone properties.	5 years
Dallas Center-4	At the present time, we are unable to run our sewer plant, water treatment plant, water storage facilities and city hall during a power outage.	Purchase three generators and the electric transfer gear for our water treatment plant.	Cost	Public works department	None identified	Grants and local funds	\$50,000 to \$100,000	Avoid sewer back ups and be able to provide adequate water supply during a power outage	2-3 years

Action ID	Issue/Background	Ideas for Implementation	Obstacles	Responsible Office	Partners	Potential Funding Source(s)	Cost Estimate	Benefits	Timeline
Dawson-4*	The City of Dawson is a participant in good standing with the National Flood Insurance Program, making flood insurance available to residents and businesses within the community. However, residents and businesses may not be aware that flood insurance is available for purchase.	Distribute flyers notifying residents and businesses of the availability of flood insurance along with water bill mailings.	lack of funding	City of Dawson, Floodplain Manager	National Flood Insurance Program, FEMA Publications Warehouse	local funds	Less than \$10,000	Inform residents and businesses of the availability of flood insurance so that they can ensure they are adequately covered.	1-3 years
Dexter-4	Additional public information is needed to ensure citizens know what to do to prepare for emergencies/disasters as well as know what to do in response	Fire Department will prepare posters and educational materials	funding and time	Fire Department	Dallas Co Emergency Mgmt	Local Funds	Little or No Cost	Preparedness in event of emergency	1 year
Granger-4	The City has grown past the coverage capacity of existing sirens and is in need of two additional sirens	Install two new sirens placed strategically at designated areas to provide full coverage	lack of funding	Fire Department & Police Department	Fire Department & Police Department	Combination of Funds	\$60,000	Lives Saved	1 month after funding
Van Meter-4	Providing education to the public on hazards that can occur in Van Meter as well as preparedness and prevention information is needed to ensure an informed public.	Develop and implement educational campaigns such as classes and pamphlets available in the library.	lack of funding	Public Safety	County Emergency Management, All City and County Departments	local funds and available grants	Less than \$10,000	An educated public can result in a reduction in injuries, loss of life and property damage as a result of hazard events.	1 year

Action ID	Issue/Background	Ideas for Implementation	Obstacles	Responsible Office	Partners	Potential Funding Source(s)	Cost Estimate	Benefits	Timeline
Woodward-4	1. To reduce amount of property damage caused by heavy rain events. 2. Lack of storm sewer in the City.	By adding properly sized storm sewers in different areas of town it mitigates the damaging effects of a significant rain event	Funding	Public Works, Clerks, and Council	Contractors	Combination of CDBG Grants, Storm sewer User Fees and Local funds in addition to any other Grant Funding available.	\$1,006,250 plus any increase in costs between now and the time the project is implemented and completed.	Lessen basement flooding, take the pressure off sanitary sewer lines so as not to back up into basements, mitigate street damage.	2 years
Adel-5	The sides of the streambeds have degraded along the waterway from S. 6th Street to S. 10th Street along the bike path.	1200 ft. of streambank stabilization would prevent future degradation of the stream bank.	lack of funding	City of Adel-City Hall	City Engineer	local funds and FEMA Hazard Mitigation Assistance Grants or other grant funds	\$10,000	Prevent the loss of the streambank due to flooding.	3 years
Dallas Center-5	To protect Dallas Center citizens in the event of a tornado or severe storm	Purchase additional outdoor warning sirens	Cost	Fire Department	None identified	Grants and local funds	\$50,000 to \$100,000	Avoid injury and death	2-3 years
Dexter-5	Public Safety	Designate safe buildings in Dexter and supply water and first aid materials	None reported	Fire Department	Dallas Co Emergency Mgmt	Local Funds	Less than \$10,000	Preparedness in event of emergency	1 year
Granger-5	U.S. Department of Homeland Security recommends all local governments receive training on the National Incident Management System(NIMS)	Have all the City employees take the NIMS classes offered online	Time	City Clerk	Mayor	None needed	\$0	City employees will be able to better manage coordinated responses to emergencies	up to 3 months

Action ID	Issue/Background	Ideas for Implementation	Obstacles	Responsible Office	Partners	Potential Funding Source(s)	Cost Estimate	Benefits	Timeline
Perry-5	There are no public storm shelters in Perry. The Bar-Jac mobile home park has a storm shelter. But it is only for park residents. The committee recommended designation of several shelters throughout the community that would provide some level of protection.	Designated shelters could be used during thunderstorms, tornadoes, winter storms, or evacuations. Suggested shelters may include the schools, McCreary Recreation Center, churches, National Guard Amory, and the library.	Once shelters are designated, their locations would be publicized through local media and signage.	City-owned shelters may not have space available; private owners may not be willing to designate their buildings.	NIMS Committee	Perry Community Schools, Iowa National Guard	Little or No Cost	life safety of residents	6 months
Woodward-5	When we experience high winds, tornado, severe winter storms, extreme heat or heavy rains the potential exists that power is lost to the entire community. The generator we have recently obtained needs to be able to be connected to up to 3 facilities for use in a time of need. Currently we do not have that capability rendering the generator useless at this point.	The equipment needs to be purchased and installed in the 3 buildings, Police Station, Fire Station and City Hall and potentially any above ground shelter that is built. This will allow power to be restored to continue vital functions and provides continuity of services.	funding	City of Woodward	Police Department, Fire Department, City of Woodward, V & K Engineering, any contracted supplier of the equipment	Grants as available and city funding	\$8500/bldg. for a total of 25,500	Avoid loss of computer data, potential loss of life if medical equipment needs electricity, avoid loss of life in extreme temperatures.	12 months

Action ID	Issue/Background	Ideas for Implementation	Obstacles	Responsible Office	Partners	Potential Funding Source(s)	Cost Estimate	Benefits	Timeline
Adel-6	The current water treatment and sewer treatment facilities do not have a back-up power system for operation of these facilities in the event of power outage.	Provide a back-up power system (generators) to provide power to the water treatment and sewer treatment facilities.	lack of funding	City of Adel-City Hall	City Engineer	Local funds and FEMA Hazard Mitigation Assistance Grants or other available grant funding.	\$350,000 to \$750,000	Continued provision of water and sewer services during times of power outages as a result of severe weather.	5-10 years
Dallas Center-6	To educate citizens on the effects of the Emerald Ash Borer	Education and awareness of hazards and how to mitigate losses.	Time, personnel and cost	Park and Recreation Board	DNR	Grants and local funds	Less than \$10,000	Avoid property damage	3-4 years
Dexter-6	Additional water capacity is needed due to population growth of the City of Granger	Construct additional in-ground water tower/storage	lack of funding	Public Works Department	Dallas Co Emergency Mgmt	Combination of Funds	Over \$1,000,000	Avoid shortage of water	3-5 years
Granger-6*	Granger currently participates in the National Flood Insurance Program and is committed to ensuring that eligibility is maintained for property owners in the community to purchase flood insurance through the National Flood Insurance Program.	Annually review the floodplain ordinance and consider applying for the Community Rating System	None	City Clerk	Mayor	None needed	\$0	Prevent the cost of property damage in the event of a flood	ongoing

Action ID	Issue/Background	Ideas for Implementation	Obstacles	Responsible Office	Partners	Potential Funding Source(s)	Cost Estimate	Benefits	Timeline
Woodward-6	The City of Woodward has a bike trail and camp ground located where an old trailer park used to exist. The trail and the camp ground have nowhere for anyone to take shelter during a severe storm. This is not safe for the people camping at the camp grounds and for the bikers that are on the trail riding at all hours of the day and night. Education on open area safety/where to seek shelter is needed.	This action item could be implemented by obtaining funding, hiring contractors to complete the project, and someone to make educational material about storm and the new storm shelter. Signage, and promotion materials, as well as public events and news articles to highlight.	Funding	City of Woodward, police department, public works	All educational classes would be presented by the police department. We could also look for assistance from our local Envision Woodward club, and our parks and recreation trail committee.	All funds must come from grants, due to the City of Woodward's currently budgetary status.	\$25,000	Knowledge and education is the first step in prevention of loss of life and or property in inclement weather. It would be beneficial not only for users of the trail but also those in the entire community to become more knowledgeable about existing and potential hazards.	12 months to ongoing
Adel-7	During times of Flash Flooding, a feeder to Butler Creek becomes inundated and does not allow proper drainage.	The feeder to Butler Creek needs to be upgraded and expanded as well as additional improvements to the stormwater system to carry water away during times of flash flooding. The system needs to be bigger to carry a larger volume of water to allow for redirection of the flash flood water.	lack of funding	City of Adel-City Hall	City Engineer	City funds and available grant funds	\$1,000,000 to \$3,000,000	Alleviate flash flooding problems for businesses and residents.	5-10 years
Dallas Center-7*	To educate citizens on the availability of the National Flood Insurance Program in our community and reduce the impact of flooding and the financial impact on property owners.	Publicize availability of flood insurance to citizens and review floodplain management ordinance on a regular basis to determine if improvements/modifications are needed to prevent risk to future construction.	Time, personnel and cost	Zoning Administrator	DNR	Grants and local funds	Little or No Cost	Avoid property damage and minimize flood losses	ongoing

Action ID	Issue/Background	Ideas for Implementation	Obstacles	Responsible Office	Partners	Potential Funding Source(s)	Cost Estimate	Benefits	Timeline
Granger-7	To reduce flooding due to heavy rains	Implement ordinances for developers to follow due to growth.	Funding	Public Works Department	Engineers, Developers & Farmers	Local Funds	\$500,000 to \$1,000,000	Reduce runoff, stormwater control, & prevent downstream flooding	1 year
Adel-8*	Adel currently participates in the National Flood Insurance Program. Citizens may not be aware of the availability of flood insurance.	Provide notification to citizens, through city government publications or website, regarding the availability of flood insurance	None	City of Adel-City Hall	None identified	City funds and available grant funds	Little or No Cost	insurance can offset costs due to losses from flood events	1 year
Perry-11	If severe drought conditions diminish the water supply, the City will need to have an alternate plan.	Develop a plan and agreements to either transport water in from Xenia Rural Water District or utilize the Tyson Foods wells. The plan would need to address issues such as who would transport the water and how and where the water would be distributed to the public.	Cost	Perry Water Dept.	National Guard., Xenia Rural Water District.	Unknown-available grants and local funds from Water Dept.	\$50,000 to \$100,000	Avoid disruption of water supply	2 years
Perry-15	This is a large population of Spanish-speaking residents.	Develop a team of a few individuals that could be called upon to assist emergency personnel in communicating to the Spanish-speaking residents during emergency situations. The emergency translation team would also be available to have at the local emergency command center and/or at community shelters to keep Spanish-speaking residents informed of the situation.	cost	Perry NIMS Committee	Hispanics United for Perry/Perry Community Schools	local funds	\$2,000	Health and Safety of Residents	1 year

Action ID	Issue/Background	Ideas for Implementation	Obstacles	Responsible Office	Partners	Potential Funding Source(s)	Cost Estimate	Benefits	Timeline
Perry-19	Dallas County is located between two fault lines. The Redfield and Perry Hamilton Fault lines run along the east and west county lines. Since construction in Iowa is not built to withstand earthquakes and retrofitting buildings would be costly, the committee determined that community education would be the best way to reduce injuries.	Conduct earthquake drills in schools and encourage children to take the information home to share with their families. In addition, it is recommended that local media report about school drill events and provide additional pertinent information about what to do during an earthquake.	time and education	Building Official	Perry Community Schools	local	\$1,000	Health and Safety	2 years
Perry-21	U.S. Department of Homeland Security recommends all local governments receive training on the National Incident Management System (NIMS).	Employee Education through online courses	none	NIMS Committee	Dallas County Emergency Management	n/a	\$0	Better coordination during emergencies	6 months
Perry-22*	The City of Perry has been a participant in the NFIP since 1985.	The City should stay up-to-date with the ordinance and periodically review it to ensure its effectiveness. Enforcing this ordinance will also help to regulate new development northeast of Perry which is in the vicinity of Beaver Creek.	none	Building Official	FEMA, National Flood Insurance Program	N/A	\$0	Residents and businesses that choose to purchase flood insurance will minimize economic loss in the event of flooding.	2 years

Action ID	Issue/Background	Ideas for Implementation	Obstacles	Responsible Office	Partners	Potential Funding Source(s)	Cost Estimate	Benefits	Timeline
Perry-23	The City has a full time building inspector on staff to review building permits and plans. With a significant amount of new housing developments planned in the coming years, it will be important to continue to enforce the building codes as well as periodically review them to make sure they are applicable and enforceable.	As construction methods change and developments grows into new areas, it is important to stay up-to-date with enforcement and administration.	Cost	Building Official	City Administration	local funds	\$0	minimize damages to structures by ensuring they are built to code	ongoing
Perry-24	Clear out overgrown brush and trees in the Frog Creek drainage area to prevent flash flooding occurrences.	Trees will be removed through the hiring of a tree serve/s to remove overgrowth.	Access to entire creek area and cost	Perry Public Works	Perry Parks Department as well as City Administration	Budgeting	\$15,000	Prevent flooding of water department, public works and residential housing	2 months
Adel-DeSoto-Minburn Schools-1	To protect ADM staff and students in the event of a tornado.	Construct saferoom to provide shelter during a tornado.	Cost	Superintendent	None identified	Grants and local funds	\$500,000 to \$1,000,000	Avoid injury and death	2-3 years
Dallas Center Grimes Schools-1	There are currently no safe rooms in the school district.	Add safe rooms to current schools buildings and/or when building new facilities, include safe rooms in the construction.	lack of funding/need of new facility	Administration Office	Architect, school officials	Sales tax, PPEL, Bond, FEMA Hazard Mitigation Assistance grant funds, or other available grant funds.	\$500,000 to \$1,000,000	Ensuring life-safety of students and faculty	3-5 years

Action ID	Issue/Background	Ideas for Implementation	Obstacles	Responsible Office	Partners	Potential Funding Source(s)	Cost Estimate	Benefits	Timeline
Perry Schools-1	Life Safety from Severe Weather. Over 1,000 people at each complex during the day and large numbers at activities complex on weekends/evenings.	Seek input from staff/community and formulate needs to plan/design structure.	Available funds/dollars to implement plan/safe rooms.	Administration and Building & Grounds	City of Perry, Dallas County Emergency Management, Architects, Engineers	Combination of grants & local district funding	Over \$1,000,000	Life Safety ... save thousands of people concentrated in one area	1-3 years
Van Meter Schools-1	To protect Van Meter students, staff and citizens in the event of a tornado.	Construct saferoom to provide shelter during a tornado.	Cost	Superintendent	None identified	Local Funds and Grants	\$2.5 Million	Avoid injury and death	1-3 years
Waukee-1 Schools	Waukee School District is a growing School District. Existing buildings do not have saferooms and future buildings should consider incorporation of a saferoom.	Construct saferooms adjacent to existing school buildings and/or incorporate saferooms in the design of new school buildings.	lack of funding	Operations Department	City of Waukee, Iowa Homeland Security and Emergency Management Division	FEMA Hazard Mitigation Assistance Grants	\$100,000 to \$500,000	Life Safety of students and faculty	3-5 years
West Central Valley Schools-1	Safe rooms are needed to protect students and staff in case of a tornado.	Construct a saferoom	Cost	Superintendent	West Central Valley Staff	FEMA Hazard Mitigation Assistance grants, local funds, and other grants as available	\$320,000	Avoid death and injuries	3-6 years
Adel-DeSoto-Minburn Schools-2	To educate students on natural disasters to increase safety.	Education and awareness of hazards and how to mitigate losses.	Loss of instructional time	Superintendent	Cities of Adel, DeSoto, and Minburn	Grants and local funds	Little or No Cost	Avoid injury and death	1-2 years
Perry Schools-2	Provide Protection and Operation of Critical Facilities Due to Power Disruption from Severe Weather	Purchase generators for district buildings	Cost/Upkeep	Administration and Building & Grounds	City of Perry, Emergency Management Personnel	Combination of grants and district facility funds	\$150,000 (3 generators)	Food Storage, Heating/Cooling, Safe Haven	1 year

Action ID	Issue/Background	Ideas for Implementation	Obstacles	Responsible Office	Partners	Potential Funding Source(s)	Cost Estimate	Benefits	Timeline
Van Meter Schools-2	Storm water management is inadequate. The facilities and grounds needs better storm water management, intake, flow, discharge, and retention.	Provide more disperse intake, provide greater diameter piping, provide more points of discharge, and provide areas of retention.	Cost and demolition of existing facilities.	Superintendent	City of Van Meter	Local funds and grants	\$300,000	Reduce flash flooding and building damages	3-4 months
West Central Valley Schools-2	Safe rooms are needed to protect students and staff in case of a tornado.	Construct a saferoom	Cost	Superintendent	West Central Valley Staff	FEMA Hazard Mitigation Assistance grants, local funds, and other grants as available	\$400,000	Avoid death and injuries	3-6 years
Woodward-Granger Schools-2	The Cities of Woodward and Granger have both been identified as having no area in the community for tornado/inclement weather protection. The district is currently exploring building opportunities and will consider accommodating one community or the other with a potential safe room within these new plans.	If the District decides to build in Granger, a safe room will be considered as part of the overall plan. It will be advertised within the community and open to anyone who needs it during inclement weather.	Bond issue being passed to build the entire elementary project	Woodward-Granger Board of Education and the City of Granger	School engineer, City of Granger	Local funds, FEMA Hazard Mitigation Assistance Grants, other available grant funds.	\$750,000 to \$1,500,000	Life-safety to students, faculty, and residents that could take shelter in the saferoom	2-4 years
Van Meter Schools-3	Provide power as needed when electricity goes out.	Purchase a generator to support energy needs of the district during times of need.	Cost and facility to house it.	Superintendent	Possibly the city of Van Meter	Local funds and grants	\$100,000	Protect data from servers and to protect people in the buildings	2-3 months

Table 4.4. Action Prioritization

Action ID	Mitigation Action Title / Description	Lives Saved?	Reduced Property Damages?	Reduce need for response actions?	Will benefits exceed cost?	Social	Technical	Administrative	Political	Legal	Economic	Environment	Score	Priority
						0-unlikely, 1-maybe, 2-probably, or 3-definitely						Positive (1) Neutral (0) Negative (-1)		
Dallas County-1	County Road System-200th St-B Ave.	0	3	1	2	1	1	1	1	1	1	0	12	Medium
Dallas County-3	County Road System-205th St-Pioneer Ave.	0	3	1	2	1	1	1	1	1	1	0	12	Medium
Dallas County-4	County road System-210th St-V. Ave.	0	3	1	2	1	1	1	1	1	1	0	12	Medium
Dallas County-5	County Road System 250th St-T. Ave.	0	3	1	2	1	1	1	1	1	1	0	12	Medium
Dallas County-6	County Road System-Other	0	3	1	2	1	1	1	1	1	1	0	12	Medium
Dallas County-8	Saferooms in New Dallas County Buildings	2	0	2	3	1	1	1	1	1	1	1	14	High
Dallas County-9*	Continued enforcement and Annual Review of Floodplain Management Ordinance to include utilizing current effective regulatory maps, issuing floodplain development permits, and monitoring substantial damage / improvements	0	1	0	1	1	1	1	1	1	1	1	9	Medium
Dallas County-10	Replace aging Generator system at County EOC North campus	1	1	2	3	1	1	1	1	1	1	1	7	Medium
Dallas County-11	Move IT systems from present location to North Campus /County EOC	1	1	2	3	1	1	1	1	1	1	1	7	Medium
Adel-1	Expand/Improve Outdoor Warning Siren network	3	1	0	3	1	1	1	1	1	1	0	13	High
Bouton-1	Upgrade to Storm Drainage System	3	3	0	3	0	0	0	0	0	3	3	15	High
Dallas Center-1	Construct Public Safety Facility that includes a Saferoom and Emergency Operations Center	3	1	0	2	1	1	1	1	1	1	0	12	Medium
Dexter-1	Tree Branch Clearing from Power Lines	0	2	2	2	0	1	0	0	0	0	0	7	Medium
Granger-1	500,000 Gallon Water Tower	0	0	1	2	1	0	1	0	1	0	1	7	Medium
Linden-1	Construct New City Hall/Fire Station/Library as a Community Saferoom	2	0	1	2	1	1	1	1	1	1	1	12	Medium
Minburn-1	Safe Room	3	0	1	3	1	1	1	1	1	1	1	14	High
Van Meter-1	Saferoom Construction for Schools and Public Buildings	3	0	3	3	1	1	1	1	1	1	1	16	High

Action ID	Mitigation Action Title / Description	Lives Saved?	Reduced Property Damages?	Reduce need for response actions?	Will benefits exceed cost?	Social	Technical	Administrative	Political	Legal	Economic	Environment	Score	Priority
						0-unlikely, 1-maybe, 2-probably, or 3-definitely								
Waukee-1*	Continued enforcement and Annual Review of Floodplain Management Ordinance to include utilizing current effective regulatory maps, issuing floodplain development permits, and monitoring substantial damage / improvements	1	3	2	3	1	1	1	1	1	0	0	14	High
Adel-2	Saferoom Construction in Public Buildings and Near Outdoor Recreation Areas	3	0	1	3	1	0	0	1	1	0	0	10	Medium
Bouton-2	Construction of a Community Saferoom	3	3	0	3	0	0	0	0	0	3	3	15	High
Dallas Center-2	Educate Citizens on Disasters	1	1	1	2	1	1	1	1	1	1	0	11	Medium
DeSoto-2*	National Flood Insurance Program Public Education and continued enforcement of Floodplain Management Ordinance to include utilizing current effective regulatory maps, issuing floodplain development permits, and monitoring substantial damage / improvements	0	1	0	3	1	1	1	0	1	1	0	9	Medium
Dexter-2	Two Generators for Emergency Backup Power at Water Treatment Plant and Stand Pipe Pump	0	0	1	0	1	1	0	0	0	0	0	3	Low
Granger-2	Emergency Services Building	3	3	1	3	1	0	1	0	1	1	1	15	High
Minburn-2	Install Transfer Switch to Enable a Portable Generator to be Hooked up to City Hall	1	0	0	3	1	1	1	1	1	1	1	11	Medium
Perry-2	Cultural Severe Weather Education	1	2	1	2	1	1	1	1	1	1	1	13	High
Redfield-2	Construct Community Saferoom	3	0	0	3	1	1	1	1	0	1	0	11	Medium
Waukee-2	Construction of Tornado Saferooms in Public Areas	3	0	1	3	1	1	1	1	1	0	0	12	Medium
Woodward-2	Construction of Saferooms/Shelter	3	1	1	3	1	1	0	1	1	0	0	12	Medium
Adel-3	Maintain/Upgrade levee System/Floodwalls	1	3	1	3	1	1	1	1	1	1	1	15	High
Dallas Center-3	Upgrade/Expand/Improve Stormwater Management System	0	2	1	2	1	1	1	1	1	1	0	11	Medium
DeSoto-3	Generator for new WTP	0	0	0	3	1	1	1	1	1	1	0	9	Medium
Minburn-3	Public Education	1	2	1	2	1	1	1	1	1	1	1	13	High
Perry-3	Bury Power Lines and Phone Lines Under Ground	1	3	3	1	1	1	1	1	1	1	1	15	High

Action ID	Mitigation Action Title / Description	Lives Saved?	Reduced Property Damages?	Reduce need for response actions?	Will benefits exceed cost?	Social	Technical	Administrative	Political	Legal	Economic	Environment	Score	Priority
						0-unlikely, 1-maybe, 2-probably, or 3-definitely								
Redfield-3*	Continued enforcement and Annual Review of Floodplain Management Ordinance to include utilizing current effective regulatory maps, issuing floodplain development permits, and monitoring substantial damage / improvements	0	2	1	3	0	1	1	0	1	1	1	11	Medium
Van Meter-3*	Continued enforcement of Floodplain Management Ordinance to include utilizing current effective regulatory maps, issuing floodplain development permits, and monitoring substantial damage / improvements	0	0	3	3	1	1	1	1	1	1	1	13	High
Waukee-3	Drainage Improvements to Alleviate Flash Flooding in the area of LA Grant and Booth Drive	0	1	2	2	1	1	1	1	1	0	1	11	Medium
Woodward-3	Install Second Warning Siren in Annexed Areas	3	2	2	2	1	1	1	1	1	1	1	16	High
Adel-4	Purchase Floodprone Properties	0	3	0	1	0	0	0	0	0	0	1	5	Low
Dallas Center-4	Back-up Power for Critical Facilities	0	2	2	3	1	1	1	1	1	0		12	Medium
Dawson-4*	Public Information Regarding Availability of Flood Insurance and continued enforcement of Floodplain Management Ordinance to include utilizing current effective regulatory maps, issuing floodplain development permits, and monitoring substantial damage / improvements	0	0	0	3	1	1	1	1	1	1	0	9	Medium
Dexter-4	Educate residents about natural disasters	1	0	1	2	1	0	0	0	0	1	0	6	Low
Granger-4	Tornado Siren	3	1	1	2	1	1	1	1	1	1	0	13	High
Van Meter-4	Public Education on Hazards	3	3	3	3	1	1	1	1	1	1	1	19	High
Woodward-4	Repair/Replace/Upgrade Storm Sewer Program	3	3	3	3	1	1	1	1	1	1	1	19	High
Adel-5	Stream Corridor Restoration	0	0	0	0	0	0	0	0	0	0	1	1	Low
Dallas Center-5	Expand/Improve Outdoor Warning Siren network	2	0	2	3	1	1	1	1	1	1	1	14	High

Action ID	Mitigation Action Title / Description	Lives Saved?	Reduced Property Damages?	Reduce need for response actions?	Will benefits exceed cost?	Social	Technical	Administrative	Political	Legal	Economic	Environment	Score	Priority
						0-unlikely, 1-maybe, 2-probably, or 3-definitely								
Dexter-5	Inform citizens of tornado shelter location and maintain supply of water and first aid supplies.	1	0	1	1	1	0	0	0	0	0	0	4	Low
Granger-5	All City Employees NIMS Certified	1	0	1	0	0	1	1	0	1	0	0	5	Low
Perry-5	Designate Public Shelters	2	0	2	3	1	1	1	1	1	1	0	13	High
Woodward-5	Install Transfer Switches and Connections on Critical Facilities to Enable Generator Hook Up	3	3	2	3	1	1	1	1	1	1	1	18	High
Adel-6	Back-up Power for Critical Facilities	0	3	3	3	1	1	1	1	1	1	1	16	High
Dallas Center-6	Emerald Ash Borer Education	0	1	0	2	1	1	1	1	1	1	1	10	Medium
Dexter-6	Additional Water Supply	1	0	1	1	1	1	0	0	0	0	0	5	Low
Granger-6*	Continued enforcement and Annual Review of Floodplain Management Ordinance to include utilizing current effective regulatory maps, issuing floodplain development permits, and monitoring substantial damage / improvements	0	1	1	1	1	1	0	0	1	1	1	8	Medium
Woodward-6	Community Education Initiative	2	1	2	1	1	1	1	1	1	1	1	13	High
Adel-7	Upgrade/Expand/Improve Stormwater Management System	0	3	3	2	1	1	1	1	1	1	1	15	High
Dallas Center-7*	Continued enforcement of Floodplain Management Ordinance to include utilizing current effective regulatory maps, issuing floodplain development permits, and monitoring substantial damage / improvements	1	3	1	3	1	1	1	1	1	1	1	15	High
Granger-7	Stormwater Management & Soil Erosion & Sediment Control	0	3	1	3	1	1	1	0	0	1	1	12	Medium
Adel-8*	Continued enforcement of Floodplain Management Ordinance to include utilizing current effective regulatory maps, issuing floodplain development permits, and monitoring substantial damage / improvements	0	0	0	3	1	1	1	1	1	1	1	10	Medium
Perry-11	Develop a Plan for Emergency Water Supply	1	1	2	2	1	1	1	1	1	1	0	12	Medium

Action ID	Mitigation Action Title / Description	Lives Saved?	Reduced Property Damages?	Reduce need for response actions?	Will benefits exceed cost?	Social	Technical	Administrative	Political	Legal	Economic	Environment	Score	Priority
						0-unlikely, 1-maybe, 2-probably, or 3-definitely								
Perry-15	Establish an Emergency Translation Team	1	1	0	1	1	1	1	1	1	1	0	9	Medium
Perry-19	Conduct an Earthquake Drill at Schools	1	0	1	1	1	1	1	1	1	1	0	9	Medium
Perry-21	Have all City Employees NIMS Certified	1	0	0	2	1	1	1	1	1	1	0	9	Medium
Perry-22*	Public Information Regarding Availability of Flood Insurance and continued enforcement of Floodplain Management Ordinance to include utilizing current effective regulatory maps, issuing floodplain development permits, and monitoring substantial damage / improvements	1	2	2	3	1	1	1	1	1	1	1	15	High
Perry-23	Continue to Enforce Local Building Codes	1	3	2	3	1	1	1	1	1	1	0	15	High
Perry-24	Clear Brush from Frog Creek	0	2	1	2	1	1	1	1	1	1	1	12	Medium
Adel-DeSoto-Minburn Schools-1	Saferoom Construction	2	1	2	1	1	1	1	1	1	1	1	13	High
Dallas Center Grimes Schools-1	Saferoom Construction	2	0	2	3	1	1	1	1	1	1	1	14	High
Perry Schools-1	Saferooms at HS/MS and Elementary Facilities	2	0	2	3	1	1	1	1	1	1	1	14	High
Van Meter Schools-1	Saferoom Construction	2	1	2	1	1	1	1	1	1	1	1	13	High
Waukee-1 Schools	Construction of Tornado Saferooms	3	0	2	3	1	1	1	1	1	1	1	15	High
West Central Valley Schools-1	Dexter Elementary Saferoom Construction	2	1	1	3	1	1	1	1	1	1	1	14	High
Adel-DeSoto-Minburn Schools-2	Educate Students on Disasters	1	0	1	2	1	1	1	1	1	1	1	11	Medium
Perry Schools-2	Back-up Power Generator	0	2	2	3	1	1	1	1	1	1	0	13	High
Van Meter Schools-2	Van Meter Schools Storm Water Drainage	2	1	2	1	1	1	1	1	1	1	1	13	High

Action ID	Mitigation Action Title / Description	Lives Saved?	Reduced Property Damages?	Reduce need for response actions?	Will benefits exceed cost?	Social	Technical	Administrative	Political	Legal	Economic	Environment	Score	Priority
						0-unlikely, 1-maybe, 2-probably, or 3-definitely								
West Central Valley Schools-2	Middle School in Redfield Saferoom Construction	2	1	1	3	1	1	1	1	1	1	1	14	High
Woodward-Granger Schools-2	Woodward-Granger Saferoom	3	1	2	3	1	1	1	1	0	1	1	15	High
Van Meter Schools-3	Purchase Generator	2	1	2	1	1	1	1	1	1	1	1	13	High