Chapter 5- Mitigation Strategy

This section presents the mitigation strategy developed by the Hazard Mitigation Planning Committee (HMPC) and the participating jurisdictions based on the county-wide risk assessment as well as each city's strategies. The mitigation strategies were developed through a collaborative group process and consist of general goal statements to guide the Participating 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 on those found in FEMA publication 386-3, *Developing a Mitigation Plan* (April, 2003):

- Goals – General guidelines that explain what you want to achieve. They are usually long-term, policy-type statements and represent broad visions
- Strategies – Implementation steps to attain the identified goals
- Mitigation Actions – Specific actions that help achieve goals and objectives

Goals/Strategies

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.

Goals were used to provide direction for reducing hazard-related losses in the Participating Jurisdictions, and strategies identified implementation areas for achieving identified goals:

Goal 1: Minimize vulnerability of the people and their property in the Participating Jurisdictions to the impacts of hazards

Strategy 1: Develop safe and functioning shelters and evacuation plans for the public in the event of a disaster

Strategy 2: Provide ample warning to people and business to reduce loss of life or property

Strategy 3: Develop hazard specific plans, conduct studies or assessments, and retrofit cities to mitigate for hazards and minimize their impact

Strategy 4: Minimize and control the impact of hazard events through enacting or updating ordinances, permits, laws or regulations

Strategy 5: Increase public knowledge regarding the location and use of community shelters and evacuation sites

Goal 2: Protect critical facilities, infrastructure and other community assets from the impacts of hazards

Strategy 1: Ensure that communities have the ability to take necessary actions to lessen the impact of a disaster on the community

Strategy 2: Maintain the function of critical facilities and services to provide continued support in the event of a disaster

Strategy 3: Develop hazard specific plans, conduct studies or assessments, and retrofit facilities, infrastructure and community assets to mitigate for hazards and minimize their impact

Strategy 4: Minimize and control the impact of hazard events through enacting or updating ordinances, permits, laws or regulations

Goal 3: Improve education and awareness regarding hazards and risk in the Participating Jurisdictions

Strategy 1: Increase public knowledge and awareness of potential hazards and the individual and collaborative actions that can be taken to reduce or eliminate the risk and impact of an event

Strategy 2: Increase public knowledge regarding the location and use of community shelters and evacuation sites

Goal 4: Strengthen communication among agencies and between agencies and the public

Strategy 1: Ensure that emergency responders have the ability and protocol to communicate effectively with one another and the public before, during and after a hazard event

Strategy 2: Increase public knowledge and awareness of potential hazards and the warning and response systems in place to react to an event

Strategy 3: Improve communication and coordination between federal, state and local experts responsible for assisting the public after a hazard event has occurred

Identification and Analysis of Mitigation Actions

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.

After review of hazards and defining the level of concern placed on each by the county and its communities, mitigation actions were developed by each jurisdiction to address those hazards deemed most critical. Actions fell into broad categories as defined below:

- **Prevention:** Administrative or regulatory actions or processes that influence the way land and buildings are developed and built
- **Property protection:** Actions that involve the modification of existing buildings or structures to protect them from a hazard or remove them for the hazard area
- **Structural:** Actions that involve the construction of structures to reduce the impact of hazards
- **Natural resource protection:** Actions that, in addition to minimizing hazard losses, also preserve or restore the functions of natural systems
- **Emergency services:** Actions that protect people and property during and immediately after a disaster or hazard event
- **Public education and awareness:** Actions to inform and educate citizens, elected officials, and property owners about the hazards and potential ways to mitigate them

Meetings open to the public were held in each community and by the planning committee to review past mitigation actions from the previous hazard mitigation plan, brainstorm new possible mitigation

actions and discuss all for inclusion in this updated plan. For each action identified in this plan, a mitigation action implementation worksheet and STAPLEE score was completed and included. The STAPLEE priorities are found in "Implementation of Mitigation Actions" and the implementation worksheets identify High Priority Actions, Medium Priority Actions, and Low Priority Actions.

Implementation of Mitigation Actions

Requirement §201.6(c)(3)(iii):
[The mitigation strategy shall include] an action strategy describing how the actions identified in paragraph (c)(3)(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.

After the actions to include in the mitigation strategy for each of the jurisdictions were determined, a STAPLEE tool was used to help guide a discussion to prioritize the mitigation actions. STAPLEE is used to assess the costs and 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?
- **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?

The STAPLEE criteria were reviewed prior to the prioritization discussion. Participating attendees then discussed each proposed action and its feasibility given the STAPLEE criteria, then recorded the priority level discussed below. Action priorities were also weighed in their ability to address or mitigate hazards that were given a high level of planning significance (priority) by **any** participating jurisdiction:

- Hazardous Materials
- Flooding
- Hailstorms
- Transportation Incidents
- Tornadoes/Windstorms
- Winter Storms
- Landslides
- Infrastructure Failure

Based on high feasibility (through STAPLEE criteria) and ability to address high priority hazards (through CPRI scoring), each action was prioritized as high, medium or low:

- High Priority = high feasibility and addresses higher priority hazards
- Medium Priority = fairly feasible and addresses moderate to high priority hazards
- Low Priority = low feasibility and addresses low to moderate priority hazards

Table 50 lists the general mitigation actions the Participating Jurisdictions selected to include in the plan, the action category, goals and hazards addressed by the mitigation action. More details regarding the specific actions by jurisdiction are found in: High Priority Actions, Medium Priority Actions, and Low Priority Actions.

Table 50: General Mitigation Actions by Jurisdiction and Priority

Mitigation Action:	Jurisdiction:	Action Category:	Priority:	Goal Addressed:	Priority Hazard Addressed:
Establish and maintain well-equipped, well-trained emergency response capabilities with active partnerships	All	Emergency Services	High	1,2,3,4	All Priority Hazards
Purchase/improve warning & alert notification systems	County, Waterville, Waukon, Community School Districts, NICC	Emergency Services	High	1,2,4	All Priority Hazards
Develop, upgrade, enhance, and protect infrastructure, and/or critical facilities	County, New Albin, Postville, Waukon	Property Protection, Emergency Services, Structural, Natural Resource Protection	High	1,2	All Priority Hazards
Develop city/county/school codes or plans to address hazard issues	All	Prevention, Property Protection, Natural Resource Protection, Public Education & Awareness	High	1,2,3,4	All Priority Hazards
Outreach to the public about hazards/encourage pre-disaster and recovery planning	All	Prevention, Public Education and Awareness	High	1,2,3,4	All Priority Hazards
Provide increased flood mitigation efforts and enhancements	County, Harpers Ferry, Waukon	Property Protection, Structural, Natural Resource Protection, Public Education & Awareness	Medium	1,2,4	All Floods
Consider the application and construction of on-road structures to protect county infrastructure from flooding	County	Property Protection, Structural, Natural Resource Protection	Medium	1,2	All Floods

Mitigation Action:	Jurisdiction:	Action Category:	Priority:	Goal Addressed:	Priority Hazard Addressed:
Generators/transfer switches/back-up power supply	County, Harpers Ferry, Postville, Waterville, Lansing, Community School Districts, NICC	Emergency Services	Medium	1,2,4	All Priority Hazards
Ensure the plan is updated prior to expiration, and promote to the public	County	Prevention, Public Education and Awareness	Medium	1,2,3,4	All Priority Hazards
Construct and stock FEMA-compliant tornado safe room(s)	County, Postville CSD	Structural, Emergency Services	Medium	1,2	All Storms
Review routes in the county posing risk for truck accidents/materials spills	County	Emergency Services, Public Education and Awareness, Structural	Low	3,4	Hazardous Materials, Transportation Incident
Participate in watershed/waterway planning and initiatives	County	Property Protection, Structural, Natural Resource Protection	Low	1,2	All Floods
Acquire and demolish damaged/nuisance structures	Postville	Property Protection, Natural Resource Protection	Low	1,2	All Priority Hazards
NFIP participation / consideration	All	Prevention, Public Education & Awareness	Low	1,2,3	All Floods
Create, maintain and utilize a communication network for quantity and quality reporting along water sources	County	Property Protection, Natural Resource Protection, Public Education & Awareness, Emergency Services	Low	1,2,3,4	All Floods

Strategies for hazard mitigation in any jurisdiction reduce overall damage in the county. Implementation of the actions will be undertaken by the county and participating jurisdictions. Not all of the mitigation actions included in the plan are relevant to all jurisdictions. The following tables provide more detailed information for each general mitigation action listed in Table 50, including the jurisdiction and its specific action, the responsible agency for pursuing the action, potential funding

sources and timeframes. Timeframes listed as “ongoing” indicate that the action is something that the jurisdiction has started and will continue to pursue and/or an action (like training) that re-occurs throughout the life of the planning document. Specific actions can also be found listed in each jurisdictional section of this plan.

Requirement §201.6(c)(3)(iv):

For multi-jurisdictional plans, there must be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan

High Priority Actions

1. Establish and maintain well-equipped, well-trained emergency response capabilities with active partnerships

Jurisdiction:	Specific Actions:	Responsible Agency:	Funding Source:	Timeframe:	Cost:
Allamakee County	Train a CERT Team (Community Emergency Response Team) to perform limited life-saving capabilities to aid First Responders	Allamakee EMA	EMA budget, local funds/grants, possible no interest loans through REC	1 – 3 yrs.	$3,000 – $5,000
	Work with public health to develop an inventory of special needs individuals to provide to emergency response teams	Allamakee Public Health, Allamakee EMA	Time	Ongoing	N/A
Harpers Ferry	Maintain/improve emergency responder equipment & training	Harpers Ferry Rural Fire Protection District	Safety/fire grants, participant fees, local fundraising, Community Foundation funds	Ongoing	>$10,000 & <$100,000
	Maintain partnerships for effective and prompt emergency response	Harpers Ferry Rural Fire Protection District & City Council	City general funds	Ongoing	<$10,000
Lansing	Maintain/improve emergency responder equipment & training	Lansing/New Albin Police Department and Lansing Fire Department	Safety/fire grants, participant fees, local fundraising, Community Foundation funds	Ongoing	>$10,000 & <$100,000
New Albin	Expand/enhance fire district facility to accommodate additional equipment (hose drying area) and to create a larger training / meeting room	New Albin Fire Department	Fire grants, local fundraising, USDA, possible no interest loans through REC, tax referendum	5 Years	Unknown
	Maintain/improve emergency responder equipment and training	New Albin Fire Dept., Lansing/New Albin Police Dept. and First Responders	Safety/fire grants, participant fees, local fundraising, Community Foundation funds	Ongoing	>$10,000 & <$100,000
	Additional full-time police officer and surveillance equipment	Lansing/New Albin Police Dept.	For equipment: safety grants, local fundraising, Community Foundation	5 years	>$10,000 & <$100,000

	City government and schools to organize ALICE or other active shooter trainings through local law enforcement	Lansing/New Albin Police Dept., New Albin City Council	Local fundraising	1-3 years	<$1,000
Postville	Additional/enhanced fire department training and equipment/supplies	Postville Fire Dept.	Fire grants, participant fees, local fundraising, Community Foundation	Ongoing	>$10,000 & <$100,000
	City government and schools to organize ALICE or other active shooter trainings through local law enforcement	Postville Police Dept., and City of Postville	Local fundraising	1-3 years	<$1,000
Waterville	Maintain partnerships for effective and prompt emergency response	Waterville Rural Fire Protection District	City general funds	Ongoing	<$10,000
Waukon	Maintain/improve emergency responder equipment and training	Waukon Area Fire Protection District, Waukon Police Dept., City Manager	Safety/fire grants, participant fees, local fundraising, Community Foundation funds	Ongoing	>$10,000 & <$100,000
	New/enhanced police station	Waukon Policy Dept., City Manager, City Council	Safety grants, local fundraising, USDA, possible no interest loans through REC	5 Years	$250,000-$500,000

2. Purchase/improve warning & alert notification systems

Jurisdiction:	Specific Actions:	Responsible Agency:	Funding Source:	Timeframe:	Cost:
Allamakee County	Continue to use and build public knowledge of warning systems/alert notification providers, including reverse 911 through county dispatch, Alert Iowa, and Code Red	Allamakee EMA	Time	Ongoing	<$1,000
	County/cities to transition to sirens with the capability for automated activation by the Allamakee County Sheriff's Office	Allamakee EMA	HMGP, Community Foundation funds, local match/fundraising	1 – 2 years after funding	Unknown
Waterville	New/enhanced emergency warning system	Waterville City Council	HMGP, City general funds, Community Foundation funds	1 – 2 years after funding	>$10,000 & <$100,000

Waukon	Upgrade city's four emergency sirens	Waukon City Council, Police Dept	HMGP, City general funds, Community Foundation funds	Ongoing	$10,000-$50,000
Community School Districts / NICC	Implement new alert systems	Community School Districts & NICC	General funds, local	Ongoing	< $9,000

3. *Develop, upgrade, enhance, and protect infrastructure, and/or critical facilities*

Jurisdiction:	Specific Actions:	Responsible Agency:	Funding Source:	Timeframe:	Cost:
Allamakee County	Maintain transportation infrastructure, including addressing safety and functionality during storm events (e.g. stormwater runoff minimization, debris cleanup at bridges, etc.)	Allamakee County Engineer and EMA	Local, state & federal road/bridge funds, CDBG, FEMA (HMGP, PDM, FMA), USDA, IDNR (SRF program)	Ongoing	Variable, >$1,000,000
New Albin	New or enhanced water distribution system, including new well, water mains, hydrants, meters and valves	New Albin City Council	City general/enterprise funds, CDBG, USDA, IDNR (SRF program)	Ongoing	>$100,000 & <$300,000
	Improved/enhanced infrastructure sought including new/enhanced lagoonless sewer plant	New Albin City Council	City general/enterprise funds, CDBG, USDA, IDNR (SRF program)	1 – 2 years after funding	>$1,000,000
Postville	Maintain/enhance water distribution system	Postville City Council	City general/enterprise funds, CDBG, USDA, IDNR (SRF program)	Ongoing	>$100,000 & <$300,000
Waukon	Complete new sewer treatment plant	Waukon City Council	City general/enterprise funds, CDBG, USDA, IDNR (SRF program)	Feb. 2020	$8.779 million
	Continue to update/enhance the water distribution system	Waukon City Council	City general/enterprise funds, CDBG, USDA, IDNR (SRF program)	Ongoing	>$100,000 & <$300,000
	Improved/enhanced street infrastructure (Hwy 9/76 to downtown, to Quillin's west, sidewalks)	Waukon City Council	City general funds, USDA, DOT STBGP, DOT TAP, SRF applied for sidewalk/bioswale improvements	On-going, Apr.-Sept. 2019 DOT sidewalks	$4.5 million

	Improved/enhanced storm sewer infrastructure sought, including replacing outdated storm sewer lines	Waukon City Council	City general funds, USDA, DOT STBGP, FEMA grants	On-going	>$1,000,000

4. *Develop city/county codes or plans to address hazard issues*

Jurisdiction:	Specific Actions:	Responsible Agency:	Funding Source:	Timeframe:	Cost:
Allamakee County	Create a countywide Community Shelter Plan	Allamakee County EMA	Time, local funding	1 – 2 years	<$5,000 (inventory of basic needs - emergencies)
	Create a Rail Response Plan to prepare for the possibility of a rail accident	Allamakee County EMA	Time	1 – 2 years	N/A
	Research and/or update zoning regulations to control development on landslide prone areas and steep slopes	Allamakee Zoning Administrator & County Supervisors	Time	Ongoing	N/A
Harpers Ferry	Participate in Allamakee EMA effort to create a county Community Shelter Plan	Harpers Ferry City Council	Time, local funding (shelter needs)	1 – 2 years	<$5,000 (emergency basic needs)
	Participate in Allamakee EMA effort to create a Rail Response Plan	Harpers Ferry City Council	Time	1 – 2 years	N/A
Lansing	Participate in Allamakee EMA effort to create a county Community Shelter Plan	Lansing City Council	Time, local funding (shelter needs)	1 – 2 years	<$5,000 (emergency basic needs)
	Participate in Allamakee EMA effort to create a Rail Response Plan	Lansing City Council	Time	1 – 2 years	N/A
	Consider creation of overlay district or zoning requirements to protect landslide prone areas	Lansing City Council	Time	Ongoing	N/A
New Albin	Participate in Allamakee EMA effort to create a county Community Shelter Plan	New Albin City Council	Time, local funding (shelter needs)	1 – 2 years	<$5,000 (emergency basic needs)
	Participate in Allamakee EMA effort to create a Rail Response Plan	New Albin City Council	Time	1 – 2 years	N/A

Postville	Participate in Allamakee EMA effort to create a county Community Shelter Plan	Postville City Council	Time, local funding (shelter needs)	1 – 2 years	<$5,000 (emergency basic needs)
	Participate in Allamakee EMA effort to create a Rail Response Plan	Postville City Council	Time	1 – 2 years	N/A
	Participate in Allamakee EMA update to the HAZMAT Response Plan	Postville City Council	Time	1 – 2 years	N/A
Waterville	Participate in Allamakee EMA effort to create a county Community Shelter Plan	Waterville City Council	Time, local funding (shelter needs)	1 – 2 years	<$5,000 (emergency basic needs)
Waukon	Participate in Allamakee EMA effort to create a county Community Shelter Plan	Waukon City Council	Time, local funding (shelter needs)	1 – 2 years	<$5,000 (emergency basic needs)
	Participate in Allamakee EMA update to the HAZMAT Response Plan	Waukon City Council	Time	1 – 2 years	N/A
	Create and implement a Continuity of Operations Plan (COOP) for the community	Waukon City Council	Local funding	1-3 years	<$5,000
	Complete an Infiltration/Inflow study for the city's collection systems	Waukon City Council	Time, local funding sources, USDA Search Grant, IDNR SRF 0% interest loans, FMA	Survey in April 2018	Unknown
	Create and implement a Wellhead Protection Plan for rural areas	Waukon City Council	Local funding	1-3 years	<$1,000
Community School Districts / NICC	Review of current facility & infrastructure protection plans/practices	CSDs & NICC	Local funding	1- 2 years	Est. <$5,000
	Update and improve emergency response plans				

5. *Outreach to the public about hazards/encourage pre-disaster and recovery planning*

Jurisdiction:	Specific Actions:	Responsible Agency:	Funding Source:	Timeframe:	Cost:
Allamakee County	Lead initiative to form a countywide disaster response coalition to serve	Allamakee County EMA	Time, local funding sources	1 – 2 years	N/A

	residents during and following storm or emergency events				
Harpers Ferry	Form/participate in county volunteer group for storms/emergency events	Harpers Ferry Rural Fire Protection District	Time	1 – 2 years	N/A
Lansing	Form/participate in county volunteer group for storms/emergency events	Lansing Fire Depart.	Time	1 – 2 years, ongoing	N/A
	Educate the public about landslide potential, and building and development precautions to avoid landslide incidents	Lansing City Council/Staff	Time, local funding for education/outreach	Ongoing	<$1,000
New Albin	Form/participate in county volunteer group for storms/emergency events	New Albin Fire Dept.	Time	1 – 2 years, ongoing	N/A
Postville	Form/participate in county volunteer group for storms/emergency events	Postville Fire Dept.	Time	1 – 2 years, ongoing	N/A
Waterville	Form/participate in county volunteer group for storms/emergency events	Waterville Rural Fire Protection District	Time	1 – 2 years, ongoing	N/A
Waukon	Form/participate in county volunteer group for storms/emergency events	Waukon Fire Dept.	Time	1 – 2 years, ongoing	N/A

Medium Priority Actions

1. Provide increased flood mitigation efforts and enhancements

Jurisdiction:	Specific Actions:	Responsible Agency:	Funding Source:	Timeframe:	Cost:
Allamakee County	Evaluate areas that experience flood damage, and for which mitigation tools and/or strategies could minimize flooding vulnerabilities	Allamakee Engineer and EMA	Local funding, federal grants	Ongoing	>$10,000
	Participate in regional watershed planning and flood mitigation initiatives	Allamakee Supervisors, Allamakee Engineer & EMA	Local funding sources, private funding sources, grant funds	Ongoing	>$100,000
Harpers Ferry	Stormwater management as needed, including infiltration, retention basins, bioswale, rain garden, & siltation removal projects	Harpers Ferry City Council	City general funds, CDBG, FEMA (HMGP, PDM, FMA), USDA, IDNR (SRF program)	Ongoing	>$10,000 & <$100,000
Waukon	Stormwater management in the community as needed, including	Waukon City Council	City general funds, CDBG, FEMA (HMGP,	Ongoing	>$10,000 & <$100,000

	infiltration, retention basins, bioswales, rain gardens, & siltation removal projects		PDM, FMA), USDA, IDNR (SRF program)		

2. *Consider the application and construction of on-road structures to protect county infrastructure from flooding*

Jurisdiction:	Specific Actions:	Responsible Agency:	Funding Source:	Timeframe:	Cost:
Allamakee County	Construct on-road structures as funding becomes available; focus on Coon Creek Watershed	Allamakee County Engineer	Local funding sources, HUD NDR	Ongoing	>$100,000

3. *Generators/transfer switches/back-up power supply*

Jurisdiction:	Specific Actions:	Responsible Agency:	Funding Source:	Timeframe:	Cost:
Allamakee County	Assist cities in identifying generator needs, including considering transfer switches, storage location and fuel needs	Allamakee EMA	Time, local funding sources, grants	1 – 2 years	City $ for generators- $20,000-$50,000
Community School Districts / NICC	School to attain additional generators as needed	Community School Districts & NICC	Local sources, FEMA (HMGP, PDM), Community Foundation	Ongoing	$20,000-$50,000
Harpers Ferry	Attain a new generator for the fire station	Harpers Ferry Fire Dept.	City general funds, Fire grants, FEMA (HMGP, PDM), Community Foundation funds	1yr. after funding	$20,000-$50,000
Postville	Additional generator(s), including at the water plant and fire station	Postville City Council	City general funds, FEMA (HMGP, PDM), Community Foundation	1yr. after funding	$20,000-$50,000
Waterville	New generator for the emergency warning siren located at the fire station	Waterville City Council	City general funds, FEMA (HMGP, PDM), Community Foundation	1yr. after funding	$20,000-$50,000
Lansing	Additional back-up generators for utility services	Lansing City Council	City general funds, FEMA (HMGP, PDM), Community Foundation	1yr. after funding	$20,000-$50,000

4. *Ensure the plan is updated prior to expiration, and promote the plan to the public*

Jurisdiction:	Specific Actions:	Responsible Agency:	Funding Source:	Timeframe:	Cost:
Allamakee County	Ensure that the Allamakee County MJ-7 Hazard Mitigation plan remains current and publicly available, is updated through public participation and is submitted for approval every 5 years with annual updates as needed	Allamakee County EMA	Time, County emergency mgmt. funds, HMPG	On-going	>$10,000 & <$30,000

5. *Construct and stock FEMA-compliant tornado safe room(s)*

Jurisdiction:	Specific Actions:	Responsible Agency:	Funding Source:	Timeframe:	Cost:
Allamakee County	Inventory high risk areas in the county (e.g. mobile home parks, recreation areas, schools, etc.), and assess locations for safe room sites	Allamakee County EMA	Time	Ongoing	N/A
Postville CSD	School district to construct a facility outside of the floodplain that can be used as a storm shelter / tornado safe room	Postville CSD	Local sources, FEMA (HMGP, PDM), Community Foundation	Ongoing	>$500,000

Low Priority Actions

1. *Review routes in the county posing risk for truck accidents/materials spills*

Jurisdiction:	Specific Actions:	Responsible Agency:	Funding Source:	Timeframe:	Cost:
Allamakee County	Complete study of Volney Hill Curve fertilizer spill, and pursue mitigation actions if/when identified	Allamakee Co. Engineer	TEAP/IDOT	Complete 2/15/18	$12,645
	Assess other county roads that are at risk of truck accidents/hazardous materials accidents due to steep topography, curvature, or conditions. Research applicable mitigation measures, and pursue implementation of measures at high risk locations.	Allamakee Co. Engineer and Allamakee EMA	LRSP/IDOT	Complete 7/15/18	Countywide $30,000 Full LRSP Study

2. *Participate in watershed/waterway planning and initiatives*

Jurisdiction:	Specific Actions:	Responsible Agency:	Funding Source:	Timeframe:	Cost:
Allamakee County	Review Upper Iowa River Watershed Management Authority Plan once complete, and implement recommended flood mitigation measures across county as applicable	Upper Iowa River WMA, County Supervisors, Allamakee EMC, Allamakee Co. Engineer	HUD and local match	1 – 3 years	>$500,000
	Continue involvement in Upper Iowa River Watershed Management Authority planning and engagement	Allamakee Soil & Water Conservation District, NEI RC&D	Local funds, grants	Ongoing	Unknown
	Pursue opportunities for engaging cities and county agencies in watershed and flood mitigation planning and education	Allamakee Supervisors, city governments	Local funding sources, grants	Ongoing	Unknown

3. *Acquire and demolish damaged structures*

Jurisdiction:	Specific Actions:	Responsible Agency:	Funding Source:	Timeframe:	Cost:
Postville	Acquire and demolish damaged/nuisance structures	Postville City Council	HMGP grant, DNR grant, IEDA grant	Ongoing	Estimated $2,000 - $60,000 per property

Requirement §201.6(c)(3)(ii):
[The mitigation plan} must address each jurisdiction's participation in the NFIP and continued compliance with NFIP requirements, as appropriate

4. *NFIP participation/consideration*

Jurisdiction:	Specific Actions:	Responsible Agency:	Funding Source:	Timeframe:	Cost:
Allamakee County	Continue membership in NFIP. Update floodplain regulations to continue to meet or exceed minimum State of Iowa regulations. Maintain work of floodplain administrator as identified in adopted floodplain ordinance.	Allamakee Supervisors	County general funds	Ongoing	>$10,000 & <$100,000

Harpers Ferry	Continue membership in NFIP. Update floodplain regulations to continue to meet or exceed minimum State of Iowa regulations. Maintain work of floodplain administrator as identified in adopted floodplain ordinance.	Harpers Ferry City Council	City general funds	Ongoing	>$10,000 & <$100,000
Lansing	Continue membership in NFIP. Update floodplain regulations to continue to meet or exceed minimum State of Iowa regulations. Maintain work of floodplain administrator as identified in adopted floodplain ordinance.	Lansing City Council	City general funds	Ongoing	>$10,000 & <$100,000
New Albin	Continue membership in NFIP. Update floodplain regulations to continue to meet or exceed minimum State of Iowa regulations. Maintain work of floodplain administrator as identified in adopted floodplain ordinance.	New Albin City Council	City general funds	Ongoing	>$10,000 & <$100,000
Postville	Continue membership in NFIP. Update floodplain regulations to continue to meet or exceed minimum State of Iowa regulations. Maintain work of floodplain administrator as identified in adopted floodplain ordinance.	Postville City Council	City general funds	Ongoing	>$10,000 & <$100,000
Waterville	Continue membership in NFIP. Update floodplain regulations to continue to meet or exceed minimum State of Iowa regulations. Maintain work of floodplain administrator as identified in adopted floodplain ordinance.	Waterville City Council	City general funds	Ongoing	>$10,000 & <$100,000
Waukon	Continue membership in NFIP. Update floodplain regulations to continue to meet or exceed minimum State of Iowa regulations. Maintain work of floodplain administrator as identified in adopted floodplain ordinance.	Waukon City Council	City general funds	Ongoing	>$10,000 & <$100,000

5. *Create, maintain and utilize a communication network for quantity and quality reporting along water sources*

Jurisdiction:	Specific Actions:	Responsible Agency:	Funding Source:	Timeframe:	Cost:
Allamakee County	Develop a communication plan or system for local/county points of contact to exchange information on rainfall amounts, flooding conditions and contamination of waterways or water sources	Allamakee EMA	Time	Ongoing	N/A