PLANNING & DEVELOPMENT

600 West Fourth Street Davenport, Iowa 52801-1106

E-mail: planning@scottcountyiowa.com

Office: (563) 326-8643 Fax: (563) 326-8257



Timothy Huey Director

To: Mahesh Sharma, County Administrator

From: Timothy Huey, Planning Director

Date: September 12, 2017

Re: Hazards Priorities, Mitigation Actions and Goals Review for Scott County Hazard

Mitigation Plan

Attached is the memo from Bi-State Regional Commission on the process to update the Scott County Multi-jurisdictional Hazard Mitigation Plan. The original plan was adopted in 2012 and needs to be updated every five years. The original scoring sheet from the 2012 Plan is included as well as the current recommended responses prepared by EMA and Planning Staff.

Bi-State Regional Commission Staff will attend the Committee of the Whole meeting to answer any questions on the next steps in this review process.

Serving local governments in Muscatine and Scott Counties, Iowa; Henry, Mercer and Rock Island Counties, Illinois.

CHAIR Carol Earnhardt VICE-CHAIR Ken "Moose" Maranda

SECRETARY Kathy Carroll-Duda TREASURER

Frank Klipsch

MUNICIPAL REPRESENTATIVES:

City of Davenport Frank Klipsch, Mayor Jason Gordon, Alderperson Kerri Tompkins, Alderperson Randy Moore, Citizen

City of Rock Island Mike Thoms. Mayor David Geenen, Alderperson

City of Moline Stephanie Acri. Mayor Mike Waldron, Alderperson

> City of Bettendorf Bob Gallagher, Mayor

City of East Moline Reggie Freeman, Mayor

City of Muscatine Diana Broderson, Mayor

City of Kewanee Steve Looney, Mayor

City of Silvis; Villages of Andalusia, Carbon Cliff, Coal Valley, Cordova, Hampton, Hillsdale, Milan, Oak Grove, Port Byron, and Rapids City Vacant

Cities of Aledo, Colona, Galva, Geneseo; Villages of Alpha, Andover, Annawan, Atkinson, Cambridge, New Boston, Orion, Sherrard, Viola, Windsor, and Woodhull Kathy Carroll-Duda, Mayor, Geneseo

> Cities of Blue Grass, Buffalo, Eldridge, Fruitland, LeClaire, Long Grove, McCausland, Princeton, Riverdale, Walcott, West Liberty, and Wilton Marty O'Boyle, Mayor, Eldridge

COUNTY REPRESENTATIVES:

Henry County Roger Gradert, Chair Erik Brown, Member Rex Kiser, Member

> Mercer County Vacant

Muscatine County Jeff Sorensen, Chair Bob Howard, Member

Rock Island County Ken "Moose" Maranda, Chair Kim Callaway-Thompson, Member Scott Terry, Member Elizabeth Sherwin, Citizen

> Scott County Carol Earnhardt, Chair Ken Beck, Member Tony Knobbe, Member Jazmin Newton-Butt, Citizen

PROGRAM REPRESENTATIVES: Ralph H. Heninger Jerry Lack Nathaniel Lawrence Marcy Mendenhall Rick Schloemer **Bill Stoermer**

> **Executive Director Denise Bulat**

Jim Tank

MEMORANDUM

TO: Mayors, Administrators and/or Clerks and Hazard Mitigation Point of

Contact for Cities or School Districts in Scott County, Iowa

FROM: Gena McCullough, AICP, Planning Director

DATE: August 11, 2017

RE: Solicitation of Hazards Priorities, Mitigation Actions and Goals Review

for Scott County Hazard Mitigation Plan Update – **HIGH**

IMPORTANCE

Due to an interpretation of funding eligibility by the Federal Emergency Management Agency (FEMA), we are moving forward more quickly on the Scott County Hazard Mitigation Plan update than originally planned. The current plan lapses September 1, 2017, and FEMA will no longer grant waivers for those currently in the midst of an update who would be seeking funding assistance for specific FEMA programs.

With your assistance, I would like your help in scoring your respective hazard priorities for your city, county, or school district; reviewing and updating your mitigation actions; and reviewing the countywide plan goals. You are being provided a mailed version of this request and an e-mailed version where we have econtacts.

We request you complete the review and approve your recommendations by Monday, September 18, 2017 at a public meeting, which can be a city council meeting or subcommittee meeting, county board or other appropriate meeting, or school board, as appropriate. The meeting should be one that the public is invited to, and it does not have to be a special meeting if possible. If timing is an issue, please contact me. An overview slide presentation is attached for reference including the revised project timeline.

The following are the directions for completing the review by September 18:

2012 Plan Goals Review- Request 1

The following are the standing Hazard Mitigation Goals for Scott County. In your public review of these goals, do you have any comments or suggestions on revising them? Indicate if you agree as they stand, or provide your input on how they should be revised.



The goals are listed in priority order, as agreed during 2012 planning process.

- 1. Protect human life and public health from the effects of hazards
- 2. Minimize vulnerability of property within Scott County from the effects of hazards
- 3. Minimize damage to critical facilities, infrastructure, and other community assets from the effects of hazards
- 4. Improve public communication, education, and awareness of hazards and their risks in Scott County
- 5. Strengthen intergovernmental communication among jurisdictions within Scott County

Jurisdiction-Specific Hazard Priorities Scoring- Request 2

Participating jurisdictions are being provided with an Excel spreadsheet that contains 4 tabs. You are asked to review your own jurisdiction's 2012 Hazards Scoring of the 16 natural hazards being updated as part of this 2017 process. You can look at the scoring overall for Scott County, then provide how you would score things currently in 2017. Each potential natural hazard is listed. When deciding priority levels for each jurisdiction, chose between using the compiled Scott County-wide priorities and altering your scoring to reflect special situations that are appropriate, such as flood hazard areas, dam failures, or those unique to your geographic area. The updated hazard profiles will be placed on the Scott County website by Friday, August 18 to reference: https://www.scottcountyiowa.com/planning/hazard-mitigation-plan or search "Hazard Mitigation Plan" on the Scott County website homepage.

Refer to the attached spreadsheets and scoring methodology as your reference.

Jurisdiction-Specific Hazard Mitigation Actions- Request 3

You are being provided your specific mitigation actions from the 2012 Plan to update. Indicate if the activity is:

- (C) Complete
- Incomplete
- (O/C) On-going as part of a continuous cycle
- (O/P) Ongoing, In Progress or In Development
- (R) Remove

Note actions are listed in priority order for each jurisdiction. If you want to change the priority, please indicate how you would revise it. Add any new mitigation actions and their respective priority.

Technical Assistance

We understand the information you are being provided is technical in nature. It is critical from a public safety perspective that you take time to read the information carefully. You may contact me gmccullough@bistateonline.org or Brandon Melton bmelton@bistateonline.org if you would like our help. Dave Donovan david.donovan@scottcountyiowa.com with the Scott County Emergency Management Agency is also available to assist. Our phone contacts are noted in the slide presentation attached.

While you are being provided the information in print form, we will also convey this by e-mail. We would prefer receiving the information back in electronic format and as provided in the Excel spreadsheets to enable us to consolidate the information easily. Please contact us if this isn't feasible and we will work with you on getting your specific information.

Thank you for scheduling this into your public meeting timeframe and getting feedback to us by September 18. We are targeting a draft plan for public review in October and subsequent approval by your jurisdiction thereafter. Please let us know if you have any questions as part of your response.

Enclosures: As noted above

 $GM \setminus sg$

P:\USERS\WORD\Hazard Mitigation\Scott County\Memos\Scott Co Goals-Review-Haz Scoring Memo.docx

Action ID	Goals	Objectives	Action Strategy	Action Measures	Hazards Addressed	Status of Action
			Unincorporated Scott (County		
1.1	1	1, 6	Ensure First Responders are aware of hazardous materials kept at each site.	- I PM HS		
1.2	1	1, 6	Create detour and road closure plans for flooded areas	PM, ES	Flash Flood, River Flood	
1.3	1	3	Promote use of NOAA weather radios	PE	All Hazards	
1.4	1	5	Consider safe room construction where vulnerable populations may not have other sources of shelter	SP	Tornado	
1.5	1, 2	1	Complete or update land use ordinances, codes and regulations to decrease risk in areas susceptible to hazards	PM	River Flood, Tornados, Severe Winter Storms, Levee Failure, Thunderstorm & Lightning, Flash Flood, Hailstorm, Fixed Hazardous Materials Incident, Transportation of Hazardous Materials Incident, Railway Transportation Incident, Highway Transportation Incident, Waterway Incident, Windstorm, Sinkholes & Land Subsidence, Landslide, Expansive Soils	
1.6	1, 2	5, 2	Ensure each public critical facilities have back-up generators	SP, PP	Energy Failure	
1.7	1, 3	5	Construct public safe rooms for government facility functions, critical facility functions, recreational areas, manufactured home parks, schools and day care centers	SP	Tornado, Thunderstorm & Lightning, Hailstorm, Windstorm	
2.1	2	1	Continue NFIP compliance by enforcing floodplain ordinances based on the State of Iowa Model Code	odplain ordinances based on the State of PM River Flood		

Action ID	Goals	Objectives	Action Strategy	Action Measures	Hazards Addressed	Status of Action				
			Unincorporated Scott (Unincorporated Scott County						
2.2	2	2, 5	Adopt and enforce current building codes	PP, SP	Windstorm, Severe Winter Storm, Tornado, Structural Fire					
2.3	2, 3	1	Encourage development where adequate facilities and infrastructure exists	PM	All Hazards					
2.4	2, 3	1, 4	Develop and implement stormwater regulations and drainage plans	PM, NR	Flash Flood, River Flood					
2.5	2, 4	1, 3	Participate in the Community Rating System	PM, PE	River Flood					
3.2	3	4	Complete watershed and hydrology studies of the creeks and rivers within Scott County	NR	River Flooding, Levee Failure, Flash Flood, Dam Failure, Drought, Sinkholes & Land Subsidence, Landslide, Expansive Soils					
3.3	3	5	Replace or retrofit bridges and culverts to meet capacity requirements	SP	River Flood, Levee Failure, Flash Flood, Dam Failure, Transportation of Hazardous Materials Incident, Fixed Hazardous Materials Incident, Structural Failure, Highway Transportation Incident, Waterway Incident					
4.1	4	3	Educate the public and businesses about NFIP and the floodplain in general	PE	River Flood					
4.2	4	3	Educate the public on the dangers of traveling during severe winter storms	PE	Severe Winter Storm					
4.3	4	3	Educate the public on the dangers of tornados and what to do during a tornado	Educate the public on the dangers of PE Tornado						
4.4	4	3	Communicate the locations of community shelters	PE	Severe Winter Storm, Energy Failure, Extreme Heat					
4.5	4	3	Educate citizens on the importance of smoke detectors and encourage their use PE Structural Fire		Structural Fire					
4.6	4	3	Create multi-lingual educational materials for hazards	PE	All Hazards					

Action ID	Goals	Objectives	Action Strategy	Action Measures	Hazards Addressed	Status of Action				
	Unincorporated Scott County									
4.7	4	3	Promote the Waste Commission of Scott County Household Hazardous Material collection facilities for proper disposal of household hazardous waste	PE	Transportation of Hazardous Materials Incident					
4.8	4	3, 6	Encourage the public to check on the disabled, elderly, and other vulnerable populations	PE, ES	All Hazards					
4.9	4	6, 1	Monitor water levels and notify the public when flooding will occur and where	ES, PM	Flash Flood, River Flood					
5.1	5	1, 6	Require First Responders to have rescue plans for severe weather.	PM, ES	All Natural Hazards					
5.2	5	1, 6	Encourage First Responders to share resources and equipment and have intergovernmental agreements in place	PM, ES	All Hazards					
5.3	5	3	Join the Iowa Floodplain and Stormwater Management Association	PE	River Flood, Flash Flood					
5.4	5	3	Establish workshops and training functions for all community floodplain managers	PE	Flash Flood, River Flood					
3.1	3	2	Be proactive with virus protection and store back-up data in offsite location	PP	Cyber Terrorism					

Action ID	Goals	Objectives	Action Strategy	Action Measures	Hazards Addressed	Status of Action	
			Unincorporated Scott County				
1.1	1	1, 6	Ensure First Responders are aware of hazardous materials kept at each site.	PM, ES	Fixed Hazardous Materials Incident	O/C	Fire, IDNR
1.2	1	1, 6	Create detour and road closure plans for flooded areas	PM, ES	Flash Flood, River Flood		Secondary Roads
1.3	1	3	Promote use of NOAA weather radios	PE	All Hazards	O/C	EMA
1.4	1	5	Consider safe room construction where vulnerable populations may not have other sources of shelter	SP	Tornado	O/C	EMA, Schools
1.5	1, 2	1	Complete or update land use ordinances, codes and regulations to decrease risk in areas susceptible to hazards	PM	River Flood, Tornados, Severe Winter Storms, Levee Failure, Thunderstorm & Lightning, Flash Flood, Hailstorm, Fixed Hazardous Materials Incident, Transportation of Hazardous Materials Incident, Railway Transportation Incident, Highway Transportation Incident, Waterway Incident, Windstorm, Sinkholes & Land Subsidence, Landslide, Expansive Soils	o/c	Planning and Development

Action ID	Goals	Objectives	Action Strategy	Action Measures	Hazards Addressed	Status of Action			
	Unincorporated Scott County								
1.6	1, 2	5, 2	Ensure each public critical facilities have back-up generators	SP, PP	Energy Failure	O/P	All Departments		
1.7	1, 3	5	Construct public safe rooms for government facility functions, critical facility functions, recreational areas, manufactured home parks, schools and day care centers	SP	Tornado, Thunderstorm & Lightning, Hailstorm, Windstorm	o/c	All Departments		
2.1	2	1	Continue NFIP compliance by enforcing floodplain ordinances based on the State of Iowa Model Code	PM	River Flood	0/C	Planning and Development		
2.2	2	2, 5	Adopt and enforce current building codes	PP, SP	Windstorm, Severe Winter Storm, Tornado, Structural Fire	0/C	Planning and Development		
2.3	2, 3	1	Encourage development where adequate facilities and infrastructure exists	PM	All Hazards	O/C	Planning and Development		
2.4	2, 3	1, 4	Develop and implement stormwater regulations and drainage plans	PM, NR	Flash Flood, River Flood	O/C	Planning and Development		
2.5	2, 4	1, 3	Participate in the Community Rating System	PM, PE	River Flood	O/P	Planning and Development		

Action ID	Goals	Objectives	Action Strategy	Action Measures	Hazards Addressed	Status of Action	
			Unincorporated Scott County				
3.2	3	4	Complete watershed and hydrology studies of the creeks and rivers within Scott County	NR	River Flooding, Levee Failure, Flash Flood, Dam Failure, Drought, Sinkholes & Land Subsidence, Landslide, Expansive Soils	O/P	Planning and Development
3.3	3	5	Replace or retrofit bridges and culverts to meet capacity requirements	SP	River Flood, Levee Failure, Flash Flood, Dam Failure, Transportation of Hazardous Materials Incident, Fixed Hazardous Materials Incident, Structural Failure, Highway Transportation Incident, Waterway Incident		Secondary Roads
4.1	4	3	Educate the public and businesses about NFIP and the floodplain in general	PE	River Flood	0/C	Planning and Development
4.2	4	3	Educate the public on the dangers of traveling during severe winter storms	PE	Severe Winter Storm	R	EMA, NWS
4.3	4	3	Educate the public on the dangers of tornados and what to do during a tornado	PE	Tornado	O/C	EMA, NWS
4.4	4	3	Communicate the locations of community shelters	PE	Severe Winter Storm, Energy Failure, Extreme Heat	I, consider removal	EMA

Action ID	Goals	Objectives	Action Strategy	Action Strategy Action Measures Hazards Addressed		Status of Action	
			Unincorporated Scott County				
4.5	4	3	Educate citizens on the importance of smoke detectors and encourage their use	PE	Structural Fire	O/C	EMA, Red Cross, Fire
4.6	4	3	Create multi-lingual educational materials for hazards	PE	All Hazards	I	EMA
4.7	4	3	Promote the Waste Commission of Scott County Household Hazardous Material collection facilities for proper disposal of household hazardous waste	PE	Transportation of Hazardous Materials Incident	O/C	Waste Commission
4.8	4	3, 6	Encourage the public to check on the disabled, elderly, and other vulnerable populations	PE, ES	All Hazards	I	EMA
4.9	4	6, 1	Monitor water levels and notify the public when flooding will occur and where	T I BY PM I		O/C	NWS, USGS
5.1	5	1, 6	Require First Responders to have rescue plans for severe weather.	PM, ES	All Natural Hazards	I	EMA
5.2	5	1, 6	Encourage First Responders to share resources and equipment and have intergovernmental agreements in place	PM, ES	All Hazards	O/P	EMA, SCFCA
5.3	5	3	Join the Iowa Floodplain and Stormwater Management Association	PE	River Flood, Flash Flood	I	Planning and Development
5.4	5	3	stablish workshops and training functions for all community oddplain managers Flash F Flood		Flash Flood, River Flood	I	IDNR
3.1	3	2	Be proactive with virus protection and store back-up data in offsite location	PP	Cyber Terrorism	O/C	Іт

2012 Hazard Mitigation Plan Scoring

	PROBABILITY	MAGNITUDE/ SEVERITY	WARNING TIME	DURATION	RISK
EVENT	Likelihood this will occur	Possibility of death or injury, personal property, and infrastructure	Potential amount of warning time before hazard occurs	The duration of time that a hazard will affect the state	Weighted Score*
	1 - Unlikely	1 - Negligible	1 - More than 24 hours	1 - Less than 6 hours	
20075	2 - Occasional	2 - Limited	2 - 12 to 24 hours	2 - Less than 1 day	The higher the score
SCORE	3 - Likely	3 - Critical	3 - 6 to 12 hours	3 - Less than 1 week	the greater the risk
	4 - Highly Likely	4 - Catastrophic	4 - Minimal or no warning (up to 6 hours)	4 - More than 1 week	
Dams					0.00
Drought					0.00
Earthquake					0.00
Expansive Soils					0.00
Extereme Heat					0.00
Flash Flood					0.00
Grass and Wildland Fires					0.00
Hazardous Spills					0.00
Landslide/Sinkhole					0.00
Levee Failure					0.00
River Flood					0.00
Severe Winter Storm					0.00
Thunderstorm, Lighning, Hail					0.00
Tornado					0.00
Windstorm					0.00
AVERAGE SCORE	0.00	0.00	0.00	0.00	0.00

^{*}The formula used for weighing the hazard scores is: Probability x .45) + (Magnitude/Severity x .30) + (Warning Time x .15) + (Duration x .10) = Total Weighted Score

Scott County Scoring 2017

	PROBABILITY	MAGNITUDE/ SEVERITY	WARNING TIME	DURATION	RISK
EVENT	Likelihood this will occur	Possibility of death or injury, personal property, and infrastructure	Potential amount of warning time before hazard occurs	The duration of time that a hazard will affect the state	Weighted Score*
	1 - Unlikely	1 - Negligible	1 - More than 24 hours	1 - Less than 6 hours	
	2 - Occasional	2 - Limited	2 - 12 to 24 hours	2 - Less than 1 day	The higher the score
SCORE	3 - Likely	3 - Critical	3 - 6 to 12 hours	3 - Less than 1 week	the greater the risk
	4 - Highly Likely	4 - Catastrophic	4 - Minimal or no warning (up to 6 hours)	4 - More than 1 week	and greater and near
Dams	1	2	2	3	1.65
Drought	2	2	1	4	2.05
Earthquake	1	4	4	1	2.35
Expansive Soils	1	2	4	3	1.95
Extereme Heat	2	2	1	3	1.95
Flash Flood	3	3	3	3	3.00
Grass and Wildland Fires	3	2	4	2	2.75
Hazardous Spills	4	2	4	3	3.30
Landslide/Sinkhole	1	1	4	3	1.65
Levee Failure	1	2	2	4	1.75
River Flood	4	2	1	4	2.95
Severe Winter Storm	4	2	1	3	2.85
Thunderstorm, Lighning, Hail	4	2	2	2	2.90
Tornado	2	4	4	1	2.80
Windstorm	4	2	2	2	2.90
AVERAGE SCORE	2.47	2.27	2.60	2.73	0.00

^{*}The formula used for weighing the hazard scores is: Probability x .45) + (Magnitude/Severity x .30) + (Warning Time x .15) + (Duration x .10) = Total Weighted Score

2017 Scoring

	PROBABILITY	MAGNITUDE/ SEVERITY	WARNING TIME	DURATION	RISK
EVENT	Likelihood this will occur	Possibility of death or injury, personal property, and infrastructure	Potential amount of warning time before hazard occurs	The duration of time that a hazard will affect the state	Weighted Score*
	1 - Unlikely	1 - Negligible	1 - More than 24 hours	1 - Less than 6 hours	
	2 - Occasional	2 - Limited	2 - 12 to 24 hours	2 - Less than 1 day	The higher the score
SCORE	3 - Likely	3 - Critical	3 - 6 to 12 hours	3 - Less than 1 week	the greater the risk
	4 - Highly Likely	4 - Catastrophic	4 - Minimal or no warning (up to 6 hours)	4 - More than 1 week	
Dams					0.00
Drought					0.00
Earthquake					0.00
Expansive Soils					0.00
Extereme Heat					0.00
Flash Flood					0.00
Grass and Wildland Fires					0.00
Hazardous Spills					0.00
Landslide/Sinkhole					0.00
Levee Failure					0.00
River Flood					0.00
Severe Winter Storm					0.00
Thunderstorm, Lighning, Hail					0.00
Tornado					0.00
Windstorm					0.00
AVERAGE SCORE	0.00	0.00	0.00	0.00	0.00

^{*}The formula used for weighing the hazard scores is: Probability x .45) + (Magnitude/Severity x .30) + (Warning Time x .15) + (Duration x .10) = Total Weighted Score

Hazard Scoring Methodology

	₹	nood of the hazard occurring again in the future, considering both the historical occurrence of the hazard the hazard occurring in any given year				
Score	Description					
1	Unlikely	Less than 10% probability in any given year (up to 1 in 10 chance of occurring). History of events is less than 10% likely or the event is unlikely, but there is a possibility of its occurrence.				
2	Occasional	Between 10% and 20% probability in any given year (up to 1 in 5 chance of occurring), history of events is greater than 10% but less than 20% the event could possibly occur.				
3	Likely	Between 20% and 33% probability in any given year (up to 1 in 3 chance of occurring), history of events is greater than 20% but less than 33% the event is likely to occur.				
4	Highly Likely	More than 33% probability in any given year (event has a 1 in 1 chance of occurring), history of events is greater than 33% likely or the event is highly likely to occur.				
	e/Severity: Assessment which the hazard aff	ent of severity in terms of injuries and fatalities, personal property, and infrastructure, and the degree and fects the county				
Score	Description					
1	Negligible	Less than 10% of property severely damaged, shutdown of facilities and services for less than 24 hours, and/or injuries/illnesses treatable with first aid.				
2	Limited	10% to 25% of property severely damaged, shutdown of facilities and services for more than a week, and/or injuries/illnesses that do not result in permanent disability.				
3	Critical	25% to 50% of property severely damaged, shutdown of facilities and services for at least 2 weeks, and/or injuries/illnesses that result in permanent disability.				
4	Catastrophic	More than 50% of property severely damaged, shutdown of facilities and services for more than 30 days, and/or multiple deaths.				
Warning T	Fime: Rating of the p	otential amount of warning time that is available before the hazard occurs				
Score	Description					
1	More than 24 hou	urs warning time				
2	12 to 24 hours wa	arning time				
3	6 to 12 hours war	rning time				
4	Minimal or no warning (up to 6 hours warning)					
Duration:		ration of time that the hazard will affect the state				
Score	Description					
11	Less than 6 hours					
2	Less than 1 day					
3	Less than 1 week					
4	More than 1 weel	K				