
4. MITIGATION STRATEGY

This section presents the mitigation strategy developed by the Hazard Mitigation Planning Committee based on the risk assessment. The mitigation strategy was developed through a collaborative group process. The *State and Local Mitigation Planning: How-To Guide from April 2003* provided by Federal Emergency Management Agency (FEMA) states that goals are general guidelines that explain desired achievements. They are usually long-term, broad, policy-type statements. Mitigation actions are specific actions that help achieve goals and objectives.

In the 2010 plan, general goals were selected to guide jurisdictions in their efforts to mitigate disaster effects and to create mitigation actions that each jurisdiction can put in place to reduce vulnerability to hazards and their associated losses.

Local Hazard Mitigation Goals

The Planning Committee developed goals to provide direction for reducing hazard-related losses in Muscatine County. Goals 2-5 were originally Goals 1-4 in the 2010 plan. The new Goal 1 was added because the planning committee felt it was important and made the goals cover all aspects of hazard mitigation.

- **Goal 1:** Protect human life, property conservation, and public health from the effects of hazards.
- **Goal 2:** Minimize vulnerability of the people and property of Muscatine County to the effects of hazards.
- **Goal 3:** Protect critical facilities, infrastructure, and other community assets from the effects of hazards.
- **Goal 4:** Improve education and awareness regarding hazards and risk in Muscatine County.
- **Goal 5:** Strengthen communication among communities and between communities and the public.

Identification and Analysis of Mitigation Actions

FEMA guidance for local hazard mitigation planning requires examining a comprehensive range of mitigation actions and projects for each hazard. Six broad categories are used in FEMA guidance documents to describe a range of mitigation measures.

Range of Mitigation Measures

1. **Preventative Measures (PM):** Government administrative or regulatory actions or processes are developed and implemented that influence the way land and buildings are developed and built. These actions also include public activities to reduce hazard losses. Preventive measures are used to keep problems from getting started or getting worse. Mitigation measures that fall into this group include planning and zoning, building codes, conducting technical studies, inspection, enforcement, implementation, hazard analysis and risk assessment, security, capital improvement programs, open space preservation, and storm water management regulations. Community participation in the National Flood Insurance Program (NFIP) also protects both individuals and the community as a whole from devastating losses.

2. **Property Protection (PP):** These are measures that involve the modification of existing buildings or structures to protect them from a hazard(s), or removal from the hazard area. They are implemented in order to remove people, property, and businesses permanently out of unsafe areas where, in terms of wise disaster planning, they should not have been in the first place. Property protection measures include acquisition, elevation, relocation, and structural retrofits.
3. **Public Education and Awareness (PE):** These measures help to inform and educate citizens, elected officials, and property owners about the hazards and potential ways to mitigate them. These measures include outreach projects, real estate disclosure, hazard information centers, and school age and adult education programs.
4. **Natural Resource Protections (NR):** These are actions that, in addition to minimizing hazard losses, also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor protections and restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
5. **Emergency Services (ES):** These actions protect people and property during and after a disaster event in order to minimize its impact and preserve the community's health and safety. Emergency services include warning systems, monitoring systems, response and recovery planning, emergency response services, evacuations, protection of critical facilities, acquisition of equipment to facilitate the delivery of these services, and training for responders in emergency situation.
6. **Structural Projects (SP):** These projects involve the construction and maintenance of structures to reduce or redirect the impact of a hazard away from at-risk populations and facilities. Such structures include, but are not limited to, dams, levees, floodwalls, seawalls, retaining walls, and safe rooms.

As described in Chapter 3, the Planning Committee determined that the focus would be on hazards identified as a first priority. The first priority hazards from the original 2010 plan and the updated 2015 plan are:

2015 Plan

- Tornado
- Severe Winter Storm
- Thunderstorm & Lightning
- Windstorm
- Flash Flood
- River Flood

2010 Plan

- Windstorm
- Thunderstorm & Lightning
- Severe Winter Storm
- Hailstorm
- Tornado
- Hazardous Material Incident

The identified hazards and their ranking may differ somewhat for individual jurisdictions based on their unique conditions within Muscatine County; however, all jurisdictions include most of these county-wide hazards, and the overall prioritization was agreed upon by the Planning Committee.

Evaluation of Mitigation Actions

In the 2010 plan, the Planning Committee brainstormed possible mitigation actions to address the first priority hazards. These were then sorted by the six categories within the comprehensive range of mitigation actions to identify whether other actions might be considered. The original action concepts were edited into consistent language of actionable items. Next, the actions were assigned to appropriate goals. The Planning Committee members and community representatives reviewed the 2010 actions. For the 2015 update, the Planning Committee elected to keep the same methodology. The original mitigation actions were reviewed and updated as necessary by the individual communities. Updates are included in the following tables.

Actions were evaluated using the STAPLEE method recommended by FEMA guidance for local hazard mitigation planning. This method provides a systematic way of evaluating the opportunities and constraints of implementing a particular mitigation action in the local jurisdiction. STAPLEE is an acronym for evaluating actions in terms of Social, Technical, Administrative, Political, Legal, Economic, and Environmental (STAPLEE) factors for implementation. A more detailed explanation of the STAPLEE evaluation method is included as Appendix 4-1. A sample worksheet is included as Appendix 4-2.

Because of the extensive detail of the STAPLEE analysis, that information is included as Appendix 4-3. This appendix contains the list of all mitigation actions considered: the first priority hazard or hazards addressed, the category of mitigation measure, information on funding, the responsible party of implementation/administration, and an approximate timeframe for completion of the mitigation action. The comments in the STAPLEE appendix indicate whether the action is recommended as a priority action and whether an action should be revisited during the update of future plans. Information also includes whether the action applies to existing or new community assets and a brief benefit/cost review.

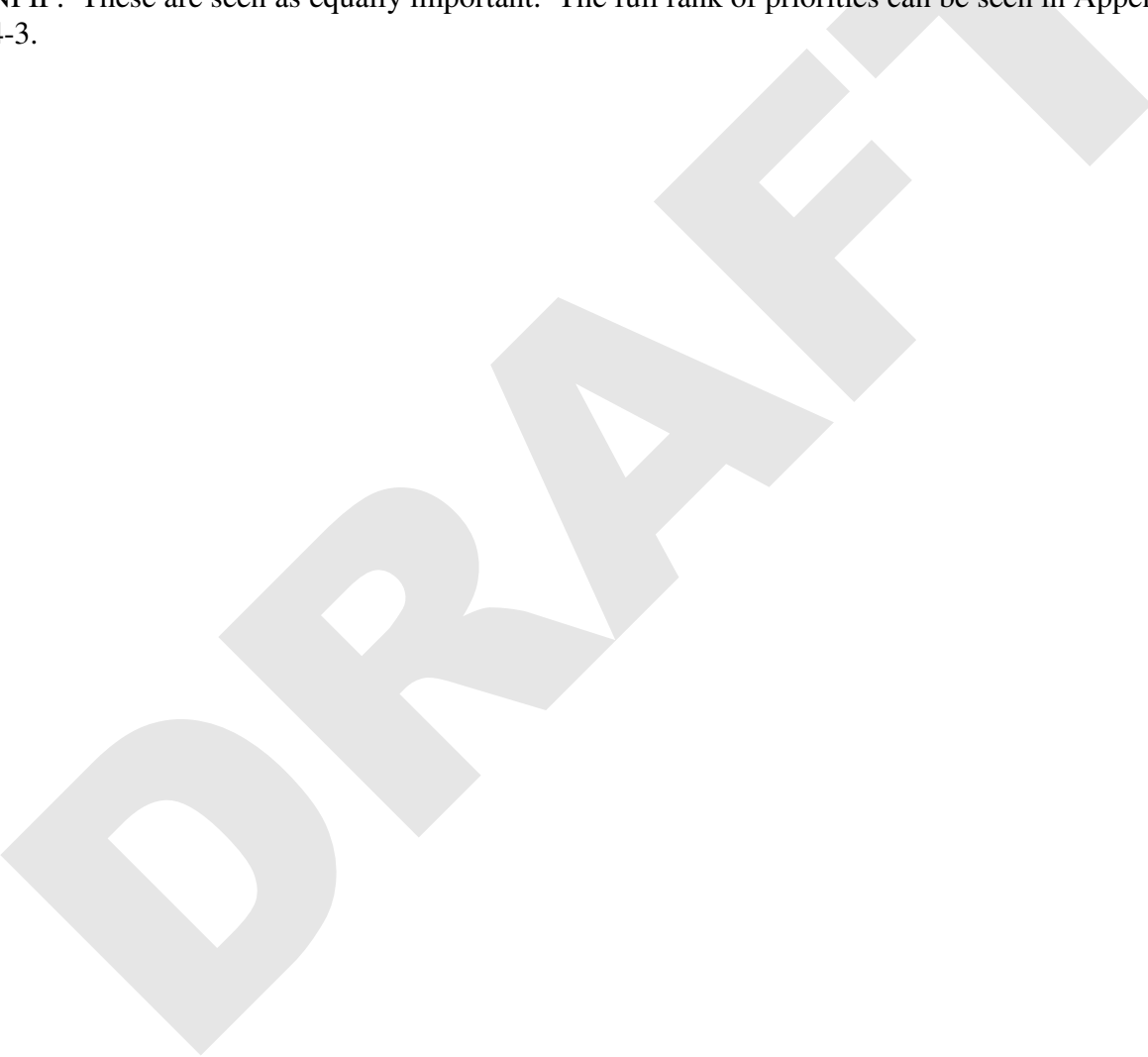
Following Planning Committee review and concurrence, the priority actions selected are summarized in Table 4-1. The top multi-jurisdictional priority action is in bold. It was chosen for its high impact and low cost. The full order of priority can be seen in the STAPLEE appendix.

**Table 4-1
Multi-Jurisdictional Priority Actions**

Action ID	Action	Objective	Goals	Hazards Addressed	Status	New for 2015	Include in 2015 Plan
4.1	Public information and signage of the location of emergency storm shelters.	PE	4	Tornado; Extreme Heat	As need depending on storm	No	Yes
4.2	Continue to educate the public on the importance of purchasing NOAA weather radios.	PE	4	All	Not Complete	No	Yes
4.4	Public education on what to do during a storm or hazard event	PE	4	All	Ongoing	No	Yes
4.5	Create educational materials about all hazards relevant to Muscatine County	PE	4	All	Not Complete	No	Yes
4.6	Create public educational materials regarding flood areas, regulations, mitigation measures, and insurance limitations available.	PE	4	River Flood; Flash Flood	Not Complete	No	Yes
4.7	Make sure educational materials regarding hazards are Bilingual	PE	4, 5	All	Not Complete	No	Yes
4.3	Education of early warning systems and how to respond	PE	4	Tornado; Windstorm; Severe Winterstorm; Thunderstorm & Lightning	Ongoing	No	Yes

Jurisdiction Mitigation Actions

In addition to the priority actions identified for the planning area as a whole, each participating jurisdiction identified at least one of its own actions to carry out. Each jurisdiction completed the STAPLEE evaluation method for each mitigation action their jurisdiction intended to carry out, and the STAPLEE evaluations are included as Appendix 4-3. The individual jurisdiction priority actions are summarized in Table 4-2. The top priority mitigation action for each jurisdiction is in bold. The top priority action for each community is believed to have high impact and generally low costs. The City of Muscatine has two bolded actions. This is due to having certified levees that require regular inspection and maintenance to ensure they will continue to protect the land behind the levee. The other action is to continue participation in the NFIP. These are seen as equally important. The full rank of priorities can be seen in Appendix 4-3.



**Table 4-2
Jurisdictional Priority Actions**

Action ID	Action	Objective	Goal	Hazard Addressed	Included in 2010 Plan	Status	New for 2015	Include in 2015 Plan
Muscatine County								
1.1	Evaluate Safe Room Construction where vulnerable populations may not have other sources of shelter and construct where financially and technically feasible	SP	1,2	Tornado	Yes, revised for 2015	No safe rooms have been considered within Muscatine County	No	Yes
1.2	Implement voluntary flood acquisition/demolition programs when financially feasible	PP	1,2	River Flood; Flash Flood	Yes, revised for 2015	Programs are ongoing and in progress	No	Yes
2.1	Implement countywide warning system for winds over 70 mph	PM	2	Windstorm; Thunderstorm & Lightning; Severe Winter Storm; Tornado	Yes	Complete and implemented	No	No
1.3	Establish warming and cooling centers	ES	1,2	Severe Winter Storms; Extreme Heat	Yes	no centers within the county. One established in Muscatine City	No	Yes
1.4	Update and enforce building codes to current International Code Series	PM	1,2	Tornado; Windstorm; Flash Flood; River Flood; Severe Winter Storm; Earthquakes	Yes	2006 version being used current proposed to adopt 2015 version in 2016	No	Yes
2.2	Ensure that mobile homes have adequate tie downs	PM	2	Tornado; Windstorm; Thunderstorm & Lightning	Yes	Attempting to plan enforcement action	No	Yes
2.3	Continue NFIP compliance by enforcing flood plain ordinances based on the State of Iowa Model Code.	PP	2,3	River Flood; Flash Flood	Yes	Enforced	No	Yes
2.4	Reduce repetitive loss properties by requiring elevation of properties	PP	2	River Flood; Flash Flood	Yes	Required but some difficulty in compliance	No	Yes
3.1	Pursue Community Rating System	PM	3	River Flood; Flash Flood	Yes	In progress	No	Yes
3.2	Identify critical facilities, such as lift stations, where back-up power generators should be installed and install as financially feasible	ES	3	Tornado; Windstorm; Thunderstorm & Lightning	Yes	In progress. Issues with funding	No	Yes
2.5	Implement uniform method of additional early warning system county wide	PM	2,4	Tornado; Windstorm; Severe Winter Storm; Thunderstorm & Lightning	Yes	Utilizing outdoor signals are exploring mass notification	No	Yes

Table 4-2 (continued)

Action ID	Action	Objective	Goal	Hazard Addressed	Included in 2010 Plan	Status	New for 2015	Include in 2015 Plan
Atalissa								
2.1	Implement countywide warning system for winds over 70 mph	PM	2	Windstorm; Thunderstorm & Lightning; Severe Winter Storm; Tornado	Yes	Completed	No	No
1.3	Establish warming or cooling centers	ES	1,2	Severe Winter Storms; Extreme Heat	Yes	Has not been completed	No	Yes
2.3	Continue NFIP compliance by enforcing flood plain ordinances based on the State of Iowa Model Code.	PP	2,3	River Flood; Flash Flood	Yes	Ongoing	No	Yes
3.2	Identify critical facilities, such as lift stations, where back-up power generators should be installed and install	ES	3	Tornado; Windstorm; Thunderstorm & Lightning	Yes	Has not been completed	No	Yes
2.5	Implement uniform method of an early warning system county wide	PM	2,4	Tornado; Windstorm; Severe Winter Storm; Thunderstorm & Lightning	Yes	Tornado sirens now uniformly sound with the rest of the county	No	No
Conesville								
1.1	Construct safe room where vulnerable populations may not have other sources of shelter where financially and technically feasible	SP	1,2	Tornado	Yes	Not completed; reworded to emphasize actual construction; would be pending grant funding	No	Yes
1.3	Establish warming or cooling center at firestation	ES	1,2	Severe Winter Storms; Extreme Heat	Yes	Has not been completed, but fire station would like one.	No	Yes
2.3	Continue NFIP compliance by enforcing flood plain ordinances based on the State of Iowa Model Code.	PP	2,3	River Flood; Flash Flood	Yes	No identified SFHAs. Not participating in NFIP	No	No
1.5	Encourage development of check-on-neighbor programs for (seniors, disabled, and special needs citizens).	PM and PE	1,5	Tornado; Severe Winter Storm; Thunderstorm & Lightning; Windstorm	Yes	Not formal program. Fire Department checks on certain people as needed	No	Yes
2.6	Provide NOAA weather radios for schools, municipal buildings, and public assembly facilities; such as soccer fields and sports stadiums	PM	2	All	Yes	Has not been completed yet. Would like them for fire station, city hall and church	No	Yes
3.2	Obtain generators for fire department, city hall and church.	ES	3	Tornado; Windstorm; Thunderstorm & Lightning	Yes	Have identified lift station as a place for a generator, would also like generators for fire dept, church and city hall. Changed wording to obtain	No	Yes

Table 4-2 (continued)

Action ID	Action	Objective	Goal	Hazard Addressed	Included in 2010 Plan	Status	New for 2015	Include in 2015 Plan
Fruitland								
1.4	Update and enforce building codes to current International Code Series	PM	1	Tornado; Windstorm; Flash Flood; River Flood; Severe Winter Storm; Earthquakes	Yes	Complete. Matches State's code	No	No
2.2	Assure that mobile homes have adequate tie downs	PM	2	Tornado; Windstorm; Thunderstorm & Lightning	Yes	Ordinance completed	No	No
2.3	Continue NFIP compliance by enforcing flood plain ordinances based on the State of Iowa Model Code.	PP	1, 2	River Flood; Flash Flood	Yes	Priority 3. Updated ordinance; will continue	No	Yes
1.5	Encourage development of check-on-neighbor programs for (seniors, disabled, and special needs citizens).	PM and PE	1	Tornado; Severe Winter Storm; Thunderstorm & Lightning; Windstorm	Yes	Priority 2. ongoing	No	Yes
2.6	Provide NOAA weather radios for schools, municipal buildings, and public assembly facilities; such as soccer fields and sports stadiums	PM	1,3	All	Yes	Completed	No	No
5.1	Test Warning Systems	PM	5	Windstorm; Thunderstorm & Lightning; Severe Winter Storm; Tornado	Yes	Priority 1. ongoing - is now integrated with MUSCOM. City tests siren and batteries twice a month	No	Yes
Muscatine								
1.4	Update and enforce building codes to current International Code Series	PM	2,3	Tornado; Windstorm; Flash Flood; River Flood; Severe Winter Storm; Earthquakes	Yes	Fire Department and Building & Zoning will update versions and go to 2012 IFC codes	No	Yes
2.3	Maintain legally enforceable floodplain management regulations that are compliant with Title 44 CFR 60 to ensure Muscatine residents and businesses are eligible to participate in the NFIP	PP	1, 2	River Flood; Flash Flood	Yes, has been modified to be consistent with 2013 Comp Plan	Ongoing - new ordinance adoption for revised FIRMs in January 2014. FIRMs effective April 2014, enforcement of regulations continue	No	Yes
3.2	Identify critical facilities, such as lift stations, where back-up power generators should be installed and install	ES	3	Tornado; Windstorm; Thunderstorm & Lightning	Yes	Not completed	No	Yes
3.3	Continue routine maintenance of levees; as needed	SP	3	Levee Failure	Yes	All levees have been certified; annual inspections for routine maintenance will continue	No	Yes
3.4	Separate combined sewer systems at the Papoose Creek pumping station	SP and NR	3	River Flood; Flash Flood	Yes	Ongoing - estimated completion in 2028	No	Yes

Table 4-2 (continued)

Action ID	Action	Objective	Goal	Hazard Addressed	Included in 2010 Plan	Status	New for 2015	Include in 2015 Plan
Nichols								
1.1	Safe room construction where vulnerable populations may not have other sources of shelter where feasible	SP	1,2	Tornado	Yes	Funding has not been available	No	Yes
1.3	Establish warming or cooling centers	ES	1,2	Severe Winter Storms; Extreme Heat	Yes	Funding has not been available	No	Yes
2.3	Continue NFIP compliance by enforcing flood plain ordinances based on the State of Iowa Model Code.	PP	1,2	River Flood; Flash Flood	Yes	Funding has not been available	No	Yes
3.2	Identify critical facilities, such as lift stations, where back-up power generators should be installed and install	ES	3	Tornado; Windstorm; Thunderstorm & Lightning	Yes	Funding has not been available	No	Yes
5.2	Implement uniform method of an early warning system county wide	PM	5	Tornado; Windstorm; Severe Winter Storm; Thunderstorm & Lightning	Yes	Completed	No	No
2.7	Establish real-time systems for notifying emergency responders and the public of road closings due to flash floods	ES	2,5	River Flood; Flash Flood	Yes	Funding has not been available	No	Yes
West Liberty								
1.1	Safe room construction where vulnerable populations may not have other sources of shelter and where feasible	SP	1,2	Tornado	Yes	School built a safe room in 2010	No	No
2.3	Continue NFIP compliance by enforcing flood plain ordinances based on the State of Iowa Model	PP	1,2	River flood, flash flood	Yes	ongoing	No	Yes
2.6	Provide NOAA weather radios for schools, municipal buildings, and public assembly facilities	PM	1,3	All	Yes	ongoing	No	Yes
3.2	Identify critical facilities, such as lift stations where back up power generators should be installed and install	ES	3	Tornado, Windstorm, Thunderstorm & Lightning	Yes	Currently working to obtain a generator	No	Yes
2.7	Establish real time systems for notifying emergency responders and public of road closings	ES	2,5	All	Yes	Started using Facebook as a way of communicating info.	No	Yes

Table 4-2 (continued)

Action ID	Action	Objective	Goal	Hazard Addressed	Included in 2010 Plan	Status	New for 2015	Include in 2015 Plan
Wilton								
1.3	Establish warming or cooling centers	ES	1,2	Severe Winter Storms; Extreme Heat	No	New	Yes	Yes
1.4	Update and enforce building codes to current International Code Series	PM	2,3	Tornado; Windstorm; Flash Flood; River Flood; Severe Winter Storm; Earthquakes	Yes	Will continue to update codes as applicable.	No	Yes
2.3	Continue NFIP compliance by enforcing flood plain ordinances based on the State of Iowa Model Code.	PP	1,2	River Flood; Flash Flood	Yes	ongoing	No	Yes
3.2	Identify critical facilities, such as lift stations, where back-up power generators should be installed and install.	ES	3	Tornado; Windstorm; Thunderstorm & Lightning	Yes	Generator installed at sewer plant, and mobile generator is available for lift stations. Would like one for Fire Dept or another mobile one.	No	Yes
3.4	Separate combined sewer systems	SP and NR	3	River Flood; Flash Flood	Yes	No update available	No	Yes
5.1	Test Warning Systems	PM	5	Windstorm; Thunderstorm & Lightning; Severe Winter Storm; Tornado	Yes	Testing regularly - will continue	No	Yes

5. PLAN MAINTENANCE PROCESS

Due to a change in staffing between the adoption of the 2010 plan and the plan update, there was little to no monitoring of the 2010 plan on a regional level. Individually, jurisdictions worked toward completing their mitigation actions, and those achievements are discussed in Chapter 4. After review of the procedures outlined in the 2010 plan, the Planning Committee agreed the plan maintenance process outlined made sense. Moving forward, Bi-State Regional Commission will help the Muscatine County Emergency Management Department coordinate annual meetings to review, evaluate, and update the plan as necessary. For record keeping purposes, an annual update form will be used to track any changes to each jurisdiction and how they were affected by various hazards. The form can be found in Appendix 5.1.

Monitoring the Plan

Muscatine County will be the lead in the overall monitoring of the plan. The Planning Committee structure as described in the “Planning Process” section will be maintained to assure that each jurisdiction participates. Jurisdictions will be asked to fill vacancies at least annually to maintain a primary contact for the plan maintenance process. The Muscatine County Emergency Management Department will schedule an annual meeting of the Planning Committee to track progress made on implementation of priority actions for both the planning area as a whole and individual jurisdictions. Generally, jurisdictions with their own ordinances and enforcement procedures will be responsible for monitoring their individual mitigation actions. At the annual meeting, the Planning Committee will also review the plan and make recommendations whether plan amendments or updates are needed due to changing conditions.

Evaluating the Plan

As part of the annual meeting described above, the Planning Committee will evaluate whether events of the previous year have affected the priority ranking of identified hazards. The plan will be evaluated based on the success of carrying out priority mitigation actions as identified in the plan. The Muscatine County Emergency Management Department will be responsible for preparing periodic progress reports on the plan utilizing the annual report form as described above. This report will be copied to the Chief Elected Officials of the participating jurisdictions and other primary contacts as appropriate. Finally, the Planning Committee will evaluate if the benefits of the priority actions are addressing the identified goals and objectives of the plan. If the completed actions from this plan are found to not benefit and address the goals and objectives of the plan, the Planning Committee may elect to update the plan early as described below.

Updating the Plan

The plan will be updated within five years of the date of the Federal Emergency Management Agency’s (FEMA) approval of the plan as required by 44 CFR 201.6(c)(4)(i). The plan may be updated earlier at the discretion of the Planning Committee, or in the event of a Presidential Disaster Declaration, which requires an update by regulation. The Muscatine County Emergency Management Department will be responsible for collecting and maintaining information pertinent to future plan updates based on recommendations of the Planning Committee. Any changes will be documented and appended to the plan document in a section titled “Amendments” until such time as a full update is scheduled. The Annual Update Reports from each jurisdiction will also be placed in this appendix. If no earlier update is needed, the Planning

Committee will evaluate the need for funding assistance for the update at its third annual meeting. This will allow time to make an application for planning grant funds and identify whether a contract with a consultant will be necessary for the update process. Actions to undertake the plan update should be scheduled so that there is continuity of FEMA approval for the applicable plan document.

Incorporation Into Existing Planning Mechanisms

Early in the planning process, participating jurisdictions were asked to update their list of existing local planning mechanisms and ordinances in order to update what was already in place and to incorporate the mechanisms into the hazard mitigation plan. These lists are summarized in a matrix of existing planning mechanisms for the participating jurisdictions as shown in Table 2-1 in Chapter 2.

What:

Incorporating requirements of the mitigation plan will focus on existing planning mechanisms common among participating jurisdictions. These include:

- Comprehensive/Land Use Plans
- Subdivision Regulations
- Zoning Ordinances
- Building Codes
- Flood Plain Management Ordinances

Comprehensive/land use plans, or subdivision regulations for communities without a current comprehensive plan, provide the guidance for a community's ongoing and future development. The remaining ordinances and regulations listed above provide the enforcement tools for those development plans.

Who:

Muscatine County Emergency Management Department will collect information to review and incorporate as required as necessary into the hazard mitigation plan. Smaller communities that do not have their own planning and ordinance enforcement officials contract out their enforcement. Larger communities with their own planning and ordinance enforcement officials will review their own existing planning mechanisms. These larger communities can communicate any adjustments in their planning mechanisms through their representation on the Planning Committee and in the Annual Update Report form.

How:

Existing planning mechanisms will be reviewed for consistency with the requirements of the local hazard mitigation plan in order to avoid duplication of efforts among jurisdictional departments or enforcement officials. Risk analysis and vulnerability data from the local hazard mitigation plan shall be incorporated into the comprehensive/land use plans of each participating jurisdiction during regular review and update cycles. Risk analysis and vulnerability data and mitigation actions will be incorporated into enforcement tools where appropriate. For example, references to the scale of earthquake intensity may be appropriate to building codes. Any adjustments or amendments to existing planning mechanisms will be made through the regular review cycle of the participating jurisdiction. Inconsistencies found between existing planning

mechanisms and the local hazard mitigation plan shall be reported to the Muscatine County Emergency Management Department for the annual plan review meeting.

When:

Muscatine County Emergency Management Department will report at least annually on the progress of incorporating requirements of the mitigation plan through the meeting of the Planning Committee as described in the “Monitoring the Plan” section above. Any issues reported of inconsistency between the local hazard mitigation plan and existing planning mechanisms will be considered for plan amendments or updates.

Continued Public Involvement

Muscatine County intends to make use of its website for continued public involvement. The website has been used in the plan process to keep the public informed about the plan document drafts in progress and Planning Committee meetings. The website will continue to be used to post the final local hazard mitigation plan document as adopted and approved by FEMA. The website also contains related hazard mitigation resources and links. Annual meetings of the Planning Committee will be publicized in the local newspaper of general circulation and the meeting notice will be posted on the website. Progress reports will also be posted on the website as issued. Public comments on the plan process or document will be recorded and reported at the annual meeting of the Planning Committee.

DRAFT

APPENDIX 1-1 DRAFT RESOLUTION

Resolution Number # _____

A RESOLUTION OF THE CITY OF _____ IN SUPPORT OF THE APPROVAL AND ADOPTION OF THE MUSCATINE COUNTY MULTI-JURISDICTION LOCAL HAZARD MITIGATION PLAN

WHEREAS, Muscatine County applied for and was awarded funding from the Hazard Mitigation Grant Program (HMGP) administered by the Federal Emergency Management agency (FEMA) and through the Iowa Homeland Security and Emergency Management Division (IHSEMD) for developing a multi-jurisdictional local hazard mitigation plan; and

WHEREAS, the County contracted with the Bi-State Regional Commission (BSRC) for assistance in preparing the Plan; and

WHEREAS, the City of _____, with the assistance from Muscatine County and BSRC has gathered information and prepared the Muscatine County Multi-Jurisdictional Local Hazard Mitigation Plan; and

WHEREAS, the Muscatine County Multi-Jurisdictional Local Hazard Mitigation Plan has been prepared in accordance with FEMA requirements at 44 CFR 201.6; and

WHEREAS, the Plan process has been subject to public review and comment during its development; and

WHEREAS, the Mayor and the City Council of the City of _____ has reviewed the Plan; and

NOW, THEREFORE BE IT RESOLVED by the Mayor and the City Council of the City of _____ that the City of _____ hereby approves and adopts the Muscatine County Multi-Jurisdiction Local Hazard Mitigation Plan as this jurisdictions Multi-Hazard Mitigation Plan pending FEMA approval of the Plan.

Adopted this ____ day of _____, 201_ at the meeting of the Mayor and City Council for the City of _____.

_____, Mayor

Attest:

_____, Clerk

APPENDIX 1-2 EXECUTED JURISDICTION ADOPTION RESOLUTIONS

Jurisdictions have not adopted the plan at this time. This serves as a place holder

APPENDIX 2-1 POWERPOINT FROM KICK-OFF MEETING

DRAFT

MUSCATINE COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

Plan Update Kick-Off Meeting

Bi-State Regional Commission
December 12, 2012

What is Hazard Mitigation?



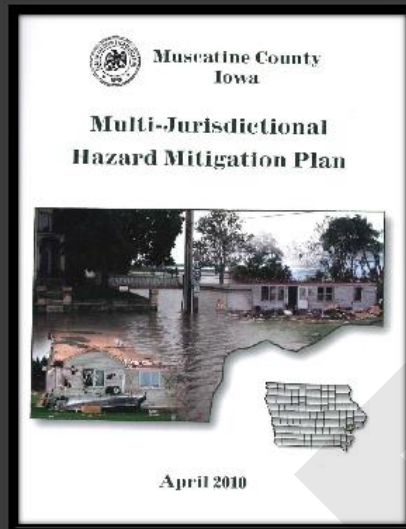
What is Hazard Mitigation Planning?



Why Create a Hazard Mitigation Plan?

- ❑ Disaster Mitigation Act of 2000
- ❑ Allows communities to be eligible for FEMA Hazard Mitigation Assistance Grant Programs
- ❑ Update to the current Hazard Mitigation Plan

2010 Muscatine County Plan



Muscatine County was awarded HMGP grant for planning September 26, 2012

Grant and Local Match

Total Project Cost: \$55,000

- 75% FEMA Grant: \$41,250
- 10% State Grant: \$5,500
- 15% Local Match Share: \$8,250

Participating Jurisdictions

- Muscatine County*
 - Atalissa*
 - Conesville*
 - Fruitland*
 - Muscatine*
 - Nichols*
 - Stockton
 - West Liberty*
 - Wilton*
 - Muscatine Community School District
 - West Liberty Community School District*
 - Wilton Community School District
 - Muscatine Community College
- * Participated in previous plan; final list TBD

Role of Participating Jurisdictions

- Participate in the planning process by:
 - Designate a primary contact
 - Attend planning committee meetings (minimum requirement is at least 50% of the meetings)
 - Provide information
 - Review Planning Documents
 - Keeping records of time spent (PAR's) on the plan

- Adoption of the Hazard Mitigation Plan

Personal Activity Reports (PAR's)

- Time keeping requirement for everyone involved in plan

- **Extremely** important to keep track of, all time is counted towards the County's local match requirement

Planning Committee Meetings

- Meetings will begin in January 2013
- Best day and time
- Location
- Each community will need to attend a minimum of 50% of the meetings for participation

Meeting Schedule

2013

2014

2013							2014						
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Online Resources

2010 Muscatine County Multi-Jurisdictional Hazard Mitigation Plan

http://www.co.muscatine.ia.us/departments/eme_haz_cnt.shtml

FEMA - Mitigation Planning

<http://www.fema.gov/plan/mitplanning/index.shtm>

Iowa Homeland Security & Emergency Management Division (IHSEMD)

http://www.iowahomelandsecurity.org/disasters/hazard_mitigation.html

<http://www.iowahomelandsecurity.org/grants/HMA.html>

Contacts

Muscatine County (Authorized Representative)

Sherry Seright, Budget Coordinator

Phone: (563) 263-5317

Email: sseright@co.muscatine.ia.us

Bi-State Regional Commission

Meghan Overton, Planner

Phone: (309) 793-6302 ext. 126

Email: moverton@bistateonline.org

Laura Berkley, Senior Planner

Phone: (309) 793-6302 ext. 148

Email: lberkley@bistateonline.org

Daya Snapp, GIS Technician

Phone: (309) 793-6302 ext. 137

Email: dsnapp@bistateonline.org

APPENDIX 2-2 PLANNING STAFF AND PLANNING COMMITTEE

Muscatine County Hazard Mitigation Plan
Planning Committee Contacts

Primary Contacts	
Jurisdiction	Name & Title
Bi-State Regional Commission	Laura Berkley, Senior Planner
Bi-State Regional Commission	Meghan Overton, Planner
Muscatine County EMA	Matt Shook
Muscatine County Building, Zoning & Environment	Jodee Stepleton, Administrator
Muscatine County Board of Supervisors	Scott Sauer
Nichols	Russ Grim, Fire Chief, City Council
Fruitland	Scott Wilson, Mayor
Conesville	Dan Conaway
West Liberty	Robert Rock
Wilton	Chris Balls
Atalissa	Joe Blick
Muscatine	Jerry Ewers, Fire Chief
Muscatine MUSCOM	Lorrie Lacina, Manager

APPENDIX 2-3 ADVISORY COMMITTEE INVITATION LETTER



To All Organizations and Interested Parties:

This notice is to invite you or another representative of your organization to participate in a planning process to update the Muscatine County Multi-Jurisdictional Hazard Mitigation Plan. Muscatine County, Iowa contracted with Bi-State Regional Commission to guide the preparation of the update of the 2010 Muscatine County Multi-Jurisdictional Hazard Mitigation Plan. In addition to Muscatine County and the local jurisdiction representatives, the planning process requires a broad range of input and expertise from individuals and organizations with interest in hazard mitigation within Muscatine County (and neighboring organizations).

The plan will meet the requirements of the Disaster Mitigation Act of 2000, also known as DMA 2000. The Act, which was signed into law on October 30, 2000, streamlines delivery and utilization of disaster recovery assistance and places increased emphasis on local mitigation planning. It requires local governments to develop and submit mitigation plans as a condition of receiving project grants under four FEMA programs: Pre-Disaster Mitigation (PDM), Hazard Mitigation Grant Program (HMGP), Flood Mitigation Assistance (FMA), Severe Repetitive Loss (SRL). Plans must be updated every 5 years in order to remain eligible.

Those participating are asked to review materials as the planning document develops. Participants are invited to attend planning group meetings as scheduled. An informational public hearing will be held on **Wednesday, February 13, 2013 at 7:00 pm** at the Muscatine County Environmental Learning Center, 3300 Cedar Street, Muscatine, Iowa.

Please let us know if you or another representative of your organization would be willing to participate in this planning process, so that we may develop an accurate contact list. Also, if you know of other organizations that should be included in this process, please let us know. Bi-State Regional Commission will be assisting Muscatine County in the plan update and you may be contacted regarding correspondence and questions. Contact information is provided below. Thank you for your assistance with this planning process, and we hope to see you at the meeting on February 13th.

Questions regarding the ongoing planning process may be directed to Laura Berkley at Bi-State Regional Commission (309) 793-6300 or lberkley@bistateonline.org.

Laura Berkley, Senior Planner
 Bi-State Regional Commission
 1504 3rd Avenue, P.O. Box 3368
 Rock Island, IL 61204-3368
 (309) 793-6300
lberkley@bistateonline.org

Note: If you would **NOT** like to be contacted please email Laura Berkley at lberkley@bistateonline.org and we will remove you from the list.

APPENDIX 2-4 ADVISORY COMMITTEE LIST

DRAFT

**MUSCATINE COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN
ADVISORY GROUP**

Neighboring Communities/ Non-Participating Communities

Organization	Contact Name	Title
City of Durant	Dawn Smith	Mayor
Scott County EMA	Ross Bergen	Director

State, Regional and Local Government Representatives

Organization	Contact Name	Title
Muscatine County EMA	Matt Shook	Director
Muscatine County Sheriff	Dave White	Sheriff
Iowa State Patrol	District 12 Office	
IHSEMD	Linda Roose	Lead State Mitigation Project Officer
IHSEMD	Mat Noble	Mitigation Planner
Iowa NFIP Coordinator	Bill Cappuccio	State Floodplain Manager
Iowa State Climatologist	Harry Hillaker	Climatologist
Iowa State Geologist	Dr. Robert Libra	Geologist

Business and Developmental Agencies

Organization	Contact Name	Title
Muscatine Chamber of Commerce	Bill Pheisan	President & CEO
Wilton Chamber of Commerce	Jackie Barten	
West Liberty Chamber of Commerce/ WeLead	Becky Algood	

Federal Agency Representatives

Organization	Contact Name	Title
USACE	Jerry Skalski	Project Manager / Floodplain Manager
National Weather Service	Donna Dubberke	Meteorologist

Neighborhood Groups and Non-Profits

Organization	Contact Name	Title
Red Cross	Brooke Mehaffey	Unit Director
United Way	Shane Orr	Interim CPO
Muscatine County Conservation Board	Curt Weiss	Director

Media

Organization	Contact Name	Title
KWQC-TV 6	Ken Freedman	General Manager
WHBF -TV 4	Marshall Porter	General Manager
WQAD-TV 8	Jim Kiser	President and General Manager
Muscatine Journal	Steve Jameson	Publisher
West Liberty Index	Stuart Clark and Jake Krob	Publisher
Wilton-Durant Advocate		Publisher

APPENDIX 2-5 PUBLIC HEARING PUBLICATION AFFIDAVITS

PROOF OF PUBLICATION

STATE OF IOWA
Muscatine County} SS.



I, Farlane H. Theobald being first duly sworn on oath depose and say; that I am circulation manager of the Wilton-Durant Advocate News; a newspaper published weekly in the City of Wilton, Muscatine County, State of Iowa, and that notice of

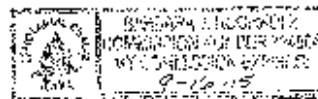
Public Meeting, Muscatine
Wilton, Iow. Mt. Pleasant
State High 2-13-13

hereto attached and made a part hereof, was published once each week for 1 week(s) in succession, in said newspaper, and that the date of publication was 2-7-13 and that the copy of said printed notice, hereto attached, was cut from one of said publications.

Farlane H. Theobald

Subscribed and sworn to before me on this 7th day of February, 2013.

Barbara J. Robinson
Notary Public



DR

PROOF OF PUBLICATION

**Muscatine County
Public Notice**

[Faded, illegible text in the left column, likely a legal notice or affidavit.]

State of Iowa, Muscatine County, ss:

I, Jesse Mullen, Editor of the West Liberty Index, a weekly newspaper of general circulation published at West Liberty, in said county, and being duly sworn, do declare and say that a Notice, of which one hereto attached is a copy, was published in said West Liberty Index respectively:

[Handwritten signature]

2-7-13

Fee: \$ 12-86

Sworn to by said Jesse Mullen before me and signed by

her in my presence this _____

day of _____

Notary Public

Received of

Dollars

in full on above publication.