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Appendix: Meeting Agendas & Minutes

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Purpose

On May 16, 2006, Federal Emergency Management Agency (FEMA) approved the Winona County All-Hazard Mitigation Plan dated October 15, 2005. Severe storms and flooding that occurred August 19-23, 2007 resulted in Presidential Disaster Declaration 1717-MN for eight counties in southeast Minnesota, including Winona County. As cities, townships and the county started to assemble information and develop specific mitigation project proposals under the Hazard Mitigation Grant Program (HMGP) administered by the State of Minnesota Homeland Security and Emergency Management (HSEM) it became apparent that several project categories were not referenced in the 2005 mitigation plan. In addition, several cities seeking funds had not participated in the original planning process. For these reasons, Winona County is submitting an amendment to the Winona County All-Hazard Mitigation Plan to include mitigation action items that were overlooked and to include jurisdictions that had not previously participated.

This document contains individual amendments by all cities within Winona County that did not participate in the original planning process. The amendments for Altura, Dakota, Elba, Lewiston, Minneiska, Minnesota City and Utica are included in this document. The resolutions confirming the participation of Goodview, Rollingstone, St. Charles, Stockton and Winona were included in the 2005 Winona County All-Hazard Mitigation Plan. The City of Minnesota City participated in the 2005 county plan, and signed a resolution in 2005. The resolution was inadvertently left out. For this reason, an amendment from Minnesota City is also included in this document. A portion of La Crescent is within Winona County but because the majority of the city is in Houston County, LaCrescent will be participating in Houston County's hazard mitigation planning process. La Crescent will be provided an opportunity for review of this plan. The flooding impacted several townships. These jurisdictions participated in the amendment planning process however it was deemed unnecessary to include amendments for each individual township and instead these jurisdiction are covered under the Winona County amendment.

City Participation in 2005 Plan and National Flood Insurance Program (NFIP)

	2005 Plan	NFIP
City of		
• Altura	-	No
• Dakota	-	Yes
• Elba	-	Yes
• Goodview	Yes	Yes
• Lewiston	-	No
• Minneiska	-	sanctioned 7/11/1976
• Minnesota City	Yes	Yes
• Rollingstone	Yes	Yes
• St. Charles	Yes	Yes
• Stockton	Yes	Yes
• Utica	-	No
• Winona	Yes	Yes
Winona County	Yes	Yes

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Extensive outreach was conducted on the part of Winona County, HSEM and FEMA to all affected jurisdictions. Presentations and meetings were held to discuss damages from the most recent disaster, solicit feedback about the 2005 FEMA approved plan, and to review the plans goals. Discussions regarding each jurisdiction's specific hazard mitigation project proposals were a priority. Meeting minutes, agendas and summaries for meetings held with the county, cities, townships, FEMA and HSEM staff are included as an appendix.

Amendment Requirements

Winona County and the participating jurisdictions have adhered to the requirements of FEMA regarding the amendment process including 1) that all jurisdictions amending the plan are located within the boundaries of Winona County, 2) Winona County is in agreement with the addition of the requesting jurisdictions to the plan, and 3) the original Winona County All-Hazard Mitigation Plan included a risk assessment and analyses of natural hazards. In addition all amending jurisdictions:

1. Reviewed the 2005 multi-jurisdictional hazard analyses and determined that there were no additional hazards that had not been addressed in their jurisdiction. See meeting minutes for each jurisdiction in Appendix.
2. Reviewed and agreed with the stated mitigation goals of the original plan and developed a list of at least one of proposed mitigation actions specific to their community.
3. Documentation of the planning process including local government and the public is provided in meeting minutes located in the appendix of the amendment.
4. The draft amendment, along with the original Winona County All Hazard Mitigation Plan, and letter from the county is being submitted to HSEM for formal review and forwarded to FEMA. Once the amendment has been "approved pending adoption", each jurisdiction will formally adopt the full plan and the amendment.

Presidential Declaration 1717-Minnesota

The conditions that resulted in the Presidential Disaster 1717-MN declared on August 23, 2007 were a record rain event in the State of Minnesota. As described by the State of Minnesota Climatology Office:

A series of thunderstorms moving along a stalled frontal boundary dropped extremely heavy rain on much of southern Minnesota on August 18, 19, and 20, 2007. The most intense precipitation rates occurred during the afternoon and evening hours of Saturday, August 18, and the early morning hours of Sunday, August 19. Over the course of the event, all or portions of 28 counties received at least four inches of rain. Six-inch totals were common across the region, and portions of southeastern Minnesota reported astounding rainfall amounts ranging from 8 to 20 inches. The heaviest rainfall reports came from Winona, Fillmore, and Houston counties, where 36-hour

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totals exceeded 14 inches. The largest multi-day rainfall total reported (through Monday, August 20) was 20.85 inches observed near the town of Houston in northern Houston County. An official National Weather Service climate observer near Hokah in Houston County reported a storm total of 16.27 inches. Of the 16.27 inches, 15.10 inches fell within the observer's 24-hour observation cycle ending at 8:00 AM on Sunday, August 19. This is the **largest 24-hour rainfall total ever recorded by an official National Weather Service reporting location in Minnesota**. The previous Minnesota record was 10.84 inches, measured at Fort Ripley in Crow Wing County on July 22, 1972.

Source: http://climate.umn.edu/doc/journal/flash_floods/ff070820.htm

The amount of rain that fell during this period resulted in flooding of several streams including Garvin Brook and its tributaries, Whitewater River and its tributaries, Rush Creek, Pine Creek, Money Creek, and other streams in the Root River watershed. There were also small streams that flow into the Mississippi River that flooded including Pleasant Valley Creek. Due to apparent debris jams on bridges that blocked the flow of Garvin Brook, floodwater was also diverted to areas in Goodview. Subsequently Goodview Lake, an old quarry with no outlet, flooded. There were also many landslides that occurred throughout the county. Lake Winona in the City of Winona was also affected.

Five people lost their lives in flood related accidents in Winona County. Many people were displaced. A compilation of damage as summarized in the Winona County Flood Recovery Common Community application estimated damages at \$77 million. This would exclude damages to the City of Winona and Minnesota City. County roads and bridge damages were calculated at \$4.5 million. The loss in taxable real property to structures was approximated at \$28 million dollars. Loss estimates of land damages have yet to be calculated.

Damages were reported to occur within eleven of the thirteen cities in Winona County and sixteen of the nineteen townships in Winona County.

Mitigation Actions

Mitigation actions being added to the plan are amended to the list of actions on page 150 of the Winona County All-Hazard Mitigation Plan dated October 12, 2005. These additional mitigation actions were developed through a series of meetings held with individual jurisdictions and one large meeting held by Winona County on November 8, 2007. The Winona County Flood Recovery Common Community Application that was submitted to the Minnesota Recovers Task Force was also reviewed for mitigation activities proposed by various jurisdictions.

A list of additional mitigations actions amending the original plan is provided in the following table. Each mitigation action indicates the type of hazard involved, the specific jurisdictions considering this action as a high priority, as well as, how the mitigation action can be categorized

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under the State of Minnesota All Hazard Mitigation Plan strategy. Mitigation actions are categorized as Prevention, Property Protection, Public Education and Awareness, Natural Resource Protection, Emergency Services or Structural Improvements. A proposed timeline for each item has also been included.

Funding for each of these project types will be applied for through various grant programs, including the Hazard Mitigation Grant Program, Flood Mitigation Assistance (FMA), Repetitive Claims program, and the Pre-Disaster Mitigation Grant Program (PDM). Funding will also be applied for through the MN DNR Flood Damage Reduction Program, and other natural resource grants through the USDA Natural Resources Conservation Service and MN Board of Water and Soil Resources (BWSR). The county and the participating jurisdictions will continue to be proactive in obtaining funding from federal, state, local and non-profit agencies to reduce the effects of hazards on the residents of Winona County and its natural and built environment.

For projects being proposed under the HMGP and FMA, the county will do a brief benefit cost review based on available information on the mitigation action. This will include a description of the action, benefit (pros) and costs (cons) and also list the priority of actions. Feasible projects will be applied for to mitigate hazards based on available data.

The county, if requested, will provide data to the State Hazard Mitigation Officer (SHMO) for BCA (Benefit Cost Analysis) per requirements of Data Documentation Template and Checklist. The county will provide building data, and other pertinent data regarding building value, mitigation measures, mitigation project costs, flood elevation data, frequency of flooding, and other data as required.

Multi-Hazard Mitigation Actions		Timeline	Implementing Jurisdiction (High Priority)	State Strategy
1	Compatible communication technology (radios) among emergency response staff.	2008-2010	Winona County and all participating jurisdictions	Emergency Services
2	Assessment of need for additional emergency operation centers in Winona County.	2009-2010	St. Charles	Emergency Services
3	Update of outdoor warning sirens to be compatible with 2013 federal requirements.	2010	Winona, Altura, Dakota, Elba, Stockton	Emergency Services
4	Private water supply protection including well sealing, well hardening and repair to meet well code.	Ongoing	Winona County	Structural Improvement
5	Private water supply protection through decontamination/disinfection of wells.	Ongoing	Winona County	Emergency Services
6	Public water supply protection.	2008-2009	Elba, Lewiston, Stockton	Structural Improvement
7	Assessment and development of all-hazard shelters.	2010	Winona County and all participating jurisdiction	Emergency Services
8	Assessment of hazard damaged septic systems and grants/loans for pumping, inspections, new installation and repair	2008-2009	Winona County (Rollingstone Township), Elba, Minnesota City	Structural Improvement
9	Adoption of building code and inspection program.	2008-2009	Winona County	Prevention
10	Development of GIS decision support system that would include updating spatial and non-spatial data (such as karst features and landslide vulnerabilities), modeling, project cost benefit evaluation, and hazard event record storage including substantial damaged structure information.	2008-2010	Winona County, Utica	Prevention and Public Education
11	Backup generators for protection of public services.	2008	Altura, Dakota, Lewiston, Utica	Emergency Services

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Flood Mitigation Actions		Timeline	Implementing Jurisdiction (High Priority)	State Strategy
1	Development of multiple methods for warning residents of hazards including countywide AM/FM radio station, distribution of NOAA Weather Radios, and cell phone coverage in areas with no present coverage. Warning sirens additions, and education/outreach	2008-2009	Winona County and all participating jurisdictions	Emergency Services
2	Minor road, bridge and culvert repair including clean out of structures.	2008	Winona County and all participating jurisdictions	Structural Improvement
3	Technical assistance and administration to survey, design agricultural conservation/water retention structures	2008-2010	Winona County & SWCD	Structural Improvement
5	Update floodplain management ordinances to insure consistencies with FEMA and MN DNR requirements.	2008	Winona County and all participating jurisdictions	Prevention
6	Acquisition of substantial and repetitive damaged structures and parcels/lots for open space use.	2008	Winona County, Elba, St. Charles, Stockton	Property Protection
7	Acquisition of substantial and repetitive damaged structures and parcels/lots in the 100 year floodplain for open space use.	2008	Winona County, Elba, St. Charles, Stockton	Property Protection
8	Acquisition of substantial and repetitive damaged structures in the 100 year floodplain with the lot remaining for rebuilding in compliance with current floodplain regulation.	2008	Winona County, Elba, Stockton	Property Protection
9	Elevation of existing substantial damaged structures in the 100 year floodplain with approved elevation methods including required surveying.	2008	Winona County, Elba, St. Charles, Stockton	Property Protection
10	Acquisition of substantial and repetitive damaged structures and parcels/lots in the contiguous areas where there are identified secondary areas of flooding (i.e. 500 year floodplain).	2008	Winona County, Elba, Stockton	Property Protection
11	Rain and stream gage triggered floodwarning systems in targeted watersheds.	2008-2009	Winona County, Elba, Minnesota City, Stockton	Emergency Services
12	Repair of dikes and levees.	2008-2009	Winona, Elba	Structural Improvement

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Flood Mitigation Actions		Timeline	Implementing Jurisdiction (High Priority)	State Strategy
13	Planning and technical assistance for flood control structures in select watersheds.	2008-2009	Winona County, Stockton, Elba and Goodview	Structural Improvement
14	Planning and technical assistance for stormwater management.	2009-2010	Winona County, Altura, Elba, Lewiston, St. Charles, Stockton, Utica	Structural Improvement
15	Hydraulic/Hydrological Studies in select watersheds.	2008-2010	Winona County, Stockton, Elba, Goodview and Winona	Structural Improvement
16	Land acquisition for floodplain and/or flood control management.	2008-2009	Winona County, Elba	Structural Improvement
18	Extension of centralized water and sewage to replace structurally damaged (water/wastewater) on-site systems.	2008	Winona County, Goodview	Structural Improvement
20	In stream and near stream debris removal and floodplain vegetation management.	2008	Winona County (Rollingstone, Hillsdale, Warren, Wilson, Homer, Elba townships), Minnesota City, Stockton	Natural Resource Protection
21	Inventory of water retention structures throughout the county.	2008	Winona County, Winona County SWCD, Stockton	Structural Improvement
22	Repair or new water retention structures in agricultural areas.	2008-2009	Winona County SWCD	Structural Improvement
23	Adoption of National Flood Insurance Program by all jurisdictions not currently participating	2008-2009	Altura, Lewiston, Minneiska (working with Wabasha County)	Prevention
24	Update of FIRM (floodplain) maps in critical flood hazard areas.	2008-2010	Winona County	Prevention
25	Public education about floodplain management ordinances, risks associated with living in the floodplain and benefits of purchasing flood insurance	Ongoing	Winona County and all participating jurisdictions	Public Education and Awareness

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	Wildfire/Fire Mitigation Actions	Timeline	Implementing Jurisdiction (High Priority)	State Strategy
1	Assessment/purchase of water storage/access for refilling fire trucks.	2008-2010	Winona County, Stockton (suggested by Lewiston), Minneiska	Emergency Services
2	Identify structural/retrofit/vegetation management projects	2008-2010	Winona County	Prevention/Structural Improvement

Amendment to Chapter 3: Assessing Vulnerability

For the 2005 Winona County All Hazard Mitigation Plan, an assessment was completed using Winona County’s Geographic Information System of the vulnerability of structures located in the 100 year floodplain. In that assessment as described on page 145, floodplain maps were cross-referenced with address/driveway locations. Building values were determined from the Winona County Assessor’s database. This assessment was done for the all Winona County townships. An assessment of vulnerability for the cities of Elba and Winona was developed using the assumption of catastrophic failure of the levees that protect these cities. No other cities were evaluated for vulnerability. Since that time, Winona County’s the GIS evaluation of vulnerability has improved because of the progression of parcel mapping, improved aerial photography, and delineation of all structures within the floodplain.

The total number of buildings in the 100-year floodplain in all jurisdictions within the county is 1,270. These buildings are located on 840 parcels of which 803 have been identified. Unfortunately it is not possible from the aerial photos to determine the use of these buildings. Of these structures, two are considered to be repetitive loss structures. There are six critical facilities that appear to be partially in the floodplain. The estimated value of the buildings on all parcels identified is \$179,482,000 (see table for breakdown by jurisdiction). Presently, there is no method for determining utility infrastructure located in the floodplain.

Estimate of potential dollar losses for structures within the 100-year floodplain

Jurisdiction	# of parcels	Estimated Market Value of structures in parcels
Unidentified	3	205700
DAKOTA CITY	4	127900
DRESBACH TOWNSHIP	8	2291000
ELBA CITY	48	2376300
ELBA TOWNSHIP	16	1178600
FREMONT TOWNSHIP	5	316500
GOODVIEW CITY	21	16470600
HART TOWNSHIP	7	834000
HILLSDALE TOWNSHIP	8	653400
HOMER TOWNSHIP	56	6352500
MINNEISKA CITY	29	2701200
MINNESOTA CITY	1	74100
MT VERNON TOWNSHIP	14	1649200
NEW HARTFORD TWP	36	4530200
NORTON TOWNSHIP	15	1727100
PLEASANT HILL TWP	10	1790000
RICHMOND TOWNSHIP	31	3781800
ROLLINGSTONE TWP	28	3328500
SAINT CHARLES CITY	34	7017800
SAINT CHARLES TWP	4	131400
SARATOGA TOWNSHIP	12	948600
STOCKTON CITY	64	5094600
UTICA TOWNSHIP	12	1774600

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WARREN TOWNSHIP	22	1797500
WHITEWATER TOWNSHIP	1	3600
WILSON TOWNSHIP	55	7623700
WINONA CITY	242	103407900
WISCOY TOWNSHIP	17	1293700

Planning Process

Many meetings were held with Winona County, all participating jurisdictions and Homeland Security and Emergency Management (HSEM). Meeting topics ranged from funding for recovery, amendment planning process, National Flood Insurance Program, and project development for substantially damaged residences and other mitigation projects. The amendment was presented to the “Sunshine Club”, a group of county-wide emergency management personnel, the group that initiated and developed the 2005 plan. Meeting minutes and summaries are included in the appendix. If more than one meeting occurred within that jurisdiction, the meetings are presented chronologically.

On November 8, 2007 Winona County and HSEM held an Amendment Planning meeting for county, city and township officials, and residents. It provided an opportunity for jurisdictions to review and comment on proposed mitigation action items and make additional recommendations to mitigation actions that were being added to the county plan.

Staff from HSEM and FEMA provided a separate meeting time for those jurisdictions that had not participated in the original plan development. These individual meetings outlined the FEMA requirements for participating in the planning process and detailed the information needed to incorporate into this amendment.

Dates of Hazard Mitigation Meetings by Jurisdiction

(Not all meeting minutes/agendas are included in appendix.)

Altura

November 12, 2007
December 4, 2007

Elba

September 3, 2007
September 28, 2007
October 23, 2007
October 27, 2007
November 12, 2007
December 10, 2007

Goodview

September 10, 2007

Hart Township

December 10, 2007

Lewiston

January 28, 2008

Minneiska

November 27, 2007

Minnesota City

September 6, 2007
November 16, 2007

Richmond Township

December 11, 2007

St. Charles

August 31, 2007
September 9, 2007
September 24, 2007
October 31, 2007

Stockton

August 31, 2007
September 6, 2007
September 24, 2007
October 30, 2007
November 27, 2007

Utica

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November 26, 2007

Utica Township

November 11, 2007

Winona County

August 30, 2007

September 14, 2007

September 15, 2007

September 16, 2007

October 23, 2007

November 1, 2007

November 8, 2007

January 4, 2008

January 22, 2008

Each of the following amendments contain four sections: 1. Discusses the jurisdictions review of the 2005 Plan; 2. Covers general information gained in meetings, including the uniqueness of the jurisdiction; 3. Outlines types of mitigation actions the jurisdiction is requesting, and 4. Summary of the planning process the jurisdiction participated in the development of the amendment.

Winona County Amendment

1. Winona County All-Hazard Mitigation Plan Review

Winona County has met FEMA Amendment requirements. Winona County is participating in the amendment process to include those mitigation action items that were not covered in the original plan and to insure that projects being proposed by townships and Winona County government are in the amendment.

2. General information and unique aspects

General information and unique features of Winona County are described in detail in the Winona County All-Hazard Mitigation Plan. Winona County participates in the National Flood Insurance Program by implementing a floodplain management ordinance that is based on the Minnesota DNR model ordinance. Winona County administers the floodplain ordinance in the nineteen townships of the county.

Historical hazardous events: Detailed descriptions of past hazard events are provided in the Winona County All-Hazard Mitigation Plan.

3. Mitigation Actions

Winona County compiled the Winona County Common Community Application for the townships within the county and also developed some additional project proposals that were suggested for inclusion by county staff. According to the Common Community Application of the nineteen townships, all but four (Dresbach, Mount Vernon, Richmond, and Whitewater) had monetary damages. The types of damages that were reported by townships were most frequently to roads, culverts and bridges. Overall the second most common damage type was to residential housing units. Rollingstone Township had the highest estimated proposed project cost at over \$11 million. This cost was primarily due to damages to houses in the subdivision areas of the Saehler Addition and Gunderson Addition.

Winona County indicated in the Common Community application a mitigation action to develop a building code ordinance. Such an ordinance and program would insure that structures are constructed meet the minimum building codes and standards that insure resiliency of buildings against disasters. Also proposed was the county's lead role in the use of Geographic Information Systems (GIS) in hazard mitigation decision support including improving floodplain maps, siting of flood control activities, and improving hazard warning communications. Public education regarding floodplain management and the National Flood Insurance Program were also areas where the county indicated a lead role. Winona County will insure continued compliance with the National Flood Insurance Program (NFIP) through review and updating of the floodplain ordinance. Winona County will also work with the other jurisdictions to insure that they maintain compliance with the NFIP

Winona County Emergency Management staff as well as Planning Department staff played a coordinating role in the amendment meeting held on November 8th. Of the nineteen townships, fourteen townships attended the meeting. In addition to this meeting, there were several other meetings with townships where county staff or HSEM staff worked through the hazard mitigation amendment process. In addition to the actions mentioned above other mitigation actions that were discussed at the township meetings included:

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- Radios for emergency managers and for use within townships for emergency communication between township workers and township supervisors
- Water supply storage for fire truck re-supply where the distance to other sources of water including the fire station are prohibitive.

4. Planning Process

Winona County has played a lead role in the amendment process by coordinating the November 8th meeting and working with HSEM in developing this amendment document. The appendix provides an indication of the participation of Winona County staff in this amendment process.

City Of Altura Amendment

1. Winona County All Hazard Mitigation Plan Review

The City of Altura has met FEMA Amendment requirements. The City of is participating in the amendment process and passed a resolution November 13, 2007 stating their resolve to participate. The City of Altura has reviewed the Winona County All Hazard Mitigation Plan dated October 15, 2005 and is in agreement with the plan's purpose and goals. Unique and/or additional mitigation actions are listed in Section 3.

2. General information and unique aspects

Altura is located in northwestern portion of Winona County. The population of Altura is 417 with 163 housing units (2000 Census). The city covers 2.97 square miles. The elevation is 1160 feet. There are four major roads that enter the city. US Highway 248 enters Altura from the northeast, County Road 26 from the northwest, County Road 27 from the southeast, and County Road 33 from the south. County Road 112 enters the city from the west; however, this road no longer has a bridge across the South Fork Whitewater River and therefore does not provide for through traffic. There are no bridges within the city and the city is not serviced by rail.

There are residential structures within the community, a middle school, churches and several commercial operations. The largest industrial facility is a food processing plant. The city boundary incorporates a large number of acres of agricultural lands and several feedlots.

The City of Altura provides water and centralized wastewater treatment. There is limited stormwater infrastructure within the city. The City of Altura has a fire department and ambulance service that is physically connected to the city offices. The community center that is also attached to the city offices has been used for sheltering citizens in times of disaster. There is also a post office within the city.

Altura meaning "high place" sits on a rolling ridge-top above deeply incised valleys. The drop from the city to these valleys is approximately 325 feet. There are no surface waters that flow within the city and therefore there are no mapped floodplain hazard areas. The geology of the city has an impact on the hazards encountered in the city. The first bedrock encountered in the area is the Prairie du Chien, a carbonate bedrock unit. This formation is associated with a karst landscape that features sinkholes, caves and loosing streams. According to the Winona County Geologic Atlas, the City of Altura is in an area of moderate to high probability of sinkhole formation and moderate to high probability of groundwater pollution susceptibility. In 1976 sinkholes opened that resulted in the collapse of the Altura's wastewater treatment effluent storage ponds. This hazard was discussed in the Winona County All Hazard Mitigation Plan but has a historical significance to Altura.

The City of Altura did experience damage as a result of the heavy rains that fell during the August 18 and 19th storm event that resulted in the Presidential Disaster Declaration. The damages suffered were primarily due to flooded basements caused by a loss of power making the sewer lift station inoperable and backing up sewage into the basements.

The Altura City Council reviewed the hazard assessment in the Winona County All Hazard Mitigation Plan and did not find any additional hazards that threaten the City of Altura.

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Historical hazardous events: Besides the aforementioned karst landscape hazard, the City of Altura has experienced damage from hazards such as hail and winds from summer storms.

3. Mitigation Actions

During the special meeting on December 4, 2007, the city discussed mitigation actions that they believe are needed within the City. These actions are:

- Evaluation of the lift station to insure operation at times when there is a power outage.
- Backup generator(s) to address vital functions of the City when there is a power outage.
- Emergency warning siren update to insure compatibility with national warning systems.
- Collaboration with other local government units to insure a communication plan that results in the ability to keep in contact with emergency response personnel including fire trucks and ambulances during an emergency.
- Technical assistance to evaluate stormwater management options for areas where flooding can occur and can cause damage to businesses.

4. Planning Process

On December 4, 2007, a special public meeting was held in the City of Altura specifically to discuss the Hazard Mitigation Plan. The City Council had previously estimated damage costs and needed repairs in preparation for the Winona County Common Community Application submitted to the State of Minnesota MN Recovers Task Force.

A city council member also attended the November 4, 2007 meeting that was held by Winona County concerning the amendment.

