

LAC QUI PARLE COUNTY

CHAPTER FIVE: GOALS, OBJECTIVES, STRATEGIES – NATURAL HAZARDS

Overview

The following tables outline the goals, objectives and mitigation strategies important to Lac qui Parle County. The goals are used as a framework for the objectives and mitigation strategies, which in turn, provide specific information on how mitigation decisions should be made. The goals, objectives and strategies are based on the issues identified by the Lac qui Parle County Local Task Force and the risk assessment in this plan. The chapter is divided into three sections; completed strategies by Lac qui Parle County and cities, current goals, objectives and strategies for Lac qui Parle County and cities, and the prioritization of strategies.

Definitions

Goals are general statements.

Objectives are action statements and start with an action verb.

Strategies support the action of the objective.

The *Time Frame* was determined with the task force and the County Emergency Management Director as an estimate timeline in which to reach the strategy. *Time Frame –Recurring* is a strategy type that does not have a specific time length. Once the strategy has been completed, the responsible entity will re-start the strategy.

Responsible Entity is the entity in charge of initiating and completing the strategy identified. This was determined by the task force and County Emergency Management Director as the most likely entity to complete the strategy.

The *Estimated Cost* was an educated guess of the cost of each strategy. Some strategies would not cost extra and were denoted "--". Some costs were not known and denoted approximately as low, moderate and high for comparative purposes.

The *Funding Partner* is a potential partner for the county/city to obtain funding from in order to complete a strategy.

General Mitigation Vision

“The County will strive to work with surrounding communities and local emergency responders to create and implement a proactive and results-oriented all-hazard mitigation plan that will make the county and region a safer and more sustainable place to live by protecting and enhancing the resources of the county as they relate to hazards that may have an impact in the future.”

The following goals, objectives and strategies are separated by hazard.

Development of Strategies

To determine strategies for each hazard identified in the risk assessment (Chapter 4), small group problem-solving techniques were used. Once the hazards most likely to affect Lac qui Parle County were identified and prioritized, a public meeting was held to review these hazards and their rankings and identify strategies to address mitigation for each hazard. Individuals participating in the public meeting included task force members, interested parties, elected officials, technical team members and some general public. Past hazard activities in the county influenced strategy development and strategy ranking (i.e. 1997, 2001, 2006-2010 flooding). In many cases when the hazards were identified for the inventory, strategies were also discussed at that time providing a good place to start discussion.

The following outlines the plan's strategy development process. 1) Using the focus group approach and working toward group consensus each hazard was reviewed individually. 2) Participants offered suggestions and input which stimulated a lively discussion as part of the planning process. All suggestions were considered and recorded by the facilitator. 3) A limited amount of time was set on each hazard by the facilitator to move the group forward. 4) Debate followed before the group was asked to decide if it should be part of the plan – group consensus was needed. 5) The group noted they could not be totally inclusive – some strategies may not even be considered – others may not be feasible.

General Criteria

- | | |
|--------------------------|------------------------------------|
| 1. History | 5. Effectiveness |
| 2. Successful Strategies | 6. Building on What Already Exists |
| 3. Need | 7. Legal Authority |
| 4. Risks | 8. Environmental Impact |

Cost/Benefit Criteria

- | | |
|------------------------|---|
| 1. Costs/Efficiencies | 4. Overall Impact |
| 2. Economic Impact | 5. Resources Needed (Social & Fiscal) |
| 3. Budget Requirements | 6. Benefits Provided by Project (Social & Fiscal) |

Identifying costs that would be attached to each strategy became the most difficult part of the process. Available data on past events was included when available. Due to limited time and resources to develop the plan, it wasn't feasible to spend a lot of time on estimating the costs. It will be critical for the County and cities to constantly be evaluating the costs as part of implementation and maintenance for the All-Hazard Mitigation Plan. Strategies that dealt with rural areas seemed harder to include in the plan – more costly, harder to regulate, and would need population buy-in. Many strategies are costly, labor intensive and time consuming and it is difficult to identify the lead for the strategy. (i.e. Updating public facilities in the county with terrorism in mind.)

Participants in the planning process agreed that to implement an ordinance or regulation was the difficult part of some strategies – would it be possible and feasible to follow-through? Participants agreed to start with strategies that were manageable to see some notable progress – “baby steps”. It also seemed reasonable to include strategies that already have been started but

not yet completed. Some strategies require more information and data before developing a strategy and should be readdressed in future updates.

In addition to creating new mitigation strategies for Lac qui Parle County, the Local Task Force met for the third time on February 23, 2011 in Madison, MN, and analyzed strategies found in the initial All-Hazard Mitigation Plan. The process for strategy analysis included two steps: Step 1) Discuss a strategy and determine its “status”, Step 2) Determine why the strategy has that status. Four different “Statuses” were available to assign to a strategy: 1) Completed, 2) Not completed – strategy still feasible, 3) Recurring - does not have a specific time length and once the strategy is completed the responsible entity will restart the strategy, and 4) Not completed – no longer relevant. Once a strategy was assigned a status by the Local Task Force through group consensus, the Local Task Force had to determine **why** it was in that status. For example, a Flood Strategy that received “not completed – strategy is still feasible” may have not been completed due to fund shortage; however, a jurisdiction may see that flood project as still important to complete in the future.

The fourth Local Task Force meeting took place on March 23, 2011 in Madison, MN. At this meeting, the Local Task Force solidified their prioritized mitigation strategies by discussing suggestions from the previous meeting. The Local Task Force had time previous to this meeting to review the updated strategies from the third meeting and through group consensus, voted on the highest priority strategies for Natural Hazards and discussed the plan in its entirety.

HMGP Funded Strategies: Lac qui Parle County and Cities

Table 88. LqP Co & Cities Hazard Mitigation Grant Program Funded Strategies (FEMA-Related)

SUBGRANTEE	PROJECT	FEDERAL SHARE	DR-PROJECT NUMBER	CITY/LOCATION	DATE STARTED
City of Dawson	Acquire 32 properties	\$383,250	DR-1175.12	Dawson	November 1997
City of Dawson	NOAA Radio Transmitter	\$56,250	DR-1175.29	Dawson, Appleton	November 1998
Lac qui Parle County	Living Snow Fences at 4 sites	\$64,113	DR-1175.37	Lac qui Parle County	December 1999

Source: MN HSEM 2009

Natural Hazard Strategies: No Longer Relevant

Table 89. LqP Co & Cities Natural Hazard Strategies – No Longer Relevant

HAZARD	STRATEGIES	Responsible Entity
Violent Storms & Extreme Temperatures	Require that all manufactured homes have tie-downs by adding to manufactured home ordinances. Provide tie-downs for homes in need.	Citizens with manufactured homes without tie-downs.
Reasoning: The State of Minnesota now mandates that all manufactured homes must have tie-downs.		
Flood	Enforce current ordinances and adopt Zoning and Floodplain Management Ordinances if a community has 100 and/or 500-year floodplains.	Boyd, Marietta, Nassau; County Zoning
Reasoning: Duplicate strategy, information is included within a different strategy.		
Flood	Riprap and create an earthen embankment of the problem area of Ten Mile Creek.	LqP YB Watershed District, County Engineer
Reasoning: The Lac qui Parle Yellow Bank Watershed District has opted for a new strategy.		
Wildfires	Educate the public about firebreaks. FSA allows firebreaks (tilled or mowed strips) on CREP and CRP land – acreage used for firebreaks can be included in CRP. Provide resources to landowners who may not have equipment to create firebreaks.	DNR, FSA, SWCD, USFWS
Reasoning: This program is run by the DNR and FSA. They educate owners about firebreaks and when burning should occur on CREP and CRP lands.		

Completed Strategies: LqP Co & Cities Natural & Manmade Technological Hazards

Table 90. LqP Co & Cities Completed Strategies in Past 5 Years: Natural & Manmade Technological Hazards

HAZARD	STRATEGIES	Responsible Entity
Violent Storms & Extreme Temperatures	All manufactured homes have tie-downs in place for violent storms.	Boyd
Violent Storms & Extreme Temperatures	Purchased a new weather warning siren in 2010 that is remotely activated by County.	Nassau
Violent Storms & Extreme Temperatures	Obtained new siren battery backups.	Dawson, Madison
Violent Storms & Extreme Temperatures	Identify alternative sites in Emergency Operations Plan for an Emergency Operations Centers that is equipped with necessary tools.	Lac qui Parle County Sheriff Department
Violent Storms & Extreme Temperatures	Constructed an Emergency Operations Center facility that doubles as a Media Center in the M-M-N Elementary School in Madison, MN in 2010.	Lac qui Parle County
Flood	Levee project completed in November 2009.	Dawson
Flood	City purchased and installed 10 new culverts to improve flood situation (2005-2010).	Marietta
Flood	Completed bank stabilization in 2011 on Ten Mile Creek.	Yellow Medicine County
Drought	Purchased new water meters for all residents between 2007 and 2008.	Boyd
Drought	Update all electric water meters to radio-reading meters.	Dawson, Madison
Wildfire	Contracted with MnDNR and local fire departments to coordinate for large wildfires.	Dawson, Louisburg
Wildfire	Received grants and continually apply for firefighting equipment including new pagers, water movement equipment, and a gator.	Bellingham, Boyd, Dawson, Louisburg, Madison
Dam Failure	Removed dam in central area of City in 2009.	Dawson
Infectious Diseases	Spray for mosquitoes as needed to reduce threat of West Nile disease.	Bellingham, Boyd, Dawson, Madison, Marietta, Nassau
Fire	City purchased and installed two dry hydrants in Marietta Fire District Area 2005-2010.	Marietta
Fire	Updated /Adopted Ordinance to manage abandoned and dilapidated buildings.	Bellingham, Boyd, Dawson, Marietta
Fire	Began Demolition Program that allows adjoining property owners of dilapidated residences to purchase the home and obtain up to \$5,000 from City and County to demolish.	Madison
Fire	City has sold (and will continue) and demonstrates the use of carbon monoxide/smoke detectors and fire extinguishers to public. Madison checked all residences' fire and carbon monoxide detectors.	Marietta, Madison
Hazardous Materials	Adopted an Ordinance regarding meth lab cleanup.	Boyd
Water Supply Contamination	Adopted a Wellhead Protection Plan in 2008.	Bellingham
Wastewater Facility System Failure	Televised all sewer lines from 2008-2009. Eighty percent of all sewer lines have been replaced from 2009-2010.	Madison
Wastewater Facility System Failure	City purchased two new sewer pumps in 2004 and new seals for pumps in 2010.	Marietta
Civil Disturbance/Terrorism	Install alarms/locks on building facility (Water Treatment Facilities)	Bellingham, Dawson, Madison, Marietta, Nassau
Civil Disturbance/Terrorism	All city-owned facilities are secured and Wastewater Treatment Facility is fenced in.	Dawson, Madison

Goals, Objectives and Mitigation Strategies – Natural Hazards

Hazard: Violent Storms and Extreme Temperatures

Goal 1: Safe and accessible shelter from violent storms.					
OBJECTIVES	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner
1. Encourage new homes without basements to have a safe shelter where household residents may go in case of violent storms.	A. Educate contractors & homeowners on safe shelters.	Recurring	Bellingham, Dawson, Boyd, Louisburg, Madison, Marietta, Nassau, County	--	FEMA
Objective 1: Strategy A Information: A. Education regarding safe shelters and emergency preparedness is a recurring strategy for Lac qui Parle County, Bellingham, Dawson and Louisburg . This is a new strategy for Boyd (1-2 years), Madison (1 year), Marietta (1-2 years), and Nassau (1 year).					
2. Ensure that all hospital, school and nursing home facilities have a severe storm plan in place to protect patients and students.	A. The County Emergency Management Director should continue to do periodic visits and review plans annually.	Recurring	County Emergency Management Director (EMD)	--	--
Goal 2: Improve severe storm warning system for all county residents.					
OBJECTIVES	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner
1. Ensure that emergency management personnel, county sheriff, emergency response persons are notified as soon as possible in the event of a severe storm.	A. Continue current programs and plans that are in place and periodically review the effectiveness of these plans. All schools have access to real-time weather information.	Recurring	County EMD, County Sheriff	--	--
2. Assess adequacy of existing civil defense sirens.	A. The County Emergency Management Director should review countywide siren needs annually. Look for funding to provide new or improve warning systems as necessary.	Recurring	County EMD; Bellingham, Dawson, Boyd, Madison, Marietta	--	NOAA
Objective 2: Strategy B Information: A. This is a specific strategy for Bellingham (3 years), Boyd (5 years), Dawson (5 years), Madison (1-2 years), and Marietta (2-3 years). Louisburg and Nassau have sufficient siren service and have been removed .					
3. Ensure that all communities and rural areas of the county have immediate access to severe weather warnings and communications.	A. Encourage local hardware stores to stock weather radios. LqP County Sheriff's Department has weather radios for sale.	Recurring	County EMD	--	--
	B. Educate the public on the use of weather radios.	Recurring	County EMD	\$500	--
Objective 3: Strategies A Information: A. This strategy has been completed and modified from 1 year to be a Recurring strategy. Further, the LqP County Sheriff's Department has weather radios for sale. In 2008-2009, all schools were provided with new NOAA weather radios. Countryside Public Health incorporates severe weather planning strategies in their Family Planning Packet provided to the public.					

Hazard: Flood

Goal 1: Reduce and protect structures in the 100-year floodway of the floodplain.					
OBJECTIVES	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner
1. Eliminate any new construction in the 100-year floodway of the floodplain.	A. Enforce current ordinances (Zoning and Floodplain Management) that state that no new construction can occur in the 100-year floodway of the floodplain and specific limitations in the flood fringe.	Recurring	Boyd, Dawson, Marietta, Nassau; County Zoning	--	--
Objective 1: Strategy A Information: A. Nassau does not currently have Floodplain Management Ordinances and intends to adopt within 1 year. Marietta does not have a Zoning Ordinance or a Floodplain Management Ordinance and intends to adopt within 2-3 years. Bellingham, Louisburg, and Madison have been removed from this strategy as they do not have floodplains.					
2. Buyout willing sellers in the 100-year floodway of the floodplain in Dawson or 100-year floodplain in rest of county.	A. Continue to offer buyouts as funding is available. Continue to look for funding.	Recurring	Boyd, Dawson; County Zoning	--	FEMA MnDNR
Objective 2: Strategy A Information: A. Strategy has been modified from 3-5 years to Recurring. Boyd to acquire one residential home within 5 years. Marietta and Nassau do not have structures in floodplains. Bellingham, Louisburg, and Madison have been removed from this strategy as they do not have floodplains.					
3. Identify areas for flood improvements in Dawson and implement the Floodplain Management Ordinance. *New Strategies	A. Raise Ash Street to flood protection level. (approx. 3 feet)	1-2 years	Dawson	Moderate	FEMA
	B. Install new stormwater infrastructure on North 4 th Street.	1-2 years	Dawson	\$50,000	FEMA
Goal 2: Address flooding issues that cross borders.					
OBJECTIVES	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner
1. Work with South Dakota on flood issues.	A. Work on pilot project to retain water in areas using technology and research ideas for areas that cross between the borders of South Dakota and Lac qui Parle County.	2-5 years	Lac qui Parle Yellow Bank Watershed District	Unknown	
Objective 1: Strategy A Information: A. This strategy was not completed, due to a lack in funding. It has been modified from 2-5 years to 15-25 years.					

Goal 3: Address overland flooding.					
OBJECTIVES	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner
1. Correct the reoccurring flooding along the banks of Ten Mile Creek and Florida Creek. *New Strategies	A. Create a large structure on the Lac qui Parle River that can encompass 150 square miles and act as a reservoir for 9,000 acre feet of water. This would be located in the South Branch Watershed.	15-25 years	County Engineer, LqP YM Watershed District	\$15-20 million	MnDNR
	B. Place a ring dike in Garfield Township.	5 years	County Engineer, LqP YM Watershed District	Medium	MnDNR
	C. Create a large structure on Florida Creek that can will act as a reservoir for flood waters.	15-25 years	County Engineer, LqP YM Watershed District	\$15-20 million	MnDNR
Goal 4: Maintain NFIP Compliance for participating jurisdictions.					
OBJECTIVES	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner
1. All communities with defined floodplains participate in the National Flood Insurance Program. *New Objective and Strategy	A. Join the NFIP.	2-3 years	Marietta, Nassau	--	--
	2. Work with DNR to develop a Flood Ordinance for the community.	A. Bring a Floodplain Ordinance to the City Council for Consideration	1 year	Marietta, Nassau	--
3. Develop and implement strategies to demonstrate “Continued Compliance”. *New Objective and Strategies	A. Work with MN DNR to review and update the Floodplain Management Ordinance as required.	Recurring	Bellingham, Boyd, Dawson, County Zoning	--	--
	B. Work with MN DNR on development applications in identified Flood Prone Areas.	Recurring	Boyd, Dawson, County Zoning	--	--
	C. Encourage property owners in “Flood Prone” areas to purchase flood insurance.	Recurring	Bellingham, Boyd, Dawson, County Zoning	--	--
	D. Discourage development in Flood Prone Areas.	Recurring	Bellingham, Boyd, Dawson, County Zoning	--	--

Hazard: Drought

Goal 1: Monitor the county's ground water supplies and demands.					
OBJECTIVES	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner
1. Encourage use of water meters to monitor water consumption.	A. Most communities have water meters. Make sure that the water consumption information is available during drought times.	Recurring	Bellingham, Dawson, Boyd, Madison, Marietta, Nassau	--	MnDNR
2. Establish a comprehensive and ongoing water-monitoring program.	A. Work with communities to periodically review quantity and quality of water supply.	Recurring	MnDNR; Bellingham, Dawson, Boyd, Madison, Marietta, Nassau	--	MnDNR

Hazard: Dam Failure

Goal 1: Prevent structures from cracking or breaking.					
OBJECTIVES	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner
1. Ensure dam construction is maintained and functioning properly.	A. Coordinate dam inspections with the MnDNR and US Army Corps of Engineers.	Recurring	County, MnDNR, ACOE	--	MnDNR, ACOE
Goal 2: Provide safety to residents.					
OBJECTIVES	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner
1. Minimize development within floodplains.	A. Enforce floodplain ordinance.	Recurring	County Zoning	--	--

Hazard: Wildfire

Goal 1: Prevent wildfires.					
OBJECTIVES	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner
1. Minimize the amount of natural fuel in areas prone to fire damage.	A. Encourage controlled burns. FSA allows controlled burns on CREP and CRP. The FSA offers cost share for controlled burns on CREP and CRP land. Encourage landowner responsibility.	Recurring	FSA SWCD NRCS	--	--
2. Provide education to the public about wildfire prevention.	A. Work with the FSA office to provide education to landowners. Some landowners may not realize that burning is allowed and beneficial.	Recurring	FSA DNR	--	--
Goal 2: Protect the safety of residents.					
OBJECTIVES	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner
1. Provide education to the public about wildfire prevention.	A. Work with local units of government, fire departments and schools to provide educational fire safety materials to the public.	Recurring	Bellingham, Dawson, Boyd, Louisburg, Madison, Marietta, Nassau FD's	\$500/city	MnDNR; DPS/ FEMA
2. Promote training programs between the DNR and local firefighters.	A. Encourage DNR to give training locally.	Recurring	MnDNR; Bellingham, Dawson, Boyd, Louisburg, Madison, Marietta, Nassau FD's	--	MnDNR
Objective 2: Strategy A Information:					
A. This strategy was completed and modified to a Recurring strategy.					
3. Increase access to equipment suitable to fighting wildfires.	A. Work with DNR to provide more equipment for local fire departments. Look for grants for additional equipment if necessary.	Recurring	Bellingham, Dawson, Boyd, Louisburg, Madison, Marietta, Nassau FD's	Costs will vary	MnDNR/ FEMA
Objective 3: Strategy A Information:					
A. Boyd received grant money for new pagers and water movement equipment. Dawson received grant money for a gator in 2009. This strategy was completed and modified to a Recurring strategy.					

National Flood Insurance Program Compliance

National Flood Insurance Program (NFIP).

The National Flood Insurance Program (NFIP) is a program regulated by the Federal Emergency Management Agency (FEMA). The NFIP provides maps for local floodplain management in an effort to reduce federal expenditures due to flood events throughout the nation. The NFIP is also the primary source for flood insurance for flood-properties and those located in 100 and 500-year floodplains. The NFIP has three basic requirements: floodplain identification and mapping, floodplain management, and the purchasing of flood insurance. Floodplains are found in four cities within Lac qui Parle County (and Lac qui Parle County) as determined previously in Table 50. Currently, of the five jurisdictions, two do not actively participate in the NFIP. Boyd, Dawson, and Lac qui Parle County all have Floodplain Management Ordinances in effect. The City of Bellingham also participates in the program, but they have No Mapped High Risk Flood Area identified in the community. Two communities, Louisburg and Madison do not participate in the program as they do not have Special Flood Hazard Areas. The NFIP participation from the initial Lac qui Parle County All-Hazard Mitigation Plan has not changed in the past five years. Table 92 identifies NFIP participation, dates of Initial Flood Insurance Rate Maps (FIRM), current effectiveness of map dates, and Emergency Dates if applicable.

Table 91. LqP Co & Cities NFIP Participation

Jurisdiction	NFIP Status	Initial FIRM Identified	Current Effective Map Date	Emergency Date
Bellingham	Participating	03/16/06	No Mapped High Risk Flood Areas	03/30/79
Boyd	Participating	03/16/06	03/16/06	05/25/84
Dawson	Participating	01/16/80	03/16/06	01/16/80
Louisburg	Not Mapped	no data	No Mapped High Risk Flood Areas	no data
Madison	Not Mapped	no data	No Mapped High Risk Flood Areas	no data
Marietta	Not Participating*	03/16/06	Have FEMA Mapped High Flood Risk Areas	09/06/75
Nassau	Not Participating*	03/16/06	Have FEMA Mapped High Flood Risk Areas	03/16/07
Lac qui Parle County	Participating	06/04/80	03/16/06	06/04/80

Source: FEMA September 30, 2010

Table 93 (following page) provides FEMA's NFIP Insurance Report for Bellingham, Boyd, Dawson, and Lac qui Parle County. Information attained in this report identifies total insurance premium amounts, number of A-Zone properties (100-year floodplain), number of existing policies, total insurance coverage, and total claims and amounts paid to each jurisdiction since 1978.

Table 92. FEMA NFIP Insurance Report

Jurisdiction	Total Premium	A-ZONE	Number of Policies	Total Coverage	Total Claims Since 1978	Total Paid Since 1978
Bellingham	\$173	0	1	\$42,000	1	\$2,352
Boyd	\$1,004	0	3	\$289,000	4	\$5,277
Dawson	\$8,917	8	13	\$2,089,700	30	\$187,567
Lac qui Parle County	\$1,723	1	5	\$637,000	4	\$26,166
TOTAL	\$11,817	9	22	\$3,057,700	39	\$221,362

Source: FEMA February 2011

NFIP Continued Compliance.

FEMA mandates that all communities participating in the NFIP must identify continued compliance with the program. Following are descriptions of Bellingham, Boyd, Dawson, and Lac qui Parle County processes for continued compliance.

Bellingham

Bellingham does not have any mapped High Risk Flood Areas in the March 16, 2006 digital Flood Insurance Rate Maps; but recognizes the importance of participating in the NFIP program. Bellingham’s Flood Plain Ordinance was adopted at the same time of the County adoption in November 2006. Below are three strategies that Bellingham intends to complete as methods to continue compliance with National Flood Insurance Program.

Strategies to Continue NFIP Compliance:

1. Work with the MnDNR to review and update the Floodplain Management Ordinance as required.
2. Discourage development in “flood-prone” areas.
3. Encourage property owners to purchase flood insurance.

Boyd

The City of Boyd utilizes digital FIRM maps dated March 16, 2006, to illustrate the location of 100 and 500-year floodplain boundaries within municipal limits. In order to prevent development in the 100-year floodplain, Boyd passed a Floodplain Management Ordinance in December 16975 and recently updated their ordinance on January 25, 2006. The process an applicant must follow to obtain a permit is detailed within the Floodplain Management Ordinance, under the jurisdiction of the Zoning Administrator, City Clerk, and Boyd City Council. The general process states that an applicant must submit specific information to the Zoning Administrator and an expert person or agency; who in turn will determine whether the property is located in a flood way or flood fringe. The Zoning Administrator will present a technical evaluation to the City Council, who could provide the information to the MnDNR for review; then later approve or deny the application. Below (following page) are four strategies that Boyd intends to complete as methods to continue compliance with National Flood Insurance Program.

Strategies to Continue NFIP Compliance:

1. Work with the MnDNR to review and update the Floodplain Management Ordinance as required.
2. Discourage development in “flood-prone” areas.
3. Encourage property owners to purchase flood insurance.
4. Work with MN DNR on development applications in identified Flood Prone Areas.

Dawson

Dawson currently utilizes March 16, 2006 digital FIRM maps to display 100 and 500-year floodplain boundaries; however with the completion of a levee to protect residences and commercial industries, the City has asked for a new study to re-determine new floodplain boundaries. The City of Dawson has been very proactive concerning flooding and bought out and removed 36 homes from 1997 – 2003 located south of the river. The properties were converted to green space including city parks and trails. All properties located within the floodway have been removed. As previously stated, the City of Dawson is committed to preventing development from occurring in floodplains. In order to track potential development; a person must fill out a zoning permit and the Floodplain Administrator determines if the property is located in the floodway, flood fringe, or floodplain. The Floodplain Administrator follows the Floodplain Management Ordinance, most recently updated in February 2006. The City works with the MnDNR on all variance applications and seriously considers their recommendations. Applicants may appeal to the City Council if their permit is denied by Floodplain Administrator.

Below are four strategies that Dawson intends to complete as methods to continue compliance with National Flood Insurance Program.

Strategies to Continue NFIP Compliance:

1. Work with the MnDNR to review and update the Floodplain Management Ordinance as required.
2. Discourage development in “flood-prone” areas.
3. Encourage property owners to purchase flood insurance.
4. Work with MN DNR on development applications in identified Flood Prone Areas.

Lac qui Parle County

Lac qui Parle County utilizes digital FIRM maps dated March 16, 2006 to illustrate the location of 100 and 500-year floodplain boundaries within the unincorporated areas of the county. To prevent future development in the 100-year floodplain, Lac qui Parle County updated their Floodplain Management Ordinance on November 21, 2006, that is actively updated as the MN DNR instructs. The process an applicant must follow to obtain a permit is detailed within the Floodplain Management Ordinance, under the jurisdiction of the Zoning Administrator, Planning Commission and Lac qui Parle County Board of Commissioners. The general process states that an applicant must submit specific information to the Zoning Administrator and an expert person or agency; who in turn will determine whether the property is located in a flood way or flood fringe. The Zoning Administrator will present a technical evaluation to the Planning

Commission and Board of Commissioners, who could provide the information to FEMA or the MnDNR for review; then later approve or deny the application. Upon all variance and conditional use permit requests, the Zoning Administrator will work with the MnDNR to review all applications. Below are four strategies that Lac qui Parle County has committed to in order to continue with NFIP compliance.

Strategies to Continue NFIP Compliance:

1. Work with the MnDNR to review and update the Floodplain Management Ordinance as required.
2. Discourage development in “flood-prone” areas.
3. Encourage property owners to purchase flood insurance.
4. Work with MN DNR on development applications in identified Flood Prone Areas.

Non-participating Communities of NFIP

Marietta& Nassau

Currently the cities of Marietta and Nassau do not participate in the NFIP. Both communities have identified joining the NFIP as a strategy under Goal 4, Objective 1 in the Flood Hazard section of this chapter. In addition both communities are reviewing the state model for a floodplain ordinance for consideration of adoption to support Goal 4, Objective 2 in the Flood Hazard section of this chapter.

Prioritizing Strategies

The fourth Local Task Force meeting took place on March 23, 2011, in Madison, MN. At this meeting, the Local Task Force solidified their prioritized hazards by discussing suggestions made by the County Emergency Management Director and County Engineer in addition to their suggestions at the previous meeting. Strategies that were a high priority for the Local Task Force contained mitigation measures for flooding, wildfires, weather related hazards – which are similar to the highest priority of hazards in Lac qui Parle County. Fire, floods and other weather related seemed to have the highest risk rank (moderate/high and moderate), due to the unforeseen nature of a storm. The strategies are focused not only a countywide level (updating and maintaining the warning siren system), but also on a city basis. The majority of the strategies focus on recurring education efforts. The flood mitigation measures are aimed at frequently flooded areas and township roads. Wildfires were also important to the Local Task Force as local fire departments continually work to improve their inventory of equipment and ensure the highest training is available to volunteer firefighters.

Strategies that were a high priority for the task force contained mitigation measures for flooding. Mitigation measures for flooding are very effective and can decrease risk tremendously. The city of Dawson has been very proactive in addressing flood mitigation. The risk assessment for flooding would be much higher if not for the mitigation measures already taken in the years since the 1997 flood. In the risk assessment in Chapter 4, flooding was ranked a moderate risk, meaning that it has a greater risk than most hazards listed in this plan.

The Local Task Force and the Lac qui Parle County Emergency Management Director analyzed the strategies and prioritized according to need and feasibility as discussed in “Development of Strategies”. Although some hazards may be a high risk for the county it did not guarantee a strategy addressing that hazard would also rank high or take priority. Many factors went into this decision:

- Current strategies. Could a strategy be supplemented or enhanced?
- Costs. What could they feasibly afford at this time? Are there current funds addressing the hazard or strategy? Does it make sense to delay or does it only postpone higher costs and create other costs? Will it ever be affordable?
- Available resources. At this time what funds are available? Would there be additional funds in the future? Are there other projects that take a higher priority?
- Length of project. Some projects could be addressed quickly and require minimal investment in time even though it may be fiscally costly.
- Compatibility to other plans. Is the project a high priority in other plans? Could the project be addressed collaboratively for efficiencies in resources? Would there be duplication?
- Available information. Can a good decision be made with the current information? Is more research needed or does it make sense to wait for a current study or development for more information before making a decision?
- Impact. Some hazards can be impacted more by mitigations (i.e. strategies to reduce flooding compared to strategies to reduce tornadoes) and that’s where task force members thought made sense to start.

Table 94 identifies the prioritized strategies for natural hazards in Lac qui Parle County.

Table 93. LqP Co Prioritized Strategies (Natural Hazards)

Rank	Hazard	Strategy	Affected Participating Jurisdiction
1	Flooding	Create a large structure on the Lac qui Parle River that can encompass 150 square miles and act as a reservoir for 9,000 acre feet of water. This would be located in the South Branch Watershed.	Yellow Bank-Lac qui Parle Watershed Districts
1	Flooding	Create a large structure on the Florida River that will act as a reservoir for flood waters.	Yellow Bank-Lac qui Parle Watershed Districts
1	Flooding	Riprap and earth embankment of the problem areas of Ten Mile Creek.	County and townships
2	Infectious Disease	Continue working with Countryside Public Health on public information.	County
3	Wildfire	Encourage controlled burns – work with landowners to educate.	County and townships
3	Wildfire	Educate on firebreaks. Provide resources to landowners without equipment.	County and Bellingham, Dawson, Boyd, Louisburg, Madison, Marietta, Nassau FD's
3	Wildfire	Coordinate with surrounding fire departments on trainings.	Bellingham, Dawson, Boyd, Louisburg, Madison, Marietta, Nassau FD's and MnDNR
3	Wildfire	Work with state and federal agencies on more equipment for local fire departments.	Bellingham, Dawson, Boyd, Louisburg, Madison, Marietta, Nassau FD's and MnDNR
4	Severe Storms	Seek funding for siren battery backups.	County EMD
4	Severe Storms	Review countywide siren needs annually.	County EMD

LAC QUI PARLE COUNTY

CHAPTER SIX: GOALS, OBJECTIVES, STRATEGIES - LAC QUI PARLE COUNTY CITIES

Overview

The following table outlines the goals, objectives and mitigation strategies important to Lac qui Parle County. The goals are used as a framework for the objectives and mitigation strategies, which in turn, provide specific information on how mitigation decisions should be made. The goals, objectives and strategies are based on the issues identified by the task force and the risk assessment in this plan. The implementation section serves as the guideline for using and maintaining this plan.

Definitions

Goals are general statements.

Objectives are action statements and start with an action verb.

Strategies support the action of the objective.

The *Time Frame* was determined with the task force and the County Emergency Manager as an estimate timeline in which to reach the strategy.

Responsible Entity is the entity in charge of initiating and completing the strategy identified. This was determined by the task force and County Emergency Manager as the most likely entity to complete the strategy.

The *Estimated Cost* was an educated guess of the cost of each strategy. Some strategies would not cost extra and were denoted "--". Some costs were not known and denoted as "unknown".

Each of the items above may change as goals, objectives and strategies change and as mitigation activities occur. Refer to the "Implementation and Maintenance" section in this chapter for an explanation how the plan will be updated.

General Mitigation Vision

"The County will strive to work with surrounding communities and local emergency responders to create and implement a proactive and results-oriented all-hazard mitigation plan that will make the county and region a safer and more sustainable place to live by protecting and enhancing the resources of the county as they relate to hazards that may have an impact in the future."

The following goals, objectives and strategies are separated by hazard.

Goals, Objectives and Mitigation Strategies: City of Bellingham

Hazard: Violent Storms and Extreme Temperatures

Goal 2: Improve severe storm warning system for all county residents.							
OBJECTIVE	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner	Rank	Reasoning for Rank
Assess adequacy of existing emergency warning sirens.	Purchase 1 new Emergency Warning Siren.	3 years	City	\$17,000	NOAA	1	Improve immediacy of rural knowledge of weather events
Goal 3: Protect people and country infrastructure from the impacts of severe weather.							
OBJECTIVE	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner	Rank	Reasoning for Rank
* New Objective	Develop a Living Snow Fence for 1/4 mile along Co Hwy 30 and 1/4 mile along US Hwy 75.	10 years	City	High \$30,000 (est)	FEMA	3	Citizen Safety
	Develop a Living Snow Fence for 3/4 mile along US Hwy 75.	15 years	City	Moderate \$20,000 (est)	FEMA	4	Citizen Safety

Hazard: Wildfire

Goal 1: Prevent wildfires.							
OBJECTIVE	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner	Rank	Reason for Ranking
Provide education to the public about wildfire prevention.	Perform public education regarding Wildfires and Fires in utility bills.	2 years	City	\$500	FEMA	2	Citizen Safety & Education

Goals, Objectives and Mitigation Strategies: City of Boyd

Hazard: Violent Storms and Extreme Temperatures

Goal 1: Safe and accessible shelter from violent storms.							
OBJECTIVE	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner	Rank	Reason for Ranking
Encourage homes without basements to have a safe room where household residents may go in case of violent storms.	Educate the public on safe room locations through a map placed in utility bills.	1-2 years	City	\$500	FEMA	1	Citizen Education
Goal 2: Improve severe storm warning system for all county residents.							
OBJECTIVE	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner	Rank	Reason for Ranking
Assess adequacy of existing emergency warning sirens.	Purchase 1 new Emergency Warning Siren.	5 years	City	\$17,000	NOAA/ FEMA	2	Improve rural knowledge of weather events
Goal 3: Protect people and country infrastructure from the impacts of severe weather.							
OBJECTIVE	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner	Rank	Reason for Ranking
Ensure that roads are kept clear during heavy snow events. * New Objective	Purchase a loader for snow removal.	5-10 years	City	\$25,000 - \$35,000	DPS	3	Citizen Safety

Hazard: Flood

Goal 1: Reduce the number of structures in the 100-year floodway of the floodplain.							
OBJECTIVE	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner	Rank	Reason for Ranking
Buyout willing sellers in the 100-year floodway of the floodplain in the County.	Acquire 1 residential home in 100-year floodplain.	5 years	City	\$20,000 (apprx)	FEMA/ DNR	4	Citizen Safety
Goal 5: Maintain NFIP Compliance for participating jurisdictions.							
OBJECTIVE	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner	Rank	Reason for Ranking
Develop and implement strategies to demonstrate "Continued Compliance".	Work with MN DNR on development applications in identified Flood Prone Areas.	Recurring	City	Staff Time	--	5	Prevent Flooding
	Encourage property owners in Flood Prone areas to purchase flood insurance.	Recurring	City	Staff Time	--	6	Prevent Flooding/ Citizen Safety
	Discourage development in Flood Prone Areas.	Recurring	City	Staff Time	--	7	Prevent Flooding
	Work with MN DNR to review and update the Floodplain Management Ordinance as required.	Recurring	City	Staff Time	--	8	Prevent Flooding/ Citizen Safety

Goals, Objectives and Mitigation Strategies: City of Dawson

Hazard: Violent Storms and Extreme Temperatures

Goal 2: Improve severe storm warning system for all county residents.

OBJECTIVE	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner	Rank	Reason for Ranking
Assess adequacy of existing emergency warning sirens.	Purchase 1 new Emergency Warning Siren for the western edge of City.	5 years	City	\$17,000	NOAA/ FEMA	5	Improve immediacy of rural knowledge of weather events

Hazard: Flood

Goal 2: Protect the structures in the 100-year floodplain.

OBJECTIVE	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner	Rank	Reason for Ranking
Identify areas for flood improvements in Dawson and implement the Floodplain Management Ordinance.	Raise Ash Street to flood protection level. (Approximately 3 feet)	1-2 years	City	Moderate	FEMA	2	Prevent Flooding/ Citizen Safety
	Install new stormwater infrastructure on North 4th Street.	1-2 years	City	\$50,000	FEMA	3	Prevent Flooding/ Citizen Safety

Goal 5: Maintain NFIP Compliance for participating jurisdictions.

OBJECTIVE	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner	Rank	Reason for Ranking
Develop and implement strategies to demonstrate "Continued Compliance".	Work with MN DNR on development applications in identified Flood Prone Areas.	Recurring	City	Staff Time	--	7	Prevent Flooding/ Citizen Safety
	Encourage property owners in Flood Prone areas to purchase flood insurance.	Recurring	City	Staff Time	--	8	Prevent Flooding/ Citizen Safety
	Discourage development in Flood Prone Areas.	Recurring	City	Staff Time	--	9	Prevent Flooding/ Citizen Safety
	Work with MN DNR to review and update the Floodplain Management Ordinance as required.	Recurring	City	Staff Time	--	10	Prevent Flooding/ Citizen Safety

Hazard: Fire

Goal 1: Prevent fires.

OBJECTIVE	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner	Rank	Reason for Ranking
Manage rental housing/dilapidated/abandoned buildings.	Adopt a "Landlord Ordinance" that determines a set of regulations and standards to follow prior to renting residences.	1 year	City	Staff Time	City	6	Citizen Safety

Continued Strategies for Dawson, MN

Hazard: Wastewater Facility Failure

Goal 1: Minimize damage from flooding.

OBJECTIVE	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner	Rank	Reason for Ranking
Reduce inflow and infiltration into municipal sewer systems.	City intends to televiser sewer lines to determine infiltration problem.	1-2 years	City	\$10,000 - \$15,000	--	1	Emergency Situation

Hazard: Water Supply Contamination

Goal 1: Focus on efforts in areas more prone to groundwater contamination.

OBJECTIVE	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner	Rank	Reason for Ranking
Protect the wellhead.	Research Wellhead Protection Plans and consider participation.	2 year	City	--	Staff Time	4	Citizen Safety

Goals, Objectives and Mitigation Strategies: City of Louisburg

Hazard: Violent Storms and Extreme Temperatures

Goal 3: Protect people and country infrastructure from the impacts of severe weather.

OBJECTIVE	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner	Rank	Reasoning for Rank
Ensure that roads are kept clear during heavy snow events. * New Objective	Build a snow fence along 400 feet of the northern city border.	10 years	City	Moderate \$15,000 (est)	FEMA	1	Protect residences from NW winds

Goals, Objectives and Mitigation Strategies: City of Madison

Hazard: Violent Storms and Extreme Temperatures

Goal 1: Safe and accessible shelter from violent storms.							
OBJECTIVE	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner	Rank	Reason for Ranking
Encourage homes without basements to have a safe room where household residents may go in case of violent storms.	Create an Education Brochure that maps out all available safe rooms in Community and distribute to all citizens.	1 year	City	\$500	FEMA	4	Citizen Education
Goal 2: Improve severe storm warning system for all county residents.							
OBJECTIVE	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner	Rank	Reason for Ranking
Assess adequacy of existing emergency warning sirens.	Purchase a Emergency Warning Siren for eastern side of City.	1-2 years	City	\$17,000	NOAA/ FEMA	2	Improve immediacy of rural knowledge of weather events

Hazard: Drought

Goal 1: Monitor the County's groundwater supplies and demands.							
OBJECTIVE	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner	Rank	Reason for Ranking
Encourage use of water meters to monitor water consumption.	Upgrade all electric and water meters to Radio-reading meters.	1 year	City	\$75,000	--	1	Improve City Infrastructure

Hazard: Hazardous Materials

Goal 4: Address inconsistencies and County shortcomings in dealing with hazardous materials.							
OBJECTIVE	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner	Rank	Reason for Ranking
Work with County and cities to address cleanup of meth labs.	Adopt an ordinance that ensures that Meth Labs will be cleaned prior to renting to other individuals.	2-3 years	City	Staff Time	--	5	Citizen Safety

Goals, Objectives and Mitigation Strategies: City of Marietta

Hazard: Violent Storms and Extreme Temperatures

Goal 1: Safe and accessible shelter from violent storms.							
OBJECTIVE	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner	Rank	Reason for Ranking
Encourage homes without basements to have a safe room where household residents may go in case of violent storms.	Provide education to residents that illustrates available shelters for those without and information on "What to do during Violent Storms".	1-2 years	City	\$500	FEMA	1	Citizen Education
Goal 2: Improve severe storm warning system for all county residents.							
OBJECTIVE	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner	Rank	Reason for Ranking
Assess adequacy of existing emergency warning sirens.	Purchase an Emergency Warning Siren for City.	2-3 years	City	\$17,000	NOAA	2	Improve immediacy of rural knowledge of weather events

Hazard: Flood

Goal 2: Protect the structures in the 100-year floodplain.							
OBJECTIVE	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner	Rank	Reason for Ranking
Continue to prohibit the building of new structures in the 100-year floodplain.	Adopt a Floodplain Management Ordinance.	2-3 years	City	Staff Time	--	3	Prevent Flooding/ Citizen Safety
	Adopt a Zoning Ordinance.	2-3 years	City	Staff Time	--	4	Prevent Flooding/ Citizen Safety
Goal 5: Maintain NFIP Compliance for participating jurisdictions.							
OBJECTIVE	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner	Rank	Reason for Ranking
All communities with defined floodplains participate in the National Flood Insurance Program.	Join the NFIP.	2-3 years	City	Staff Time	--	5	Prevent Flooding/ Citizen Safety
*New Objective	*New Strategy						

Goals, Objectives and Mitigation Strategies: City of Nassau

Hazard: Violent Storms and Extreme Temperatures

Goal 1: Safe and accessible shelter from violent storms.							
OBJECTIVE	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner	Rank	Reason for Ranking
Encourage homes without basements to have a safe room where household residents may go in case of violent storms.	Map shelters and provided residents with emergency information for violent storms.	1 year	City	\$500	FEMA	2	Citizen Education

Hazard: Flood

Goal 2: Protect the structures in the 100-year floodplain.							
OBJECTIVE	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner	Rank	Reason for Ranking
Continue to prohibit the building of new structures in the 100-year floodplain.	Adopt a Floodplain Management Ordinance.	1 year	City	Staff Time	--	1	Prevent Flooding/ Citizen Safety
Goal 5: Maintain NFIP Compliance for participating jurisdictions.							
OBJECTIVE	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner	Rank	Reason for Ranking
All communities with defined floodplains participate in the National Flood Insurance Program. *New Objective	Join the NFIP. *New Strategy	2 years	City	Staff Time	--	3	Prevent Flooding/ Citizen Safety

LAC QUI PARLE COUNTY

CHAPTER SEVEN: GOALS, OBJECTIVES, STRATEGIES – MANMADE / TECHNOLOGICAL HAZARDS

Overview

The following table outlines the goals, objectives and mitigation strategies important to Lac qui Parle County. The goals are used as a framework for the objectives and mitigation strategies, which in turn, provide specific information on how mitigation decisions should be made. The goals, objectives and strategies are based on the issues identified by the Lac qui Parle County Local Task Force and the risk assessment in this plan. The chapter is divided into three sections; completed strategies by Lac qui Parle County and cities, current goals, objectives and strategies for Lac qui Parle County and cities, and the prioritization of strategies.

Definitions

Goals are general statements.

Objectives are action statements and start with an action verb.

Strategies support the action of the objective.

The *Time Frame* was determined with the task force and the County Emergency Management Director as an estimate timeline in which to reach the strategy.

The *Time Frame –Recurring* is a strategy type that does not have a specific time length. Once the strategy has been completed, the responsible entity will re-start the strategy.

Responsible Entity is the entity in charge of initiating and completing the strategy identified. This was determined by the task force and County Emergency Management Director as the most likely entity to complete the strategy.

The *Estimated Cost* was an educated guess of the cost of each strategy. Some strategies would not cost extra and were denoted "--". Some costs were not known and denoted approximately as low, moderate and high for comparative purposes.

The *Funding Partner* is a potential partner for the county/city to obtain funding from in order to complete a strategy.

General Mitigation Vision

“The County will strive to work with surrounding communities and local emergency responders to create and implement a proactive and results-oriented all-hazard mitigation plan that will make the county and region a safer and more sustainable place to live by protecting and enhancing the resources of the county as they relate to hazards that may have an impact in the future.”

Development of Strategies

To determine strategies for each hazard identified in the hazard inventory and risk assessments (Chapters 3 & 4) small group problem-solving techniques were used. Once the hazards most likely to affect Lac qui Parle County were identified and prioritized a public meeting was held to review these hazards and their rankings and identify strategies to address mitigation for each hazard. Individuals participating in the public meeting included task force members, interested parties, elected officials, technical team members and some general public. Past hazard activities in the county influenced strategy development and strategy ranking (i.e. 1997 and 2001 flooding). In many cases when the hazards were identified for the inventory, strategies were also discussed at that time providing a good place to start discussion.

The following outlines the plan's strategy development process. 1) Using the focus group approach and working toward group consensus each hazard was reviewed individually. 2) Participants offered suggestions and input which stimulated a lively discussion as part of the planning process. All suggestions were considered and recorded by the facilitator. 3) A limited amount of time was set on each hazard by the facilitator to move the group forward. 4) Debate followed before the group was asked to decide if it should be part of the plan – group consensus was needed. 5) The group noted they could not be totally inclusive – some strategies may not even be considered – others may not be feasible.

General Criteria

- | | |
|--------------------------|------------------------------------|
| 1. History | 5. Effectiveness |
| 2. Successful Strategies | 6. Building on what already exists |
| 3. Need | 7. Legal Authority |
| 4. Risks | 8. Environmental Impact |

Cost/Benefit Criteria

- | | |
|------------------------|---|
| 1. Costs/Efficiencies | 4. Overall Impact |
| 2. Economic Impact | 5. Resources Needed (Social & Fiscal) |
| 3. Budget Requirements | 6. Benefits Provided by Project (Social & Fiscal) |

Identifying costs that would be attached to each strategy was the most difficult part of the process. Due to limited time and resources to develop the plan it was not feasible to spend a lot of time on estimating the costs. It is critical for the Local Task Force to constantly be evaluating the costs as part of implementation and maintenance for the All-Hazard Mitigation Plan. Strategies that dealt with rural areas seemed harder to include in the plan – more costly, harder to regulate, and would need population buy-in. Many strategies are costly, labor intensive, time consuming and it is difficult to identify the lead for the strategy. It was determined that the Emergency Management Director will perform a cost-benefit review for all potential future project applications.

Manmade-Technological Hazard Strategies: No Longer Relevant

Table 94. LqP Co & Cities Manmade-Technological Hazard Strategies – No Longer Relevant

HAZARD	STRATEGIES	Responsible Entity
Infectious Diseases	Continue cooperation between Countryside Public Health and County Emergency Management Director.	CPH, County EMD
Reasoning: Duplicate strategy, information is included within a different strategy.		
Fire	Continue fire education programs.	Bellingham, Boyd, Dawson, Louisburg, Madison, Marietta, Nassau FD's
Reasoning: Duplicate strategy, information is included within a different strategy.		
Hazardous Materials	Adopt an ordinance for landlords to clean up meth labs before renting to any other family.	Bellingham, Boyd, Dawson, Louisburg, Madison, Marietta, Nassau; County, County EMD
Reasoning: Strategy under authority of Minnesota State Statutes.		
Civil Disturbance/ Terrorism	Continue to review landscape design to improve security of current structures. Develop an appropriate design for new structures.	County EMD, County
Reasoning: Issue has been resolved.		

Goals, Objectives and Mitigation Strategies – Manmade/Technological Hazards

Hazard: Infectious Diseases

Goal 1: Reduce the threat of infectious diseases through education and awareness.					
OBJECTIVES	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner
1. Support and maintain programs that keep the county healthy and safe from infectious diseases.	A. Continue to support Countryside Public Health programs.	Recurring	Countryside Public Health (CPH) & County	--	--
2. Educate the public.	A. Get uniform, accurate and up-to-date information out to the public through the risk communication service.	Recurring	CPH	--	--
	B. Continue cooperation with County Emergency Management Director, Countryside Public Health and hospitals and clinic staff.	Recurring	CPH, County EMD, Hospitals/ Clinics	--	PHEP/ HRSA Grants
Goal 2: Improve the effectiveness and quality of the various efforts addressing infectious diseases that have the potential to impact the county.					
OBJECTIVES	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner
1. Consider new threats and ways to reduce potential impacts.	A. Research the impacts of spraying the county for mosquitoes and reducing the threat of West Nile. Implement the findings of this research.	Recurring	Bellingham, Boyd, Dawson, Madison, Marietta, Nassau, CPH & County EMD	Moderate	--
Objective 2: Strategy A Information:					
A. This strategy has been completed by Bellingham, Boyd, Dawson, Madison, Marietta, and Nassau, excluding Louisburg ; as they do not have the funding to spray for insects. This strategy has been modified from 1-2 years to a Recurring strategy.					

Hazard: Fire

Goal 1: Protect structures from fire.					
OBJECTIVES	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner
1. Provide residents with adequate knowledge of fire safety.	A. Continue fire education programs.	Recurring	Bellingham, Dawson, Boyd, Louisburg, Madison, Marietta, Nassau FD's	--	FEMA/MnDNR
2. Ensure fire departments have adequate staff and equipment to fight fires	A. Have an annual assessment of equipment and personnel needs.	Recurring	Bellingham, Dawson, Boyd, Louisburg, Madison, Marietta, Nassau FD's	--	FEMA/MnDNR
	B. Work to purchase needed equipment and secure funding sources.	Recurring	Bellingham, Dawson, Boyd, Louisburg, Madison, Marietta, Nassau FD's	Varies	FEMA/MnDNR
Goal 2: Provide safety to residents.					
OBJECTIVES	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner
1. Educate the public about fire safety.	A. Provide public education to residents, focusing on carbon monoxide poisoning, evacuation and smoke alarms. Find ways to provide carbon monoxide detectors to residents.	Recurring	Bellingham, Dawson, Boyd, Louisburg, Madison, Marietta, Nassau FD's	--	FEMA/MnDNR
2. Keep electrical units up to code.	A. Enforce ordinances and/or follow State Codes.	Recurring	Schools, Bellingham, Dawson, Boyd, Louisburg, Madison, Marietta, Nassau FD's	--	--
3. Manage abandoned buildings.	A. Eliminate abandoned and unsafe buildings through the passage of Ordinances or programs.	Recurring	Schools, Bellingham, Dawson, Boyd, Louisburg, Madison, Marietta, Nassau FD's	--	--

Hazard: Hazardous Materials

Goal 1: Provide useful and factual information about hazardous materials located in the county.					
OBJECTIVES	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner
1. Support policies and programs that assist in creating factual and timely information about hazardous material in the county.	A. Continue current programs and periodically evaluate their effectiveness.	Recurring	County EMD; Bellingham, Dawson, Boyd, Louisburg, Madison, Marietta, Nassau FD's	--	DHSEM
2. Educate the public about hazardous materials and substances such as carbon monoxide poisoning.	A. Provide public education to residents on hazardous materials and proper disposal. County provides household (domestic) and agricultural hazardous material collection events.	Recurring	County EMD	--	DHSEM
3. Work to get accurate reports of hazardous materials from the public and businesses.	A. Work with the state and federal level to make sure information that is gathered is available at the local level.	Recurring	County EMD	--	DHSEM
4. Make sure emergency personnel have hazardous material location information.	A. Fire departments should get specific locations of hazardous materials on farms and in the county.	3-5 years	Bellingham, Dawson, Boyd, Louisburg, Madison, Marietta, Nassau FD's	--	--
Objective 4: Strategy A Information:					
A. This strategy has been modified from Recurring to 3-5 years, to highlight the importance of this issue.					
5. Periodically inventory and map hazardous material sites in the county.	A. Provide educational material to businesses that use hazardous materials.	Recurring	County EMD	--	DHSEM
Goal 2: Improve the effectiveness and quality of the various efforts addressing hazardous material that may impact the county.					
OBJECTIVES	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner
1. Maintain and update material, plans, and agreements for addressing hazardous material.	A. Review and update the Lac qui Parle County Emergency Operations Plan that outlines procedures for dealing with hazardous material on an annual basis.	Recurring	County EMD	--	DHSEM
	B. Continue to expand the use of mutual aid agreements and memoranda of understandings to improve coordination between state, local and federal agencies and appropriate private sectors.	Recurring	County EMD	--	--

Goal 3: Improve overall preparedness and equipment for handling hazardous events.					
OBJECTIVES	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner
1. Educate emergency personnel on hazardous materials.	A. Encourage that emergency responder groups, fire departments, and emergency managers are trained to at least the Hazardous Materials Awareness level.	Recurring	County EMD	\$4,000	DHSEM
Goal 4: Address inconsistencies and county shortcomings in dealing with hazardous materials.					
OBJECTIVES	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Partner
1. Implement procedures or programs that address gaps or deficiencies in dealing with hazardous materials.	A. Work to get farmers and fertilizer plants to secure ammonia tanks.	2-3 years	County EMD, County Zoning, Law Enforcement	Unknown	--
Objective 1: Strategy A Information:					
A. This strategy was not fully completed due to a lack in funding. It is still a viable strategy. Dawson and Madison have taken steps to secure fertilizer plants.					

Hazard: Water Supply Contamination

Goal 1: Protect the quality of the county's ground water resources.					
OBJECTIVES	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Source
1. Reduce contamination from feedlots.	A. Continue to monitor and regulate locations of feedlots.	Recurring	County Zoning and Mn Dept. of Health	--	--
2. Reduce contamination into private wells.	A. Provide education materials on monitoring private wells.	Recurring	County Zoning and Mn Dept. of Health	--	--
3. Minimize contamination of ground water from unused or abandoned wells.	A. Continue well sealing program in county.	Recurring	Soil & Water Conservation Districts	--	--
4. Reduce contamination from herbicide and pesticide use.	A. Provide education regarding wellhead protection plans.	Recurring	County Zoning and Mn Dept. of Health	--	--
5. Reduce contamination from individual septic systems.	A. Inspect and enforce upgraded septic systems for homeowners. Provide funding to homeowners for this upgrade.	Recurring	County Zoning	--	--
Goal 2: Protect residents from contaminated ground water.					
OBJECTIVES	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Source
1. Provide adequate drinking water in the event of ground water contamination.	A. Identify alternate drinking water sources in emergency operations plan.	Recurring	County EMD	--	--
Goal 3: Focus on efforts in areas more prone to ground water contamination.					
OBJECTIVES	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Source
1. Implement the wellhead protection program for the county.	A. Keep implementation of wellhead protection a top priority in county.	Recurring	County Zoning	Unknown	MPCA
Objective 1: Strategy A Information:					
A. This strategy has been incorporated into the Lac qui Parle Water Plan and has been modified from 3 years to a Recurring strategy.					
2. Protect the wellhead.	A. Encourage cities to adopt wellhead protection plans.	1-5 years	Dawson, Boyd, Madison, Nassau	Unknown	--
Objective 2: Strategy A Information:					
A. Bellingham and Madison have completed this strategy. Boyd is in the process of completing a Wellhead Protection Plan. Dawson and Nassau will consider the strategy. Marietta does not have wells for city usage, wells are used for fire protection purposes only and a one-way valve prevents water from returning to the well once removed. Louisburg has been removed from this strategy due to a lack in funding. This is still viable strategy in the next 1-5 years.					

Hazard: Wastewater Facility Failure

Goal 1: Minimize damage from flooding.					
OBJECTIVES	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Source
1. Reduce inflow and infiltration into municipal sewer systems.	A. Continue to monitor, identify, and solve problems.	Recurring	Bellingham, Dawson, Boyd, Madison, Marietta, Nassau	Moderate – High (varies)	--
Objective 1: Strategy A Information: A. Bellingham, Dawson, Boyd, Madison, Marietta, and Nassau have completed this strategy and it has been modified from 2-3 years to a Recurring strategy. Louisburg does not have a Wastewater Treatment Facility.					
Goal 2: Protect the health of residents.					
OBJECTIVES	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Source
1. Ensure that all public facilities are working properly.	A. Continue updating sanitary sewer systems and securing funding to make these updates.	Recurring	Bellingham, Dawson, Boyd, Madison, Marietta, Nassau	Moderate/ High (varies)	USDA Rural Water; PFA
2. Address the threat of human-induced failures, including terrorism.	A. Monitor activities around each city sanitary sewer system.	Recurring	Bellingham, Dawson, Boyd, Madison, Marietta, Nassau, Law Enforcement, County EMD	--	--

Hazard: Civil Disturbance/Terrorism

Goal 1: Decrease vulnerability of the county.					
OBJECTIVES	STRATEGIES	Time Frame	Responsible Entity	Estimated Cost	Funding Source
1. Work with state and federal agencies engaged in the statewide domestic preparedness strategy to identify further options for the county.	A. Schedule discussions with school leaders, hospital administrators, emergency managers, law enforcement and local units of government to address performance in response to terrorism, focusing on schools and hospitals.	Recurring	County EMD, Law Enforcement	\$5000	--
2. Increase security at major public gathering places.	A. Continue review of facilities and make changes as needed.	Recurring	Law Enforcement	--	--
Objectives 1 & 2: Strategy A Information: A. Bellingham, Boyd, Dawson, Louisburg, Madison, Marietta, Nassau have been removed from these strategies as the responsibility lies with the County.					

LAC QUI PARLE COUNTY

CHAPTER EIGHT: PLAN MAINTENANCE

Implementation & Maintenance

Implementation and Maintenance. The Lac qui Parle County All-Hazard Mitigation Plan is intended to serve as a guide for dealing with the impact of both current and future hazards for all county people and institutions. As such it is not a static document but must be modified to reflect changing conditions if it is to be an effective plan. The goals, objectives and mitigation strategies will serve as the action plan. Even though individual strategies have a responsible party assigned to it to ensure implementation, overall responsibility, oversight and general monitoring of the action plan has been assigned to the Lac qui Parle County Emergency Management Director. It will be their responsibility to gather a Local Task Force to update the All-Hazard Mitigation Plan on a routine basis. Every year, the County Emergency Management Director will call a meeting to review the plan, mitigation strategies and the estimated costs attached to each strategy. All participating parties of the original Local Task Force and cities will be invited to this meeting. Responsible parties will report on the status of their projects. Committee responsibility will be to evaluate the plan to determine whether:

- Goals and objectives are relevant.
- Risks have changed.
- Resources are adequate or appropriate.
- The plan as written has implementation problems or issues.
- Strategies have happened as expected.
- Partners participating in the plan need to change (new and old).
- Strategies are effective.
- Any changes have taken place that may affect priorities.
- Any strategies should be changed.

In addition to the information generated at the Local Task Force meetings, the County Emergency Management Director will also annually evaluate the All-Hazard Mitigation Plan and update the plan in the event of a hazardous occurrence. Two-year updates are due on the anniversary of the plan approval date.

After the second two-year update meeting, the Lac qui Parle County Emergency Management Director will finalize a new Local Task Force to begin the required five-year update process. This will be accomplished in coordination with Lac qui Parle County cities and the entire All-Hazard Mitigation Plan shall be updated and submitted to FEMA for approval (within 5 years of plan adoption). These revisions will include public participation by requiring a public hearing and published notice, in addition to multiple Local Task Force meetings to make detailed updates to the plan.

Public participation for updates is as critical as in the initial plan. Public participation methods that were used in the initial writing will be duplicated for any future update processes – direct mailing list of interested parties, public meetings, press releases, surveys, questionnaires, and

resolutions of participation and involvement. Additional methods of getting public input and involvement are encouraged such as placing copies of the plan in public libraries for public comment or placing the plan on county and city websites. Notifications of these methods could be placed in chamber newsletters, the UMVRDC newsletter and newspapers. Committee responsibilities will be the same as with updates.

Chapters 5, 6, and 7 focus on mitigation strategies for natural hazards, city-specific mitigation strategies for both natural and man-made/technological hazards, and man-made/technological hazards. The All-Hazard Mitigation Plan proposes a number of strategies, some of which will require outside funding in order to implement. If outside funding is not available, the strategy will be set aside until sources of funding can be identified. In these situations, Lac qui Parle County and cities will also consider other funding options such as the county's/cities' general funds, bonding and other sources. Based on the availability of funds and the risk assessment of that hazard, the county will determine which strategies should be continued and which should be set aside. Consequently, the action plan and the risk assessment serves as a guide to spending priorities but will be adjusted annually to reflect current needs and financial resources.

The last step requires an evaluation of the strategies identified in the goals and policies framework, selecting preferred strategies based on the risk assessment, prioritizing the strategy list, identifying who is responsible for carrying out the strategy, and the timeframe and costs of strategy completion. Lac qui Parle County and cities have incorporated the preferred strategies including identification of the responsible party to implement, the timeframe and the cost of the activity with the goals and policies framework.

This plan will be integrated into other county plans such as County Comprehensive Plan, County Water Plan, County Transportation Plan and all Emergency Operations Plans. Chapter One will serve as an executive summary to be attached to those plans as necessary. The County Board and Emergency Management Director will encourage cities to implement their city-specific mitigation strategies in their comprehensive plans, land use regulations, zoning ordinances, capitol improvement plans and/or building codes by including mitigation strategies in their plans as listed in Table 95 on the following page. Further, as each land use mechanism is updated, mitigation strategies will be evaluated to determine whether they can implement or include them at that time. This evaluation will consist of basic cost-benefit analyses, much like what was used to create the mitigation strategies as discussed in Chapters 5, 6, and 7.

Table 95. LqP & Cities - Local Planning Mechanisms

Planning Mechanisms	Jurisdictions
Comprehensive Plan	LqP Co, Boyd, Dawson
Emergency Operations Plan	LqP Co, Dawson
Capital Improvement Plan	Bellingham, Dawson
Local Water Management Plan	LqP Co, Bellingham, Dawson, Madison
Watershed Plan	Watershed District
Land Use Plan	LqP Co, Bellingham, Boyd, Dawson
Zoning Ordinance	LqP Co, Bellingham, Boyd, Dawson, Madison, Nassau
Floodplain Ordinance*	LqP Co, Bellingham, Boyd, Dawson
Shoreland Ordinance	LqP Co

*Marietta and Nassau intend to adopt Floodplain Management Ordinances within 1-3 years.

Many of these plans or policies can help implement the goals, objectives and strategies in Lac qui Parle County's All-Hazard Mitigation Plan. The Lac qui Parle County Emergency Management Director is responsible for meeting with each city within the County two times throughout the next five years. During these meetings, the Emergency Management Director will review all Local Planning Mechanisms and collaborate with the cities to ensure the All-Hazard Mitigation Plan is becoming as integrated into local plans as possible. As adopted versions of Lac qui Parle County's All-Hazard Mitigation Plan will be available at all city offices, during these meetings the Emergency Management Director will solicit and collect any public comments relevant to the plan and make a record for the upcoming update process to be discussed at a Local Task Force meeting. These Local Planning Mechanisms are meant to work cooperatively together in order to ensure the health, safety, and welfare of Lac qui Parle County and its corresponding cities.