KITTSON COUNTY MINNESOTA



2023

Hazard Mitigation Plan





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KITTSON COUNTY MINNESOTA

HAZARD MITIGATION PLAN

Scot Elling Olson Emergency Management Director Kittson County Emergency Management 410 South 5th, Suite 104 Hallock, MN 56728

218-843-2113

Prepared By:

U-Spatial Research Computing | Office of the Vice President for Research 1208 Kirby Drive University of Minnesota Duluth Duluth, MN 55812

218-726-7438

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Section 1 – Introduction

1.1 Introduction

Hazard mitigation is defined as any sustained action to reduce or eliminate long-term risk to human life and property from hazard events. The Federal Emergency Management Agency (FEMA) has made reducing hazards one of its primary goals, and a primary mechanism in achieving this goal is both the hazard mitigation planning process and the subsequent implementation of resulting projects, measures, and policies (FEMA, 2015).

Since 1980, damages due to natural disasters in the U.S. exceeded \$2.195 trillion. 2017 was the costliest year on record with \$306 billion in damage, and while the costliest disasters may occur in coastal states, in 2020, wildfires, hailstorms, drought, and tornadoes caused a record amount of billion-dollar disasters across the nation (Smith, 2022). Hazard mitigation planning is an effective process to prepare communities and lessen the impact of loss of life and property from future disasters. Although mitigation efforts will not eliminate all disasters, government at all levels should strive to be as prepared as possible for a disaster for the wellbeing of its residents.

The Hazard Mitigation Plan (HMP) is a requirement of the Federal Disaster Mitigation Act of 2000. The development of a local government plan is required to maintain eligibility for federal hazard mitigation grant funding programs. For communities to be eligible for future mitigation funds, they must adopt an HMP.

Researchers at the National Institute of Building Sciences looked at the results of 23 years of federally funded mitigation grants provided by FEMA, the U.S. Economic Development Administration (EDA), and the U.S. Department of Housing and Urban Development (HUD). Their findings revealed that for every \$1 spent on hazard mitigation funding in the nation, \$6 is saved in future disaster costs (Multi-Hazard Mitigation Council, 2019).

Kittson County is vulnerable to a variety of natural hazards that threaten the loss of life and property in the county. Hazards such as tornadoes, flooding, wildfires, blizzards, straight-line winds, and droughts have the potential for inflicting vast economic loss and personal hardship.

This HMP represents the efforts of Kittson County and its local governments to fulfill the responsibility of hazard mitigation planning. The intent of the plan is to limit the damages and losses caused by specific hazards.

This written plan is accompanied by a website that allows for easy stakeholder and community engagement, as well interactive maps, dashboards, and infographics.

A broad overview of this companion website's features are as follows:

<u>Kittson County HMP website</u>

- About HMP Planning
- County Profile
- Natural Hazard Profiles
- Climate Change
- Mitigation Actions

1.1.1 SCOPE

U-Spatial, University of Minnesota, was contracted by Minnesota Homeland Security and Emergency Management using FEMA Pre-Disaster Mitigation (PDM) grant funds to work with Kittson County Emergency Management to facilitate an update to the 2015 Kittson County HMP. U-Spatial brings extensive geographic data analysis skills and hazard risk assessment expertise to the process. U-Spatial also employed the services of Hundrieser Consulting LLC for county and stakeholder outreach as well as mitigation action development related to this plan.

This HMP evaluates and prioritizes the major natural hazards affecting Kittson County as determined by frequency of event, economic impact, deaths, and injuries. Mitigation recommendations are based on input from state and local agencies, the public, and national best practices.

This is a multi-jurisdictional plan that covers Kittson County, including the cities of Donaldson, Hallock, Halma, Humboldt, Karlstad, Kennedy, Lake Bronson, Lancaster, and St. Vincent. The Kittson County mitigation activities identified in this plan also incorporate the concerns and needs of townships, school districts, and other participating entities.

Members from each of these jurisdictions actively participated in the planning process by assisting with public outreach, attending planning team meetings, providing local information, identifying mitigation actions, and reviewing the plan document (see Appendix C). The information in these forms was used to help identify mitigation actions for local implementation (see also Section 2.2). Each jurisdiction will adopt the plan by resolution after the plan is approved by FEMA. County and local city resolutions will be added by Kittson County after final approval by FEMA (see Appendix B).

Kittson County has specified the following goals for this plan update:

- Include more recent data documenting the critical infrastructure and hazards faced by Kittson County.
- Reformat and reorganize the plan to reflect definitions of hazards as expressed in the 2019 Minnesota State Hazard Mitigation Plan.
- Reflect current hazard mitigation priorities in Kittson County.
- Encourage recipients and sub-recipients of hazard mitigation grants to consider climate change adaptation and resiliency in their planning efforts.

1.1.2 HAZARD MITIGATION DEFINITION

Hazard mitigation may be defined as any action taken to eliminate or reduce the long-term risk to human life and property from natural hazards. The benefits of hazard mitigation planning include the following:

- saving lives, protecting the health of the public, and reducing injuries
- preventing or reducing property damage
- reducing economic losses
- minimizing social dislocation and stress
- reducing agricultural losses
- maintaining critical facilities in functioning order
- protecting infrastructure from damage
- protecting mental health
- reducing legal liability of government and public officials

1.2 State Administration of Mitigation Grants

FEMA currently has three mitigation grant programs that are administered by the State of Minnesota: the Hazard Mitigation Grant Program (HMGP), the Building Resilient Infrastructure and Communities (BRIC) program, and the Flood Mitigation Assistance (FMA) program. The HMGP, BRIC, and FMA programs are administered through the state of Minnesota Department of Public Safety Homeland Security Emergency Management (HSEM) Division. All applicants must have or be covered under an approved Hazard Mitigation Plan. Eligible applicants include state and local governments, certain private non-profit organizations or institutions, and tribal communities.

Section 2 – Public Planning Process

2.1 Planning Team Information

The Kittson County HMP planning team is headed by the Kittson County emergency manager, who is the primary point of contact. Members of the Kittson County HMP planning team include representatives from the public and governmental sectors. Table 1 identifies the planning team individuals and the organizations they represent.

<u>Find the planning team</u> <u>members on the Kittson</u> <u>County HMP website</u>

Jurisdictional representatives were contacted throughout the

HMP process to help facilitate local participation and provide feedback on the hazards of concern to their communities. This feedback was used to develop local mitigation actions that they would seek to implement upon plan adoption (see Section 5.3 and Appendix H).

Name	Agency/Organization	Participant Title
Scot Olson	Kittson County Emergency Management & Kittson County Environmental Services Dept.	Emergency Management Director / Environmental Services Director
Andrea Weleski	Kittson County Highway Dept.	County Engineer
Adam Maus	Kittson Healthcare Public Health Dept.	Chief Services Officer
Jeanna Kujava	Kittson Healthcare Public Health Dept.	Public Health Director
Twyla Preble	Kittson County Social Services	Account Technician
Kathy Johnson	Kittson County Social Services	Director
Carol Johnson	City of Lancaster	City Clerk/Treasurer
Shelby Lee	City of Karlstad	City Clerk
Aimee Sugden	City of Hallock	City Administrator
Tom Miesner	Saint Joseph Township	Chair
Nicole Thompson	Lancaster School	Superintendent
Bob Jaszczak	Kittson Central School District	Superintendent
Matt Waterworth	Natural Resources Conservation Service	District Conservationist
Dan Carroll	MN DNR	NW MN Firewise Coordinator
Paul Konickson	MnDOT District 2	Assistant District Engineer – Operations
Dan Money	Two Rivers Watershed District	District Administrator
Andrew Tepfer	MN DPS/HSEM	HSEM Region 3 Regional Program Coordinator (Acting)
Samantha Diemert	Pembina County Emergency Management (ND)	Emergency Management Director
Brittany Fisher	Rural Municipality of Stuartburn (Canada)	Assistant Chief Administrative Officer / Joint Emergency Coordinator

Table 1. Hazard Mitigation Planning (HMP) Team

2.2 Review of Existing Plans, Capabilities & Vulnerabilities

Kittson County and its local communities utilized a variety of planning documents to direct plan development. These documents included a Comprehensive/Master Plan, Emergency Operations Plan, Transportation Plan, etc. (see Section 5.1.3 and Appendix D). The planning process also incorporated the existing natural hazard mitigation elements from previous planning efforts. In addition, the 2019 Minnesota All-Hazard Mitigation Plan was consulted.

In the development of the Kittson County HMP, U-Spatial consultants reviewed and incorporated a variety of planning documents that direct community development and influence land use decisions for the county and its jurisdictions. In addition, U-Spatial consultants worked closely with the Kittson County emergency management director and other key county staff and local city officials to collect feedback on local mitigation capabilities and vulnerabilities that either support or hinder the ability to mitigate against natural hazards countywide and at the local level. Following is a summary of the assessment tools used to gather information on local capabilities and vulnerabilities during the planning process:

Capabilities Assessment (hazard-specific). In this assessment, detailed information was collected from Kittson County on current plans and programs in place (i.e., existing programs, plans, or policies) as well as program gaps or deficiencies that currently exist to mitigate against damages caused by each natural hazard addressed in the plan. Section 4 identifies current gaps and deficiencies for mitigation and Section 5.3 describes the mitigation capabilities that are in place by Kittson County to support mitigation.

Local Mitigation Surveys: As part of Kittson County's 2023 HMP update, participating jurisdictions and key county personnel were asked to fill out a Local Mitigation Survey (LMS) form. Questions in the LMS form addressed the following:

- Part A: Hazard Identification, Risk Assessment & Vulnerability Analysis
- Part B: Local Mitigation Capabilities Assessment
- Part C: Local Mitigation Projects
- Part D: Survey Participants

The purpose of the survey was to gather jurisdictionally specific information needed to support the update of the plan and to help inform development of local-level mitigation actions for the next five-year planning cycle (for the full Kittson County LMS report, see Appendix C).

2.3 Planning Process Timeline and Steps

To update the 2015 Kittson County HMP, U-Spatial consultants worked in coordination with Kittson County Emergency Management and members of the planning team. The updated plan includes new data documenting the types of hazards faced by Kittson County residents and emergency planning officials as well as new thinking on how to address these hazards.

2.3.1 KITTSON COUNTY STAKEHOLDER COORDINATION

Two planning team meetings took place via Zoom video conference hosted by U-Spatial. Meeting participants included representatives from Kittson County, city and township governments, neighboring

jurisdictions, and other key stakeholders. Appendix F provides documentation of stakeholder outreach and participation in the plan update.

<u>Survey forms to acquire</u> <u>mitigation ideas and feedback</u> <u>remain available on the HMP</u> <u>website</u> To provide opportunity for public input, Kittson County issued two news releases announcing the plan update and inviting public review and feedback on the draft plan. The news release provided information on where to view the plan and submit comments. The public feedback period for the draft plan was open from 11/7/23 to 11/21/23, for a period of 15 days.

Table 2 documents dates of Hazard Mitigation update meetings

and public outreach. Appendix G provides documentation of the public outreach for feedback on the draft plan by Kittson County and jurisdictions.

Event	Date	Appendix
Kickoff Webinar	7/19/22	Appendix F, Planning Team Meetings
News Release #1	8/3/22	Appendix G, Public Outreach & Engagement Documentation
Planning Team Meeting #1	9/26/22	Appendix F, Planning Team Meetings
Planning Team Meeting #2	10/2/23	Appendix F, Planning Team Meetings
News Release #2	11/7/23	Appendix G, Public Outreach & Engagement Documentation

Table 2. Kittson County Hazard Mitigation Update meetings and public outreach

At the close of the public outreach period, the U-Spatial consultants worked with the Kittson County Emergency Manager and members of the planning team to incorporate feedback from the public into the HMP.

For more information on the planning process, see Sections 5 and 6.

2.3.2 OVERVIEW OF JURISDICTIONAL PARTICIPATION

Throughout the planning process, Kittson County and the U-Spatial team worked to engage representatives from the county and each city in the update of the plan. Key activities for jurisdictions included assisting with public outreach, participating in planning team meetings, providing local-level information, reviewing and providing feedback to the plan update.

U-Spatial and Kittson County actively used the following methods to engage jurisdictions in the HMP plan update process:

• Zoom Video Conferencing: Planning team meetings were conducted via Zoom video conferencing hosted by U-Spatial. Virtual meetings proved to be a beneficial addition to the planning process, resulting in a high turnout from jurisdictional representatives and other stakeholders, as well as providing the ability for presenters to collect, respond to, and document feedback from participants through Zoom functions such as surveys, chat, and Q&A.

- **Email Correspondence**: Email was a primary tool used to communicate with representatives from Kittson County, municipal governments, and other stakeholders. Emails were used to distribute news releases for public outreach, to invite participation in meetings and to share meeting summaries, as well as to request local information and final review of the draft plan. Email proved to be an effective tool that resulted in increased jurisdictional participation and collection of locally specific information. Email was also used by the public to submit feedback to Kittson County following news releases on the HMP.
- **Phone Calls**: Phone calls were frequently used to conduct direct outreach or follow-up to jurisdictions to ensure participation or to collect information via one-on-one interviews. Phone calls proved to be an effective tool that resulted in increased jurisdictional participation and collection of quality information. Phone calls were especially useful in engaging very small communities that had limited staff or technological capabilities.

Cities participating in Kittson County HMP update varied by population and associated government resources to participate in the planning process (e.g., personnel, time, and technology). Rural communities with smaller populations (under 500) typically had part-time elected officials, limited-to-no city staff, and reduced city hall hours in which to conduct business. Kittson County and U-Spatial were sensitive to these local challenges and worked to help these local governments to participate using the methods that worked best to accommodate them, such as phone interviews to complete local mitigation survey forms (see Appendix C).

Table 3 provides an overview of the participation of each city that took part in the Kittson County HMP update planning process, with reference to the location of supporting documentation.

Jurisdiction (2022 Est. Population, Esri)	News Release #1	Planning Team Mtg. #1	Local Mitigation Survey	Mitigation Action Charts	Planning Team Mtg. #2	News Release #2 & Plan Review
Supporting Documentation	App. G	App. F	App. C	Sec. 5.3 App. H	App. F	App. G
Kittson County (4,126)	Х	Х	Х	Х	Х	Х
City of Donaldson (20)	Х			Х		X
City of Hallock (906)	Х	Х		Х	Х	Х
City of Halma (58)	Х		X	Х		Х
City of Humboldt (40)	Х		X	Х		Х
City of Karlstad (707)	Х		X	Х	Х	Х
City of Kennedy (171)	Х		X	Х		Х
City of Lake Bronson (179)	Х		X	Х		Х
City of Lancaster (324)	Х	Х	X	Х		X
City of St. Vincent (56)	Х		X			Х
Neighboring Jurisdictions:						
Roseau County					Х	
Marshall County						

Table 3. Jurisdictional participation in planning process

Jurisdiction (2022 Est. Population, Esri)	News Release #1	Planning Team Mtg. #1	Local Mitigation Survey	Mitigation Action Charts	Planning Team Mtg. #2	News Release #2 & Plan Review
Pembina County, ND		Х				
Rural Municipality of Emerson/Franklin MB, Canada						
Rural Municipality of Stuartburn, MB Canada		Х				

Section 3 – Risk Assessment and Vulnerability Analysis

The goal of mitigation is to reduce or eliminate the future impacts of a hazard, including loss of life, property damage, disruption to local and regional economies, and the expenditure of public and private funds for recovery. Sound mitigation practices must be based on sound risk assessment. A risk assessment involves quantifying the potential loss resulting from a disaster by assessing the vulnerability of buildings, infrastructure, and people.



The risk assessments in this plan are based on widely accepted tools and databases as well as consultation with hazard mitigation planning expertise at FEMA and HSEM as well as technical guidance from the MN DNR State Climatology Office. Geographic Information System (GIS) tools are used throughout to demonstrate geographically based risk and vulnerabilities.

This assessment identifies the characteristics of natural hazard events, the severity of the risk, the likelihood of these events occurring, and the vulnerability of each jurisdiction's population and assets.

3.1 Hazard Identification and Prioritization

The cornerstone of the risk assessment is identification of the hazards that affect jurisdictions. Listed below are the natural hazards addressed in the 2019 Minnesota State Hazard Mitigation Plan:

Flooding	Lightning	Drought
Dam/Levee Failure	Winter Storms	Extreme Heat
Wildfires	Landslides (Erosion and	Extreme Cold
Windstorms	Mudslides)	Earthquakes
Tornadoes	Land Subsidence (Sinkholes	Coastal Erosion & Flooding
Hail	and Karst)	

3.1.1 HAZARD PRIORITIZATION

As part of the plan update process, the planning team reviewed, updated, and prioritized the hazards faced by residents of Kittson County, updated the existing mitigation actions published in the 2015 HMP, and proposed new mitigation actions.

The team examined the hazards identified in the 2015 HMP and adjusted prioritization to reflect the definitions of natural hazards used in the 2019 Minnesota State Hazard Mitigation Plan.

While the focus of this HMP is on natural hazards, planning took place with the understanding that many non-natural hazards could occur as a result of natural disasters (e.g., disruption in electrical service due to downed powerlines from heavy snow, ice storms, or high wind events).

The prioritization of hazards for the Kittson County HMP update (Table 4) was based upon group review and discussion of the natural hazards that pose risk to the county during the HMP Planning Team Meeting #1. In the review of each hazard, the group was asked to consider if the risk to severe natural hazards had increased or decreased since the last plan (changes are noted in bold), and if this affected their priority level to mitigate against that hazard. F provides the discussion notes from the meeting.

Hazard	2023 Update
Winter Storms	High
Flooding	High
Wildfire	High
Extreme Cold	Moderate
Windstorms	Moderate
Tornadoes	Moderate
Extreme Heat	Moderate
Drought	Moderate
Landslides	Moderate
Hail	Low
Lightning	Low
Subsidence/Erosion	Low
	Low (Note: this was reduced from moderate to low for
Dam/Levee Failure	the plan update. The one high hazard dam in the
	county has mitigation actions being applied.)

Table 4. Prioritization of hazards for 2023 Kittson County HMP update

3.1.2 FEMA- AND MINNESOTA-DECLARED DISASTERS AND ASSISTANCE

Another historical perspective is derived from FEMA-declared disasters. Twenty-six major disasters and five emergency declarations in Kittson County have been made between 1957 and September 2023 for a total of 31; details of these can be viewed on the <u>Kittson County HMP website</u>.

Minnesota Statutes Chapter 12A established a framework for state agencies to help communities recover from disaster. In 2014, Governor Mark Dayton signed legislation establishing the state's Disaster Assistance Contingency Account to assist local communities after a natural disaster when federal aid is not available. Damage required to declare a disaster is half the threshold of the federal/FEMA public assistance (only) program threshold (MN HSEM, 2019). Kittson County was included in seven State Disaster Declarations.

The Hazard Mitigation Grant Program (HMGP), Building Resilient Infrastructure and Communities (BRIC), and Flood Mitigation Assistance (FMA) Program are FEMA-administered hazard mitigation assistance programs which provide funding for eligible mitigation planning and projects which reduce disaster losses and protect life and property from future disaster damages (FEMA, 2021). Table 5 lists the projects in the county funded by a hazard mitigation assistance program.

Project Identifier	Sub-Grantee	Project Type	Project Total	Federal Share
DR-4442-0012-R	Kittson County	200.3: Acquisition of Public Real Property (Structures and Land) - Riverine	\$253,700	\$190,275
Dr-1175-0018-R	Kittson County	200.1: Acquisition of Private Real Property (Structures and Land) - Riverine	\$62,533	\$46,900
Dr-1116-0007-R	Kittson County	200.1: Acquisition of Private Real Property (Structures and Land) - Riverine	\$58,772	\$44,079
Dr-1175-0016-R	Kittson County	200.1: Acquisition of Private Real Property (Structures and Land) - Riverine	\$299,695	\$224,771
Dr-4009-0005-P	Kittson County	91.1: Local Multihazard Mitigation Plan	\$30,000	\$22,500
Dr-1283-0015-R	Two Rivers Watershed District	403.1: Stormwater Management - Culverts	\$124,600	\$79,000
Dr-1212-0014-R	Two Rivers Watershed	301.1: Shoreline Stabilization (Riprap, Etc.)	\$46,134	\$34,601

Table 5. Historical hazard mitigation funding awarded in Kittson County

SOURCE: (FEMA, 2023B)

3.2 Population Vulnerability

The degree to which a person is vulnerable to the impacts of a hazard depends on how well they can react before, during, and after a hazardous event. The Centers for Disease Control and Prevention (CDC)

<u>Explore population vulnerability</u> on the Kittson County HMP <u>Website</u> Agency for Toxic Substances & Disease Registry (ATSDR) defines social vulnerability as "...the resilience of communities when confronted by external stresses on human health, stresses such as natural or human-caused disasters, or disease outbreaks" (ATSDR, 2020). Exacerbating these stressors are the increasing number of extreme weather events attributed to Minnesota's changing climate (MPCA, 2018).

The ATSDR created the CDC Social Vulnerability Index (SVI) to help identify vulnerable communities who may need support in preparing for hazardous or recovering from disaster. The CDC SVI is created at the census tract level using American Community Survey (ACS) five-year data.

The SVI is included in the FEMA National Risk Index (NRI) and presented on the webpage for each hazard. Additionally, at-risk populations are summarized for each jurisdiction in the county profile page. Vulnerable attributes of a population are addressed with each natural hazard.

3.3 Climate Change

Minnesota's climate is currently changing in ways that are pushing us to adapt to weather patterns and extreme events that pose major threats to our health, homes, environment, and livelihoods. These events

cost our state millions in property loss, damaged infrastructure, disrupted business, medical care, and support services, and put residents and responders at risk. Understanding how our weather is changing now and into the future will help planners and decision-makers in emergency management and supporting fields extend our progress in climate adaptation and lead to more resilient communities (MDH, 2018).



The National Climate Assessment suggests that infrastructure planning (particularly water resources infrastructure) should "be improved by incorporating climate change as a factor in new design standards and asset management and rehabilitation of critical and aging facilities, emphasizing flexibility, redundancy, and resiliency" (Georgakakos, et al., 2014).

Federal, state, and tribal governments are increasingly integrating climate change adaptation into existing decision-making, planning, or infrastructure-improvement processes (Georgakakos, et al., 2014). Definite predictions are difficult to make, as changes may vary depending on geographical location, even within Minnesota. Intense study of these topics is ongoing.

Rural communities are particularly vulnerable to climate change, due to their dependence upon natural resources, physical isolation, limited economic diversity, higher poverty rates and aging populations. According to *Climate Change Impacts in the United States: The Third National Climate Assessment*,

Warming trends, climate volatility, extreme weather events, and environmental change are already affecting the economies and cultures of rural areas. Many rural communities face considerable risk to their infrastructure, livelihoods, and quality of life from observed and projected climate shifts. These changes will progressively increase volatility in food commodity markets, shift the ranges of plant and animal species, and, depending on the region, increase water scarcity, exacerbate flooding and coastal erosion, and increase the intensity and frequency of wildfires across the rural landscape (Hales et al., 2014).

The Assessment also notes that transportation systems in rural areas are more vulnerable to risks such as flooding since there are typically fewer transportation options and infrastructure redundancies. In addition, power and communication outages due to severe weather events typically take longer to repair in rural areas, which can increase the vulnerability of elderly populations. Rural area populations are also more vulnerable since they typically have limited financial resources to deal with the effects of climate change.

The composition of the region's forests is expected to change as increasing temperatures shift tree habitats northward. While forests in the Midwest are currently acting as a net absorber of carbon, this could change in the future due to projected increases in insect outbreaks, forest fires, and drought, which will result in greater tree mortality and carbon emissions (Pryor et al., 2009).

3.4 Jurisdictional Change in Risk or Vulnerability Assessment

Jurisdictions in Kittson County have varying vulnerabilities to and concerns about impacts to their communities. Interviews with jurisdictional representatives in addition to the Local Mitigation Survey resulted in some specific concerns (see Appendix C). Participants were asked to provide feedback on how their community's vulnerability to natural hazards had either increased (due to changes such as development) or decreased (due to local mitigation efforts) over the past five years.

At the local jurisdictional level, several communities did note an increase in development over the last five years as a factor for an increase in vulnerability to severe weather or disaster events.

3.4.1 JURISDICTIONAL RESPONSES

As part of the Local Mitigation Survey form, Kittson County Emergency Management and each city jurisdiction were asked to provide a vulnerability assessment that described what structures, systems, populations, or other community assets were susceptible to damage and loss from specific hazard events. Following are examples of common responses related to noted local vulnerabilities (as preserved in Appendix C: Part A) for each jurisdiction. This information was used to help tie local vulnerability back to the exposure of people, buildings, infrastructure, and the environment to the natural hazards listed in Table 4 and to assist local governments in development of related local mitigation actions to reduce risk.

Kittson County

Blizzards, Ice Storms: Much of the county's electrical service consists of overhead power lines and electrical poles. These overhead lines and power poles are prone to failure in ice storms and blizzards with heavy snowfall and high winds that may bring down trees and branches.

Tornadoes, Windstorms: We have three mobile home parks within the county that do not have on-site storm shelters (residents can shelter at city facilities if necessary) and residents are vulnerable to high wind and tornado events.

The City of Hallock has a municipal campground that is active during summer and fall months with RVs and campers and does not have a storm shelter.

The City of Lancaster needs to replace its aged Weather Siren.

The Lake Bronson State Park has a small shelter but construction of a larger facility is warranted.

Extreme Cold: Residents are susceptible to dangers from extreme cold, especially if the power goes down during winter storm events. We have a high population of senior citizens and low-income residents who are more vulnerable during these events.

Flooding: The City of Lake Bronson has a sanitary sewer lift station that is prone to flooding during high rain events. City and fire department personnel have sandbagged the area in the past to prevent flooding into the lift station.

The City of Hallock has sloughing issues on the Two Rivers that are beginning to threaten a cemetery located along the river.

The United States Customs and Border Patrol has frequent flooding issues at the border crossing in St. Vincent Township and during high water events must sandbag their infrastructure.

Both the Township of St. Vincent and the city of St. Vincent have United States Corps of Engineers certified dikes that have sloughing and soil degradation issues from frequent flooding.

City of Donaldson

No local vulnerabilities to report.

City of Hallock

No local vulnerabilities to report.

City of Halma

Flooding: The city has experienced overland flooding that washes out roads, as the railroad culverts and US Hwy 59 culverts are not properly sized south of town.

Wildfire: We have concerns about the impact that wildfire would have to the increase transport of oil trains passing through the county.

City of Humboldt

Windstorms: We would like to have an outdoor warning siren, but we have nowhere to put it. We feel that using the county's CodeRED system is the best emergency notification system for our residents.

City of Karlstad

The city of Karlstad has no local vulnerabilities to report in relation to natural hazards.

City of Kennedy

Blizzards, Ice Storms: Much of the city's municipal electrical service consists of overhead power lines and electrical poles. Those overhead lines and power poles are prone to failure in ice storms and blizzards with heavy snowfall and high winds that may bring down trees and branches.

Tornadoes, Windstorms: We have mobile homes within the city that do not have a storm shelter and are vulnerable to high wind and tornado events. Overhead power lines are in danger of coming down due to trees/branches or the wind itself.

Extreme Cold: Residents are susceptible to dangers from extreme cold, especially if the power goes down during winter storm events. We have a high population of senior citizens and low-income residents who are more vulnerable during these events.

City of Lake Bronson

Blizzards, Ice Storms: Much of the city's municipal electrical service consists of overhead power lines and electrical poles. Those overhead lines and power poles are prone to failure in ice storms and blizzards with heavy snowfall and high winds that may bring down trees and branches.

Tornadoes, Windstorms: The Lake Bronson State Park is located 2 miles east of the city and is a popular destination for camping and recreation. They have a storm shelter (a concrete bathroom), but no warning siren on site.

Extreme Cold: Residents are susceptible to dangers from extreme cold, especially if the power goes down during winter storm events. We have a high population of senior citizens and low-income residents who are more vulnerable during these events.

In the past we have experienced frozen water services and some residential homes experienced burst pipes from extended extreme cold.

The city has experienced damage to roads from spring frost heaves, frozen culverts that cause localized flooding.

Flooding: Flood issues have been minor over the past five years, although the Two Rivers banks within city limits has experienced erosion and soil loss. The concern of flood due to a dam breach is being addressed and a new dam has been approved. Construction is scheduled to start in 2024.

Dam Failure: The Lake Bronson Dam at the State Park empties from the lake into the Two Rivers, flowing west to the Red River. This dam is old and in need of replacement, which is slated to begin in 2024. We have been aggressive in documenting residences along the flood zone of the river and keep that list updated both through the county Emergency Management Office and the Lake Bronson State Park Emergency Plan. CodeRed is strongly advised for local residents to have on their phones to provide first alerts in emergency situations.

City of Lancaster

Blizzards, Ice Storms: Much of the city's municipal electrical service consists of overhead power lines and electrical poles. Those overhead lines and power poles are prone to failure in ice storms and blizzards with heavy snowfall and high winds that may bring down trees and branches. Otter Tail Power Company provides the utility power to the city.

Tornadoes, Windstorms: The city has one municipal campground that is active during summer and fall months. It has a wooden structure shower house to provide shelter during a storm, but it is not a sturdy brick building. An upgrade to a sturdier building would be desired, however limited financial resources make this difficult. We also would like to upgrade the city's outdoor warning siren, however financial resources to meet a matching grant.

Extreme Cold: The city's community center is our designated shelter, but it needs an updated generator – our old one is Army Surplus and is quite outdated. We have a large population of senior citizens who would be more vulnerable to extreme cold in the event of a prolonged power outage.

Flooding: City storm sewers, lagoon, and golf course have experienced localized flooding during high rain events.

City of St. Vincent

We have no local vulnerabilities to report. We have limited infrastructure and a small population of 56.

3.4.2 FUTURE DEVELOPMENT

Because Kittson County is vulnerable to a variety of natural hazards, the county government—in partnership with the state government—must make a commitment to prepare for the management of these events. Kittson County is committed to ensuring that county elected and appointed officials become informed leaders regarding community hazards so that they are better prepared to set and direct policies for emergency management and county response.

As part of the vulnerability assessment conducted for the Kittson County HMP update, jurisdictions were asked to describe if there were any factors related to population growth, zoning, or development they felt have increased their community's vulnerability to future severe weather or disaster events. Following is a compilation of common responses as noted in Appendix C: Part A.

Kittson County

With the Red River flood diversion projects south of Kittson County, water will move more quickly upstream and exacerbate flooding in the county. Kittson County will continue to see moderate to major flooding on a yearly basis.

City of Lake Bronson

The median age of the city residents is older and concerns for seniors are a topic when considering vulnerability.

In the development of local mitigation actions, all jurisdictions were encouraged to consider hazard mitigation strategies that would reduce risk in relation to future development, such as the update of local comprehensive plans, enforcement of ordinances, and incorporation of infrastructure improvements to reduce local vulnerabilities (see Appendix H).

The Kittson County emergency management director will work to keep the jurisdictions covered by the HMP engaged and informed during the plan's cycle. By keeping jurisdictional leaders involved in the

monitoring, evaluation, and update of the HMP, they will keep their local governments aware of the hazards that face their communities and how to mitigate those hazards through planning and project implementation.

Section 6 of this plan further outlines the process by which Kittson County will address the maintenance of this plan, including monitoring, evaluation, and update of the plan, as well as implementation and continued public involvement.

Section 4 – Hazards

As part of the risk assessment, each natural hazard that poses risk to the county was independently reviewed for its past hazard history, relationship to future trends, and jurisdictional vulnerability to

future events. A capabilities assessment was also conducted by the county to review the plans and programs that are in place or that are lacking (program gaps or deficiencies) for the implementation of mitigation efforts, as related to each natural hazard. An assessment was also conducted for local jurisdictions to identify the plans, policies, programs, staff, and funding they have in place in order to incorporate mitigation into other planning mechanisms (see Section 5.1 and Appendix C).

<u>Read more about natural</u> <u>hazard prioritization and</u> <u>view interactive information</u> <u>on all hazards</u>

Hazards that were deemed by Kittson County to be of moderate to high risk are addressed in the following hazard profiles. Hazards that were determined to be of low risk or without substantive mitigation actions to address them are not required to be included.

4.1 Flooding

Flooding is the most significant and costly natural hazard in Minnesota. Seventeen of the 31 federal disaster declarations in Kittson County included flooding.

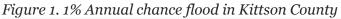
4.1.1 PROBABILITY OF OCCURRENCE

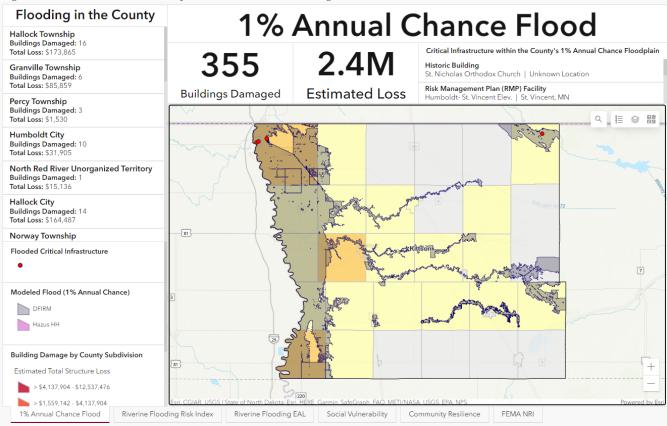
From 1997 to 2023, the NCEI Storm Events Database has recorded 51 flood and flash flood events. Kittson County has experienced one flash flood event every 1.7 years and one riverine flood event every 1.3 years on average during this period.

Minnesota HSEM has encouraged a potential risk and economic loss analysis for a 1% annual chance flood using the FEMA tool, Hazus for ArcGIS. A Digital Flood Insurance Rate Map (DFIRM) defined the

<u>View interactive maps and see</u> <u>information about flooding</u> <u>history, risk, and</u> <u>vulnerability</u> 1% annual chance flood boundary. Flood cross-section and base flood elevation data were used to generate depth grids where available. The remainder of the county's depth grids were modeled in HAZUS using the EQL method. Areas where no DFIRM exists were analyzed using a hydraulics and hydrology model. The resulting Hazus 1% annual chance floodplain is shown in the Flood Vulnerability dashboard on the Kittson

County HMP website (Figure 1), where it is available in an interactive form.





4.1.2 VULNERABILITY

Potential economic loss estimates were based on county-specific building data. Kittson County provided parcel tax and spatial databases that included building valuations, occupancy class, square footage, year built, and number of stories. The quality of the inventory is the limiting factor to a Hazus flood model loss



estimation. Best practices were used to use local data and assumptions were made to populate missing (but required) values.

Hazus reports the percent damage of each building in the floodplain, defined by the centroid of each building footprint. After formatting the tax and spatial data, 4,988 points were input to Hazus to represent buildings with a total estimated building

plus contents value of \$296 million. Approximately 96% of the buildings (and 90% of the building value) are associated with residential housing.

The estimated loss by occupancy class for the entire county is shown in Table 6.

General Occupancy	County Total Buildings	County Building and Contents Value	Floodplain Total Buildings	Floodplain Building + Contents Value	Buildings with damage	Building + Contents Loss
Residential	4,783	\$265,135,721	510	\$20,632,609	341	\$2,381,887
Commercial	147	\$14,505,384	14	\$306,800	13	\$5,814
Other	58	\$15,909,194	6	\$407,250	1	\$16
Totals	4,988	\$295,550,299	530	\$21,346,659	355	\$2,387,717



SOURCE: (FEMA, 2023A)

The distinction between building attributes within a parcel was not known, so the maximum percent damage to a building in that parcel was used to calculate loss estimates for the entire parcel. The sum of all the losses in each census block were aggregated for the purposes of visualizing the loss (see map <u>here</u>). Please note: It is possible for a building location to report no loss even if it is in the flood boundary. For example, if the water depth is minimal relative to 1st-floor height, there may be 0% damage.

Hazus Critical Infrastructure Loss Analysis

Critical facilities and infrastructure are vital to the public and their incapacitation or destruction would have a significant negative impact on the community. These facilities and infrastructure were identified on the <u>HMP website</u> and verified by Kittson County.

Buildings identified as essential facilities for the Hazus flood analysis include hospitals, police and fire stations, and schools (often used as shelters). Loss of essential facilities are vulnerable to structural failure, extensive water damage, and loss of facility functionality during a flood, thereby negatively impacting the communities relying on these facilities' services. Kittson County has two schools within the 1% annual chance floodplain: Sterling North-Pembina Campus and Kittson Central-St. Vincent Elementary, both in the city of St. Vincent. These sites should be reviewed to determine actual vulnerability.

Extreme precipitation resulting in flooding may overwhelm water infrastructure, disrupt transportation, and cause other damage. Particularly where stormwater, sewage and water treatment infrastructure is aging or undersized for more intense rainstorms, extreme rain events may pose both health and ecological risks in addition to costly damage (USGCRP, 2018).

It is important to identify any critical infrastructure within the 1% annual chance floodplain, given the higher risk of the facility or infrastructure being incapacitated or destroyed during a flood. In Kittson County, one Risk Management Plan (RMP) Facility was found to be at risk in the 1% annual chance flood. This facility is mapped in the <u>Kittson County HMP website</u>. No other information is available.

Community Vulnerability

Potential economic losses were estimated by Census Minor Civil Division. The City of St. Vincent would suffer significant estimated losses in the 1% annual chance flood. St. Vincent Township and Teien

Townships also have significant estimated losses. All jurisdictions with buildings identified in the 1% annual chance flood zone can also be viewed on the Kittson County HMP website.

The status of jurisdictional participation in the National Flood Insurance Program and any repetitive loss properties are detailed in Section 5.1.1. National Flood Insurance Program (NFIP).

Section 3.4 provides jurisdictional responses of localized vulnerabilities to specific hazards.

4.1.3 PROGRAM GAPS AND DEFICIENCIES

Kittson County Emergency Management identified that there are existing program gaps and deficiencies that make its residents more vulnerable to flooding. The following gaps and deficiencies should be addressed with new mitigation efforts to reduce that vulnerability:

Increasing Culverts and Raising Roads: Some roads, bridges, and culverts within Kittson County continue to need improvements as they are impacted by annual high rain events. The county needs funding assistance to improve roads and culverts that experience repetitive flooding. Several culverts were replaced and resized after flood damage within the county in 2022.

Road Infrastructure: Flood mitigation for county and township roads (e.g., culvert replacements, road repair) is an ongoing need. The county and many of our townships have limited funding for road infrastructure. Kittson County continues to provide assistance on road infrastructure mitigation projects to reduce the impacts of localized flooding.

Flood Plan for Public Awareness & Safety: Increasing public outreach and developing a better road closure plan with more punitive action for people ignoring road closures due to flooding is needed. Every year emergency services are required for people that disregard road closures and end up in a life-threatening situation.

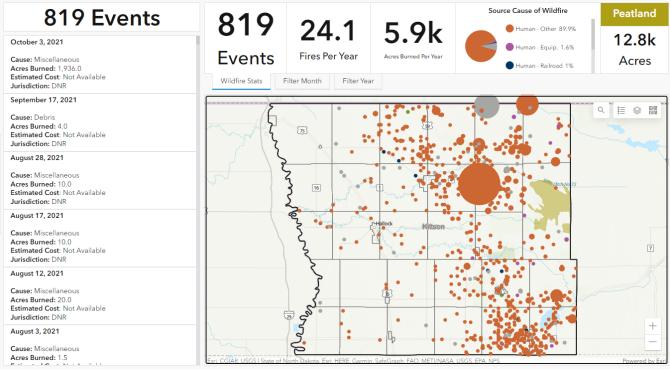
Funding: Significant State and Federal funding is needed to construct infrastructure projects to prevent, reduce, and mitigate funding. Traditional funding sources such as the MN DNR's Flood Hazard Mitigation grant program are severely underfunded. It is critical that expanded funding opportunities be explored through the DNR, HSEM, BWSR, and various federal agencies.

4.2 Wildfires

A wildfire is an uncontrolled fire spreading through vegetative fuels, posing danger and destruction to property. Minnesota experienced an average of 1,400 wildfires each year between 1985 and June 2021 (MN DNR, 2021a). Wildfires occur throughout the spring, summer and fall; however, most wildfires in Minnesota take place in March, April and May. The history of wildfire in Kittson County is shown in Figure 2; an interactive map is available on the Kittson County HMP website.

View interactive maps and see information about wildfire history, risk, and vulnerability

Figure 2. History of wildfire in Kittson County



4.2.1 PROBABILITY OF OCCURRENCE

To determine the probability of future wildfires Kittson County, records of previous wildfire events in were summed and divided by the dataset's period of record, resulting in the annual relative frequency of wildfires during the period of record. Based on Minnesota DNR records, from January 1985 to June 10, 2021, the relative frequency of wildfire events in the county is 24 per year (MN DNR, 2021b). This relative frequency can be used to infer the probability of these events occurring in the future.

4.2.2 VULNERABILITY

Wildfires jeopardize the built environment, health, and wellbeing of individuals living near its fuel source. Some residents are more vulnerable to air quality conditions of wildfire, including children, older adults, and those with respiratory issues (AirNow, 2021).

Structures located in areas near undeveloped wildland are vulnerable to wildfires. The SILVIS Lab at University of Wisconsin–Madison created a dataset documenting the changes of the wildland–urban interface (WUI) in the United States from 1990 to 2010. Radeloff et al. (2018) define WUI as the area where structures and other human development meet or intermingle with wildland vegetation. With the increase of development in metropolitan fringes and rural areas, the WUI is growing. The expansion of the WUI in recent decades has significant implications for wildfire management and impact as it creates an environment in which fire can readily move between structures and people (Radeloff et al., 2018).

Total WUI Total WUI Total WUI % Change 2000 2010 2020 (2000-2020) Land Area 0.26% 0.27% 0.26% -1.1% Housing 19.7% 20.5% 21.6% +9.6%	1 uoto /1 matana C	// 0ull Incol Juce (11 01	<i>)</i> , M <i>a</i> bon county, 2 00	50 2020	
Land Area 0.26% 0.27% 0.26% -1.1%		Total WUI	Total WUI	Total WUI	% Change
		2000	2010	2020	(2000-2020)
Housing 19.7% 20.5% 21.6% +9.6%	Land Area	0.26%	0.27%	0.26%	-1.1%
	Housing	19.7%	20.5%	21.6%	+9.6%

Table 7. Wildland-Urban Interface (WUI), Kittson County, 2000–2020

SOURCE: (RADELOFF ET AL., 2023)

There are two main types of WUI: intermix and interface. Intermix WUI are areas where housing and wildland vegetation intermingle; interface WUI are areas where housing are adjacent to wildland vegetation (Radeloff et al., 2018). Table 7 shows the change of total WUI (intermix and interface) in the county from 2000 to 2020, and the percent of the county's land, housing, and population located in the WUI area.

Some communities are more vulnerable than others to wildfires. Thirty percent of the land area of Karlstad City is in wildland-urban intermix or interface. Other communities at higher risk due to the percentage of WUI in the city limits include Hallock City (15%), Lake Bronson City (10%), and Lancaster City (9%).

Section 3.4 provides jurisdictional responses of localized vulnerabilities to specific hazards.

4.2.3 PROGRAM GAPS AND DEFICIENCIES

Kittson County Management identified existing program gaps and deficiencies that make its residents more vulnerable to wildfire. These gaps should be addressed with new mitigation efforts to reduce vulnerability, outlined as follows:

Community Wildfire Protection Plan: Kittson County does not have a full Community Wildfire Protection Plan (CWPP) in place. Kittson County should consider working with the MN DNR Firewise Program and local fire departments to conduct a coordinated, comprehensive risk assessment for wildfire risk and targeted wildfire mitigation activities. Having a CWPP in place will allow the county and communities to be eligible to apply for MN DNR Firewise grant funding for eligible wildfire mitigation activities.

Community Wildfire Protection Plan: Funding, technical assistance, and resources are needed to help Kittson County facilitate a coordinated effort with local fire departments, MN DNR, and other partners to identify areas within the county that are most at-risk for wildfire, local vulnerabilities, and targeted mitigation activities to reduce risk.

Firewise Outreach & Activities: Funding, technical assistance, and resources are needed to help Kittson County work with local fire departments to promote Firewise public awareness and education on wildfire as well as to assist property owners in high-risk wildfire areas to conduct Level 1 and 2 Firewise Assessments for defensible space and implementation of recommended wildland fuels reduction projects.

County Zoning for New Development: Kittson County should consider updating the zoning code requirements for new construction in areas defined as high-risk wildland urban interface areas (WUI's) in the county. The county would need to have the CWPP in place to support changes to the zoning code

for conditional use permits and building permits in order to review areas of risk and the current zoning map.

4.3 Windstorms

A windstorm is a wind strong enough to cause damage to trees and buildings and typically exceeding 34 mph (Pielke, 2012). Windstorm events encompass a variety of types of damaging wind. The history of windstorms in Kittson County is shown in Figure 3; an interactive version of this map can be found on the Kittson County HMP website.

<u>View interactive maps and see</u> <u>information about windstorm</u> <u>history, risk, and</u> <u>vulnerability</u>

4.3.1 PROBABILITY OF OCCURRENCE

To determine the probability of future wind-related events in Kittson County, records of previous windrelated events (strong wind, high wind, and thunderstorm wind) in Kittson County were examined since 1996, the period of record all wind events have in common. The relative frequency of all wind-related events since January of 1996 is 5.8 per year. These relative frequencies can be used to infer the probability of these events occurring in the future.

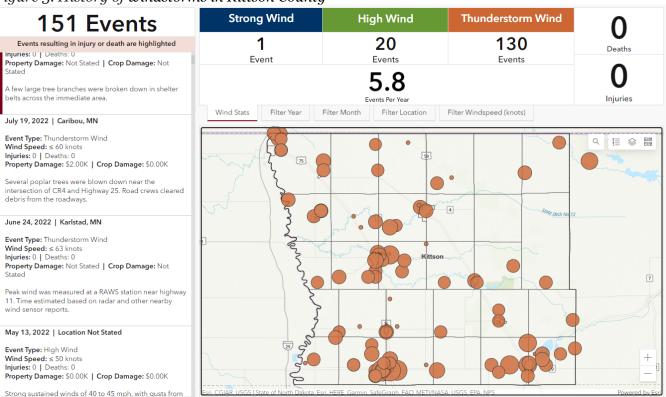


Figure 3. History of windstorms in Kittson County

4.3.2 VULNERABILITY

The likelihood of a windstorm event does not vary geographically within the county, but the vulnerability of its residents is not constant. Vulnerability to injury from all kinds of windstorms decreases with adequate warnings, warning time, and sheltering in a reinforced structure. Therefore, residents living in rural areas, living alone or with limited mobility, or living in a manufactured home may be more vulnerable. Also at a higher risk of windstorms are those who work outdoors or do not have permanent housing.

Structural vulnerability depends in part upon the construction of a building and its infrastructure. Residents of mobile homes are more vulnerable to fatality or injury from windstorms because mobile homes are not able to withstand high winds as well as other structural dwellings, with 50 mph (43.4 knots) being the lower limit of wind speeds capable of damaging mobile homes (AMS, 2004). Steps to mitigate these vulnerabilities have been taken by the state, requiring all mobile home parks to provide an evacuation plan, and parks with at least 10 homes licensed after March 1, 1988 to provide a storm shelter (MDH, 2020). However, mobile home parks often do not provide the required storm shelters (Sepic, 2017). Building codes have also changed to improve the strength of new mobile home construction but there are still many older mobile homes in use that do not meet these new standards.

Section 3.4 provides jurisdictional responses of localized vulnerabilities to specific hazards.

4.3.3 PROGRAM GAPS AND DEFICIENCIES

Kittson County Emergency Management identified several existing program gaps and deficiencies that make its residents more vulnerable to summer storms, including windstorms, that should be addressed with new mitigation efforts to reduce vulnerability. These include:

Additional Warning Sirens: Lake Bronson State Park has an isolated hike-in camping area where guests may not be able to hear the siren. An additional siren placed at the park is something in early discussions between Kittson County Emergency Management and the park superintendent. The City of Hallock also has an older siren in their City Hall building that should be updated/replaced.

Above-Ground Power Lines: Most powerlines throughout Kittson County are above ground, exposing them to potential damage from high wind events. The county and local jurisdictions continue to work with utility providers to convert overhead powerlines to underground or to implement other measures to reduce risk of power failure.

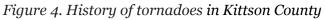
Public Education: Ongoing public education is needed during tornado season to inform the public on what is a tornado watch/warning and what to do when outdoor warning sirens are activated. Kittson County and local jurisdictions also need to continue to encourage residents to be aware of and ready for severe storm events that can lead to long-term power outages.

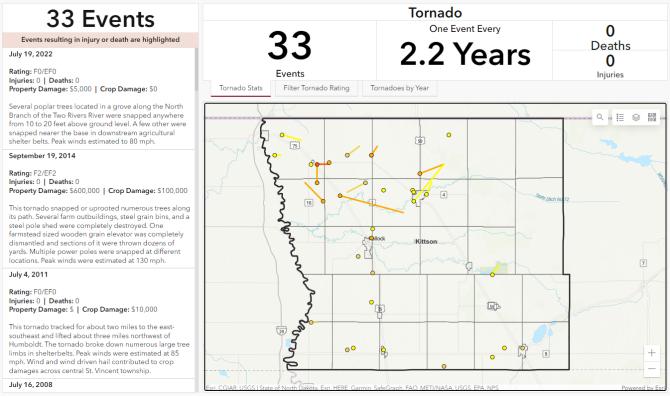
Storm Shelters and Tornado Safe Rooms: Lake Bronson State Park does have some private church camps on private property within their boundary and a tornado shelter would be a good addition. The Kittson County Fairgrounds also needs a tornado shelter, which is a high priority. There are other areas throughout Kittson County without viable storm shelters or tornado safe rooms where there are populations vulnerable to high wind and storm events. A coordinated approach is needed to identify where storm shelters or tornado safe rooms are needed and to evaluate whether new construction or a retrofit of facilities is appropriate. Finding funding for the implementation of such construction projects is also a barrier.

4.4 Tornadoes

With wind speeds reaching up to 300 mph, tornadoes are one of nature's most violent storms (Hogeback, 2020). The history of tornadoes in Kittson County is shown in Figure 4; an interactive version of this map can be found on the Kittson County HMP website.

<u>View interactive maps and see</u> <u>information about tornado</u> <u>history, risk, and</u> <u>vulnerability</u>





4.4.1 PROBABILITY OF OCCURRENCE

Estimating the probability of future tornadoes in Kittson County was done using two methods. The first method summed the total number of tornadoes which either touched down in or traveled through the county. This sum was divided by the number of years tornado data was recorded, resulting in the annual relative frequency of tornado occurrences in the county. Based on records in the NCEI Storm Events Database through May 2023, there has been one tornado every 2.2 years in Kittson County. These 33 tornadic events occurred in 16 of the 72 years on record.

Because tornadoes often cross county lines and tornadic frequency may be better understood using events from a larger area, a second method was used to describe the frequency of tornadic events within a 50-mile radius of any location within the county. A grid of 900 square-meter cells was used to cover Minnesota and 50 miles beyond its border. From the center of each cell, the number of tornadoes that intersected a 50-mile radius was counted. Each cell was assigned a total tornado line count, which was then divided by the tornado dataset's period of record, resulting in the annual relative frequency of tornadoes occurring within 50 miles of the respective cell.

Most of Kittson County has an annual frequency of 0–2 tornadoes within a 50-mile radius. These relative frequencies can be used to infer the probability of these events occurring in the future.

4.4.2 VULNERABILITY

The likelihood of a tornado does not vary significantly across geography within Kittson County; however, certain populations may be more vulnerable and less resilient to the impacts of a tornado. In general, tornado casualties decrease when people receive adequate warnings with sufficient time to seek shelter

in a reinforced structure. Because communication is critical before a tornadic event, certain residents may be more negatively impacted by a tornado, including those living in rural areas, individuals with limited mobility, people who do not live near an outdoor warning siren, or those who do not use social media. Section 3.4 provides jurisdictional responses of localized vulnerabilities to specific hazards.

<u>View at-risk populations in</u> <u>Kittson County</u>

People living in mobile homes are particularly vulnerable to tornadoes due to them not being able to withstand the strong winds produced by a tornado. An analysis by the Associated Press of NOAA storm data found that since 1996, 53% of tornado fatalities in the United States were people who remained within or attempted to flee from mobile homes (Borestein et al., 2023). While Minnesota law requires most mobile home parks to have storm shelters, many do not (Raiche, 2022).

4.4.3 PROGRAM GAPS AND DEFICIENCIES

Kittson County Emergency Management identified that there are existing program gaps and deficiencies that make its residents more vulnerable to summer storms, including tornadoes, that should be addressed with new mitigation efforts to reduce vulnerability. These include:

Additional Warning Sirens: Lake Bronson State Park has an isolated hike-in camping area where guests may not be able to hear the siren. An additional siren placed at the park is something in early discussions between Kittson County Emergency Management and the park superintendent. The City of Hallock also has an older siren in their City Hall building that should be updated/replaced.

Above-Ground Power Lines: Most powerlines throughout Kittson County are above ground, exposing them to potential damage from high wind events. The county and local jurisdictions continue to work with utility providers to convert overhead powerlines to underground or to implement other measures to reduce risk of power failure.

Public Education: Ongoing public education is needed during tornado season to inform the public on what is a tornado watch/warning and what to do when outdoor warning sirens are activated. Kittson County and local jurisdictions also need to continue to encourage residents to be aware of and ready for severe storm events that can lead to long-term power outages.

Storm Shelters and Tornado Safe Rooms: Lake Bronson State Park does have some private church camps on private property within their boundary and a tornado shelter would be a good addition. The Kittson County Fairgrounds also needs a tornado shelter, which is a high priority. There are other areas throughout Kittson County without viable storm shelters or tornado safe rooms where there are populations vulnerable to high wind and storm events. A coordinated approach is needed to identify where storm shelters or tornado safe rooms are needed and to evaluate whether new construction or a retrofit of facilities is appropriate. Finding funding for the implementation of such construction projects is also a barrier.

4.5 Winter Storms

Winter storms encompass a number of winter weather events which the National Weather Service (NWS) organizes into the following categories: blizzard, heavy snow, ice storm, winter storm, and winter

View interactive maps and see information about winter storm history, risk, and vulnerability rd, heavy snow, ice storm, winter storm, and winter weather. Winter weather events are common in Minnesota and can be costly. According to the Spatial Hazard Events and Losses Database (SHELDUS), winter weather events in Minnesota have cost more than \$1.02 billion dollars in damages since 1960 (CEMHS, 2023). The history of winter storms in Kittson County is shown in Figure 5; an interactive version of this map can

be found on the Kittson County HMP website.

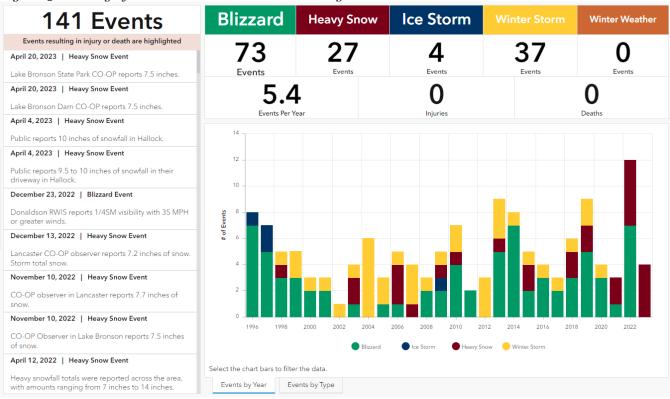
4.5.2 PROBABILITY OF OCCURRENCE

To determine the probability of future winter-related storm events in Kittson County, records of previous events (blizzards, heavy snows, ice storms, winter storms, and winter weather) were summed and divided by the dataset's period of record, resulting in the annual relative frequency of winter-related storms. Based on records in the NCEI Storm Events Database through May 2023, the relative frequency of winter-related storm events in Kittson County is 5.4 per year. This relative frequency can be used to infer the probability of these events occurring in the future.

4.5.3 VULNERABILITY

Transportation systems, electrical distribution systems, and structures are vulnerable to winter storms throughout the county. These events do not vary geographically within the county; all jurisdictions are equally vulnerable. While it is highly likely these events will continue occurring annually, the amount of snow and ice and number of winter-related storm events to occur each year are unpredictable. Citizens living in climates such as these must always be prepared for situations that put their lives or property at risk. It is important that extra consideration be given to the vulnerable populations discussed in Section 3.2. Section 3.4 provides jurisdictional responses of localized vulnerabilities to specific hazards.

Figure 5. History of winter storms in Kittson County



4.5.4 PROGRAM GAPS AND DEFICIENCIES

Kittson County Emergency Management identified that there are existing program gaps and deficiencies that make its residents more vulnerable to severe winter storms. The following gaps and deficiencies should be addressed with new mitigation efforts to reduce that vulnerability:

Above-Ground Power Lines: Most powerlines throughout Kittson County are above ground, exposing them to impacts/damage from winter high wind and ice events, potentially leading to localized or extensive power outages.

Public Education: Ongoing public education is needed to encourage residents to be ready for long-term power outages or to be snowed in during dangerous winter events such as ice storms and blizzards.

Backup Power: Not all designated shelter facilities have generator back-up power to provide the ability to care for residents if displaced during a severe winter event coupled with an extended power outage.

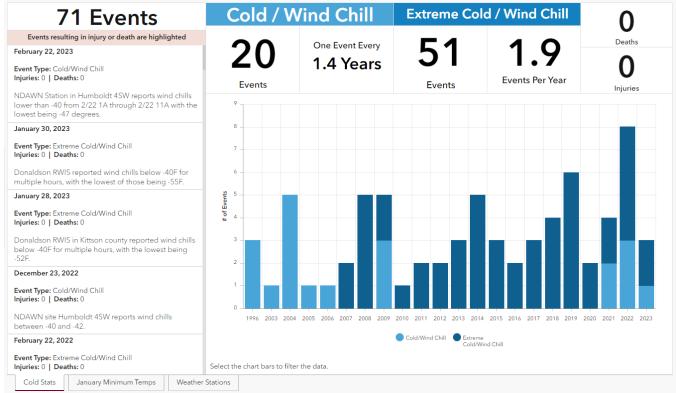
Outreach to Seniors and Isolated Residents: Extended severe winter storms can prevent senior citizens and isolated residents from having the ability to obtain food or present them with other challenging situations. Looking at ways to increase outreach to vulnerable residents to be prepared for winter storms is an ongoing need. Other volunteer programs to provide assistance could also be explored.

4.6 Extreme Cold

Due to Minnesota's position in the middle of the continent and subsequent climate, the state may

<u>View interactive maps and see</u> <u>information about extreme cold</u> <u>history, risk, and vulnerability</u> experience extremely frigid temperatures in winter. Winter in Kittson County can be especially dangerous when low temperatures and wind create arctic-like wind chills. The history of extreme cold in Kittson County is shown in Figure 6; an interactive version of this dashboard can be found on the Kittson County HMP website.

Figure 6. History of extreme cold in Kittson County



4.6.1 PROBABILITY OF OCCURRENCE

To determine the probability of future cold-related events in Kittson County, records of previous cold/wind chill and extreme cold/wind chill events were summed and divided by the dataset's period of record, resulting in the annual relative frequency. Based on records in the NCEI Storm Events Database through May 2023, the relative frequency of extreme cold/wind chill events in Kittson County is 1.9 per year. (NCEI, 2023). This relative frequency can be used to infer the probability of these events occurring in the future.

4.6.2 VULNERABILITY

The risk of extreme cold does not vary geographically within the county. Citizens living in climates such as these must always be prepared for situations that put their lives or property at risk. The youngest and more elderly residents, homeless persons, individuals with chronic medical conditions, and those who are working or recreating outdoors are most at risk for frostbite and hypothermia (MDH, 2021)

<u>View at-risk populations in</u> <u>Kittson County</u>

It is not always the depth of the cold that poses a threat but rather unpreparedness for the cold, such as an individual with a vehicle breakdown who lacks a personal winter safety kit in the vehicle. The cost of propane can make rural residents more vulnerable to issues with extreme cold. A propane shortage and resulting crisis, such as that which occurred in 2014, may increase the cost of heating homes and farms to a prohibitive amount (Eaton, 2014). The Minnesota Department of Commerce presents options and suggestions for homeowners who use propane <u>on their website</u>.

The CDC publication "Extreme Cold: A Prevention Guide to Promote Your Personal Health and Safety" outlines preparation measures that individuals can take to reduce their vulnerability to extreme cold. Highlights in this document include advice about travel preparations, securing your home water supply, and safety during recreation (CDC, 2021).

Section 3.4 provides jurisdictional responses of localized vulnerabilities to extreme cold.

4.6.3 PROGRAM GAPS AND DEFICIENCIES

Kittson County Emergency Management identified that there are existing program gaps and deficiencies that make its residents more vulnerable to extreme cold. The following gaps and deficiencies should be addressed with new mitigation efforts to reduce that vulnerability:

Generators for Backup Power to Critical Facilities & Shelters: Not all healthcare and other critical facilities utilized for the care of residents and visitors, including designated severe weather/emergency shelters (schools, churches, etc.) have backup power to run heating systems in the event of a power outage.

Public Education: Ongoing public education is needed to encourage residents to be prepared for extreme weather, including power outages during periods of extreme cold. Kittson County Emergency Management continues to conduct public education through the local schools, senior and health care centers, and local government for weather awareness.

4.7 Extreme Heat

Extreme heat is the combination of very high temperatures and exceptionally humid conditions. Kittson County's agricultural lands and structures are vulnerable to heat damage and its residents to injury, exacerbation of pre-existing chronic conditions, and even death (Moss, 2017). Medical costs related to extreme heat can be enormous, and with extreme heat estimated to create \$1 billion in health care-related costs

<u>View interactive maps and see</u> <u>information about extreme heat</u> <u>history, risk, and vulnerability</u>

in the United States in 2023 (Center for American Progress, 2023). In 2020 in Minnesota, 613 people went to the emergency department and five died from heat-related illness (MDH, 2022).

When the atmospheric moisture content is high, the rate of perspiration from the body decreases and the human body feels warmer (NWS, 2021). Heat stress can be indexed by combining the effects of temperature and humidity. The history of extreme heat in Kittson County is shown in Figure 7; an interactive version of this chart can be found on the Kittson County HMP website.

Data from the Spatial Hazard Events and Losses Database (SHELDUS) for the United States was examined to identify the county's monetary losses due to heat damage to crops. Ranking 37th among Minnesota counties in crop indemnity payments, heat-related losses for Kittson County totaled over \$1.5 million for the period of record spanning 1989 to 2022 (CEMHS, 2023).



Figure 7. History of extreme heat in Kittson County

4.7.1 PROBABILITY OF OCCURRENCE

To determine the probability of future heat-related events in Kittson County records of previous heat and excessive heat events were summed and divided by the dataset's period of record, resulting in the annual relative frequency of heat-related events. Based on records in the NCEI Storm Events Database through May 2023, the relative frequency of extreme heat events in the county is .04 per year. This relative frequency can be used to infer the probability of these events occurring in the future.

4.7.1 VULNERABILITY

The Minnesota Department of Health released a 2012 Minnesota Extreme Heat Toolkit, to help local governments prepare for extreme heat events. In their toolkit, they note extreme heat events are often dubbed "silent killers" because deaths and illnesses from these events are often misunderstood and underreported. Minnesota has no official system to report deaths and illnesses linked to extreme heat (MDH, 2012). It is important to not underestimate the danger of extreme heat events within the state.

High temperatures can be exacerbated by the urban heat island effect in densely developed areas, an effect that amplifies higher temperatures in areas with a higher concentration of impervious and paved surfaces. These types of surfaces absorb more heat and hold it for longer than vegetation cover (EPA, 2019). Impervious surfaces cover 1.7% of Kittson County (MDH & University of Minnesota, 2019). Impervious surfaces are not spread evenly throughout the county and attention should be given to cities or areas within the county that contain the largest amounts of this type of surface cover. Except for these areas, the risk of extreme heat does not vary geographically.

The impact extreme heat has on individuals is not equal. According to the Center for Disease Control and Prevention (CDC), population groups more vulnerable to extreme heat include:

- Older adults (≥65 years old). The elderly are not able to easily adjust to sudden changes in temperature and are more likely to have a chronic medical condition, or take medication affecting their body's ability to control its temperature.
- Infants and children. Young children and infants have limited control with their surroundings and rely on others to keep them cool and hydrated.
- <u>View at-risk populations in</u> <u>Kittson County</u>
- Individuals with chronic health conditions. These individuals are less likely to respond to changes in temperature, may be taking a medication which exacerbates the effects of extreme heat, or have a condition which is a risk-factor for heat-related illness (e.g., heart disease, mental illness, poor blood circulation, and obesity).
- People with low income. These individuals may not be able to afford to properly cool their home and may face transportation challenges when trying to access cooling shelters.
- Athletes and people working outdoors. Both groups are likely to exert energy while being exposed to the heat (CDC, 2020).

Warming temperatures will continue to increase the risk of extreme heat, especially among these already vulnerable populations. Section 3.4 provides jurisdictional responses of localized vulnerabilities to extreme heat.

4.7.2 PROGRAM GAPS AND DEFICIENCIES

Kittson County Emergency Management identified that there are existing program gaps and deficiencies that make its residents more vulnerable to extreme heat. The following gaps and deficiencies should be addressed with new mitigation efforts to reduce that vulnerability:

Generators for Backup Power to Critical Facilities & Shelters: Not all healthcare and other critical facilities utilized for the care of residents and visitors, including designated severe weather/emergency shelters (schools, churches, etc.) have backup power to run heating systems in the event of a power outage.

Public Education: Ongoing public education is needed to encourage residents to be prepared for extreme weather, including power outages during periods of extreme cold. Kittson County Emergency Management continues to conduct public education through the local schools, senior and health care centers, and local government for weather awareness.

4.8 Drought

There are numerous approaches to assessing drought conditions. The current gold standard for accurate drought conditions in the United States is the United States Drought Monitor (USDM). Annual drought statistics since 2000 can be seen in Figure 8; an interactive version of this dashboard can be found on the Kittson County HMP website.

See interactive information about drought, including history and the USDM Dashboard, on the Kittson County HMP website

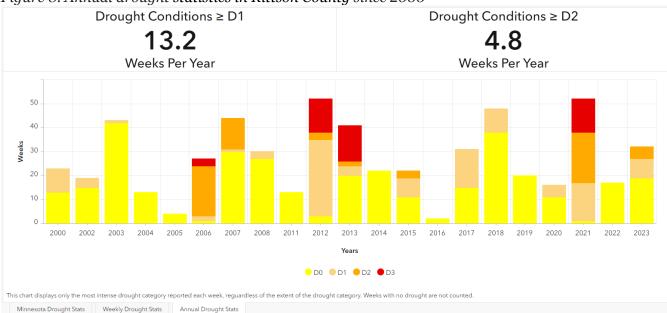


Figure 8. Annual drought statistics in Kittson County since 2000

4.8.1 PROBABILITY OF OCCURRENCE

To determine the probability of future droughts in Kittson County, records of previous droughts were summed and divided by the dataset's period of record, resulting in the annual relative frequency of droughts. The USDM database was examined from January 2000–September 12, 2023 for any occurrence of drought \geq D1 in Kittson County, regardless of the duration of the drought. According to the weekly reported data, the relative frequency of the county experiencing drought conditions \geq D1 is 13.2 weeks per year, and the relative frequency of drought conditions \geq D2 is 4.8 weeks per year (NDMC et al., 2021). The relative frequency of past droughts can be used to infer the probability of similar droughts occurring in the future.

4.8.2 VULNERABILITY

One way to identify county assets vulnerable to drought is by examining the impacts of previous droughts. Overseen by the National Drought Mitigation Center (NDMC), the Drought Impact Reporter (DIR) is a comprehensive database that gathers drought-related reports from a variety of sources and identifies the sector(s) impacted by each drought. The NDMC (NDMC et al., 2021) defines a drought impact as "[a]n observable loss or change that occurred at a specific place and time because of drought." A drought meeting this definition is categorized based on the sector(s) the drought impacts; therefore, a single drought affecting multiple sectors will be counted once for each respective sector it impacted.

DIR records show 12 reported drought incidents in Kittson County between 2000 and 2022, impacting six sectors with greatest impacts to the sectors of agriculture; business & industry; fire; plants & wildlife; and relief, response & restrictions (NDMC, 2023). Since droughts are regional in nature, jurisdictions within Kittson County do not vary in their vulnerability to drought; however, the impact from droughts are not equal.

Drought conditions may impact soil moisture reserves, groundwater supplies, lake levels and stream flows. Water-dependent industries that experience the greatest impacts include: agriculture, public utilities, forestry and tourism (MN DNR, 2021c). In addition, droughts may negatively affect an individual's health by contributing to poor air quality caused by wildfire smoke and particulate, or a dusty environment. The 2021 drought resulted in elevated fire danger in roughly the northern two-thirds of the state, and record high particulate readings across Minnesota due to the Canadian wildfires (Huttner, 2021). Populations vulnerable to these conditions include children, older adults, and those with respiratory issues.

According to the DIR, Kittson County's agriculture sector has been impacted by drought more than once, and with 53% of Kittson County's land devoted to cultivated crops, the county's agriculture community is also vulnerable to the economic impact a drought may have on crops. From 1989–2012, Kittson County received \$27,050,206 (2018 ADJ) in crop indemnity payments due to drought, placing it as the 32nd-highest-paid county in Minnesota (CEMHS, 2023).

Section 3.4 provides jurisdictional responses of localized vulnerabilities to specific hazards.

4.8.3 PROGRAM GAPS AND DEFICIENCIES

Kittson County Emergency Management did not identify any program gaps or deficiencies that make its residents more vulnerable to drought.

4.9 Landslides

The movement of a mass of rock, debris, or earth down a slope by the force of gravity is considered a landslide. They occur when the slope or soil stability changes from stable to unstable, which may be caused by earthquakes, storms, erosion, fire, or additional human-induced activities. Floods and

<u>See interactive information</u> <u>about landslides on the</u> <u>Kittson County HMP website</u> landslides are closely related, and both involve precipitation, runoff, and ground saturation that may be the result of severe thunderstorms; however, landslides also take place over time and often take place when no natural disaster is evident.

4.9.1 PROBABILITY OF OCCURRENCE

Researchers from eight colleges and universities across Minnesota examined the prevalence of landslides across the state and compiled an inventory of geological activity. This historical landslide inventory was published by USGS (DeLong, et al., 2022).

West Kittson County, specifically along the Red River of the North, is most susceptible to landslides based on this research. In addition, areas along the North & Middle branches of Two Rivers show historical susceptibility to landslides.

To determine the frequency of landslides in Kittson County, we require records of previous landslides and the period in which they occurred. Comprehensive data for historical landslide events are not available. Statewide and national maps suggest that landslide risk in Kittson County is relatively low; however, anecdotal evidence does indicate that there is a risk of landslides in bluff areas and areas of lakeshore development. There is a documented increase in frequency of the heaviest 1% of extreme precipitation events (Climate Adaptation Partnerships, 2022). These extreme rain events are the most likely to cause landslides. Although the risk to infrastructure and property in Kittson County is low, landslides remain a concern to Kittson County Emergency Management.

4.9.2 VULNERABILITY

Given the lack of data on landslide incidents in Minnesota, the locations of Best Management Practices (BMPs) reported to the MN Board of Soil and Water Resources (BWSR) were used to identify areas in the State which may be more susceptible to landslides. BMPs are ways to manage land and activities to protect water quality and promote soil conservation, they can be a structure or part of a process. The BWSR identifies four BMPs which may be implemented to mitigate against erosion and slope failure issues that may result in landslides. Descriptions of these BMPs and the number of them installed in Kittson County are in Table 8.

Practice Name	Code	Description	Count in County
Grade Stabilization Structure	410	A structure used to control the grade and head cutting in natural or artificial channels. Includes side-inlet controls for existing drainage ditches and/or streams.	10
Streambank and Shoreline Protection	580	Treatment(s) used to stabilize and protect banks of streams or constructed channels, and shorelines of lakes, reservoirs, or estuaries.	9

Table 8. Best Management Practices (BMP) affiliated with erosion, slope failure, and landslides

SOURCE: (MN BWSR, 2023)

BWSR has reported a total of 19 best management practices, including 10 grade stabilization structures and nine streambank & shoreline protections. The 19 BMPs are spread evenly throughout the county, with a high concentration located in central Kittson County. Grade stabilization structures are dispersed evenly throughout west Kittson County, with a single structure existing in Pelan Township in east Kittson County. Areas along the north and middle branches of Two Rivers contain the most streambank & shoreline protection BMPs, specifically Hallock and Lancaster townships.

4.9.3 PROGRAM GAPS AND DEFICIENCIES

Kittson County Emergency Management did not identify any program gaps or deficiencies that make its residents more vulnerable to landslides.

4.10 Dam & Levee Failure

The MN DNR Dam Safety Program has the mission of protecting the life and safety of people by ensuring that dams are safe. Minnesota's Dam Safety Program sets minimum standards for dams and regulates the design, construction, operation, repair, and removal of both privately and publicly (non-federal) owned dams (MN DNR, 2020). The federal government is responsible for regulating and maintaining dam safety of federally owned dams. No single agency regulates all federally owned dams. Forty-two percent of federal dams are owned and managed by the U.S. Army Corp of Engineers (USACE) and the Bureau of Reclamation. The remaining federal dams are owned and managed by other federal agencies, including the Fish and Wildlife Service, Forest Service, the Department of Defense, and the Bureau of Indian Affairs, among others (Normand, 2019).The Federal Energy Regulatory Commission (FERC) Dam Safety Program is the largest dam safety program in the U.S. The Commission works with federal and state agencies to ensure and promote dam safety of over 3,000 dams across the U.S. The Commission inspects projects on an unscheduled basis to investigate potential dam safety problems; complaints about constructing and operating a project; safety concerns related to natural disasters; and issues concerning compliance with the term and conditions of a license (FERC, 2020).

Similar to dams, levees in Minnesota are regulated by various federal, state, and local entities that own the levee. While the USACE has designed and built many of the levees in the U.S., the USACE is only responsible for the maintenance of federally owned levees in the USACE system.

<u>View interactive maps and see</u> <u>information about dam failure</u> <u>history, risk, and vulnerability</u>

Dam & Levee Inventory: There are seven dams and three levees in Kittson County. Dams are mapped in Figure 10; an interactive version of this map is available on the Kittson County HMP website.

The Lake Bronson Dam has a high hazard potential rating and is the only dam in the county with a significant or high hazard rating. The three levees include the Hallock - Middle Branch Two Rivers Levee, the Red River of The North - Noyes-Emerson Levee, and the St. Vincent (Gage At Pembina) Levee.

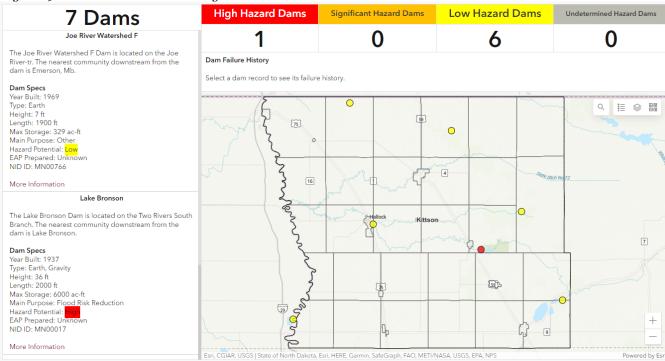


Figure 9. Dams in Kittson County

4.10.1 PROBABILITY OF OCCURRENCE

Extreme precipitation is only one factor contributing to dam failure, and the possibility of failure is dam specific, relating to both environmental and structural conditions. There are few incidents of dam failure in Minnesota and the likelihood of a dam failure in Kittson County is very low. Dam failures are extremely unlikely if the dam is maintained in compliance with Minnesota's Dam Safety Program. The Lake Bronson Dam earthen embankments adjacent to the spillway did partially fail in 1966 due to scour from floodwaters. The other dams in Kittson County are all of low hazard potential. Following the improvements to the Lake Bronson Dam in the next couple of years, the likelihood of failure in Kittson County will be extremely low.

4.10.2 VULNERABILITY

Although dam regulatory authorities differ between various federal and state agencies, all authorities attempt to classify dams according to the potential impacts from a dam failure or mis-operation. In response to the numerous classification systems, FEMA's Interagency Committee on Dam Safety created a downstream hazard potential classification system that is adaptable to any agency's current system. Table 9 provides an overview of the main criteria agencies consider when determining a dam's downstream hazard potential. This classification system does not imply that the dam is unsafe, but rather categorizes dams based on the probable loss of human life and the impacts on economic, environmental, and lifeline interests (FEMA, 2004).

Hazard Potential Classification	Loss of Human Life	Economic, Environmental, Lifeline Losses
Class III (Low)	None expected	Low and generally limited to owner
Class II (Significant)	None expected	Yes
Class I (High)	Probable - one or more expected.	Yes (but not necessary for this classification)
SOURCE: (USACE 0008)		

Table 9. Downstream hazard potential classification criteria

SOURCE: (USACE, 2008)

Dams for which a hazard potential has not been designated, or is not provided, are classified as "Undetermined."

An Emergency Action Plan (EAP) is a document which identifies potential emergency conditions at a dam and specifies preplanned actions to be followed during a dam failure to minimize property damage or loss of life. An EAP is required for Class I dams and strongly recommended for Class II dams (MN DNR, 2020).

The Lake Bronson Dam has an EAP that was last revised in 2017, however the EAP was not available for this plan. The last inspection was in 2022.

The DNR is preparing to replace the aging dam in Lake Bronson State Park. Issues for the aging dam include an undersized spillway, seepage through the embankment and deterioration of the existing structure. The project is slated to begin in the spring of 2024 with a bonding appropriation of \$20 million from 2020.

An alert about the aging dam and the replacement project is prominently shown on the Lake Bronson State Park website: <u>https://www.dnr.state.mn.us/state_parks/lake-bronson-dam-replacement-project.html</u>.

4.10.3 PROGRAM GAPS AND DEFICIENCIES

Kittson County Emergency Management did not identify any program gaps or deficiencies that make its residents more vulnerable to dam failure.

Section 5 – Mitigation Strategy

The goal of mitigation is to protect lives and reduce the impacts of future hazard events including property damage, disruption to local and regional economies, the amount of public and private funds spent to assist with recovery, and to build disaster-resistant communities. Mitigation actions and projects should be based on a well-constructed risk assessment, provided in Section 3 of this plan. Mitigation should be an ongoing process adapting over time to accommodate a community's needs.

5.1 Community Capability Assessments

The capability assessment identifies current activities and existing planning tools used to mitigate hazards. The capability assessment identifies the policies, regulations, procedures, programs and projects that contribute to the lessening of disaster damages. The assessment also provides an evaluation of these capabilities to determine whether the activities can be improved in order to more effectively reduce the impact of future hazard events. The following sections identify existing plans and mitigation capabilities within all of the communities:

- Appendix D: Lists the plans and programs in place in Kittson County as related to hazard mitigation.
- Appendix C: As part of the Kittson County HMP update, the county and city governments were asked to participate in filling out a "Local Mitigation Survey" (LMS) form to report on their current mitigation capabilities and program gaps. Appendix C provides the LMS reports gathered for Kittson County.

Information from the capability assessments was used to support development of local mitigation actions for implementation over the next five years (see column *Comments on Implementation & Integration*).

5.1.1 NATIONAL FLOOD INSURANCE PROGRAM (NFIP)

The NFIP is a federal program created by Congress to mitigate future flood losses nationwide through sound, community-enforced building and zoning ordinances and to provide access to affordable, federally backed flood insurance protection for property owners. The NFIP is designed to provide an insurance alternative to disaster assistance to meet the escalating costs of repairing damage to buildings and their contents caused by floods. Participation in the NFIP is based on an agreement between local communities and the federal government that states that if a community will adopt and enforce a floodplain management ordinance to reduce future flood risks to new construction in Special Flood Hazard Areas (SFHAs), the federal government will make flood insurance available within the community as a financial protection against flood losses.

Table 10 below lists and describes jurisdictional participation in the National Flood Insurance Program (NFIP).

	FEMA Plan Requirements Plan Review Tool, Section C2	Description		
Nar	ne of Community	KITTSON COUNTY		
Par	ticipation in the NFIP	Participating – entry date 2/4/81		
FEI	МА Мар	FEMA-mapped high-risk areas		
Cur	rrent Effective Map Date	9/29/17		
	al # of Buildings within Floodplain (including ll townships and cities)	373		
1.	Adoption of NFIP minimum floodplain management criteria via local regulation	Adoption of current floodplain ordinance: 9/5/17		
2.	Adoption of the latest effective Flood Insurance Rate Map (FIRM), if applicable	9/5/17		
3.	Implementation and enforcement of local floodplain management regulations to regulate and permit development in SFHAs	Kittson County enforces requirements of the NFIP through the county's current floodplain ordinance adopted 9/5/17 and published publicly 9/13/17. This ordinance establishes the flood plain district and zoning regulations and conditional uses permitted within the floodway, flood fringe, and general floodplain districts. The Kittson County Zoning Office maintains and enforces the floodplain management ordinance for the county.		
4.	Appointment of a designee or agency to implement the addressed commitments and requirements of the NFIP	Floodplain Administrator: Lane Nordin, Kittson County Zoning Administrator		
5.	Description of how participant implements the substantial improvement / substantial damage provisions of their floodplain management regulations after an event.	Following a flood event, the city would work with the MN DNR to use a form to track cumulative improvements and repetitive losses in the floodplain. The city would also review the MN DNR Minnesota Post-Flood Substantial Damage Playbook for Local Officials.		
Nar	ne of Community	CITY OF DONALDSON		
Par	ticipation in the NFIP	Participating – entry date 11/5/09		
FEMA Map		No FEMA-mapped high-risk areas		
Cur	rent Effective Map Date	(NSFHA) (9/29/17) No Special Flood Hazard Area is mapped		
Tot	al # of Buildings within Floodplain	Ο		
1.	Adoption of NFIP minimum floodplain management criteria via local regulation	N/A		

<u>Table 10. NFIP participation in Kittson County</u> FEMA Plan Requirements

z.umn.edu/KittsonHMP

	FEMA Plan Requirements Plan Review Tool, Section C2	Description	
2.	Adoption of the latest effective Flood Insurance Rate Map (FIRM), if applicable	N/A	
3. Implementation and enforcement of local floodplain management regulations to regulate and permit development in SFHAs		N/A	
4. Appointment of a designee or agency to implement the addressed commitments and requirements of the NFIP		N/A	
5. Description of how participant implements the substantial improvement / substantial damage provisions of their floodplain management regulations after an event.		N/A	
Nai	ne of Community	CITY OF HALLOCK	
Par	ticipation in the NFIP	Participating in NFIP – entry date 1/2/80	
FEI	МА Мар	FEMA-mapped high-risk areas	
Cui	rrent Effective Map Date	9/29/17	
Tot	al # of Buildings within Floodplain	19	
1.	Adoption of NFIP minimum floodplain management criteria via local regulation	Adoption of current floodplain ordinance: 8/7/17	
2.	Adoption of the latest effective Flood Insurance Rate Map (FIRM), if applicable	9/13/17	
3. Implementation and enforcement of local floodplain management regulations to regulate and permit development in SFHAs		The city of Hallock enforces requirements of the NFIP through the city's current floodplain ordinance, adopted $8/7/17$ and published publicly $9/13/17$. This ordinance regulates development in the flood hazard areas of the city.	
4. Appointment of a designee or agency to implement the addressed commitments and requirements of the NFIP		Floodplain Administrator: Lisa Kraulik, City Clerk Additional Contact: Karyl Grochowski, Treasurer	
5.	Description of how participant implements the substantial improvement / substantial damage provisions of their floodplain management regulations after an event.	Following a flood event, the city would work with the MN DNR to use a form to track cumulative improvements and repetitive losses in the floodplain. The city would also review the MN DNR Minnesota Post-Flood Substantial Damage Playbook for Local Officials.	

FEMA Plan Requirements Plan Review Tool, Section C2	Description		
Name of Community	CITY OF HALMA		
Participation in the NFIP	NOT Participating		
FEMA Map	No FEMA-mapped high-risk areas		
Name of Community	CITY OF HUMBOLDT		
Participation in the NFIP	NOT Participating		
FEMA Map	FEMA-mapped high-risk areas		
Current Effective Map Date	9/29/17		
Total # of Buildings within Floodplain	14		
Description of why community does not participate in the NFIP.	The city council decided against the floodplain mapping tha was identified for the city and voted against enrolling in th NFIP.		
Name of Community	CITY OF KARLSTAD		
Participation in the NFIP	NOT Participating		
FEMA Мар	No FEMA-mapped high-risk areas		
Name of Community	CITY OF KENNEDY		
Participation in the NFIP	Participating – entry date 8/5/86		
FEMA Map	FEMA-mapped high-risk areas		
Current Effective Map Date	9/29/17		
Total # of Buildings within Floodplain	32		
1. Adoption of NFIP minimum floodplain management criteria via local regulation	Adoption of current floodplain ordinance: 9/11/17		
2. Adoption of the latest effective Flood Insurance Rate Map (FIRM), if applicable	9/11/17		
3. Implementation and enforcement of local floodplain management regulations to regulate and permit development in SFHAs	The city of Kennedy enforces requirements of the NF through the city's current floodplain ordinance, adopt 9/11/17 and published publicly 9/20/17. This ordinance regulates development in the flood hazard areas of the city.		

FEMA Plan Requirements Plan Review Tool, Section C2	Description
 4. Appointment of a designee or agency to implement the addressed commitments and requirements of the NFIP 	Floodplain Administrator: Melissa Woinarowicz, City Clerk
5. Description of how participant implement the substantial improvement / substantial damage provisions of their floodplain management regulations after an event.	
Name of Community	CITY OF LAKE BRONSON
Participation in the NFIP	NOT Participating
FEMA Map	FEMA-mapped high-risk areas
Current Effective Map Date	9/29/17
Total # of Buildings within Floodplain	2
Description of why community does no participate in the NFIP.	ot Community elected not to participate.
Name of Community	CITY OF LANCASTER
Participation in the NFIP	Participating in NFIP
Participation in the NFIP FEMA Map	Participating in NFIP FEMA-mapped high-risk areas
-	
FEMA Map	FEMA-mapped high-risk areas
FEMA Map Current Effective Map Date	FEMA-mapped high-risk areas 9/29/17
FEMA Map Current Effective Map Date Total # of Buildings within Floodplain 1. Adoption of NFIP minimum floodplain	FEMA-mapped high-risk areas 9/29/17 2 Adoption of current floodplain ordinance: 7/12/17
 FEMA Map Current Effective Map Date Total # of Buildings within Floodplain 1. Adoption of NFIP minimum floodplain management criteria via local regulation 2. Adoption of the latest effective Flood 	FEMA-mapped high-risk areas 9/29/17 2 Adoption of current floodplain ordinance: 7/12/17 9/29/17 The city of Lancaster enforces requirements of the NFIP through the city's current floodplain ordinance, adopted

	FEMA Plan Requirements Plan Review Tool, Section C2	Description	
t	Description of how participant implements the substantial improvement / substantial damage provisions of their floodplain management regulations after an event.	Following a flood event, the city would work with the MN DNR to use a form to track cumulative improvements and repetitive losses in the floodplain. The city would also review the MN DNR Minnesota Post-Flood Substantial Damage Playbook for Local Officials.	
Name	e of Community	CITY OF ST. VINCENT	
Partio	cipation in the NFIP	Participating in NFIP – entry date 9/2/82	
FEM	А Мар	FEMA-mapped high-risk areas	
Curre	ent Effective Map Date	9/29/17	
Total	# of Buildings within Floodplain	81	
	Adoption of NFIP minimum floodplain management criteria via local regulation	Adoption of current floodplain ordinance: 8/24/17	
	Adoption of the latest effective Flood Insurance Rate Map (FIRM), if applicable	8/24/17	
f	Implementation and enforcement of local floodplain management regulations to regulate and permit development in SFHAs	The City of St. Vincent enforces requirements of the NFIP through the city's current floodplain ordinance, adopted 8/24/17 and published publicly 9/6/17. This ordinance regulates development in the flood hazard areas of the city.	
4. Appointment of a designee or agency to implement the addressed commitments and requirements of the NFIP		Floodplain Administrator: Faith Khalaf, Clerk Additional Contact: Kris Ohmann, Treasurer	
t (Description of how participant implements the substantial improvement / substantial damage provisions of their floodplain management regulations after an event. c: (CEIL STRAUSS, MN FLOODPLAIN MANAGER, PERSON	Following a flood event, the city would work with the MN DNR to use a form to track cumulative improvements and repetitive losses in the floodplain. The city would also review the MN DNR Minnesota Post-Flood Substantial Damage Playbook for Local Officials.	

Repetitive loss properties are defined as properties that have had two or more flood insurance claims of \$1,000 or more in any rolling 10-year period. Property owners are asked to consider mitigation activities such as acquisition, relocation, or elevation, among other options. FEMA's Repetitive Loss (RL) properties strategy is to eliminate or reduce the damage to property and the disruption to life caused by repeated flooding of the same properties. Property owners are notified of their status by FEMA.

A Severe Repetitive Loss (SRL) property is defined as a residential property that is covered under an NFIP flood insurance policy and:

- a) That has at least four NFIP claim payments (including building and contents) over \$5,000 each, and the cumulative amount of such claims payments exceeds \$20,000; or
- b) For which at least two separate claims payments (building payments only) have been made with the cumulative amount of the building portion of such claims exceeding the market value of the building.
- c) For both (a) and (b) above, at least two of the referenced claims must have occurred within any 10-year period and must be greater than 10 days apart.

Kittson County has eight RL properties and no SRL properties. In Hallock, there are three single family properties and two non-residential properties with loss dates of 1979, 1997, and 2011. Humbolt and Hampden Township each have one non-residential RL property, and another single-family residence is a RL in Noyes.

For more on the areas that flood repeatedly in Kittson County, see the Kittson County Flooding page.

5.1.2 PLANS AND ORDINANCES

Kittson County and its incorporated communities have a number of plans and ordinances in place to ensure the safety of residents and the effective operation of communities including a Zoning Ordinance, Floodplain Ordinance, Emergency Operations Plan, and Wellhead Protection Plan.

5.1.3 PLANS AND PROGRAMS IN PLACE TO ADDRESS NATURAL HAZARDS

Kittson County has numerous plans and programs in place to address natural hazards. Some of these programs are specific to a hazard and others address impacts and human safety for many types of events ("All-Hazards"). For the purpose of grouping related natural hazards, "Summer Storms" encompasses Tornadoes, Windstorms, Lightning, and Hail. Following is a description of the plans and programs in place by Kittson County to support mitigation for the hazards addressed in this plan.

All Hazards

All Hazards Emergency Operations Plan: Kittson County Emergency Management maintains an all-hazards Emergency Operations Plan (EOP) which lays out concepts and operating guidelines for all incident management and support functions that may be needed to ensure life safety, incident stabilization, and property preservation during an incident and the transition to recovery.

CodeRED Emergency Notification System and IPAWS: Kittson County maintains the CodeRED Emergency Notification System which allows residents and visitors to sign up ("opt-in") to receive severe weather alerts targeted to their location, along with other local emergency alerts. A link to sign up for the system is located on the Kittson County Emergency Management website page. Kittson County also has "Text to 911" capabilities for residents. Kittson County additionally uses IPAWS (Integrated Public Alert Warning System), which allows for both targeted and county-wide emergency notifications to both residents and visitors (not an "opt-in" service).

Relationship with National Weather Service: Kittson County has a strong relationship with the Grand Forks, ND National Weather Service (NWS) Forecast Office, having access to all live and on-demand briefings, announcements, and educational opportunities, and contact information for direct collaboration as needed. The county also receives all products/statements issued by the NWS, and in turn shares or incorporates these into its community outreach and public education.

Preparedness Outreach & Public Education: Kittson County utilizes the Kittson County Emergency Management website page, Kittson County Emergency Management Facebook page, and local news media to communicate with residents, visitors, schools, and long-term care facilities on emergency preparedness, severe weather, and other hazard conditions throughout the year.

Mass Care Sheltering: In the event of a disaster or other hazardous situation where temporary housing and basic human services are needed, Kittson County Social Services is the lead agency with Kittson County Emergency Management working in coordination with them. KCEM also works closely with local Fire and EMS, Kittson County Public Health, and the American Red Cross to provide mass care services as needed. The county EOP includes plans, procedures, and resources available for mass care sheltering.

NOAA Weather Radios: Kittson County Emergency Management promotes the use of NOAA Weather Radios by local residents, businesses, schools, long term care facilities, government buildings, faith communities, and other places of common gathering. NOAA Weather Radios broadcast continuous weather information directly from the nearest National Weather Service office, including warnings, watches, forecasts, and other hazard information 24 hours a day, 7 days a week. They are an important tool to be able to receive information, particularly in the event of extended power outages where updates from local media and cell phone apps may not be available.

Weather-Ready Nation Ambassador/StormReady Community: Kittson County is a registered NOAA and NWS Weather-Ready Nation Ambassador and StormReady Community (2022), supporting initiatives to improve readiness, responsiveness, and overall resilience to weather, water, and climate events. As an ambassador, the county promotes weather-ready messages and themes to our stakeholders, engages with NOAA personnel on collaborative opportunities, shares success stories of preparedness and resiliency, and educates employees, partners, and the public on preparedness actions. As a StormReady Community, the county meets specific guidelines on how to improve hazardous weather operations.

Backup Power: Kittson County works to ensure the continuity of operations of county government services and critical infrastructure in the event of an extended power outage. Hardwired backup generators are located in the courthouse for all facilities including the Sheriff's Department Dispatch and Jail. The Kittson County Highway Department, United States Customs and Border Patrol, and local fire departments also have portable generators for use as necessary. If necessary, KCEM has the ability to reach out to local businesses, contractors, and farmers for additional help.

Schools Support: Kittson County Emergency Management coordinates with local school districts as needed on related emergency planning and preparedness, including support for specific trainings, exercises, equipment, and relay of county-level emergency notifications. School districts have their own policies, decision-making protocols, and communications plans in place to determine the need to close school and to notify targeted audiences in the event of severe weather, extreme temperatures, or other events that pose risk to students and staff. KCEM currently tracks school AED's and notifies them when they have expiring pads and batteries.

Regional Collaboration: Kittson County Emergency Management works closely with the MN HSEM Region 3 regional program coordinator and county emergency managers on a range of planning, training, and exercises to support all-hazards preparedness, mitigation, response, and recovery capabilities.

Severe Winter Storms

Winter Weather Statements (Watch, Advisory, Warning, etc.): Kittson County Emergency Management works to relay winter weather statements received from the NWS via the Kittson County Emergency Management Facebook page and by CodeRED emergency notifications as necessary to help alert residents and visitors to hazardous conditions.

Winter Hazard Awareness Week: Kittson County participates in the Winter Hazard Awareness Week campaign sponsored by MN HSEM and the NWS each November. The week-long effort provides specific information each day covering the topics of winter weather, outdoor winter safety, indoor winter safety, and winter driving safety. Kittson County Emergency Management promotes and shares information during the week via social media which communities, schools, churches or other civic programs are encouraged to share locally.

Snow Removal & Ice Control: The Kittson County Highway Department is responsible for the removal of snow and ice control for county roads, as well as some city and township roads based upon agreement. The department completes its snow removal process in accordance with the Kittson County Hwy Department Snow Plowing and Ice Control Guidelines. MNDOT removes snow from State Highways as well as disperses salt/sand as needed.

Severe Summer Storms

Severe Weather Statements (Watch, Advisory, Warning, etc.): Kittson County works to relay severe spring and summer weather statements (such as for thunderstorms, windstorms, or tornadoes) received from the NWS via the Kittson County Emergency Management Facebook page and by CodeRED emergency notifications as necessary to help alert residents and visitors to hazardous conditions.

Outdoor Warning Sirens: There are 9 outdoor warning sirens within the county, located in the following cities: Donaldson (1), Hallock (2), Lake Bronson (1), Lancaster (1), Karlstad (1), Halma (1), Humboldt (1), St. Vincent (1). The warning siren locate on the south side of Hallock is close to the County Fairgrounds and covers that area.

The warning siren located in the city of Lake Bronson is located approximately 3 miles from Lake Bronson State Park and can be heard in the main camping area. The cities of Karlstad and Lancaster took advantage of a USDA grant 2019 to install new sirens. All outdoor warning sirens are remotely activated at the Kittson County Sheriff's Office Dispatch Office and are tested once a month.

Skywarn Program: Kittson County Emergency Management works with the National Weather Service to offer Storm Spotter training on an annual basis to local fire and law enforcement departments and local residents that wish to be trained as spotters. SkyWarn Storm Spotters help to keep their local communities safe by providing timely and accurate reports of severe weather to their local NWS office.

Severe Weather Awareness Week: Kittson County participates in the Severe Weather Awareness Week campaign sponsored by MN HSEM and the NWS each April. The week-long effort provides specific information each day covering the topics of severe weather alerts and warnings, lightning, hail, floods, tornadoes (with statewide drills), and extreme heat. Each topic covered includes factsheets, checklists, data, and other resources. Kittson County Emergency Management promotes and shares information during the week via social media which communities, schools, churches or other civic programs are encouraged to share locally.

Vegetation Management: The Kittson County Highway Department regularly conducts vegetation management along county roads to reduce the risk of downed trees or branches resulting from severe spring and summer storm events. Local utility providers also work to manage vegetation near power lines to reduce the risk of downed lines and power outages.

Manufactured Home Parks Shelters & Evacuation Plans: Kittson County Public Health works in coordination with the Minnesota Department of Health (MDH) to ensure that licensed manufactured home parks within the county meet the requirements of MN Statute 327.20 for shelters and evacuation plans. Shelter and evacuation plans must be approved by the city or township in which they are located and submitted to the Minnesota Department of Health.

Extreme Cold

Emergency Notifications: Extreme cold temperature warnings are issued by the National Weather Service. Kittson County Emergency Management assists with sharing this information with the public. Kittson County places a strong emphasis on use of the Kittson County Sheriff's Department Facebook page for public outreach during periods of extreme cold. Any weather situation and/or warnings are posted on the Facebook Page. The Kittson County Emergency Management Office also encourages citizens to subscribe to the NWS local forecast applications for additional information.

Extreme Cold Safety Awareness: Kittson County Emergency Management and Kittson County Public Health promote public awareness of personal safety measure to take during periods of extreme cold, such as minimizing exposure and being prepared with survival kits in vehicles during winter.

Extreme Cold Emergency Sheltering: In the event of an extended power outage coupled with a period of extreme cold, Kittson County Social Services would work with Kittson County Emergency Management and local Fire or EMS agencies as needed to assist vulnerable residents such as the elderly who may need temporary sheltering.

Extreme Heat

Emergency Notifications: Extreme heat temperature warnings are issued by the National Weather Service. Kittson County Emergency Management assists with sharing this information with the public.

Public Education and Awareness: Kittson County Emergency Management and Kittson County Public Health help to share the message of personal safety and preparedness to stay safe during periods of extreme heat with county residents, utilizing communication platforms such as the county website, Facebook, and local news media.

Extreme Heat Emergency Sheltering: In the event of an extended power outage coupled with a period of extreme heat, Kittson County Emergency Management works with local Fire or EMS locations as needed to assist vulnerable residents such as the elderly who may need temporary sheltering.

Drought

Public Awareness & Outreach: In the event of drought conditions, Kittson County works in concert with the NWS, MN DNR, and local communities to raise public awareness of dry conditions and increased danger of wildfire, and recommended water use restrictions, if needed.

Kittson Soil and Water Conservation District: The Kittson SWCD helps to connect agricultural landowners and local jurisdictions in Kittson County to educational and other technical resources for issues associated with managing drought. The SWCD also administers a rainfall monitoring program throughout the county that works with trained residents to record rainfall in the county on a daily basis. The SWCD reports data on rainfall to the Minnesota State Climatology Office in order to monitor the amount of moisture received in the county.

Two Rivers Watershed District: The TRWD monitors streamflow discharges at up to 20 locations along rivers, streams, and ditches within the watershed. This is in coordination with and complements the one USGS stream gage station at Lake Bronson and several DNR gaging stations. This activity provides data and information regarding water levels and stream flow. The TRWD also monitors precipitation and temperature at Hallock as a National Weather Service volunteer. The TRWD monitors water quality at 12 locations throughout the watershed on a monthly basis to help determine baseline conditions and water quality trends over time.

Wildfire

Public Awareness & Emergency Notifications: In event of wildfire, Kittson County Emergency Management works with local law enforcement, local fire departments, NWS, and the Minnesota Department of Natural Resources to get the word out on the risk of wildfire conditions and safety measures to help keep the public informed and protected. The MN DNR works closely with local fire departments within the county on wildland fire issues. Kittson County Emergency Management participates in a support role as needed.

Cross-Border Mutual Aid Agreement: Kittson County has a mutual aid plan in place between Kittson County and the fire departments in the Rural Municipalities of Emerson/Franklin and Stuartburn in the Province of Manitoba, Canada for cross-border access during wildland fires and also 24-hour access through the Port of Lancaster/Tolstoi for Structural Fires. This greatly enhances the pool of available resources to Kittson County for manpower and equipment in the event of both structural and wildland fire incidents.

County Zoning for Streets and Roads: Kittson County 2014 Zoning & Subdivision Regulations, Section 8.5.2 Streets and Roads establishes the requirements for the development of roads for proposed new subdivisions. These regulations support the ability for Fire and EMS to have the necessary road access for emergency response, including wildland fires.

Landslides

Kittson Soil and Water Conservation District: The Kittson Soil & Water Conservation District provides access to natural resource management and conservation services and provides technical, financial, and educational assistance to landowners to address natural resource concerns. The Kittson SWCD applies for Federal and State grant dollars every year to address erosion and water quality issues throughout the county. This money is used to provide cost-share to landowners with erosion problems that otherwise would not be addressed due to the high cost of the projects. SWCD cost share programs also provide services such as streambed stabilization and crop cover programs.

Two Rivers Watershed District: The TRWD regularly surveys and inspects its ditch systems for erosion and sloughing. If sloughing of ditch side slopes is found measures are taken to repair them. The TRWD also provides cost share funding in coordination with Kittson SWCD programs.

Flooding

National Flood Insurance Program (NFIP): Kittson County has FEMA-mapped high-risk areas and participates in the NFIP. Initial entry date into the program was 02/04/1981.

Floodplain Administrator: The Kittson County Zoning Administrator is the county's designated Floodplain Administrator, who is responsible to implement the requirements of the NFIP.

Floodplain Ordinance: The Kittson County Floodplain Ordinance (adopted 10/17/1990, revised 10/14/2003) establishes the flood plain district and zoning regulations and conditional uses permitted within the floodway, flood fringe, and general floodplain districts. The Kittson County Zoning Office maintains and enforces the floodplain management ordinance for the county.

Floodplain Mapping: Kittson County's current effective FEMA flood map date is 9/29/2017. The county's Zoning Office is the repository for the floodplain maps for the county. The Zoning Office assists county residents in determining whether their property is affected by an officially mapped flood area.

Subdivision Ordinance: The Kittson County Floodplain Ordinance includes Section 7.0 – Subdivisions. This section of the ordinance addresses review criteria for subdivision of land within flood plain districts, Floodway/Flood Fringe Determinations in the General Flood Plain District, and the FEMA requirements for addressing requests for removal of Special Flood Hazard Area Designation. New manufactured home parks and expansions to existing manufactured home parks shall be subject to the provisions placed on subdivisions by Section 7.0 of the Ordinance.

5-Year Transportation Plan: The Kittson County Highway Department is responsible for engineering, design, reconstruction and repair of roads and bridges throughout the county. The department is also responsible for the inspection and maintenance of the county ditch system. The Highway Department develops and updates a 5-year plan which identifies and schedules road improvement projects that include measures for flood mitigation.

Property Buyout Acquisitions: In 2022 Kittson County completed one buyout in Teien Township along the Red River of the North within the floodplain. Kittson County continues to assess potential future buyouts as necessary.

Kittson County Local Water Management Plan: The Kittson Soil and Water Conservation District oversees the update and implementation of the Kittson County Water Management Plan (2010-2019). The plan identifies the primary water planning concerns, including flooding along the Red River of the North, the Roseau River, and the South Branch of the Two Rivers.

Minnesota Buffer Law: Kittson County has adopted the requirements of the Minnesota Buffer Law on legal ditches for which they are the ditch authority. The Two Rivers Watershed District has adopted the requirements of the MN Buffer Law on legal ditches for which they are the ditch authority. The Middle Snake Tamarac Rivers Watershed District has also adopted the MN Buffer Law. The purpose and intent of the law is to protect state water resources from erosion and runoff pollution; to stabilize soils, shores and banks; and to protect or provide riparian corridors. The Kittson SWCD and TRWD oversee reviewing and tracking compliance with the buffer law. The SWCD is required through the Minnesota Buffer Law to monitor compliance by reviewing all parcels on a 3-year basis. Kittson County and TRWD are responsible for enforcement actions on their respective ditch systems.

One-Watershed One Plan: Kittson County participates in the Two Rivers Plus Joint Powers Board One Watershed, One Plan (1W1P). A Joint Powers Board (JPB) was formed in July 2021 to start

the 10-year implementation phase of the Two Rivers Plus Comprehensive Watershed Management Plan. Members of the JPB include Kittson and Roseau Counties and Kittson and Roseau SWCD's. A Work Plan will be developed every two years, showing current activities going on in the watershed area. The plan includes considerations for flood risk areas within the regional watershed planning area.

Two Rivers Watershed District (TRWD) Flood Control Projects: The TRWD owns and operates three flood control impoundments that reduce flood flows on both the North Branch and South Branch of the Two Rivers Watershed District. Together these impoundments provide over 9,000-acre feet of storage. Another impoundment is in the planning and design stages, and if completed will provide another 35,750 acre feet of storage. In addition to these impoundments, the District has designed and constructed four channel projects within Kittson County, including one in the City of Kennedy, to prevent and reduce overland flooding. The TRWD together with the Red River Watershed Management Board and the State of MN has designed and constructed 23 farmstead ring dikes within Kittson County to protect farmsteads, reduce impacts of flooding, and protect the environment.

TRWD Disaster Response & Flood Mitigation Planning: The TRWD operates under MN Statutes 103D, and has the ability to declare a disaster during extreme events. This allows the District to provide funding and technical resources to fight floods by undertaking projects while an event is happening. The District works closely with federal, state and local entities. The TRWD can provide flow data, survey data, Lidar data, and mapping services during flooding events. Also under MN Statute, the TRWD is required to write a water management plan and update the plan every 10 years. This plan is specific to both flood damage reduction and natural resources enhancement goals and objectives. Regional goals identified are to reduce peak flows on the Red River by 20%, and to provide functioning drainage systems to carry up to a 10-year runoff event. The TRWD participates on the Red River Flood Damage Reduction Work Group to help to achieve local and regional goals.

TRWD Snow Pack Monitoring: The Two Rivers Watershed District monitors snow pack and works closely with the National Weather Service and the MN DNR to provide forecast data for both spring and summer flooding. During runoff events, the TRWD monitors flows at up to 20 locations and provides data and reports to agencies and the general public.

TRWD Permitting Program: The TRWD requires permits for any activities that affect surface and groundwater. This includes any ditching, diking, tiling, culvert installation or alteration, road construction, or other works that affect the flow of water. Through this permitting system, culvert sizing and tile drainage policies have been incorporated that help to reduce and prevent flood damages and to ensure that new problems do not arise.

Other Watershed Districts: Other watershed districts within Kittson County (Middle- Snake-Tamarac Rivers Watershed District, Roseau River Watershed District, and Joe River Watershed District) provide similar services to the Two Rivers Watershed District and may vary in scope due to footprint within the county.

Dam Failure

No noted plans or programs in place.

5.2 Mitigation Goals

The goals and strategies for natural hazards in the 2019 Minnesota State Hazard Mitigation Plan were adopted for use in the Kittson County Plan. This framework, as outlined below, will allow for integration of the mitigation actions that are listed by Kittson County and its jurisdictions into the state plan. The state will then be able to develop a statewide strategy that will benefit all of Minnesota.

Flooding Goal: Reduce deaths, injuries, property loss and economic disruption due to all types of flooding (riverine, flash, coastal, dam/levee failure).

Wildfire Goal: Reduce deaths, injuries, property loss, natural resource and economic disruption due to wildfires (forest, prairie, grass, and peat bogs).

Windstorms Goal: Reduce deaths, injuries, property loss, and economic disruption due to windstorms.

Hail Goal: Reduce deaths, injuries, property damage, and economic disruption due to hailstorms.

Winter Storms Goal: Reduce deaths, injuries, property loss, and economic disruption due to winter storms (blizzard, ice, and ice storm).

Lightning Goal: Reduce deaths, injuries, property losses, loss of services, and economic disruption due to lightning.

Tornado Goal: Reduce deaths, injuries, property loss, and economic disruption due to tornadoes.

Drought Goal: Reduce economic loss and environmental impacts due to drought.

Extreme Heat Goal: Reduce deaths, injuries, and economic disruption due to extreme heat.

Extreme Cold Goal: Reduce deaths, injuries, and economic disruption due to extreme cold.

Dam/Levee Failure Goal: Reduce deaths, injuries, property loss, natural resource and economic disruption due to dam/levee failure.

Erosion/Landslide/Mudslide Goal: Reduce deaths, injuries, property loss, and economic disruption due to hillside, coastal, bluff: caused primarily by oversaturation of soil.

5.3 Mitigation Action and Project Strategies

The mitigation actions in this plan are summarized into four main strategy types, as described in the FEMA publications *Local Mitigation Planning Handbook* (2013) and *Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards* (2013). A fifth strategy type was determined by Minnesota HSEM for use within the state: Mitigation Preparedness and Response. The strategies and example actions are listed in Table 11.

Mitigation Strategy	Description	Example Mitigation Actions
Local Plans and Regulations	These actions include government authorities, policies, or codes, that influence the way land and buildings are developed and built.	 Comprehensive plans Land use ordinances Planning and zoning Building codes and enforcement Floodplain ordinances NFIP Community Rating System Capital improvement programs Open space preservation Shoreline codes Stormwater management regulations and master plans
Structure and Infrastructure Projects	 These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards. Many of these types of actions are projects eligible for funding through the FEMA Hazard Mitigation Assistance program. 	 Acquisitions and elevations of structures in flood prone areas Utility undergrounding Structural retrofits Floodwalls and retaining walls Detention and retention structures Culverts Safe rooms
Natural Systems Protection	These are actions that minimize damage and losses and also preserve or restore the functions of natural systems.	 Sediment and erosion control Stream corridor restoration Forest management Conservation easements Wetland restoration and preservation

Table 11 Mitigation strategies and action t

Mitigation Strategy	Description	Example Mitigation Actions
Education and Awareness Programs	These are actions to inform and educate residents, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady or Firewise Communities. Although this type of mitigation reduces risk less directly than structural projects or regulation, it is an important foundation. A greater understanding and awareness of hazards and risk among local officials, stakeholders, and the public is more likely to lead to direct actions.	 Radio or television spots Websites with maps and information Real estate disclosure Presentations to school groups or neighborhood organizations Mailings to residents in hazard- prone areas. StormReady Certification Firewise Communities
Mitigation Preparedness and Response	This is a State of Minnesota mitigation strategy with the intent of covering preparation and actions that protect life and property during a natural disaster.	 Emergency operations plan Flood fight plans and preparedness Dam emergency action plans Warning Backup power Emergency capabilities

Local leaders work together with the Kittson County emergency management director to assure that the hazards and mitigation actions included in this plan are accurate and addressed in their jurisdictions. Development of mitigation actions for the county and each city was informed by a community's hazard and risk assessment; identification of local vulnerabilities, and review of capabilities in place to address mitigation. Planning team members, local elected officials and staff from Kittson County and each city actively participated in the development and review of mitigation action charts for implementation through participation in planning team meetings (see Appendix F) and development of Local Mitigation Surveys (see Appendix C). Additional jurisdictional and public feedback was incorporated following news releases inviting public input to the planning process (see Appendix G).

The Kittson County risks and mitigation activities identified also incorporate the concerns and needs of townships, school districts, and other entities participating in this plan. Appendix H contains the jurisdictional mitigation action charts for the cities of Donaldson, Hallock, Halma, Humboldt, Karlstad, Kennedy, Lake Bronson, Lancaster, and St. Vincent.

Following is an overview the mitigation action charts and description of each element of the chart.

Number (#)

Each mitigation action is identified by a number.

Hazard

Each mitigation action is identified by the natural hazard that it relates to. Actions that fall under "All-Hazards" relate to both natural and non-natural hazards.

Mitigation Strategy

Each mitigation action is identified by one of the following five mitigation strategies.

- Local Planning and Regulations
- Structure and Infrastructure Projects
- Natural Systems Protection
- Education and Awareness Programs
- Mitigation Preparedness and Response Support

See Table 11 for a description of each mitigation strategy and related types of actions.

Mitigation Action

Each mitigation action provides a concise, action-oriented description of the action or project to be undertaken. If a mitigation reduces risk to new or existing buildings/infrastructure it is noted.

Status

The status of each mitigation action is indicated by one of the following categories:

- New New actions that have been identified since the last plan.
- Existing Actions that are carried over from the last plan or have been updated.
- In Progress Actions from the last plan that are currently being acted upon.

Mitigation actions that have been completed or deleted from the 2015 Kittson County Hazard Mitigation Plan are identified and reported on in Appendix H. Completed and deleted mitigation actions are not carried over into the updated mitigation action chart.

Priority

In the review and discussion of selected mitigation strategies and actions, the planning team ranked mitigation actions by priority for implementation. Table 12 provides criteria that were taken into consideration in the process.

are technically reliable. ng mitigation measures. eral grant programs. r the hazard. e cost effective. property for a long period of time, or are

Table 12. Criteria for Mitigation Action Priority Ranking

Ranking	Criteria
Moderate Priority	 Mitigation methods are established. The County has limited experience with the kinds of measures that may be appropriate to mitigate the hazard. Some mitigation measures are eligible for federal grants. There is a limited range of effective mitigation measures for the hazard. Mitigation measures are cost-effective only in limited circumstances. Mitigation measures are effective for a reasonable period of time.
Low Priority	 Methods for reducing risk from the hazard are not well-established, are not proven reliable, or are experimental. The State or Counties have little or no experience in implementing mitigation measures, and/or no technical knowledge of them. Mitigation measures are ineligible under federal grant programs. There is a very limited range of mitigation measures for the hazard, usually only one feasible alternative. The mitigation measure(s) have not been proven cost effective and are likely to be very expensive compared to the magnitude of the hazard. The long-term effectiveness of the measure is not known or is known to be relatively poor.

Time frame

Each mitigation action identifies the anticipated timeframe for implementation of the action within the next five-year planning cycle.

- Ongoing Implementation of the action will require continued application.
- Defined (year) Implementation of the action will occur within a defined time frame that is noted.
- TBD The anticipated time frame for implementation of an action is to be determined.

Responsibility

Each mitigation action identifies what personnel, department or agency will be lead for the administration or implementation of the action.

Comments on Implementation & Integration

Each mitigation action provides a description of how the jurisdiction will work to implement the mitigation action and incorporate the activity into other existing planning mechanisms.

Possible Funding

Each mitigation action identifies where potential funding may come from to support implementation of the mitigation activity, such as existing county or city funding, state or federal funding. Projects that may be eligible for future FEMA Hazard Mitigation Assistance grant funding are noted.

The Kittson County Mitigation Action Chart is provided in Table 13. Appendix H provides the mitigation action charts developed for each city participating in the HMP update.

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Fimeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
1	All-Hazards	Education & Awareness Programs	EMERGENCY NOTIFICATION Encourage all county residents to sign-up for the county's CodeRED Emergency Notification System.	Existing High Ongoing	Kittson County Emergency Management (KCEM)	Kittson County maintains the CodeRED Emergency Notification System which allows residents and visitors to sign up ("opt-in") to receive severe weather alerts targeted to their location, along with other local emergency alerts. A link to sign up for the system is located on the Kittson	Kittson County
2	All-Hazards	Mitigation Preparedness & Response Support	EOP PLANNING Ensure the county's Emergency Operations Plan (EOP) is updated and addresses policies & procedures needed to support EM functions prior to, during, and following a disaster.	Existing High Ongoing	KCEM	County website. The Kittson County EOP is updated on a regular basis and addresses functions that dually support mitigation and response for natural disasters, including public information and warning, operational coordination, mass care sheltering, evacuation, and access to resources.	Kittson County
3	All-Hazards	Local Planning & Regulations	PLANS, POLICIES & CODES Adopt and enforce plans, policies, and building codes that reduce risk against future natural hazard events.	Existing High Ongoing	KC Environmental Services, SWCD, KC Hwy. Dept, County Board	Kittson County departments continue to implement and enforce plans, policies, and codes that address risk reduction for natural hazards, including the Kittson County floodplain ordinance, subdivision ordinance, zoning for streets and roads, 5-year Transportation Plan, Local Water Management Plan, building permits and codes for new development, and the Minnesota State Buffer Law.	Kittson County
4	All-Hazards	Local Planning & Regulations	REGIONAL PLANNING Participate in regional planning and project efforts that address risk reduction to natural hazard events and improve shared mitigation capabilities.	Existing High Ongoing	KCEM, other county depts.	Kittson County continues to work with key partners on shared efforts that help to mitigate damage from future hazard events, such as flood risk reduction projects, public outreach and education, and regional watershed planning. Long-term active partnerships are in place with the Grand Forks, ND NWS, Kittson SWCD, NRCS, area watershed organizations, as well MN HSEM Region 3 Emergency Managers.	Kittson County, other agencies & organizations

Table 13. Kittson County Mitigation Action Chart (2023–2027)

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#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Fimeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
5	All-Hazards	Mitigation Preparedness & Response Support	VULNERABLE POPULATIONS Work in partnership with key partners on efforts to reduce risk to and benefit underserved communities or socially vulnerable populations within the county from the impacts of future natural hazard events.	Existing High Ongoing	KCEM, KC Public Health, JK Envir. Services/GIS in coord with others	KCEM and KC Public Health continue to work with local governments, school districts, hospitals, mobile home park (MHP) operators, long- term care and childcare facilities, MN Dept. of Health, American Red Cross, and the Salvation Army on emergency preparedness efforts that benefit those considered to be more vulnerable in the county from severe weather or extreme temperature events. This includes the elderly, disabled, students, and low-income residents. Example efforts include provision of energy assistance programs during periods of extreme cold, evacuation & shelter planning for long-term care facilities and MHP's, and delivery of education and awareness information in different formats. KCEM maintains data on location of vulnerable facilities which is incorporated in EM planning.	Kittson County, other agencies & organizations
6	All-Hazards	Education & Awareness Programs	OUTREACH & EDUCATION Inform and educate residents through outreach and education programs to increase awareness and preparedness for severe weather events, periods of extreme cold, and extended power outages.	Existing High Ongoing	KCEM with assistance from KC Public Health, JK Envir. Services/GIS in coord with others	-	Kittson County

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Fimeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
7	Severe Winter Storms	Local Planning & Regulations	SNOW & ICE CONTROL Implement snow removal and ice control to ensure the safety of county roads impacted by winter storms.	Existing High Ongoing	Kittson County Hwy. Dept.	The KC Highway Dept. is responsible for the removal of snow and ice control for county roads, as well as some city and township roads based upon agreement. The department completes its snow removal process in accordance with the Kittson County Hwy Department Snow Removal Policy.	Kittson County
8	Severe Winter Storms	Education & Awareness Programs	OUTREACH TO ISOLATED RURAL RESIDENTS Increase outreach to the elderly and rural, isolated residents who may be more vulnerable to the impacts of severe winter storms.	Existing High Ongoing	KCEM with assistance from KC Public Health	KCEM continues to look for ways to increase outreach to vulnerable residents to be prepared for winter storms. Other volunteer programs to provide assistance could also be explored.	Kittson County
9	Severe Summer Storms	Education & Awareness Programs	SKYWARN TRAINING Work with the National Weather Service (NWS) to provide SkyWarn training and develop a network of trained Storm Spotters throughout the county.	Existing High Ongoing	KCEM in coord with NWS	KCEM works with the NWS to offer this training on an annual basis to local fire and law enforcement departments and local residents that wish to be trained as spotters.	National Weather Service
10	Severe Summer Storms	Mitigation Preparedness & Response Support	OUTDOOR WARNING SIRENS Ensure outdoor warning sirens are located where needed and functioning properly.	Existing High Ongoing	KCEM in coord with local jurisdictions,	Kittson County Sheriff's Office conducts remote testing on sirens on a monthly basis. KCEM will assist any other communities in their effort to obtain a new outdoor warning sirens and connect them to the county system. The City of Lancaster has expressed a new for a new warning siren. Grant funding may be available for warning sirens from the USDA Rural Development Community Facilities Grant Program.	Kittson County & local jurisdictions

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Γimeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
11	Severe Summer Storms	Structure & Infrastructure Projects	STORM SHELTERS / TORNADO SAFE ROOMS Coordinate with local jurisdictions to address the need for the construction of storm shelters or tornado safe rooms in areas where residents or visitors are vulnerable to high wind events, such as mobile home parks and campgrounds.	Existing High Ongoing	KCEM in coord with local jurisdictions	KCEM will assist any communities in their effort to assess and address the need for construction of a storm shelter or tornado safe room. Grant funding may be available for tornado safe rooms from FEMA Hazard Mitigation Assistance (HMA) grant program funding, based on application approval.	Kittson County, Local Gov't, FEMA HMA
12	Severe Summer Storms	Local Planning & Regulations	MHP SAFTEY Ensure that licensed manufactured home parks (MHP's) within the county meet the requirements of MN Statute 327.20 for shelters and evacuation plans.	Existing High Ongoing	Kittson County Public Health	Kittson County Public Health works in coordination with the Minnesota Department of Health (MDH) on this effort. Shelter and evacuation plans must be approved by the city or township in which they are located and submitted to the MDH.	Kittson County, MDH
13	Severe Winter & Summer Storms	Structure & Infrastructure Projects	POWERLINE RETROFITS Encourage municipal and rural electric coops to address burying powerlines or strengthening power poles to avoid power outages from high wind events and storms.	Existing High Ongoing	KCEM, local jurisdictions in coord with electric utility providers	KCEM works with our utility coops and local governments on these efforts as needed. FEMA HMA grant funding may be a source for powerline infrastructure retrofits that eligible rural and municipal electric coops can apply for.	Electric Coops, FEMA HMA
14	Severe Winter & Summer Storms	Mitigation Preparedness & Response Support	GENERATOR BACKUPS Work with county departments and local jurisdictions to obtain generator backup power where needed for extended power outages due to storms.	Existing Moderate Ongoing	KCEM in coord with county depts and local jurisdictions	KCEM continues to work with county departments and local jurisdictions to secure portable or permanent backup generators to power critical facilities during extended power outages. Where applicable, FEMA HMA grant funding may be applied for generators.	Kittson County, Local Gov't, FEMA HMA
15	Severe Winter & Summer Storms	Mitigation Preparedness & Response Support	SEVERE WEATHER PLANS Encourage schools and other facilities that house senior citizens or other vulnerable populations to have emergency plans in place to deal with severe weather, extreme temperatures, and extended power outages.	Existing Moderate Ongoing	KCEM in coord with local jurisdictions	KCEM continues to work with local jurisdictions provide outreach to and support to schools and other facilities on emergency planning. Schools and long-term care (LTC) facilities are required to have such plans in place. KCEM provides direct training or planning assistance as requested.	Kittson County, Schools, LTC Facilities

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Γimeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
16	Severe Winter & Summer Storms	Local Planning & Regulations	BUILDING SAFETY Ensure that new development projects follow state building codes in order to withstand the impacts of severe weather events, including roof collapse from heavy snow or damages from high wind events.	Existing Moderate Ongoing	Kittson County Planning and Zoning	Kittson County Environmental Services Dept. oversees permits for new development. The permitting system adheres to the MN State Building Code in order to limit risk to existing buildings and new development.	Kittson County
17	Severe Winter & Summer Storms	Natural Systems Protection	VEGETATION MANAGEMENT Manage trees and other vegetation along roads from severe storm events to reduce risk to passing motorists.	Existing Moderate Ongoing	KC Highway Dept., Local Utility Providers	Kittson County Highway Dept. regularly conducts vegetation management along county roads to reduce the risk of downed trees or branches resulting from severe spring and summer storm events. Local utility providers also work to manage vegetation near power lines to reduce the risk of downed lines and power outages.	County, Utilities
18	Extreme Heat/Cold Temps	Education & Awareness Programs	EXTREME TEMPERATURES PUBLIC OUTREACH Conduct public outreach and provide information to residents on safety measures when there are periods of extreme heat or extreme cold.	Existing High Ongoing	KCEM	KCEM works to share information received from the National Weather Service when periods of extreme heat or cold are forecast and occurring. KCEM utilizes the county EM website page, and EM Facebook. Local radio and TV stations also provide this information to the public. School Districts have plans and policies in place for delaying or closing school to protect students from extreme	Kittson County
19	Wildfire	Local Planning & Regulations	COMMUNITY WILDFIRE PROTECTION PLAN Work with the MN DNR Firewise Program and local fire departments to develop a Community Wildfire Protection Plan (CWPP) for Kittson County.	New High 2024 - 2029	KCEM in coord with MN DNR Firewise and local FD's	temps. KCEM will work with the MN DNR Firewise Coordinator for northeast MN and local fire departments on this effort. Funding for CWPP updates is available periodically through the Community Wildfire Defense Grant (CWDG) which provides opportunities for Community Wildfire Preparedness. The grant funding will be necessary to hire an outside consultant to lead the planning process.	CWDG grant

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Fimeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
20	Wildfire	Education & Awareness Programs	WILDFIRE PUBLIC OUTREACH Conduct public outreach and education on wildfire risk and prevention during periods of high risk for wildfire.	Existing High Ongoing	KCEM in coordination with local FD's	KCEM uses its EM Facebook page to help do outreach to the public on extreme dry conditions and wildfire risk as per MN DNR guidance.	Kittson County
21	Wildfire	Natural Systems Protection	DEFENSIBLE SPACE ASSESSMENTS Acquire funding to support local fire departments in providing Level 1 and 2 defensible space assessments for properties in high-risk wildfire areas.	New High 2024- 2029	KCEM in coord with local FD's and MN DNR	KCEM will work with local fire departments to seek MN DNR Firewise grant funding to be able to assist property owners with Level 1 and Level 2 Firewise Assessments. It may be required to first have a CWPP in place.	Firewise Grant Funding
22	Landslides	Natural Systems Protection	RE-SLOPE PROJECT Re-slope 2.5 miles of County Ditch 19 in Davis Township to alleviate erosion of the adjacent county road	New Moderate 2024 - 2029	KC Highway Dept. in coor with KC Envr. Services and Davis Township	This work is slated for implementation by the county as part of the Kittson County 5-year transportation plan.	Kittson County
23	Flooding	Structure & Infrastructure Systems	DIKE REINFORCMENTS Work with the city of St. Vincent and the Township of St. Vincent to address reinforcement of certified dikes that are impacted from flood events.	New High 2024- 2029	KC Envr. Services Dept. in coord with township & city public works	KC Environmental Services will work with the St. Vincent Township and the City of St. Vincent which have United States Corps of Engineers certified dikes that have sloughing and soil degradation issues from frequent flooding. FEMA HMA grant funding may be sought to support project efforts if it is an eligible activity.	Kittson County, Township, City funding FEMA HMA
24	Flooding	Local Planning & Regulations	NATIONAL FLOOD INSURANCE PROGRAM Participate in the National Flood Insurance Program and enforce policies that address development in high-risk flood areas.	Existing High Ongoing	Kittson County Zoning	Kittson County participates in the NFIP and enforces the county floodplain ordinance (adopted 10/17/1990, revised 10/14/2003). The ordinance establishes the flood plain district and zoning regulations and conditional uses permitted within the floodway, flood fringe, and general floodplain districts. The Kittson County Zoning Office maintains and enforces the floodplain management ordinance for the county.	Kittson County

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Fimeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
25	Flooding	Local Planning & Regulations / Structure & Infrastructure Projects	LOCALIZED FLOOD RISK REDUCTION Plan for and implement measures to address localized flood reduction projects for roads, bridges, and culverts throughout the county.	Existing High Ongoing	KC Hwy. Dept.	The Kittson County Highway Department is responsible for engineering, design, reconstruction and repair of roads and bridges throughout the county. The department is also responsible for the inspection and maintenance of the county ditch system. The Highway Department develops and updates a 5-year plan which identifies and schedules road improvement projects that include measures for flood mitigation.	Kittson County
26	Flooding	Local Planning & Regulations	WATERSHED PLANNING Work with the Two Rivers Watershed District to address mitigation plans and projects that address risk reduction for localized flooding and erosion.	Existing High Ongoing	KCEM, KC Envr. Services in coord with TRWD	The "Overall Plan of the Two Rivers Watershed District" details goals, strategies, and preferred outcomes for a wide range of projects that seek to reduce damages and loss due to overland flooding to roads, culverts, cropland, and rural residents. KC Environmental Services and KC Highway Dept. continue to partner with the TRWD and other agencies involved on implementation of projects where we have a role.	SWCD, NRCS, DNR, North Kittson Rural Water, Kittson Marshall Rural Water, County Water Planners, MDH, MPCA
27	Flooding	Local Planning & Regulations	PROPERTY BUYOUTS Conduct property buyouts to acquire homes affected by repetitive flooding and physically relocate or remove those homes to eliminate future flood damages.	Existing Moderate Ongoing	KCEM, KC Envir. Services	In 2022 Kittson County completed one buyout in Teien Township along the Red River of the North within the floodplain. Kittson County continues to assess potential future buyouts as necessary. The county will continue to evaluate and assist with potential future property acquisition projects and application to FEMA or MN DNR for grant funding to conduct buyouts.	Kittson County, FEMA HMA

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Γimeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
28	Flooding	Natural Systems Protection	RESTORATION PROJECTS Conduct floodplain and stream corridor restoration in areas that are impacted by high rain events.	Existing Moderate Ongoing	KC Envr. Services in coord with SWCD and other watershed groups	KC Envr. Services continues to work with the Kittson SWCD and watershed districts on related floodplain or stream restoration projects as needed. Plans that address these efforts include the Kittson County Local Water Management Plan, the Two Rivers Plus Join Power Board 1W1P, and Two Rivers Watershed District Overall Plan. FEMA HMA grant funding may be sought for future eligible projects.	TRWD, NRCS, USFWS, USCOE, local landowners, NGO groups, FEMA HMA
29	Flooding	Structure & Infrastructure Projects	FLOOD DIVERSION & STORAGE PROJECTS Work with the Two Rivers Watershed District, Kittson SWCD, and others on flood diversion and storage projects where identified as needed to reduce the impacts of high rain events on streams, rivers, or drainage systems which may result in localized or downstream flooding.	Existing Moderate 2023- 2028	KC Envr. Services in coord with others	KC Envr. Services continues to partner with the TRWD, SWCD, and other involved representatives (County, Watershed District, City, Township), on flood diversion and storage projects. Currently the TRWD is advancing a proposal for the Klondike Clean Water Retention Project #11 which addressed large scale overland flood damage reduction in an area covering nearly 12 square miles on the Kittson and Roseau County line. The work is slated from 2023-	TRWD, NRCS, USFWS, USCOE, local landowners, NGO groups
30	Drought	Education & Awareness Programs	DROUGHT OUTREACH & EDUCATION Provide outreach and education to residents to be aware of watering restrictions, water conservation tips, and fire safety during periods of severe drought.	Existing High Ongoing	KCEM	2028. KCEM continues to provide public outreach and education during heightened drought periods using the county website and social media platforms. KCEM encourages city and townships to promote drought awareness to residents at the local level.	Kittson County
31	Drought	Local Planning & Regulations	WATERING RESTRICTIONS Implement watering restrictions during periods of drought as per MN DNR guidance.	Existing High Ongoing	KCEM in coord with MN DNR and local jurisdictions	Kittson County and local jurisdictions will establish and enforce watering restrictions as per MN DNR guidelines during periods of severe drought.	Kittson County, Local Gov'ts

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Fimeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
32	Dam/Levee Failure	Mitigation Preparedness & Response Support	LAKE BRONSON DAM EAP Work with the MN DNR to ensure EAP planning for the Lake Bronson Dam is updated on a regular basis.	Existing Low Ongoing	MN DNR	The Lake Bronson Dam was built in 1937 on the Two Rivers South Branch. The MN DNR manages and operates the dam, and is responsible for its design and reconstruction. Lake Bronson is the nearest community downstream from the dam (2 miles). The dam has a high hazard potential and has an Emergency Action Plan (EAP). Kittson County Emergency Management works with the DNR to update the EAP as needed.	MN DNR

Section 6 – Plan Maintenance

6.1 Monitoring, Evaluation, and Updating the Plan

The Kittson County Hazard Mitigation Plan (HMP) should be considered a living document. The plan should be updated and approved by FEMA at a minimum of every five years. The guidance in this section will function as the primary tool when reviewing progress on the implementation of the Kittson County HMP.

The Kittson County emergency management director (EMD) is the individual responsible for leading all efforts to monitor, evaluate, and update the hazard mitigation plan within the five-year window. Throughout the five-year planning cycle, the Kittson County EMD will work with a Local Emergency Preparedness Committee (LEPC), which includes the Kittson County Emergency Management Director, Kittson County Sheriff and deputies, local Fire Chiefs and government officials from the cities of Donaldson, Hallock, Halma, Humboldt, Karlstad, Kennedy, Lake Bronson, Lancaster, and St. Vincent and any other concerned citizens and/or invited guests. Representatives from agencies or organizations that are involved with related mitigation work in the county as well as those that work with underserved communities or socially vulnerable populations will also be invited to participate in the group. The Kittson County EMD will conduct outreach to and communicate with the group on a quarterly basis on emergency management matters regarding severe weather awareness, local preparedness, mitigation, and response & recovery as needed. Additional stakeholders will be added based on need or in response to severe weather events.

If necessary, the Kittson County EMD will convene the group to meet on a more regular basis to monitor plan implementation progress and reassess needs and opportunities. This could be done in response to funding cycles of programs that provide resources for hazard mitigation activities. If there is a need for a special meeting due to new developments or a declared disaster occurring in the county, the group will meet to update pertinent mitigation strategies. Depending on Kittson County opportunities and fiscal resources, mitigation projects may be implemented independently by individual communities or through local partnerships.

The group will continue to review the HMP goals and objectives to determine their relevance to changing situations in Kittson County. In addition, state and federal policies will be reviewed to ensure they are addressing current and expected conditions. The group will also review the risk assessment portion of the plan to determine if this information should be updated or modified. The parties responsible for the various implementation actions will report on the status of their projects, and will include which implementation processes worked well, any difficulties encountered, how coordination efforts are proceeding, and which strategies should be revised.

Updates or modifications to the HMP during the five-year planning process will require a public notice and a meeting prior to submitting revisions to the individual jurisdictions for approval. The plan will be updated via written changes, submissions as the group deems appropriate and necessary, and as approved by county commissioners. Throughout the five-year window of the plan, each respective county department and jurisdiction will be required to report on the status of mitigation actions in their charts to the Kittson County EMD so that progress notes may be maintained for the next plan update.

6.2 Implementation

Kittson County and its included municipalities share a common HMP and work together closely to develop, revise, and implement it. This HMP provides a comprehensive chart of mitigation actions for Kittson County and its jurisdictions (see Appendix H and Section 5.3). The cities of Donaldson, Hallock, Halma, Humboldt, Karlstad, Kennedy, Lake Bronson, Lancaster, and St. Vincent participated in the HMP planning process and identified the specific mitigation strategies that they would seek to implement in their communities during the five-year planning cycle. These mitigation actions are provided in Appendix H.

A number of implementation tools are available to address hazards. Many of these tools are below; however, in some cases additional discussion is needed in order to identify what strategies are most appropriate to use. This will be part of an ongoing discussion as Kittson County looks for opportunities for plan implementation. The following tools will be considered:

Education: In many cases, education of residents has been identified as one of the most effective mitigation strategies.

Capital Investments: Capital investments such as fire and ambulance equipment, sprinkler systems, and dry hydrants are tools that can limit risks and impacts of natural and manmade hazards.

Data Collection and Needs Assessments: Data collection and needs assessments can aid in gaining a better understanding of threats and allow planning for mitigation strategies accordingly. As resources are limited for this part of the planning process, additional data collection is likely to be an ongoing activity as resources become available.

Coordination: Responsibilities for mitigation strategies run across various county departments, local fire and ambulance departments, city and township governments, and a host of state and federal agencies. Ongoing coordination is an important tool to ensure resources are used efficiently. Coordination can also avoid duplication of efforts or prevent gaps that are created because of unclear roles and responsibilities. The mitigation plan review process can function as a tool to have an ongoing discussion of roles, responsibilities, and opportunities for coordination.

Regional Cooperation: Counties and public safety services providers throughout the region often share similar challenges and concerns. In some cases, a regional approach may be warranted as a mitigation strategy in order to save resources. Mutual aid agreements are a tool already in use for a number of services. Needs assessments for fire and ambulance services and development of assistance for volunteer recruiting, training, and retention could benefit from a regional approach. Cooperation among counties could also help in lobbying for certain funding priorities that address concerns relating to challenges in service delivery in rural areas. Organizations such as FEMA Region 5 and the Minnesota Division of Homeland Security and Emergency Management (HSEM) through the Regional Program Director can offer tools and resources to assist in these cooperative efforts.

Regulation: Regulation is an important mitigation tool for Kittson County. Regulation plays a particularly important role for land use, access to structures, and the protection of water resources and public health.

6.3 Continued Public Involvement

Continued public involvement is critical to the successful implementation of the Hazard Mitigation Plan. The Kittson County Emergency Management Director and the Local Emergency Preparedness Committee will continue to engage new public stakeholders in planning discussions and project implementation during the five-year cycle of this plan.

To seek continued public participation after the plan has been approved and during the five-year window of implementation for this plan, Kittson County will take the following measures:

• The Kittson County HMP website link will be posted on the Kittson County Emergency Management website. The website provides a PDF of the plan for download and an interactive experience for the public to understand the planning process, where county-specific <u>The Kittson County HMP</u> <u>website provides</u> <u>opportunities for continued</u> <u>public involvement and</u> <u>feedback</u>

vulnerabilities lie, national best practices, as well as a chance to submit feedback. Collected feedback will be reviewed during the five-year plan cycle and will be noted for future update of the plan or addressed as necessary.

- Following any major storms or natural disasters, Kittson County Emergency Management will seek to gather concerns and new ideas for mitigation from residents to include in the next update of the plan. This may be done through public meetings, outreach via social media, or news releases via local media.
- Each community participating in the plan will be responsible for keeping their local government, schools and community members updated and engaged in the implementation of their respective mitigation action charts (see Appendix H). Each respective jurisdiction will be required to report on the status of mitigation actions in their charts to the Kittson County EMD.
- Kittson County and its jurisdictions will use numerous means of public outreach to engage new public stakeholders in providing input on mitigation concerns, including those from underserved communities or socially vulnerable populations. Outreach methods may include presentations at city council or township board meetings, sharing information at special events, working with local schools and partner organizations, and posting information in areas that are used to communicate with the public (bulletin boards, websites, social media, and local media sources that communities use to inform and engage the public). As mitigation projects are implemented, jurisdictions will work to keep the public updated and engaged in those local efforts.

APPENDICES

- Appendix A References
- Appendix B Adopting Resolutions
- Appendix C Local Mitigation Survey Report
- Appendix E Past Mitigation Action Review Status Report
- Appendix F Planning Team Meetings
- Appendix G Public Outreach & Engagement Documentation
- Appendix H Mitigation Actions by Jurisdiction

Appendix A – References

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Appendix B – Adopting Resolutions

Appendix C – Local Mitigation Survey Report



Kittson County Local Mitigation Survey Report

Overview

As part of Kittson County's 2023 Hazard Mitigation Plan update, participating jurisdictions and county personnel were asked to fill out a Local Mitigation Survey (LMS) form. The purpose of the survey was to gather jurisdictionally-specific information needed to support update of the plan and to help inform development of local-level mitigation actions for the next five-year planning cycle.

Following is a list of the jurisdictions that participated in the survey.

LMS Forms

Kittson County	Yes
City of Donaldson	No
City of Hallock	No
City of Halma	Yes
City of Humboldt	Yes
City of Karlstad	Yes
City of Kennedy	Yes
City of Lake Bronson	Yes
City of Lancaster	Yes
City of St. Vincent	Yes

The following LMS Survey Report includes a copy of each jurisdiction's completed survey.

Kittson County LOCAL MITIGATION SURVEY

Please fill out the Jurisdiction and Point of Contact information and Parts A, B, C, D, and E of this survey. Please be as specific as possible in your responses with information as it relates to your jurisdiction. It is strongly recommended to include government officials and staff to help provide detailed feedback.

Name of Jurisdiction: KITTSON COUNTY

Point of Contact:

Name:	Scot Elling Olson
Job Title:	Kittson County Emergency Management Director
Phone:	218-843-2113
Email:	<u>solson@co.kittson.mn.us</u>

PART A: HAZARD IDENTIFICATION, RISK ASSESSMENT & VULNERABILITY ANALYSIS

HAZARD IDENTIFICATION

In the chart below, please identify the natural hazards that pose the greatest risk to your community. Consider past damaging events, likelihood of future events, and impacts to community assets. Rank the prioritization of hazards as high, moderate, or low. Only put an "X" next to those hazards that are of moderate to high priority. These will be addressed with localized mitigation actions.

Natural Hazard	Use an "X" to select the natural hazards that pose the greatest risk to your jurisdiction.	Please indicate if the hazard is of high, moderate, or low priority.	Note if you feel the risk has increased, decreased, or had no change over the last 5 years.
Winter Storms (Blizzards,	X	High	Increasing
Ice Storms)			
Tornadoes	X	Moderate	Increasing
Windstorms	X	Moderate	No Change
Lightning		Low	No Change
Hail		Low	No Change
Flooding	X	High	Increasing
Extreme Cold	X	Moderate	No Change
Extreme Heat	X	Moderate	No Change
Drought	Х	Moderate	No Change
Wildfire	X	High	No Change
Landslides	Х	Moderate	No Change
Dam Failure		Low	No Change

RECENT HAZARD EVENTS

Please describe any severe weather or disaster events that have occurred over the last 5 years that caused damages in your community or resulted in a state or federal disaster declaration.

In the past five (5) years, Kittson County has had seven (7) flood events comprised five (5) State and two (2) Federal declarations. During this time, the Red River has had three (3) top-ten historical crests (2019 - #8 (42.48), 2020 - #4 (43.33), and 2022 - #5 (43.19) A federal disaster was declared for spring flooding in 2019 and 2022. The expected damage totals for 2022 expect to exceed 1 million dollars. In addition to the Red River flooding, Kittson County has also experienced severe overland flooding and damage in 2020 due to summer time rain storms and high winds.

Natural Hazard	Vulnerability Assessment
(please list)	Describe <u>specific</u> community assets (infrastructure, systems, or populations) that
	are suspectable to damage or loss from hazard events.
Flooding	The City of Lake Bronson has a sanitary sewer lift stations that is prone to
	flooding during high rain events. City and fire department personnel have
	sandbagged the area in the past to prevent flooding into the lift station.
	The City of Hallock has sloughing issues on the Two Rivers that is beginning
	to threaten a cemetery located along the river.
	The United States Customs and Border Patrol has frequent flooding issues
	at the border crossing in St. Vincent Township and during high water events
	must sandbag their infrastructure.
	Both the Township of St Vincent and the City have United States Corps of
	Engineers certified dikes that have sloughing and soil degradation issues
	from frequent flooding.
Ice Storms, Blizzards	Much of the County's electrical service consists of overhead power lines
	and electrical poles. These overhead lines and power poles are prone to
	failure in ice storms and blizzards with heavy snowfall and high winds that
	may bring down trees and branches.
Windstorms and	We have three mobile home parks within the county that do not have on-
Tornadoes	site storm shelters (residents can shelter at city facilities if necessary) and
	residents are vulnerable to high wind and tornado events.
	The City of Hallock has a municipal campground is active during summer
	and fall months with RVs and campers and does not have a storm shelter.
	The City of Lancaster needs to replace its aged Weather Siren.
	The Lake Bronson State Park has a small shelter but construction of a larger
	Facility is warranted.
Extreme Cold	Residents are susceptible to dangers from extreme cold, especially if the
	power goes down during winter storm events. We have a high population

LOCAL VULNERABILITIES

of senior citizens and also low-income residents who are more vulnerable
during these events.

REDUCTION IN VULNERABILITY

Please describe any actions your community has taken to <u>reduce</u> vulnerability against future severe weather or disaster events. This can include examples of any work that has been completed or is underway that reduces future risk.

Kittson County has been proactive in pre-warning and notification to local resident of weather events, using the county website, Sheriff's Office Facebook page and local medica to communicate with residents on emergency preparedness.

INCREASE IN VULNERABILITY

Please describe any current conditions or changes you feel have <u>increased</u> your community's vulnerability to future severe weather or disaster events. Consider factors such as recent population growth or new development.

With the Red River flood diversion projects south of Kittson County , water will move more quickly upstream and exacerbate flooding in the county. Kittson County will continue to see moderate to major flooding on a yearly basic.

PART B: LOCAL MITIGATION CAPABILITIES ASSESSMENT

PUBLIC OUTREACH

Please describe what capabilities you have in place to communicate with those in your community to share information about severe weather events and personal preparedness. Please include any considerations for underserved communities or socially vulnerable populations within your jurisdiction.

Kittson County utilizes the Kittson County Emergency Management website page, Kittson County Emergency Management Facebook page, and local news media to communicate with residents, visitors, schools, and long-term care facilities on emergency preparedness, severe weather, and other hazard conditions throughout the year.

EMERGENCY NOTIFICATION SYSTEM

Do you encourage residents in your community to sign up for the county's emergency notification system and/or a local emergency alert system? If yes, how? If not, is this something you would do?

Kittson County maintains the CodeRED Emergency Notification System which allows residents and visitors to sign up ("opt-in") to receive severe weather alerts targeted to their location, along with other local emergency alerts. A link to sign up for the system is located on the Kittson County Emergency Management website page. Kittson County also has "Text to 911" capabilities for residents. Kittson County additional uses IPAWS (Integrated Public Alert Warning System), which allows for both targeted and county-wide emergency notifications to both residents and visitors (not an "opt-in" service).

LOCAL PLANS & AUTHORITIES

Please describe any local plans, authorities or policies in place that help to reduce risk from natural hazards in your community. <u>Please make note of enforcement of existing building codes and land use</u> and development ordinances or regulations as they apply to your community. Please also note if your community has any plans or policies in place related to resilience and adaptation for climate change.

All Hazards Emergency Operations Plan: Kittson County Emergency Management maintains an allhazards Emergency Operations Plan (EOP) which lays out concepts and operating guidelines for all incident management and support functions that may be needed to ensure life safety, incident stabilization, and property preservation during an incident and the transition to recovery.

Snow Removal & Ice Control: The Kittson County Highway Department is responsible for the removal of snow and ice control for county roads, as well as some city and township roads based upon agreement. The department completes its snow removal process in accordance with the Kittson County Hwy Department Snow Plowing and Ice Control Guidelines. MNDOT removes snow from State Highways as well as disperses salt/sand as needed.

Manufactured Home Parks Shelters & Evacuation Plans: Kittson County Public Health works in coordination with the Minnesota Department of Health (MDH) to ensure that licensed manufactured home parks within the county meet the requirements of MN Statute 327.20 for shelters and evacuation plans. Shelter and evacuation plans must be approved by the city or township in which they are located and submitted to the Minnesota Department of Health.

Building Code Enforcement: Kittson County Zoning enforces the MN State Building Code.

County Zoning for Streets and Roads: Kittson County 2014 Zoning & Subdivision Regulations, Section 8.5.2 Streets and Roads establishes the requirements for the development of roads for proposed new subdivisions. These regulations support the ability for Fire and EMS to have the necessary road access for emergency response, including wildland fires.

National Flood Insurance Program (NFIP): Kittson County has FEMA Mapped High Risk Areas and participates in the NFIP. Initial entry date into the program was 02/04/1981.

Floodplain Ordinance: The Kittson County Floodplain Ordinance (adopted 10/17/1990, revised 10/14/2003) establishes the flood plain district and zoning regulations and conditional uses permitted within the floodway, flood fringe, and general floodplain districts. The Kittson County Zoning Office maintains and enforces the floodplain management ordinance for the county.

Subdivision Ordinance: Kittson County Floodplain Ordinance includes Section 7.0 – Subdivisions. This section of the ordinance addresses review criteria for subdivision of land within flood plain districts, Floodway/Flood Fringe Determinations in the General Flood Plain District, and the FEMA requirements for addressing requests for removal of Special Flood Hazard Area Designation. New manufactured home parks and expansions to existing manufactured home parks shall be subject to the provisions placed on subdivisions by Section 7.0 of the Ordinance.

5-Year Transportation Plan: The Kittson County Highway Department is responsible for engineering, design, reconstruction and repair of roads and bridges throughout the county. The department is also responsible for the inspection and maintenance of the county ditch system. The Highway Department

develops and updates a 5-year plan which identifies and schedules road improvement projects that include measures for flood mitigation.

Kittson County Local Water Management Plan: The Kittson Soil and Water Conservation District oversees the update and implementation of the Kittson County Water Management Plan (2010-2019). The plan identifies the primary water planning concerns, including flooding along the Red River of the North, the Roseau River, and the South Branch of the Two Rivers.

Minnesota Buffer Law: Kittson County has adopted the requirements of the Minnesota Buffer Law on legal ditches for which they are the ditch authority. The Two Rivers Watershed District has adopted the requirements of the MN Buffer Law on legal ditches for which they are the ditch authority. The Middle Snake Tamarac Rivers Watershed District has also adopted the MN Buffer Law. The purpose and intent of the law is to protect state water resources from erosion and runoff pollution; to stabilize soils, shores and banks; and to protect or provide riparian corridors. The Kittson SWCD and TRWD oversee reviewing and tracking compliance with the buffer law. The SWCD is required through the Minnesota Buffer Law to monitor compliance by reviewing all parcels on a 3-year basis. Kittson County and TRWD are responsible for enforcement actions on their respective ditch systems.

One-Watershed One Plan: Kittson County participates in the Two Rivers Plus Joint Powers Board One Watershed, One Plan (1W1P). A Joint Powers Board (JPB) was formed in July 2021 to start the 10-year implementation phase of the Two Rivers Plus Comprehensive Watershed Management Plan. Members of the JPB include Kittson and Roseau Counties and Kittson and Roseau SWCD's. A Work Plan will be developed every two years, showing current activities going on in the watershed area. The plan includes considerations for flood risk areas within the regional watershed planning area.

STAFF & PARTNERSHIPS

Please describe what staff or partnerships are in place to help accomplish mitigation in your community. This can include specific department staff or outside agencies that have a role with mitigation-related planning.

Kittson County staff partner together to help accomplish mitigation goals, these staff include the Emergency Management Director, Sheriff's Office administrative staff, Kittson County Highway Department, Kittson County Public Health, Kittson County Environmental Services, Kittson County Zoning, Kittson County SWCD, and Kittson County GIS.

Kittson County has a cross-border mutual aid agreement plan in place between Kittson County and the fire departments in the Rural Municipalities of Emerson/Franklin and Stuartburn in the Province of Manitoba, Canada for cross-border access during wildland fires and also 24-hour access through the Port of Lancaster/Tolstoi for Structural Fires. This greatly enhances the pool of available resources to Kittson County for manpower and equipment in the event of both structural and wildland fire incidents.

Kittson County has a strong relationship with the Grand Forks, ND National Weather Service (NWS) Forecast Office, having access to all live and on-demand briefings, announcements, and educational opportunities, and contact information for direct collaboration as needed. The county also receives all products/statements issued by the NWS, and in turn shares or incorporates these into its community outreach and public education. Kittson County is a registered NOAA and NWS Weather-Ready Nation Ambassador and StormReady Community (2022), supporting initiatives to improve readiness, responsiveness, and overall resilience to weather, water, and climate events. As an ambassador, the county promotes weather-ready messages and themes to our stakeholders, engages with NOAA personnel on collaborative opportunities, shares success stories of preparedness and resiliency, and educates employees, partners, and the public on preparedness actions. As a StormReady Community, the county meets specific guidelines on how to improve hazardous weather operations.

Kittson County Emergency Management coordinates with local school districts as needed on related emergency planning and preparedness, including support for specific trainings, exercises, equipment, and relay of county-level emergency notifications.

Kittson County Emergency Management works closely with the MN HSEM Region 3 regional program coordinator and county emergency managers on a range of planning, training, and exercises to support all-hazards preparedness, mitigation, response, and recovery capabilities.

In the event of a disaster or other hazardous situation where temporary housing and basic human services are needed, Kittson County Social Services is the lead agency with Kittson County Emergency Management working in coordination with them. KCEM also works closely with local Fire and EMS, Kittson County Public Health, and the American Red Cross to provide mass care services as needed.

The Two Rivers Watershed District regularly surveys and inspects its ditch systems for erosion and sloughing. If sloughing of ditch side slopes is found measures are taken to repair them. The TRWD also provides cost share funding in coordination with Kittson SWCD programs.

PROGRAMS IN PLACE

Describe any programs in place that to help reduce risk from natural hazards in your community.

NOAA Weather Radios: Kittson County Emergency Management promotes the use of NOAA Weather Radios by local residents, businesses, schools, long term care facilities, government buildings, faith communities, and other places of common gathering. NOAA Weather Radios broadcast continuous weather information directly from the nearest National Weather Service office, including warnings, watches, forecasts, and other hazard information 24 hours a day, 7 days a week. They are an important tool to be able to receive information, particularly in the event of extended power outages where updates from local media and cell phone apps may not be available.

Weather-Ready Nation Ambassador: Kittson County is a registered NOAA and NWS Weather-Ready Nation Ambassador and StormReady Community (2022), supporting initiatives to improve readiness, responsiveness, and overall resilience to weather, water, and climate events. As an ambassador, the county promotes weather-ready messages and themes to our stakeholders, engages with NOAA personnel on collaborative opportunities, shares success stories of preparedness and resiliency, and educates employees, partners, and the public on preparedness actions. As a StormReady Community, the county meets specific guidelines on how to improve hazardous weather operations.

National Weather Service – Severe Weather Awareness Weeks: Kittson County participates in the annual Winter Hazard Awareness Week and Severe Weather Awareness Week campaigns sponsored by MN HSEM and the NWS each November and April. Each week-long effort provides specific information each day covering the topics of severe weather winter weather, outdoor winter safety, indoor winter

safety, and winter driving safety. Kittson County Emergency Management promotes and shares information during the week via social media which communities, schools, churches or other civic programs are encouraged to share locally.

Skywarn Program: Kittson County Emergency Management works with the National Weather Service to offer Storm Spotter training on an annual basis to local fire and law enforcement departments and local residents that wish to be trained as spotters. SkyWarn Storm Spotters help to keep their local communities safe by providing timely and accurate reports of severe weather to their local NWS office.

Vegetation Management: The Kittson County Highway Department regularly conducts vegetation management along county roads to reduce the risk of downed trees or branches resulting from severe spring and summer storm events. Local utility providers also work to manage vegetation near power lines to reduce the risk of downed lines and power outages.

Property Buyout Acquisitions: In 2022 Kittson County completed one buyout in Teien Township along the Red River of the North within the floodplain. Kittson County continues to assess potential future buyouts as necessary.

FUNDING & OTHER RESOURCES

Please describe what sorts of funding or other resources are available to help accomplish mitigation in your community. Please make note of any work with outside organizations or agencies or municipal/rural electrical coop providers.

Kittson County primarily uses its own budget to address mitigation projects, such as replacement of culverts. We also work closely with the County Highway Engineer on local flood mitigation projects for roads and the County Zoning Department when we updated our local floodplain Ordinance.

In 2022 the county received grant funding from FEMA and the Minnesota DNR to assist with the buyout of one flood prone residence.

The county also works closely with the Kittson County SWCD to address erosion issues. In 2023, the County received funding to re-slope 2.5 miles of County Ditch 19 to a 4:1 slope which will greatly aid in erosion control.

PART C: LOCAL MITIGATION PROJECTS

LOCAL MITIGATION PROJECTS

Please describe mitigation actions that would help to reduce risk to your community from future natural hazards events. The development of mitigation actions must emphasize activities that reduce risk to existing buildings, structures, and infrastructure as well as limit risk to new development and redevelopment. The range of actions should also include activities that benefit any underserved communities or socially vulnerable populations within your community.

- Re-slope 2.5 miles of County Ditch 19 in Davis Township to alleviate erosion of the adjacent county road
- Address the need for a new weather siren for the City of Lancaster.

- Encourage all county residents to sign-up for the county's emergency notification alert system.
- Provide ongoing education and outreach to residents on personal preparedness for severe weather, extreme temperatures, and extended power outages. Coordinate with local jurisdictions to share information locally.
- Ensure the county's Emergency Operations Plan (EOP) is updated and addresses policies & procedures needed to support EM functions prior to, during, and following a disaster.
- Ensure designated facilities are in place and prepared for providing mass care sheltering and county staff are trained in sheltering operations.
- Work with municipalities / rural electric coops to encourage them to address burying powerlines or strengthening power poles to avoid power outages from high wind events and storms.
- Address the safety of county, city, and township roads in winter through snow removal and ice control.
- Ensure there is a network of trained Storm Spotters throughout the county to support situational awareness of and public notification for dangerous storms such as severe thunderstorms and tornadoes.
- Work with county departments and local jurisdictions to acquire generator backup power to support critical infrastructure and delivery of essential services during an extended power outage due to storms.
- Encourage schools and long-term facilities that house senior citizens or other vulnerable populations to have emergency plans and generators in place to deal with severe weather, extreme temperatures and power outages.
- Work with owners of mobile home parks (MHP's) to ensure they are in compliance with Minnesota Department of Health (MDH) requirements for evacuation plans and storm shelters.
- Work with local governments to ensure the functionality of outdoor warnings sirens to warn residents of dangerous high wind or tornado events.
- Provide assistance to local jurisdictions that require purchase & installation of new outdoor warning sirens and ensure they are connected to the county's remote activation system.
- Work with the MN DNR Firewise Program and local fire departments to develop a Community Wildfire Protection Plan (CWPP) for Kittson County. Apply for grant funding to develop the CWPP.
- Work in partnership with state, county, and local partners to conduct wildfire prevention campaigns to raise awareness of the dangers of wildland fire.

- Encourage private landowners in high-risk wildfire areas of the county to assess and manage their wooded areas to reduce the risk of wildfire. Work with local fire departments to assist property owners with Level 1 and Level 2 Firewise Assessments.
- Work in coordination with local jurisdictions to address the need for the construction of storm shelters or tornado safe rooms in locations where residents and visitors are vulnerable to high wind events, such as mobile home parks, municipal campgrounds, Lake Bronson State Park, and the Kittson County Fairgrounds.
- Conduct outreach to residents to be aware of water restrictions, water conservation tips, and fire safety during periods of severe drought.
- Continue to participate in the National Flood Insurance Program and enforce policies that address development in high-risk flood areas.
- Continue to enforce the Minnesota State Building Code to ensure new development is built to construction standards that help to minimize damages from severe storms.
- Continue to enforce ordinances and policies within the county's code of ordinances to support reduction of risk to existing buildings, structures, and infrastructure as well as to limit risk to new development and redevelopment. This includes shoreland regulations, setback limits, and floodplain regulations.
- Plan for and implement measures to address localized flood reduction projects for roads, bridges, and culverts throughout the county such as hardening public roads, bridges, and installing high-flow culverts to mitigate recurring flood damages. Additional projects may include paving shoulders of roads, paving or adding rip-rap around culverts, and adding rip-rap to the banks of ditches and streams. These projects may be in coordination between the county, SWCD, and other area watershed districts and in accordance with other existing plans.
- Continue to work in partnership with the Soil & Water Conservation District and other watershed partners to address mitigation plans, policies, and projects that address risk reduction for localized flooding and erosion.
- Continue to address shoreland zoning regulations and stormwater management to mitigate impacts from high rain events, especially for areas of new development and population growth within the county.
- Conduct property buyouts to acquire homes affected by repetitive flooding and physically relocate or remove those homes to eliminate future flood damages.
- Conduct soil stabilization and slope management projects in unstable areas for sediment and erosion control resulting from high rain events.
- Conduct floodplain and stream corridor restoration in areas that are impacted by high rain events.

• Construct flood diversion and storage projects where identified as needed to reduce the impacts of high rain events on streams, rivers, or drainage systems which may result in localized or downstream flooding.

GAPS OR DEFICIENCIES

Please describe any specific gaps or deficiencies that are a barrier to implementing local mitigation measures.

Communications: Not all Kittson County residents are signed up for our CodeRED Emergency Notification System, have NOAA weather radios, or use social media to follow our EM Facebook page to receive important messages. Ongoing continued public education needs to be done to encourage people to utilize these resources.

Backup Power: Not all county, city, and other incident support facilities (e.g., public safety/emergency services stations, designated mass care shelters, etc.) have generator backup power in the event of extended power outages. County and local government funding to purchase generators is limited and obtaining generators can be a slow process.

Funding: Significant State and Federal funding is needed to construct infrastructure projects to prevent, reduce, and mitigate funding. Traditional funding sources such as the MN DNR's Flood Hazard Mitigation grant program are severely underfunded. It is critical that expanded funding opportunities be explored through the DNR, HSEM, BWSR, and various federal agencies.

Outreach to Seniors and Isolated Residents: Extended severe winter storms can prevent senior citizens and isolated residents from having the ability to obtain food or present them with other challenging situations. Looking at ways to increase outreach to vulnerable residents to be prepared for winter storms is an ongoing need. Other volunteer programs to provide assistance could also be explored.

Wildfire Mitigation Technical and Financial Assistance: Funding, technical assistance, and resources are needed to help Kittson County facilitate a coordinated effort for CWPP planning and implementation of Firewise outreach and activities.

PART D: NATIONAL FLOOD INSURANCE PROGRAM (NFIP) INFORMATION

Does your community participate in the NFIP?

Yes, Kittson County participates in the NFIP and has FEMA-mapped high-risk areas.

If NO, and your community is in a FEMA mapped area, please describe <u>why</u> the community does not participate in the NFIP.

N/A

If YES (your community participates NFIP), please provide descriptive information on how your community works to meet NFIP requirements below:

- 1. NFIP. Adoption of NFIP minimum floodplain management criteria via local regulation.
 - Provide the **original date of a floodplain ordinance adoption** for NFIP enrollment. [for implementation and enforcement of local floodplain management regulations to regulate and permit development in Special Flood Hazard Areas]

2/4/81

• Provide the adoption date of your **current** floodplain ordinance.

9/16/23

• Provide the effective date of your **current** floodplain ordinance (usually when it has been published publicly).

9/16/23

- 2. Contacts. Please provide names and emails for your:
 - Floodplain Administrator Lane Nordin, Kittson County Zoning Administrator, Inordin@co.kittson.mn.us
 - Engineering Contact Andrea Weleski, Kittson County Engineer, aweleski@co.kittson.mn.us
- 3. As part of the new hazard mitigation plan requirements, your community must demonstrate that you know the process to implement substantial improvement/substantial damage provisions of their floodplain management regulations after an event. These questions will help us meet those requirements.
 - Do you know of any existing buildings in the FEMA mapped floodplain?

Yes

 Does your community use a form to track cumulative improvements and repetitive losses in the floodplain (for example see Evaluating Cumulative Improvements and Cumulative Damages section in <u>the DNR sample form</u>) -please attach or link the form.

No

Have you reviewed the <u>Local Official Playbook</u> substantial improvement/substantial damage ?

No

PART E: SURVEY PARTICIPANTS

Please list the names & titles of all persons that contributed information to this survey. Also provide an approximate amount of time of their participation.

Scot Olson, Kittson County Emergency Management Director, 8 hrs.

Kittson County LOCAL MITIGATION SURVEY

Please fill out the Jurisdiction and Point of Contact information and Parts A, B, C, D, and E of this survey. Please be as specific as possible in your responses with information as it relates to your jurisdiction. It is strongly recommended to include government officials and staff to help provide detailed feedback.

Name of Jurisdiction: CITY OF HALMA

Point of Contact:

Name:	Shane Olson
Job Title:	Mayor
Phone:	218-265-2849
Email:	Shane.Olson@digikey.com

PART A: HAZARD IDENTIFICATION, RISK ASSESSMENT & VULNERABILITY ANALYSIS

HAZARD IDENTIFICATION

In the chart below, please identify the natural hazards that pose the greatest risk to your community. Consider past damaging events, likelihood of future events, and impacts to community assets. Rank the prioritization of hazards as high, moderate, or low. Only put an "X" next to those hazards that are of moderate to high priority. These will be addressed with localized mitigation actions.

Natural Hazard	Use an "X" to select the natural hazards that pose the greatest risk to your jurisdiction.	Please indicate if the hazard is of high, moderate, or low priority.	Note if you feel the risk has increased, decreased, or had no change over the last 5 years.
Winter Storms (Blizzards,	X	Low	No Change
Ice Storms)			
Tornadoes			
Windstorms			
Lightning			
Hail			
Flooding	X	Low to moderate	No Change
Extreme Cold	X		No Change
Extreme Heat			
Drought			
Wildfire	Х	Moderate	No Change
Landslides			
Dam Failure			

RECENT HAZARD EVENTS

Please describe any severe weather or disaster events that have occurred over the last 5 years that caused damages in your community or resulted in a state or federal disaster declaration.

None noted.

LOCAL VULNERABILITIES

Use the chart below to identify what specific community assets are vulnerable to damages or loss from the hazards that pose risk to your community.

Natural Hazard (please list)	Vulnerability Assessment Describe <u>specific</u> community assets (infrastructure, systems, or populations) that are suspectable to damage or loss from hazard events.
Flooding	The city has experienced overland flooding that washes out roads, as the railroad culverts and US Hwy 59 culverts are not properly sized South of town.
Wildfire	We have concerns about the impact that wildfire would have to the increase transport of oil trains passing through the county.

REDUCTION IN VULNERABILITY

Please describe any actions your community has taken to <u>reduce</u> vulnerability against future severe weather or disaster events. This can include examples of any work that has been completed or is underway that reduces future risk.

We do not have the funding like other cities in our areas to fix streets, sidewalks etc. because we do not have county or state highways running through our city. We are on our own!

INCREASE IN VULNERABILITY

Please describe any current conditions or changes you feel have <u>increased</u> your community's vulnerability to future severe weather or disaster events. Consider factors such as recent population growth or new development.

None noted.

PART B: LOCAL MITIGATION CAPABILITIES ASSESSMENT

PUBLIC OUTREACH

Please describe what capabilities you have in place to communicate with those in your community to share information about severe weather events and personal preparedness. Please include any considerations for underserved communities or socially vulnerable populations within your jurisdiction.

We are a city of 58. We communicate with our residents by word of mouth. We have no city website or social media.

EMERGENCY NOTIFICATION SYSTEM

Do you encourage residents in your community to sign up for the county's emergency notification system and/or a local emergency alert system? If yes, how? If not, is this something you would do?

We do not do anything with this.

LOCAL PLANS & AUTHORITIES

Please describe any local plans, authorities or policies in place that help to reduce risk from natural hazards in your community. <u>Please make note of enforcement of existing building codes and land use</u> and development ordinances or regulations as they apply to your community. Please also note if your community has any plans or policies in place related to resilience and adaptation for climate change.

None noted. We are a small community.

STAFF & PARTNERSHIPS

Please describe what staff or partnerships are in place to help accomplish mitigation in your community. This can include specific department staff or outside agencies that have a role with mitigation-related planning.

City Clerk, Mayor, and City Council. We work with Kittson County as needed.

PROGRAMS IN PLACE

Describe any programs in place that to help reduce risk from natural hazards in your community.

None.

FUNDING & OTHER RESOURCES

Please describe what sorts of funding or other resources are available to help accomplish mitigation in your community. Please make note of any work with outside organizations or agencies or municipal/rural electrical coop providers.

We have extremely limited city funding. We are a small community.

PART C: LOCAL MITIGATION PROJECTS

LOCAL MITIGATION PROJECTS

Please describe mitigation actions that would help to reduce risk to your community from future hazard events. Please consider mitigation activities that address the local vulnerabilities you have identified.

None noted. We have no mitigation projects needed.

GAPS OR DEFICIENCIES

Please describe any specific gaps or deficiencies that are a barrier to implementing local mitigation measures.

We are a small city with limited staff and funding.

PART D: NATIONAL FLOOD INSURANCE PROGRAM (NFIP) INFORMATION

Does your community participate in the NFIP?

The city of Halma is not participating and has no FEMA-mapped high-risk areas.

If NO, and your community is in a FEMA mapped area, please describe <u>why</u> the community does not participate in the NFIP.

N/A

If YES (your community participates NFIP), please provide descriptive information on how your community works to meet NFIP requirements below:

- 1. NFIP. Adoption of NFIP minimum floodplain management criteria via local regulation.
 - Provide the **original date of a floodplain ordinance adoption** for NFIP enrollment. [for implementation and enforcement of local floodplain management regulations to regulate and permit development in Special Flood Hazard Areas]

N/A

• Provide the adoption date of your **current** floodplain ordinance.

N/A

• Provide the effective date of your **current** floodplain ordinance (usually when it has been published publicly).

N/A

- 2. Contacts. Please provide names and emails for your:
 - Floodplain Administrator N/A
 - Engineering Contact (optional)
 - Additional Floodplain Contact (optional)
- 3. As part of the new hazard mitigation plan requirements, your community must demonstrate that you know the process to implement substantial improvement/substantial damage provisions of their floodplain management regulations after an event. These questions will help us meet those requirements.
 - Do you know of any existing buildings in the FEMA mapped floodplain?

N/A

 Does your community use a form to track cumulative improvements and repetitive losses in the floodplain (for example see Evaluating Cumulative Improvements and Cumulative Damages section in <u>the DNR sample form</u>) -please attach or link the form.

N/A

• Have you reviewed the <u>Local Official Playbook</u> substantial improvement/substantial damage ?

N/A

PART E: SURVEY PARTICIPANTS

Please list the names & titles of all persons that contributed information to this survey. Also provide an approximate amount of time of their participation.

Shane Olson, Mayor, 1 hr. Rhonda Davis, City Clerk, 1 hr.

Kittson County LOCAL MITIGATION SURVEY

Please fill out the Jurisdiction and Point of Contact information and Parts A, B, C, D, and E of this survey. Please be as specific as possible in your responses with information as it relates to your jurisdiction. It is strongly recommended to include government officials and staff to help provide detailed feedback.

Name of Jurisdiction: CITY OF HUMBOLDT

Point of Contact:

Name:	Brad Hemmes
Job Title:	City Clerk
Phone:	218-379-3153
Email:	brad.hemmes@candmford.com

PART A: HAZARD IDENTIFICATION, RISK ASSESSMENT & VULNERABILITY ANALYSIS

HAZARD IDENTIFICATION

In the chart below, please identify the natural hazards that pose the greatest risk to your community. Consider past damaging events, likelihood of future events, and impacts to community assets. Rank the prioritization of hazards as high, moderate, or low. Only put an "X" next to those hazards that are of moderate to high priority. These will be addressed with localized mitigation actions.

Natural Hazard	Use an "X" to select the natural hazards that pose the greatest risk to your jurisdiction.	Please indicate if the hazard is of high, moderate, or low priority.	Note if you feel the risk has increased, decreased, or had no change over the last 5 years.
Winter Storms (Blizzards,	Х	High	No change
Ice Storms)			
Tornadoes	Х	Moderate	No change
Windstorms	Х	Moderate	No change
Lightning			
Hail			
Flooding			
Extreme Cold	Х	Moderate	No change
Extreme Heat			
Drought	Х	Moderate	No change
Wildfire			
Landslides			
Dam Failure			

RECENT HAZARD EVENTS

Please describe any severe weather or disaster events that have occurred over the last 5 years that caused damages in your community or resulted in a state or federal disaster declaration.

We have had 2 big wind storms in that resulted in tree damage. We experience regular winter weather and summer storms.

LOCAL VULNERABILITIES

Use the chart below to identify what specific community assets are vulnerable to damages or loss from the hazards that pose risk to your community.

Natural Hazard (please list)	Vulnerability Assessment Describe <u>specific</u> community assets (infrastructure, systems, or populations) that are suspectable to damage or loss from hazard events.
Windstorm	We would like to have an outdoor warning siren, but we have nowhere to put it. We feel that using the county's CodeRED system is the best emergency notification system for our residents.

REDUCTION IN VULNERABILITY

Please describe any actions your community has taken to <u>reduce</u> vulnerability against future severe weather or disaster events. This can include examples of any work that has been completed or is underway that reduces future risk.

Otter Tail Power Company and the city have both taken efforts over the last 5 years to do some tree management to reduce risk to powerlines.

INCREASE IN VULNERABILITY

Please describe any current conditions or changes you feel have <u>increased</u> your community's vulnerability to future severe weather or disaster events. Consider factors such as recent population growth or new development.

We have not had any increase in vulnerability. The railroad protects the city from the Red River of the North and the Two Rivers. Highway 75 has also been built up by MnDOT and helps to protect the city flooding.

PART B: LOCAL MITIGATION CAPABILITIES ASSESSMENT

PUBLIC OUTREACH

Please describe what capabilities you have in place to communicate with those in your community to share information about severe weather events and personal preparedness. Please include any considerations for underserved communities or socially vulnerable populations within your jurisdiction.

We are a small community of 42 people and share information with residents by posting information at the city office, Post Office, and by making announcements at City Council meetings as needed.

EMERGENCY NOTIFICATION SYSTEM

Do you encourage residents in your community to sign up for the county's emergency notification system and/or a local emergency alert system? If yes, how? If not, is this something you would do?

We have posted information about CodeRED for residents at the Post Office, City Hall, and included information in a mailing to residents. The Kittson County Emergency Management Director gave us the information we needed to share with our residents.

LOCAL PLANS & AUTHORITIES

Please describe any local plans, authorities or policies in place that help to reduce risk from natural hazards in your community. <u>Please make note of enforcement of existing building codes and land use</u> and development ordinances or regulations as they apply to your community. Please also note if your community has any plans or policies in place related to resilience and adaptation for climate change.

None. We defer to Kittson County zoning regulations and building codes.

STAFF & PARTNERSHIPS

Please describe what staff or partnerships are in place to help accomplish mitigation in your community. This can include specific department staff or outside agencies that have a role with mitigation-related planning.

We have our City Clerk, Mayor, and City Council that address anything that is needed for attending to the city. We work with Kittson County as needed.

PROGRAMS IN PLACE

Describe any programs in place that to help reduce risk from natural hazards in your community.

Our public outreach to residents is our only related program for mitigation.

FUNDING & OTHER RESOURCES

Please describe what sorts of funding or other resources are available to help accomplish mitigation in your community. Please make note of any work with outside organizations or agencies or municipal/rural electrical coop providers.

We have limited city funding for operations and maintenance.

PART C: LOCAL MITIGATION PROJECTS

LOCAL MITIGATION PROJECTS

Please describe mitigation actions that would help to reduce risk to your community from future hazard events. Please consider mitigation activities that address the local vulnerabilities you have identified.

Continue to encourage residents to sign up for CodeRED. We do not have any mitigation projects that are needed.

GAPS OR DEFICIENCIES

Please describe any specific gaps or deficiencies that are a barrier to implementing local mitigation measures.

We are a small city with limited staff and funding.

PART D: NATIONAL FLOOD INSURANCE PROGRAM (NFIP) INFORMATION

Does your community participate in the NFIP?

No. The city of Humboldt does not participate in the NFIP.

If NO, and your community is in a FEMA mapped area, please describe <u>why</u> the community does not participate in the NFIP.

The city of Humboldt is noted by the MN DNR as not participating in the NFIP but with having FEMA mapped high-risk areas (new on 9/29/2017). The City Council decided against the floodplain mapping that was identified for the city and voted against enrolling in the NFIP.

If YES (your community participates NFIP), please provide descriptive information on how your community works to meet NFIP requirements below:

- 1. NFIP. Adoption of NFIP minimum floodplain management criteria via local regulation.
 - Provide the **original date of a floodplain ordinance adoption** for NFIP enrollment. [for implementation and enforcement of local floodplain management regulations to regulate and permit development in Special Flood Hazard Areas]

N/A

• Provide the adoption date of your **current** floodplain ordinance.

N/A

• Provide the effective date of your **current** floodplain ordinance (usually when it has been published publicly).

N/A

- 2. Contacts. Please provide names and emails for your:
 - Floodplain Administrator N/A
 - Engineering Contact (optional)
 - Additional Floodplain Contact (optional)

- 3. As part of the new hazard mitigation plan requirements, your community must demonstrate that you know the process to implement substantial improvement/substantial damage provisions of their floodplain management regulations after an event. These questions will help us meet those requirements.
 - Do you know of any existing buildings in the FEMA mapped floodplain?

None.

 Does your community use a form to track cumulative improvements and repetitive losses in the floodplain (for example see Evaluating Cumulative Improvements and Cumulative Damages section in <u>the DNR sample form</u>) -please attach or link the form.

No

Have you reviewed the <u>Local Official Playbook</u> substantial improvement/substantial damage ?

No

PART E: SURVEY PARTICIPANTS

Please list the names & titles of all persons that contributed information to this survey. Also provide an approximate amount of time of their participation.

Brad Hemmes, City Clerk, 1 hr.

Kittson County LOCAL MITIGATION SURVEY

Please fill out the Jurisdiction and Point of Contact information and Parts A, B, C, D, and E of this survey. Please be as specific as possible in your responses with information as it relates to your jurisdiction. It is strongly recommended to include government officials and staff to help provide detailed feedback.

Name of Jurisdiction: CITY OF KARLSTAD

Point of Contact:

Name:	Shelby Lee
Job Title:	City Clerk
Phone:	218-436-2178
Email:	karlstadcity@wiktel.com

PART A: HAZARD IDENTIFICATION, RISK ASSESSMENT & VULNERABILITY ANALYSIS

HAZARD IDENTIFICATION

In the chart below, please identify the natural hazards that pose the greatest risk to your community. Consider past damaging events, likelihood of future events, and impacts to community assets. Rank the prioritization of hazards as high, moderate, or low. Only put an "X" next to those hazards that are of moderate to high priority. These will be addressed with localized mitigation actions.

Natural Hazard	Use an "X" to select the natural hazards that pose the greatest risk to your jurisdiction.	Please indicate if the hazard is of high, moderate, or low priority.	Note if you feel the risk has increased, decreased, or had no change over the last 5 years.
Winter Storms (Blizzards,	X	High	Increased
Ice Storms)			
Tornadoes	X	Low	No change
Windstorms			
Lightning	X	Moderate	No change
Hail	Х	Low	No change
Flooding			
Extreme Cold	X	High	Increased
Extreme Heat	X	Low	Decreased
Drought			
Wildfire	Х	Moderate	No change
Landslides			
Dam Failure			

RECENT HAZARD EVENTS

Please describe any severe weather or disaster events that have occurred over the last 5 years that caused damages in your community or resulted in a state or federal disaster declaration.

None

LOCAL VULNERABILITIES

Use the chart below to identify what specific community assets are vulnerable to damages or loss from the hazards that pose risk to your community.

Natural Hazard	Vulnerability Assessment	
(please list)	Describe <u>specific</u> community assets (infrastructure, systems, or populations) that	
	are suspectable to damage or loss from hazard events.	
	The city of Karlstad has no local vulnerabilities to report in relation to	
	natural hazards.	

REDUCTION IN VULNERABILITY

Please describe any actions your community has taken to <u>reduce</u> vulnerability against future severe weather or disaster events. This can include examples of any work that has been completed or is underway that reduces future risk.

None

INCREASE IN VULNERABILITY

Please describe any current conditions or changes you feel have <u>increased</u> your community's vulnerability to future severe weather or disaster events. Consider factors such as recent population growth or new development.

Winter storms, blizzards have seemed to increase over the last few years.

PART B: LOCAL MITIGATION CAPABILITIES ASSESSMENT

PUBLIC OUTREACH

Please describe what capabilities you have in place to communicate with those in your community to share information about severe weather events and personal preparedness. Please include any considerations for underserved communities or socially vulnerable populations within your jurisdiction.

We post information on the city's Facebook page. We also post information in the City Hall lobby.

EMERGENCY NOTIFICATION SYSTEM

Do you encourage residents in your community to sign up for the county's emergency notification system and/or a local emergency alert system? If yes, how? If not, is this something you would do?

To date we have not done anything with this. We can use our city Facebook page and post information in the City Hall lobby.

LOCAL PLANS & AUTHORITIES

Please describe any local plans, authorities or policies in place that help to reduce risk from natural hazards in your community. <u>Please make note of enforcement of existing building codes and land use</u> and development ordinances or regulations as they apply to your community. Please also note if your community has any plans or policies in place related to resilience and adaptation for climate change.

The city's planning and zoning committee follows City Code and Zoning requirements.

The city previously had a local community wildfire protection plan on file with the MN DNR Firewise Program, but it should be updated or developed in coordination with a larger plan for Kittson County.

The city posts information on our website asking residents not to direct sump pump drainage into floor drains or the city sewer system to avoid overburden of the city's sanitary sewer system and lift stations. Compliance inspections may be performed.

STAFF & PARTNERSHIPS

Please describe what staff or partnerships are in place to help accomplish mitigation in your community. This can include specific department staff or outside agencies that have a role with mitigation-related planning.

Our mayor is the city's designated Emergency Manager in the event of an emergency. We also work with the Kittson County Emergency Manager as needed.

PROGRAMS IN PLACE

Describe any programs in place that to help reduce risk from natural hazards in your community.

We post information about the severe weather awareness week on the City's Facebook page.

FUNDING & OTHER RESOURCES

Please describe what sorts of funding or other resources are available to help accomplish mitigation in your community. Please make note of any work with outside organizations or agencies or municipal/rural electrical coop providers.

Only city funding.

PART C: LOCAL MITIGATION PROJECTS

LOCAL MITIGATION PROJECTS

Please describe mitigation actions that would help to reduce risk to your community from future hazard events. Please consider mitigation activities that address the local vulnerabilities you have identified.

None

GAPS OR DEFICIENCIES

Please describe any specific gaps or deficiencies that are a barrier to implementing local mitigation measures.

None

PART D: NATIONAL FLOOD INSURANCE PROGRAM

Does your community participate in the NFIP?

The city does not participate in the NFIP and has no FEMA mapped high risk areas.

If NO, and your community is in a FEMA mapped area, please describe <u>why</u> the community does not participate in the NFIP.

N/A

If YES (your community participates NFIP), please provide descriptive information on how your community works to meet NFIP requirements below:

- 1. NFIP. Adoption of NFIP minimum floodplain management criteria via local regulation.
 - Provide the **original date of a floodplain ordinance adoption** for NFIP enrollment. [for implementation and enforcement of local floodplain management regulations to regulate and permit development in Special Flood Hazard Areas]

N/A

• Provide the adoption date of your **current** floodplain ordinance.

N/A

• Provide the effective date of your **current** floodplain ordinance (usually when it has been published publicly).

N/A

• Has your jurisdiction adopted the latest effective Flood Rate Insurance Map?

N/A

- 2. Contacts. Please provide names and emails for your:
 - Floodplain Administrator: N/A
 - Engineering Contact (optional)

- Additional Floodplain Contact (optional)
- 3. As part of the new hazard mitigation plan requirements, your community must demonstrate that you know the process to implement substantial improvement/substantial damage provisions of their floodplain management regulations after an event. These questions will help us meet those requirements.
 - Do you know of any existing buildings in the FEMA mapped floodplain?

N/A

 Does your community use a form to track cumulative improvements and repetitive losses in the floodplain (for example see Evaluating Cumulative Improvements and Cumulative Damages section in the DNR sample form) -please attach or link the form.

N/A

Have you reviewed the <u>Local Official Playbook</u> substantial improvement/substantial damage ?

N/A

PART E: SURVEY PARTICIPANTS

Please list the names & titles of all persons that contributed information to this survey. Also provide an approximate amount of time of their participation.

Shelby Lee, Clerk, 2 hours

Kittson County LOCAL MITIGATION SURVEY

Please fill out the Jurisdiction and Point of Contact information and Parts A, B, C, D, and E of this survey. Please be as specific as possible in your responses with information as it relates to your jurisdiction. It is strongly recommended to include government officials and staff to help provide detailed feedback.

Name of Jurisdiction: CITY OF KENNEDY

Point of Contact:

Name:	Melissa Woinarowicz
Job Title:	City Clerk
Phone:	218-674-4142
Email:	office@kennedymn.org

PART A: HAZARD IDENTIFICATION, RISK ASSESSMENT & VULNERABILITY ANALYSIS

HAZARD IDENTIFICATION

In the chart below, please identify the natural hazards that pose the greatest risk to your community. Consider past damaging events, likelihood of future events, and impacts to community assets. Rank the prioritization of hazards as high, moderate, or low. Only put an "X" next to those hazards that are of moderate to high priority. These will be addressed with localized mitigation actions.

Natural Hazard	Use an "X" to select the natural hazards that pose the greatest risk to your jurisdiction.	Please indicate if the hazard is of high, moderate, or low priority.	Note if you feel the risk has increased, decreased, or had no change over the last 5 years.
Winter Storms (Blizzards,	X	High	No change
Ice Storms)			
Tornadoes	X	Moderate	No change
Windstorms	X	Moderate	No change
Lightning		Low	
Hail	X	Moderate	No change
Flooding	X	Low	No change
Extreme Cold	X	High	No change
Extreme Heat		Low	
Drought		Low	
Wildfire		Low	
Landslides		Low	
Dam Failure		Low	

RECENT HAZARD EVENTS

Please describe any severe weather or disaster events that have occurred over the last 5 years that caused damages in your community or resulted in a state or federal disaster declaration.

In June, 2020 we experienced a major hail and windstorm that caused damage to buildings in town, as well as brought down some trees and branches.

LOCAL VULNERABILITIES

Use the chart below to identify what specific community assets are vulnerable to damages or loss from the hazards that pose risk to your community.

Natural Hazard	Vulnerability Assessment
(please list)	Describe specific community assets (infrastructure, systems, or populations) that
	are suspectable to damage or loss from hazard events.
Ice Storms, Blizzards	Much of the city's municipal electrical service consists of overhead power lines and electrical poles. Those overhead lines and power poles are prone to failure in ice storms and blizzards with heavy snowfall and high winds that may bring down trees and branches.
Windstorms and	We have mobile homes within the city that do not have a storm shelter and
Tornadoes	are vulnerable to high wind and tornado events.
	Overhead power lines are in danger of coming down due to trees/branches or the wind itself.
Extreme Cold	Residents are susceptible to dangers from extreme cold, especially if the power goes down during winter storm events. We have a high population of senior citizens and also low-income residents who are more vulnerable during these events.

REDUCTION IN VULNERABILITY

Please describe any actions your community has taken to <u>reduce</u> vulnerability against future severe weather or disaster events. This can include examples of any work that has been completed or is underway that reduces future risk.

The city has increased use of our Facebook page and set up a resident mass email list to communicate with residents in emergency situations.

INCREASE IN VULNERABILITY

Please describe any current conditions or changes you feel have <u>increased</u> your community's vulnerability to future severe weather or disaster events. Consider factors such as recent population growth or new development.

We have had no increase in vulnerability.

PART B: LOCAL MITIGATION CAPABILITIES ASSESSMENT

PUBLIC OUTREACH

Please describe what capabilities you have in place to communicate with those in your community to share information about severe weather events and personal preparedness. Please include any considerations for underserved communities or socially vulnerable populations within your jurisdiction.

We post information on our Facebook page as well as send a mass email to residents. We also encourage residents to sign up for the county's emergency notification system, Code Red Alerts.

EMERGENCY NOTIFICATION SYSTEM

Do you encourage residents in your community to sign up for the county's emergency notification system and/or a local emergency alert system? If yes, how? If not, is this something you would do?

Yes. Through our monthly newsletter that is sent with utility bills, we encourage residents to sign up for Code Red Alerts that will notify residents of emergency events.

LOCAL PLANS & AUTHORITIES

Please describe any local plans, authorities or policies in place that help to reduce risk from natural hazards in your community. <u>Please make note of enforcement of existing building codes and land use</u> and development ordinances or regulations as they apply to your community. Please also note if your community has any plans or policies in place related to resilience and adaptation for climate change.

The City of Kennedy is looking to update our Code of Ordinances.

STAFF & PARTNERSHIPS

Please describe what staff or partnerships are in place to help accomplish mitigation in your community. This can include specific department staff or outside agencies that have a role with mitigation-related planning.

We are a small community that has a part-time city clerk, part-time Maintenance Worker, Mayor, City Council, and a volunteer Fire Department.

PROGRAMS IN PLACE

Describe any programs in place that to help reduce risk from natural hazards in your community.

We have an outreach program in place utilizing our Facebook page and email list when necessary. The city trims trees as necessary near power lines, we encourage residents to sign up for Code Red Alerts, and we encourage residents to run water when temperatures get too low to avoid pipes freezing.

FUNDING & OTHER RESOURCES

Please describe what sorts of funding or other resources are available to help accomplish mitigation in your community. Please make note of any work with outside organizations or agencies or municipal/rural electrical coop providers.

As a very small community, we use our own city funding as needed for projects. Any larger mitigation projects would require assistance from other funding sources.

PART C: LOCAL MITIGATION PROJECTS

LOCAL MITIGATION PROJECTS

Please describe mitigation actions that would help to reduce risk to your community from future hazard events. Please consider mitigation activities that address the local vulnerabilities you have identified.

We encourage residents to be prepared for all severe weather and emergency situations. The city could look into developing an emergency plan for sheltering residents in the event of extreme weather. The city is looking to update its Code of Ordinances to address building regulations and get our codes up to date. The city needs to review whether we need to update our floodplain ordinance.

GAPS OR DEFICIENCIES

Please describe any specific gaps or deficiencies that are a barrier to implementing local mitigation measures.

Not all residents are on Facebook, using email, or signed up for the county's emergency notification system. We are a small city with limited financial and staff resources to address other local mitigation projects.

PART D: NATIONAL FLOOD INSURANCE PROGRAM (NFIP) INFORMATION

Does your community participate in the NFIP?

Yes. The city participates in the NFIP and has FEMA-mapped high-risk areas.

If NO, and your community is in a FEMA mapped area, please describe <u>why</u> the community does not participate in the NFIP.

N/A

If YES (your community participates NFIP), please provide descriptive information on how your community works to meet NFIP requirements below:

- 1. NFIP. Adoption of NFIP minimum floodplain management criteria via local regulation.
 - Provide the **original date of a floodplain ordinance adoption** for NFIP enrollment. [for implementation and enforcement of local floodplain management regulations to regulate and permit development in Special Flood Hazard Areas]

August 5, 1986

• Provide the adoption date of your **current** floodplain ordinance.

September 29, 2017

• Provide the effective date of your **current** floodplain ordinance (usually when it has been published publicly).

I was not able to find this information.

- 2. Contacts. Please provide names and emails for your:
 - Floodplain Administrator: Melissa Woinarowicz, City Clerk- office@kennedymn.org
 - Engineering Contact (optional) N/A
 - Additional Floodplain Contact (optional) Kittson County
- 3. As part of the new hazard mitigation plan requirements, your community must demonstrate that you know the process to implement substantial improvement/substantial damage provisions of their floodplain management regulations after an event. These questions will help us meet those requirements.
 - Do you know of any existing buildings in the FEMA mapped floodplain?

Yes

 Does your community use a form to track cumulative improvements and repetitive losses in the floodplain (for example see Evaluating Cumulative Improvements and Cumulative Damages section in <u>the DNR sample form</u>) -please attach or link the form.

No

• Have you reviewed the <u>Local Official Playbook</u> substantial improvement/substantial damage ?

No. However, now that I am aware of this, I plan to review it at a later time.

PART E: SURVEY PARTICIPANTS

Please list the names & titles of all persons that contributed information to this survey. Also provide an approximate amount of time of their participation.

Melissa Woinarowicz, City Clerk/Treasurer, 2 hours

Kittson County LOCAL MITIGATION SURVEY

Please fill out the Jurisdiction and Point of Contact information and Parts A, B, C, D, and E of this survey. Please be as specific as possible in your responses with information as it relates to your jurisdiction. It is strongly recommended to include government officials and staff to help provide detailed feedback.

Name of Jurisdiction: CITY OF LANCASTER

Point of Contact:

Name:	Carol Johnson
Job Title:	Clerk/Treasurer
Phone:	218-762-6472
Email:	lancastercity@wiktel.com

PART A: HAZARD IDENTIFICATION, RISK ASSESSMENT & VULNERABILITY ANALYSIS

HAZARD IDENTIFICATION

In the chart below, please identify the natural hazards that pose the greatest risk to your community. Consider past damaging events, likelihood of future events, and impacts to community assets. Rank the prioritization of hazards as high, moderate, or low. Only put an "X" next to those hazards that are of moderate to high priority. These will be addressed with localized mitigation actions.

Natural Hazard	Use an "X" to select the natural hazards that pose the greatest risk to your jurisdiction.	Please indicate if the hazard is of high, moderate, or low priority.	Note if you feel the risk has increased, decreased, or had no change over the last 5 years.
Winter Storms (Blizzards,			
Ice Storms)	X	Low	No Change
Tornadoes	X	Low	No Change
Windstorms	X	Low	No Change
Lightning			
Hail			
Flooding	X	Moderate	No Change
Extreme Cold	X	Moderate	No Change
Extreme Heat			
Drought			
Wildfire			
Landslides			
Dam Failure			

RECENT HAZARD EVENTS

Please describe any severe weather or disaster events that have occurred over the last 5 years that caused damages in your community or resulted in a state or federal disaster declaration.

In June 2020 the city of Lancaster experienced an overland flood event due to excessive rain. We experienced damage to street/storm sewer; sewer lift station, lagoon; manholes, and the golf course.

LOCAL VULNERABILITIES

Use the chart below to identify what specific community assets are vulnerable to damages or loss from the hazards that pose risk to your community.

Natural Hazard	Vulnerability Assessment
(please list)	Describe specific community assets (infrastructure, systems, or populations) that
	are suspectable to damage or loss from hazard events.
Windstorms,	The city has one municipal campground that is active during summer and
Tornadoes	fall months. It has a wooden structure shower house to provide shelter
	during a storm, but it is not a sturdy brick building. An upgrade to a
	sturdier building would be desired, however limited financial resources
	make this difficult. We also would like to upgrade the city's outdoor
	warning siren, however financial resources to meet a matching grant.
Winter Storms	Much of the city's municipal electrical service consists of overhead power
	lines and electrical poles. Those overhead lines and power poles are prone
	to failure in ice storms and blizzards with heavy snowfall and high winds
	that may bring down trees and branches. Otter Tail Power Company
	provides the utility power to the city.
Flooding	City storm sewers, and lagoon, and golf course have experienced localized
	flooding during high rain events.
Extreme Cold	The city's community center is our designated shelter but it needs an
	updated generator – out old one is Army Surplus and is quite outdated. We
	have a large population of senior citizens who would be more vulnerable to
	extreme cold in the event of a prolonged power outage.

REDUCTION IN VULNERABILITY

Please describe any actions your community has taken to <u>reduce</u> vulnerability against future severe weather or disaster events. This can include examples of any work that has been completed or is underway that reduces future risk.

The city repaired storm sewer with new manholes and pipe to reduce issues. Lagoon rip rap repaired and access roads raised. Manholes repaired with concrete catch basin to reduce erosion.

The city has the community center as our designated facility for residents to go to in the event of an extended power outages.

INCREASE IN VULNERABILITY

Please describe any current conditions or changes you feel have <u>increased</u> your community's vulnerability to future severe weather or disaster events. Consider factors such as recent population growth or new development.

None. We have not experienced any increase in vulnerability to severe weather events.

PART B: LOCAL MITIGATION CAPABILITIES ASSESSMENT

PUBLIC OUTREACH

Please describe what capabilities you have in place to communicate with those in your community to share information about severe weather events and personal preparedness. Please include any considerations for underserved communities or socially vulnerable populations within your jurisdiction.

We post information in City Hall and at the U.S. Post Office.

EMERGENCY NOTIFICATION SYSTEM

Do you encourage residents in your community to sign up for the county's emergency notification system and/or a local emergency alert system? If yes, how? If not, is this something you would do?

No, our city does not do this currently, but we could post a flyer on it at City Hall.

LOCAL PLANS & AUTHORITIES

Please describe any local plans, authorities or policies in place that help to reduce risk from natural hazards in your community. <u>Please make note of enforcement of existing building codes and land use</u> and development ordinances or regulations as they apply to your community. Please also note if your community has any plans or policies in place related to resilience and adaptation for climate change.

The city has a Floodplain Ordinance. The city has a designated emergency shelter for our campground (the bathhouse building). The Community Center is our designated building for sheltering of residents if there is a storm that results in a prolonged power outage.

STAFF & PARTNERSHIPS

Please describe what staff or partnerships are in place to help accomplish mitigation in your community. This can include specific department staff or outside agencies that have a role with mitigation-related planning.

City Employees and our city council work with our local fire department, the Sheriff's Office, and the county emergency manager to respond to emergency situations and assist with notifications and evacuations. The city also has an emergency siren for notifications for severe wind events.

PROGRAMS IN PLACE

Describe any programs in place that to help reduce risk from natural hazards in your community.

Our city works with the county to participate in the National Weather Service's annual Severe Winter/Spring Weather Awareness Week by posting severe weather awareness information in the City Hall and US Post office. Our local school practices tornado drills on an annual basis.

FUNDING & OTHER RESOURCES

Please describe what sorts of funding or other resources are available to help accomplish mitigation in your community. Please make note of any work with outside organizations or agencies or municipal/rural electrical coop providers.

The city primarily uses its own budget to address mitigation projects, such as replacement of culverts. We have also worked closely with the county highway engineer on local flood mitigation projects for roads and the county zoning department when we updated our local floodplain ordinance. The city is a member of MnWARN.

PART C: LOCAL MITIGATION PROJECTS

LOCAL MITIGATION PROJECTS

Please describe mitigation actions that would help to reduce risk to your community from future hazard events. Please consider mitigation activities that address the local vulnerabilities you have identified.

- Upgrade the shelter facility at the city campground (if funding can be obtained).
- If possible, upgrade the city's outdoor warning siren. Grant funding is needed.
- Encourage Otter Tail Power to address converting powerlines from overhead to underground if possible to reduce the chance of power outages.
- Continue to address stormwater management to reduce localized flooding and overload to the city's stormwater system during high rain events.
- Encourage residents to sign up for the county's CodeRED emergency notification system and to be prepared for severe weather events.
- Upgrade the city's existing generator to a new one for the city's Community Center which serves as our emergency shelter facility.

GAPS OR DEFICIENCIES

Please describe any specific gaps or deficiencies that are a barrier to implementing local mitigation measures.

The city has very limited financial resources and staff to address any relate mitigation projects. We have one city clerk and one maintenance/public works person to address these matters.

PART D: NATIONAL FLOOD INSURANCE PROGRAM

Does your community participate in the NFIP?

Yes, the City of Lancaster participates in the NFIP. We have FEMA-mapped high-risk areas, new as of 9/29/2017.

If NO, and your community is in a FEMA mapped area, please describe <u>why</u> the community does not participate in the NFIP.

N/A

If YES (your community participates NFIP), please provide descriptive information on how your community works to meet NFIP requirements below:

- 1. NFIP. Adoption of NFIP minimum floodplain management criteria via local regulation.
 - Provide the **original date of a floodplain ordinance adoption** for NFIP enrollment. [for implementation and enforcement of local floodplain management regulations to regulate and permit development in Special Flood Hazard Areas]

Floodplain Ordinance adopted July 12, 2017

• Provide the adoption date of your **current** floodplain ordinance.

Our city council adopted our floodplain ordinance on July 12, 2017 and the Flood Insurance Rate Map that went into effect on Sept. 29, 2017. We have not adopted anything since then and have not been informed of any map updates.

• Provide the effective date of your **current** floodplain ordinance (usually when it has been published publicly).

Floodplain Ordinance published in legal newspaper July 19, 2017.

- 2. Contacts. Please provide names and emails for your:
 - Floodplain Administrator: Michael Olson, Mayor, lancastercity@wiktel.com
 - Engineering Contact (optional)
 - Additional Floodplain Contact (optional)
- 3. As part of the new hazard mitigation plan requirements, your community must demonstrate that you know the process to implement substantial improvement/substantial damage provisions of their floodplain management regulations after an event. These questions will help us meet those requirements.
 - Do you know of any existing buildings in the FEMA mapped floodplain?

None

 Does your community use a form to track cumulative improvements and repetitive losses in the floodplain (for example see Evaluating Cumulative Improvements and Cumulative Damages section in <u>the DNR sample form</u>) -please attach or link the form.

There have not been repetitive losses. The city does not have a form.

Have you reviewed the <u>Local Official Playbook</u> substantial improvement/substantial damage ?

Yes

PART E: SURVEY PARTICIPANTS

Please list the names & titles of all persons that contributed information to this survey. Also provide an approximate amount of time of their participation.

Michael Olson, Mayor, 30 minutes Carol Johnson, Clerk/Treasurer, 4 hours

Kittson County LOCAL MITIGATION SURVEY

Please fill out the Jurisdiction and Point of Contact information and Parts A, B, C, D, and E of this survey. Please be as specific as possible in your responses with information as it relates to your jurisdiction. It is strongly recommended to include government officials and staff to help provide detailed feedback.

Name of Jurisdiction: CITY OF ST. VINCENT

Point of Contact:

Name:	Faith Khalaf
Job Title:	City Clerk
Phone:	701-331-4600
Email:	faithkhalaf@yahoo.com

PART A: HAZARD IDENTIFICATION, RISK ASSESSMENT & VULNERABILITY ANALYSIS

HAZARD IDENTIFICATION

In the chart below, please identify the natural hazards that pose the greatest risk to your community. Consider past damaging events, likelihood of future events, and impacts to community assets. Rank the prioritization of hazards as high, moderate, or low. Only put an "X" next to those hazards that are of moderate to high priority. These will be addressed with localized mitigation actions.

Natural Hazard	Use an "X" to select the natural hazards that pose the greatest risk to your jurisdiction.	Please indicate if the hazard is of high, moderate, or low priority.	Note if you feel the risk has increased, decreased, or had no change over the last 5 years.
Winter Storms (Blizzards,	x	High	No change
Ice Storms)			
Tornadoes	X	Moderate	No change
Windstorms	X	Moderate	No change
Lightning			
Hail			
Flooding	X	Moderate	No change
Extreme Cold	X	Moderate	No change
Extreme Heat			
Drought	X	Moderate	No change
Wildfire			
Landslides			
Dam Failure			

RECENT HAZARD EVENTS

Please describe any severe weather or disaster events that have occurred over the last 5 years that caused damages in your community or resulted in a state or federal disaster declaration.

Around May 2022 the city experienced a high rain event coupled with lots of snow melt that resulted in high river levels on the Red River of the North. The water came up close to the edge of our dike. Aside from that, we have not had any major storms that caused damage in the last 5 years. We experience regular winter weather and summer storms.

LOCAL VULNERABILITIES

Use the chart below to identify what specific community assets are vulnerable to damages or loss from the hazards that pose risk to your community.

Natural Hazard (please list)	Vulnerability Assessment Describe <u>specific</u> community assets (infrastructure, systems, or populations) that are suspectable to damage or loss from hazard events.
	We have no local vulnerabilities to report. We have limited infrastructure and a small population of 56.

REDUCTION IN VULNERABILITY

Please describe any actions your community has taken to <u>reduce</u> vulnerability against future severe weather or disaster events. This can include examples of any work that has been completed or is underway that reduces future risk.

In 2022 we completely repaired our dike with our surveyor to reduce localized flood risk, We also have a pump house that helps to take out a lot of floodwater from the edges of town that would be affected by rising water level on the Red River of the North. We also have culvers and storm gates that can be activated if needed.

INCREASE IN VULNERABILITY

Please describe any current conditions or changes you feel have <u>increased</u> your community's vulnerability to future severe weather or disaster events. Consider factors such as recent population growth or new development.

We have not had any increase in vulnerability.

PART B: LOCAL MITIGATION CAPABILITIES ASSESSMENT

PUBLIC OUTREACH

Please describe what capabilities you have in place to communicate with those in your community to share information about severe weather events and personal preparedness. Please include any considerations for underserved communities or socially vulnerable populations within your jurisdiction.

We are a small community and share information with residents by posting information on our community bulletin board just outside of our garage where we keep our city supplies. This is where we post information ranging from city council meetings, to flood stage information, thanks you's to

residents etc. We also have a group chat with our cell phones for city council members and highly involved residents that aid the city.

EMERGENCY NOTIFICATION SYSTEM

Do you encourage residents in your community to sign up for the county's emergency notification system and/or a local emergency alert system? If yes, how? If not, is this something you would do?

We have not done anything with this to date. We look to Kittson County Emergency Management to do outreach to encourage residents to sign up for the CodeRED system. We do connect residents to other emergency information and NWS service on flood stage. We could easily use the city bulletin board to put up a flyer to encourage residents to sign up for CodeRED.

LOCAL PLANS & AUTHORITIES

Please describe any local plans, authorities or policies in place that help to reduce risk from natural hazards in your community. <u>Please make note of enforcement of existing building codes and land use</u> <u>and development ordinances or regulations as they apply to your community</u>. Please also note if your community has any plans or policies in place related to resilience and adaptation for climate change.

We defer to Kittson County zoning regulations and building codes. The city does have a flood plan that was based on another city's flood plan. We have been in the process of updating it.

STAFF & PARTNERSHIPS

Please describe what staff or partnerships are in place to help accomplish mitigation in your community. This can include specific department staff or outside agencies that have a role with mitigation-related planning.

We have our City Clerk, Mayor, City Council, and a city maintenance worker that address anything that is needed for attending to the city. We work with Kittson County Emergency Management as needed.

The city also has a flood committee of local residents. They help to execute the city flood plan. They help to walk the dike to mark anything of concern and convey any concerns to city staff. We are a small city council and cannot do all this ourselves; our residents who participate on our flood committee are important.

PROGRAMS IN PLACE

Describe any programs in place that to help reduce risk from natural hazards in your community.

We encourage residents to maintain their sump pumps. We also encourage residents to keep their property maintained. We maintain the city dike and stormwater system.

FUNDING & OTHER RESOURCES

Please describe what sorts of funding or other resources are available to help accomplish mitigation in your community. Please make note of any work with outside organizations or agencies or municipal/rural electrical coop providers.

The city has used its own funds directly to get our dike fixed. We get donations from residents for cemetery upkeep. In the future if we really needed funding for infrastructure improvements to our dike we would probably seek FEMA grant funding.

PART C: LOCAL MITIGATION PROJECTS

LOCAL MITIGATION PROJECTS

Please describe mitigation actions that would help to reduce risk to your community from future hazard events. Please consider mitigation activities that address the local vulnerabilities you have identified.

- Work with Kittson County to provide us with a flyer encouraging residents to sign up for CodeRED.
- Continue to maintain our flood dike.
- Continue to do outreach to residents with our notice board.
- Continue to blow out ditches to avoid flooding.
- Find out from MN DNR if we need to update our floodplain ordinance. Find out what our actual flood map is from MN DNR.
- Continue to update our city flood plan.
- Work on development of a city website so we have another way to share information with our residents.

GAPS OR DEFICIENCIES

Please describe any specific gaps or deficiencies that are a barrier to implementing local mitigation measures.

EXAMPLES Our city does not have its own website or Facebook page to do better outreach to our residents. Not all our residents are signed up for the county's emergency notification system. We have poor NOAA weather tower coverage due to our topography and notifications on severe weather can be delayed. The city needs significant funding assistance to buy out residential properties that have experienced repetitive loss from flooding. We need to update our city's long-range Comprehensive Plan to address considerations for future hazard events such as flooding. There is new development occurring with most homes being built on slab instead of with basements – this leaves residents more vulnerable in the event of a tornado. We are small city with limited financial and staff resources to address local mitigation projects.

We are a small city with limited staff and funding.

PART D: NATIONAL FLOOD INSURANCE PROGRAM (NFIP) INFORMATION

Does your community participate in the NFIP?

Yes, according to the MN DNR database the city of St. Vincent is enrolled in the NFIP and has FEMA mapped high risk areas.

If NO, and your community is in a FEMA mapped area, please describe <u>why</u> the community does not participate in the NFIP.

-Type Answer-

If YES (your community participates NFIP), please provide descriptive information on how your community works to meet NFIP requirements below:

- 1. NFIP. Adoption of NFIP minimum floodplain management criteria via local regulation.
 - Provide the **original date of a floodplain ordinance adoption** for NFIP enrollment. [for implementation and enforcement of local floodplain management regulations to regulate and permit development in Special Flood Hazard Areas]

09/02/1982

• Provide the adoption date of your **current** floodplain ordinance.

We are not sure it has been updated, unless there was a change after the flood of 1997.

• Provide the effective date of your **current** floodplain ordinance (usually when it has been published publicly).

Don't know.

- 2. Contacts. Please provide names and emails for your:
 - Floodplain Administrator Faith Khalaf, City Clerk, <u>faithkhalaf@yahoo.com</u>
 - Engineering Contact (optional)
 - Additional Floodplain Contact (optional)
- 3. As part of the new hazard mitigation plan requirements, your community must demonstrate that you know the process to implement substantial improvement/substantial damage provisions of their floodplain management regulations after an event. These questions will help us meet those requirements.
 - Do you know of any existing buildings in the FEMA mapped floodplain?

The pump house might be in the flood zone. We have not seen the FEMA flood map.

 Does your community use a form to track cumulative improvements and repetitive losses in the floodplain (for example see Evaluating Cumulative Improvements and Cumulative Damages section in <u>the DNR sample form</u>) -please attach or link the form.

No

Have you reviewed the <u>Local Official Playbook</u> substantial improvement/substantial damage ?

No

PART E: SURVEY PARTICIPANTS

Please list the names & titles of all persons that contributed information to this survey. Also provide an approximate amount of time of their participation.

Faith Khalaf, City Clerk. .5 hr.

Scot E. Olson, Kittson County Emergency Management Director, 1 hr.

Appendix D – Plans & Programs in Place

Kittson County HMP Plans & Programs in Place Form

EMERGENCY PLANNING CAPABILITIES	Yes/No	Comments
Emergency Mass Notification System		CodeRED Emergency Notification System
	Yes	and IPAWS
		Donaldson (1), Hallock (2), Lake Bronson (1),
		Lancaster (1), Karlstad
Outdoor Warning Sirens		(1), Halma (1),
		Humboldt (1), St.
	Yes	Vincent (1).
Emergency Operations Plan (EOP)		County EOP is updated
	Yes	annually
Mass Care Sheltering Plan / List of Shelter Facilities	Yes	Addressed in EOP
		Local vulnerabilities are
Tornado Safe Rooms / Storm Shelters		addressed in coordination with
	No	schools & jurisdictions
		Kittson County is a
		registered NOAA and
NWS Weather Ready Nation / StormReady Certification		NWS Weather-Ready
		Nation Ambassador
	Vac	and StormReady
	Yes	Community (2022) Tornado Drills, other
Coordination with Schools	Yes	trainings
		HSEM Region 3
Coordination with Neighboring County/Tribal Jurisdictions	Yes	regional planning &
		exercises annually
		SWCD, MN DNR,
Coordination with Local / Regional Agencies involved in mitigation	Yes	MnDOT, Rural and
		Municipal Electric
Coordination with organizations or agencies addressing disaster		Cooperatives Public Health,
related issues and vulnerable populations, emergency preparedness,	Yes	American Red Cross,
access and functional needs populations		Salvation Army
		Damage information on
Hazard data and information	Yes	file from past storm
		events and disaster
		declarations
Other (please describe)	Yes	PH has preparedness plans in place
	162	pians in piace

PLANNING & REGULATORY CAPABILITIES	Yes/No	Comments
		Kittson County Zoning
Comprehensive/Land Use Plan		Ordinance / Watershed
	No	District plans
Capital Improvements Plan	No	Being developed
Economic Development Plan	No	County Committee
Climate Adaptation Plan	No	
		Kittson County
Continuity of Operations Plan (COOP)		Emergency
	Yes	Management (lead)
Transportation Plan (Roads, Bridges, Culverts, Ditches)		5-Year Transportation
Thansportation Flam (Noaus, Bruges, Cuiverts, Ditches)	Yes	Plan, Highway Dept.
		Kittson SWCD Local
Stormwater Management Plan / Drainage Plan		Water Management
	Yes	Plan
Burning Permits/Restrictions	Yes	MN DNR
Comprehensive Local Water Management Plan		Updated by Kittson
Comprehensive Local water Management Plan	Yes	SWCD
		Kittson County
		participates in the Two
Watershed Plan (One Watershed, One Plan)		Rivers Plus Joint
watershea han (one watershea, one han)		Powers Board One
		Watershed, One Plan
	Yes	(1W1P).
		Municipal level plans
Wellhead Protection Plan		are done in
		coordination with MDH
Forest Management Plan	No	MN DNR Forestry (lead)
		No county level CWPP
Community Wildfire Protection Plan (CWPP)		but the City of Karlstad
	No	does have a CWPP
Participation in MN DNR Firewise Program		No formal participation
	No	in DNR program
Database of Dry Hydrants/Well Access	No	
Other (please describe)		

LOCAL POLICY / PROGRAM CAPABILITIES	Yes/No	Comments
Land Use, Planning, & Zoning Ordinance	Yes	Kittson County Zoning and Subdivision Regulations 2014
Subdivision Ordinance	Yes	Kittson County Floodplain Ordinance, Section 7.0 – Subdivisions.

Building Codes		Kittson County Zoning enforces the MN State Building Code
National Flood Insurance Program (NFIP)	Yes	Kittson County NFIP entry date 02/04/1981.
Flood insurance rate maps	Yes	Kittson County Zoning Office
Floodplain Ordinance	Yes	Kittson County Floodplain Ordinance (adopted 10/17/1990, revised 10/14/2003)
Shoreland Ordinance	No	
Minnesota Buffer Law / Soil Erosion Ordinance	Yes	Enforced by Kittson SWCD
Home Buyouts for flood or erosion mitigation	Yes	2022 – one buyout
Other natural hazard specific ordinance (i.e., stormwater, steep slope, wildfire)	No	
Maintenance programs to reduce risk		Highway Dept. ROW maintenance and drainage systems
Other (please describe)		

ADMINISTRATIVE/TECHNICAL CAPABILITIES	Yes/No	Comments
Emergency Management Director	Yes	Kittson County Emergency Management Office
Sheriff/Police Department	Yes	Kittson County Sheriff's Office
Floodplain Administrator	Yes	Kittson County Zoning Office
Chief Building Official	Yes	Kittson County Zoning Office
County Engineer	Yes	Kittson County Highway Dept.
Mapping Specialist (GIS)	Yes	Kittson County Assessor's Office
Public Health Coordinator/Department	Yes	Kittson County Social Services Dept.
Planning Commission	Yes	Kittson County Board of Commissioners
Soil and Water Conservation District	Yes	Kittson SWCD
Minnesota Department of Natural Resources	Yes	MN DNR coordination as needed

Mitigation Planning Committee	Yes	2023 HMP Update Planning Team
Mutual Aid Agreements	Yes	Regional
Other (please describe)		

EDUCATION & OUTREACH CAPABILITIES	Yes/No	Comments
SKYWARN Program Training with NWS	Yes	Annual event
Severe Weather Awareness Week (HSEM/NWS)	Yes	Annual event
Winter Weather Awareness Week (HSEM/NWS)	Yes	Annual event
Promotion of NOAA Weather Radios	Yes	During NWS Severe Weather Weeks and Ongoing
Other (please describe)		

Appendix E – Past Mitigation Action Review Status Report

Kittson County Past Mitigation Action Review Status Report

Following is a report on the status of mitigation actions related to natural hazards included in the Kittson County 2015 Hazard Mitigation Plan. This report identifies those actions that have been completed, are being deleted, or are considered as ongoing efforts. Mitigation actions that are noted as "ongoing" will be reviewed and revised as necessary for future implementation. This report covers the mitigation actions that were listed for implementation by the county and by city jurisdictions, as applicable.

Hazard	Mitigation Action	Responsibility	Status	Comments
Severe Winter & Summer Storms	Identify power lines that have an acute need of mitigation and or can be buried. / Bury power lines to reduce power Outages.	Power Companies, Kennedy	Ongoing	The utility providers within the county continue to identify and address mitigation measures for powerlines that may be vulnerable to failure from severe storm events.
Severe Winter & Summer Storms	Identify critical infrastructure that needs alternative and backup power methods. / Add new generators to critical infrastructure and shelters.	Kittson County, All Cities	Ongoing	Kittson County and local jurisdictions continue to address what critical infrastructure or facilities should have back up power and work to obtain necessary generators.
Severe Winter & Summer Storms	Promote the weather radio for homes and businesses	Emergency Management, Emergency Response Personnel, NWS	Ongoing	KCEM promotes NOAA weather radios during the NWS severe weather awareness weeks.
Severe Winter & Summer Storms	Educate on multiple hazards so that individuals take on the responsibility for the actions of themselves and their neighbors/families	Emergency Management, Emergency Management Personnel	Ongoing	KCEM and local jurisdictions continue to promote severe weather awareness and personal preparedness through local outreach measures such as websites, social media, and local media sources. Kittson County was designated a StormReady Community by the NWS in 2022.
Severe Winter & Summer Storms	Continue working with the National Weather Service to improve storm warning and awareness	Emergency Management	Ongoing	KCEM continues to participate in the NWS severe weather awareness weeks in April and November each year.
Severe Winter & Summer Storms	Install a power back up for all Sirens	Lancaster	Ongoing	All jurisdictions that own outdoor warning sirens are encouraged to ensure there is a back up power supply.

Hazard	Mitigation Action	Responsibility	Status	Comments
Severe Winter & Summer Storms	Assess the current siren warning system for the county and all cities on a regular basis.	KCEM, All Cities	Ongoing	Kittson County Sheriff's Office works with local jurisdictions to test all warning sirens monthly to ensure functionality.
Severe Winter & Summer Storms	Add sirens to areas that are not covered by the existing siren framework, ensure all areas of jurisdiction can hear sirens	Emergency Management, Hallock, Kennedy ST Vincent Humboldt, Donaldson, Halma	Ongoing	KCEM continues to work with communities that may need a new siren or upgrades due to outdated sirens or areas of new development. Funding may be available from the USDA Rural Development Grant Program for warning sirens. Two new sirens were installed in 2021.
Severe Summer Storms	Encourage trailer courts to have either an on-site shelter or an evacuation plan to a nearby shelter	KCEM, Hallock, Karlstad, St. Vincent	Ongoing	Cities with mobile home parks are required to meet State Statutes for evacuation plans and storm shelters.
Severe Summer Storms	Create/update/improve storm shelters	Emergency Management, Karlstad, Hallock, Lancaster, Kittson Central School, Kennedy, St Vincent	Ongoing	KCEM and local jurisdictions continue to work to identify and address where storm shelters or tornado safe rooms are needed to protect residents and visitors from high wind or tornado events in areas such as schools, mobile home parks, and campgrounds.
Severe Summer Storms	Continue to work with the National Weather Service to keep the emergency weather spotters program active in Kittson County.	KCEM, NWS	Ongoing	KCEM works with the NWS on an annual basis to provide SkyWarn training to local law enforcement, FD's and local residents.
Severe Winter Storms	Plant living/tree snow fences to protect Critical Infrastructure	Hallock, St Vincent	Ongoing	Kittson SWCD is the leading agency that continues to work with communities and private landowners on living snow fence projects.
Flooding	Investigate ways to decrease flooding risk posed by 5th St. Bridge in Kennedy.	Kennedy, MnDOT, Watershed	Ongoing	Townships and cities with flood damage are encouraged to apply for mitigation funding to alleviate future issues.
Flooding	Look at levee construction as a tool for flood mitigation	Cities, FEMA, DNR, State, USACE, USDA, Watersheds	Ongoing	Ongoing as applicable for local jurisdictions.

Hazard	Mitigation Action	Responsibility	Status	Comments
Flooding	Enforce and or create floodplain ordinances.	Emergency Management, All Cities, Kittson County	Ongoing	Participation in the NFIP and enforcement of floodplain ordinances is ongoing by the county and local jurisdictions as applicable.
Flooding	Maintain efficient city drainage and propose solutions to decrease damage done by fast moving water and overland flooding.	Watersheds, Cities	Ongoing	All cities continue to work on local stormwater management and flood mitigation to handle high rain events.
Flooding	Protect cities that lie in the 100-yr floodplain, including planning for risk removal, such as dikes, gates and pumps.	Watersheds, Kittson County, Emergency Management	Ongoing	All cities continue to work on local stormwater management and flood mitigation to handle high rain events.
Flooding	Compare emergency management plans with current watershed management plans and city plans incorporating necessary mitigation as appropriate.	Emergency Management, Watershed and all cities	Ongoing	Kittson County and city governments continue to work with the Kittson SWCD and area watershed organizations (Two Rivers Watershed / Joe River Watershed) on related flood mitigation efforts as applicable.
Flooding	Work to create a flood model of Karlstad, showing the effects of a large rainfall, heavy water flows	Emergency Management, Watersheds, Karlstad	Delete	Karlstad does not have FEMA mapped high risk flood areas.
Flooding	Utilize the ring dike program, if the program is available.	Emergency Management, Landowners	Ongoing	Ongoing as applicable for flood mitigation within Kittson County.
Flooding	Certify and maintain levees	Hallock, St. Vincent, FEMA, Army Corp of Engineers	Ongoing	Ongoing as applicable for flood mitigation within Kittson County.
Flooding	Buyout willing landowners if located in the floodplain and or are repetitively damaged properties.	Emergency Management, All cities	Ongoing	Conducting buyouts of properties affected by repetitive flooding will continue to be considered by the county and cities as relevant. One buyout was completed in 2022 in Teien Township along the Red River of the North within the Flood Plain

Hazard	Mitigation Action	Responsibility	Status	Comments
Flooding	Enforce current building and shoreland ordinances. Change to provide increased protection if deemed necessary.	Emergency Management, city officials and public administrators	Ongoing	Enforcement of building codes for new development and shoreland ordinances continue at the county and local level.
Flooding	Ensure that nursing homes, hospitals, public events and schools have updated comprehensive all hazard plans, creating them if necessary, update them as necessary	Emergency Management, city officials and public administrators	Ongoing	KCEM continues to encourage and provide support as needed to such facilities to be prepared with emergency plans for severe weather and other emergencies.
Flooding	Re-size culvert and replace culvert, Clean culverts out	Kittson County, MNDOT, County Engineer, St Vincent	Ongoing	Kittson County and local jurisdictions continue to assess and address localized stormwater management road and drainage infrastructure improvements as needed to handle high rain events. Several culverts were replaced and resized after flood damage within the county in 2022
Flooding	Modify, raise or install drainage, add pumps and improve drainage.	MNDOT, Hallock, Lancaster, St Vincent, Kittson County	Ongoing	Same as above.
Flooding	Inventory county roads that suffer continuous damage from flooding events	Emergency Management, MNDOT, Kittson County	Ongoing	Same as above.
Flooding	Investigate cost-effective methods for repairing repetitively damaged roads in Kittson County	MNDOT, Kittson County, Emergency Management, Watershed boards	Ongoing	Same as above.
All-Hazards	Incorporate additional Public and Private Partners (DNR, MNDOT, USDA, NRCS) and Kittson County employees in the mitigation planning effort.	KCEM	Ongoing	The 2023 Kittson County HMP update includes a broad range of agency and organizational stakeholders in the planning process.
All-Hazards	Utilize GIS technology in emergency management and hazard mitigation when cost efficient.	KCEM	Ongoing	Ongoing by KCEM.

Hazard	Mitigation Action	Responsibility	Status	Comments
All-Hazards	Create and conduct annual awareness training of new technologies for citizen alert, such as reverse 911 and text to 911 and consider the local benefit.	Kittson County Emergency Management, All cities	Ongoing	This falls under the ongoing efforts of KCEM to raise awareness of residents to sign up for our county emergency notification system.
Drought	Enforce burning bans	MN DNR, All Cities	Ongoing	Kittson County and local jurisdictions work to help enforce burning bans as put in place by MN DNR.
Wildfire	Utilize controlled burns if the option is available.	Landowner, Fire Departments, NRCS and DNR	Ongoing	Wildfire mitigation efforts such as fuels reduction projects continue to be coordinated and addressed as necessary by local fire departments, landowners, MN DNR, and other agencies involved in forest management.
Wildfire	Create Firebreaks around populated areas.	Fire Departments, All Cities	Ongoing	Same as above.
Wildfire	Conduct an assessment to determine if water access is adequate	Donaldson, Halma	Ongoing	Same as above.
Wildfire	Provide fire prevention methods information to landowners/citizens.	Fire Departments, Emergency Management, USDA, NRCS, and DNR	Ongoing	Public awareness and education for wildfire danger and prevention is an ongoing effort by KCEM in conjunction with local FD's MN DNR, USDA, and NRCS – particularly during periods of drought.

Appendix F – Planning Team Meetings

Kittson County HMP Update

Appendix F – Kickoff Meeting Documentation

Overview:

On July 19, 2022, U-Spatial@UMD hosted a kickoff meeting online that was attended by the Kittson County Emergency Manager. The webinar included a project overview, U-Spatial@UMD's background, the roles and responsibilities of the Emergency Manager, the contents of the Hazard Mitigation Plan, the planning process, and the projected timeline of the project.

Attached Documentation:

- **Project Handout:** "Minnesota 2022-2023 Multi-Hazard Mitigation Plan Update Project Overview"
- Webinar Slides: "Minnesota 2022-2023 Multi-Hazard Mitigation Plan Update Project Kickoff Orientation Webinar"

Minnesota 2022-2023 Multi-Hazard Mitigation Plan Update Project Overview

During 2022-2023, U-Spatial at the University of Minnesota Duluth (U-Spatial@UMD) will be working to update Multi-Hazard Mitigation Plans (MHMPs) for 5 counties. Our team consists of UMD staff who specialize in GIS applications and research and Hundrieser Consulting LLC, who specializes in stakeholder engagement and mitigation strategies.

Participating Jurisdictions

Jackson, Kittson, Marshall, Pope, and Red Lake counties. Cities within each county are required to participate in the planning process.

Overview of Update Process

The U-Spatial@UMD team will coordinate with each Emergency Manager throughout the plan update process to engage participating jurisdictions and other stakeholders in the planning process. Following is an overview of key tasks that the U-Spatial@UMD team will facilitate to meet FEMA requirements in the update of each plan:

- Conduct 2 planning team meetings
- Conduct public outreach & engagement
- Assess Plans & Programs in Place to address natural hazards
- Conduct a Past Mitigation Action Review from past plan
- Update prioritization of natural hazards that pose risk
- Complete jurisdictional Local Mitigation Surveys (hazards, vulnerabilities & capabilities)
- Conduct hazard risk assessment for 1% annual chance floods using the Hazus GIS tool
- Inventory critical infrastructure
- Develop hazard profiles for each natural hazard (description, incident history, geographic variability, future probability, relationship to changing climate trends and local vulnerabilities) and present data in an interactive website.
- Prepare a PDF document that meets FEMA MHMP plan requirements.
- Develop 5-year jurisdictional Mitigation Action Charts

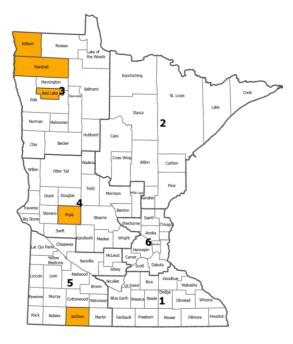
The planning process generally occurs over the course of 14-18 months from start to finish.

Contact

Stacey Stark, U-Spatial Associate Director (MHMP Project Manager) Phone: (218) 726-7438 / Email: <u>slstark@d.umn.edu</u>









Driven to Discover

Overview of the MHMP Update Process

The U-Spatial@UMD team will coordinate with each Emergency Manager (EM), participating jurisdictions, and other stakeholders throughout the planning process. The plan update generally occurs over the course of 14-18 months from start to finish. Following is an overview of key tasks that will occur and the approximate timeline for completion. This list is not a complete list of what the plan update entails.

Stage 1 Tasks (4-5 months)

- HMP kickoff meeting/webinar with EM and U-Spatial@UMD
- Develop jurisdictional contact list for MHMP planning team
- Disseminate & document News Release #1 (plan update announcement)
- Complete Plans & Programs in Place Checklist
- Conduct a Past Mitigation Action Review from prior plan
- Complete Capabilities Assessment to address natural hazards
- Hold & document Planning Team Meeting #1
- Complete Local Mitigation Surveys (hazards, vulnerabilities & capabilities)
- Revisit prioritization of natural hazards that pose risk
- Assist U-Spatial@UMD with provision of key data
- Complete inventory of Critical Infrastructure

Stage 2 Tasks (5-7 months)

- Develop 5-year Jurisdictional Mitigation Action Charts
- Conduct hazard risk assessment for 1% annual chance floods using the Hazus GIS tool
- Develop hazard profiles for each natural hazard (description, incident history, geographic variability, future probability)
- Complete hazard profiles for each natural hazard
- Complete Plan Maintenance section of draft plan

Stage 3 Tasks (2-3 months)

- EM review of Draft Plan
- Hold & document Planning Team Meeting #2
- Finalize Mitigation Action Charts
- Disseminate & document News Release #2 (Public Review & Comment Period)
- EM coordination of plan review by local government(s) & other stakeholders

Stage 4 Tasks (2-3 months)

- Post-public review revisions made to plan (as necessary)
- Draft Plan sent to HSEM for review & approval
- Draft Plan sent to FEMA for review & approval
- Post FEMA review revisions made to plan (as necessary)
- FEMA to send letter stating "Approval Pending Adoption" to EM
- EM to facilitate MHMP jurisdictional adoptions (County/Tribe and cities)

Ongoing - Quarterly 25% Local Match Tracking Quarterly to HSEM

As part of the MHMP plan update, EM's are required to submit quarterly reports to HSEM on their local 25% match accrued through MHMP activities during that quarter.

Minnesota 2022-2023 Multi-Hazard Mitigation Plan Update Project Kick-off Orientation Webinar

U-SPATIAL

UNIVERSITY OF MINNESOTA DULUTH Driven to Discover

Webinar Purpose & Goals

The purpose of this webinar is to provide an orientation for Emergency Managers participating in 2022-2023 Multi-Hazard Mitigation Plan Updates.

- Introduce the U-Spatial@UMD Team and county contacts.
- Provide an overview of the project.
- Clarify roles and responsibilities.
- Outline the planning process, discuss key tasks and timelines.
- Discuss next steps and answer your questions.

Stacey Stark

Introductions

U-Spatial@UMD Project Team

Stac Proj U-Sj Boni Eme

Bonnie Hundrieser Emergency Management Plan Hundrieser Consulting LLC

Zach Vavra GIS Specialist and Rese U-Spatial@UMD

Research Associate, Flood Modeling Special U-Spatial@UMD

Project Coordinator, Communications S U-Spatial@UMD

Emergency Managers:

•Name, Title, and Jurisdiction •Past Experience with MHMP?

Minnesota HSEM: Jennifer Davis, MN HSEM State Hazard Mitigation Officer

Project Overview

5 Counties: Jackson Kittson Marshall Pope Red Lake



Why U-Spatial@UMD?

Proven experience

Our updates of 30+ MHMPs, as well as the State MHMP, have been quickly approved by FEMA and adopted by counties.

> Advanced Capabilities

Expertise in the application of GIS, HAZUS, and research supports plan development and meeting all FEMA requirements.

Ability to Expedite

A consistent and proven approach for multiple counties supports State & FEMA review of draft plans.

Planning Team

Our project team includes advanced GIS students and Hundrieser Consulting.

Purpose

The Federal Disaster Mitigation Act of 2000 (DMA 2000) established programs and funding:

"to reduce the loss of life and property, human suffering, economic disruption, and disaster assistance costs resulting from natural disasters"

A local government plan is required in order to maintain eligibility for FEMA hazard mitigation grant programs.

MHMP's must be updated every 5 years.

Flooding	Hail	Drought
Dam/Levee	Lightning	Extreme
Failure	Lightning	Heat
Wildfire	Winter Storms	Extreme
wiidilife		Cold
Windstorms	Landslides	Earthquakes
	Sinkholes &	Coastal
Tornadoes	Karst	Erosion

Natural hazard categories for Minnesota MHMPs. Hazards may be omitted if low risk is demonstrated.

Overview of MHMP Update Process

U-Spatial@UMD Team Roles & Responsibilities

- Keep you informed about the progress of your plan.
- Facilitate & document jurisdictional engagement.
- Facilitate & document public outreach.
- Work with EM and planning team to complete key tasks.
- Keep up-to-date on FEMA requirements and Minnesota guidance.
- Produce a quality plan that FEMA will approve.
- Answer questions in a timely fashion.
- Support EM's in tracking your required local 25% match.
- Provide quarterly reports to HSEM on your plan progress.

Bonnie Hundriese

EM Roles & Responsibilities

- > Act as main Point of Contact. (EM / Deputy EM)
- Report to HSEM quarterly on required local 25% match.
- Coordinate engagement of MHMP Planning Team.
- Conduct & document public outreach.
- > Participate in completion of key assignments for plan update
- Coordinate with county staff & other key stakeholders to obtain
- information.
- Assist in timely review of draft document.
- Facilitate completion of local adoptions.

Local 25% Match

EM's will be responsible to track and submit local match documentation to HSEM on a quarterly basis.

Notes:

>EM's are provided with a "Master Match Tracking" Excel Workbook to document match MHMP activities, participants, and amount accrued.

- >Bonnie will assist with local match tracking on several task items.
- Regular reminders & guidance will be provided on tracking match.

MHMP Planning Team

In addition to jurisdictional participation, the plan must provide documentation of an **opportunity for stakeholders to be involved** in the current planning process. The MHMP Planning Team should include:

- 1. Local & Regional Agencies involved in hazard mitigation
- 2. Agencies that have the authority to regulate development
- 3. Neighboring communities (counties, tribes)
- Representatives of businesses, academia, and other private organizations
 Representatives of nonprofit organizations, including community-based organizations that work with/provide support to underserved communities and socially vulnerable populations

Key Tasks

- Develop Jurisdictional Contact List.
- Hold & document Planning Team Meeting #1 & Meeting #2.

Public Outreach

The plan update must document how the public was given the opportunity to be involved in the planning process and how their feedback was incorporated into the plan.

- Collect feedback on local-level concerns & mitigation actions.
- Use of local/social media, websites & community bulletin boards.
- Other outreach (i.e., attendance at City Council mtgs)
- Must include underserved communities and vulnerable populations within the planning area.

Key Tasks

- Distribute & document News Release #1 (start of plan)
- Distribute & document News Release #2. (public review of plan)
 Conduct additional public outreach (i.e., County Fair, other events)

Hazard Risk Assessment and Vulnerability Analysis

The U-Spatial@UMD Team will work closely with each EM and key departments to provide information as needed.

Key Tasks

- Review and contribute to critical infrastructure inventory.
- >Identify specific, local-level impacts and vulnerabilities.
- Identify if and how risk priorities have changed since the last plan.
- >Identify any factors (i.e., new development) that may increase the community's vulnerability to natural hazard events.
- Review social vulnerability factors.

Key Task Assignments

Bonnie Hundrieser will coordinate with each EM and participating cities on key task assignments that will provide information required for the plan update.

Key Tasks

- Complete Plans in Place Checklist.
- Complete Capabilities Assessment for Mitigation.
- Conduct Past Mitigation Action Review.
- Coordinate Local Mitigation Survey (LMS) Forms.
- NFIP Status Information and documentation program compliance

Mitigation Action Charts

Bonnie Hundrieser will also coordinate development of draft 5year jurisdictional Mitigation Action Charts (MACs) for the county and each participating city jurisdiction.

Key Tasks

- Conduct local-level development of MACs.
- Facilitate & document jurisdictional MAC review.
- Hold Planning Team Mtg. #2 for any additional feedback.
- > Complete final MAC revisions.

Draft Plan Review

The U-Spatial@UMD Team will work with each EM to conduct a review of the draft MHMP and provide an opportunity for public review & comment on the plan.

Key Tasks

- EM review of initial draft plan > Revisions made as needed.
- Distribute News Release #2 public review & comment period.
- EM coordination of review by county & key stakeholders.
- Posting of draft plan online with comment form
- Documentation and incorporation of public feedback

Plan Submission

The draft MHMP will be submitted to HSEM and FEMA for review & approval. Timing for review & approval is generally within 1-2 months.

Key Steps

- U-Spatial@UMD will submit the draft plan & Plan Review Tool (PRT) to HSEM.
- HSEM will submit the draft plan & PRT to FEMA reviewer.
- FEMA may respond with requests for revisions > U-Spatial@UMD to address revisions and resubmit plan.
- FEMA will send a letter of Approval Pending Adoption (APA status)

Plan Adoption

After FEMA has provided APA status, the county and all participating cities must formally adopt the plan.

Notes

- Good jurisdictional participation will facilitate local adoptions.
- Adoption of the plan is required for HMA grant program eligibility.
- Example adoption resolutions are provided for county and city adoption. Townships may elect to adopt (not required).
- Resolutions are incorporated into the final MHMP (PDF) by the Emergency Manager or included as hard copies.

Plan format and delivery

"Next Gen" - MN Hazard Mitigation Plans

•

PDF

document

ArcGIS Hub

(website)

companion

- Contains almost all required elementsNo mapping
- Community outreach/input remains the same
- Includes appendices with jurisdictional outreach

Interactive maps and content

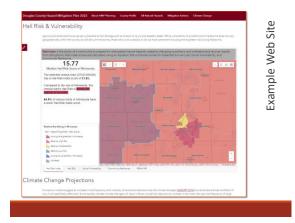
- Simple, concise explanations and highlights
- Multiple ways to navigate the content
- Links to PDF components and document
- Public input form on site







Example Web Site



Timeline Overview

- ≻18-Month total timeline (June 2022 December 2023)
- Most plans take 14-18 months.
- Staggering of plans will be required to complete update of risk assessments, research of hazard histories, etc. for each jurisdiction.
- >Many tasks occur concurrently, others must be done in succession.
- Work is expedited at the pace by which Emergency Managers complete tasks with Bonnie Hundrieser.

Possible timelin	e for your plan	Red includes county action items
Stage 1 Tasks (4-5 months)	June – November 2022	HMP kickoff meeting/webinar with U-Spatial@UMD Develop jurisdictional contact list for MHMP planning team Disseminate & document News Release #1 Hold & document Planning Team Meeting #1 Complete Plans & Programs in Place Checklist Complete Capabilities Assessment to address natural hazards Conduct a Past Mitigation Action Review from prior plan Complete Local Mitigation Surveys Revisit prioritization of natural hazards that pose risk Assist U-Spatia@UMD with provision of key data Complete Local Withgation Surveys
Stage 2 Tasks (4-6 months)	December 2022 – May 2023	Develop 5-year Jurisdictional Mitigation Action Charts Hazus hazard risk assessment for flooding Develop hazard profiles for each natural hazard Complete county profile sections and maps Complete Draft Plan
Stage 3 Tasks (2-3 months)	June – August 2023	EM review of Draft Plan Hold & document Planning Team Meeting #2 Finalize Mitigation Action Charts Disseminate & document New Release #2 EM coordination of plan review by stakeholders
Stage 4 Tasks (2-3 months)	September - November 2023	Post-public review revisions made to plan (as necessary) Draft Plan sent to HSEM for review & approval Draft Plan sent to FEMA for review & approval

Next Steps

U-Spatial@UMD Team members will coordinate each EM to commence work on several tasks that will take place over the next several months.

Notes:

- We are sensitive to the workloads of EM's.
- All information requests or assignments are in prepared form.
- Please communicate your availability to complete/not complete work.
- Plans most expired are priority; however, EM's with completed tasks move up in the que for plan development.

Questions?

What questions do you have for U-Spatial@UMD or HSEM about the MHMP update process?

Contact Information

Stacey Stark, MS, GISP

U-Spatial@UMD

slstark@d.umn.edu 218-726-7438

Example Plans: https://z.umn.edu/hazardmitigation

Kittson County HMP Update JURISDICTIONAL CONTACT LIST

COUNTY CONTACTS

Name	Title	Phone	Email
Scot Olson	Emergency Management	218-843-2113	solson@co.kittson.mn.us
	Director / Environmental		
	Services Director		
Matt Vig	Sheriff	218-843-3535	mvig@so.co.kittson.mn.us
David Thompson	KCSO Chief Deputy	218-261-1064	dthompson@so.co.kittson.mn.us
Brian Buhmann	County Administrator	218-843-2670	bbuhmann@co.kittson.mn.us
Andrea Weleski	County Engineer	218-843-2686	aweleski@co.kittson.mn.us
Dana Olson	County Supervisor	218-843-1273	dolson@co.kittson.mn.us
Kathleen Johnson	Social Services Director	218-843-2689	kjohnson@co.kittson.mn.us
Lane Nordin	Zoning Administrator	218-853-2114	Inordin@co.kittson.mn.us
Heather Bruley	County Assessor	218-843-3615	hbruley@co.kittson.mn.us
Nathan Kraulik	District 1 Commissioner	218-843-3499	nkraulik@co.kittson.mn.us
Theresia Gillie	District 2 Commissioner	218-843-5149	tgillie@co.kittson.mn.us
Loren Younggren	District 3 Commissioner	218-843-1145	lyounggren@co.kittson.mn.us
Leon Olson	District 4 Commissioner	218-988-2706	leon.caribou@gmail.com
Ryan Swenson	District 5 Commissioner	218-843-3499	rswenson@co.kittson.mn.us
Jeanna Kujava	Public Health Nurse	218-988-2347	Jeanna.kujava@kmhc.net

CITY CONTACTS

CITY OF DONALDSON (POP. 20)

Name	Title	Phone	Email
Lisa Kraulik	Clerk	218-466-2681	klkraulik@invisimax.com
Lonnie Thompson	Mayor	218-466-2321	

CITY OF HALLOCK (POP. 906)

Name	Title	Phone	Email
Aimee Sugden	Clerk/Treasurer	218-843-2737	asugden@hallockmn.org
Kendra Johnson	Office Clerk	218-843-2737	kjohnson@hallockmn.org
Mike Docken	Police Chief	218-843-3434	mdocken@so.co.kittson.mn.us
Kevin Klein	Fire Chief	218-843-1288	Kevinklein5187@gmail.com
Naomi Larson	Hallock Ambulance	218-843-1532	naomi.larson@kmhc.net

CITY OF HALMA (POP. 58)

Name	Title	Phone	Email
Rhonda Davis	Clerk	218-265-2084	mngram5@gmail.com
Shane Olson	Mayor	218-265-2849	Shane.Olson@digikey.co

CITY OF HUMBOLDT (POP. 40)

Name	Title	Phone	Email
Brad Hemmes	Clerk	218-379-3153	Brad.hemmes@candmford.com
Rick Bakken	Mayor	218-843-1604	

CITY OF KARLSTAD (POP. 707)

Name	Title	Phone	Email
Garnette Hanson	Clerk	218-436-2178	karlstadcity@wiktel.com
Dale Nelson	Mayor	218-689-7872	dnelson@co.kittson.mn.us
Jeremy Folland	Fire Chief	218-689-8336	jfolland@wiktel.com
Ashley Turner	Karlstad Ambulance, Tri-	218-436-3161	triems@wiktel.com
	County EMS		

CITY OF KENNEDY (POP. 171)

Name	Title	Phone	Email
Melissa Woinarowicz	Clerk/Treasurer	218-674-4142	office@kennedymn.org
Earl Mattson	Mayor	218-843-5182	
Aaron Kirkeby	Fire Chief	701-899-3215	aaronkirkeby@hotmail.com

CITY OF LAKE BRONSON (POP. 179)

Name	Title	Phone	Email
Sandra Lund	Clerk	218-754-2710	lakebronson@wiktel.com
Ryan Rector	Mayor	701-552-2153	
Bobby Schmeideberg	Fire Chief	218-988-2824	lbfd@wiktel.com

CITY OF LANCASTER (POP. 324)

Name	Title	Phone	Email
Carol Johnson	Clerk/Treasurer	218-762-6472	lancastercity@wiktel.com
Michael Olson	Mayor	218-843-5033	
Casey Fakken	Fire Chief	218-843-1499	lancasterfiredepartment@gmail.com

CITY OF ST. VINCENT (POP. 56)

Name	Title	Phone	Email
Faith Khalaf	Clerk	701-331-4600	faithkhalaf@yahoo.com
Evan Herberg	Mayor	701-521-0585	eherberg@ghmail.com

TOWNSHIP CONTACTS

Name of Township	Name & Title	Phone	Email
Arveson Township	Darwyn Anderson, Clerk	218-289-1169	andersond@wiktel.com
Cannon Township	Melinda Coffield, Clerk	218-762-4161	mcoffield@lancaster.k12.mn.us
Caribou Township	Carolyn Weleski, Clerk	218-762-5311	bcweleski@yahoo.com
Clow Township	Mark Wiese, Clerk	218-843-5143	mkw@invisimax.com
Davis Township	Tom Dowdle, Clerk	218-843-1230	Tom.dowdle@plantpioneer.com
Deerwood Township	Todd Fossell, Clerk	218-689-2875	July_314ever@yahoo.com
Granville Township	Jeff Deere, Clerk	218-843-1295	Jeffdeere60@gmail.com
Hallock Township	Ron Anderson, Supervisor	218-843-1529	ron75@frontier.com
Hampden Township	Lee Pemberton, Clerk	218-843-2074	lpemberton1968@yahoo.com
Hazelton Township	Richard Lambert, Clerk	218-689-8246	rl7503635@gmail.com

Hill Township	William Dykhuis,	218-379-3213	wamdykhuis@outlook.com
	Supervisor		
Jupiter Township	Ryan Schwenzfeier, Clerk	218-843-1394	ryanschwenzfeier@gmail.com
Norway Township	Kayla Anderson, Clerk	218-265-3456	Kayla.klegstad2@gmail.com
Pelan Township	Wayne Cummins, Chair	218-436-2575	No emails available for Pelan Officials
Percy Township	Judy Bronson, Clerk	218-754-7971	gbronson@wiktel.com
Poppleton Township	Nikki Larson, Clerk	218-988-2424	Nlarson9@live.com
Richardville Township	Joe Olsonowski,	218-843-1374	joeheidi@wiktel.com
	Supervisor		
St. Joseph Township	Tom Miesner, Chair	218-762-4141	thm@wiktel.com
St. Vincent Township	Roger Loer, Chair	218-843-1498	rjloer@hotmail.com
Skane Township	Mark Lundberg, Clerk	218-674-4392	Hammer1755@hotmail.com
South Red River	Terry Ososki, Clerk	218-843-5046	terryo@invisimax.com
Township			
Springbrook Township	Justin Dagen, Chair	218-686-1734	jdagen@wiktel.com
Svea Township	Jeff Mortenson, Clerk	218-686-7443	mort.jcm@gmail.com
Tegner Township	Robert Gunnarson, Chair	218-988-2020	robert.gunnarson@gmail.com
Teien Township	Jason Sobolik, Chair	218-843-1595	Jasonjames_s@hotmail.com
Thompson Township	Greg Snare, Supervisor	218-988-2579	Greg.snare@icloud.com

OTHER STAKEHOLDER CONTACTS

LOCAL & REGIONAL AGENCIES INVOLVED IN HAZARD MITIGATION

Name of Agency /	Name & Title	Phone	Email
Organization			
MN Homeland Security &	Andrew Tepfer, HSEM	651-387-9997	andrew.tepfer@state.mn.us
Emergency Management	Region 3 Regional	cell	
	Program Coordinator	651-201-7491 Office	
Kittson Soil & Water	Jamie Osowski, District	218-843-2619	jamie.osowski@mnswcd.org
Conservation District (SWCD)	Manager	Ext. 3	
Natural Resources	Kathy Fillmore, Customer	218-463-1862	Kathy.fillmore@usda.gov
Conservation Service (NRCS)	Service Team Lead	(Roseau Office)	
USDA Rural Development	Angie Bokovoy, Area	218-751-1942,	angela.bokovoy@usda.gov
Community Programs	Specialist	Ext. 116	
Northwest Regional	Jennifer Olson,	218-745-9114	jolson@nwrdc.org
Development	Emergency Operations		
Commission	Planning Director		
MnDOT District 2	J.T. Anderson,	218-755-6549	j.t.anderson@state.mn.us
	Transportation District		
	Engineer		
Two Rivers Watershed	Dan Money, Director	218-843-3333	dan.money@tworiverswd.com
	Tyler Coffield, District		Tyler.coffield@tworiverswd.com
	Technician		
Joe River Watershed	Marshall Hemmes, Clerk	218-843-1496	mlhemmes@ruralaccess.net
Middle-Snake-Tamarac-	Mori Maher	218-230-5703	morteza.maher@mstrwd.org
River Watershed District	District Administrator		
Roseau River Watershed	Tracy Halstensgard,	218-242-1737	rrwd@mncable.net
District	Administrator		

United States Customs	Jonathan Turn, Chief	701-825-5829	JONATHAN.S.TURN@CBP.DHS.GOV
and Border Patrol			
Lake Bronson State Park	Tim Williams, Park Ranger	218-754-2200	lakebronson.statepark@state.mn.us
MN DNR Forestry –	Dan Carroll, Northwest	218-732-3309	Dan.Carroll@state.mn.us
Firewise Program	MN Firewise Specialist	Ext. 230	
MN DNR – Ecological and	Stephanie Klamm, Region	651-587-5448	Stephanie.Klamm@state.mn.us
Water Resources Division	1, NW Area Hydrologist		

REPRESENTATIVES OF BUSINESSES, ACADEMIA, AND OTHER PRIVATE ORGANIZATIONS

Name of Agency / Organization	Name & Title	Phone	Email
Kittson Healthcare	Adam Maus, Chief	218-843-3831,	Adam.Maus@kmhc.net
	Services Officer	Ext. 131	
American Red Cross -	Marion Jordan, Disaster	701-205-7794	Marian.jordan@redcross.org
Northwestern	Program Manager		
Minnesota/Eastern ND			
Chapter			
Salvation Army -Eastern	Cody Kill, Regional Service	701-213-3467	Cody.kill@usc.salvationarmy.org
ND/Western MN	Representative		
Salvation Army – Kittson	Jeff Hane, Director	218-843-3686	brinklaw@brinklawyers.com
County Chapter			
Kittson Memorial Health	Gabriel Mooney, Chief	218-843-3612	Gabriel.Mooney@kmhc.net
Care (Hallock Hospital)	Executive Officer		
and Assisting Living			
Karlstad Senior Living		218-436-2161	No local email found, can work through
Center			the County Public Health Nurse
PKM Electric Co-op	Karen Olson,	218-745-4711	kolson@pkmcoop.com
	Administrative Manager		
Kittson Central School	Bob Jaszczak,	218-843-3682	bjaszczak@kittson.k12.mn.us
District #2171 - Hallock	Superintendent	Ext. 223	
Lancaster School District	Nicole Thompson,	218-762-5400	nthompson@lancaster.k12.mn.us
#356 – Lancaster	Principle		
Tri-County School District	Ron Rudd,	218-436-2261	ruuron@tricounty.k12.mn.us
#2358 – Karlstad	Superintendent/Principle		
Heritage Christian School	Mark Hanson,	218-436-2144	heritage@heritagepatriots.org
- Karlstad	Administrator		
Agassiz Education Inc. –	Roger Seed, President	218-823-6822	No email found
St Vincent			

REPRESENTATIVES OF NONPROFIT ORGS, INCLUDING COMMUNITY-BASED ORGS THAT WORK WITH OR PROVIDE SUPPORT TO UNDERSERVED COMMUNITIES AND SOCIALLY VULNERABLE POPULATIONS

Name of Agency /	Name & Title	Phone	Email
Organization			
Northwest Regional	Darla Waldner, Executive	218-745-9109	darla@nwrdc.org
Development	Director		
Commission			
Northwest Minnesota	Nate Dorr, VP For	218-759-2057	nated@nwmf.org
Foundation	Advocacy and Dawn		dawng@nwmf.org
	Ganje, Director for		
	Community Philanthropy		

Disabled Adult Center	Missy Karoviak	218-754-2225	Missyk5@hotmail.com
(DAC) – Lake Bronson			
Kittson County Veterans	Wayne Jacobson,	218-843-2198	wjacobson@co.kittson.mn.us
Service Office	Veterans Service Officer		

NEIGHBORING JURISDICTIONS

Name of Jurisdiction	Name & Title	Phone	Email
Roseau County	Sue Grafstrom,	(218) 463-3375	sue.grafstrom@co.roseau.mn.us
	Emergency Management		
	Director		
Marshall County	Josh Johnston,	(218) 745-5841	josh.johnston@co.marshall.mn.us
	Emergency Management		
	Director		
Pembina County, ND	Samantha Diemert,	(701) 265-4849	sdiemert@nd.gov
	Emergency Management		
	Director		
Rural Municipality of	Pat French, Municipal	204-373-2580	Patlor29@gmail.com
Emerson/Franklin, MB,	Emergency Coordinator		
Canada			
Rural Municipality of	Brittany Fisher, Joint	204-425-3218	Inquiries@rmofstuartburn.com
Stuartburn, MB, Canada	Emergency Coordinator		

LOCAL MEDIA CONTACTS

Name of Local Media	Media Contact	Phone	Email
Kittson County Enterprise	Margie Holmgren,	218-843-2868	kce@wiktel.com
– Hallock (weekly	Managing Editor		
newspaper)			
North Star News –	Sue Anderson, Office	218-431-2151	norstar@wiktel.com
Karlstad (weekly	Assistant		
newspaper)			

Kittson County MHMP Planning Team Meeting #1 9/26/2022 - Meeting Summary & Documentation

Summary: On Monday, September 26, 2022 Kittson County Emergency Management convened key county, city, and township representatives, as well as neighboring jurisdictions and other stakeholders to participate in the 1st Planning Team Meeting for the update of the Kittson County Multi-Hazard Mitigation Plan (MHMP). The purpose of the meeting was to formally present information about the Kittson County MHMP update and to discuss key items that would inform plan development. The meeting was held via Zoom webinar video conference and was facilitated by Stacey Stark and Bonnie Hundrieser of the U-Spatial@UMD project team.

Stakeholder Invitations: Kittson County Emergency Management invited all stakeholders included on the county's MHMP Update Jurisdictional Contact List (JCL), which includes the key County Contacts, City Contacts, Township Contacts, Other Stakeholder Contacts, and Neighboring Jurisdiction Contacts identified to be invited to participate in the plan update process. Contacts were encouraged to engage additional staff or to send someone in their stead if they could not attend. A copy of the county's Jurisdictional Contact List is provided in *Appendix F Planning Team Meetings*.

Meeting Participants: A total of **19** people attended the meeting. Representation included elected departmental staff from Kittson County and the cities of Lancaster, Karlstad, and Hallock. The cities of Donaldson, Halma, Humboldt, Kennedy, Lake Bronson, and St. Vincent were unable to attend due to staff capacity. Other stakeholders, including neighboring jurisdictions, participated in the meeting. A participant list is included with this meeting summary.

Presentation Overview: The Power Point presentation covered the following items. A PDF of the presentation slides is included with this meeting summary.

- > Overview of Hazard Mitigation & the MHMP Update
- > Who the Plan Covers & Role of the Planning Team
- Review of Hazards + Overview of Risk Assessment and Vulnerability Analysis
- Update of Risk Priorities
- > Review of Mitigation Strategies & Example Actions
- > Overview of FEMA HMA grant program
- Discussion of local mitigation ideas
- > Discussion of next steps & answer your questions.

Participant Poll: At the start of the meeting participants were presented with an interactive poll asking "Have you participated in Hazard Mitigation Planning previously?" Following are the poll results:

- Yes, I have previously participated in in a hazard mitigation planning process. (5/14) 36%
- No, but I am familiar with hazard mitigation planning. (4/14) 29%
- No, and this is all new to me. (5/14) 36%

Prioritization of Natural Hazards: The planning team was presented with an overview of each of the natural hazards that were covered in the county's last plan and the risk prioritization at that time. Considerations for the current risk prioritization since the last plan was presented for each hazard, such as events recorded since the last plan, NCEI Storm Data, or known existing local vulnerabilities (i.e., number of mobile home parks). It was noted to participants that:

- Hazards deemed to be of high or moderate risk must result in mitigation actions to address them for the jurisdictions that are affected.
- Hazard prioritization may vary for jurisdictions or may not differ countywide.
- Hazards deemed to be low risk and without significant mitigation actions may be dropped from the plan. This excludes the hazard of Dam/Levee failure, which must be addressed per new FEMA guidelines, even if risk is deemed low.

Following is a chart reflecting the 2016 risk priorities for Kittson County and any changes to the current risk prioritization for the plan update. This discussion served as an introduction to updating the risk prioritization and will be followed up with further information gathered from the county and local jurisdictions during the planning process. Changes to risk prioritizations are noted in bold.

Hazard	2015 Plan	2022 Plan
Winter Storms	Moderate	High
Extreme Cold	Moderate	Moderate
Flooding	Moderate	High
Wildfire	Moderate	High
Dam/Levee Failure	Moderate	Low
Windstorms	Low	Moderate
Tornadoes	Low	Moderate
Hail	Low	Low
Lightning	Low	Low
Extreme Heat	Low	Low to Moderate
Drought	Low	Moderate
Subsidence	Low	Low
Erosion	Low	Low
Landslides	Not addressed	Moderate

Comments, Questions or Mitigation Ideas – Following are the questions, comments or mitigation ideas that were shared by participants and how they will be addressed for the plan update.

Meeting Participant	Comment, Question or Mitigation Idea Submitted	Facilitator Feedback / How to be Addressed in Plan Update
Dan Money, Two Rivers Watershed District	Regarding presentation slide on who the plan covers: "How does this apply to the four watershed districts in Kittson County?"	Bonnie Hundrieser: Clarified that key agency and organizational stakeholders are included in the planning process and may be eligible to apply for FEMA HMA grant funding. The watershed districts are an important planning partner for flood and erosion mitigation planning & projects in the county.

Meeting Participant	Comment, Question or	Facilitator Feedback / How to be
Jeanna Kujava, Kittson County Public Health Director	Mitigation Idea Submitted Regarding presentation on the hazards covered by the MHMP: Would a county wide power outages fall under non-natural hazards?	Addressed in Plan Update Stacey Stark: Clarified that power outages are not considered a natural hazard but a cascading effect from several different natural hazard events. Mitigation considerations for power outages are included in the plan, such as converting overhead powerlines to
Tom Miesner, St. Joseph Township Chair	Regarding presentation on the hazards covered by the MHMP: Is hazard notification via cell phone part of the plan? Cell coverage is very spotty in the county.	underground, or obtaining backup generators for critical facilities. Bonnie Hundrieser: Clarified that addressing improvements in emergency notification capabilities and outreach is commonly addressed in plans as an all-hazards type of mitigation concern. We include this under the strategy of "Mitigation Preparedness & Response Support".
Jeanna Kujava, Kittson County Public Health Director	Regarding presentation on the hazards covered by the MHMP: Does the plan include poor air quality such as radon as a hazard?	Stacey Stark: No, it does not as it is not listed as a natural hazard under the state plan. However, if the county wishes to address it and develop mitigation actions to address it we can work with you to do so.
Dan Money, Two Rivers Watershed District, District Administrator	Regarding discussion on prioritization of natural hazards: Suggested to move winter storms and flooding to high. Move dam failure to low as there are mitigation activities occurring that have reduced risk and the dam is on schedule to be replaced in 2023- 2024. Move landslides from low to moderate.	Stacey Stark: Noted and opened up for any further discussion. Group was in agreement. Dan Money provided extensive input from the Two Rivers Watershed District following the meeting for support of information on the WD's planning efforts related to flood mitigation.
Dan Carroll, MN DNR, NW MN Firewise Coordinator	Regarding discussion on prioritization of natural hazards: Suggested to talk to area fire chiefs for their feedback on if they consider wildland fire to be of moderate or high priority.	Scot Olson: Noted he will follow up with area Fire Chiefs to get their feedback. For now we will note wildfire as a high priority based on the data that Stacey presented for wildfire history & frequency.
Twyla Prebble, Kittson County Social Services, Account Tech.	Post-meeting inquiry to Scot Olson, EMD: Inquired on the possibility to address mitigation for extreme heat at the county fairgrounds Midway area (shelter and watering station). Also inquired on local tornado shelter options for Gilbert Olson Park.	Scot Olson: We can include extreme heat as a low to moderate priority hazard and address these considerations. For tornado safe rooms / storm shelters, we will be considering all locations in the county that should address current or desired new facilities to protect residents and visitors.

Following the discussion, participants were encouraged to fill out and return the "Mitigation Ideas" worksheet that they were provided with to Kittson County Emergency Management to submit any specific local concerns and related mitigation ideas. The meeting concluded with an overview of next steps and estimated timeline for completion.

Attached are the following documentation items for the Kittson County MHMP Meeting #1:

- 9-26-22 Mtg. #1 Email Invitation
- 9-26-22 Mtg. #1 List of Participants
- 9-26-22 Mtg. #1 Power Point Slides
- 9-26-22 Mtg. #1 Handouts

Meeting Summary Prepared By: Bonnie Hundrieser, U-Spatial@UMD Project Team

-	
From:	Scot Olson
To:	<u>karlstadcity@wiktel.com; Dale Nelson; jfolland@wiktel.com; cityofkennedy@ruralaccess.net;</u>
	aaronkirkeby@hotmail.com; lakebronson@wiktel.com; lbfd@wiktel.com; lancastercity@wiktel.com;
	lancasterfiredepartment@gmail.com; citvofstvincentmn@gmail.com; eherberg@gmail.com;
	andersond@wiktel.com; mcoffield@lancaster.k12.mn.us; bcweleski@yahoo.com; mkw@invisimax.com;
	Tom.dowdle@plantpioneer.com; July 314ever@yahoo.com; Jeffdeere60@gmail.com; ron75@frontier.com;
	lpemberton1968@yahoo.com; rl7503635@gmail.com; wamdykhuis@outlook.com; ryanschwenzfeier@gmail.com;
	Kayla.klegstad2@gmail.com; gbronson@wiktel.com; Nlarson9@live.com; joeheidi@wiktel.com; thm@wiktel.com;
	riloer@hotmail.com; Hammer1755@hotmail.com; terryo@invisimax.com; jdagen@wiktel.com;
	mort.icm@gmail.com; robert.gunnarson@gmail.com; Jasonjames_s@hotmail.com; Greg.snare@icloud.com;
	Heather.Winkleblack@state.mn.us; Jamie.osowski@mn.nacdnet.net; Jim.schwab@mn.usda.gov;
	angela.bokovoy@usda.gov; jolson@nwrdc.org; j.t.anderson@state.mn.us; dan.money@tworiverswd.com;
	mlhemmes@ruralaccess.net; John.e.swanson@cbp.dhs.gov; lakebronson.statepark@state.mn.us;
	Dan.Carroll@state.mn.us; Stephanie.Klamm@state.mn.us; Adam.Maus@kmhc.net; Marian.jordan@redcross.org;
	Cody.kill@usc.salvationarmy.org; brinklaw@brinklawyers.com; Gabriel.Mooney@kmhc.net;
	kolson@pkmcoop.com; bjaszczak@kittson.k12.mn.us; nthompson@lancaster.k12.mn.us;
	ruuron@tricounty.k12.mn.us; heritage@heritagepatriots.org; darla@nwrdc.org; nated@nwmf.org;
	dawng@nwmf.org; Missyk5@hotmail.com; Wayne Jacobson; sue.grafstrom@co.roseau.mn.us;
	josh.johnston@co.marshall.mn.us; sdiemert@nd.gov; Patlor29@gmail.com; Inguiries@rmofstuartburn.com
Cc:	hundrieserconsulting@outlook.com
Subject:	Kittson County Multi-Hazard Mitigation Plan Update - Meeting Invitation
Date:	Wednesday, August 17, 2022 8:40:05 AM

KITTSON COUNTY

MULTI-HAZARD MITIGATION PLAN UPDATE – MEETING INVITATION

Greetings,

Your presence is requested at a virtual Planning Team Meeting for the update of the **Kittson County Multi-Hazard Mitigation Plan**. You are requested to participate in this vital meeting because you have a position of administrative or departmental responsibility within either the county, a municipal government, or are a key stakeholder related to the planning process. Emergency Managers from neighboring jurisdictions are also encouraged to attend so we may strengthen our shared mitigation efforts.

We will be holding the meeting virtually using Zoom video/phone conferencing:

Date: Monday, September 26, 2022 Time: 2:00 p.m. – 4:00 p.m. Zoom Link: <u>https://umn-private.zoom.us/webinar/register/WN_1TELVM-KRda34tDELfAGiA</u>

Please Note: You must click on the link above to register. (Ctrl+Click to follow link) When you register, you will automatically be placed on an RSVP list. Please be sure to include the name, title and representation (jurisdiction/agency) for all persons planning to attend the meeting.

About the Plan

The update of the Kittson County Multi-Hazard Mitigation Plan (MHMP) is a requirement by the State of Minnesota Department of Homeland Security & Emergency Management (HSEM) as well as the Federal Emergency Management Agency (FEMA) every 5 years. Our last plan is due for an update and our planning is currently underway. The plan addresses the natural hazards that face Kittson County and will result in the identification of mitigation actions that will help to reduce or eliminate the impact of future hazard events, such as flooding and severe winter or summer storms.

Your participation in this plan update is important for several reasons:

- 1. You will help to identify critical mitigation projects to implement at the county / municipal level, and how they can be integrated with existing plans, policies, or project efforts.
- 2. Participating jurisdictions will be eligible to apply for FEMA hazard mitigation grant funding.
- 3. Mitigation planning is necessary to keep our communities resilient against future disasters and reduce the costs of recovery.
- 4. FEMA requires documentation of how local government and key stakeholders participated in the planning process.

During this meeting we will review and prioritize the natural hazards that pose risk to Kittson County and individual communities and discuss a range of mitigation measures for local implementation. The meeting will be facilitated by personnel from U-Spatial at the University of MN Duluth who are working closely with us on this project.

We look forward to you joining us for this important meeting.

Thank you,

Scot E. Olson Emergency Management Director/Environmental Services Administrator Kittson County Courthouse 410 5th St. SE Suite #104 Hallock, MN 56728

Cell: 701-215-8399 Office: 218-843-2113 Olsone21@hotmail.com

From:	Scot Olson
To:	Scot Olson; mwilwant@so.co.kittson.mn.us; Brian Buhmann; Andrea Weleski; Dana Olson; Kathy Johnson; Lane
	Nordin; Heather Bruley; Nathan Kraulik; Theresia Gillie; Loren Younggren; leon.caribou@gmail.com; Darrel
	Johnson; Jeanna.kujava@kmhc.net; klkraulik@invisimax.com; asudgen@hallockmn.org;
	kjohnson@hallockmn.org; mdocken@so.co.kittson.mn.us; Kevinklein5187@gmail.com; mngram5@gmail.com;
	<u>Brad.hemmes@candmford.com; karlstadcity@wiktel.com; Dale Nelson; jfolland@wiktel.com;</u>
	<u>cityofkennedy@ruralaccess.net;</u> <u>aaronkirkeby@hotmail.com;</u> <u>lakebronson@wiktel.com</u> ; <u>lbfd@wiktel.com</u> ;
	<u>lancastercity@wiktel.com; lancasterfiredepartment@gmail.com; cityofstvincentmn@gmail.com;</u>
	andersond@wiktel.com; mcoffield@lancaster.k12.mn.us; bcweleski@yahoo.com; mkw@invisimax.com;
	Tom.dowdle@plantpioneer.com; July_314ever@yahoo.com; Jeffdeere60@gmail.com; ron75@frontier.com;
	lpemberton1968@yahoo.com; rl7503635@gmail.com; wamdykhuis@outlook.com; ryanschwenzfeier@gmail.com;
	Kayla.klegstad2@gmail.com; gbronson@wiktel.com; Nlarson9@live.com; joeheidi@wiktel.com; thm@wiktel.com;
	rjloer@hotmail.com; Hammer1755@hotmail.com; terryo@invisimax.com; jdagen@wiktel.com;
	mort.jcm@gmail.com; robert.gunnarson@gmail.com; Jasonjames_s@hotmail.com; Greg.snare@icloud.com;
	<u>Heather.Winkleblack@state.mn.us;</u> <u>Jamie.osowski@mn.nacdnet.net;</u> <u>Jim.schwab@mn.usda.gov;</u>
	angela.bokovoy@usda.gov; jolson@nwrdc.org; j.t.anderson@state.mn.us; Dan.Money@tworiverswd.org;
	mlhemmes@ruralaccess.net; John.e.swanson@cbp.dhs.gov; lakebronson.statepark@state.mn.us;
	Dan.Carroll@state.mn.us; Stephanie.Klamm@state.mn.us; Marian.jordan@redcross.org; Cody.kill@usc.salvationarmy.org; brinklaw@brinklawyers.com; Gabriel.Mooney@kmhc.net;
	kolson@pkmcoop.com; bjaszczak@kittson.k12.mn.us; nthompson@lancaster.k12.mn.us;
	ruuron@tricounty.k12.mn.us; heritage@heritagepatriots.org; darla@nwrdc.org; jessicay@nwmf.org;
	<u>Missyk5@hotmail.com; Wayne Jacobson; sue.grafstrom@co.roseau.mn.us; josh.johnston@co.marshall.mn.us;</u>
	sdiemert@nd.gov; Patlor29@gmail.com; Inguiries@rmofstuartburn.com
Cc:	Bonnie K Hundrieser
Subject:	Kittson County Hazard Mitigation Planning Meeting Registration
Date:	Friday, September 16, 2022 3:23:17 PM

Greetings,

This is an important reminder to please register for the upcoming Kittson County hazard mitigation planning meeting coming up on Monday, Sept. 26th. Information on how to register is provided below. Your community / organization's representation and feedback during this

meeting is critical to our plan update and meeting FEMA requirements. If you have not registered already, we hope you will do so.

Thank you, Scot

Date: Monday, September 26, 2022 Time: 2:00 p.m. – 4:00 p.m. Zoom Link: <u>https://umn-private.zoom.us/webinar/register/WN_1TELVM-KRda34tDELfAGiA</u>

Please Note: You must click on the link above to register. (Ctrl+Click to follow link) When you register, you will automatically be placed on an RSVP list. Please be sure to include the name, title and representation (jurisdiction/agency) for all persons planning to attend the meeting.

Scot E. Olson Emergency Management Director/Environmental Services Administrator Kittson County Courthouse 410 5th St. SE Suite #104 Hallock, MN 56728

Kittson County 9/26/22 MHMP Planning Team Meeting #1 List of Participants (19)

	First Name	Last Name	Organization	Job Title
1	Scot	Olson	Kittson County Emergency Management & Kittson County Environmental Services	Emergency Management Director / Environmental Services Director
2	Andrea	Weleski	Kittson County Highway Dept.	County Engineer
3	Adam	Maus	Kittson Healthcare	Chief Services Officer
4	Jeanna	Kujava	Kittson Healthcare Public Health Department	Public Health Director
5	Twyla	Preble	Kittson County Social Services	Account Technician
6	Kathy	Johnson	Kittson County Social Services (MN)	Director
7	Carol	Johnson	City of Lancaster	Clerk/Treasurer
8	Shelby	Lee	City of Karlstad	City Clerk
9	Aimee	Sugden	City of Hallock	City Administrator
10	Tom	Miesner	Saint Joseph Township	Chair
11	Nicole	Thompson	Lancaster School	Superintendent
12	Bob	Jaszczak	Kittson Central School District	Superintendent
13	Matt	Waterworth	Natural Resources Conservation Service	District Conservationist
14	Dan	Carroll	MN DNR	NW MN Firewise Coordinator
15	Paul	Konickson	MnDOT District 2	Assistant District Engineer - Operations
16	Dan	Money	Two Rivers Watershed District	District Administrator
17	Heather	Winkleblack	MN HSEM	HSEM Region 3 Regional Program Coordinator
18	Samantha	Diemert	Pembina County, North Dakota	Emergency Management Director
19	Brittany	Fisher	Rural Municipality of Stuartburn (Canada)	Assistant Chief Administrative Officer / Joint Emergency Coordinator

KITTSON COUNTY Multi-Hazard Mitigation Plan Update 2022 Planning Team Meeting #1

September 26, 2022



U-SPATIAL UNIVERSITY OF MINNESOTA DULUTH Driven to Discover

Welcome & Introductions

U-Spatial@UMD Project Leads **Kittson County Project Lead**



Bonnie Hundriese HM Planning Specialist Hundrieser Consulting LLC Scot Olson, Kittson County Emergency Management Director



Please type your name and jurisdiction in the CHAT - so others know who is here



Zoom Logistics

If you haven't yet, please type your name and jurisdiction or department in the Chat window

PLEASE REMAIN MUTED AND VIDEO OFF SO EVERYONE CAN HAVE THE BEST EXPERIENCE.

USE CHAT:



>Send a message to individuals or the presenters

Send a message to host to ask for help or ask a question that isn't for the whole group. The host is Stacey Stark

ASK TO SPEAK:

>Send a message to everyone



Meeting Purpose & Agenda

The purpose of this meeting is to formally convene the Kittson County MHMP Planning Team for a presentation of the plan update and discussion of key items.



Agenda: Overview of Hazard Mitigation & the MHMP Update

Who the Plan Covers & Role of the Planning Team

Review of Hazards + Overview of Risk Assessment and Vulnerability Analysis Review of Hazard Risk Prioritization

Review of Mitigation Strategies & Actions

Overview of FEMA HMA grant program

Discuss local mitigation ideas

Discuss next steps & answer your questions.



U-Spatial at the University of Minnesota Duluth was contracted by MN HSEM to facilitate the development of this plan and to conduct spatial analysis, mapping

and research for the plan.

Working with U-Spatial@UMD is Bonnie Hundrieser, who specializes in hazard mitigation planning.

U-SPATIAL UNIVERSITY OF MINNESOTA DULUTH

Driven to Discover

We Bring:

> Proven experience in county/tribal plan updates and State MHMP

Advanced capabilities in GIS, HAZUS, and research

Ability to expedite plan development and approval through consistent & proven approach

What is Hazard Mitigation?

Hazard Mitigation is any action taken to reduce or eliminate long term risk to people and property from natural disasters.



Hazard Mitigation Planning:

- identifies risks and vulnerabilities
- develops a plan of action built on capabilities and partnerships.
- breaks the cycle of disaster and reconstruction.
- builds stronger & more resilient communities.

MHMP Overview & Timeline

The Multi-Hazard Mitigation Plan (MHMP) is a requirement of the Federal Disaster Mitigation Act of 2000 (DMA 2000)

✓ The development of a local government plan is required in order to maintain eligibility for FEMA hazard mitigation grant programs.

- ✓ Plans must be updated every 5 years.
- Must address all jurisdictions and engage key stakeholders.
- Planning process must give an opportunity to the public to provide feedback.



Kittson County MHMP Update 2022

Last plan adopted in 2016.

The updated plan will cover a 5year window for implementation.

 Documentation of county and locallevel government participation is required for plan approval.



PRESENTER: BONNIE HUNDRIES

MHMP Planning Team

Kittson County Planning Team

- Kittson County Emergency Management
- Key County Officials & Staff
- City & Township Officials & Staff
- Neighboring Jurisdictions
- Other Related Agency or **Organizational Stakeholders**



- Participate in 2 planning team meetings.
- Assist with public outreach (2 news) releases) using websites, social media & bulletin boards.
- >Provide information to inform plan update.
- Help develop & review local mitigation action charts.
- Review the draft plan.
- Facilitate local-level adoptions.



>Natural hazards that pose risk to the county and its

jurisdictions.

- Manmade hazards are not required to be addressed (per the DMA 2000).
- Hazards that are deemed to be of low risk may be omitted from the plan.
- Hazard risk may differ in cities and the county overall.

Flooding Hail Drought Dam/Levee Extreme Lightning Failure Heat Extreme Wildfire Winter Storms Cold Windstorms Landslides Earthquakes Sinkholes & Coastal

Karst Natural hazard categories for Minnesota MHMPs.

Tornadoes

Erosion

The structure of the HMP

PDF document

Contains almost all FEMA required elements Limited Figures and Images

Summary of Hazard Identification -summaly of Hazaro Iodentification -Local mitigation survey report -Plans and Programs in Place -Plast Mitigation Action Review Status Report -Planning Team Meetings -Public Outreach and Engagement Documentation -Mitigation Actions by Jurisdiction

Website companion

Interactive maps and content
 Simple, concise explanations
 Multiple ways to navigate the content
 Links to PDF components and document
 Public input form on site



Comments and Questions?

 Interactive maps and content
 Simple, concise
 explanations
 Multiple ways to navigate
 the content
 Links to PDF components
 and document
 Public input form on site



Hazard Risk Assessment and Vulnerability Analysis

The U-Spatial@UMD Team will work closely with the county and each city to provide information as needed.

- Inventory of critical infrastructure.
- Identify specific, local-level impacts and vulnerabilities.
- Identify any factors (i.e., new development) that may increase the community's vulnerability.
- Review social vulnerability factors.
- Identify if and how risk priorities have changed since the last plan. (Increased / Decreased)

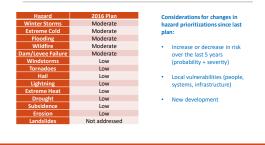






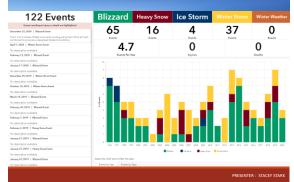
April, 2022 roadway collapse PRESENTER : STACEY STARK

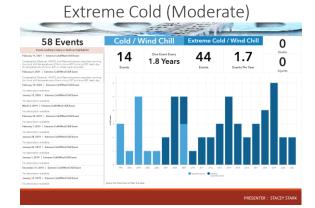
Kittson County Review of Hazard Risk Prioritization



PRESENTER : STACEY STAR

Winter Storms (Moderate)





Flooding (Moderate)

- A potential economic loss model is run for 1% annual chance flood
- Use of FEMA Flood Insurance Rate Map (FIRM)
- Use of property values from county assessor
- Critical Infrastructure locations from GIS and EM input



Wildfire/Wildland Fire (Moderate)

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Windstorms, Lightning, Hail (Low)

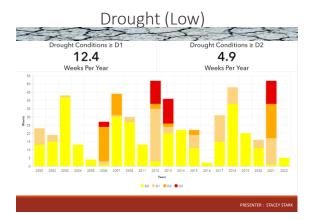


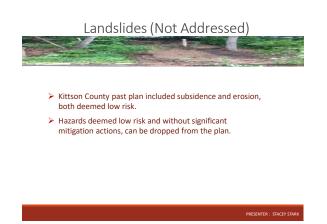
Tornadoes (Low)



Extreme Heat (Low)







Dam Failure (Moderate)



- One High Hazard dam in Kittson County: The Lake Bronson Dam on the Two Rivers South Branch.
- > All other dams in the county are low hazard dams.
- Must state any mitigation actions if the county wishes to be eligible for the High Hazard Potential Dam Rehabilitation Grant Program

Kittson County Review of Hazard Risk Prioritiza

Review of Hazard Risk Prioritization

Hazard	2015 Plan	2022 Plan
Winter Storms	Moderate	
Extreme Cold	Moderate	
Flooding	Moderate	
Wildfire	Moderate	
Dam/Levee Failure	Moderate	
Windstorms	Low	
Tornadoes	Low	
Hail	Low	
Lightning	Low	
Extreme Heat	Low	
Drought	Low	
Subsidence	Low	
Erosion	Low	
Landslides	Not addressed	

High to moderate priority hazards will be addressed in the 2022 plan update and will require mitigation actions



Mitigation Strategies & Example Actions



See Handout: Mitigation Strategies & Action Types

PRESENTER : BONNIE HUNDRIESER

#1 - Local Planning & Regulations

These actions include government authorities, policies, or codes that influence the way land and buildings are developed and built.





EXAMPLES:

 Establishing & enforcing floodplain & shoreland ordinances

Participating in the NFIP

 Developing stormwater management plans

 Long-term planning for infrastructure improvements

 Working with MHP operators to be in compliance with State statutes for storm shelters & evacuation plans.

PRESENTER : BONNIE HUNDRIESE

#2 – Structure and Infrastructure Projects

These actions involve modifying existing structures to protect them from a hazard or remove them from a hazard area. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.





EXAMPLES: • Property acquisitions (repetitive

- flooding/erosion risk)

 Structural elevations (flooding)
- Constructing floodwalls & retaining walls
- Improving culverts, roads & bridges
- Green infrastructure projects
- Tornado Safe Rooms
- Utility undergrounding

PRESENTER : BONNIE HUNDRIESE



Are eligible for FEMA HMA grant funding

 Include new construction or retrofit of existing facilities

Should be considered for vulnerable areas such as MHPs, schools, parks, and campgrounds



Warba, MN mobile home park tornado safe room, FEMA grant funded





1st School-based tornado safe room, Wadena, MN (2012) following June 17, 2010 tornado damage

ESENTER : BONNIE HUNDRIESER

5

Utility Undergrounding

- Converting vulnerable overhead powerlines to underground is eligible for FEMA HMA grant funding.
- Include municipal and rural electric cooperatives in the planning process to document participation and establish eligibility for potential future project applications.



PRESENTER : BONNIE HUNDRIE

#3 – Natural Systems Protection

These are actions that minimize damage and losses and also preserve or restore the functions of natural systems.





EXAMPLES:

- Slope management for soil stabilization
- Shoreland restoration
- "Living Fences" for wind/erosion reduction or snow buffer
- Forest management for wildfire mitigation (fuels reduction)
- Flood diversion and storage

#4 – Education & Awareness Programs

These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them.

CodeRED

eao

EXAMPLES:

- Promoting sign-up for emergency notifications Educate on use of outdoor warning sirens and response
- Participation in the NWS Severe Weather Awareness Weeks
- SKYWARN Storm Spotter Training
- Turn Around Don't Drown

Promoting personal & family emergency preparedness (i.e. Ready.gov)

PRESENTER : BONNIE HUND

#5 – Mitigation Preparedness & Response Support

These are actions that help to protect life and property prior to, during, and immediately after a disaster or hazard event.

These activities are typically not considered mitigation, but support reduction of the effects of damaging events.



EXAMPLES:

- Emergency Operations Plans
- Outdoor warning sirens
- Shelter Planning
- Flood fight plans & equipment Training local elected officials in
- EM responsibilities
- Obtaining backup generators for critical facilities

FEMA HMA Grant Program

WEATHER GO

See Handout: HSEM HMA Grants Program Overview

✓ All applicants must have or be covered under an approved MHMP.

Eligible applicants: State & local governments, Tribal Communities, and certain private non-profit organizations or institutions.

✓ Cost Share: Federal 75%/ Applicant 25%

Eligible projects must be identified in the local MHMP.

Examples of Eligible Activities

- Property Acquisition/Relocation
- Tornado Safe Room Construction
- Minor Localized Flood Risk Reduction
- Green Infrastructure
- Infrastructure Retrofits
- Soil Stabilization
- Wildfire Mitigation
- 5% Initiative Projects

Mitigation Ideas

See Handout: Mitigation Ideas Worksheet

Do you have questions or ideas to share about local hazards, vulnerabilities and proposed mitigation actions?



Oct. 2022 - Feb., 2023

Capabilities Assessment, and Past Mitigation Action Review Completion of EM LMS Forms (County/City) Tasks and Local Local hazard identification & risk

- prioritization.
- Lead: Bonnie Hundrieser

Mitigation Survey

(LMS) Forms

Local vulnerabilities (critical infrastructure, populations or assets)

EM Tasks: Plans in Place Form,

- Local-level capabilities (programs, polices, staff, funding)
- Identify local mitigation projects.

Next Steps

(Concurrent) Oct. 2022 – Feb., 2023

Critical Infrastructure Inventory, Risk Assessment and **Vulnerability Analysis**

Lead: U-Spatial

Updated risk assessment & vulnerability analysis

- > Update of CI inventory
- > Development of hazard profiles (history, probability,
- impacts of climate change) GIS mapping
- HAZUS analysis



Local Mitigation

Lead: Bonnie Hundrieser

Action Charts

March – May, 2023

- County and City-Specific MACs **Development of** 5-year window
 - Mitigation actions must address high and moderate risk hazards.
 - Mitigation actions must incorporate local capabilities & planning mechanisms.

Include projects eligible for FEMA HMA grant funding.



Hold Planning Team Meeting #2

Lead: U-Spatial & Bonnie Hundrieser

June – July, 2023

- Planning Team Mtg. #2 Outreach to stakeholders
- Presentation of risk assessment & vulnerability analysis, hazards , prioritizations
- Overview of Mitigation Action Charts and FEMA grant funding.
- Finalize draft MACs



EM review of Draft

& Comment Period

Lead: U-Spatial & Bonnie Hundrieser

Plan + Public Review

Aug. - Sept., 2023

EM initial review of draft plan

News Release #2 Disseminate & document news release by county and jurisdictions.

Document and incorporate feedback as appropriate.



Draft Plan Submission to HSEM & FEMA for Approval

Lead: U-Spatial



Draft plan will be submitted first to HSEM and then to FEMA for approval for meeting all Federal requirements.

- Typically requires 1-2 months. > APA letter
- EM coordination of adopting resolutions and submission to HSEM
- Final Letter of Approval

Questions?

What questions do you have for U-Spatial@UMD about the MHMP update process?

Contact Information

Stacey Stark, MS, GISP U-Spatial@UMD

slstark@d.umn.edu

218-726-7438



438 21 **.TIAI**

UNIVERSITY OF MINNESOTA DULUTH Driven to Discover Bonnie Hundrieser, Consultant Hundrieser Consulting LLC hundrieserconsulting@outlook.com 218-343-3468

2020



ESENTER : STACEY STARK

Mitigation Strategies & Action Types

Following are the five types of mitigation strategies that will be used in the update of the Multi-Hazard Mitigation Plan with examples of related mitigation actions. Minnesota HSEM recommends the use of these mitigation strategies to be in alignment with the State plan and those recommended by FEMA. The first four strategies listed are taken from the FEMA publications *Local Mitigation Planning Handbook* (2013) and *Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards* (2013). The fifth strategy type was determined by Minnesota HSEM for use within the state.

These strategies will provide the framework for identification of new jurisdictional-level mitigation actions for implementation over the next 5-year planning cycle.

Mitigation Strategy	Description	Example Mitigation Actions
Local Planning and Regulations	These actions include government authorities, policies, or codes that influence the way land and buildings are developed and built.	 Comprehensive plans Land use ordinances Planning and zoning Building codes and enforcement Floodplain ordinances NFIP Community Rating System Capital improvement programs Open space preservation Shoreline codes Stormwater management regulations and master plans Mobile home park compliance for storm shelters
Structure and Infrastructure Projects	These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.	 Property Acquisitions and elevations of structures in flood prone areas Utility undergrounding Structural retrofits (i.e., metal roofs) Floodwalls and retaining walls Detention and retention structures Culvert Installation/Modification Roads & Bridge risk reduction Safe Room (New construction or facility retrofit) Green Infrastructure Methods Many of these types of actions are projects eligible for funding through FEMA HMA grant programs.

Mitigation Strategy	Description	Example Mitigation Actions
Natural Systems Protection	These are actions that minimize damage and losses and also preserve or restore the functions of natural systems.	 Soil stabilization for sediment and erosion control Floodplain and Stream corridor restoration Slope management Forest management (defensible space, fuels reduction, sprinkler systems) Conservation easements Wetland restoration and preservation Aquifer Storage & Recovery Flood Diversion and Storage Many of these types of actions are projects eligible for funding through FEMA HMA grant programs.
Education and Awareness Programs	These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady or Firewise Communities. Although this type of mitigation reduces risk less directly than structural projects or regulation, it is an important foundation. A greater understanding and awareness of hazards and risk among local officials, stakeholders, and the public is more likely to lead to direct actions that support life safety and lessen property damage.	 Radio or television spots Websites with maps and information Social media outreach Promotion of sign-up for emergency warnings Real estate disclosure Promotion of NFIP insurance to property owners Presentations to school groups or neighborhood organizations Mailings to residents in hazard- prone areas. NWS StormReady Program Firewise Communities Some of these types of actions may be projects eligible for funding through the FEMA HMA "5 Percent Initiative Program".
Mitigation Preparedness and Response Support	This is a State of Minnesota mitigation strategy with the intent of covering emergency preparedness actions that protect life and property prior to, during, and immediately after a disaster or hazard event. These activities are typically not considered mitigation, but support reduction of the effects of damaging events.	 Emergency Operations Plan Flood fight plans and preparedness measures Dam emergency action plans Emergency Warning Systems (i.e., CodeRed, warning sirens) Generator backup power NWS Storm Spotter Training Training and education for local elected officials and key partners.



HAZARD MITIGATION ASSISTANCE

Hazard Mitigation Assistance (HMA) grant programs provide funding with the aim to reduce or eliminate risk to property and loss of life from future natural disasters. HMA programs are typically a 75%/25% cost share program. The federal share is 75% of total eligible project reimbursement costs. The local applicant is responsible for 25% of the project costs. The amount of HMGP funds availability is based on a percent of Public Assistance provided by Federal Emergency Management Agency (FEMA).

- <u>Hazard Mitigation Grant Program</u> (HMGP) funds assists in implementing long-term hazard mitigation measures following a Presidential major disaster declaration.
- <u>Pre-Disaster Mitigation</u> (PDM) provides funds for hazard mitigation planning and projects on an annual basis.
- <u>Flood Mitigation Assistance</u> (FMA) provides funds on an annual basis to reduce or eliminate risk of flood damage to buildings that are insured under the National Flood Insurance Program (NFIP).

Who is eligible for grant funding?

All applicants must have or be covered under an approved Hazard Mitigation Plan. Eligible applicants include: State and local governments; certain private non-profit organizations or institutions; and Tribal Communities

What types of projects can be funded?

All projects must be eligible, technically feasible, and cost-effective. All projects are subject to environmental and cultural resource review. Examples of projects include:

- Advance Assistance may be used to develop mitigation strategies and obtain data, including for environmental and historic preservation compliance considerations, and develop complete project applications in a timely manner.
- Aquifer Storage and Recovery (ASR) projects serve primarily as a drought management tool, but can also be used to reduce flood risk and restore aquifers that have been subject to overdraft. The concept is to capture water when there is an abundant supply, store the water in subsurface aquifers, and recover water from the storage aquifer when needed. Storing water underground can help protect it from pollutants, evaporation, and weather events.
- **Floodplain and stream restoration** (FSR) projects are used primarily to reduce flood risk and erosion by providing stable reaches, and may also mitigate drought impacts. FSR projects restore and enhance the floodplain, stream channel and riparian ecosystem's natural function. They provide base flow recharge, water supply augmentation, floodwater storage, terrestrial and aquatic wildlife habitat, and recreation opportunities by restoring the site's soil, hydrology and vegetation conditions that mimic pre-development channel flow and floodplain connectivity.
- **Flood Diversion and Storage** (FDS) projects often are used to reduce flood risk, but also can be used to mitigate drought and improve ecosystem services. These projects involve diverting floodwaters from a stream, river, or other body of water into a conduit such as a canal, pipe, or wetland and storing them in an above-ground storage facility. Water is then slowly released, reducing flood risk.

- **Green Infrastructure Methods** are a sustainable approach to natural landscape preservation and storm water management. Include in *eligible hazard mitigation activities* as well as provide additional ecosystem benefits. Ecosystem-based approach to replicate a site's pre-development, natural hydrologic function. Benefits include: Increase water supply, improved water quality, can be scaled to size and designed to fit site conditions.
- **Property Acquisition and Structure Demolition or Relocation** The voluntary acquisition of an existing at-risk structure and the underlying land, and conversion of the land to open space through the demolition or relocation of the structure. The property must be deed-restricted in perpetuity to open space uses to restore and/or conserve the natural floodplain functions.
- **Retrofit Flood-Prone Residential Structures** are changes made to an existing structure to reduce or eliminate the possibility of damage to that structure from flooding, erosion, or other hazards. Examples of this mitigation are primarily elevation of structures above flood levels and floodwalls.
- **Safe Room Construction** Safe room construction projects are designed to provide immediate lifesafety protection for people in public and private structures from tornado and severe wind events. Includes retrofits of existing facilities or new safe room construction projects, and applies to both single and dual-use facilities
- **Minor Localized Flood Reduction Projects** Projects to lessen the frequency or severity of flooding and decrease predicted flood damages, such as the installation or up-sizing of culverts, and stormwater management activities, such as creating retention and detention basins. These projects must not duplicate the flood prevention activities of other Federal agencies and may not constitute a section of a larger flood control system.
- Infrastructure Retrofit Measures to reduce risk to existing utility systems, roads, and bridges.
- **Soil Stabilization** Projects to reduce risk to structures or infrastructure from erosion and landslides, including installing geotextiles, stabilizing sod, installing vegetative buffer strips, preserving mature vegetation, decreasing slope angles, and stabilizing with rip rap and other means of slope anchoring. These projects must not duplicate the activities of other Federal agencies. *New tools for Bioengineered Shoreline Stabilization, Bioengineered Streambank Stabilization.*
- Wildfire Mitigation Projects to mitigate at-risk structures and associated loss of life from the threat of future wildfire through: Defensible Space for Wildfire, Application of Ignition-resistant Construction and Hazardous Fuels Reduction. *New tool for Bioengineered Wildfire Mitigation.*
- **HMGP only 5 Percent Initiative Projects** These projects, which are only available pursuant to an HMGP disaster, provide an opportunity to fund mitigation actions that are consistent with the goals and objectives of approved mitigation plans and meet all HMGP program requirements, but for which it may be difficult to conduct a standard Benefit-Cost Analysis (BCA) to prove cost-effectiveness.

How do I apply?

Start by submitting a Notice of Interest, available on HSEMs website at: <u>https://dps.mn.gov/divisions/hsem</u>

Where can I obtain further information?

For additional information about the HMA grant program, you can refer to the FEMA website: <u>http://www.fema.gov/hazard-mitigation-assistance</u>

MITIGATION IDEAS WORKSHEET

Please use the following worksheet to list your ideas for mitigation actions that you feel will help reduce the impact of future natural hazard events to the county or to your jurisdiction. Following the MHMP planning team meeting, please return this form via email to your county Emergency Manager to submit your feedback.

NAME OF JURISDICTION:

CONTACT INFORMATION

Name: Phone: Email:

Hazard	Description of Concern or Proposed Mitigation Action

Kittson County HMP Planning Team Meeting #2 October 2, 2023 - Meeting Summary & Documentation

Summary: On Monday, October 2, 2023, Kittson County Emergency Management convened key county, city, and township representatives, as well as neighboring jurisdictions and other stakeholders to participate in the 2nd and final Planning Team Meeting for the update of the Kittson County Hazard Mitigation Plan (HMP). The purpose of the meeting was to formally convene the Kittson County HMP Planning Team for a presentation on the draft plan and discussion of key items prior to public review and submission of the plan to HSEM and FEMA. The meeting was held via Zoom webinar video conference and was facilitated by Stacey Stark and Bonnie Hundrieser of the U-Spatial@UMD project team.

Stakeholder Invitations: Kittson County Emergency Management invited all stakeholders included on the county's HMP Update Jurisdictional Contact List (JCL), which includes the key County Contacts, City Contacts, Township Contacts, Other Stakeholder Contacts, and Neighboring Jurisdiction Contacts identified to be invited to participate in the plan update process. Contacts were encouraged to engage additional staff or to send someone in their stead if they could not attend. A copy of the county's Jurisdictional Contact List is provided in *Appendix F Steering Committee Meetings*.

Meeting Participants: A total of **15** people attended the meeting. Representation included departmental staff from Kittson County and the cities of Hallock and Karlstad. The cities of Donaldson, Halma, Humboldt, kennedy, Lake Bronson, Lancaster, and St. Vincent were not available to participate and were not in attendance. Other stakeholders, including neighboring jurisdictions, participated in the meeting. A participant list is included with this meeting summary.

Presentation Overview: The PowerPoint presentation covered the following items about the process and content of the plan update. A PDF of the presentation slides is included with this meeting summary.

- Meeting Purpose and Agenda
- About the Project Team
- Overview of Plan Update
- Who the Plan Covers
- Who Needs to Participate
- Overview of the Structure of the HMP (Website and PDF)
- Prioritization of Natural Hazards
- Review of Risk Assessment Factors and Hazard Profiles
- Overview of Mitigation Action Charts and FEMA HMA Grant Funding
- Review of Mitigation Strategies and Actions
- Open Discussion (Comments and Questions)
- Discussion of Next Steps & answer your questions

The opening PowerPoint presentation covered a re-cap of key points about the plan update, a review of the Risk Assessment & Vulnerability Analysis, an overview of FEMA Hazard Mitigation Assistance (HMA) grant funding; an overview of how mitigation actions are developed and an overview of the jurisdictional Mitigation Action Charts (MACs). Following the presentation, participants were provided with an opportunity to review and discuss the county and local mitigation action charts. This discussion period offered a facilitated opportunity for participants to consider any changes or new additions to the MACs prior to completion of the draft plan for public review.

Discussion Notes: Following is an overview of key discussion points, questions, or mitigation ideas that were shared during the presentation and how they will be incorporated into the plan update.

Meeting Participant	Comment, Question or Mitigation Idea Submitted	Facilitator Feedback / How to be Addressed in Plan Update
Jeanna Kujava, Kittson Healthcare Public Health Director	In regards to hazard profiles for natural hazards: Where are events such as Train Derailment, Anthrax, Chemical Spill/Threats captured? Also where are events such as Civil Unrest (gas pipeline), illegal border crossings captured?	Stacey Stark/Bonnie Hundrieser: FEMA's requirement for the hazard mitigation plans is to conduct a risk assessment of natural hazards; non natural hazards are not required for the plan update. Planning for these sorts of hazards is covered under other planning measures by the county and other agencies.
Dan Money, Two Rivers Watershed District Administrator	Regarding Flooding: Have you included any information regarding the projects that have been built? i.e., flood control projects in Kennedy and Hallock, Watershed District projects, ring dikes that have been constructed, etc? Also, consider local and regional flood control initiatives like the "Long Term Flood Solutions" report, which has goals for floodwater storage?	Stacey Stark – If you have information we can reference that would be helpful. I can also follow up with you to see if there is anything else you want to make sure we have addressed. Dan Money: Provided TRWD website <u>www.tworiverswd.com</u>
Tim Williamson, MN DNR Parks Manager	Regarding review of the Kittson County HMP website pages: Can a link to this page be emailed to everyone after this meeting?	Stacey Stark: This is the draft website. We welcome your review and feedback on it: https://kittson-county-hmp- umn.hub.arcgis.com/
Dan Money, Two Rivers Watershed District Administrator	Regarding FEMA HMA grant funding program and future applications for eligible projects: If we have a proposed project, do you want details?	Bonnie Hundrieser: Yes, if you have a proposed project for a possible future grant application that you would like to include in the Kittson County MAC that would be helpful to know. I will follow up with you after the meeting.
Tom Miesner, Saint Joseph Township Chairman	Regarding Public Education & Awareness Programs: Communication is essential during an emergency event, cell phone coverage continues to be spotty at best in my area. what can be done	Bonnie Hundrieser: This is indeed a common problem throughout rural areas. It's recommended to follow up with Kittson County Emergency Management and the cell providers that may be able to increase cell tower coverage.

Meeting Conclusion: The meeting concluded with an overview and timeline of the upcoming next steps for public review and submission of the draft plan to HSEM and FEMA for final review and approval.

Attached are the following documentation items for the Kittson County HMP Meeting #2:

- Meeting Invitation to Stakeholders
- List of Meeting Participants
- PowerPoint Presentation Slides
- Information Handouts

Meeting Summary Prepared By: Bonnie Hundrieser, U-Spatial@UMD Project Team

From:	<u>Scot Olson</u>
To:	Scot Olson; mwilwant@so.co.kittson.mn.us; Brian Buhmann; Andrea Weleski; Dana Olson; Kathy Johnson; Lane
	Nordin; Heather Bruley; Nathan Kraulik; Theresia Gillie; Loren Younggren; leon.caribou@gmail.com; Darrel
	Johnson; Jeanna.kujava@kmhc.net; klkraulik@invisimax.com; asugden@hallockmn.org;
	kjohnson@hallockmn.org; mdocken@so.co.kittson.mn.us; Kevinklein5187@gmail.com; mngram5@gmail.com;
	Brad.hemmes@candmford.com; karlstadcity@wiktel.com; Dale Nelson; jfolland@wiktel.com;
	<u>cityofkennedy@ruralaccess.net; aaronkirkeby@hotmail.com; lakebronson@wiktel.com; lbfd@wiktel.com;</u>
	lancastercity@wiktel.com; lancasterfiredepartment@gmail.com; faithkhalaf@yahoo.com; eherberg@ghmail.com;
	andersond@wiktel.com; mcoffield@lancaster.k12.mn.us; bcweleski@yahoo.com; mkw@invisimax.com;
	Tom.dowdle@plantpioneer.com; July_314ever@yahoo.com; Jeffdeere60@gmail.com; ron75@frontier.com;
	Ipemberton1968@yahoo.com; rI7503635@gmail.com; wamdykhuis@outlook.com; ryanschwenzfeier@gmail.com;
	Kayla.klegstad2@gmail.com; gbronson@wiktel.com; Nlarson9@live.com; joeheidi@wiktel.com; thm@wiktel.com;
	rjloer@hotmail.com; Hammer1755@hotmail.com; terryo@invisimax.com; jdagen@wiktel.com;
	mort.jcm@gmail.com; robert.gunnarson@gmail.com; Jasonjames_s@hotmail.com; Greg.snare@icloud.com;
	Heather.Winkleblack@state.mn.us; jamie.osowski@mnswcd.org; Kathy.fillmore@usda.gov;
	angela.bokovoy@usda.gov; jolson@nwrdc.org; j.t.anderson@state.mn.us; dan.money@tworiverswd.com;
	tyler.coffield@tworiverswd.com; Bonnie K Hundrieser; morteza.maher@mstrwd.org; rrwd@mncable.net;
	John.e.swanson@cbp.dhs.gov; lakebronson.statepark@state.mn.us; Dan.Carroll@state.mn.us;
	Stephanie.Klamm@state.mn.us; Adam.Maus@kmhc.net; Marian.jordan@redcross.org;
	Cody.kill@usc.salvationarmy.org; brinklaw@brinklawyers.com; Gabriel.Mooney@kmhc.net;
	kolson@pkmcoop.com; bjaszczak@kittson.k12.mn.us; nthompson@lancaster.k12.mn.us;
	ruuron@tricounty.k12.mn.us; heritage@heritagepatriots.org; Tepfer, Andrew (DPS); darla@nwrdc.org;
	nated@nwmf.org; dawng@nwmf.org; Missyk5@hotmail.com; Wayne Jacobson; sue.grafstrom@co.roseau.mn.us;
•	josh.johnston@co.marshall.mn.us; sdiemert@nd.gov; Patlor29@gmail.com; Inquiries@rmofstuartburn.com
Cc:	hundrieserconsulting@outlook.com; Tepfer, Andrew (DPS)
Subject:	Kittson County Hazard Mitigation plan meeting invitation
Date:	Friday, August 25, 2023 1:33:00 PM

KITTSON COUNTY **HAZARD MITIGATION PLAN UPDATE – MEETING INVITATION**

Greetings,

Your presence is requested at the **2nd Planning Team Meeting** for the update of the **Kittson County Hazard Mitigation Plan (HMP).** You are requested to participate in this vital meeting because you have a position of administrative or departmental responsibility within either the county, a municipal government, or are a key stakeholder related to the planning process. Emergency Managers from neighboring jurisdictions are also encouraged to attend so we may strengthen our shared mitigation efforts. This meeting will be the final planning meeting for the HMP update process.

We will be holding the meeting virtually using Zoom webinar:

Date:	Monday, October 2, 2023
Time:	10:00 a.m. – 11:30 a.m.
Zoom Link:	https://umn-private.zoom.us/webinar/register/WN_okvGYesyQZCXiaZvR3vorQ

Please click on the link above to register. (Ctrl + click to follow link)

The purpose of this meeting is to provide an overview of the plan and interactive website, including a review of the updated risk assessment for natural hazards that affect the county. We will also discuss the Mitigation Action Charts that will be specific to Kittson County and each city, as well as funding opportunities available under the FEMA Hazard Mitigation Assistance grant program.

Your participation in this meeting and feedback on the draft plan is important to us. The draft

Kittson County HMP is nearing completion and will be ready for review by planning team members and the public this fall.

When you register, you will automatically be placed on an RSVP list. If you are not able to attend, please consider sending another representative in your stead.

Thank you, Scot

Scot E. Olson Emergency Management Director/Environmental Services Administrator Kittson County Courthouse 410 5th St. SE Suite #104 Hallock, MN 56728

Cell: 701-215-8399 Office: 218-843-2113 Olsone21@hotmail.com

Kittson County 10/2/23 HMP Planning Team Meeting #2 List of Meeting Participants **(15)**

	Name	Organization	Job Title
1		Kittson County Highway	
	Andrea Weleski	Department	Engineer
2		Kittson County Highway	
	Dana Olson	Department	Maintenance Foreman
3	Kathy Johnson	Kittson County	Interim Administrator/Director KCSS
4		Kittson Healthcare Public	Kittson Healthcare Public Health
4	Jeanna Kujava	Health Dept.	Director
5	Shelby Fossell	City of Karlstad	Clerk
6	Aimee Sugden	City of Hallock	City Administrator
7	Judy Bronson	Percy Township	Clerk
8	Tom Miesner	Saint Joseph Township	Chair
9			Emergency Operations Planning
9	Jennifer Olson	Northwest RDC	Director
10	Bonnie		
10	Hasbrouck	USDA-NRCS	District Conservationist
11	Jamie Osowski	Kittson SWCD	District Manager
12	Dan Money	Two Rivers WD	Administrator
13	Tim Williamson	MNDNR	Park Manager
14	Andrew Tepfer	MN HSEM	Region 3 RPC
15	Sue Grafstrom	Roseau County	Roseau County HSEM Director

KITTSON COUNTY Hazard Mitigation Plan Update 2023 Planning Team Meeting #2

October 2, 2023



U-SPATIAL UNIVERSITY OF MINNESOTA DULUTH Driven to Discover

Welcome & Introductions



Ronnie Hundriese HM Planning Specialist Hundrieser Consulting LLC

Kittson County Project Lead Scot Olson, Kittson County Emergency Management Director



Please type your name and jurisdiction in the CHAT - so others know who is here



Zoom Logistics

If you haven't yet, please type your name and jurisdiction or department in the Chat window

PLEASE REMAIN MUTED AND VIDEO OFE SO EVERYONE CAN HAVE THE BEST EXPERIENCE.

USE CHAT:



>Send a message to individuals or the presenters

Send a message to host to ask for help or ask a question that isn't for the whole group The host is Stacey Stark

ASK TO SPEAK:

Send a message to everyone



Meeting Purpose & Agenda

The purpose of this meeting is to formally convene the Kittson **County HMP Planning** Team for a presentation on the draft plan and discussion of key items prior to public review and submission of the plan to HSEM and FEMA.



Agenda

- > Welcome & Introductions Recap of Key HMP Points
- > Overview of Website HMP
- Review of Risk Assessment & Vulnerability Analysis
- Overview of FEMA HMA Funding and Mitigation Action Charts
- Review & Feedback
- Next Steps

Overview of Plan Update

Kittson County is updating its Hazard Mitigation Plan (HMP) to fulfill a state & federal requirement. The plan must be updated every 5 years. The last plan was adopted in 2016.

The purpose of the plan is to identify & assess natural hazards that pose risk to the county and its jurisdictions and develop long-term strategies and mitigation actions that will help to reduce or eliminate the impact of future hazard or disaster events.





This is a multi-jurisdictional plan that covers Kittson County, including all cities and townships within the county.

The plan also takes into consideration the needs and concerns of other stakeholders such as schools, watershed districts, and agencies or organizations involved in mitigation or services to vulnerable populations within the county.





Who Needs to **Participate**

Key Stakeholders

It is required to provide an opportunity for local county & municipal government, related agency stakeholders and neighboring jurisdictions to participate in the plan update.

2 Planning Team Meetings Local Mitigation Survey Provision of key data

MAC Review & Feedback Review of Draft Plan



The Public

It is required to provide an opportunity for the public to learn about the plan update, ask questions and provide input that may be incorporated into the plan update.

2 News Releases

Outreach conducted via websites, social media, bulletin boards, and local media Online public review &

comment period for draft plan

HMP products

PDF document:

- Contains almost all FEMA required elements
- Limited figures & Images Summary of Hazard Identification
- Local Mitigation Summary Report
- · Plans & Programs in Place . Past Mitigation Action
- Review · Planning Team Meetings
- . Public Outreach & Engagement Documentation

Jurisdiction

- Multiple ways to navigate the content Mitigation Actions by
 - Links to PDF components and document Public input form on site .

KITTSON COUNTY

Website companion:

Interactive maps and context

Simple, concise explanations

2013 4. 4

1

Hazards Risk Assessment

- Validates the prioritization of hazards
- Provides probability and severity of future events as possible
- Identifies vulnerable populations and structures at risk as possible
- Considers variable jurisdictional vulnerability
- Informs Mitigation Actions in the HMP



Prioritization of Hazards for Kittson County

Prioritization of hazards by the Kittson County planning team included consideration of

≻ Probability and Severity of natural hazard events (risk)

≻Observed increase or decrease in risk since last plan

> Jurisdictional variations in risk (i.e., local vulnerabilities, changes in development)

Hazard	2023 Priority
Winter Storms	High
Flooding	High
Wildfire	High
Windstorms	Moderate
Tornadoes	Moderate
Extreme Cold	Moderate
Extreme Heat	Moderate
Drought	Moderate
Landslides	Moderate
Hail	Low
Lightning	Low
Dam/Levee Failure	Low

Comments and Questions?

Overview of Mitigation Action Charts

Mitigation Action Charts identify activities to reduce future risk to natural hazard events. MAC's include:

- Hazard of Priority
- Mitigation Strategy
- Mitigation Action
- Status/Priority/Timeframe
- Responsibility
- Comments on Implementation and Integration
- Possible Funding



Mitigation Action Charts are the end product of the HMP.

Mitigation actions are specific.

Mitigation actions address known vulnerabilities.

Mitigation actions utilize capabilities to reduce risk.

Eligible project activities must be identified for future FEMA HMA Grants!

FEMA HMA Grant Funding

- All applicants must be covered by an approved HMP
- Cost share: Federal 75%, Applicant 25%
- Projects must address risk reduction.
- Eligible projects must be identified in the plan of action.



Example Eligible Activities

Property Acquisition (flooding/erosion) Tornado Safe Rooms (new/retrofit) Infrastructure Retrofits (utility systems,

roads & bridges) Wildfire Mitigation

Soil Stabilization

Flood Risk Reduction

Green Infrastructure

Other projects difficult to conduct a standard BCA

PRESENTER: BONNIE H

Local Planning & Regulations

Kittson County Examples:

 Enrollment in the NFIP and enforcement of county and local floodplain ordinances.

 Participation in regional One Watershed, One Plan (1W1P) and partnership projects

 Working with mobile home parks to be in compliance with Minnesota State statutes for storm shelters & evacuation plans.

 Permitting for new development and adhering to MN state building codes to reduce impacts of severe weather to structures.







PRESENTER: BONNIE HUNDRIESER

Structure & Infrastructure Projects

Kittson County Examples:

- Installation of new outdoor warning sirens
- Construction of safe rooms / storm shelters
- Burying powerlines to reduce power failure
- Conducting property buyouts for flooding
- Addressing road, bridge, culvert, and drainage ditch improvements to reduce localized flood risks
- Protection of vulnerable critical infrastructure such as lift stations, WWTPs, Fire Halls





Kittson County Examples:

 Conduct vegetation management along roads to reduce the risk of downed trees and branches resulting from severe storms. (County, Local, Electric Coop)

Other examples:

- Planting Living Snow Fences to reduce snow drifting
- Installing Rain Gardens to reduce impacts of high rain events







Mitigation Preparedness &

Kittson County Examples:

 Acquire generators for backup power of critical infrastructure and key facilities

Response Support

- Update of county EOP
- Conduct local and regional shelter planning
- Preparation for extended power outages and evacuation of vulnerable populations.
- Testing of outdoor warning sirens.
- Participate in regional EM planning,
- training, and exercising







PRESENTER: BONNIE HUNDRIESER

Education & Awareness Programs

Kittson County Examples:

- Promoting sign-up for the county's emergency notification system and EM Facebook page.
- Providing presentations and information on preparedness at schools, special facilities, and public events.
- Participation in the NWS Severe Weather Awareness Weeks and SKYWARN Storm Spotter Training
- Outreach to vulnerable populations



Comments and Questions?



MAC Review, EM Review of Draft Plan and Public Review & Comment Period



Fall 2023

Following Planning Team Mtg. #2

- Jurisdictional MAC Review
- EM review of draft plan
- Public review & comment period (News Release #2)
- Document public outreach
- Incorporate public feedback as appropriate.

PRESENTER: BONNIE HUNDRIESER



Draft Plan Submission to HSEM & FEMA, Plan Approval, and Collection of Adopting Resolutions

Winter 2023

Draft plan will be submitted first to HSEM and then to FEMA for approval for meeting all Federal requirements.

> Typically requires 1-2 months.

APA letter

EM coordination of adopting resolutions from each city.

SENTER: BONNIE HUNDRIE

Questions?

What questions do you have for U-Spatial@UMD about the draft HMP or next steps ?

Contact Information

Stacey Stark, MS, GISP

U-Spatial@UMD

slstark@d.umn.edu 218-726-7438

U-SPATIAL

HUNDRIESER CONSULTING LLC

Bonnie Hundrieser, HM Planner

Hundrieser Consulting LLC

hundrieserconsulting@outlook.com

218-343-3468

UNIVERSITY OF MINNESOTA DULUTH Driven to Discover

PRESENTER: STACEY ST



HAZARD MITIGATION ASSISTANCE

Hazard Mitigation Assistance (HMA) grant programs provide funding with the aim to reduce or eliminate risk to property and loss of life from future natural disasters. HMA programs are typically a 75%/25% cost share program. The federal share is 75% of total eligible project reimbursement costs. The local applicant is responsible for 25% of the project costs. The amount of HMGP funds availability is based on a percent of Public Assistance provided by Federal Emergency Management Agency (FEMA).

- <u>Hazard Mitigation Grant Program</u> (HMGP) funds assists in implementing long-term hazard mitigation measures following a Presidential major disaster declaration.
- <u>Pre-Disaster Mitigation</u> (PDM) provides funds for hazard mitigation planning and projects on an annual basis.
- <u>Flood Mitigation Assistance</u> (FMA) provides funds on an annual basis to reduce or eliminate risk of flood damage to buildings that are insured under the National Flood Insurance Program (NFIP).

Who is eligible for grant funding?

All applicants must have or be covered under an approved Hazard Mitigation Plan. Eligible applicants include: State and local governments; certain private non-profit organizations or institutions; and Tribal Communities

What types of projects can be funded?

All projects must be eligible, technically feasible, and cost-effective. All projects are subject to environmental and cultural resource review. Examples of projects include:

- Advance Assistance may be used to develop mitigation strategies and obtain data, including for environmental and historic preservation compliance considerations, and develop complete project applications in a timely manner.
- Aquifer Storage and Recovery (ASR) projects serve primarily as a drought management tool, but can also be used to reduce flood risk and restore aquifers that have been subject to overdraft. The concept is to capture water when there is an abundant supply, store the water in subsurface aquifers, and recover water from the storage aquifer when needed. Storing water underground can help protect it from pollutants, evaporation, and weather events.
- **Floodplain and stream restoration** (FSR) projects are used primarily to reduce flood risk and erosion by providing stable reaches, and may also mitigate drought impacts. FSR projects restore and enhance the floodplain, stream channel and riparian ecosystem's natural function. They provide base flow recharge, water supply augmentation, floodwater storage, terrestrial and aquatic wildlife habitat, and recreation opportunities by restoring the site's soil, hydrology and vegetation conditions that mimic pre-development channel flow and floodplain connectivity.
- **Flood Diversion and Storage** (FDS) projects often are used to reduce flood risk, but also can be used to mitigate drought and improve ecosystem services. These projects involve diverting floodwaters from a stream, river, or other body of water into a conduit such as a canal, pipe, or wetland and storing them in an above-ground storage facility. Water is then slowly released, reducing flood risk.

- **Green Infrastructure Methods** are a sustainable approach to natural landscape preservation and storm water management. Include in *eligible hazard mitigation activities* as well as provide additional ecosystem benefits. Ecosystem-based approach to replicate a site's pre-development, natural hydrologic function. Benefits include: Increase water supply, improved water quality, can be scaled to size and designed to fit site conditions.
- **Property Acquisition and Structure Demolition or Relocation** The voluntary acquisition of an existing at-risk structure and the underlying land, and conversion of the land to open space through the demolition or relocation of the structure. The property must be deed-restricted in perpetuity to open space uses to restore and/or conserve the natural floodplain functions.
- **Retrofit Flood-Prone Residential Structures** are changes made to an existing structure to reduce or eliminate the possibility of damage to that structure from flooding, erosion, or other hazards. Examples of this mitigation are primarily elevation of structures above flood levels and floodwalls.
- **Safe Room Construction** Safe room construction projects are designed to provide immediate lifesafety protection for people in public and private structures from tornado and severe wind events. Includes retrofits of existing facilities or new safe room construction projects, and applies to both single and dual-use facilities
- **Minor Localized Flood Reduction Projects** Projects to lessen the frequency or severity of flooding and decrease predicted flood damages, such as the installation or up-sizing of culverts, and stormwater management activities, such as creating retention and detention basins. These projects must not duplicate the flood prevention activities of other Federal agencies and may not constitute a section of a larger flood control system.
- Infrastructure Retrofit Measures to reduce risk to existing utility systems, roads, and bridges.
- **Soil Stabilization** Projects to reduce risk to structures or infrastructure from erosion and landslides, including installing geotextiles, stabilizing sod, installing vegetative buffer strips, preserving mature vegetation, decreasing slope angles, and stabilizing with rip rap and other means of slope anchoring. These projects must not duplicate the activities of other Federal agencies. *New tools for Bioengineered Shoreline Stabilization, Bioengineered Streambank Stabilization.*
- Wildfire Mitigation Projects to mitigate at-risk structures and associated loss of life from the threat of future wildfire through: Defensible Space for Wildfire, Application of Ignition-resistant Construction and Hazardous Fuels Reduction. *New tool for Bioengineered Wildfire Mitigation.*
- **HMGP only 5 Percent Initiative Projects** These projects, which are only available pursuant to an HMGP disaster, provide an opportunity to fund mitigation actions that are consistent with the goals and objectives of approved mitigation plans and meet all HMGP program requirements, but for which it may be difficult to conduct a standard Benefit-Cost Analysis (BCA) to prove cost-effectiveness.

How do I apply?

Start by submitting a Notice of Interest, available on HSEMs website at: <u>https://dps.mn.gov/divisions/hsem</u>

Where can I obtain further information?

For additional information about the HMA grant program, you can refer to the FEMA website: <u>http://www.fema.gov/hazard-mitigation-assistance</u>

Mitigation Strategies & Action Types

Following are the five types of mitigation strategies that will be used in the update of the Multi-Hazard Mitigation Plan with examples of related mitigation actions. Minnesota HSEM recommends the use of these mitigation strategies to be in alignment with the State plan and those recommended by FEMA. The first four strategies listed are taken from the FEMA publications *Local Mitigation Planning Handbook* (2013) and *Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards* (2013). The fifth strategy type was determined by Minnesota HSEM for use within the state.

These strategies will provide the framework for identification of new jurisdictional-level mitigation actions for implementation over the next 5-year planning cycle.

Mitigation Strategy	Description	Example Mitigation Actions
Local Planning and Regulations	These actions include government authorities, policies, or codes that influence the way land and buildings are developed and built.	 Comprehensive plans Land use ordinances Planning and zoning Building codes and enforcement Floodplain ordinances NFIP Community Rating System Capital improvement programs Open space preservation Shoreline codes Stormwater management regulations and master plans Mobile home park compliance for storm shelters
Structure and Infrastructure Projects	These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.	 Property Acquisitions and elevations of structures in flood prone areas Utility undergrounding Structural retrofits (i.e., metal roofs) Floodwalls and retaining walls Detention and retention structures Culvert Installation/Modification Roads & Bridge risk reduction Safe Room (New construction or facility retrofit) Green Infrastructure Methods Many of these types of actions are projects eligible for funding through FEMA HMA grant programs.

Mitigation Strategy	Description	Example Mitigation Actions
Natural Systems Protection	These are actions that minimize damage and losses and also preserve or restore the functions of natural systems.	 Soil stabilization for sediment and erosion control Floodplain and Stream corridor restoration Slope management Forest management (defensible space, fuels reduction, sprinkler systems) Conservation easements Wetland restoration and preservation Aquifer Storage & Recovery Flood Diversion and Storage Many of these types of actions are projects eligible for funding through FEMA HMA grant programs.
Education and Awareness Programs	These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady or Firewise Communities. Although this type of mitigation reduces risk less directly than structural projects or regulation, it is an important foundation. A greater understanding and awareness of hazards and risk among local officials, stakeholders, and the public is more likely to lead to direct actions that support life safety and lessen property damage.	 Radio or television spots Websites with maps and information Social media outreach Promotion of sign-up for emergency warnings Real estate disclosure Promotion of NFIP insurance to property owners Presentations to school groups or neighborhood organizations Mailings to residents in hazard- prone areas. NWS StormReady Program Firewise Communities Some of these types of actions may be projects eligible for funding through the FEMA HMA "5 Percent Initiative Program".
Mitigation Preparedness and Response Support	This is a State of Minnesota mitigation strategy with the intent of covering emergency preparedness actions that protect life and property prior to, during, and immediately after a disaster or hazard event. These activities are typically not considered mitigation, but support reduction of the effects of damaging events.	 Emergency Operations Plan Flood fight plans and preparedness measures Dam emergency action plans Emergency Warning Systems (i.e., CodeRed, warning sirens) Generator backup power NWS Storm Spotter Training Training and education for local elected officials and key partners.

Appendix G – Public Outreach & Engagement Documentation

Kittson County MHMP News Release #1 Record of Public Input & Incorporation

Overview: On **August 3, 2022**, Kittson County Emergency Management put out a news release titled "**Public Input Wanted as County Updates Multi-Hazard Mitigation Plan**" to announce the start of the county's Multi-Hazard Mitigation Plan. The news release provided information on the purpose and content of the plan, who the plan covers, stakeholders involved in the plan update and examples of hazard mitigation activities. Kittson County used the news release to gather feedback from residents and businesses from across the county to incorporate into the plan, inviting feedback to the following:

- What are the natural hazards you feel pose the greatest risk to your community?
- What concerns do you have, and what sorts of mitigation actions or projects do you feel would help to reduce the damages of potential future events for your personal property, your community, or the County as a whole?

The public was strongly encouraged contact Kittson County Emergency Management to submit comments, concerns, or questions regarding natural disasters and potential mitigation actions to be included into the plan update process. The public was also able to post comments electronically on county or city Facebook sites where the news release was posted.

Distribution: The news release was sent via email to the county's MHMP Jurisdictional Contact List, which includes the names, titles, phone numbers, and email addresses of key stakeholders to be engaged in the MHMP update, including County Contacts, City Contacts, Township Contacts, Other Stakeholder Contacts, and Neighboring Jurisdiction Contacts. (A copy of the Jurisdictional Contact List can be found in Appendix F). The news release was additionally sent to local media contacts with a request to carry the news release.

Postings: Attached is documentation of the news release postings by Kittson County, participating jurisdictions, local media, and other stakeholders. Cities and townships were encouraged to help share the news release locally by posting it on their websites, social media, or community bulletin boards.

Public Input & Incorporation:

Following is a record of public responses to the news release and how their input will be incorporated into the plan update, and if not relevant to be addressed, why.

No Public Input: Kittson County Emergency Management and local jurisdictions did not receive any public input following News Release #1.

From:	Scot Olson
To:	Scot Olson; mwilwant@so.co.kittson.mn.us; Brian Buhmann; Andrea Weleski; Dana Olson; Kathy Johnson; Lane
	Nordin: Heather Bruley; Nathan Kraulik; Theresia Gillie; Loren Younggren; leon.caribou@gmail.com; Darrel
	Johnson; Jeanna.kujava@kmhc.net; klkraulik@invisimax.com; asugden@hallockmn.org;
	kjohnson@hallockmn.org; mdocken@so.co.kittson.mn.us; Kevinklein5187@gmail.com; mngram5@gmail.com;
	<u>Brad.hemmes@candmford.com; karlstadcity@wiktel.com; Dale Nelson; jfolland@wiktel.com;</u>
	<u>cityofkennedy@ruralaccess.net; aaronkirkeby@hotmail.com; lakebronson@wiktel.com; lbfd@wiktel.com;</u>
	lancastercity@wiktel.com; lancasterfiredepartment@gmail.com; cityofstvincentmn@gmail.com;
	eherberg@gmail.com; andersond@wiktel.com; mcoffield@lancaster.k12.mn.us; bcweleski@yahoo.com;
	mkw@invisimax.com; Tom.dowdle@plantpioneer.com; July_314ever@yahoo.com; Jeffdeere60@gmail.com;
	ron75@frontier.com; lpemberton1968@yahoo.com; rl7503635@gmail.com; wamdykhuis@outlook.com;
	ryanschwenzfeier@gmail.com; Kayla.klegstad2@gmail.com; gbronson@wiktel.com; Nlarson9@live.com;
	joeheidi@wiktel.com; thm@wiktel.com; rjloer@hotmail.com; Hammer1755@hotmail.com; terryo@invisimax.com; jdagen@wiktel.com; mort.jcm@gmail.com; robert.gunnarson@gmail.com; Jasonjames_s@hotmail.com;
	<u>Greg.snare@icloud.com; Heather.Winkleblack@state.mn.us; Jamie.osowski@mn.nacdnet.net;</u>
	Jim.schwab@mn.usda.gov; angela.bokovoy@usda.gov; jolson@nwrdc.org; j.t.anderson@state.mn.us;
	dan.money@tworiverswd.com; mlhemmes@ruralaccess.net; John.e.swanson@cbp.dhs.gov;
	lakebronson.statepark@state.mn.us; Dan.Carroll@state.mn.us; Stephanie.Klamm@state.mn.us;
	Marian.jordan@redcross.org; Cody.kill@usc.salvationarmy.org; brinklaw@brinklawyers.com;
	Gabriel.Moonev@kmhc.net; kolson@pkmcoop.com; bjaszczak@kittson.k12.mn.us;
	nthompson@lancaster.k12.mn.us; ruuron@tricounty.k12.mn.us; heritage@heritagepatriots.org;
	darla@nwrdc.org; jessicay@nwmf.org; Missyk5@hotmail.com; Wayne Jacobson;
	sue.grafstrom@co.roseau.mn.us; josh.johnston@co.marshall.mn.us; sdiemert@nd.gov; Patlor29@gmail.com;
	Inquiries@rmofstuartburn.com
Cc:	Bonnie K Hundrieser; Winkleblack, Heather (DPS)
Subject:	Kittson County Multi-Hazard Mitigation Plan update/news release
Date:	Wednesday, August 3, 2022 9:59:37 AM
Attachments:	HMP Newsrelease.pdf

Kittson County News Release

Greetings,

Kittson County Emergency Management is commencing work on the update of the Kittson County Multi-Hazard Mitigation Plan (MHMP). Attached is a news release for your information.

Your assistance is requested to post this news release in order to help notify the public about the plan update and have an opportunity to provide feedback:

Participation by all cities is required in order to help fulfill required documentation to FEMA for the plan update. Townships, businesses, and other agencies or organizations are also encouraged to participate to help reach out to the public.

INSTRUCTIONS:

Please post this news release using the outreach methods best available to you (your website, Facebook, community bulletin boards). We welcome as many of ways of posting that you can cover.

- **Electronic Postings** If you are posting to a website and/or Facebook page, please send me an email with information on the <u>date, location, and website link</u> of the posting. We will need to get a screenshot of the posting for documentation.
- **Hardcopy Postings** If you are posting it as a printed hardcopy in a visible location such as City Hall, Post Office or a Community Center, please send me the <u>date and location</u> of the posting. No photo is required.

The timely return of your posting documentation is appreciated. We will be working to wrap this up before the end of August.

I look forward to your participation in the Kittson County MHMP update.

If you have any questions, please let me know.

Thank you,

Scot

Scot E. Olson Emergency Management Director/Environmental Services Administrator Kittson County Courthouse 410 5th St. SE Suite #104 Hallock, MN 56728

Cell: 701-215-8399 Office: 218-843-2113 Olsone21@hotmail.com

From:	Scot Olson
To:	Margie Holmgren; North Star Newspaper
Cc:	Bonnie K Hundrieser
Subject:	Kittson County Hazard Mitigation Plan update RFP
Date:	Wednesday, August 3, 2022 10:04:27 AM
Attachments:	HMP Newsrelease.pdf

Hi Margie and Sue, can you please run this news release in an upcoming issue of the paper? Any questions, please give me a call. Thanks, Scot

Scot E. Olson Emergency Management Director/Environmental Services Administrator Kittson County Courthouse 410 5th St. SE Suite #104 Hallock, MN 56728

Cell: 701-215-8399 Office: 218-843-2113 Olsone21@hotmail.com



KITTSON COUNTY NEWS RELEASE

August 3, 2022

Public Input Wanted as Kittson County

Updates Multi-Hazard Mitigation Plan

Kittson County residents, business owners, nonprofit members, and community leaders now have an organized opportunity to share how severe weather events impact their property and lives. There is also an opportunity to share their ideas on how to reduce the impact in the future.

The Kittson County Office of Emergency Management is working with U-Spatial at the University of Minnesota Duluth to update the county's Multi-Hazard Mitigation Plan (MHMP). The plan assesses the natural hazards that pose risk to the county, such as tornadoes, straight line winds, ice storms, blizzards, wildfire, flooding, and extreme temperatures and identifies ways to minimize the damage of future events. As the county works to update the plan, it wants to hear from the public.

The Kittson County MHMP is a multi-jurisdictional plan that covers Kittson County, including the cities of Donaldson, Hallock, Halma, Humboldt, Karlstad, Kennedy, Lake Bronson, Lancaster, and St. Vincent. The Kittson County MHMP also incorporates the concerns and needs of townships, school districts, and area agencies or organizations participating in the plan. The plan will be updated by a planning team made up of representatives from county departments, local municipalities, school districts and other key stakeholders.

"Hazard mitigation planning is a central part of our emergency management program," said Scot Olson, Kittson County Emergency Management Director. "Understanding the natural hazards that can cause serious impact to our communities and taking action to reduce or eliminate the impact of future disasters makes us more resilient. Hazard mitigation helps us to break the cycle of damage and repair caused by things like flooding, ice storms, and severe wind events that can damage property, stress economies, and threaten life safety in our county."

Examples of hazard mitigation include:

• improvement of roads and culverts that experience repetitive flooding

- construction of safe rooms at campgrounds, public parks, mobile home parks or schools to protect lives in the event of tornados or severe wind events
- burying powerlines that may fail due to heavy snow, ice, or windstorms
- ensuring timely emergency communication to the public through warning sirens and mass notification systems
- conducting public awareness and education campaigns to help people be prepared to take safe action before, during, or following a hazard event.

Some mitigation activities may be eligible for future FEMA Hazard Mitigation Assistance grant funding.

Public input is an essential part of the plan update. As part of the planning process, Kittson County is seeking feedback from residents and businesses from across the county to incorporate into the plan:

- What are the natural hazards you feel pose the greatest risk to your community?
- What concerns do you have, and what sorts of actions or projects do you feel would help to reduce the damages of potential future events for your personal property, your community, or the county as a whole?

Comments, concerns, or questions regarding natural disasters and potential mitigation actions to be included into the plan update process should be submitted to Kittson County Emergency Management by phone or email. Comments may also be submitted on the Kittson County Sheriff's Office Facebook page where this news release will be posted.

There will be additional opportunities for public feedback throughout the planning process. A draft of the plan will be made available for public review prior to submission of the plan to the State of Minnesota. Future news releases will be shared with the media to notify the public of these opportunities.

The Federal Disaster Mitigation Act of 2000 (DMA 2000) requires counties to update their plan every 5 years to maintain eligibility for FEMA's Hazard Mitigation Assistance (HMA) grant programs.

Contact

Scot Olson Kittson County Emergency Management Director Phone: 218-843-2113

Email: solson@co.kittson.mn.us

Kittson County HMP News Release #1 – August 3, 2022 Chart Documentation of News Release Postings

Jurisdiction or Agency	Posting Representative	Date & Location of News Release Posting
Kittson County	Scot Olson, Kittson County	8/3/22, Kittson County website, Sheriff's Office
,	Emergency Management	Facebook page.
	Director	
City of Donaldson	Lisa Kraulik, City Clerk	8/17/22, City Hall bulletin board
City of Hallock	Aimee Sugden, City Clerk	8/8/22, City Hall bulletin board, city Facebook page.
		Also included in packets for City Council meeting.
City of Halma	Ronda Davis, City Clerk	8/17/22, City Hall and Community Center bulletin boards.
City of Humboldt	Brad Hemmes, City Clerk	8/6/22, City Hall front door and Post Office bulletin board.
City of Karlstad	Garnette Hanson, City	8/17/22, City Office bulletin board, Prime Security
	Clerk	Bank, Karlstad Community Center, and Post Office.
City of Kennedy	Melissa Woinarowicz, City	8/17/22, City Office and Post Office bulletin boards.
	Clerk/Treasurer	
City of Lake Bronson	Sandy Lund, City Clerk	8/3/22, City website and Post Office bulletin board.
City of Lancaster	Carol Johnson, City Clerk/Treasurer	8/3/22, City Hall and Post Office bulletin boards.
City of St. Vincent	Faith Khalaf, City Clerk	8/9/22, City Hall bulletin board
Teine Township	Jason Sobolik, Twp.	8/8/22, Skjeberg and Teien Covenant information
	Supervisor	boards.
Lancaster School	Mendy Coffield, Business	8/3/22, A copy of the news release was emailed out
District	Manager	to school contacts, posted to the school bulletin
		board, and posted on the school's Instagram and
		Facebook pages.
Kittson County	Margie Holmgren,	8/10/22, Kittson County Enterprise printed
Enterprise	Managing Editor	newspaper article
North Star News	Sue Anderson, Office Assistant	8/11/22, North Star News printed newspaper article

Kittson County MHMP News Release #2 Record of Public Input & Incorporation

Overview: On November 7, 2023 Kittson County Emergency Management put out a news release titled **"Public Comment Sought for County's Hazard Mitigation Plan"** to announce the completion of the draft Kittson County Hazard Mitigation Plan and invitation for public review and comment. The news release informed jurisdictional stakeholders and the public that a copy of the draft plan, interactive website, and comment form for public feedback was available online with a website link. The public review period for the draft plan was open from 11/7/23 to 11/21/23 for a total of 15 days.

Distribution: The news release was sent via email to the county's HMP Jurisdictional Contact List, which includes the names, titles, phone numbers, and email addresses of key stakeholders to be engaged in the HMP update, including County Contacts, City Contacts, Township Contacts, Other Stakeholder Contacts, and Neighboring Jurisdiction Contacts. (A copy of the Jurisdictional Contact List can be found in Appendix F). The news release was additionally sent to local media contacts such as area newspapers, radio and television channels with a request to carry the news release.

Postings: Attached is documentation of the news release postings by Kittson County, participating jurisdictions, and local media. Cities and townships were encouraged to help share the news release locally by posting it on their websites, social media, or community bulletin boards.

Public Input & Incorporation:

Following is a record of public responses to the Kittson County news release and how the input will be incorporated into the plan update, and if not relevant to be addressed, why.

11/17/23 Email response to Scot Olson, Kittson County EMD William Dykhuis, Hill Township Supervisor

1. Acronyms – Usually when they are used they are spelled out before or after they are used but not always and the person not familiar with the acronym is left wondering. How about a page at the beginning or end of the hazard mitigation plan listing all of the acronyms and the meaning of them.

Incorporation: No changes to the plan are necessary. The HMP does spell out the full reference of an acronym before using the shorthand reference in the plan. This comment may refer to an acronym where the reader did not come across the full reference.

 Item 13 coops 2 places Mitigation Action and Possible Funding – use cooperatives in lieu of coops.

Incorporation: No changes to the plan are necessary. Coops is an acceptable shorthand for cooperatives.

3. Item 23 check on the Corps of Engineers certification of the dike in the City of St. Vincent, built in 1966 under emergency provisions and there was some difficulty getting funding in later years for repair due to the fact that the Corps hadn't certified.

Incorporation: No changes to the plan are necessary. Scot Olson, Kittson County Emergency Manager explained via follow up phone call with Mr. Dykhuis that the dike is owned by the city of St. Vincent, it is not owned by the ACOE anymore. The city has not identified any issues with the condition of the dike.

4. Flooding is a big issue and have seen all the floods since 1948 and the flooding will probably be a bigger issue in the future so total compliance of ways to minimize flooding and the duration of a flood is very important.

Incorporation: No changes to the plan are necessary. Flooding is identified as a high priority hazard in the plan and mitigation actions were included for Kittson County to continue to reduce risk against future flood events.

11/21/23 Email Response to Stacey Stark, U-Spatial from Greg Snare, Thompson Township Supervisor

I did review the Kittson County Hazard Mitigation Plan (Draft) and did not see anything that needed changes or I have no new suggestions within this draft at this time. Thanks for sending out for review.

Incorporation: No changes to the plan are necessary. Mr. Snare was thanked for his time to review the Kittson County HMP.

Email Response from Kathy Fillmore, NRCS

Please replace my name with Bonnie Hasbrouck (District Conservationist in the Hallock NRCS office). She is the Kittson County contact for NRCS. I have cc'd her on this email. (bonnie.hasbrouck@usda.gov)

Incorporation: No changes to the plan are necessary. The contact information was updated for NRCS in the Kittson County jurisdictional contact list for future reference.

Email response from Carol Johnson, City of Lancaster – City Clerk

Page 23 section 4.2.3 in paragraph 2 -----Isanti County is mentioned. It seems that this should be changed to Kittson County.

Incorporation: This correction was made in the plan.

Email Response from Jeremy Folland, Fire Chief, City of Karlstad

Why wouldn't Wikstrom Telephone be a part of critical infrastructure? They operate the main communication system and Fiber lines for NW MN and direct Midwest line into Canada from U.S. Cell towers/Armer towers. Without communication anything else that happens in regard to this plan doesn't matter. No one would know about it.

Return Email Response from Stacey Stark, U-Spatial

Scot and Jeremy,

Thank you for your comment about Wikstrom Telephone critical infrastructure. I absolutely agree that this network is part of Kittson County's critical infrastructure. When we moved to producing these plans online and in a written plan, the critical infrastructure inventory is something only addressed on the website. Due to the complexity of the map and usability of the site, we are only mapping point and line features that we can publicly access, and we are not mapping service areas. There are many transportation systems, communication lines, electric lines, and cell towers that are not mapped (and some would be too detailed for this purpose).

That said, it isn't acknowledged here that this is not a comprehensive list of critical infrastructure. Would you be satisfied if we added a sentence in the critical infrastructure section that reads (adding "communication" and the second sentence)

The lifelines of communities, critical infrastructure includes transportation, communications, and utility systems fundamental to basic functions and resilience in the midst of a natural hazard event. Please note, not all systems could be mapped below due to the availability of data.

We could additionally list specific systems (like Wikstrom Telephone, PCM Electric Cooperative, Otter Tail Power, and others) but I would need your help with that list!

Thank you, Stacey

Resolution: Scot Olson, Kittson County Emergency Management Director concurred that the suggested approach was acceptable to address additional communication infrastructure within the Kittson County HMP.

From:	Scot Olson
To:	<u>Scot Olson; mvia@so.co.kittson.mn.us; dthompson@so.co.kittson.mn.us; Rvan Swenson;</u>
	naomi.larson@kmhc.net; triems@wiktel.com; Andrea Weleski; Dana Olson; Kathy Johnson; Lane Nordin: Nathan
	<u>Kraulik; Theresia Gillie; Loren Younggren; leon.caribou@gmail.com; Jeanna.kujava@kmhc.net;</u>
	<u>klkraulik@invisimax.com; asugden@hallockmn.org; kjohnson@hallockmn.org; mdocken@so.co.kittson.mn.us;</u>
	<u>Kevinklein5187@gmail.com; mngram5@gmail.com; Brad.hemmes@candmford.com; karlstadcity@wiktel.com;</u>
	Dale Nelson; jfolland@wiktel.com; office@kennedymn.org; aaronkirkeby@hotmail.com;
	lakebronson@wiktel.com; lbfd@wiktel.com; lancastercity@wiktel.com; lancasterfiredepartment@gmail.com;
	faithkhalaf@yahoo.com; eherberg@ghmail.com; andersond@wiktel.com; mcoffield@lancaster.k12.mn.us;
	<u>bcweleski@yahoo.com;</u> mkw@invisimax.com; <u>Tom.dowdle@plantpioneer.com;</u> <u>July_314ever@yahoo.com;</u> Jeffdeere60@gmail.com; ron75@frontier.com; <u>lpemberton1968@yahoo.com;</u> rl7503635@gmail.com;
	<u>wamdykhuis@outlook.com; ryanschwenzfeier@gmail.com; Kayla.klegstad2@gmail.com; gbronson@wiktel.com;</u>
	Narson9@live.com; joeheidi@wiktel.com; thm@wiktel.com; riloer@hotmail.com; Hammer1755@hotmail.com;
	terryo@invisimax.com; jdagen@wiktel.com; mort.jcm@gmail.com; robert.gunnarson@gmail.com;
	Jasonjames s@hotmail.com; Greg.snare@icloud.com; jamie.osowski@mnswcd.org; Kathy.fillmore@usda.gov;
	angela.bokovoy@usda.gov; jolson@nwrdc.org; i.t.anderson@state.mn.us; dan.money@tworiverswd.com;
	tyler.coffield@tworiverswd.com; mlhemmes@ruralaccess.net; morteza.maher@mstrwd.org; rrwd@mncable.net;
	lakebronson.statepark@state.mn.us; Dan.Carroll@state.mn.us; Stephanie.Klamm@state.mn.us;
	Adam.Maus@kmhc.net; Marian.jordan@redcross.org; Cody.kill@usc.salvationarmy.org;
	brinklaw@brinklawyers.com; kolson@pkmcoop.com; bjaszczak@kittson.k12.mn.us;
	nthompson@lancaster.k12.mn.us; heritage@heritagepatriots.org; darla@nwrdc.org; nated@nwmf.org;
	dawng@nwmf.org; Missyk5@hotmail.com; Wayne Jacobson; sue.grafstrom@co.roseau.mn.us;
	josh.johnston@co.marshall.mn.us; sdiemert@nd.gov; Patlor29@gmail.com; Inquiries@rmofstuartburn.com;
•	andrew.tepfer@state.mn.us; JONATHAN.S.TURN@CBP.DHS.GOV
Cc:	Bonnie K Hundrieser
Subject:	Kittson County News Release - Public Comment Sought for Hazard Mitigation Plan
Date:	Tuesday, November 7, 2023 1:53:52 PM
Attachments:	<u>11-7-23 Kittson County News Release - Hazard Mitigation Plan Public Review.docx</u>
	11-7-23 Kittson County News Release - Hazard Mitigation Plan Public Review.pdf

Greetings, please post within your jurisdictions, share with residents and comment on the plan. Instructions are listed below on accessing the plan through the word or PDF document for review.

Attached is a news release announcing the public review and comment period is open for the Kittson County Hazard Mitigation Plan from **November 7 to November 21**, prior to submission of the plan to FEMA. As a jurisdiction, related agency, or neighboring jurisdiction involved in the Kittson County plan update, your assistance is requested to help post the news release and also to review the draft plan. Your assistance requested on the following items below in order to document to FEMA your participation in this important public outreach process:

• PLEASE POST THE NEWS RELEASE

Each city jurisdiction within the county is requested to post the news release. Townships and other agency stakeholders are also encouraged to participate in posting the news release. Please post to areas such as your website, Facebook page, public bulletin boards, or other locations. Please note that photos or screenshots are not necessary. <u>Please email me</u> to notify me of when and where you posted the news release.

• PLEASE ALSO REVIEW THE PLAN

All recipients of this notice are asked to review the plan and let us know if you have any comments. Please also share with your local governments or agency partners to review. There are website links as well as QR codes in the news release that will take you to PDF of the plan, interactive website, and mitigation action charts. There is also an online feedback form where you are encouraged to provide any comments, questions, or other feedback. **Please email me the names & titles of who reviewed the plan.**

As this is a 15-day review period, your timeliness to post the news release and review the plan is very important. Please respond to me with the requested information above no later than November 21st, which will be the end of the public review and comment period. Everyone's participation in posting the news release and reviewing the plan will help to count towards the county's 25% local match.

If you have any questions or comments, please let me know.

Thank you for your help, Scot

Scot E. Olson Emergency Management Director/Environmental Services Administrator Kittson County Courthouse 410 5th St. SE Suite #104 Hallock, MN 56728

Cell: 701-215-8399 Office: 218-843-2113 Olsone21@hotmail.com

From:	Scot Olson
То:	Margie Holmgren; Margie Holmgren; North Star Newspaper
Cc:	Bonnie K Hundrieser
Subject:	Kittson County News Release - Public Comment Sought for Hazard Mitigation Plan
Date:	Tuesday, November 7, 2023 1:47:34 PM
Attachments:	11-7-23 Kittson County News Release - Hazard Mitigation Plan Public Review.docx
	11-7-23 Kittson County News Release - Hazard Mitigation Plan Public Review.pdf

Greetings, could you please run the attached PDF or Word Document in the upcoming editions of the Kittson County Enterprise and the North Star News for issues on November 8, and 15. Instruction are below.

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PLEASE RESPOND BY NOV 21st

As this is a 15-day review period, your timeliness to post the news release and review the plan is very important. Please respond to me with the requested information above no later than November 21st, which will be the end of the public review and comment period. Everyone's participation in posting the news release and reviewing the plan will help to count towards the county's 25% local match.

If you have any questions or comments, please let me know.

Thank you, Scot

Scot E. Olson Emergency Management Director/Environmental Services Administrator Kittson County Courthouse 410 5th St. SE Suite #104 Hallock, MN 56728

Cell: 701-215-8399 Office: 218-843-2113 Olsone21@hotmail.com Dear Bonnie,

Kittson County has an updated draft of its Hazard Mitigation Plan (HMP) available for review.

Now that the news release about the plan is out, I wanted to write to remind you to please take the time to review this draft as a stakeholder in the planning process.

These plans are required by FEMA in order for county governments to mitigate damage and injury due to natural disasters, as well as be able to apply for certain funding programs from the federal government. The plans are updated every five years, so this is the county's last opportunity to make changes before the next update in 2028.

Planning team and stakeholder input is vital to the success of the plan! If you have not yet had time to do so, please take some time to review the Kittson HMP Update. Opportunities for review and feedback are required prior to submitting the plan to the State of Minnesota and the Federal Emergency Management Agency (FEMA).

Your feedback may be provided via the online comment forms or directly to Kittson County Emergency Management. Please **respond by November 21**.

You will find the draft plan on the County Hazard Mitigation Plan website here: https://z.umn.edu/KittsonHMP

Use the Public Comment Feedback Form to submit feedback: https://z.umn.edu/CountyHMP_Feedback

Feedback may be also be provided directly to the County HMP Contact:

Scot Elling Olson Kittson County Emergency Management Director Phone: 218-843-2113 / cell 701-215-8399 Email: <u>solson@co.kittson.mn.us</u>

Thank you for your attention.

Stacey Stark U-Spatial, UMN County Hazard Mitigation Plan Project Manager

Stacey Stark, MS, GISP Associate Director | U-Spatial | <u>uspatial.umn.edu</u> Research Computing | Office of the Vice President for Research 389 Kirby Plaza University of Minnesota Duluth | d.umn.edu slstark@d.umn.edu | 218-726-7438

Stacey Stark, MS, GISP Associate Director | U-Spatial | <u>uspatial.umn.edu</u> Research Computing | Office of the Vice President for Research 389 Kirby Plaza University of Minnesota Duluth | <u>d.umn.edu</u> <u>slstark@d.umn.edu</u> | 218-726-7438

Stay informed with U-Spatial news!



KITTSON COUNTY NEWS RELEASE November 7, 2023

Public Comment Sought for County's Hazard Mitigation Plan

Kittson County has completed an updated draft of its Hazard Mitigation Plan (HMP) and is now seeking public feedback. Like all Minnesota counties, Kittson County is vulnerable to a variety of natural hazards such as tornadoes, windstorms, severe winter storms, flooding, drought, and extreme temperatures, which can threaten the loss of life and property in the county. Planning for natural disasters minimizes the impact of events that can cause vast economic loss and personal hardship.

All county residents, as well as other interested agency or organizational stakeholders are strongly encouraged to review and offer feedback on the interactive website, PDF of the draft plan, and proposed local mitigation actions. The review and comment period is open for a period of 15 days through November 21, 2023. The public can access the plan using the following links:

<u>Kittson County HMP Website</u> (z.umn.edu/KittsonHMP) <u>Mitigation Action Charts (https://kittson-county-hmp-umn.hub.arcgis.com/pages/mitigation-actions)</u> <u>Public Comment Feedback Form</u> (https://z.umn.edu/HMPfeedback)

The Kittson County HMP is a multi-jurisdictional plan that covers Kittson County, including the cities of Donaldson, Hallock, Halma, Humboldt, Karlstad, Kennedy, Lake Bronson, Lancaster, and St. Vincent. The Kittson County HMP also incorporates the concerns and needs of townships, school districts, and other stakeholders participating in the plan.

Update of the plan has been under direction of Kittson County Emergency Management in cooperation with U-Spatial at the University of Minnesota Duluth and representatives from county departments, city and township governments, school districts, and other key stakeholders. Together, the planning team worked to identify cost-effective and sustainable actions to reduce or eliminate the long-term risk to human life or property from natural hazards. Examples include improvement of roads and culverts that experience repetitive flooding; construction of safe rooms in areas where residents and visitors are vulnerable to tornadoes and severe storm events; burying powerlines that may fail due to heavy snow, ice or wind storms; ensuring timely emergency communication to the public through warning sirens and mass notification systems; and conducting outreach to increase public awareness of severe weather and personal preparedness.

Hazard mitigation planning helps Kittson County and other jurisdictions protect their residents. Working with local communities through the process helps identify vulnerabilities and develop strategies to reduce or eliminate the effects of a potential hazard. In addition, increasing public awareness of natural disasters and encouraging personal preparedness helps to create a community that is resilient to disaster, and breaks the cycle of response and recovery. Updating the plan further allows Kittson County and its jurisdictions

to be eligible to apply for future FEMA Hazard Mitigation Assistance grant program funding for projects that help to reduce or eliminate the impacts of future natural hazard events.

Community feedback is vital to the success of the plan. Kittson County invites public review and feedback of the draft plan prior to submitting it to the State of Minnesota and the Federal Emergency Management Agency (FEMA) for review. Feedback may be provided via the online comment forms or directly to Kittson County Emergency Management.

Contact:

Scot Olson Kittson County Emergency Management Director Phone: 218-843-2113 Email: solson@co.kittson.mn.us

Please scan the following QR codes to go directly to the Kittson County Hazard Mitigation Plan interactive website and online feedback form:





Kittson County HMP News Release #2 – November 7, 2023 Chart Documentation of News Release Postings

Jurisdiction or Agency	Posting Representative	Date & Location of News Release Posting
Kittson County	Scot Olson, Kittson County	11/7/23, Kittson County Website and Sheriff's Office
	Emergency Management	Facebook page
	Director	
City of Donaldson	Lisa Kraulik, City Clerk	11/13/23, posted on City Hall bulletin board
City of Hallock	Aimee Sugden, City Clerk	11/7/23, posted on City Hall bulletin board
City of Halma	Ronda Davis, City Clerk	11/10/23, posted on City Hall bulletin board
City of Humboldt	Brad Hemmes, City Clerk	11/10/23, posted on City Hall bulletin board
City of Karlstad	Garnette Hanson, City	11/7/23, posted on City Hall bulletin board
	Clerk	
City of Kennedy	Melissa Woinarowicz, City	11/10/23, posted on City Hall bulletin board
	Clerk/Treasurer	
City of Lake Bronson	Sandy Lund, City Clerk	11/7/23, posted on City Hall bulletin board and City
		website
City of Lancaster	Carol Johnson, City	11/7/23, posted on City Hall bulletin board
	Clerk/Treasurer	
City of St. Vincent	Faith Khalaf, City Clerk	11/10/23, posted on City Hall bulletin board
Kittson County	Margie Holmgren,	11/13/23 HMP article was printed in the Kittson
Enterprise (weekly	Managing Editor	County Enterprise weekly printed paper
newspaper)		

Appendix H – Mitigation Actions by Jurisdiction

CITY OF DONALDSON			Mitigation Action	n Chart			
#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
1	All- Hazards	Education & Awareness Programs	Encourage residents to be aware of and prepared for severe weather events, periods of extreme temperatures, and extended power outages.	Existing High 2024-2029	City Admin in coord with KCEM	We communicate with our residents by word of mouth. We have no city website or social media. We look to Kittson County Emergency Management to encourage residents to sign up for the county's CodeRED emergency notification.	City
2	Severe Summer Storms	Structure & Infrastructure Projects	Ensure the functionality of the city's outdoor warning siren for high wind events.	Existing High 2024-2029	City Admin in coord with KCEM	Donaldson has one outdoor warning siren that is maintained and tested on a monthly basis in coordination with the Kittson County Sheriff's Office.	City
3	Drought	Local Planning & Regulations / Education & Awareness Programs	Establish watering restrictions during drought conditions and raise public awareness of water conservation measures.	New Moderate 2024-2029	City Admin	The city will establish and enforce a water conservation ordinance as per MN DNR guidelines during periods of severe drought. The city will do local outreach to help make residents aware of the ordinance and the limitations on non-essential water usage.	City

CI	CITY OF HALLOCK Mitigation Action Chart						
#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
1	All- Hazards	Education & Awareness Programs	Encourage residents to be aware of and prepared for severe weather events, periods of extreme temperatures, and extended power outages.	Existing High 2024-2029	City Admin in coord with KCEM	The city has a website and a Facebook page that we use to communicate information to our residents. We also post flyers in public areas such as City Hall.	City
2	Severe Summer Storms	Structure & Infrastructure Projects	Ensure the functionality of the city's outdoor warning siren for high wind events.	Existing High 2024-2029	City Admin in coord with KCEM	The city of Hallock has 4 outdoor warning sirens which are maintained and tested on a monthly basis in coordination with the Kittson County Sheriff's Office.	City
3	Drought	Local Planning & Regulations / Education & Awareness Programs	Establish watering restrictions during drought conditions and raise public awareness of water conservation measures.	New Moderate 2024-2029	City Admin	The city will establish and enforce a water conservation ordinance as per MN DNR guidelines during periods of severe drought. The city will do local outreach to help make residents aware of the ordinance and the limitations on non-essential water usage.	City
4	Flooding	Local Planning & Regulations	Enforce city ordinances that reduce the impacts of high rain events and risk of flooding to areas of new development.	Existing Moderate 2024-2029	City Admin	The city of Hallock participates in the National Flood Insurance Program and our floodplain ordinance regulates development in the flood hazard areas of the city.	City
5	Flooding	Local Planning & Regulations	Ensure that personnel, plans, and equipment are in place to handle flood mitigation and response.	Existing High 2024-2029	City Admin in coord with KCEM	Hallock has a designated Flood Committee that includes our City Administrator, Mayor and City Councilors, Utility Superintendent, Fire Chief and Police Chief. The city works with Kittson County Emergency Management to handle local flood events.	City

CI	CITY OF HALMA Mitigation Action Chart						
#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
1	All- Hazards	Education & Awareness Programs	Encourage residents to be aware of and prepared for severe weather events, periods of extreme temperatures, and extended power outages.	Existing High 2024-2029	City Admin, City EM	We communicate with our residents by word of mouth. We have no city website or social media. We look to Kittson County Emergency Management to encourage residents to sign up for the county's CodeRED emergency notification.	City
2	Severe Summer Storms	Structure & Infrastructure Projects	Ensure the functionality of the city's outdoor warning siren for high wind events.	Existing High 2024-2029	City EM	Halma has one outdoor warning siren that is maintained and tested on a monthly basis in coordination with the Kittson County Sheriff's Office.	City
3	Flooding	Structure & Infrastructure Projects	Implement measures to improve drainage and reduce risk of overland flooding that impact city roads.	Existing High 2024-2029	City Admin, City Maintenance	The city has experienced overland flooding that washes out roads, as the railroad culverts and US Hwy 59 culverts are not properly sized South of town. The city works to address flood risk reduction for our roads as funding allows.	City
4	Drought	Local Planning & Regulations / Education & Awareness Programs	Establish watering restrictions during drought conditions and raise public awareness of water conservation measures.	New Moderate 2024-2029	City Admin	The city will establish and enforce a water conservation ordinance as per MN DNR guidelines during periods of severe drought. The city will do local outreach to help make residents aware of the ordinance and the limitations on non-essential water usage.	City

CI	TY OF I	HUMBOLI	DT			Mitigation Action	n Chart
#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
1	All- Hazards	Education & Awareness Programs	Encourage residents to be aware of and prepared for severe weather events, periods of extreme temperatures, and extended power outages.	Existing High 2024-2029	City Admin in coord with KCEM	We are a small community of 42 people and share information with residents by posting information at the city office, Post Office, and by making announcements at City Council meetings as needed. Residents are encouraged to be prepared for severe weather, extreme temperatures, and power outages.	City
2	Severe Winter & Summer Storms	Structure & Infrastructure Projects	Reduce the risk of downed power lines and extended power outages from the impacts of heavy snow, ice, or high wind events.	Existing High 2024-2029	City Maintenance, Otter Tail Power	Otter Tail Power Company and the city have both taken efforts over the last 5 years to do some tree management to reduce risk to powerlines.	City, Otter Tail Power Company
3	Drought	Local Planning & Regulations / Education & Awareness Programs	Establish watering restrictions during drought conditions and raise public awareness of water conservation measures.	New Moderate 2024-2029	City Admin	The city will establish and enforce a water conservation ordinance as per MN DNR guidelines during periods of severe drought. The city will do local outreach to help make residents aware of the ordinance and the limitations on non-essential water usage.	City

CI	TY OF I	KARLSTAI		Mitigation Action Chart				
#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding	
1	All- Hazards	Education & Awareness Programs	Encourage residents to be aware of and prepared for severe weather events, periods of extreme temperatures, and extended power outages.	Existing High 2024-2029	City Admin in coord with KCEM	We post information on the city's Facebook page. We also post information in the City Hall lobby. We will encourage residents to sign up for the county's CodeRED emergency notification system by posting on FB and a flyer at City Hall. We post information about the Severe Weather Awareness Week on the City's Facebook page. In winter we encourage residents to be prepared for severe storms and periods of extreme cold with power outages.	City	
2	Wildfire	Local Planning & Regulations	Work with Kittson County on development of a Community Wildfire Protection Plan and wildfire mitigation activities for the City of Karlstad.	New High 2024-2029	City EM / Fire Dept. in coord with KCEM	The city previously had a local community wildfire protection plan on file with the MN DNR Firewise Program, but it should be updated or developed in coordination with a larger plan for Kittson County. We will participate in CWPP process with Kittson County Emergency Management and the MN DNR and identify wildfire risk reduction activities for Karlstad.		
3	Severe Summer Storms	Structure & Infrastructure Projects	Ensure the functionality of the city's outdoor warning siren for high wind events.	Existing High 2024-2029	City Admin in coord with KCEM	The city has one outdoor warning siren, which our fire department maintains and tests on a regular basis in coordination with Kittson County Emergency Management.	City	
4	Drought	Local Planning & Regulations / Education & Awareness Programs	Establish watering restrictions during drought conditions and raise public awareness of water conservation measures.	New Moderate 2024-2029	City Admin	The city will establish and enforce a water conservation ordinance as per MN DNR guidelines during periods of severe drought. The city will do local outreach to help make residents aware of the ordinance and the limitations on non-essential water usage.	City	

CI	TY OF I	KARLSTAI)		Mitigation Action Chart		
#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
5	Flooding	Education & Awareness Programs / Local Planning & Regulations	Raise public awareness of measures to take to reduce risk of overburden to the city storm sewer system.	Existing Moderate 2024-2029	City Admin	The city posts information on our website asking residents not to direct sump pump drainage into floor drains or the city sewer system to avoid overburden of the city's sanitary sewer system and lift stations. Compliance inspections may be performed.	City

CI	CITY OF KENNEDY Mitigation Action Chart							
#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding	
1	All- Hazards	Education & Awareness Programs	Encourage residents to be aware of and prepared for severe weather events, periods of extreme temperatures, and extended power outages.	Existing High 2024-2029	City Admin in coord with KCEM	We encourage residents to be prepared for all severe weather and emergency situations. To share information with our residents we post information on our Facebook page as well as send a mass email to residents. We also encourage residents to sign up for the county's emergency notification system, Code Red Alerts. In winter we encourage residents to run water when temperatures get too low to avoid pipes freezing.	City	
2	Severe Winter & Summer Storms	Local Planning & Regulations	Ensure new development is built to guidelines to reduce risk of damage or failure from extreme storm events.	Existing High 2024-2029	City Admin, City Public Works	The city is looking to update its Code of Ordinances to address building regulations and get our codes up to date.	City	
3	Severe Winter & Summer Storms	Structure & Infrastructure Projects	Reduce the risk of downed power lines and extended power outages from the impacts of heavy snow, ice, or high wind events.	Existing High 2024-2029	City Maintenance	The city trims trees as necessary near power lines. Our utility provider, Otter Tail Power oversees ongoing maintenance as well as other measures to reduce vulnerability for power outages.	City	
4	Extreme Temps	Mitigation Preparedness & Response Support	Be prepared to provide emergency sheltering to vulnerable residents during extreme temperature events.	Existing High 2024-2029	City Admin in coord with KCEM	The city will look into developing an emergency plan for sheltering residents in the event of extreme weather. We have mobile homes within the city that do not have a storm shelter and are vulnerable to high wind and tornado events. We will work with Kittson County Emergency Management on this effort.	City	

CI	TY OF H	KENNEDY	,			Mitigation Action	n Chart
#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
5	Drought	Local Planning & Regulations / Education & Awareness Programs	Establish watering restrictions during drought conditions and raise public awareness of water conservation measures.	New Moderate 2024-2029	City Admin	The city will establish and enforce a water conservation ordinance as per MN DNR guidelines during periods of severe drought. The city will do local outreach to help make residents aware of the ordinance and the limitations on non-essential water usage.	City
6	Flooding	Local Planning & Regulations	Enforce city ordinances that reduce the impacts of high rain events and risk of flooding to areas of new development.	Existing Moderate 2024-2029	City Admin	The city of Kennedy enforces requirements of the NFIP through the city's current floodplain ordinance, adopted 9/29/17 and published publicly 9/29/17. This ordinance regulates development in the flood hazard areas of the city. Our City Clerk is the city's designated Floodplain Administrator. The city needs to review whether we need to update our floodplain ordinance.	City

CI	TY OF I	LAKE BRO	NSON			Mitigation Action	ı Chart
#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
1	All- Hazards	Education & Awareness Programs	Encourage residents to be aware of and prepared for severe weather events, periods of extreme temperatures, and extended power outages.	Existing High 2024-2029	City Admin in coord with KCEM	The City of Lake Bronson has been proactive in encouraging residents to subscribe to Code Red alerts on their phones and to watch social media (Kittson County Sheriff's Office Facebook page) for emergency notifications and information about severe weather conditions. The county is also planning to reactivate the "Community Hotline" for where county residents can call for updates and notifications on road closures, emergency situations, weather, etc.	City
2	Extreme Cold	Education & Awareness Programs	Encourage residents to take measures to avoid frozen pipes when there are periods of extreme cold.	New High 2024-2029	City Admin, City Public Works	In the past we have experienced frozen water services and some residential homes experienced burst pipes from extended extreme cold. We will use our local outreach methods to encourage residents to run a warm stream of water to avoid frozen pipes during periods of extreme cold.	City
3	Landslides / Flooding	Natural Systems Protection	Consider bank erosion mitigation efforts through available grants and programs.	New High 2024-2019	City Admin, City Public Works	The Two Rivers banks within city Limits has experienced erosion and soil loss. The city will seek to work with the Kittson Soil & Water Conservation District, Two Rivers Watershed District, and the MN DNR on identifying and addressing mitigation measures to reduce further erosion resulting from high rain events.	
4	Severe Winter & Summer Storms	Structure & Infrastructure Projects	Reduce the risk of downed power lines and extended power outages from the impacts of heavy snow, ice, or high wind events.	Existing High 2024-2029	City Public Works	The city's Public Works office works to trim vegetation near powerlines. Otter Tail Power Company also clears vegetation and takes action to reduce risk for power outages to the city.	City, Otter Tail Power

CI	TY OF I	LAKE BRO	NSON			Mitigation Action	n Chart
#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
5	Severe Summer Storms	Structure & Infrastructure Projects	Update or replace the city's existing outdoor warning siren, and install a 2 nd warning siren at the Lake Bronson State Park.	Existing High 2024-2029	City Admin in coord with KCEM	The city would like to update or replace our outdoor warning siren. We may look to apply for a USDA Community Facilities Grant to support this effort. The Lake Bronson State Park is located 2 miles east of the city and is a popular destination for camping and recreation. They have a storm shelter (Concrete Bathroom) but no warning siren on site. The city will encourage the park manager to pursue installation of an outdoor warning siren.	City, USDA CF Grant
6	Severe Summer Storms	Structure & Infrastructure Projects	Install a community tornado shelter.	New High 2024-2029	City Admin in coord with KCEM	This is an effort that the city would like to investigate and pursue as feasible. Supportive grant funding may be applied for from the FEMA HMA grant program.	City, FEMA HMA
7	Drought	Local Planning & Regulations / Education & Awareness Programs	Establish watering restrictions during drought conditions and raise public awareness of water conservation measures.	New Moderate 2024-2029	City Admin	The city will establish and enforce a water conservation ordinance as per MN DNR guidelines during periods of severe drought. The city will do local outreach to help make residents aware of the ordinance and the limitations on non-essential water usage.	City
8	Flooding	Local Planning & Regulations	Enroll the city in the National Flood Insurance Program and develop a floodplain ordinance.	Existing High 2024-2029	City Admin in coord with KCEM	The City of Lake Bronson was mapped with new FEMA mapped high risk areas on 9/29/2017. The city will work with the MN DNR to learn more about our flood map and develop a floodplain ordinance that can be approved by the city and enforced.	City

CI	TY OF I	LAKE BRO	NSON			Mitigation Action	n Chart
#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
9	Dam Failure	Structure & Infrastructure Projects / Mitigation Preparedness & Response Support	Complete construction of new dam and participate in emergency action planning for residences within the dam breach area.	In-Progress High 2024-2029	City Admin, City EM in coord with MN DNR and KCEM	The Lake Bronson Dam at the State Park empties from the lake into the Two Rivers, flowing west to the Red River. This dam is old and in need of replacement, which is slated to begin in 2024. The city has been aggressive in documenting residences along the flood zone of the river and keep that list updated both through the Kittson County Emergency Management Office and the Lake Bronson State Park Emergency Plan. CodeRed is strongly advised for local residents to have on their phones to provide first alerts in emergency situations.	City, MN DNR

CI	TY OF I	LANCASTI	ER			Mitigation Action	n Chart
#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
1	All- Hazards	Education & Awareness Programs	Encourage residents to be aware of and prepared for severe weather events, periods of extreme temperatures, and extended power outages.	Existing High 2024-2029	City Admin in coord with KCEM	Our city works with Kittson County to participate in the National Weather Service's annual Severe Winter/Spring Weather Awareness Week by posting severe weather awareness information in the City Hall and US Post office. Our local school practices tornado drills on an annual basis.	City
2	All- Hazards	Mitigation Preparedness & Response Support	Be prepared to provide emergency sheltering to vulnerable residents during severe storm or extreme temperature events.	Existing High 2024-2029	City Admin in coord with KCEM	The city has a designated emergency shelter for our campground (the bathhouse building). The Community Center is our designated building for sheltering of residents if there is a storm or extreme temperature event coupled with a prolonged power outage.	City
3	All- Hazards	Mitigation Preparedness & Response Support	Upgrade the city's existing generator to a new one for the city's Community Center which serves as our emergency shelter facility.	New Moderate 2024 - 2029	City Public Works	The city will work to purchase a new portable generator as funding is available.	City
4	Severe Winter & Summer Storms	Structure & Infrastructure Projects	Reduce the risk of downed power lines and extended power outages from the impacts of heavy snow, ice, or high wind events.	Existing High 2024-2029	City Public Works in coord with Otter Tail Power	The city's Public Works department works to trim vegetation away from powerlines within the city as needed. We will encourage Otter Tail Power to address converting powerlines from overhead to underground if possible to reduce the chance of power outages.	City, Otter Tail Power
5	Severe Summer Storms	Structure & Infrastructure Projects	Upgrade the city's outdoor warning siren.	In-Progress High 2024	City Admin in coord with KCEM	The city is using the 2023 MN Public Safety funds approved in June 2023 for all cities in MN to purchase a new siren. The city will also use some of its own dollars to complete the project. The siren is on order and should be installed in 2024.	City, USDA CF Grant

CI	TY OF I	LANCASTI	ER			Mitigation Action	n Chart
#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
6	Severe Summer Storms	Structure & Infrastructure Projects	Upgrade the shelter facility at the city campground, if funding can be obtained.	New High 2024-2029	City Admin in coord with KCEM	The city has one municipal campground that is active during summer and fall months. It has a wooden structure shower house to provide shelter during a storm, but it is not a sturdy brick building. An upgrade to a sturdier building would be desired, however limited financial resources make this difficult. The city will seek outside grant funding for this effort, which may include an application to FEMA for a tornado safe room.	City, FEMA HMA Grant
7	Drought	Local Planning & Regulations / Education & Awareness Programs	Establish watering restrictions during drought conditions and raise public awareness of water conservation measures.	New Moderate 2024-2029	City Admin	The city will establish and enforce a water conservation ordinance as per MN DNR guidelines during periods of severe drought. The city will do local outreach to help make residents aware of the ordinance and the limitations on non-essential water usage.	City
8	Flooding	Structure & Infrastructure Projects	Implement stormwater system improvement to reduce the risk of localized flooding to homes and the city storm sewer system.	Existing High 2024-2029	City Admin, City Public Works	Our public works department continues to address stormwater management to reduce localized flooding and overload to the city's stormwater system during high rain events.	City
9	Flooding	Local Planning & Regulations	Enforce city ordinances that reduce the impacts of high rain events and risk of flooding to areas of new development.	Existing Moderate 2024-2029	City Admin	The city of Lancaster enforces requirements of the NFIP through the city's current floodplain ordinance, adopted 7/12/17 and published publicly 7/19/17. This ordinance regulates development in the flood hazard areas of the city. The Mayor of Lancaster is our designated Floodplain Administrator.	City

CI	TY OF S	ST VINCE	NT	Mitigation Action Chart			
#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
1	All- Hazards	Education & Awareness Programs	Encourage residents to be aware of and prepared for severe weather events, periods of extreme temperatures, and extended power outages.	Existing High 2024-2029	City Admin in coord with KCEM	We are a small community and share information with residents by posting information on our community bulletin board located outside of our city garage. This is where we post information ranging from city council meetings, to flood stage information, thanks you's to residents etc. We also have a group chat with our cell phones for city council members and highly involved residents that aid the city. We encourage residents to follow local media for weather conditions and to be prepared for storms or extreme temperature events with a loss of power. We plan to put up a flyer to encourage residents to sign up for the Kittson County CodeRED emergency notification system.	City
2	Severe Winter & Summer Storms	Local Planning & Regulations	Ensure new development is built to guidelines to reduce risk of damage or failure from extreme storm events.	Existing High 2024-2029	City Admin, City Public Works	We defer to Kittson County zoning regulations and building codes.	City
3	Drought	Local Planning & Regulations / Education & Awareness Programs	Establish watering restrictions during drought conditions and raise public awareness of water conservation measures.	New Moderate 2024-2029	City Admin	The city will establish and enforce a water conservation ordinance as per MN DNR guidelines during periods of severe drought. The city will do local outreach to help make residents aware of the ordinance and the limitations on non-essential water usage.	City

CI	TY OF S	ST VINCE	NT			Mitigation Action Chart		
#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding	
4	Flooding	Structure & Infrastructure Projects	Implement stormwater system improvement to reduce the risk of localized flooding to homes and the city storm sewer system.	Existing High 2024-2029	City Admin, City Maintenance	We maintain the city dike and stormwater system. In 2022 we completely repaired our dike with our surveyor to reduce localized flood risk. We also have a pump house that helps to take out a lot of floodwater from the edges of town that would be affected by rising water level on the Red River of the North. We also have culverts and storm gates that can be activated if needed. Our city maintenance continues to address any stormwater improvements as needed.	City	
5	Flooding	Local Planning & Regulations	Enforce city ordinances that reduce the impacts of high rain events and encourage residents to take personal action to reduce risk of basement flooding.	Existing Moderate 2024-2029	City Admin	The city does have a flood plan that was based on another city's flood plan. We have been in the process of updating it. We encourage residents to maintain their sump pumps to avoid basement flooding.	City	