

# MEEKER COUNTY MINNESOTA



2023

Hazard Mitigation Plan



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UNIVERSITY OF MINNESOTA DULUTH  
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# MEEKER COUNTY MINNESOTA

## HAZARD MITIGATION PLAN

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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 \$2.295 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).

Meeker 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 Meeker 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:



*[Meeker County HMP website](#)*

- 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 Meeker County Emergency Management to facilitate an update to the 2015 Meeker 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 Meeker 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 Meeker County, including the cities of Cedar Mills, Cosmos, Darwin, Dassel, Eden Valley, Grove City, Kingston, Litchfield, and Watkins. The Meeker 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 Meeker County after final approval by FEMA (see Appendix B).

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

- Include more recent data documenting the critical infrastructure and hazards faced by Meeker 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 Meeker 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 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 Meeker County HMP planning team is headed by the Meeker County emergency manager, who is the primary point of contact. Members of the Meeker County HMP planning team include representatives from the public and governmental sectors. Table 1 identifies the planning team individuals and the organizations they represent.

*[Find the planning team members on the Meeker County HMP website](#)*

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 they would seek to implement upon plan adoption (see Section 5.3 and Appendix H).

*Table 1. Hazard Mitigation Planning (HMP) Team*

Name	Agency/Organization	Participant Title
Stephanie Johnson	Meeker County Emergency Management	Emergency Management Director
Becky Howell	Meeker County Sheriff's Office	Chief Deputy
Greg Schultz	Meeker County Land Use Department	Land Use Director
Amy Rausch	Meeker County	County Assessor
Phil Schmalz	Meeker County Highway Department	Public Works Director / County Engineer
Mark Spies	Meeker County Highway Department	Assistant Engineer
Andrew Letson	Meeker County Administration	County Administrator
Diane Winter	Meeker County Public Health Department	Public Health Director
Josh Johnson	City of Darwin	Mayor
Nicole Carlen	City of Dassel	City Councilor
Terri Boese	City of Dassel	City Clerk/Treasurer
Cindy Anderson	City of Eden Valley	City Clerk
Brent Bengtson	City of Eden Valley	Mayor
Jesse Hudec	City of Grove City	Mayor
Michael Geers	City of Litchfield	Operations Engineer
Deb Kramer	City of Watkins	City Clerk
Bruce Dicke	Acton Township	Supervisor/Board Chairman
Matt Foley	Darwin Township	Township Supervisor
Bridget Klein	Manannah Township	Treasurer
Paul Carlson	ACGC Public Schools	Superintendent
Beckie Simenson	Litchfield Public Schools	Superintendent
Mark Raymond	Dassel-Cokato School District	Superintendent
Jacob Stich	USDA Natural Resource Conservation Service	CST Lead

Name	Agency/Organization	Participant Title
Lisa Villcheck	MN Homeland Security and Emergency Management	HSEM Region 4 Regional Program Coordinator
Nick Pochardt	Mayo Clinic Ambulance	Operation Assistant Supervisor/Paramedic
Stephanie Felt	Kandiyohi County Emergency Management	Emergency Management Director
Ace Bonnema	Kandiyohi County Emergency Management	Deputy Emergency Management Director
Kevin Mathews	McLeod County Emergency Management	Emergency Management Director
Mike Hennen	Renville County Emergency Management	Emergency Management Director
Samantha Best	Renville County Emergency Management	Deputy Emergency Management Director

## 2.2 Review of Existing Plans, Capabilities & Vulnerabilities

Meeker 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 Meeker 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 Meeker 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 Meeker 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 Meeker County to support mitigation.

*Local Mitigation Surveys:* As part of Meeker 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 Meeker County LMS report, see Appendix C).

## 2.3 Planning Process Timeline and Steps

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

### 2.3.1 MEEKER COUNTY STAKEHOLDER COORDINATION

Two planning team meetings took place via Zoom video conference hosted by U-Spatial. Meeting participants included representatives from Meeker County, city and township governments, neighboring jurisdictions, and other key stakeholders. Appendix F provides documentation of stakeholder outreach and participation in the plan update.

*Survey forms to acquire mitigation ideas and feedback remain available on the HMP website*

To provide opportunity for public input, Meeker 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 County HMP website hosted by U-Spatial and the feedback and mitigation action ideas surveys will remain available through the five-year planning period to foster public engagement. The public feedback period for the draft plan was

open from 1/30/23 to 2/13/23, 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 Meeker County and jurisdictions.

*Table 2. Meeker County hazard mitigation update meetings and public outreach*

Event	Date	Appendix
Kickoff Webinar	7/29/21	Appendix F, Planning Team Meetings
News Release #1	10/1/21	Appendix G, Public Outreach & Engagement Documentation
Planning Team Meeting #1	2/1/22	Appendix F, Planning Team Meetings
Planning Team Meeting #2	10/31/22	Appendix F, Planning Team Meetings
News Release #2	1/30/23	Appendix G, Public Outreach & Engagement Documentation

At the close of the public outreach period, the U-Spatial consultants worked with the Meeker 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, Meeker 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 Meeker 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 Meeker 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 Meeker 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 Meeker 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. Meeker 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 Meeker County HMP update planning process, with reference to the location of supporting documentation.

*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
Supporting Documentation	App. G	App. F	App. C	Sec. 5.3 App. H	App. F	App. G
Meeker County (23,308)	X	X	X	X	X	X
City of Cedar Mills (62)	X		X	X		X
City of Cosmos (506)	X		X			X
City of Darwin (342)	X		X	X	X	X
City of Dassel (1,519)	X	X	X	X	X	X
City of Eden Valley (1,056)	X	X	X	X	X	X
City of Grove City (614)	X	X				X
City of Kingston (184)	X		X	X		X
City of Litchfield (6,611)	X	X		X		X
City of Watkins (1,002)	X	X	X	X	X	X
Neighboring Jurisdictions:						
Stearns County						
Wright County						
McLeod County						
Renville County					X	
Kandiyohi County					X	

# 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.

*[See a list of all natural hazards covered in the 2023 HMP](#)*

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 Meeker 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 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 Meeker 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, and if this affected their priority level to mitigate against that hazard. Appendix F provides the discussion notes from the meeting.

*Table 4. Prioritization of hazards for 2023 Meeker County HMP Update*

Natural Hazards Addressed in the Last Plan	Current Priority
Flooding	High
Tornadoes	High
Winter Storms	Moderate
Windstorms	Moderate
Extreme Cold	Moderate
Extreme Heat	Moderate
Drought	Low to Moderate
Dam/Levee Failure	Low – but included
Wildfire	Low
Hail	Low
Lightning	Low
Landslides	Low

### 3.1.2 FEMA- AND MINNESOTA-DECLARED DISASTERS AND ASSISTANCE

Another historical perspective is derived from FEMA-declared disasters. Eleven major disasters and three emergency declarations in Meeker County have been made between 1957 and December 2022; the details can be viewed on the Meeker County [HMP website](#).

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). Meeker County was included in two 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, 2021a). Table 5 lists the projects in the county funded by a hazard mitigation assistance program.

Table 5. Historical hazard mitigation funding awarded in Meeker County

Project Identifier	Sub-Grantee	Project Type	Federal Share (%75)
DR-1283-0012-R	Meeker Cooperative Light Assn	Utility Protective Measures (Electric, Gas, etc.)	\$19,500
DR-1225-0013-R	Meeker Cooperative Light and Power Association	Utility Protective Measures (Electric, Gas, etc.)	\$52,500
DR-1225-0011-R	Meeker Cooperative Light and Power Association	Utility Protective Measures (Electric, Gas, etc.)	\$48,993
DR-1283-0011-R	Meeker Cooperative Light Assn	Utility Protective Measures (Electric, Gas, etc.)	\$150,000
DR-4009-0007-P	Meeker County	Local Multihazard Mitigation Plan	\$22,500

SOURCE: (MN HSEM, 2022)

### 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)

[Explore population vulnerability on the Meeker County HMP Website](#)

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.

### 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).

[Climate Change and Natural Hazards](#)

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 Meeker 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, Meeker 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, Question 3) 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.

#### **Meeker County**

*Windstorms/Tornadoes:* Meeker County has numerous locations for seasonal travel trailer/mobile home parks, and campgrounds. There are also manufactured home parks located throughout the county. Some have storm shelters or designated shelter areas, but many do not. Koronis Camp Grounds has a storm shelter, however, many of the county parks and several municipal parks are without storm shelters. The absence of storm shelters leaves residents, guests, and visitors only their vehicle or manufactured structure for protection and making them more susceptible to the winds, debris, and damage associated with these storms.

Uprooted and fallen trees and branches have the ability to cause extensive physical damage to residential and community infrastructure, create impediments to travel and emergency response access, and create cascading impacts such as power outages.

A vast majority of electrical infrastructure throughout the county is above ground. We have experienced damage to electrical infrastructure (power generation facilities/equipment, poles & lines, substations, transformers, etc.) that has resulted in power outages, creating near universal vulnerability for people (especially children, seniors, and anyone who relies on powered medical devices) and animals.

Physical damages and losses to private homes, commercial structures, and disconnects societal access to community lifelines, economic activity, etc. are also widely experienced in power outages.

*Extreme Heat:* There are several homes, businesses, and other gathering areas that do not have air conditioning available. This could lead to heat emergencies in a lot of our population should they not have air conditioning or if there is power failure.

*Extreme Cold:* Seniors & children are vulnerable to extreme cold especially if the power goes down during storm events. Rural 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.

The county has also experienced damages to roads from spring frost heaves, frozen culverts that cause localized flooding.

*Ice Storms & Blizzards:* We have powerlines, transmission lines and high voltage lines running through several areas of our county. Ice storms or windstorms could cause damage to these. We have powerlines and power poles that have failed or may fail due to heavy snow and ice storms.

Road closures or otherwise impassable roads create at least temporary loss of access to transportation and adverse effects to public safety systems.

Spring snowmelt can also lead to wet/soft road base soils, potentially creating washouts and eroded transportation systems.

*Flooding:* Large-scale riverine flooding can cause the most damage to roads, bridges, culverts, and agricultural drainage areas in Meeker County. There have been some instances where a high quantity of rain has also caused flash flooding and washed out or required the closing of portions of the roads and or bridges. Additional hazards potentially experienced are utility failure, erosion, debris flow, and blockage of drainage systems.

### **City of Cedar Mills**

*Ice Storms, Blizzards, Tornadoes:* 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.

### **City of Cosmos**

*Tornadoes:* City buildings, park equipment potential damage, mobile home park vulnerability.

*Blizzards:* Keeping emergency service equipment accessible, shelter for travelers.

### **City of Darwin**

*Flooding:* Flooding risk is largely limited to a few residents/businesses in town. City lift station does see increased usage with excessive rain events, which stresses the pumps, causing an increased likelihood of mechanical failure. Pump failure could lead to sewer backups and sewer pond integrity issues.

*Extreme Cold:* Excessive frost depth puts water infrastructure at risk. We have had several breaks in previous years, with frost movement being a contributing factor.

*Extreme Heat:* Extreme heat is largely listed as a contributing factor to the hazard of drought. The city sees increased levels of water usage during dry and hot weather, which has led to increased

production at the water treatment plant. Could also lead to fires, necessitating use of city water by the local fire department, which brings the possibility of production not meeting water demand.

*Drought:* Drought leads to increased water usage by residents and farmers for irrigation, which depletes aquifer levels, potentially to the point where recharge rate cannot keep up with use. As aquifer level decreases, pump depth and well failure is potentially an issue.

## **City of Dassel**

*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, Tornadoes:* We have one mobile home park within the city that does not have a storm shelter and residents are vulnerable to high wind and tornado events.

We have a development on the southwest side of the city that residents say they are unable to hear the warning siren. We need to install a new outdoor warning siren in that area to help warn residents.

*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. The city has also experienced damages to roads from spring frost heaves.

*Drought:* The city experienced extreme drought conditions last year which caused watering restrictions to maintain the city's freshwater supply.

## **City of Eden Valley**

*Ice Storms, Blizzards:* Electrical service consists of overhead power lines and electrical poles that can be brought down by ice storms and blizzards.

*Windstorms, Tornadoes:* Our Aho development was built as slab-on-grade with no basements. These residents are at a greater risk with winds/tornadoes. There is no storm shelter in the area.

## **City of Kingston**

*Ice Storms, Windstorms, Tornadoes:* 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.

## **City of Watkins**

*Windstorms, Tornadoes:* We have one mobile home park in the city that does not have a storm shelter. They use a community hall as a storm shelter, but it's a couple blocks away from the park. We also have a subdivision out the outskirts of town that may not be within audible reach of our current warning siren. An additional warning siren may be needed to reach those residents.

*Flooding:* The city's main lift station is located in an area that may be susceptible to flooding.

### **3.4.2 FUTURE DEVELOPMENT**

Because Meeker 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. Meeker 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 Meeker 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, Question 5.

#### **Meeker County**

In the past five years Meeker County's total population has increased slightly. There has also been an increase in residential and business construction throughout the county. About 20% of the population in Meeker County fits into the 65 and older age group, and we continue to see a gradual increase in this percentage. In addition, around 3% of the population of the county speaks another language other than English in their home. Within this population we have many who have very limited English proficiency.

#### **City of Darwin**

Additional farm irrigation wells in our aquifer, leading to increased risk of interference.

#### **City of Watkins**

We have had an increase in our population of senior citizens due to additions made to the local nursing home over the last several years.

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 Meeker 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 Meeker 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 in place or 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 to incorporate mitigation into other planning mechanisms (see Section 5.1 and Appendix C).

[Read more about natural hazard prioritization and view interactive information on all hazards](#)

Hazards that were deemed by Meeker 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. Six of the 11 federal disaster declarations in Meeker County included flooding.

### 4.1.1 PROBABILITY OF OCCURRENCE

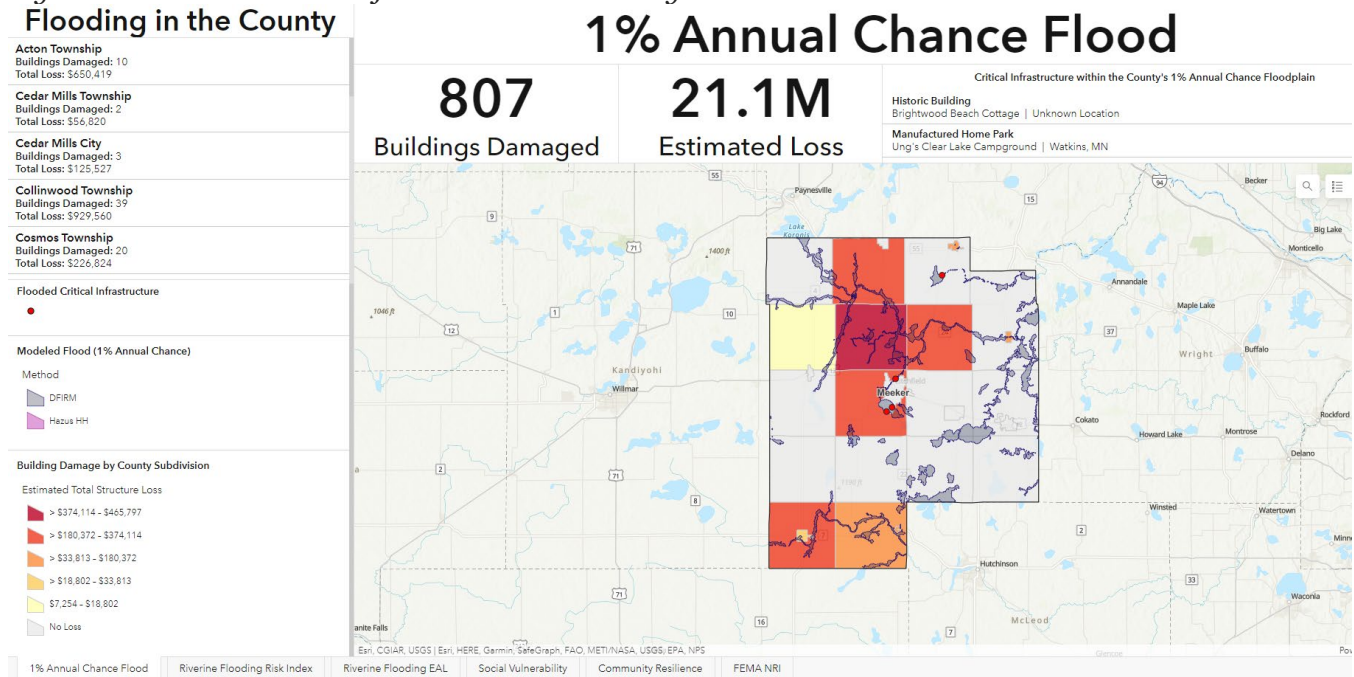
From 1997 to 2022, the NCEI Storm Events Database has recorded five flood and six flash flood events. Meeker County has experienced one flash flood event every 4.3 years and one riverine flood event every 5.3 years on average during this period.

[View interactive maps and see information about flooding history, risk, and vulnerability](#)

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 1% annual chance flood boundary. Where available, stream base flow elevation and cross-section data were used to generate a depth grid with a 10-meter horizontal resolution. The remainder of the county's depth grids were modeled in HAZUS using the EQL method. The resulting Hazus 1% annual chance

floodplain is shown in the Flood Vulnerability dashboard on the Meeker County HMP website (Figure 1), where it is available in an interactive form.

Figure 1. 1% Annual chance flood in Meeker County



## 4.1.2 VULNERABILITY

Potential economic loss estimates were based on county-specific building data. Meeker 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, 33,590 points were input to Hazus to represent buildings with a total estimated building plus contents value of \$3.2 billion. Approximately 66% of the buildings (and 65% of the building value) are associated with residential housing. The estimated loss by occupancy class for the entire county is shown in Table 6.

*[View at-risk populations in Meeker County](#)*

Table 6. Summary of 1% annual chance flood loss estimation by occupancy class

General Occupancy	County Total Buildings	County Building and Contents Value	Floodplain Total Buildings	Floodplain Building + Contents Value	Buildings with damage	Building + Contents Loss
Residential	22,049	\$2,070,000,000	771	\$114,000,000	700	\$16,620,158
Commercial	972	\$202,000,000	14	\$2,701,200	13	\$239,063
Other	10,569	\$922,000,000	111	\$17,887,800	94	\$4,236,158
<b>Totals</b>	<b>33,590</b>	<b>\$3,194,000,000</b>	<b>896</b>	<b>\$134,589,000</b>	<b>807</b>	<b>\$21,095,379</b>

SOURCE: (FEMA, 2021B)

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 [here](#)). 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 1<sup>st</sup>-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 [HMP website](#) and verified by Meeker 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. Fortunately, none of Meeker County's essential facilities included in the Hazus flood analysis are located within the 1% annual chance floodplain.

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 Meeker County, one wastewater treatment facility was found to be at risk in the 1% annual chance flood. In addition, manufactured home parks in Watkins and Litchfield; as well as an historic building on Lake Ripley were also found to be at potential risk. The locations are mapped in the [Meeker County HMP website](#). No other information is available.

### *Community Vulnerability*

The municipality of Litchfield is the city with the most potential flood risk to structures. Ellsworth and Union Grove Townships may also suffer significant estimated losses in the 1% annual chance flood. Jurisdictions with buildings identified in the 1% annual chance flood zone can also be viewed on the Meeker 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

Meeker County Emergency Management identified several 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 Meeker 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.

*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. Meeker County continues to provide assistance on road infrastructure mitigation projects to reduce the impacts of localized flooding.

## 4.2 Windstorms

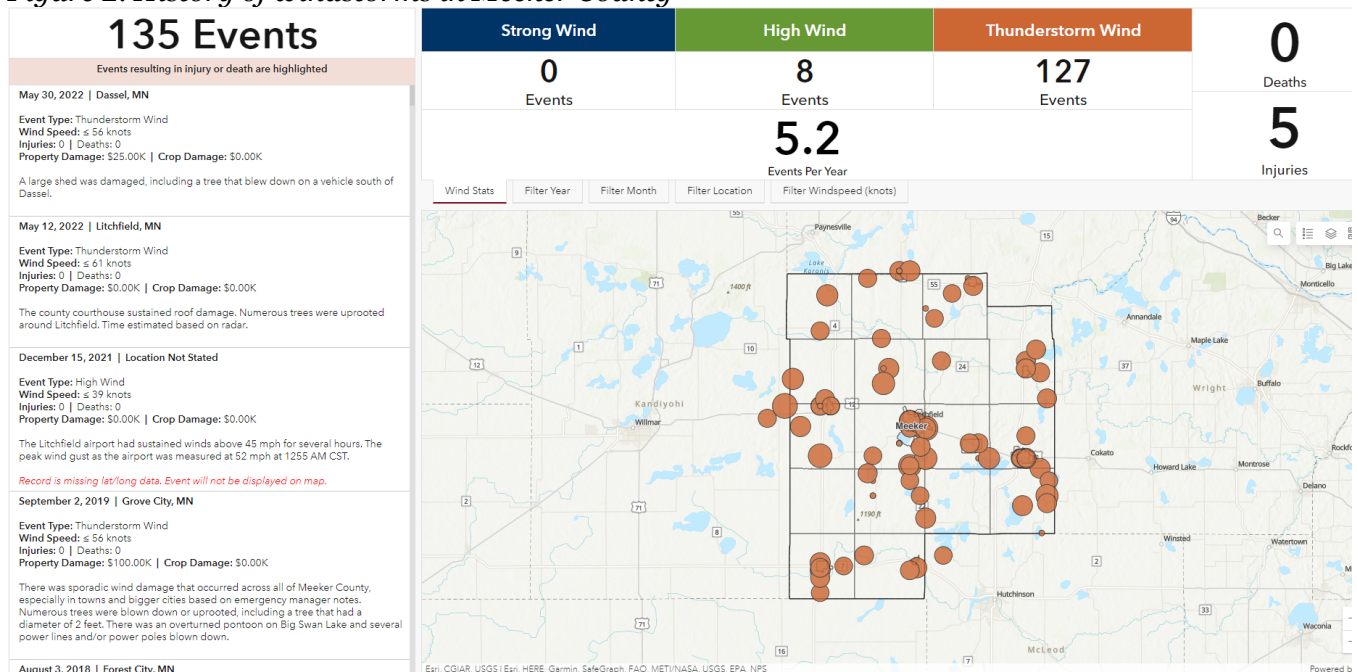
A windstorm is a wind strong enough to cause damage to trees and buildings and typically exceeding 34 mph (Pielke, 2012). Windstorm events encompass a variety of types of damaging wind. The history of windstorms in Meeker County is shown in Figure 2; an interactive version of this map can be found on the Meeker County HMP website.

[View interactive maps and see information about windstorm history, risk, and vulnerability](#)

### 4.2.1 PROBABILITY OF OCCURRENCE

To determine the probability of future wind-related events in Meeker County, records of previous wind-related events (strong wind, high wind, and thunderstorm wind) in Meeker 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 5.2 per year. These relative frequencies can be used to infer the probability of these events occurring in the future.

Figure 2. History of windstorms in Meeker County



## 4.2.2 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 to 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.

## 4.2.3 PROGRAM GAPS AND DEFICIENCIES

Meeker County Emergency Management identified several 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:

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

*Public Education:* Continued public education needs to be conducted during tornado season to inform the public on what is a tornado watch/warning and what to do when outdoor warning sirens are activated. Ongoing public education is also needed to encourage residents to be ready for long-term power outages during dangerous spring and summer storm events such as thunderstorms or high wind events.

*Storm Shelters and Tornado Safe Rooms:* There are areas throughout the county without viable storm shelters or tornado safe rooms where there are populations vulnerable to high wind and storm events, such as campgrounds, resorts, mobile home parks, schools, and other seasonal gathering locations such as the county fairgrounds and county parks that offer camping. 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.

## 4.3 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 Meeker County is shown in Figure 3; an interactive version of this map can be found on the Meeker County HMP website.

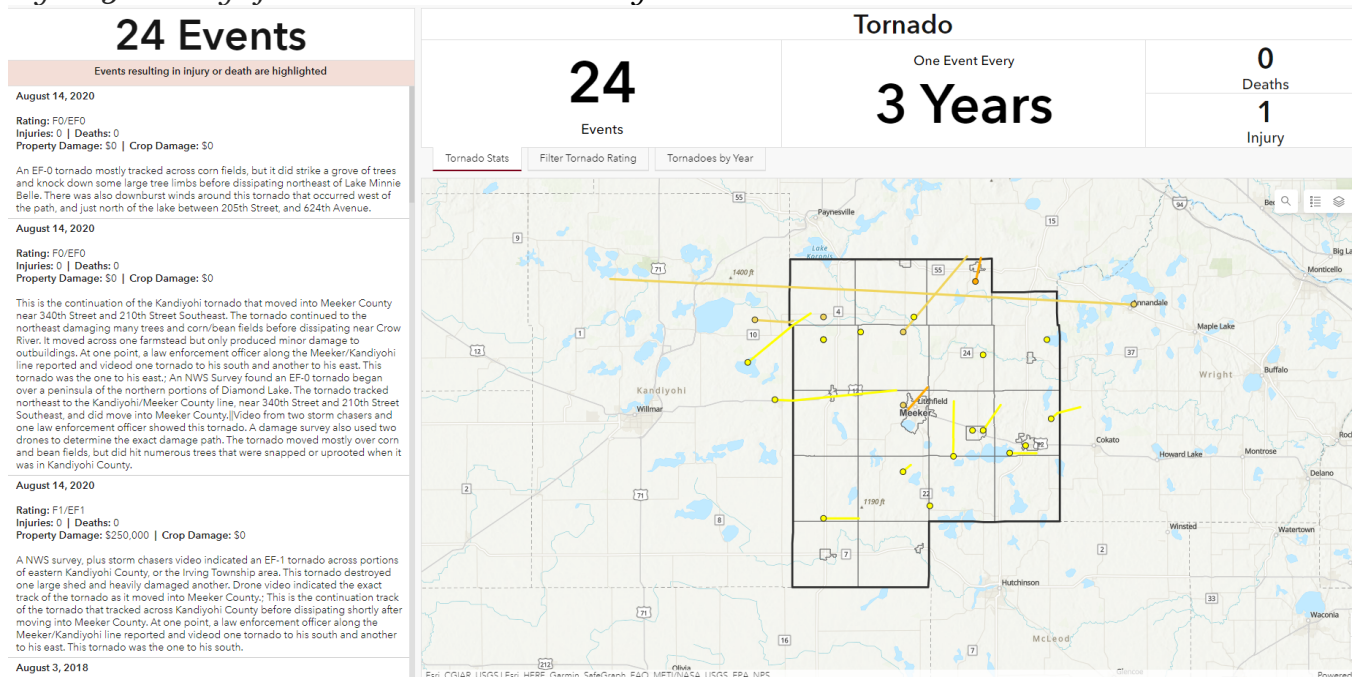
[View interactive maps and see information about tornado history, risk, and vulnerability](#)

### 4.3.1 PROBABILITY OF OCCURRENCE

Estimating the probability of future tornadoes in Meeker 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 February 2020, there has been one tornado every 3 years in Meeker County. These 24 tornadic events occurred in 16 of the 70 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.

Figure 3. History of tornadoes in Meeker County



For any location in Meeker County, there was an annual frequency of 4–5 tornadoes within a 50-mile radius. The historical frequency was only slightly higher in the southeast than the northwest. These relative frequencies can be used to infer the probability of these events occurring in the future.

### 4.3.2 VULNERABILITY

The likelihood of a tornado does not vary significantly across geography within Meeker 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.



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. According to NOAA’s Storm Prediction Center, from 1985–2002, 49% of tornado fatalities in the United States were people who remained within or attempted to flee from mobile homes (AMS, 2004). While Minnesota law requires most mobile home parks to have storm shelters, many do not (Sepic, 2017).

### 4.3.3 PROGRAM GAPS AND DEFICIENCIES

Meeker County Emergency Management identified that there are several 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:

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

*Public Education:* Continued public education needs to be conducted during tornado season to inform the public on what is a tornado watch/warning and what to do when outdoor warning sirens are activated. Ongoing public education is also needed to encourage residents to be ready for long-term power outages during dangerous spring and summer storm events such as thunderstorms or high wind events.

*Storm Shelters and Tornado Safe Rooms:* There are areas throughout the county without viable storm shelters or tornado safe rooms where there are populations vulnerable to high wind and storm events, such as campgrounds, resorts, mobile home parks, schools, and other seasonal gathering locations such as the county fairgrounds and county parks that offer camping. 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.

## 4.4 Winter Storms

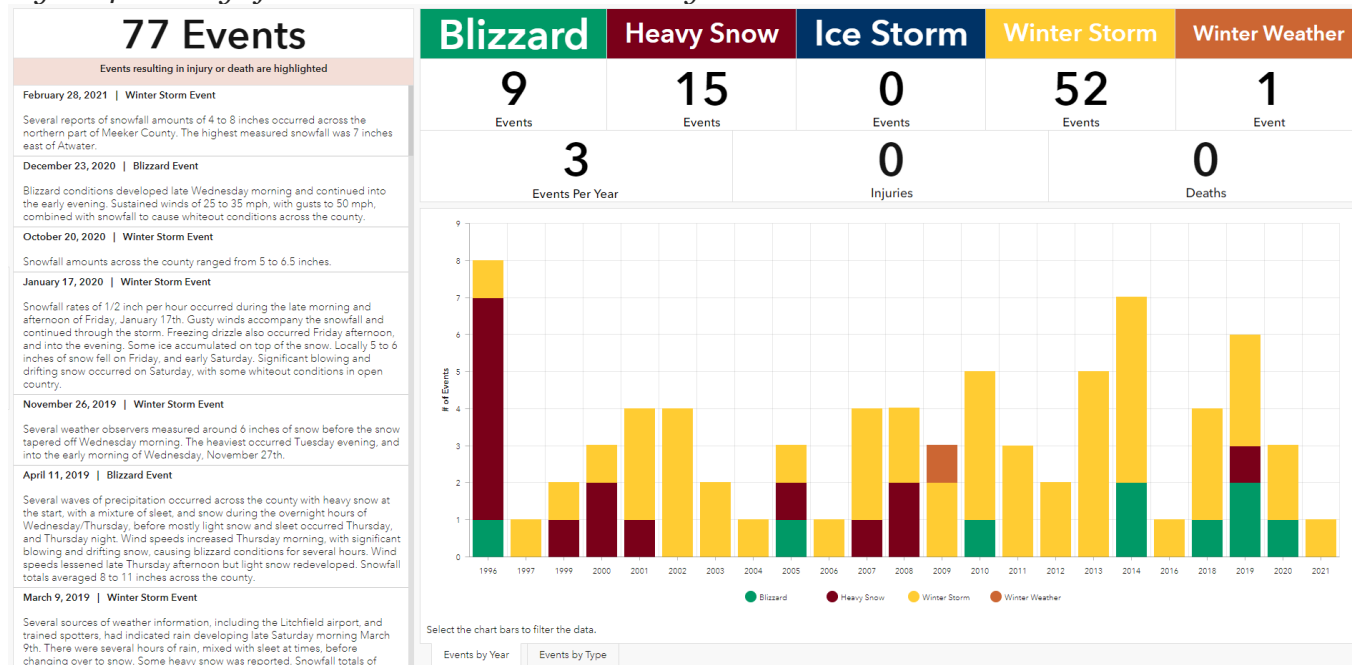
Winter storms encompass a number of winter weather events which the National Weather Service (NWS) organizes into the following categories: blizzard, heavy snow, ice storm, winter storm, and winter weather. Winter weather events are common in Minnesota and can be costly. According to the Spatial Hazard Events and Losses Database (SHELDUS), winter weather events in Minnesota have cost more than \$957 million dollars in damages since 1960 (CEMHS, 2019). The history of winter storms in Meeker County is shown in Figure 4; an interactive version of this map can be found on the Meeker County HMP website.

*[View interactive maps and see information about winter storm history, risk, and vulnerability](#)*

### 4.4.1 PROBABILITY OF OCCURRENCE

To determine the probability of future winter-related storm events in Meeker 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 January 2020, the relative frequency of winter-related storm events in Meeker County is 3 per year. This relative frequency can be used to infer the probability of these events occurring in the future.

Figure 4. History of winter storms in Meeker County



## 4.4.2 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.

## 4.4.3 PROGRAM GAPS AND DEFICIENCIES

Meeker County Emergency Management identified several 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 Meeker 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.

## 4.5 Extreme Cold

Due to Minnesota's position in the middle of the continent and subsequent climate, the state may experience extremely frigid temperatures in winter. Winter in Meeker County can be especially dangerous when low temperatures and wind create arctic-like wind chills. The history of extreme cold in Meeker County is shown in Figure 5; an interactive version of this dashboard can be found on the Meeker County HMP website.

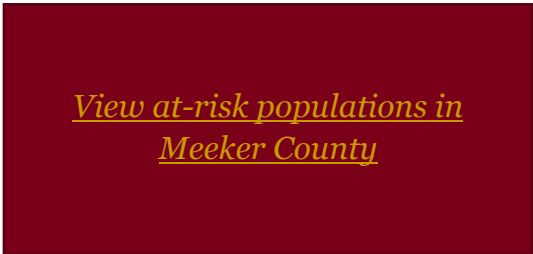
[View interactive maps and see information about extreme cold history, risk, and vulnerability](#)

### 4.5.1 PROBABILITY OF OCCURRENCE

To determine the probability of future cold-related events in Meeker 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 January 2020, the relative frequency of extreme cold/wind chill events in Meeker County is one event every 1.8 years. (NCEI, 2021). This relative frequency can be used to infer the probability of these events occurring in the future.

## 4.5.2 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)

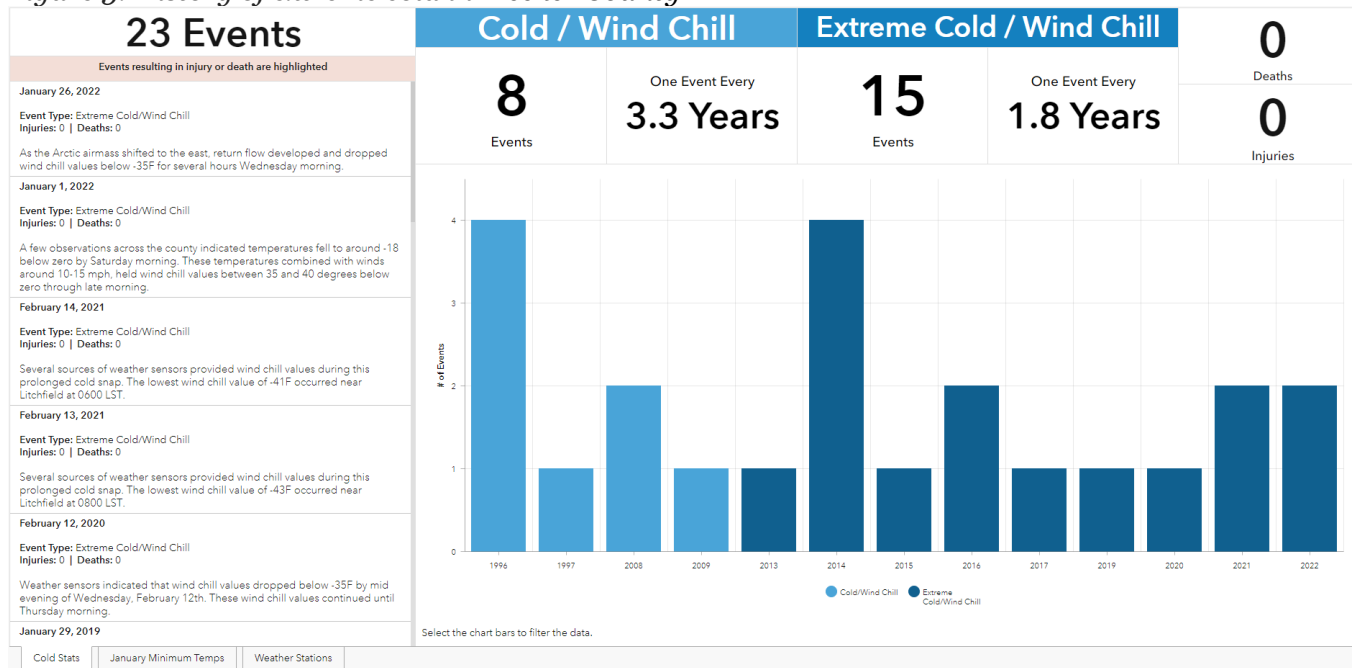


It is not always the depth of the cold that poses a threat but rather unpreparedness for the cold, such as an individual with a vehicle breakdown who lacks a personal winter safety kit in the vehicle. The cost of propane can make rural residents more vulnerable to issues with extreme cold. A propane 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 [on their website](#).

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.

Figure 5. History of extreme cold in Meeker County



### 4.5.3 PROGRAM GAPS AND DEFICIENCIES

Meeker County Emergency Management identified several 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 & visitors, including designated severe weather/emergency shelters (schools, churches, etc.) have backup power.

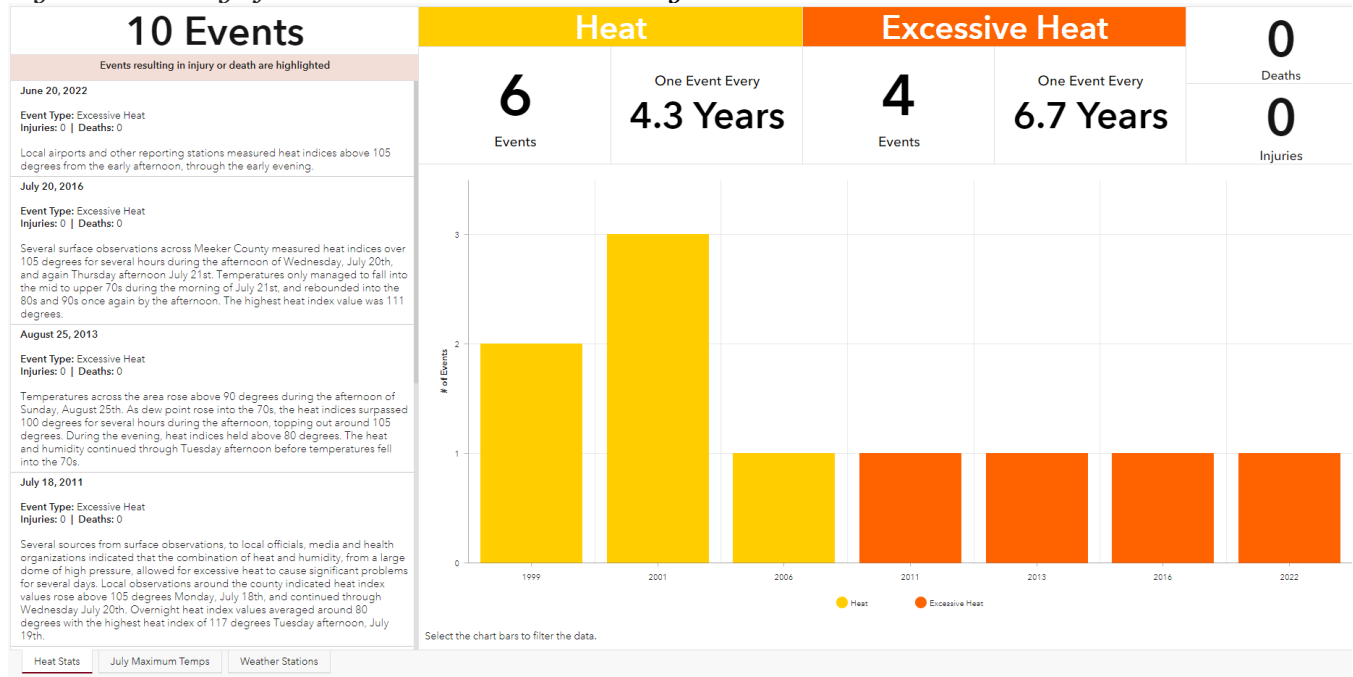
*Public Education:* Ongoing public education is needed to encourage residents to be prepared for extreme weather, including power outages during periods of extreme cold.

### 4.6 Extreme Heat

Extreme heat is the combination of very high temperatures and exceptionally humid conditions. 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 Meeker County is shown in Figure 6; an interactive version of this chart can be found on the Meeker County HMP website.

*View interactive maps and see information about extreme heat history, risk, and vulnerability*

Figure 6. History of extreme heat in Meeker County



Extreme heat events are linked to a range of illnesses, even death, and can exacerbate pre-existing chronic conditions (Moss, 2017). Medical costs related to extreme heat can be enormous: in 2005, the total was \$1.5 billion nationwide, or more than \$16,000 per patient (Union of Concerned Scientists, 2009). Heat-related hazards have cost Meeker County over \$63,000 in property damages since 1960 (CEMHS, 2019).

#### 4.6.1 PROBABILITY OF OCCURRENCE

To determine the probability of future heat-related events in Meeker 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 January 2020, the relative frequency of extreme heat events in the county is 4 per year. This relative frequency can be used to infer the probability of these events occurring in the future.

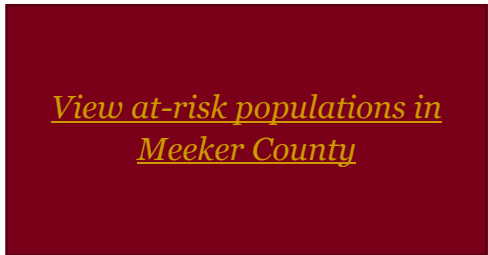
#### 4.6.2 VULNERABILITY

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 less than 1% of Meeker 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.
- 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.

### 4.6.3 PROGRAM GAPS AND DEFICIENCIES

Meeker County Emergency Management identified several 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:

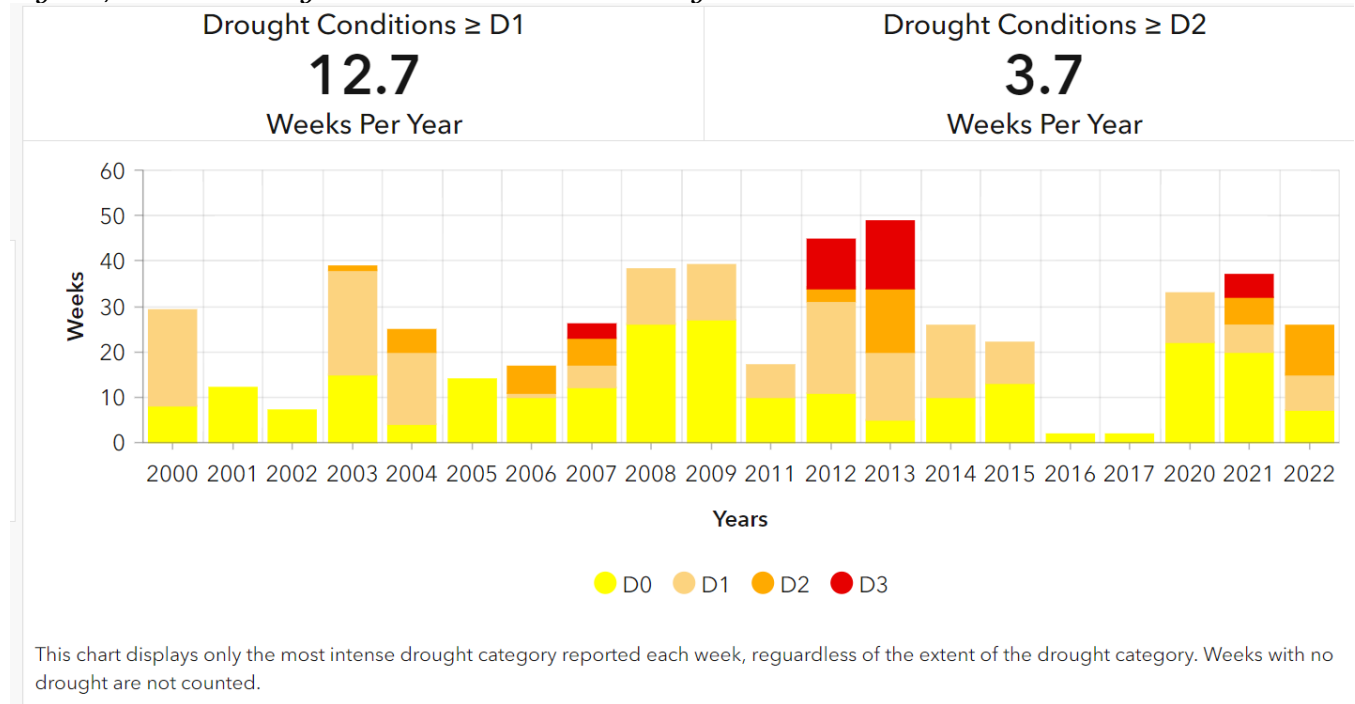
*Generators for Backup Power to Critical Facilities & Shelters:* Not all healthcare and other critical facilities utilized for the care of residents & visitors, including designated severe weather/emergency shelters (schools, churches, etc.) have backup power.

## 4.7 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 7; an interactive version of this dashboard can be found on the Meeker County HMP website.

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

Figure 7. Annual drought statistics in Meeker County since 2000



### 4.7.1 PROBABILITY OF OCCURRENCE

To determine the probability of future droughts in Meeker 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–August 2, 2021 for any occurrence of drought  $\geq$  D1 in Meeker 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 12.7 weeks per year, and the relative frequency of drought conditions  $\geq$  D2 is 3.7 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.

### 4.7.2 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 drought incidents impacting five sectors in Meeker County between 2000 and 2022. Since droughts are regional in nature, jurisdictions within Meeker 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, 2021). 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, Meeker County’s agriculture sector has been impacted by drought more than once, and with 70% of Meeker 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 1989–2018, Meeker County received \$32,728,121 (2018 ADJ) in crop indemnity payments due to drought, placing it as the 15<sup>th</sup>-highest-paid county in Minnesota (CEMHS, 2019).

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

### 4.7.3 PROGRAM GAPS AND DEFICIENCIES

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

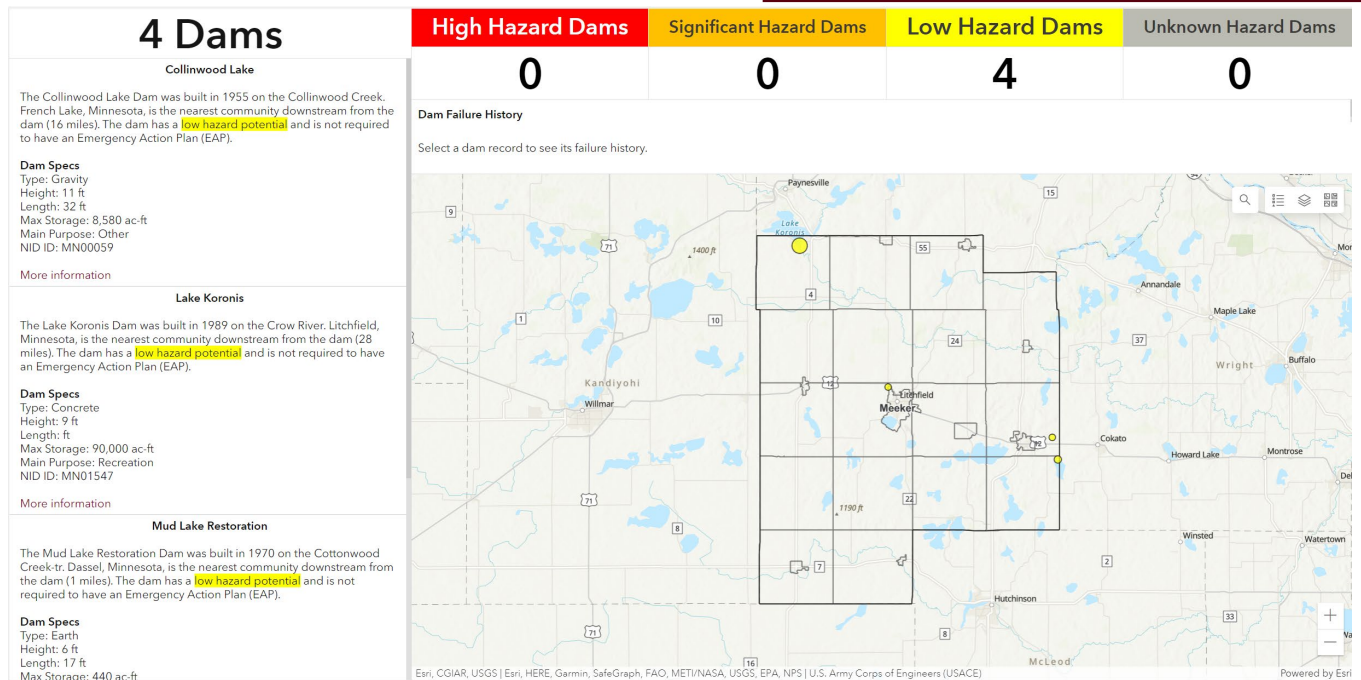
## 4.8 Dam Failure

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. 42% 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).

**Dam Inventory:** There are four dams in Meeker County. Dams are mapped in Figure 8; an interactive version of this map is available on the Meeker County HMP website.

*[View interactive maps and see information about dam failure history, risk, and vulnerability](#)*

Figure 8. Dams in Meeker County



### 4.8.1 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 Meeker County is very low. Dam failures are extremely unlikely if the dam is maintained in compliance with Minnesota’s Dam Safety Program. The dams in Meeker County are all of low hazard potential, and the likelihood of failure in Meeker County is also extremely low.

### 4.8.2 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 7 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).

*Table 7. Downstream hazard potential classification criteria*

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, 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).

### 4.8.3 PROGRAM GAPS AND DEFICIENCIES

Meeker County Emergency Management did not identify any program gaps or deficiencies that make its citizens 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 Meeker County as related to hazard mitigation.
- Appendix C: As part of the Meeker 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 Meeker 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 8 below lists and describes jurisdictional participation in the National Flood Insurance Program (NFIP).

*Table 8. NFIP participation in Meeker County*

Community Name	Participation in the NFIP	FEMA Map	Description of Participation
Meeker County	Participating	FEMA-mapped high-risk areas	Meeker County's Planning & Zoning Department maintains and enforces the Meeker County Floodplain Management Ordinance and floodplain maps for the county. The Planning and Zoning Dept. is the repository for the National Flood Insurance Program's Digital Flood Insurance Rate Maps (DFIRM), as well as flood boundary and floodway maps for rural Meeker County.
Cedar Mills	Not Participating	FEMA-mapped high-risk areas	The city has noted they are not participating in the NFIP due to not having enough employees/resources. The city been put in touch with the State NFIP coordinator to review the city's official floodplain map, learn how to enroll in the NFIP, and receive a model floodplain ordinance appropriate for their level of flood risk.
Cosmos	Not Participating	FEMA-mapped high-risk areas	The city was not participating in the NFIP because they were unaware of any mapped high-risk areas. The city has been put in touch with the State NFIP coordinator to review the city's official floodplain map, learn how to enroll in the NFIP, and receive a model floodplain ordinance appropriate for their level of flood risk.
Darwin	Not Participating	No FEMA-mapped high-risk areas	The city does not have a FEMA map and is not participating.
Dassel	Not Participating	No FEMA-mapped high-risk areas	The city does not have a FEMA map and is not participating.
Eden Valley	Participating	FEMA-mapped high-risk areas	The city enforces requirements of the NFIP through Chapter 152: Floodplain Management in the city's code of ordinances. This chapter regulates development in the flood hazard areas of the city.
Grove City	Not Participating	No FEMA-mapped high-risk areas	The city does not have a FEMA map and is not participating.
Kingston	Participating	FEMA-mapped high-risk areas	The city enforces requirements of the NFIP through the City of Kingston Floodplain Ordinance, adopted on March 29, 2012. This ordinance regulates development in the flood hazard areas of the city.

Community Name	Participation in the NFIP	FEMA Map	Description of Participation
Litchfield	Participating	FEMA-mapped high-risk areas	The city enforces requirements of the NFIP through Title XV: Land Usage, Chapter 156 Floodplain Management Ordinance. This ordinance regulates development in the flood hazard areas of the city.
Watkins	Not Participating	FEMA-mapped high-risk areas	The city of Watkins does not participate in the NFIP, noting that several years ago it was discussed but not approved by the City Council. The city has been put in touch with the State NFIP coordinator to review the city’s official floodplain map, learn how to enroll in the NFIP and how to develop a floodplain ordinance appropriate for their level of flood risk.

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.

Meeker County has one RL property, a single-family residence in Litchfield. There are no SRL properties in Meeker County.

For more on the areas that flood repeatedly in Meeker County, see the [Meeker County Flooding page](#).

### 5.1.2 PLANS AND ORDINANCES

Meeker 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

Meeker 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 Meeker County to support mitigation for the hazards addressed in this plan.

#### **All Hazards**

*All Hazards Emergency Operations Plan:* Meeker County Emergency Management maintains an all-hazards Emergency Operations Plan 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.

*Emergency Notification Systems:* Meeker 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 Meeker County website. Meeker County also has the Integrated Public Alert & Warning System (IPAWS) which can be used to alert everyone in or passing through a community to any qualifying incident.

*Relationship with National Weather Service:* Meeker County has a strong relationship with the National Weather Service – Twin Cities/Chanhassen 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:* Meeker County utilizes the Meeker County Emergency Management website page, Meeker County Sheriff’s Office Facebook page and local news media to communicate with residents and visitors on emergency preparedness.

*Mass Care Shelter Facilities:* In partnership with the American Red Cross, Meeker County has designated facilities throughout the county that could be utilized to provide mass care services to support an evacuation or other incident where temporary housing and basic human services are needed. Meeker County Emergency Management maintains a list of shelters within the county and has trained staff prepared for shelter operations.

*NOAA Weather Radios:* Meeker County actively 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 to encourage their use & functionality.

*Weather-Ready Nation Ambassador:* Meeker County Emergency Management is a NOAA Weather-Ready Nation Ambassador, 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.

*Backup Power:* Generator back-up power is in place for the Meeker County Law Enforcement Center/Jail.

*School Closings:* Schools throughout Meeker County have 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.

## **Severe Winter Storms**

*Winter Weather Statements (Watch, Advisory, Warning, etc.):* Meeker County relays winter weather statements received from the National Weather Service internally and to response chiefs/public works departments. The Meeker County Sheriff's Office Facebook page may also be used to alert to the public if deemed necessary.

*Public Education:* Meeker County participates annually in the Winter Hazard Awareness Week campaign sponsored by the National Weather Service and MN Homeland Security and Emergency Management each November. Throughout the week, the county shares information on winter storms, outdoor & indoor winter safety, winter fire safety, and winter driving.

*Snow Removal & Ice Control:* The Meeker 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 Meeker County Highway Department Snow Removal Policy. MNDOT removes snow from State Highways as well as disperses salt/sand as needed.

## **Severe Summer Storms**

*Emergency Notifications:* Severe spring and summer storm warnings are initiated by the National Weather Service. Residents receive warnings by NOAA weather radio, local media, CodeRED Emergency Notification System, cell phone apps, and the outdoor warning siren system. Meeker County relays severe weather statements received from the National Weather Service internally and to response chiefs/public works departments. If necessary, CodeRED alerts will be used to notify the public of immediate life-threatening weather conditions.

*Outdoor Warning Sirens:* There are 27 outdoor warning sirens located in Meeker County which are tested on a monthly basis by the Meeker County Sheriff's Office. Sirens are activated when the National Weather Service notifies Dispatch of high winds or tornado conditions that pose a risk to the public. Warning sirens are owned and maintained by the cities where they are located. All

sirens are remotely activated by the Meeker County Sheriff's Office. Sirens within city limits may be activated by city officials.

*Skywarn Program:* Meeker 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 who 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.

*Public Education:* Meeker County participates in the annual Severe Weather Awareness Week campaign sponsored by the National Weather Service and Minnesota Homeland Security and Emergency Management each April. Throughout the week the county shares information on severe weather alerts and warnings, lightning, hail, floods, tornadoes, and extreme heat.

*Right of Way Clearance:* Meeker County Highway Department and local utility providers regularly maintain and clear their right of ways of trees, vegetation, and debris to prevent the creation of additional hazards or blocking road/site access resulting from severe spring and summer storm events.

*Manufactured Home Parks Shelters & Evacuation Plans:* Meeker County Public Health works with licensed manufactured home parks to ensure the requirements of MN Statute 327.20 relating to shelters and evacuation plans are met. 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 (NWS). The Meeker County Sheriff's Office Facebook page may also be used to alert to the public if deemed necessary.

*Extreme Cold Safety Awareness:* Meeker County Emergency Management and Meeker 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 Heat**

*Emergency Notifications:* Extreme heat temperature warnings are issued by the National Weather Service. The Meeker County Sheriff's Office Facebook page may also be used to alert to the public if deemed necessary.

*Public Education and Awareness:* Meeker County Emergency Management and Meeker 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.

## **Drought**

*Public Awareness & Outreach:* In the event of drought conditions, Meeker 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.

*Meeker County Soil and Water Conservation District:* The Meeker County 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, including those associated with drought.

*Meeker County Comprehensive Water Plan:* The Meeker County Comprehensive Water Management Plan (2013 - 2018) describes both surface and groundwater quantities and quality. It also addresses the county's water needs and concerns. The plan is updated by the Meeker County Planning & Zoning Office with assistance from the Meeker County Soil and Water Conservation District and other key stakeholders.

## **Flooding**

*National Flood Insurance Program (NFIP):* Meeker County has FEMA Mapped High Risk Areas and participates in the NFIP.

*Floodplain Ordinance and Mapping:* Meeker County's Planning & Zoning Department maintains the floodplain management ordinance and floodplain maps for the county. The Planning and Zoning Dept. is the repository for the National Flood Insurance Program's Digital Flood Insurance Rate Maps (DFIRM), as well as flood boundary and floodway maps for rural Meeker County. The Planning and Zoning Office can assist county residents in determining whether their property is affected by an officially mapped flood area.

*Shoreland Management Ordinance:* Meeker County has a Shoreland Management for Crow River Ordinance in place for the controlling of bluffland and riverland development in order to protect and preserve the outstanding scenic, recreational, natural, historical and scientific values of the Crow River in Meeker County.

*Transportation Improvement Plan:* Meeker County Highway Department maintains a 5-year Transportation Improvement Plan that identifies and schedules road improvement projects that include measures for flood mitigation. The current TIP is for 2020-2025.

*Meeker County Comprehensive Water Plan:* The Meeker County Comprehensive Water Plan (2013-2018) is written and overseen by the Meeker County Planning & Zoning Office with assistance from the Meeker County Soil and Water Conservation District and other key

stakeholders and has a five-year implementation plan. The plan identifies the primary water planning issues, which include erosion and sediment control, stormwater management, and wetlands and water storage/retention.

*Buffer Law:* Meeker County adopts and enforces the State 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. Meeker County SWCD oversees compliance with the State Buffer Law.

*Meeker County Soil and Water Conservation District:* The Meeker County 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, including those associated with drought.

## **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 Meeker County Plan. This framework, as outlined below, will allow for integration of the mitigation actions that are listed by Meeker 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 9 below:

*Table 9. Mitigation strategies and action types*

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.	<ul style="list-style-type: none"> <li>• Comprehensive plans</li> <li>• Land use ordinances</li> <li>• Planning and zoning</li> <li>• Building codes and enforcement</li> <li>• Floodplain ordinances</li> <li>• NFIP Community Rating System</li> <li>• Capital improvement programs</li> <li>• Open space preservation</li> <li>• Shoreline codes</li> <li>• Stormwater management regulations and master plans</li> </ul>
Structure and Infrastructure Projects	<p>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.</p> <p>This type of action also involves projects to construct manmade structures to reduce the impact of hazards.</p> <p>Many of these types of actions are projects eligible for funding through the FEMA Hazard Mitigation Assistance program.</p>	<ul style="list-style-type: none"> <li>• Acquisitions and elevations of structures in flood prone areas</li> <li>• Utility undergrounding</li> <li>• Structural retrofits</li> <li>• Floodwalls and retaining walls</li> <li>• Detention and retention structures</li> <li>• Culverts</li> <li>• Safe rooms</li> </ul>

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.	<ul style="list-style-type: none"> <li>• Sediment and erosion control</li> <li>• Stream corridor restoration</li> <li>• Forest management</li> <li>• Conservation easements</li> <li>• Wetland restoration and preservation</li> </ul>
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.	<ul style="list-style-type: none"> <li>• Radio or television spots</li> <li>• Websites with maps and information</li> <li>• Real estate disclosure</li> <li>• Presentations to school groups or neighborhood organizations</li> <li>• Mailings to residents in hazard-prone areas.</li> <li>• StormReady Certification</li> <li>• Firewise Communities</li> </ul>
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.	<ul style="list-style-type: none"> <li>• Emergency operations plan</li> <li>• Flood fight plans and preparedness</li> <li>• Dam emergency action plans</li> <li>• Warning</li> <li>• Backup power</li> <li>• Emergency capabilities</li> </ul>

Local leaders work together with the Meeker 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 Meeker 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 Meeker 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 Cedar Mills, Cosmos, Darwin, Dassel, Eden Valley, Grove City, Kingston, Litchfield, and Watkins.

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 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 9 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 Meeker 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 10 provides the criteria taken into consideration in the process.

*Table 10. Criteria for Mitigation Action Priority Ranking*

Ranking	Criteria
High Priority	<ul style="list-style-type: none"><li>• Methods for reducing risk from the hazard are technically reliable.</li><li>• The County has experience in implementing mitigation measures.</li><li>• Mitigation measures are eligible under federal grant programs.</li><li>• There are multiple mitigation measures for the hazard.</li></ul>

Ranking	Criteria
Moderate Priority	<ul style="list-style-type: none"> <li>• The mitigation measure(s) are known to be cost effective.</li> <li>• The mitigation measures protect lives and property for a long period of time, or are permanent risk reduction solutions.</li> <li>• Mitigation methods are established.</li> <li>• The County has limited experience with the kinds of measures that may be appropriate to mitigate the hazard.</li> <li>• Some mitigation measures are eligible for federal grants.</li> <li>• There is a limited range of effective mitigation measures for the hazard.</li> <li>• Mitigation measures are cost-effective only in limited circumstances.</li> <li>• Mitigation measures are effective for a reasonable period of time.</li> </ul>
Low Priority	<ul style="list-style-type: none"> <li>• Methods for reducing risk from the hazard are not well-established, are not proven reliable, or are experimental.</li> <li>• The State or Counties have little or no experience in implementing mitigation measures, and/or no technical knowledge of them.</li> <li>• Mitigation measures are ineligible under federal grant programs.</li> <li>• There is a very limited range of mitigation measures for the hazard, usually only one feasible alternative.</li> <li>• The mitigation measure(s) have not been proven cost effective and are likely to be very expensive compared to the magnitude of the hazard.</li> <li>• The long-term effectiveness of the measure is not known or is known to be relatively poor.</li> </ul>

**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 Meeker County Mitigation Action Chart is provided in Table 11.

Appendix H provides the mitigation action charts developed for each city participating in the HMP update.

Table 11. Meeker County Mitigation Action Chart (2023–2027)

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
1	All-Hazards	Education & Awareness Programs	Encourage all county residents to sign-up for the county’s CodeRED emergency notification alert system.	Existing High 2023-2028	Meeker County Emergency Management (MCEM)	Meeker County promotes individuals to sign up for the CodeRED notification system at public events including National Night Out and the Meeker County Fair. Information on the CodeRED notification system is also included on the Meeker County website for registration.	County
2	All-Hazards	Mitigation Preparedness & Response Support	Ensure the Meeker County Emergency Operations Plan (EOP) is updated and addresses policies & procedures needed to support EM functions prior to, during, and following a disaster.	Existing Moderate 2023-2028	MCEM	MCEM has an EOP that is updated on a regular basis which helps the county be ready to respond to disasters across a range of EM functions. This includes plans in place for sheltering of displaced residents and pet sheltering.	County
3	All-Hazards	Mitigation Preparedness & Response Support	Ensure designated facilities are in place and prepared for providing mass care sheltering and county staff are trained in sheltering operations.	Existing Moderate 2023-2028	MCEM	In partnership with the American Red Cross, Meeker County has designated facilities throughout the county that could be utilized to provide mass care services to support an evacuation or other incident where temporary housing and basic human services are needed. Meeker County Emergency Management maintains a list of shelters within the county and has trained staff prepared for shelter operations.	County
4	Severe Winter & Summer Storms	Education & Awareness Programs	Provide education and outreach to residents on personal preparedness for severe weather events and extended power outages. Coordinate with local jurisdictions to share information locally.	Existing High 2023-2028	MCEM in coord with Local Gov’t	MCEM participates in and promotes the NWS Severe Weather Awareness Weeks in spring and fall each year. We also promote residents to be prepared for emergencies, to have NOAA weather radios, and to sign up for the county’s CodeRED system and Sheriff’s Office Facebook page to receive emergency notifications and other information. MCEM shares information with local governments and encourages them to use their communication platforms to keep residents informed.	County

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
5	Severe Winter & Summer Storms	Structure & Infrastructure Systems	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.	Existing High 2023-2028	MCEM in coord with Local Gov't and Rural & Municipal Utility Coops	Xcel Energy, Great River Energy, Heartland Consumer Power District, Litchfield Municipal Light and Power, and Meeker Coop Light and Power continue to address where power lines can be strengthened or buried underground. MCEM will assist as needed with future applications to FEMA for eligible projects to reduce risk of power outages by these coops.	Electric Coops, FEMA HMA grant
6	Severe Winter & Summer Storms	Mitigation Preparedness & Response Support	Purchase and install backup generators for the Meeker County Public Works/MN DOT Building.	New High 2023-2028	MCEM in coord with MC Public Works & MnDOT	MCEM will work with Meeker County Public Works and MnDOT to address the emergency backup power needs for this key county facility. FEMA HMA grant funding may be a possible source of funding if eligible. MCEM continues to provide assistance to local jurisdictions that need to acquire portable generators to power infrastructure such as lift stations and other key facilities such as City Hall /community shelters in the event of a power outage. In some cases, this may include helping to identify where used portable generators may be obtained or helping to prepare a funding application.	County, MnDOT, FEMA HMA grant funding
7	Severe Winter & Summer Storms	Mitigation Preparedness & Response Support	Work with local jurisdictions to acquire generator backup power to support critical infrastructure and delivery of essential services during an extended power outage due to storms.	Existing Moderate 2023-2028	MCEM in coord with Local Gov't	Meeker County Highway Department and local utility providers regularly maintain and clear their right of ways of trees, vegetation, and debris to prevent the creation of additional hazards or blocking road/site access resulting from severe spring and summer storm events.	County, Local Gov't
8	Severe Winter & Summer Storms	Natural Systems Protection	Conduct vegetation management along county-owned roads to reduce the risk of downed trees and branches resulting from severe storms.	Existing Moderate 2023-2028	MC Highway Dept. & Utility Providers	This is an ongoing element of the MCEM program. MCEM continues to work with school districts and other long-term care facilities across the county and will encourage them to have plans in place for when the need arises.	County, Utility Coops
9	Severe Winter & Summer Storms	Mitigation Preparedness & Response Support	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.	Existing High 2023-2028	MCEM		County, Local Facilities

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
10	Severe Summer Storms	Local Planning & Regulations	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.	Existing High 2023-2028	MCPH in coord with Local Gov't and MHP's	Meeker County Public Health works with licensed manufactured home parks to ensure the requirements of MN Statute 327.20 relating to shelters and evacuation plans are met. Shelter and evacuation plans must be approved by the city or township in which they are located and submitted to MDH.	MCPH, MHP Owners
11	Severe Summer Storms	Mitigation Preparedness & Response Support	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.	Existing Moderate 2023-2028	MCEM in coord with NWS & Local Gov't	MCEM 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 who wish to be trained as spotters.	County, NWS
12	Severe Summer Storms	Local Planning & Regulations / Structure & Infrastructure Projects	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.	Existing High 2023-2028	MCEM in coord with Local Gov't	MCEM will assist communities as needed with applying for funding to the USDA Community Facilities Grant Program which is a source for funding outdoor warning sirens. All new sirens will be connected to the county's remote activation system.	County, Local Gov't, USDA CF Grant Program
13	Severe Summer Storms	Structure & Infrastructure Projects	Address the need for construction of tornado safe rooms or storm shelters at Meeker County parks that have high usage but lack protective shelter facilities.	Existing High 2023-2028	MCEM, MC Parks Dept.	Many of the county parks do not have adequate sheltering available on site that could shelter all individuals during busy usage times. Meeker County Emergency Management and Meeker County Parks Department continue to assess how to address the need for protective shelter options at high-use parks. MCEM may seek to apply for FEMA HMA grant funding if a decision is made to pursue construction of any tornado safe rooms. This is an ongoing project by Meeker County Emergency Management in coordination with Meeker County Fair Board. Outside grant funding is necessary to fund a large-scale storm shelter project for the county fairgrounds. MCEM may seek to apply for FEMA HMA grant funding if a decision is made to pursue construction of a tornado safe rooms for the fairgrounds.	County, FEMA HMA grant funding
14	Severe Summer Storms	Structure & Infrastructure Projects	Work with the Meeker County Fair Board to determine and incorporate tornado safe rooms/shelters into future building and grounds updates.	Existing High 2023-2028	MCEM, MC Parks Dept. in coord with MC Fair Board		County, FEMA HMA grant funding

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
15	Severe Summer Storms	Structure & Infrastructure Projects	Work with communities in the county on the construction of storm shelters or tornado safe rooms in areas where there are vulnerable populations, such as at municipal campgrounds, mobile home parks and schools.	Existing Moderate 2023-2028	MCEM in coord with Local Gov't	MCEM will provide assistance to communities as needed to help assess need, possible construction options, and assist in applying for grant funding as needed (i.e., FEMA HMA safe room grant).	County, FEMA HMA Grant funding
16	Flooding	Local Planning & Regulations	Participate in the National Flood Insurance Program and enforce policies that address development in high-risk flood areas.	Existing High 2023-2028	MC Planning & Zoning Dept.	Meeker County's Planning & Zoning Department maintains and enforces the Meeker County Floodplain Management Ordinance and floodplain maps for the county. The Planning and Zoning Dept. is the repository for the National Flood Insurance Program's Digital Flood Insurance Rate Maps (DFIRM), as well as flood boundary and floodway maps for rural Meeker County.	County
17	Flooding	Local Planning & Regulations / Structure & Infrastructure Projects	Work in coordination with township governments and the SWCD to identify, plan for, and implement measures to reduce damages from high rain events to roads, bridges, and culverts throughout the county, as well as addressing ditch maintenance and bank stabilization.	In- Progress High 2019-2023	MC Public Works Dept. in coord with Township Gov't and SWCD	The Meeker County Public Works Department maintains an inventory of the condition of county roads and bridges and slates improvement projects as needed on an annual basis. A transportation plan is in place (2020-2025). Additional projects are identified and addressed in coordination with township officials and the Meeker County SWCD. Efforts continue to stabilize vulnerable shoreline along our two creeks that are eroding due to sluffing from alternate high rain events and dry periods.	County, State, Federal
18	Flooding	Local Planning & Regulations	Encourage cities to develop and implement stormwater management plans and upgrade storm sewer systems as needed.	Existing Moderate 2023-2028	MCEM, MC Public Works	Meeker County encourages local jurisdictions to continue to address stormwater management plans and infrastructure improvements as needed. Stormwater management planning and projects continue to be conducted by Meeker County and individual jurisdictions. MPCA provides Best Management Practices and other assistance to communities in stormwater management planning and projects.	County, Local Gov't's

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
19	Flooding	Local Planning & Regulations	Work in partnership with the Meeker Soil & Water Conservation District to coordinate planning and implementation of project efforts that address mitigation for flooding and erosion.	Existing Moderate 2023-2028	MC Planning & Zoning in coord with Meeker SWCD	The Meeker County Comprehensive Local Water Plan is written and overseen by the Meeker County Planning & Zoning Office with assistance from the Meeker County SWCD and has a 5-year implementation plan. The plan identifies the primary water planning issues, which include erosion and sediment control, stormwater management, and wetlands and water storage/retention.	County, SWCD Cost Share Grant Program
20	Flooding	Local Planning & Regulations / Structure & Infrastructure Projects	Conduct property buyouts to acquire homes affected by repetitive flooding and physically relocate or remove those homes to eliminate future flood damages.	Existing Low 2023-2028	MCEM, MC Planning & Zoning in coord with Local Gov'ts	There are currently no identified projects for conducting property buyouts, however Meeker 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.	County, MN DNR, FEMA HMA, Local Gov't
21	Drought	Public Awareness & Education	Conduct outreach to residents to be aware of water restrictions, water conservation tips, and fire safety during periods of severe drought.	New Moderate 2023-2028	MCEM in coord with Local Gov't.	MCEM continues to provide public outreach and education during heightened drought periods. MCEM further encourages city and townships to promote drought awareness to residents.	County
22	Drought	Local Planning & Regulations	Encourage communities to develop and enforce ordinances for water use restrictions during periods of severe drought.	Existing Moderate 2023-2028	MCEM, MC Planning & Zoning	Meeker County will encourage communities to be in compliance with MN DNR watering restrictions when such guidelines are established.	County

# Section 6 – Plan Maintenance

## 6.1 Monitoring, Evaluation, and Updating the Plan

The Meeker County Hazard Mitigation Plan 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 Meeker County HMP.

The Meeker 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 Meeker County EMD will work with an emergency managers group to help monitor, review, evaluate, and update the Hazard Mitigation Plan. The group will include township representatives and designated city emergency managers from the cities of Cedar Mills, Cosmos, Darwin, Dassel, Eden Valley, Grove City, Kingston, Litchfield, and Watkins as well as other city elected officials or staff as needed. The Meeker 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 Meeker 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 Meeker 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 Meeker 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 committee deems appropriate and necessary, and as approved by county commissioners.

Throughout the five-year window of the plan, Meeker County EMD will request updates from county departments and jurisdictions on that status of mitigation efforts so that progress notes may be maintained for the next plan update.

## 6.2 Implementation

Meeker County and its included municipalities share a common Hazard Mitigation Plan and work together closely to develop, revise, and implement it. This HMP provides a comprehensive chart of mitigation actions for Meeker County and its jurisdictions (see Appendix H and Section 5.3). The cities of Cedar Mills, Cosmos, Darwin, Dassel, Eden Valley, Grove City, Kingston, Litchfield, and Watkins 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 Meeker 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 man-made 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 V and the MN Department of 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 Meeker 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 Meeker County Emergency Management Director and the emergency managers group will continue to engage new public stakeholders in planning discussions and project implementation during the five-year cycle of this plan.

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

- The plan will be posted on the Meeker County Emergency Management website for the public to read and provide 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, Meeker County Emergency Management will seek to gather concerns and new ideas for mitigation from local 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 to keep 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 Meeker County Emergency Management Director.
- Jurisdictions will use numerous means of public outreach to engage new public stakeholders in providing input on mitigation efforts or concerns on hazards by sharing information at city council/township board meetings, sharing information at special events, working with local schools and partner organizations, and posting information on relevant local or social media that their 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.

*The Meeker County HMP website provides opportunities for continued public involvement and feedback*

# 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**

# Meeker County

## Local Mitigation Survey Report

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### Overview

As part of Meeker County’s Multi-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 are the responses from the county and jurisdictions that participated in the survey.

### LMS Forms

Meeker County	Page 2
City of Cedar Mills	Page 9
City of Cosmos	Page 11
City of Darwin	Page 14
City of Dassel	Page 18
City of Eden Valley	Page 21
City of Grove City <b>(no LMS)</b>	-
City of Kingston	Page 24
City of Litchfield <b>(no LMS)</b>	-
City of Watkins	Page 27

**MEEKER COUNTY**

**PART A: HAZARD IDENTIFICATION, RISK ASSESSMENT & VULNERABILITY ANALYSIS**

- Hazard Identification & Risk Prioritization:** Please fill out the chart below as you feel it relates for your jurisdiction. Please note that hazards that are considered as significant (moderate to high priority) will need to have at least one mitigation action associated with it.

<b>Natural Hazard</b>	<b>Use an "X" to Select 3-5 of the top hazards you feel pose risk to your jurisdiction.</b>	<b>Indicate your priority level of each hazard to your community as <u>Low, Moderate, or High.</u> Consider past events, likelihood of future events, and impacts to community assets.</b>	<b>Note if you feel the risk has increased, decreased, or had no change over the last 5 years.</b>
<b>Winter Storms (Blizzards, Ice Storms)</b>	X	Moderate	Increasing
<b>Tornadoes</b>	X	High	No change
<b>Windstorms</b>	X	Moderate	Increasing
<b>Lightning</b>		Low	No change
<b>Hail</b>		Low	No change
<b>Flooding</b>	X	High	No change
<b>Extreme Cold</b>	X	Moderate	No change
<b>Extreme Heat</b>		Moderate	No change
<b>Drought</b>		Low to Moderate	Increasing
<b>Wildfire</b>		Low	No change
<b>Landslides</b>		Low	No change
<b>Dam Failure</b>		Low	No change

- Recent Hazard Events:** Describe any severe weather or disaster events that have occurred over the last 5 years that caused damages in your community.

Since January 2015, Meeker County has experienced around 45 weather events ranging from extreme cold, winter storm/blizzard, Hail, tornadoes/funnels, heavy rain, high winds, and excessive heat. During this timeframe, Meeker County had 4 tornadoes that caused damages within the county. The most significant of these happened on July 11, 2016, when an EF-2 tornado caused damages to the City of Litchfield, the City of Watkins, and various locations in between. Meeker County sustained damages in excess of approximately \$226,600 and was included in State Public Disaster Assistance declaration.

Additional Storm Events not resulting in a state or federal declaration include:

June 13, 2017: Meeker County declared a local State of Emergency for a derecho storm system which moved through Meeker County in the early morning of June 11, 2017. This storm tore down and uprooted trees, damaged roofs and siding to businesses and homes, and severely damaged the electrical infrastructure (broken power poles, downed power lines, damage to transmission lines, substation damage, etc.) to the county which caused an extended power outage for about 70-80% of the county. Due to the outage, the Meeker County Sheriff's Office Dispatch was on backup power from 7:30 a.m. until 7 p.m. on Sunday, June 11. Some residents

did not get power until the early afternoon on June 13, 2017. This storm also caused major damage to barns and outbuildings on private properties, and damages at the Atwater-Cosmos-Grove City High School.

August 3, 2018: An EF-0 tornado moved from Kandiyohi County into Meeker County almost following Highway 12 from Atwater into Litchfield MN. The Meeker County Fair was in full activity during the storm event and was required to evacuate the grandstand and shelter attendees of the fair. Damages from the storm were tree damage, power line damages/power outages, and private outbuilding damages. Thankfully, this storm dissipated just before reaching the Meeker County Fairgrounds.

August 14, 2020: 3 EF-0 tornadoes caused damages to private structures and outbuildings, trees, and heavy rain.

- 3. Local Vulnerabilities: Use the chart below to identify what specific community assets (i.e., infrastructure, systems, populations) are vulnerable to damages or loss from the hazards that pose risk to your community. Use the blank rows to enter in your answers as they relate to your community.**

<b>Natural Hazard (please list)</b>	<b>Vulnerability Assessment</b> Describe <u>specific</u> community assets are susceptible to damage or loss from hazard events.
<b>Windstorms/Tornadoes</b>	<p>Meeker County has numerous locations for seasonal travel trailer/mobile home parks, and campgrounds. There are also manufactured home parks located throughout the county. Some have storm shelters or designated shelter areas. Many do not. Koronis Camp Grounds has a storm shelter, however, many of the county parks and several municipal parks are without storm shelters. The absence of storm shelters leaves residents, guests, and visitors only their vehicle or manufactured structure for protection and making them more susceptible to the winds, debris, and damage associated with these storms.</p> <p>Uprooted and fallen trees and branches have the ability to cause extensive physical damage to residential and community infrastructure, create impediments to travel and emergency response access, and create cascading impacts such as power outages.</p> <p>A vast majority of electrical infrastructure throughout the county is above ground. We have experienced damage to electrical infrastructure (power generation facilities/equipment, poles &amp; lines, substations, transformers, etc.) that has resulted in power outages, creating near universal vulnerability for people (especially children, seniors, and anyone who relies on powered medical devices) and animals.</p> <p>Physical damages and losses to private homes, commercial structures, and disconnects societal access to community lifelines, economic activity, etc. are also widely experienced in power outages.</p>
<b>Extreme Heat</b>	<p>There are several homes, businesses, and other gathering areas that do not have air conditioning available. This could lead to heat emergencies in a lot of our population should they not have air conditioning or if there is power failure.</p>

<b>Extreme Cold</b>	<p>We have seniors &amp; children are vulnerable to extreme cold especially if the power goes down during storm events. Rural 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.</p> <p>The county has also experienced damages to roads from spring frost heaves, frozen culverts that cause localized flooding.</p>
<b>Ice Storms &amp; Blizzards</b>	<p>We have powerlines, transmission lines and high voltage lines running through several areas of our county. Ice storms or windstorms could cause damage to these. We have powerlines and power poles that have failed or may fail due to heavy snow and ice storms.</p> <p>Road closures or otherwise impassable roads create at least temporary loss of access to transportation and adverse effects to public safety systems.</p> <p>Spring snowmelt can also lead to wet/soft road base soils, potentially creating washouts and eroded transportation systems</p>
<b>Flooding</b>	<p>Large-scale riverine flooding can cause the most damage to roads, bridges, culverts, and agricultural drainage areas in Meeker County. There have been some instances where a high quantity of rain has also caused flash flooding and washed out or required the closing of portions of the roads and or bridges. Additional hazards potentially experienced are utility failure, erosion, and debris flow and blockage of drainage systems.</p>

**4. Reduction in Vulnerability - Describe any actions your community has taken to reduce 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**

Meeker County Highway Department has continued the work of upgrading various culverts over the last few years.

Meeker County Sheriff’s Office and Emergency Management have encouraged residents and businesses to sign up for CodeRED notifications and has a MOA to use IPAWS to notify the public during emergent events.

Several agencies in the county have also added the utilization of social media resources for notification and sharing information to the public.

**5. Increase in Vulnerability – Describe any current conditions or changes you feel have increased your community’s vulnerability to future severe weather or disaster events. Consider factors such as recent population growth or new development.**

In the past five years Meeker County’s total population has increased slightly. There has also been an increase in residential and business construction throughout the county.

Many of the county parks do not have adequate sheltering available on site that could shelter all individuals during busy usage times.

About 20% of the population in Meeker County fits into the 65 and older age group, and we continue to see a gradual increase in this percentage. In addition, around 3% of the population of the county speaks another language other than English in their home. Within this population we have many who have very limited English proficiency.

## **PART B: LOCAL MITIGATION CAPABILITIES ASSESSMENT**

### **1. Describe what methods you use to provide information to residents on emergencies or personal preparedness for severe weather.**

Meeker County shares information with residents on preparedness through the Meeker County website and the Meeker County Sheriff's Office Facebook page.

Meeker County utilizes the CodeRED emergency notification system, along with IPAWS, to notify the public of emergency situations requiring them to act.

Meeker County also maintains a list of local media resources in the area that would help share information to the public for personal preparedness or in the event of an emergency situation.

### **2. Do you encourage residents to sign up for the county's emergency notification system and/or a local emergency alert system? If so, how?**

Meeker County promotes individuals to sign up for the CodeRED notification system at public events including National Night Out and the Meeker County Fair. Information on the CodeRED notification system is also included on the Meeker County website for registration.

### **3. Does your community participate in the National Flood Insurance Program?**

Yes. Meeker County has FEMA Mapped High Risk Areas and participates in the NFIP. Meeker County's Planning & Zoning Department maintains the floodplain management ordinance and floodplain maps for the county. The Planning and Zoning Dept. is the repository for the National Flood Insurance Program's Digital Flood Insurance Rate Maps (DFIRM), as well as flood boundary and floodway maps for rural Meeker County.

### **4. Describe any plans, authorities or policies in place that help to reduce risk from natural hazards in your community.**

Meeker County's Capital Improvements Plan outlines future needs and development within the county for the next three years.

The Meeker County Public Works Department maintains an inventory of the condition of county roads and bridges and slates improvement projects as needed on an annual basis. A transportation plan is in place (2020-2025).

Meeker County Emergency Management maintains an all-hazard Emergency Operations Plan which is updated on a regular basis. The plan outlines guidelines and objectives which help the county be ready to respond to ensure life safety, incident stabilization, and property preservation during an incident and the transition to recovery.

Meeker County participates in the National Flood Insurance Program (NFIP).

The Meeker County Comprehensive Local Water Plan is written and overseen by the Meeker County Planning & Zoning Office with assistance from the Meeker County Soil and Water Conservation District and other key stakeholders and has a 5-year implementation plan. The plan identifies the primary water planning issues, which include erosion and sediment control, stormwater management, and wetlands and water storage/retention.

**5. Please describe what staff or partnerships are in place to help accomplish mitigation in your community.**

Meeker County staff related to mitigation efforts include the Emergency Management Director, County Administrator, Facilities Maintenance Director, Land Use Director, Public Works Director, Parks Manager, Public Health Director, and the Meeker County GIS Coordinator.

Meeker County has the Meeker Soil and Water Conservation District (SWCD). In addition to the SWCD, there are four watershed districts within the county that oversees regional planning and projects to reduce the impact of high rain events and resulting localized flooding and erosion. The four watershed districts are; Clearwater River Watershed District (CRWD), Sauk River Watershed District (SRWD), North-fork Crow River Watershed District, South-fork Crow River Watershed District.

In partnership with the American Red Cross, Meeker County has identified, engaged, and designated potential sites throughout the county that could be utilized to provide mass care services to support an evacuation or other incident where temporary housing and basic human services are needed.

We have close working relationships with Emergency Managers in MN HSEM Region 4 and support each other in emergency mitigation and preparedness planning, exercises and emergency response, when needed.

**6. Describe any programs in place that to help accomplish mitigation in your community.**

Meeker County Emergency Management participates in and promotes the NWS Severe Weather Awareness Weeks in spring and fall each year and also works with the NWS to provide SKYWARN storm spotter training on an annual basis. Meeker County Emergency Management promotes the use of NOAA weather radios by schools, long-term care facilities, county buildings, local residents, and visitors to receive information broadcast from the National Weather Service.

Meeker County Emergency Management utilizes the county website, the Meeker County Sheriff's Office Facebook page, the CodeRED notification system, and local news media to communicate with residents and visitors on emergency preparedness and response actions. A link for the CodeRED emergency notification system is located on the Sheriff's Office homepage of the Meeker County website. The system can also be used to alert everyone in or passing through a community to any qualifying incident through the Integrated Public Alert & Warning System (IPAWS).

Meeker County Emergency Management participates in regional emergency management exercises for Region 4.

**7. Please describe any agency partnerships, funding or other resources to help accomplish mitigation in your community.**

The county primarily uses its own budget and capital improvement plans to address maintenance/replacement on mitigation measures and first-time small to medium projects conducted by county departments. Public Works gets partial funding from State and Federal partners for authorized projects. FEMA Hazard Mitigation Grant Program opportunities have also been considered.

The USDA Natural Resources Conservation Service (NRCS) in Meeker County is an agency that provides funding to landowners with Natural Resource Concerns through a couple of Programs available. The Environmental Quality Improvement Program (EQIP), Conservation Reserve Program, Conservation Stewardship Program, and Wetland Restoration Easement Program. These programs can provide Technical and financial assistance for practices that get implemented which can include: Wetland Restorations – also can benefit flood reduction, Water and Sediment Control Basins, Terraces, Grassed Waterways, Living Snow fences, and Shelterbelts.

**8. Does your jurisdiction have any plans or policies in place related to resilience and adaptation for climate change? If yes, please describe.**

No plans exist.

**9. Who is your local electric provider? (i.e., municipal / rural electric coop / other)**

Xcel Energy, Great River Energy, Heartland Consumer Power District, Litchfield Municipal Light and Power, and Meeker Coop Light and Power.

**10. Do you need back-up generators for specific critical facilities? Please identify them.**

Generator back-up power is in place for the Meeker County Law Enforcement Center and Jail. Currently, the Meeker County Courthouse (Primary EOC in basement), Family Services Building, and the Meeker County Public Works/MN DOT Building do not have back-up generation.

**PART C: LOCAL MITIGATION PROJECTS**

**1. Local Mitigation Projects: Describe any specific mitigation activities you think would help to address local vulnerabilities and reduce risk against future hazard events in your community.**

Identify where generator back-up power is needed for Meeker County critical infrastructure, facilities, and potential sheltering facilities and acquire backup power (i.e., permanent or portable generators) for them.

Continue to promote residents to be prepared for emergencies, to have NOAA weather radios, and to sign up for the county's CodeRED system and Sheriff's Office Facebook page to receive emergency notifications and other information.

Work with municipal and 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 need for construction of tornado safe rooms or storm shelters at the Meeker County parks that have high usage and do not have adequate tornado safe rooms or storm shelters within a reasonable distance.

Work with the Meeker County Fair Board to determine and incorporate tornado safe rooms/shelters into future building and grounds updates.

Work with communities in the county on the construction of storm shelters or tornado safe rooms in areas where there are vulnerable populations, such as at municipal campgrounds, mobile home parks and schools.

Encourage long-term care facilities that house senior citizens or other vulnerable populations to have emergency plans and generators in place to deal with severe weather, power outages, and extreme temperatures.

Address road improvements, ditch maintenance, and bank stabilization projects needed to mitigate against high rain events as identified by the Meeker County Public Works Director/County Engineer, township officials, and the Meeker County SWCD.

Offer support to cities to update stormwater management plans and identify where critical public infrastructure needs to be protected for future high rain events.

Offer and provide support to communities to identify where storm shelters or tornado safe rooms are needed and assist in applying for grant funding (i.e., USDA, FEMA HMA)

Review list of Past Mitigation Actions from last plan and update those actions deemed as "Ongoing" for continued implementation.

**2. Gaps or Deficiencies: Please describe any specific gaps or deficiencies that are a barrier to implementing local mitigation measures.**

Funding for tornado safe rooms or storm shelters.

Some roads, bridges, and culverts within Meeker 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. Continued culvert replacement to prevent road flooding is a strain on our smaller townships that have limited funding for road infrastructure.

Continued culvert replacement to prevent road flooding is a strain on our smaller townships that have limited funding for road infrastructure.

Continued efforts are needed to stabilize vulnerable shoreline along our two creeks that is eroding due to sluffing from alternate high rain events and dry periods.

**PART D: SURVEY PARTICIPANTS**

Stephanie Johnson, Emergency Management Director  
 Jacob Stitch, NRCS District Conservationist  
 Greg Schultz, Land Use Director  
 Phil Schmalz, Public Works Director  
 Andrew Letson, County Administrator

**CITY OF CEDAR MILLS**

**PART A: HAZARD IDENTIFICATION, RISK ASSESSMENT & VULNERABILITY ANALYSIS**

- Hazard Identification & Risk Prioritization:** Please fill out the chart below as you feel it relates for your jurisdiction. Please note that hazards that are considered as significant (moderate to high priority) will need to have at least one mitigation action associated with it.

Natural Hazard	Use an "X" to Select 3-5 of the top hazards you feel pose risk to your jurisdiction.	Indicate your priority level of each hazard to your community as <u>Low</u> , <u>Moderate</u> , or <u>High</u> . Consider past events, likelihood of future events, and impacts to community assets.	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			
Lightning			
Hail			
Flooding	X	Low	No change
Extreme Cold			
Extreme Heat			
Drought	X	Low	No change
Wildfire			
Landslides			
Dam Failure			

- Recent Hazard Events:** Describe any severe weather or disaster events that have occurred over the last 5 years that caused damages in your community.

Tornadoes/High winds—downed some trees, damage to personal property.

- Local Vulnerabilities:** Use the chart below to identify what specific community assets (i.e., infrastructure, systems, populations) are vulnerable to damages or loss from the hazards that

pose risk to your community. Use the blank rows to enter in your answers as they relate to your community.

Natural Hazard (please list)	Vulnerability Assessment Describe <u>specific</u> community assets are susceptible to damage or loss from hazard events.
Ice Storms, Blizzards, tornadoes	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.

4. **Reduction in Vulnerability - Describe any actions your community has taken to reduce 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

5. **Increase in Vulnerability – Describe any current conditions or changes you feel have increased your community’s vulnerability to future severe weather or disaster events. Consider factors such as recent population growth or new development.**

None

**PART B: LOCAL MITIGATION CAPABILITIES ASSESSMENT**

1. **Describe what methods you use to provide information to residents on emergencies or personal preparedness for severe weather.**

Residents can sign up for CodeRED through Meeker County. We have one siren that is maintained by Meeker County.

2. **Do you encourage residents to sign up for the county’s emergency notification system and/or a local emergency alert system? If so, how?**

Yes, by word of mouth.

3. **Does your community participate in the National Flood Insurance Program?**

Response: No, the city does not participate in the NFIP. Not enough employees/resources. Note – the MN DNR NFIP data for Meeker County shows that the city is not participating but does have FEMA mapped high risk areas. The MN DNR is in touch with the city to provide information about how to enroll in the NFIP and develop an ordinance.

4. **Describe any plans, authorities or policies in place that help to reduce risk from natural hazards in your community.**

None

5. Please describe what staff or partnerships are in place to help accomplish mitigation in your community.

None

6. Describe any programs in place that to help accomplish mitigation in your community.

None

7. Please describe any agency partnerships, funding or other resources to help accomplish mitigation in your community.

None

8. Does your jurisdiction have any plans or policies in place related to resilience and adaptation for climate change? If yes, please describe.

No

9. Who is your local electric provider? (*i.e., municipal / rural electric coop / other*)

Meeker Cooperative

10. Do you need back-up generators for specific critical facilities? Please identify them.

Yes-sewer. We currently do not have back-up generators.

### **PART C: LOCAL MITIGATION PROJECTS**

1. **Local Mitigation Projects:** Describe any specific mitigation activities you think would help to address local vulnerabilities and reduce risk against future hazard events in your community.

Could use help getting back up generator for sewer.

2. **Gaps or Deficiencies:** Please describe any specific gaps or deficiencies that are a barrier to implementing local mitigation measures.

None

### **PART D: SURVEY PARTICIPANTS**

Kata Dahlman, City Clerk

**CITY OF COSMOS**

**PART A: HAZARD IDENTIFICATION, RISK ASSESSMENT & VULNERABILITY ANALYSIS**

- Hazard Identification & Risk Prioritization:** Please fill out the chart below as you feel it relates for your jurisdiction. Please note that hazards that are considered as significant (moderate to high priority) will need to have at least one mitigation action associated with it.

Natural Hazard	Use an "X" to Select 3-5 of the top hazards you feel pose risk to your jurisdiction.	Indicate your priority level of each hazard to your community as <u>Low, Moderate, or High</u> . Consider past events, likelihood of future events, and impacts to community assets.	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			
Lightning			
Hail	X	Low	No Change
Flooding			
Extreme Cold			
Extreme Heat			
Drought			
Wildfire			
Landslides			
Dam Failure			

- Recent Hazard Events:** Describe any severe weather or disaster events that have occurred over the last 5 years that caused damages in your community.

N/A

- Local Vulnerabilities:** Use the chart below to identify what specific community assets (i.e., infrastructure, systems, populations) are vulnerable to damages or loss from the hazards that pose risk to your community. Use the blank rows to enter in your answers as they relate to your community.

Natural Hazard (please list)	Vulnerability Assessment Describe <u>specific</u> community assets are susceptible to damage or loss from hazard events.
Tornadoes	City buildings, park equipment potential damage, mobile home park vulnerability.
Blizzards	Keeping emergency service equipment accessible, shelter for travelers.

- Reduction in Vulnerability -** Describe any actions your community has taken to reduce 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

City center has cots, sleeping bags for temporary storm shelter events

- 5. Increase in Vulnerability – Describe any current conditions or changes you feel have increased your community’s vulnerability to future severe weather or disaster events. Consider factors such as recent population growth or new development.**

No Change

## **PART B: LOCAL MITIGATION CAPABILITIES ASSESSMENT**

- 1. Describe what methods you use to provide information to residents on emergencies or personal preparedness for severe weather.**

Local radio station, digital signage in front of city hall, civil defense siren.

- 2. Do you encourage residents to sign up for the county’s emergency notification system and/or a local emergency alert system? If so, how?**

Yes, pamphlets at city hall.

- 3. Does your community participate in the National Flood Insurance Program?**

No, the city does not participate in the NFIP, however, the MN DNR database shows that the city does have FEMA-mapped high-risk areas. The city of Cosmos is currently working with the MN DNR Floodplain Management Program to develop an appropriate ordinance for their level of flood risk and potential future development.

- 4. Describe any plans, authorities or policies in place that help to reduce risk from natural hazards in your community.**

City engineer and use of state building codes to build to regulations.

- 5. Please describe what staff or partnerships are in place to help accomplish mitigation in your community.**

We are a small community with limited staffing. Volunteer fire and medical first responders are used in hazardous situations.

- 6. Describe any programs in place that to help accomplish mitigation in your community.**

Civil defense sirens are tested monthly during the summer season.

- 7. Please describe any agency partnerships, funding or other resources to help accomplish mitigation in your community.**

The city uses its own funding for Civil Defense equipment and updates.

8. Does your jurisdiction have any plans or policies in place related to resilience and adaptation for climate change? If yes, please describe.

No, we do not.

9. Who is your local electric provider? (i.e., municipal / rural electric coop / other)

Xcel Power

10. Do you need back-up generators for specific critical facilities? Please identify them.

Yes, water plant, high storm water events (pumps)

**PART C: LOCAL MITIGATION PROJECTS**

1. Local Mitigation Projects: Describe any specific mitigation activities you think would help to address local vulnerabilities and reduce risk against future hazard events in your community.

We need a more robust backup power system for water plant, lift stations, city hall, fire station. To keep critical structures operating during hazard events.

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

Funding and staff time to purchase, implement and maintain equipment.

**PART D: SURVEY PARTICIPANTS**

John Douville, City Administrator

**CITY OF DARWIN**

**PART A: HAZARD IDENTIFICATION, RISK ASSESSMENT & VULNERABILITY ANALYSIS**

1. Hazard Identification & Risk Prioritization: Please fill out the chart below as you feel it relates for your jurisdiction. Please note that hazards that are considered as significant (moderate to high priority) will need to have at least one mitigation action associated with it.

Natural Hazard	Use an "X" to Select 3-5 of the top hazards you feel pose risk to your jurisdiction.	Indicate your priority level of each hazard to your community as <u>Low</u> , <u>Moderate</u> , or <u>High</u> . Consider past events, likelihood of future events, and impacts to community assets.	Note if you feel the risk has increased, decreased, or had no change over the last 5 years.
Winter Storms (Blizzards, Ice Storms)			
Tornadoes			

Windstorms			
Lightning			
Hail			
Flooding	X	Moderate	No Change
Extreme Cold	X	Low	No Change
Extreme Heat	X	Low	No Change
Drought	X	Moderate	No Change
Wildfire			
Landslides			
Dam Failure			

**2. Recent Hazard Events: Describe any severe weather or disaster events that have occurred over the last 5 years that caused damages in your community.**

In 2021 the city experienced the regional drought that caused aquifer static level reduction, which as a result put stress on our water treatment plant. This was largely due to the fact that a local farmer added an irrigation well that was/is drawing from our aquifer at high levels, which along with residents increased usage during a dry spell, caused such a reduction in the level that pumping rates were slowed by 30%+.

Extreme cold, along with lack of snow cover, has led to frozen pipes in the past.

**3. Local Vulnerabilities: Use the chart below to identify what specific community assets (i.e., infrastructure, systems, populations) are vulnerable to damages or loss from the hazards that pose risk to your community. Use the blank rows to enter in your answers as they relate to your community.**

Natural Hazard (please list)	Vulnerability Assessment Describe <u>specific</u> community assets are susceptible to damage or loss from hazard events.
Flooding	Flooding risk is largely limited to a few residents/businesses in town. City lift station does see increased usage with excessive rain events, which stresses the pumps, causing an increased likelihood of mechanical failure. Pump failure could lead to sewer backups and sewer pond integrity issues.
Extreme Cold	Excessive frost depth puts water infrastructure at risk. We have had several breaks in previous years, with frost movement being a contributing factor.
Extreme Heat	Extreme heat is largely listed as a contributing factor to the hazard of drought. The city sees increased levels of water usage during dry and hot weather, which has led to increased production at the water treatment plant. Could also lead to fires, necessitating use of city water by the local fire department, which brings the possibility of production not meeting water demand.
Drought	Drought leads to increased usage by residents and farmers for irrigation, which depletes aquifer levels, potentially to the point where recharge rate cannot keep up with use. As aquifer level decreases, pump depth and well failure is potentially an issue.

**4. Reduction in Vulnerability - Describe any actions your community has taken to reduce 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 put in a new water treatment plant 7 years ago, which has allowed for increased production.

We have increased well maintenance and installed an observation well to monitor aquifer levels and discover potential issues before they cause major problems.

The city has water restrictions put in place. During the drought period of 2021 the city did not allow lawn watering for a period of time.

Storm lines, inlet, outlet and ponds are maintained to ensure no reduction in our storm water capacity.

- 5. Increase in Vulnerability – Describe any current conditions or changes you feel have increased your community’s vulnerability to future severe weather or disaster events. Consider factors such as recent population growth or new development.**

Additional farm irrigation wells in our aquifer, leading to increased risk of interference.

## **PART B: LOCAL MITIGATION CAPABILITIES ASSESSMENT**

- 1. Describe what methods you use to provide information to residents on emergencies or personal preparedness for severe weather.**

Monthly letters/statements with water/sewer bills. Mayoral Facebook page.

- 2. Do you encourage residents to sign up for the county’s emergency notification system and/or a local emergency alert system? If so, how?**

Have not to this point.

- 3. Does your community participate in the National Flood Insurance Program?**

No. The city does not participate in the NFIP and does not have FEMA mapped high risk areas. We have no areas that are high risk and no bodies of water.

- 4. Describe any plans, authorities or policies in place that help to reduce risk from natural hazards in your community.**

Zoning ordinances, policies, land use map. Wellhead protection plan and I&I reduction plan.

- 5. Please describe what staff or partnerships are in place to help accomplish mitigation in your community.**

City engineer, county resources, council, local contractors, water/sewer operator.

City is a member of the MN Rural Water (MnWARN) system which shares generator resources with other cities, assuming availability.

**6. Describe any programs in place that to help accomplish mitigation in your community.**

Various maintenance as needed. Work with the county and NWS to ensure awareness regarding severe weather conditions and warning systems.

**7. Please describe any agency partnerships, funding or other resources to help accomplish mitigation in your community.**

City funds. Have partnered with MN Rural Water to develop policies and strategies. MN Dept of Health, Small Cities/DEED, and PFA have been utilized for funding sources in the past.

**8. Does your jurisdiction have any plans or policies in place related to resilience and adaptation for climate change? If yes, please describe.**

No

**9. Who is your local electric provider? (i.e., municipal / rural electric coop / other)**

Meeker Cooperative

**10. Do you need back-up generators for specific critical facilities? Please identify them.**

Yes. We have no generators owned by the city. Our Water Treatment Facility and lift station could be supported with generators.

**PART C: LOCAL MITIGATION PROJECTS**

**1. Local Mitigation Projects: Describe any specific mitigation activities you think would help to address local vulnerabilities and reduce risk against future hazard events in your community.**

Not allowing additional irrigation wells within our at-risk aquifer. Increase monitoring of existing. Supply of water is sufficient but recharge rate is too slow for such high volume usage. Average total city use is 20,000-30,000 gallons per day in the summer. An irrigation well can pump nearly 20x that in one day.

Water Treatment Facility and lift station could be supported with generators.

**2. Gaps or Deficiencies: Please describe any specific gaps or deficiencies that are a barrier to implementing local mitigation measures.**

Depending on regulators or other authorities/entities as some areas are outside our city jurisdiction.

**PART D: SURVEY PARTICIPANTS**

Josh Johnson, Mayor

**CITY OF DASSEL**

**PART A: HAZARD IDENTIFICATION, RISK ASSESSMENT & VULNERABILITY ANALYSIS**

- Hazard Identification & Risk Prioritization:** Please fill out the chart below as you feel it relates for your jurisdiction. Please note that hazards that are considered as significant (moderate to high priority) will need to have at least one mitigation action associated with it.

Natural Hazard	Use an "X" to Select 3-5 of the top hazards you feel pose risk to your jurisdiction.	Indicate your priority level of each hazard to your community as <u>Low, Moderate, or High</u> . Consider past events, likelihood of future events, and impacts to community assets.	Note if you feel the risk has increased, decreased, or had no change over the last 5 years.
Winter Storms (Blizzards, Ice Storms)	X	Moderate	No change
Tornadoes	X	High	No Change
Windstorms	X	Moderate	No Change
Lightning	X	Low	No Change
Hail			
Flooding			
Extreme Cold			
Extreme Heat			
Drought	X	Moderate	Increased
Wildfire			
Landslides			
Dam Failure			

- Recent Hazard Events:** Describe any severe weather or disaster events that have occurred over the last 5 years that caused damages in your community.

Wind damage annually. Loss of trees and increased potential for damage to structures.

- Local Vulnerabilities:** Use the chart below to identify what specific community assets (i.e., infrastructure, systems, populations) are vulnerable to damages or loss from the hazards that pose risk to your community. Use the blank rows to enter in your answers as they relate to your community.

Natural Hazard (please list)	Vulnerability Assessment Describe <u>specific</u> community assets are susceptible 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 Tornadoes	We have 1 mobile home park within the city that does not have a storm shelter and residents are vulnerable to high wind and tornado events.

	We have a development on the southwest side of the city that residents say they are unable to hear the warning siren. We need to install a new outdoor warning siren in that area to help warn residents.
<b>Extreme Cold</b>	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.  The city has also experienced damages to roads from spring frost heaves.
<b>Drought</b>	The city experienced extreme drought conditions last year which caused watering restrictions to maintain the city’s freshwater supply.

**4. Reduction in Vulnerability - Describe any actions your community has taken to reduce 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 2019 the city completed a Wellhead Protection Plan to protect the city’s freshwater supply from numerous types of hazards. The plan is reviewed and updated annually. In 2018 the city lost 1 leg of 3-phase power to a main lift station due to a lightning strike. The alarms did not go off because the alarm panel still sensed power but the pumps were unable to start up under those conditions. Staff was unaware of the problem until residents started calling in to report sewage backing up in their basements near the lift station. The city replaced the alarm panel and we have not had any issues since.

**5. Increase in Vulnerability – Describe any current conditions or changes you feel have increased your community’s vulnerability to future severe weather or disaster events. Consider factors such as recent population growth or new development.**

None.

**PART B: LOCAL MITIGATION CAPABILITIES ASSESSMENT**

**1. Describe what methods you use to provide information to residents on emergencies or personal preparedness for severe weather.**

We use our city website, reader board located on the main highway and Facebook page. We also post information on bulletin boards at the City Hall, grocery store, gas station and at the Post Office.

**2. Do you encourage residents to sign up for the county’s emergency notification system and/or a local emergency alert system? If so, how?**

Yes - We have a place on the homepage of our city website with a link to the county’s sign-up page and we talk with residents when they come into City Hall.

**3. Does your community participate in the National Flood Insurance Program?**

No, the city does not have FEMA mapped high-risk areas and is not participating.

**4. Describe any plans, authorities or policies in place that help to reduce risk from natural hazards in your community.**

Early in 2022 the city updated our 20-year Comprehensive Plan that is designed to plan for the future physical growth of the city and appropriate land uses.

In 2022 we are in the process of updating our Zoning Ordinance and Land Use Map.

In 2021 we installed new water meters and surveyed sump pump installations in each building to help mitigate potential overload of our wastewater system.

**5. Please describe what staff or partnerships are in place to help accomplish mitigation in your community.**

We have a designated Safety Committee made of representatives from every city department along with Council members. We have a city engineer and a public works director that address road maintenance issues for flooding. We have worked with the Meeker County emergency manager to address the need to upgrade our warning siren and add an additional siren.

**6. Describe any programs in place that to help accomplish mitigation in your community.**

Our city works with Meeker County Emergency Management to participate in the National Weather Service's annual Severe Winter/Spring Weather Awareness Week. Our local school practices tornado drills on an annual basis. The Fire Department conducts annual controlled burns to prevent wildfires.

**7. Please describe any agency partnerships, funding or other resources to help accomplish mitigation in your community.**

The city primarily uses its own budget to address mitigation projects and we apply annually for grants through MN Department of Health for wellhead protection projects. We also partner with MRWA for grant writing assistance.

**8. Does your jurisdiction have any plans or policies in place related to resilience and adaptation for climate change?**

No.

**9. Who is your local electric provider? (i.e., municipal / rural electric coop / other)**

Xcel Energy

**10. Do you need back-up generators for specific critical facilities? Please identify them.**

No, we have replaced or added generators at all critical facilities in the past few years.

**PART C: LOCAL MITIGATION PROJECTS**

- 1. Local Mitigation Projects:** Describe any specific mitigation activities you think would help to address local vulnerabilities and reduce risk against future hazard events in your community.

Upgrade the city’s warning siren and add an additional siren on the southwest area of the city.

- 2. Gaps or Deficiencies:** Please describe any specific gaps or deficiencies that are a barrier to implementing local mitigation measures.

Not all of our residents are signed up for the county’s emergency notification system. We are small city with limited financial and staff resources to address local mitigation projects.

**PART D: SURVEY PARTICIPANTS**

Terri Boese, City Clerk/Treasurer  
 Ron Hungerford, Mayor  
 Nicole Carlen, City Councilor  
 David Johnson, Fire Chief  
 Kyle Moy, Public Works Director

**CITY OF EDEN VALLEY**

**PART A: HAZARD IDENTIFICATION, RISK ASSESSMENT & VULNERABILITY ANALYSIS**

- 1. Hazard Identification & Risk Prioritization:** Please fill out the chart below as you feel it relates for your jurisdiction. Please note that hazards that are considered as significant (moderate to high priority) will need to have at least one mitigation action associated with it.

Natural Hazard	Use an “X” to Select 3-5 of the top hazards you feel pose risk to your jurisdiction.	Indicate your priority level of each hazard to your community as <u>Low</u> , <u>Moderate</u> , or <u>High</u> . Consider past events, likelihood of future events, and impacts to community assets.	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			
Extreme Cold			
Extreme Heat			
Drought			
Wildfire			
Landslides			
Dam Failure			

2. **Recent Hazard Events:** Describe any severe weather or disaster events that have occurred over the last 5 years that caused damages in your community.

None

3. **Local Vulnerabilities:** Use the chart below to identify what specific community assets (i.e., infrastructure, systems, populations) are vulnerable to damages or loss from the hazards that pose risk to your community. Use the blank rows to enter in your answers as they relate to your community.

Natural Hazard (please list)	Vulnerability Assessment Describe <u>specific</u> community assets are susceptible to damage or loss from hazard events.
Ice Storms, Blizzards	Electrical service consists of overhead power lines and electrical poles that can be brought down by ice storms and blizzards.
Windstorms/tornadoes	Our Aho development were built as slab-on-grade with no basements. These residents are at a greater risk with winds/tornadoes. There is no storm shelter in the area.

4. **Reduction in Vulnerability -** Describe any actions your community has taken to reduce 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

5. **Increase in Vulnerability –** Describe any current conditions or changes you feel have increased your community’s vulnerability to future severe weather or disaster events. Consider factors such as recent population growth or new development.

None

**PART B: LOCAL MITIGATION CAPABILITIES ASSESSMENT**

1. **Describe what methods you use to provide information to residents on emergencies or personal preparedness for severe weather.**

We use our city website. We have a page on Severe Weather with information on Alerts and Warnings, Severe Weather, Lightning and Hail, Floods, Tornadoes, and Extreme Heat. We also post on the city bulletin boards at city hall.

2. **Do you encourage residents to sign up for the county’s emergency notification system and/or a local emergency alert system? If so, how?**

Our city is in 2 counties – we do with Meeker County and are working to get Stearns County as well.

**3. Does your community participate in the National Flood Insurance Program?**

Yes, the city participates in the NFIP and had FEMA-mapped high-risk areas. The city enforces requirements of the NFIP through Chapter 152: Floodplain Management in the city's code of ordinances. This chapter regulates development in the flood hazard areas of the city.

**4. Describe any plans, authorities or policies in place that help to reduce risk from natural hazards in your community.**

We are working on the ditches in town and have a 5-year plan to lessen the flooding caused in those areas. We have just begun a 20-year comprehensive plan update that will include future land use.

**5. Please describe what staff or partnerships are in place to help accomplish mitigation in your community.**

One of our fire/rescue members is the cities designated emergency manager. The public works director and the city engineer work to maintain our road maintenance plan.

**6. Describe any programs in place that to help accomplish mitigation in your community.**

We keep our website page on Severe Weather updated. We also have a have a page for residents with information to prevent pipes from freezing.

**7. Please describe any agency partnerships, funding or other resources to help accomplish mitigation in your community.**

None noted.

**8. Does your jurisdiction have any plans or policies in place related to resilience and adaptation for climate change? If yes, please describe.**

No.

**9. Who is your local electric provider? (i.e., municipal / rural electric coop / other)**

Xcel and Meeker Cooperative

**10. Do you need back-up generators for specific critical facilities? Please identify them.**

We have generators for out water treatment plant, pumps at water tower.

**PART C: LOCAL MITIGATION PROJECTS**

**1. Local Mitigation Projects: Describe any specific mitigation activities you think would help to address local vulnerabilities and reduce risk against future hazard events in your community.**

We need a generator at our Community Center, which is our designated care shelter.

We need a larger tornado safe room at the large city park and ball field.

**2. Gaps or Deficiencies: Please describe any specific gaps or deficiencies that are a barrier to implementing local mitigation measures.**

The city needs to develop a better plan to get notifications to our residents.

**PART D: SURVEY PARTICIPANTS**

Cindy Anderson, City Clerk  
 Ernie Junker, Police Chief  
 Zach Blonigen, PW Director

**CITY OF KINGSTON**

**PART A: HAZARD IDENTIFICATION, RISK ASSESSMENT & VULNERABILITY ANALYSIS**

**1. Hazard Identification & Risk Prioritization: Please fill out the chart below as you feel it relates for your jurisdiction. Please note that hazards that are considered as significant (moderate to high priority) will need to have at least one mitigation action associated with it.**

Natural Hazard	Use an "X" to Select 3-5 of the top hazards you feel pose risk to your jurisdiction.	Indicate your priority level of each hazard to your community as <u>Low</u> , <u>Moderate</u> , or <u>High</u> . Consider past events, likelihood of future events, and impacts to community assets.	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	Moderate	No Change
Windstorms			
Lightning			
Hail			
Flooding	X	Low	No Change
Extreme Cold			
Extreme Heat			
Drought	X	Low	No Change
Wildfire			
Landslides			
Dam Failure			

**2. Recent Hazard Events: Describe any severe weather or disaster events that have occurred over the last 5 years that caused damages in your community.**

Over the last 5 years the city has experienced flooding along the Crow River a number of times. For the most part, the flooding has been contained in the "backwater" areas along the river and has caused only minimal damage / problems.

3. **Local Vulnerabilities:** Use the chart below to identify what specific community assets (i.e., infrastructure, systems, populations) are vulnerable to damages or loss from the hazards that pose risk to your community. Use the blank rows to enter in your answers as they relate to your community.

Natural Hazard (please list)	Vulnerability Assessment Describe <u>specific</u> community assets are susceptible to damage or loss from hazard events.
Ice Storms, windstorms and tornadoes	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.

4. **Reduction in Vulnerability - Describe any actions your community has taken to reduce 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 made inquiries into obtaining an emergency back-up generator for the community center to provide emergency shelter during power outages.

5. **Increase in Vulnerability – Describe any current conditions or changes you feel have increased your community’s vulnerability to future severe weather or disaster events. Consider factors such as recent population growth or new development.**

None.

**PART B: LOCAL MITIGATION CAPABILITIES ASSESSMENT**

1. **Describe what methods you use to provide information to residents on emergencies or personal preparedness for severe weather.**

The city maintains two severe weather warning sirens. We also post info on the community center bulletin board.

2. **Do you encourage residents to sign up for the county’s emergency notification system and/or a local emergency alert system? If so, how?**

Our city website provides a link to the Meeker County Sheriff’s Department website where residents can sign up for CodeRED.

3. **Does your community participate in the National Flood Insurance Program?**

Yes. The city participates in the NFIP and has FEMA-mapped high-risk areas. There are flood zones within the city and building permits are denied within the flood zones.

- 4. Describe any plans, authorities or policies in place that help to reduce risk from natural hazards in your community.**

The city is still attempting to acquire an emergency generator for the community center.

- 5. Please describe what staff or partnerships are in place to help accomplish mitigation in your community.**

Volunteerism from limited city council and residents

- 6. Describe any programs in place that to help accomplish mitigation in your community.**

None noted

- 7. Please describe any agency partnerships, funding or other resources to help accomplish mitigation in your community.**

The city primarily uses its own budget to address mitigation projects.

- 8. Does your jurisdiction have any plans or policies in place related to resilience and adaptation for climate change? If yes, please describe.**

No

- 9. Who is your local electric provider? (i.e., municipal / rural electric coop / other)**

Xcel Energy and Meeker Co-op

- 10. Do you need back-up generators for specific critical facilities? Please identify them.**

The city would like an emergency generator for the community center.

#### **PART C: LOCAL MITIGATION PROJECTS**

- 1. Local Mitigation Projects: Describe any specific mitigation activities you think would help to address local vulnerabilities and reduce risk against future hazard events in your community.**

The city could use help in finding government surplus emergency generator through the D.O.D.

- 2. Gaps or Deficiencies: Please describe any specific gaps or deficiencies that are a barrier to implementing local mitigation measures.**

None.

#### **PART D: SURVEY PARTICIPANTS**

James Herda, Mayor

**CITY OF WATKINS**

**PART A: HAZARD IDENTIFICATION, RISK ASSESSMENT & VULNERABILITY ANALYSIS**

- Hazard Identification & Risk Prioritization:** Please fill out the chart below as you feel it relates for your jurisdiction. Please note that hazards that are considered as significant (moderate to high priority) will need to have at least one mitigation action associated with it.

Natural Hazard	Use an "X" to Select 3-5 of the top hazards you feel pose risk to your jurisdiction.	Indicate your priority level of each hazard to your community as <u>Low, Moderate, or High</u> . Consider past events, likelihood of future events, and impacts to community assets.	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	Moderate	Increased
Windstorms	X	High	Increased
Lightning	X	Low	Increased
Hail			
Flooding	X	Low	No change
Extreme Cold			
Extreme Heat			
Drought			
Wildfire			
Landslides			
Dam Failure			

- Recent Hazard Events:** Describe any severe weather or disaster events that have occurred over the last 5 years that caused damages in your community.

In 2016 a tornado came through the city of Watkins resulting in serious damages to businesses and apartment complexes, the nursing homes, private homes, and widespread tree damage & limbs down. No city buildings were damaged. No other recent major storms are notable.

- Local Vulnerabilities:** Use the chart below to identify what specific community assets (i.e., infrastructure, systems, populations) are vulnerable to damages or loss from the hazards that pose risk to your community. Use the blank rows to enter in your answers as they relate to your community.

Natural Hazard (please list)	Vulnerability Assessment Describe <u>specific</u> community assets are susceptible to damage or loss from hazard events.
Windstorms and Tornadoes	We have 1 mobile home park in the city that does not have a storm shelter. They use a community hall as a storm shelter, but it's a couple blocks away from the park. We also have a subdivision out the outskirts of town that may not be within audible reach of our current warning siren. An additional warning siren may be needed to reach those residents.

<b>Flooding</b>	The city's main lift station is located in an area that may be susceptible to flooding.
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- 4. Reduction in Vulnerability - Describe any actions your community has taken to reduce 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 noted.

- 5. Increase in Vulnerability – Describe any current conditions or changes you feel have increased your community's vulnerability to future severe weather or disaster events. Consider factors such as recent population growth or new development.**

We have had an increase in our population of senior citizens due to additions made to the local nursing home over the last several years.

**PART B: LOCAL MITIGATION CAPABILITIES ASSESSMENT**

- 1. Describe what methods you use to provide information to residents on emergencies or personal preparedness for severe weather.**

We haven't really used anything but we could use the city's website and FB page, along with newsletters.

- 2. Do you encourage residents to sign up for the county's emergency notification system and/or a local emergency alert system? If so, how?**

We are part of Meeker County's CodeRED emergency notification system. We have been trying to get residents to sign up for the program over the past couple of years. We have mailed sign up forms in the past and try to hand out to new residents when they register for water and sewer services.

- 3. Does your community participate in the National Flood Insurance Program?**

No, our city doesn't participate. We do have a couple areas in the city that are in the flood zone. (The city has FEMA-mapped high-risk areas). Joining the program was discussed several years ago but never was approved. This will be brought forward again in the near future.

Note – the MN DNR Floodplain Management program will provide information to the city on how to enroll in the NFIP and develop an updated ordinance for their level of flood risk.

- 4. Describe any plans, authorities or policies in place that help to reduce risk from natural hazards in your community.**

The city has a policy in place for the prevention of frozen water and sewer service lines. In the event of an extended period of cold weather and when the frost has reached a depth that may impact water service lines, the city will issue a notice to begin running a recommended stream of water to prevent a frozen water line.

Our City Zoning Ordinance includes section XXI Floodplain Overlay District. The purpose of the ordinance is to create an overlay zoning district which will protect the flood hazard areas of the City of Watkins, which are subject to periodic inundation resulting in potential loss of life, loss of property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare. The Flood Boundary and Floodway Map dated July 2, 1976 are hereby adopted by reference and declared to be a part of this Ordinance.

**5. Please describe what staff or partnerships are in place to help accomplish mitigation in your community.**

The City has a Mayor and City Council to make policy decisions. We have a Public Works Department that is responsible for the water and sewer systems as well as street maintenance. We have a Volunteer Fire Department that covers all of the City of Watkins and additional adjacent township areas. We also have a Volunteer Ambulance Department.

**6. Describe any programs in place that to help accomplish mitigation in your community.**

We remind residents semi-annually in newsletters not to blow grass, leaves or dirt into the street so it doesn't end up in the storm sewer.

**7. Please describe any agency partnerships, funding or other resources to help accomplish mitigation in your community.**

The city purchased a warning siren in 2018, receiving some grant funds from Canadian Pacific Railroad and Meeker Cooperative.

**8. Does your jurisdiction have any plans or policies in place related to resilience and adaptation for climate change? If yes, please describe.**

No

**9. Who is your local electric provider? (i.e., municipal / rural electric coop / other)**

Most of the city is served by Xcel Energy. There are a few areas that are served by Meeker Cooperative.

**10. Do you need back-up generators for specific critical facilities? Please identify them.**

We have one backup generator at the city's main lift station.

### **PART C: LOCAL MITIGATION PROJECTS**

- 1. Local Mitigation Projects: Describe any specific mitigation activities you think would help to address local vulnerabilities and reduce risk against future hazard events in your community.**

We need a storm shelter in the mobile home park, instead of using something that's a couple blocks away.

We also have a subdivision out the outskirts of town that may not be within audible reach of our current warning siren. An additional warning siren may be needed to reach those residents.

Work with the MN DNR on how the city can enroll in the NFIP and update our floodplain ordinance.

- 2. Gaps or Deficiencies: Please describe any specific gaps or deficiencies that are a barrier to implementing local mitigation measures.**

Outside funding is necessary to address construction of a storm shelter or purchase of another warning siren.

### **PART D: SURVEY PARTICIPANTS**

Steve Geislinger, Public Works Director  
Deb Kramer, City Clerk

# **Appendix D – Plans & Programs in Place**

# Meeker County

## MHMP Plans in Place Form

### *Planning & Regulatory*

<i>Plans/Programs</i>	<i>Yes/No</i>	<i>Comments</i>
Comprehensive/Master Plan	Yes	Held by Land Use
Capital Improvements Plan	Yes	Updated as part of budget process
Economic Development Plan	No	
Emergency Operations Plan	Yes	EM updates annually
Climate Adaptation Plan	No	
Continuity of Operations Plan	Yes	Will be updating plan
Transportation Plan	Yes	Maintained by Meeker County Highway Department
Stormwater Management Plan	No	Municipal-level plans in place.
Community Wildfire Protection Plan	No	MN DNR notes no CWPP for Meeker County
FireWise Program	No	
Comprehensive Water Management Plan	Yes	Meeker County Comprehensive Water Management Plan (2013-2018)
One Watershed, One Plan (1W1P)	Yes	Currently ongoing development – partnership with SWCD
Wellhead Protection Plan	No	Municipal-level plans done in accordance with MDH
Database of dry hydrants/well access	No	
Burning permits/restrictions	Yes	Permits are purchased through Township Fire Wardens, Fire Chiefs, or the MN DNR
Zoning ordinance	Yes	Maintained by Meeker County Land Development
Subdivision ordinance	Yes	Maintained by Land Development
Floodplain ordinance	Yes	Maintained by the P&Z Department

Natural hazard specific ordinance (i.e., stormwater, steep slope, wildfire)	Yes	Meeker County Buffer Ordinance overseen by Meeker SWCD
Flood insurance rate maps	Yes	Meeker County is a part of the NFIP
Acquisition of homes (buyouts) due to repetitive flood damage or imminent risk of failure from erosion	No	Not aware of any buyouts taking place
School closing policy/communications plan in event of inclement weather/temperatures	Yes	Schools maintain their own policies.
Mass Care Sheltering Plan	Yes	In County Emergency Operations Plan
Designated Mass Care Sheltering Facilities (list available)	Yes	In County Emergency Operations Plan
Tornado Safe Rooms/Outdoor Storm Shelters (list available)	Yes	
Outdoor Warning sirens (list all locations)	Yes	City of Eden Valley, Lake Koronis, City of Kingston, Lake Francis, City of Watkins, Clear Lake, City of Darwin, City of Dassel, Big Swan Lake, Lake Washington, Lake Collinwood, City of Grove City, City of Litchfield, Lake Minnie Belle, Star Lake, City of Cosmos, and City of Cedar Mills
SKYWARN Program	Yes	Annual trainings with NWS
Emergency Mass Notification System (provide type, i.e., CodeRED)	Yes	CodeRED
Severe Weather Awareness Week	Yes	Annual Participation (April)
Winter Weather Awareness Week	Yes	Annual Participation (November)
NOAA Weather Radios	Yes	Emergency Management promotes the use of Weather Radios or weather apps
THIRA	Yes	Past THIRA but no longer required
<i>Other *please describe</i>		

### ***Administrative & Technical***

<i>Administration</i>	<i>Yes/No</i>	<i>Comments</i>
Planning Commission	Yes	
Mitigation Planning Committee	Yes	MHMP Update Planning Team
Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems)	Yes	Highway Dept. ROW maintenance and drainage systems
Mutual aid agreements		
<i>Staff</i>	<i>Yes/No</i>	<i>Comments</i>
Chief Building Official	Yes	
Floodplain Administrator	Yes	
Emergency Manager	Yes	Emergency Management Director, Full-Time
County Coordinator	Yes	County Administrator
Civil Engineer	Yes	Highway Department-County Engineer
GIS Coordinator	Yes	
<i>Technical</i>	<i>Yes/No</i>	<i>Comments</i>
Hazard data and information	Yes	Damage information on file from past storm events
Hazus analysis	No	Will be conducted as part of MHMP update.

### ***Education & Outreach***

<i>Program/Organization</i>	<i>Yes/No</i>	<i>Comments</i>
Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc.	Yes	EM has planning groups and frequently includes the whole community with emergency preparedness goals. EM works with the ARC, SA, local healthcare, LTC facilities, first response groups, ministerial associations, and additional nonprofit organizations.
Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	Yes	Emergency management and local first response agencies do multiple outreach

		programs throughout the year to encourage fire safety and preparedness actions.
Natural disaster or safety related school programs	No	
StormReady certification	No	
Firewise Communities certification	No	
Public-private partnership initiatives addressing disaster-related issues	No	
<i>Other *please list &amp; describe</i>	Yes	The Meeker-Mcleod-Sibley Counties Community Health Board also supports the local county EM and Public Health departments with community preparedness and response goals.

# **Appendix E – Past Mitigation Action Review Status Report**

# Meeker County

## Past Mitigation Action Review Status Report

Following is a report on the status of mitigation actions related to natural hazards listed in *Chapter 5: Goals, Objectives, and Mitigation Strategies* of the Meeker County 2015 Hazard Mitigation Plan. This report identifies those actions that have been completed, are being deleted, or are ongoing. Mitigation actions that are noted as “ongoing” will be reviewed & revised as necessary based on the updated risk assessment and local input. This report covers the mitigation actions that were listed for implementation by the county and by city jurisdictions, as applicable.

Hazard	Mitigation Action	Participating Jurisdictions	Status	Comments
All-Hazards	(Early Warning System) Continue to regularly test the County’s Emergency Alert System (EAS).	Meeker County and all cities	Delete	Not a necessary mitigation action. This is a standard element of Meeker County EM communications.
All-Hazards	(Early Warning System) Bi-annually conduct a countywide assessment of the adequacy of warning siren coverage. Create a map and identify priority areas needing coverage (2015). Ensure that schools have adequate coverage.	Meeker County and all cities	Ongoing	Meeker County continues to assess and address any new locations where warnings sirens may be needed in the county.
All-Hazards	(Early Warning System) Install additional warning sirens where needed. Upgrade existing sirens with battery back-up.	Meeker County and all cities	Ongoing	Meeker County Emergency Management (MCEM) continues to work with local jurisdictions to identify if new warning sirens or siren upgrades are needed.
All-Hazards	(Early Warning System) Work towards planning for and/or requiring new warning sirens as part of the land use development process (2015-16).	Meeker County and all cities	Delete	This is not worked into county or local ordinances. Warning siren locations are determined by location and existing warning siren coverage on an individual case basis within the jurisdiction of the county and individual cities.
All-Hazards	(Early Warning System) Examine implementing the Integrated Public Alert and Warning System (IPAWS). Encourage stakeholders to receive FEMA’s free online training.	Meeker County and all cities	Completed	MCEM employees IPAWS as part of our existing emergency notification system capabilities.

Hazard	Mitigation Action	Participating Jurisdictions	Status	Comments
All-Hazards	(Early Warning System) Grove City Warning Sirens. Work with stakeholders to upgrade two new warning sirens in Grove City.	Grove City and Meeker County	Ongoing	This is an ongoing project by the city of Grove City.
All-Hazards	(Early Warning System) City of Watkins Warning Siren. Work with stakeholders to upgrade the warning siren in the City of Watkins.	Watkins and Meeker County	Completed	Warning siren project was completed by the City of Watkins.
All-Hazards	(Early Warning System) City of Dassel Warning Siren. Work with stakeholders to upgrade the warning siren in the City of Dassel's Summit Hills Addition.	Dassel and Meeker County	Ongoing	This is an ongoing project by the city of Dassel.
All-Hazards	(Early Warning System) Long Lake Warning Siren. Work with stakeholders to install a warning siren to service the residents on Long Lake.	Meeker County and Acton Township	Ongoing	This is an ongoing project by Meeker County for the Long Lake residential area.
All-Hazards	(Early Warning System) City of Eden Valley Warning Siren. Work with stakeholders to install a new warning siren on the east side of the City near Eden Valley Elementary School.	Eden Valley and Meeker County	Ongoing	This is an ongoing project by the city of Eden Valley.
All-Hazards	(Storm Shelters) Pursue building storm shelters where vulnerable populations need protection during severe weather events. Ensure the County's vast lake population is included.	Meeker County and all cities	Ongoing	MCEM continues to work with communities to identify and address where storm shelters or tornado safe rooms are needed to protect vulnerable populations
All-Hazards	(Storm Shelters) City of Cosmos Storm Shelter. Work with the City of Cosmos to ensure the City's new community center (anticipated to be built in 2016) can serve as storm shelter.	City of Cosmos and Meeker County	Completed	This has been completed by the City of Cosmos.

Hazard	Mitigation Action	Participating Jurisdictions	Status	Comments
All-Hazards	(Storm Shelters) City of Watkins Storm Shelter. Work with the City of Watkins to identify a suitable storm shelter facility. Apply for funds to retrofit the building to ensure it is safe or build a new facility if needed.	City of Watkins and Meeker County	Ongoing	This is an ongoing project by the City of Watkins. MCEM will continue to provide support as needed to the city on their planning efforts.
All-Hazards	(Storm Shelters) City of Dassel Storm Shelter. Work with the City of Dassel to upgrade restrooms at Breed's Park to double as a storm shelter; build a restroom/storm shelter at Sellard's Park; and build a restroom/storm shelter at Summit Hills Addition with a new warning siren (the siren would serve two lake areas).	City of Dassel and Meeker County	Ongoing	These are ongoing projects by the City of Dassel. MCEM will continue to provide support as needed to the city on their planning efforts.
All-Hazards	(Storm Shelters) City of Eden Valley Storm Shelter. Work with stakeholders to establish storm shelters in the community.	City of Eden Valley and Meeker County	Ongoing	This is an ongoing project by the City of Eden Valley. MCEM will continue to provide support as needed to the city on their planning efforts.
All-Hazards	(Storm Shelters) Meeker County Fairgrounds Storm Shelter. Work with stakeholders to secure funding for a storm shelter at the County's Fairgrounds	Meeker County, Meeker County Fair Board	Ongoing	This is an ongoing project by Meeker County Emergency Management in coordination with Meeker County Fair Board. Outside grant funding is necessary to fund a large-scale storm shelter project for the county fairgrounds.
All-Hazards	(Storm Shelters) Lake Ripley Park Storm Shelter. Work with stakeholders to secure funding for a storm shelter at Lake Ripley Park.	City of Litchfield and Meeker County	Ongoing	This is an ongoing project by Meeker County Emergency Management in coordination with Meeker County Parks Department.
All-Hazards	(Storm Shelters) City of Darwin Storm Shelter. Identify a suitable storm shelter to be used by the Darwin Community.	City of Darwin and Meeker County	Ongoing	This is an ongoing project by the City of Darwin. MCEM will continue to provide support as needed to the city on their planning efforts.

Hazard	Mitigation Action	Participating Jurisdictions	Status	Comments
All-Hazards	(Storm Shelters) Darwin Rod & Gun Club. Explore the feasibility of establishing a storm shelter at the Darwin Rod & Gun Club. If feasible, the storm shelter would serve the Lake Washington (400+ homes) and Stella Lake (100+ homes) areas.	Meeker County and Darwin, Ellsworth, Dassel, and Collinwood Townships	Ongoing	No work took place on this project. MCEM will continue to evaluate the potential for a storm shelter at the Darwin Rod & Gun Club that can be of service to residents in the surrounding area.
All-Hazards	(Severe Weather) Participate annually in Minnesota's Severe Weather Awareness Week every April.	Meeker County	Ongoing	MCEM participates in the NWS Severe Weather Awareness Week every April on an annual basis.
All-Hazards	(Severe Weather) Use public announcements in local newspapers and radio stations to increase citizen knowledge on disaster plans and what to do during emergencies.	Meeker County	Ongoing	MCEM utilizes the Meeker County Emergency Management website page, Meeker County Sheriff's Office Facebook page and local news media to communicate with residents and visitors on emergency preparedness.
All-Hazards	(Severe Weather) Provide educational "Best Management Practices" to residents on protecting life and property during severe weather events.	Meeker County	Ongoing	This is ongoing under MCEM public outreach & education on storm preparedness.
All-Hazards	(Vulnerable Populations) Inventory vulnerable populations and develop a plan to provide assistance to them during severe weather events.	Meeker County	Ongoing	MCEM, MC Public Health and local jurisdictions continue to be aware of where there are local facilities that provide care to vulnerable residents, such as nursing homes. These facilities are responsible to have emergency plans prepared. Local first responders provide support in the event of emergencies as needed (i.e., evacuation)
All-Hazards	(NIMS) Continue to provide National Incident Management System (NIMS) training annually.	Meeker County	Ongoing	MCEM continues to provide outreach and training opportunities to local government officials on NIMS training.

Hazard	Mitigation Action	Participating Jurisdictions	Status	Comments
All-Hazards	(Generators) Purchase back-up generators to ensure that critical facilities have access to power during emergencies and severe weather events.	Meeker County and all cities	Ongoing	MCEM and local jurisdictions continue to identify critical facilities that should have back up power and work to obtain generators.
All-Hazards	(Generators) Work with City of Kingston to secure funds to purchase a generator for the Kingston Community Center.	City of Kingston and Meeker County	Ongoing	Obtaining backup power is an ongoing effort for the City of Kingston.
All-Hazards	(Generators) Work with Grove City to secure funds to purchase generators at the fire hall, sewer plant, and at South Grove (senior facility).	Grove City and Meeker County	Ongoing	Obtaining backup power is an ongoing effort for the City of Grove City.
All-Hazards	(Generators) Work with the City of Dassel to secure funds to purchase generators for the City Hall and the Fire Department.	City of Dassel and Meeker County	Ongoing	Obtaining backup power is an ongoing effort for the City of Dassel.
All-Hazards	(Generators) Work with the City of Eden Valley to secure funds to purchase a generator for the Community Center (serves as the storm shelter).	City of Eden Valley and Meeker County	Ongoing	Obtaining backup power is an ongoing effort for the City of Eden Valley.
All-Hazards	(Mock Disasters) Participate in emergency preparedness mock training disasters.	Meeker County and all cities	Delete	Not a necessary mitigation action. This is a standard part of MCEM emergency preparedness program.
All-Hazards	(Power Lines) Work with electric companies and Federal, State, and local agencies to review and identify all electrical transmissions in the County that need to be upgraded and/or buried in order to protect them from severe weather events.	Meeker County	Ongoing	Municipal and rural electric cooperatives continue to identify and address where mitigation measures can be applied for powerlines vulnerable to failure due to severe storm events.

Hazard	Mitigation Action	Participating Jurisdictions	Status	Comments
All-Hazards	(Emergency Signage) Upgrade and expand emergency management signage to be used during extreme weather events (i.e., detour signs during floods, road closed signs, etc.).	Meeker County	Delete	This is a standard element of work for the Meeker County Highway Department.
Flooding	Road & Bridges. Continue to maintain a current list of roads and bridges throughout the County that experience flooding. Identify proper mitigation strategies and seek funding to implement.	Meeker County and Townships	Ongoing	Meeker County Highway Department maintains a 5-year Transportation Improvement Plan that identifies and schedules road improvement projects that include measures for flood mitigation. The current TIP is for 2020-2025.
Flooding	Stormwater Management. Assist communities with developing and implementing Stormwater Management Plans and upgrading storm sewer systems.	Meeker County and All Cities	Ongoing	Stormwater management planning and projects continue to be conducted by Meeker County and individual jurisdictions. MPCA provides BMP's and other assistance to communities in stormwater management planning and projects.
Extreme Temperatures	Provide educational information and "best practices" for protecting life and property during extreme temperatures on the county's website.	Meeker County	Ongoing	MCEM and Meeker County Public Health continue to help to share the message of personal safety and preparedness to stay safe during periods of extreme temperatures with county residents, utilizing communication platforms such as the county website, Facebook, and local news media.
Severe Storms	Debris Management. Identify sites throughout the County that can serve as temporary and/or long-term for debris management sites after storms.	Meeker County and All Cities	Delete	This is a part of MCEM response and recovery planning.

Hazard	Mitigation Action	Participating Jurisdictions	Status	Comments
Erosion	Work with the County's Soil & Water Conservation District to map severe erosion sites or potential high risk landslide areas (slopes greater than 10% and larger than 40 feet).	Meeker County	Delete	Landslides/erosion were deemed a low-risk priority for the 2022 plan update.
Erosion	Watkins Erosion Site. Work with the City of Watkins to mitigate severe erosion along County Ditch 20 in the City.	Meeker County and City of Watkins	Ongoing	This is an ongoing project by the City of Watkins.
Drought	Develop a Drought Contingency Plan with proper policies and ordinance language that limit water usage during drought emergencies.	Meeker County	Ongoing	Revise for plan update. Meeker County follows the recommendations of the MN DNR in the event of severe drought and cities within an affected area will institute water restriction ordinances as instructed by MN DNR.
Drought	Work with stakeholders on promoting the need for water conservation.	Meeker County and All Cities	Ongoing	This is an ongoing part of MCEM public outreach and education during periods of severe drought.

# **Appendix F – Planning Team Meetings**

## Meeker County MHMP Update

### Appendix F - Kickoff Meeting Documentation

#### Overview:

On July 29, 2021, U-Spatial@UMD hosted a kickoff meeting online that was attended by the Meeker 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 Multi-Hazard Mitigation Plan, the planning process, and the projected timeline of the project

#### Attached Documentation:

- **Project Handout:** "Minnesota 2021-2022 Multi-Hazard Mitigation Plan Update Project Overview".
- **Webinar Slides:** "Minnesota 2021-2022 Multi-Hazard Mitigation Plan Update Project Kickoff Orientation Webinar"

# Minnesota 2021-2022 Multi-Hazard Mitigation Plan Update Project Overview

During 2021-2022, U-Spatial from the University of Minnesota Duluth (U-Spatial@UMD) will be working to update Multi-Hazard Mitigation Plans (MHMPs) for 9 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

Big Stone, Douglas, Isanti, Meeker, Morrison, Polk, Wadena, Wright, and Yellow Medicine counties. Cities within each county are required to participate in the planning process.

## Overview of Update Process

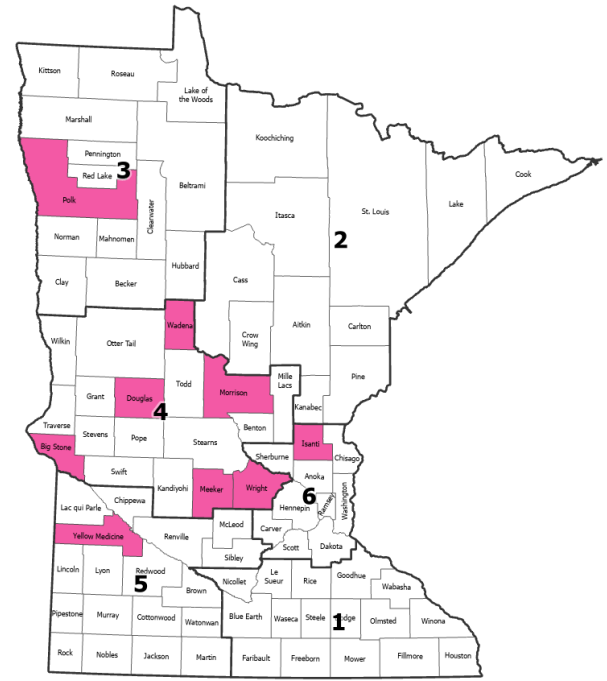
The U-Spatial@UMD team will coordinate with each Emergency Manager throughout the plan update process to engage participating jurisdictions and other stakeholders in the planning process. Following is an overview of key tasks that the U-Spatial@UMD team will facilitate to meet FEMA requirements in the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

- Conduct 2 planning team meetings
- Conduct 2 periods of 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)
- 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: [slstark@d.umn.edu](mailto:slstark@d.umn.edu)



# 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 county profile sections and maps
- 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 2021-2022 Multi-Hazard Mitigation Plan Update Project Kick-off Orientation Webinar



## Webinar Purpose & Goals

The purpose of this webinar is to provide an orientation for Emergency Managers participating in 2021-2022 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.

## Introductions

### U-Spatial@UMD Project Team



Stacey Stark  
Project Manager  
U-Spatial@UMD



Bonnie Hundrieser  
Emergency Management Planning Consultant  
Hundrieser Consulting LLC



Zach Vavra  
GIS Specialist and Researcher  
U-Spatial@UMD



Steve Graham  
Research Associate, Flood Modeling Specialist  
U-Spatial@UMD



Jane Lindelof  
Project Coordinator, Communications Specialist  
U-Spatial@UMD

### Emergency Managers:

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

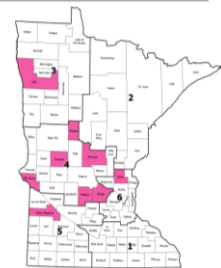
### Minnesota HSEM:

Jennifer Davis, MN HSEM  
State Hazard Mitigation Officer

## Project Overview

### 9 Counties:

- Big Stone
- Douglas
- Isanti
- Meeker
- Morrison
- Polk
- Wadena
- Wright
- Yellow Medicine



## 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 Failure	Lightning	Extreme Heat
Wildfire	Winter Storms	Extreme Cold
Windstorms	Landslides	Earthquakes
Tornadoes	Sinkholes & Karst	Coastal Erosion

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

## 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.

## 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.

## 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.

## MHMP Planning Team

The MHMP planning team must include representation from local government, related stakeholders and neighboring jurisdictions.

- County Government key officials and staff
- Cities – required; Townships – optional
- Other Related Stakeholders (i.e., SWCD, USDA, Schools, Rural & Municipal Electric Coops, MN DNR, etc.)
- Neighboring county/tribal jurisdictions

### Key Tasks

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

### Key Tasks

- Distribute & document News Release #1.
- Distribute & document News Release #2.
- Conduct other public outreach (optional).

## 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.

## Mitigation Action Charts

Bonnie Hundrieser will also coordinate development of draft 5-year 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.

## Timeline Overview

- 22-Month total timeline (July 2021 – May 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 timeline for your plan		Red includes county action items
<b>Stage 1 Tasks (4-5 months)</b>	July – November 2021	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-Spatial@UMD with provision of key data Complete inventory of Critical Infrastructure
<b>Stage 2 Tasks (4-6 months)</b>	December 2021 – May 2022	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
<b>Stage 3 Tasks (2-3 months)</b>	June – August 2022	EM review of Draft Plan Hold & document Planning Team Meeting #2 Finalize Mitigation Action Charts Disseminate & document News Release #2 EM coordination of plan review by stakeholders
<b>Stage 4 Tasks (2-3 months)</b>	September - November 2022	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

## 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.

## 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](mailto:slstark@d.umn.edu)  
 218-726-7438

Example Plans:

<https://z.umn.edu/hazardmitigation>

# Meeker County MHMP Update

## JURISDICTIONAL CONTACT LIST

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### County Contacts

Name	Title	Phone	Email
Stephanie Johnson	Emergency Management Director	320-693-5420	Stephanie.Johnson@co.meeker.mn.us
Becky Howell	Chief Deputy/EM Deputy Director	320-693-5400	Becky.howell@co.meeker.mn.us
Brian Cruze	County Sheriff	320-693-5400	brian.cruze@co.meeker.mn.us
Andrew Letson	County Administrator	320-693-5200	andrew.letson@co.meeker.mn.us
Phil Schmalz	County Engineer	320-693-5362	phillip.schmalz@co.meeker.mn.us
Mark Spies	Assistant Engineer	320-693-5367	mark.spies@co.meeker.mn.us
Braden Piram	Parks Superintendent	320-693-5450	braden.piram@co.meeker.mn.us
Diane Winter	Public Health Director	320-693-5370	diane.winter@co.meeker.mn.us
Greg Schultz	Land Use & Records Management Division Director (P&Z Dept).	320-693-5290	greg.schultz@co.meeker.mn.us
Amy Rausch	County Assessor	320-693-5205	Amy.rausch@co.meeker.mn.us
Joel Ramthun	Facilities Manager		Joel.Ramthun@co.meeker.mn.us
TBD	County Commissioner		

### City Contacts

#### CITY OF CEDAR MILLS

Name	Title	Phone	Email
Kata Dahlman	Clerk/Treasurer	320-583-6075	cedarmillsmn@gmail.com
Brian Hettver	Mayor	320-455-7402	

#### CITY OF COSMOS

Name	Title	Phone	Email
John Douville	Clerk	320-877-7345	cosmoscity@mchsi.com
Tom McCarthy	Mayor	320-444-7722	mccarthy2003@gmail.com
Emily Van Hatten	Ambulance Captain	320-583-1570	cosmosambulance@gmail.com
Jon Fruetel	Fire Chief	320-583-1840	cosmosfire540@gmail.com

#### CITY OF DARWIN

Name	Title	Phone	Email
Corrine Grotto	Clerk	320-693-2928	clerk@darwinmn.com
Josh Johnson	Mayor	320-693-2928	josh@perennialbank.com

#### CITY OF DASSEL

Name	Title	Phone	Email
Terri Boese	Clerk/Treasurer	320-275-2454	Terri.boese@dassel.com
Ron Hungerford	Mayor	320-275-2454	ron.hungerford@dassel.com
David Johnson	Fire & Rescue Chief	320-583-1002	dasselfire@dassel.com

### CITY OF EDEN VALLEY

Name	Title	Phone	Email
Cindy Anderson	Clerk/Treasurer	320-453-5251	canderson@edenvalleymn.city
Brent Bengtson	Mayor	320-453-2478	mayorbengtson@edenvalleymn.city
Chad Kuechle	Fire Chief	320-980-3278	valleyviewchad@gmail.com
Pam Haag	Rescue Chief	612-804-0918	pamhaag@meltel.net
Ernie Junker	Police Chief	320-453-5452	chiefjunker@edenvalleymn.city

### CITY OF GROVE CITY

Name	Title	Phone	Email
Baily Kalkbrenner	Clerk/Treasurer	320-857-2322	grovecity@embarqmail.com
Jesse Hudec	Mayor	763-670-5939	Jhudec03@gmail.com
Joe Jans	Fire Chief	320-699-1563	Joejans1234@gmail.com
Josh Thomas	Rescue Chief	320-583-3492	grovecityrescue@gmail.com

### CITY OF KINGSTON

Name	Title	Phone	Email
Jean Yunker	Clerk	763-232-2182	cityclerk.kingston.mn@gmail.com
James Herda	Mayor	320-275-5464	jmhdraft58@gmail.com

### CITY OF LITCHFIELD

Name	Title	Phone	Email
Dave Cziok	City Administrator	320-693-7201	Dave.Cziok@ci.litchfield.mn.us
Joyce Spreiter	Assistant City Administrator	320-693-7201	joycespreiter@ci.litchfield.mn.us
Kurt Beckstrand	Fire Chief	320-282-8890	kbeckstrand@hotmail.com
Blake Tangen	Rescue Chief	320-221-5472	Rescue.Chief@ci.litchfield.mn.us
Pat Fank	Police Chief	320-693-5425	Patrick.fank@co.meeker.mn.us

### CITY OF WATKINS

Name	Title	Phone	Email
Deb Kramer	Clerk	320-764-6400	cityclerk@watkinsmn.city
Christopher Rowan	Mayor	320-492-2203	
Jeff Hilsgen	Ambulance & Rescue Chief	320-248-0881	j@arvig.net
Ron Kramer	Fire Chief	320-980-3545	randrkramer@gmail.com

## Township Contacts

Name of Township	Name & Title	Phone	Email
Acton Township	Richard Thorp, Clerk	320-295-2903	richardjthorp1952@gmail.com
Cedar Mills Township	John Sanken, Clerk	651-503-9992	jsanken@sagepointadvisor.com
Collinwood Township	Celia Knoll, Clerk	320-583-1320	celiaknoll@gmail.com
Cosmos Township	Gerald Fank, Clerk	320-877-7795	
Danielson Township	Russ Peterson, Clerk	320-905-0733	blackvelvetranch@outlook.com
Darwin Township	Robin Johnson, Clerk	612-636-1273	llamka128@gmail.com
Dassel Township	Karin Colberg, Clerk	320-221-0267	kcolberg2@gmail.com
Ellsworth Township	Lori Johnson, Clerk	320-583-8888	ellsworthclerk@outlook.com
Forest City Township	Courtney Johnson, Clerk	320-434-3050	cljohnson1302@gmail.com
Forest Prairie Township	Robert Geisliner, Clerk	320-764-2421	rgeislinger@yahoo.com

Greenleaf Township	Doris Johnson, Clerk	320-535-0985	honeymoonhill501@yahoo.com
Harvey Township	Wanda Urdahl, Clerk	320-693-8405	wandaurdahl@yahoo.com
Kingston Township	Gail Schiefelbein, Clerk	320-250-5693	rgaaab@meltel.net
Litchfield Township	David Lindberg, Clerk	320-693-3734	wildlife@hutchtel.net
Manannah Township	Deb McCann, Clerk	320-444-2291	manannahtownship@gmail.com
Swede Grove Township	Teresa Drange, Clerk	320-699-0400	swedegrove@hotmail.com
Union Grove Township	Loren Pearson, Clerk	320-290-2237	lvpearson33@hotmail.com

### Other Stakeholder Contacts

Contacts to consider including: HSEM RPC, USDA CF Contact, School Districts, Colleges, Rural Electric Coops, MN DNR, etc.

Name of Agency/Org.	Name & Title	Phone	Email
USDA Rural Development Community Programs	Doug Grindberg, Area Specialist	651-602-7794	douglas.grindberg@usda.gov
MN Homeland Security & Emergency Management	Lisa Dumont, HSEM Region 4 Regional Program Coordinator	320-429-0348	Lisa.Dumont@state.mn.us
Meeker County Soil & Water Conservation District	Joe Norman, District Technician	320-693-7287, Option 3	joseph.norman@mn.nacdnet.net
Natural Resource Conservation Service (NRCS)	Jacob Stich, District Conservationist	320-693-7287, Option 2	Jacob.stich@usda.gov
Mayo Ambulance	Nick Pochardt, Assistant Supervisor	320-229-3639	Pochardt.nicholas@mayo.edu
A.C.G.C. Schools	Nels Onstad, Superintendent	320-244-4712	OnstadN@acgcfalcons.org
Dassel-Cokato Schools	Mark Raymond, Superintendent	320-286-4100 Ext. 1003	mark.raymond@dc.k12.mn.us
EV-W Schools	Mark Messman, Superintendent	320-453-2900 Ext. 1143	mmessman@evw.k12.mn.us
Litchfield Public Schools	Beckie Simenson, Superintendent	320-894-4098	bsimenson@lsd465.org
Litchfield Public Utilities	Michael Geers, Operations Engineer	320-693-3277	mike.geers@ci.litchfield.mn.us
Meeker Coop	Chrysy Shoutz, Operations	320-693-3231	cshoutz@meeker.coop

### Neighboring Jurisdiction Contacts

Name of Jurisdiction	Name & Title	Phone	Email
Stearns County	Erin Tuftte, Emergency Management Director	320-259-3940	Erin.Tuftte@co.stearns.mn.us
Wright County	Seth Hansen, Emergency Management Director	763-684-2371	seth.hansen@co.wright.mn.us
McLeod County	Kevin Mathews, Emergency Management Director	320-864-3134	kevin.mathews@co.mcleod.mn.us

Renville County	Mike Hennen, Emergency Management Director	320-523-3838	mikehe@renvillecountymn.com
Kandiyohi County	Stephanie Felt, Emergency Management Director	320-235-5133	Stephanie.Felt@kcmn.us

# Meeker County MHMP Planning Team Meeting #1

## February 1, 2022 - Meeting Summary & Documentation

**Summary:** On Tuesday, February 1, 2022 Meeker County Emergency Management convened key county, city, and township representatives, as well as neighboring jurisdictions and other stakeholders to participate in the 1<sup>st</sup> Planning Team Meeting for the update of the Meeker County Multi-Hazard Mitigation Plan (MHMP). The purpose of the meeting was to formally present information about the Meeker 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:** Meeker 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 Steering Committee Meetings*.

**Meeting Participants:** A total of **25** people attended the meeting. Representation included departmental staff from Meeker County and the following cities: Dassel, Eden Valley, Grove City, Litchfield, and Watkins. The cities of Cedar Mills, Cosmos, Darwin, and Kingston were not able to attend. 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. **(10/17) 59%**
- No, but I am familiar with hazard mitigation planning. **(2/17) 12%**
- No, and this is all new to me. **(5/17) 29%**

**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 2015 risk priorities for Meeker 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. Any changes to the risk prioritizations will be noted.

HAZARD	EXISTING PLAN	2022 PLAN
Flooding	High	High
Tornadoes	High	High
Winter Storms	Moderate	Moderate
Windstorms	Moderate	Moderate
Extreme Cold	Moderate	Moderate
Extreme Heat	Moderate	Moderate
Wildfire	Low	Low
Hail	Low	Low
Drought	Low	<b>Low to Moderate</b>
Lightning	Low	Low
Dam/Levee Failure	Low	Low
Landslides	N/A	Low

**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
Paul Carlson, ACGC Public Schools, Superintendent	<i>Regarding prioritization of hail:</i> What would be a mitigation action for Hail?	Stacey Stark: Mitigation for hail is usually addressed with activities related to public education and awareness for home owners to protect their cars and property from hail damage. If the county felt there were large mitigation activities needed to protect county facilities from hail damage those could also be included.
Terri Boese, City of Dassel, City Clerk/Treasurer	<i>Regarding prioritization of drought:</i> Drought might need to move a higher level due to the compounding effect.	Stacey Stark: Comment noted, and asked if there was further feedback from others in the meeting regarding drought.

Meeting Participant	Comment, Question or Mitigation Idea Submitted	Facilitator Feedback / How to be Addressed in Plan Update
<p>Jesse Hudec, City of Grove City, Mayor</p>	<p><i>Regarding prioritization of drought:</i> Following on what Terri mentioned about drought. Would we want to have it included to have plans in place to address irrigators drawing down water resources during drought?</p>	<p>Stacey Stark: Jesse, do you know if plans are in place to address drawing down water? If not, creating a plan would be a great mitigation action.</p> <p>Jesse Hudec - Other than the DNR requirements of conservation tactics, I am not aware of any formal process. We had local farm irrigation systems this past summer going at full power while our water source was below 12 feet lower than normal.</p> <p>Stephanie Johnson, Meeker County Emergency Management Director: Thanks for the thought, Jesse. Irrigation systems are unique for who has authorities with their use during a drought. I know this was a concern across the county last summer. I can have a conversation with the DNR to see if there are any mitigation steps that could be done to conserve the water draw down in a drought and what type of planning might be beneficial to add into this plan update. Meeker County can't do anything to enforce watering restrictions, this falls to the MN DNR. We will explore if Meeker County has a role in any possible mitigation actions related to drought.</p>

Following the discussion, participants were encouraged to fill out and return the “Mitigation Ideas” worksheet that they were provided with to Meeker 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 Meeker County MHMP Meeting #1:**

- 2-1-22 Mtg. #1 Email Invitation
- 2-1-22 Mtg. #1 List of Participants
- 2-1-22 Mtg. #1 Power Point Slides
- 2-1-22 Mtg. #1 Handouts

*Meeting Summary Prepared By: Bonnie Hundrieser, U-Spatial@UMD Project Team*

**From:** [Stephanie L Johnson](#)  
**To:** [Stephanie L Johnson](#); [Becky Howell](#); [Brian Cruze](#); [Andrew Letson](#); [Phil Schmalz](#); [Mark Spies](#); [Braden Piram](#); [Diane Winter](#); [Greg Schultz](#); [Amy Rausch](#); [cedarmillsmn@gmail.com](#); [cosmoscity@mchsi.com](#); [mccarthy2003@gmail.com](#); [cosmosambulance@gmail.com](#); [cosmosfire540@gmail.com](#); [clerk@darwinmn.com](#); [josh@perennialbank.com](#); [Terri.boese@dassel.com](#); [ron.hungerford@dassel.com](#); [dasselfire@dassel.com](#); [canderson@edenvalleymn.city](#); [mayorbengtson@edenvalleymn.city](#); [valleyviewchad@gmail.com](#); [pamhaag@meltel.net](#); [chiefjunker@edenvalleymn.city](#); [grovecity@embarqmail.com](#); [Jhudec03@gmail.com](#); [Joejans1234@gmail.com](#); [grovecityrescue@gmail.com](#); [cityclerk.kingston.mn@gmail.com](#); [jmhdraft58@gmail.com](#); [Dave.Cziok@ci.litchfield.mn.us](#); [joycespreiter@ci.litchfield.mn.us](#); [kbeckstrand@hotmail.com](#); [Rescue.Chief@ci.litchfield.mn.us](#); [Patrick Fank](#); [cityclerk@watkinsmn.city](#); [j@arvig.net](#); [randrkramer@gmail.com](#); [richardjthorp1952@gmail.com](#); [jsanken@sagepointadvisor.com](#); [celiaknoll@gmail.com](#); [blackvelvetranch@outlook.com](#); [llamka128@gmail.com](#); [kcolberg2@gmail.com](#); [ellsworthclerk@outlook.com](#); [cljohnson1302@gmail.com](#); [rgeislinger@yahoo.com](#); [honeymoonhill501@yahoo.com](#); [wandaurdahl@yahoo.com](#); [rgaaab@meltel.net](#); [wildlife@hutchtel.net](#); [manannahtownship@gmail.com](#); [swedegrove@hotmail.com](#); [lypearson33@hotmail.com](#); [douglas.grindberg@usda.gov](#); [Lisa.Dumont@state.mn.us](#); [joseph.norman@mn.nacdn.net](#); [Jacob.stich@usda.gov](#); [Pochardt.nicholas@mayo.edu](#); [OnstadN@acgcfalcons.org](#); [jeff.powers@dc.k12.mn.us](#); [mnessman@evw.k12.mn.us](#); [bsimenson@lsd465.org](#); [mike.geers@ci.litchfield.mn.us](#); [cshoutz@meeker.coop](#); [Erin.Tufte@co.stearns.mn.us](#); [seth.hansen@co.wright.mn.us](#); [kevin.mathews@co.mcleod.mn.us](#); [mikehe@renvillecountymn.com](#); [Stephanie.Felt@kcmn.us](#)  
**Cc:** [Bonnie K Hundrieser](#)  
**Subject:** MEEKER COUNTY MULTI-HAZARD MITIGATION PLAN UPDATE-MEETING INVITATION  
**Date:** Friday, December 10, 2021 1:37:40 PM

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## MEEKER COUNTY

### MULTI-HAZARD MITIGATION PLAN UPDATE – MEETING INVITATION

Greetings,

Your presence is requested at a Planning Team Meeting for the update of the **Meeker 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: Tuesday, February 1, 2022

Time: 1:00 – 3:00 p.m.

Zoom Link: [https://umn-private.zoom.us/webinar/register/WN\\_HQZqv\\_LBTRmOvroZ5N2GSg](https://umn-private.zoom.us/webinar/register/WN_HQZqv_LBTRmOvroZ5N2GSg)

**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 Meeker 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 Meeker 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 Meeker 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,

**Stephanie Johnson**

Stephanie Johnson

Emergency Management Director & Safety Coordinator

Meeker County Sheriff's Office

326 N Ramsey Ave

Litchfield, MN 55355

320-693-5420 (office)

320-693-5424 (fax)

[www.weather.gov/wrn/](http://www.weather.gov/wrn/)

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## Meeker County

### 2/1/11 MHMP Planning Team Meeting #1

#### List of Participants (25)

	<b>First Name</b>	<b>Last Name</b>	<b>Organization</b>	<b>Job Title</b>
1	Stephanie	Johnson	Meeker County Emergency Management	Emergency Management Director
2	Greg	Schultz	Meeker County	Land Use Director
3	Amy	Rausch	Meeker County	County Assessor
4	Phil	Schmalz	Meeker County	Public Works Director/County Engineer
5	Andrew	Letson	Meeker County	County Administrator
6	Diane	Winter	Meeker County Public Health	Director
7	Nicole	Carlen	City of Dassel	Council Member
8	Terri	Boese	City of Dassel	City Clerk/Treasurer
9	Jesse	Hudec	City of Grove City	Mayor
10	Michael	Geers	City of Litchfield	Operations Engineer
11	Cindy	Anderson	City of Eden Valley	City Clerk
12	Deb	Kramer	City of Watkins	Clerk
13	Bruce	Dicke	Acton Township	Supervisor, Board Chairman
14	Matt	Foley	Darwin Township	Township Supervisor
15	Bridget	Klein	Manannah Township	Treasurer
16	Jacob	Stich	USDA - NRCS	CST Lead
17	Lisa	Villcheck	HSEM	Regional Program Coordinator
18	Paul	Carlson	ACGC Public Schools	Superintendent
19	Beckie	Simenson	Litchfield Public Schools	Superintendent
20	Mark	Raymond	Dassel-Cokato School District	Superintendent
21	Stephanie	Felt	Kandiyohi County Emergency Management	Director
22	Ace	Bonnema	Kandiyohi County Emergency Management	Deputy Director
23	Kevin	Mathews	McLeod County Emergency Management	Emergency Management Director
24	Mike	Hennen	Renville County Emergency Management	Director
25	Samantha	Best	Renville County Emergency Management	Deputy Director

# MEEKER COUNTY Multi-Hazard Mitigation Plan Update 2022 Planning Team Meeting #1

February 1, 2022



## Welcome & Introductions

### U-Spatial@UMD Project Leads



**Stacey Stark**  
Project Manager  
U-Spatial@UMD



**Bonnie Hundrieser**  
HM Planning Specialist  
Hundrieser Consulting LLC

### Meeker County Project Lead

- Stephanie Johnson, Meeker County Emergency Management Director



Please type your name and jurisdiction in the CHAT – so others know who is here

PRESENTER: STACEY STARK

## 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 everyone
- 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:



PRESENTER: STACEY STARK

## Meeting Purpose & Agenda



July 11, 2016 City of Litchfield Tornado

The purpose of this meeting is to formally convene the Meeker 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.

PRESENTER: STACEY STARK

## About your Project Team



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.

### 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

PRESENTER: STACEY STARK

## 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.

PRESENTER: BONNIE HUNDRIESER

# MHMP Overview & Timeline



Thunderstorm Watch photo, KNSI

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.

## Meeker County MHMP Update 2022

- Last plan adopted in 2015.
- The updated plan will cover a 5-year window for implementation.
- Documentation of county and local-level government participation is required for plan approval.

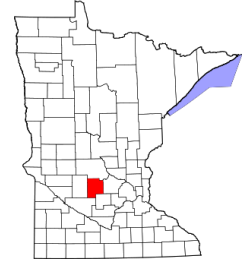
PRESENTER : BONNIE HUNDRIESEN

# Who the Plan Covers



The Meeker County MHMP is a multi-jurisdictional plan that covers the county as well as all city & townships within the county.

- ✓ County and city governments are required to adopt the plan.
- ✓ Townships are covered under the umbrella of the county, but may elect to adopt.
- ✓ City-level participation in the plan update must be documented for local adoptions to be approved.



PRESENTER : BONNIE HUNDRIESEN

# MHMP Planning Team



## Meeker County Planning Team

- Meeker 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.

PRESENTER : BONNIE HUNDRIESEN

# What Hazards are Addressed in the Plan?



- 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 Failure	Lightning	Extreme Heat
Wildfire	Winter Storms	Extreme Cold
Windstorms	Landslides	Earthquakes
Tornadoes	Sinkholes & Karst	Coastal Erosion

Natural hazard categories for Minnesota MHMPs.

PRESENTER : STACEY STARK

# Comments and Questions?

# 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)



July 23, 2016 City of Litchfield flooding



July 11, 2016 City of Watkins Tornado

PRESENTER : STACEY STARK

# Meeker County Review of Existing Hazard Risk Prioritization

HAZARD	EXISTING PLAN	2022 PLAN
Flooding	High	
Tornadoes	High	
Winter Storms	Moderate	
Windstorms	Moderate	
Extreme Cold	Moderate	
Extreme Heat	Moderate	
Wildfire	Low	
Hail	Low	
Drought	Low	
Lightning	Low	
Dam/Levee Failure	Low	
Landslides	N/A	

Please consider any changes for these priorities in 2022 based on:

- Increase or decrease in risk over the last 5 years (probability + severity)
- Local vulnerabilities (people, systems, infrastructure)
- New development

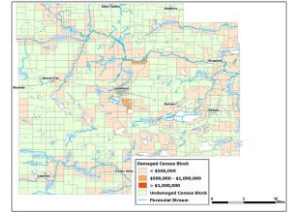
Updated hazard priorities for 2022 should seek to be clearly identified as High, Moderate or Low.

PRESENTER : STACEY STARK

## Flooding (High)



- Use of FEMA Flood Insurance Rate Map (FIRM)
- A potential economic loss model is run for 1% annual chance flood
- Use of property values from county assessor
- Critical Infrastructure locations from GIS and EM input



Distribution of Estimated Economic Loss: 1% annual chance flood.

PRESENTER : STACEY STARK

## Tornadoes (High)



- Based NCEI Storm Events Database through 2021, the relative frequency of tornadoes is .37 per year (26 total)
- Tornadoes occurred in 2020 (EF0) and 2016 (EF2)
- Identify mobile home locations



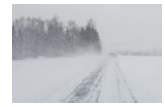
August 3, 2018 City of Grove City Tornado

PRESENTER : STACEY STARK

## Winter Storms (Moderate)



- 29 winter weather related events (blizzards, heavy snows, ice storms, winter storms, and winter weather ) have occurred since January 2012 (2.9 year)
- Based on all records in the NCEI Storm Events Database, the relative frequency of winter-related storm events is 3 per year.



January 24, 2018 NWS issues severe blizzard warning for Meeker County

PRESENTER : STACEY STARK

## Windstorms (High), Lightning, Hail (Low)



- Each addressed individually
- The relative frequency of all wind-related events since January of 1996 is 5 per year.
- There were 18 hailstorms with hail greater or equal to 1-inch since 2012. The relative frequency of 1-inch events is 3 per year.
- Hazards deemed low risk and without significant mitigation actions, can be dropped from the plan.



Minnesota storm front, InForum photo



Central MN hailstorm Brainerd Dispatch photo

PRESENTER : STACEY STARK

## Extreme Cold (Moderate)



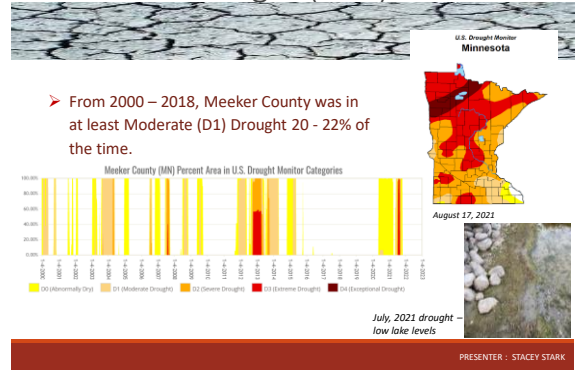
- From 2012 - 2021, daily low temperatures < -18 °F were recorded 35 times at Dassel 3SE weather station. Meeker experiences an average of 3-4 extreme cold days each year.
- -30°F recorded by the Dassel 3SE weather station on January 30-31, 2019
- The relative frequency of cold-related events (NWS Warning issued due to wind chill of -35 °F or colder ) in Meeker County is 2 per year.

PRESENTER : STACEY STARK

## Extreme Heat (Moderate)

- From 2012 - 2021, daily high temperatures > 90 °F were recorded 70 times at Dassel 35E weather station. Meeker County experiences an average of 7-8 extreme heat days each year.
- No Excessive Heat Warnings (Heat Index > 105 °F) in NCEI database.

## Drought (Low)



## Wildfire/Wildland Fire (Low)



## Landslides (Low)



- Hazards deemed low risk and without significant mitigation actions, can be dropped from the plan.

## Dam Failure (Low)



- No high hazard potential dams in Meeker County
- 4 dams in Meeker County. All with the hazard risk of "low".
- Must state any mitigation actions if the county wishes to be eligible for the High Hazard Potential Dam Rehabilitation Grant Program

PRESENTER : STACEY STARK

PRESENTER : BONNIE HUNDRIESER

## Meeker County Review of Hazard Risk Prioritization

HAZARD	EXISTING PLAN	2022 PLAN
Flooding	High	
Tornadoes	High	
Winter Storms	Moderate	
Windstorms	Moderate	
Extreme Cold	Moderate	
Extreme Heat	Moderate	
Wildfire	Low	
Hail	Low	
Drought	Low	
Lightning	Low	
Dam/Levee Failure	Low	
Landslides	N/A	

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 : STACEY STARK

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 HUNDRIESER

## #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 HUNDRIESER

## Tornado Safe Rooms

- 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



1998 Tornado damage to MHP in Le Center, MN.



Warba, MN mobile home park tornado safe room, FEMA grant funded



1<sup>st</sup> School-based tornado safe room, Wadena, MN (2012) following June 17, 2010 tornado damage

PRESENTER : BONNIE HUNDRIESER

## 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 HUNDRIESER

## #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



PRESENTER : BONNIE HUNDRIESER

## #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.

**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 HUNDRIESER

## #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 Notification Systems
- 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

PRESENTER : BONNIE HUNDRIESER

## FEMA HMA Grant Program

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

PRESENTER : BONNIE HUNDRIESER

## Historical Projects in Meeker County Resulting from HMA Funding

- 2011 Meeker County Local Hazard Mitigation Plan
  - \$37.2k total, \$22.5k federal share
- 1998 and 1999 Utility Protective Measures
  - Meeker Cooperative Light and Power Assn
  - \$350k total, \$250k federal share
- 1997 Utility Protective Measures
  - Meeker Cooperative Light and Power Assn
  - \$290k total, \$217.5k federal share

PRESENTER : BONNIE HUNDRIESER

## Mitigation Ideas

See Handout: Mitigation Ideas Worksheet

Do you have questions or ideas to share about local hazards, vulnerabilities and proposed mitigation actions?

PRESENTER : BONNIE HUNDRIESER



## January – April, 2022

### Completion of EM Tasks and Local Mitigation Survey (LMS) Forms

Lead: Bonnie Hundrieser

- **EM Tasks:** Plans in Place Form, Capabilities Assessment, and Past Mitigation Action Review
- **LMS Forms (County/City)**
  - Local hazard identification & risk prioritization.
  - Local vulnerabilities (critical infrastructure, populations or assets)
  - Local-level capabilities (programs, polices, staff, funding)
  - Identify local mitigation projects.

PRESENTER : BONNIE HUNDRIESER



## (Concurrent) January – June, 2022

### 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

PRESENTER : BONNIE HUNDRIESER



## April – June, 2022

### Development of Local Mitigation Action Charts

Lead: *Bonnie Hundrieser*

- County and City-Specific MACs
- 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.

PRESENTER : BONNIE HUNDRIESER



## July – August, 2022

### Hold Planning Team Meeting #2

Lead: *U-Spatial & Bonnie Hundrieser*

- **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

PRESENTER : BONNIE HUNDRIESER



## Sept. – Oct., 2022

### EM review of Draft Plan + Public Review & Comment Period

Lead: *U-Spatial & Bonnie Hundrieser*

- EM initial review of draft plan
- **News Release #2**
  - Disseminate & document news release by county and jurisdictions.
  - Document and incorporate feedback as appropriate.

PRESENTER : BONNIE HUNDRIESER



## Nov. – Dec., 2022 to Spring, 2023

### 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 (Spring, 2023)
- Final Letter of Approval

PRESENTER : BONNIE HUNDRIESER

## Questions?

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

PRESENTER : STACEY STARK

## Contact Information

Stacey Stark, MS, GISP  
**U-Spatial@UMD**  
[slstark@d.umn.edu](mailto:slstark@d.umn.edu)  
 218-726-7438

Bonnie Hundrieser, Consultant  
**Hundrieser Consulting LLC**  
[hundrieserconsulting@outlook.com](mailto:hundrieserconsulting@outlook.com)  
 218-343-3468



PRESENTER : 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
<b>Local Planning and Regulations</b>	These actions include government authorities, policies, or codes that influence the way land and buildings are developed and built.	<ul style="list-style-type: none"> <li>• Comprehensive plans</li> <li>• Land use ordinances</li> <li>• Planning and zoning</li> <li>• Building codes and enforcement</li> <li>• Floodplain ordinances</li> <li>• NFIP Community Rating System</li> <li>• Capital improvement programs</li> <li>• Open space preservation</li> <li>• Shoreline codes</li> <li>• Stormwater management regulations and master plans</li> <li>• Mobile home park compliance for storm shelters</li> </ul>
<b>Structure and Infrastructure Projects</b>	<p>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.</p> <p>This type of action also involves projects to construct manmade structures to reduce the impact of hazards.</p>	<ul style="list-style-type: none"> <li>• Property Acquisitions and elevations of structures in flood prone areas</li> <li>• Utility undergrounding</li> <li>• Structural retrofits (i.e., metal roofs)</li> <li>• Floodwalls and retaining walls</li> <li>• Detention and retention structures</li> <li>• Culvert Installation/Modification</li> <li>• Roads &amp; Bridge risk reduction</li> <li>• Safe Room (New construction or facility retrofit)</li> <li>• Green Infrastructure Methods</li> </ul> <p><i>Many of these types of actions are projects eligible for funding through FEMA HMA grant programs.</i></p>

Mitigation Strategy	Description	Example Mitigation Actions
<p><b>Natural Systems Protection</b></p>	<p>These are actions that minimize damage and losses and also preserve or restore the functions of natural systems.</p>	<ul style="list-style-type: none"> <li>• Soil stabilization for sediment and erosion control</li> <li>• Floodplain and Stream corridor restoration</li> <li>• Slope management</li> <li>• Forest management (defensible space, fuels reduction, sprinkler systems)</li> <li>• Conservation easements</li> <li>• Wetland restoration and preservation</li> <li>• Aquifer Storage &amp; Recovery</li> <li>• Flood Diversion and Storage</li> </ul> <p><i>Many of these types of actions are projects eligible for funding through FEMA HMA grant programs.</i></p>
<p><b>Education and Awareness Programs</b></p>	<p>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.</p>	<ul style="list-style-type: none"> <li>• Radio or television spots</li> <li>• Websites with maps and information</li> <li>• Social media outreach</li> <li>• Promotion of sign-up for emergency warnings</li> <li>• Real estate disclosure</li> <li>• Promotion of NFIP insurance to property owners</li> <li>• Presentations to school groups or neighborhood organizations</li> <li>• Mailings to residents in hazard-prone areas.</li> <li>• NWS StormReady Program</li> <li>• Firewise Communities</li> </ul> <p><i>Some of these types of actions may be projects eligible for funding through the FEMA HMA "5 Percent Initiative Program".</i></p>
<p><b>Mitigation Preparedness and Response Support</b></p>	<p>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.</p>	<ul style="list-style-type: none"> <li>• Emergency Operations Plan</li> <li>• Flood fight plans and preparedness measures</li> <li>• Dam emergency action plans</li> <li>• Emergency Warning Systems (i.e., CodeRed, warning sirens)</li> <li>• Generator backup power</li> <li>• NWS Storm Spotter Training</li> <li>• Training and education for local elected officials and key partners.</li> </ul>



State of Minnesota  
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Division of Homeland Security and Emergency Management  
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St. Paul, MN 55101-6223

## 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).

- Hazard Mitigation Grant Program (HMGP) funds assists in implementing long-term hazard mitigation measures following a Presidential major disaster declaration.
- Pre-Disaster Mitigation (PDM) provides funds for hazard mitigation planning and projects on an annual basis.
- Flood Mitigation Assistance (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 life-safety 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:

<https://dps.mn.gov/divisions/hsem>

### Where can I obtain further information?

For additional information about the HMA grant program, you can refer to the FEMA website:

<http://www.fema.gov/hazard-mitigation-assistance>

# 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

## Meeker County MHMP Planning Team Meeting #2 October 31, 2022 - Meeting Summary & Documentation

**Summary:** On Monday, October 31, 2022, Meeker County Emergency Management convened key county, city, and township representatives, as well as neighboring jurisdictions and other stakeholders to participate in the 2<sup>nd</sup> and final Planning Team Meeting for the update of the Meeker County Multi-Hazard Mitigation Plan (MHMP). The purpose of the meeting was to formally convene the Meeker County MHMP 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:** Meeker 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 Steering Committee Meetings*.

**Meeting Participants:** A total of 17 people attended the meeting. Representation included departmental staff from Meeker County and the cities of Darwin, Dassel, Eden Valley, and Watkins. The cities of Cedar Mills, Cosmos, Grove City, Kingston, and Litchfield were not available to attend. 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
- Prioritization of Hazards
- Hazards Risk Assessment (Critical Infrastructure, Population Vulnerability Factors, and Review of High/Moderate Priority Natural Hazards)
- Development of Mitigation Actions
- FEMA HMA Grant Funding
- Overview of Mitigation Action Charts and Discussion
- 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.

- There were no questions or discussion during or following the presentation.

**Meeting Conclusion:** The meeting concluded with an overview and timeline of the upcoming next steps of posting the plan for public review and input and submitting the draft plan to HSEM and FEMA for final review and approval.

**Attached are the following documentation items for the Meeker County MHMP Meeting #2:**

- 10-31-22 Mtg. #2 Email Invitation
- 10-31-22 Mtg. #2 List of Participants
- 10-31-22 Mtg. #2 Power Point Slides
- 10-31-22 Mtg. #2 Handouts

*Meeting Summary Prepared By: Bonnie Hundrieser, U-Spatial@UMD Project Team*

**From:** [Stephanie L Johnson](#)  
**To:** [Stephanie L Johnson](#); [Becky Howell](#); [Brian Cruze](#); [Andrew Letson](#); [Phil Schmalz](#); [Mark Spies](#); [Braden Piram](#); [Diane Winter](#); [Greg Schultz](#); [Amy Rausch](#); [cedarmillsmn@gmail.com](#); [cosmoscity@mchsi.com](#); [mccarthy2003@gmail.com](#); [cosmosambulance@gmail.com](#); [cosmosfire540@gmail.com](#); [clerk@darwinmn.com](#); [josh@perennialbank.com](#); [Terri.boese@dassel.com](#); [dasselfire@dassel.com](#); [canderson@edenvalleymn.city](#); [mayorbengtson@edenvalleymn.city](#); [valleyviewchad@gmail.com](#); [pamhaag@meltel.net](#); [chiefjunker@edenvalleymn.city](#); [grovecity@embarqmail.com](#); [Jhudec03@gmail.com](#); [Joejans1234@gmail.com](#); [grovecityrescue@gmail.com](#); [cityclerk.kingston.mn@gmail.com](#); [jmhdraft58@gmail.com](#); [Dave.Cziok@ci.litchfield.mn.us](#); [joycespreiter@ci.litchfield.mn.us](#); [kbeckstrand@hotmail.com](#); [Rescue.Chief@ci.litchfield.mn.us](#); [Patrick Fank](#); [cityclerk@watkinsmn.city](#); [j@arvig.net](#); [randrkramer@gmail.com](#); [richardjthorp1952@gmail.com](#); [jsanken@sagepointadvisor.com](#); [celiaknoll@gmail.com](#); [llamka128@gmail.com](#); [kcolberg2@gmail.com](#); [ellsworthclerk@outlook.com](#); [cljohnson1302@gmail.com](#); [rgeislinger@yahoo.com](#); [honeymoonhill501@yahoo.com](#); [wandaurdahl@yahoo.com](#); [rqaaab@meltel.net](#); [wildlife@hutchtel.net](#); [manannahtownship@gmail.com](#); [swedegrove@hotmail.com](#); [lvpearson33@hotmail.com](#); [douglas.grindberg@usda.gov](#); [Lisa.Dumont@state.mn.us](#); [joseph.norman@mn.nacdn.net](#); [Jacob.stich@usda.gov](#); [Pochardt.nicholas@mayo.edu](#); [OnstadN@acgcfalcons.org](#); [mark.raymond@dc.k12.mn.us](#); [mmessman@evw.k12.mn.us](#); [bsimenson@lsd465.org](#); [mike.geers@ci.litchfield.mn.us](#); [cshoutz@meeker.coop](#); [Erin.Tufte@co.stearns.mn.us](#); [seth.hansen@co.wright.mn.us](#); [kevin.mathews@co.mcleod.mn.us](#); [mikehe@renvillecountymn.com](#); [Stephanie Felt](#)  
**Cc:** [Bonnie K Hundrieser](#)  
**Subject:** MEEKER COUNTY MULTI-HAZARD MITIGATION PLAN UPDATE - MEETING INVITATION 10-31-22  
**Date:** Monday, September 26, 2022 9:02:23 AM  
**Attachments:** [image001.png](#)

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## MEEKER COUNTY

### MULTI-HAZARD MITIGATION PLAN UPDATE – MEETING INVITATION

Greetings,

Your presence is requested at the **2nd Planning Team Meeting** for the update of the **Meeker County Multi-Hazard Mitigation Plan (MHMP)**. This meeting will be the final planning meeting for the hazard mitigation planning process for the county, city jurisdictions, and other stakeholders.

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 webinar:**

Date: Monday, October 31, 2022

Time: 9:00 a.m. – 11:00 a.m.

Zoom Link: [https://umn-private.zoom.us/webinar/register/WN\\_R4bL88BZQ6Or0kdyXcdTKQ](https://umn-private.zoom.us/webinar/register/WN_R4bL88BZQ6Or0kdyXcdTKQ)

#### **You must click on the link above to register. (Ctrl + click to follow link)**

The purpose of this meeting is to provide a final overview of the plan, including a review of the updated risk assessment for natural hazards that affect the county (history, local vulnerabilities, and future trends). We will also discuss the Mitigation Action Charts that have been developed for Meeker County and each city, as well as funding opportunities for eligible projects 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 Meeker County MHMP is underway and will be ready for review by planning team members and the public following this meeting.

**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.

Thank you,

**Stephanie Johnson**

Stephanie Johnson  
Emergency Management Director & Safety Coordinator  
Meeker County Sheriff's Office  
326 N Ramsey Ave  
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320-693-5420 (office)  
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**From:** [Stephanie L Johnson](#)  
**To:** [Becky Howell](#); [Brian Cruze](#); [Andrew Letson](#); [Phil Schmalz](#); [Mark Spies](#); [Braden Piram](#); [Diane Winter](#); [Greg Schultz](#); [Amy Rausch](#); [cedarmillsmn@gmail.com](#); [cosmoscity@mchsi.com](#); [mccarthy2003@gmail.com](#); [cosmosambulance@gmail.com](#); [cosmosfire540@gmail.com](#); [clerk@darwinmn.com](#); [josh@perennialbank.com](#); [Terri.boese@dassel.com](#); [dasselfire@dassel.com](#); [canderson@edenvalleymn.city](#); [mayorbengtson@edenvalleymn.city](#); [valleyviewchad@gmail.com](#); [pamhaag@meltel.net](#); [chiefjunker@edenvalleymn.city](#); [grovecity@embarqmail.com](#); [Jhudec03@gmail.com](#); [Joejans1234@gmail.com](#); [grovecityrescue@gmail.com](#); [cityclerk.kingston.mn@gmail.com](#); [jmhdraft58@gmail.com](#); [Dave.Cziok@ci.litchfield.mn.us](#); [joycespreiter@ci.litchfield.mn.us](#); [kbeckstrand@hotmail.com](#); [Rescue.Chief@ci.litchfield.mn.us](#); [Patrick Fank](#); [cityclerk@watkinsmn.city](#); [j@arvig.net](#); [randrkramer@gmail.com](#); [richardjthorp1952@gmail.com](#); [jsanken@sagepointadvisor.com](#); [celiaknoll@gmail.com](#); [llamka128@gmail.com](#); [kcolberg2@gmail.com](#); [ellsworthclerk@outlook.com](#); [cljohnson1302@gmail.com](#); [rgeislinger@yahoo.com](#); [honeymoonhill501@yahoo.com](#); [wandaurdahl@yahoo.com](#); [rqaaab@meltel.net](#); [wildlife@hutchtel.net](#); [manannahtownship@gmail.com](#); [swedegrove@hotmail.com](#); [lvpearson33@hotmail.com](#); [douglas.grindberg@usda.gov](#); [Lisa.Dumont@state.mn.us](#); [joseph.norman@mn.nacdnet.net](#); [Jacob.stich@usda.gov](#); [Pochardt.nicholas@mayo.edu](#); [OnstadN@acgcfalcons.org](#); [mark.raymond@dc.k12.mn.us](#); [mmessman@evw.k12.mn.us](#); [bsimenson@lsd465.org](#); [mike.geers@ci.litchfield.mn.us](#); [cshoutz@meeker.coop](#); [Erin.Tufte@co.stearns.mn.us](#); [seth.hansen@co.wright.mn.us](#); [kevin.mathews@co.mcleod.mn.us](#); [mikehe@renvillecountymn.com](#); [Stephanie Felt](#)  
**Cc:** [Bonnie K Hundrieser](#)  
**Subject:** RE: MEEKER COUNTY MULTI-HAZARD MITIGATION PLAN UPDATE - MEETING INVITATION 10-31-22  
**Date:** Monday, October 24, 2022 11:21:53 AM  
**Attachments:** [image001.png](#)

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Friendly reminder to register for the Meeker County Multi-Hazard Mitigation plan update meeting. This meeting is the **Final** planning meeting for the hazard mitigation planning process. Please use the link below to register. Once you are registered you will be sent the meeting information and be placed on the RSVP list. Please let me know if you have questions.

**We will be holding the meeting virtually using Zoom webinar:**

Date: Monday, October 31, 2022

Time: 9:00 a.m. – 11:00 a.m.

Zoom Link: [https://umn-private.zoom.us/webinar/register/WN\\_R4bL88BZQ6Or0kdyXcdTKQ](https://umn-private.zoom.us/webinar/register/WN_R4bL88BZQ6Or0kdyXcdTKQ)

**You must click on the link above to register. (Ctrl + click to follow link)**

Thank you,

Stephanie Johnson  
Emergency Management Director & Safety Coordinator  
Meeker County Sheriff's Office  
320-693-5420

---

**From:** Stephanie L Johnson

**Sent:** Monday, September 26, 2022 9:02 AM

**To:** Stephanie L Johnson <Stephanie.Johnson@co.meeker.mn.us>; Becky Howell <Becky.Howell@co.meeker.mn.us>; Brian Cruze <Brian.Cruze@co.meeker.mn.us>; Andrew Letson <Andrew.Letson@co.meeker.mn.us>; Phil Schmalz <Phillip.Schmalz@co.meeker.mn.us>; Mark Spies <mark.spies@co.meeker.mn.us>; Braden Piram <Braden.Piram@co.meeker.mn.us>; Diane Winter <Diane.Winter@co.meeker.mn.us>; Greg Schultz <Greg.Schultz@co.meeker.mn.us>; Amy Rausch <Amy.Rausch@co.meeker.mn.us>; cedarmillsmn@gmail.com; cosmoscity@mchsi.com;

## Meeker County

10/21/22 MHMP Planning Team Meeting #2

### List of Participants (17)

	<b>First Name</b>	<b>Last Name</b>	<b>Organization</b>	<b>Job Title</b>
1	Stephanie	Johnson	Meeker County Sheriff's Office	Emergency Management Director
2	Andrew	Letson	Meeker County	County Administrator
3	Diane	Winter	Meeker County Public Health	PHN/Director
4	Becky	Howell	Meeker County Sheriff's Office	Chief Deputy
5	Mark	Spies	Meeker County Highway Department	Assistant Engineer
6	Phil	Schmalz	Meeker County	Public Works Director
7	Greg	Schultz	Meeker County	Land Use Director
8	Josh	Johnson	City of Darwin	Mayor
9	Terri	Boese	City of Dassel	City Clerk/Treasurer
10	Cindy	Anderson	City of Eden Valley	Clerk
11	Brent	Bengtson	City of Eden Valley	Mayor
12	Deb	Kramer	City of Watkins	City Clerk
13	Lisa	Villcheck	HSEM	HSEM Region 4 RPC
14	Nick	Pochardt	Mayo Clinic Ambulance	Operation Assistant Supervisor/ Paramedic
15	Stephanie	Felt	Kandiyohi County Emergency Management	Emergency Management Director
16	Ace	Bonnema	Kandiyohi County Emergency Management	EM Deputy Director
17	Mike	Hennen	Renville County Emergency Management	Emergency Management Director

# MEEKER COUNTY Multi-Hazard Mitigation Plan Update 2022 Planning Team Meeting #2

OCTOBER 31, 2022



## Welcome & Introductions

U-Spatial@UMD Project Leads



**Stacey Stark**  
Project Manager  
U-Spatial@UMD



**Bonnie Hundrieser**  
HM Planning Specialist  
Hundrieser Consulting LLC

Meeker County Project Lead

- Stephanie Johnson, Meeker County Emergency Management Director



Please type your name and jurisdiction in the CHAT – so others know who is here

PRESENTER: STACEY STARK

## 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 everyone
- 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:



PRESENTER: STACEY STARK

## Meeting Purpose & Agenda



July 11, 2016 City of Litchfield Tornado

The purpose of this meeting is to formally convene the **Meeker County MHMP 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 MHMP Points
- Review of Risk Assessment & Vulnerability Analysis
- Overview of FEMA HMA Funding and Mitigation Action Charts
- Review & Feedback
- Next Steps

PRESENTER: STACEY STARK

## Overview of Plan Update

Meeker County is updating its **Multi-Hazard Mitigation Plan (MHMP)** to fulfill a state & federal requirement. The plan must be updated every 5 years. The last plan was adopted in 2015.

The purpose of the plan is to identify & assess natural hazards that pose risk to the county and it's jurisdictions and **develop long-term strategies and mitigation actions** that will help to reduce or eliminate the impact of future hazard or disaster events.



**Hazard Mitigation** is any action taken to reduce or eliminate long term risk to people and property from natural disasters.

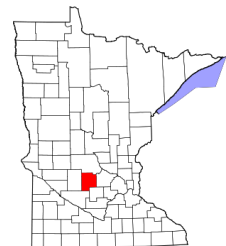
PRESENTER: BONNIE HUNDRIESER

## Who the Plan Covers



This is a **multi-jurisdictional plan** that covers Meeker County, including all cities and townships within the county.

The plan also takes into consideration the needs and concerns of other stakeholders participating in the plan update.



PRESENTER: BONNIE HUNDRIESER

## 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 and local media
- Online public review & comment period for draft plan

PRESENTER: BONNIE HUNDRIESER

## The structure of the HMP

### PDF document

- Contains almost all FEMA required elements
- Limited Figures and Images
- Summary of Hazard Identification
- Local mitigation survey report
- Plans and Programs in Place
- Past Mitigation Action Review Status Report
- Planning Team Meetings
- Public Outreach and Engagement Documentation
- Mitigation Actions by Jurisdiction

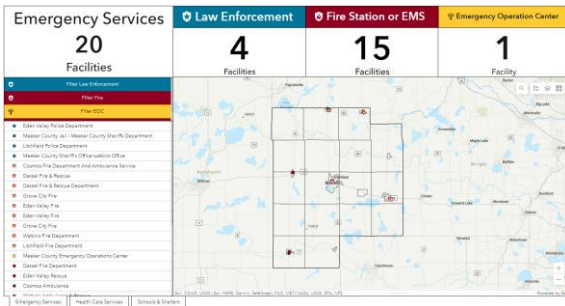
### Website companion

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



PRESENTER: BONNIE HUNDRIESER

## All Hazards - Critical Infrastructure



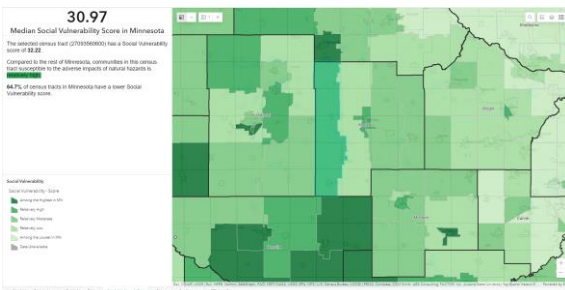
PRESENTER: STACEY STARK

## All Hazards - Critical Infrastructure



PRESENTER: STACEY STARK

## All Hazards – Population Vulnerability



PRESENTER: STACEY STARK

## Hazards Risk Assessment

- Validate prioritization
- Provide probability and severity of future events as possible
- Identify vulnerable populations and structures at risk as possible
- Consider variable jurisdictional vulnerability
- Inform Mitigation Actions in the HMP



Thunderstorm Watch photo, KNIS

PRESENTER: STACEY STARK

# Prioritization of Hazards for Meeker County



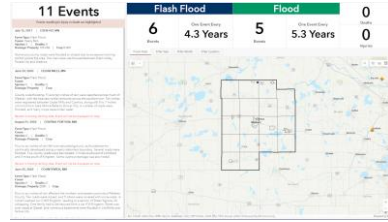
Prioritization of hazards by the Meeker County planning team included consideration of:

- Probability and Severity of natural hazard events (risk)
- Observed increase or decrease in risk since 2015
- Jurisdictional variations in risk (i.e., local vulnerabilities, changes in development)

Hazard	2022 Priority
Flooding	High
Tornadoes	High
Winter Storms	Moderate
Windstorms	Moderate
Extreme Cold	Moderate
Extreme Heat	Moderate
Drought	Low to Moderate
Dam/Levee Failure	Low – but included
Wildfire	Low
Hail	Low
Lightning	Low
Landslides	Low

PRESENTER: STACEY STARK

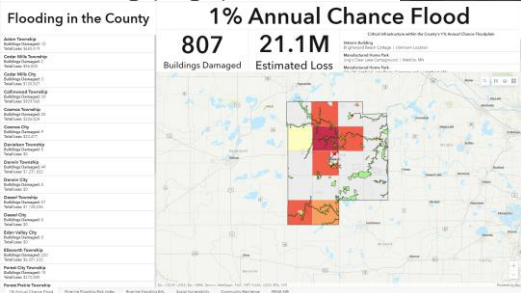
# MEEKER COUNTY: Flooding (High)



- Obtained building and parcel values
- Used statewide building footprint data
- Obtained FEMA Flood Insurance Rate Maps
- Ran flood model to estimate economic loss
- Identified Critical Infrastructure in flood zone

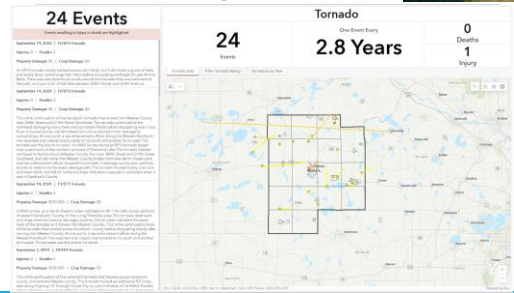
PRESENTER: STACEY STARK

# MEEKER COUNTY: Flooding (High)



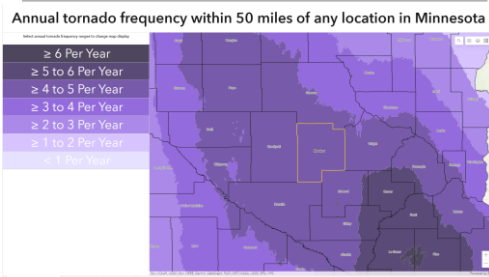
PRESENTER: STACEY STARK

# MEEKER COUNTY: Tornadoes (High)



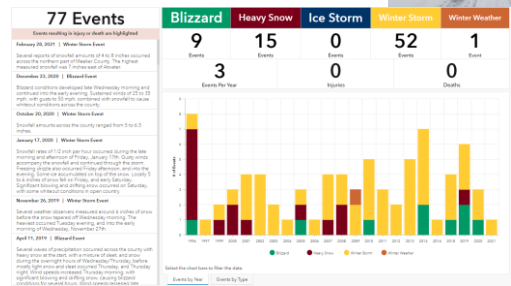
PRESENTER: STACEY STARK

# MEEKER COUNTY: Tornadoes (High)



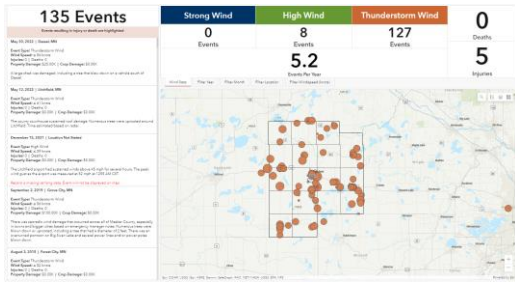
PRESENTER: STACEY STARK

# MEEKER COUNTY: Winter Storms (Moderate)



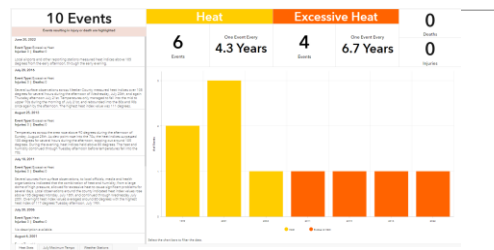
PRESENTER: STACEY STARK

## MEEKER COUNTY: Windstorms (Moderate)



PRESENTER: STACEY STARK

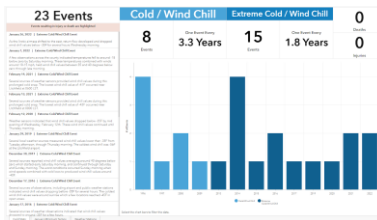
## MEEKER COUNTY: Extreme Heat (Moderate)



A daily maximum temperature  $\geq 90^{\circ}\text{F}$  is reported an average of 33 days per year at the Litchfield Station.

PRESENTER: STACEY STARK

## MEEKER COUNTY: Extreme Cold (Moderate)



The Litchfield station experiences a daily minimum temperature of  $\leq -18^{\circ}\text{F}$  an average of 15 days per year.

### Program Gaps and Deficiencies:

*Obtaining generators for backup power to healthcare facilities and designated shelter facilities.*

**Plans and Programs in Place**  
*Emergency Notifications – NWS & Meeker County Emergency Management School Closings – policy and communication plans NWS Winter Hazard Awareness Week – public education & awareness*

PRESENTER: STACEY STARK

## Comments and Questions?

## Development of Mitigation Actions

- Must address hazards of moderate to high risk
- Must be jurisdictionally-specific
- Should address local vulnerabilities & reduce risk
- Should incorporate existing planning mechanisms and capabilities



**Important**

*Eligible FEMA HMA project activities must be identified to support a future grant application.*

## FEMA HMA Grant Funding



### Example Eligible Activities:

- All applicants must be covered by an approved MHMP
  - Cost share: Federal 75%, Applicant 25%
  - Projects must address risk reduction.
  - Eligible projects must be identified in the plan of action.
- 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 HUNDRIESER

## Overview of 5-year Jurisdictional Mitigation Action Charts

**Each MAC is organized to address:**

- Hazards of priority
- Mitigation Strategy
- Mitigation Action
- Status/Priority/Timeframe
- Responsibility
- Comments on Implementation and Integration
- Possible Funding



## Local Planning & Regulations



**Meeker County Examples:**

- Participating in the NFIP
- Collaborating with SWCD and watershed districts to address flooding and erosion.
- Working with MHP operators to be in compliance with Minnesota State statutes for storm shelters & evacuation plans.
- Encouraging communities to develop and enforce ordinances for water use restrictions during periods of severe drought.



PRESENTER: BONNIE HUNDRIESER

## Structure & Infrastructure Projects

**Meeker County Examples:**

- Installation of new outdoor warning sirens.
- Construction of safe rooms / storm shelters at Meeker County parks, County Fairgrounds, MHPs, and other locations
- Burying powerlines to reduce power failure
- Implementing stormwater improvement projects for high rain and snow melt (i.e. drainage improvements, culvert upsizing). (Cities / Townships)
- Meeker County Highway Dept. projects to address flood mitigation in key locations.
- Conducting property buyouts of homes at risk from repetitive flooding and convert to open space.



PRESENTER: BONNIE HUNDRIESER

## Natural Systems Protection

**Meeker County Examples:**

- Conduct vegetation management along roads to reduce the risk of downed trees and branches resulting from severe storms.
  - County Highway Dept.
  - Utility Providers
  - Local road authorities



PRESENTER: BONNIE HUNDRIESER

## Education & Awareness Programs

**Meeker County Examples:**

- Promoting sign-up for the County's CodeRED emergency notification system.
- Promoting residents to be aware of and prepared for severe weather and extended power outages.
- Encouraging residents to maintain sump pumps and to clear street drains of debris.
- Promoting water conservation measures during periods of drought
- SKYWARN Storm Spotter Training



PRESENTER: BONNIE HUNDRIESER

## Mitigation Preparedness & Response Support

**Meeker County Examples:**

- Purchasing generators for critical services or facilities (i.e., sewer, city well, City Hall, fire hall, community centers).
- Updating EOP's
- Shelter Planning
- Working with long-term care facilities to be prepared for power outages or evacuation.
- Training local elected officials in EM responsibilities



PRESENTER: BONNIE HUNDRIESER

## Comments and Questions?



## Fall/Winter 2022

### Planning Team Meeting #2 and Public Review & Comment Period



- Following Planning Team Mtg. #2, disseminate & document news release by county and jurisdictions.
- Conduct public review & comment period (stakeholder & public review of draft plan).
- Document and incorporate feedback into the plan as appropriate.

PRESENTER: BONNIE HUNDRIESER



## Winter 2022-2023

### Draft Plan Submission to HSEM & FEMA, Plan Approval, and Collection of Adopting Resolutions

- 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

PRESENTER: BONNIE HUNDRIESER

## Questions?

What questions do you have for U-Spatial@UMD about the draft MHMP or next steps ?

PRESENTER: STACEY STARK

## Contact Information

Stacey Stark, MS, GISP

**U-Spatial@UMD**

[slstark@d.umn.edu](mailto:slstark@d.umn.edu)

218-726-7438

Bonnie Hundrieser, HM Planner

**Hundrieser Consulting LLC**

[hundrieserconsulting@outlook.com](mailto:hundrieserconsulting@outlook.com)

218-343-3468

**U-SPATIAL**

UNIVERSITY OF MINNESOTA DULUTH  
Driven to Discover



PRESENTER: STACEY STARK



**State of Minnesota**  
**Department of Public Safety**  
**Division of Homeland Security and Emergency Management**  
**445 Minnesota Street, Suite 223**  
**St. Paul, MN 55101-6223**

## **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).

- Hazard Mitigation Grant Program (HMGP) funds assists in implementing long-term hazard mitigation measures following a Presidential major disaster declaration.
- Pre-Disaster Mitigation (PDM) provides funds for hazard mitigation planning and projects on an annual basis.
- Flood Mitigation Assistance (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 life-safety 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:

<https://dps.mn.gov/divisions/hsem>

### Where can I obtain further information?

For additional information about the HMA grant program, you can refer to the FEMA website:

<http://www.fema.gov/hazard-mitigation-assistance>

# 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
<b>Local Planning and Regulations</b>	These actions include government authorities, policies, or codes that influence the way land and buildings are developed and built.	<ul style="list-style-type: none"> <li>• Comprehensive plans</li> <li>• Land use ordinances</li> <li>• Planning and zoning</li> <li>• Building codes and enforcement</li> <li>• Floodplain ordinances</li> <li>• NFIP Community Rating System</li> <li>• Capital improvement programs</li> <li>• Open space preservation</li> <li>• Shoreline codes</li> <li>• Stormwater management regulations and master plans</li> <li>• Mobile home park compliance for storm shelters</li> </ul>
<b>Structure and Infrastructure Projects</b>	<p>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.</p> <p>This type of action also involves projects to construct manmade structures to reduce the impact of hazards.</p>	<ul style="list-style-type: none"> <li>• Property Acquisitions and elevations of structures in flood prone areas</li> <li>• Utility undergrounding</li> <li>• Structural retrofits (i.e., metal roofs)</li> <li>• Floodwalls and retaining walls</li> <li>• Detention and retention structures</li> <li>• Culvert Installation/Modification</li> <li>• Roads &amp; Bridge risk reduction</li> <li>• Safe Room (New construction or facility retrofit)</li> <li>• Green Infrastructure Methods</li> </ul> <p><i>Many of these types of actions are projects eligible for funding through FEMA HMA grant programs.</i></p>

Mitigation Strategy	Description	Example Mitigation Actions
<p><b>Natural Systems Protection</b></p>	<p>These are actions that minimize damage and losses and also preserve or restore the functions of natural systems.</p>	<ul style="list-style-type: none"> <li>• Soil stabilization for sediment and erosion control</li> <li>• Floodplain and Stream corridor restoration</li> <li>• Slope management</li> <li>• Forest management (defensible space, fuels reduction, sprinkler systems)</li> <li>• Conservation easements</li> <li>• Wetland restoration and preservation</li> <li>• Aquifer Storage &amp; Recovery</li> <li>• Flood Diversion and Storage</li> </ul> <p><i>Many of these types of actions are projects eligible for funding through FEMA HMA grant programs.</i></p>
<p><b>Education and Awareness Programs</b></p>	<p>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.</p>	<ul style="list-style-type: none"> <li>• Radio or television spots</li> <li>• Websites with maps and information</li> <li>• Social media outreach</li> <li>• Promotion of sign-up for emergency warnings</li> <li>• Real estate disclosure</li> <li>• Promotion of NFIP insurance to property owners</li> <li>• Presentations to school groups or neighborhood organizations</li> <li>• Mailings to residents in hazard-prone areas.</li> <li>• NWS StormReady Program</li> <li>• Firewise Communities</li> </ul> <p><i>Some of these types of actions may be projects eligible for funding through the FEMA HMA "5 Percent Initiative Program".</i></p>
<p><b>Mitigation Preparedness and Response Support</b></p>	<p>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.</p>	<ul style="list-style-type: none"> <li>• Emergency Operations Plan</li> <li>• Flood fight plans and preparedness measures</li> <li>• Dam emergency action plans</li> <li>• Emergency Warning Systems (i.e., CodeRed, warning sirens)</li> <li>• Generator backup power</li> <li>• NWS Storm Spotter Training</li> <li>• Training and education for local elected officials and key partners.</li> </ul>

# **Appendix G – Public Outreach & Engagement Documentation**

## **Meeker County MHMP News Release #1 Record of Public Input & Incorporation**

**Overview:** On October 1, 2021, Meeker 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. Meeker 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?
- Have you experienced a previous disaster event?
- 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 Meeker 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 Meeker 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 news release and how their input will be incorporated into the plan update, and if not relevant to be addressed, why.

**No Public Input:** Meeker County Emergency Management and local jurisdictions did not receive any public input following News Release #1.

**From:** [Stephanie Johnson](#)  
**To:** [OnstadN@acgcfalcons.org](mailto:OnstadN@acgcfalcons.org); [Jeff Hillsen](#); [Dave.Cziok@ci.litchfield.mn.us](mailto:Dave.Cziok@ci.litchfield.mn.us); [Joyce Spreiter](#); [Mario Provencher](#); [Michael Geers](#); [Blake Tangen](#); [Kevin.Mathews@co.mcleod.mn.us](mailto:Kevin.Mathews@co.mcleod.mn.us); [Amy Rausch](#); [Andrew Letson](#); [Becky Howell](#); [Braden Piram](#); [Brian Cruze](#); [Diane Winter](#); [Greg Schultz](#); [Mark Spies](#); [Patrick Fank](#); [Phillip Schmalz](#); [Stephanie Johnson](#); [Erin Tufte](#); [seth.hansen@co.wright.mn.us](mailto:seth.hansen@co.wright.mn.us); [Lois Paul](#); [David Johnson](#); [Ron Hungerford](#); [Terri Boese](#); [Jeff Powers](#); [chiefjunker@edenvalleymn.city](mailto:chiefjunker@edenvalleymn.city); [Brent Bengtson](#); [Baily Kalkbrenner](#); [Mark Messman](#); [Kata Dahlman](#); [Celia Knoll](#); [Jean Yunker](#); [Courtney Johnson](#); [Emily Schmeling](#); [Jon Fruetel](#); [Josh Thomas](#); [Jesse Hudec](#); [James Herda](#); [Joe Jans](#); [Karin Colberg](#); [Robin Johnson](#); [Deb McCann](#); [Tom McCarthy](#); [Ronald Kramer](#); [Richard Thorp](#); [Chad Kuechle](#); [Kurt Beckstrand](#); [Loren Pearson](#); [David Lindberg](#); [bsimenson@lsd465.org](mailto:bsimenson@lsd465.org); [Stephanie Felt](#); [Pochardt.Nicholas@mayo.edu](mailto:Pochardt.Nicholas@mayo.edu); [John Douville](#); [Chris Shouts](#); [Russ Peterson](#); [Teresa Drange](#); [Cindy Anderson](#); [Deb Kramer](#); [Pam Haag](#); [Gail Schiefelbein](#); [Joe Norman](#); [ellsworthclerk@outlook.com](mailto:ellsworthclerk@outlook.com); [josh@perennialbank.com](mailto:josh@perennialbank.com); [MikeHe@renvillecountymn.com](mailto:MikeHe@renvillecountymn.com); [John Sanken](#); [Lisa\(DPS\)Dumont](#); [Doug Grindberg](#); [Jacob Stich](#); [Doris Johnson](#); [Robert Geislinger](#); [Wanda Urdahl](#)  
**Cc:** [hundrieserconsulting@outlook.com](mailto:hundrieserconsulting@outlook.com)  
**Subject:** Request for Public Input for Meeker County Multi-Hazard Mitigation Plan  
**Date:** Friday, October 1, 2021 9:35:18 AM  
**Attachments:** [10-01-21 Multi-Hazard Mitigation Plan.pdf](#)

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The Meeker County Emergency Management Department 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 Meeker County MHMP is a multi-jurisdictional plan that covers Meeker County, including the cities of Cedar Mills, Cosmos, Darwin, Dassel, Eden Valley, Grove City, Kingston, Litchfield, and Watkins. The Meeker County MHMP also incorporates the concerns and needs of townships, school districts, and other stakeholders 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 Stephanie Johnson, Meeker 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 actions 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 wind storms; ensuring timely emergency communication to the public through warning sirens and mass notification systems, and conducting public awareness and education campaigns to help people to 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, Meeker 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?
- Have you experienced a previous disaster event?

•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?

Comments, concerns, or questions regarding natural disasters and potential mitigation actions to be included into the plan update process should be submitted to Meeker County Emergency Management by phone or email.

There will be additional opportunities for public feedback throughout the planning process. A draft of the plan will be posted on the county website 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

Stephanie Johnson

Meeker County Emergency Management Director

Phone: 320-693-5420

Email: [stephanie.johnson@co.meeke.mn.us](mailto:stephanie.johnson@co.meeke.mn.us)

## Stephanie Johnson

Stephanie Johnson

Emergency Management Director &

Safety Coordinator

Meeker County Sheriff's Office

326 N Ramsey Ave

Litchfield, MN 55355

320-693-5420 (office)

320-693-5424 (fax)

[www.weather.gov/wrn/](http://www.weather.gov/wrn/)

The unauthorized disclosure or interception of e-mail is a federal crime. See 18 U.S.C. SEC 2517[4]. This e-mail is intended for the use of those whom it is addressed and may contain information which is privileged, confidential and exempt from disclosure under the law. If you have received this e-mail in error, do not distribute or copy it. Please return it immediately to the sender with attachments, if any, and notify the sender by telephone. Thank you for your cooperation.

**From:** [MCSO Media](#)  
**To:** [Andrew Letson](#); [Brian Cruze](#); [Cathy Peters](#); [iraconteur@heraldjournal.com](mailto:iraconteur@heraldjournal.com); [record@heraldjournal.com](mailto:record@heraldjournal.com); [Herald Cray](#); [Hutchinson 3](#); [Hutchinson 1](#); [Hutchinson 2](#); [Independent 1](#); [Independent 2](#); [KDJS Address](#); [KDUZ Radio](#); [KDUZ Radio](#); [KLFJ Radio](#); [KWLM Radio](#); [Paynesville Press](#); [Jean Matua](#); [West Central Tribune Newspaper](#)  
**Cc:** [hundrieserconsulting@outlook.com](mailto:hundrieserconsulting@outlook.com)  
**Subject:** News Release from Sheriff Brian Cruze-Request for Public Input for Meeker County Multi-Hazard Mitigation Plan  
**Date:** Friday, October 1, 2021 9:00:02 AM  
**Attachments:** [10-01-21 Multi-Hazard Mitigation Plan.pdf](#)

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**News Release from Sheriff Brian Cruze is attached. The body of the release is below for your convenience.**

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**Contact**

Stephanie Johnson

Meeker County Emergency Management Director

Phone: 320-693-5420

Email: [stephanie.johnson@co.meeke.mn.us](mailto:stephanie.johnson@co.meeke.mn.us)



# News Release



Meeker County Sheriff's Office  
Sheriff Brian Cruze  
Phone: (320) 693-5400  
Email: [media@co.meeker.mn.us](mailto:media@co.meeker.mn.us)

**FOR IMMEDIATE RELEASE**

**Date: 10/01/21**

**Subject: Request for Public Input for Meeker County Multi-Hazard Mitigation Plan**

The Meeker County Emergency Management Department 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.

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### **Contact**

Stephanie Johnson

Meeker County Emergency Management Director

Phone: 320-693-5420

Email: [stephanie.johnson@co.meeker.mn.us](mailto:stephanie.johnson@co.meeker.mn.us)

# Meeker County MHMP News Release #1 Documentation of News Release Postings

## COUNTY POSTINGS

### Meeker County Meeker County Website, October 1, 2021

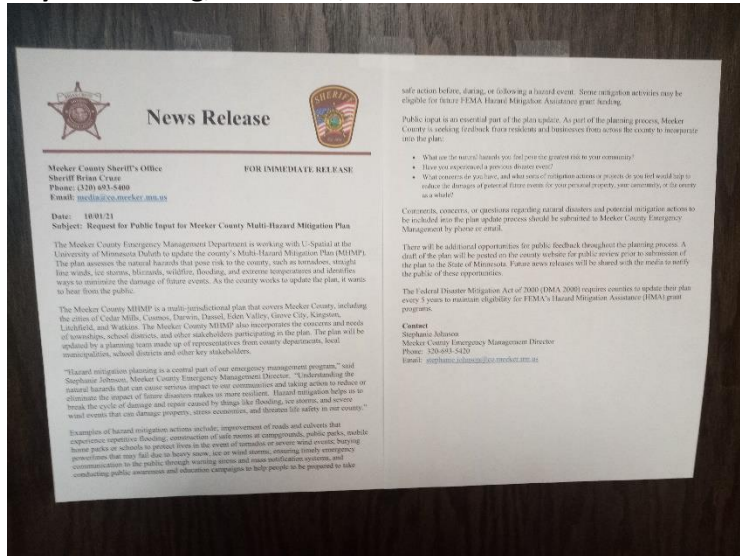


## LOCAL MEDIA POSTINGS

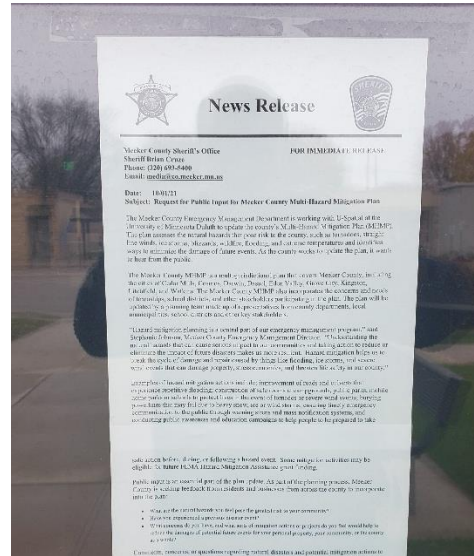
No local media postings

## CITY POSTINGS

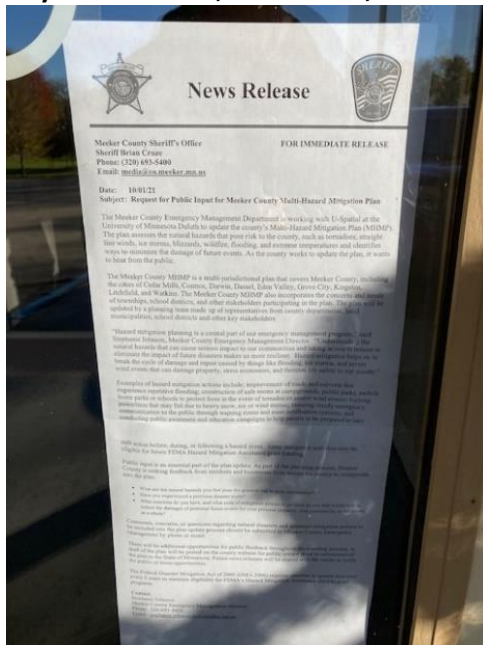
### City of Cedar Mills City Hall Posting, October 1, 2021



**City of Cosmos**  
**City Hall Window Posting, October 28, 2021**

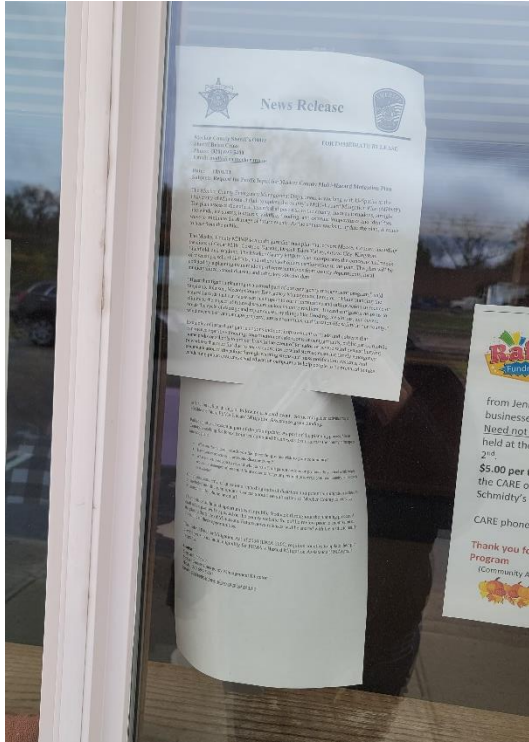


**City of Darwin**  
**City Hall Window, October 29, 2021**

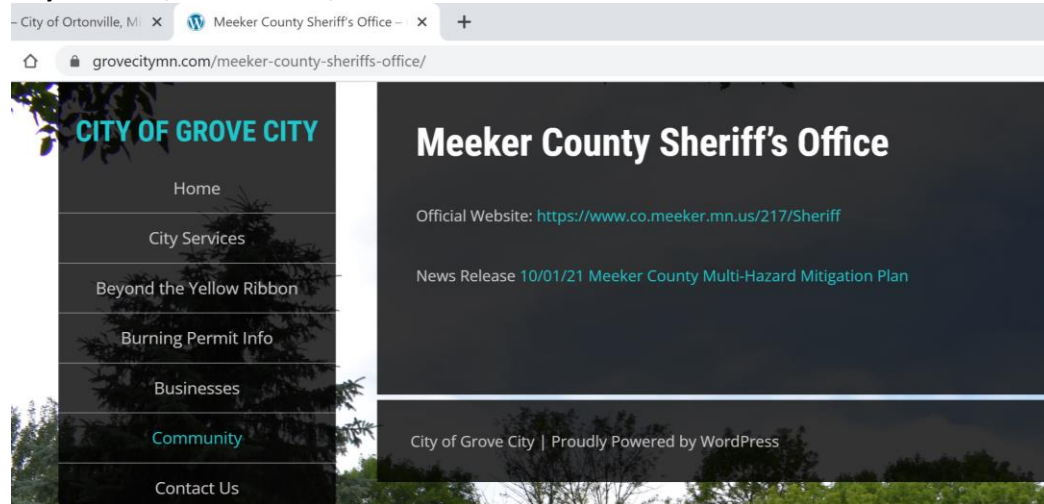




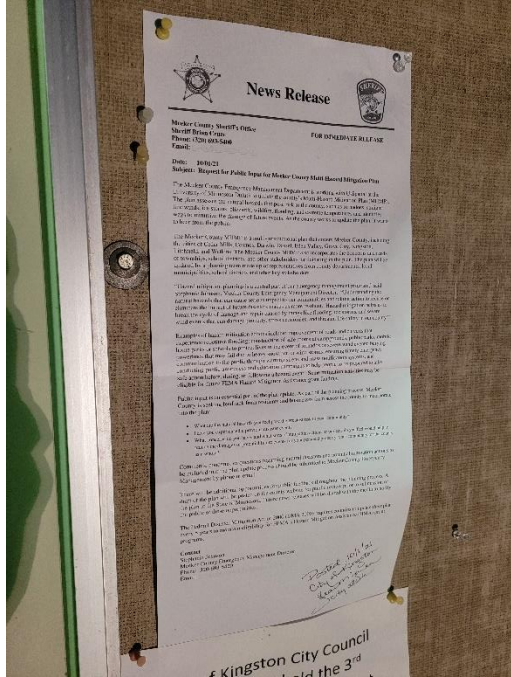
# City of Grove City City Office Posting, October 1, 2021



# City of Grove City City Website, November 1, 2021



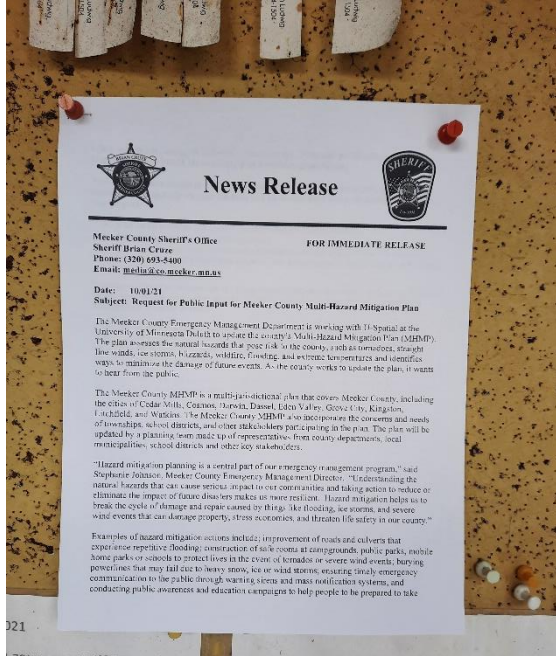
**City of Kingston  
Community Center Bulletin Board Posting, October 3, 2021**



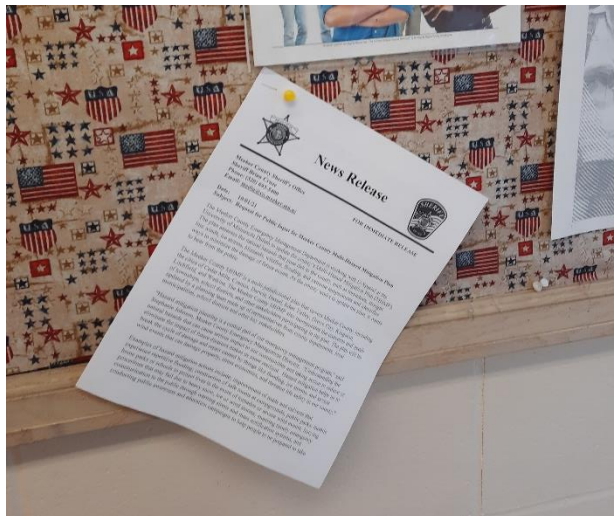
**City of Litchfield  
City Website, October 27, 2021**



## City of Watkins City Hall Community Board Posting, 10-1-21



## City of Watkins – Post Office Bulletin Board, 10-1-21



## TOWNSHIPS

**Dassel Township, October 1, 2021**  
**Meeker County website – township page,**

crease your productivity, customize your experience, and engage in information you care about.

Acton Township Board

Cedar Mills Township  
Board

Collinwood Township  
Board

Cosmos Township Board

### **Dassel Township Board**

#### **Change Notices**

- [2021 Hazard Mitigation Plan Info Memo](#)
- [Dassel Twsp Meeting Date Change Notice 2021](#)
- [Dassel Twsp Board of Appeal Notice 2021](#)
- [Dassel Resolution Notice of Board Meetings by Phone](#)
- [Dassel Township Resolution Electronic Board Meeting](#)

## **Meeker County MHMP News Release #2 Record of Public Input & Incorporation**

**Overview:** On January 31, 2023 Meeker County Emergency Management put out a news release titled “**Public Comment Sought for County’s Multi-Hazard Mitigation Plan**” to announce the completion of the draft Meeker County Multi-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 1/31/23 to 2/14/23, for a total of 15 days.

**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 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 Meeker 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 Meeker County news release and how the input will be incorporated into the plan update, and if not relevant to be addressed, why.

- No public input was received by Meeker County Emergency Management, local jurisdictions, or via the online comment form.

**From:** [Bonnie K Hundrieser](#)  
**To:** [Becky.howell@co.meeker.mn.us](#); [brian.cruze@co.meeker.mn.us](#); [andrew.letson@co.meeker.mn.us](#); [phillip.schmalz@co.meeker.mn.us](#); [mark.spies@co.meeker.mn.us](#); [braden.piram@co.meeker.mn.us](#); [diane.winter@co.meeker.mn.us](#); [greg.schultz@co.meeker.mn.us](#); [Amy.rausch@co.meeker.mn.us](#); [cedarmillsmn@gmail.com](#); [cosmoscity@mchsi.com](#); [mccarthy2003@gmail.com](#); [cosmosambulance@gmail.com](#); [cosmosfire540@gmail.com](#); [clerk@darwinmn.com](#); [josh@perennialbank.com](#); [Terri.boese@dassel.com](#); [dasselfire@dassel.com](#); [canderson@edenvalleymn.city](#); [mayorbengtson@edenvalleymn.city](#); [valleyviewchad@gmail.com](#); [pamhaag@meltel.net](#); [chiefjunker@edenvalleymn.city](#); [grovecity@embarqmail.com](#); [Jhudec03@gmail.com](#); [Joejans1234@gmail.com](#); [grovecityrescue@gmail.com](#); [cityclerk.kingston.mn@gmail.com](#); [jmhdraft58@gmail.com](#); [Dave.Cziok@ci.litchfield.mn.us](#); [joycespreiter@ci.litchfield.mn.us](#); [kbeckstrand@hotmail.com](#); [Rescue.Chief@ci.litchfield.mn.us](#); [Patrick.fank@co.meeker.mn.us](#); [cityclerk@watkinsmn.city](#); [j@arvig.net](#); [randrkramer@gmail.com](#); [richardjthorp1952@gmail.com](#); [jsanken@sagepointadvisor.com](#); [celiaknoll@gmail.com](#); [llamka128@gmail.com](#); [kcolberg2@gmail.com](#); [ellsworthclerk@outlook.com](#); [cljohnson1302@gmail.com](#); [rgeislinger@yahoo.com](#); [honeymoonhill501@yahoo.com](#); [wandaurdahl@yahoo.com](#); [rgaaab@meltel.net](#); [wildlife@hutchtel.net](#); [manannahtownship@gmail.com](#); [swedegrove@hotmail.com](#); [lvpearson33@hotmail.com](#); [douglas.grindberg@usda.gov](#); [Lisa.Dumont@state.mn.us](#); [joseph.norman@mn.nacdn.net](#); [Jacob.stich@usda.gov](#); [Pochardt.nicholas@mayo.edu](#); [OnstadN@acgcfalcons.org](#); [mark.raymond@dc.k12.mn.us](#); [mmessman@evw.k12.mn.us](#); [bsimenson@lsd465.org](#); [mike.geers@ci.litchfield.mn.us](#); [cshoutz@meeker.coop](#); [Erin.Tufte@co.stearns.mn.us](#); [seth.hansen@co.wright.mn.us](#); [kevin.mathews@co.mcleod.mn.us](#); [mikehe@renvillecountymn.com](#); [Stephanie.Felt@kcmn.us](#)  
**Cc:** [Stephanie L Johnson](#)  
**Subject:** Meeker County News Release - Public Comment Sought for Meeker County Hazard Mitigation Plan  
**Date:** Tuesday, January 31, 2023 11:20:00 AM  
**Attachments:** [01- 31- 23 Hazard Mitigation Plan.pdf](#)  
**Importance:** High

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Greetings,

Attached is a news release from the Meeker County Sherriff's Office announcing the public review and comment period is open for the Meeker County Hazard Mitigation Plan from **January 31 – February 14** prior to submission of the plan to FEMA. As a jurisdiction, related agency, or neighboring jurisdiction involved in the Meeker County plan update, your assistance is requested to help post the news release and also to review the plan. Please see the following directions and links to the plan below:

### **PLEASE POST THE NEWS RELEASE**

**All cities within the county are requested to post the news release for their community. As a multi-jurisdictional plan, we are required to document the participation of cities helping to conduct this local outreach. Townships and other agency stakeholders are also encouraged to participate in posting the news release. You can post the news release in any of the ways below:**

- *Posting Online:* Please post the news release to your respective website and/or social media and provide me with the name of your jurisdiction/agency, along with a direct website link to your posting(s) or a screenshot of the posting online.
- *Posting a Hardcopy:* If posting a printed copy of the news release, please provide me with the name of your jurisdiction/agency, date & location of where it was posted (i.e., City Hall, Post Office, Community Center).
- *Posting to Local Papers:* If you are a jurisdiction with a local paper, you are also encouraged to run this as a printed or online story and notify me of where it was submitted.

Please email me your documentation of your electronic or hardcopy posting of the news release

within the next few days to make sure the public has had an opportunity to be notified and review the plan.

**PLEASE REVIEW THE PLAN**

All recipients of this notice are encouraged to review the plan and provide comment. Please also share with your local governments or agency partners to review. The county and city mitigation action charts are available in the online website to review. Following are links for the interactive website, PDF plan document, jurisdictional mitigation action charts, and online public feedback form. Use Control +Click to follow links:

[Meeker County HMP Website](#)

[Mitigation Action Charts](#)

[Public Comment Feedback Form](#)

Please email me the names & titles of who reviewed the plan, as well as approximate time spent. All participants' time counts towards the county's 25% local match on this project.

**As this is a 15-day review period, your timeliness to post the news release and review the plan is very important.** This is our final step in completing the update of the Meeker County Hazard Mitigation Plan. We thank you for your assistance and participation.

If you have any questions or comments, please let me know.

Thank you!

Bonnie Hundrieser

**Bonnie K. Hundrieser, CEM**

Hazard Mitigation Planning Specialist

Part of the **U-Spatial@UMD** MHMP Planning Team

*Hundrieser Consulting LLC*

*Phone: 218-343-3468*

**From:** [MCSO Media](#)  
**To:** [Andrew Letson](#); [apminneapolis@ap.org](#); [bonelli@independentreview.net](#); [Brandi Schiefelbein](#); [contact@bringmethenews.com](#); [cops@wctrib.com](#); [csrecord@midconetwork.com](#); [editor@paynesvillepress.com](#); [editor@rencopub.com](#); [editor@tricitynews.mn](#); [gdstill@wcco.com](#); [Herald Journal](#); [hsinker@startribune.com](#); [info@karpradio.com](#); [jim@wjon.com](#); [joe@mykasm.com](#); [jones@hutchinsonleader.com](#); [jpcola@kwlm.com](#); [kasm1150am@albanytel.com](#); [lakesareareview@willmarnet.com](#); [laura.grossmann@alphamediausa.com](#); [lee@wjon.com](#); [markanthony@kooltv-mn.com](#); [news@1450knsi.com](#); [news@bringmethenews.com](#); [news@dasselcokato.com](#); [news@evwvoice.com](#); [news@hutchinsonleader.com](#); [news@independentreview.net](#); [news@kare11.com](#); [news@kduz.com](#); [news@klfd1410.com](#); [news@pioneerpress.com](#); [news@tricitynews.mn](#); [news@utvs.com](#); [news@hctel.net](#); [newsreply@kstp.com](#); [newsroom@mnnradio.com](#); [newsroom@mpr.org](#); [newsroom@stcloudtimes.com](#); [newstips@wccoradio.com](#); [spots@k-musicradio.com](#); [statenews@startribune.com](#); [timnelson@mpr.org](#); [tips@wcco.com](#); [wiblemo@hutchinsonleader.com](#); [wjon@townsquaremedia.com](#)  
**Subject:** News Release from Sheriff Brian Cruze - Public Comment Sought for Meeker County's Hazard Mitigation Plan  
**Date:** Tuesday, January 31, 2023 10:55:35 AM  
**Attachments:** [01- 31- 23 Hazard Mitigation Plan.pdf](#)

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**News Release from Sheriff Brian Cruze is attached. The body of the release is below for your convenience.**

### **Public Comment Sought for Meeker County's Hazard Mitigation Plan**

Meeker County has completed an updated draft of the of its Hazard Mitigation Plan (HMP) and is now seeking public feedback. Like all Minnesota counties, Meeker County is vulnerable to a variety of potential natural disasters, such as tornadoes, windstorms, severe winter storms, flooding, drought, and extreme temperatures, which threaten the loss of life and property in the county. Planning for natural disasters minimizes the impact of these events that can cause vast economic loss and personal hardship.

All county residents, as well as other interested stakeholders (those in neighboring counties or working with affected agencies) 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 February 14, 2023. The public can access the plan using the following links:

[Meeker County HMP Website](https://z.umn.edu/MeekerHMP) ([z.umn.edu/MeekerHMP](https://z.umn.edu/MeekerHMP))

[Mitigation Action Charts](https://meeker-county-hmp-umn.hub.arcgis.com/pages/mitigation-actions) (<https://meeker-county-hmp-umn.hub.arcgis.com/pages/mitigation-actions>)

[Public Comment Feedback Form](https://z.umn.edu/MeekerSurveyHMP) (<https://z.umn.edu/MeekerSurveyHMP>)

The Meeker County HMP is a multi-jurisdictional plan that covers Meeker County, including the cities of Cedar Mills, Cosmos, Darwin, Dassel, Eden Valley, Grove City, Kingston, Litchfield, and Watkins. The Meeker 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 Meeker 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 public awareness and education campaigns to

help people be prepared to take safe action before, during, or following a hazard event.

Hazard mitigation planning helps Meeker 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 Meeker 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. Meeker 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 Meeker County Emergency Management.

**Contact:**

Stephanie Johnson

Meeker County Emergency Management Director

Phone: 320-693-5420

Email: [stephanie.johnson@co.meeke.mn.us](mailto:stephanie.johnson@co.meeke.mn.us)



# News Release



Meeker County Sheriff's Office  
Sheriff Brian Cruze  
Phone: (320) 693-5400  
Email: [media@co.meeker.mn.us](mailto:media@co.meeker.mn.us)

**FOR IMMEDIATE RELEASE**

**Date: Tuesday, January 31, 2023**

**Subject: Public Comment Sought for Meeker County's Hazard Mitigation Plan**

## **Public Comment Sought for Meeker County's Hazard Mitigation Plan**

Meeker County has completed an updated draft of the of its Hazard Mitigation Plan (HMP) and is now seeking public feedback. Like all Minnesota counties, Meeker County is vulnerable to a variety of potential natural disasters, such as tornadoes, windstorms, severe winter storms, flooding, drought, and extreme temperatures, which threaten the loss of life and property in the county. Planning for natural disasters minimizes the impact of these events that can cause vast economic loss and personal hardship.

All county residents, as well as other interested stakeholders (those in neighboring counties or working with affected agencies) 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 February 14, 2023. The public can access the plan using the following links:

[Meeker County HMP Website](https://z.umn.edu/MeekerHMP) ([z.umn.edu/MeekerHMP](https://z.umn.edu/MeekerHMP))

[Mitigation Action Charts](https://meeker-county-hmp-umn.hub.arcgis.com/pages/mitigation-actions) (<https://meeker-county-hmp-umn.hub.arcgis.com/pages/mitigation-actions>)

[Public Comment Feedback Form](https://z.umn.edu/MeekerSurveyHMP) (<https://z.umn.edu/MeekerSurveyHMP>)

The Meeker County HMP is a multi-jurisdictional plan that covers Meeker County, including the cities of Cedar Mills, Cosmos, Darwin, Dassel, Eden Valley, Grove City, Kingston, Litchfield, and Watkins. The Meeker 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 Meeker 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 public awareness and education campaigns to help people be prepared to take safe action before, during, or following a hazard event.

Hazard mitigation planning helps Meeker 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 Meeker 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. Meeker 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 Meeker County Emergency Management.

**Contact:**

Stephanie Johnson

Meeker County Emergency Management Director

Phone: 320-693-5420

Email: [stephanie.johnson@co.meeker.mn.us](mailto:stephanie.johnson@co.meeker.mn.us)

# Meeker County 2023 Hazard Mitigation Plan Online Public Review Website & Comment Forms

Meeker County Hazard Mitigation Plan 2023   About HMP Planning   County Profile   All Natural Hazards   Mitigation Actions   Climate Change

## Meeker County Minnesota Hazard Mitigation Planning



Welcome to the Meeker County Hazard Mitigation Plan! Hazard mitigation planning is the process of preparing for natural disasters to reduce the loss of life and property in communities of all sizes. By developing long-term strategies for protecting people and property, hazard mitigation plans are key to breaking the cycle of disaster damage and reconstruction ([FEMA 2022](#)).

This website provides an interactive experience for the public to understand the planning process, where county-specific vulnerabilities lie, national best practices, as well as a chance to submit feedback.

[Link to the 2023 Hazard Mitigation Plan \(HMP\)](#)

(PDF companion)

The Meeker County 2023 Hazard Mitigation Plan was made available for public review online with a website hosted by U-Spatial@UMD ([Meeker County HMP Website](#)). The website provided an interactive experience for the public to understand the planning process, learn about the natural hazards that affect the county and where county-specific vulnerabilities lie, review jurisdictional mitigation action charts, as well as a chance to submit feedback. Website content included:

- **About HMP Planning**  
Description of what hazard mitigation, purpose of the HMP update, overview of the planning process, and members of the planning team.
- **County Profile**  
County-specific information on demographics, economy, critical infrastructure, utility & transportation infrastructure, other county assets (significant buildings, cultural or historic assets, and mobile home park locations).
- **Hazard Profiles for each natural hazard covered by the plan**
  - o Definition of hazard and supporting information
  - o Hazard History of Events
  - o Hazard Risk & Vulnerability
  - o Relationship to Climate Change
- **Mitigation Actions**  
Overview of the development of mitigation actions and PDFs of draft jurisdictional mitigation action charts for the county and each participating city.
- **Climate Change and Adaptation**  
Overview of climate change in Minnesota, information on building climate resilience, and interactive data to explore Minnesota climate data.
- **Public Feedback Forms**  
Survey links provided for feedback on the 2023 HMP website and draft plan (during public comment period) or submission of mitigation actions (ongoing survey). Following are the detailed questions provided in each survey.

### **Mitigation Plan Feedback Survey**

Fill in this survey to provide feedback on the Hazard Mitigation Draft Plan.

**What section(s) of the Plan would you like to comment on?** Select all that apply.

- |   |  |
|---|--|
| <input type="checkbox"/> Planning Process | <input type="checkbox"/> Mitigation Strategy |
| <input type="checkbox"/> Risk Assessment  | <input type="checkbox"/> Implementation Plan |

**Please provide comments about the Plan.** (Comment box provided)

**Upload document** (optional)

**Would you like to be contacted by the Planning Team?** (Yes / No)

**County** – Enter the county you live in or represent (drop down menu)

**Jurisdictional Check-box** – Select your jurisdictional representation

### **Hazard Mitigation Ideas Survey**

This survey will be used to capture mitigation ideas for a county hazard mitigation plan. Please be as specific as possible. Thank you for your participation!

**Name** (First Name, Last Name)

**Email**

**Job Title or Organization** (enter job title or organization. If a resident, type “community resident”)

**County** – Enter the county you live in or represent (drop down menu)

**Jurisdictional Check-box** – Select your jurisdictional representation

**New Action Idea** - Please describe in detail any mitigation action ideas you have for your jurisdiction.

**Is the mitigation action site-specific, or for the whole jurisdiction?** (select answer)

**What hazards will this action address?**

- |  |  |
|--|--|
| <input type="checkbox"/> Winter Storms | <input type="checkbox"/> Extreme Cold      |
| <input type="checkbox"/> Windstorms    | <input type="checkbox"/> Extreme Heat      |
| <input type="checkbox"/> Tornadoes     | <input type="checkbox"/> Wildfire          |
| <input type="checkbox"/> Hail          | <input type="checkbox"/> Landslides        |
| <input type="checkbox"/> Lightning     | <input type="checkbox"/> Drought           |
| <input type="checkbox"/> Flooding      | <input type="checkbox"/> Dam/Levee Failure |

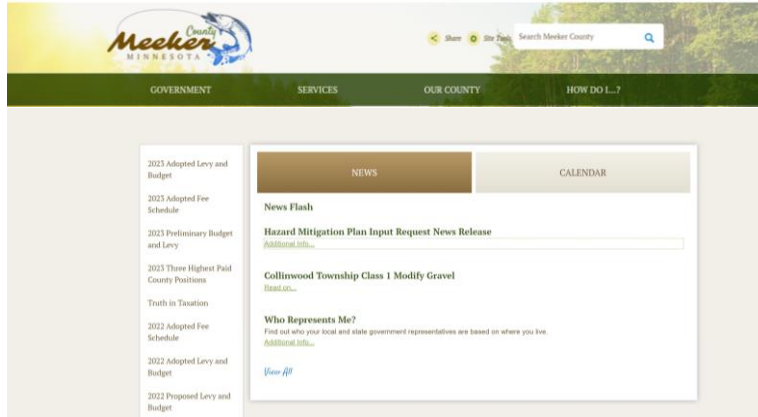
**What mitigation strategy best describes this action?** Select all that apply

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

# Meeker County MHMP News Release #2 Documentation of News Release Postings

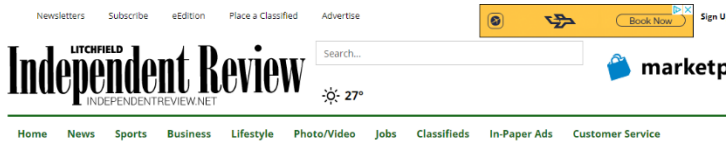
## COUNTY POSTINGS

1/31/23 Meeker County Website



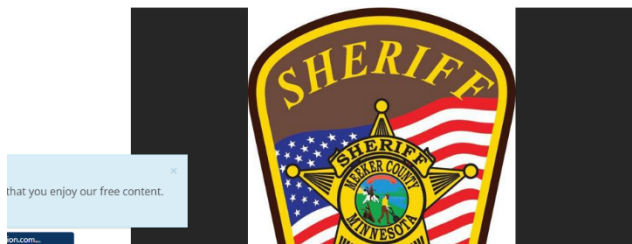
## LOCAL MEDIA POSTINGS

2/1/23, Litchfield Independent Review



### Meeker County's seeks public comment on hazard mitigation plan

Feb 1, 2023 Updated 2 hrs ago



2/1/23, KLFD Radio



[COVID-19 Updates](#) [News](#) [Sports](#)

HOME » LOCAL NEWS

## Seeking Public Feedback on Updated Hazard Mitigation Plan

KLFD POSTED ON FEBRUARY 1, 2023

30 Views 0



### CITY POSTINGS

#### City of Cedar Mills

1/31/23, Hardcopy Posting

A printed copy of the news release was posted at the display board at Cedar Mills City Hall.

#### City of Cosmos

2/3/23, Hardcopy Posting

A printed copy of the news release was posted on the bulletin board at the Cosmos City Office.

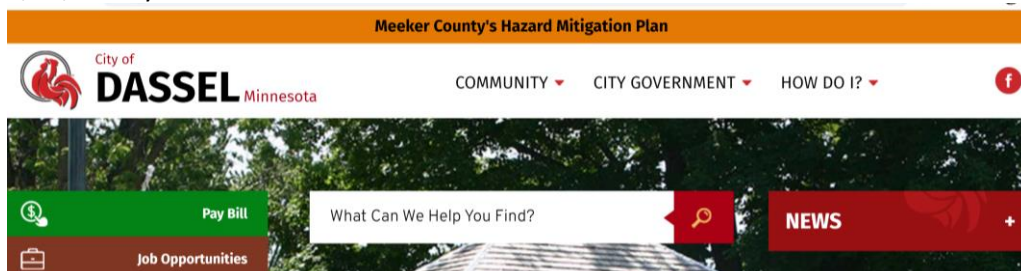
#### City of Darwin

1/31/23, Hardcopy Posting

A printed copy of the news release was posted at the display board at Darwin City Hall.

#### City of Dassel

1/31/23 City Website



## 1/31/23, City of Dassel Facebook



## 2/1/23 City of Dassel Hardcopy Postings

Printed copies of the news release were posted on the city's community bulletin boards outside of and inside of City Hall, on the community bulletin board at the Dassel Post Office.

## City of Eden Valley

1/31/23, Hardcopy Posting

A printed copy of the news release was put up at the Eden Valley City Hall.

## City of Grove City

2/1/23, Hardcopy Posting

A printed copy of the news release was posted in the window of the Grove City Hall.

## City of Kingston

2/1/23, Hardcopy Posting

A printed copy of the news release was posted at the Kingston Community Center.

## City of Litchfield

2/13/23, City of Litchfield Website



## City of Watkins

1/31/23 City of Watkins website

# City of Watkins, Minnesota

HOME

GOVERNMENT

COUNCIL MEETING MINUTES

ECON. DEVELOPMENT

RECREATION

MORE...



City of Watkins, 111 Central Ave. So., P.O. Box 306, Watkins MN 55389

Phone: 320.764.6400 · Fax: 320.764.6401

email: [info@watkinsmn.city](mailto:info@watkinsmn.city)

**PUBLIC COMMENT SOUGHT FOR MEEKER COUNTY'S HAZARD MITIGATION PLAN.** Meeker County has completed an updated draft of its Hazard Mitigation Plan (HMP) and is now seeking public feedback. Click [here](#) for more information.

The city council will be considering amendments to the city's Nuisance Ordinance and Snow Removal and Parking; Fines Ordinance and 2023 Fee Schedule at the February 9, 2023 council meeting. Click [here](#) for the proposed

# **Appendix H – Mitigation Actions by Jurisdiction**

## CITY OF CEDAR MILLS

## 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 all city residents to sign-up for the county's CodeRED emergency notification alert system.	Existing High 2023-2028	City Admin, City EM	We encourage residents to sign up by word of mouth. The city does not have a website or Facebook page. Residents are informed they can sign up for CodeRED on the Meeker County website.	City
2	Severe Winter & Summer Storms	Education & Awareness Programs	Provide education and outreach to residents on personal preparedness for severe weather events and extended power outages.	Existing High 2023-2028	City Admin, City EM	We encourage residents to be aware of local weather warnings, dangerous conditions and to be personally prepared for severe storms and power outages.	City
3	Severe Winter & Summer Storms	Mitigation Preparedness & Response Support	Acquire a backup generator for the city sewer system.	New Moderate 2023-2028	City Public Works in coord with MCEM	We will work with Meeker County Emergency Management on our efforts to purchase an emergency backup generator, if city funding is available.	City
4	Flooding	Local Planning & Regulations	Work with the MN DNR to get the city enrolled in the National Flood Insurance Program and develop a floodplain ordinance.	New Moderate 2023-2028	City Admin in coord with MN DNR	The city has not participated in the NFIP due to not having enough employees/resources. The city been put in touch with the State NFIP coordinator to review the city's official floodplain map, learn how to enroll in the NFIP, and receive a model floodplain ordinance appropriate for their level of flood risk.	City
5	Drought	Local Planning & Regulations / Education & Awareness Programs	Establish a water conservation ordinance and conduct outreach to residents to be aware of drought conditions and watering restrictions.	New Moderate 2023-2028	City Admin	The city will establish and enforce a water conservation ordinance and conduct outreach as per MN DNR guidelines during periods of severe drought.	City

**CITY OF COSMOS**

**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 all city residents to sign-up for the county's CodeRED emergency notification alert system.	Existing High 2023-2028	City Admin, City EM	We post pamphlets at City Hall about how to sign up for the county's CodeRED system.	City
2	Severe Winter & Summer Storms	Education & Awareness Programs	Provide education and outreach to residents on personal preparedness for severe weather events and extended power outages.	Existing High 2023-2028	City Admin, City EM	We have a digital sign in front of City Hall where we can display messages and reminders about severe weather. Residents are also encouraged to be aware of weather reports via local radio for our area. We also test our outdoor warning sirens monthly during the summer season.	City
3	Severe Winter & Summer Storms	Mitigation Preparedness & Response Support	Acquire backup generators for city critical infrastructure, including the water plant, lift stations, City Hall, and the fire station.	New High 2023-2028	City Admin, City EM	The city wishes to develop a more robust backup power system to be able to continue critical operations in the event of an extended power outage. The purchase of generators is expensive and the city will work on acquiring them as city funding allows. If generator power is eligible for FEMA HMA grant funding the city may seek to apply for a grant.	City, FEMA HMA grant funding
4	Flooding	Local Planning & Regulations	Work with the MN DNR to get the city enrolled in the National Flood Insurance Program and develop a floodplain ordinance.	New Moderate 2023-2028	City Admin in coord with MN DNR	The city was not participating in the NFIP because they were unaware of any mapped high-risk areas. The city has been put in touch with the State NFIP coordinator to review the city's official floodplain map, learn how to enroll in the NFIP, and receive a model floodplain ordinance appropriate for their level of flood risk.	City
5	Drought	Local Planning & Regulations / Education & Awareness Programs	Establish a water conservation ordinance and conduct outreach to residents to be aware of drought conditions and watering restrictions.	New Moderate 2023-2028	City Admin	The city will establish and enforce a water conservation ordinance and conduct outreach as per MN DNR guidelines during periods of severe drought.	City

**CITY OF DARWIN**

**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 all city residents to sign-up for the county’s CodeRED emergency notification alert system.	Existing High 2023-2028	City Admin, City EM	We have not done this to date, however we can encourage residents to sign up on the Meeker County website, Mayoral Facebook page and other printed flyers or notices in utility bills.	City
2	Severe Winter & Summer Storms	Education & Awareness Programs	Provide education and outreach to residents on personal preparedness for severe weather events and extended power outages.	Existing High 2023-2028	City Admin, City EM	Monthly letters/statements with water/sewer bills. Mayoral Facebook page.	City
3	Severe Winter & Summer Storms	Mitigation Preparedness & Response Support	Acquire backup generators to support operations of city Water Treatment Facility and lift station.	New Moderate 2023-2028	City Admin, City EM	The seeks to acquire generator backup power to ensure operation of our water treatment facility and lift station. Purchase of generators is costly and will be addressed as city funding allows. If FEMA HMA grant funding is an eligible source for generators the city may seek to apply in the future.	City, FEMA HMA Grant funding
4	Drought	Local Planning & Regulations / Education & Awareness Programs	Establish a water conservation ordinance and conduct outreach to residents to be aware of drought conditions and watering restrictions.	New Moderate 2023-2028	City Admin	The city has water restrictions put in place. During the drought period of 2021 the city did not allow lawn watering for a period of time. We will continue to follow MN DNR guidelines to enforce watering restrictions during periods of drought.	City

**CITY OF DARWIN****Mitigation Action Chart**

<b>#</b>	<b>Hazard</b>	<b>Mitigation Strategy</b>	<b>Mitigation Action</b>	<b>Status Priority Timeframe</b>	<b>Responsibility</b>	<b>Comments on Implementation &amp; Integration</b>	<b>Possible Funding</b>
5	Drought	Local Planning & Regulations	Monitor the city aquifer levels during periods of drought, and encourage MN DNR to establish restriction of agricultural irrigation wells that impact our water supply.	New High 2023-2028	City Admin in coord with MN DNR	In 2021 the city experienced the regional drought that caused aquifer static level reduction, which as a result put stress on our water treatment plant. We have increased well maintenance and installed an observation well to monitor aquifer levels and discover potential issues before they cause major problems. However, the city would like to encourage restrictions on future agricultural water use that impacts our water supply.	MN DNR

**CITY OF DASSEL**

**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 all city residents to sign-up for the county's CodeRED emergency notification alert system.	Existing High 2023-2028	City Admin, City EM	We have a place on the homepage of our city website with a link to the county's sign-up page and we talk with residents when they come into City Hall.	City
2	Severe Winter & Summer Storms	Education & Awareness Programs	Provide education and outreach to residents on personal preparedness for severe weather events and extended power outages.	Existing High 2023-2028	City Admin, City EM	We use our city website, reader board located on the main highway and Facebook page. We also post information on bulletin boards at the City Hall, grocery store, gas station and at the Post Office. Our city works with Meeker County Emergency Management to participate in the National Weather Service's annual Severe Winter/Spring Weather Awareness Week.	City
3	Severe Summer Storms	Structure & Infrastructure Projects	Construct a storm shelter or tornado safe room at the mobile home park within the city where residents are vulnerable to high wind and tornado events.	New High 2023-2028	City Admin, City EM in coord with MCEM	The city will seek to work with the mobile home park operator and Meeker County Emergency Management to see what sort of safe shelter can be constructed to help protect residents from dangerous wind events. FEMA HMA grant funding may be a possible source of funding if a tornado safe room is the desired option to pursue.	City, FEMA HMA grant funding
4	Severe Summer Storms	Structure & Infrastructure Projects	Upgrade the city's warning siren and add an additional siren on the southwest area of the city.	New High 2023-2028	City Admin, City EM in coord with MCEM	We will continue to work with the Meeker County Emergency Manager to address the need to upgrade our existing warning siren and add an additional siren. The city will look into the possibility of our eligibility for grant funding from the USDA Rural Development Community Facilities grant program to help purchase these sirens.	City, USDA CF grant program

**CITY OF DASSEL****Mitigation Action Chart**

<b>#</b>	<b>Hazard</b>	<b>Mitigation Strategy</b>	<b>Mitigation Action</b>	<b>Status Priority Timeframe</b>	<b>Responsibility</b>	<b>Comments on Implementation &amp; Integration</b>	<b>Possible Funding</b>
5	Drought	Local Planning & Regulations / Education & Awareness Programs	Establish a water conservation ordinance and conduct outreach to residents to be aware of drought conditions and watering restrictions.	New Moderate 2023-2028	City Admin	The city will establish and enforce a water conservation ordinance and conduct outreach as per MN DNR guidelines during periods of severe drought.	City

**CITY OF EDEN VALLEY**

**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 all city residents to sign-up for the county's CodeRED emergency notification alert system.	Existing High 2023-2028	City Admin, City EM	Our city is in 2 counties, so we promote sign up for both the Meeker County and Stearns County emergency notification systems. We use our city website to provide information to residents and encourage them to sign up for the system that covers their area.	City
2	Severe Winter & Summer Storms	Education & Awareness Programs	Provide education and outreach to residents on personal preparedness for severe weather events and extended power outages.	Existing High 2023-2028	City Admin, City EM	We use our city website. We have a page on Severe Weather with information on Alerts and Warnings, Severe Weather, Lightning and Hail, Floods, Tornadoes, and Extreme Heat. We also post on the city bulletin boards at city hall.	City
3	Severe Winter & Summer Storms	Mitigation Preparedness & Response Support	Acquire a generator for the city's Community Center, which is our designated care shelter.	New High 2023-2028	City Admin, City EM	The city will work to purchase a generator for our Community Center, as city funding is available.	City
4	Extreme Cold	Education & Awareness Programs	Provide outreach to residents on how to keep pipes from freezing during periods of extreme cold.	Existing Moderate 2023-2028	City Admin	We have a have a page for residents with information to prevent pipes from freezing and put out reminders in winter to residents.	City
5	Severe Summer Storms	Structure & Infrastructure Projects	Construct a tornado safe room at the large city park and ball field.	Existing High 2023-2028	City Admin, City EM in coord with MCEM	The city wishes to construct a tornado safe room to protect visitors to the city park and ball field from high wind or tornado events. Outside grant funding would be necessary to implement this project. The city may seek to apply for FEMA grant funding if the project is determined to be eligible. We will work with Meeker County Emergency Management on this effort.	City, FEMA HMA grant funding

**CITY OF EDEN VALLEY**

**Mitigation Action Chart**

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
6	Severe Summer Storms	Mitigation Preparedness & Response Support	Provide emergency warning to residents of approaching dangerous wind events.	Existing High 2023-2028	City EM	The city has 3 outdoor warning sirens that are sounded throughout the city to warn people of dangerous high wind or tornado events. The city tests the sirens on a regular basis to ensure their functionality.	City
7	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 2023-2028	City Admin	The city enforces requirements of the NFIP through Chapter 152: Floodplain Management in the city's code of ordinances. This chapter regulates development in the flood hazard areas of the city.	City
8	Flooding	Local Planning & Regulations / Structure & Infrastructure Systems	Address the reduction of future flood impacts from high rain events through planning and project implementation.	In-Progress High 2023-2028	City Admin, City Public Works	We are working on the ditches in town and have a 5-year plan to lessen the flooding caused in those areas. We have just begun a 20-year comprehensive plan update that will include future land use.	City
9	Drought	Local Planning & Regulations / Education & Awareness Programs	Establish a water conservation ordinance and conduct outreach to residents to be aware of drought conditions and watering restrictions.	New Moderate 2023-2028	City Admin	The city will establish and enforce a water conservation ordinance and conduct outreach as per MN DNR guidelines during periods of severe drought.	City

**CITY OF GROVE CITY****Mitigation Action Chart**

<b>#</b>	<b>Hazard</b>	<b>Mitigation Strategy</b>	<b>Mitigation Action</b>	<b>Status Priority Timeframe</b>	<b>Responsibility</b>	<b>Comments on Implementation &amp; Integration</b>	<b>Possible Funding</b>
1	All-Hazards	Education & Awareness Programs	Encourage all city residents to sign-up for the county's CodeRED emergency notification alert system.	Existing High 2023-2028	City Admin, City EM	The city website includes a link to the Meeker County Sheriff's Office website. Residents are informed they can sign up for the system by going directly to this site.	City
2	Severe Winter & Summer Storms	Education & Awareness Programs	Provide education and outreach to residents on personal preparedness for severe weather events and extended power outages.	Existing High 2023-2028	City Admin, City EM	We use our city website to provide information to residents on city matters as well as reminders on severe weather readiness and will continue to do so.	City
3	Drought	Local Planning & Regulations / Education & Awareness Programs	Establish a water conservation ordinance and conduct outreach to residents to be aware of drought conditions and watering restrictions.	New Moderate 2023-2028	City Admin	The city will establish and enforce a water conservation ordinance and conduct outreach as per MN DNR guidelines during periods of severe drought.	City

# CITY OF KINGSTON

# 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 all city residents to sign-up for the county's CodeRED emergency notification alert system.	Existing High 2023-2028	City Admin, City EM	Our city website provides a link to the Meeker County Sheriff's Department website where residents can sign up for CodeRED.	City
2	Severe Winter & Summer Storms	Education & Awareness Programs	Provide education and outreach to residents on personal preparedness for severe weather events and extended power outages.	Existing High 2023-2028	City Admin, City EM	The city maintains two severe weather warning sirens. We also post info on the community center bulletin board.	City
3	Severe Winter & Summer Storms	Mitigation Preparedness & Response Support	Acquire an emergency backup generator for the city's Community Center.	Existing High 2023-2028	City Admin, City EM	The city has made inquiries into obtaining an emergency back-up generator for the community center to provide emergency shelter during power outages. This is an effort we continue to work on and will address as city funding is available or if we can obtain a generator through potential government surplus.	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 High 2023-2028	City Admin	The city enforces requirements of the NFIP through the City of Kingston Floodplain Ordinance, adopted on March 29, 2012. This ordinance regulates development in the flood hazard areas of the city.	City
5	Drought	Local Planning & Regulations / Education & Awareness Programs	Establish a water conservation ordinance and conduct outreach to residents to be aware of drought conditions and watering restrictions.	New Moderate 2023-2028	City Admin	The city will establish and enforce a water conservation ordinance and conduct outreach as per MN DNR guidelines during periods of severe drought.	City

**CITY OF LITCHFIELD**

**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 all city residents to sign-up for the county's CodeRED emergency notification alert system.	Existing High 2023-2028	City Admin, City EM	The city encourages residents to sign up by directing them to the Meeker County website to do so. A link to the county website is provided on the city website.	City
2	Severe Winter & Summer Storms	Education & Awareness Programs	Provide education and outreach to residents on personal preparedness for severe weather events and extended power outages.	Existing High 2023-2028	City Admin, City EM	The city uses its website to encourage residents to be aware of and ready for severe weather events and extended power outages.	City
3	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 2023-2028	City Admin	The city enforces requirements of the NFIP through Title XV: Land Usage, Chapter 156 Floodplain Management Ordinance. This ordinance regulates development in the flood hazard areas of the city.	City
4	Drought	Local Planning & Regulations / Education & Awareness Programs	Establish a water conservation ordinance and conduct outreach to residents to be aware of drought conditions and watering restrictions.	New Moderate 2023-2028	City Planning & Zoning Dept.	The city will establish and enforce a water conservation ordinance and conduct outreach as per MN DNR guidelines during periods of severe drought.	City

**CITY OF WATKINS**

**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 all city residents to sign-up for the county's CodeRED emergency notification alert system.	Existing High 2023-2028	City Admin, City EM	We have been trying to get residents to sign up for the program over the past couple of years. We have mailed sign up forms in the past and try to hand out to new residents when they register for water and sewer services.	City
2	Severe Winter & Summer Storms	Education & Awareness Programs	Provide education and outreach to residents on personal preparedness for severe weather events and extended power outages.	Existing High 2023-2028	City Admin, City EM	The city plans to use the city's website and FB page, along with newsletters to share information with residents we receive from Meeker County Emergency Management about severe weather and preparedness tips.	City
3	Extreme Cold	Local Planning & Regulations / Education & Awareness Programs	Conduct outreach to residents during periods of extreme cold on the city's policy to follow to avoid frozen pipes.	Existing Moderate 2023-2028	City Admin	The city has a policy in place for the prevention of frozen water and sewer service lines. In the event of an extended period of cold weather and when the frost has reached a depth that may impact water service lines, the city will issue a notice to begin running a recommended stream of water to prevent a frozen water line.	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.	New Moderate 2023-2028	City Admin	Our City Zoning Ordinance includes section XXI Floodplain Overlay District. The purpose of the ordinance is to create an overlay zoning district which will protect the flood hazard areas of the City of Watkins. The city further conducts public awareness campaigns to remind residents semi-annually in newsletters not to blow grass, leaves or dirt into the street so it doesn't end up in the storm sewer.	City

**CITY OF WATKINS****Mitigation Action Chart**

<b>#</b>	<b>Hazard</b>	<b>Mitigation Strategy</b>	<b>Mitigation Action</b>	<b>Status Priority Timeframe</b>	<b>Responsibility</b>	<b>Comments on Implementation &amp; Integration</b>	<b>Possible Funding</b>
5	Drought	Local Planning & Regulations / Education & Awareness Programs	Enforce the city's water restriction ordinance and conduct outreach to residents to be aware of drought conditions and watering restrictions.	New Moderate 2023-2028	City Admin	Section 51.21 of the city's water ordinance addresses that whenever the City Council determines that a shortage of water supply threatens the city, it may by resolution limit the times and hours during which city water may be used for sprinkling, irrigation, car washing, air conditioning, or other specified uses. During periods when this ordinance needs to be enforced the city will do public outreach to alert residents.	City