

# MORRISON COUNTY MINNESOTA



2023

## Hazard Mitigation Plan



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UNIVERSITY OF MINNESOTA DULUTH

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# MORRISON COUNTY MINNESOTA

## HAZARD MITIGATION PLAN

Victoria MacKissock  
Emergency Manager/Communications Supervisor  
Morrison County Sheriff's Office  
213 1<sup>st</sup> Avenue SE  
Little Falls, MN 56345  
  
320-632-0195

*Prepared By:*

U-Spatial  
Research Computing | Office of the Vice President for Research  
1208 Kirby Drive  
University of Minnesota Duluth  
Duluth, MN 55812  
  
218-726-7438

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# Section 1 – Introduction

## 1.1 Introduction

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

Since 1980, damages due to natural disasters in the U.S. exceeded \$2.295 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).

Morrison 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 Morrison 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:

*Morrison 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 Morrison County Emergency Management to facilitate an update to the 2015 Morrison 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 Morrison 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 Morrison County, including the cities of Bowlus, Buckman, Elmdale, Flensburg, Genola, Harding, Hillman, Lastrup, Little Falls, Motley, Pierz, Randall, Royalton, Sobieski, Swanville, and Upsala. The Morrison 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 Morrison County after final approval by FEMA (see Appendix B).

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

- Include more recent data documenting the critical infrastructure and hazards faced by Morrison 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 Morrison County.
- Encourage recipients and sub-recipients of hazard mitigation grants to consider climate change adaptation and resiliency in their planning efforts.

### 1.1.2 HAZARD MITIGATION DEFINITION

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

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

## **1.2 State Administration of Mitigation Grants**

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

# Section 2 – Public Planning Process

## 2.1 Planning Team Information

The Morrison County HMP planning team is headed by the Morrison County emergency manager, who is the primary point of contact. Members of the Morrison 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 Morrison 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 that 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
Victoria MacKissock	Morrison County Sheriff's Office	Emergency Manager/Communications Supervisor
Matthew LeBlanc	Morrison County	County Administrator
Amy Kowalzek	Morrison County	Land Services Director
Brad Vold	Morrison County Health and Human Services Dept.	Director
Emily Loomis	Morrison County Health and Human Services Dept.	Public Health Emergency Preparedness Coordinator
Sarah Pratt	Morrison County Health and Human Services Dept.	Human Services Supervisor
Tony Hennen	Morrison County Public Works	Public Works Director
Linda Brezinka	City of Buckman	City Clerk
Tammi Gorka	City of Flensburg	City Councilor
Cory Hayes	City of Harding	City Clerk
Kay Hoheisel	City of Lastrup	Mayor
Pat Boser	City of Lastrup	City Councilor
Greg Zylka	City of Little Falls	Mayor
Craig Seelen	City of Little Falls Fire Department	Fire Chief
Kyle Johnson	City of Little Falls Police Department	Police Captain
Bob Otremba	City of Pierz	City Administrator
Eric Hanneken	City of Pierz Police Department	Chief of Police
Dan Noss	City of Randall	Mayor
Leah Walberg	City of Royalton	City Clerk
Brenda Weiss-Pesta	City of Royalton	Mayor
Ted VanHove	City of Royalton Fire and Rescue	Fire Chief

Name	Agency/Organization	Participant Title
Travis Blais	City of Royalton Fire and Rescue	Assistant Fire Chief
Sandy Lange	City of Swanville	Mayor
Nancy Lanners	Buckman Township	Clerk
Mary Hoover	Green Prairie Township	Treasurer
Mel Buesseler	Leigh Township	Treasurer
Rick Monson	Leigh Township	Supervisor
Ron Hourscht	Pike Creek Township	Supervisor
Ross Wamre	Pike Creek Township	Supervisor
Darlene Kroll	Pike Creek Township	Supervisor
Anthony Azcodroski	Rosing Township	Township Road Supervisor
Stephen Jones	Little Falls Community Schools	Superintendent
Greg Johnson	Little Falls Community Schools	Superintendent
Travis Hensch	Swanville Public School District	Superintendent
Lisa Villcheck	MN Department of Homeland Security and Emergency Management	HSEM Region 4 Regional Program Coordinator
Jason Kern	MN Department of Natural Resources – Forestry	Resource Protection Program Forester
Pat Boone	Camp Ripley – Minnesota National Guard - Fire Department	Fire Chief
Josh Hanson	USDA Natural Resource Conservation Service	District Conservationist
Andy Beckstrom	Mille Lacs County Emergency Management	Emergency Management Director
James McDermott	Benton County Emergency Management	Emergency Management Director
Chad Emery	Cass County Sheriff's Office	Deputy/ Emergency Management Director
Scott Heide	Crow Wing County Sheriff's Office	Emergency Management Coordinator

## 2.2 Review of Existing Plans, Capabilities & Vulnerabilities

Morrison 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 Morrison 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 Morrison 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 Morrison 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 Morrison County to support mitigation.

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

## 2.3 Planning Process Timeline and Steps

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

### 2.3.1 MORRISON COUNTY STAKEHOLDER COORDINATION

Two planning team meetings took place via Zoom video conference hosted by U-Spatial. Meeting participants included representatives from Morrison 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, Morrison 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 survey will remain available through the five-year planning period to foster public engagement. Table 2 documents dates of Hazard Mitigation

update meetings and public outreach. The public feedback period for the draft plan was open from 1/23/23 to 2/6/23, for a period of 15 days. Appendix G provides documentation of the public outreach for feedback on the draft plan by Morrison County and jurisdictions.

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

Event	Date	Appendix
Kickoff Webinar	7/29/21	Appendix F, Planning Team Meetings
News Release #1	9/3/21	Appendix G, Public Outreach & Engagement Documentation
Planning Team Meeting #1	1/27/22	Appendix F, Planning Team Meetings
Planning Team Meeting #2	11/18/22	Appendix F, Planning Team Meetings
News Release #2	1/23/23	Appendix G, Public Outreach & Engagement Documentation

At the close of the public outreach period, the U-Spatial consultants worked with the Morrison 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, Morrison 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 Morrison 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 Morrison 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 Morrison 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 Morrison 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. Morrison 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 Morrison 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
Morrison County (34,062)	X		X	X	X	X
City of Bowlus (274)	X					X
City of Buckman (303)	X		X		X	X
City of Elmdale (112)	X		X			X
City of Flensburg (213)	X		X		X	X
City of Genola (69)	X		X	X		X
City of Harding (124)	X		X	X		X
City of Hillman (26)						
City of Lastrup (122)	X	X	X		X	X
City of Little Falls (9,067)	X	X	X	X	X	X
City of Motley (670)	X		X	X		
City of Pierz (1,480)	X	X	X	X	X	X
City of Randall (597)	X		X	X	X	X
City of Royalton (1,326)	X	X	X	X	X	X
City of Sobieski (207)	X		X	X		X
City of Swanville (331)	X	X	X	X	X	X
City of Upsala (519)	X		X	X		X
<b>Neighboring Jurisdictions:</b>						
Cass County		X			X	
Crow Wing County					X	
Mille Lacs County		X				
Benton County		X				
Stearns County						
Todd County						
Mille Lacs Band of Ojibwe						

# 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 Morrison County, updated the existing mitigation actions published in the 2014 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 Morrison 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 Morrison County HMP Update*

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

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

Another historical perspective is derived from FEMA-declared disasters. Between 1957 and December 2022, FEMA declared a total of thirteen official disasters in Morrison County: nine classified as major disasters, three as emergency declarations, and one as fire management assistance. Details of these can be viewed on the [Morrison 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). Morrison County was included in five 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 Morrison County

Project Identifier	Sub-Grantee	Project Type	Federal Share (%75)
DR-1990-0004-P	Morrison (County)	Local Multihazard Mitigation Plan	\$20,882
DR-1921-0013-F	Royalton	Warning Systems (as a Component of a Planned, Adopted, and Exercised Risk Reduction Plan)	\$23,159

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 Morrison 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 Morrison 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 5 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, Morrison 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.

## **Morrison County**

*Flooding:* Morrison County has experienced at least two heavy rain events with over 6+ inches of rainfall which caused area flooding, road washouts, and damage to culverts. Ice jams caused flooding over roadways and put additional stress on structural integrity of bridges.

*Ice Storms, Blizzards:* Morrison County has two municipal utility COOPs located in the eastern part of the county that sustained significant damage to their power infrastructure due to heavy snowstorms/ice storms/blizzards. Most of their critical infrastructure consists of overhead power lines making them susceptible to damage and power outages.

*Thunderstorms, Windstorms and Tornadoes:* Morrison County has many mobile home parks and seasonal travel trailer parks and campgrounds. Some have storm shelters or designated shelter areas, but most do not. The campgrounds are very active during summer and fall months.

*Wildfire:* Morrison County is heavily forested in the northwest part of county with the rest of the county agricultural making our county more vulnerable to the spread of wildfire. Large wetland complexes in the county also increase threats to developed properties and communities.

## **City of Flensburg**

*Flooding:* Our sewer is approximately 70 years old. System is getting old and worn.

## **City of Genola**

*Windstorms, Tornadoes, Winter Storms:* Damage can occur to electrical, trees, and buildings during these sorts of storm events.

## **City of Harding**

*Windstorms:* The city has overhead power which are prone to failure in storms from trees falling on them.

*Extreme Cold, Blizzards:* If the power were to go out during extreme cold the residents would be vulnerable to not having heat for their homes.

## **City of Lastrup**

*Tornadoes:* No warning siren system installed in the city.

*Flooding:* Drain/Sewer system could use upgrading.

## City of Little Falls

*Winter Storms, Ice Storms, Blizzards:* Much of the city's municipal electrical service (owned and operated by Minnesota Power) 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.

Major blizzards would create challenges for snow renewal and maintaining emergency routes through the city. We're limited in our ability to clear 4" or more of snowfall in a single 8-hour workday.

*Windstorms, Tornadoes:* Much of the city's municipal electrical service (owned and operated by Minnesota Power) consists of overhead power lines and electrical poles. Those overhead lines and power poles are prone to failure during windstorms and tornadoes.

Many homes in new developments are built on slab with no basement. These residents are at greater risk during severe wind events.

We have one campground in the city at Lindbergh State Park, which is operated by the MN DNR. I'm not sure if they have a storm shelter. There are also 3 mobile home parks within the city that would have residents at higher risk to high wind events. However, these trailer parks have storm shelters and plans in place as per MDH requirements.

*Lightning:* Recent lightning strikes caused damage to several houses and damaged phone and internet service in the area.

*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.

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

*Flooding:* Our wastewater treatment facility is located along the Mississippi River. We have not had any flooding issues with the location, but if the upstream dam were damaged it could pose a threat to the facility.

The city of Little Falls has the Mississippi River running through the community. The city's Wastewater Treatment plant is the most vulnerable asset to a flood as it is set below the dam and within the floodplain.

Our City Hall, Water Treatment Plant, Public Works Building, East Fire Hall, and Police Station are all within two blocks of the river, and above the dam. If flooding conditions were extreme, they may all be vulnerable to flooding.

The city has 19 lift stations and some are within or very close to the floodplain.

There are 11 parcels, mostly parks, parts of the Municipal golf course or vacant land that are also within the floodplain, and are quite vulnerable to a flood event. A couple of the parks have assets like bathrooms, shelters and landscaping that certainly would be damaged during a major flood event.

The Mississippi River runs through the city with a dam that is owned and operated by Minnesota Power. It would be devastating to the downstream areas in the event of extreme flooding or a dam failure.

*Landslides:* The Weyerhaeuser Museum continues to be at risk for erosion issues along the Mississippi River. The Minnesota County Historical Society, which owns the museum is working with Morrison County and the City of Little Falls to secure funding to pay for engineering design on the project.

## **City of Motley**

*Flooding:* Our city sewer lift station is vulnerable to failure during flood events if the power goes down or the lift station is flooded. Only Lift Station 2 is vulnerable to power outages, because Trident is on a separate power feed from the rest of town and rarely loses power. They rarely stop putting out waste to the lift station. We have alarm dialers to notify us so we can get over there relatively fast and connect a generator if needed. We also have homes that continue to get water in the basements.

*Ice Storms, Blizzards:* We have had occasional power outages but not more than any other town in Minnesota.

*Windstorms, Tornadoes:* We have 2 mobile home parks and a municipal campground without storm shelters where residents are vulnerable to high wind events. The park owner has supplied one resident in each park with a weather radio and a key to the free Methodist church and the other occupants of the park are instructed to go to that location in the event of dangerous storms.

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

## **City of Pierz**

*Flooding:* The city owned Park Complex that includes the campground, Pierz Park, and Pierz Golf Course are all prone to flooding from the Hillman Creek and Skunk River which join on the Park Complex.

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

Our municipal campground is active during summer and fall months with RVs and campers and we have a shower house in the campground that doubles as a storm shelter.

Many homes in the new developments are built on slab with no basement. These residents are at greater risk during severe wind events.

*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.

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

## **City of Randall**

*Flooding:* One of our sanitary sewer lift stations is prone to flooding during high rain 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, 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.

*Extreme Cold:* The city has also experienced damages to roads from spring frost heaves, frozen culverts that cause localized flooding.

## **City of Royalton**

*Flooding:* The Platte River runs through the town cutting most of it in half. Due to high water levels that occur due to spring thaw and rains, the river will expand over its banks. On occasion, the river will rise enough for the residents to sand bag their riverfront property. At this time, the city has community parks and uninhabitable land that will flood; it is watched closely potential damage.

*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. Some of the more recent events have caused more disruption to roadways, but the power lines have and could sustain damage as it has in the past.

*Windstorms, Tornadoes:* The city of Royalton currently has a mobile home park within the city that does not have a storm shelter and residents are vulnerable to high wind and tornado events.

Town homes built in a development are built on slab with no basement. These residents are at greater risk during severe wind events.

*Drought:* In recent years, the city has been able to sustain a good water supply for the residents. But with the drought of 2021, it caused a few private wells to dry up, therefore they needed to be put on city services.

### **City of Sobieski**

*Flooding:* The city has had heavy rains and spring frost heaves to the road.

### **City of Swanville**

*Flooding:* Storm sewers are prone to flooding with too much rain, and many houses would experience basement flooding.

*Tornadoes, Windstorms:* The city has new development with patio homes (built on slab) and have no basements, so they are at greater risk during storms.

Many trees are old in our community which has a greater risk of falling on houses and damaging them.

*Extreme Cold:* During periods of extreme cold frozen services can occur. We have a high population of seniors and low-income residents who are more vulnerable during these events.

### **City of Upsala**

*Windstorms/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. Tree damage can occur to power lines and homes.

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

*Hail:* Several homes, businesses and buildings are prone to hail damage in our area.

## **3.4.2 FUTURE DEVELOPMENT**

Because Morrison 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. Morrison 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 Morrison 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.

### **Morrison County**

An additional 160-site campground has been permitted on Lake Lena as well as existing resort/camping expansions in the northwest lakes area of the county.

New developments of residential properties the past 10 years have been properties built on slab. If a wind event happens in these areas, there will be added risk to the residents due to not having basements to shelter in.

### **City of Little Falls**

New developments of residential properties the past 10 years have been properties built on slab. If a wind event happens in these areas, there will be added risk to the residents due to not having basements to shelter in.

The increase in runoff from property increases the risk of flooding along rivers. The increase runoff is from a number of causes, including development, addition of drain tile in farm fields, and not maintaining a vegetated buffer between the waterway and erodible soil.

There is private construction project slated for a new 49-unit housing project, which would increase the population in the community that may be affected by future severe storm events.

### **City of Pierz**

In general, we have noticed an increase in more frequent high-rain events in the last 10 years. Our city has grown, and we currently have 68 rental units being built which will add to the storm water runoff.

### **City of Swanville**

New development within the city limits that include patio homes (built slab-on-grade) with no basements and would include seniors that would need assistants should a disaster occur.

### **City of Upsala**

With the construction of a new assisted living facility, there will be a large concentration of senior residents in one location that will need assistance during a disaster event.

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 Morrison 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 Morrison County will address the maintenance of this plan, including monitoring, evaluation, and update of the plan, as well as implementation and continued public involvement.

# Section 4 – Hazards

As part of the risk assessment, each natural hazard that poses risk to the county was independently reviewed for its past hazard history, relationship to future trends, and jurisdictional vulnerability to future events. A capabilities assessment was also conducted by the county to review the plans and programs that are in place or that are lacking (program gaps or deficiencies) for the implementation of mitigation efforts, as related to each natural hazard. An assessment was also conducted for local jurisdictions to identify the plans, policies, programs, staff, and funding they have in place 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 Morrison 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. Eight of the 13 federal disaster declarations in Morrison County included flooding.

### 4.1.1 PROBABILITY OF OCCURRENCE

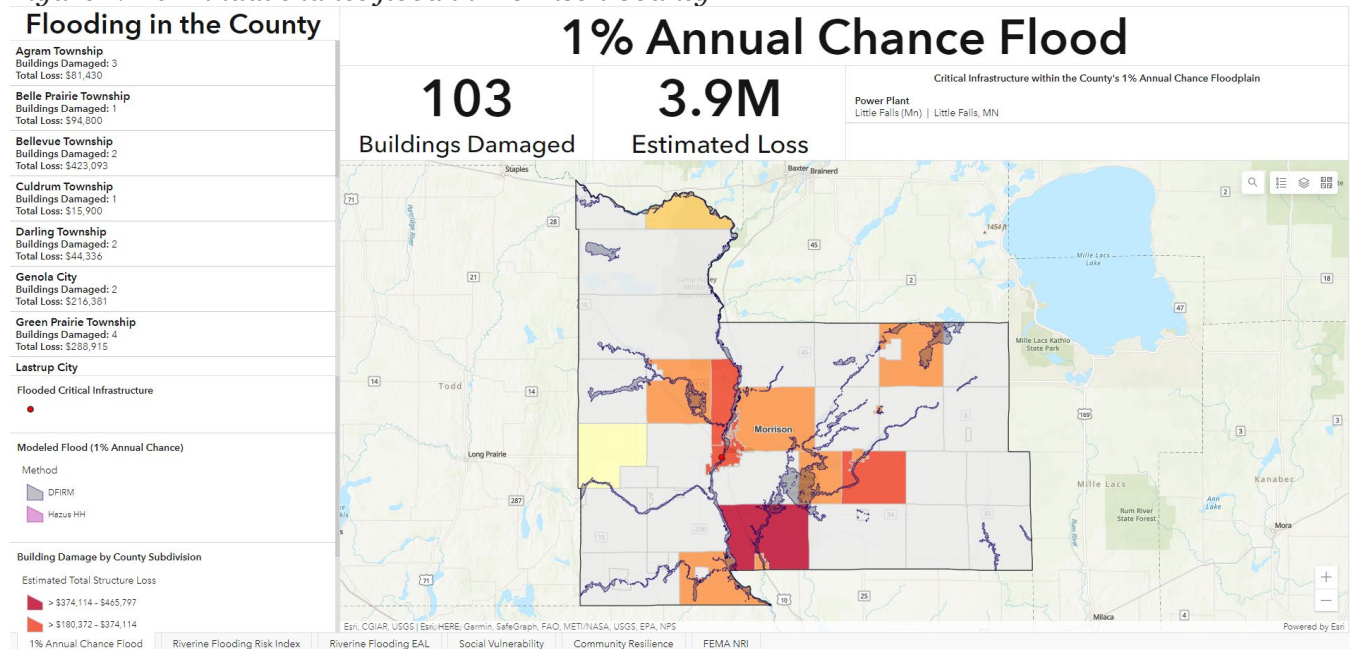
From 1997 to 2022, the NCEI Storm Events Database has recorded 19 flood and flash flood events. Morrison County has experienced one flash flood event every 2.4 years and one riverine flood event every 3.3 years on average during this period.

[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. Flood cross-section and base flood elevation data were used to generate depth grids. The resulting Hazus 1% annual chance floodplain is shown

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

Figure 1. 1% Annual chance flood in Morrison County



## 4.1.2 VULNERABILITY

Potential economic loss estimates were based on county-specific building data. Morrison 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.

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

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, 31,401 points were input to Hazus to represent buildings with a total estimated building plus contents value of \$4.6 billion. Approximately 54% of the buildings (and 59% of the building value) are associated with residential housing. The estimated loss by occupancy class for the entire county is shown in Table 6.

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	16,919	\$2,700,000,000	175	\$25,953,669	75	\$1,653,338
Commercial	1,234	\$310,000,000	16	\$6,016,736	15	\$1,191,030
Other	13,248	\$1,580,000,000	32	\$8,948,890	13	\$1,080,370
Totals	31,401	\$4,590,000,000	223	\$40,919,295	103	\$3,924,738

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 Morrison 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 Morrison 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. The Power Plant in Little Falls was found to be at risk in the 1% annual chance flood, but no other information is available. The location is mapped in the [Morrison County HMP website](#).

### *Community Vulnerability*

Potential economic losses were estimated by Census Minor Civil Division. Skandia Valley would suffer the most significant estimated losses in Morrison County in a 1% annual chance flood. The Cities of Little Falls, Pierz, and Lastrup all have six to seven structures in a 1% annual chance flood with moderate damage. All jurisdictions with buildings identified in the 1% annual chance flood zone can also be viewed on the Morrison 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

Morrison 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 Morrison 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.

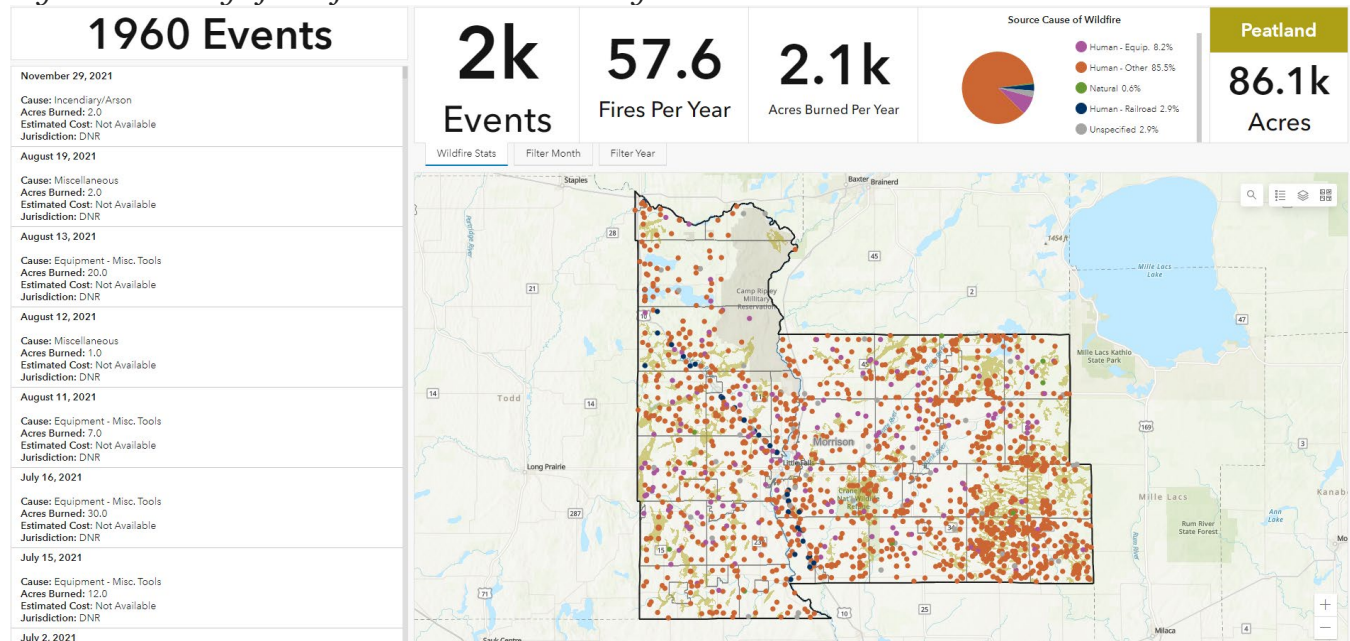
*Road Infrastructure:* Flood mitigation for county and township roads (e.g., culvert replacements, road repair) is an ongoing need. The county and many of our townships have limited funding for road infrastructure. Morrison County continues to provide assistance on road infrastructure mitigation projects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

## 4.2 Wildfires

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

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

Figure 2. History of wildfire in Morrison County



### 4.2.1 PROBABILITY OF OCCURRENCE

To determine the probability of future wildfires Morrison County, records of previous wildfire events in were summed and divided by the dataset’s period of record, resulting in the annual relative frequency of wildfires during the period of record. Based on Minnesota DNR records, from January 1985 to June 10, 2021, the relative frequency of wildfire events in the county is approximately 58 per year (MN DNR, 2021c). This relative frequency can be used to infer the probability of these events occurring in the future

### 4.2.2 VULNERABILITY

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

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

There are two main types of WUI: intermix and interface. Intermix WUI are areas where housing and wildland vegetation intermingle; interface WUI are areas where housing are adjacent to wildland vegetation (Radeloff et al., 2018). Table 7 shows the change of total WUI (intermix and interface) in the county from 1990 to 2010, and the percent of the county’s land, housing, and population located in the WUI area.

*Table 7. Wildland-Urban Interface (WUI), Morrison County, 1990–2010*

	Total WUI 1990	Total WUI 2000	Total WUI 2010	% Change (1990–2010)
Land Area	2.4%	2.8%	3.2%	+33.3%
Housing	20.0%	21.6%	21.1%	+5.5%
Population	9.6%	12.2%	12.6%	+31.3%

SOURCE: (RADELOFF ET AL., 2019)

The area in the county were the most land classified as WUI include Agram, Little Fall, Darling, and Green Falls Townships. These communities along with others in WUI areas are more vulnerable to wildfires.

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

### 4.2.3 PROGRAM GAPS AND DEFICIENCIES

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

**Community Wildfire Protection Plan:** Morrison County does not have a Community Wildfire Protection Plan (CWPP) in place. Morrison County should consider the opportunity to work with the MN DNR Firewise Program and local fire departments to conduct a coordinated, comprehensive risk assessment for wildfire risk and identify High-Risk Wildfire Areas and targeted wildfire mitigation activities. Having a CWPP in place will also allow the county and communities to be eligible to apply for MN DNR Firewise grant funding for eligible wildfire mitigation activities.

**Rural Water Access for Wildland Firefighting:** There are areas within Morrison County where improved water access is needed for fighting wildfire. These areas are rural and not supported by a municipal water source. Local fire departments have the opportunity assess their needs and to work with the MN DNR to evaluate the potential for dry hydrant/well access projects.

**Public Awareness:** Raising public awareness of wildfire safety and dangerous conditions is an on-going effort of Morrison County Emergency Management, local fire departments, and the MN DNR.

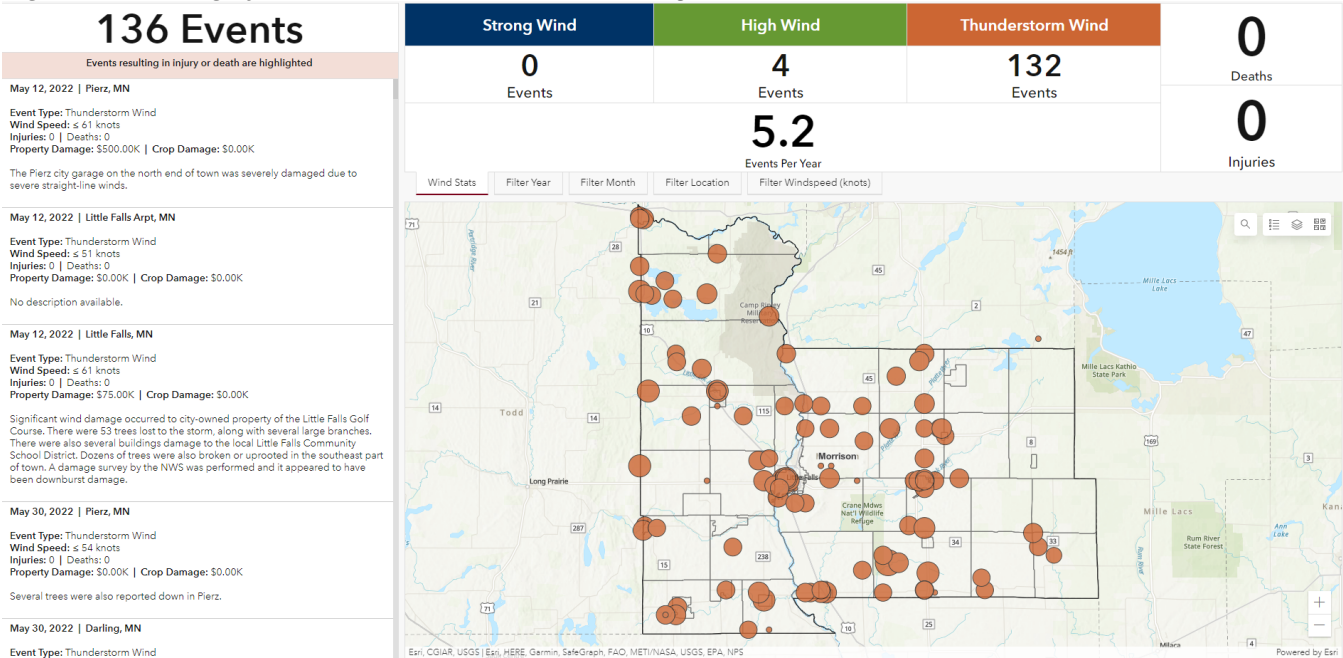
**Firewise Assessments:** Level-1 Firewise assessments should be encouraged for homeowners living in rural, woodland high-risk wildfire areas.

4.3 Windstorms

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

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

Figure 3. History of windstorms in Morrison County



### 4.3.1 PROBABILITY OF OCCURRENCE

To determine the probability of future wind-related events in Morrison County, records of previous wind-related events (strong wind, high wind, and thunderstorm wind) in Morrison 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.

### 4.3.2 VULNERABILITY

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

### 4.3.3 PROGRAM GAPS AND DEFICIENCIES

Morrison 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 Morrison 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 is always needed to inform the public on what tornado awareness, safety, and 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

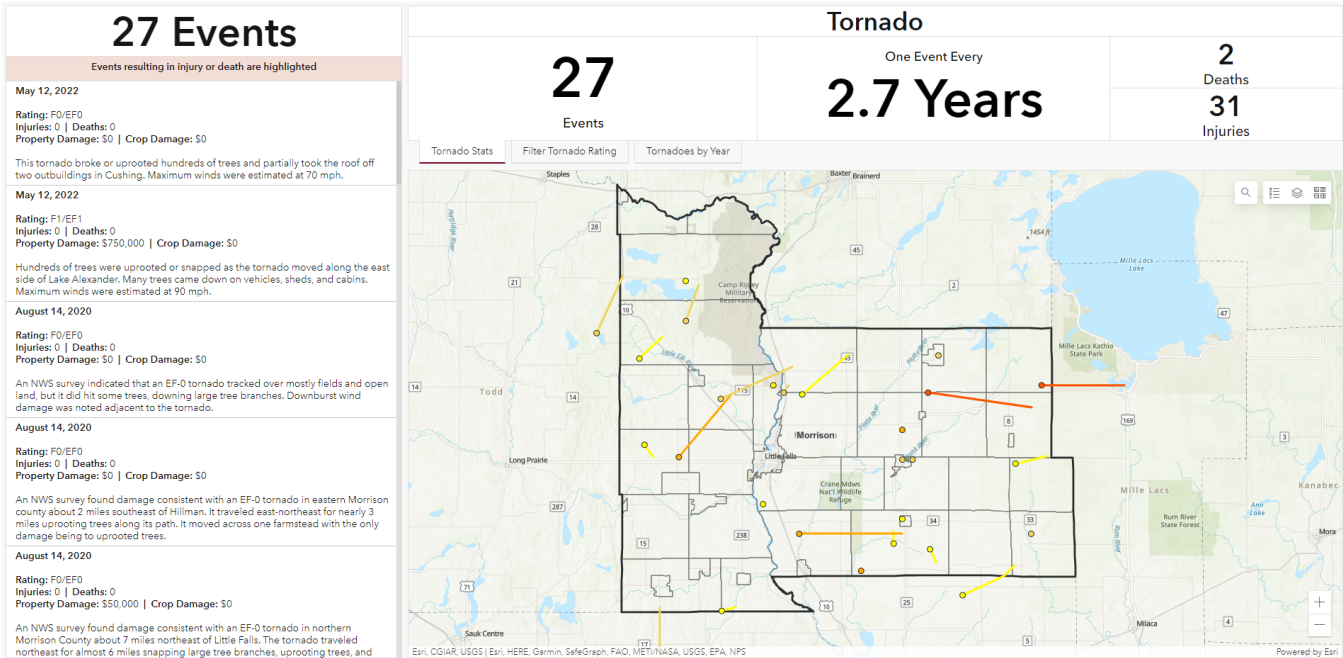
as the county fairgrounds and county parks that offer camping. A coordinated approach is needed to identify where storm shelters or tornado safe rooms are needed and to evaluate whether new construction or a retrofit of facilities is appropriate.

4.4 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 Morrison County is shown in Figure 4; an interactive version of this map can be found on the Morrison County HMP website.

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

Figure 4. History of tornadoes in Morrison County



4.4.1 PROBABILITY OF OCCURRENCE

Estimating the probability of future tornadoes in Morrison 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 2.7 years in Morrison County. These 25 tornadic events occurred in 18 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.

For any location in Morrison County, there was an annual frequency of 2-4 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.

#### 4.4.2 VULNERABILITY

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

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

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).

#### 4.4.3 PROGRAM GAPS AND DEFICIENCIES

Morrison 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 Morrison 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 is always needed to inform the public on what tornado awareness, safety, and to be ready for long-term power outages during dangerous spring and summer storm events such as thunderstorms or high wind events.

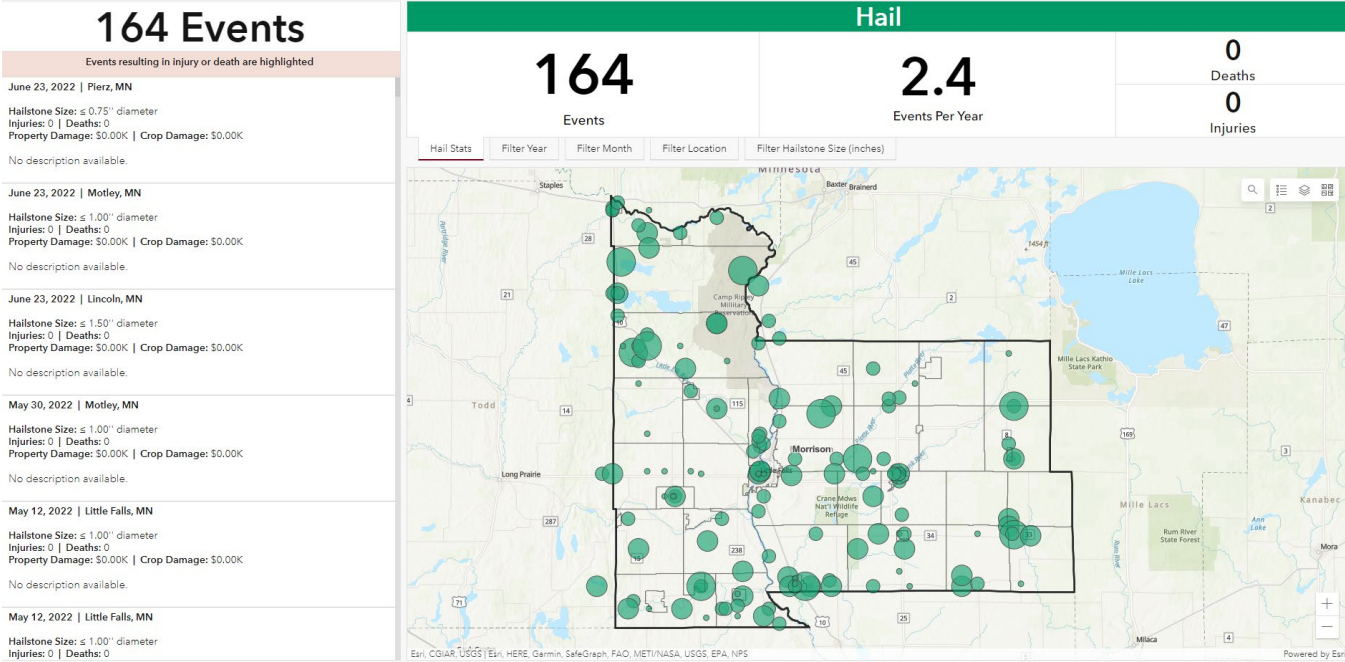
*Storm Shelters and Tornado Safe Rooms:* There are areas throughout the county without viable storm shelters or tornado safe rooms where there are populations vulnerable to high wind and storm events, such as campgrounds, resorts, mobile home parks, schools, and other seasonal gathering locations such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

# 4.5 Hail

Hailstorms occur throughout the year though are most frequent between May and August (NWS, 2020). Although hailstorms rarely cause injury or loss of life, they do cost Minnesota nearly \$16 million in property and crop damage each year (CEMHS, 2019). In 2017, 44% of properties in Minnesota were affected by damaging hail events (Samanta & Wu, 2017). The history of hail in Morrison County is shown in Figure 5; an interactive version of this map can be found on the Morrison County HMP website.

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

Figure 5. History of hail in Morrison County



## 4.5.1 PROBABILITY OF OCCURRENCE

To determine the probability of future hailstorms in Morrison County, records of previous hail events in the county were examined for the period of record. From January 1955 through January 2020, the relative frequency of hail events was 2.4 per year. This relative frequency can be used to infer the probability of hail events occurring in the future. Please note that public reports of hail are often secondary to those of thunderstorm winds or tornadoes because if either damaging winds or tornadoes occur, the damaging wind and/or tornado are more important to the reporter and may result in underreporting of hail events.

## 4.5.2 VULNERABILITY

Morrison County's agricultural lands and structures are vulnerable to hail damage and its residents to injury and possibly death. Data from the Spatial Hazard Events and Losses Database for the United States (SHELDUS) was examined to identify the county's monetary losses due to hail damage to crops, property,

injury, and death. From 1960 through 2018 Morrison County reported \$11.3 million in hail damages, ranking 23rd among Minnesota counties in total hail damages. Morrison County's losses are primarily due to crop damages reported at \$10.2 million, followed by \$1.2 million in property damages. Crop indemnity payments due to hail totaled \$3.1 million for the period of record spanning 1989–2018 (CEMHS, 2019).

Within Morrison County, the vulnerability of jurisdictions to hailstorms does not vary geographically. As with all summer storms, those who work outdoors or do not have permanent housing are at greater risk during hailstorms.

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

### 4.5.3 PROGRAM GAPS AND DEFICIENCIES

Morrison County Emergency Management identified that there are several program gaps and deficiencies that make its citizens more vulnerable to summer storms, including hail. The following gaps and deficiencies should be addressed with new mitigation efforts to reduce that vulnerability:

*Above-Ground Power Lines:* Most powerlines throughout Morrison 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 is always needed to inform the public on what tornado awareness, safety, and 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.

## 4.6 Winter Storms

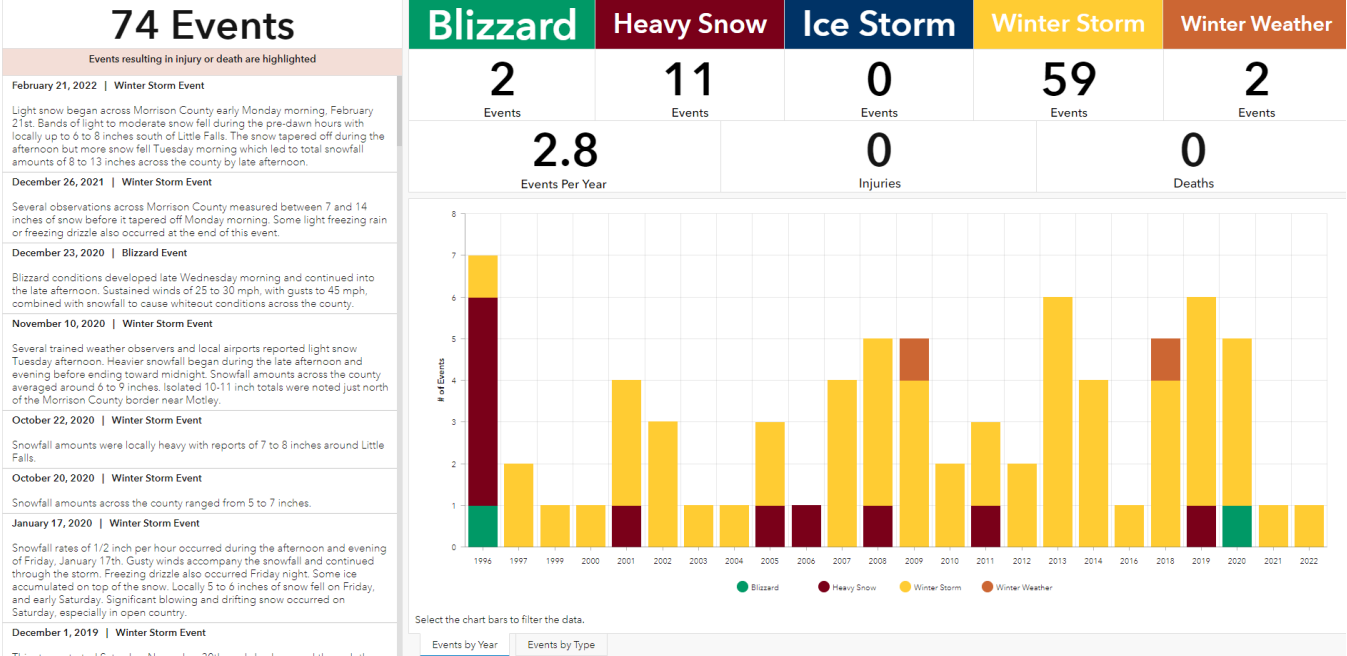
Winter storms encompass several winter weather events which the National Weather Service (NWS) organizes into the following categories: blizzard, heavy snow, ice storm, winter storm, and winter

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

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 Morrison County is shown in Figure 6; an interactive version of this map

can be found on the Morrison County HMP website.

Figure 6. History of winter storms in Morrison County



#### 4.6.2 PROBABILITY OF OCCURRENCE

To determine the probability of future winter-related storm events in Morrison 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 Morrison County is 2.8 per year. This relative frequency can be used to infer the probability of these events occurring in the future.

#### 4.6.3 VULNERABILITY

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

#### 4.6.4 PROGRAM GAPS AND DEFICIENCIES

Morrison 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 Morrison 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 always 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.

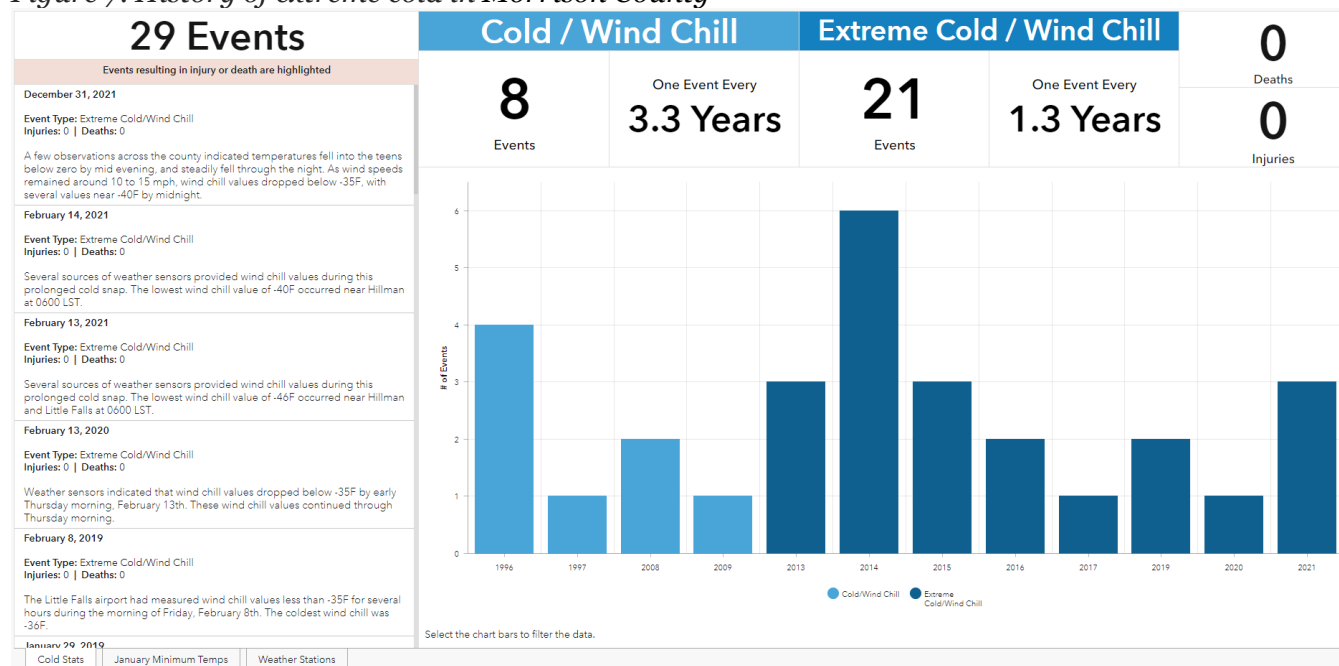
**Backup Power:** Not all designated shelter facilities have generator back-up power to provide the ability to care for residents if displaced during a severe winter event coupled with an extended power outage.

## 4.7 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 Morrison County can be especially dangerous when low temperatures and wind create arctic-like wind chills. The history of extreme cold in Morrison County is shown in Figure 7; an interactive version of this dashboard can be found on the Morrison County HMP website.

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

Figure 7. History of extreme cold in Morrison County



### 4.7.1 PROBABILITY OF OCCURRENCE

To determine the probability of future cold-related events in Morrison 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 Morrison County is one event every 1.3 years. (NCEI, 2021). This relative frequency can be used to infer the probability of these events occurring in the future.

#### 4.7.2 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)

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

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.

#### 4.7.3 PROGRAM GAPS AND DEFICIENCIES

Morrison 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.

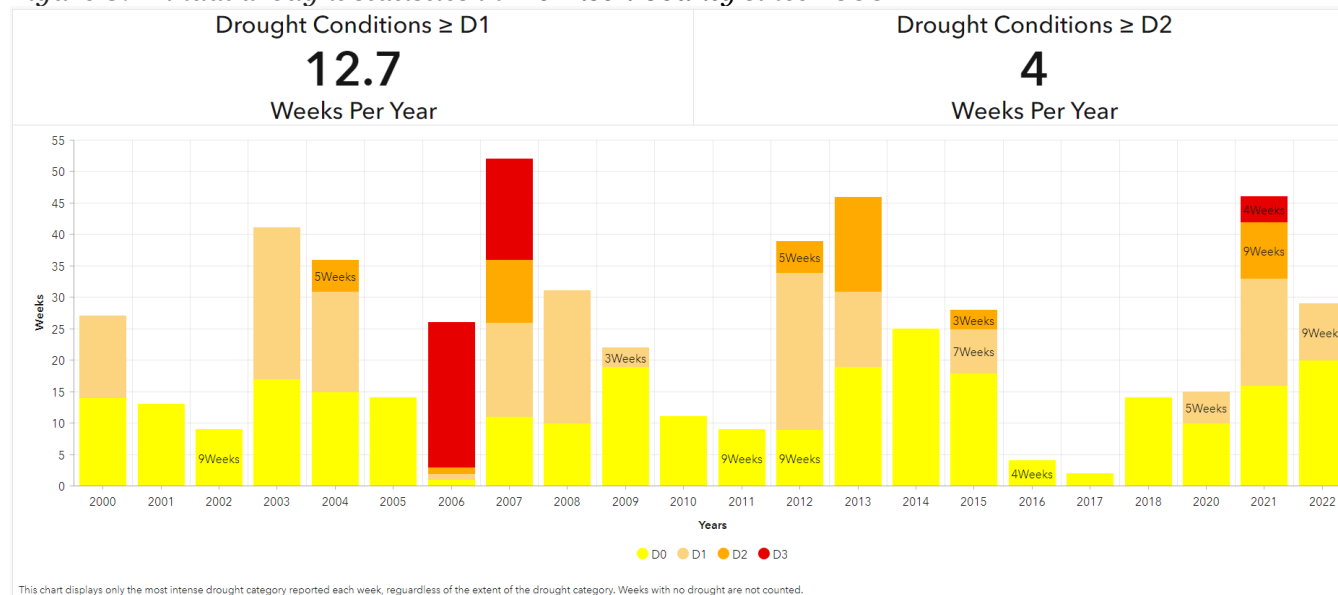
*Public Education:* Ongoing public education is needed to encourage residents to be prepared for extreme weather, including power outages during periods of extreme cold.

## 4.8 Drought

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

[See interactive information about drought, including history and the USDM Dashboard, on the Morrison County HMP website](#)

Figure 8. Annual drought statistics in Morrison County since 2000



### 4.8.1 PROBABILITY OF OCCURRENCE

To determine the probability of future droughts in Morrison 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 2000-2022 for any occurrence of drought  $\geq$  D1 in Morrison 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 four weeks per year (NDMC et al., 2021). The relative frequency of past droughts can be used to infer the probability of similar droughts occurring in the future.

### 4.8.2 VULNERABILITY

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

DIR records show 33 drought incidents impacting seven sectors in Morrison County between 2000 and 2022. Since droughts are regional in nature, jurisdictions within Morrison 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, 2021a). 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, Morrison County's agriculture sector has been impacted by drought more than once, and with 28.7% of Morrison 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, Morrison County received \$57.7 million (2018 ADJ) in crop indemnity payments due to drought, placing it as the 2<sup>nd</sup>-highest-paid county in Minnesota (CEMHS, 2019).

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

#### 4.8.3 PROGRAM GAPS AND DEFICIENCIES

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

### 4.9 Dam Failure

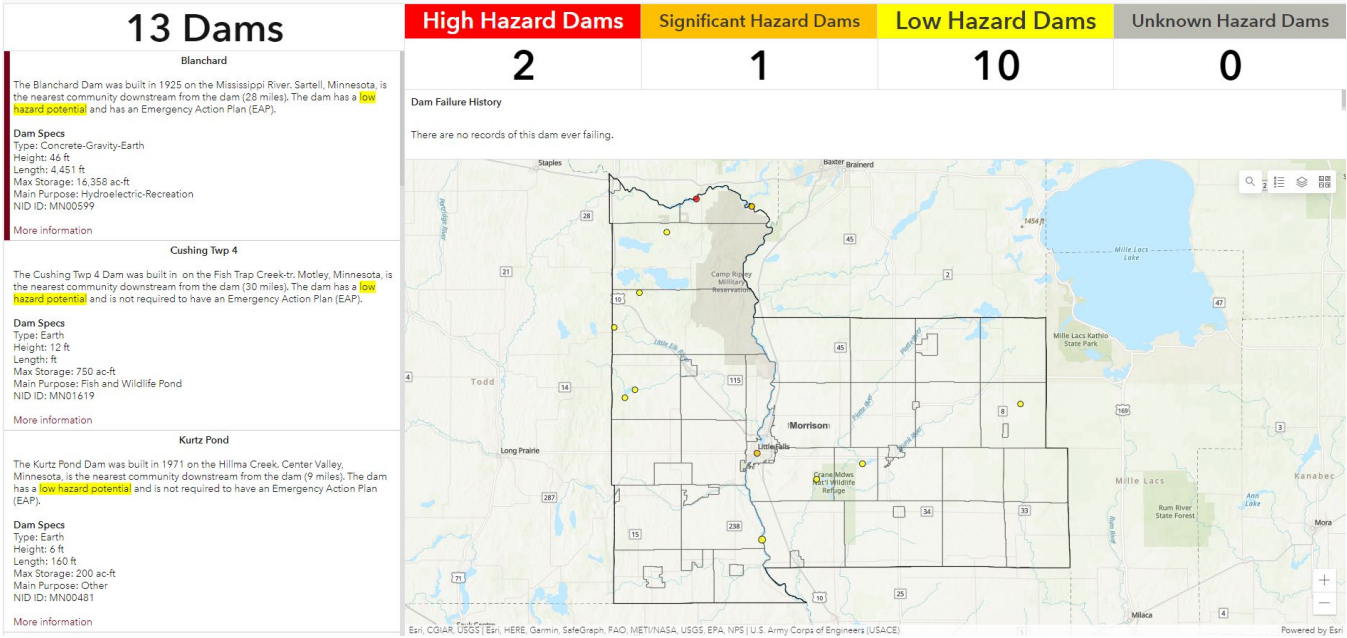
The MN DNR Dam Safety Program has the mission of protecting the life and safety of people by ensuring that dams are safe. Minnesota's Dam Safety Program sets minimum standards for dams and regulates the design, construction, operation, repair, and removal of both privately and publicly (non-federal) 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 13 dams in Morrison County. Dams are mapped in Figure 9; an interactive version of this map is available on the Morrison County HMP website.

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

Two dams with a high hazard potential rating are on the Crow Wing River which creates the border of Morrison and Cass counties. One significant hazard dam is built on the Mississippi River.

Figure 9. Dams in Morrison County



4.9.1 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 significant dam failure in Morrison County is very low. Dam failures are extremely unlikely if the dam is maintained in compliance with Minnesota’s Dam Safety Program.

During a heavy rain event on May 15th, 1999, The Little Falls Dam on the Mississippi River breached approximately 100-150 feet along the eastern dike. The failure damaged a metal pole shed, two wastewater treatment silos, and eroded the soil under the building and along the railway track. The dam was rebuilt.

In April 2008, The Kurtz Pond Dam (a low earthen dam with low hazard potential) failed. The embankment washed out immediately adjacent to the pipe to a depth of 4.5 depth. The dam was rebuilt. The Little Elk Wma Main Pool dam (also a low earthen dam with low hazard potential) experienced a breach in 2003 that resulted in no damage.

## 4.9.2 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 8 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 8. 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).

The Sylvan and Pillager Dams are both Class I dams in Morrison County. There is one Class II dam, the Little Falls Dam, on the Mississippi. All three of these dams are owned and operated by Minnesota Power.

The Sylvan Dam on the Crow Wing River was built in 1913. Little Falls, Minnesota, is the nearest community downstream from the dam (25 miles). This earthen dam is 35 feet tall and 1154 feet long with a maximum storage capacity of 9,216 acre feet. The Sylvan dam was last inspected in 2020 and the condition assessment was not available.

The Pillager Dam was built in 1917 and is also on the Crow Wing River. This is an earthen and concrete dam and is 22 feet high and has a maximum storage of 4,853 acre feet and a maximum discharge of 21,000 cubic feet/ second. The community of Pillager, Minnesota is one mile downstream from the dam. The Pillager dam was last inspected in 2020 and the condition assessment was not available.

Minnesota Power maintains a detailed Emergency Action Plan for all three dams which addresses response measures such as emergency public notification and evacuation in the event of a dam breach. Minnesota Power also maintains inundation maps to identify the affected public and assets in the event of dam failure. The inundation information was not available for this plan.

### 4.9.3 PROGRAM GAPS AND DEFICIENCIES

Morrison 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 Morrison County as related to hazard mitigation.
- Appendix C: As part of the Morrison 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 Morrison 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 9 below lists and describes jurisdictional participation in the National Flood Insurance Program (NFIP).

*Table 9. NFIP participation in Morrison County*

Community Name	Participation in the NFIP	FEMA Map	Description of Participation
Morrison County	Participating	FEMA-mapped high-risk areas	<p>Morrison County's Land Services Department maintains the floodplain management ordinance and floodplain maps for the county (Section 1000, Morrison County Land Use Control Ordinance). The Land Services Department 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 Morrison County. The Land Services Office can assist county residents in determining whether their property is affected by an officially mapped flood area.</p>
Bowlus	Not Participating	No FEMA-mapped high-risk areas	<p>The city does not have a FEMA map and is not participating.</p> <p>Reasons for the city's lack of participation in the NFIP could not be obtained. The state NFIP coordinator has conducted outreach to the city to provide them with information on enrolling in the NFIP.</p>
Buckman	Not Participating	FEMA-mapped high-risk areas	
Elmdale	Not Participating	No FEMA-mapped high-risk areas	<p>The city does not have a FEMA map and is not participating.</p>
Flensburg	Not Participating	No FEMA-mapped high-risk areas	<p>The city does not have a FEMA map and is not participating.</p> <p>The city noted that it has not participated in the NFIP because they are a small community with a population of 70 and are not aware of any areas of flood risk within the city. The city has been encouraged to work with the state NFIP coordinator to review the city's official flood map, learn how to enroll in the NFIP and how to develop a floodplain ordinance appropriate for their level of flood risk.</p>
Genola	Not Participating	FEMA-mapped high-risk areas (annexed county SFHA)	
Harding	Not Participating	No FEMA-mapped high-risk areas	<p>The city does not have a FEMA map and is not participating.</p>
Hillman	Not Participating	No FEMA-mapped high-risk areas	<p>The city does not have a FEMA map and is not participating.</p>

Community Name	Participation in the NFIP	FEMA Map	Description of Participation
Lastrup	Participating	FEMA-mapped high-risk areas	The most recent floodplain ordinance on file for the city was adopted 2/20/1991. The city has been put in touch with the state NFIP coordinator to review the city's floodplain map and learn how to develop an updated model ordinance for the city.
Little Falls	Participating	FEMA-mapped high-risk areas	The city enforces requirements of the NFIP through Chapter 11.50, Floodplain Management in the city's code of ordinances. This chapter regulates development in the flood hazard areas of the city.
Motley	Participating	FEMA-mapped high-risk areas	The city enforces requirements of the NFIP through Ordinance #126 in the city's code of ordinances and has mapped floodplain areas in the city's zoning map. The city uses the ordinance and map to regulate any development in the flood hazard areas of the city.
Pierz	Participating	FEMA-mapped high-risk areas (annexed county SFHA)	The city of Pierz was enrolled in the NFIP on 1/3/1985. When the city got enrolled, they didn't have any FEMA-mapped areas, so were not required to have a floodplain ordinance. Since then, the city has annexed area in the floodplain, but has not had a floodplain ordinance. The city is working with the MN DNR floodplain manager to develop an up-to-date floodplain ordinance.
Randall	Participating	FEMA-mapped high-risk areas	The city enforces requirements of the NFIP through the city's Two District Floodplain Ordinance (June 7, 1988). This ordinance regulates development in the flood hazard areas of the city.
Royalton	Participating	FEMA-mapped high-risk areas	The city enforces requirements of the NFIP through the City of Royalton Floodplain Ordinance, adopted 7/5/11. This chapter regulates development in the flood hazard areas of the city. The city has been put in touch with the state NFIP coordinator to learn about the updated flood map for their city and how to update their floodplain ordinance.

Community Name	Participation in the NFIP	FEMA Map	Description of Participation
Sobieski	Participating	FEMA-mapped high-risk areas	The city enforces requirements of the NFIP through Floodplain Ordinance #270304 0001-0002, adopted July 16, 1980. This chapter regulates development in the flood hazard areas of the city.
Swanville	Not Participating	No FEMA-mapped high-risk areas	The city does not have a FEMA map and is not participating.
Upsala	Participating	FEMA-mapped high-risk areas (annexed county SFHA)	The city did not have information on if a current floodplain ordinance exists. The city has been put in touch with the state NFIP coordinator to review their official floodplain map, learn about 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:

- 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
- 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.
- 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.

Morrison County has four RL properties and a total of eight losses. The properties are all single-family residences. Payments have totaled \$122,546 as of September 2022.

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

## 5.1.2 PLANS AND ORDINANCES

Morrison 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

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

#### **All Hazards**

*All Hazards Emergency Operations Plan:* Morrison 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:* Morrison County maintains the Everbridge Mass 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 Morrison County website.

*Relationship with National Weather Service:* Morrison 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:* Morrison County utilizes the Morrison County website, Morrison 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, Morrison 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. Morrison County Public Health maintains the list of shelter locations.

*NOAA Weather Radios:* Morrison 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 (In-Progress):* During 2022, Morrison County Emergency Management is working to become a NOAA Weather-Ready Nation Ambassador, supporting initiatives to improve readiness, responsiveness, and overall resilience to weather, water, and climate events.

*Backup Power:* Generator back-up power is in place for the Morrison County Government Center, excluding the historic courthouse.

*School Closings:* Schools throughout Morrison 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.):* Morrison County relays all winter weather statements received from the National Weather Service via social media platforms and our community partners.

*Public Education:* Morrison 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 Morrison County Public Works 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 Morrison County Hwy 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, Everbridge Mass Notification System, cell phone apps, and the outdoor warning siren system. Morrison County redistributes all outlook, watch, advisory, and warning statements issued by the NWS.

*Outdoor Warning Sirens:* There are 28 outdoor warning sirens located in Morrison County which are tested on a monthly basis by the Morrison County Sheriff's Office. Warning sirens are owned and maintained by the cities where they are located. All sirens are remotely activated by the Morrison County Sheriff's Office in the event of a tornado.

*Skywarn Program:* During 2022, Morrison County Emergency Management is working with the National Weather Service to begin offering Storm Spotter training to local fire and law enforcement departments and local residents that wish to be trained as spotters. SkyWarn Storm Spotters help to keep their local communities safe by providing timely and accurate reports of severe weather to their local NWS office.

*Public Education:* Morrison 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:* Morrison County Public Works 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:* Morrison 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.

## **Wildfire**

*Emergency Notifications:* The National Weather Service helps to put out information on wildfire conditions via NOAA weather radios. In events of wildfire, Morrison County Emergency Management works with local law enforcement, local fire departments, and partner agencies to get the word out on wildfire conditions and safety measures via their public information centers, websites, and social media.

*Local Fire Departments/Mutual Aid:* Local fire departments throughout the county are responsible for wildfires within their department boundaries and work together through mutual aid agreements on larger fires, including wildland fires.

*Burning Permits/Restrictions:* Burn permits for vegetation are available from the Minnesota Department of Natural Resources. In times of high fire danger, burning restrictions are put in place and enforced.

## **Extreme Cold**

*Emergency Notifications:* Extreme cold temperature warnings are issued by the National Weather Service (NWS). Morrison County Emergency Management assists with sharing this information with the public.

*Extreme Cold Safety Awareness:* Morrison County Emergency Management and Morrison 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.

## **Drought**

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

*Morrison County Soil and Water Conservation District:* The Morrison 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.

*Morrison County Water Plan:* The Morrison County Water Plan (2017-2022) is written and overseen by the Morrison County Soil and Water Conservation District. The plan identifies the priority water resource concerns in the county for groundwater, surface water and land use and development and lists goals, objectives, and measurable outcomes for protection, management, and development of water and related land resources over a 5-year implementation period.

## **Flooding**

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

*Floodplain Ordinance and Mapping:* Morrison County's Planning & Zoning Department maintains the floodplain management ordinance and floodplain maps for the county (Section 1000, Morrison County Land Use Control Ordinance). The Land Services 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 Morrison County. The Land Services Office can assist county residents in determining whether their property is affected by an officially mapped flood area.

*Shoreland Regulations:* Morrison County Land Use Control Ordinance – Section 700, Shoreland District Uses and Standards establishes the regulations for development adjacent to shorelands, including bluff impact zones, stormwater management standards, and lowest floor elevation in accordance with floodplain regulations.

*Transportation Improvement Plan:* Morrison County Public Works Department maintains a 5-year Transportation Improvement Plan that identifies and schedules road improvement projects that include measures for flood mitigation, including installation of new box culverts.

*Morrison County Water Plan:* The Morrison County Water Plan (2017-2022) is written and overseen by the Morrison County Soil and Water Conservation District. The plan identifies the priority water resource concerns in the county for groundwater, surface water and land use and development and lists goals, objectives, and measurable outcomes for protection, management, and development of water and related land resources over a 5-year implementation period.

*Buffer Law:* Morrison County Soil and Water Conservation District enforces requirements of 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.

## Dam Failure

*Dam Emergency Action Plans (EAP's):* Allete, Inc. owns and manages two high-hazard potential dams in Morrison County, located in the city of Little Falls and the city of Pillager. Allete maintains EAP's for these dams including identification of potential inundation areas in the event of a dam failure.

## 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 Morrison County Plan. This framework, as outlined below, will allow for integration of the mitigation actions that are listed by Morrison 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 10 below:

*Table 10. 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>
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>

Mitigation Strategy	Description	Example Mitigation Actions
Education and Awareness Programs	These are actions to inform and educate residents, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady or Firewise Communities. Although this type of mitigation reduces risk less directly than structural projects or regulation, it is an important foundation. A greater understanding and awareness of hazards and risk among local officials, stakeholders, and the public is more likely to lead to direct actions.	<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 Morrison 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 Morrison 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 Morrison 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 Bowlus, Buckman, Elmdale, Flensburg, Genola, Harding, Hillman, Lastrup, Little Falls, Motley, Pierz, Randall, Royalton, Sobieski, Swanville, and Upsala.

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

### Number (#)

Each mitigation action is identified by a number.

**Hazard**

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

**Mitigation Strategy**

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

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

See Table 10 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 Morrison 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 11 provides criteria that were taken into consideration in the process.

*Table 11. 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><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></ul>

Ranking	Criteria
Moderate Priority	<ul style="list-style-type: none"> <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 Morrison County Mitigation Action Chart is provided in Table 12. Appendix H provides the mitigation action charts developed for each city participating in the HMP update.

*Table 12. Morrison 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 Everbridge emergency notification alert system.	Existing High 2023-2028	Morrison County Emergency Management (MCEM)	Morrison County maintains the Everbridge Mass Notification System which allows residents and visitors to sign up or "opt-in" to receive severe weather alerts targeted to their location. A link for Everbridge mass notification system is located on the Morrison County website under the Sheriff's Office/Emergency Management page. Morrison County Emergency Management has had a booth at our local county fair to encourage residents/visitors to sign up. Morrison County Emergency Management has written articles that were published in the local newspaper to educate the public about our mass notification system and to encourage sign up.	County
2	All-Hazards	Mitigation Preparedness & Response Support	Ensure the Morrison 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	Morrison 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. In partnership with the American Red Cross, Morrison 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. Morrison County Emergency Management and Morrison County Public Health are prepared to work with the Red Cross to set up sheltering sites as needed depending on the emergency.	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, MC Public Health in coord with Red Cross		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	Morrison County utilizes the county website, Sheriff's Office Facebook page, and local news media to communicate with residents and visitors on emergency preparedness.	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	MCEM participates in and promotes the NWS Severe Weather Awareness Weeks in spring and fall each year and promotes the use of NOAA weather radios by local residents, businesses, schools, long term care facilities, government buildings and visitors to receive information from the NWS. MCEM shares information with local governments and encourages them to use their communication platforms to keep residents informed. Crow Wing Coop Power & Light Company, East Central Energy, Minnesota Power, Stearns Electric Association, Todd-Wadena Electric Cooperative, Pierz Municipal, and Randall Municipal 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	Work with county departments and local jurisdictions to acquire generator backup power to support critical infrastructure and delivery of essential services during an extended power outage due to storms.	Existing Moderate 2023-2028	MCEM in coord with Local Gov't	MCEM continues to work with the county to be ready to deploy generators to county-critical facilities. MCEM also 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, Local Gov't
7	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 Public Works Dept.	Morrison County Public Works 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

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
8	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, in coord with Schools & Other Facilities	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. MCEM and local city emergency managers are available resources for these facilities in their preparedness efforts. MCEM encourages business and area nursing homes to enroll in the county's emergency notification system so they will be aware of dangerous storm events.	County, Local Facilities
9	Severe Winter Storms	Mitigation Preparedness & Response Support	Address the safety of county, city, and township roads in winter through snow removal and ice control.	Existing High 2023-2028	MC Public Works Dept. in coord with Local Gov'ts and MnDOT	Morrison County Public Works 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 Morrison County Hwy Department Snow Removal Policy. MnDOT removes snow from State Highways as well as disperses salt/sand as needed.	County
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	MC Public Health in coord with Local Gov't and MHP's	Morrison 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.	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	In 2022, Morrison County Emergency Management worked with the National Weather Service to begin offering Storm Spotter training to local fire and law enforcement departments and local residents that wish to be trained as spotters. Law enforcement training completed.	County, NWS

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
12	Severe Summer Storms	Mitigation Preparedness & Response Support	Work with local governments to ensure the functionality of outdoor warnings sirens to warn residents of dangerous high wind or tornado events.	Existing High 2023-2028	MC Sheriff's Office in coord with Local Gov'ts	There are 28 outdoor warning sirens located in Morrison County which are tested on a monthly basis by the Morrison County Sheriff's Office. Warning sirens are owned and maintained by the cities where they are located. All sirens are remotely activated by the Morrison County Sheriff's Office in the event of a tornado.	County, Local Gov'ts
13	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
14	Severe Summer Storms	Structure & Infrastructure Projects	Provide assistance to communities in addressing the need for the construction of storm shelters or tornado safe rooms in areas where people are vulnerable to high wind or tornadic events.	Existing Moderate 2023-2028	MCEM in coord with Local Gov't	Morrison County has many mobile home parks and seasonal travel trailer parks and campgrounds. Some have storm shelters or designated shelter areas, but most do not. The campgrounds are very active during summer and fall months. An additional 160-site campground has been permitted on Lake Lena as well as existing resort/camping expansions in the northwest lakes area of the county. MCEM will work to provide assistance to help assess need, possible construction options, and assist in applying for possible FEMA grant funding to address tornado safe rooms where needed.	County, FEMA HMA, Other (TBD)
15	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 Land Services	Morrison County Land Services will encourage communities to be in compliance with MN DNR watering restrictions when such guidelines are established. Morrison County Land Services does not regulate wells, water appropriation or water use. The MN DNR places restrictions on high volume wells in time of drought and also investigates well interference cases.	County

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
16	Drought / Wildfire	Education & Awareness Programs	Work in partnership with state, county, and local partners to conduct wildfire prevention campaigns to raise awareness of the dangers of wildland fire.	Existing High 2023-2028	MCEM in coord with MN DNR Forestry and local fire departments	During times of drought, and increased associated wildfire danger, MCEM will work to increase wildfire prevention outreach in partnership with MN DNR Forestry, local fire departments, local governments, and schools. Public awareness of wildfire risk will include a focus on drought conditions, causes of human-caused wildfires, and the direct and indirect costs associated with those fires during times of drought. MCEM and local fire departments will seek to engage local school districts to continue and expand upon wildfire prevention for youth within Morrison County.	MCEM, Local funding
17	Wildfire	Local Planning & Regulations	Work with the MN DNR Firewise Program to develop a County Community Wildfire Protection Plan (CWPP) for Morrison County.	New Moderate 2023-2028	MCEM in coord with MN DNR Firewise and local fire departments	MCEM will seek to work with the MN DNR Firewise Program and local fire departments to conduct a coordinated, comprehensive risk assessment for wildfire risk and targeted wildfire mitigation activities. Funding for development of the CWPP may be sought from the Community Wildfire Defense Grant (CWDG).	County, CWDG
18	Wildfire	Education & Awareness Programs	Encourage private landowners in high-risk wildfire areas of the county to assess and manage their wooded areas to reduce the risk of wildfire.	In- Progress High 2023-2028	MCEM in coord with local FD's, Morrison SWCD and NRCS	MCEM will seek to work in coordination with the MN DNR Firewise Program and local fire departments to encourage property owners in high-risk wildfire areas to assess and address wildfire mitigation measures for their property. Firewise grant funding may be available to help support these efforts.	County, MN DNR Firewise, RCPP funds

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
19	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 Land Services	<p>In addition, the Morrison SWCD in partnership with the USDA NRCS National and State offices has received grant monies to help private landowners manage their wooded areas to reduce the risk of wildfire and potentially pay for prescribed fire on these properties. The next five years (2022-2027) the SWCD will be receiving \$2.7 million in Regional Conservation Partnership Program (RCPP) funds and just this last year received \$400,000 for staffing a forester and contracting the Forest Stewards Guild to provide training on prescribed burning in woodland areas.</p> <p>Morrison County Land Services maintains the floodplain management ordinance and floodplain maps for the county (Section 1000, Morrison County Land Use Control Ordinance). Morrison County Land Services Department also enforces the county's Land Use Control Ordinance – Section 700, Shoreland District Uses and Standards. This ordinance establishes the regulations for development adjacent to shorelands, including bluff impact zones, stormwater management standards, and lowest floor elevation in accordance with floodplain regulations.</p>	County

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
20	Flooding	Local Planning & Regulations / Structure & Infrastructure Projects	Plan for and implement measures to address minor localized flood reduction projects for roads, bridges, and culverts throughout the county.	In- Progress High 2023-2028	Morrison SWCD in coord with MC Public Works Dept. and Townships	Morrison County Public Works maintains a 5-year Transportation Improvement Plan that identifies and schedules road improvement projects that include measures for flood mitigation, including installation of new box culverts. The MC Works Dept. works in coordination with the Morrison SWCD and townships on necessary flood and erosion mitigation measures to improve township roads and culverts damaged by high rain events. Over the last several years the Morrison SWCD has led an effort to coordinate with townships to conduct a countywide culvert inventory. MC Public Works and the Morrison SWCD have coordinated to build the inventory as a joint effort to inventory the county centerline culverts and the township centerline townships. The project field portion was completed in 2022 after six years of working on it. Morrison County Public Works continues to provide assistance on this with the SWCD as needed.	SWCD, County, State, Federal
21	Flooding	Local Planning & Regulations / Structure & Infrastructure Projects	Work in partnership with the Morrison County Soil & Water Conservation District and other watershed partners to address mitigation plans, policies, and projects that address erosion and localized flooding.	In- Progress Moderate 2023-2028	MCEM, MC Land Services Dept. in coord with Morrison SWCD	Morrison County is participating in the One Watershed One Plan (1W1P) efforts to align local water planning across the watersheds over county boundaries. Currently, four plans are underway (Rum, Mississippi River- St. Cloud, Mississippi River – Brainerd, Long Prairie). Morrison County regularly partners with the SWCD for shoreline and wetland mitigation projects and works in partnership with the SWCD to administer the MN Buffer law. Morrison County also has a cooperative partnership with the MN DNR for ensuring accurate administration of the floodplain regulations and participation in the drafting of the statewide model floodplain ordinance.	County, Local Gov't, SWCD Cost Share Grant Funding

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
22	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 Land Services in coord with Local Gov'ts	There are currently no projects for conducting property buyouts, however Morrison County Emergency Management and Morrison County Land Services 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

# Section 6 – Plan Maintenance

## 6.1 Monitoring, Evaluation, and Updating the Plan

The Morrison 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 Morrison County HMP.

The Morrison 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 Morrison 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 Bowlus, Buckman, Elmdale, Flensburg, Genola, Harding, Hillman, Lastrup, Little Falls, Motley, Pierz, Randall, Royalton, Sobieski, Swanville, and Upsala as well as other city elected officials or staff as needed. The Morrison 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 Morrison 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 Morrison 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 Morrison 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, Morrison 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

Morrison 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 Morrison County and its jurisdictions (see Appendix H and Section 5.3). The cities of Bowlus, Buckman, Elmdale, Flensburg, Genola, Harding, Hillman, Lastrup, Little Falls, Motley, Pierz, Randall, Royalton, Sobieski, Swanville, and Upsala 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 Morrison 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 Morrison 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 Morrison 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, Morrison County will take the following measures:

- The plan will be available on the U-Spatial-hosted HMP website and linked to from the Morrison County Emergency Management page on the Sheriff's Office website. From the HMP website, the public has the opportunity for continued viewing and feedback of the plan. 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, Morrison 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 Morrison 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 Morrison 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**

# Morrison County

## Local Mitigation Survey Report

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### Overview

As part of Morrison 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

Morrison County	Page 2
City of Bowlus <b>(no LMS)</b>	-
City of Buckman <b>(no LMS)</b>	-
City of Elmdale	Page 11
City of Flensburg	Page 13
City of Genola	Page 16
City of Harding	Page 19
City of Hillman <b>(no LMS)</b>	-
City of Lastrup	Page 21
City of Little Falls	Page 24
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City of Upsala	Page 51

## MORRISON 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.

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	High	Increasing
Tornadoes	X	Moderate	Increasing
Windstorms	X	Moderate	No change
Lightning		Low	No change
Hail	X	Moderate	No change
Flooding	X	High	No change
Extreme Cold	X	Moderate	No change
Extreme Heat		Low	No change
Drought	X	Moderate	No change
Wildfire	X	High	No change
Landslides		Low	No change
Dam Failure		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.

- July 11, 2016 – Severe storm dumped over 6 inches of rainfall in Morrison County causing road washouts, damaged culverts, downed trees and debris on roadways causing over \$271,000 in damages. This storm resulted in a local state of emergency declaration. State disaster 2016-SD-008.
- September 7, 2016 – EF1 tornado touched down in Morrison County impacting Camp Ripley and in Darling Township. Extensive damage to buildings, trees, solar panel array and military equipment in Camp Ripley. In Darling Township, storm damage included downed trees, structural damage to seasonal homes, overturned 5<sup>th</sup> wheel camper, docks and boats were capsized. Over \$35 million in total damages. Local emergency state of emergency declared however, it didn't meet criteria for state or federal disaster assistance. The PDA revealed that the costs and damages inside Camp Ripley were eligible for assistance from existing federal programs or private insurance and were not eligible under the Stafford Act or state disaster assistance programs. There were no extensive damages outside of the base.

- September 20, 2017 – Severe storms caused downed trees, power lines. Total damage \$30,000. Did not meet criteria for state or federal disaster assistance.
- June 29, 2018 - Severe storm with high winds of 61-68 MPH caused tree damage and building damage (roof partially torn off).
- July 16, 2019 – Severe storm caused trees and power lines down, hail, some localized flooding and ponding in the streets including Camp Ripley.
- September 3, 2019 – Severe storm with high winds caused tree damage and a roof lifted off a local private business.
- March 29, 2020 – Heavy rain and snow storm caused down power lines impacting local utility coops- total damages of \$430,813. Local state of emergency declaration. State disaster 2020-SD-042.
- June 29, 2020 – Severe storm (over 9 inches of heavy rain) caused approximately \$775,481.00 to public infrastructure with most damage from washed out roadways, culverts, gravel roads and debris on roadways. Local state of emergency declaration. State disaster 2020-SD-046.
- August 14, 2020 – Four tornadoes confirmed with one EF-1 tornado and three EF-0 tornadoes resulted in tree damage, downed power lines, debris and damage to local private businesses.
- Wildfire averages in Morrison County are 4<sup>th</sup> highest occurrence in the state. In the last five years, 2050 acres have burned (1396 non-forested, 104 acres forested). In the 5-year period, 2 residences were damaged, 2 outbuildings damaged, and 1 outbuilding destroyed for a loss of approximately \$21,570. Wildfires also caused 1 civilian fatality in the last 5 years.

**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.
<b>Flooding</b>	Morrison County has experienced at least two heavy rain events with over 6+ inches of rainfall which caused area flooding, road washouts, and damage to culverts. Ice jams caused flooding over roadways and put additional stress on structural integrity of bridges.
<b>Ice Storms, Blizzards</b>	Morrison County has two municipal utility COOPs located in the eastern part of the county that sustained significant damage to their power infrastructure due to heavy snow storms/ice storms/blizzards. Most of their critical infrastructure consists of overhead power lines making them susceptible to damage and power outages.

<b>Thunderstorms, Windstorms and Tornadoes</b>	Morrison County has many mobile home parks and seasonal travel trailer parks and campgrounds. Some have storm shelters or designated shelter areas, but most do not. The campgrounds are very active during summer and fall months.
<b>Wildfire</b>	Morrison County is heavily forested in the northwest part of county with the rest of the county agricultural making our county more vulnerable to the spread of wildfire. Large wetland complexes in the county also increase threats to developed properties and communities.

**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 Minnesota County Historical Society (MCHS), which owns the Weyerhaeuser Museum is working with Morrison County and the City of Little Falls to secure funding to pay for engineering design to restabilize the riverbank. MCHS is looking for \$210,000 total from the city of Little Falls and Morrison County to pay for an engineering design on the project and provide matching funds for potential grant opportunities.

We have encouraged business, residents, and area nursing homes to enroll in the county's emergency notification system so they will be aware of dangerous storm events.

Morrison County has increased the use of our website and Facebook page to communicate with residents on emergency preparedness.

Updated FEMA floodplain maps are expected to be adopted soon and will provide more accurate mapping of flood prone areas.

Morrison County SWCD monitors for compliance with the MN Buffer Law and Morrison County Land Services enforces violations of the buffer law.

Morrison County SWCD has nearly completed a culvert inventory that records the location, size and elevation of the culverts within the county.

Morrison County has contributed to the outlet fee to be paid to Todd County if/when the Lake Shamineau pumping project comes online.

Morrison County Land Services Department has adopted the model Shoreland ordinance with some elevated standards for Shoreland property including structure setbacks from public waters and sensitive features such as bluffs.

MN DNR Forestry has encouraged local governments (townships and municipalities) and fire departments to apply for FIREWISE projects to include preplanning and infrastructure improvements.

MN DNR Forestry works with willing landowners to practice sustainable forest management to include fuels reduction on forested private lands within Morrison County.

**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.**

An additional 160-site campground has been permitted on Lake Lena as well as existing resort/camping expansions in the northwest lakes area of the county.

In general, we have noticed an increase in more frequent high-rain events in the last 5 years.

New developments of residential properties the past 10 years have been properties built on slab. If a wind event happens in these areas, there will be added risk to the residents due to not having basements to shelter in.

Morrison County has a long history of extensive and large peatland fire complexes. In the Spring, and during times of drought, these wetland complexes are a major threat and areas where large wildfires occur. Grassland fires are also a prime driver in wildland fires, and actually cause the most loss in Minnesota.

**PART B: LOCAL MITIGATION CAPABILITIES ASSESSMENT**

The purpose of the questions in Part B is to identify what local-level capabilities (strengths or gaps) exist for implementing mitigation in the community.

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

Morrison County Emergency Management relays all severe weather/winter weather statements received by the National Weather Service utilizing the Morrison County Facebook page.

Morrison County Emergency Management participates in the annual Severe Weather Awareness Week and Winter Hazard Awareness Week campaigns sponsored by the National Weather Service and Minnesota Department of Emergency Management each April and November. Throughout each week, the county shares the campaign topics via the Morrison County Sheriff’s Office Facebook page and local news media.

In 2022, Morrison County Emergency Management worked with the National Weather Service to provide SKYWARN Storm Spotter training to law enforcement departments. We continue to work with the NWS to offer SKYWARN Storm Spotter training to local fire departments and first response teams to be trained.

Morrison County utilizes the Morrison County website, Morrison County Sheriff’s Office Facebook page and local news media to communicate with residents and visitors on emergency preparedness.

Morrison County works with the NWS, MN DNR and local communities to raise public awareness of dry conditions and increased danger of wildfire and recommended water restrictions if needed.

**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?**

Morrison County maintains the Everbridge Mass Notification System which allows residents and visitors to sign up or "opt-in" to receive severe weather alerts targeted to their location. A link for Everbridge mass notification system is located on the Morrison County website under the Sheriff's Office/Emergency Management page. Morrison County Emergency Management has had a booth at our local county fair to encourage residents/visitors to sign up. Morrison County Emergency Management has written articles that were published in the local newspaper to educate the public about our mass notification system and to encourage sign up.

Morrison County actively promotes the use of NOAA weather radios by local residents, businesses, schools, long term care facilities, government buildings and visitors to receive information from the National Weather Service.

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

Yes, Morrison County has FEMA Mapped High Risk Areas and participates in the NFIP. Morrison County's Planning and Zoning Department maintains the floodplain management ordinance and floodplain maps for the county (Section 1000, Morrison County Land Use Control Ordinance). The Planning and Zoning Department 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 Morrison County. The Planning and Zoning Office can assist county residents in determining whether their property is affected by an officially mapped flood area.

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

Morrison 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.

Morrison County Public Works Department maintains a 5-year Transportation Improvement Plan (2022-2026) that identifies and schedules road/bridge improvement projects that include measures for flood mitigation and installation of new box culverts.

Morrison County has a Major Project Capital Plan (2022-2026) that plan for future development within the county.

Morrison County has FEMA Mapped High Risk Areas and participates in the NFIP. Morrison County's Planning and Zoning Department maintains the floodplain management ordinance and floodplain maps for the county (Section 1000, Morrison County Land Use Control Ordinance).

Morrison County Land Use Control Ordinance- Section 700, Shoreland District Uses and Standards establishes the regulations for development adjacent to shorelands, including bluff impact zones, stormwater management standards, and lowest floor elevation in accordance with floodplain regulations.

Morrison County Soil and Water Conservation District enforces requirements to 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.

Morrison County Water Plan (2017-2022) is written and overseen by the Morrison County Soil and Water Conservation District. The plan identifies the priority water concerns in the county for groundwater, surface water and land use and development and lists goals, objectives, and measurable outcomes for protection, management, and development of water and related land resources over a 5-year implementation period.

Morrison 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.

Morrison County Public Works 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 Morrison County Highway Department Snow Removal Policy. MNDOT removes snow from state highways as well as disperses salt/sand as needed.

Morrison County Public Works Department and local utility providers regularly maintain and clear their right of ways trees, vegetation, and debris to prevent the creation of additional hazards or blocking road/site access resulting from severe spring and summer storm events.

MN DNR Forestry trains with local fire departments on wildfire incidents and encourages the use of Community Wildfire Protection Plans.

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

Morrison County staff related to mitigation efforts include the Emergency Management Director (Sheriff) and Emergency Management Deputy Director (Emergency Manager); Public Works Director; Land Services Director; GIS Specialist; Public Health Director and Public Health Emergency Preparedness Coordinator.

In partnership with the American Red Cross, Morrison County has identified, engaged and designated 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. Morrison County Public Health maintains the list of the shelters.

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.**

Morrison County Emergency Management participates in the annual Winter Hazard Awareness Week and Severe Weather Awareness Week campaigns sponsored by the National Weather Service and Minnesota Department of Homeland Security and Emergency Management. Throughout each week, the county shares information on severe weather that can occur, education on alerts and warning and resources for emergency preparedness.

Morrison County maintains the Everbridge Mass Notification System which allows residents and visitors to sign up (“opt-in”) to receive weather alerts targeted to their location, along with local emergency alerts and general situational awareness. The system is capable of sending the alerts by telephone, text message, email or mobile app. The system can also be used to alert everyone in or passing through a community to any qualifying event through the Integrated Public Alert & Warning System (IPAWS). A link for Everbridge Mass Notification System is located on the Morrison County website under the Sheriff’s Office/Emergency Management page.

Morrison County utilizes its outdoor warning sirens and local media partners for emergency notification and tests the outdoor warning sirens on the first Wednesday of each month.

Morrison County Emergency Management utilizes the Morrison County Sheriff’s Office Facebook page and local news media to communicate with residents and visitors on emergency preparedness.

Morrison County actively promotes the use of NOAA weather radios by local residents, businesses, schools, long term care facilities, government buildings and visitors to receive information from the National Weather Service.

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

Morrison County actively promotes the use of NOAA weather radios by local residents, businesses, schools, long term care facilities, government buildings and visitors to receive information from the National Weather Service.

When extreme heat or cold temperature warnings are issued by the National Weather service (NWS), Morrison County Emergency Management helps share the information of personal safety and preparedness to stay safe with residents using communication using the county website, Facebook and local news media.

Morrison County assess damages due to erosion and flood damage following a significant rain/flood event to repair/replace or otherwise conduct mitigation measures for areas experiencing repetitive losses (resurfacing, culvert replacement, and bank stabilization).

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

Morrison County is participating in the One Watershed One Plan (1W1P) efforts to align local water planning across the watersheds over County boundaries. Currently, four plans are

underway (Rum, Mississippi River- St. Cloud, Mississippi River – Brainerd, Long Prairie); regular partnership with the SWCD occurs for shoreline and wetland mitigation projects; cooperative partnership with the SWCD to administer the MN Buffer law; cooperative partnership with the DNR for accurate administration of the floodplain regulations and participation in the drafting of the statewide model floodplain ordinance

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

Morrison County Comprehensive Local Water Plan addresses water resources on many fronts and the discusses climate and long-term development goals and objectives.

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

Crow Wing Coop Power and Light Company, East Central Energy, Minnesota Power, Stearns Electric Association, Mille Lacs Energy, Todd-Wadena Electric Cooperative, Pierz Municipal, and Randall Municipal

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

Generator backup power is in place for the Morrison County EOC/Sheriff's Office, Morrison County Government Center excluding the historic courthouse. There may be other facilities that need 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.**

Continue to promote residents to prepare for severe weather and winter hazards, to have NOAA weather radios, and to sign up for Morrison County's Everbridge Mass Notification System and Morrison County Sheriff's Office Facebook page for emergency notifications and other information.

Work with municipalities/rural electric coops to encourage them to address burying powerlines or strengthening power poles to avoid power outages from high wind and storms.

Work with communities in the county on the construction of storms shelters or tornado safe rooms in areas where there are vulnerable populations, such as municipal campgrounds, mobile home parks and schools. A coordinated approach is needed to evaluate existing facilities and consider whether new construction or a retrofit is appropriate.

Obtain portable generators to deploy to county-critical facilities and designated shelter facilities.

Address road improvements, ditch maintenance, and bank stabilization projects needed to mitigate against high rain events identified by townships, Morrison County Public Works Director and Land Services Director.

Continue to provide assistance to townships and cities on road infrastructure mitigation projects to reduce the impacts of localized flooding (i.e., road repair, culvert replacements).

Work with the MN DNR to develop a Community Wildfire Protection Plan (CWPP) for Morrison County and promote participation in the DNR's FIREWISE program. A CWPP would help develop more specific risk assessment data for the county, but all of the MN DNR's FIREWISE program material is voluntary unless the county or local governments choose to enact ordinances. Morrison County can pursue the opportunity to work with the MN DNR Firewise Program and local fire departments to conduct a coordinated, comprehensive risk assessment for wildfire risk and identify High-Risk Wildfire Areas and targeted wildfire mitigation activities.

Encourage healthcare and other critical facilities utilized for care of residents and visitors, including designated severe weather/emergency shelters (schools, churches, etc.) to have emergency plans in place as well as generator backup power.

Encourage cities that do not participate in the NFIP to do so. (Buckman and Genola

Encourage local fire departments to assess their needs for rural water access for wildland fire fighting and to work with the MN DNR to evaluate the potential for dry hydrant/well access projects.

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

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

Lack of property owner understanding of regulations that have been implemented to protect the resource and private investment and willingness to put long-term value ahead of personal need/want.

Some roads, bridges and culverts within Morrison County continue to need improvement 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.

**PART D: SURVEY PARTICIPANTS**

Victoria MacKissock, Morrison County Emergency Manager

Amy Kowalzek, Morrison County Land Services Director

Jason Kern, MN DNR Forestry, Resource Protection Program Forester, 1.5 hours

## CITY OF ELMDALE

### 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	Moderate	No Change
Tornadoes	X	Moderate	No Change
Windstorms	X	Moderate	No Change
Lightning			
Hail			
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.

The city experienced has not experienced any major storm events in the last 5 years that caused any damages.

- 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.
N/A	N/A. We are a small city with no community assets of concern to natural hazards such as winter storms and wind events.

- 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.

Nothing 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.**

Nothing noted.

## **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 post information at City Hall and have an outdoor warning siren that is remotely activated by the Morrison County Sherriff’s Office when necessary.

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 don’t do anything currently. Over half of our residents are over the age of 70 and don’t such technology such as cell phones. When the outdoor siren goes off the city clerk makes personal phone calls to about 7 households to instruct them to go to the basement because they don’t have cell phones and usually do not hear the warning siren inside their homes.

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

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

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.**

We are small city with only our City Council and City Clerk as staff. We would work with Morrison County as needed if we had any mitigation projects of concern.

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

City Clerk does direct outreach to about 7 households by phone in the event the warning siren goes off to tell them to go into their basement for safety.

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

We have a small city budget and would look to Morrison County for assistance.

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)

Minnesota Power

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

Our City Hall does not have back up power. We have no other critical facilities.

#### **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.

Encourage residents to sign up for the county's emergency notification system if they have cell phones. We have no other projects in mind for mitigation.

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

Over half of our residents are over age 70 and do not utilize technology such as cell phones.

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

Joy Koroll, City Clerk

### **CITY OF FLENSBURG**

#### **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.
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Winter Storms (Blizzards, Ice Storms)			
Tornadoes	X	Moderate	No Change
Windstorms	X	High	No Change
Lightning			
Hail			
Flooding			
Extreme Cold	X	High	No Change
Extreme Heat	X	High	No Change
Drought	X	Moderate	No Change
Wildfire	X	Moderate	No Change
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 in the past five years.

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.
Sewer	Our sewer is approximately 70 years old. System is getting old and worn.

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 an excellent emergency siren system.

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.**

Social Media and the city's emergency 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?**

No

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

The city does not have FEMA-mapped high-risk areas and does not participate in the NFIP. We are a small city and residents have their own insurance.

- 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.**

We only have our City Council. We work with and rely on Morrison County.

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

We rely and work with Morrison County

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

Highway MnDOT for work on roads.

- 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)**

Minnesota Power

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

No

## **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.**

Maintain our city siren as needed.

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**

City Clerk-William Boser  
Mayor-Jim Gorka

### **CITY OF GENOLA**

#### **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	Moderate	No Change
Tornadoes	X	High	No Change
Windstorms			
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 in the past five years.

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.
Windstorms, Tornadoes, Winter Storms	Damage can occur to electrical, trees, and buildings during these sorts of storm events.

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 installed a new outdoor warning siren between 1995-1998 for weather related issues.

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**

The purpose of the questions in Part B is to identify what local-level capabilities (strengths or gaps) exist for implementing mitigation in the community.

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

Our outdoor warning siren is activated by Morrison 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?**

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

We are only a population of 70. The city does not participate in the NFIP. There are no areas of flood risk in the city. / Note – the Morrison County NFIP data shows that the city of Genola is not participating but has FEMA mapped high risk areas (annexed county SFHA). The MN DNR Floodplain Management Program is conducting follow up with the city to provide information about how the city’s mapped flood risk and how to enroll in the NFIP and develop an appropriate level 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.**

We only have our City Council. We work with and rely on Morrison County.

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

We work with and rely on Morrison County.

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

Highway MDOT on roads.

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*)**

Minnesota Power

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

No.

### **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.**

Maintain our city siren as needed.

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**

Tammy Giuliani, City Clerk  
Larry Korf, Mayor

## CITY OF HARDING

### 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	Moderate	No change
Tornadoes	X	Low	No change
Windstorms	X	Moderate	Increased
Lightning	X	Low	No change
Hail			
Flooding			
Extreme Cold	X	Moderate	No change
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 May 2022 we had high winds tip trees over and do some damage to houses.

- 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	The city has overhead power which are prone to failure in storms from trees falling on them.
Extreme cold and blizzards	If the power were to go out during extreme cold the residents would be vulnerable to not having heat for their homes.

- 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 received a grant to put up a new tornado siren to replace the old one that was not working. Now all the residents can hear the new siren when it goes off to warn them of severe weather.

- 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.**

There have not been any real changes in the community.

## **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 really do not do anything for the residents.

- 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?**

No, our city does not currently do this.

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

The city does not have FEMA-mapped high-risk areas and does not participate in the NFIP.

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

We have installed a tornado siren to warn residents of severe weather.

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

The city council is responsible for any mitigation in the community.

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

We do not have any programs in place.

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

The city received a grant from community development to install a new tornado siren.

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 have any plans in place.

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

Rural electric coop

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

No

### **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.

Public education on how to be prepared for bad storms and extended power outages.

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

The city does not have a website or Facebook page to do better outreach to our residents.

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

Corey Hayes, City Clerk

## **CITY OF LASTRUP**

### **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	Moderate	No change
Tornadoes	X	High	No change
Windstorms	X	High	No change
Lightning	X	Low	No change

Hail	X	Low	No change
Flooding	X	Moderate	No change
Extreme Cold		Low	No change
Extreme Heat		Low	No change
Drought		Low	No change
Wildfire		Low	No change
Landslides		Low	No change
Dam Failure		Low	No change

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.

Spring Storm in May 2022- downed trees, tin torn from buildings.

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.
Tornadoes	No warning siren system installed in the city.
Flooding	Drain/Sewer system could use upgrading.

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.

None

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?

No

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

According to the MN DNR NFIP status for Morrison County, the city of Lastrup does participate in the NFIP and has FEMA-mapped high-risk areas. The city is working with the MN DNR Floodplain Manager to review their most current FEMA flood risk map and update their city ordinance. The current floodplain ordinance on file for the city was adopted 2/20/1991.

**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.**

City funding is used to replace culverts when it has been needed.

**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)**

Minnesota Power

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

No

**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 would like to install a warning siren system.

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

We don't have someone to update our website with information, and we have no Facebook page.

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

Kay Hoheisel, Mayor  
Rayme Hoheisel, resident

### **CITY OF LITTLE FALLS**

#### **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	Moderate	No Change
Tornadoes		Low	No Change
Windstorms	X	Moderate to High	No Change
Lightning		Low	No Change
Hail		Low	No Change
Flooding	X	Moderate	No Change
Extreme Cold	X	Moderate	No Change
Extreme Heat		Low	No Change
Drought		Low to Moderate	Increased
Wildfire		Low	No Change
Landslides	X	Moderate	No Change
Dam Failure		Low	No Change

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 June, 2018 we experienced a major rain event that caused street flooding and basement flooding for many residential properties.

In approximately 2019, a windstorm came through the city and took parts of roofs off of 2-3 buildings.

In 2020, the city experienced a rain event that had 10” of rain fall in a 5-hour period. This caused surface flooding, over-charged the stormwater system, and inundated the wastewater treatment plant.

A pair of major rain events — one in spring 2015 and another in June 2020 — caused significant erosion on the bank of the Mississippi River. The Weyerhaeuser Museum is only about 20 feet from the edge. Both events caused a massive slide of the riverbank along the museum’s shoreline and into the Mississippi River.

In 2021, the city experienced a prolonged drought, from June until December. The city enacted water restrictions, and bans in ordered to meet State orders. There were loses of numerous trees, and indications are that we will be prone to oak wilt and other diseases over the next couple years. This drought was not a common experience for the city but has potential to occur again if drought patterns continue in the state.

In spring 2022 we had thunderstorms that came through. Lightning strikes caused damage to several homes and to communication lines within the area.

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.
<b>Winter Storms, Ice Storms, Blizzards</b>	<p>Much of the city’s municipal electrical service (owned and operated by Minnesota Power) 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.</p> <p>Major blizzards would create challenges for snow renewal, and maintaining emergency routes through the city. We’re limited in our ability to clear 4” or more of snowfall in a single 8-hour work day.</p>
<b>Windstorms and Tornadoes</b>	<p>Much of the city’s municipal electrical service (owned and operated by Minnesota Power) consists of overhead power lines and electrical poles. Those overhead lines and power poles are prone to failure during windstorms and tornadoes.</p> <p>Many homes in new developments are built on slab with no basement. These residents are at greater risk during severe wind events.</p> <p>We have one campground in the City at Lindbergh State Park, which is operated by the MN DNR. I’m not sure if they have a storm shelter. There are also 3 mobile home parks within the city that would have residents at higher risk to high wind events. However, these trailer parks have storm shelters and plans in place as per MDH requirements.</p>
<b>Lightning</b>	Recent lighting strikes caused damage to several houses and damaged phone and internet service in the area.

<b>Extreme Cold</b>	<p>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>In the past we have also experienced frozen water services and some residential homes experienced burst pipes from extended extreme cold.</p>
<b>Flooding</b>	<p>Our wastewater treatment facility is located along the Mississippi River. We have not had any flooding issues with the location, but if the upstream dam were damaged it could pose a threat to the facility.</p> <p>The City of Little Falls has the Mississippi River running through the community. The city's Wastewater Treatment plant is the most vulnerable asset to a flood as it is set below the dam and within the floodplain.</p> <p>Our City Hall, Water Treatment Plant, Public Works Building, East Fire Hall, and Police Station are all within two blocks of the river, and above the dam. If flooding conditions were extreme, they may all be vulnerable to flooding.</p> <p>The city has 19 lift stations and some are within or very close to the floodplain.</p> <p>There are 11 parcels, mostly parks, parts of the Municipal golf course or vacant land that are also within the floodplain, and are quite vulnerable to a flood event. A couple of the parks have assets like bathrooms, shelters and landscaping that certainly would be damaged during a major flood event.</p> <p>The Mississippi River runs through the city with a dam that is owned and operated by Minnesota Power. It would be devastating to the downstream areas in the event of extreme flooding or a dam failure.</p>
<b>Landslides</b>	<p>The Weyerhaeuser Museum continues to be at risk for erosion issues along the Mississippi River. The Minnesota County Historical Society, which owns the museum is working with Morrison County and the City of Little Falls to secure funding to pay for engineering design on the project.</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.**

We have encouraged business, residents, and area nursing homes to enroll in the county's emergency notification system so they will be aware of dangerous storm events.

The city has also increased use of our website and Facebook page to communicate with residents on emergency preparedness. The city is in the process of updating and enhancing our city website and city Facebook page.

The city also had one outdoor warning siren replaced and had two others rebuilt.

The Minnesota County Historical Society (MCHS), which owns the Weyerhaeuser Museum is working with Morrison County and the City of Little Falls to secure funding to pay for engineering design to

restabilize the riverbank. MCHS is looking for \$210,000 total from the city of Little Falls and Morrison County to pay for an engineering design on the project and provide matching funds for potential grant opportunities.

**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.**

New developments of residential properties the past 10 years have been properties built on slab. If a wind event happens in these areas, there will be added risk to the residents due to not having basements to shelter in.

The increase in runoff from property increases the risk of flooding along rivers. The increase runoff is from a number of causes, including development, addition of drain tile in farm fields, and not maintaining a vegetated buffer between the waterway and erodible soil.

There is private construction project slated for a new 49-unit housing project, which would increase the population in the community that may be affected by future severe storm events.

**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 and Facebook page. The city also provides public service announcements to the local radio and newspaper.

**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.

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

Yes, the City has a flood plain management ordinance and enforces it. The ordinance sections are as follows:

- a. 11.50 - Floodplain Management
- b. 11.51 - Statutory Authorization, Findings of Facts and Purpose
- c. 11.52 - General Provisions
- d. 11.53 - Establishment of Floodplain Districts
- e. 11.54 - Floodway Districts
- f. 11.55 - Flood Fringe District
- g. 11.56 - General Floodplain District
- h. 11.57 - Subdivisions

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

Our city has a 20-year Comprehensive Plan that is designed to plan for the future physical growth of the city and appropriate land uses.

We have a 5-year Transportation Plan (2020-2025) that identifies and schedules road improvement projects to reduce over-the-road repetitive flooding.

The city works with our 2 mobile home parks to be in compliance with the Minnesota Department of Health requirements to plan for the evacuation and sheltering of the residents of the park in times of severe weather such as tornadoes, high winds, or floods.

We have a sump pump ordinance in place to mitigate against overload of the city's I&I system.

During land development, we require stormwater analysis consistent with the MPCA to minimize flooding. The city limits the amount of impervious coverage on a lot to promote infiltration. Contractors are required to obtain a land disturbance permit when construction activities occur on private property.

The City of Little Falls is currently developing an Emergency Operations Plan for the city to identify plans and procedures in place to respond to all-hazard events.

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

Our Fire Chief is the city's designated Emergency Manager. We have a city engineer and a public works director that address road maintenance issues for flooding (culverts, repetitive flooding). The city employs 5 employees within the engineering department to address stormwater. We have worked with the county emergency manager to address upgrade of our warning siren and local flood issues.

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

Our city works with the county to participate in the National Weather Service's annual Severe Winter/Spring Weather Awareness Week by posting severe weather awareness information out on our city Facebook page.

Our local schools practice tornado drills on an annual basis.

The local electric power company has a program to manage vegetation near powerlines to reduce risk of power outages during storms.

Each spring and fall we clean out structural sedimentation devices. After each rain fall, staff remove leaves from the storm sewer grates to improve efficiency.

Severe weather sirens are tested on the first Wednesday of each month.

**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, such as replacement of culverts. In 2020, the city worked with Morrison SWCD to install rain gardens.

**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)**

Minnesota Power

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

The city has backup generators for water and wastewater facilities and portable generators for our lift stations. The Police Department has a backup generator which provides limited power for computer servers and some lighting, but will not power the entire facility.

We do not currently have backup generators for the Fire Department and City Hall. This could pose a problem during a prolonged emergency as the primary local EOC is designated as being at City Hall.

**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 portable generator for our City Hall and Fire Department. City Hall would serve as the local EOC in a prolonged disaster and the Fire Department would also be a hub for emergency services.

Continue upgrades to city Facebook page and website to improve public outreach.

Work with the Minnesota County Historical Society (MCHS) and Morrison County to restabilize the riverbank along the Charles A. Weyerhaeuser Memorial Museum. In May, 2022 the Little Falls City Council voted 5-2 to accept a funding request of \$70,000 toward the project. The contribution from the city of Little Falls is contingent upon Morrison County funding its requested portion of the project, which is \$140,000. MCHS will also contribute \$3,000, with another \$4,000 or more in fundraising.

**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 will work to encourage more participation.

There is also new development occurring with most homes being built on slab instead of with basements – this leaves residents more vulnerable in the event of a tornado.

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

Craig Seelen, Fire Chief/Emergency Manager  
 Jon Radermacher, City Administrator  
 Greg Zylka, Mayor  
 Greg Kimman, City Engineer, Public Works Director  
 Greg Schirmers, Police Chief

### **CITY OF MOTLEY**

#### **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	Moderate	No Change
Tornadoes	X	Moderate	No Change
Windstorms	X	High	No Change
Lightning	X	Moderate	No Change
Hail	X	Moderate	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.
<b>Flooding</b>	Our city sewer lift station is vulnerable to failure during flood events if the power goes down or the lift station is flooded. Only Lift Station 2 is vulnerable to power outages, because Trident is on a separate power feed from the rest of town and rarely loses power. They rarely stop putting out waste to the lift station. We have alarm dialers to notify us so we can get over there relatively fast and connect a generator if needed. We also have homes that continue to get water in the basements.
<b>Ice Storms, Blizzards</b>	We have had occasional power outages but not more than any other town in Minnesota.
<b>Windstorms and Tornadoes</b>	We have 2 mobile home parks and a municipal campground without storm shelters where residents are vulnerable to high wind events. The park owner has supplied one resident in each park with a weather radio and a key to the free Methodist church and the other occupants of the park are instructed to go to that location in the event of dangerous storms.
<b>Extreme Cold</b>	We have seniors & children are vulnerable to extreme cold especially if the power goes down during storm events.

- 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 the past we kept up on our emergency response plan. We did add a permanent generator to City Hall, so sirens and Fire Hall lights and doors will continue to work in the event of a power outage here in town.

Harmony House and one resident's basement are the only buildings that were affected in the past by backups and we have since replaced the sewer main to a larger pipe and required Harmony House to add a check valve to their line too.

The wastewater plant has a permanent generator, and we have an agreement with Zeigler to provide a generator within 12 hours for the water plant. The City of Staples also has a generator that will connect to our water plant. We keep the water level in the tower at least 2/3rds full so in the event of an outage we have time to get a generator onsite. We also did add a permanent generator to City Hall, so sirens and Fire Hall lights and doors will continue to work in the event of a power outage here in town.

- 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.**

N/A

## **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 have a link on our website for Cass and Morrison Counties' emergency notification system and encourage them to sign up.

- 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 provides information to residents on our city website on how to sign up for emergency notifications.

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

Yes. We did have an ordinance from 1989, Ordinance #126, that I don't think got updated when we adopted the Basic Code of Ordinances back in 2003.

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

The city works with our 2 mobile home parks to be in compliance with the Minnesota Department of Health requirements to plan for the evacuation and sheltering of the residents of the park in times of severe weather such as tornadoes, high winds, or floods.

Our city provides information to new residents on how to sign up for emergency notifications.

We also just updated our Wellhead Protection Plan.

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

Our Mayor is the city's designated Emergency Manager. We have a City Engineer and a Public Works Director that address road maintenance issues for flooding. We really don't have any areas of repeated flooding or road drainage problems. The only time we have had street flooding is when the catch basins have filled with leaves or ice during the spring thaw.

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

The city participates in the county's emergency alert system and we promote residents to sign up for it by having a link on our website to the registration site.

- 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 local mitigation measures, such as replacement of culverts.

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

Not currently.

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

Minnesota Power for most of town and Crow Wing Power for the East River Road area.

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

None needed.

### **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.

Public education is a standing need and homeowners would benefit from more information on how to be prepared for bad storms and extended power outages (i.e., generators, food, water, etc).

Updating our emergency response plan would be a good Idea.

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 City's/County's emergency notification system. We need to update our city's long-range Comprehensive Plan (2000-2020) to address considerations for future hazard. We did update the Comp Plan in 2014, but I don't know that it addressed hazards other than to set a goal to continue to work with the other local units of government to maintain mutual aid agreements and to support public safety programs that serve the Motley community. Many of our residents live in mobile homes, leaving them more vulnerable in the event of a tornado or windstorm.

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

Al Yoder, Emergency Manager/Mayor  
Bruce Brotherton, Public Works Director  
Jason Borash, Police Chief  
Curt Bryniarski, past Clerk-Treasurer  
Darci Odden, current Clerk-Treasurer

## CITY OF PIERZ

### 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	High	No Change
Tornadoes	X	Low	No Change
Windstorms	X	High	Increased
Lightning	X	Moderate	No Change
Hail			
Flooding	X	Low	Increased
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.

On May 8<sup>th</sup>, 2022, we experienced straight line wind damage of about 80 mph that caused about 50 trees to fall within the city limits. There were 10 trees that fell on the city owned golf course that caused damage. In 2020 there was lightning storm that caused damage to electric transformers on the city owned electric system.

- 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	The city owned Park Complex that includes the campground, Pierz Park, and Pierz Golf Course are all prone to flooding from the Hillman Creek and Skunk River which join on the Park Complex.
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.
<b>Windstorms and Tornadoes</b>	<p>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.</p> <p>Our municipal campground is active during summer and fall months with RVs and campers and we have a shower house in the campground that doubles as a storm shelter.</p> <p>Many homes in the new developments are built on slab with no basement. These residents are at greater risk during severe wind events.</p>
<b>Extreme Cold</b>	<p>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>In the past we have experienced frozen water services and some residential homes experienced burst pipes from extended extreme cold.</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.**

In 2006 the city of Pierz installed a stormwater overflow pipe to allow storm sewer on the west side of town to overflow to the pipe and outlet to the Skunk River. The city contracted with SEH to complete a mapping of our storm sewer system to provide information to city staff and emergency responders.

In 2010 the city in conjunction with MnDOT reconstructed TH 25 through Pierz significantly adding to the storm sewer capacity and abilities to serve the city.

Street projects that added or improved stormwater control since 2000 include Park Avenue, Robert Street, Kapsner St, Summer St N, 1<sup>st</sup> Ave NW.

Our municipal utility has worked to convert overhead powerlines to underground. In 2021 we buried about one mile of line underground as part of the Third Ave N project in conjunction with Morrison County and Rich Prairie Sewer and Water District.

The city does have a One Call system that we use to communicate emergencies to stakeholders in our city. We use Facebook and the city website to communicate emergency information as needed.

We have performed some diking operations around our campground to reduce some flooding events. The city is considering a purchase of the adjacent gravel pit to expand our campground. This gravel pit is not prone to flooding and will allow another access/egress point to our existing Park Complex.

We are expanding our golf course to 18 holes in an area that is not prone to flooding. This will allow us to have some revenue if our clubhouse/existing nine holes is not accessible from flooding/storms.

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 general, we have noticed an increase in more frequent high-rain events in the last 10 years. Our city has grown and we currently have 68 rental units being built which will add to the storm water runoff.

## **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 and Facebook page. We also post information on bulletin boards at the Farmers and Merchants State Bank, City Hall, and the Post Office. We utilize a stakeholder communication system called One Call that we can call, text, or email valuable information to our residents, business owners, and other parties that wish to sign up for the service.

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?**

I am not aware of a countywide emergency notification system, but the City of Pierz uses one. On our utility service form for new residents/customers, this information is communicated and residents are encouraged to sign up for the city wide system.

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

Response: “The city does not have FEMA mapped high-risk areas and is not participating. I would like more information if we should participate.” // Note: The NFIP chart for Morrison County shows that the city of Pierz is participating and has FEMA-mapped high-risk areas (annexed county SFHA). The city has followed up with the MN DNR about this. From Ceil Strauss: The city of Pierz was actually enrolled in the National Flood Insurance Program (NFIP) 1/3/1985, and there are no annual fees or paperwork to stay in the program. So you are good there. And when you got enrolled you didn’t have any FEMA mapped areas, so were not required to have a floodplain ordinance. But you have annexed area in the floodplain since then, and we will want to work with the city to get you an up to date floodplain ordinance. We can talk over your ordinance situation (and how that update process works), current and pending new FEMA maps (for Morrison County), what needs permits, and where to get help.

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

The city has an active vegetation management program in place for its city owned electric utility. Trees that may pose a risk are communicated to property owners and trimming and removal is completed.

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

Our police chief is the city's designated Emergency Manager. We have our own municipal utility that is responsible for mitigating against power outages. We have maintained our two tornado sirens that are located within the city limits.

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

Our city works with the county to participate in the National Weather Service's annual Severe Winter/Spring Weather Awareness Week by posting severe weather awareness information out on our city Facebook page. Our local school practices tornado drills on an annual basis. City crews clear leaves and debris regularly by sweeping streets. The city has a program to manage vegetation near powerlines to reduce risk of power outages during storms.

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

The city implemented a storm water utility in 2006 that provides the city approximately \$40,000 per year for stormwater management. Currently the funds are used to pay debt from two large stormwater projects that were built in 2005. These bonds have been paid off in 2022 and future funds will be used for stormwater projects as needs arise. The city primarily uses its own budget to address mitigation project. The city has also worked with the Morrison Soil and Water District on a erosion issue on Hole #5 at the golf course. The city applied and received a grant to rebuild the creek bank and control flows from the Hillman Creek that caused damage to the golf course.

**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)**

City of Pierz owns the electric system. Minnesota Power serves about 12 customers that are in the city limits of Pierz and the rest are City of Pierz Municipal Electrical customers.

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

This is a need for our city right now. Our biggest needs are for the Pierz Fire Hall, City Hall, and our Public Works Shop.

## **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 would like to mitigate the flooding in our Park Complex by adding dikes, diverting water, better dam controls for our swimming area, raising elevations if necessary. We are looking at a Park Complex Master Plan study for the entire complex including the gravel pit that may be purchased soon.

We would like to look at generators for the city hall, fire hall, and public works shop to ensure we have adequate facilities to manage emergency incidents.

We have a need to add stormwater on several streets that are currently in the planning phases. Namely Summer St., Kapsner St N, 4<sup>th</sup> Ave N, Vincent St, Peter Ave, and 1<sup>st</sup> Ave N.

The tornado warning signals are at least 25 years old and nearing the end of life.

We are in need of burying some power lines that are difficult to access especially after heavy rains because they are in back yard areas. We have two areas in town with primary electric lines that are difficult to access because they are heavily wooded and not next to roadways.

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

The city needs funding assistance to purchase generators for our critical buildings. We are a small city with limited financial and staff resources to address local mitigation projects.

## **PART D: SURVEY PARTICIPANTS**

Bob Otremba, City Administrator

### **CITY OF RANDALL**

## **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

<b>Tornadoes</b>	X	Low	No Change
<b>Windstorms</b>	X	Low	No Change
<b>Lightning</b>			
<b>Hail</b>			
<b>Flooding</b>	X	Low	No Change
<b>Extreme Cold</b>			
<b>Extreme Heat</b>			
<b>Drought</b>			
<b>Wildfire</b>			
<b>Landslides</b>			
<b>Dam Failure</b>			

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

We had a hailstorm come through Randall that caused damage to nearly every roof in the city.

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>Flooding</b>	One of our sanitary sewer lift stations is prone to flooding during high rain events.
<b>Ice Storms, Blizzards</b>	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.
<b>Windstorms and Tornadoes</b>	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.
<b>Extreme Cold</b>	The city has also experienced damages to roads from spring frost heaves, frozen culverts that cause localized flooding.

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 done a lot of trimming around power lines to reduce the risk of downed power lines during a storm.

We have installed a natural gas generator at our water treatment plant to provide electricity to keep the town supplied with water during any power outages.

We also have purchased backup generators for both lift stations on our sanitary sewer system.

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 general, we have noticed an increase in more frequent high-rain events in the last 5 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 use our city website and Facebook page. We also post information on bulletin boards at the Bank, City Hall and at the Post Office. We also make announcements at city council meetings to the public during severe weather season. The Mayor also takes every possible opportunity he can to be on the radio.

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?**

No, we have not.

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. Flood insurance is available to any resident that is identified to be within the FEMA floodplain.

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

We have a sump pump ordinance in place to mitigate against overload of the city’s I&I system, We are currently in the process of identifying any homes that are in violation and requiring them to correct the issue.

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

We work closely with MNOPS for our natural gas system and MN power for mutual aid on the electric system. Our fulltime utility worker has completed the 4 year lineman program with MMUA and we have purchased a Bucket truck for him to work on the electric system. We also encourage property owners not to plant vegetation near utility lines to reduce the risk of electric outages and improve response time.

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

Our city works with the county to participate in the National Weather Service’s annual Severe Winter/Spring Weather Awareness Week by posting severe weather awareness information out on our city Facebook page. Our local school practices tornado drills on an annual basis. The city

has a program to manage vegetation near powerlines to reduce risk of power outages during storms

**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)**

Municipal

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

We have them in place for our water plant and lift stations.

**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 would like to add a second warning siren and need a storm shelter or tornado safe room constructed in the trailer park.

The city would also like to buy out 3 homes on 2nd Ave. East so we can eliminate a lift station that is prone to flooding.

We need a portable generator for our City Hall and Community Center, which is our designated community mass care shelter.

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

We are small city with limited financial and staff resources to address local mitigation projects.

**PART D: SURVEY PARTICIPANTS**

Matt Pantzke, City Manager

## CITY OF ROYALTON

### **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	Moderate	No Change
Tornadoes	X	Moderate	No Change
Windstorms	X	High	Increased
Lightning			
Hail			
Flooding	X	High	Increased
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.

In 2021, a severe drought was experienced in the city of Royalton and surrounding communities. A few private resident wells had dried up due to the drought and watering and splash park use was restricted.

During the end of 2021, beginning of 2022, high windstorms were felt across the city which is leading to a weather pattern causing severe rain storms and possible tornados bringing down some tree/power loss. No homes were damaged due to these events.

Because of the spring thaw and rains, the Platte River has caused some flooding in areas of the town. These areas are mostly located in the low-lying areas and parks. No homes have reported flooding which would need potential sand bagging.

- 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	The Platte River runs through the town cutting most of it in half. Due to high water levels that occur due to spring thaw and rains, the river will expand over its banks. On occasion, the river will rise enough for the residents to sand bag their riverfront property. At this time, the city has community parks and uninhabitable land that will flood; it is watched closely potential damage.
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. Some of the more recent events have caused more disruption to roadways, but the power lines have and could sustain damage as it has in the past.
Windstorms and Tornadoes	<p>The City of Royalton currently has a mobile home park within the city that does not have a storm shelter and residents are vulnerable to high wind and tornado events.</p> <p>Town homes built in a development are built on slab with no basement. These residents are at greater risk during severe wind events.</p>
Drought	In recent years, the city has been able to sustain a good water supply for the residents. But with the drought of 2021, it caused a few private wells to dry up, therefore they needed to be put on city services.

**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 2021-22 the city completed a street reconstruction project which included adding more storm sewer and catch basins.

The city has also increased use of our website and Facebook page to communicate with residents on emergency preparedness.

Our tornado warning sirens are checked monthly to make sure they work and any failure is addressed urgently. These are located in various parts of the town.

**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 at this time.

**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 and Facebook page. We also post information on bulletin boards in the Post Office and 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 does not offer an emergency notification system.

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

MN DNR NFIP status for Morrison County shows that the city of Royalton is participating in the NFIP and has FEMA mapped high risk areas. However, the city thought that they do not participate and were waiting for Morrison County to update maps and the flood ordinance. MN DNR reports that the current floodplain ordinance we have for the city was adopted 7/5/2011, at the time the new FEMA maps for Benton County came out. Ceil Strauss, MN DNR Floodplain Manager is following up with the city to talk over our ordinance, current and pending new FEMA maps (for the Morrison County part of the city), what needs permits, and where to get help.

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

Our city has a 20-year Comprehensive Plan that is designed to plan for the future physical growth of the city and appropriate land uses.

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

We have a city engineer and a public works director that address road maintenance issues for flooding (culverts, repetitive flooding).

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

No programs at this time.

**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, such as replacement of culverts.

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

Not at this time.

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

Minnesota Power

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

The City of Royalton currently uses generators for lift stations and wells when needed. Grants will be looked at for future purchases of 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.**

The city had addressed the south side of the town to that was prone to street flooding. The street project included upgrading utilities as well as adding storm sewer and a holding pond. At this time that is the only area left in town that needed attention.

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

The only current barrier would be a lack of monies to address some of the issues that would come up. The city has sandy soil which helps with drainage in yards when heavy rains come.

**PART D: SURVEY PARTICIPANTS**

Leah Walberg, City Clerk  
Stacy Dillenburg, Deputy Clerk

**CITY OF SOBIESKI**

**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	Moderate	No Change
Tornadoes	X	Moderate	No Change
Windstorms	X	Moderate	No Change
Lightning	X	Moderate	No Change
Hail	X	Moderate	No Change
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.

In the last couple of years, we have had heavy rains, resulting in washing out of city roads and in need of repair.

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	The city has had heavy rains and spring frost heaves to the road.

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.

N/A

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.

N/A

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

The purpose of the questions in Part B is to identify what local-level capabilities (strengths or gaps) exist for implementing mitigation in the community.

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

The city has an emergency warning 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?**

No

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

Yes. The city participates in the NFIP and has a floodplain ordinance in place.

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

Floodplain ordinance.

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

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

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

The city does trim the trees near powerlines and the city works with Morrison County with the National Weather Services at the time of a weather awareness.

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

In the past the city has worked with the Morrison SWCD.

- 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)**

Stearns Electric Association in Melrose, MN

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

We do not have a backup generator and we do have City Sewer.

#### **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.**

An upgrade of our city's warning siren in the future would be nice if funds were available.

We would also like to acquire a portable generator.

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

Our city does not have a website.

## **PART D: SURVEY PARTICIPANTS**

Joyce Holtz, City Clerk

### **CITY OF SWANVILLE**

## **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	X	Moderate	No Change
Windstorms	X	Moderate	No Change
Lightning	X	Moderate	No Change
Hail			
Flooding	X	Moderate	No Change
Extreme Cold	X	Moderate	No Change
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.

We have not experienced major damage in the past 5 years.

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	Storm sewers are prone to flooding with too much rain, and many houses would experience basement flooding.

<b>Tornadoes and Wind</b>	<p>The city has new development with patio homes (built on slab) and have no basements, so they are at greater risk during storms.</p> <p>Many trees are old in our community which has a greater risk of falling on houses and damaging them</p>
<b>Extreme cold</b>	<p>During periods of extreme cold frozen services can occur. We have a high population of seniors and low-income residents who are more vulnerable during these events.</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.**

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.**

New development within the city limits that include patio homes (built slab-on-grade) with no basements and would include seniors that would need assistants should a disaster occur.

## **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.**

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?**

No, our city currently does not do this.

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

No, our city does not have FEMA mapped as high-risk areas and does not participate in the NFIP.

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

No plans.

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

Our fire department works with the MN DNR on wildfires around our community. Our city maintenance would address road issues after a storm.

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

City Maintenance clears storm sewer drains of debris. Our school practices tornado drills. MN Power manages vegetation near powerlines.

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

The city primary uses its own budget to address any road work.

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

No, not at this time

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

MN Power

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

There is a generator which will work for the water plant/ water plant.

**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.**

Public education on how to prepare for storms and extended power outages.

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

We are a small city with limited financial and staff resources to address local mitigation projects.

**PART D: SURVEY PARTICIPANTS**

Julie Hollermann, City Clerk/Treasurer  
Jesse Hollermann, Fire Chief  
Lonny Hutchins, City Maintenance

## CITY OF UPSALA

### 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	Moderate	No Change
Tornadoes	X	Low	No Change
Windstorms	X	Moderate	Increased
Lightning	X	Low	No Change
Hail	X	Moderate	Increased
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.

August 2021 power out for 20 hours, hail, straight line winds, several trees down.

Spring 2022 multiple storms taking the trees and power lines down, excessive rain and hail, damage to several homes and buildings.

In the past couple of winters we have experienced homes with frozen water services.

- 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/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.

	Tree damage can occur to power lines and homes.
<b>Winter Storms</b>	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.
<b>Hail</b>	Several homes, businesses and buildings are prone to hail damage in our 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.**

We have talked to the city mayor and are in the process of purchasing a generator to run the water plant and lift stations due to the constant threat of power outages. We are also addressing inflow and infiltrations.

- 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.**

With the construction of a new assisted living facility, there will be a large concentration of senior residents in one location that will need assistance during a disaster event. In general, we have noticed an increase in more frequent high-rain events in the last 5 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 depend on the Morrison County emergency alert system to warn citizens of extreme weather conditions. A local community Facebook page is updated frequently with local weather events.

- 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 have notified citizens of the county's emergency notification system and how to access it.

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

The NFIP chart for Morrison County shows that the city of Upsala is participating and has FEMA-mapped high-risk areas. The city thought that they were not participating and said they were waiting for the county to come out with new floodplain maps. The MN DNR Floodplain Management Program director is following up with the city of Upsala.

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

We have a sump pump ordinance in place to mitigate against overload of the city's I&I system. The city is in the process of creating a new comp plan for its community.

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

The city has created a long-term disaster recovery team. Our emergency manager directors are the fire chief, public works director and director for our long-term disaster recovery.

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

Our local school practices tornado drills on an annual basis. The power company manages vegetation near powerlines to reduce risk of power outages during storms.

- 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)**

Minnesota Power

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

Needed for City Hall, the community center, the water treatment plant and lift stations.

### **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.**

Acquire portable generators for City Hall, community center, water plant, and lift stations.

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

We are small city with limited financial and staff resources to address local mitigation projects.

**PART D: SURVEY PARTICIPANTS**

Mike Tschida, Public Works Director  
Jane Popp, Clerk/Treasurer  
Michelle Stevens, Clerk  
Rollie Johnson, Mayor

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

# Morrison County

## MHMP Plans in Place Form

### Planning & Regulatory

<i>Plans/Programs</i>	<i>Yes/No</i>	<i>Comments</i>
Comprehensive/Master Plan	No	
Capital Improvements Plan	Yes	Have 5-year plan for years 2022-2026
Economic Development Plan	No	
Emergency Operations Plan	Yes	MC Emergency Operations Plan, updated annually
Climate Adaptation Plan	No	
Continuity of Operations Plan	Yes	Updated annually/as needed by MC Emergency Management/county staff
Transportation Plan	Yes	5-year Transportation Improvement Plan
Stormwater Management Plan	TBD	Not a formal plan, MC does regulate stormwater within the Land Use Control Ordinance
Community Wildfire Protection Plan	No	MN DNR notes no CWPP for Morrison County
FireWise Program	No	
Comprehensive Water Management Plan	Yes	Comprehensive Local Water plan, Adopted in 2017
One Watershed, One Plan (1W1P)	No	The plan is in progress
Wellhead Protection Plan	No	Many cities do
Database of dry hydrants/well access	No	Geologic atlas contains well locations
Burning permits/restrictions	No	Permits are purchased/issued via MNDNR
Zoning ordinance	Yes	Land Use Control Ordinance, adopted 12/1/2021

Subdivision ordinance	Yes	Land Use Control Ordinance, adopted 12/1/2021
Floodplain ordinance	Yes	Land Use Control Ordinance, adopted 12/1/2021
Natural hazard specific ordinance (i.e., stormwater, steep slope, wildfire)	Yes	Bluff, steep slope, stormwater regs in Land Use Control Ordinance, adopted 12/1/2021
Flood insurance rate maps	Yes	MC adopted by reference current maps and utilize for permitting
Acquisition of homes (buyouts) due to repetitive flood damage or imminent risk of failure from erosion	No	
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)	No	Not current, under update
Outdoor Warning sirens (list all locations)	Yes	Agram Township, Bowlus, Buckman, Camp Ripley, Elmdale, Flensburg, Genola, Little Falls, Motley, Pierz, Platte Lake, Randall, Royalton, Scandia Valley area, Sobieski, Sullivan Lake, Upsala
SKYWARN Program	No	Currently coordinating training
Emergency Mass Notification System (provide type, i.e., CodeRED)	Yes	Everbridge Mass Notification System
Severe Weather Awareness Week	Yes	Annual participation in NWS event (April)
Winter Weather Awareness Week	Yes	Annual participation in NWS event (November)
NOAA Weather Radios	Yes	MC Emergency Management promotes

		use of NOAA weather radios
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	Within Land Use Control Ordinance
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	Yes	Neighboring counties, all of HSEM Region IV, American Red Cross
<i>Staff</i>	<i>Yes/No</i>	<i>Comments</i>
Chief Building Official	Yes	MC Facilities Manager
Floodplain Administrator	Yes	Land Services Director
Emergency Manager	Yes	MC Emergency Management, Deputy Director
County Coordinator	Yes	County Administrator
Civil Engineer		Public Works Director/County Engineer
GIS Coordinator	Yes	GIS Specialist, Land Services
<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.		MC has an Emergency Preparedness Coordinator, Health & Human Services, MC Public Safety group,

		also work with American Red Cross, Salvation Army, hospital, LTC and community partners.
Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	Yes	MC Emergency Management and MC Health and Human Services Emergency Preparedness Coordinator, MC Public Safety group
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>		

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

# Morrison 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: Mitigation Strategy* of the Morrison 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	Jurisdiction / Lead Entity	Status	Comments
Tornado	Require storm shelters for all mobile home parks & multiple family dwellings.	County	Ongoing	Morrison County Public Health continues to work with licensed manufactured home parks to ensure the MN State statutes for shelters and evacuation plans are met. **It is the responsibility of the park to get plan approved by city/municipality. Morrison County Public Health assists only when requested.
Tornado	Continue to upgrade and improve Emergency Warning Systems.	County, Cities	Ongoing	Morrison County and local jurisdictions continue to monitor and maintain outdoor warning sirens and address upgrades as needed.
Tornado	Encourage NOAA weather radio use	County	Ongoing	This is an ongoing part of Morrison County Emergency Management (MCEM) public outreach and education on storm preparedness.
Tornado	Require all warning systems to be radio activated by dispatch and have battery back- up	County	Delete	Not a necessary mitigation action. This is covered under standard MCEM emergency communications procedures.
Tornado	Continue to provide Posters, brochures, media materials to public about tornado safety.	County	Ongoing	This is an ongoing part of Morrison County Emergency Management (MCEM) public outreach and education on storm preparedness.
Tornado	Continue to provide information on safer building materials and on structure hardening.	County	Delete	MCEM does not provide this information to construction firms or individual homeowners.

Hazard	Mitigation Action	Jurisdiction / Lead Entity	Status	Comments
Tornado	Provide information to local communities regarding FEMA grant programs to construct saferooms and or harden structures.	County	Ongoing	MCEM is working with all cities to identify projects that may be eligible for future FEMA HMA grant funding such as tornado safe rooms.
Wildfire	Continue to provide public education materials related to the prevention of wildfire.	County, MN DNR, Local FD's	Ongoing	This is an ongoing effort of the MN DNR, MCEM, and local fire departments.
Wildfire	Ensure the strong coordination between local fire departments and associations as well as those from outside areas to provide fire protection, which will reduce the impact of wildfires.	County, MN DNR, Local FD's	Delete	Not a necessary mitigation action. Existing agreements are in place between fire departments.
Wildfire	Promote positive forestry management techniques including the principles of fire adapted communities, Firewise program and the removal of dead, dry vegetation and trees which may ignite as a result of lightning or human related causes.	MN DNR, County	Ongoing	Ongoing by MN DNR and local fire departments. Morrison County does not have a CWPP in place. This is something the county will consider to add as part of our MHMP plan update.
Wildfire	Continue to encourage the removal of trees and vegetation around electrical lines and if possible bury electrical lines where feasible.	Power Companies	Ongoing	Vegetation management is an ongoing effort by local road authorities and electric utilities. Municipal and rural electric coops continue to work to bury powerlines where feasible to reduce power outages.
Extreme Heat	Encourage property owners to install air conditioning systems as they have been demonstrated to be the most effective intervention in reducing heat- related deaths.	County	Delete	Not a necessary specific mitigation action. This falls under more broad public education for dealing with severe heat prevention.
Extreme Heat	Consider constructing centralized cooling centers to increase the public's access to air-conditioned buildings.	County	Delete	MCEM and MC Public Health have designated facilities and plans in place for activation of shelters in our emergency operations plan.

Hazard	Mitigation Action	Jurisdiction / Lead Entity	Status	Comments
Extreme Heat	Encourage the use of building materials that reduce the “heat island” effect in urban areas.	County	Delete	This is not something Morrison County actively endorses. It occurs at the local jurisdictional level and by construction firms in the design process of new development.
Drought	Encourage the wise utilization of water resources regardless of time of year.	Municipalities, County, SWCD	Ongoing	Revise - Morrison County and local jurisdictions promote public awareness of water conservation during times of drought.
Drought	Implement local regulation of water usage as necessary to alleviate drought.	Municipalities, County, MNDNR	Ongoing	Local ordinances are established and enforced as per MN DNR recommendations or requirements during periods of severe drought.
Flooding & Flash Flooding	Restrict building in floodplain areas that consistently flood – includes cities.	County, Cities	Ongoing	Morrison County and communities that participate in the NFIP have floodplain ordinances in place that restrict where new development can occur.
Flooding & Flash Flooding	Encourage development of parks and open space areas along floodplain areas that consistently flood.	County, Cities	Ongoing	This may apply to different communities as per their interests and local needs to address floodplain management.
Flooding & Flash Flooding	Continue to review Emergency Operations Plan annually, as it pertains to flooding and flash flooding.	County	Ongoing	MCEM updates the county EOP on a regular basis.
Flooding & Flash Flooding	Encourage early participation of individual landowners in the FEMA National Flood Insurance Program by property owners located within floodplain areas.	County	Ongoing	Ongoing by Morrison County and local jurisdictions as relevant for flooding concerns.
Flooding & Flash Flooding	Continue to provide public education on dangers of flash flooding.	County, SWCD	Ongoing	Covered by MCEM through public outreach and emergency notices during high rain events.

Hazard	Mitigation Action	Jurisdiction / Lead Entity	Status	Comments
Flooding & Flash Flooding	Encourage municipalities to require the development of new storm sewer infrastructure capable of handling a ten-to-twenty-year rain event in new developments or subdivisions.	County	Ongoing	Ongoing in working with municipalities during 2022 MHMP update to consider stormwater management improvements for localized flood mitigation as necessary.
Flooding & Flash Flooding	Develop and adopt a county wide drainage maintenance plan.	SWCD	Ongoing	Morrison County Public Works addresses drainage along county roads. More broadly the Morrison SWCD continue to work on the One Watershed, One Plan (1W1P).
Flooding & Flash Flooding	Develop and adopt a storm water run-off plan for critical areas.	SWCD	Ongoing	MC Public Works addresses stormwater management for rural areas in the county. Cities address this at the local level.
Severe Summer Storms (Lighting, Hail, High Winds)	Continue to promote severe summer storm safety through multi-media such as posters, brochures, media materials, social media and mailings.	County	Ongoing	MCEM participates in the annual Severe Weather Awareness Week campaign sponsored by the NWS each April. Public information is also shared throughout the rest of the spring/summer storm season to raise awareness of hazards and personal safety measures.
Severe Summer Storms	Provide information on making structures safer: Materials, building storm shelters, etc.	County, Insurance Companies	Delete	MCEM and local municipalities continue to address the need for storm shelters where needed.
Severe Summer Storms	Recommend that storm shelters exist for all mobile home parks, multiple family dwellings, and patio homes.	County, Municipalities	Ongoing	Ongoing by MCEM and local municipalities
Severe Summer Storms	Encourage National Weather Service radio use.	County, NWS	Ongoing	MCEM continues to promote the use of NOAA weather radios for personal preparedness.
Severe Summer Storms	Continue to upgrade and improve Emergency Warning Systems.	County	Delete	Not a necessary mitigation action. This is covered by MCEM ongoing emergency management planning.

Hazard	Mitigation Action	Jurisdiction / Lead Entity	Status	Comments
Severe Summer Storms	Recommend that each LUG have storm shelters in place and available to public.	County, Municipalities	Ongoing	Municipalities continue to identify and work to address where storm shelters or tornado safe rooms may be needed.
Severe Winter Storms (Blizzard, Extreme Cold, Ice Storm)	Encourage local utility companies to continue to invest in and harden power infrastructure to withstand ice storms and other severe winter weather conditions.	Power Companies	Ongoing	Municipal and rural electric coops are involved in the MHMP update process. The plan will include mitigation actions to address reducing vulnerability of powerlines to severe storms.
Severe Winter Storms	Provide information to landowners with Individual Septic Treatment Systems on ways to protect their systems from extreme cold.	Municipalities	Ongoing	Ongoing by local municipalities.
Severe Winter Storms	Encourage the development of living snow-fences or similar devices along roadways to minimize snow accumulation.	County, Municipalities, MNDOT	Ongoing	This is an effort we will look at with Morrison SWCD.
Severe Winter Storms	Continue providing exceptional snow removal, salting, and sanding to minimize the impacts of snow accumulations on roadways.	County, Municipalities	Delete	This is a standard work element of Morrison County Public Works for winter roads treatment.
Severe Winter Storms	Provide information on building materials and practices that increase structural safety, and increase energy conservation in cold weather conditions.	State, County, Municipalities	Delete	This is not done by Morrison County or municipalities.
Severe Winter Storms	Encourage the planting of trees and natural vegetation in new development to minimize large snow accumulation.	County	Delete	Not a strong mitigation action for winter weather. Installing living snow fences will be addressed with SWCD.
Severe Winter Storms	Provide public education on staying safe during cold weather and winter storm events including information on safety kit items and where to purchase them locally.	County	Ongoing	This is ongoing under MCEM public outreach and education during periods of extreme cold.

Hazard	Mitigation Action	Jurisdiction / Lead Entity	Status	Comments
Extreme Heat	Publish information on recognition and prevention of heat exhaustion.	County, Cities	Ongoing	This is ongoing under MCEM public outreach and education during periods of extreme heat.
Extreme Heat	Provide information regarding heat abatement.	Cities	Ongoing	As per the discretion of local action by cities.
Dam & Levee Failure	Maintain contact and coordination with the Minnesota Dam Safety Office.	Power Companies, Dam Owners, County	Ongoing	MN DNR Dam Safety Program is the lead agency to monitor dams in coordination with Allete and the cities of Little Falls and Pillager where high-hazard dams are located.
Dam & Levee Failure	Establish a notification procedure in the event of a dam failure event for all "1" and "2" classified dams within the County.	Power Companies, Dam Owners, County	Ongoing	Allete, Inc. owns and manages two high-hazard potential dams in Morrison County, located in the city of Little Falls and the city of Pillager. Allete maintains EAP's for these dams including identification of potential inundation areas in the event of a dam failure.

## **Appendix F – Planning Team Meetings**

## Morrison 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 Morrison 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

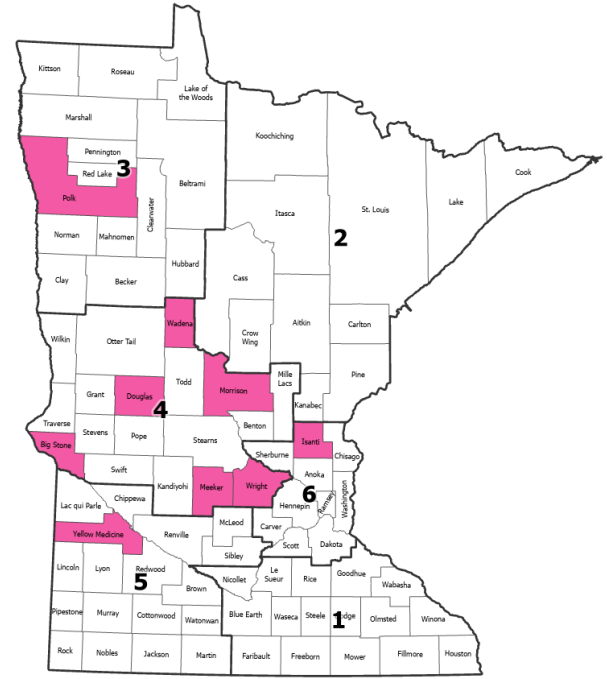
The U-Spatial@UMD team will coordinate with each Emergency Manager throughout the plan update process to engage participating jurisdictions and other stakeholders in the planning process. Following is an overview of key tasks that the U-Spatial@UMD team will facilitate to meet FEMA requirements in the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

**U-SPATIAL**  
UNIVERSITY OF MINNESOTA DULUTH  
**Driven to Discover**

## Webinar Purpose & Goals

The purpose of this webinar is to provide an orientation for Emergency Managers participating in 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?

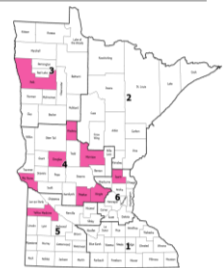
### Minnesota HSEM:

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
Stage 1 Tasks (4-5 months)	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
Stage 2 Tasks (4-6 months)	December 2021 – May 2022	Develop 5-year Jurisdictional Mitigation Action Charts Hazard hazard risk assessment for flooding Develop hazard profiles for each natural hazard Complete county profile sections and maps Complete Draft Plan
Stage 3 Tasks (2-3 months)	June – August 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
Stage 4 Tasks (2-3 months)	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 queue 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>

# Morrison County MHMP Update

## JURISDICTIONAL CONTACT LIST- BONNIE

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### County Contacts

Name	Title	Phone	Email
Victoria MacKissock	Emergency Management Director/Communications Supervisor	320-632-0195	victoriam@co.morrison.mn.us
Shawn Larsen	County Sheriff/Deputy EM Director	320-632-9233	shawnl@co.morrison.mn.us
Matt LeBlanc	County Administrator	320-632-0293	mattl@co.morrison.mn.us
Amy Kowalzek	Director of Land Services	320-632-0170	amyK@co.morrison.mn.us
Tony Hennen	Public Works Director	320-632-0120	tonyh@co.morrison.mn.us
Sherry Welinski	Operations Manager (Public Works Dept.)	320-631-2863	sherryw@co.morrison.mn.us
Brad Vold	Public Health/Social Services Director	320-632-6664	bradv@co.morrison.mn.us
Sarah Pratt	Human Services Supervisor (PHEP)	320-632-0357	sarahp@co.morrison.mn.us
Emily Loomis	Community Health Educator	320-632-0375	emilyl@co.morrison.mn.us

### City Contacts

#### CITY OF BOWLUS

Name	Title	Phone	Email
Joseph Larson	Mayor- EM		cityofbowlus@yahoo.com
Judith R Barnes	Clerk	320-380-1106	<a href="mailto:cityclerk@cityofbowlus.com">cityclerk@cityofbowlus.com</a>
Brad Psyck	Fire Chief	320-333-0266	<a href="mailto:bipsyck@msn.com">bipsyck@msn.com</a>

#### CITY OF BUCKMAN

Name	Title	Phone	Email
Greg Gangl	Mayor- EM	360-360-1157	buckman@gmail.com
Linda Brezinka	Clerk	320-468-2382	<a href="mailto:cityofbuckman@gmail.com">cityofbuckman@gmail.com</a>

#### CITY OF ELMDALE

Name	Title	Phone	Email
John Kulla	Mayor- EM	320-573-4323	Kullajohn2@gmail.com
Joy Koroll	Clerk	320-573-2219	Joykoroll57@gmail.com

#### CITY OF FLENSBURG

Name	Title	Phone	Email
Jim Gorka	Mayor- EM	320-630-6454	<a href="mailto:jimgorka.cityofflensburg@gmail.com">jimgorka.cityofflensburg@gmail.com</a> <a href="mailto:jimgorka7@gmail.com">jimgorka7@gmail.com</a>
William Boser	Clerk	320-630-0176	<a href="mailto:cityofflensburg@gmail.com">cityofflensburg@gmail.com</a>
Brad Piekarski	Fire Chief	320-630-9652	bp@fallsnet.com

## CITY OF GENOLA

Name	Title	Phone	Email
Larry Korf	Mayor- EM	320-468-2235	Larry.korf@dezurik.com
Tammy Giuliani	Clerk	320-630-0743	tegiuliani@hotmail.com

## CITY OF HARDING

Name	Title	Phone	Email
Robert Litke	Mayor- EM	320-360-3643	robert3881@gmail.com
Corey Hayes	Clerk	320-630-2837	cityofhardingmn2@gmail.com

## CITY OF HILLMAN

Name	Title	Phone	Email
Norman Iverson	Mayor- EM	320-630-0882	
Dana Iverson	Clerk	320-630-7791	

## CITY OF LASTRUP

Name	Title	Phone	Email
Kay Hoheisel	Mayor- EM	320-232-0112	Khoheisel57@gmail.com
Rayme Hoheisel	Assistant to Kay Hoheisel (Main Contact to use)	320-468-2396	<a href="mailto:rayme@hoheiseltax.com">rayme@hoheiseltax.com</a>
Roberta Gross	Clerk	320-360-9461	
Diane Schmditz	Treasurer	320-468-2840	<a href="mailto:dschmditz@centurytel.net">dschmditz@centurytel.net</a>

## CITY OF LITTLE FALLS

Name	Title	Phone	Email
Greg Zylka	Mayor	320-232-9336	mayor@cityoflittlefalls.com
Jon Radermacher	City Administrator	320-616-5500	jonr@cityoflittlefalls.com
Craig Seelen	Fire Chief-City EM	320-616-5591	<a href="mailto:Craig.Seelen@cityoflittlefalls.com">Craig.Seelen@cityoflittlefalls.com</a>

## CITY OF MOTLEY

Name	Title	Phone	Email
Mike Schmidt	Mayor-EM	218-296-2438	<a href="mailto:motleymayor.mikeschmidt@gmail.com">motleymayor.mikeschmidt@gmail.com</a>
Darci Odden	Clerk	218-352-6200	<a href="mailto:cityofmotley@brainerd.net">cityofmotley@brainerd.net</a>
Brad Olson	Fire Chief	218-330-1410	<a href="mailto:mfd@brainerd.net">mfd@brainerd.net</a>

## CITY OF PIERZ

Name	Title	Phone	Email
Dave Fischer	Mayor	320-232-7771	mayor@pierzmn.org
Dionne Haberman	Deputy Clerk		<a href="mailto:deputyclerk@pierzmn.org">deputyclerk@pierzmn.org</a>
Robert Otremba	Administrator	320-468-6471	<a href="mailto:BobO@pierzmn.org">BobO@pierzmn.org</a>
Eric Hanneken	Police Chief- EM	320-468-0299	<a href="mailto:erich@pierzmn.org">erich@pierzmn.org</a>
Dan Rocheleau	Fire Chief- EM	320-630-6340	<a href="mailto:danr@co.morrison.mn.us">danr@co.morrison.mn.us</a>

## CITY OF RANDALL

Name	Title	Phone	Email
Dan Noss	Mayor- EM	320-232-9412	randallcity@brainerd.net
Matt Pantzke	Administrator	320-749-2159	<a href="mailto:randallcity@brainerd.net">randallcity@brainerd.net</a>
Scott Hughson	Fire Chief	763-360-2992	<a href="mailto:rfd@brainerd.net">rfd@brainerd.net</a>

### CITY OF ROYALTON

Name	Title	Phone	Email
Andrea Lauer	Mayor	320-630-2229	mayor@royaltonmn.com
Leah Walberg	Clerk	320-584-5900	cityhall@royaltonmn.com
Ted VanHove	Fire Chief- EM	320-232-0612	trvanhove@gmail.com

### CITY OF SOBIESKI

Name	Title	Phone	Email
Tim Opatz	Mayor- EM	320-630-4751	topatzsob@gmail.com
Joyce Holtz	Clerk	320-630-7481	joyceholtz@icloud.com

### CITY OF SWANVILLE

Name	Title	Phone	Email
Sandy Lange	Mayor- EM	320-360-9409	sandy@sonnytrucking.com
Julie Hollermann	Clerk	320-547-2291	cityof_swanville@yahoo.com
Tony Maciej	Fire Chief	320-360-2548	swanvillefire@gmail.com

### CITY OF UPSALA

Name	Title	Phone	Email
Rollie Johnson	Mayor- EM	320-267-0804	rollie@sytekcom.com
Michelle M Stevens	Clerk	320-573-4950	cityofup@surfsota.com
Jay Baggenstoss	Fire Chief	320-360-1048	milkfire8@yahoo.com

## Township Contacts

Name of Township	Name & Title	Phone	Email
Agram Township	David Meyer- Chairperson	320-468-2648	cheetah5@centurytel.net (Clerk)
Belle Prairie Township	Greg Colombe- Chairperson	320-630-7065	kdkcpa@outlook.com(Clerk) belleprrtownship@outlook.com
Bellevue Township	John Walburn- Chairperson	320-266-8875	walburn20@gmail.com bellevuetwp@outlook.com (Clerk)
Buckman Township	Gary Solinger- Chairperson	320-282-6932	bucktownship@outlook.com (Clerk)
BuhTownship	Duane Schraut- Chairperson	320-630-3708	atoewsmk@hotmail.com (Clerk)
Culdrum Township	Thomas Mrozek- Chairperson	320-547-2261	jmctwp@hotmail.com (Clerk)
Cushing Township	Daniel Symanietz- Chairperson	320-749-2580	CALL Clerk Deb Symanietz 320-749-2580
Darling Township	John Tabatt- Chairperson	320-749-2521	Annieh11098@gmail.com (Clerk)
Elmdale Township	Jerry Theisen- Chairperson	320-573-2516	peggy.frieler@icloud.com (Clerk)
Granite Township	Jeron Kapsner- Chairperson	320-468-6222	granitetwp@outlook.com (Clerk)
Green Prairie Township	Dan Maslowski- Chairperson	320-360-1611	lpeterschick@yahoo.com (Clerk)

Hillman Township	Thomas Stangl- Chairperson	320-630-2175	<a href="mailto:mjs468@hotmail.com">mjs468@hotmail.com</a> <a href="mailto:cekastanek@juno.com">cekastanek@juno.com</a> (Clerk)
Lakin Township	D. Jamey Rueckert- Chairperson	320-355-2126	<a href="mailto:wayneg@tru-stone.com">wayneg@tru-stone.com</a> (Clerk)
Leigh Township	Larry Hebler- Chairperson	320-277-3835	CALL Wendy Tretter Clerk 320-277-3364
Little Falls Township	Charles Parins- Chairperson	320-232-9554	<a href="mailto:littlefallstownship@gmail.com">littlefallstownship@gmail.com</a>
Morrill Township	Ed Kampa- Chairperson	320-355-2213	<a href="mailto:jlrichols@jetup.net">jlrichols@jetup.net</a> (Clerk)
Motley Township	Verde L. Pepin- Chairperson	218-746-3863	<a href="mailto:riverman@brainerd.net">riverman@brainerd.net</a> <a href="mailto:motleytwp@gmail.com">motleytwp@gmail.com</a> (Clerk)
Mount Morris Township	Jennifer Miller- Chairperson	320-355-2349	<a href="mailto:tiney77@hotmail.com">tiney77@hotmail.com</a> (Clerk)
Parker Township	Randy Rutz- Chairperson	320-749-2824	<a href="mailto:tammygladys32@gmail.com">tammygladys32@gmail.com</a> (Clerk)
Pierz Township	Robert J. Virnig- Chairperson	320-468-6876	<a href="mailto:virnigrj@centurytel.net">virnigrj@centurytel.net</a> <a href="mailto:lorjanmeyer@gmail.com">lorjanmeyer@gmail.com</a> (Clerk)
Pike Creek Township	Ross Wamre- Chairperson	320-360-9632	<a href="mailto:rossw@surveymapsolutions.com">rossw@surveymapsolutions.com</a> <a href="mailto:pikecreektownship2@outlook.com">pikecreektownship2@outlook.com</a> (Clerk)
Platte Township	Shelly Boser- Chairperson	320-360-1758	<a href="mailto:clipclop2014@gmail.com">clipclop2014@gmail.com</a> (Clerk)
Pulaski Township	Allen Woitalla- Chairperson	320-277-3860	<a href="mailto:sharonannskwira@gmail.com">sharonannskwira@gmail.com</a> (Clerk)
Richardson Township	Mike Insley- Chairperson	320-277-3264	<a href="mailto:insley1965@yahoo.com">insley1965@yahoo.com</a> <a href="mailto:cherilincoln@outlook.com">cherilincoln@outlook.com</a> (Clerk)
Ripley Township	Darvin Keehr- Chairperson	320-745-2431	<a href="mailto:dkeehr@brainerd.net">dkeehr@brainerd.net</a> <a href="mailto:ripleytownship@brainerd.net">ripleytownship@brainerd.net</a> (Clerk)
Rosing Township	Tom Longenecker- Chairperson	218-297-4895	<a href="mailto:telonganecker@msn.com">telonganecker@msn.com</a> <a href="mailto:amyleewalker@yahoo.com">amyleewalker@yahoo.com</a> (Clerk)
Scandia Valley Township	Terry Sandstrom- Chairperson	218-575-3262	<a href="mailto:ardisterry@hotmail.com">ardisterry@hotmail.com</a> <a href="mailto:scandiavalleyfd@gmail.com">scandiavalleyfd@gmail.com</a>
	Ryan Kuklok- Fire Chief	218-280-5180	<a href="mailto:klheadle@brainerd.net">klheadle@brainerd.net</a> (Clerk)
Swan River Township	Tim Zapzalka- Chairperson	320-360-4645	<a href="mailto:swanriver19@gmail.com">swanriver19@gmail.com</a> (Clerk)
Swanville Township	Neil Johnson- Chairperson	320-232-7687	<a href="mailto:acadiared@yahoo.com">acadiared@yahoo.com</a> (Clerk)
Two Rivers Township	Ron Leners- Chairperson	320-573-2926	<a href="mailto:racecows8@yahoo.com">racecows8@yahoo.com</a> (Clerk)

### 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	Brett Repulske, Area Specialist	(218) 829-5965 x113	<a href="mailto:brett.repulske@usda.gov">brett.repulske@usda.gov</a>
MN Homeland Security & Emergency Management	Lisa Dumont, HSEM Region 4 Regional Program Coordinator	320-429-0348	<a href="mailto:Lisa.Dumont@state.mn.us">Lisa.Dumont@state.mn.us</a>

Morrison County Soil & Water Conservation District	Shannon Wettstein, District Manager	320-631-3553	shannon.wettstein@morrisonswcd.org
Natural Resource Conservation Services (NRCS)	Joshua Hanson, District Conservationist	320-632-6606, ext. 102	joshua.hanson@mn.usda.gov
MN DNR	Jason Kern, Resource Protection Program Forester	320-232-1074	jason.kern@state.mn.us
East Central Energy	Kayla Hagfors, Finance Supervisor	763-689-8014	kayla.hagfors@ecemn.com
Crow Wing Power	Eric C. Quale, COO	800-648-9401 x2219	quale@cwpower.com
Pierz School District	George Weber, Superintendent	320-468-6458	gweber@pierz.k12.mn.us
Little Falls School District	Greg Johnson, Superintendent	320-632-2002	<a href="mailto:gjohnson@lfalls.k12.mn.us">gjohnson@lfalls.k12.mn.us</a>
Upsala School District	Vern Capelle, Superintendent	320-573-2174 x105	<a href="mailto:vcapelle@upsala.k12.mn.us">vcapelle@upsala.k12.mn.us</a>
Swanville School District	Travis Hensch, Superintendent	320-547-5100	<a href="mailto:thensch@swanville.k12.mn.us">thensch@swanville.k12.mn.us</a>
Royalton School District	Dr. Kristine Wehrkamp, Superintendent	320-584-4250	<a href="mailto:kristine.wehrkamp@isd485.org">kristine.wehrkamp@isd485.org</a>
Camp Ripley	Pat Boone, Fire Chief-EM	320-360-5240	<a href="mailto:patrick.j.boone.nfg@mail.mil">patrick.j.boone.nfg@mail.mil</a>

### Neighboring Jurisdiction Contacts

Name of Jurisdiction	Name & Title	Phone	Email
Cass County	Chad Emery, Emergency Management Director	218-547-7437	chad.emery@co.cass.mn.us
Crow Wing County	John Bowen, Emergency Management Director	218-825-3445	john.bowen@crowwing.us
Mille Lacs County	Andy Beckstrom, Emergency Management Director	320-983-8288	<a href="mailto:Andy.beckstrom@millelacs.mn.gov">Andy.beckstrom@millelacs.mn.gov</a>
Benton County	Kristin Tschida, Emergency Management Director	320-968-8105	<a href="mailto:ktschida@co.benton.mn.us">ktschida@co.benton.mn.us</a>
Stearns County	Erin Tufte, Emergency Management Director	320-259-3940	Erin.Tufte@co.stearns.mn.us
Todd County	Mike Wisniewski, Emergency Management Director	320-533-4697	michael.wisniewski@co.todd.mn.us
Mille Lacs Band of Ojibwe	Monte Fronk, Emergency Management Director	320-532-3430	monte.fronk@millelacsband.com

# Morrison County MHMP Planning Team Meeting #1

## January 27, 2022 - Meeting Summary & Documentation

**Summary:** On Thursday, January 27, 2022 Morrison 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 Morrison County Multi-Hazard Mitigation Plan (MHMP). The purpose of the meeting was to formally present information about the Morrison 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:** Morrison 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 **30** people attended the meeting. Representation included departmental staff from Morrison County and the following cities: Lastrup, Little Falls, Pierz, Royalton, and Swanville. The cities of Bowlus, Buckman, Elmdale, Flenburg, Genola, Harding, Hillman, Motley, Randall, Sobieski, and Upsala 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. **(7/20) 35%**
- No, but I am familiar with hazard mitigation planning. **(5/20) 25%**
- No, and this is all new to me. **(8/20) 40%**

**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 Morrison 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
Wildfire	High	High
Winter Storms	Moderate	Moderate
Tornadoes	Moderate	Moderate
Windstorms	Moderate	Moderate
Hail	Moderate	Moderate
Drought	Moderate	Moderate
Extreme Cold	Low	<b>Moderate</b>
Extreme Heat	Low	Low
Lightning	Low	Low
Landslides	N/A	Low
Dam/Levee Failure	N/A	<b>Low</b>

**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
Amy Kowalzek, Morrison County Land Services Director	<i>Regarding flood risk review:</i> Have you reviewed FEMA's new draft map for the county? Quite a few areas will change.	Stacey Stark: Yes, we do use FEMA's latest survey for the data.
Amy Kowalzek, Morrison County Land Services Director	<i>Regarding FEMA HMA grant funding for flood mitigation projects:</i> Would potential flood mitigation projects need to be within the mapped floodplain?	Bonnie Hundrieser: I am not certain; this is a good question for the MN HSEM State Hazard Mitigation Officer. The FEMA grant application is thorough in evaluating many criteria for eligible projects.

Meeting Participant	Comment, Question or Mitigation Idea Submitted	Facilitator Feedback / How to be Addressed in Plan Update
Victoria MacKissock, Morrison County Emergency Management Director	<i>Regarding dam &amp; levee failure prioritization:</i> This was not addressed in the last plan. We have 2 high-hazard potential dams (HHPD's) that are owned by Allete in the county, but we would only need to include mitigation actions if the county had any role in that mitigation. I think we can note it as a low priority. It will still be addressed in the plan update.	Stacey Stark: Correct, we will still address dam failure in the plan as one of our requirements. But mitigation actions only need to be included if they fall under Morrison County's responsibility. We will also seek feedback from Allete for input on the condition of these dams and associated activity to monitor and maintain them.

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

- 1-27-22 Mtg. #1 Email Invitation
- 1-27-22 Mtg. #1 List of Participants
- 1-27-22 Mtg. #1 Power Point Slides
- 1-27-22 Mtg. #1 Handouts

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

**From:** [Victoria MacKissock](#)  
**To:** [Shawn Larsen](#); [Matt LeBlanc](#); [Amy Kowalzek](#); [Tony Hennen](#); [Sherry Welinski](#); [Brad Vold](#); [Sarah Pratt](#); [Emily Loomis](#); [mnfrogs3@yahoo.com](#); [cityofbowlus@bowlusmn.com](#); [bjpsyck@msn.com](#); [buckman@gmail.com](#); [cityofbuckman@gmail.com](#); [joykoroll57@gmail.com](#); [jimgorka.cityofflensburg@gmail.com](#); [cityofflensburg@gmail.com](#); [bp@fallsnet.com](#); [Larry.korf@dezurik.com](#); [tegiuliani@hotmail.com](#); [robert3881@gmail.com](#); [cityofhardingmn2@gmail.com](#); [Khoheisel57@gmail.com](#); [dschmidt@centurytel.net](#); [mayor@cityoflittlefalls.com](#); [jonr@cityoflittlefalls.com](#); [Craig.Seelen@cityoflittlefalls.com](#); [wzylka@cityoflittlefalls.com](#); [motleymayor@gmail.com](#); [cityofmotley@brainerd.net](#); [mfd@brainerd.net](#); [mayor@pierzmn.org](#); [BobO@pierzmn.org](#); [erich@pierzmn.org](#); [clerk@pierzmn.org](#); [deputyclerk@pierzmn.org](#); [randallcity@brainerd.net](#); [rfd@brainerd.net](#); [mayor@royaltonmn.com](#); [cityhall@royaltonmn.com](#); [nathanb448@gmail.com](#); [topatzsub@gmail.com](#); [joyceholtz@icloud.com](#); [sandy@sonnytrucking.com](#); [cityofswanville@yahoo.com](#); [swanvillefire@gmail.com](#); [rollie@sytek.com](#); [cityofup@surfsota.com](#); [milkfire8@yahoo.com](#); [parinsfamily@charter.net](#); [littlefallstownshipclerk@yahoo.com](#); [jlnichols@jetup.net](#); [riverman@brainerd.net](#); [motleytwp@gmail.com](#); [tiney77@hotmail.com](#); [tammygladys32@gmail.com](#); [virnigrj@centurytel.net](#); [lorjanmeyer@gmail.com](#); [booner39@hotmail.com](#); [pikecreektownship2@outlook.com](#); [clipclp2014@gmail.com](#); [sharonannskwira@gmail.com](#); [insley1965@yahoo.com](#); [cherilincoln@outlook.com](#); [dkeehr@brainerd.net](#); [ripleytownship@brainerd.net](#); [telonganecker@msn.com](#); [amyleewalker@yahoo.com](#); [ardisterry@hotmail.com](#); [scandiavalleyfd@gmail.com](#); [klheadle@brainerd.net](#); [acadiared@yahoo.com](#); [racecows8@yahoo.com](#); [cheetah5@centurytel.net](#); [kdkcpa@mncpapro.com](#); [walburn20@gmail.com](#); [bellevuetwp@outlook.com](#); [bucktownship@outlook.com](#); [atoewsmk@hotmail.com](#); [jmctwp@hotmail.com](#); [wacavach@yahoo.com](#); [peggy.frieler@icloud.com](#); [granitetwp@outlook.com](#); [lpeterschick@yahoo.com](#); [mjs468@hotmail.com](#); [cekastanek@juno.com](#); [wayneg@tru-stone.com](#); [melnetty@littlefalls.net](#); [brett.repulske@usda.gov](#); [Lisa.Villcheck@state.mn.us](#); [Shannon.Wettstein](#); [joshua.hanson@mn.usda.gov](#); [jason.kern@state.mn.us](#); [kayla.hagfors@ecemn.com](#); [quale@cwpower.com](#); [gweber@pierz.k12.mn.us](#); [sjones@falls.k12.mn.us](#); [vcapelle@upsala.k12.mn.us](#); [gharthan@swanville.k12.mn.us](#); [kristine.wehrkamp@isd485.org](#); [patrick.j.boone.nfg@mail.mil](#); [chad.emery@co.cass.mn.us](#); [john.bowen@crowwing.us](#); [julie.peterson@co.mille-lacs.mn.us](#); [mcdermott@co.benton.mn.us](#); [Erin.Tufte@co.stearns.mn.us](#); [michael.wisniewski@co.todd.mn.us](#); [monte.fronk@millelacsband.com](#)  
**Cc:** [Bonnie K. Hundrieser](#)  
**Subject:** Morrison County MHMP Planning Team Meeting- Meeting Invite January 27, 2022 9:00-11:00AM  
**Date:** Thursday, December 2, 2021 8:01:33 AM

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## MORRISON COUNTY

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

Greetings,

Your presence is requested at a Planning Team Meeting for the update of the **Morrison 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: Thursday, January 27, 2022

Time: 9:00 – 11:00 a.m.

Zoom Link: [https://umn-private.zoom.us/webinar/register/WN\\_oX8aQ2eDRhuWqXFyz0xIOg](https://umn-private.zoom.us/webinar/register/WN_oX8aQ2eDRhuWqXFyz0xIOg)

**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 Morrison 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 Morrison 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 Morrison 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,

Victoria MacKissock  
Emergency Manager/Communications Supervisor  
Morrison County Sheriff's Office  
213 – 1<sup>st</sup> Avenue SE  
Little Falls, MN 56345  
Sheriff Office: 320-632-9233  
Office Direct: 320-632-0195  
Fax: 320-632-0179  
Email: [victoriam@co.morrison.mn.us](mailto:victoriam@co.morrison.mn.us)

## Morrison County

### 1/27/22 MHMP Planning Team Meeting #1

#### List of Participants (30)

	First Name	Last Name	Organization	Job Title
1	Victoria	MacKissock	Morrison County Sheriff's Office	Emergency Manager/Communications Supervisor
2	Matthew	LeBlanc	Morrison County	Administrator
3	Amy	Kowalzek	Morrison County	Land Services Director
4	Emily	Loomis	Morrison County Health and Human Services	Public Health Emergency Preparedness Coordinator
5	Sarah	Pratt	Morrison County Health and Human Services	Human Services Supervisor
6	Tony	Hennen	Morrison County Public Works	Public Works Director
7	Greg	Zylka	City of Little Falls	Mayor
8	Kay	Hoheisel	City Of Lastrup	Mayor
9	Craig	Seelen	City of Little Falls Fire Dept.	Fire Chief
10	Kyle	Johnson	City of Little Falls Police Dept.	Police Captain
11	Bob	Otremba	City of Pierz	City Administrator
12	Eric	Hanneken	City of Pierz Police Dept.	Chief of Police
13	Ted	VanHove	City of Royalton Fire and Rescue	Fire Chief
14	Travis	Blais	City of Royalton Fire and Rescue	Assistant Chief
15	Sandy	Lange	City of Swanville	Mayor
16	mel	buesseler	Leigh Township	Treasurer
17	Nancy	Lanners	Buckman Township	Clerk
18	Mary	Hoover	Green Prairie Township	Treasurer
19		Arhourschtt	Pike creek township supervisor	Supervisor
20	Rick	Monson	Township Leigh	Supervisor
21	Ross	Wamre	Pike Creek Township	Supervisor
22	Darlene	Kroll	Pike Creek Township	Supervisor
23	Stephen	Jones	Little Falls Community Schools	Superintendent
24	Lisa	Villcheck	HSEM	Regional Program Coordinator

25	Jason	Kern	MN DNR Forestry	Resource Protection Program Forester
26	Pat	Boone	Camp Ripley Fire Department	Fire Chief
27	Josh	Hanson	USDA-NRCS	District conservationist
28	Andy	Beckstrom	Mille lacs county	PSAP EM
29	James	McDermott	Benton County	Director of Emergency Management
30	Chad	Emery	Cass County Sheriff's Office	Deputy / Emergency Management Coordinator

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

January 27, 2022



## Welcome & Introductions

### U-Spatial@UMD Project Leads



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



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

### Morrison County Project Lead

- Victoria MacKissock, Morrison County Emergency Manager / Communications Supervisor



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



March 29, 2020 heavy snowstorm damage

The purpose of this meeting is to formally convene the **Morrison 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



Sept. 7, 2016 Camp Ripley Tornado Damage

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.

### Morrison 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.

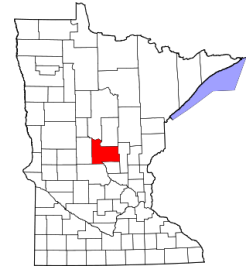
PRESENTER : BONNIE HUNDRIEER

## Who the Plan Covers



The **Morrison 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.



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## MHMP Planning Team



### Morrison County Planning Team

- **Morrison 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.

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## 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

## 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)



June 29, 2020 heavy flooding, SW Morrison County



August 14, 2020 Tornado Cushing Township

PRESENTER : STACEY STARK

## Comments and Questions?

## Morrison County Review of Existing Hazard Risk Prioritization

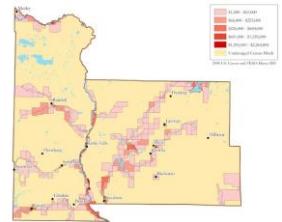
HAZARD	EXISTING PLAN	2022 PLAN
Flooding	High	
Wildfire	High	
Winter Storms	Moderate	
Tornadoes	Moderate	
Windstorms	Moderate	
Hail	Moderate	
Drought	Moderate	
Extreme Cold	Low	
Extreme Heat	Low	
Lightning	Low	
Landslides	N/A	
Dam/Levee Failure	N/A	

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

## Flooding (High)



- A potential economic loss model is run for 1% annual chance flood
- Use of FEMA Flood Insurance Rate Map (FIRM)
- Use of property values from count assessor
- Critical Infrastructure locations from GIS and EM input
- From 2019 MN State HMP, 74 bldg flooded, \$19.2M
- Four flash floods in the last decade



PRESENTER : STACEY STARK

## Wildfire/Wildland Fire (High)



- Minnesota DNR tracked 464 wildfires in Morrison County between 2007 and 2017, burning an average of 45 acres/fire
- Normalized costs are \$216,843 year

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## 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 2.8 per year.



March 29, 2020 Heavy snowstorm damage – NE Morrison County

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## Tornadoes (Moderate)



- Based NCEI Storm Events Database through 2021, the relative frequency of tornados is .38 per year (27 total)
- Tornadoes occurred in 2020 (EF0) and 2016 (EF1)
- Identify mobile home locations



August 14, 2020 Tornado – City of Staples

PRESENTER : STACEY STARK

## Windstorms, Lightning, Hail (Moderate/Low)



- Each addressed individually
- The relative frequency of all wind-related events since January of 2012 is 2.4 per year.
- There were ten hailstorms with hail greater or equal to 1-inch since 2014. The relative frequency of all hail events is 2.8 per year.
- Hazards deemed low risk and without significant mitigation actions, can be dropped from the plan.



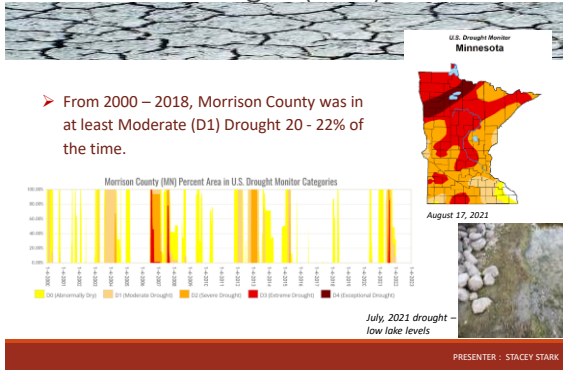
Minnesota storm front, InForum photo



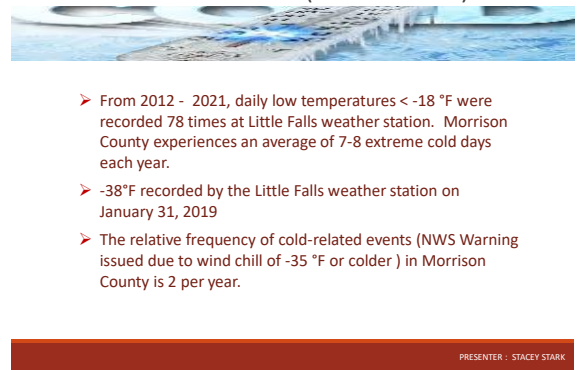
Central MN hailstorm Brainerd Dispatch photo

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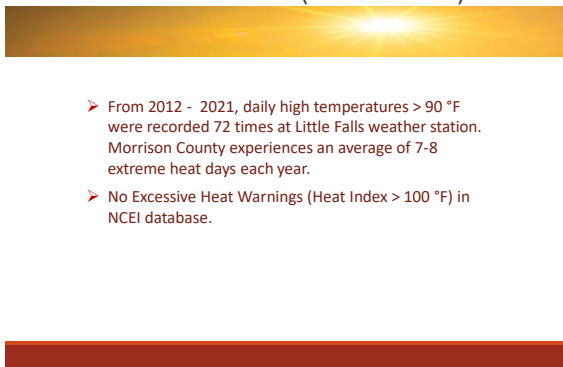
## Drought (Low)



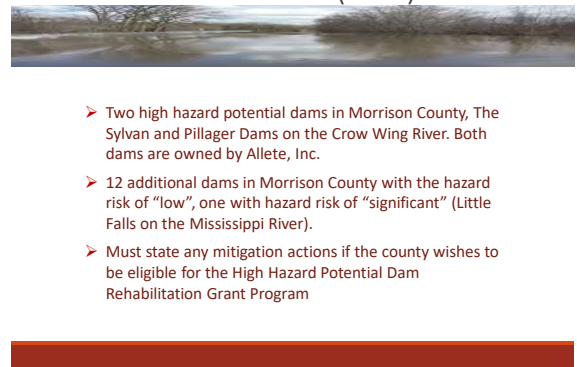
## Extreme Cold (Moderate)



## Extreme Heat (Moderate)



## Dam Failure (Low)



## Morrison County Review of Hazard Risk Prioritization

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

High to moderate priority hazards will be addressed in the 2022 plan update and will require mitigation actions.

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## Mitigation Strategies & Example Actions



See Handout: Mitigation Strategies & Action Types

PRESENTER : BONNIE HUNDRIESER

## #1 - Local Planning & Regulations



These actions include government authorities, policies, or codes that influence the way land and buildings are developed and built.

### EXAMPLES:

- Establishing & enforcing floodplain & shoreland ordinances
- Participating in the NFIP
- Developing stormwater management plans
- Long-term planning for infrastructure improvements
- Working with MHP operators to be in compliance with State statutes for storm shelters & evacuation plans.



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## #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



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## 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

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## 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.



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## #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)



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## #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

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## 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

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## Historical Projects in Morrison County Resulting from HMA Funding

Year	Project Type	Subgrantee	Project Amount	Federal Share
2011	91.1: Local Multihazard Mitigation Plan	Morrison (County)	\$27,851	\$20,882
2010	600.1: Warning Systems (as a Component of a Planned, Adopted, and Exercised Risk Reduction Plan)	Royalton	\$30,879	\$23,159

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, policies, 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


 Next Steps

## 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


 Next Steps

## 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


 Next Steps

## 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


 Next Steps

## 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

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CONSULTING LLC

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
<b>Natural Systems Protection</b>	<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>
<b>Education and Awareness Programs</b>	<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>
<b>Mitigation Preparedness and Response Support</b>	<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  
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 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

## Morrison County MHMP Planning Team Meeting #2

### November 18, 2022 - Meeting Summary & Documentation

**Summary:** On Friday, November 18, 2022, Morrison 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 Morrison County Multi-Hazard Mitigation Plan (MHMP). The purpose of the meeting was to formally convene the Morrison 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:** Morrison 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 **28** people attended the meeting. Representation included departmental staff from Morrison County and the cities of Buckman, Harding, Flensburg, Randall, Lastrup, Little Falls, Pierz, Royalton, and Swanville. The cities of Bowlus, Elmdale, Genola, Hillman, Motley, Sobieski, and Upsala were unavailable 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.

Meeting Participant	Comment, Question or Mitigation Idea Submitted	Facilitator Feedback / How to be Addressed in Plan Update
Amy Kowalzek, Morrison County Land Services Director	Regarding Interactive Map Overview Slide on Flood-Risk Mapping Data of location of structures within the flood zone:  Is that data based on the current maps or the preliminary new maps?	Stacey Stark – We are using the newer maps from the MN DNR even though they are not fully approved yet through the adoption process, as we assume them to be more accurate.

There were no further questions or comments 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 Morrison County MHMP Meeting #2:**

- 11-18-22 Mtg. #2 Email Invitation
- 11-18-22 Mtg. #2 List of Participants
- 11-18-22 Mtg. #2 Power Point Slides
- 11-18-22 Mtg. #2 Handouts

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

**From:** [Victoria MacKissock](#)  
**To:** [Victoria MacKissock](#); [Shawn Larsen](#); [Matt LeBlanc](#); [Amy Kowalzek](#); [Tony Hennen](#); [Sherry Welinski](#); [Brad Vold](#); [Sarah Pratt](#); [Emily Loomis](#); [cityofbowlus@yahoo.com](#); [bipsyck@msn.com](#); [buckman@gmail.com](#); [cityofbuckman@gmail.com](#); [Kullajohn2@gmail.com](#); [Joykoroll57@gmail.com](#); [jimgorka.cityofflensburg@gmail.com](#); [cityofflensburg@gmail.com](#); [bp@fallsnet.com](#); [Larry.korf@dezurik.com](#); [tegiuliani@hotmail.com](#); [robert3881@gmail.com](#); [cityofhardingmn2@gmail.com](#); [Khoheisel57@gmail.com](#); [rayme@hoheiseltax.com](#); [dschmidt@centurytel.net](#); [mayor@cityoflittlefalls.com](#); [jonr@cityoflittlefalls.com](#); [Craig.Seelen@cityoflittlefalls.com](#); [motleymayor@gmail.com](#); [cityofmotley@brainerd.net](#); [mfd@brainerd.net](#); [mayor@pierzmn.org](#); [deputyclerk@pierzmn.org](#); [BobO@pierzmn.org](#); [erich@pierzmn.org](#); [Dan Rocheleau](#); [randallcity@brainerd.net](#); [rfd@brainerd.net](#); [mayor@royaltonmn.com](#); [cityhall@royaltonmn.com](#); [nathanb448@gmail.com](#); [topatzsob@gmail.com](#); [joyceholtz@icloud.com](#); [sandy@sonnytrucking.com](#); [cityof\\_swanville@yahoo.com](#); [swanvillefire@gmail.com](#); [rollie@sytek.com](#); [cityofup@surfsota.com](#); [milkfire8@yahoo.com](#); [cheetah5@centurytel.net](#); [kdkcpa@outlook.com](#); [belleptownship@outlook.com](#); [walburn20@gmail.com](#); [bellevuetwp@outlook.com](#); [bucktownship@outlook.com](#); [atoewsmk@hotmail.com](#); [jmctwp@hotmail.com](#); [wacavach@yahoo.com](#); [peggy.frieler@icloud.com](#); [granitetwp@outlook.com](#); [lpeterschick@yahoo.com](#); [mjs468@hotmail.com](#); [cekastanek@juno.com](#); [wayneg@tru-stone.com](#); [parinsfamily@charter.net](#); [littlefallstownshipclerk@yahoo.com](#); [jlnichols@jetup.net](#); [riverman@brainerd.net](#); [motleytwp@gmail.com](#); [tiney77@hotmail.com](#); [tammygladys32@gmail.com](#); [virmigri@centurytel.net](#); [lorjanmeyer@gmail.com](#); [booner39@hotmail.com](#); [pikecreektownship2@outlook.com](#); [clipclp2014@gmail.com](#); [sharonannskwira@gmail.com](#); [insley1965@yahoo.com](#); [cherillincn@outlook.com](#); [dkeehr@brainerd.net](#); [ripleytownship@brainerd.net](#); [telonganecker@msn.com](#); [amyleewalker@yahoo.com](#); [ardisterry@hotmail.com](#); [scandiavalleyfd@gmail.com](#); [klheadle@brainerd.net](#); [swanriver19@gmail.com](#); [acadiared@yahoo.com](#); [racecows8@yahoo.com](#); [brett.repulske@usda.gov](#); [Lisa.Dumont@state.mn.us](#); [Shannon Wettstein](#); [joshua.hanson@mn.usda.gov](#); [jason.kern@state.mn.us](#); [kayla.hagfors@ecemn.com](#); [quale@cwppower.com](#); [gweber@pierz.k12.mn.us](#); [gjohnson@lfalls.k12.mn.us](#); [capelle@upsala.k12.mn.us](#); [Travis Hensch](#); [kristine.wehrkamp@isd485.org](#); [patrick.j.boone.nfg@mail.mil](#); [chad.emery@co.cass.mn.us](#); [john.bowen@crowwing.us](#); [Andy.beckstrom@millelacs.mn.gov](#); [jmcdermott@co.benton.mn.us](#); [Erin.Tufte@co.stearns.mn.us](#); [michael.wisniewski@co.todd.mn.us](#); [monte.fronk@millelacsband.com](#)  
**Cc:** [hundrieserconsulting@outlook.com](#)  
**Subject:** Morrison County Multi-Hazard Mitigation Plan Update- Meeting #2 Invitation 11-18-22  
**Date:** Friday, September 23, 2022 9:32:41 AM

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## MORRISON COUNTY

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

Greetings,

Your presence is requested at the **2nd Planning Team Meeting** for the update of the **Morrison 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: Friday, November 18, 2022

Time: 9:00 a.m. – 11:00 a.m.

Zoom Link: [https://umn-private.zoom.us/webinar/register/WN\\_JxyNoqO7QpCUQksNW3402g](https://umn-private.zoom.us/webinar/register/WN_JxyNoqO7QpCUQksNW3402g)

**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 Morrison 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 Morrison 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,

Victoria MacKissock  
Emergency Manager/Communications Supervisor  
Morrison County Sheriff's Office  
213 – 1<sup>st</sup> Avenue SE  
Little Falls, MN 56345  
Sheriff Office: 320-632-9233  
Office Direct: 320-632-0195  
Fax: 320-632-0179  
Email: [victoriam@co.morrison.mn.us](mailto:victoriam@co.morrison.mn.us)

## Morrison County

### 11/18/22 MHMP Planning Team Meeting #2

#### List of Participants (28)

	<b>First Name</b>	<b>Last Name</b>	<b>Organization</b>	<b>Job Title</b>
1	Victoria	MacKissock	Morrison County Sheriff's Office	Emergency Management Director
2	Brad	Vold	Morrison County Health and Human Services	Health and Human Services Director
3	Amy	Kowalzek	Morrison County	Land Services Director
4	Matthew	LeBlanc	Morrison County	Administrator
5	Sarah	Pratt	Morrison County Health and Human Services	Human Services Supervisor
6	Tony	Hennen	Morrison County Public Works	Public Works Director
7	Linda	Brezinka	City of Buckman	City Clerk
8	Corey	Hayes	City of Harding	Clerk
9	Tammy	Gorka	City of Flensburg	Council member
10	DAN	NOSS	City of Randall	Mayor
11	Kay	Hoheisel	City of Lastrup	Mayor
12	Pat	Boser	City of Lastrup	City Councilor
13	Craig	Seelen	City of Little Falls Fire Dept.	Fire Chief
14	Bob	Otremba	City of Pierz	City Administrator
15	Leah	Walberg	City of Royalton	City Clerk
16	Ted	VanHove	City of Royalton	Fire Chief
17	Brenda	Weiss-Pesta	City of Royalton	Mayor
18	Sandy	Lange	City of Swanville	Mayor
19	Travis	Hensch	Swanville Public School	Superintendent
20	Jason	Kern	MN DNR Forestry	Resource Protection Program Forester
21	Greg	Johnson	Little Falls Community Schools	Superintendent
22	Pat	Boone	Camp Ripley – Minnesota National Guard – Fire Dept.	Fire Chief
23	Lisa	Villcheck	MN Homeland Security and Emergency Management	HSEM Region 4 Regional Program Coordinator
24	Ross	Wamre	Pike Creek Township	Township Supervisor
25	Nancy	Lanners	Buckman Township	Township Clerk
26	Anthony	Szczodroski	Rosing Township - Morrison County	Township Road Supervisor
27	Chad	Emery	Cass County Sheriff's Office	Deputy Sheriff / Emergency Management Coordinator
28	Scott	Heide	Crow Wing County Sheriff's Office	Emergency Management Coordinator

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

NOVEMBER 18, 2022



## Welcome & Introductions

### U-Spatial@UMD Project Leads



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



**Bonnie Hurdieser**  
HM Planning Specialist  
Hurdieser Consulting LLC

### Morrison County Project Lead

- Victoria Mackissock, Morrison 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



March 29, 2020 heavy snowstorm damage

The purpose of this meeting is to formally convene the **Morrison 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

Morrison 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.

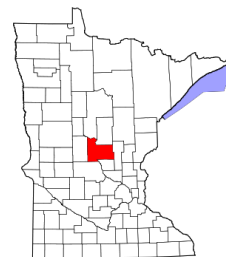
PRESENTER: BONNIE HURDIESER

## Who the Plan Covers



This is a **multi-jurisdictional plan** that covers Morrison 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 HURDIESER

## 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

## 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

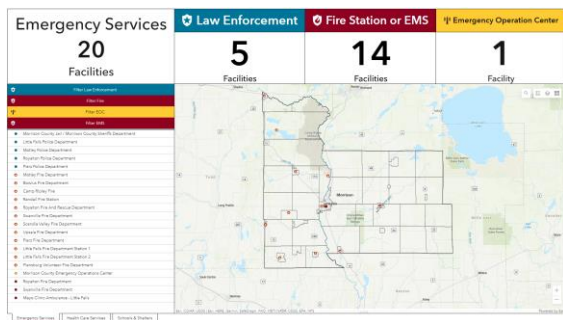
- Interactive maps and content
- Simple, concise explanations
- Multiple ways to navigate the content
- Links to PDF components and document
- Public input form on site



PRESENTER: BONNIE HUNDRIESER

PRESENTER: STACEY STARK

## All Hazards - Critical Infrastructure



PRESENTER: STACEY STARK

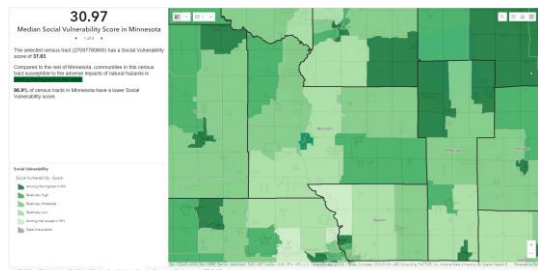
## All Hazards - Critical Infrastructure



- Correctional facilities
- Mobile home parks/ RV campgrounds
- Historic Places
- EPA Resource Conservation and Recovery Act (RCRA) Registry

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



Sept. 7, 2016 Camp Ripley Tornado Damage

PRESENTER: STACEY STARK

## Prioritization of Hazards for Morrison County

### NATURAL HAZARDS

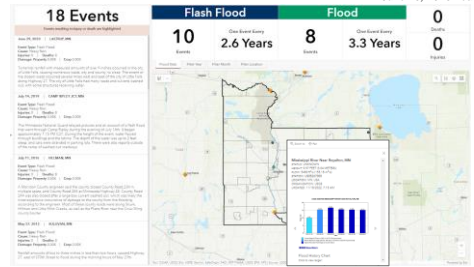
Prioritization of hazards by the Morrison County planning team included consideration of:

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

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

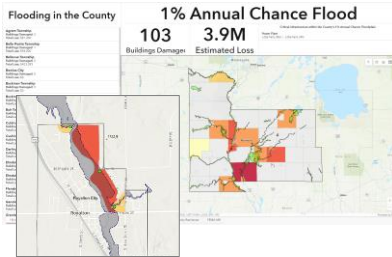
PRESENTER: BONNIE HUNDRIESER

## MORRISON COUNTY: Flooding (High)



PRESENTER: STACEY STARK

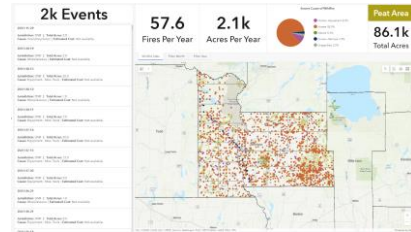
## MORRISON COUNTY: Flooding (High)



- 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

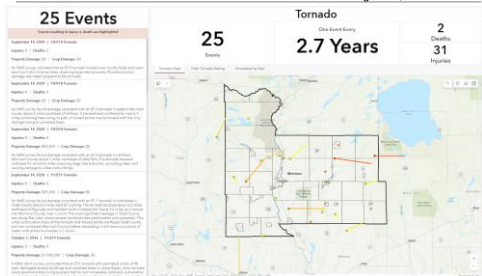
## MORRISON COUNTY: Wildfire (High)



- Program Gaps/Deficiencies:**
- Develop Community Wildfire Protection Plan (CWPP)
  - Continued wildfire safety & awareness to the public
  - Rural water access for wildland fire fighting (dry hydrants, well access)

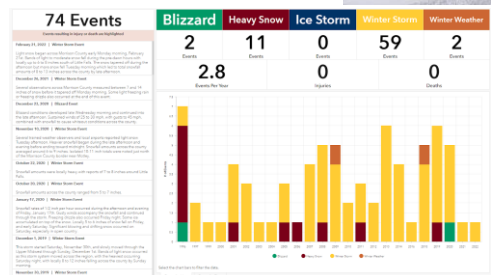
PRESENTER: STACEY STARK

## MORRISON COUNTY: Tornadoes (Moderate)



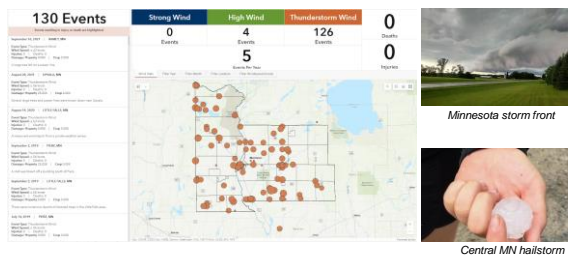
PRESENTER: STACEY STARK

## MORRISON COUNTY: Winter Storms (Moderate)



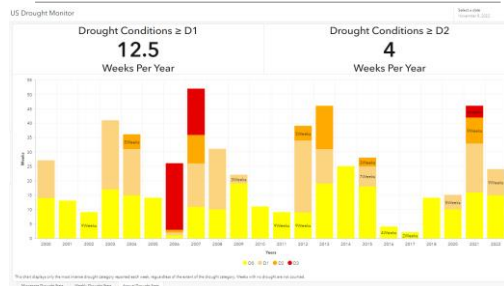
PRESENTER: STACEY STARK

## MORRISON COUNTY: Windstorms, Hail (Moderate)



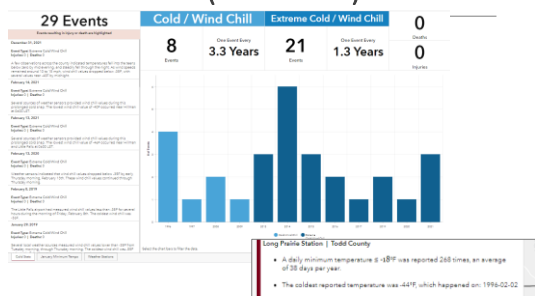
PRESENTER: STACEY STARK

## MORRISON COUNTY: Drought (Moderate)



PRESENTER: STACEY STARK

## MORRISON COUNTY: Extreme Cold (Moderate)



PRESENTER: STACEY STARK

## MORRISON COUNTY: Extreme Cold (Moderate)

### Plans and Programs in Place

*Emergency Notifications* – NWS & Morrison County Emergency Management  
*School Closings* – policy and communication plans  
*NWS Winter Hazard Awareness Week* – public education & awareness

### Program Gaps and Deficiencies:

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

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



- 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.

**Example Eligible Activities:**

Property Acquisition (flooding/erosion)  
Tornado Safe Rooms (new/retrofit)  
Infrastructure Retrofits (utility systems, roads & bridges)  
Wildfire Mitigation  
Soil Stabilization  
Flood Risk Reduction  
Green Infrastructure  
Other projects difficult to conduct a standard BCA

PRESENTER: BONNIE 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



PRESENTER: BONNIE HUNDRIESER

# Local Planning & Regulations



**Morrison County Examples:**

- Participating in the NFIP
- Collaborating with Morrison SWCD and other watershed partners to address flooding and erosion. (1W1P)
- Working with MHP operators to be in compliance with Minnesota State statutes for storm shelters & evacuation plans.
- Work with MN DNR Firewise and local fire departments to develop a Community Wildfire Protection Plan for Morrison County



PRESENTER: BONNIE HUNDRIESER

# Structure & Infrastructure Projects

**Morrison County Examples:**

- Installation of new outdoor warning sirens.
- Construction of safe rooms / storm shelters (MHP's, seasonal campgrounds, i.e., Lake Lena).
- Burying powerlines to reduce power failure
- Implementing stormwater improvement projects for high rain and snow melt (i.e. drainage improvements, culvert upsizing).
- Conducting property buyouts of homes at risk from repetitive flooding and convert to open space.

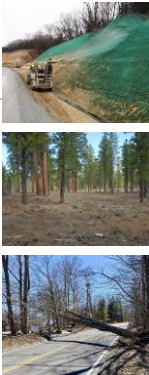


PRESENTER: BONNIE HUNDRIESER

# Natural Systems Protection

**Morrison County Examples:**

- Work with property owners to address fuels reduction for wildfire mitigation (MCEM, FD's, Morrison SWCD & NRCS)
- Conduct vegetation management along roads to reduce the risk of downed trees and branches resulting from severe storms.
  - County Public Works Dept.
  - Utility Providers
  - Local road authorities



PRESENTER: BONNIE HUNDRIESER

# Education & Awareness Programs

**Morrison County Examples:**

- Promoting sign-up for the County's Everbridge emergency notification system.
- Promoting residents to be aware of and prepared for severe weather and periods of extreme cold.
- Encouraging residents to maintain sump pumps and to clear street drains of debris.
- Conducting public outreach during periods of drought to raise awareness of water conservation measures and the dangers of wildland fire.



PRESENTER: BONNIE HUNDRIESER

## Mitigation Preparedness & Response Support

### Morrison County Examples:

- Work with local jurisdictions to acquire generator backup power (i.e., lift stations, City Hall, Fire Hall, community centers).
- Updating County/Local EOPs
- Mass Care Shelter Planning
- Working with long-term care facilities to be prepared for power outages or evacuation.
- Annual SKYWARN Storm Spotter Training with National Weather Services



PRESENTER: BONNIE HUNDRIESER

## Comments and Questions?



### Fall/Winter 2022

#### EM Review of Draft Plan and Public Review & Comment Period



Following Planning Team Mtg. #2

- EM review of draft plan
- Conduct public review & comment period (News Release #2)
- Document public outreach
- Incorporate public 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

  
**HUNDRIESER CONSULTING LLC**

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
<b>Natural Systems Protection</b>	<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>
<b>Education and Awareness Programs</b>	<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>
<b>Mitigation Preparedness and Response Support</b>	<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**

## **Morrison County MHMP News Release #1**

### **Record of Public Input & Incorporation**

**Overview:** On September 3, 2021, Morrison 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. Morrison 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 Morrison 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 Morrison 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.

#### **Email to Morrison County Emergency Management Director September 7, 2021**

Hello,

I am writing today to give input, from the perspective of a Skywarn Spotter, ID Morrison D15. I feel one of our largest concerns at this time would be that of straight-line winds, as well as tornados. witnessing many of the said events throughout Minnesota, Wisconsin, Iowa I have seen the devastation that can

and often does occur. The biggest issue I see, so many times when I am out spotting and reporting to Chanhassen is people out storm watching. So many have lack knowledge on weather events, hazards involved and the dangers a storm can possess. I often see injury to people caught outside in large hail events, vehicle accidents as people keep driving into a severe warned storm with excessive winds or torrential rains etc. Sadly, even death, as people watch or chase a tornado with no knowledge whatsoever of meso's, tornados, anything. I try my best to educate those I can, with what I've learned over the years as a Skywarn spotter...but as a community, we need to do better! I find it sad that people become injured from a lack of basic knowledge during severe weather events. I do not know what plan could be implemented. I however remain faithful in our leaders such as yourself. I am sure you all can find a way to help.

Cory Fletcher  
SkyWarn Spotter Volunteer

**EMD Response Email**  
**September 7, 2021**

Cory,

Thank you for your email and input regarding the Morrison County Multi-Hazard Mitigation Plan update. Education of the public is an on-going effort to address in the Hazard Mitigation Plan. We appreciate all that you do!

Thanks,

Victoria MacKissock  
Emergency Manager/Communications Supervisor  
Morrison County Sheriff's Office  
213 – 1<sup>st</sup> Avenue SE  
Little Falls, MN 56345  
Sheriff Office: 320-632-9233  
Office Direct: 320-632-0195  
Fax: 320-632-0179  
Email: [victoriam@co.morrison.mn.us](mailto:victoriam@co.morrison.mn.us)

**Incorporation:** Morrison County Emergency Management will include mitigation activities related to public education and awareness for storm events in the county's 5-year mitigation action chart. Local communities will also be encouraged to include similar information in their mitigation action charts for local resident awareness of severe weather safety.

**From:** [Victoria MacKissock](#)  
**To:** [Shawn Larsen](#); [Beth Hamlin](#); [Amy Kowalzek](#); [Steve Backowski](#); [Sherry Welinski](#); [Brad Vold](#); [Sarah Pratt](#); [Emily Loomis](#); [Joykoroll57@gmail.com](#); [cityofflensburg@gmail.com](#); [tegiuliani@hotmail.com](#); [cityofhardingmn2@gmail.com](#); [oreogrossl@gmail.com](#); [wzylka@cityoflittlefalls.com](#); [cityofmotley@brainerd.net](#); [clerk@pierzmn.org](#); [randallcity@brainerd.net](#); [cityhall@royaltownmn.com](#); [joyceholtz@icloud.com](#); [cityofswanville@yahoo.com](#); [cityofup@surfsota.com](#); [cheetah5@centurytel.net](#); [kdkcpa@mncpapro.com](#); [bellevuetwp@outlook.com](#); [bucktownship@outlook.com](#); [atoewsmk@hotmail.com](#); [jmctwp@hotmail.com](#); [wacavach@yahoo.com](#); [peggy.frieler@icloud.com](#); [granitetwp@outlook.com](#); [lpeterschick@yahoo.com](#); [cekastanek@juno.com](#); [wayneg@tru-stone.com](#); [melnetty@littlefalls.net](#); [littlefallstownshipclerk@yahoo.com](#); [jlnichols@jetup.net](#); [motleytwp@gmail.com](#); [tiney77@hotmail.com](#); [tammygladys32@gmail.com](#); [lorjanmeyer@gmail.com](#); [pikecreektownship2@outlook.com](#); [clipclp2014@gmail.com](#); [sharonannskwira@gmail.com](#); [cherilincoln@outlook.com](#); [ripleytownship@brainerd.net](#); [amyleewalker@yahoo.com](#); [klheadle@brainerd.net](#); [swanriver19@gmail.com](#); [acadiared@yahoo.com](#); [racecows8@yahoo.com](#); [brett.repulske@usda.gov](#); [Lisa.Dumont@state.mn.us](#); [Shannon Wettstein](#); [joshua.hanson@mn.usda.gov](#); [jason.kern@state.mn.us](#); [kayla.hagfors@ecemn.com](#); [quale@cwpower.com](#); [gweber@pierz.k12.mn.us](#); [sjones@lfalls.k12.mn.us](#); [vcapelle@upsala.k12.mn.us](#); [gharthan@swanville.k12.mn.us](#); [kristine.wehrkamp@isd485.org](#); [patrick.j.boone.nfg@mail.mil](#); [chad.emery@co.cass.mn.us](#); [john.bowen@crowwing.us](#); [julie.peterson@millelacs.mn.gov](#); [jmcdermott@co.benton.mn.us](#); [Erin.Tufte@co.stearns.mn.us](#); [michael.wisniewski@co.todd.mn.us](#); [monte.fronk@millelacsband.com](#); [bowluscitclerk@cityofbowlus.com](#); [cityofbuckman@gmail.com](#)  
**Cc:** [Bonnie K. Hundrieser](#)  
**Subject:** Morrison County Multi-Hazard Mitigation Plan News Release #1  
**Date:** Friday, September 3, 2021 11:42:03 AM  
**Attachments:** [Morrison County MHMP News Release #1.pdf](#)

---

Greetings,

Morrison County Emergency Management is commencing work on the update of the Morrison County Multi-Hazard Mitigation Plan (MHMP). Attached is a news release for your information.

**Cities and Townships:** In order to reach the greater public, we request your assistance to post this news release for your community. We will be documenting local outreach which is a requirement of the planning process. **Participation by all cities is requested in order to help fulfill required documentation to FEMA for the plan update.** The participation by townships is optional.

-

Instructions:

- **Post the News Release Electronically and/or as a Hardcopy:** Please post this news release locally using the outreach methods best available to you (your website and/or Facebook page, Post Office or community center bulletin board, or taped physically to a facility such as the City Hall or Town Hall door for public view.) We welcome as many ways of posting that you can cover.
- **If posting this news release electronically,** please email me a link to the posting (i.e. website or Facebook page).
- **If posting it as a hardcopy,** please email me a picture of it hung up and let me know the location (i.e., City Hall, Township Hall, Post Office, local community center).

The timely return of your posting documentation is appreciated. We will be working to wrap this up within the month of September.

I look forward to your participation in the Morrison County MHMP update.

If you have any questions, please let me know.

Thank you,

Victoria MacKissock

Emergency Manager/Communications Supervisor

Morrison County Sheriff's Office

213 – 1<sup>st</sup> Avenue SE

Little Falls, MN 56345

Sheriff Office: 320-632-9233

Office Direct: 320-632-0195

Fax: 320-632-0179

Email: [victoriam@co.morrison.mn.us](mailto:victoriam@co.morrison.mn.us)

**From:** [Mary Swenson](#)  
**To:** [Associated Press](#); [Brainerd Dispatch](#); [Brainerd Dispatch](#); [Falls Radio](#); [fox9news@foxtv.com](mailto:fox9news@foxtv.com); [Hometown News](#); [hotrod fm](#); [Jennifer Kraus](#); [KARE11](#); [KASM RADIO](#); [KASM Radio](#); [KNSI Radio](#); [Kool TV](#); [KSTP](#); [KSTP-Eric Chaloux](#); [LP TV](#); [Mark Slupe](#); [MC Record](#); [Melrose Beacon](#); [MN Public Radio-Collegville](#); [MPR](#); [Sauk Herald News](#); [St Cloud Times](#); [Staples World](#); [Star Tribune](#); [Terry Lehrke <terry.lehrke@apgecm.com>](mailto:terry.lehrke@apgecm.com); [WCCO News](#); [WCCO Radio](#); [WJON Radio](#); [WWWI FM & AM/KLKS KKIN FM & AM/KFGI](#)  
**Cc:** [hundrieserconsulting@outlook.com](mailto:hundrieserconsulting@outlook.com); [Victoria MacKissock](#)  
**Subject:** RE: News Release  
**Date:** Friday, September 3, 2021 12:01:57 PM  
**Attachments:** [09-03-21 Multi-Hazard Mitigation Plan.docx](#)

---

Sorry, the news release is now attached.

Public input sought for Multi-Hazard Mitigation Plan Update. For more information please see news release. Contact Victoria MacKissock, Emergency Manager at 320-632-0195 or [victoriam@co.morrison.mn.us](mailto:victoriam@co.morrison.mn.us).

Mary Swenson, Office Support Supervisor  
MORRISON COUNTY SHERIFF'S OFFICE  
320-632-0183



**Office of the Sheriff**

**SHAWN LARSEN**

213 1<sup>st</sup> Avenue SE  
Little Falls, MN 56345

Phone: 320-632-9233

Fax: 320-631-2893

Toll Free: 866-401-1111

Ext. 180

**NEWS RELEASE**

**Morrison County Sheriff's Office  
September 3, 2021**

**Public Input Wanted as County Updates  
Multi-Hazard Mitigation Plan**

The Morrison County Office of Emergency Management is working with U-Spatial at the University of Minnesota Duluth to update the county's Multi-Hazard Mitigation Plan (MHMP). The plan assesses the natural hazards that pose risk to the county, such as tornadoes, straight line winds, ice storms, blizzards, wildfire, flooding, and extreme temperatures and identifies ways to minimize the damage of future events. As the county works to update the plan, it wants to hear from the public.

The Morrison County MHMP is a multi-jurisdictional plan that covers Morrison County, including the cities of Bowlus, Buckman, Elmdale, Flensburg, Genola, Harding, Hillman, Lastrup, Little Falls, Motley, Pierz, Randall, Royalton, Sobieski, Swanville, and Upsala. The Morrison 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 Victoria MacKissock, Morrison County Emergency Management Director. "Understanding the natural hazards that can cause serious impact to our communities and taking action to reduce or eliminate the impact of future disasters makes us more resilient. Hazard mitigation helps us to break the cycle of damage and repair caused by things like flooding, ice storms, and severe wind events that can damage property, stress economies, and threaten life safety in our county."

Examples of hazard mitigation include 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, Morrison 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 Morrison County Emergency Management by phone or email. Public comments may also be submitted on the Morrison County Sheriff's Office Facebook page where this news release will be posted.

There will be additional opportunities for public feedback throughout the planning process. A draft of the plan will be 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**

Victoria MacKissock  
Morrison County Emergency Management Director  
Phone: 320-632-0195  
Email: victoriam@co.morrison.mn.us

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

### COUNTY POSTINGS

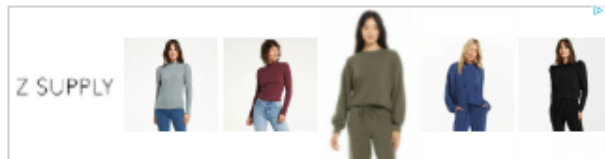
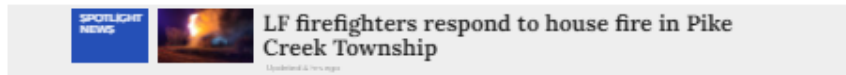
#### Morrison County County Website, September 3, 2021



#### Morrison County Sheriff's Office Facebook Page, September 3, 2021



**Morrison County Dispatch Newspaper**  
**September 7, 2021**



## Public input requested as county updates multi-hazard mitigation plan

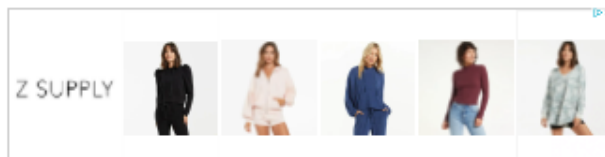
Sep 7, 2021



The Morrison County Office of Emergency Management is working with U-Spatial at the University of Minnesota Duluth to update the county's Multi-Hazard Mitigation Plan (MHMP). The plan assesses the natural hazards that pose risk to the county, such as tornadoes, straight line winds, ice storms, blizzards, wildfire, flooding, and extreme temperatures and identifies ways to minimize the damage of future events. As the county works to update the plan, it wants to hear from the public.



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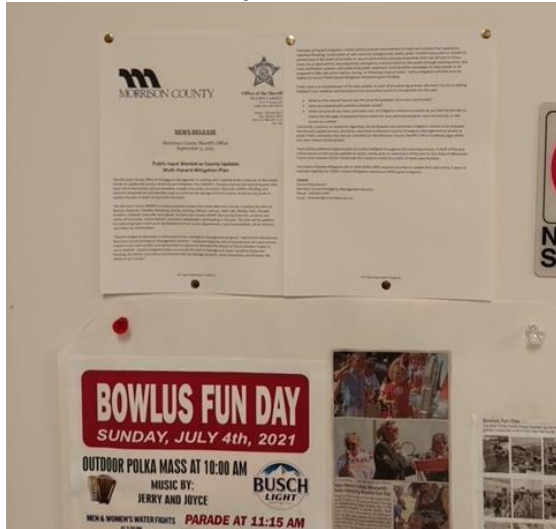
Trending Now

- 1 Joyce Irene Reintjes Crowder
- 2 Little Falls man dies in single-vehicle crash, Wednesday
- 3 Passenger injured in UTV

## CITY POSTINGS

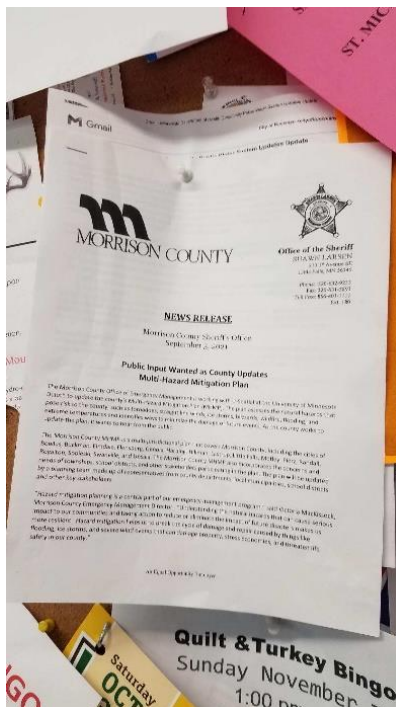
### City of Bowlus

Fire Hall Community Bulletin Board, November 3, 2021

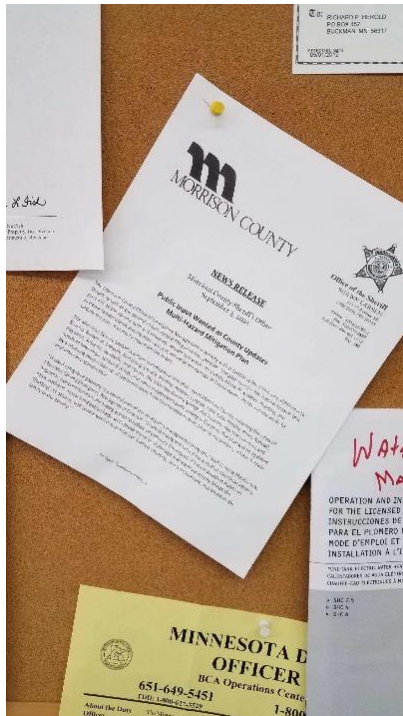


### City of Buckman

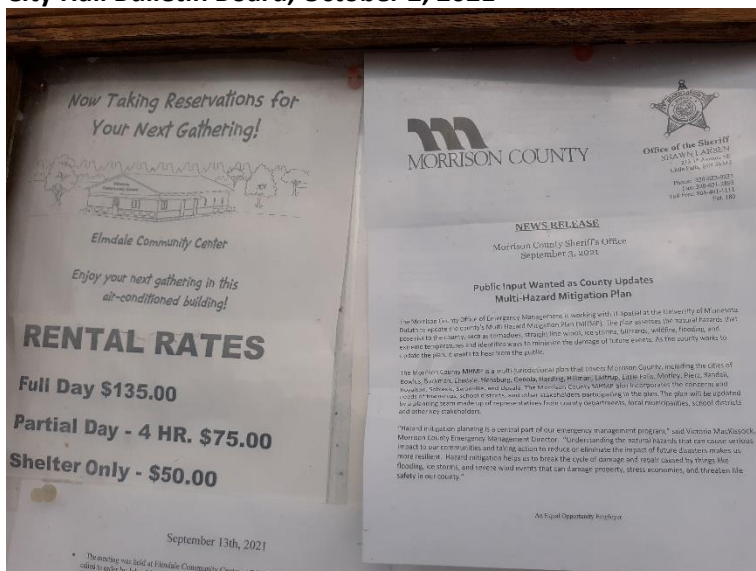
City Hall Bulletin Board, October 31, 2021



## City of Buckman Hardware Store Bulletin Board, October 31, 2021



## City of Elmdale City Hall Bulletin Board, October 2, 2021



## City of Flensburg City Facebook Page, September 30, 2021



## City of Genola Genola City Hall Door, October 27, 2021



**City of Harding**  
**Community Center Bulletin Board, October 29, 2021**




**City of Hillman**  
No posting

**City of Lastrup**  
**City Hall Bulletin Board, November 4, 2021**



**City of Lastrup**  
**City Website, November 4, 2021**



The header image shows a street scene in Lastrup, Minnesota, with a blue building on the left and a road sign for Highway 278 and 23. The text "CITY OF LASTRUP, MINNESOTA" is overlaid on the image.

Home City Officials Meeting Minutes Calendar Ordinances Forms Fees Local Businesses Park

### Official Website for the City of Lastrup, Minnesota

#### Announcements

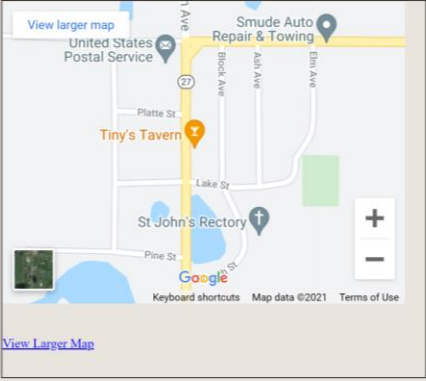
[County Seeks Input on Multi-Hazard Mitigation Plan](#)

The Morrison County Office of Emergency Management is working with U-Spatial at the University of Minnesota Duluth to update the county's Multi-Hazard Mitigation Plan (MHMP). The plan assesses the natural hazards that pose risk to the county, such as tornadoes, straight line winds, ice storms, blizzards, wildfire, flooding, and extreme temperatures and identifies ways to minimize the damage of future events.

[Read more](#)

[City Park Use](#)

The water has been shut off so the bathrooms are closed for the season. The park remains open for now, but please be mindful



A Google Map of Lastrup, Minnesota, showing the intersection of Highway 278 and Highway 23. Landmarks include United States Postal Service, Smude Auto Repair & Towing, Tiny's Tavern, and St John's Rectory. The map includes a "View larger map" link and a "View Larger Map" link.

**City of Little Falls**  
**City of Little Falls Facebook Page, September 27, 2021**



A circular profile picture showing a tree in front of a building.

City of Little Falls - Government  
@cityoflittlefallsmn

Home  
Posts  
Videos  
Photos  
About  
Reviews  
Community

Like Share ...

#### Posts

 **City of Little Falls - Government**  
20 hrs · 🌐




A gold-colored sheriff's badge with "SHAWN LARSEN" at the top, "SHERIFF" in the center, and "MORRISON COUNTY" at the bottom. The badge also features the "STATE OF MINNESOTA" seal.

CO.MORRISON.MN.US  
**Morrison County, MN**  
09-03-21 Morrison County Multi-Hazard Mitigation Plan News Release...

## City of Motley City Website Posting, September 29, 2021

### City Hall Hours

Monday - Thursday 8:00 AM - 4:00 PM  
Friday - CLOSED



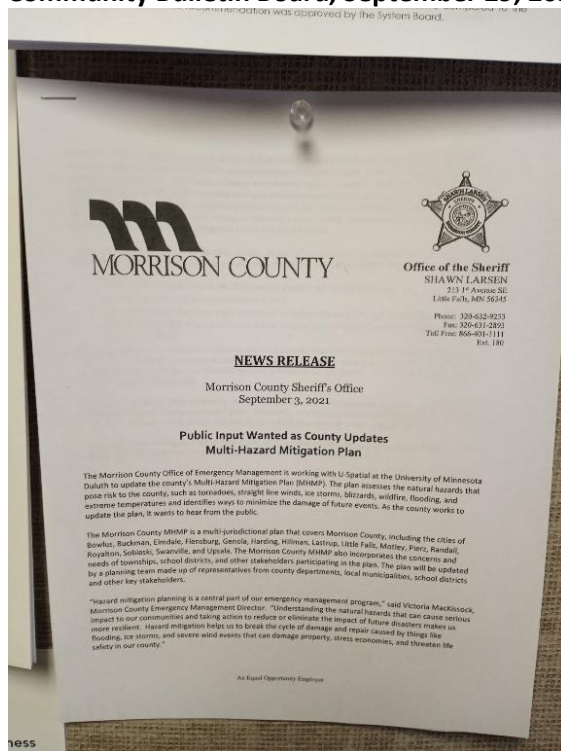
### Welcome to Motley!

**REMINDER:** Pet licenses have expired as of May 31st. There's still time to take care of this by coming in to the City Hall with a current rabies certificate. If you registered your pet after January 1, 2021 your license is good until May 31, 2022. All other residents should have had their pets licensed on or before May 31st of this year. The cost of registration is \$5 per pet, and a copy of your pet's current rabies vaccination is required. It's required by City Ordinance to register your pets annually with the City. Failure to do so could result in an ordinance violation and an unlicensed pet fee of \$100. Applications are available at City Hall or [here](#).

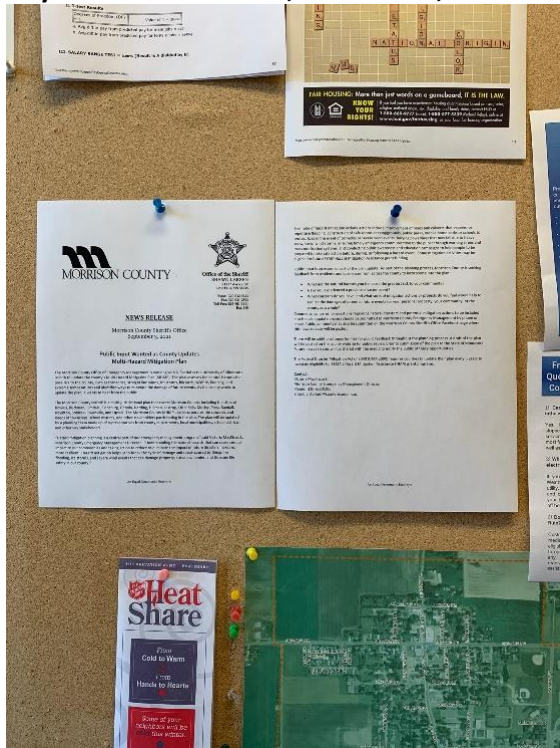
### Notices

- [LPS Garbage/Recycling Calendar 2021](#)
- [SMACF Emergency Relief & Response Fund](#)
- [Spring/Summer 2021 Newsletter](#)
- [2020 Consumer Confidence Report](#)
- [City Hall Wheelchair Accessibility Resolution](#)
- [Tri-CAP Notice 7-22-2020](#)
- [Multi-Hazard Mitigation Plan](#)
- [2021 Fee Schedule](#)

## City of Motley Community Bulletin Board, September 29, 2021

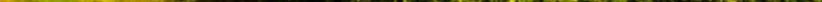


## City of Pierz City Hall Bulletin Board, October 29, 2021



## City of Pierz City Facebook, November 1, 2021





Pierz is in the heart of Central Minnesota and prides itself on its small town atmosphere. A stable and diverse economic base has supported Pierz throughout its history. Check out the history of Pierz [here](#).

Pierz City Hall is now open to the public. Only two people are allowed in the waiting area for proper social distancing. Face masks are not required but are encouraged. Please do not enter city hall if you feel sick. There are still many contact free ways to pay utility payments if you choose. You may use the drop box at Pierz City Hall, pay online

[Read Full News Release Here](#)

Pierz Senior Dining Site is now open to in house dining.  
Monday, Tuesday, Wednesday, & Friday's, meals served at 11:30am.  
Thursday, meals served at 5:00pm.  
Tuesday's, Bingo starts at 10:30am.  
Wednesday's, 4-point Smeer at 1:00pm.  
Please call the day before to reserve a meal at 320-468-2160

randall.govoffice2.com

Group

### Feedback Form

### Area Churches

## Employment Opportunities

## Contact Us

## Tourism

Morrison County Hazard Mitigation news release

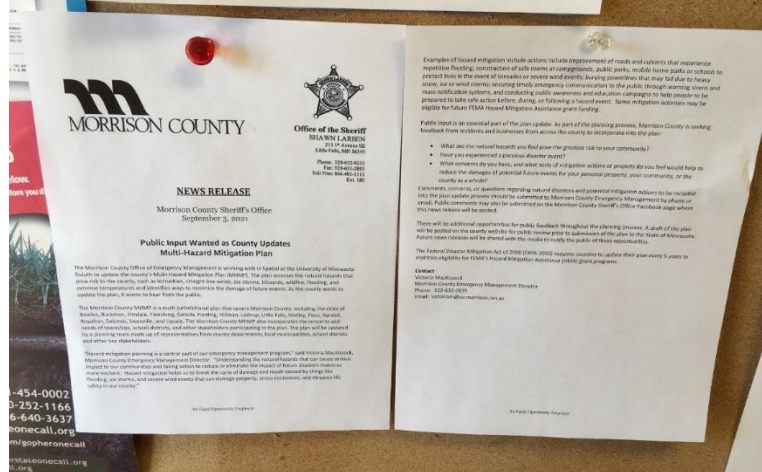
See what is happening in the Area and Go to Events Tab to find out More!

**Effective June 1, 2018 The City of Randall will be contracting with Morrison County Sheriff Department.**

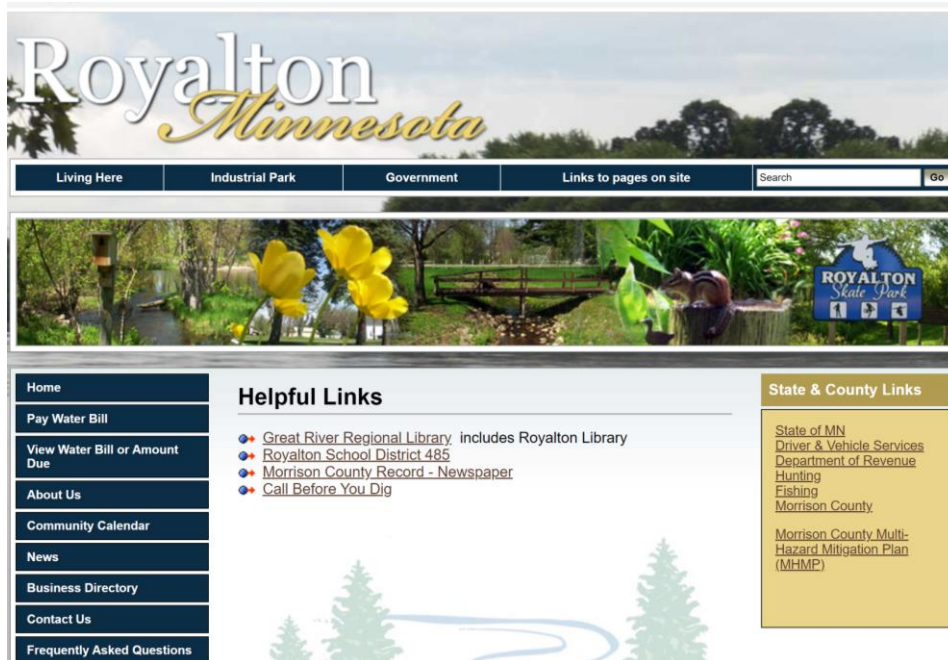
Water Restrictions 7/22/2021

SEPTEMBER	9 <sup>th</sup> , 2021	AUGUST	18 <sup>th</sup> , 2021
OCTOBER	13 <sup>th</sup> , 2021	SEPTEMBER	15 <sup>th</sup> , 2021
	11 <sup>th</sup> , 2021		

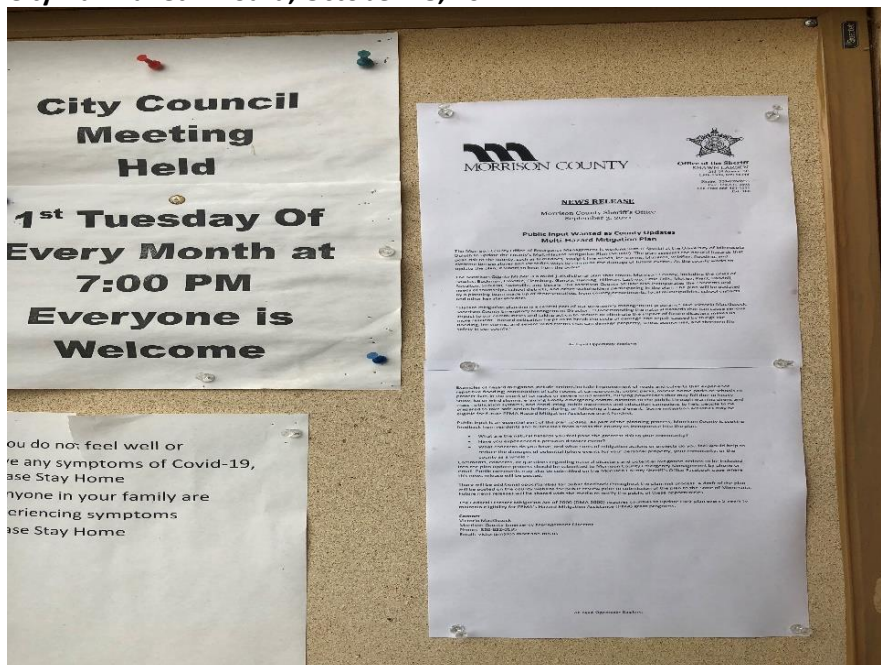
SEPTEMBER	9 <sup>th</sup> , 2021	AUGUST	18 <sup>th</sup> , 2021
OCTOBER	13 <sup>th</sup> , 2021	SEPTEMBER	15 <sup>th</sup> , 2021
NOVEMBER	11 <sup>th</sup> , 2021	OCTOBER	20 <sup>th</sup> , 2021
DECEMBER	8 <sup>th</sup> , 2021	NOVEMBER	17 <sup>th</sup> , 2021
	13 <sup>th</sup> , 2021	DECEMBER	15 <sup>th</sup> , 2021



**City of Royalton**  
**City Website, October 5, 2021**



**City of Sobieski**  
**City Hall Bulletin Board, October 28, 2021**



## City of Swanville

City Website posting, October 27, 2021

### GOALS

1. Provide fair and economical municipal services and be responsive to community needs.
2. Make Swanville a desirable place to live for all ages and families.
3. Ensure residents feel safe and secure. See **Morrison County Multi-hazard mitigation plan below**
4. Involve community in decisions and planning. Create an environment to promote involvement.
5. Enhance housing opportunities.
6. Promote and improve locale business opportunities.
7. Improve, replace, and maintain infrastructure.
8. Offer an array of recreational areas for all ages.
9. Provide fair and honest governing policies.

 [Morrison County Multi-Hazard Mitigation Plan](#)

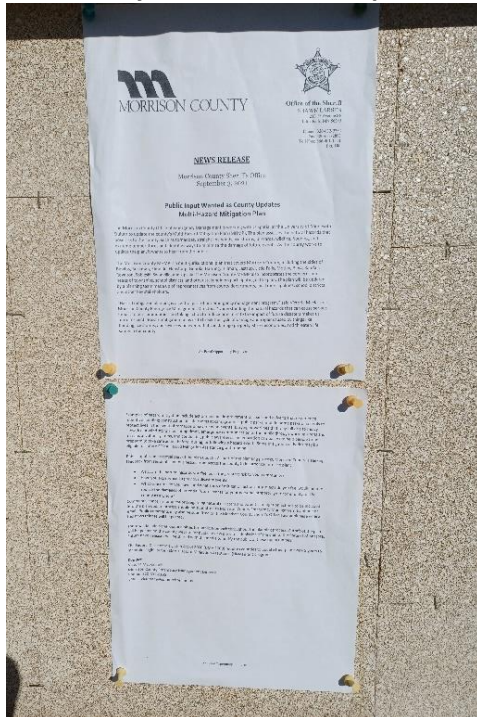
## City of Upsala

City Hall Bulletin Board, October 7, 2021

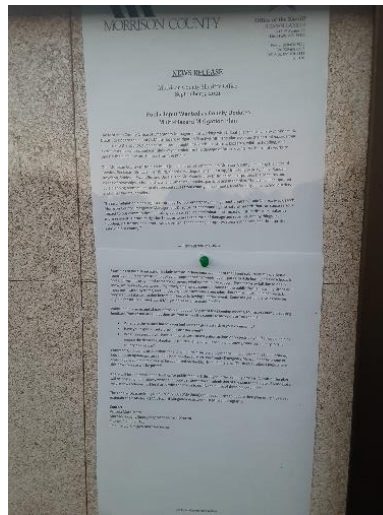
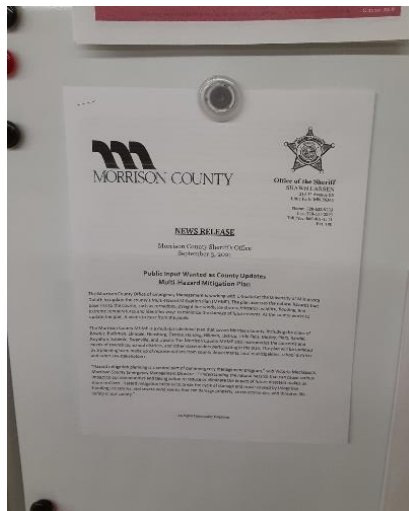


## TOWNSHIP POSTINGS

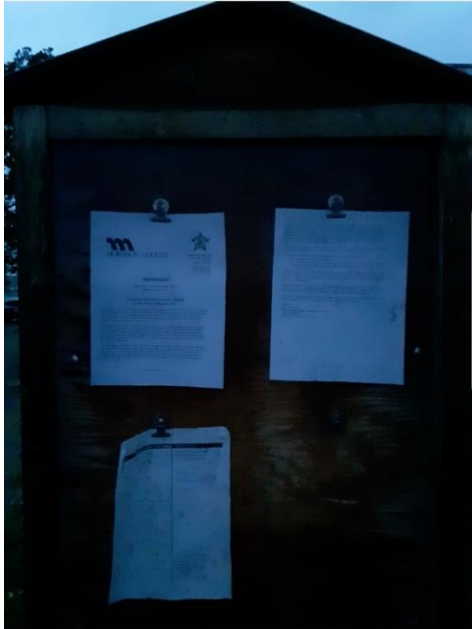
### Belle Prairie Township Community Bulletin Board, September 27, 2021



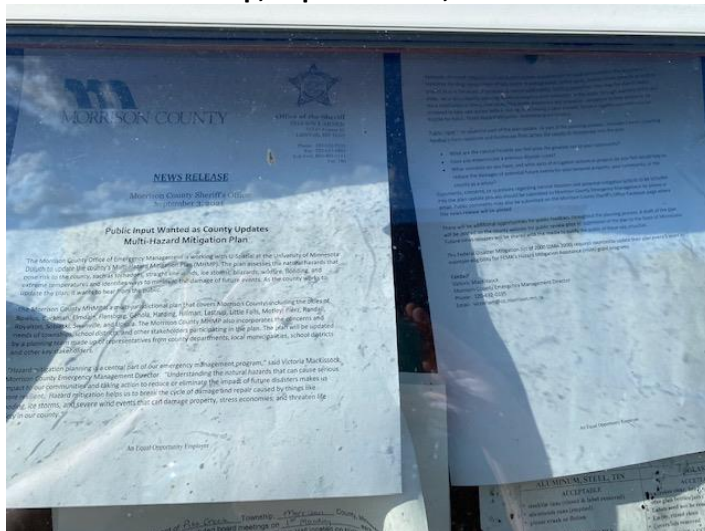
### Bellevue Township Town Hall Postings, October 7, 2021



## Green Prairie Township Town Hall Community Bulletin Board, September 14, 2021



## Pike Creek Township, September 20, 2021



## **Morrison County MHMP News Release #2**

### **Record of Public Input & Incorporation**

**Overview:** On January 23, 2023 Morrison 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 Morrison 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 1/23/23 to 2/6/23, 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 Morrison 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 Morrison 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 Morrison County Emergency Management, local jurisdictions, or via the online comment form.

**From:** [Bonnie K Hundrieser](#)  
**To:** [shawnl@co.morrison.mn.us](#); [mattl@co.morrison.mn.us](#); [amyK@co.morrison.mn.us](#); [tonyh@co.morrison.mn.us](#); [sherryw@co.morrison.mn.us](#); [bradv@co.morrison.mn.us](#); [SarahP@co.morrison.mn.us](#); [emilyl@co.morrison.mn.us](#); [cityclerk@cityofbowlus.com](#); [bjpsyck@msn.com](#); [buckman@gmail.com](#); [cityofbuckman@gmail.com](#); [Kullajohn2@gmail.com](#); [Joykoroll57@gmail.com](#); [jimgorka.cityofflensburg@gmail.com](#); [cityofflensburg@gmail.com](#); [bp@fallsnet.com](#); [Larry.korf@dezurik.com](#); [tegiuliani@hotmail.com](#); [robert3881@gmail.com](#); [cityofhardingmn2@gmail.com](#); [Khoheisel57@gmail.com](#); [rayme@hoheiseltax.com](#); [dschmidt@centurytel.net](#); [mayor@cityoflittlefalls.com](#); [jonr@cityoflittlefalls.com](#); [Craig.Seelen@cityoflittlefalls.com](#); [motleymayor.mikeschmidt@gmail.com](#); [cityofmotley@brainerd.net](#); [mfd@brainerd.net](#); [mayor@pierzmn.org](#); [deputyclerk@pierzmn.org](#); [BobO@pierzmn.org](#); [erich@pierzmn.org](#); [danr@co.morrison.mn.us](#); [randallcity@brainerd.net](#); [rfd@brainerd.net](#); [mayor@royaltonmn.com](#); [cityhall@royaltonmn.com](#); [trvanhove@gmail.com](#); [topatzsob@gmail.com](#); [joyceholtz@icloud.com](#); [sandy@sonnytrucking.com](#); [cityof\\_swanville@yahoo.com](#); [swanvillefire@gmail.com](#); [rollie@sytekcom.com](#); [cityofup@surfsota.com](#); [milkfire8@yahoo.com](#); [cheetah5@centurytel.net](#); [kdkcpa@outlook.com](#); [bellevetownship@outlook.com](#); [walburn20@gmail.com](#); [bellevetwp@outlook.com](#); [bucktownship@outlook.com](#); [atoewsmk@hotmail.com](#); [jmctwp@hotmail.com](#); [Annieh11098@gmail.com](#); [peggy.frieler@icloud.com](#); [granitewp@outlook.com](#); [lpeterschick@yahoo.com](#); [mjs468@hotmail.com](#); [cekastanek@juno.com](#); [wayneg@tru-stone.com](#); [littlefallstowship@gmail.com](#); [jlnichols@jetup.net](#); [riverman@brainerd.net](#); [motleytp@gmail.com](#); [tiney77@hotmail.com](#); [tammygladys32@gmail.com](#); [virmgrj@centurytel.net](#); [lorjanmeyer@gmail.com](#); [rossw@surveymapsolutions.com](#); [pikecreektownship2@outlook.com](#); [clipclp2014@gmail.com](#); [shannonnaskwira@gmail.com](#); [insley1965@yahoo.com](#); [cherilincoln@outlook.com](#); [dkeehr@brainerd.net](#); [ripleytownship@brainerd.net](#); [telonganecker@msn.com](#); [amyleewalker@yahoo.com](#); [ardisterry@hotmail.com](#); [scandiavalleyfd@gmail.com](#); [klheadle@brainerd.net](#); [swanriver19@gmail.com](#); [acadiared@yahoo.com](#); [racecows8@yahoo.com](#); [brett.repulske@usda.gov](#); [Lisa.Dumont@state.mn.us](#); [shannon.wettstein@morrisonswcd.org](#); [joshua.hanson@mn.usda.gov](#); [jason.kern@state.mn.us](#); [kayla.hagfors@ecemn.com](#); [quale@cwpower.com](#); [gweber@pierz.k12.mn.us](#); [gjohnson@lfalls.k12.mn.us](#); [vcapelle@upsala.k12.mn.us](#); [thensch@swanville.k12.mn.us](#); [kristine.wehrkamp@isd485.org](#); [patrick.j.boone.nfg@mail.mil](#); [chad.emery@co.cass.mn.us](#); [john.bowen@crowwing.us](#); [Andy.beckstrom@millelacs.mn.gov](#); [jmcdermott@co.benton.mn.us](#); [Erin.Tufte@co.stearns.mn.us](#); [michael.wisniewski@co.todd.mn.us](#); [monte.fronk@millelacsband.com](#)  
**Cc:** [Victoria MacKissock](#)  
**Subject:** News Release - Public Comment Sought for Morrison County Hazard Mitigation Plan  
**Date:** Monday, January 23, 2023 10:47:00 AM  
**Attachments:** [Morrison County News Release Hazard Mitigation Plan Public Review \(1-23-23\).pdf](#)  
**Importance:** High

---

Greetings,

Attached is a news release announcing the public review and comment period is open for the Morrison County Hazard Mitigation Plan from **January 23 – February 6** prior to submission of the plan to FEMA. As a jurisdiction, related agency, or neighboring jurisdiction involved in the Morrison 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:

[Morrison 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 Morrison 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*



**Office of the Sheriff**

SHAWN LARSEN

213 1<sup>st</sup> Avenue SE  
Little Falls, MN 56345

Phone: 320-632-9233  
Fax: 320-631-2893  
Toll Free: 866-401-1111  
Ext. 180

**NEWS RELEASE**

Morrison County Sheriff's Office  
January 23, 2023

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

Morrison County has completed an updated draft of the of its Hazard Mitigation Plan (HMP) and is now seeking public feedback. Like all Minnesota counties, Morrison 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, tribal nations, 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 6 2023. The public can access the plan using the following links:

[Morrison County HMP Website](https://z.umn.edu/MorrisonHMP) (z.umn.edu/MorrisonHMP)

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

[Public Comment Feedback Form](https://z.umn.edu/MorrisonSurveyHMP) (https://z.umn.edu/MorrisonSurveyHMP)

The Morrison County HMP is a multi-jurisdictional plan that covers Morrison County, including the cities of Bowlus, Buckman, Elmdale, Flenburg, Genola, Harding, Hillman, Lastrup, Little Falls, Motley, Pierz, Randall, Royalton, Sobieski, Swanville, and Upsala. The Morrison 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 Morrison County Emergency Management in cooperation with U-Spatial at

An Equal Opportunity Employer

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 Morrison 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 Morrison 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. Morrison 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 Morrison County Emergency Management.

**Contact:**

Victoria MacKissock

Morrison County Deputy Emergency Management Director

Phone: 320-632-0195

Email: [victoriam@co.morrison.mn.us](mailto:victoriam@co.morrison.mn.us)

# Morrison County 2023 Hazard Mitigation Plan

## Online Public Review Website & Comment Forms



The Morrison County 2023 Hazard Mitigation Plan was made available for public review online with a website hosted by U-Spatial@UMD ([Morrison 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

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

### COUNTY POSTINGS

1/23/23 Morrison County website




1/23/23 Morrison County Sheriff's Office Facebook



## LOCAL MEDIA POSTINGS

1/24/23, R&J Broadcasting Website



NEWS

### Morrison County seeking public comment on Hazard Mitigation Plan

Post January 24, 2023 News Items 4036 4102 4145 4099 9



Morrison County is seeking public comment on its Hazard Mitigation Plan (HMP). The plan is a multi-jurisdictional plan that covers Morrison County, including the cities of Bowles,...

All county residents, as well as other interested stakeholders (those in neighboring counties, tribal nations, 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 8, 2023. The public can access the plan using the following links:

[Morrison County HMP Website \(z.umn.edu/MorrisonHMP\)](#)

[Mitigation Action Charts \(https://morrison-county.hmp-umh.hub.arcgis.com/pages/mitigation-actions\)](#)

[Public Comment Feedback Form \(https://z.umn.edu/MorrisonSurveyHMP\)](#)

The Morrison County HMP is a multi-jurisdictional plan that covers Morrison County, including the cities of Bowles,...

News

- Community Events
  - HLJBLNHLNACQ Community Events
  - HLJBLNHLNACQ Community Events
  - HLJBLNHLNACQ Community Events
- Farm News
- School News
- Announcements & Cancellations


Front Page

- Sports
  - Coaches Corner
    - HLJBLNHLNACQ High School & Local Sports
  - College Sports
    - College Sports - Future Schedules
    - College Sports - Sports & Results
  - HLJBLNHLNACQ High School & Local Sports
    - HLJBLNHLNACQ High School & Local Sports - Sports & Results
    - HLJBLNHLNACQ High School & Local Sports - Future Schedules
  - HLJBLNHLNACQ High School & Local Sports - Future Schedules

1/23/23, Morrison County Record online

Public comment sought on county's Hazard Mitigation Plan

By Zach Hacker zach.hacker@aggr.com Jan 23, 2023 Updated Jan 23, 2023



Morrison County is seeking public feedback on a recently updated draft of its Hazard Mitigation Plan (HMP).

All county residents, along with other interested stakeholders – those in neighboring counties, tribal nations or working with affected agencies, for example – are encouraged to review and offer feedback. The updated plan on which input is sought includes an interactive website, a PDF of the draft plan and proposed mitigation actions.

The review and comment period is open for 15 days, through Feb. 6. The public can access the plan via the following websites:

- [z.umn.edu/MorrisonHMP](https://z.umn.edu/MorrisonHMP)
- [morrison-county.hmp-umh.hub.arcgis.com/pages/mitigation-actions](https://morrison-county.hmp-umh.hub.arcgis.com/pages/mitigation-actions), and
- [z.umn.edu/MorrisonSurveyHMP](https://z.umn.edu/MorrisonSurveyHMP)

"Like all Minnesota counties, Morrison 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," read a statement from Morrison County Emergency Management (MCEM). "Planning for natural disasters minimizes the impact of these events that can cause vast economic loss and personal hardship."

According to MCEM, the HMP is a "multi-jurisdictional plan" that covers Morrison County, along with each of its 16 incorporated municipalities. It also takes into account the needs and concerns of townships, school districts and other stakeholders participating in the plan.

Updates to the plan have been made under the direction of MCEM, 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. The 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.

According to MCEM, some examples of construction of safe rooms in areas with...

in-store shopping In-store pickup Delivery


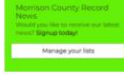


Photo Contest Sweepstakes

Prize: \$1000

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Murphy Chevrolet

201 Silverado 1500 4x4

2018 Silverado 1500

WEBSITE

Trending Now

- Missing Motley man found dead, no foul play suspected
- Morrison County Arrest Warrants
- Morrison County prepares for road construction season
- Jefitski gives decade of experience to disability advocacy program
- No injuries reported after

## CITY POSTINGS

### City of Bowlus

1/27/23, Hardcopy Posting

A printed copy of the news release was posted on the community bulletin board at Bowlus City Hall.

### City of Buckman

1/23/23, Hardcopy Postings

Printed copies of the news release were posted on the front door window of the Buckman City Hall and also at the Buckman Hardware Store/Post Office.

### City of Elmdale

1/23/23, Hardcopy Posting

A printed copy of the news release was posted on the community bulletin board at Elmdale City Hall.

### City of Flensburg

1/24/23, City of Flensburg Facebook



### City of Genola

2/1/23 Hardcopy Posting

A printed copy of the news release was posted on the bulletin board at Genola City Hall.

### City of Harding

1/23/23, Hardcopy Posting

A printed copy of the news release was posted on the bulletin board at Harding City Hall.

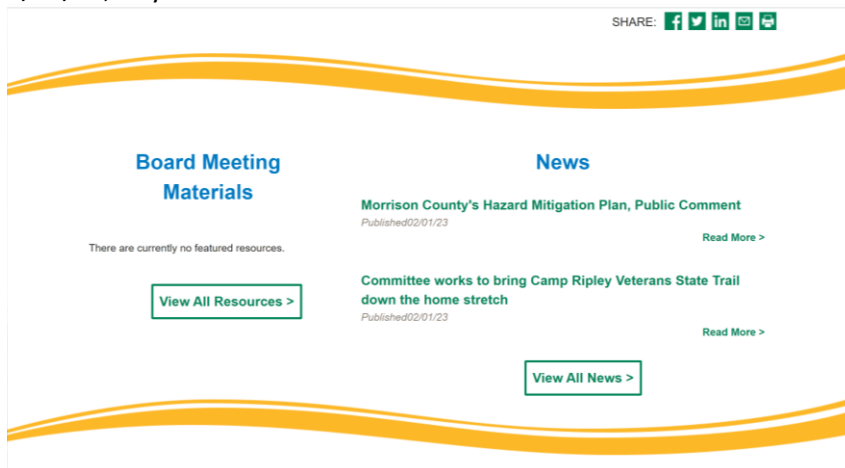
## City of Lastrup

1/28/23, Hardcopy Postings

Printed copies of the news release were posted on the community bulletin board at the Lastrup City Hall and at Sunrise Ag.

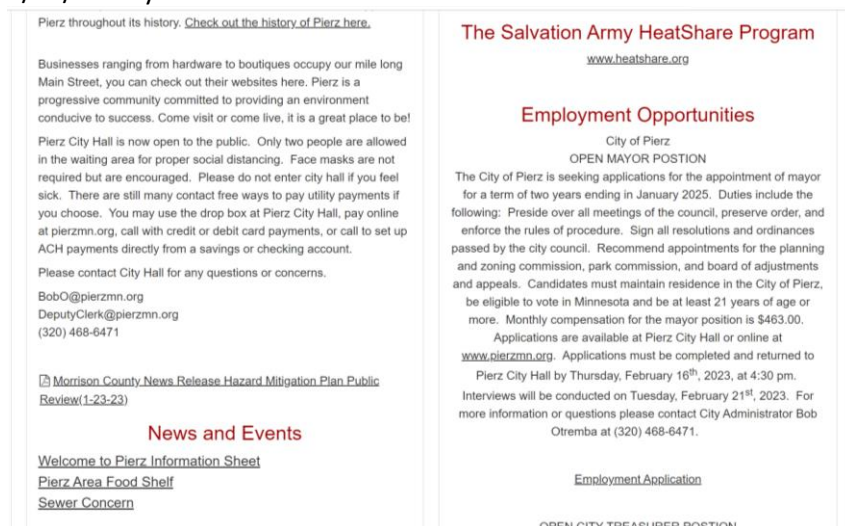
## City of Little Falls

1/23/23, City of Little Falls Website



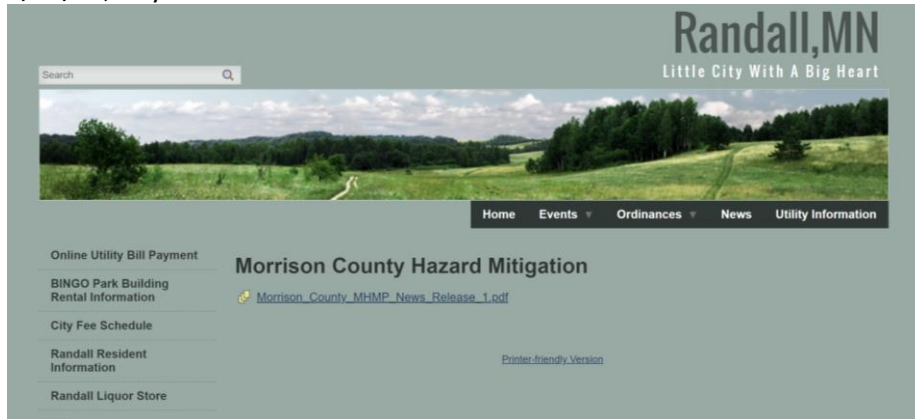
## City of Pierz

2/23/23 City of Pierz Website



## City of Randall

1/24/23, City of Randall Website



## City of Royalton

1/23/23, City of Royalton Website



## City of Sobieski

1/24/23 Hardcopy Posting

A printed copy of the news release was posted on the bulletin board at the Sobieski Community Center.

## City of Swanville

1/25/23, City of Swanville website



1/25/23 Hardcopy Posting

A printed copy of the news release was posted at the Swanville City Hall.

## City of Upsala

1/26/23, Hardcopy Postings

Printed copies of the news release were posted at the Upsala Community Center, Stearns Bank – Upsala, and the Upsala Post Office.

## OTHER POSTINGS

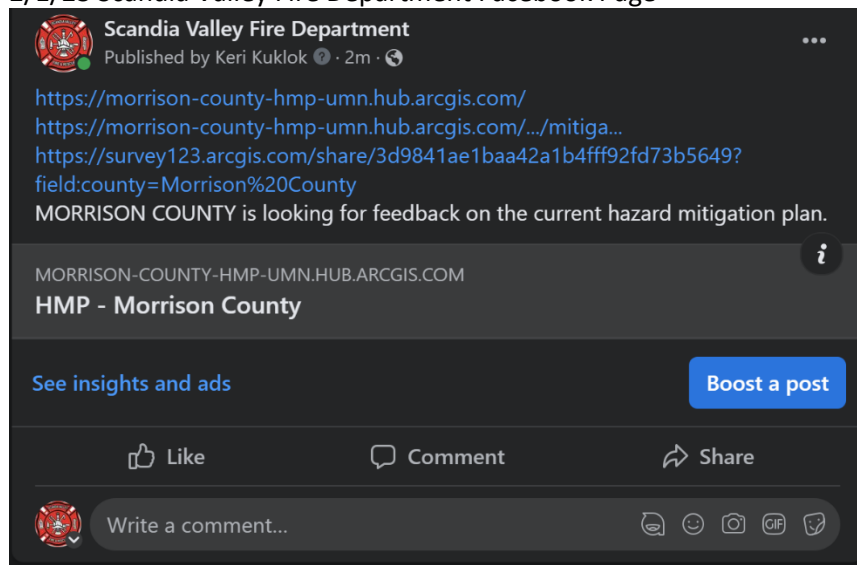
### Pike Creek Township

1/25/23, Hardcopy Posting

A printed copy of the news release was posted outside the Pike Creek Town Hall.

### Scandia Valley Township

2/1/23 Scandia Valley Fire Department Facebook Page



**Pulaski Township**

1/25/23 Hardcopy Posting

A printed copy of the news release was posted at the Pulaski Town Hall.

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

# CITY OF BOWLUS

# 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 Everbridge emergency notification alert system.	Existing High 2023-2028	City Admin, City EM	This is something the city has not done to date; however, we have a city website and city Facebook page where we can encourage residents to go to the Morrison County website to sign up. We also can post flyers at our City Hall and Community Center.	City
2	Severe Winter & Summer Storms	Education & Awareness Programs	Provide education and outreach to residents on personal preparedness for severe weather events, periods of extreme cold, and extended power outages.	Existing High 2023-2028	City Admin, City EM in coord with MCEM	We use our city Facebook page as our primary tool to communicate emergency and storm-related information to residents. We will seek to share information we receive from Morrison County Emergency Management in the future to support residents to be aware of and ready for severe weather.	City
3	Drought	Local Planning & Regulations / Education & Awareness Programs	Enforce the city's watering ban during periods of severe drought and conduct outreach to residents to make them aware of the restrictions.	Existing Moderate 2023-2028	City Admin	In 2021 the city put out a watering ban restricting homes to limit watering (lawns) to no more than one hour per day. The restrictions alternated for homes with even/odd numbers. The city used its Facebook page and posted/verbal announcements to the public to make them aware of the watering ban. The city will enact watering restrictions again in the future as per MN DNR guidelines during periods of severe drought.	City

**CITY OF BUCKMAN****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 Everbridge emergency notification alert system.	Existing High 2023-2028	City Admin, City EM	This is something the city has not done to date; however, we can encourage residents to sign up on the Morrison County website through occasional announcements at City Council meetings or by hanging flyers. The city has no website or Facebook page.	City
2	Severe Winter & Summer Storms	Education & Awareness Programs	Provide education and outreach to residents on personal preparedness for severe weather events, periods of extreme cold, and extended power outages.	Existing High 2023-2028	City Admin, City EM	Same as above. The city will seek to share information we receive from Morrison County Emergency Management to help residents be aware of and prepared for severe weather events.	City

# CITY OF ELMDALE

## 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 Everbridge emergency notification alert system.	Existing High 2023-2028	City Admin, City EM	This is something the city has not done to date; however, we can make occasional announcements at City Council meetings or post flyers to encourage residents to sign up on the Morrison County website. Over half of our residents are seniors and do not use devices like cell phones, so we rely on verbal communication or posting information in public places.	City
2	Severe Winter & Summer Storms	Education & Awareness Programs	Provide education and outreach to residents on personal preparedness for severe weather events, periods of extreme cold, and extended power outages.	Existing High 2023-2028	City Admin, City EM	We post information at City Hall and have an outdoor warning siren that is remotely activated by the Morrison County Sherriff's Office when necessary. Over half of our residents are over the age of 70 and don't use such technology such as cell phones. When the outdoor siren goes off the city clerk makes personal phone calls to about 7 households to instruct them to go to the basement because they don't have cell phones and usually do not hear the warning siren inside their homes.	City
3	Severe Winter & Summer Storms	Mitigation Preparedness & Response Support	Acquire a backup generator for City Hall.	New Moderate 2023-2028	City Admin, City EM in coord with MCEM	The city would need to work with Morrison County Emergency Management to see if we can receive assistance in acquiring a portable generator for our City Hall. We have a small city budget for any mitigation activities and would look to the county for assistance.	City, County

# CITY OF FLENSBURG

# 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 Everbridge emergency notification alert system.	Existing High 2023-2028	City Admin, City EM	This is not something the city has done to date; however, we can post reminders on our city Facebook page and on a flyer at our City Office to encourage residents to go to the Morrison County website to sign up.	City
2	Severe Winter & Summer Storms	Education & Awareness Programs	Provide education and outreach to residents on personal preparedness for severe weather events, periods of extreme cold, and extended power outages.	Existing High 2023-2028	City Admin, City EM	The city has a Facebook page that we actively use to communicate with our residents. We also post information at our City Office. We will continue to post information to help make our residents aware of and prepared for severe weather. We will pass along information we receive from Morrison County Emergency Management.	City
3	Severe Summer Storms	Mitigation Preparedness & Response Support	Maintain the city's outdoor warning siren to ensure functionality.	Existing Moderate 2023-2028	City EM	The city tests our siren on monthly basis and will continue to maintain it as needed. Our siren is remotely activated by Morrison County Sheriff's Office during periods of dangerous high winds.	City

**CITY OF GENOLA****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 Everbridge emergency notification alert system.	Existing High 2023-2028	City Admin, City EM	This is not something the city has done to date; however, we can encourage residents verbally with reminders at City Council meetings or posting information in public places. We are a community of only 70 people; we do not have a website or Facebook page.	City
2	Severe Winter & Summer Storms	Education & Awareness Programs	Provide education and outreach to residents on personal preparedness for severe weather events, periods of extreme cold, and extended power outages.	Existing High 2023-2028	City Admin, City EM	We are a small community and interact with residents primarily in-person. We continue to encourage our residents to be aware of and prepared for severe weather and power outages. We encourage residents to stay posted to local news that carries information from the National Weather Service.	City
3	Severe Summer Storms	Mitigation Preparedness & Response Support	Maintain the city's outdoor warning siren to ensure functionality.	Existing Moderate 2023-2028	City EM	The city tests our siren on monthly basis and will continue to maintain it as needed. Our siren is remotely activated by Morrison County Sheriff's Office during periods of dangerous high winds.	City

**CITY OF HARDING****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 Everbridge emergency notification alert system.	Existing High 2023-2028	City Admin, City EM	This is not something the city has done in the past, however, we can encourage residents to go to the Morrison County website to sign up by making occasional announcements at City Council meetings or by posting flyers in public areas.	City
2	Severe Winter & Summer Storms	Education & Awareness Programs	Provide education and outreach to residents on personal preparedness for severe weather events, periods of extreme cold, and extended power outages.	Existing High 2023-2028	City Admin, City EM	We encourage residents to be aware of weather alerts by staying tuned to the news and local radio. We do not have a city website or Facebook page. In 2019 the city received a grant to put up a new tornado siren to replace the old one that was not working. Now all the residents can hear the new siren when it goes off to warn them of severe weather.	City

**CITY OF HILLMAN****Mitigation Action Chart**

	<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 Everbridge emergency notification alert system.	Existing High 2023-2028	City Admin, City EM	This is not something the city has done in the past, however, we can encourage residents to go to the Morrison County website to sign up by making occasional announcements at City Council meetings or by posting flyers in public areas.	City
2	Severe Winter & Summer Storms	Education & Awareness Programs	Provide education and outreach to residents on personal preparedness for severe weather events, periods of extreme cold, and extended power outages.	Existing High 2023-2028	City Admin, City EM	We encourage residents to be aware of weather alerts by staying tuned to the news and local radio. We do not have a city website or Facebook page.	City

# CITY OF LASTRUP

# 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 Everbridge emergency notification alert system.	Existing High 2023-2028	City Admin, City EM	This is not something the city has done in the past; however, we can encourage residents to go to the county website to sign up by posting information on our city website and hanging up a flyer at City Hall.	City
2	Severe Winter & Summer Storms	Education & Awareness Programs	Provide education and outreach to residents on personal preparedness for severe weather events, periods of extreme cold, and extended power outages.	Existing High 2023-2028	City Admin, City EM	We encourage residents to be aware of weather alerts by staying tuned to the news and local radio to be prepared for severe weather. We also work to share information we receive from Morrison County Emergency Management in different ways, such as using our website, announcements at City Council meetings, or posting flyers.	City
3	Severe Summer Storms	Structure & Infrastructure Projects	Install an outdoor warning siren for the city of Lastrup.	New High 2023-2028	City Admin, City EM in coord with MCEM	The city does not have an outdoor warning siren and would like to have one installed to help warn residents of dangerous high wind or tornado events. We will work with the Morrison County Emergency Management Director to see if we may be eligible to receive grant funding from the USDA Community Development – Community Facilities grant program to purchase a siren and have it connected to the county's remote activation system	City, County, USDA CF grant program
4	Flooding	Local Planning & Regulations	Work with the MN DNR NFIP Manager to develop an updated floodplain ordinance for the city of Lastrup.	New Moderate 2023-2028	City Admin	The most recent floodplain ordinance on file for the city of Lastrup was adopted on 2/20/1991. The city has been put in touch with the state NFIP coordinator to review the city's floodplain map and learn how to develop an updated model ordinance for the city.	City, MN DNR

# CITY OF LITTLE FALLS

# 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 Everbridge 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. We encourage residents to sign up for the emergency notification system.	City
2	All-Hazards	Mitigation Preparedness & Response Support	Develop an Emergency Operations Plan for the City of Little Falls.	In-Progress High 2022-2023	City EM in coord with city Admin and departments	The City of Little Falls is currently developing an Emergency Operations Plan for the city to identify plans and procedures in place to respond to all-hazard events.	
3	Severe Winter & Summer Storms	Education & Awareness Programs	Provide education and outreach to residents on personal preparedness for severe weather events, periods of extreme cold, and extended power outages.	Existing High 2023-2028	City Admin, City EM	The city uses our website and Facebook page to communicate with residents on emergency preparedness. The city also provides public service announcements to the local radio and newspaper. Our city works with Morrison County Emergency Management to participate in the National Weather Service's annual Severe Winter/Spring Weather Awareness Week by posting severe weather awareness information out on our city Facebook page.	City
4	Severe Winter & Summer Storms	Structure & Infrastructure Projects	Conduct vegetation management near power lines to reduce the changes of power outages due to severe storms.	Existing Moderate 2023-2028	Minnesota Power, City Public Works	The local electric power company (MN Power) has a program to manage vegetation near powerlines to reduce risk of power outages during storms. The city communicates with MN Power on this matter as needed following storms.	MN Power

## CITY OF LITTLE FALLS

## Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
5	Severe Winter & Summer Storms	Mitigation Preparedness & Response Support	Acquire portable generators for our City Hall and Fire Hall.	New High 2023-2028	City Admin, City EM	We need a portable generator for our City Hall and Fire Department. City Hall would serve as the local EOC in a prolonged disaster and the Fire Department would also be a hub for emergency services. The city will work to purchase new generators as funding allows.	City
6	Flooding	Local Planning & Regulations	Enforce city ordinances and develop plans 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 Chapter 11.50, Floodplain Management in the city's code of ordinances. This chapter regulates development in the flood hazard areas of the city. We also have a sump pump ordinance in place to mitigate against overload of the city's I&I system. During land development, we require stormwater analysis consistent with the MPCA to minimize flooding. The city limits the amount of impervious coverage on a lot to promote infiltration. Contractors are required to obtain a land disturbance permit when construction activities occur on private property.	City
7	Flooding	Local Planning & Regulations	Continue to maintain and improve the city's stormwater system to be prepared to handle high rain events.	Existing High 2023-2028	City Engineer, City Public Works	The city employs 5 employees within the engineering department to address stormwater. Each spring and fall we clean out structural sedimentation devices. After each rain fall, staff remove leaves from the storm sewer grates to improve efficiency.	City

## CITY OF LITTLE FALLS

## Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
8	Flooding / Landslides	Structure & Infrastructure Projects	Work with the Minnesota County Historical Society (MCHS) and Morrison County to restabilize the riverbank along the Charles A. Weyerhaeuser Memorial Museum.	In-Progress High 2023-2028	City Admin in coord with MCHS and Morrison County	In May, 2022 the Little Falls City Council voted 5-2 to accept a funding request of \$70,000 toward the project. The contribution from the city of Little Falls is contingent upon Morrison County funding its requested portion of the project, which is \$140,000. MCHS will also contribute \$3,000, with another \$4,000 or more in fundraising.	City, County, MCHS
9	Dam Failure	Structure & Infrastructure Projects	Continue to work with Minnesota Power to monitor the condition of the Little Falls Dam (Class II dam) within the city of Little Falls and address any issues.	Existing High 2023-2028	MN Power in coord with City of Little Falls Fire Dept EM and MCEM	The Little Falls Dam on the Mississippi River is owned and operated by MN Power. MN Power maintains a detailed Emergency Action Plan for the dam which addresses response measures such as emergency public notification and evacuation in the event of a dam breach. MN Power also maintains inundation maps to identify the affected public and assets in the event. Each year MN Power meets with the Little Falls Fire Chief/Emergency Manager and the Morrison County Emergency Manager to go over any changes to their emergency action plan for the Little Falls Dam. The city of Little Falls continues to work with MN Power as needed on dam inspections, addressing infrastructure improvements, and emergency planning.	MN Power

# CITY OF MOTLEY

# 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 Everbridge emergency notification alert system.	Existing High 2023-2028	City Admin, City EM	We have a link on our website for both the Cass County and Morrison County emergency notification system and encourage residents to sign up. The city also provides information to new residents on how to sign up for emergency notifications.	City
2	Severe Winter & Summer Storms	Education & Awareness Programs	Provide education and outreach to residents on personal preparedness for severe weather events, periods of extreme cold, and extended power outages.	Existing High 2023-2028	City Admin, City EM	We have a city website and city Facebook page that we use to share information with our community about severe weather and other emergency information.	City
3	Severe Summer Storms	Education & Awareness Programs	Ensure that residents of the mobile home park are aware of the evacuation and sheltering plan in the event of dangerous storm events.	Existing High 2023-2028	MHP Operator, City Admin	The MHP owner has supplied one resident in each park with a weather radio and a key to the free Methodist church. Residents are instructed to go to that location in the event of dangerous storms. The city works with the MHP as needed on these plans for residents.	MHP, City
4	Flooding	Local Planning & Regulations	Enforce city ordinances and develop plans 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 Ordinance #126 in the city's code of ordinances and has mapped floodplain areas in the city's zoning map. The city uses the ordinance and map to regulate any development in the flood hazard areas of the city. The city also plans to use our long-range Comprehensive Plan (2000-2020) to address considerations for future hazards such as flooding.	City

**CITY OF PIERZ****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 city's "One Call" system and the county's Everbridge emergency notification alert system.	Existing High 2023-2028	City Admin, City EM	The city encourages residents to sign up for the citywide system, "One Call". We have not promoted sign up for the county system to date but we can use our website and Facebook page to encourage residents to sign up for that option as well to receive county notifications.	City
2	Severe Winter & Summer Storms	Education & Awareness Programs	Provide education and outreach to residents on personal preparedness for severe weather events, periods of extreme cold, and extended power outages.	Existing High 2023-2028	City Admin, City EM	We use our city website and Facebook page. We also post information on bulletin boards at the Farmers and Merchants State Bank, City Hall, and the Post Office. We utilize a stakeholder communication system called One Call that we can call, text, or email valuable information to our residents, business owners, and other parties that wish to sign up for the service.	City
3	Severe Winter & Summer Storms	Structure & Infrastructure Projects	Conduct vegetation management near powerlines to reduce the risk of power failure due to falling branches or trees during severe storms.	Existing High 2023-2028	City of Pierz Municipal Electric	The city has an active vegetation management program in place for its city-owned electric utility. Trees that may pose a risk are communicated to property owners and trimming and removal is completed.	Municipal Electric

# CITY OF PIERZ

# Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
4	Severe Winter & Summer Storms	Structure & Infrastructure Projects	Convert powerlines from overhead to underground where needed to reduce the chance of power outages due to severe storms.	In-Progress Moderate 2023-2028	City of Pierz Municipal Electric	We are in need of burying some power lines that are difficult to access especially after heavy rains because they are in back yard areas. We have two areas in town with primary electric lines that are difficult to access because they are heavily wooded and not next to roadways. The City of Pierz Municipal Electric will oversee efforts on this project. The city may seek to look into supportive grant funding from FEMA HMA grant program to support this utility mitigation project.	City of Pierz Municipal Electric, FEMA HMA Grant Funding
5	Severe Winter & Summer Storms	Mitigation Preparedness & Response Support	Acquire backup portable generators to power City Hall, the Fire Hall, and the Public Works shop.	New High 2023-2028	City Admin, City EM, City Public Works	We would like to acquire generators for the city hall, fire hall, and public works shop to ensure we have adequate facilities to manage emergency incidents. The city needs funding assistance to purchase generators for our critical buildings.	City, Other (TBD)
6	Severe Summer Storms	Structure & Infrastructure Projects	Update the city's outdoor warning sirens to ensure effective warning of high wind or tornado events.	New High 2023-2028	City Admin, City EM, City Public Works	The city's outdoor warning sirens are at least 25 years old and nearing the end of life. Warning sirens are expensive. The city will work with Morrison County Emergency Management to see if we may be eligible for USDA Rural Development Community Facility grant program funding to support the purchase of new sirens.	City, USDA RD CF Grant Funding

## CITY OF PIERZ

## Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
7	Flooding	Local Planning & Regulations	Work with the MN DNR State Floodplain Manager to enroll the city in the National Flood Insurance Program and develop a floodplain ordinance.	New Moderate 2022-2023	City Admin in coord with MN DNR	The city of Pierz was actually enrolled in the National Flood Insurance Program (NFIP) 1/3/1985. When the city got enrolled at that time we did not have any FEMA mapped areas, so were not required to have a floodplain ordinance. Since that time the city has annexed area in the floodplain, so the MN DNR has recommended we get an up-to-date floodplain ordinance. The city is in touch with the state NFIP coordinator to review the city's official flood map, learn how to enroll in the NFIP and how to develop a floodplain ordinance appropriate for their level of flood risk.	City, MN DNR
8	Flooding	Local Planning & Regulations	Continue to plan for stormwater improvements as needed to handle future high rain events.	In-Progress Moderate 2023-2028	City Admin, City Public Works	The city is in the planning process for stormwater projects on several streets, namely Summer St., Kapsner St N, 4th Ave N, Vincent St, Peter Ave, and 1st Ave N. The city implemented a storm water utility in 2006 that provides the city approximately \$40,000 per year for stormwater management. Currently the funds are used to pay debt from two large stormwater projects that were built in 2005. These bonds have been paid off in 2022 and future funds will be used for stormwater projects as needs arise.	City

**CITY OF PIERZ****Mitigation Action Chart**

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
9	Flooding	Local Planning & Regulations / Structure & Infrastructure Projects	Plan for and address localized flooding issues for the city's Park Complex.	In-Progress Moderate 2023-2028	City Admin, City Public Works	We would like to mitigate the flooding in our Park Complex by adding dikes, diverting water, better dam controls for our swimming area, raising elevations if necessary. We are looking at a Park Complex Master Plan study for the entire complex including the gravel pit that may be purchased soon. The city may explore the possibility of future FEMA HMA grant funding to help support funding for implementation of these flood mitigation projects.	City, FEMA HMA grant funding

# CITY OF RANDALL

# 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 Everbridge emergency notification alert system.	Existing High 2023-2028	City Admin, City EM	This is not something the city has done to date; however, in the future we can use our city website, city Facebook page, and local postings to encourage residents to sign up directly on the county website.	City
2	Severe Winter & Summer Storms	Education & Awareness Programs	Provide education and outreach to residents on personal preparedness for severe weather events, periods of extreme cold, and extended power outages.	Existing High 2023-2028	City Admin, City EM	Our city works with the county to participate in the National Weather Service's annual Severe Winter/Spring Weather Awareness Week by posting severe weather awareness information out on our city Facebook page. We use our city website and Facebook page to convey severe weather information to the public. We also post information on bulletin boards at the Bank, City Hall and at the Post Office, and make announcements at city council meetings during severe weather season.	City
3	Severe Winter & Summer Storms	Structure & Infrastructure Systems	Conduct vegetation management near powerlines to reduce the risk of power failure due to falling branches or trees during severe storms.	Existing High 2023-2028	City of Randall Municipal Utility	The city has done a lot of trimming around power lines to reduce the risk of downed power lines during a storm. We also encourage property owners not to plant vegetation near utility lines to reduce the risk of electric outages and improve response time.	Municipal Utility
4	Severe Winter & Summer Storms	Mitigation Preparedness & Response Support	Acquire a portable generator for our City Hall and Community Center, which is our designated community mass care shelter.	New High 2023-2028	City Admin, City EM	The city will work to purchase a generator as funding allows.	City

# CITY OF RANDALL

## Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
5	Severe Summer Storms	Structure & Infrastructure Projects	Install a second warning siren in the city.	New Moderate 2023-2028	City Admin, City EM	The city would like to install a 2 <sup>nd</sup> outdoor warning siren. If eligible, the city may seek to apply for supportive grant funding from the USDA Rural Development – Community Facilities Program, which helps to fund the purchase of warning sirens.	City, USDA RD CF Grant Program
6	Severe Summer Storms	Structure & Infrastructure Projects	Construct a storm shelter or tornado safe room for the trailer park within the city.	New Moderate 2023-2028	City Admin, City EM	We have 1 trailer park within the city that does not have a storm shelter and residents are vulnerable to high wind and tornado events. The city would need funding assistance to undertake a construction project for the mobile home park. We will work with Morrison County Emergency Management to look at what solutions may exist. If a tornado safe room is the preferred option, the city may seek to apply for future FEMA HMA grant funding to support the project.	City, FEMA HMA Grant Funding
7	Flooding	Local Planning & Regulations	Enforce city ordinances and develop plans 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 National Flood Insurance Program through the city's Two District Floodplain Ordinance (June 7, 1988). This ordinance regulates development in the flood hazard areas of the city. We also have a sump pump ordinance in place to mitigate against overload of the city's I&I system. We are currently in the process of identifying any homes that are in violation and requiring them to correct the issue.	City

# CITY OF ROYALTON

## 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 Everbridge emergency notification alert system.	Existing High 2023-2028	City Admin, City EM	This is something the city has not done to date; however we can use our city website and Facebook page to encourage residents to sign up by going to the Morrison County website.	City
2	Severe Winter & Summer Storms	Education & Awareness Programs	Provide education and outreach to residents on personal preparedness for severe weather events, periods of extreme cold, and extended power outages.	Existing High 2023-2028	City Admin, City EM	To share emergency information with residents we use our city website and Facebook page and also post information on bulletin boards in the Post Office and City Hall.	City
3	Severe Summer Storms	Mitigation Preparedness & Response Support	Maintain regular maintenance of the city's outdoor warnings sirens to ensure they are functioning properly.	Existing High 2023-2028	City EM, City Public Works	Our tornado warning sirens are checked monthly to make sure they work and any failure is addressed urgently. These are located in various parts of the town.	City
4	Flooding	Local Planning & Regulations	Enforce city ordinances and develop plans 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 the City of Royalton Floodplain Ordinance, adopted 7/5/11. This chapter regulates development in the flood hazard areas of the city. The city has been put in touch with the state NFIP coordinator to learn about the updated flood map for their city and how to update their floodplain ordinance.	City
5	Flooding	Local Planning & Regulations / Structure & Infrastructure Projects	Continue to address flood mitigation projects where needed in the city.	Existing Moderate 2023-2028	City Engineer, City Public Works	We have a city engineer and a public works director that address road maintenance issues for flooding (culverts, repetitive flooding). The city had addressed the south side of the town to that was prone to street flooding. The street project included upgrading utilities as well as adding storm sewer and a holding pond. At this time that is the only area left in town that needed attention.	City

**CITY OF ROYALTON****Mitigation Action Chart**

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
6	Drought	Local Planning & Regulations	Be prepared to provide emergency water services to residents with private wells during periods of severe drought.	New Moderate 2023-2028	City Engineer, City Public Works	In recent years, the city has been able to sustain a good water supply for the residents. But with the drought of 2021, it caused a few private wells to dry up, therefore they needed to be put on city services. During future periods of extreme drought, the city will be prepared to coordinate city water services.	City

# CITY OF SOBIESKI

# 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 Everbridge emergency notification alert system.	Existing High 2023-2028	City Admin, City EM	We do not have a city website or Facebook page, so we will encourage residents to go directly to the Morrison County website to sign up through making occasional announcements at city council meetings.	City
2	Severe Winter & Summer Storms	Education & Awareness Programs	Provide education and outreach to residents on personal preparedness for severe weather events, periods of extreme cold, and extended power outages.	Existing High 2023-2028	City Admin, City EM	We encourage residents to be aware of and prepared for severe weather by tuning into the local TV and radio news, and also do outreach via our in-person experiences with residents. We are a small city and work with Morrison County Emergency Management and the National Weather Service to stay informed and share information with our residents.	City
3	Severe Winter & Summer Storms	Mitigation Preparedness & Response Support	Acquire a portable generator for emergency backup power for city services.	New High 2023-2028	City Admin, City EM	The city will work with Morrison County Emergency Management to see if we can obtain assistance in getting a portable generator for the city. The city will work to purchase a generator as funding allows.	City
4	Severe Summer Storms	Structure & Infrastructure Projects	Upgrade the city's outdoor warning siren.	New High 2023-2028	City Admin, City EM in coord with MCEM	We will work with Morrison County Emergency Management on this effort. If eligible, the city may seek to apply for supportive grant funding from the USDA Rural Development – Community Facilities Program, which helps to fund the purchase of warning sirens.	City
5	Flooding	Local Planning & Regulations	Enforce city ordinances and develop plans 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 Floodplain Ordinance #270304 0001-0002, adopted July 16, 1980. This chapter regulates development in the flood hazard areas of the city.	City

# CITY OF SWANVILLE

## 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 Everbridge emergency notification alert system.	Existing High 2023-2028	City Admin, City EM	We will encourage residents to go the City Web page or Facebook page with a link to . But they can also go directly to the Morrison County website to sign up. The City will work with Swanville 1 <sup>st</sup> response, Swanville fire dept, residents, Swanville School, churches, Swanville businesses and Morrison and Todd County on planning an emergency response plan.	City FEMA
2	Severe Winter & Summer Storms	Education & Awareness Programs	Provide education and outreach to residents on personal preparedness for severe weather events, periods of extreme cold, and extended power outages.	Existing High 2023-2028	City Admin, City EM	We encourage residents to be aware of and prepared for severe weather by tuning into the local TV and radio news, and also do outreach via our in-person experiences with residents. We are a small city and work with Morrison County Emergency Management and the National Weather Service to stay informed and share information with our residents.	City
3	Wildfire	Natural Systems Protection	Plan for and address measures to reduce wildfire risk for the city of Swanville.	Existing Moderate 2023-2028	Fire Dept. in coord with MN DNR	Our fire department works with the MN DNR on wildfires around our community.	City, MN DNR
4	Flooding	Local Planning & Regulations	Continue to address measures to reduce the risk of localized flooding after high rain and impacts to the city's stormwater system	Existing Moderate 2023-2028	City Maintenance	Our City Maintenance staff regularly clears storm sewer drains of debris to avoid localized flooding or debris clogging the city's stormwater system. Any new development will have storm sewer systems. When maintaining existing streets, the City will consider adding Storm Sewer systems or make changes to help with current flooding conditions. If FEMA grant funding is available to support those efforts the city would seek to apply.	City FEMA HMA grant funding

## CITY OF UPSALA

## 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 Everbridge emergency notification alert system.	Existing High 2023-2028	City Admin, City EM	We do not have a city website or Facebook page, so we will encourage residents to go directly to the Morrison County website to sign up through making occasional announcements at city council meetings.	City
2	Severe Winter & Summer Storms	Education & Awareness Programs	Provide education and outreach to residents on personal preparedness for severe weather events, periods of extreme cold, and extended power outages.	Existing High 2023-2028	City Admin, City EM	We encourage residents to be aware of and prepared for severe weather by tuning into the local TV and radio news, and also do outreach via our in-person experiences with residents. We are a small city and work with Morrison County Emergency Management and the National Weather Service to stay informed and share information with our residents. In the past couple of winters, we have experienced homes with frozen water services. We will encourage residents to run a stream of hot water during periods of extreme cold to keep water pipes from freezing.	City
3	Severe Winter & Summer Storms	Mitigation Preparedness & Response Support	Acquire portable generators for City Hall and the Community Center.	In-Progress High 2023-2028	City Admin, City Public Works	The city purchased a generator to run the water plant and lift stations due to the constant threat of power outages. We will work on acquiring additional generators as funding allows.	City

## CITY OF UPSALA

## Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
4	Severe Summer Storms	Structure & Infrastructure Projects	Construct a storm shelter or tornado safe room for the mobile home park within the city.	New Moderate 2023-2028	City Admin, City EM	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. The city would need funding assistance to undertake a construction project for the mobile home park. We will work with Morrison County Emergency Management to look at what solutions may exist. If a tornado safe room is the preferred option, the city may seek to apply for future FEMA HMA grant funding to support the project.	City, FEMA HMA Grant Funding
5	Flooding	Local Planning & Regulations	Work with the MN DNR Floodplain Manager to enroll in the National Flood Insurance Program and develop a floodplain ordinance.	New Moderate 2022-2023	City Admin	The city did not have information on if a current floodplain ordinance exists. The city has been put in touch with the state NFIP coordinator to review their official floodplain map, learn about how to enroll in the NFIP, and how to develop a floodplain ordinance appropriate for their level of flood risk.	City, MN DNR
6	Flooding	Local Planning & Regulations	Enforce city ordinances and develop plans that reduce the impacts of high rain events and risk of flooding to areas of new development.	Existing High 2023-2028	City Admin	We have a sump pump ordinance in place to mitigate against overload of the city's sewer system. The city is in the process of creating a new comp plan for its community. We are also addressing inflow and infiltrations.	City