

Mower County 2025 Hazard Mitigation Plan



Mower County Minnesota

2025 Hazard Mitigation Plan

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Section 1 – Introduction

1.1 Hazard Mitigation Planning in Minnesota

Hazard mitigation planning refers to any sustained action to reduce or eliminate long-term risk to human life and property from natural disasters. 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, 2023b).

Since 1980, damages from natural disasters in the U.S. have exceeded \$2.72 trillion. 2023 saw a record 28 separate billion-dollar weather and climate disaster events in the United States, breaking the previous record of 22 events set in 2020. Minnesota alone has experienced 59 separate billion-dollar disasters since 1980 (NCEI, 2024). 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 well-being 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. To be eligible for future mitigation funds, communities 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).

Mower County is vulnerable to a variety of natural hazards that threaten the loss of life and property. Hazards such as tornadoes, flooding, wildfires, blizzards, straight-line winds, and droughts can potentially inflict vast economic loss and personal hardship.

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

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

- Homepage (featuring Declared Disasters dashboard, feedback forms, links to Mower County Emergency Management website, etc.)
- County Profile
- Risk Assessment & Natural Hazard Profiles
- Goals & Implementation
- Climate Change

[*Mower County HMP Website*](#)

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 Mower County Emergency Management to facilitate an update to the 2015 Mower 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 Mower 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 Mower County, including the cities of Adams, Austin, Brownsdale, Dexter, Elkton, Grand Meadow, Le Roy, Lyle, Mapleview, Racine, Rose Creek, Sargeant, Taopi, and Waltham. The Mower 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 Mower County after final approval by FEMA (see Appendix B).

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

- Include more recent data documenting the critical infrastructure and hazards faced by Mower County.
- Reformat and reorganize the plan to reflect definitions of hazards as expressed in the 2024 Minnesota State Hazard Mitigation Plan.
- Reflect current hazard mitigation priorities in Mower County.
- Encourage recipients and sub-recipients of hazard mitigation grants to consider climate change adaptation, resiliency, and equity 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 two mitigation grant programs that the State of Minnesota administers: the Hazard Mitigation Grant Program (HMGP) and the Flood Mitigation Assistance (FMA) program. The HMGP and FMA programs are administered through the 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 Mower County HMP planning team is headed by the Mower County emergency manager, who is the primary point of contact. Planning team members include representatives from public and governmental sectors. Table 1 identifies the planning team individuals and organizations that participated in virtual planning team meetings during the plan update process.

Note: Table 1 is not an exhaustive list of stakeholder participation in the Mower County HMP update. Additional participation by jurisdictional and other agency representatives is documented in Table 3 of this section, as well as in Section 3.4, Appendix C, and Appendix G. The meeting summaries in Appendix F provide a comprehensive overview of each session. This includes a complete list of invited planning team stakeholders and information on other significant opportunities for engagement during the plan update.

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

Table 1. Hazard Mitigation Planning (HMP) Team

Name	Agency/Organization	Participant Title
Amy Bramwell	Mower County Emergency Management	Emergency Management Director
John Mueller	Mower County	County Commissioner
Dave Pike	Sheriff's Office / Emergency Management	Chief Deputy / Deputy Director
Angela Lipelt	Mower County Environmental Services	Environmental Services Supervisor
Mindy Williamson	Mower County Environmental Services	Environmental Technician
Scott Felten	Mower County	Auditor-Treasurer
Michael Harvey	Mower County	County Assessor
Eric Miller	Mower County	GIS Administrator
Denny Zwiener	Mower County	Assistant Engineer
Crystal Peterson	Mower County	HHS Director
Pam Kellogg	Health and Human Services	Manager
Lisa Ganser	Mower County HHS	Public Health Planner
Mitch Wenum	Mower County	County Engineer
Steve Sandvik	Mower County Sheriff's Office	Mower County Sheriff
Matthew Verdick	Mower County	Chief Deputy County Administrator
Valerie Sheedy	Mower County	Deputy County Administrator
Cody Fox	Mower Soil and Water Conservation District	District Manager
Jake Goodale	City of Adams	City Clerk

Name	Agency/Organization	Participant Title
Steven Lang	City of Austin	City Engineer
David McKichan	City of Austin Police Dept.	Chief of Police
Kory Robinson	Austin Utilities	Finance & Customer Care Director
Alex Bumgardner	Austin Utilities	Utility Operations Director
Jim McCoy	Austin Fire Department	Fire Chief
Dave Pike	City of Brownsdale Fire Dept.	Fire Chief
James Christian	City of Grand Meadow	City Administrator
Patty White	City of LeRoy	City Clerk-Treasurer
Jim Kiefer	City of Taopi	City Clerk
John Kloeckner	Adams Township	Chairman
Dennis Bray	Austin Township	Supervisor
Connie Krebsbach	Austin Township	Clerk
Rodney McDermott	Austin Township	Supervisor
David Baldner	Lyle Township	Supervisor
Jim Davis	Grand Meadow Township	Supervisor
Robert Kuhlman	Pleasant Valley Township	Supervisor
Nicholas Sorenson	Udolpho Township	Supervisor
Amanda Kiefer	Waltham Township	Clerk
Kristine Allas	Lansing Township	Township Clerk
Joey Page	Austin Public Schools	Superintendent
Jennifer Backer-Johnson	ISD 499	Superintendent
Jamie Goebel	Lyle Public School	Superintendent
Paul Besel	Grand Meadow Public School	Superintendent
Marie Lewis	The Salvation Army	Corps Officers
Chad Hanson	MnDOT	Emergency Management Coordinator
Allan Stadheim	Freeborn Mower Electric Cooperative	Director, E&O
Jason Harmening	Fillmore County	Emergency Management Director
Jonathan Jacobson	Olmsted County	Emergency Management Director

2.2 Review of Existing Plans, Capabilities & Vulnerabilities

Mower 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 5.1.4 and Appendix D). The planning process also incorporated the existing natural hazard mitigation elements from previous planning efforts. In addition, the 2024 Minnesota All-Hazard Mitigation Plan was consulted.

In the development of the Mower 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 Mower

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.

Building codes offer a way to incorporate geographically relevant and best available building science with policies and programs. The Cities of Adams, Austin, Brownsdale, Elkton, Grand Meadow, Mapleview, and Waltham have adopted the Minnesota Building Code. While Mower County has not adopted the Minnesota Building Code, zoning permit applications must be submitted to, reviewed, and approved by the Mower County Environmental Services Department prior to the construction or placement of any structure within unincorporated areas of the county. For more information, see Appendix C, Question 7: Building Codes.

The 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 Mower 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 Mower County to support mitigation.

Local Mitigation Surveys: As part of Mower County's 2025 HMP update, participating jurisdictions, key county personnel, and additional agency stakeholders were asked to fill out a Local Mitigation Survey (LMS) form. Questions in the LMS form addressed the following:

- Hazard Identification, Risk Assessment & Vulnerability Analysis
- Local Mitigation Capabilities Assessment
- Local Mitigation Projects
- 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 Mower County LMS report, see Appendix C).

2.3 Planning Process Timeline and Steps

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

2.3.1 Mower County Stakeholder Coordination

Two planning team meetings took place via Zoom video conference hosted by U-Spatial. Meeting participants included representatives from Mower 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 the opportunity for public input, Mower 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 Mower 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 12/9/25 to 12/23/25, for a period of 15 days. Appendix G provides documentation of the public outreach for feedback on the draft plan by Mower County and jurisdictions.

Table 2. Mower County hazard mitigation update meetings and public outreach

Event	Date	Appendix
Kickoff Webinar	6/18/24	Appendix F, Planning Team Meetings
News Release #1	9/19/24	Appendix G, Public Outreach & Engagement Documentation
Planning Team Meeting #1	2/21/25	Appendix F, Planning Team Meetings
Planning Team Meeting #2	12/21/25	Appendix F, Planning Team Meetings
News Release #2	12/9/25	Appendix G, Public Outreach & Engagement Documentation

At the close of the public outreach period, the U-Spatial consultants worked with the Mower County Emergency Manager and planning team to incorporate public feedback 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, Mower 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, and reviewing and providing feedback to the plan update.

U-Spatial and Mower 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 Mower 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.
- **Surveys, forms, and polls:** Input tools such as surveys, forms, and tools were used throughout the process to efficiently collect information in a format that could directly be fed into the written hazard mitigation plan. Polls were used to elicit feedback during the planning team meetings. The Local Mitigation Survey (LMS) was used to ensure feedback from every jurisdiction for critical input such as building code use, NFIP adoption, and changes in vulnerabilities. Feedback forms were posted on the website for easy access during the plan review.
- **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 Mower 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. Mower 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 each city's participation in the Mower County HMP update planning process and a reference to supporting documentation.

Table 3. Jurisdictional participation in planning process

Jurisdiction (2024 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
Mower County (40,261)	X	X	X	X	X	X
City of Adams (739)	X		X	X	X	X
City of Austin (26,099)	X	X	X	X	X	X
City of Brownsdale (640)	X		X	X		X
City of Dexter (305)	X		X	X		X
City of Elkton (135)	X		X	X		X
City of Grand Meadow (1,072)	X	X	X	X	X	X
City of Le Roy (956)	X	X	X	X	X	X
City of Lyle (488)			X	X		X
City of Mapleview (162)	X		X	X		X
City of Racine (423)	X		X	X		X

Jurisdiction (2024 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
City of Rose Creek (392)	X		X	X		X
City of Sargeant (63)	X		X	X		X
City of Taopi (56)	X		X	X	X	X
City of Waltham (154)						X
Neighboring Jurisdictions:						
Dodge County						
Fillmore County					X	
Freeborn County						
Olmsted County					X	
Steele County						
Mitchell County, IA						

Section 3 – Risk Assessment and Vulnerability Analysis

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

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

3.1 Natural Hazard Identification

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.

See a list of all natural hazards covered in the 2025 HMP

The cornerstone of risk assessment is identifying the hazards that affect jurisdictions. Listed below are the natural hazards addressed in the 2024 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 Mower County, updated the existing mitigation actions published in the 2015 HMP, and proposed new mitigation actions.

The team examined the hazards identified in the 2015 HMP and adjusted them to reflect the definitions of natural hazards used in the 2024 Minnesota State Hazard Mitigation Plan.

While this HMP focuses on natural hazards, planning took place with the understanding that many non-natural hazards could occur due to 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 Mower 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 2025 Mower County HMP Update

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

3.1.2 FEMA- and Minnesota-Declared Disasters and Assistance

Another historical perspective is derived from FEMA-declared disasters and emergencies. The Stafford Act provides for two types of disaster declarations: emergency declarations and major disaster declarations (Robert T. Stafford Disaster Relief and Emergency Assistance Act, 1974). Between 1957 and August 2025, Mower County was included in 15 federal disaster declarations; see details on the [Mower 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). Mower County has been included in two State Disaster Declarations.

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

Table 5. Historical hazard mitigation funding awarded in Mower County

DR#	Fiscal Year	Subrecipient	Project Type	Project Cost	Federal Share
4442	2019	Austin	200.1: Acquisition of Private Real Property (Structures and Land) - Riverine	\$265,335	\$199,360
1830	2009	Austin	200.1: Acquisition of Private Real Property (Structures and Land) - Riverine	\$318,000	\$238,500
1717	2007	Austin	200.1: Acquisition of Private Real Property (Structures and Land) - Riverine	\$470,201	NA
1717	2007	Freeborn-Mower Cooperative Services	400.1: Utility Protective Measures (Electric, Gas, etc.)	\$178,317	\$133,738
1622	2006	Mower County	200.1: Acquisition of Private Real Property (Structures and Land) - Riverine	\$269,905	\$202,429
1622	2006	Mower County	200.1: Acquisition of Private Real Property (Structures and Land) - Riverine	\$88,509	\$66,382
NA	2005	Mower County	200.1: Acquisition of Private Real Property (Structures and Land) - Riverine	\$900,000	NA
NA	2005	City of Austin	200.1: Acquisition of Private Real Property (Structures and Land) - Riverine	\$2,210,975	\$1,366,588
1569	2005	Mower County	200.1: Acquisition of Private Real Property (Structures and Land) - Riverine	\$105,000	NA
NA	2002	Austin, City Of	200.1: Acquisition of Private Real Property (Structures and Land) - Riverine	\$3,333,000	\$2,500,000
1370	2001	Austin	91.1: Local Multihazard Mitigation Plan	\$25,333	\$0
1370	2001	Austin	91.1: Local Multihazard Mitigation Plan	\$25,333	\$19,000
1333	2000	Austin	200.1: Acquisition of Private Real Property (Structures and Land) - Riverine	\$366,247	\$274,706
1333	2000	Austin	200.1: Acquisition of Private Real Property (Structures and Land) - Riverine	\$391,565	\$0
1333	2000	Austin	200.1: Acquisition of Private Real Property (Structures and Land) - Riverine	\$827,500	\$0
1333	2000	Austin	200.1: Acquisition of Private Real Property (Structures and Land) - Riverine	\$994,446	\$0
1333	2000	Mower County	200.1: Acquisition of Private Real Property (Structures and Land) - Riverine	\$835,596	\$626,697
NA	2000	Austin, City Of	200.1: Acquisition of Private Real Property (Structures and Land) - Riverine	\$165,867	\$124,400
1283	1999	Austin City Water Gas & Electric	400.1: Utility Protective Measures (Electric, Gas, etc.)	\$265,045	\$156,109
1225	1998	Mower County	200.1: Acquisition of Private Real Property (Structures and Land) - Riverine	\$131,237	\$98,428

DR#	Fiscal Year	Subrecipient	Project Type	Project Cost	Federal Share
1225	1998	Freeborn Mower Electric Cooperative Services	400.1: Utility Protective Measures (Electric, Gas, etc.)	\$258,000	\$193,500
1187	1997	City of Austin Municipal Utilities	602.1: Other Equipment Purchase and Installation	\$209,000	\$156,750
993	1993	Austin, City Of	200.1: Acquisition of Private Real Property (Structures and Land) - Riverine	\$1,200,000	\$900,000
993	1993	Mower County	200.1: Acquisition of Private Real Property (Structures and Land) - Riverine	\$867,480	\$650,610
993	1993	Mower County	200.1: Acquisition of Private Real Property (Structures and Land) - Riverine	\$283,833	\$212,875
993	1993	Austin	200.1: Acquisition of Private Real Property (Structures and Land) - Riverine	\$2,752,500	\$2,064,375
929	1992	Waltham	400.1: Utility Protective Measures (Electric, Gas, etc.)	NA	NA

SOURCE: (FEMA, 2025)

3.2 Community 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) 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 that need support in preparing for hazards or recovering from disasters. The CDC SVI is created at the census tract level using American Community Survey (ACS) five-year data.

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

The Risk and Vulnerability dashboard for each hazard also includes the FEMA Community Resilience Challenges Index (CRCI). The CRCI is a composite index of 22 community resilience indicators, including population and household characteristics, housing, healthcare, economic factors, and connection to community. The index value provides a relative composite value by census tract and is designed for emergency managers to target outreach strategies and understand the resilience challenges community members face (FEMA, 2024a).

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

3.3 Climate Change

Minnesota's climate change summary is informed primarily by the Midwest Chapter of the Fifth National Climate Assessment (NCA5) dated November 2023 and with interpretations from the MN DNR State Climatology Office (Wilson et al., 2023).

Rising global temperatures and the resulting increases in atmospheric moisture from evaporation of ocean waters have allowed Minnesota to become warmer, wetter, and more humid during the past several decades. The ten combined warmest and wettest years between 1895 and 2022 all occurred since 1998. Nights have warmed faster than days since 1970, and winter has warmed several times faster than summer. Even with the drought conditions of the early 2020s in Minnesota, heavy precipitation continues to show long-term increases, with damaging rain and snowfall events reported somewhere in the state each year of the decade through 2023. Despite no increase in the highest temperatures of summer, maximum annual heat index values (one measure of how hot it feels) have been rising across the state because of increased humidity during heat waves.

Even though periods of intense growing-season drought have defined the climate of the early 2020s in much of Minnesota, long-term increases in annual precipitation have continued because of heavy and even record-setting precipitation during the cold season. For instance, record-dry conditions during May through mid-August of 2021 led to parts of northwestern and northern Minnesota reaching "Exceptional Drought"—the worst category on the US Drought Monitor. A shift to a stormy pattern during the following winter and spring, however, produced unprecedented precipitation between December in May in the exact same areas, with historic flooding along the Rainy River.

The observed changes in our climate have altered growing seasons, damaged forests, challenged natural resource management, limited recreational opportunities, destroyed infrastructure, and affected the conditions of lakes, rivers, wetlands, and groundwater aquifers that provide water for drinking and agriculture. Climate models project that temperature and precipitation increases will continue in Minnesota through the 21st century, with hotter summers and increased drought severity during dry periods as well.

To help the public understand how the changing climate has affected and is expected to affect the behavior of common weather hazards in Minnesota, the MN DNR State Climatology Office developed graphical summaries of the scientific confidence associated with each hazard's relationship to climate change (Table 6 and Table 7). Climate change in Minnesota has by far the strongest associations with (1) sharp declines in the frequency and severity of extreme cold outbreaks, tied to a persistent warming of winters, and (2) sharp increases in the frequency and intensity of extreme precipitation events. For instance, from 1970 through 2023, Minnesota's winters warmed at a rate of almost one degree F per decade, and approximately three-four times faster than summer. During that same period, the coldest night of the year has warmed almost twice as fast as winter as a whole—up to two degrees F per decade (or 20 degrees F per century).

Despite major losses to cold extremes, the warming climate and increased abundance of atmospheric moisture has led to an uptick in many heavy snowfall metrics across Minnesota, leading to moderately high confidence that the changing climate is increasing heavy snowfall events—even as other winter characteristics decline. The intensity and frequency of tornadoes and severe convective storms are weakly connected at best to recent climate changes, and since the 1950s, despite superior detection and verification capabilities, the number of damaging tornadoes rated at least F-2 or EF-2 in Minnesota has shown no increases. Dramatic changes in the seasonal and geographical ranges of severe convective weather have, on the other hand, already affected Minnesota. In 2021, a damaging tornado crossed the Boundary Waters into Canada, becoming the latest on record so far north in the state. Then, on December 15th, an outbreak of destructive thunderstorm winds and over 20 tornadoes struck the southeastern parts of the state, producing the latest tornadoes on record by 29 days.

The climatic picture is expected to change further beyond the 2020s and especially as Minnesota approaches the middle of the 21st century (Table 7). Dramatic losses in extreme cold and additional increases in heavy and extreme precipitation are expected to remain the state's leading climate change symptoms. Although Minnesota has not yet observed increases in the frequency, severity, or duration of summertime high temperatures or drought (through 2023), climate model projections summarized in NCA5 indicate that heat waves are all but certain to increase by mid-century. A 2018 study conducted by NOAA scientists indicates that by the 2050s, heat waves in Minnesota will be more attributable to climate change than to natural variability (Lopez et al., 2018).

Table 6. Confidence that climate change has already impacted common Minnesota weather/climate hazards

Confidence	Hazard	Recent & Current Observations
Highest	Extreme cold	Rapid decline in severity & frequency
	Extreme rainfall and heavy snowfall	Becoming larger and more frequent
Moderately High	Humid heat waves	Some increase in maximum dew point and Heat Index values since 1980
Moderately Low	Tornadoes, hail, thunderstorm winds	Intensity and frequency unchanged, but seasons expanding aggressively
Low	Drought and dry spells	Intense & major episodes in early 2020s but no long-term trend
Lowest	Summer high temperature extremes	Highest temperatures still well within historical ranges, and number of hot days increasing only slightly in isolated locations

SOURCE: (BLUMENFELD, K. MINNESOTA STATE CLIMATOLOGY OFFICE, PERSONAL COMMUNICATION, DECEMBER 21, 2023)

Table 7. Confidence that climate change will impact common Minnesota weather/climate hazards through 2070

Confidence	Hazard	Expectations through 2070
Highest	Extreme cold	Continued rapid decrease in severity and frequency
	Extreme rainfall	Unprecedented events more common
High	Heat waves	Summer high temperatures, maximum dew point and heat index values all projected to increase
Moderately High	Drought	Increased severity likely as summer heat increases; frequency and duration projections unclear
Moderately Low	Heavy snowfall	Greater extremes, but events less frequent as winter rain increases
	Tornadoes, hail, thunderstorm winds	Intensity and frequency unclear but continued seasonal expansion and larger “outbreaks” possible

SOURCE: (BLUMENFELD, K. MINNESOTA STATE CLIMATOLOGY OFFICE, PERSONAL COMMUNICATION, DECEMBER 21, 2023)

3.3.1 Climate Change Impacts and Resilience Planning

The NCA5 states that even if the world decarbonizes rapidly, the Nation will continue to face climate impacts and risks. Adequately and equitably addressing these risks involves longer-term inclusive planning, investments in transformative adaptation, and mitigation approaches that consider equity and justice. In the Midwest, rising temperatures, extreme precipitation, drought, and other climate-related events are impacting agriculture, ecosystems, cultural practices, health, infrastructure, and waterways. Communities, Indigenous Peoples, governments, and businesses are embracing adaptation approaches that include climate-smart agriculture, improved landscape management, innovative green infrastructure financing, and collaborative decision-making.

NCA5 includes these key messages for the Midwest region ([Chapter 24: Midwest](#)):

- Changes in precipitation extremes, timing of snowmelt, and early-spring rainfall are expected to pose greater challenges for crop and animal agriculture, including increased pest and disease transmission, muddier pastures, and further degradation of water quality. Climate-smart agriculture and other adaptation techniques provide a potential path toward environmental and economic sustainability.
- Increasing incidence of flooding and drought is expected to further alter aquatic ecosystems, while terrestrial ecosystems are being reshaped by rising temperatures and decreasing snow and ice cover. In response, communities are adapting their cultural practices and the ways they manage the landscape, preserving and protecting ecosystems and the services they provide.
- Climate change has wide-ranging effects on lives and livelihoods. Mitigation and adaptation strategies, such as expanded use of green infrastructure, heat-health early warning systems, and improved stormwater management systems, when developed in collaboration with affected communities, have the potential to improve individual and community health.

- Increases in temperatures and extreme precipitation events are already challenging aging infrastructure and are expected to impair surface transportation, water navigation, and the electrical grid. Shifts in the timing and intensity of rainfall are expected to disrupt transportation along major rivers and increase chronic flooding. Green infrastructure and public and private investments may mitigate losses, provide relief from heat, and offer other ways to adapt the built environment to a changing climate.
- Climate-related changes to water quantity and quality are increasing the risks to ecosystem health, adequate food production, surface water and groundwater uses, and recreation (high confidence). Projected increases in droughts, floods, and runoff events across the Mississippi River basin and the Great Lakes will adversely impact ecosystems through increased erosion, harmful algal blooms, and expansion of invasive species.

Key messages from the NCA5 are indicated in green throughout this document.

3.3.2 Health Impacts of Climate Change in Minnesota

Climate change already impacts our health, and these impacts are expected to worsen in the years ahead. The risks are especially high for Minnesotans who are less able to cope due to their age, income, housing insecurity, preexisting health conditions, and more.

Heat, air pollution (including wildfire smoke and allergens like pollen), extreme precipitation, floods, droughts, and ecosystem changes are all “climate hazards” that impact our health. Some of these climate hazards have a direct effect, like a heat-related illness from a heatwave, while some have an indirect impact, like exacerbation of asthma from mold growth in a flooded basement.

Heat

Minnesotans will experience a wide range of impacts from the increased frequency and severity of extreme heat events. Higher heat, increased humidity, and longer and more frequent extreme heat events can lead to direct health impacts of dehydration and heatstroke. Untreated heat stroke can lead to death. Heat-related illness directly accounted for 75 deaths in Minnesota from 2000–2022.

Heat can also worsen existing health conditions, such as respiratory and cardiovascular diseases. The people most at risk include those who are more exposed and those who may be more susceptible due to physiological reasons. People more likely to be exposed to heat include outdoor workers in agriculture and construction, student athletes, people who live in cities (due to the heat island effect), people without air conditioning, and unhoused persons.

People at higher risk because of physiological reasons include those with underlying medical conditions, pregnant people, older adults, infants, and young children.

Just as one example of the devastating effects of heat, in the summer of 2011, Minnesota had six days when the heat index was 105 degrees F or higher—and that same summer there were 1,302 emergency department visits and 3 deaths due to heat. What makes these numbers tragic is that heat-related illnesses are preventable.

Air Pollution

In general, we breathe clean air in Minnesota, according to federal standards. But on some days and in some locations, air is unhealthy due to ozone or fine particulate matter. Greenhouse gas emissions

can increase air pollution, and rising temperatures can also affect the formation and release of pollutants. Unhealthy air days are expected to become more frequent, and more intense due to climate change.

Climate change is likely to increase three main air contaminants in Minnesota: ozone, particulate matter (including wildfire smoke), and allergens. These air pollutants can cause or exacerbate cardiovascular and respiratory diseases, chronic obstructive pulmonary disease (COPD), allergies, and asthma.

Pollen is intensifying with climate change, and can trigger allergies, asthma attacks, and affect other respiratory conditions. In Minnesota, asthma affects one in 16 children (6.4%) and one in 13 adults (7.4%). People with asthma need to be especially aware of pollen sources and seasons to prevent an allergy-related asthma attack.

There are three pollen seasons in Minnesota: trees, grasses, and weeds. Trees are the first to release pollen, typically starting in early April, grasses usually ramp up pollen release in early June, and weeds typically begin releasing pollen in mid-June and continue until the first hard frost. Research shows that the growing season for ragweed pollen, which is highly allergenic, has increased by 15 to 25 days in and around Minnesota. The lengthening pollen season is strongly related to climate change characteristics, such as lengthening of the frost-free season and later timing of the first fall frost.

Indirect health effects from air pollution can include reduced visibility on a high smog day, reduced productivity at work or school due to allergies or asthma, and reduced productivity and degradation of crops and water sources, which can lead to economic burdens.

Those most at risk include:

- Children, because they have developing lungs, are outside more, and they play vigorously and inhale more air per pound of body weight compared to adults.
- Adults over 60, because their bodies are aging.
- People with chronic respiratory or cardiovascular disease because they are more susceptible to air pollution.
- Individuals living near other sources of air pollution (such as roadways, freeways, and heavy industry), because they are chronically exposed to air pollution.
- People of color, because they are more likely to be exposed to more air pollution and have a disproportionate burden of heart and lung diseases, which may increase susceptibility.

Extreme Precipitation, Floods, Drought

Rain is falling more frequently in extreme, heavy, localized events, leading to some parts of our state experiencing flooding while other areas experience drought.

Increased frequency and severity of heavy rainfalls can lead to flooding, which results in both direct and indirect health impacts like:

- Injury or even death from drowning.
- Illnesses from being exposed to contaminated drinking water or recreational sources.
- Mental health stress from experiencing the trauma of the event or later from being displaced or dealing with damaged homes and business.
- Respiratory ailments from exposure to mold from flooded basements.

- Carbon monoxide poisoning from exposure to carbon monoxide when using secondary power sources, like generators.
- Flooding can also disrupt economic and social networks and put a strain on essential services.

The people most at risk are Minnesotans who are more likely to be exposed to flood waters, like those who live in a flood plain or near water bodies, or people who cannot easily evacuate or recover from flooding destruction, such as people who do not have reliable transportation, people who can't use the stairs when elevators are out of service, people in wheelchairs, people with disabilities, older adults, and lower income people.

Heavy rain events can cause standing water in backyards or basements. Many homeowners have experienced wet basements, which is mentally and financially stressful, and if mold starts to grow that can become a health problem.

Localized flash flooding can also be a problem where our infrastructure is undersized, and people get caught off guard by flooded roads. This is an important public health safety concern as almost half of flash flood fatalities occur in vehicles. It takes as little as six inches of fast-moving water to knock over and carry away an adult, and as little as 12 inches can carry away a small car.

Another public health concern with precipitation changes exacerbated by climate change is waterborne disease outbreaks. Heavy downpours can lead to a host of problems, including increased runoff and sewage overflows, which can cause outbreaks of waterborne diseases such as E. coli and Cryptosporidium. Runoff can carry viruses and other disease-causing agents into wells and recreational waters, contaminating them and causing health problems.

Zoonotic Diseases

Zoonotic diseases or zoonoses are caused by germs like viruses, bacteria, parasites, and fungi that spread between animals and people. Increases in temperatures and changes in rain patterns are changing our ecosystems, which can affect the spread of diseases carried by insects, ticks, rodents, birds, and other animals.

Diseases from ticks include Lyme disease, Anaplasmosis, and Babesiosis. As temperatures increase, disease-transmitting ticks will become active sooner and stay active longer, allowing more time to develop and feed on hosts. Ticks thrive in warm humid environments.

Additionally, there may be a decreased die off over the winter months if temperatures do not get very cold. An increase in winter temperatures can also lead to new tick species moving into and surviving in Minnesota, which can lead to the introduction of new diseases.

People more at risk for diseases carried by insects, ticks, and rodents are people who spend more time outdoors or are more exposed to these pests.

Harmful Algal Blooms

An increase in water temperatures can lead to blue-green algal blooms, which contain toxins that can pose harmful health risks. People or pets who drink or swim in water with dangerous levels of harmful algal bloom (HAB) contamination may experience stomach illness, skin irritation, allergic responses, and damage to the liver and nervous system. In extreme cases, dogs and other animals have died after drinking water containing these toxins.

Harmful algal blooms in Minnesota lakes result from several factors including runoff from fertilizers, discharges from waste treatment plants, warmer waters, and higher temperatures. While HABs can occur naturally, the frequency of outbreaks is increasing in part because human activities create favorable conditions for the blooms.

Zoonotic diseases and HABs can have an indirect health effect when they threaten the livelihoods of people who work in recreation-dependent economies that revolve around camping, fishing, and hunting.

Mental Health

Climate change threatens our mental health through direct exposure to a climate-related disaster (e.g., flooding); through the disruption to a major determinant of health, such as a loss of livelihood or a cultural tradition; and through awareness or uncertainty of climate change as an existential threat. These experiences may overlap and lead to compounded impacts on an individual or even an entire community, such as family farmers burdened with decadal drought who are more likely to commit suicide.

Existing research has associated several mental health conditions with climate change, such as psychological distress, grief reactions, depression, post-traumatic stress disorder, interpersonal conflicts, drug or alcohol abuse, loss of identity, and suicidal ideation.

Vulnerable populations such as children, the elderly, communities of color, and other marginalized communities are most at risk of climate change-related mental health impacts.

3.3.3 Climate Change Adaptation

Climate change adaptation is important for increasing the resilience of communities and the environment. The shocks caused by more extreme weather events and the stressors of longer-term changes to the climate affect all natural systems. For human communities, these impacts challenge the surroundings in which they live, the critically important ecosystem services upon which they depend, public health, local facilities and infrastructure, the safety of their residences, and the viability of their livelihoods. Development trends can further exacerbate both climate impacts and population vulnerability. Communities are only as resilient as the most vulnerable within them.

3.3.4 Climate Change Data and Tools in Minnesota

The University of Minnesota Extension and the University of Minnesota's Water Resources Center coordinate the Minnesota Climate Adaptation Partnership (MCAP), which brings together federal and state agencies, organizations, and individuals statewide with an interest in climate adaptation. MCAP received funding after the 2021 legislative session to develop high-resolution (2.6 mile/4km grid) dynamically downscaled climate projections utilizing the University of Minnesota's Supercomputing Institute. This data is being made publicly accessible via the new [Minnesota CliMAT—Climate Mapping and Analysis Tool](#). This interactive online tool provides highly localized climate projections for Minnesota. MN CliMAT is based on data from the latest generation of global climate models, called [CMIP6](#). With the dynamically downscaled climate projection data, users can visualize even how small cities will likely be impacted in the coming decades (Liess, S. et al., 2023).

More resources are available on the [climate change page](#) of the Mower County website

3.4 Jurisdictional Change in Risk or Vulnerability Assessment

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

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

3.4.1 Jurisdictional Responses

As part of the Local Mitigation Survey form, Mower 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. 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.

The following is a compilation of common responses taken directly from jurisdictional representatives as preserved in Appendix C: Question 2 – Local Vulnerabilities. Responses here are edited only for clarity.

Mower County

All Hazards: Mower County has some ethnic diversity that may not receive messages and information in their language.

Windstorms, Tornadoes: There are mobile home parks located within rural areas of the county which may have storm shelters, but they may not have enough room for their entire mobile home court population (PID 02.023.0130 & 20.004.0130). We also have 6 camping areas in the rural Mower County - it is unknown what they do or do not have (PID 12.006.0020, 18.009.0042, 06.014.0051, 06.008.0020). There are also 2 motor speedway recreational areas where if people are caught off-guard it could be problematic (PID 06.008.0020 & 08.011.0010). Other areas of possible concern for tornadic activity are: Four Daughters Winery (PID 06.017.0100), local golf courses when having large events: PID 01.009.0040, 08.014.0055, Root River Antique Historical Power Association 06.008.0023, and Lake Louise State Park - near Leroy.

Flooding: The Pleasant View Addition (SE1/4 Section 11 is an area subject to flooding. During a 1% (100-year) flood event the area would be under 5-feet of water). There are 23 total lots; 4 are developed with residential structures and the remaining parcels are used recreationally.

for camping. Lots 1-10 are substantially located in the floodway. Lots 17-23 are $\frac{3}{4}$ covered by floodway; $\frac{1}{4}$ 1% chance floodplain.

(Mower County Highway Department) Areas of vulnerability to flooding include roads and bridges at stream and river crossings, roads at isolated low points along roads adjacent to fields, mobile home parks, and buildings and infrastructure at low elevations that could flood and interrupt services (i.e. lift stations)

City of Adams

All Hazards: We need to get a new standby generator for our Emergency Services Building.

Flooding: We need to upgrade the standby generator for WWTP. Need to upgrade storm water piping to prevent ponding (heavy fall of rain or snow) on Hwy 56.

City of Austin

Flooding: The City of Austin has experienced sanitary sewer backups caused by excessive rain events. Flooding has also impacted Interstate 90 and other local roadways. Extreme flood events have impacted those on the edges of the floodplain.

Flooding: In 2024, debris piled up against the structure that holds the gas line over the Cedar River, and there was a risk of damage and outages if it were lost. Austin Utilities would like to convert the gas line to underground to eliminate the risk of flood damage.

Flooding: There are still about 50 structures that are still located within the floodplain (residential and commercial). The City of Austin is working to assess removal of these structures to eliminate the risk of repetitive flood damages.

City of Brownsdale

All Hazards: In the event of a disaster, we would need additional housing, meals, and transport. Overhead powerlines are also vulnerable to coming down from severe winter storms or other wind events.

City of Dexter

All Hazards: The city needs a generator for our fire station/community building. In addition, the city's 50,000-gallon water tower has been determined past the point of repair and in the event the tower can no longer meet State requirements, the city's water main system will be compromised.

Flooding: We have undersized storm sewers which do not allow for heavy rainfall and are prone to flooding streets/driveways.

City of Elkton

All Hazards: Our infrastructure is old and needs repairs/improvements, and we have the need for generators for our utilities (sewer (lift station)/water) in an emergency. We also need a generator for the Community Center if emergency shelter is needed.

Flooding: We have a city lift station that is prone to flooding during high rain events. We need to upgrade storm water piping to prevent flooding to nearby homes.

City of Grand Meadow

All Hazards: We need to obtain a permanent generator for our Well House, City Hall, and Community Center that serves as our local shelter if people are displaced from a severe storm event or extended power outage.

Flooding: Aging infrastructure leads to excessive inflow and infiltration in our sanitary sewer system, and our sewer ponds are under-sized, leading to possible off-season discharge events. We are currently in the planning phase to add additional capacity. Inadequate drainage in the County ditch south of the city (Hwy 8) leads to storm sewer backup on that side of town.

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 does not have a storm shelter.

Dam/Levee Failure: The dam in Pine Lawn Park is aging.

City of Le Roy

All Hazards: The city needs standby generator connections (electrical, etc.) for the Community Center and another location to serve as emergency shelters.

City of Lyle

All Hazards: We need a new standby generator for our Emergency Services Building and City Hall/Community Center.

Flooding: We have some inflow and infiltration in our sanitary sewer system during heavy rain events that we are working on identifying. During heavy rain events we have one area that is prone to sewer backups.

City of Maplevue

All Hazards: We need to get a new standby generator for our Emergency Services Building as well as 2 backup generators for our lift station & pump house. We also need 2 new sources of heat for them as well.

City of Racine

All Hazards: We have a place to serve as a community shelter, but would not support the entire city population. The city is primarily powered through overhead electric lines except for the newer subdivisions which are underground. Overhead powerlines may be vulnerable to failure from severe storm events.

City of Rose Creek

Flooding: Our city infrastructure is vintage and needs repairs/improvements. We need backup generators for our utilities lift station & pump house in an emergency. An additional pond may be needed in the future.

City of Sargeant

Windstorms, Tornadoes: There are two residential sites that do not have basements for cover in an event. Flooding is of low priority with no local vulnerabilities.

City of Taopi

All Hazards: Keeping storm sewers clean to prevent flooding backup is an issue.

City of Waltham

Flooding: Our lift station is prone to flooding; we are in process of updating the Wastewater Treatment infrastructure. We have some streets and private properties that are subject to flooding due to culverts. We have stormwater infiltration issues.

Windstorms, Tornadoes: The city's outdoor warning siren has had issues going off in case of a tornado.

All Hazards: Our water tower and piping need replacement. If a major storm event impacts our water tower, our wastewater systems would not function properly and the city would need emergency drinking water.

Other Stakeholders

MnDOT District 6

Flooding: We manage our State Highway System and it is vulnerable to many hazards listed above. The largest vulnerability for this infrastructure is observed trend in increasing extreme precipitation events (both intensity and frequency). The hydraulic assets under and upstream of the roads were designed based on outdated precipitation probabilities (typically TP-40 Design Storms since Atlas 14 wasn't used until about 10 years ago) and so the risk of damage and traffic impact is greater than originally designed. Additionally, there are no signs that the

increasing trend of extreme precipitation will reverse, so even there is a good deal of uncertainty for the future, it suggests this infrastructure will continue to become more vulnerable.

All populations that use the State Highway System have increased risk of traffic impacts, and we are working to quantify at a high-level which certain areas may have a larger share of that risk.

3.4.2 Future Development

Because Mower 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. Mower 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 Mower 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. The following is a compilation of responses taken directly from jurisdictional representatives as preserved in Appendix C: Question 4 – Increase in Vulnerability. Responses here are edited only for clarity.

Mower County

Mower County has not had any increase in development. Forthcoming in the future the University of MN is working on development of an advanced agricultural research complex in Mower County - The FAARM (Future of Advanced Agricultural Research) Project - Udolpho Township.

City of Adams

In 2021 the City of Adams constructed 2 new subdivisions adding 24 new residential lots with 8 new homes built to date. 3 stormwater retention ponds were added to the subdivisions as well.

City of Austin

In 2019, 13 residential lots were added in Nature Ridge Second. In 2021, 26 residential lots were added in Nature Ridge Third and 8.7 ac industrial development at Creekside. In 2023, 10 ac industrial development at Creekside. These new developments have not created any new vulnerabilities within the City of Austin.

City of Brownsdale

The City of Brownsdale has Legacy of Brownsdale Assisted Living Center, which will need a higher level of assistance during disaster.

City of Dexter

The city allowed for the addition of sites in the mobile home park. It was ensured in the conditional use permit that the occupants had a storm shelter in place. No other significant increase in population.

City of Elkton

No new developments and no increase in vulnerability.

City of Grand Meadow

No major new development. We are maxed out on pond capacity and natural gas availability.

City of Le Roy

The city has seen some new home construction; these homes have been constructed in a development that has stormwater retention ponds.

City of Lyle

The city has a new development area but sees no increase in vulnerability.

City of Maplevue

No new developments and no increase in vulnerability.

City of Racine

No new developments and no increase in vulnerability.

City of Rose Creek

At this time, no new developments, but if we add developments, we may have an increase in vulnerability (needing to add a third pond for wastewater and updated infrastructure).

City of Sargeant

No new developments and no increase in vulnerability.

City of Taopi

We have had 5 new homes built, with no increase in vulnerability.

City of Waltham

No new developments and no increase in vulnerability.

*Other Stakeholders***MnDOT District 6**

Recently, there has been an increase in new development, some of it upstream of the roadway. If the proper design and permits from MPCA Construction Stormwater Permit and MnDOT are obtained, then there is less risk of increasing vulnerability... however, if the development does not address increased impervious, the extra runoff can increase vulnerability to our infrastructure.

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 Mower 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 Mower 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. The county also conducted a capabilities assessment to review the plans and programs that are in place or lacking (program gaps or deficiencies) for implementing 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](#)

The following hazard profiles address hazards that the Mower County Planning Team deemed moderate to high risk. Hazards determined to be low risk or without substantive mitigation actions are not required to be included.

4.1 Flooding

Flooding is the most significant and costly natural hazard in Minnesota. Three of the 15 federal disaster declarations in Mower County included flooding.

After several years of drought and exceptionally mild winter, the first half of 2024 was extremely wet with frequent, heavy precipitation causing widespread flooding throughout Minnesota, resulting in a Federal Disaster Declaration affecting 22 counties (FEMA, 2024d).

On June 11-12, 2008, southeast Minnesota, particularly Austin in Mower County, faced severe flooding with up to 4.25 inches of rain in 24 hours. The intense rainfall on already saturated ground led to road closures and significant flooding, including one fatality and a car rescue in Freeborn County.

4.1.1 Probability of Occurrence

From 1996 through May 2025, the NCEI Storm Events Database has recorded 80 flood and flash flood events. Mower County has experienced 1.2 flash flood events per year and 1.6 riverine flood events per year 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.

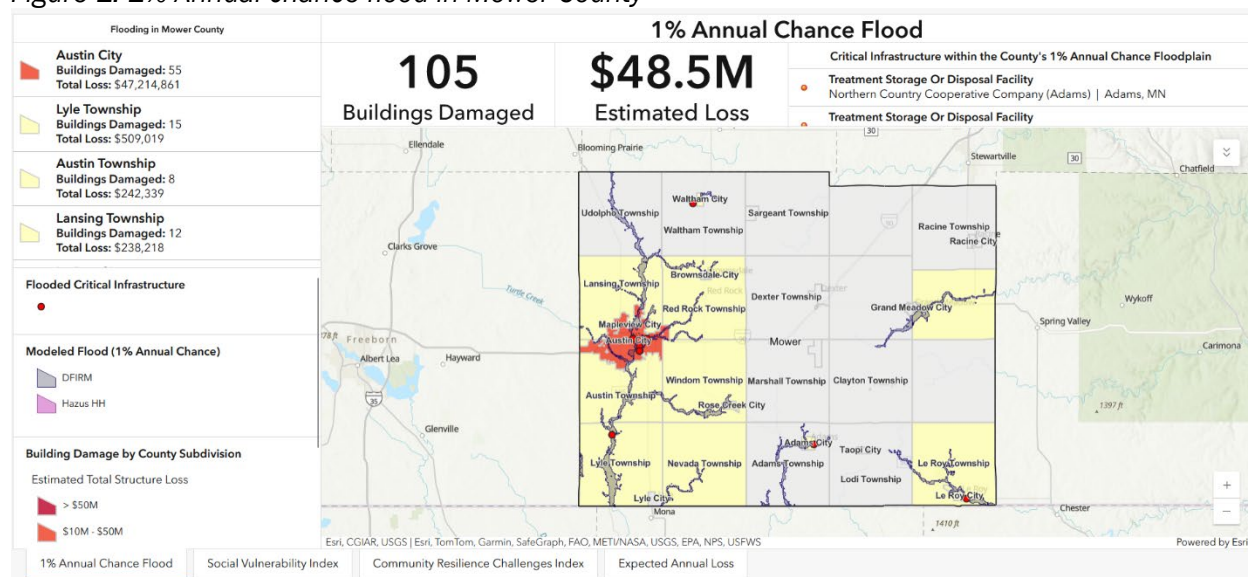
A raster layer (10m resolution) of flood water depths within the 1% annual chance flood boundary was calculated by taking the difference between the elevation of the ground and the surface of the flood

water. Static base flood elevation (BFE) data was available for some areas in the flood boundary, but the water surface elevation (WSEL) had to be calculated for the rest of the flooded areas.

The method of calculating the WSEL varied by the data available. For this analysis, water surface elevations were calculated by interpolating three different datasets: the regulatory water surface elevation values of cross section lines (primary data), the elevation values of base flood elevation lines (secondary data), and the elevation at the flood boundary where cross section and base flood line data was not available.

The resulting Hazus 1% annual chance floodplain is shown in the Flood Vulnerability dashboard on the Mower County HMP website (Figure 1), where it is available in an interactive form.

Figure 1. 1% Annual chance flood in Mower County



4.1.2 Vulnerability

Potential economic loss estimates were based on county-specific building data. Mower 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 Mower 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, 29,844 points were input to Hazus to represent buildings with a total estimated building plus contents value of \$5.75 billion. Approximately 74% of the buildings (and 69% of the building value) are associated with residential housing.

The estimated loss by occupancy class for the entire county is shown in Table 8.

Table 8. Summary of 1% annual chance flood loss estimation by occupancy class

General Occupancy	County Total Buildings	County Building and Contents Value	Floodplain Total Buildings	Floodplain Building + Contents Value	Buildings with damage	Building + Contents Loss
Residential	22,093	\$3,964,803,230	117	\$108,763,800	79	\$44,547,995
Commercial	1,349	\$688,040,188	14	\$6,587,000	14	\$3,129,255
Other	6,402	\$1,097,619,008	28	\$5,665,050	12	\$811,802
Totals	29,844	\$5,750,462,426	159	\$121,015,850	105	\$48,489,052

SOURCE: (FEMA, 2024c)

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 to visualize the loss (see [flood risk map on the HMP website](#)). Please note: It is possible for a building location to report no loss even if it is in the flood boundary. For example, if the water depth is minimal relative to 1st-floor height, there may be 0% damage.

Hazus Critical Infrastructure Loss Analysis

Critical facilities and infrastructure are vital to the public, and their incapacitation or destruction would have a significant negative impact on the community. These facilities and infrastructure were identified on the [HMP website](#) and verified by Mower County.

Buildings identified as essential facilities for the Hazus flood analysis include hospitals, police and fire stations, and schools (often used as shelters). 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 Mower 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, 2018b).

It is important to identify other critical infrastructure within the 1% annual chance floodplain, given the higher risk of the facility or infrastructure being incapacitated or destroyed during a flood. In Mower County, two wastewater facilities were found to be at risk in the 1% annual chance flood. They are mapped on the [Mower County HMP website](#). This flood analysis did not evaluate flooding bridges, roads, or other linear features.

There were several other important assets within the 1% annual chance flood boundary and worth further flood risk review. Buildings considered include places where critical leaders' offices may be, historical resources, hazardous waste storage, and places where populations may be exposed, such as campgrounds or mobile home parks. In Mower County, the assets vulnerable to a 1% annual chance flood are the following seven treatment storage or disposal facilities; their vulnerabilities should be reviewed in more detail:

- Artesian Water-Treatment (Le Roy)
- Austin Electric (Austin)

- Car-Nu Auto Body LLC (Austin)
- Hormel Foods Corp R&D (Austin)
- Kaal Television (Austin)
- Northern Country Cooperative Company (Adams)
- Palmer Bus Service – Site 1 (Austin)

Community Vulnerability

Potential economic losses were estimated by Census Minor Civil Division. The City of Austin would suffer estimated losses of \$47 million in the 1% annual chance flood. Lyle, Austin, and Lansing Townships also have significant estimated losses. All jurisdictions with buildings identified in the 1% annual chance flood zone can also be viewed on the Mower County HMP website.

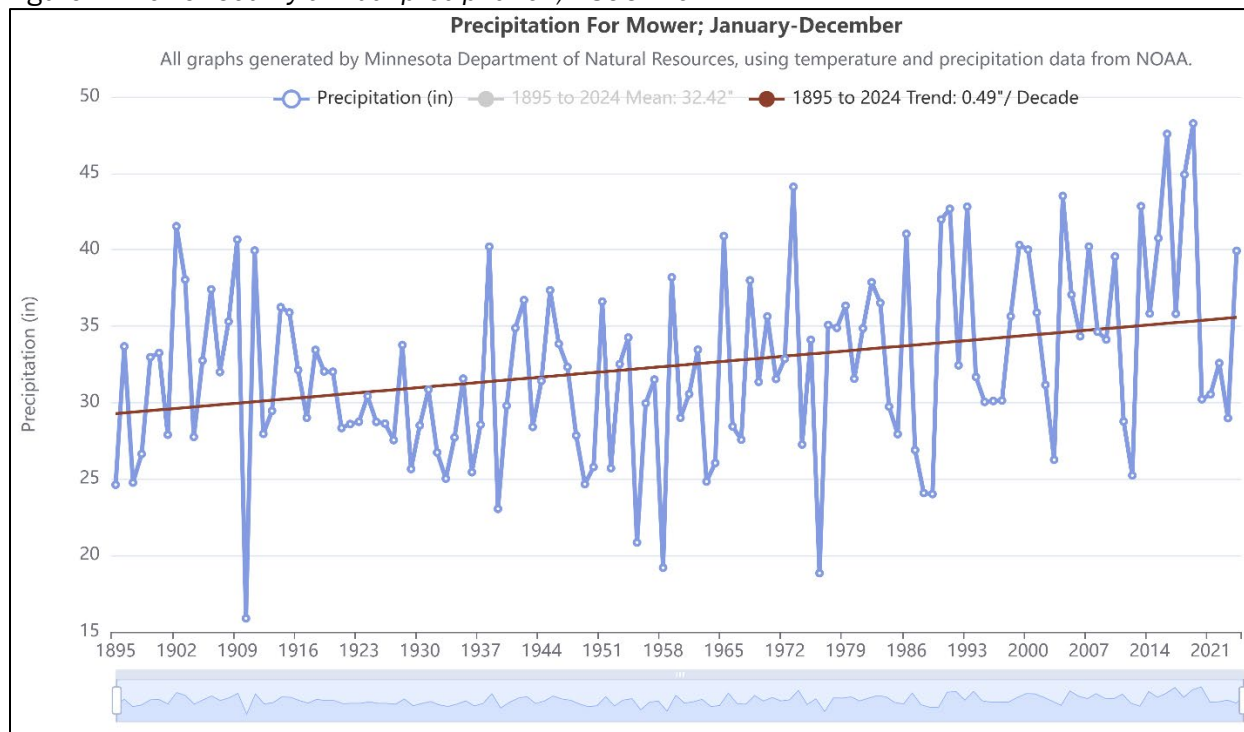
The status of jurisdictional participation in the National Flood Insurance Program and any repetitive loss properties are detailed in Section 5.1.1. National Flood Insurance Program (NFIP).

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

4.1.3 Flooding and Climate Change

Higher temperatures globally have evaporated more surface and ocean water into the atmosphere, which, in turn, has provided more potential moisture for precipitating weather systems. In Mower County, the result has been increased precipitation, with annual totals increasing at an average rate of just under a half inch per decade statewide since 1895 (see Figure 2).

Figure 2. Mower County annual precipitation, 1895–2024



SOURCE:(MN DNR, 2025B)

Key Message #1 in the Water Chapter of the NCA5 states that climate change will continue to cause profound changes in the water cycle.

Snow cover will decrease and melt earlier and heavier rainfall is leading to increasing flooding (Payton et al., 2023). Additional increases in heavy and extreme precipitation are expected to remain the state's leading climate change symptoms. Heavy rains are now more common in Minnesota and more intense than at any time on record. Long-term observation sites have seen dramatic increases in one-inch rains, three-inch rains, and the size of the heaviest rainfall of the year. Since 2000, Minnesota has seen a significant uptick in devastating, large-area extreme rainstorms as well. Rains that historically would have been in the 98th percentile annually (the largest 2%) have become more common (MN DNR, 2024).

This precipitation increase is found in all seasons, but spring and summer are becoming wetter at faster rates than fall and winter. Whereas temperature increases have been greatest in the northern parts of the state, precipitation increases have been well distributed geographically, and have somewhat favored southern Minnesota, which has better access to moisture from the Gulf of Mexico and is more frequently near the “low-level jet” airflow (a relatively fast-moving zone of winds in the lower atmosphere) that influences precipitation production.

4.1.4 Program Gaps and Deficiencies

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

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

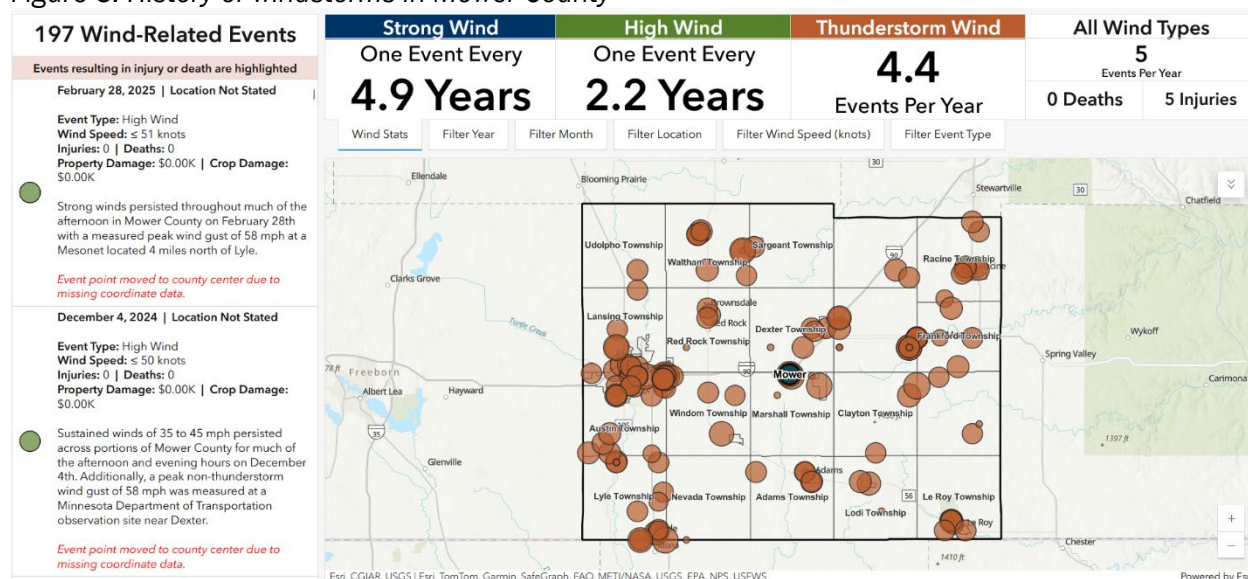
Funding: The county needs funding assistance to improve roads and culverts that experience repetitive flooding. Significant State and Federal funding is needed to construct infrastructure projects to prevent, reduce, and mitigate the impacts of high rain events and flooding.

4.2 Windstorms

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

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

Figure 3. History of windstorms in Mower County



4.2.1 Probability of Occurrence

To determine the probability of future wind-related events in Mower County, records of previous wind-related events (strong wind, high wind, and thunderstorm wind) in Mower County were examined since 1996, the period of record all wind events have in common. The relative frequency of all wind-related events from January 1996 to May 2025 is five per year. These relative frequencies can be used to infer the probability of these events occurring in the future.

4.2.2 Vulnerability

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

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

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

4.2.3 Windstorms and Climate Change

Lack of high-quality long-term data sets makes assessment of changes in wind speeds very difficult (Kunkel et al., 2013). In general, one analysis found no evidence of significant changes in wind speed distribution. Other trends in severe storms, including the number of hurricanes and the intensity and frequency of tornadoes, hail, and damaging thunderstorm winds, are uncertain. Since the impact of more frequent or intense storms can be larger than the impact of average temperature, climate scientists are actively researching the connections between climate change and severe storms (USGCRP, 2018a).

According to the NCA5 Key Message #5 in the Climate Trends chapter, extreme events are becoming more frequent.

4.2.4 Program Gaps and Deficiencies

Mower County Emergency Management identified program gaps and deficiencies that make its residents more vulnerable to summer storms, including windstorms. The following gaps and deficiencies should be addressed with new mitigation efforts to reduce that vulnerability:

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

Public Education: Ongoing public education is needed during tornado season to inform the public about what a tornado watch/warning is and what to do when outdoor warning sirens are activated. This includes improving outreach to an increasingly ethnic population that may not speak English. Mower County and local jurisdictions also need to continue to encourage residents to be aware of and ready for severe storm events that can lead to long-term power outages.

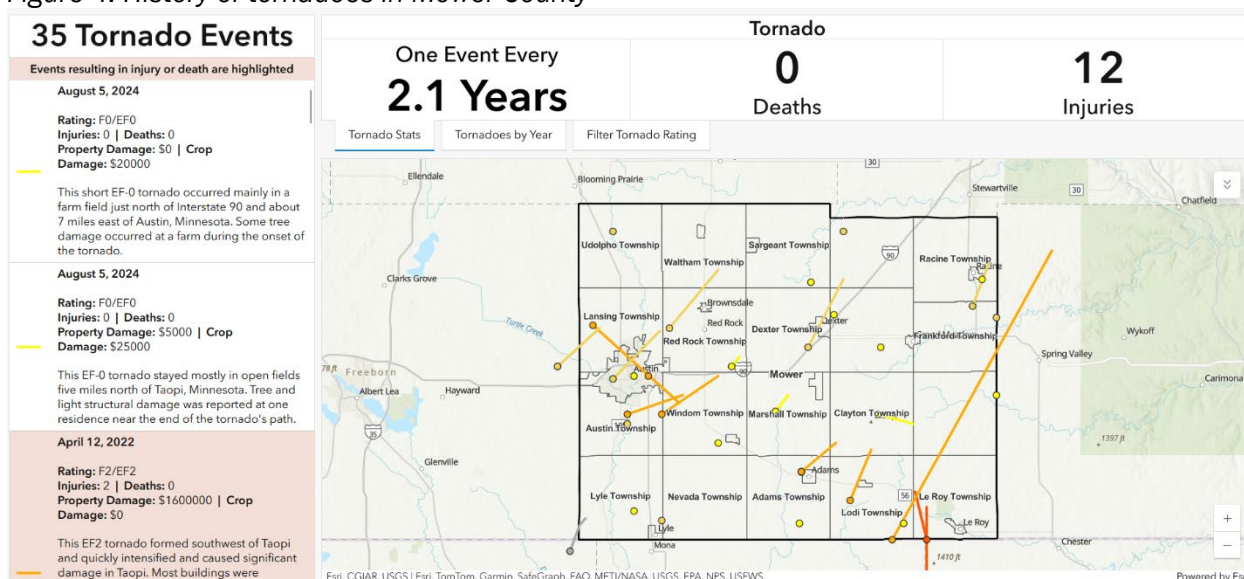
Storm Shelters and Tornado Safe Rooms: There are areas throughout Mower County without viable storm shelters or tornado safe rooms where there are populations vulnerable to high wind and storm events, such as mobile home parks and campgrounds. A coordinated approach is needed to identify where storm shelters or tornado safe rooms are needed and to evaluate whether new construction or a retrofit of facilities is possible. Finding funding for the implementation of such construction projects is also a barrier.

4.3 Tornadoes

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

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

Figure 4. History of tornadoes in Mower County



4.3.1 Probability of Occurrence

Estimating the probability of future tornadoes in Mower County was done using two methods. The first method summed the total number of tornadoes that either touched down in or traveled through the county. This sum was divided by the number of years tornado data was recorded, resulting in the annual relative frequency of tornado occurrences in the county. Based on records in the NCEI Storm Events Database through May 2025, there has been one tornado every 2.1 years in Mower County. These 35 tornadic events occurred in 20 of the 75 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 Mower County, there was an annual frequency of 2–5 tornadoes within a 50-mile radius. The historical frequency was lowest in the southeast and highest in the northwest of the county. These relative frequencies can be used to infer the probability of these events occurring in the future.

4.3.2 Vulnerability

The likelihood of a tornado does not vary significantly across geography within Mower 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 to localized vulnerabilities to specific hazards.

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

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

4.3.3 Tornadoes and Climate Change

Minnesota's climate is undergoing distinct changes, but as reported by the MN DNR State Climatology Office, these changes are only weakly connected to increases in tornadoes or severe convective storms. Minnesota, like all parts of the U.S., has seen increases in the weakest class of tornadoes (rated F-0 or EF-0), but these increases are known to be linked to improved spotting, detection, and verification procedures within the National Weather Service.

When examining tornadoes that cause significant structural damage and are rated EF-2 or above, Minnesota has seen no recent trends towards increasing frequencies—whether measured as raw counts, or as days with one or more of these tornadoes (MN DNR, 2019).

The tornado trends in Minnesota match those found nationally. NCA5 states that while the average annual number of tornadoes appears to have remained relatively constant, there is evidence that tornado outbreaks have become more frequent, tornado seasons are extending into later in the fall, and that tornado strength has increased (Marvel et al., 2023). An October 10, 2021 tornado in the Boundary Waters Canoe Area Wilderness became the latest on record so far north in the state. Then, on December 15, 2021, an outbreak of destructive thunderstorm winds and over 20 tornadoes struck the southeastern parts of the state, producing the latest tornadoes on record by 29 days (Blumenfeld, K. Minnesota State Climatology Office, personal communication, December 21, 2023).

According to the NCA5 Key Message #5 in the Climate Trends chapter, extreme events are becoming more frequent.

However, climate scientists are unclear about whether the recent statistical behavior of these severe convective storm events has any relationship with the changing climate. This uncertainty results from the fact that tornadoes and their parent thunderstorms operate on smaller scales and more localized processes than the global climate. There has been some indication that, on a national basis, tornadoes are being clustered into fewer days, suggesting a greater tendency towards outbreaks. Scientific modelling studies indicate that the meteorological conditions supportive of severe thunderstorms should increase in the future, but it is unclear whether the specific conditions required for the formation of tornadoes, and particularly significant tornadoes, will increase (Kossin, 2017). Until more studies are completed, the Minnesota State Climatology Office recommends assuming that tornadoes will remain an important and dangerous part of Minnesota's climate, even if they do not increase in frequency or severity in response to changing climatic conditions.

4.3.4 Program Gaps and Deficiencies

Mower County Emergency Management identified program gaps and deficiencies that make its residents more vulnerable to summer storms, including tornadoes. The following gaps and deficiencies should be addressed with new mitigation efforts to reduce that vulnerability:

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

Public Education: Ongoing public education is needed during tornado season to inform the public about what a tornado watch/warning is and what to do when outdoor warning sirens are activated. This includes improving outreach to an increasingly ethnic population that may not speak English. Mower County and local jurisdictions also need to continue to encourage residents to be aware of and ready for severe storm events that can lead to long-term power outages.

Storm Shelters and Tornado Safe Rooms: There are areas throughout Mower County without viable storm shelters or tornado safe rooms where there are populations vulnerable to high wind and storm events, such as mobile home parks and campgrounds. 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 possible. Finding funding for the implementation of such construction projects is also a barrier.

4.4 Hail

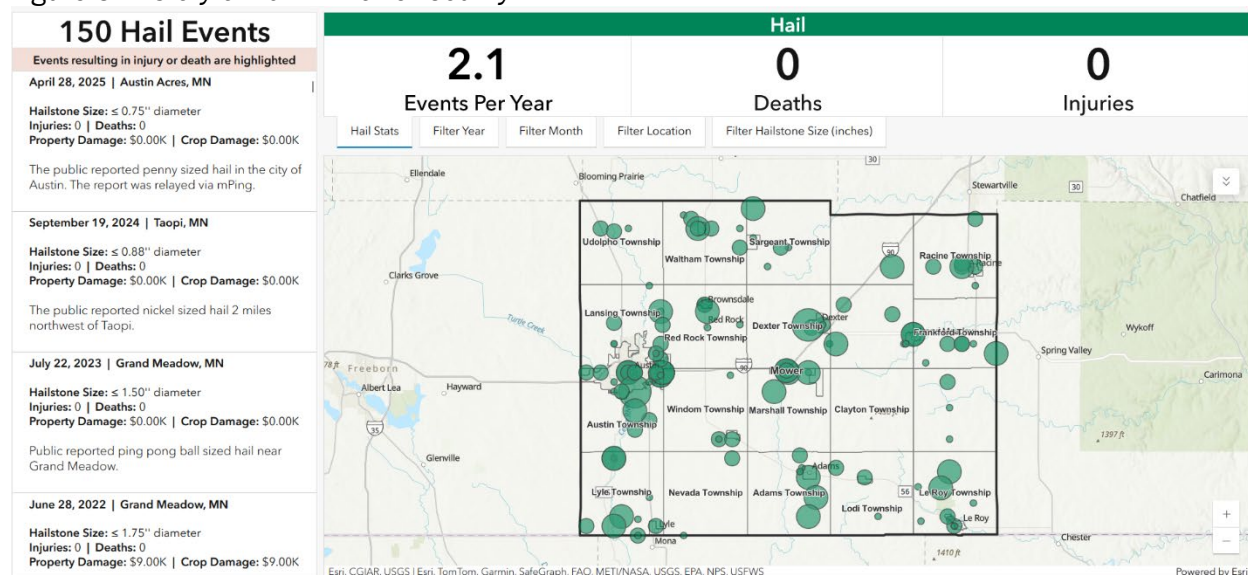
Hailstorms occur throughout the year though are most frequent between May and August (NWS, 2020). Although hailstorms rarely cause injury or loss of life, they do cost Minnesota nearly \$16 million in property and crop damage each year (CEMHS, 2023). In 2017, 44% of properties in Minnesota were affected by damaging hail events (Samanta & Wu, 2017). The history of hail in Mower County is shown in Figure 5; an interactive version of this map can be found on the Mower County HMP website.

4.4.1 Probability of Occurrence

To determine the probability of future hailstorms in Mower County, records of previous hail events in the county were examined for the period of record. From January 1955 through May 2025, the relative frequency of hail events was 2.1 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.

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

Figure 5. History of hail in Mower County



4.4.2 Vulnerability

Mower 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 2022 Mower County reported \$2,585,553 (2021 ADJ) in hail damages, ranking 72nd among Minnesota counties in total hail damages. Mower County's losses are primarily due to crop damages reported at \$1,420,133, followed by \$1,165,420 in property damages. Crop indemnity payments due to hail totaled \$10,757,948 for the period of record spanning 1989–2022 (CEMHS, 2023).

Within Mower 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 to localized vulnerabilities to specific hazards.

4.4.3 Hail and Climate Change

Trends in severe storms, including the numbers of hail and damaging thunderstorm winds are uncertain. Since the impact of more frequent or intense storms can be larger than the impact of average temperature, climate scientists are actively researching the connections between climate change and severe storms (Marvel et al., 2023). The NCA reports that in Minnesota's neighboring Great Plains region, hail size, frequency of large hail, and length of hail season are projected to increase through the rest of this century (Knapp et al., 2023). The occurrence of very heavy precipitation has increased in Minnesota in recent decades, and future projections also indicate this will continue (Blumenfeld, K. Minnesota State Climatology Office, personal communication, December 21, 2023).

According to the NCA5 Key Message #5 in the Climate Trends chapter, extreme events are becoming more frequent.

4.4.4 Program Gaps and Deficiencies

Mower County Emergency Management identified program gaps and deficiencies that make its residents more vulnerable to summer storms, including hailstorms. The following gaps and deficiencies should be addressed with new mitigation efforts to reduce that vulnerability:

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

Public Education: Ongoing public education is needed during tornado season to inform the public about what a tornado watch/warning is and what to do when outdoor warning sirens are activated. This includes improving outreach to an increasingly ethnic population that may not speak English. Mower County and local jurisdictions also need to continue to encourage residents to be aware of and ready for severe storm events that can lead to long-term power outages.

Storm Shelters and Tornado Safe Rooms: There are areas throughout Mower County without viable storm shelters or tornado safe rooms where there are populations vulnerable to high wind and storm events, such as mobile home parks and campgrounds. 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 possible. Finding funding for the implementation of such construction projects is also a barrier.

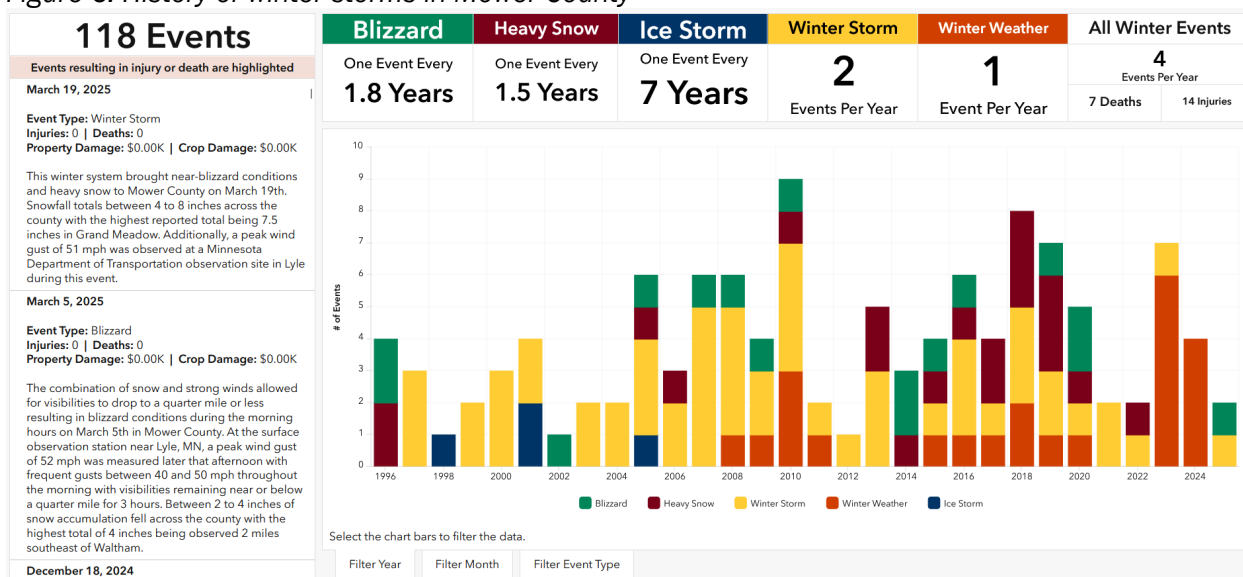
4.5 Winter Storms

Winter storms encompass a number of winter weather events which the National Weather Service (NWS) organizes into the following categories: blizzard, heavy snow, ice storm, winter storm, and winter weather. Winter weather events are common in Minnesota and can be costly. According to the Spatial Hazard Events and Losses Database (SHELDUS), winter weather events in Minnesota have cost more than \$1.02 billion in damages since 1960 (CEMHS, 2023). The history of winter storms in Mower County is shown in Figure 6; an interactive version of this map can be found on the Mower County HMP website.

4.5.1 Probability of Occurrence

To determine the probability of future winter-related storm events in Mower County, records of previous events (blizzards, heavy snows, ice storms, winter storms, and winter weather) were summed and divided by the dataset's period of record, resulting in the annual relative frequency of winter-related storms. Based on records in the NCEI Storm Events Database through May 2025, the relative frequency of winter-related storm events in Mower County is four per year. This relative frequency can infer the probability of these events occurring in the future.

Figure 6. History of winter storms in Mower County



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

4.5.2 Vulnerability

Transportation systems, electrical distribution systems, and structures are vulnerable to winter storms throughout the county. These events do not vary geographically within the county; all jurisdictions are equally vulnerable. While it is highly likely these events will continue occurring annually, the amount of snow and ice and number of winter-related storm events to occur each year are unpredictable. People residing 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 to localized vulnerabilities to specific hazards.

4.5.3 Winter Storms and Climate Change

Historically, winter storms have had a large impact on public safety in Minnesota. If the frequency of snowstorms and annual total snowfalls increase, as anticipated effects of Climate Change, the effects on public safety will also increase. Pressures on energy use, reduced reliability of services, potential outages, and potential rise in household energy costs are major climate change risks to public health that can occur from winter weather.

Table 7 in Section 3.3 discusses confidence that climate change will impact common Minnesota weather/climate hazards beyond 2025, there is some weak evidence that warming winters may make heavy snowfall events less frequent as winter warms.

4.5.4 Program Gaps and Deficiencies

Mower 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 power lines throughout Mower County are above ground, exposing them to impacts/damage from winter high wind and ice events, potentially leading to localized or extensive power outages.

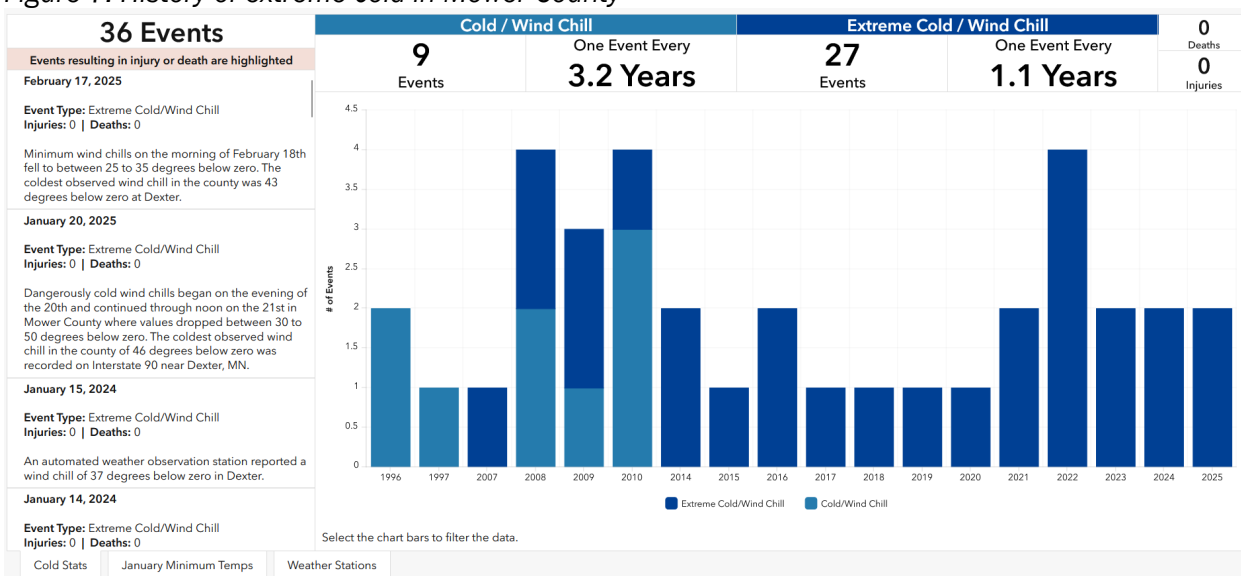
Public Education: Ongoing public education is needed to encourage residents to be ready for long-term power outages or to be snowed in during dangerous winter events such as ice storms and blizzards. This includes improving outreach to an increasingly ethnic population that may not speak English.

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

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

Figure 7. History of extreme cold in Mower County



4.6.1 Probability of Occurrence

To determine the probability of future cold-related events in Mower County, records of previous cold/wind chill and extreme cold/wind chill events were summed and divided by the dataset's period of record, resulting in the annual relative frequency. Based on records in the NCEI Storm Events Database through May 2025, the relative frequency of extreme cold/wind chill events in Mower County is .6 per year. (NCEI, 2025). This relative frequency can be used to infer the probability of these events occurring in the future.

4.6.2 Vulnerability

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

[View at-risk populations in Mower 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 to localized vulnerabilities to extreme cold.

4.6.3 Extreme Cold and Climate Change

Although climate research indicates that Minnesota's average winter lows are rising rapidly, and our coldest days of winter are now warmer than we have ever recorded, cold temperatures have always been a part of Minnesota's climate, and extreme cold events will continue.

As the climate changes, an increase in extreme precipitation or storm events could lead to a higher risk of residents being exposed to cold temperatures during power outages or other storm-related hazards. Extreme and changing temperatures are already challenging aging infrastructure and are expected to impair surface transportation and the electrical grid.

Key Message #4 in NCA5 in the Midwest Chapter states that green infrastructure and public and private investments may mitigate losses, provide relief from heat, and offer other ways to adapt the built environment to a changing climate.

4.6.4 Program Gaps and Deficiencies

Mower 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 facilities utilized for the care of residents & visitors, including designated severe weather/emergency shelters (schools, churches, etc.) have backup power to run heating systems in the event of a power outage.

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

4.7 Extreme Heat

Extreme heat describes weather that is much hotter and/or humid than typical for a place and time of year. In the United States, extreme heat is the deadliest weather-related hazard and causes more deaths than flooding, tornadoes, and hurricanes combined. While heat waves are infrequent in a northern state like Minnesota, they can have severe consequences for residents who are not acclimatized to their effects (Runkle et al., 2022).

While Mower County has ranked extreme heat as a low-priority hazard, it is included in this plan due to its significant health impacts. The Minnesota Climate Action Framework states a goal for every county in Minnesota to profile the risk of extreme heat in its jurisdiction, regardless of its prioritization of this hazard. Minnesota Homeland Security and Emergency Management and the Minnesota Department of Health support this inclusion as a form of outreach. Counties do not need to have mitigation action addressing extreme heat unless the hazard is also a moderate or high priority for the county.

The National Weather Service (NWS) issues extreme heat watches, heat advisories, and extreme heat warnings based on the heat index, which is a combination of air temperature and relative humidity that determines how hot it feels. The heat index threshold differs based on locality, since people in colder climates are less prepared for heat events than people who live in warmer climates (NWS, 2025b).

More recently, the NWS has developed the HeatRisk tool to issue a forecast of heat-related impacts to occur over a 24-hour period. It is intended to provide risk guidance to decision-makers and heat-sensitive populations. Historical data from the HeatRisk tool, available back to 2015, provide a more comprehensive look at extreme heat events beyond those reported as Extreme Heat Events in the Storm Events Database. The HeatRisk tool takes into consideration:

- How unusual the heat is for the time of year
- The duration of the heat, including both daytime and nighttime temperatures
- If those temperatures pose an elevated risk of heat-related impacts based on data from the Centers for Disease Control and Prevention (NWS, 2025a).

Impacts of extreme heat are far-reaching and can be severe. Some impacts include infrastructure failures, such as roads buckling and power outages; strain on essential services, such as increased demand for emergency medical services and law enforcement (Guo, 2017; Williams et al., 2020); and disruptions to important social and economic networks, such as school and event cancellations, which reduce access to education, physical activity, and community support.

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

Mower County's agricultural lands and structures are vulnerable to heat damage. Residents can suffer from increased heat-related illnesses, exacerbation of pre-existing chronic conditions, and even death (Moss, 2017). In the United States, heat is estimated to result in \$100 billion in economic losses annually, primarily due to lost productivity, and it accounts for \$1 billion in direct healthcare costs each year (American Public Health Association, 2025). In 2022, extreme heat led to 682 emergency department visits, 63 hospitalizations, and two deaths in Minnesota (MDH, 2025).

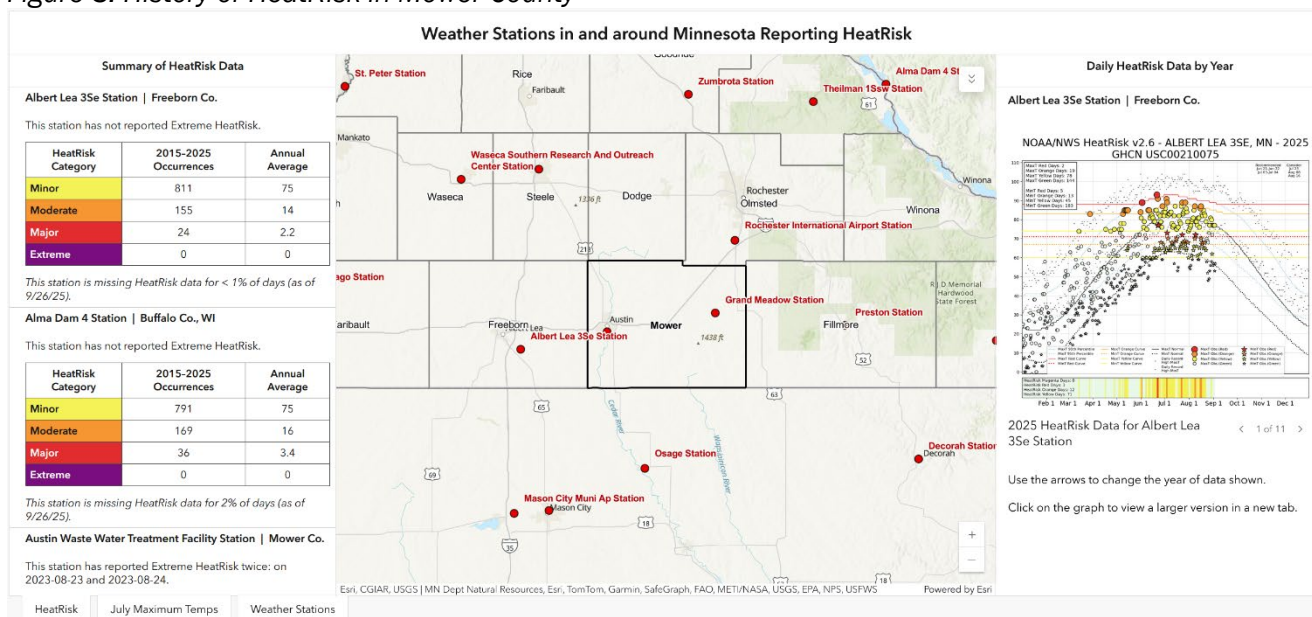
Extreme heat exacerbates poor air quality conditions because the stagnant air during a heat wave increases ozone and particulate pollution (Center for Science Education, 2025). Air pollution is particularly harmful for people over the age of 65, children under the age of five, outdoor workers, and people with respiratory or cardiovascular conditions. The [Minnesota Extreme Heat Toolkit](#) further details the health effects of poor air quality.

Data from the Spatial Hazard Events and Losses Database (SHELDUS) for the United States was examined to identify the county's monetary losses due to heat damage to crops. Ranking 15th among Minnesota counties in crop indemnity payments, heat-related losses for Mower County totaled over \$3.4 million (ADJ 2021) for the period of record spanning 1989 to 2022 (CEMHS, 2023).

The history of extreme heat in Mower County is shown in Figure 8; an interactive version of this chart can be found on the Mower County HMP website. This dashboard summarizes the occurrences of days when each HeatRisk category threshold was met for each year from 2015–2025. For the purposes of hazard mitigation planning, we have considered days in the Major (Red) Category (a level of heat affects anyone without effective cooling and/or adequate hydration. Impacts are likely in some health systems, heat-sensitive industries, and infrastructure) and the Extreme (Magenta) Category (level of rare and/or long-duration extreme heat with little to no overnight relief affects anyone without effective cooling and/or adequate hydration. Impacts are likely in most health systems, heat-sensitive industries, and infrastructure) as extreme heat-related events.

While Mower County has ranked extreme heat as a low-priority hazard, it is included in this plan on the Minnesota Department of Health recommendation that every county consider this hazard in their HMP due to its significant health impacts.

Figure 8. History of HeatRisk in Mower County



4.7.1 Probability of Occurrence

To determine the probability of future heat-related events in Mower County, the average number of days exceeding the major or extreme HeatRisk categories is used to reflect heat events in the county. Austin Waste Water Treatment Facility Station experiences major or extreme HeatRisk days an average of 2.2 days per year, and Grand Meadow Station experiences these events an average of 1.3 days per year based on the 11 years of record. This relative frequency can infer the probability of these events occurring in the future.

Based on records in the Midwestern Regional Climate Center (MRCC) that date back to 1991, the average daily maximum temperature for July in Mower County has historically been in the 78–82 °F range (MRCC, 2021), which is below the 90 °F for 2–3 days criteria for “extreme” heat events (FEMA, 2024b). However, Austin Waste Water Treatment Facility Station has reported daily maximum temperatures of at least 90 °F a total of 207 times, an average of eight days per year. Grand Meadow Station has experienced 143 days with a temperature of at least 90 °F, an average of five per year. These historical averages can be used to infer future events, although climate change projections show an increase in the number of days that exceed 90 °F by mid-century (see Section 4.7.3).

4.7.2 Vulnerability

The Minnesota Department of Health updated the Minnesota Extreme Heat Toolkit in 2025 to help local governments prepare for extreme heat events. In their toolkit, they note extreme heat events are often dubbed “silent killers” because deaths and illnesses from these events are often misunderstood and underreported. In fact, extreme heat kills more people in the United States than all extreme weather events combined (Adams-Fuller, 2023). Minnesota does not have a mandated reporting system to report deaths and illnesses linked to extreme heat (MDH, 2025), but is important to not underestimate the danger of extreme heat events within the state.

High temperatures can be exacerbated by the urban heat island effect in developed areas, an effect that amplifies temperatures in areas with a higher concentration of impervious and paved surfaces. These types of surfaces absorb more heat and hold it for longer than vegetation cover (EPA, 2019). Impervious surfaces are not spread evenly throughout the county, and attention should be given to cities or areas within the county where this type of surface cover is most dense. The city with the highest concentration of impervious surfaces is Austin at 10.66% (MDH & University of Minnesota, 2019). The distribution of heat-trapping surfaces and their proximity to tree canopy are more important than their total area.

The distribution of impervious surfaces can be viewed in the [Extreme Heat Risk & Vulnerability dashboard](#) in the Exposure tab. The metro counties have an additional layer that demonstrates tree canopy, an effective mitigation of extreme heat: urban tree canopy of at least 40% can result in as much as 7–9 °F cooler temperatures (Ziter et al., 2019). The Metropolitan Council [Growing Shade Tool](#) provides data and resources to inform tree planting and canopy preservation for the Twin Cities region to realize benefits, such as cooler temperatures, improved air quality, cleaner stormwater, improved mental health, and enhanced biodiversity.

Rural areas have higher rates of heat-related emergency department visits compared with urban areas (MDH, 2024), and Americans living in rural areas are twice as likely as those in urban areas to have pre-existing health conditions that make them more vulnerable to extreme heat (Pohl, 2025). Rural agricultural regions can have higher rates of humidity due to moisture-producing crops like corn (Minnesota Supercomputing Institute, 2016), which produces evapotranspiration, or “corn sweat,” that can add as much as 5–10 °F to the dew point temperature (Steil, 2016).

Key Message #3 in the Midwest Chapter of the NCA5 lists strategies, such as expanded use of green infrastructure and heat-health early warning systems, have the potential to improve both individual and community health (Wilson et al., 2023).

Everyone is susceptible to extreme heat, but certain individuals are at a higher risk of developing heat-related illnesses. According to the Centers for Disease Control and Prevention (CDC), population groups more vulnerable to extreme heat include:

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

Table 9 shows characteristics that MDH has determined make individuals more at risk to adverse health effects from extreme heat, including how that vulnerability ranks among Minnesota counties. The indicator's percentile rank within Minnesota determines the vulnerability level of Mower County for that indicator (e.g., the 81st – 100th percentile is associated with the highest vulnerability compared to other Minnesota counties). For more information on what makes individuals and communities more vulnerable, see the [Minnesota Extreme Heat Toolkit](#).

Table 9. Populations vulnerable to extreme heat in Mower County

Vulnerability Indicator	Percentage of Population	Percentile Rank within Minnesota	Vulnerability Level
Adults with COPD	7.3%	55th	Moderate
Adults with a self-care disability	4.1%	79th	High
Adults with coronary heart disease	8.0%	55th	Moderate
Adults with diabetes	12.2%	66th	High
Families at less than 200% of poverty level	20.3%	62nd	High
Households where a person age 65 or over lives alone	11.7%	17th	Lowest
Households with no computing device	5.6%	29th	Low
Households with no vehicle available	5.9%	65th	High
Households with rent over 50% of income	4.8%	77th	High
Medicare beneficiaries who are electricity-dependent	4.9%	70th	High
Medicare–Medicaid-enrolled beneficiaries	3.7%	79th	High
People age 5 or over with limited English	10.1%	97th	Highest
People age 65 or over	18.5%	33rd	Low
People over age 16 who work outdoors	7.3%	35th	Low
People under age 5	6.5%	85th	Highest
People who are experiencing homelessness	0.1%	42nd	Moderate
People who are uninsured	6.1%	81st	Highest
People who do not identify as “White alone, not Hispanic or Latino”	26.0%	92nd	Highest

Facilities where vulnerable populations may be concentrated, such as prisons, group homes, and childcare centers, are considered to be at higher risk during heat events.

[View interactive information about at-risk populations in Mower County](#)

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

4.7.3 Extreme Heat and Climate Change

Minnesota's annual average temperature has increased more than 3 °F since record-keeping began in 1895, and nine of Minnesota's hottest 16 years on record have occurred since the year 2000

(MCAP, 2024). In Mower County, the average temperature from July to September has increased 0.04 degrees Fahrenheit per decade since 1895 (MN DNR, 2025b).

Nights are warming at a much higher rate than days in Minnesota. In Mower County, nighttime minimum temperatures from July to September have increased at a rate of 0.2 degrees Fahrenheit per decade (MN DNR, 2025b). While 94% of Minnesota households have some form of air conditioning (including central air, room units, dehumidifiers, and ceiling fans), only 68% have the central air conditioning that can provide reliable whole-house cooling (U.S. Energy Information Administration, 2023). Furthermore, homes with air conditioning equipment may not use it; for example, low-income homes might not turn on their units due to the associated costs, and homes in areas with higher crime rates may be reluctant to use window units for security reasons (EPA, 2006).

The average number of days per year with temperatures over 90 °F under a very high carbon emissions (SSP 585), mid-century (2040–2059) scenario is illustrated in the [Climate Dashboard](#) on the Plan website.

Climate models project that temperature and precipitation increases will continue in Minnesota through the 21st century, with hotter summers and increased drought severity during dry periods as well. Already, the maximum annual heat index values have been rising across the state, because increased humidity during heat waves (Blumenfeld, K. Minnesota State Climatology Office, personal communication, December 21, 2023).

Table 10 compares historical temperature averages to projections under a high emissions (SSP 585) scenario, demonstrating how many more days will reach above 90 °F and nights where the minimum does not go below 75.2 °F. The data in the table is taken from [Minnesota CliMAT](#), an interactive online tool that provides highly localized climate projections for Minnesota and visualize how even specific towns will likely be impacted in the coming decades (Liess, S. et al., 2023). While models differ on how many degrees of warming will be caused by climate change, all models agree that temperatures will continue to rise.

Table 10. Historical vs projected number of days reaching temperature thresholds in Mower County

	Historical (1995–2014)	Projected (2040–2059)	Change
Days Above 90	18.09	40.4	+22.31
Nighttime Minimum > 75.2	0.51	4.03	+3.51

Greenhouse gas concentrations will continue rising through the century, and the air's ability to trap heat from the Earth's surface will increase accordingly. Warming of the atmosphere will evaporate even more water into the air, further limiting the amount of cooling Minnesota will be able to achieve at night and during the winter. As warmer winters and warmer baseline conditions transition into summer, it will be much easier to attain extreme heat (MN DNR, 2025a).

4.7.4 Program Gaps and Deficiencies

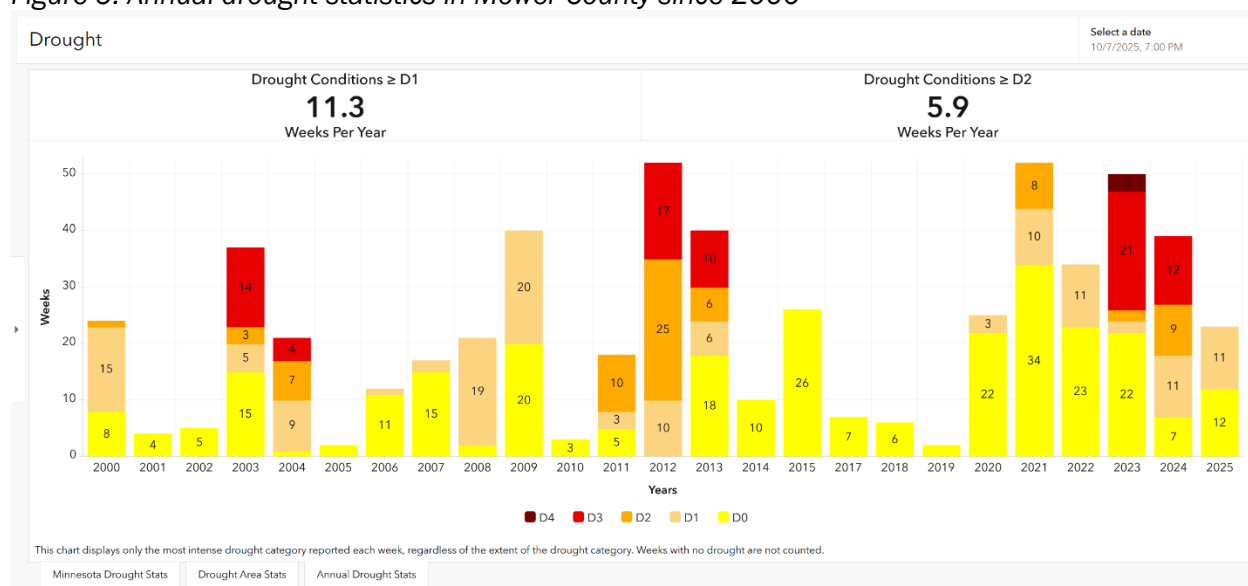
Extreme Heat was considered a low priority by the planning team for the 2025 HMP. Gaps and deficiencies were not addressed.

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 9; an interactive version of this dashboard can be found on the Mower County HMP website.

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

Figure 9. Annual drought statistics in Mower County since 2000



4.8.1 Probability of Occurrence

To determine the probability of future droughts in Mower County, records of previous droughts were summed and divided by the dataset's period of record, resulting in the annual relative frequency of droughts. The USDM database was examined from January 2000–October 7, 2025 for any occurrence of drought $\geq$ D1 in Mower 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 11.3 weeks per year, and the relative frequency of drought conditions $\geq$ D2 is 5.9 weeks per year (NDMC, 2025b). 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, 2025b) 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 four reported drought impacts in Mower County from 2000 to 2024, affecting four sectors: agriculture; relief, response & restrictions; business & industry; and society & public health (NDMC, 2025a). Since droughts are regional in nature, jurisdictions within Mower County do not vary in their vulnerability to drought; however, the impacts from droughts are not equal.

Drought conditions may impact soil moisture reserves, groundwater supplies, lake levels, and stream flows. Water-dependent industries that experience the greatest impacts include: agriculture, public utilities, forestry, and tourism (MN DNR, 2021). In addition, droughts may negatively affect an individual’s health by contributing to poor air quality caused by wildfire smoke and particulate matter, 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, Mower County’s agriculture sector has been impacted by drought more than once, and with 85.4% of Mower 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 1989–2022, Mower County received \$49,380,108 (2021 ADJ) in crop indemnity payments due to drought, placing it as the 11th-highest-paid county in Minnesota (CEMHS, 2023).

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

4.8.3 Drought and Climate Change

Droughts have been happening throughout Minnesota’s history. While the degree at which climate change will impact future droughts is not certain, an increase in efforts and resources are being devoted to project these impacts. In 2023, the NCA5 was completed by the U.S. Global Change Research Program. It provided a comprehensive scientific review of how climate change is impacting the U.S. as well as providing climate change projections.

According to the report, a warming climate is contributing to oscillations between extreme droughts and floods, threatening the agriculture and livestock in the Midwest which produces more than 30% of the world’s corn and soybeans (Wilson et al., 2023). Climate change is attributed to an estimated \$31.9 billion (2022 USD adjusted) of US crop indemnity payments over the last 30 years, with the largest portion of payments going to farmers affected by drought (Wilson et al., 2023). In Minnesota, drought alone represents 25% of the total crop indemnity payments made in the state (CEMHS, 2023).

Climate projections indicate an increase in annual precipitation of 0.2%–0.5% in the western Midwest and the increase in cumulative runoff is expected to continue through the midcentury (Wilson et al., 2023).

Key Message #5 in the Midwest Chapter of the NCA5 states that managing extremes is necessary to minimize impacts on water quality and quantity. The extreme variability between wet and dry periods is expected to negatively impact the water quality and quantity of the Mississippi River System and adversely affect dependent ecosystems and commerce (Wilson et al., 2023).

4.8.4 Program Gaps and Deficiencies

Mower 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: The National Dam Inventory reports that there are 15 dams in Mower County. Dams are mapped on the [MN State 2024 HMP website](#). Mower County has zero dams classified as High Hazard Dams, zero dams classified as Significant Hazard Dams, and 15 dams classified as Low Hazard Dams. The Minnesota Dam Safety Program office was consulted to identify dam incidents and concerns.

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 is one noted dam incident in Mower County. In June 1969, the Lake Louise Dam's right earthen embankment washed out, and its right concrete abutment collapsed during a flood. Structural deficiency of a temporarily placed culvert contributed to this failure. The dam was rebuilt.

Total dam failures are extremely unlikely if the dam is maintained in compliance with Minnesota's Dam Safety Program. The likelihood of failure in Mower County is low.

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

4.9.3 Dam Failure and Climate Change

Dams are designed based on assumptions about a river's annual flow behavior that will determine the volume of water behind the dam and flowing through the dam at any one time. Changes in weather patterns due to climate change may change the hydrograph or expected flow pattern. Spillways are put in place on dams as a safety measure in the event of the reservoir filling too quickly. Spillway overflow events are mechanisms that also result in increased discharges downstream. It is conceivable that bigger rainfalls at earlier times in the year could threaten a dam's designed margin of safety, causing dam operators to release greater volumes of water earlier in a storm cycle in order to maintain the required margins of safety. Such early releases of increased volumes can increase flood potential downstream.

Climate change may increase the probability of design failures. Some spillways may not be large enough to convey the increased flow pattern. An undersized spillway could lead to dam overtopping and failure.

The partial failure of the Rapidan Dam in Blue Earth County in June of 2024 highlighted the growing threat climate change poses to the country's aging infrastructure as extreme weather becomes more common and severe. The Rapidan Dam is a Significant Hazard Dam in "poor" condition. About 20% of Minnesota's Significant and High Hazard Potential Dams are in "fair" or "poor" condition, with a few in "undefined" condition, and about 70% of these dams were built before 1970 (USACE, 2024). These

older dams are growing increasingly taxed by extreme weather, especially in the Midwest (Harrison, 2024). Climate change is adding a new level of uncertainty that needs to be considered with respect to assumptions made during the dam construction.

While the Rapidan Dam partial failure did not result in mass inundation, it sent an estimated 11.6 million cubic yards of sediment downstream. The sediment was high in phosphorus and nitrogen because of nearby agricultural runoff. The impacts to the fish habitat and ecology of the stream may not be known for years (MPR News, 2024). The sediment loading behind older dams adds another compounding threat of dam failure to the stream and structures below.

4.9.4 Program Gaps and Deficiencies

Mower 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 on recovery, and to build disaster-resistant communities. Mitigation actions and projects should be based on a well-constructed risk assessment as provided in Section 3 of this plan and on the HMP website. 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 reducing disaster damages. The assessment also evaluates these capabilities to determine whether the activities can be improved 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 Mower County as related to hazard mitigation.
- Appendix C: As part of the Mower 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 Mower 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 financial protection against flood losses.

Jurisdictional participation in the National Flood Insurance Program (NFIP) is outlined below.

Mower County

- Status: Participating
- Entry Date: 12/22/1972 (Emergency Entry); 7/16/1979
- FEMA Map: FEMA Mapped High Risk Areas
- Current Effective Map Date: 9/4/2013
- Potential Buildings Damaged in Floodplain: 34
- Adoption of Current Floodplain Ordinance: 9/12/2023 (Effective 9/16/2023)
- Adoption of latest DFIRM Map: 8/27/2013 (and in 9/12/2023 amendment)
- Floodplain Administrator: Angela Lipelt (angiel@co.mower.mn.us)

Adams

- Status: Participating
- Entry Date: 2/12/1974 (Emergency Entry); 8/15/1979 (Regular Entry)
- FEMA Map: FEMA Mapped High Risk Areas
- Current Effective Map Date: 9/4/2013
- Potential Buildings Damaged in Floodplain: 2
- Adoption of Current Floodplain Ordinance: 6/11/2013 (Effective 6/20/2013)
- Adoption of latest DFIRM Map: 6/11/2013
- Floodplain Administrator: Jake Goodale, City Clerk (jgoodale@adamsmn.com)

Austin

- Status: Participating
- Entry Date: 9/25/1970 (Emergency Entry); 5/14/1971 (Regular Program)
- FEMA Map: FEMA Mapped High Risk Areas
- Current Effective Map Date: 9/4/2013
- Potential Buildings Damaged in Floodplain: 55
- Adoption of Current Floodplain Ordinance: 6/5/2023 (Effective 6/10/2023)
- Adoption of latest DFIRM Map: 8/19/2013 (and in 6/5/2023 amendment)
- Floodplain Administrator: Holly Wallace, Planning & Zoning Administrator (hollyw@ci.austin.mn.us)

Brownsdale

- Status: Participating
- Entry Date: 7/5/1974 (Emergency Entry); 3/18/1985 (Regular Entry)
- FEMA Map: FEMA Mapped High Risk Areas
- Current Effective Map Date: 9/4/2013
- Potential Buildings Damaged in Floodplain: NA
- Adoption of Current Floodplain Ordinance: 8/5/2013 (Effective 8/14/2013)
- Adoption of latest DFIRM Map: 8/5/2013
- Floodplain Administrator: Adria Vargas, City Clerk/Treasurer (brownsdale.mn.clerk@frontiernet.net)

Dexter

- Status: Not Participating
- Entry Date: NA
- FEMA Map: No Special Flood Hazard Areas
- Current Effective Map Date: 9/4/2013
- Potential Buildings Damaged in Floodplain: NA
- Adoption of Current Floodplain Ordinance: NA
- Adoption of latest DFIRM Map: NA
- Floodplain Administrator: NA

Elkton

- Status: Not Participating
- Entry Date: NA
- FEMA Map: No Special Flood Hazard Areas
- Current Effective Map Date: 9/4/2013
- Potential Buildings Damaged in Floodplain: NA
- Adoption of Current Floodplain Ordinance: NA
- Adoption of latest DFIRM Map: NA
- Floodplain Administrator: NA

Grand Meadow

- Status: Participating
- Entry Date: 12/16/2013 (Regular Entry)
- FEMA Map: FEMA Mapped High Risk Areas
- Current Effective Map Date: 9/4/2013
- Potential Buildings Damaged in Floodplain: NA
- Adoption of Current Floodplain Ordinance: 7/8/2013 (Effective 7/17/2013)
- Adoption of latest DFIRM Map: 7/8/2013
- Floodplain Administrator: James Christian, City Administrator
(cityadministrator@cityofgrandmeadow.com)

Le Roy

- Status: NA
- Entry Date: NA
- FEMA Map: NA
- Current Effective Map Date: NA
- Potential Buildings Damaged in Floodplain: 2
- Adoption of Current Floodplain Ordinance: NA
- Adoption of latest DFIRM Map: NA
- Floodplain Administrator: NA

Lyle

- Status: Participating
- Entry Date: 9/20/2013 (Regular Entry)
- FEMA Map: FEMA Mapped High Risk Areas
- Current Effective Map Date: 9/4/2013
- Potential Buildings Damaged in Floodplain: NA
- Adoption of Current Floodplain Ordinance: 6/12/2013 (Effective 7/5/2013)
- Adoption of latest DFIRM Map: 6/12/2013
- Floodplain Administrator: Diana Witt, City Clerk/Treasurer (cityclerk@lylemn.org)

Mapleview

- Status: Participating
- Entry Date: 4/30/1974 (Emergency Entry); 5/15/1984 (Regular Entry)
- FEMA Map: FEMA Mapped High Risk Areas
- Current Effective Map Date: 9/4/2013
- Potential Buildings Damaged in Floodplain: 0
- Adoption of Current Floodplain Ordinance: 8/22/2013 (Effective 8/29/2013)
- Adoption of latest DFIRM Map: 8/22/2013
- Floodplain Administrator: Mysti Acosta, City Clerk/Treasurer (mapleview@outlook.com)

Racine

- Status: Not Participating
- Entry Date: NA
- FEMA Map: No Special Flood Hazard Areas
- Current Effective Map Date: 9/4/2013
- Potential Buildings Damaged in Floodplain: NA
- Adoption of Current Floodplain Ordinance: NA
- Adoption of latest DFIRM Map: NA
- Floodplain Administrator: NA

Rose Creek

- Status: Participating
- Entry Date: 4/16/1976 (Emergency Entry); 7/16/1979 (Regular Entry)
- FEMA Map: FEMA Mapped High Risk Areas
- Current Effective Map Date: 9/4/2013
- Potential Buildings Damaged in Floodplain: 0
- Adoption of Current Floodplain Ordinance: 7/8/2013 (Effective 7/18/2013)
- Adoption of latest DFIRM Map: 7/8/2013
- Floodplain Administrator: Kristine Allas, City Clerk/Treasurer (Inkallas@gmail.com)

Sargeant

- Status: Not Participating
- Entry Date: NA
- FEMA Map: No Special Flood Hazard Areas
- Current Effective Map Date: 9/4/2013
- Potential Buildings Damaged in Floodplain: NA
- Adoption of Current Floodplain Ordinance: NA
- Adoption of latest DFIRM Map: NA
- Floodplain Administrator: NA

Taopi

- Status: Not Participating
- Entry Date: NA
- FEMA Map: No Special Flood Hazard Areas
- Current Effective Map Date: 6/4/2013
- Potential Buildings Damaged in Floodplain: NA
- Adoption of Current Floodplain Ordinance: NA
- Adoption of latest DFIRM Map: NA
- Floodplain Administrator: NA

Waltham

- Status: Participating
- Entry Date: 9/8/1975 (Emergency Entry); 10/16/1979 (Regular Entry)
- FEMA Map: FEMA Mapped High Risk Areas
- Current Effective Map Date: 9/4/2013
- Potential Buildings Damaged in Floodplain: 4
- Adoption of Current Floodplain Ordinance: 8/13/2013 (Effective 8/21/2013)
- Adoption of latest DFIRM Map: 8/13/2013
- Floodplain Administrator: Stormey Gunneson, City Clerk/Treasurer
(cityofwaltham@gmail.com)

Following a damaging flood event, any impacted jurisdiction would work with the MN DNR to use a form to track cumulative improvements and repetitive losses in the floodplain. The affected jurisdiction would also review the [Minnesota Post-Flood Substantial Damage Playbook for Local Officials](#).

5.1.2 Repetitive Loss Properties

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

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

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

Mower County has 140 RL properties and eight SRL properties. Six of the SRL properties are located in Austin, and two are listed as being generally within Mower County. Two of the RL properties are in Adams, six are listed as being generally within Mower County, and the remaining 132 are in Austin. Net payments for both RL and SRL properties total \$6,324,922.

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

5.1.3 Previous Integration of Hazard Mitigation into Planning Mechanisms

Mower County and its incorporated communities are encouraged to integrate relevant information from this mitigation plan into their other planning mechanisms. This demonstrates local progress in mitigation efforts and strengthens the overall mitigation planning process. As part of this plan update, communities were asked to report whether and how information from the 2015 plan was incorporated into their existing plans, policies, programs, partnerships, or other documents. The following provides an overview of their responses.

Mower County

Mower County has worked to integrate the 2015 Mower County Hazard Mitigation Plan across county departmental efforts, including:

- Mower County Emergency Management has worked to conduct public outreach on severe weather awareness and preparedness. MCEM uses the county website to share information with the public. Outreach is also conducted to reach local jurisdictions as needed during emergencies or during recovery efforts after a major storm event. MCEM participates in the National Weather Service's Severe Weather Awareness Weeks held in April and November each year.
- The Mower County Environmental Services Department maintains and enforces the floodplain management ordinance and shoreland overlay requirements for the county.
- The Mower County SWCD /Cedar River Watershed District has worked together on water retention projects to hold water back during intensive water events.
- The Mower County Highway Department has used local funds, state aid maintenance funds, state and Federal Hazard Mitigation grants, and MnDNR grants to support highway department projects.

- Mower County Environmental Services has continued to participate in FEMA's Community Rating System (CRS) program. Flood information is sent out annually to those that are vulnerable within the county. Information is provided on how to prepare for a flood event, how to disinfect their well after a flood, and how to care for their septic system before/during/after a flood event.
- Mower County's Water Plan has been updated to use the Watershed approach. Mower County is covered by one of two different One Watershed One Plan (1W1P) programs: Cedar-Wapsi 1W1P and managed through cooperation with Mower SWCD. The plan addresses regional watershed planning which include measures for flood mitigation.
- The Mower County Highway Department has continued to address flood mitigation efforts related to the county's transportation infrastructure (roads, bridges and culverts) to ensure that stormwater runoff is not prevented from flowing freely through structures as they were designed. The Highway Department also works together with the Mower County Environmental Services Dept and Mower SWCD on wetland projects. Mower County also has continued to work with MnDOT as needed to address flood issues to I-90.
- The Mower County Highway Department has worked to keep county roads safe and maintained in winter in accordance with the Mower County Snow and Ice Control Safety Policy.
- Mower County Highway Dept. also has worked to reduce risk of power outages and damages from downed trees or branches resulting from severe spring and summer storm events by managing vegetation within the right-of-way on county roads.

City of Adams

The city of Adams has integrated the Mower County 2015 Hazard Mitigation plan by keeping our outdoor warning siren maintained and testing it monthly to support our ability to warn residents of severe wind and tornado events. In 2017 the City of Adams worked with the State of Minnesota to complete a full reconstruction including sanitary (to removing clay pipe and replace with PVC to reduce I&I) and storm sewers on a half mile portion of Hwy 56. In 2020 there was reconstruction of 7 city blocks including sanitary sewer (to removing clay pipe and replace with PVC to reduce I&I) and 1800 feet of storm sewer. In 2021 the city installed three retention ponds in new developments to alleviate stormwater runoff and prevent the risk of flooding. In 2022 the city implemented a new sewer line ordinance which helped to reduce the potential I&I into the City's storm sewers. The city is currently working with an engineer and Mower County to reconstruct 2 1/2 blocks with new sanitary sewer (removing clay pipe and replacing with PVC to reduce I&I) and to add new storm sewer to help alleviate with water running across the road during heavy rainfalls.

City of Austin

The city of Austin has integrated the Mower County 2015 Hazard Mitigation plan through our investments and public works projects that reduce our risk to flooding:

- In 2018-24, the city completed a sump pump inspection program to reduce the introduction of clean water into the sanitary sewer system.

- In 2019, we completed the final phase of the North Main Levee project, which was the culmination of a 12-phase levee project to protect homes, business, and infrastructure, which spanned over the course of 13-years of construction.
- In 2020, we completed the Turtle Creek Levee system to protect homes and infrastructure susceptible to flood events.
- In 2020-21, we acquired 3 residential structures that were susceptible to flooding and removed the structures from the floodplain. The City of Austin recently received notice from the MN DNR of a grant in the amount of \$490K for repetitive loss property acquisition for additional homes. We will likely execute the grant in 2026.
- In 2022, we added an additional severe weather siren in a newly annexed NE area of the city, where our current system did not provide an overlap.
- In 2023, we purchased 2 additional backup generators for flood pumps and other needs.
- In 2024, we finalized the construction plans and funding package for the WWTP levee system. We acquired the former Salvation Army Thrift Store which was susceptible to flooding.

City of Brownsdale

The city of Brownsdale has integrated the Mower County 2015 Hazard Mitigation plan by keeping our outdoor warning siren maintained and testing it monthly to support our ability to warn residents of severe wind and tornado events. We have also worked to address mitigation for local flooding. We have updated a sewer lift station, made soil corrections, and added rip rap to sewer ponds.

City of Dexter

The city of Dexter has integrated the Mower County 2015 Hazard Mitigation plan by keeping our outdoor warning siren maintained and testing it monthly to support our ability to warn residents of severe wind and tornado events. For our city mobile home park we approved the addition of sites with the requirement in the Conditional Use Permit that the occupants have a storm shelter in place. The city has also focused on our flood risk reduction efforts. The city has conducted a Feasibility Study on watermain/street improvements. Our public works department is working to address undersized storm sewers which do not allow for heavy rainfall and are prone to flooding streets/driveways.

City of Elkton

The city of Elkton has integrated the Mower County 2015 Hazard Mitigation plan through local flood mitigation efforts. Our public works department has been working to address a city lift station that is prone to flooding during high rain events. We enforce the city's sump pump ordinance to minimize impacts to the city's stormwater system.

City of Grand Meadow

The city of Grand Meadow has integrated the Mower County 2015 Hazard Mitigation plan by keeping our outdoor warning siren maintained and testing it monthly to support our ability to warn residents of severe wind and tornado events. The city has also worked to invest in and address local flood risk reduction efforts. In 2024, the city completed the construction of a new main lift station and up-sized force main. In 2024 the city also completed a full reconstruction (water, sanitary, and storm sewers as well as curb/gutter/pavement) on the south end of town. City's engineering company completed our Infrastructure Plan in 2024. We have also completed some ditch grading/cleaning over the past year to aid stormwater flow. The city is currently in the planning process of a sewage treatment expansion project, as well as ongoing I&I mitigation efforts.

City of Le Roy

The city of Le Roy has integrated the Mower County 2015 Hazard Mitigation plan by keeping our two outdoor warning sirens maintained and testing it monthly to support our ability to warn residents of severe wind and tornado events. We have also reduced the risk of flooding to new development; recent home construction has included stormwater retention ponds.

City of Lyle

The city of Lyle has integrated the Mower County 2015 Hazard Mitigation plan by keeping our outdoor warning siren maintained and testing it monthly to support our ability to warn residents of severe wind and tornado events. Each winter we have also continued to send reminders out with the utility bills on how to avoid freezing pipes. We share emergency information with residents on our website, by posting notices at City Hall, Post Office and Freeborn County Coop bulletin board, and the Lyle Announcement Facebook page.

City of Maplevue

The city of Maplevue has integrated the Mower County 2015 Hazard Mitigation plan through our local flood mitigation efforts. The city has worked with the Mower County SWCD /Cedar River Watershed District on water retention projects to hold water back during intensive water events. The city has repaired stormwater infrastructure lining culverts and storm sewer pipes that were in poor condition, as a large precipitation event could cause a sinkhole under the road or shoulder, which has happened in the past. The city has repaired the vulnerable areas.

City of Racine

The city of Racine has integrated the Mower County 2015 Hazard Mitigation plan through our efforts to invest in and implement stormwater infrastructure improvements, including putting catch basins in, installing curb and gutter, and redoing the understructure so we can control the water runoff better. We also have a designated place to serve as a community shelter with backup generator power to take care of vulnerable residents in the event of a power outage during a period of extreme cold.

City of Rose Creek

The city of Rose Creek has integrated the Mower County 2015 Hazard Mitigation plan by keeping our two outdoor warning sirens maintained and testing it monthly to support our ability to warn residents of severe wind and tornado events. The city has also integrated the HMP through our efforts to locally address flood mitigation. The city has been working with an engineering firm to plan for water/wastewater/stormwater system improvements, which include adding another sewage pond for the city over the next several years, after successfully receiving funding.

City of Sargeant

The city of Sargeant has integrated the Mower County 2015 Hazard Mitigation plan by keeping our outdoor warning siren maintained and testing it monthly to support our ability to warn residents of severe wind and tornado events. We have also worked to be prepared for extended power outages. The city purchased a generator for backup power. We keep this generator maintained to ensure it is operational for an emergency situation.

City of Taopi

The city of Taopi has integrated the Mower County 2015 Hazard Mitigation plan through our local efforts to improve stormwater management and ensure our ability to handle high rain events. The city has made culvert replacements to allow faster removal of stormwater. We also work to keep storm sewers clean to prevent flooding backup is an issue.

City of Waltham

The city of Waltham has integrated the Mower County 2015 Hazard Mitigation plan by keeping our outdoor warning siren maintained and testing it monthly to support our ability to warn residents of severe wind and tornado events. However, our warning siren is noted as needing to be replaced. Since 2015 we have also continued to work on our local flood mitigation and public works projects. We have a generator to service the community in the event of power outages. We keep the generator maintained to ensure it is operational.

5.1.4 Plans and Programs in Place to Address Natural Hazards

Mower 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”). To group related natural hazards, “Summer Storms” encompasses Tornadoes, Windstorms, Lightning, and Hail. The plans and programs in place by Mower County to support mitigation for the hazards addressed in this plan are described as follows:

All Hazards

Zoning Permit Enforcement: Zoning permits are required for the construction or placement of any structure on a person’s property with unincorporated areas of the county. This process

ensures the property remains compliant with the setbacks and land use activities of the Zoning District. Zoning permit applications must be submitted to, reviewed and approved by the Mower County Environmental Services Department.

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

Emergency Notification System: Mower County maintains the CodeRED Emergency Notification System which allows residents and visitors to sign up (“opt-in”) to receive public alerts and warnings targeted to their location, along with other local emergency alerts. La Crosse NWS weather notifications are automatically pushed through the CodeRED notification system if the warning reaches certain criteria. A link to sign up for the system is located on the Mower County Emergency Management website page. Mower County also uses IPAWS (Integrated Public Alert Warning System), which allows for targeted and county-wide emergency notifications to both residents and visitors (not an “opt-in” service).

Preparedness Outreach & Education: Mower County Emergency Management utilizes the Mower County website, Mower County Sheriff’s Office website page, and local news media to communicate with the public on emergency preparedness, severe weather, and other hazard conditions throughout the year. The Mower County Emergency Management website page provides information and resource links for public education on emergency preparedness. The county also receives all products/statements issued by the National Weather Service, and in turn shares or incorporates these into its community outreach and public education. Promotion of the use of NOAA weather radios occurs during the NWS Severe Weather Awareness Week as well as throughout the year. Mower County Emergency Management provides special presentations or other planning assistance as requested to local governments, schools, or other local organizations and facilities within the county.

Mass Care Sheltering: In the event of a disaster where temporary sheltering is needed, Mower County Emergency Management coordinates with Volunteer Fire Departments, Mower County Posse, Mower County Reserve and Mower County Health and Human Services provide mass care services as needed. The county EOP includes plans, procedures, and resources available for mass care sheltering.

Backup Power: Mower County works to ensure the continuity of operations of county government services and critical infrastructure in the event of an extended power outage. Local jurisdictions are encouraged to assess where backup power is needed and to obtain emergency generators.

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

School districts have their own policies, decision-making protocols, and communications plans in place to determine the need to close school and to notify targeted audiences in the event of severe weather, extreme temperatures, or other events that pose risk to students and staff.

Regional Collaboration: Mower County Emergency Management works closely with the neighboring emergency managers on a range of planning, training, and exercises to support all-hazards preparedness, mitigation, response, and recovery capabilities. Mower County Emergency Management also works closely with our regional National Weather Service (NWS) office, having access to all live and on-demand briefings, announcements, and educational opportunities, and contact information for direct collaboration as needed.

Severe Winter Storms

Winter Weather Statements (Watch, Advisory, Warning, etc.): Mower County Emergency Management works to relay winter weather statements received from the NWS to help alert residents and visitors to hazardous conditions.

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

Snow Removal & Ice Control: The Mower County Highway Department conducts winter road maintenance on county roads in accordance with the Mower County Snow and Ice Control Safety Policy. Other road jurisdictions conduct winter road maintenance on their respective road systems in accordance with each of their established policy and/or practice.

Severe Summer Storms

Severe Weather Statements (Watch, Advisory, Warning, etc.): Mower County works to relay severe spring and summer weather statements (such as for thunderstorms, windstorms, or tornadoes) received from the NWS to help alert residents and visitors to hazardous conditions.

Outdoor Warning Sirens: Outdoor warning sirens are located throughout the county and are tested monthly by the Mower County Sheriff's Office in coordination with local jurisdictions. Warning sirens are owned and maintained by the cities where they are located.

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

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

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

Extreme Cold

Emergency Notifications: Extreme cold temperature warnings are issued by the National Weather Service. Mower County Emergency Management works to relay extreme cold temperature warnings from the NWS to help alert residents and visitors to hazardous conditions. The Mower County Emergency Management Office also encourages residents to follow local news or NWS weather applications to receive severe weather and extreme temperature notifications.

Extreme Cold Safety Awareness: Mower County Emergency Management and Mower County Public Health promote public awareness of personal safety measure to take during periods of extreme cold, such as sharing information via Facebook posts.

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

Drought

Public Awareness & Outreach: In the event of extreme drought conditions, Mower County works in concert with the NWS, MN DNR, and local communities to raise public awareness of drought conditions and recommended water use restrictions as per MN DNR guidance.

Precipitation Monitoring: The Mower County SWCD participates in the MNgage Minnesota Volunteer Precipitation Observing Program, which is administered by the DNR Minnesota State Climatology Office. Data collected by volunteers is entered into a database for various studies and weather prediction simulations, including the assessment of drought severity and impacts.

Flooding

Floodplain Management: Mower County Zoning Ordinance, Article III – Floodplain Management Ordinance, establishes the floodplain district and zoning regulations and conditional uses permitted within the floodway, flood fringe, and general floodplain districts within the county. The Mower County Environmental Services Department maintains and enforces the floodplain management ordinance for the county. The department also assists county residents in determining whether their property is affected by an officially mapped flood area.

Shoreland Ordinance: Mower County Zoning Ordinance – Division 9, Shoreland Management Overlay Regulations establishes allowable uses and development standards in shoreland areas designated within the county.

Subdivision Ordinance: Mower County Ordinance 13-1, Subdivision of Land is established to regulate the subdividing of land in Mower County.

Transportation Plan: The Mower County Highway Department maintains update of the county's Mower County Five Year Transportation Plan. The plan outlines the priorities and scheduling of road, bridge, and other projects that address localized flood risk reduction.

Flood Mitigation: The Mower County Highway Department maintains bridges and culverts to ensure that stormwater runoff is not prevented from flowing freely through structures as they were designed. The department removes blockages, as well as provides and maintains erosion control measures so that downstream drainage systems do not become impeded and can operate properly.

Minnesota Buffer Law: The Mower County SWCD administers the state Buffer Law and provides technical assistance on buffers to landowners. Mower County Environmental Services provides enforcement, when deemed necessary.

One-Watershed One Plan (1w1P): Mower County's Water Plan has been updated to use the Watershed approach. Mower County is covered by one of two different One Watershed One Plan (1W1P) programs: Cedar-Wapsi 1W1P and managed through cooperation with Mower SWCD. The plan addresses regional watershed planning which include measures for flood mitigation.

Dam/Levee Failure

Mower County does not have any plans in place in regards to dam or levee failure.

5.2 Mitigation Goals

The goals and strategies for natural hazards in the 2024 Minnesota State Hazard Mitigation Plan were adopted for use in the Mower County Plan. This framework, as outlined below, will allow for integration of the mitigation actions that are listed by Mower 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). Minnesota HSEM determined a fifth strategy type for use within the state: Mitigation Preparedness and Response. The strategies and example actions are listed in Table 12.

Table 12. 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.	• Comprehensive plans • Land use ordinances • Planning and zoning • Building codes and enforcement • Floodplain ordinances • NFIP Community Rating System • Capital improvement programs • Open space preservation • Shoreline codes • Stormwater management regulations and master plans
Structure and Infrastructure Projects	These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards. Many of these types of actions are projects eligible for funding through the FEMA Hazard Mitigation Assistance program.	• Acquisitions and elevations of structures in flood-prone areas • Utility undergrounding • Structural retrofits • Floodwalls and retaining walls • Detention and retention structures • Culverts • Safe rooms
Natural Systems Protection	These are actions that minimize damage and losses and also preserve or restore the functions of natural systems.	• Sediment and erosion control • Stream corridor restoration • Forest management • Conservation easements • Wetland restoration and preservation
Education and Awareness Programs	These are actions to inform and educate residents, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady or Firewise Communities. Although this type of mitigation reduces risk less directly than structural projects or regulation, it is an important foundation. A greater understanding and awareness of hazards and risk among local officials, stakeholders, and the public is more likely to lead to direct actions.	• Radio or television spots • Websites with maps and information • Real estate disclosure • Presentations to school groups or neighborhood organizations • Mailings to residents in hazard-prone areas. • StormReady Certification • Firewise Communities
Mitigation Preparedness and Response	This is a State of Minnesota mitigation strategy with the intent of covering preparation and actions that protect life and property during a natural disaster.	• Emergency operations plan • Flood fight plans and preparedness • Dam emergency action plans • Warning • Backup power • Emergency capabilities

Local leaders work together with the Mower 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 Mower 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 Mower 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 participating cities.

[See Mitigation Actions for all jurisdictions and provide ongoing feedback on the HMP website](#)

The following is an overview of the mitigation action charts and a description of each element of the chart.

Number (#)

Each mitigation action is identified by a number.

Hazard

Each mitigation action is identified by the natural hazard it relates to. Actions that fall under “All Hazards” relate to both natural and non-natural hazards. “Severe Winter Storms” includes blizzards, heavy snow, ice storms, winter storms, and winter weather. “Severe Summer Storms” includes windstorms, tornadoes, lightning, and hail.

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 12 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 that will help to reduce or eliminate future risk, including in areas with existing or new development.

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 Mower 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 13 provides criteria that were taken into consideration in the process.

Table 13. Criteria for Mitigation Action Priority Ranking

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

Time frame

Each mitigation action identifies the anticipated timeframe for implementation within the next five-year planning cycle. If a mitigation action is considered an ongoing effort, the next five-year period in which the activity would occur is listed. If a mitigation activity has a defined period for implementation (i.e., a specific year), it will be noted.

Responsibility

Each mitigation action identifies what personnel, department, or agency will serve as 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. This can include description of methods for public outreach, enforcement of policies, development of plans, and coordination of key staff and partnership efforts.

Possible Funding

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

5.3.1 Mower County Mitigation Action Chart

The Mower County Mitigation Action Chart is provided in Table 14. Appendix H provides the mitigation action charts developed for each city participating in the 2025 HMP update. A report on the status of mitigation actions related to natural hazards included in the Mower County 2015 plan update can be found in Appendix E.

See Mitigation Actions for all jurisdictions and provide ongoing feedback on the HMP website

Table 14. Mower County Mitigation Action Chart, 2026–2031

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
1	All Hazards	Education & Awareness Programs	Utilize and improve on different methods to share information with the public about severe weather, extreme temperatures, and personal preparedness.	Existing High 2026-2031	Mower County Emergency Management (MCEM)	Mower County Emergency Management uses the county website to share information with the public. Outreach is also conducted to reach local jurisdictions as needed during emergencies or during recovery efforts after a major storm event. MCEM participates in the NWS Severe Weather Awareness Weeks held in April and November each year. The Mower County plans to expand on our outreach efforts and create/dedicate a common webpage for all Mower County communities as a resource and information for various types of emergencies and how to be prepared. This will fall under the work of Mower County Emergency Management.	Internal: MCEM Dept. budget External: FEMA EMPG
2	All Hazards	Education & Awareness Programs	Conduct outreach to encourage residents to opt-in for the county's emergency notification system.	Existing High 2026-2031	MCEM	A link to sign up for the county's CodeRED system is available on the Mower County Emergency Management website page.	Internal: MCEM Dept. budget
3	All Hazards	Mitigation Preparedness & Response Support	Work to expand CodeRED emergency notifications and other outreach to the public in different languages.	New High 2026-2031	MCEM	Mower County has an increasingly diverse ethnic population. We need to see if CodeRED provides alternative language options to reach all residents, as well as work to expand other outreach on severe weather to ethnic populations within the county.	Internal: MCEM Dept. Budget
4	All Hazards	Local Planning & Regulations	Adopt and enforce regulations governing new construction to prevent damage to buildings and infrastructure from severe weather events.	Existing Moderate 2026-2031	MC Envr. Services Dept.	Zoning Permits are required for the construction or placement of any structure on a person's property within unincorporated areas of the county. This process ensures the property remains compliant with the setbacks and land use activities of the Zoning District. Zoning permit applications must be submitted to, reviewed and approved by the Mower County Environmental Services Department. The department also enforces floodplain and shoreland overlay requirements.	Internal: Zoning permits and general budget (tax levy dollars)

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
5	All Hazards	Local Planning & Regulations	Work to complete the new joint “Comprehensive Plan 2045” for Mower County and the City of Austin.	Existing High 2026-2031	MC Envr. Services Dept. in coord with City of Austin	Mower County and the City of Austin have partnered to develop a joint Comprehensive Plan. This partnership will ensure a unified vision for the County and City into the year 2045.	Internal: Zoning permits and general budget (tax levy dollars) External: City of Austin funding
6	All Hazards	Local Planning & Regulations	Utilize departmental staff and elected officials to work together to accomplish identified mitigation efforts.	Existing High 2026-2031	Mower County departments	Mower County Emergency Management, Mower County Environmental Services, Mower County Highway Department, and Mower County Administration, City Councils, and Township Boards work cooperatively as needed on mitigation related planning and project efforts.	Internal: MC General Operating Budget
7	All Hazards	Local Planning & Regulations	Develop and sustain partnerships with outside agencies, organizations, businesses, and neighboring jurisdictions to accomplish mitigation efforts.	Existing High 2026-2031	MCEM in coord with other county depts.	Mower County works with the Mower Soil & Water Conservation District, City Councils, Township Boards, local clubs and organizations, and local business owners. MCEM also works closely with the neighboring emergency managers on a range of planning, training, and exercises. The Mower County SWCD /Cedar River Watershed District has worked together on water retention projects to hold water back during intensive water events.	Internal: MC General Operating Budget
8	All Hazards	Mitigation Preparedness & Response Support	Ensure the county’s Emergency Operations Plan (EOP) is updated and addresses policies & procedures needed to support EM functions prior to, during, and following a disaster.	Existing High 2026-2031	MCEM	Mower County Emergency Management maintains an all-hazards Emergency Operations Plan (EOP) which lays out concepts and operating guidelines for all incident management and support functions that may be needed to ensure life safety, incident stabilization, and property preservation during an incident and the transition to recovery.	Internal: MCEM Dept. Budget

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
9	All Hazards	Mitigation Preparedness & Response Support	Identify critical infrastructure or facilities that need backup generators and work to obtain them.	Existing High 2026-2031	MCEM in coord with other county depts.	Mower County works to ensure the continuity of operations of county government services and critical infrastructure in the event of an extended power outage. Local jurisdictions are encouraged to assess where backup power is needed and to obtain emergency generators. FEMA HMGP may be one source of external grant funding to which the county and local jurisdictions can seek to apply for the purchase of generators for critical facilities.	Internal: MC General Operating Budget External: FEMA HMGP grant funding
10	All Hazards	Mitigation Preparedness & Response Support	Ensure that plans, procedures, and designated facilities are in place to provide temporary sheltering due to a severe weather or other disaster event.	Existing High 2026-2031	MCEM, MC HHS	In the event of a disaster where temporary sheltering is needed, Mower County Emergency Management coordinates with Volunteer Fire Departments, Mower County Posse, Mower County Reserve and Mower County Health and Human Services provide mass care services as needed. The county EOP includes plans, procedures, and resources available for mass care sheltering.	Internal: MCEM, MCHHS funding
11	All Hazards	Mitigation Preparedness & Response Support	Encourage schools and other facilities that house seniors or other vulnerable populations to have emergency plans in place to deal with severe weather, extreme temperatures, and extended power outages.	Existing Moderate 2026-2031	MCEM in coord with local jurisdictions	MCEM continues to work with local jurisdictions provide outreach to and support to schools and other facilities on emergency planning. Schools and long-term care (LTC) facilities are required to have such plans in place. MCEM provides direct training or planning support as requested.	Internal: MCEM, MCHHS funding External: Schools, Private LTC Facilities, Local Govt's

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
12	All Hazards	Local Planning & Regulations	Identify and work to secure internal as well as external funding (grant or loan sources) to help accomplish mitigation activities in the county.	Existing Moderate 2026-2031	MCEM, Other County depts as related	Mower County budgets provide operating costs for staff and enforcement of regulatory ordinances and to share information with the public. We have used MN DNR Flood Mitigation Grant Assistance along with federal funds to buy out flood prone homes. The SWCD /Cedar River Watershed has used grant funding to provide water retention areas. The Mower County Highway Department has used local funds, state aid maintenance funds, state and Federal Hazard Mitigation grants, and MnDNR grants to support highway department projects. MCEM will work to assist communities to apply for outside grant funding for eligible mitigation projects as applicable, including from FEMA.	Internal: MC General Operating Budget External: FEMA EMPG, FEMA HMGP, MN DNR FHM, USDA CF
13	Flooding	Education & Awareness Programs	Continue to participate in FEMA's Community Rating System (CRS) Program and provide flood education to vulnerable landowners within the county.	Existing High 2026-2031	MC Envr. Services Dept.	Mower County Environmental Services participates in the CRS program. Flood information is sent out annually to those that are vulnerable within the county. By the county participating in this program - it also provides a flood insurance rate discount to landowners. We provide information annually to vulnerable landowners about how to prepare for a flood event, how to disinfect their well after a flood, and how to care for their septic system before/during/after a flood event. Mower County will continue participation in the CRS program and these outreach efforts.	Internal: Zoning permits and general budget (tax levy dollars)
14	Flooding	Local Planning & Regulations	Enforce policies and ordinances that address development in high-risk flood areas.	Existing High 2026-2031	MC Envr. Services Dept.	Mower County Zoning Ordinance, Article III – Floodplain Management Ordinance, establishes the floodplain district and zoning regulations and conditional uses permitted within the floodway, flood fringe, and general floodplain districts within the county. The Mower County Environmental Services Department maintains and enforces the floodplain management ordinance for the county. Mower County Zoning Ordinance – Division 9, Shoreland Management Overlay Regulations establishes allowable uses and development standards in shoreland areas designated within the county.	Internal: Zoning permits and general budget (tax levy dollars)

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
15	Flooding	Local Planning & Regulations	Work with area watershed organizations to address mitigation plans and projects that address risk reduction for localized flooding and erosion.	Existing High 2026-2031	Mower SWCD	Mower County's Water Plan has been updated to use the Watershed approach. Mower County is covered by one of two different One Watershed One Plan (1W1P) programs: Cedar-Wapsi 1W1P and managed through cooperation with Mower SWCD. The plan addresses regional watershed planning which include measures for flood mitigation.	External: Mower SWCD, MN BWSR funding
16	Flooding	Local Planning & Regulations / Structure & Infrastructure Projects	Plan for and implement measures to address flood risk reduction projects for roads, bridges, and culverts throughout the county.	Existing High 2026-2031	MC Highway Dept.	The Mower County Highway Department maintains update of the county's Mower County Five Year Transportation Plan. The plan outlines the priorities and scheduling of road, bridge, and other projects that address localized flood risk reduction. The Mower County Highway Department maintains bridges and culverts to ensure that stormwater runoff is not prevented from flowing freely through structures as they were designed. The department continues to remove blockages, as well as provide and maintain erosion control measures so that downstream drainage systems do not become impeded and can operate properly.	Internal: MC Highway Dept. Budget External: Local funds, State Aid Maintenance funds, State and Federal Hazard Mitigation grants, and MnDNR flood hazard mitigation grants
17	Flooding	Structure & Infrastructure Projects	Minimize/prevent the creation of new impervious areas when reconstructing or maintaining roads and bridges. Also minimize or eliminate the filling of wetlands and low areas that help store floodwaters.	New High 2026-2031	MC Highway Department in coord with MC Envr. Services Dept. and Mower SWCD	Mower County Highway Department continues to address flood mitigation measures as planning occurs for road and bridge improvements. The Hwy. department also works together with the Mower County Environmental Services Dept and Mower SWCD on wetland projects. Mower County also works with MnDOT as needed to address flood issues to I-90.	Same as above

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
18	Flooding	Local Planning & Regulations	Conduct property buyouts to acquire homes affected by repetitive flooding and physically relocate or remove those homes to eliminate future flood damages.	Existing Low 2026-2031	MCEM	There are currently no potential property buyout projects identified by Mower County. The county will continue to evaluate and assist with any potential future acquisition projects and application to FEMA or MN DNR for grant funding to conduct buyouts.	External: FEMA HMGP, MN DNR FHM grant programs
19	Flooding	Local Planning & Regulations / Structure & Infrastructure Projects	Work to identify and implement mitigation measures for flood vulnerabilities to the Pleasant View Addition.	New High 2026-2031	MC Envr. Services	The Mower County Environmental Services Dept. is working to review and plan for flood risk reduction issues for this area. The Pleasant View Addition (SE1/4 Section 11 is an area subject to flooding. During a 1% (100-year) flood event the area would be under 5-feet of water). There are 23 total lots; 4 are developed with residential structures and the remaining parcels are used recreationally for camping. Lots 1-10 are substantially located in the floodway. Lots 17-23 are $\frac{3}{4}$ covered by floodway; $\frac{1}{4}$ 1% chance floodplain.	Internal: Zoning permits and general budget (tax levy dollars)
20	Severe Winter Storms	Local Planning & Regulations	Implement snow removal and ice control to ensure the safety of county roads impacted by winter storms.	Existing High 2026-2031	MC Highway Dept.	The Mower County Highway Department conducts winter road maintenance on county roads in accordance with the Mower County Snow and Ice Control Safety Policy. Other road jurisdictions conduct winter road maintenance on their respective road systems in accordance with each of their established policy and/or practice.	Internal: MC General Operating Budget
21	Severe Summer Storms	Education & Awareness Programs	Work with the National Weather Service (NWS) to provide SkyWarn training and develop a network of trained Storm Spotters throughout the county.	Existing High 2026-2031	MCEM in coord with NWS	MCEM coordinates with the National Weather Service to offer this training on an annual basis to local fire and law enforcement departments and local residents that wish to be trained as storm spotters.	External: National Weather Service

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
22	Severe Summer Storms	Mitigation Preparedness & Response Support	Ensure outdoor warning sirens are located where needed and functioning properly.	Existing High 2026-2031	MCEM in coord with local jurisdictions	Outdoor warning sirens are located throughout the county and are tested monthly by the Mower County Sheriff's Office in coordination with local jurisdictions. Warning sirens are owned and maintained by the cities where they are located. MCEM will assist any cities that are in need of new outdoor warning sirens in looking for possible grant funding, such as from the USDA or FEMA grant programs.	Internal: MCEM Dept. funding External: Local Gov'ts, FEMA HMGP grant funding, USDA grant funding
23	Severe Summer Storms	Structure & Infrastructure Projects	Address the need for the construction of storm shelters or tornado safe rooms in areas where residents or visitors are vulnerable to high wind events, such as mobile home parks and campgrounds.	New High 2026-2031	MCEM in coord with local jurisdictions	The following are local vulnerabilities to address for storm shelters or tornado safe rooms: - There are mobile home parks located within rural areas of the county which may have storm shelters, but they may not have enough room for their entire mobile home court population. - We also have 6 camping areas in the rural Mower County - it is unknown what they do or do not have. - There are also 2 motor speedway recreational areas where if people are caught off-guard it could be problematic. Other areas of possible concern for tornadic activity are: Mower County Fairgrounds, Four Daughters Winery, local golf courses when having large events, Root River Antique Historical Power Association, and Lake Louise State Park - near Leroy. MCEM will help to explore possible funding for projects, including application to FEMA for tornado safe room funding.	Internal: MCEM Dept. funding External: Local Gov'ts, FEMA HMGP safe room grant, Private funding (businesses)

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
24	Severe Winter & Summer Storms	Structure & Infrastructure Projects	Encourage municipal and rural electric cooperatives to address burying powerlines or strengthening power poles to avoid power outages from high wind events and storms.	Existing High 2026-2031	MCEM, local jurisdictions in coord with electric utility providers	MCEM works with our utility coops and local governments on these efforts as needed. FEMA HMA grant funding may be a source for powerline infrastructure retrofits that eligible rural and municipal electric coops can apply for.	External: Electric Coops, FEMA HMGP grant
25	Severe Winter & Summer Storms	Natural Systems Protection	Manage trees and other vegetation along roads from severe storm events to reduce risk to powerlines and passing motorists.	Existing Moderate 2026-2031	MC Highway Dept., Local Utility Providers	Mower County Highway Dept. regularly conducts vegetation management along county roads to reduce the risk of downed trees or branches resulting from severe spring and summer storm events. Local utility providers also work to manage vegetation near power lines to reduce the risk of downed lines and power outages.	Internal: MC Hwy. Dept. External: Utility Companies
26	Extreme Cold/Heat Temps	Education & Awareness Programs	Provide outreach and education to the public on personal safety measures to take during periods of extreme cold or extreme heat.	In-Progress High 2026-2031	MCEM & MC HHS	MCEM works to share information received from the National Weather Service when periods of extreme cold or heat are forecast and occurring. MCEM utilizes the county EM website page, and EM Facebook. Local radio and TV stations also provide this information to the public. School Districts have plans and policies in place for delaying or closing school to protect students from extreme temps.	Internal: MCEM, MC HHS general funding
27	Extreme Cold/Heat Temps	Mitigation Preparedness & Response Support	Work with local jurisdictions to plan for temporary warming/cooling facilities and promote their use for those that are vulnerable to extremely heat or cold temperatures (i.e., homeless, elderly)	Existing High 2026-2031	MCEM in coord with PH and local govt's	MCEM addresses planning for extreme temperature sheltering within the county EOP and in coordination with Mower County Health & Human Services and local jurisdictions. Designated facilities in the county are identified for use for emergency warming/cooling centers. MCEM will continue to work with local communities and partner agencies to establish a warming/cooling center facility and program for those who are homeless and exposed to extreme cold or heat.	Internal: MCEM Dept. funding External: Local Govt's, Red Cross

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
28	Drought	Local Planning & Regulations	Continue to participate in the MnGAGE precipitation monitoring program to help track and report data related to periods of drought.	Existing Moderate 2026-2031	Mower SWCD	Mower County SWCD participates in the MNGage Minnesota Volunteer Precipitation Observing Program, which is administered by the DNR Minnesota State Climatology Office.	External: SWCD, MN DNR
29	Drought	Local Planning & Regulations	Encourage communities to establish and enforce watering restrictions during drought conditions and raise public awareness of water conservation measures.	Existing High 2026-2031	MCEM in coord with MN DNR and local jurisdictions	MCEM encourages city and townships to promote drought awareness to residents on limiting non-essential water usage. Local communities will be encouraged to establish watering restrictions as per MN DNR guidelines during periods of severe drought.	Internal: MCEM Dept. funding External: Local Govt's, MNDNR
30	Dam Failure	Structure & Infrastructure Projects	Work with the MN DNR Dam Safety program to address aging dams within the county.	Existing Low 2026-2031	MC Envr. Services	Mower County Environmental Services Department will work to assess and address aging dam structures within the county. During recent flooding events we recognized a potential for our aging dams to fail in local waterways.	Internal: Zoning permits and general budget (tax levy dollars) External: MN DNR Dam Safety Program

Section 6 – Plan Maintenance

6.1 Monitoring, Evaluation, and Updating the Plan

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

The Mower County emergency management director (EMD) is the individual responsible for leading all efforts to monitor, evaluate, and update the HMP within the five-year window. Throughout the five-year planning cycle, the Mower County EMD will work with an emergency managers group to help monitor, review, evaluate, and update the HMP. The group will include township representatives and designated city emergency managers from cities participating in the plan update, and include other city elected officials or staff as needed. Representatives from agencies or organizations that are involved with related mitigation work in the county as well as those that work with underserved communities or socially vulnerable populations will also be invited to participate in the group. The Mower County EMD will conduct quarterly outreach to and communicate with the group 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 Mower County EMD will convene the group to meet more regularly 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 Mower 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 Mower County. In addition, state and federal policies will be reviewed to ensure they are addressing current and expected conditions. The group will also review the risk assessment portion of the plan to determine if this information should be updated or modified. The parties responsible for the various implementation actions will report on the status of their projects, and will include which implementation processes worked well, any difficulties encountered, how coordination efforts are proceeding, and which strategies should be revised.

Updates or modifications to the HMP during the five-year planning process will require a public notice and a meeting prior to submitting revisions to the individual jurisdictions for approval. The plan will be updated via written changes, submissions as the group deems appropriate and necessary, and as approved by county commissioners.

During the five-year plan period, the EMD will require all relevant county departments and jurisdictions to report on the status of their mitigation actions using the worksheets provided in Appendix I. This

information will be used to track progress for the next plan update. Additionally, the EMD will establish and implement an HMP maintenance schedule. Forms for these purposes are drawn from FEMA's 2023 Local Mitigation Planning Handbook and can be found in Appendix I (FEMA, 2023a).

The EMD will also solicit feedback from the emergency managers group using the following prompts (also found in Appendix I):

- Are there any new representatives from jurisdictions, agencies, or organizations that you feel should be included in our stakeholder outreach?
- Do you feel your community has any new vulnerabilities that may be impacted by hazard events? (critical infrastructure, systems, or populations)
- Has your community identified any new mitigation activities that would help reduce risk to future hazard events?
- Are there any funding opportunities or other resources that may be available to help implement local mitigation activities?
- How is your community integrating information from the mitigation plan into other planning mechanisms (such as plans, policies, or partnerships)?

6.2 Implementation

Mower County and its included municipalities share a common HMP and work together closely to develop, revise, and implement it. This HMP provides a comprehensive chart of mitigation actions for Mower County and its jurisdictions (see Appendix H and Section 5.3). The cities participating in the HMP planning process 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.

Several implementation tools are available to address hazards. The strategies to use will be part of an ongoing discussion as Mower County looks for opportunities for plan implementation. The following tools will be considered:

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

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

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

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

roles and responsibilities. The mitigation plan review process can function as a tool to have an ongoing discussion of roles, responsibilities, and opportunities for coordination.

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

Regulation: Regulation is an important mitigation tool for Mower County. Regulation plays a vital role in 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 Mower 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.

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

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

- The Mower County HMP website link will be posted on the Mower County Emergency Management website. The website provides a PDF of the plan for download and an interactive experience for the public to understand the planning process, where county-specific vulnerabilities lie, national best practices, as well as a chance to submit feedback. Collected feedback will be reviewed during the five-year plan cycle and will be noted for future update of the plan or addressed as necessary.
- Following any major storms or natural disasters, Mower 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 for keeping their local government, schools, and community members updated and engaged in the implementation of their respective mitigation action charts (see Appendix H or the Mower County HMP website). Each respective jurisdiction will be required to report on the status of mitigation actions in their charts to the Mower County EMD.

- Mower County and its jurisdictions will use numerous means of public outreach to engage new public stakeholders in providing input on mitigation concerns, including those from underserved communities or socially vulnerable populations. Outreach methods may include presentations at city council or township board meetings, sharing information at special events, working with local schools and partner organizations, and posting information in areas that are used to communicate with the public (bulletin boards, websites, social media, and local media sources that communities use to inform and engage the public). As mitigation projects are implemented, jurisdictions will work to keep the public updated and engaged in those local efforts.
- To ensure an equitable outreach strategy continues after the plan is adopted, the planning team will continue to seek to engage with underserved and vulnerable populations during the next five years. This will vary across jurisdictions, as underserved or vulnerable populations will differ across the planning area. Methods of engagement will include those listed above, as well as working with partner agencies, local organizations, facilities, or community interest groups (e.g., schools, nursing homes, Rotary Club) to conduct more targeted outreach or presentations to share information on hazard mitigation and solicit for feedback on concerns and ideas.

Appendices

Appendix A – References

Appendix B – Adopting Resolutions

Appendix C – Local Mitigation Survey Report

Appendix D – Plans & Programs in Place

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 I – Plan Maintenance & Monitoring Worksheets

Appendix A – References

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Appendix B – Adopting Resolutions

Appendix C – Local Mitigation Survey Report

Mower County

LOCAL MITIGATION SURVEY

As part of the Mower County 2025 Hazard Mitigation Plan update, the **Local Mitigation Survey (LMS)** Form is used to gather jurisdictionally-specific information that is used to meet FEMA requirements and to support development of local mitigation actions.

Jurisdictions to Complete LMS:

This form is to be completed by representatives from **Mower County** and the **cities of Adams, Austin, Brownsdale, Dexter, Elkton, Grand Meadow, Le Roy, Lyle, Mapleview, Racine, Rose Creek, Sargeant, Taopi, and Waltham.**

Additional stakeholders on the Mower County HMP contact list are also invited to provide feedback to this form in the designated areas. (See “Other Stakeholders” section with each question).

LMS - Main Point of Contact (Name, Work Title, and Email)

Mower County	Amy Bramwell, Mower County Emergency Management Director amyl@co.mower.mn.us
City of Adams	Dillon Heimer, Emergency Management Director, dillon_heimer7@hotmail.com Jake Goodale, City Administrator, jgoodale@adamsmn.com Al Sorenson, Public Works Director, asorenson@adamsmn.com
City of Austin	David McKichan, Police Chief, davidm@co.mower.mn.us
City of Brownsdale	Adria Vargas City Clerk/Treasurer brownsdalecityclerk@gmail.com
City of Dexter	Natalie Carroll, City Clerk/Treasurer, cityclerk@dextermn.com
City of Elkton	Kari Haarstad, City Clerk/Treasurer, cityofelktonmn@gmail.com
City of Grand Meadow	James Christian, City Administrator, cityadministrator@cityofgrandmeadow.com Chris Hyrkas, City Clerk, cityclerk@cityofgrandmeadow.com Jim Richardson, Police Chief, gmchief@cityofgrandmeadow.com
City of Le Roy	Nick Sweeney, Emergency Management, citymaintenance@leroymn.com Patty White, City Clerk-Treasurer, cityclerk@leroymn.com
City of Lyle	Diana Witt, City Clerk/Treasurer, cityclerk@lylemn.org
City of Mapleview	Mysti Acosta, Clerk/Treasurer, mapleview@outlook.com
City of Racine	Robert Mathias, Clerk, rmathias@inbox.com
City of Rose Creek	Kristine M Allas, City Clerk/Treasurer cityofrosecreek@gmail.com Aaron Wagner, Public Works/Maintenance wagneaa1@gmail.com
City of Sargeant	Roger Nelson, cityofsargeantmn@outlook.com
City of Taopi	Jim Kiefer, city clerk, jim.kiefer53@gmail.com
City of Waltham	Dallen Ruud, Mayor Sally Mindrup, City Council Member, sallyk5312@gmail.com
Other Stakeholders	Chad Hanson, Emergency Management Coordinator, MnDOT District 6, chad.hanson@state.mn.us

Review: Prioritization of Hazards

During the Mower County HMP Planning Team Meeting #1, participants determined the following natural hazards below to be of high, moderate, or low priority as they relate at a countywide level. Hazards noted as high or moderate priority are considered to be of greatest risk and concern, reflecting the frequency of past events, the probability of future events, and the severity of impacts that can occur. Hazards listed as a low priority are considered to be of lower risk and concern, reflecting an infrequency of past events and/or occurring without significant impacts to local vulnerabilities.

Prioritization of Hazards for 2025 Mower County Update

Natural Hazards	Current Priority
Flooding	High
Winter Storms	High
Windstorms	High
Tornadoes	High
Hail	Moderate
Extreme Cold	Moderate
Drought	Moderate
Extreme Heat	Low
Lightning	Low
Wildfire	Low
Landslides	Low
Land Subsidence	Low
Dam/Levee Failure	Low

SURVEY QUESTIONS (1-15)

#1 - HAZARD IDENTIFICATION	
Does the priority level listed for any of the hazards in the table above differ for your jurisdiction? If so, please describe how.	
Mower County	Mower County Environmental Services - Agree the table reflects the major and minor elements. Mower County does have over 300 identified sinkholes.
City of Adams	No changes.
City of Austin	No changes
City of Brownsdale	No changes
City of Dexter	No changes
City of Elkton	No changes
City of Grand Meadow	No changes
City of Le Roy	No changes
City of Lyle	No Changes
City of Maplevue	No changes
City of Racine	No changes
City of Rose Creek	No changes.
City of Sargeant	no changes
City of Taopi	No changes

City of Waltham	No changes
OTHER STAKEHOLDERS	

#2 - LOCAL VULNERABILITIES

Describe any specific community assets (infrastructure, systems, or populations) that are susceptible to damage or loss from natural hazard events in your jurisdiction. Consider how recent severe storms or other natural hazard events have caused damages or threatened life safety to people in your community. Please list the natural hazards and related local vulnerabilities separately.

Mower County	All-Hazards: Mower County has some ethnic diversity that may not receive messages and information in their language. Windstorms, Tornadoes - There are mobile home parks located within rural areas of the county which may have storm shelters, but they may not have enough room for their entire mobile home court population (PID 02.023.0130 & 20.004.0130). We also have 6 camping areas in the rural Mower County - it is unknown what they do or do not have (PID 12.006.0020, 18.009.0042, 06.014.0051, 06.008.0020). There are also 2 motor speedway recreational areas where if people are caught off-guard it could be problematic (PID 06.008.0020 & 08.011.0010). Other areas of possible concern for tornadic activity are: Four Daughters Winery (PID 06.017.0100), local golf courses when having large events: PID 01.009.0040, 08.014.0055, Root River Antique Historical Power Association 06.008.0023, and Lake Louise State Park - near Leroy. Flooding: The Pleasant View Addition (SE1/4 Section 11 is an area subject to flooding. During a 1% (100-year) flood event the area would be under 5-feet of water). There are 23 total lots; 4 are developed with residential structures and the remaining parcels are used recreationally for camping. Lots 1-10 are substantially located in the floodway. Lots 17-23 are ¾ covered by floodway; ¼ 1% chance floodplain. (Mower County Highway Department) Areas of vulnerability to flooding include roads and bridges at stream and river crossings, roads at isolated low points along roads adjacent to fields, mobile home parks, and buildings and infrastructure at low elevations that could flood and interrupt services (i.e. lift stations)
City of Adams	All Hazards - We need to get a new standby generator for our Emergency Services Building. Flooding - We need to upgrade the standby generator for WWTP. Need to upgrade storm water piping to prevent ponding (heavy fall of rain or snow) on Hwy 56.
City of Austin	The City of Austin has experienced sanitary sewer backups caused by excessive rain events. Flooding has also impacted Interstate 90 and other local roadways. Extreme flood events have impacted those on the edges of the floodplain.

	In 2024 debris piled up against the structure that holds the gas line and there was a risk of damage and outages if it was lost. Austin Utilities would like to convert the gas line to underground to eliminate the risk of flood damage. There are about 50 structures that are still located within the floodplain (residential and commercial). The city of Austin is working to assess removal of these structures of to eliminate risk of repetitive flood damages.
City of Brownsdale	All Hazards: In the event of a disaster, we would need additional housing, meals, and transport. Overhead powerlines are also vulnerable to coming down from severe winter storms or other wind events.
City of Dexter	All Hazards: The city needs a generator for our fire station/community building. In addition, the city's 50,000-gallon water tower has been determined past the point of repair and in the event the tower can no longer meet State requirements, the city's water main system will be compromised. Flooding: We have undersized storm sewers which do not allow for heavy rainfall and are prone to flooding streets/driveways.
City of Elkton	All Hazards: Our infrastructure is old and needs repairs/improvements, and we have the need for generators for our utilities (sewer (lift station)/water) in an emergency. We also need a generator for the Community Center if emergency shelter is needed. Flooding: We have a city lift station that is prone to flooding during high rain events. We need to upgrade storm water piping to prevent flooding to nearby homes.
City of Grand Meadow	All Hazards: We need to obtain a permanent generator for our Well House, City Hall, and Community Center that serves as our local shelter if people are displaced from a severe storm event or extended power outage. Flooding: Aging infrastructure leads to excessive inflow and infiltration in our sanitary sewer system, and our sewer ponds are under-sized, leading to possible off-season discharge events. We are currently in the planning phase to add additional capacity. Inadequate drainage in the County ditch south of the city (Hwy 8) leads to storm sewer backup on that side of town. 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 does not have a storm shelter. Dam/Levee Failure: The dam in Pine Lawn Park is aging.

City of Le Roy	All Hazards - The city needs standby generator connections (electrical, etc.) for the Community Center and another location to serve as emergency shelters.
City of Lyle	All Hazards: We need a new standby generator for our Emergency Services Building and City Hall/Community Center. Flooding: We have some inflow and infiltration in our sanitary sewer system during heavy rain events that we are working on identifying. During heavy rain events we have one area that is prone to sewer backups.
City of Mapleview	All Hazards: We need to get a new standby generator for our Emergency Services Building as well as 2 backup generators for our lift station & pump house. We also need 2 new sources of heat for them as well.
City of Racine	All Hazards: We have a place to serve as a community shelter, but would not support the entire city population. The city is primarily powered through overhead electric lines except for the newer subdivisions which are underground. Overhead powerlines may be vulnerable to failure from severe storm events.
City of Rose Creek	Flooding: Our city infrastructure is vintage and needs repairs/improvements. We need backup generators for our utilities lift station & pump house in an emergency. An additional pond may be needed in the future.
City of Sargeant	Windstorms, Tornadoes: There are two residential sites that do not have basements for cover in an event. Flooding is of low priority with no local vulnerabilities.
City of Taopi	All hazards - Keeping storm sewers clean to prevent flooding backup is an issue.
City of Waltham	Flooding: Our lift station is prone to flooding; we are in process of updating the Wastewater Treatment infrastructure. We have some streets and private properties that are subject to flooding due to culverts. We have stormwater infiltration issues. Windstorms, Tornadoes: The city's outdoor warning siren has had issues going off in case of a tornado. All-Hazards: Our water tower and piping need replacement. If a major storm event impacts our water tower, our wastewater systems would not function properly and the city would need emergency drinking water.
OTHER STAKEHOLDERS	MnDOT District 6: We manage our State Highway System and it is vulnerable to many hazards listed above. The largest vulnerability for this infrastructure is observed trend in increasing extreme precipitation events (both intensity and frequency). The hydraulic assets under and upstream of the roads were designed based on outdated precipitation probabilities (typically TP-40 Design Storms since Atlas 14 wasn't used until about 10 years ago) and so the risk of damage and traffic impact is greater than originally designed. Additionally, there are no signs that the increasing trend of extreme precipitation will reverse, so even there is a good deal of

	uncertainty for the future, it suggests this infrastructure will continue to become more vulnerable. All populations that use the State Highway System have increased risk of traffic impacts, and we are working to quantify at a high-level certain areas that may have a larger share of that risk.
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#3 - REDUCTION IN VULNERABILITY

In the last 5 years, has your jurisdiction taken any actions to reduce vulnerability against future severe weather or disaster events? Please describe.

Mower County	Mower County SWCD/Cedar River Watershed has created some flood reduction features in the county to reduce flooding impacts on the Cedar River. Mower County previously, with aid from the State and FEMA, bought out flood-prone properties. The Environmental Services Department has worked with owners of land in an area that was once subdivided into 24 residential lots. Four (PID 08.051.0240, 08.051.0140, 08.051.0120, 08.051.0110) have been developed into year-round homes. The remaining parcels have been used recreationally. All are located within the floodway of the Cedar River. Our office has worked with the landowners to educate them of the impact flooding could have on the property, what the floodplain rules are and we have worked with the landowners to clean the area up in case of flooding. Of the 20 undeveloped lots, all but one is now road-ready at all times with camping equipment. Illegal decks, etc. have been removed from the premises. (Pleasant View Addition- Lansing Township was platted in 1959 - prior to MN Floodplain regulations). The Mower County SWCD /Cedar River Watershed District has worked on water retention projects to hold water back during intensive water events. MOWER COUNTY HIGHWAY DEPT: Minimize/prevent the creation of new impervious areas when reconstructing or maintaining roads and bridges. also minimize or eliminate the filling of wetlands and low areas that help store floodwaters.
City of Adams	In 2020 the City of Adams completed a street reconstruction project upgrading storm sewers and catch basins. In 2021 the city implemented a point-of-sale sewer inspection ordinance which limits the inflow and infiltration of groundwater resulting from cracked pipes, foundation drains, roof drains, sump pumps and other sources of surface runoff from entering the City's wastewater disposal system.
City of Austin	In 2018-24, the city completed a sump pump inspection program to reduce the introduction of clean water into the sanitary sewer system.

	In 2019, we completed the final phase of the North Main Levee project, which was the culmination of a 12-phase levee project to protect homes, business, and infrastructure, which spanned over the course of 13-years of construction. In 2020, we completed the Turtle Creek Levee system to protect homes and infrastructure susceptible to flood events. In 2020-21, we acquired 3 residential structures that were susceptible to flooding and removed the structures from the floodplain. In 2022, we added an additional severe weather siren in a newly annexed NE area of the city, where our current system did not provide an overlap. In 2023, we purchased 2 additional backup generators for flood pumps and other needs. In 2024, we finalized the construction plans and funding package for the WWTP levee system. We acquired the former Salvation Army Thrift Store which was susceptible to flooding.
City of Brownsdale	Brownsdale is working with MnDOT for the 2030 Hwy 56 project, updated sewer lift station in 2024. Soil corrections and rip rap added to sewer ponds
City of Dexter	Recently did a Feasibility Study on watermain/street improvements. The Fire Department has added new trucks and equipment. 2023-2024 televised and cleaned the city's sanitary sewer system. Currently repairing infiltration areas. Improved stormwater issues on Pine Place.
City of Elkton	The last five years we have not been able to focus any of our funds on reducing our areas that are vulnerable to flooding, but hope to investigate this further in the near future.
City of Grand Meadow	In 2024, the city completed the construction of a new main lift station and up-sized force main. The city also completed in that year a full reconstruction (water, sanitary, and storm sewers as well as curb/gutter/pavement) on the south end of town. The city is currently in the planning phase of another project to reconstruct a high-priority street (including utilities), as well as a pond expansion. The City's engineering company completed our Infrastructure Plan in 2024. We have also completed some ditch grading/cleaning over the past year to aid stormwater flow.
City of Le Roy	State Hwy 56 was fully reconstructed in 2024; this replaced the storm sewer system and catch basins. A storm sewer system was installed in the south part of LeRoy in 2012; this collection system has helped with surface drainage.
City of Lyle	The Fire Dept has all updated equipment. We clean and televise ½ the city's sanitary sewer lines every year.
City of Maplevue	The Mower County SWCD /Cedar River Watershed District has worked with the city on water retention projects to hold water back during intensive water events. The city has repaired stormwater infrastructure lining

	culverts and storm sewer pipes that were in poor condition, as a large precipitation event could cause a sinkhole under the road or shoulder, which has happened in the past. The city has repaired the vulnerable areas.
City of Racine	We have been putting catch basins in. We have two streets that are putting in curb and gutter, and we are redoing the understructure so we can control the water runoff better. We have a generator in case of emergency for our water tower and another one for City Hall. We also have one lift station that has a generator on it. We have a place to serve as a community shelter, but would not support the entire city population. The city is primarily powered through overhead electric lines except for the newer subdivisions which are underground.
City of Rose Creek	Our city is currently working with an engineering firm to plan for water/wastewater/stormwater system improvements include adding another sewage pond for the city over the next several years, after successfully receiving funding. Our infrastructure is in bad need of repairs/improvements.
City of Sargeant	The city has purchased a generator for backup power.
City of Taopi	The city has made culvert replacements to allow faster removal of stormwater.
City of Waltham	The last five years we have not been able to focus any of our funds on reducing vulnerable areas of flooding, but hope to investigate this further in the near future. We have worked with a neighboring town to automatically set off the sirens in case of tornadoes.
OTHER STAKEHOLDERS	MnDOT District 6: Yes, in the past 5 years we have: 1) Repaired via lining culverts and storm sewer pipes that were in very poor condition such that a large precipitation event could cause a sinkhole under the road or shoulder. 2) Added armoring to roadway inslopes in areas prone to overtopping/erosion where we did not have the project funding to upsize the culvert capacity. 3) Added riprap to waterways to help increase the resilience along the roadways and around bridge piers. 4) This Summer we are going to be stabilizing a very steep inslope with geocells that was damaged in the 2007 Extreme Storm and the repairs made under emergency conditions are now starting to reach the end of their service life. 5) On the design side for new or replaced assets, we have modified the Hydraulic Design Process to add a Check Storm Analysis. This looks at “what if” impacts from an precipitation event larger than the design storm (i.e. 1

	annual exceedance probability up [50yr goes to 100yr] or a 15% increase or looking at confidence intervals in Atlas 14/StreamStats).
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#4 – INCREASE IN VULNERABILITY

In the last 5 years, has your jurisdiction experienced an increase in new development? Has this new development created new vulnerabilities to natural hazards in your community? Please describe.

Mower County	We have not had any increase in development. Forthcoming in the future the University of MN is working on development of an advanced agricultural research complex in Mower County - The FAARM (Future of Advanced Agricultural Research) Project - Udolpho Township.
City of Adams	In 2021 the City of Adams constructed 2 new subdivisions adding 24 new residential lots with 8 new homes built to date. 3 stormwater retention ponds were added to the subdivisions as well.
City of Austin	In 2019, 13 residential lots were added in Nature Ridge Second. In 2021, 26 residential lots were added in Nature Ridge Third and 8.7 ac industrial development at Creekside. In 2023, 10 ac industrial development at Creekside. These new developments have not created any new vulnerabilities within the City of Austin.
City of Brownsdale	The City of Brownsdale has the Legacy of Brownsdale senior living facility which will need a higher level of assistance during disaster.
City of Dexter	Allowed for the addition of sites in the mobile home park. Ensured in the C.U.P. that the occupants had a storm shelter in place. No other significant increase in population.
City of Elkton	No new developments and no increase in vulnerability.
City of Grand Meadow	No major new development - we are maxed out on pond capacity and natural gas availability.
City of Le Roy	The city has seen some new home construction; these homes have been constructed in a development that has stormwater retention ponds.
City of Lyle	The city has a new development area but sees no increase in vulnerability.
City of Maplevue	No new developments and no increase in vulnerability.
City of Racine	No new developments and no increase in vulnerability.
City of Rose Creek	At this time, no new developments, but if we add developments, we may have an increase in vulnerability (needing to add a third pond for wastewater and updated infrastructure).
City of Sargeant	No new developments and no increase in vulnerability.
City of Taopi	We have had 5 new homes built, with no increase in vulnerability
City of Waltham	No new developments and no increase in vulnerability.
OTHER STAKEHOLDERS	MnDOT District 6: Recently, there has been an increase in new development, some of it upstream of the roadway. If the proper design and permits from MPCA Construction Stormwater Permit and MnDOT are obtained, then there is less risk of increasing vulnerability... however, if the development does not address increased impervious, the extra runoff can increase vulnerability to our infrastructure.

#5 - PUBLIC OUTREACH

How does your jurisdiction share information with community members about severe weather events and personal preparedness? If this is not something that is currently done, how could it be done in the future?

Mower County	Mower County Emergency Management uses the county website to share information with the public. Outreach is also conducted to reach local jurisdictions as needed during emergencies or during recovery efforts after a major storm event. Mower County Environmental Services participates in the Community Rating System. As part of the CRS program, we send flood information out annually to those that are vulnerable within Mower County. By the county participating in this program, it provides a flood insurance rate discount to landowners. MOWER COUNTY HIGHWAY DEPT: Our department works cooperatively with Law Enforcement and Emergency Management to ensure that the public is informed in a timely manner. The National Weather Service Area Offices and local television and radio media outlets are also valuable partners.
City of Adams	The City of Adams sends out letters and posts information on the city website and social media page.
City of Austin	The City of Austin uses its city website and Facebook page. Individual city departments with Facebook pages also use those. Media releases are done as well. Outdoor warning sirens are also activated when necessary. Personal emails of weather updates also go out.
City of Brownsdale	The City of Brownsdale has been encouraging the sign up of Code RED, we also have the siren which is centrally located.
City of Dexter	We belong to MN WARN; City's website will host new and upcoming news. Outdoor warning sirens. Local news media. Information available on Code-Red program.
City of Elkton	The city has a Facebook page that we use to keep citizens aware of inclement weather or any other emergencies.
City of Grand Meadow	The city posts information on our city website and on the City Facebook page. The city also has an outdoor warning siren that is activated when needed. The city also has a marquee sign and we have an outdoor warning siren on the fire hall building.
City of Le Roy	The city posts information on our city website and on the City Facebook page. The city also has two outdoor warning sirens that are activated when needed. We encourage residents to sign up for the County Code-Red program. Most of the Lake Louise State Park area should be covered by the warning siren located on the west side of LeRoy.
City of Lyle	The city posts information on its website, post notices at City Hall, Post Office and Freeborn County Coop bulletin board, and Lyle Announcement Facebook page.

City of Mapleview	We send out letters and or provide information in the notes of our water bills which go out to every resident. We also have the use of our outdoor warning sirens which are activated when necessary.
City of Racine	The city uses outdoor warning sirens and has a community Facebook group where information can be shared.
City of Rose Creek	We share information on the city's website (https://rosecreek.municipalimpact.com/) & alert system (cell phone and email), City of Rose Creek Facebook page, postings at City Hall, the Post Office and local businesses. Public to sign up for Code RED also, and we use television alerts when needed. We have 2 warning sirens for the City.
City of Sargeant	Residents rely on tv or internet for emergency related information. But we do have an outdoor warning siren that we set off when necessary.
City of Taopi	Residents rely on television notices and cell phone alerts
City of Waltham	This is not currently done. The council should discuss a plan. We do have a civil defense siren in our community to alert for severe weather.
OTHER STAKEHOLDERS	MnDOT District 6: We share information regarding severe weather threats via its social media channels on X (https://x.com/mndotsoutheast) and a MnDOT Facebook group for southeast Minnesota (https://www.facebook.com/groups/MnDOTsoutheast). The decision is based on geography and its effect on traffic. Some personal preparedness messages may be shared from other trusted/verified providers. Additionally, MnDOT District has an email alert service that people can sign up for. These alerts are emailed or texted to people who choose to sign up. It covers winter driving alerts, emergency events that affect traffic for extended periods of time in all seasons. The link can be found at https://www.dot.state.mn.us/d6/

#6 - EMERGENCY NOTIFICATIONS

Does your jurisdiction encourage residents to sign up for the county's emergency notification system and/or a local emergency alert system? If yes, how? If this not something that is currently done, how could it be done in the future?

Mower County	A link to sign up for the county's CodeRED system is available on the Mower County Emergency Management website page.
City of Adams	Our city does not currently do this but we could notify residents to do so through the City's webpage and social media outlets as well as send out information on how to do so through the comment section on the quarterly water bills.
City of Austin	The city has the link to the CodeRED and the County Emergency Management site posted on our city website.
City of Brownsdale	Yes we encourage all to sign up for Code RED
City of Dexter	The city mailed out letters to residents encouraging them to sign up for the Code Red program. Good idea to post this on our city website as I see others have done.
City of Elkton	We have encouraged our residents to sign up for Code RED.

City of Grand Meadow	Currently, our city does not do this, but we will post information at City Hall, share information on the City Facebook page and website, and include information in our next round of utility billing.
City of Le Roy	We encourage residents to sign up for the Code Red program. This will again be posted on the city website and on the City Facebook page.
City of Lyle	We encourage residents to sign up for the Code Red program.
City of Maplevue	No, our city does not do this currently, but we could post a flyer on it at City Hall, and add a flyer to go out with our water bills.
City of Racine	Our city does not do this currently, but we could post information at City Hall and the Post Office, share information on the City Facebook group, do direct mailing to all residents, or include a note on outgoing water/sewer bills.
City of Rose Creek	We encourage the residents/businesses to sign up for the City's alert system thru our website and also the County's Code RED alert system.
City of Sargeant	The city does not do this. We depend upon the county to do this outreach.
City of Taopi	No- our city does not do this currently; we could post a flyer in the local township building located in our city.
City of Waltham	We are not currently doing this. We could put a flyer up in the post office and at the Government Center. We could also send a letter in the water bill to encourage sign up for CodeRED.
OTHER STAKEHOLDERS	

#7 - BUILDING CODES

Has your jurisdiction adopted the Minnesota State Building Code? Please clearly answer yes or no and provide supporting detail. IF YES, please describe how it is enforced. IF NO, please describe if there are other building codes or permitting processes in place to reduce the risk to future development.

Mower County	No. Mower County has not adopted the MN State Building Code and does not enforce building code compliance. Zoning Permits are required for the construction or placement of any structure on a person's property within unincorporated areas of the county. This process ensures the property remains compliant with the setbacks and land use activities of the Zoning District. Zoning permit applications must be submitted to, reviewed and approved by the Mower County Environmental Services Department.
City of Adams	Yes, the City of Adams has adopted the Minnesota State Building Code. There is a permitting process that needs to be completed and approved by the Adams City Council before any kind of construction project can begin and the MN State Building Code is enforced during the entire process.
City of Austin	The City of Austin, by Ordinance Section 4.01, adopts the Minnesota State Building Code by reference as it is adopted by the Commissioner of Labor and Industry pursuant to M.S. 26B. The code enforcement agency is the City of Austin Building Department and is administered by a State Certified Building Official designated by the municipality. The City has adopted a unified development code, which includes shoreland regulations and a floodplain ordinance, to regulate development in the special flood hazard area.

City of Brownsdale	Yes, we have adopted MN State Building codes, enforced by CMS/WSE Rochester office. Permits are accepted at the city office and passed to CMS/WSE
City of Dexter	We use the State building code for examples but have our own zoning ordinance along with other ordinances. The city council serves as our zoning officer.
City of Elkton	Yes, the City of Elkton has adopted the Minnesota State Building Code. There is a permitting process that needs to be completed and approved by the City Council before any kind of construction project can begin and the MN State Building Code is enforced during the entire process.
City of Grand Meadow	The City of Grand Meadow has adopted the State Building code and requires building permits that must be approved by Planning and Zoning and City Council prior to construction. However, the city does not enforce the building code.
City of Le Roy	The City of Le Roy has not adopted the State Building Code, the City issues land use permits that need to be approved by the city council prior to the beginning of construction. It is stated in city ordinance that any construction is to be done by licensed contractors and according to the State Building Code.
City of Lyle	We have our own Zoning Ordinance and approve building permits for new construction, decks, fences and accessory buildings.
City of Maplevue	Yes, the city adopts and enforces the MN State Building Code. We have a building permit that must be completed and approved by the City Council before building can begin. MN building code is used.
City of Racine	No, the City of Racine has not adopted MN State Building Code. We do not have an inspector. We explain what is expected of them. We do inspect sewer and water hook ups. They are required to have a state electrical inspection.
City of Rose Creek	No, the city approves building permits for construction of homes.
City of Sargeant	No, the city has not adopted the MN State Building Code. The city has a permit system in place for any new construction.
City of Taopi	No, the city has not adopted the Mn State Building Code, the city approves building permits for construction of homes.
City of Waltham	Yes. Anyone requesting a building permit must submit the plans so the council can approve them first. The city approves building permits for the construction of homes.
OTHER STAKEHOLDERS	

#8 - OTHER PLANS AND POLICIES

What other plans or policies does your jurisdiction have in place to help mitigate against the impacts of flooding and other natural hazards to future development? Please describe.

Mower County	Mower County Environmental Services enforces floodplain and shoreland overlay requirements of the ordinance. We currently have a higher elevation standard than the state - Mower County requires 2 feet above the BFE for floodplain development since 2013. The reason for this was multifold: 1) we knew when the floodplain maps were adopted that the frequency and intensity of storms increased from the time the modeling
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	was completed by FEMA; 2) MN requires the Regulatory Flood protection elevation (RFPE) to be calculated as follows: BFE (base flood elevation) + 1 foot of freeboard + stage increase. Stage increases vary from location to location; to simply this - they just made it one (1) additional foot. This provides a small amount of additional protection, as we all know that there are flood events that go over and above the 1% (100-year) event. 3) this decreased liability to the county if a person in the zoning office misinterpreted/misread the stage increase graph or forgot to simply add it into the formula. MOWER COUNTY HIGHWAY DEPT: Maintain bridges and culverts to ensure that storm runoff is not prevented from flowing freely through structures as they were designed. Remove blockages. Provide and maintain erosion control measures so that downstream drainage systems do not become impeded and can operate properly.
City of Adams	In 2014 Adams developed a wellhead protection plan with the help of the Minnesota Department of Health to protect the city's water supply from being contaminated
City of Austin	The City of Austin Planning & Zoning Department enforces our floodplain requirements, maintains a Comprehensive Plan to coordinate growth and appropriate land uses. The Public Works Department has been working on the development of a Flood Preparedness Manual. We have conducted a resiliency study of the storm sewer system in the NW part of town susceptible to surface street ponding. Austin Utilities has a wellhead protection plan.
City of Brownsdale	The city has a wellhead protection plan in place.
City of Dexter	We are looking into implementing a comprehensive plan that would address this issue. We have a wellhead protection plan in place.
City of Elkton	Our city has a wellhead protection plan in place.
City of Grand Meadow	The city has an approved wellhead protection plan in place.
City of Le Roy	The city has an approved wellhead protection plan in place. The City also approves any land use permits to make sure any construction is not done in a flood-prone area.
City of Lyle	The city has a Wellhead Protection Plan in place. The city also approves any land-use permits to make sure any new construction is not done in a flood-prone area.
City of Maplevue	The city has a wellhead protection plan to prevent the water supply from being contaminated. We haven't been flooded in this area.
City of Racine	The city has a wellhead protection plan. We do not have any flooding issue in the City of Racine.
City of Rose Creek	The city has an approved wellhead protection plan. It was developed with the help of the Minnesota Department of Health to protect the city's water supply. City's engineers are diligently assisting us with attainment of loans/grants to update and improve the aging infrastructure, and the flooding issues.
City of Sargeant	City does not have flooding issues.

City of Taopi	The city is planning more culvert cleaning and waterway cleaning to prevent any flooding in new construction areas.
City of Waltham	The city has a wellhead protection plan in place. If we have an issue with flooding, we have someone come in to make sure something is not plugged up and we work on keeping the creek cleaned out from brush.
OTHER STAKEHOLDERS	MnDOT District 6: There are several goals and plans focused on improving resilience and we have also worked to advance research to determine ways to find and rank vulnerable assets. Lots more detail available if you would like specific information on any one area. We also have an Emergency Response Plan for handling emergencies within the district. We work closely with our State Emergency Operations Center depending on the level of emergency.

#9 - ORGANIZATIONAL CAPACITY	
What departmental staff or elected officials in your jurisdictional help to accomplish hazard mitigation in your community? Please describe.	
Mower County	Mower County Emergency Management, Mower County Environmental Services, Mower County Highway Department, and Mower County Administration, City Councils, and Township Boards work cooperatively as needed on mitigation related planning and project efforts.
City of Adams	Fire Chief is Emergency Operation Manager / Public Works Director / Council & Mayor
City of Austin	The Police Department handles emergency management issues and works with the Mower County Emergency Manager, Austin Fire Department, and Sheriff's Department in this regard. Long term hazard mitigation projects, such as for flooding and sewage, are handled by the City's Engineering Department. The Mayor, Council, City Administrator, Parks Department, Planning/Zoning, and City Finance director all assist in these projects depending on scope, financing, and location. Austin Utilities, would handle any mitigation efforts as they relate to power, water, and gas outages/problems.
City of Brownsdale	The Police Chief is the Emergency Operations Manager. Council and Employees are also on call.
City of Dexter	Mayor, Council and Fire Department
City of Elkton	The City Council and Mayor all work together to handle any emergency issues.
City of Grand Meadow	The Police Chief is the designated emergency manager, and coordinates with the Fire Chief, the City Administrator, and the Public Works Supervisor to address emergencies.
City of Le Roy	The public works supervisor is the designated Emergency Manager. The city council, Mower County Sheriff's Department, LeRoy Fire Department, other city employees, and the Mower County Emergency Manager would work together to address emergency management issues.

City of Lyle	The Public Works supervisor is the designated Emergency Manager. The City Council, Mower County Sheriff's Dept, Lyle Fire Dept. and other City employees work together to address emergency management issues.
City of Maplevue	The City Council and Mayor all work together to handle any emergency issues.
City of Racine	The City Council and Mayor all work together to handle any emergency issues.
City of Rose Creek	City's public works/maintenance personnel, the Mayor and City Council, volunteer fire department - all manage and work together to handle any emergency issues.
City of Sargeant	The City Council and Mayor all work together to handle any emergency issue.
City of Taopi	The City Council and Mayor work together to handle emergency issues.
City of Waltham	The City Council and Mayor all work together to handle any emergency issues.
OTHER STAKEHOLDERS	

#10 – PARTNERSHIPS

Are there any agencies, organizations, or businesses that your jurisdiction has worked with to address mitigation efforts in your community? Please describe.

Mower County	Soil & Water Conservation District, City Councils, Township Boards, local clubs and organizations, and local business owners.
City of Adams	Member of MN Rural Water Assn / MNWARN / Volunteer Fire Department
City of Austin	HSEM on property acquisition, MnDNR on property acquisition and structural mitigation projects, CRWD/SWCD on water impoundments upstream of the City of Austin.
City of Brownsdale	We are a member of MN rural water. The fire dept. has also helped with pumping when events have arisen.
City of Dexter	MNWARN. MN Rural Water. Mower Co SWCD
City of Elkton	We are a member of MN rural water. Our residents help out when needed.
City of Grand Meadow	MNWARN, MN Rural Water, GMFD
City of Le Roy	We are a member of MnWARN. We have worked with the Fire Department to assist with cleanup efforts.
City of Lyle	We are a member of MNWarn (MN Water/Wastewater Agency Response Network). We are also part of the MN Rural Water Association who have advised us in the past. We are also members of NFIP.
City of Maplevue	We are a member of MN rural water. The fire department will always help when needed.
City of Racine	The Fire department (Stewartville), has helped us out when we have had storms. We are a member of the MN Rural Water.
City of Rose Creek	Volunteer fire department, member of Minnesota Rural Water, MPCA, MN Department of Health, and local businesses have assisted in emergency situations.
City of Sargeant	We are a member of the MN Rural water. We are under contract with the Hayfield fire department.
City of Taopi	We contract with the Adams Fire Department and belong to the Adams Area Ambulance to assist in emergency situations.

City of Waltham	We have worked with the county emergency manager to upgrade our outdoor warning siren. We have worked with MN Rural Water.
OTHER STAKEHOLDERS	

#11 - PROGRAMS IN PLACE

What sort of programs does your jurisdiction participate in to help raise awareness and reduce risk from natural hazards in your community?

Mower County	Mower County Emergency Management participates in the NWS Severe Weather Awareness Weeks held in April and November each year. The MCEM also coordinates with local jurisdictions to participate in annual SkyWarn storm spotter training. Mower County Environmental Services participates in the CRS program - we send flood information out annually to those that are vulnerable within Mower County. By the County participating in this program - it also provides a flood insurance rate discount to landowners. We provide information annually to vulnerable landowners about how to prepare for a flood event, how to disinfect their well after a flooding, and how to care for their septic system before/during/after a flood event. MOWER COUNTY HIGHWAY DEPT: We work directly with other county departments and local government entities to make the community better informed.
City of Adams	Local schools practice tornado and fire drills. We send out posted notices and notices via the city website and social media platforms to inform residents to clear leaves, grass and snow from roadways to prevent clogging of catch basins and over the road flooding.
City of Austin	The city of Austin participates in the FEMA Community Rating System, which is part of the National Flood Insurance Program. ,
City of Brownsdale	The City of Brownsdale contracts with the Brownsdale Volunteer Fire Department for emergencies, along with our police department and mutual aid.
City of Dexter	County - Emergency response center - daily test.
City of Elkton	Nothing at this time.
City of Grand Meadow	We post on our Facebook page, the school works with our emergency services on drills, and we participate in the statewide programs.
City of Le Roy	We participate in the statewide tornado awareness program. The local school practices tornado and fire drills. Information is also posted on the City Facebook page.
City of Lyle	Local school practices tornado and fire drills. We have our community siren operated by Mower County tested monthly.
City of Maplevue	We currently aren't doing this. We can start sending out annual flyers on this. We have an emergency management plan for our community center if people need to come during such events. This is headed by our fire chief, and the council.

City of Racine	We have our community sirens operated by Mower County and are tested monthly. We put information out on Facebook; we have our own Facebook page. We ask the county for help, when necessary. Our community works together as a team when we have issues.
City of Rose Creek	We work with Mower County officials, and our Fire Department, Southland Schools, and post Notices as needed on our Facebook page, website, and around the City for clearing roadways, water/wastewater issues, flooding, etc. Sirens are repaired, and once a month sounding drills, and used as needed in an emergency situation.
City of Sargeant	None. We are a city of population 63.
City of Taopi	The city contracts with the City of Adams for fire protection, and the Adams Area Ambulance Service for emergency services.
City of Waltham	We contract with Hayfield for fire protection. We have cleaned roadside debris from gutters to prevent clogging and flooding. We have cleaned up vegetation and trees to reduce damage during storms.
OTHER STAKEHOLDERS	

#12 - FUNDING & OTHER RESOURCES

What funding sources are available to help your jurisdiction to accomplish implementation of mitigation activities? Please describe. Include internal local government funding as well as external funding sources (grant or loan sources from local, state, or federal agencies).

Mower County	Mower County budgets provide operating costs for staff and enforcement of regulatory ordinances and to share information with the public. We have used MN DNR Flood Mitigation Grant Assistance along with federal funds to buy out flood prone homes. The SWCD /Cedar River Watershed has used grant funding to provide water retention areas. MOWER COUNTY HIGHWAY DEPT: Local funds, state aid maintenance funds, state and Federal Hazard Mitigation grants, and MnDNR grants, for example.
City of Adams	Currently the City of Adams uses city-budgeted funds.
City of Austin	The city has used HSEM grants, MnDNR grants, DEED grants, Local Option Sales Tax, Stormwater Utility Fund, and Tax Levy.
City of Brownsdale	The City uses the local budget and general fund.
City of Dexter	Local funding. Donations from our Fire Department. Any State/County funds when/if available.
City of Elkton	We only have the funds from our local budget and general fund.
City of Grand Meadow	Most funding is through local levy. Have used bonding, grants, and PFA funds in the past for infrastructure improvements.
City of Le Roy	We use funds through the local budget/levy.
City of Lyle	We use funds from our budget and general fund.
City of Maplevue	We the city use our funds for operating costs for staff and enforcement of regulatory ordinances and to share information with the public.

City of Racine	We use the local budget and general funds. Any State/County funds when/if available.
City of Rose Creek	The City is seeking funding thru engineers to update and improve infrastructure, when needed the local budget and general fund are used.
City of Sargeant	None. We have no funding beyond our limited city budget.
City of Taopi	Our funding is through the local budget/levy.
City of Waltham	We use funds through the local budget/levy. Our city uses its own general operating fund.
OTHER STAKEHOLDERS	MnDOT District 6: State and Federal Transportation Funds and Grants. We also utilize FEMA and FHWA disaster assistance funds, if eligible and needed.

#13 - LOCAL MITIGATION PROJECTS

Please describe what mitigation actions would help to reduce risk to your community from future natural hazard events. Please include mitigation activities that address local vulnerabilities that were identified in Question #2. Please be as specific as possible in your responses. The mitigation actions you identify will be used to develop your local mitigation action charts. If you have any mitigation projects you are aware that your jurisdiction will be seeking to apply for FEMA HMA Grant Program funding for, please make note of that.

Mower County	Flooding - Continue to have Mower County participate in the CRS program (send flood information out annually to those that are flood vulnerable, provide information annually to vulnerable landowners about how to prepare for a flood event, how to disinfect their wells after a flooding, and how to care for their septic system before/during/after a flood event)/ Extreme Cold – Encourage residents to be prepared for periods of extreme cold and potential power outages. Use our city website and utility bills to notify residents to avoid freezing pipes during sub-zero weather. Work with the local nursing home to be prepared with emergency plans for extended power outages. Work with the county and partner agencies to establish a warming center facility and program for those who are homeless and exposed to extreme cold. All Hazards (public outreach and education) - Create/dedicate a common webpage for all Mower County communities as a resource and information for various types of emergencies and how to be prepared. MOWER COUNTY HIGHWAY DEPT: Many examples of site-adaptable flood mitigation projects are documented and details are readily available for implementation.
City of Adams	We are currently working with grant writer to fund a new generator for our Emergency Services Building WWTP generator is outdated and is becoming hard to find parts for repair. A new larger sized generator would be more reliable.

	The city is hoping to be able to work with MNDOT for a stormwater piping project to alleviate the flooding across Hwy 56.
City of Austin	Completion of the flood mitigation manual. Complete the WWTP levee project. Acquisition and removal of miscellaneous structures located near the perimeter of the 100-yr floodplain. Maintain and update the comprehensive plan. Update the WWTP generator. Work with MnDOT to develop a plan to minimize flooding impacts to Interstate 90. Apply for grant funding to convert the gas line running over the Cedar River to underground. Also apply for grant funding to buy out the remaining residential and commercial properties within the floodplain (approximately 50). Possible grant sources include FEMA HMGP and MN DNR FHM grants.
City of Brownsdale	The city owns a generator and one can be borrowed from the fire dept. water restrictions during drought if needed. City use of website and flyer around town
City of Dexter	Generator: Work with other entities that use the building/share the costs of putting one in. Storm sewer: consider adding new along with upgrading the old system. Comprehensive planning that allows for adequate storm sewers/retention ponds. Water Tower: Pray for grant money! Continue to apply for grants/low interest loans.
City of Elkton	The city has an old generator that we can use if the need should arise. It is not reliable but the maintenance gets it working when needed. Enforce the city's sump pump ordinance to minimize impacts to the city's stormwater system. Keep our community informed when/if needs or issues arise to keep everyone informed and aware.
City of Grand Meadow	Flooding: Have County ditch south of town re-graded for proper flow. Continue I&I remediation. Tornadoes/Wind Storms: work with mobile home park to install storm shelter. All Hazards: Install generators at Well House, City Hall, and the Community Center for backup power.
City of Le Roy	Severe Weather/Summer Storms-We need to get the electrical connections for a portable generator for the community center and one other location to be used as a designated mass care shelter. This could also be used in the case of severe winter weather if the city would lose electrical power. The city website and City Facebook page can be used to notify people in advance of these types of weather events of what is available for them.
City of Lyle	We provide public notice via our city website and Lyle Announcement Facebook page. Windstorms/Tornados we use the city's warning siren.

	Extreme Cold: We send reminders out with the utility bills in the winter on how to avoid freezing pipes. During droughts, we send out messages to conserve water.
City of Maplevue	Drought – Establish and enforce watering use restrictions when in periods of severe drought. Severe Winter / Summer Storms- Acquire a portable generator for our Community Center, which is our designated community mass care shelter. Extreme Cold – Encourage residents to be prepared for periods of extreme cold and potential power outages. Use our utility bills to notify residents to avoid freezing pipes during sub-zero weather.
City of Racine	We provided notice via our Facebook page to inform residents about issues such as freezing pipes, or to conserve water in drought or if we were to have well issues.
City of Rose Creek	Flooding - our aging infrastructure needs/repairs/improvements. As our city's contracted engineers seek funding for our aging infrastructure, we are in need of generators to assist.
City of Sargeant	Our city has not encountered issues where someone is in need, but our community center is available if need be. We are a small city of population 63 and do not have any projects needed in regards to hazard mitigation.
City of Taopi	Work with MnDot to clean, and repair, storm sewer drain along Highway 56 to prevent future flooding issues.
City of Waltham	We have a generator to service the community. Seeking funding to replace the water tower and piping in half our community; the other half has already been completed. We are also working on new pumps for our lift station for wastewater treatment ponds. Check the warning siren to make sure it does not need an upgrade. Enforce the sump pump ordinance to minimize impact to storm sewers.
OTHER STAKEHOLDERS	

#14 - GAPS OR DEFICIENCIES

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

Mower County	Language barriers - Mower County has an increasingly diverse ethnic population. We need to see if CodeRED provides alternative language options to reach all residents. Personal disaster resources need to be available to the public as information or steps to take. Access to technology is a barrier for some. Training - Table-top training exercises for staff/community personnel. Cross training/backfill for those who are front-line responders in a community crisis - how other staff can backfill and relieve stressors or duties of those in the front line.
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	Building Code Enforcement - If Mower County chose to adopt and enforce the MN State Building Code in the future, the county could score higher in the CRS program and county homeowners would have an increased savings on their flood insurance policies.
City of Adams	We are a small city with limited finances and staff.
City of Austin	We are a larger city, but have the same issues related to staffing and time constraints.
City of Brownsdale	we are a small city with limited staff and financial resources
City of Dexter	State Mandates
City of Elkton	We are a small city with very limited finances and staff.
City of Grand Meadow	We are a small city with limited financial and staff resources to address local mitigation projects
City of Le Roy	We are a small city with limited finances and staff.
City of Lyle	We are a small city with limited finances and staff.
City of Maplevue	We are a small city with limited financial and staff resources to address local mitigation projects. We need to find funding to work on our water tower.
City of Racine	We are a small city with limited staff and financial resources.
City of Rose Creek	We are a small city with limited financial budget and staff resources to address considerations for future hazard events such as flooding and aging infrastructure repairs/improvements. We have a new website, and we have our Facebook page.
City of Sargeant	We do have a website but we are a small community with limited resources
City of Taopi	We are a small city with limited finances and staff.
City of Waltham	Our city does not have its own website or Facebook page to reach out to our residents. We are a small city with limited financial and staff resources to address local mitigation projects.
OTHER STAKEHOLDERS	

#15 - SURVEY PARTICIPANTS

Please list the names & titles of all persons that contributed information to this survey. Participant information is important to ensure good jurisdictional participation, and each person's time will count towards the 25% in-kind match requirement for the HMP update.

Mower County	Mindy Williamson, Environmental Services Technician II Angela M. Lipelt, Environmental Services Supervisor
City of Adams	Jake Goodale, City Clerk Dillon Heimer, Emergency Management Director Al Sorenson, Public Works Director
City of Austin	David McKichan, Police Chief Holly Wallace, Planning and Zoning Director Steven Lang, Public Works Director/City Engineer
City of Brownsdale	Adria Vargas, City Clerk/Treasurer
City of Dexter	Natalie Carroll City Clerk/Treasurer
City of Elkton	Kari Haarstad, City Clerk/Treasurer
City of Grand Meadow	James Christian, City Administrator Chris Hyrkas, City Clerk

	Tom Bleifus, Public Works Superintendent Jim Richardson, Police Chief
City of Le Roy	Patty White, City Clerk/Treasurer
City of Lyle	Diana Witt, City Clerk-Treasurer Jesse Burma - Mayor Wayne Frank - Public Works Superintendent
City of Maplevue	Mysti Acosta, Clerk/Treasurer Arnie Johnson, Mayor
City of Racine	Deri Nordsving, City Mayor Rob Mathias, City Clerk
City of Rose Creek	Kristine M Allas, City Clerk/Treasurer Aaron Wagner, Public Works/Maintenance
City of Sargeant	Roger Nelson, Mayor
City of Taopi	Jim Kiefer, City Clerk Mary Huntley, Mayor
City of Waltham	Sally Mindrup, City Council Member Dallen Ruud, Mayor Stormy Gunneson, City Clerk
OTHER STAKEHOLDERS	Chad Hanson, Emergency Management Coordinator, MnDOT District 6

Appendix D – Plans & Programs in Place

Mower County

HMP Plans & Programs in Place Form

EMERGENCY PLANNING CAPABILITIES	Yes/No	Comments
Emergency Notification System (please specify, i.e., CodeRED, Smart911, Everbridge, etc)	Yes	CodeRED
Outdoor Warning Sirens (please note locations and # per jurisdiction)	Yes	City of Adams-1 City of Austin – 5 City of Brownsdale -1 City of Dexter- 1 City of Grand Meadow City of LeRoy – 1(2 normally) City of Lyle -1 City of Rose Creek -1 City of Waltham-1
Emergency Operations Plan (EOP)	Yes	EOP is updated annually and as needed
Mass Care Sheltering Plan / List of Shelter Facilities	Yes	Addressed in EOP and in coordination with local jurisdictions
Tornado Safe Rooms / Storm Shelters (please list any existing specific locations)	No	Addressed in coordination with schools & local jurisdictions with local vulnerabilities
NWS Weather Ready Nation / StormReady Certification	No	
Coordination with Schools	Yes	Training and planning is forwarded as needed.
Coordination with Neighboring Jurisdictions	Yes	Monthly meetings, Annual regional planning and training; statewide AMEM and Governors Conference
Coordination with Local and Regional Agencies involved in mitigation	Yes	SWCD, MN DNR, MnDOT, Rural and Municipal Electric Cooperatives, Watershed Districts
Coordination with organizations or agencies addressing disaster related issues and vulnerable populations, emergency preparedness, access and functional needs populations (List as applicable)	Yes	Public Health, Salvation Army, Mayo Clinic-Austin, Mutual Aid Volunteer Fire Departments and first

		responders, utility companies
Past storm hazard data and information	Yes	Damage information is kept on file from past storm events and disaster declarations
<i>Other (please describe)</i>		Public Health preparedness plans in place

PLANNING & REGULATORY CAPABILITIES	Yes/No	Comments
Comprehensive/Land Use Plan	Yes	Current version 2003; 2025 revision is underway
Capital Improvements Plan	Yes	Highway Department has a CIP. Mower County Finance has a continuous 5-year plan.
Economic Development Plan	No	Mower County has an economic policy
Climate Adaptation Plan	No	
Continuity of Operations Plan (COOP)	Yes	Mower County has a COOP plan and is updated as needed.
Transportation Plan	Yes	Mower County Highway Dept. maintains a rolling 5-year plan
Stormwater Management Plan / Drainage Plan	Yes	Stormwater is in part managed as part of Zoning Ordinance; Mower SWCD is the Ditch authority
Burning Permits/Restrictions (i.e., identify if issued through Sheriff's Office or MN DNR)	Yes	Burning Permits issued through the Mower County Environmental Services office, as an arm of the Sheriff.
Comprehensive Local Water Management Plan	Yes	Managed by Mower SWCD, through 1W1P
Watershed Plan (One Watershed, One Plan)	Yes	Cedar River 1W1P and Root River 1W1P cover Mower County's boundaries.

Wellhead Protection Plan	Yes	Municipal level plans are in coordination with MDH
Forest Management Plan	No	
Community Wildfire Protection Plan (CWPP)	No	
Participation in MN DNR Firewise Program	No	
Database of Dry Hydrants/Well Access	No	
<i>Other (please describe)</i>		

LOCAL POLICY / PROGRAM CAPABILITIES	Yes/No	Comments
Land Use, Planning, & Zoning Ordinance	Yes	Mower County Zoning and Land Use Ordinance in place; falls under Mower County Environmental Services
Subdivision Ordinance	Yes	Subdivision Ordinance is in place
MN State Building Code Enforcement	No	Mower County has not adopted State Building Code.
Participation in the National Flood Insurance Program (NFIP)	Yes	Mower County is a participating community.
Adoption of Digital Flood Insurance Rate Maps	Yes	Zoning Ordinance, Mower County GIS
Floodplain Ordinance	Yes	See Zoning Ordinance
Shoreland Ordinance	Yes	See Zoning Ordinance
Minnesota Buffer Law / Soil Erosion Ordinance	Yes	Monitored for compliance by SWCD, Enforced by Mower County.
Home Buyouts for flood or erosion mitigation	Yes	When supported through FEMA as disaster recovery.
Other natural hazard specific ordinances (i.e., stormwater, steep slope, wildfire)		
Maintenance programs to reduce risk	Yes	Highway Dept. conducts maintenance of ROW and drainage systems

<i>Other (please describe)</i>		Mower County Sheriff's Office has a maintenance agreement for the ARMER Radio System
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ADMINISTRATIVE/TECHNICAL CAPABILITIES	Yes/No	Comments
Emergency Management Director	Yes	Mower County Administration / Emergency Management Dept.
Sheriff/Police Department	Yes	Mower County Sheriff's Office
Floodplain Management Administrator	Yes	Environmental Services Supervisor
Chief Building Official- (Facilities Director)	Yes	Mower County Administration
Highway Engineer	Yes	Mower County Highway Department
Mapping Specialist (GIS)	Yes	Mower County GIS
Public Health Coordinator/Department	Yes	Mower County Health and Human Services
Planning Commission	Yes	Mower County Environmental Services
Coordination with Soil and Water Conservation District	Yes	Administrator/Deputy Administrator
Coordination with Minnesota Department of Natural Resources	Yes	Various Departments as needed
Mitigation Planning Committee	Yes	2025 HMP Update Planning Team of Stakeholders
Mutual Aid Agreements in place	Yes	MAA's existing between local fire departments and first responders
<i>Other (please describe)</i>		

EDUCATION & OUTREACH CAPABILITIES	Yes/No	Comments
SKYWARN Program Training with NWS (annual training)	Yes	Held in coordination with the NWS bi-yearly
National Weather Service – Severe Weather Awareness Weeks	Yes	Emergency Management participates in coordination with

		HSEM and NWS each November and April
Promotion of NOAA Weather Radios	Yes	During NWS Severe Weather Weeks and Ongoing
<i>Other (please describe)</i>	Yes	Outreach/education is provided as needed for situational awareness through Emergency Management.

Appendix E – Past Mitigation Action Review Status Report

Mower County

Past Mitigation Action Review Status Report

Following is a report on the status of mitigation actions related to natural hazards included in the Mower County **2015** Hazard Mitigation Plan. This report covers the mitigation actions that were listed for implementation by Mower County and by city jurisdictions or partner agencies, as applicable. The status of mitigation actions is defined as the following:

Completed – The action was a defined activity or project completed since the last plan update.

Ongoing – The action is continually being implemented and moving forward. Ongoing mitigation actions will be reviewed and revised as necessary for inclusion in the plan update.

Deleted – The action is deemed as not relevant and is not considered for inclusion in the plan update.

#	Hazard	Mitigation Action	2025 Status	Comments
1	Flooding	Continue to work with home/business owners to acquire repetitive loss properties.	Ongoing	Ongoing as applicable.
2	Flooding	Conduct an inventory and identify the highest risk roads/bridges for flooding in the county. Determine measures to improve safety on those roads/bridges	Ongoing	This is ongoing work by Mower County Highway Dept.
3	Flooding	Remove Debris to prevent localized flooding.	Ongoing	Ongoing as applicable by Mower County in coordination with local jurisdictions for flood risk reduction.
4	Flooding	Continuation of gage usage.	Ongoing	Ongoing as applicable by Mower County in coordination with SWCD.
5	Ag Disease	Obtain a stocked livestock response trailer.	Completed	In service and mutual aid partners educated on use.
6	Flooding	Reduce the flood damage to insurable property.	Ongoing	Ongoing as applicable by Mower County in coordination with local jurisdictions for flood risk reduction.
7	Flooding	Stabilize river banks with riprap and native vegetation.	Ongoing	Ongoing as applicable by Mower County in coordination with local jurisdictions for flood risk reduction.
8	All-Hazards (Preparedness)	Have the ability to support community partners in the development and grant applications.	Delete	Not a necessary mitigation action.

#	Hazard	Mitigation Action	2025 Status	Comments
9	Flooding	Develop educational materials and promote shoreline buffer vegetation best Management Practices and monitoring	Ongoing	Ongoing as applicable by Mower County in coordination with SWCD.
10	Groundwater Pollution	Enforcement and inspection of septic systems with county adopted regulations.	Delete	This is covered by other planning efforts and not included under the scope of the HMP update.
11	Groundwater Pollution	Update the county land use plan and city land use plans to provide additional policies on development/land uses within the highly sensitive areas to groundwater pollution. Follow up with any necessary changes to the local zoning ordinances.	Delete	This is covered by other planning efforts and not included under the scope of the HMP update.
12	Flooding	Develop a countywide program for the use of Storm water best management practices that includes the use native plant species, storm water capture and other measures by public agencies and the private sector.	Ongoing	Ongoing as applicable by Mower County in coordination with local jurisdictions for flood risk reduction.
13	Flooding	Maintain a catch of sandbags.	Ongoing	Ongoing as applicable by Mower County in coordination with local jurisdictions for flood risk reduction.
14	Severe Winter & Summer Storms	Ensure that the emergency response plan for Mower County includes response actions for both winter and summer events. Include the identification of vulnerable populations and location in the county	Ongoing	
15	Windstorms / Tornadoes	Increase emergency warnings to citizens.	Completed	We utilize CodeRED for mass emergency notifications.
16	All-Hazards (Preparedness)	Provide updated radio equipment for reserve and posse to use when activated.	Completed	
17	All-Hazards (Preparedness)	100% of Mower County Fire Departments using ARMER	Completed	VHF discontinued.
18	All-Hazards (Preparedness)	Remaining 2 cities receive radio equipment to allow for 24 hour dispatch to set off sirens.	Ongoing	Cities not ready to invest.

#	Hazard	Mitigation Action	2025 Status	Comments
19	Flooding	Eliminate holding tank exhaustion during heavy rain events.	Ongoing	Ongoing as applicable by Mower County in coordination with local jurisdictions for flood risk reduction.
20	Flooding	Relocation of lift station	Ongoing	Ongoing as applicable by Mower County in coordination with local jurisdictions for flood risk reduction.
21	Flooding	To eliminate excessive infiltration during flood events.	Ongoing	Ongoing as applicable by Mower County in coordination with local jurisdictions for flood risk reduction.
22	Flooding	From previous flooding, list station needs improvements to increase sanitary flow especially during flooding events.	Ongoing	Ongoing as applicable by Mower County in coordination with local jurisdictions for flood risk reduction.
23	Flooding	Replacement of siphons under the Cedar River to allow for enhanced water movement.	Ongoing	Ongoing as applicable by Mower County in coordination with local jurisdictions for flood risk reduction.
24	Flooding	Structural protection of downtown power plant.	Ongoing	Ongoing as applicable by Mower County in coordination with local jurisdictions for flood risk reduction.
25	Flooding	Structural protection on the west side of the Cedar River from the community swimming pool to I90	Ongoing	Ongoing as applicable by Mower County in coordination with local jurisdictions for flood risk reduction.
26	Flooding	Remove homes and/or business that have repetitive loss criteria.	Ongoing	Ongoing as applicable by Mower County in coordination with local jurisdictions for flood risk reduction.
27	Flooding	Acquire or protect structures from the Cedar River East to 8th Street and also 2nd Ave NE.	Ongoing	Ongoing as applicable by Mower County in coordination with local jurisdictions for flood risk reduction.
28	Flooding	Stabilize stream banks throughout Austin.	Ongoing	Ongoing as applicable by Mower County in coordination with local jurisdictions for flood risk reduction.
29	Flooding	Upgrade current levees for emergency measurements.	Ongoing	Ongoing as applicable by Mower County in coordination with local jurisdictions for flood risk reduction.
30	Flooding	To provide drainage to a large watershed.	Ongoing	Ongoing as applicable by Mower County in coordination with local jurisdictions for flood risk reduction.

#	Hazard	Mitigation Action	2025 Status	Comments
31	Flooding	Increase storm water ponding plan	Ongoing	Ongoing as applicable by Mower County in coordination with local jurisdictions for flood risk reduction.
32	All-Hazards (Preparedness)	Continue to improve existing plans and establish secondary plans.	Ongoing	Mower County Emergency Management – ongoing work.
33	All-Hazards (Preparedness)	Update information as needed.	Ongoing	After lessons learned
34	All-Hazards (Preparedness)	Update clinics, hospitals and triage sites for improvement plan.	Delete	Not related to scope of HMP
35	Groundwater Pollution	Assure that a plan is in place to provide safe drinking water and food supplies when normal delivery systems are disrupted due to shortages or contamination	Ongoing	This is covered by other planning efforts and not included under the scope of the HMP update.
36	Infectious Diseases	Assure policy and operational structure is in place to provide education, consultation and regulation as needed to help assure prevention and control of infectious diseases during an epidemic	Ongoing	This is covered by other planning efforts and not included under the scope of the HMP update.
37	All-Hazards (Preparedness)	Revisit methods and assets.	Delete	This falls under broader MCEM emergency planning; not a necessary mitigation action.
38	All-Hazards (Preparedness)	Formalize and be prepared to deliver regional emergency preparedness and response roles such as communication, mass dispensing, flu centers, antiviral/vaccine/supplies storage and distribution capacity of Austin	Delete	This falls under broader MCEM emergency planning; not a necessary mitigation action.
39	Infectious Diseases	Assure policy and operational structure is in place to provide education, consultation and regulation as needed to help assure prevention and control of infectious diseases during an epidemic	Delete	This is covered by other planning efforts and not included under the scope of the HMP update. Updated as needed after Lessons Learned or as needed.
40	Infectious Diseases	Develop and/or sustain methods and assets necessary to quickly detect and report emerging infectious disease threats	Delete	This is covered by other planning efforts and not included under the scope of the HMP update.

#	Hazard	Mitigation Action	2025 Status	Comments
41	All-Hazards (Preparedness)	Continue education to new employees and review plans for existing employees for just in time training. Update data on a bi-yearly basis information to support daily assessments	Ongoing	This falls under broader MCEM emergency planning; not a necessary mitigation action.
42	All-Hazards (Public Education)	Develop educational materials to distribute as needed.	Ongoing	

Appendix F – Planning Team Meetings

Mower County HMP Planning Team Meeting #1

2/21/25 Meeting Summary & Documentation

Synopsis: On February 21, 2025 Mower County Emergency Management convened key county, city, and township representatives, as well as neighboring jurisdictions and other stakeholders to participate in the 1st Planning Team Meeting for the update of the Mower County Hazard Mitigation Plan (HMP). 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.

The purpose of the meeting was to present on the update of the Mower County HMP update and gather stakeholder feedback on several key discussion items, including:

- 1) Prioritization of the natural hazards to be profiled in the plan,
- 2) Identification of local vulnerabilities (i.e., infrastructure and populations),
- 3) Ideas for local mitigation actions for implementation, and
- 4) Review of FEMA Hazard Mitigation Assistance grant funding opportunities.

Stakeholder Invitations: Mower County Emergency Management invited all stakeholders included on the county's HMP Update Jurisdictional Contact List, 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.

Presentation Overview: The Power Point presentation covered the following items:

- Welcome & Introductions
- Meeting Purpose & Agenda
- Overview of HMP Key Points
- Overview of Plan Content (Hazard Identification, Risk Assessment, Vulnerability Analysis, Update of Hazard Prioritization)
- Overview of Mitigation Actions and FEMA Grants
- Overview of Mitigation Strategies for the development of mitigation actions
- Discussion of ideas for local mitigation ideas
- Overview of Next Steps following Planning Team Meeting #1

Materials: The following meeting summary includes documentation of the stakeholders that participated in the meeting, poll results, questions or comments provided during the meeting, and information on the FEMA Hazard Mitigation Assistance Grant Program. A list of stakeholders invited to participate is also included. A copy of the meeting invitation and a handout of the Power Point presentation slides accompany this meeting summary.

To submit comments or questions regarding this meeting summary, please contact:

Amy Bramwell, Mower County Emergency Management Director

amyl@co.mower.mn.us

Meeting Participants

Following is a list of representatives that participated in Planning Team Meeting #1. These individuals will be considered as part the formal planning team recorded in Table 1. Hazard Mitigation (HMP) Team of the Mower County HMP Update.

	Name	Organization	Job Title
1	Amy Bramwell	Mower County Emergency Management	Emergency Management Director
2	John Mueller	Mower County	County Commissioner
3	Dave Pike	Sheriff's Office / Emergency Management	Chief Deputy / Deputy Director
4	Mindy Williamson	Mower County Environmental Services	Environmental Technician
5	Cody Fox	Mower Soil and Water Conservation District	District Manager
6	Patty White	City of LeRoy	City Clerk-Treasurer
7	Kristine Allas	Lansing Township	Township Clerk
8	Jennifer Backer-Johnson	ISD 499	Superintendent
9	David McKichan	Austin PD	Chief of Police
10	Kory Robinson	Austin Utilities	Finance & Customer Care Director
11	Jamie Goebel	Lyle Public School	Superintendent
12	James Christian	City of Grand Meadow	City Administrator
13	Joey Page	Austin Public Schools	Superintendent
14	Alex Bumgardner	Austin Utilities	Utility Operations Director
15	Scott Felten	Mower County	Auditor-Treasurer
16	Michael Harvey	Mower County	County Assessor
17	Paul Besel	Grand Meadow Public School	Superintendent
18	Marie Lewis	The Salvation Army	Corps Officers
19	Amanda Kiefer	Waltham Township	Clerk
20	Eric Miller	Mower County	GIS Administrator
21	Denny Zwiener	Mower County	Assistant Engineer
22	Jim McCoy	Austin Fire Department	Chief
23	Chad Hanson	MnDOT	Emergency Management Coordinator
24	Crystal Peterson	Mower County	HHS Director
25	Pam Kellogg	Health and Human Services	Manager
26	Lisa Ganser	Mower County HHS	Public Health Planner
27	Mitch Wenum	Mower County	County Engineer
28	Steve Sandvik	Mower County Sheriff's Office	Mower County Sheriff
29	Angela Lipelt	Mower County Environmental Services	Environmental Services Supervisor
30	Matthew Verdick	Mower County	Chief Deputy County Administrator
31	Dennis Bray	Austin township	Supervisor

32	John Kloeckner	Adams Township	Chairman
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Discussion Polls

The presentation included several polling questions to generate discussion and gather specific feedback from participants that would be used to support public outreach, identify local vulnerabilities, and determine the updated prioritization of hazards for inclusion in the plan. Following are the polling questions and participant responses.

POLL #1 (Slide 9, Who Participates)

Question 1 - How can you expand participation by the county residents, including vulnerable populations, in the planning process?

Kory Robinson	Adding information to our social media accounts and newsletter.
Crystal Peterson	Partner with organizations like CLUES, the library, maybe Riverland Community College?
Alex Bumgardner	resident surveys
Angela Lipelt	Social media, QR codes at county offices; handouts at Salvation Army or United Way
James Christian	More social media posts, reposting in town
Jamie Goebel	Social Media and public meetings in various parts of the county
Dave Pike	Do targeted outreach in their familiar settings. Community center, grocery stores etc.
Patty White	I think all are covered.
David McKichan	Present to the APEX Austin group.

Question 2 - Is there someone (or an organization) missing from this planning team who you think should be involved with the Hazard Mitigation Plan Development?

Scott Felten	Was someone from Riverland Community College listed? Was someone from the Welcome Center/Community Action Building agencies included?
Crystal Peterson	More representation from our BIPOC community members and leaders
Alex Bumgardner	Other critical infrastructure owners - natural gas (MERC, Northern Natural Gas) Any other electric utilities serving in the county
Marie Lewis	Marvin Raatz is part of our EDS group. Marie Lewis is not a Major but is Captain. However, could be referred to as the Corps Officer.
Jamie Goebel	Absolute Energy in Mona, across the state border in Lyle.

POLL #2, Slide 13 (Plan Content – Vulnerability Analysis)

Question 1 - Are there any factors in your community that may have increased the community's vulnerability? (please identify community)

Kory Robinson	Recent flooding has brought up a potential area	Residents of Austin
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Crystal Peterson	Non-english speaking, poverty, rural communities with little to no resources	
Angela Lipelt	Austin and the Cedar River area is prone to flooding. The ag sector could be subject to drought and heat events, as well as livestock.	
James Christian	Aging and inadequate infrastructure	Grand Meadow
Jim McCoy	Those that choose to be unhoused. Drought with recent weather patterns.	Austin
Dave Pike	An ever-increasing number of non-English speaking people living and working in our area. Also, we have a lack of volunteers willing to volunteer for fire departments to fight rural fires.	Mower County, Dams on Cedar River
Michael Harvey	Illegal immigration crackdowns.	Mower County

Question 2 - Are there specific areas of concern in your community that you would consider to be more highly vulnerable to damages or danger resulting from future natural hazard events? (please identify community)

Kory Robinson	I am unsure at this time but our operations director is also on this call and would have a better idea.	Residents of Austin
Scott Felten	County Fairgrounds, specifically during the county fair, in Austin.	
Alex Bumgardner	Electric substation county wide - specific to Austin, we have the NE Substation and Murphy Creek substation	Austin
James Christian	Lack of permanent backup power at wellhouses. Lack of permanent storm shelter at Grand Meadow trailer park. As far as campgrounds, please make sure that Pine Lawn is included.	Grand Meadow
Jim McCoy	Flooding outside of flood mitigation efforts. Yes, the river stays within its banks, but the water outside of the flood wall cannot get to the river resulting in overland flooding.	Austin
Dave Pike	During recent flooding events we recognized a potential for our aging dams to fail in local waterways. Who is responsible for their care, maintenance and replacement.	Mower County, Dams on Cedar River
Patty White	If sinkholes were to occur either in or near the wastewater ponds.	LeRoy
David McKichan	Flood mitigation remains a priority. A lot of work has been done in that regard over the past 15-20 years but last summer's flood event did highlight a need to keep a focus on this type of event.	Austin

POLL #3 (Slide 17) Mower County 2025 Update of Hazard Prioritization

Meeting participants ranked each of the natural hazards listed below as what they felt was a high, moderate, or low hazard priority to include in the plan update.

Which of the following hazards would you consider HIGH priority in your county?

Flood	24
Tornadoes	21
Windstorms	19
Winter Storms	18
Extreme Cold	9
Hail Storms	6
Drought	6
Extreme Heat	4
Lightning	2
Wildfire	1
Landslides	0
Land Subsidence	0
Dam/Levee Failure	2

Would you consider any of the hazards below to be low risk, low priority, or not applicable in your county?

Flood	0
Winter Storms	0
Windstorms	0
Tornadoes	0
Hail Storms	1
Lightning	4
Extreme Cold	1
Extreme Heat	2
Drought	3
Wildfire	8
Landslides	14
Land Subsidence	13
Dam/Levee Failure	9

Mower County 2025 Prioritization of Hazards

The chart below reflects the planning team's updated prioritization of hazards that will be included in the Mower County 2025 HMP Update.

HAZARD	Mower County 2025
Flooding	High
Winter Storms	High
Windstorms	High
Tornadoes	High

Hail	Moderate
Extreme Cold	Moderate
Drought	Moderate
Extreme Heat	Low
Lightning	Low
Wildfire	Low
Landslides	Low
Land Subsidence	Low
Dam/Levee Failure	Low

Other Comments or Questions

Following are additional comments or questions addressed during the planning team meeting and responses from meeting presenters:

John Muller, Mower County Commissioner: Mower County and the City of Austin are both working on their 20-year Comprehensive Plans. Are there mutual topics or concerns that this process and comp plan processes could or should be working on together to insure they are similar or don't conflict?

Bonnie Hundrieser: Working together to address mitigation for hazards that pose risk such as flooding in the updated comp plans is great way to incorporate mitigation across other planning mechanisms. This is an example of mitigation that falls under the strategy of "Local Planning and Regulations."

Marie Lewis - The Salvation Army in Austin is trying to get an EDS (Emergency Disaster Services) team together. You may want to contact the corps and speak with Capts. John and Faith Woodard. 507-437-4566. They are used when we go out for flooding etc. We have one in Freeborn County that covers part of Mower County. If you want more information on this for Mower contact them for more info.

FEMA HMA Grant Funding:

As part of the planning team meeting, participants were informed that having a FEMA-approved Hazard Mitigation Plan in place is a requirement in order to apply for FEMA Hazard Mitigation Assistance Grant Programs. Examples of eligible projects were reviewed for participants to consider for potential inclusion in their local mitigation action charts, as applicable. It was noted that representatives from the county, local governments, and other stakeholder agencies/organizations must have documented participation in the planning process in order to formally adopt the plan and be eligible to apply for future FEMA HMA grants.

To learn more about FEMA's HMA grant programs, please review the following:

[FEMA Mitigation Assistance Program and Policy Guide, Effective July 30, 2024](#)

At a glance info: See Table 4, Eligible Activities by Program (page 43)

MOWER COUNTY HMP JURISDICTIONAL CONTACT LIST

Following is a list of the stakeholders that received an invitation to participate in Planning Team Mtg. #1 and will receive the meeting summary.

To submit suggested additions to this contact list, please contact Mower County Emergency Management and provide the name of the jurisdiction, agency, or organization along with the person's full name, work title, and email address.

REPRESENTATION	NAME	TITLE
Mower County Emergency Management	Amy Bramwell	Emergency Management Director
Mower County Emergency Management	Dave Pike	Deputy EM Director/Chief Deputy
Mower County Sheriff's Office	Steve Sandvik	County Sheriff
Mower County Administration	Trish Harren Gjersvik	County Administrator
Mower County Assessor's Office	Michael Harvey	County Assessor
Mower County Auditor/Treasurer's Office	Scott Felten	County Auditor/Treasurer
Mower County Public Works	Michal Hanson	Public Works Director/County Engineer
Mower County Public Works	Denny Zwiener	Asst. Public Works Director (Highway)
Mower County Environmental Services	Valerie Sheedy	Asst. Public Works Director (ES Dept)
Mower County Environmental Services	Angie Lipelt	Environmental Services Supervisor
Mower County GIS	Eric Miller	GIS Administrator
Mower County Health & Human Services	Crystal Peterson	Director of HHS
Mower County Board of Commissioners	John Mueller	District 1 Commissioner/Chair
Mower County Board of Commissioners	Polly Glynn	District 2 Commissioner
Mower County Board of Commissioners	Jerry Reinartz	District 3 Commissioner
Mower County Board of Commissioners	Dan Sparks	District 4 Commissioner
Mower County Board of Commissioners	Mike Ankeny	District 5 Commissioner
City of Adams	Brian Anderson	Mayor
	Jake Goodale	Clerk
City of Austin	Craig Clark	City Administrator
	Steve King	Mayor
	Jim McCoy	Fire Chief
	Dave McKichan	Chief of Police/Emergency Manager
	Steven Lang	Public Works Director
	Ann Kasel	Clerk
City of Brownsdale	Jeff Foster	Mayor
	Adria Vargas	Clerk
City of Dexter	Justin Forthun	Mayor
	Natalie Carroll	Clerk
City of Elkton		Mayor
	Kari Haarstad	Clerk
City of Grand Meadow	Ryan Queensland	Mayor
	Chris Hyrkas	Clerk
City of Le Roy	Ed Koppen	Mayor
	Patty White	Clerk

City of Lyle	Ron Frank	Mayor
	Diane Witt	Clerk
City of Mapleview		Mayor
	Mysti Acosta	Clerk
City of Racine	Deri Nordsving	Mayor
	Robert Mathias	Clerk
City of Rose Creek	Barbara Greenlee	Mayor
	Kristine Allas	Clerk
City of Sargeant	Roger Nelson	Mayor
City of Taopi	Mary Huntley	Mayor
	James Kiefer	Clerk
City of Waltham	Sean Arndt	Mayor
	Stormy Gunneson	Clerk
Adams Township	John Kloeckner	Chairman/Supervisor A
	Ryan Mullenbach	Clerk
Austin Township	Dennis Bray	Chairman/Supervisor A
	Connie Krebsbach	Clerk
Bennington Township	Brad Davis	Chairman/Supervisor A
	Elizabeth Rice	Clerk
Clayton Township	Richard Schaufler	Chairman/Supervisor A
	David Weness	Clerk
Dexter Township	Matthew Sherman	Chairman/Supervisor A
	Jacob Tapp	Clerk
Frankford Township	Ron Vogt	Chairman/Supervisor A
	Diane Hanson	Clerk
Grand Meadow Township	James Jacobson	Chairman/Supervisor A
	LuAnn Holst	Clerk
Lansing Township	Duane Mortenson	Chairman/Supervisor A
	Kristine Allas	Clerk
Le Roy Township	Tim Freerksen	Chairman/Supervisor A
	Elizabeth Rice	Clerk
Lodi Township	John Kirtz	Chairman/Supervisor A
	Nancy Lewison	Clerk
Lyle Township	David Baldner	Chairman/Supervisor A
	Mary Kenyon	Clerk
Marshall Township	Randy Stephenson	Chairman/Supervisor A
	Kathy Voigt	Clerk
Nevada Township	Bryan May	Chairman/Supervisor A
	Dawn Helgeson	Clerk
Pleasant Valley Township	Robert Kuhlman	Chairman/Supervisor A
	John Thompson	Clerk
Racine Township	Bruce Bucknell	Chairman/Supervisor A
	Brittany Stevens	Clerk

Red Rock Township	David Holst	Chairman/Supervisor A
	Roxanne Holst	Clerk
Sargeant Township	Rande Gronseth	Chairman/Supervisor A
	Kelsey Gronseth	Clerk
Udolpho Township	Linn Thoen	Chairman/Supervisor A
	Norman Hagstrom	Clerk
Waltham Township	Eugene Anderson	Chairman/Supervisor A
	Amanda Kiefer	Clerk
Windom Township	Tom Verdoorn	Chairman/Supervisor A
	Sheldon Sayles	Clerk
LOCAL & REGIONAL AGENCIES INVOLVED IN HAZARD MITIGATION		
HSEM Region 1	Mike Peterson	Region 1 Regional Program Coordinator
Mower Soil & Water Conservation District	Cody Fox	District Manager
MnDOT District 6	Mark Schoenfelder	District Engineer
MN DNR Ecological and Water Resources Division	Erynn Jenzen	Area Hydrologist
BUSINESSES, ACADEMIA, AND OTHER PRIVATE ORGS.		
Austin Utilites	Alex Bumgardner	Utility Operations Manager
Mayo Clinic- Austin	Tammy Schultz	Operations Manager
Freeborn/Mower Coop	Jim Krueger	President CEO
Austin Public Schools	Joey Page	Superintendent
Lyle Public School	Jamie Gobal	Superintendent
LeRoy Public School	Jennifer Backer-Johnson	Superintendent
Grand Meadow Public School	Paul Besel	Superintendent
Southland School District	Scott Hall	Superintendent
NONPROFIT ORGS/COMMUNITY-BASED ORGS THAT WORK WITH UNDERSERVED COMMUNITIES AND SOCIALLY VULNERABLE POPULATIONS		
American Red Cross	Eli Szydlo	District Program Manager (SE)
United Way	Erin Haag	Executive Director
Salvation Army	Marie Lewis	Major
NEIGHBORING JURISDICTIONS		
Freeborn County Emergency Management	Rich Hall	Emergency Management Director
Fillmore County Emergency Management	Don Kullot	Emergency Management Director
Steele County Emergency Management	Kristen Sailer	Emergency Management Director
Dodge County Emergency Management	Matt Maas	Emergency Management Director

Olmsted County Emergency Management	Jonathan Jacobson	Emergency Management Director
Mitchell County Emergency Management (IA)	Kris Olson	Emergency Management Director

From: [Amy Bramwell](#)
To: [Amy Bramwell](#); [Dave Pike](#); [Steve Sandvik](#); [Trish Harren](#); [Michael Harvey](#); [Scott Felten](#); [Michal Hanson](#); [Denny Zwiener](#); [Valerie Sheedy](#); [Angie Lipelt](#); [Eric Miller](#); [Crystal Peterson](#); [John Mueller](#); [Polly Glynn](#); [Jerry Reinartz](#); [Dan Sparks](#); [Mike Ankeny](#); [banderson@adamsmn.com](#); [jgoodale@adamsmn.com](#); [craigc@ci.austin.mn.us](#); [mayorsteve@ci.austin.mn.us](#); [jim@ci.austin.mn.us](#); [David McKichan](#); [slang@ci.austin.mn.us](#); [annk@ci.austin.mn.us](#); [brownsdale.mn.clerk@frontiernet.net](#); [jforthun@dextermn.com](#); [cityclerk@dextermn.com](#); [cityofelktonmn@gmail.com](#); [ryan@cityofgrandmeadow.com](#); [cityclerk@cityofgrandmeadow.com](#); [enkoppen@smig.net](#); [cityclerk@leroymn.com](#); [rcbfrank@hotmail.com](#); [cityclerk@lylemn.org](#); [mapleview@outlook.com](#); [rmathias@inbox.com](#); [racinemntreas@gmail.com](#); [bgreenlee@isd500.k12.mn.us](#); [cityofrosecreek@gmail.com](#); [cityofsargeantmn@outlook.com](#); [jim.kiefer53@gmail.com](#); [seana@foxelectricinc.com](#); [cityofwaltham@gmail.com](#); [kloecknerj@hotmail.com](#); [adamstownship10@outlook.com](#); [dlbray@smig.net](#); [austintownship@gmail.com](#); [rice.beth@yahoo.com](#); [tallcorn49@gmail.com](#); [dweness@lakes.com](#); [dextertownship@gmail.com](#); [rovogt58@hotmail.com](#); [dhanson80@gmail.com](#); [Jake_jodie07@yahoo.com](#); [holstluann@gmail.com](#); [duaneamortenson@gmail.com](#); [lnkallas@gmail.com](#); [timstransport@frontiernet.net](#); [rice.beth@yahoo.com](#); [kirtzfarm@gmail.com](#); [loditwpmn2019@gmail.com](#); [baldnerd@northlandbuildings.com](#); [lmkenyon2@gmail.com](#); [kathyvoightlcm@gmail.com](#); [bpmtractorhut@hotmail.com](#); [dawn@lifemowercounty.org](#); [rkuhlman727@gmail.com](#); [pvtownclerk@gmail.com](#); [bbconstruction8830@gmail.com](#); [brittanygeerdes@gmail.com](#); [supholstredrock@gmail.com](#); [redrocktownship@gmail.com](#); [rigronseth@gmail.com](#); [sargeanttownshipclerk@gmail.com](#); [mlthoen@yahoo.com](#); [normhaq@smig.net](#); [walthamtownship@hotmail.com](#); [shelly6937@hotmail.com](#); [Michael.R.Peterson@state.mn.us](#); [cody@mowerdistrict.org](#); [mark.schoenfelder@state.mn.us](#); [erynn.jenzen@state.mn.us](#); [abumgardner@austinutilities.com](#); [schultz.tammy@mayo.edu](#); [jkrueger@fmcs.coop](#); [joey.page@austin.k12.mn.us](#); [jqobel@lyle.k12.mn.us](#); [jbjohnson@leroy.k12.mn.us](#); [pbesel@qm.k12.mn.us](#); [shall@isd.500.k12.mn.us](#); [eli.szydlo@redcross.org](#); [Erin@unitedwayfc.org](#); [Marie.Lewis@usc.salvationarmy.org](#); [rich.hall@co.freeborn.mn.us](#); [dkullot@co.fillmore.mn.us](#); [kristen.sailer@steelecountymn.gov](#); [matt.maas@co.dodge.mn.us](#); [jonathan.jacobson@olmstedcounty.gov](#); [mtch911@osage.net](#)
Cc: [Bonnie K Hundrieser](#); ["Stacey Stark"](#)
Subject: Meeting Invitation- Mower County Hazard Mitigation Plan
Date: Friday, January 10, 2025 7:07:42 AM
Attachments: [image001.png](#)

MOWER COUNTY HAZARD MITIGATION PLAN UPDATE – MEETING INVITATION

Greetings,

Your presence is requested at a Planning Team Meeting for the update of the **Mower County Hazard Mitigation Plan**. You are requested to participate in this meeting because you have a position of administrative or departmental responsibility within 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 conferencing:

Date: Friday, February 21, 2025

Time: 9:00-10:30 AM

RSVP: https://umn-private.zoom.us/webinar/register/WN_OuUkwtGdT4iz4LeFFk2cuw

(Ctrl+Click to follow link) When you register, you will be placed on an RSVP list and will be sent an email confirmation. If you are not able to attend, please seek to send another representative in your stead.

About the Hazard Mitigation Plan

In order to maintain eligibility for FEMA Hazard Mitigation Assistance (HMA) Grant Program funding, the county's hazard mitigation plan must be updated 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 Mower County and will result in the identification of mitigation actions that

will help to reduce or eliminate the impact of future hazard events.

Meeting Information

This meeting will be facilitated by personnel from U-Spatial at the University of MN Duluth who are working closely with us on this project. The purpose of this meeting is to present on the update of the Mower County HMP update and gather stakeholder feedback on several key discussion items, including:

- 1) Prioritization of the natural hazards to be profiled in the plan,
- 2) Identification of local vulnerabilities (i.e., infrastructure and populations),
- 3) Ideas for local mitigation actions for implementation, and
- 4) Review of FEMA Hazard Mitigation Assistance grant funding opportunities.

About FEMA HMA Grant Funding:

To learn more about FEMA's HMA grant programs, please review the following:

[FEMA Mitigation Assistance Program and Policy Guide, Effective July 30, 2024](#)

At a glance info: See Table 4, Eligible Activities by Program (page 43)

Please note that representatives from the county, local governments, and other stakeholder agencies/organizations **must** have documented participation in the planning process in order to formally adopt the plan and be eligible to apply for future FEMA HMA grants.

We look forward to you joining us for this important meeting.



Thank you,

Amy

Amy (Lammey) Bramwell

Emergency Manager

(d) 507-437-9483 (C) 507-279-9685

IMPORTANT NOTICE: The content of this email is confidential and intended for the recipient specified in message only. It is strictly forbidden to share any part of this message with any third party, without a written consent of the sender. If you received this message by mistake, please reply to this message and follow with its deletion, so that we can ensure such a mistake does not occur in the future.

Mower County Hazard Mitigation Plan Update 2025 Planning Team Meeting #1

FEBRUARY 21, 2025



Welcome & Introductions

U-Spatial@UMD Project Leads



Stacey Stark
Project Manager
U-Spatial@UMD

Mower County Project Lead

- Amy Bramwell, Mower County
Emergency Management Director



Bonnie Hundrieser
HM Planning Specialist
Hundrieser Consulting LLC



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

PRESENTER: STACEY STARK

Meeting Participation

To make a comment or ask a question, please use the chat or raise your hand to speak.

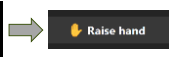
PLEASE REMAIN MUTED AND VIDEO OFF SO EVERYONE CAN HAVE THE BEST EXPERIENCE.

USE CHAT:

- To send a message to everyone
- To send a message to individuals or the presenters
- To 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



The purpose of this meeting is to formally convene the **Mower County HMP Planning Team** for a presentation on the plan update and to discuss key items required for the plan update.

Agenda

- Overview of HMP Key Points
- Review of Past Plan Hazard Risk Priorities, Hazard Profiles, and Current Hazard Prioritization
- Overview of Mitigation Strategies
- Overview of FEMA HMA grant program
- Discuss local mitigation ideas
- Overview of Next Steps

PRESENTER: STACEY STARK

Overview of HMP Key Points

MOWER COUNTY 2025 HMP UPDATE

PRESENTER: BONNIE HUNDRIESER

Plan Requirement



The Hazard Mitigation Plan (HMP) is a requirement of the Federal Disaster Mitigation Act of 2000 (DMA 2000).

- The development of a local government plan is required to maintain eligibility for FEMA HMA grant programs.
- Plans must be updated every 5 years.
- Must address all jurisdictions and engage key stakeholders + the public
- Must be approved by FEMA for meeting all federal requirements.

Mower County HMP Update 2025

- The updated plan will cover a 5-year window for implementation and grant program eligibility (2026-2031)
- Participating jurisdictions must have documented engagement in the planning process and adopt the final plan.

PRESENTER: BONNIE HUNDRIESER

Plan Purpose



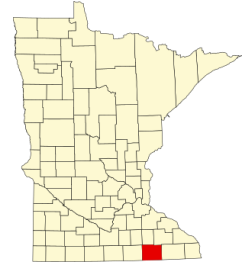
The purpose of the HMP is to:

- **Conduct risk assessment** (history, future probability, impacts of natural hazards)
- **Conduct vulnerability assessment** (at-risk critical infrastructure and populations)
- **Conduct capabilities assessment** (plans, programs, policies, partnerships, funding, etc in place or that are lacking)
- **Develop plan of action** (strategies and mitigation actions for implementation).

PRESENTER: BONNIE HUNDRIESER

Who the Plan Covers

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



The plan also takes into consideration the needs and concerns of other stakeholders such as schools, watershed districts, and agencies or organizations involved in mitigation or services to vulnerable populations within the county.

PRESENTER: BONNIE HUNDRIESER

Who Participates



Key Stakeholders

Local government as well as related non-governmental agencies & organizations must participate.

- 2 planning team meetings
- Public outreach
- Provision of local information (LMS forms, other data)
- Mitigation Action Charts
- Final plan review

The Public

The public must have an opportunity to learn about and provide input to the plan update.

- Use of news releases, social media, local bulletin boards, and public meetings or events.
- Must document local-level concerns and mitigation ideas
- Consider how to engage with underserved communities and vulnerable populations.

POLL #1

PRESENTER: BONNIE HUNDRIESER

Overview of Plan Content

MOWER COUNTY 2025 HMP UPDATE

PRESENTER: STACEY STARK

Plan Content

Hazard Identification

- The HMP addresses the **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

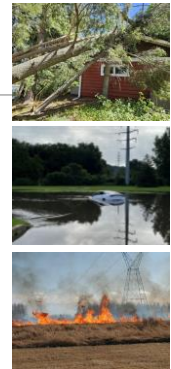
Natural hazard categories as per the State Hazard Mitigation Plan

PRESENTER: STACEY STARK

Plan Content

Risk Assessment

- History of events
- Probability of occurrence
- Severity
- Climate Change
- Identify if and how risk priorities have changed since the last plan. (Increased / Decreased)



PRESENTER: STACEY STARK

Plan Content

Vulnerability Analysis

- Inventory of critical infrastructure.
- Identify specific, local-level impacts and vulnerabilities.
- Includes local-level capabilities assessment that supports mitigation or identifies gaps
- Identify any factors (e.g. new development) that may increase the community's vulnerability.
- Review social vulnerability factors.



POLL #2

PRESENTER: STACEY STARK

Timeframe for development & Plan Format

Timeframe:

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

- The Mower County Plan will be completed in 2025.

Format:

- PDF document (paper version)
- Interactive website companion
- Developed and hosted by U-Spatial at UMD



Example HMP website

PRESENTER: STACEY STARK

Hazard Prioritization

REVIEW OF THE HAZARD RISK PRIORITIES FOR
MOWER COUNTY

PRESENTER: STACEY STARK

Mower County Past Prioritization of Hazards

This is at a
county level

HAZARD	Mower Previous Plan
Flooding	High
Winter Storms	High
Windstorms	High
Tornadoes	High
Hail	Moderate
Lightning	Low
Extreme Cold	Moderate
Extreme Heat	Moderate
Drought	Moderate
Wildfire	Low
Landslides	not profiled
Land Subsidence	n/a
Dam/Levee Failure	not profiled

POLL #3

PRESENTER: STACEY STARK

Mower County 2025 Update of Hazard Prioritization

Considerations:

- Increase/Decrease of events
- Local vulnerabilities (impacts)
- New development/population growth

HAZARD	Mower 2025
Flooding	
Winter Storms	
Windstorms	
Tornadoes	
Hail	
Lightning	
Extreme Cold	
Extreme Heat	
Drought	
Wildfire	
Landslides	
Land Subsidence	
Dam/Levee Failure	

PRESENTER: STACEY STARK

Hazard Prioritization Poll results and discussion

Do any of these countywide hazards NOT
apply in a city?

PRESENTER: STACEY STARK

Comments or Questions?

Overview of Mitigation Actions & FEMA grants

DEVELOPMENT OF MITIGATION ACTIONS AND
ACTIVITIES ELIGIBLE FOR FEMA HAZARD
MITIGATION ASSISTANCE GRANT FUNDING

PRESENTER: STACEY STARK

PRESENTER: BONNIE HUNDRIESER

Mitigation Action Charts



MACs reflect each jurisdiction's plan of action to reduce the impacts of future natural hazard events. They are based on the information gathered from each community during the planning process.

- **Must** address hazards of moderate to high priority.
- **Must** address identified local vulnerabilities.
- **Must** identify priority, status, timeframe, responsibility, how incorporation/implementation will occur, and possible funding.

- ★ Eligible FEMA HMA grant activities **must** be identified in the risk assessment and plan of action.

PRESENTER: BONNIE HUNDRIESER

CITY OF BALATON				Mitigation Action Chart			
#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
5	Extreme Cold	Education & Awareness Programs	Conduct outreach to property owners on how to avoid freezing pipes during periods of extreme cold.	Existing High 2025-2030	City Admin / City EM	We do this as part of our outreach during periods of extreme cold. We remind homeowners to run a stream of hot water to avoid frozen pipes during periods of extreme cold.	City Funding
6	Severe Winter & Summer Storms	Mitigation Preparedness & Response Support	Obtain a portable generator for our City Hall and Community Center that serves as our local shelter if people are displaced from a severe storm event or extended power outage.	New High 2025-2030	City EM / City Public Works	The city will work to purchase a generator as funding is available. If necessary, we will seek possible outside grant funding.	City Funding, FEMA 5% Initiative Grant Funding
7	Severe Summer Storms	Structure & Infrastructure Projects	Work with the local mobile home park owner to construct a storm shelter or tornado safe room.	New High 2025-2030	City EM, Public Works	The city will work with our local mobile home park operator to evaluate possible shelter solutions, or to establish an alternate facility location for residents to take shelter. The city would work with Leon County Emergency Management to seek potential FEMA grant funding for a tornado safe room.	City Funding, FEMA BRAC grant funding
8	Drought	Local Planning & Regulations / Education & Awareness Programs	Establish and enforce watering use restrictions when in periods of severe drought and raise public awareness of water conservation measures.	New Moderate 2025-2030	City Admin	The city will enforce emergency water use restrictions as per direction from the MSF DWR. The city will also do outreach to help make residents aware of limitations on non-essential water use. We recently developed a new lawn irrigation ordinance.	City Funding
9	Flooding	Structure & Infrastructure Projects	Implement new storm sewer upgrades as construction projects and purchase additional pumps in the event of flooding.	Existing Moderate 2025-2030	City Public Works	Our public works staff monitors and addresses any stormwater infrastructure upgrades and equipment as needed.	City Funding

FEMA HMA Grant Funding



FEMA

Example eligible grant activities:

- All applicants **must** be covered by an approved HMP and have formally adopted the plan.
- Projects **must** be addressed in the risk assessment and be identified in the plan of action.
- Several different grant programs
- State Hazard Mitigation Officer is the main POC for questions
- Property Acquisition
- Tornado Safe Rooms
- Burying Powerlines
- Wildfire Mitigation
- Soil Stabilization
- Minor Localized Flood Reduction
- Green Infrastructure
- "5% Initiative" (e.g. warning systems, generators, public awareness/education campaigns)

PRESENTER: BONNIE HUNDRIESER

Overview of Mitigation Strategies

THE FOLLOWING STRATEGIES ARE RECOMMENDED GUIDANCE IN THE DEVELOPMENT OF LOCAL MITIGATION ACTIONS

LOCAL PLANNING & REGULATIONS

These actions include policies or codes that influence the way land is developed and structures are built, and also incorporate mitigation into other plans.

- Limit or restrict development in floodplain areas
- Adopt and enforce building codes
- Improve stormwater management planning
- Incorporate mitigation into comp plans
- Enforce watering / burning restrictions during periods of drought

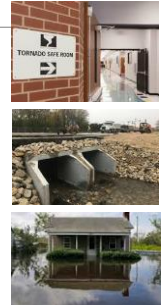


PRESENTER: BONNIE HUNDRIESER

STRUCTURE & INFRASTRUCTURE PROJECTS

These actions protect structures and infrastructure by changing them or removing them from danger.

- Construction of tornado safe rooms.
- Burying powerlines
- Property acquisition for properties at risk to repetitive flooding or failure to landslides
- Infrastructure retrofit (upsizing culverts, other road & bridge projects)
- Protection of vulnerable critical infrastructure such as lift stations and Fire Halls

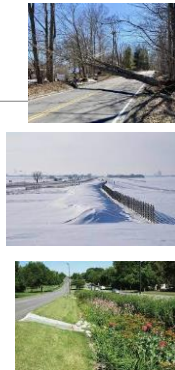


PRESENTER: BONNIE HUNDRIESER

NATURAL SYSTEMS PROTECTION

These actions use a natural systems approach to minimize damage and losses from natural hazard events.

- Tree management near roads & powerlines
- Floodplain and stream restoration
- Soil stabilization on at-risk slopes
- Wildfire fuels reduction & defensible space
- Living snow fences to reduce drifting
- Rain gardens to slow impacts of rain events



PRESENTER: BONNIE HUNDRIESER

EDUCATION & AWARENESS PROGRAMS



These actions inform and educate the community to raise awareness of hazards and ways to mitigate risk.

- Promoting sign up for CodeRED etc.
- Sharing information on severe weather awareness
- Promoting personal preparedness
- Tornado season education
- Outreach to vulnerable populations
- Wildfire safety (creation of defensible space, burning restrictions)

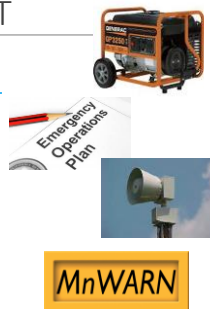


PRESENTER: BONNIE HUNDRIESER

MITIGATION PREPAREDNESS & RESPONSE SUPPORT

These actions are typically not considered mitigation, but support reduction of the effects of damaging natural hazard events.

- Flood fight plans and equipment
- Installing generator backup power
- Development of EOPs
- Shelter planning and training
- Working with facilities that care for vulnerable populations (e.g. schools, nursing homes)
- Installation of outdoor warning sirens.
- Joining MnWARN for utility disaster mutual aid



PRESENTER: BONNIE HUNDRIESER

Comments or Questions?

Do you have any ideas for specific mitigation activities for implementation?

PRESENTER: BONNIE HUNDRIESER



Following Planning Team Meeting #1

COMPLETION OF LOCAL MITIGATION SURVEY FORMS

Representatives from Mower County and each city jurisdiction will participate in filling out Local Mitigation Survey forms. These forms include:

- Local hazard identification & risk prioritization.
- Local vulnerabilities (critical infrastructure, populations or assets)
- Local-level capabilities (programs, policies, staff, funding)
- Review past mitigation actions/identify new mitigation projects.

PRESENTER: BONNIE HUNDRIESER

Questions?

What questions do you have for
U-Spatial@UMD about development of the
HMP or next steps?

PRESENTER: STACEY STARK

Contact Information

Stacey Stark, MS, GISP

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Bonnie Hundrieser, HM Planner

Hundrieser Consulting LLC

hundrieserconsulting@outlook.com

218-343-3468

U-SPATIAL
UNIVERSITY OF MINNESOTA DULUTH
Driven to Discover



PRESENTER: STACEY STARK

Mower County HMP Planning Team Meeting #2

11/21/25 Meeting Summary & Documentation

Summary: On November 21, 2025, Mower County Emergency Management convened key county, city, and township representatives, as well as neighboring jurisdictions and other stakeholders to participate in the 2nd and final Planning Team Meeting for the update of the Mower County Hazard Mitigation Plan (HMP). The purpose of the meeting was to formally convene the Mower County HMP Planning Team for a presentation on the draft plan and discussion of key items prior to public review and submission of the plan to HSEM and FEMA. The meeting was held via Zoom webinar video conference and was facilitated by Jane Lindelof and Bonnie Hundrieser of the U-Spatial@UMD project team.

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

Meeting Participants: A total of **29** people attended the meeting. Representation included elected officials and departmental staff from Mower County and the cities of Adams, Austin, Brownsdale, Grand Meadow, Le Roy, and Taopi. The cities of Dexter, Elkton, Lyle, Mapleview, Racine, Rose Creek, Sargeant, and Waltham were not available to participate and were not in attendance. Other stakeholders, including neighboring jurisdictions, participated in the meeting. A participant list is provided below:

- 1 Amy Bramwell, Mower County Emergency Management, EM Director
- 2 Angela Lipelt, Mower County, Environmental Services Director
- 3 Michael Harvey, Mower County, County Assessor
- 4 Denny Zwiener, Mower County, Assistant Engineer
- 5 Dave Pike, Mower County Sheriff's Office, Chief Deputy / Brownsdale FD
- 6 Cody Fox, Mower SWCD, District Manager
- 7 Pam Kellogg, Mower County Health and Human Services, HHS manager
- 8 Scott Felten, Mower County, Mower County Auditor-Treasurer
- 9 Valerie Sheedy, Mower County, Deputy County Administrator
- 10 John Mueller, Mower County, Commissioner
- 11 Jake Goodale, City of Adams, City Clerk
- 12 Steven Lang, City of Austin, City Engineer
- 13 Kory Robinson, City of Austin Utilities, Director of Finance
- 14 David McKichan, City of Austin Police Dept., Chief of Police
- 15 Jim McCoy, City of Austin Fire Dept., Fire Chief
- 16 James Christian, City of Grand Meadow, City Administrator
- 17 Patty White, City of LeRoy, City Clerk-Treasurer
- 18 Jim Kiefer, City of Taopi, City Clerk

- 19 John Kloeckner, Adams Township, Board Chairman
- 20 Connie Krebsbach, Austin Township, Clerk
- 21 Rodney McDermott, Austin Township, Supervisor
- 22 David Baldner, Lyle Township, Supervisor
- 23 Jim Davis, Grand Meadow Township, Supervisor
- 24 Robert Kuhlman, Pleasant Valley Township, Supervisor
- 25 Nicholas Sorensen, Udolpho Township, Supervisor
- 26 Jamie Goebel, Lyle Public School, Superintendent
- 27 Allan Stadheim, Freeborn Mower Electric Cooperative, Director, E&O
- 28 Jason Harmening, Fillmore County Sheriff's Office, Emergency Manager
- 29 Jonathan Jacobson, Olmsted County, Director of Emergency Management

Presentation Overview: The PowerPoint presentation covered the following items about the process and content of the plan update. A PDF of the presentation slides is included with this meeting summary.

- Meeting Purpose and Agenda
- About the Project Team
- Overview of Plan Update
- Who the Plan Covers
- Who Needs to Participate
- Overview of the Structure of the HMP (Website and PDF)
- Prioritization of Natural Hazards
- Review of Risk Assessment Factors and Hazard Profiles
- Overview of Mitigation Action Charts and FEMA HMA Grant Funding
- Review of Mitigation Strategies and Actions
- Open Discussion (Comments and Questions)
- Discussion of Next Steps & answer your questions

The opening PowerPoint presentation covered a re-cap of key points about the plan update, a review of the Risk Assessment & Vulnerability Analysis, an overview of FEMA Hazard Mitigation Assistance (HMA) grant funding; an overview of how mitigation actions are developed and an overview of the jurisdictional Mitigation Action Charts (MACs). Following the presentation, participants were provided with an opportunity to review and discuss the county and local mitigation action charts. This discussion period offered a facilitated opportunity for participants to consider any changes or new additions to the MACs prior to completion of the draft plan for public review.

MOWER COUNTY HMP PLANNING TEAM MEETING #2 DISCUSSION NOTES

From Steven Lang, City of Austin – (Regarding discussion of property buyouts for flood mitigation): The City of Austin recently received notice from the DNR of a grant in the amount of \$490K for repetitive loss property acquisition. We will likely execute the grant in 2026.

Bonnie Hundrieser response: This is great information. I will follow up with you to get more information and include this in your city LMS form.

Kory Robinson, Austin Utilities – (Regarding Structure & Infrastructure Projects utility retrofits): Would mitigation actions for Austin Utilities be included in the city of Austin mitigation action chart, or would we need our own chart?

Bonnie Hundrieser response: We would include projects for Austin Utilities under the city of Austin mitigation action chart. I will follow up with you to get more information.

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

Included with this meeting summary are the following:

- Mower County HMP Jurisdictional Contact List
- Meeting Invitation to Stakeholders
- PowerPoint Presentation Slides

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

MOWER COUNTY HMP JURISDICTIONAL CONTACT LIST

Following is a list of the stakeholders that received an invitation to participate in Planning Team Mtg. #2 and will receive the meeting summary.

REPRESENTATION	NAME	TITLE
Mower County Emergency Management	Amy Bramwell	Emergency Management Director
Mower County Emergency Management	Dave Pike	Deputy EM Director/Chief Deputy
Mower County Sheriff's Office	Steve Sandvik	County Sheriff
Mower County Administration	Matt Verdick	County Administrator
Mower County Assessor's Office	Michael Harvey	County Assessor
Mower County Auditor/Treasurer's Office	Scott Felten	County Auditor/Treasurer
Mower County Public Works	Denny Zwiener	Asst. Public Works Director (Highway)
Mower County Environmental Services	Valerie Sheedy	Asst. Public Works Director (ES Dept)
Mower County Environmental Services	Angie Lipelt	Environmental Services Supervisor
Mower County GIS	Eric Miller	GIS Administrator
Mower County Health & Human Services	Crystal Peterson	Director of HHS
Mower County Board of Commissioners	John Mueller	District 1 Commissioner/Chair
Mower County Board of Commissioners	Polly Glynn	District 2 Commissioner
Mower County Board of Commissioners	Jerry Reinartz	District 3 Commissioner
Mower County Board of Commissioners	Dan Sparks	District 4 Commissioner
Mower County Board of Commissioners	Mike Ankeny	District 5 Commissioner
City of Adams	Brian Anderson	Mayor
	Jake Goodale	Clerk
City of Austin	Craig Clark	City Administrator
	Steve King	Mayor
	Jim McCoy	Fire Chief
	Dave McKichan	Chief of Police/Emergency Manager
	Steven Lang	Public Works Director
	Brianne Wolf	Clerk
City of Brownsdale	Jeff Foster	Mayor
	Adria Vargas	Clerk
City of Dexter	Justin Forthun	Mayor
	Natalie Carroll	Clerk
City of Elkton		Mayor
	Kari Haarstad	Clerk
City of Grand Meadow	James Christian	City Administrator
	Chris Hyrkas	Clerk
City of Le Roy	Ed Koppen	Mayor
	Patty White	Clerk
City of Lyle	Ron Frank	Mayor
	Diane Witt	Clerk
City of Maplevue		Mayor

	Mysti Acosta	Clerk
City of Racine	Deri Nordsving	Mayor
	Robert Mathias	Clerk
City of Rose Creek	Barbara Greenlee	Mayor
	Kristine Allas	Clerk
City of Sargeant	Roger Nelson	Mayor
City of Taopi	Mary Huntley	Mayor
	James Kiefer	Clerk
City of Waltham	Sean Arndt	Mayor
	Stormy Gunneson	Clerk
Adams Township	John Kloeckner	Chairman/Supervisor A
	Ryan Mullenbach	Clerk
Austin Township	Dennis Bray	Chairman/Supervisor A
	Connie Krebsbach	Clerk
Bennington Township	Brad Davis	Chairman/Supervisor A
	Elizabeth Rice	Clerk
Clayton Township	Richard Schaufler	Chairman/Supervisor A
	David Weness	Clerk
Dexter Township	Matthew Sherman	Chairman/Supervisor A
	Jacob Tapp	Clerk
Frankford Township	Ron Vogt	Chairman/Supervisor A
	Diane Hanson	Clerk
Grand Meadow Township	James Jacobson	Chairman/Supervisor A
	LuAnn Holst	Clerk
Lansing Township	Duane Mortenson	Chairman/Supervisor A
	Kristine Allas	Clerk
Le Roy Township	Tim Freerksen	Chairman/Supervisor A
	Elizabeth Rice	Clerk
Lodi Township	John Kirtz	Chairman/Supervisor A
	Nancy Lewison	Clerk
Lyle Township	David Baldner	Chairman/Supervisor A
	Mary Kenyon	Clerk
Marshall Township	Randy Stephenson	Chairman/Supervisor A
	Kathy Voigt	Clerk
Nevada Township	Bryan May	Chairman/Supervisor A
	Dawn Helgeson	Clerk
Pleasant Valley Township	Robert Kuhlman	Chairman/Supervisor A
	John Thompson	Clerk
Racine Township	Bruce Bucknell	Chairman/Supervisor A
	Brittany Stevens	Clerk
Red Rock Township	David Holst	Chairman/Supervisor A
	Roxanne Holst	Clerk
Sargeant Township	Rande Gronseth	Chairman/Supervisor A

	Kelsey Gronseth	Clerk
Udolpho Township	Linn Thoen	Chairman/Supervisor A
	Norman Hagstrom	Clerk
Waltham Township	Eugene Anderson	Chairman/Supervisor A
	Amanda Kiefer	Clerk
Windom Township	Tom Verdoorn	Chairman/Supervisor A
	Sheldon Sayles	Clerk
LOCAL & REGIONAL AGENCIES INVOLVED IN HAZARD MITIGATION		
HSEM Region 1	Mike Peterson	Region 1 Regional Program Coordinator
Mower Soil & Water Conservation District	Cody Fox	District Manager
MnDOT District 6	Mark Schoenfelder	District Engineer
MN DNR Ecological and Water Resources Division	Todd Piepho	Area Hydrologist
BUSINESSES, ACADEMIA, AND OTHER PRIVATE ORGS.		
Austin Utilites	Alex Bumgardner	Utility Operations Manager
Mayo Clinic- Austin	Tammy Schultz	Operations Manager
Freeborn/Mower Coop	Jim Krueger	President CEO
Austin Public Schools	Joey Page	Superintendent
Lyle Public School	Jamie Gopal	Superintendent
LeRoy Public School	Jennifer Backer-Johnson	Superintendent
Grand Meadow Public School	Paul Besel	Superintendent
Southland School District	Scott Hall	Superintendent
NONPROFIT ORGS/COMMUNITY-BASED ORGS THAT WORK WITH UNDERSERVED COMMUNITIES AND SOCIALLY VULNERABLE POPULATIONS		
American Red Cross	Eli Szydlo	District Program Manager (SE)
United Way	Erin Haag	Executive Director
Salvation Army	Marie Lewis	Major
NEIGHBORING JURISDICTIONS		
Freeborn County Emergency Management	Rich Hall	Emergency Management Director
Fillmore County Emergency Management	Don Kullot	Emergency Management Director
Steele County Emergency Management	Kristen Sailer	Emergency Management Director
Dodge County Emergency Management	Matt Maas	Emergency Management Director
Olmsted County Emergency Management	Jonathan Jacobson	Emergency Management Director
Mitchell County Emergency Management (IA)	Kris Olson	Emergency Management Director

From: Amy Bramwell

Sent: Wednesday, November 12, 2025 12:38 PM

To: Amy Bramwell <amyl@co.mower.mn.us>

Subject: HAZARD MITIGATION PLAN UPDATE – MEETING INVITATION

MOWER COUNTY

HAZARD MITIGATION PLAN UPDATE – MEETING INVITATION

Greetings,

Your presence is requested at the 2nd and final Planning Team Meeting for the update of the **Mower County Hazard Mitigation Plan (HMP)**. You are requested to participate in this vital meeting because you have a position of administrative or departmental responsibility within either the county, a municipal government, or are a key stakeholder related to the planning process. Emergency Managers from neighboring jurisdictions are also encouraged to attend so we may strengthen our shared mitigation efforts. We will be holding the meeting virtually using Zoom webinar.

Please click on the link below to register.

Date: Friday, November 21, 2025

Time: 9:00 – 10:30 a.m.

[Register here for the meeting](#)

The purpose of this meeting is to provide an overview of the plan and interactive website, including a review of the updated risk assessment for natural hazards that affect the county. We will also discuss the Mitigation Action Charts that will be specific to Mower County and each city, as well as funding opportunities available under the FEMA Hazard Mitigation Assistance grant programs.

Your participation in this meeting and feedback on the draft plan is important to us. The draft Mower County HMP is nearing completion and will be ready for review by planning team members and the public in the coming weeks.

When you register, you will automatically be placed on an RSVP list. If you are not able to attend, please consider sending another representative in your stead.

Thank you,

Amy Bramwell

Emergency Manager / Operations Manager

Mower County Sheriff's Office

201 1st St NE, Suite 1, Austin MN 55912

Office: 507-437-9400

Cell: 507 279-9685

IMPORTANT NOTICE: The content of this email is confidential and intended for the recipient specified in message only. It is strictly forbidden to share any part of this message with any third party, without a written consent of the sender. If you received this message by mistake, please reply to this message and follow with its deletion, so that we can ensure such a mistake does not occur in the future.

Mower County Hazard Mitigation Plan Update 2025 Planning Team Meeting #2

November 21, 2025



Welcome & Introductions

U-Spatial@UMD Project Leads



Stacey Stark
Project Manager
U-Spatial@UMD



Bonnie Hundrieser
HMP Planning Specialist
Hundrieser Consulting LLC

Mower County Project Lead

- Amy Bramwell, Mower County Emergency Management Director



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

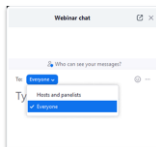
PRESENTER: STACEY STARK

Zoom Logistics

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
- 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



This meeting formally convenes the **Mower County HMP Planning Team** for a presentation on the draft plan and discussion of key items prior to public review and submission of the plan to HSEM and FEMA.

Agenda

- Recap of Key HMP Points
- Preview of Deliverables
- Review of Risk Assessment & Vulnerability Analysis in Website
- Overview of FEMA HMA Funding and Mitigation Action Charts
- Review & Feedback
- Next Steps

PRESENTER: STACEY STARK

Overview of Plan Update

- Mower County is updating its **Hazard Mitigation Plan (HMP)** to fulfill a state & federal requirement.
- The plan must be updated every 5 years. The last plan was adopted in 2015.
- The purpose of the plan is to identify & assess natural hazards that pose risk to the county and its jurisdictions and **develop long-term strategies and mitigation actions** that will help to reduce or eliminate the impact of future hazard or disaster events.



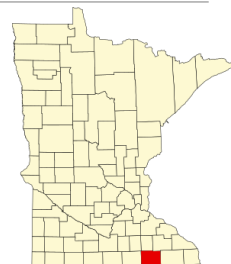
Hazard Mitigation is any action taken to reduce or eliminate long term risk to people and property from natural disasters.

PRESENTER: BONNIE HUNDRIESER

Who the Plan Covers

This is a **multi-jurisdictional plan** that covers all of Mower County, including all **14 cities** and **20 townships** within the county.

The plan also takes into consideration the needs and concerns of other stakeholders such as schools, watershed districts, and agencies or organizations involved in mitigation or services to vulnerable populations within the county.



PRESENTER: BONNIE HUNDRIESER

Stakeholder Involvement



Planning Team

- Representatives from: Mower County, all cities & townships, neighboring jurisdictions, and related agencies or organizations.
- Participation in planning team meetings, public outreach, local mitigation survey, provision of spatial or other data, and review of draft plan.

The Public

- Opportunity to learn about the plan and provide feedback on local-level concerns, mitigation ideas, and review of draft plan.

PRESENTER: BONNIE HUNDRIESER

Deliverables

PDF document:

- All FEMA required elements
- Limited figures & images
- Integrated links to website
- Local mitigation surveys
- Plans & programs in place
- Past mitigation action review
- Planning team meetings
- Outreach & engagement documentation



- Risk and vulnerability of each hazard
- Mitigation actions!

Both formats

Website companion:

- Links to PDF components
- Interactive maps** and context
- Critical infrastructure and assets
- Simple, concise explanations
- Public input form on site

PRESENTER: STACEY STARK

Prioritization of Hazards for Mower County

NATURAL HAZARDS

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

Natural Hazards	Current Priority
Flooding	High
Winter Storms	High
Windstorms	High
Tornadoes	High
Hail	Moderate
Extreme Cold	Moderate
Drought	Moderate
Extreme Heat	Low
Lightning	Low
Wildfire	Low
Landslides	Low
Land Subsidence	Low
Dam/Levee Failure	Low

PRESENTER: STACEY STARK

Hazards Risk Assessment

- Validates the prioritization of hazards
- Provides probability and severity of future events as possible
- Identifies vulnerable populations and structures at risk as possible
- Considers variable geographic vulnerability
- Informs Mitigation Actions in the HMP



PRESENTER: STACEY STARK

Website Demo

Under Development:
z.umn.edu/MowerHMP

Comments and Questions?

Overview of Mitigation Action Charts



Mitigation Action Charts are the end product of the HMP.

They demonstrate a community's 5-year plan to:

- Reduce future risk to natural hazard events.
- Address local vulnerabilities through targeted activities.
- Utilize local capabilities to implement actions.



Eligible FEMA HMA grant activities **must** be identified in the plan of action.

PRESENTER: BONNIE HUNDRIESER

Mower County				Mitigation Action Chart		
#	Hazard	Mitigation Strategy	Mitigation Action	Status/Project Timeline	Responsibility	Comments on Implementation & Integration
18	Flooding	Local Planning & Regulations	Conduct property buyouts to acquire homes affected by repetitive flooding and physically relocate or remove these homes to eliminate future flood damages.	Existing Low 2006-2021	MCEM	There are currently no potential property buyout projects identified by Mower County. The county will continue to evaluate and assist with any potential future acquisition projects and application to FEMA or MCDOT for grant funding to conduct buyouts.
19	Flooding	Local Planning & Regulations Structures & Infrastructure Projects	Work to identify and implement mitigation measures for flood vulnerability to the Pleasant View Addition.	New High 2026-2031	MC Envr. Services	The Mower County Environmental Services Dept. is working to review and plan for flood risk reduction issues for this area. The Pleasant View Addition (PVA) Section 11 is an area subject to flooding. During a 4% (100-year) flood event the area would be under 3 feet of water. There are 23 total lots; 4 are developed with residential structures and the remaining parcels are used recreationally for camping. Lots 1-20 are substantially located in the floodway. Lots 17-23 are 1/4 covered by floodway. 1/4 chance floodplain.
20	Severe Winter Storms	Local Planning & Regulations	Implement snow removal and ice control to ensure the safety of county roads impacted by winter storms.	Existing High 2006-2021	MC Highway Dept.	The Mower County Highway Department conducts winter road maintenance on county roads in accordance with the Mower County Signs and Line Control Safety Policy. Other road maintenance on their respective road systems in accordance with each of their established policy and/or practice.

"Previous Integration of HMP"



In addition to jurisdictional review of local mitigation action charts:

- Participating jurisdictions (county and cities) must provide a description of how the past HMP was integrated into other planning mechanisms.
- If information from the prior HMP was **not** integrated, this just be stated (and if possible, why).

What are "Planning Mechanisms"?

- Plans, Policies, Ordinances
- Public Education & Outreach
- Implementation of projects (i.e., warning sirens, flood mitigation, installation of generators)
- Other EM related programs or projects (i.e., shelter planning)
- County and partner coordination

FEMA Mitigation Grant Funding



FEMA's hazard mitigation assistance provides funding for eligible long-term solutions that reduce the impact of future disasters.

- All applicants **must** be covered by an approved HMP and have formally adopted the plan.
- Projects **must** be addressed in the risk assessment and be identified in the plan of action.

Examples of "Section 404" eligible activities:

- Property Acquisition
- Tornado Safe Rooms
- Bury Overhead Powerlines
- Wildfire Mitigation
- Soil Stabilization
- Flood Risk Reduction
- Green Infrastructure
- Other projects may be eligible (i.e., tornado warning sirens, generators for critical facilities)

PRESENTER: BONNIE HUNDRIESER

Strategy #1 - Local Planning & Regulations



Mower County Examples:

- Enforcement of ordinances that reduce impacts of high rain events (Floodplain, Shoreland)
- New - Work to complete the new joint "Comprehensive Plan 2045" for Mower County and the City of Austin.
- Implementation of watering restrictions during periods of extreme drought.
- Enforcement of state or local regulations for new development.



COMPREHENSIVE PLAN 2045
MOWER COUNTY | CITY OF AUSTIN



PRESENTER: BONNIE HUNDRIESER

Strategy #2 - Structure & Infrastructure Projects

Mower County Examples:

- Installation of new outdoor warning sirens
- Construction of tornado safe rooms
 - Areas of concern: MHP's, 6 camping areas, 2 motor speedways, Lake Louis State Park + other areas of vulnerability
- Burying powerlines to reduce power failure
- Property buyouts (*no identified projects*)
- Local stormwater management improvements
- New - Mower County Envr. Services – Flood risk reduction planning for new Pleasant View Addition



PRESENTER: BONNIE HUNDRIESER

Strategy #3 - Natural Systems Protection



Mower County Examples:

- Conduct vegetation management along roads to reduce the risk of downed trees and branches resulting from heavy snow, ice, or high winds.
- Other examples:
 - Planting Living Snow Fences to reduce snow drifting
 - Installing Rain Gardens to reduce impacts of high rain events



PRESENTER: BONNIE HUNDRIESER

Strategy #4 - Education & Awareness Programs



Mower County Examples:

- Promoting sign-up for CodeRED
- Increasing multi-lingual approach
- Mower County Floodplain Inquiry Tool
- Participation in the NWS Severe Weather Awareness Weeks and Skywarn Storm Spotter Training
- Encouraging residents to be aware of and prepared for severe weather, extreme temperatures, flooding, and extended power outages.
- Jurisdictions identify how they can best share information locally



Mower County Geospatial Hub
Floodplain Inquiry Mower County Website

PRESENTER: BONNIE HUNDRIESER

Strategy #5 - Mitigation Preparedness & Response Support

Mower County Examples:

- Obtaining generators for backup power
- Update of county EOP
- Shelter planning
- Planning assistance to schools and LTC Facilities for vulnerable populations
- Testing of outdoor warning sirens.
- Participation in regional EM planning, training, and exercising



PRESENTER: BONNIE HUNDRIESER

Comments and Questions?



Nov-Dec, 2025

Following Planning Team Mtg. #2

- Completion of City MAC reviews + description of "Previous Integration of Past HMP"
- Government review period
- Public review & comment period (News Release #2) – documentation of local postings

Review of Draft Plan and Public Review & Comment Period



PRESENTER: BONNIE HUNDRIESER



December, 2025

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.
- FEMA "APA" letter**
- EM coordination of adopting resolutions and submission to HSEM.
- Final FEMA approval letter**

PRESENTER: BONNIE HUNDRIESER

Questions?

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

PRESENTER: STACEY STARK

Contact Information

Stacey Stark, MS, GISP

U-Spatial@UMD

slstark@d.umn.edu

218-726-7438

U-SPATIAL
UNIVERSITY OF MINNESOTA DULUTH
Driven to Discover

Bonnie Hundrieser, HM Planner

Hundrieser Consulting LLC

hundrieserconsulting@outlook.com

218-343-3468


**HUNDRIESER
CONSULTING LLC**

PRESENTER: STACEY STARK

Appendix G – Public Outreach & Engagement Documentation

Mower County HMP News Release #1

Record of Public Input & Incorporation

Overview: On September 19, 2024 Mower County Emergency Management put out a news release titled “**Public Input Wanted as Mower County Updates Hazard Mitigation Plan**” to announce the start of the county’s 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. Mower 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?**
- **Are there specific populations or assets in your community that you feel are more vulnerable to future storm events?**
- **What concerns do you have, and what sorts of actions do you feel would help to reduce damages of future hazard events in your community or the county as a whole?**

The public was strongly encouraged contact Mower 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 HMP Jurisdictional Contact List, which includes the names, titles, phone numbers, and email addresses of key stakeholders to be engaged in the HMP update, including county, city, and township contacts; other related agency and organizational 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 Mower County, participating jurisdictions, local media, and other stakeholders. Cities and townships were encouraged to help share the news release locally by posting it on their websites, social media, or community bulletin boards.

Public Input & Incorporation:

Following is a record of public responses to the news release and how their input will be incorporated into the plan update, and if not relevant to be addressed, why.

- No public comments were received by Mower County Emergency Management or individual jurisdictions in response to the news release.

From: [Amy Bramwell](#)
To: [Emergency Management](#)
Cc: [Bonnie K Hundrieser](#)
Subject: Mower County Plan Public Posting Request
Date: Thursday, September 19, 2024 11:35:03 AM
Attachments: [Outlook-3z40xgvn.png](#)
[Mower County Hazard Mitigation Plan Update News Release #1.docx](#)
[Mower County Hazard Mitigation Plan Update News Release #1.pdf](#)

Greetings,

Mower County Emergency Management is commencing work on the update of the Mower County Hazard Mitigation Plan (HMP). Attached is a news release for your information.

Your assistance is requested to post this news release to help notify the public about the plan update and to have an opportunity to provide feedback. If you have a website and/or Facebook page we encourage you to post the news release electronically to those places. You may also post a hardcopy of the news release in locations that are common to the public, such as City Hall. We welcome as many of ways of posting that you can cover. As part of the plan update, we must document the public outreach that was conducted.

Please send me an email letting me know when and where you posted the news release. If you have a city website or social media such as Facebook, please post to those locations. You are also encouraged to post printed hardcopies in areas such as at City Hall, the Post Office, a local Community Center or Senior Center, etc. Outreach to the public should be done in as many ways as you can to reach a wide audience.

All city governments within the county are requested to participate in order to meet FEMA requirements. Townships, businesses, and other agencies or organizations are also strongly encouraged to participate.

If you receive any return public comments, please notify me so we may document this and incorporate this feedback into the plan update.

The timely return of your posting documentation within the **next 7 days** is appreciated.

If you have any questions, please let me know.

Thank you,



Thank you,

Amy

Amy (Lammey) Bramwell

Emergency Manager / Operations Manager

Mower County Sheriff's Office



Emergency Management

201 1st Street NE, Ste. 9 Austin, Minnesota 55912

Phone: (507) 437-9549

Amy Bramwell, Emergency Manager

mcso@co.mower.mn.us

Greetings,

Mower County Emergency Management is commencing work on the update of the Mower County Hazard Mitigation Plan (HMP). Attached is a news release for your information.

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All city governments within the county are requested to participate in order to meet FEMA requirements. Townships, businesses, and other agencies or organizations are also strongly encouraged to participate.

If you receive any return public comments, please notify me so we may document this and incorporate this feedback into the plan update.

The timely return of your posting documentation within the **next 7 days** is appreciated.

If you have any questions, please let me know.

Thank you,

Amy Bramwell



MOWER COUNTY NEWS RELEASE

September 19, 2024

Public Input Wanted as Mower County Updates Hazard Mitigation Plan

Mower County residents, community leaders, business owners, area agencies and organizations now have an opportunity to share how severe weather events impact their property and lives. There is also an opportunity to share their ideas on how to reduce local impacts in the future.

The Mower County Office of Emergency Management is working with U-Spatial at the University of Minnesota Duluth to update the county's Hazard Mitigation Plan (HMP). 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 Mower County HMP is a multi-jurisdictional plan that covers Mower County, including all cities and townships within the county. The Mower County HMP also incorporates the concerns and needs of school districts, watershed districts, and other related agencies, organizations, or businesses participating in the planning process. The plan will be updated by a planning team made up of representatives from county departments, local municipalities, and other key stakeholders. When completed, the plan will be submitted to the Minnesota Department of Homeland Security and Emergency Management and the Federal Emergency Management Agency (FEMA) for approval.

"Hazard mitigation planning is a central part of our emergency management program," said Amy Bramwell, Mower 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:

- Conducting public outreach on severe weather awareness and preparedness
- Improving stormwater management systems to better handle high-rain events
- Removing existing buildings from flood or erosion prone hazard areas
- Increasing defensible space around homes in high-risk wildfire areas
- Constructing tornado safe rooms in vulnerable areas such as mobile home parks
- Burying overhead powerlines that may fail due to heavy snow, ice, or windstorms

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, Mower County is seeking feedback from residents and businesses to incorporate into the plan. Your input will be recorded and incorporated into the planning process:

- **What are the natural hazards you feel pose the greatest risk to your community?**
- **Are there specific populations or assets in your community that you feel are more vulnerable to future storm events?**
- **What concerns do you have, and what sorts of actions do you feel would help to reduce damages of future hazard events in your community or the county as a whole?**

Your feedback is wanted. Comments, concerns, or questions regarding natural disasters and your ideas for mitigation projects should be submitted to Mower County Emergency Management email.

There will be additional opportunities for public feedback throughout the planning process. A draft of the plan will be made available for public review prior to submission of the plan to the State of Minnesota. Future news releases will be shared with the media to notify the public of these opportunities.

The Federal Disaster Mitigation Act of 2000 (DMA 2000) requires counties to update their plan every 5 years to maintain eligibility for FEMA's Hazard Mitigation Assistance (HMA) grant programs.

Contact

Amy Bramwell

Mower County Emergency Management Director

507-437-9483

mcsco@co.mower.mn.us

Mower County HMP News Release #1 (9/19/24)
Chart Documentation of News Release Postings

Jurisdiction or Agency	Posting Representative (name and title)	Date & Location of News Release Posting
Mower County	Denise Barthels, Executive Assistant	11/12/24 Posted to Mower County website homepage
City of Adams	Jake Goodale, Clerk	09/20/2024, posted to Facebook
City of Austin	Brianne Wolf, City Clerk	11/12/24, Posted to meeting notice board at City Hall and on the Austin city website.
City of Brownsdale	Adria Vargas, Clerk	09/20/2024, Posted to window of City Hall
City of Dexter	Natalie Carroll, City Clerk	11/12/24, Posted at City Hall
City of Elkton	Kari Haarstad, City Clerk	11/12/24, Posted at Elkton Community Center
City of Grand Meadow	James Christensen, Clerk	09/19/2024, Posted to Facebook, website and community center bulletin board
City of Le Roy	Patty White, Clerk	09/20/2024, Posted to Facebook
City of Lyle		
City of Mapleview	Mysti Acosta, City Clerk	11/12/24, Posted at City Hall and copies provided to City Councilors.
City of Racine	Melissa Lawler, Deputy Clerk/Treasurer	11/12/24, Posted at City Hall, the Post Office, and the local First Farmers & Merchants Bank
City of Rose Creek	Kris Allas, Clerk	9/20/24, Posted at the Rose Creek Post office, Heidi's Corner and to the city website
City of Sargeant	Roger Nelson, Mayor	11/13/24, Posted at Sargeant Community Center bulletin board
City of Taopi	Jim Kiefer, Clerk	09/26/2024, Posted at the collective Post Office box
City of Waltham		
Austin Public Schools	Joey Page, Superintendent	09/26/2024, Posted to the Austin Community Public School Newsletter
Grand Meadow Public School	Paul Besel, Superintendent	09/20/2024, Posted in the school by the board agendas
Lyle Public School	Jamie Goebel, Superintendent	09/19/2024, Posted to school website
LeRoy Public School	Jennifer Becker, Superintendent	09/19/2024, Posted to school website
Adams Township	Ryan Mullenbach, Clerk	09/23/2024, Posted at Adams Town Hall and to township Facebook page
Lansing Township	Kris Allas, Clerk	09/19/2024, Posted at Lansing Town Hall and at the Post Office

Mower County HMP News Release #2

Record of Public Input & Incorporation

Overview: On December 9, 2025 Mower County Emergency Management put out a news release titled “Public Comment Sought for County’s Hazard Mitigation Plan” to announce the completion of the draft Mower County Hazard Mitigation Plan and invitation for public review and comment. The news release informed jurisdictional stakeholders and the public that a copy of the draft plan, interactive website, and comment form for public feedback was available online with a website link. The public review period for the draft plan was open from 12/9/25 to 12/23/25 a total of 15 days.

Distribution: The news release was sent via email to the county’s HMP Jurisdictional Contact List, which includes the names, titles, phone numbers, and email addresses of key stakeholders to be engaged in the HMP update, including County Contacts, City Contacts, Township Contacts, Other Stakeholder Contacts, and Neighboring Jurisdiction Contacts. 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 Mower 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 Mower County news release and how the input will be incorporated into the plan update, and if not relevant to be addressed, why.

Public Input & Incorporation:

Following is a record of public responses to the Blue Earth County news release and how the input will be incorporated into the plan update, and if not relevant to be addressed, why.

- **There were no public comments submitted via the Mower County HMP website.**
- **No public input was received directly by Mower County Emergency Management or local jurisdictions.**

From: [Amy Bramwell](#)
To: [Amy Bramwell](#)
Cc: [Bonnie K. Hundrieser](#)
Subject: Mower County HMP News Release #2 - Public Review Period - For Release 12/9/25
Date: Tuesday, December 9, 2025 1:30:44 PM
Attachments: [image001.png](#)
[12-9-25 Mower County News Release HMP Public Review.pdf](#)

Greetings,

The public review and comment period is now open for the Mower County Hazard Mitigation Plan from **Tuesday, December 9th to Tuesday, December 23rd**. This public review period is required prior to the plan being sent to FEMA for review. Your assistance is requested in sharing this information with the public.

The **cities of Adams, Austin, Brownsdale, Dexter, Elkton, Grand Meadow, Le Roy, Lyle, Mapleview, Racine, Rose Creek, Sargeant, Taopi, Waltham** are requested to please post this locally. Townships and other related stakeholders involved in the plan update are also encouraged to share the news release. As this is a 15-day review period, please post the release promptly.

Instructions:

- Please post the attached news release to areas where you share information with the public (i.e., your website, social media, or posted hardcopy)
- Please email me to let me know the date and location(s) of where the news release was posted.

There are website links as well as a QR code in the news release that will take you to the HMP website that includes a PDF of the plan and local mitigation action charts. There is also an online feedback form to provide any comments, questions, or other feedback. If you have not already reviewed the plan during the government review period, you are strongly encouraged to do so.

Please respond to let me know where you posted the news release by Friday, Dec. 12th.

Thank you for your assistance!

Thank you,

Amy Bramwell

Emergency Manager / Operations Manager

Mower County Sheriff's Office

201 1st St NE, Suite 1, Austin MN 55912

Office: 507-437-9400

Cell: 507 279-9685

IMPORTANT NOTICE: The content of this email is confidential and intended for the recipient specified in message only. It is strictly forbidden to share any part of this message with any third party, without a written consent of the sender. If you received this message by mistake, please reply to this message and follow with its deletion, so that we can ensure such a mistake does not occur in the future.



MOWER COUNTY NEWS RELEASE

December 9, 2025

Public Comment Sought for Mower County's Hazard Mitigation Plan

Mower County has completed an updated draft of its Hazard Mitigation Plan (HMP) and is now seeking public feedback.

Like all Minnesota counties, Mower County is vulnerable to a variety of natural hazards such as tornadoes, windstorms, severe winter storms, flooding, drought, and extreme temperatures, which can threaten the loss of life and property in the county. Planning for natural disasters minimizes the impact of events that can cause vast economic loss and personal hardship.

All county residents, interested agency or organizational stakeholders are encouraged to review and offer feedback on the draft plan and proposed local mitigation actions. The review and comment period is open for a period of 15 days through December 23, 2025. The public can access the plan using the following links:

[Mower County HMP Website Homepage](#) (feedback form at the bottom of page)

[Mower County Mitigation Action Charts](#) (feedback form at the bottom of page).

The Mower County HMP is a multi-jurisdictional plan that covers Mower County, including all cities and townships within the county. The Mower County HMP also incorporates the concerns and needs of other key stakeholders such as school districts and related agencies, organizations, or businesses participating in the planning process.

Update of the plan has been under direction of Mower County Emergency Management in cooperation with U-Spatial at the University of Minnesota Duluth and representatives from county departments, city and township governments and other participating 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 infrastructure projects for areas that experience repetitive flooding; construction of safe rooms in areas where residents and visitors are vulnerable to tornadoes and severe storm events; burying powerlines that may fail due to heavy snow, ice, or wind storms; ensuring timely emergency communication to the public through warning sirens and mass notification systems; and conducting outreach to increase public awareness of severe weather and personal preparedness.

Hazard mitigation planning helps Mower 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 Mower 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. Mower 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.

Comments, concerns, or questions regarding the draft plan or ideas for mitigation projects should be submitted either via the Hazard Mitigation Plan website online public feedback form or by contacting Mower County Emergency Management.

Contact

Amy Bramwell, Emergency Manager
Mower County Sheriff's Office
507-437-9483
mcsso@co.mower.mn.us

The following QR code may be used to directly access the Mower County Hazard Mitigation Plan interactive website:



Mower County HMP News Release #2 (12/9/25)
Chart Documentation of News Release Postings

Jurisdiction or Agency	Posting Representative (name and title)	Date & Location of News Release Posting
Mower County	Denise Barthels, Admin Assistant	12/9/25, Posted to County Website and Bulletin Board
City of Adams	Jake Goodale, City Clerk	12/16/25, Posted to front window of City Hall and to the City Website and Facebook page.
City of Austin	Dave McKichan, Chief of Police/Emergency Manager	12/10/2025 Posted at City Hall and Library
City of Brownsdale	Adria Vargas, Clerk	12/15/25, Posted at City Hall on Bulletin Board
City of Dexter	Natalie Carroll, Clerk	12/9/25, Posted at City Hall on Bulletin Board
City of Elkton	Kari Haarstand, City Clerk	12/17/25 Posted to City Hall Door
City of Grand Meadow	Jim Christian, City Administrator	12/9/25, Posted to City Website and City Hall Bulletin Board
City of Le Roy	Patty White, Clerk	City Hall, Post Office 12/10/2025
City of Lyle	Diana Witt, Clerk	12/16/25, Posted at City Office
City of Maplevue	Mysti Acosta, Clerk	12/16/25, Posted at City Office
City of Racine	Robert Mathias, City Clerk	12/9/25, Posted at City Hall and at the Post Office
City of Rose Creek	Kristine Allas, City Clerk	City hall, post office, website, Wendel's Repair 12/09/2025
City of Sargeant	Adria Vargas, City Clerk	12/16/25, Posted to City of Sargeant Website and to bulletin board at City Hall
City of Taopi	Jim Kiefer, Clerk	12/9/25, Posted to Community Board
City of Waltham	Stormy Gunneson, City Clerk	12/12/25, Posted to Community Board
LeRoy School	Jennifer Backer-Johnson	12/9/25, Posted to school website
Austin Public Schools	Joey Page, Superintendent	12/9/25, Posted to the school district's official communication bulletin board and in our district newsletters

Appendix H – Mitigation Actions by Jurisdiction

City of Adams

Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
1	All-Hazards	Education & Awareness Programs	Encourage residents to be aware of and prepared for severe weather events, periods of extreme temperatures, and extended power outages.	Existing High 2026-2031	City Admin / City EM	The City of Adams sends out letters and posts information on the city website and social media page. We will work with Mower County Emergency Management to help us participate locally in sharing information during the NWS Severe Weather Awareness Week each April and Winter Hazards Awareness Week each November.	Internal: City Gen. Operating Budget
2	All-Hazards	Education & Awareness Programs	Encourage residents to sign up for the county's emergency notification system to receive alerts on severe weather events.	Existing High 2026-2031	City Admin / City EM	Our city does not currently do this but we could notify residents to do so through the City's webpage and social media outlets as well as send out information on how to do so through the comment section on the quarterly water bills.	Internal: City Gen. Operating Budget
3	All-Hazards	Local Planning & Regulations	Enforce city regulations that help to reduce the risk of storm damages to new development.	Existing High 2026-2031	City Admin	The City of Adams has adopted the Minnesota State Building Code. There is a permitting process that needs to be completed and approved by the Adams City Council before any kind of construction project can begin and the MN State Building Code is enforced during the entire process.	Internal: City Gen. Operating Budget

City of Adams Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
4	All-Hazards	Local Planning & Regulations	Incorporate mitigation strategies across the city's long-term plans and policies for future growth and new development.	Existing Moderate 2026-2031	City Admin	In 2014 Adams developed a wellhead protection plan with the help of the Minnesota Department of Health to protect the city's water supply from being contaminated. We keep this plan updated. In 2021 the city implemented a point-of-sale sewer inspection ordinance which limits the inflow and infiltration of groundwater resulting from cracked pipes, foundation drains, roof drains, sump pumps and other sources of surface runoff from entering the City's wastewater disposal system.	Internal: City Gen. Operating Budget
5	Severe Winter & Summer Storms	Mitigation Preparedness & Response Support	Obtain an emergency backup generator for the city's Emergency Services building and for the Waste Water Treatment Plant to be prepared for power outages.	New High 2026-2031	City PW / City EM	We are currently working with grant writer to fund a new generator for our Emergency Services Building. WWTP generator is outdated and is becoming hard to find parts for repair. A new larger sized generator would be more reliable. The city may seek FEMA HMGP grant funding for these generators if deemed eligible by HSEM.	Internal: City Gen. Operating Budget External: FEMA HMGP grant funding
6	Severe Summer Storms	Mitigation Preparedness & Response Support	Ensure that the city's outdoor warning sirens are maintained and functioning.	Existing High 2026-2031	City EM	The city has 1 outdoor warning siren which we test monthly in coordination with the Mower County Sheriff's Office. The siren is maintained on a regular basis.	Internal: City Gen. Operating Budget
7	Severe Summer Storms	Education & Awareness Programs	Encourage residents to be aware of severe windstorms and tornadic weather, to understand warning siren alerts, and to be prepared with personal evacuation or shelter plans.	Existing High 2026-2031	City Admin / City EM	The city will seek to work with Mower County to promote tornado awareness and safety during the NWS Severe Weather Awareness week each April. Local schools practice tornado drills on an annual basis.	Internal: City Gen. Operating Budget

City of Adams

Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
8	Extreme Cold	Mitigation Preparedness & Response Support	Be prepared to provide emergency sheltering to vulnerable residents during periods of extreme cold temperatures.	Existing High 2026-2031	City Admin, City EM	In the event of an extreme cold temperature event coupled with an extended power outage, the city will work with our fire department and Mower County Emergency Management to address any emergency sheltering that is needed for those who are most vulnerable.	Internal: City Gen. Operating Budget
9	Flooding	Education & Awareness Programs	Encourage residents to keep storm sewers free of debris to avoid clogging and localized flooding.	Existing Moderate 2016-2031	City Admin	We send out posted notices and notices via the city website and social media platforms to inform residents to clear leaves, grass and snow from roadways to prevent clogging of catch basins and over the road flooding.	Internal: City Gen. Operating Budget
10	Flooding	Structure & Infrastructure Projects	Work to address flood mitigation on Hwy. 56 and continue to implement stormwater management improvements to help the city to handle future high rain events.	Existing High 2026-2031	City Public Works Dept. in coord with MnDOT	The city is seeking to work with MNDOT for a stormwater piping project to alleviate the flooding across Hwy 56. We need to upgrade storm water piping to prevent ponding (heavy fall of rain or snow) over the highway. The city is currently working with an engineer and Mower County to reconstruct 2 1/2 blocks with new sanitary sewer (removing clay pipe and replacing with PVC to reduce I&I) and to add new storm sewer to help alleviate with water running across the road during heavy rainfalls.	Internal: PW Dept. Budget External: MnDOT
11	Drought	Local Planning & Regulations / Education & Awareness Programs	Establish water use restrictions and conduct public outreach on water conservation measures during periods of drought.	New Moderate 2026-2031	City Admin	During periods of severe drought, the city will establish watering restrictions as per MN DNR guidance. We work to promote awareness to residents of the restrictions and water conservation measures.	Internal: City Gen. Operating Budget

City of Austin

Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
1	All-Hazards	Education & Awareness Programs	Encourage residents to be aware of and prepared for severe weather events, periods of extreme temperatures, and extended power outages.	Existing High 2026-2031	City Admin / City EM	The City of Austin uses its city website and Facebook page to share information with the public. Individual city departments with Facebook pages also use those. Media releases are also utilized. We will work with Mower County Emergency Management to help us participate locally in sharing information during the NWS Severe Weather Awareness Week each April and Winter Hazards Awareness Week each November.	Internal: City Gen. Operating Budget
2	All-Hazards	Education & Awareness Programs	Encourage residents to sign up for the county's emergency notification system to receive alerts on severe weather events.	Existing High 2026-2031	City Admin / City EM	The city has the link to the county's CodeRED sign up. The Mower County Emergency Management site is posted on our city website.	Internal: City Gen. Operating Budget
3	All-Hazards	Local Planning & Regulations	Enforce city regulations that help to reduce the risk of storm damages to new development.	Existing High 2026-2031	City Admin	The City of Austin, by Ordinance Section 4.01, adopts the Minnesota State Building Code. The code enforcement agency is the City of Austin Building Department and is administered by a State Certified Building Official designated by the municipality. The City has adopted a unified development code, which includes shoreland regulations and a floodplain ordinance, to regulate development in the special flood hazard area. In 2018-24, the city completed a sump pump inspection program to reduce the introduction of clean water into the sanitary sewer system.	Internal: City Gen. Operating Budget

City of Austin

Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
4	All-Hazards	Local Planning & Regulations	Incorporate mitigation strategies across the city's long-term plans and policies for future growth and new development.	Existing Moderate 2026-2031	City Admin	The City of Austin Planning & Zoning Department enforces our floodplain requirements, maintains a Comprehensive Plan to coordinate growth and appropriate land uses. The Public Works Department has been working on the development of a Flood Preparedness Manual. We have conducted a resiliency study of the storm sewer system in the NW part of town susceptible to surface street ponding. The city of Austin participates in the FEMA Community Rating System, which is part of the National Flood Insurance Program. The city has a half-a-cent sales tax and the revenue is all designated towards flood mitigation. This into effect April 1, 2007 and it expires March 31, 2027.	Internal: City Gen. Operating Budget
5	Severe Winter & Summer Storms	Mitigation Preparedness & Response Support	Obtain a new backup generator for the WWTP.	New High 2026-2031	City PW / City EM	The city will purchase a new generator as city funding is available. We may also seek outside grant funding from FEMA HMGP or other sources if possible.	Internal: City Gen. Operating Budget External: FEMA HMGP grant, Other TBD

City of Austin

Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
6	Severe Summer Storms	Mitigation Preparedness & Response Support	Ensure that the city's outdoor warning sirens are maintained and functioning.	Existing High 2026-2031	City EM	The city has 10 outdoor warning sirens which we test monthly in coordination with the Mower County Sheriff's Office. Warning sirens are maintained on a regular basis. In 2022, we added an additional severe weather siren in a newly annexed NE area of the city, where our current system did not provide an overlap.	Internal: City Gen. Operating Budget
7	Severe Summer Storms	Education & Awareness Programs	Encourage residents to be aware of severe windstorms and tornadic weather, to understand warning siren alerts, and to be prepared with personal evacuation or shelter plans.	Existing High 2026-2031	City Admin / City EM	The city will seek to work with Mower County to promote tornado awareness and safety during the NWS Severe Weather Awareness week each April.	Internal: City Gen. Operating Budget
8	Extreme Cold	Mitigation Preparedness & Response Support	Be prepared to provide emergency sheltering to vulnerable residents during periods of extreme cold temperatures.	Existing High 2026-2031	City Admin, City EM	In the event of an extreme cold temperature event coupled with an extended power outage, the city will work with our fire department and Mower County Emergency Management to address any emergency sheltering that is needed for those who are most vulnerable.	Internal: City Gen. Operating Budget
9	Flooding	Structure & Infrastructure Projects	Work to address flood mitigation measures that help the city to handle future high rain events.	Existing High 2026-2031	City Public Works Dept.	The city is working to complete a flood mitigation manual. We are also working to complete the WWTP Levee Project. In 2024, we finalized the construction plans and funding package for the WWTP levee system.	Internal: Local Options Sales Tax External: FEMA HMGP
10	Flooding	Structure & Infrastructure Projects	Work with MnDOT to develop a plan to minimize flooding impacts to Interstate 90.	New High 2026-2031	City Public Works in coord with MnDOT	The city is seeking to work with MnDOT on issues with flooding on I-90 that affect the city of Austin.	External: MnDOT

City of Austin

Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
11	Flooding	Structure & Infrastructure Projects	Acquire and remove miscellaneous structures located near the perimeter of the 100-yr floodplain.	New High 2026-2031	City Admin, City Public Works	The city is working to assess removal of about 50 structures that are still located within the floodplain (residential and commercial) to eliminate risk of repetitive flood damages. The city has successful experience in previous related projects. In 2020-21, we acquired 3 residential structures that were susceptible to flooding and removed the structures from the floodplain.	Internal: Local Options Sales Tax Revenue External: FEMA HMGP, MN DNR FHM
12	Flooding	Structure & Infrastructure Projects	Implement property acquisition of commercial structure along the Cedar River and convert to open space.	In-Progress High 2026-2031	City Admin, City Public Works	The City of Austin recently received notice from the DNR of a grant in the amount of \$490K for repetitive loss property acquisition. We will likely execute the grant in 2026.	Internal: Local Options Sales Tax External: MN DNR FHM Grant funding (Secured)
13	Flooding	Structure & Infrastructure Projects	Convert the gas line running over the Cedar River to underground to reduce risk of failure due to flood damage.	New High 2026-2031	Austin Utilities	Austin Utilities would like to convert the gas line to underground to eliminate the risk of flood damage. In 2024 debris piled up against the structure that holds the gas line and there was a risk of damage and outages if it was lost.	Internal: Local Options Sales Tax External: FEMA HMGP, MN DNR FHM

City of Austin**Mitigation Action Chart**

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
14	Drought	Local Planning & Regulations / Education & Awareness Programs	Establish water use restrictions and conduct public outreach on water conservation measures during periods of drought.	New Moderate 2026-2031	City Admin	During periods of severe drought, the city will establish watering restrictions as per MN DNR guidance. We work to promote awareness to residents of the restrictions and water conservation measures.	Internal: City Gen. Operating Budget

City of Brownsdale

Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
1	All-Hazards	Education & Awareness Programs	Encourage residents to be aware of and prepared for severe weather events, periods of extreme temperatures, and extended power outages.	Existing High 2026-2031	City Admin / City EM	The city shares information with the public by posting information on our city website or posting flyers in public locations, such as City Hall. We will work with Mower County Emergency Management to help us participate locally in sharing information during the NWS Severe Weather Awareness Week each April and Winter Hazards Awareness Week each November.	Internal: City Gen. Operating Budget
2	All-Hazards	Education & Awareness Programs	Encourage residents to sign up for the county's emergency notification system to receive alerts on severe weather events.	Existing High 2026-2031	City Admin / City EM	We will work with Mower County to get information about CodeRED and a link to the Mower County website to encourage residents to sign up.	Internal: City Gen. Operating Budget
3	All-Hazards	Local Planning & Regulations	Enforce city regulations that help to reduce the risk of storm damages to new development.	Existing High 2026-2031	City Admin	The city has adopted MN State Building code. Enforcement is done by CMS/WSE Rochester office. Permits are accepted at the city office and passed to CMS/WSE.	Internal: City Gen. Operating Budget
4	All-Hazards	Local Planning & Regulations	Incorporate mitigation strategies across the city's long-term plans and policies for future growth and new development.	Existing Moderate 2026-2031	City Admin	The city has a wellhead protection plan in place that we keep updated to protect our water supply.	Internal: City Gen. Operating Budget
5	Severe Winter & Summer Storms	Mitigation Preparedness & Response Support	Ensure the city has emergency generator backup power for city services and buildings.	New High 2026-2031	City PW / City EM	The city owns a generator and one can be borrowed from the fire dept. water restrictions during drought if needed.	Internal: City Gen. Operating Budget
6	Severe Summer Storms	Mitigation Preparedness & Response Support	Ensure that the city's outdoor warning sirens are maintained and functioning.	Existing High 2026-2031	City EM	The city has 1 outdoor warning siren which we test monthly in coordination with the Mower County Sheriff's Office. The siren is maintained on a regular basis.	Internal: City Gen. Operating Budget

City of Brownsdale

Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
7	Severe Summer Storms	Education & Awareness Programs	Encourage residents to be aware of severe windstorms and tornadic weather, to understand warning siren alerts, and to be prepared with personal evacuation or shelter plans.	Existing High 2026-2031	City Admin / City EM	The city will seek to work with Mower County to promote tornado awareness and safety during the NWS Severe Weather Awareness week each April.	Internal: City Gen. Operating Budget
8	Extreme Cold	Mitigation Preparedness & Response Support	Be prepared to provide emergency sheltering to vulnerable residents during periods of extreme cold temperatures.	Existing High 2026-2031	City Admin, City EM	In the event of an extreme cold temperature event coupled with an extended power outage, the city will work with our fire department and Mower County Emergency Management to address any emergency sheltering that is needed for those who are most vulnerable. The city has a senior living facility (Legacy of Brownsdale) which would need a higher level of assistance during disaster.	Internal: City Gen. Operating Budget
9	Flooding	Structure & Infrastructure Projects	Work to address flood mitigation measures that help the city to handle future high rain events.	Existing High 2026-2031	City Public Works Dept.	The city of Brownsdale is working with MnDOT for the 2030 Hwy 56 project. We continue to work on local flood mitigation and infrastructure improvements. We have updated a sewer lift station in 2024, and made soil corrections and added rip rap to sewer ponds.	Internal: PW Dept. Budget External: MnDOT
10	Drought	Local Planning & Regulations / Education & Awareness Programs	Establish water use restrictions and conduct public outreach on water conservation measures during periods of drought.	New Moderate 2026-2031	City Admin	During periods of severe drought, the city will establish watering restrictions as per MN DNR guidance. We work to promote awareness to residents of the restrictions and water conservation measures.	Internal: City Gen. Operating Budget

City of Dexter

Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
1	All-Hazards	Education & Awareness Programs	Encourage residents to be aware of and prepared for severe weather events, periods of extreme temperatures, and extended power outages.	Existing High 2026-2031	City Admin / City EM	The city shares information with the public by posting information on our city website and local news media. We will work with Mower County Emergency Management to help us participate locally in sharing information during the NWS Severe Weather Awareness Week each April and Winter Hazards Awareness Week each November.	Internal: City Gen. Operating Budget
2	All-Hazards	Education & Awareness Programs	Encourage residents to sign up for the county's emergency notification system to receive alerts on severe weather events.	Existing High 2026-2031	City Admin / City EM	The city mailed out letters to residents encouraging them to sign up for the Code Red program. We will work with Mower County to provide us with information and link to post this on our city website.	Internal: City Gen. Operating Budget
3	All-Hazards	Local Planning & Regulations	Enforce city regulations that help to reduce the risk of storm damages to new development.	Existing High 2026-2031	City Admin	We use the State building code for examples but have our own zoning ordinance along with other ordinances. The city council serves as our zoning officer.	Internal: City Gen. Operating Budget
4	All-Hazards	Local Planning & Regulations	Incorporate mitigation strategies across the city's long-term plans and policies for future growth and new development.	New Moderate 2026-2031	City Admin	We are looking into implementing a comprehensive plan that would address this mitigation considerations for new development. We also have a wellhead protection plan in place that we keep updated.	Internal: City Gen. Operating Budget
5	Severe Winter & Summer Storms	Mitigation Preparedness & Response Support	Obtain a backup generator for the city's Fire Station / Community Building.	New High 2026-2031	City PW / City EM	The city will work to purchase a generator as city funding is available. This is a critical facility for emergency services and emergency sheltering of residents.	Internal: City Gen. Operating Budget

City of Dexter

Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
6	Severe Summer Storms	Mitigation Preparedness & Response Support	Ensure that the city's outdoor warning sirens are maintained and functioning.	Existing High 2026-2031	City EM	The city has 1 outdoor warning siren which we test monthly in coordination with the Mower County Sheriff's Office. The warning siren is maintained on a regular basis.	Internal: City Gen. Operating Budget
7	Severe Summer Storms	Education & Awareness Programs	Encourage residents to be aware of severe windstorms and tornadic weather, to understand warning siren alerts, and to be prepared with personal evacuation or shelter plans.	Existing High 2026-2031	City Admin / City EM	The city will seek to work with Mower County to promote tornado awareness and safety during the NWS Severe Weather Awareness week each April.	Internal: City Gen. Operating Budget
8	Severe Summer Storms	Local Planning & Regulations / Structure & Infrastructure Projects	Work with the city's mobile home park to address evacuation and shelter planning.	Existing High 2026-2031	City EM	For our city mobile home park we approved the addition of sites with the requirement in the Conditional Use Permit that the occupants have a storm shelter in place. The city will work with the MHP as needed on the storm shelter provision. If a tornado safe room is determined to be a best construction option, we may seek to apply for FEMA HMGP grant funding to support planning and construction of that new facility for the HMP.	External: MHP Funded External: FEMA HMGP
9	Extreme Cold	Mitigation Preparedness & Response Support	Be prepared to provide emergency sheltering to vulnerable residents during periods of extreme cold temperatures.	Existing High 2026-2031	City Admin, City EM	In the event of an extreme cold temperature event coupled with an extended power outage, the city will work with our fire department and Mower County Emergency Management to address any emergency sheltering that is needed for those who are most vulnerable.	Internal: City Gen. Operating Budget

City of Dexter**Mitigation Action Chart**

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
10	Flooding	Structure & Infrastructure Projects	Work to address flood mitigation measures that help the city to handle future high rain events.	Existing High 2026-2031	City Public Works Dept.	The city recently did a Feasibility Study on watermain/street improvements. Our public works department is working to address undersized storm sewers which do not allow for heavy rainfall and are prone to flooding streets/driveways. We will also consider adding new storm sewers along with upgrading the old system. The city has worked to implement other stormwater improvements, including in 2023-2024 we televised and cleaned the city's sanitary sewer system. We are currently repairing infiltration areas and are addressing stormwater issues on Pine Place.	Internal: PW Dept. Budget
11	Drought	Local Planning & Regulations / Education & Awareness Programs	Establish water use restrictions and conduct public outreach on water conservation measures during periods of drought.	New Moderate 2026-2031	City Admin	During periods of severe drought, the city will establish watering restrictions as per MN DNR guidance. We work to promote awareness to residents of the restrictions and water conservation measures.	Internal: City Gen. Operating Budget

City of Elkton

Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
1	All-Hazards	Education & Awareness Programs	Encourage residents to be aware of and prepared for severe weather events, periods of extreme temperatures, and extended power outages.	Existing High 2026-2031	City Admin / City EM	The city of Elkton has a Facebook page that we use to keep citizens aware of inclement weather or any other emergencies. We will work with Mower County Emergency Management to help us participate locally in sharing information during the NWS Severe Weather Awareness Week each April and Winter Hazards Awareness Week each November.	Internal: City Gen. Operating Budget
2	All-Hazards	Education & Awareness Programs	Encourage residents to sign up for the county's emergency notification system to receive alerts on severe weather events.	Existing High 2026-2031	City Admin / City EM	We will continue to encourage our residents to sign up for CodeRED through occasional postings on our city Facebook page as well as locally posted flyers that provide direction to go to the Mower County website.	Internal: City Gen. Operating Budget
3	All-Hazards	Local Planning & Regulations	Enforce city regulations that help to reduce the risk of storm damages to new development.	Existing High 2026-2031	City Admin	The City of Elkton has adopted the Minnesota State Building Code. There is a permitting process that needs to be completed and approved by the City Council before any kind of construction project can begin and the MN State Building Code is enforced during the entire process.	Internal: City Gen. Operating Budget
4	All-Hazards	Local Planning & Regulations	Incorporate mitigation strategies across the city's long-term plans and policies for future growth and new development.	Existing Moderate 2026-2031	City Admin	Our city has a wellhead protection plan in place. We also enforce the city's sump pump ordinance to minimize impacts to the city's stormwater system.	Internal: City Gen. Operating Budget

City of Elkton

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	Purchase one or more new portable generators for emergency backup power for city facilities and critical infrastructure during power outages.	New High 2026-2031	City PW / City EM	We have the need for generators for our utilities (sewer (lift station)/water) and the Community Center if emergency shelter is needed. The city has an old generator that we can use if the need should arise. It is not reliable but the maintenance gets it working when needed. We will seek to budget for new generators as city funding is available. If FEMA or other external grant funding is available for generators we would look into applying.	Internal: City Gen. Operating Budget External: FEMA HMGP grant funding, other TBD
6	Severe Summer Storms	Mitigation Preparedness & Response Support	Work with Mower County Emergency Management to apply for grant funding for a new outdoor warning siren.	Existing High 2026-2031	City EM	The city does not have an outdoor warning siren to warn our residents of severe windstorms or tornado events. The cost for one exceeds our financial capabilities. The city will work with Mower County Emergency Management to see if we may be able to apply for FEMA HMGP grant funding in the future for a siren.	Internal: City Gen. Operating Budget
7	Severe Summer Storms	Education & Awareness Programs	Encourage residents to be aware of severe windstorms and tornadic weather, to understand warning siren alerts, and to be prepared with personal evacuation or shelter plans.	Existing High 2026-2031	City Admin / City EM	The city will seek to work with Mower County to promote tornado awareness and safety during the NWS Severe Weather Awareness week each April.	Internal: City Gen. Operating Budget
8	Extreme Cold	Mitigation Preparedness & Response Support	Be prepared to provide emergency sheltering to vulnerable residents during periods of extreme cold temperatures.	Existing High 2026-2031	City Admin, City EM	In the event of an extreme cold temperature event coupled with an extended power outage, the city will work with our fire department and Mower County Emergency Management to address any emergency sheltering that is needed for those who are most vulnerable.	Internal: City Gen. Operating Budget

City of Elkton**Mitigation Action Chart**

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
9	Flooding	Structure & Infrastructure Projects	Work to address flood mitigation measures that help the city to handle future high rain events.	Existing High 2026-2031	City Public Works Dept.	Our public works department is working to address a city lift station that is prone to flooding during high rain events. We need to upgrade storm water piping to prevent flooding to nearby homes.	Internal: PW Dept. Budget
10	Drought	Local Planning & Regulations / Education & Awareness Programs	Establish water use restrictions and conduct public outreach on water conservation measures during periods of drought.	New Moderate 2026-2031	City Admin	During periods of severe drought, the city will establish watering restrictions as per MN DNR guidance. We work to promote awareness to residents of the restrictions and water conservation measures.	Internal: City Gen. Operating Budget

City of Grand Meadow

Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
1	All-Hazards	Education & Awareness Programs	Encourage residents to be aware of and prepared for severe weather events, periods of extreme temperatures, and extended power outages.	Existing High 2026-2031	City Admin / City EM	The city shares information with the public by posting information on our city website and on the City Facebook page. The school works with our emergency services on drills, and we participate in the statewide programs. We will continue to work with Mower County Emergency Management to help us participate locally in sharing information during the NWS Severe Weather Awareness Week each April and Winter Hazards Awareness Week each November.	Internal: City Gen. Operating Budget
2	All-Hazards	Education & Awareness Programs	Encourage residents to sign up for the county's emergency notification system to receive alerts on severe weather events.	Existing High 2026-2031	City Admin / City EM	Currently, our city does not do this, but we will post information at City Hall, share information on the City Facebook page and website, and include information in our next round of utility billing.	Internal: City Gen. Operating Budget
3	All-Hazards	Local Planning & Regulations	Enforce city regulations that help to reduce the risk of storm damages to new development.	Existing High 2026-2031	City Admin	The City of Grand Meadow has adopted the State Building code and requires building permits that must be approved by Planning and Zoning and City Council prior to construction. However, the city does not enforce the building code.	Internal: City Gen. Operating Budget
4	All-Hazards	Local Planning & Regulations	Incorporate mitigation strategies across the city's long-term plans and policies for future growth and new development.	Existing Moderate 2026-2031	City Admin	The city has an approved wellhead protection plan in place that we keep updated.	Internal: City Gen. Operating Budget

City of Grand Meadow

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	Purchase and install generators at Well House, Public Works Facility, City Hall, and the Community Center for backup power.	New High 2026-2031	City PW / City EM	The city will work to purchase new generators as city funding is available within our budget. If FEMA or other outside grant funding is available for generators we may seek to apply.	Internal: City Gen. Operating Budget External: FEMA HMGP grant funding, Other TBD
6	Severe Summer Storms	Mitigation Preparedness & Response Support	Ensure that the city's outdoor warning sirens are maintained and functioning.	Existing High 2026-2031	City EM	The city has an outdoor warning siren located on the fire hall building, which we test monthly in coordination with the Mower County Sheriff's Office. Warning sirens are maintained on a regular basis, but the system is aging and requiring frequent repairs. System should be updated.	Internal: City Gen. Operating Budget External: FEMA HMGP grant funding, Other TBD
7	Severe Summer Storms	Education & Awareness Programs	Encourage residents to be aware of severe windstorms and tornadic weather, to understand warning siren alerts, and to be prepared with personal evacuation or shelter plans.	Existing High 2026-2031	City Admin / City EM	The city will seek to work with Mower County to promote tornado awareness and safety during the NWS Severe Weather Awareness week each April.	Internal: City Gen. Operating Budget
8	Severe Summer Storms	Local Planning & Regulations / Structure & Infrastructure Projects	Address the need for a new storm shelter or tornado safe room for the city's mobile home park and municipal campground.	Existing High 2026-2031	City EM	We will work with the MHP owner to address construction of a new storm shelter or mobile home park for the residents. The city will also evaluate possible construction options for the campground. We may seek to apply for a FEMA grant for a tornado safe room if that is determined to be our best option to protect MHP residents and campers.	Internal: City Gen. Operating Budget External: MHP Owner, FEMA HMGP safe room grant

City of Grand Meadow

Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
9	Extreme Cold	Mitigation Preparedness & Response Support	Be prepared to provide emergency sheltering to vulnerable residents during periods of extreme cold temperatures. [Note: This applies to extreme heat hazards as well. Center is used as a cooling station.]	Existing High 2026-2031	City Admin, City EM	Our Community Center serves as our local shelter if people are displaced from a severe storm event or extended power outage. However, we need to obtain a backup generator for this facility.	Internal: City Gen. Operating Budget External: FEMA HMGP grant funding, Other TBD
10	Flooding	Structure & Infrastructure Projects	Work to address flood mitigation measures that help the city to handle future high rain events.	Existing / In-Progress High 2026-2031	City Public Works Dept.	The city will work with the county to address improvements to the ditch south of town (Hwy 8), which needs to be re-graded for proper flow and cleaning/ regrading of ditches on east side of town. Inadequate drainage leads to storm sewer backups during heavy rain events. Our public works dept. also continues to work on I&I remediation. Aging infrastructure leads to excessive inflow and infiltration in our sanitary sewer system, and our sewer ponds are under-sized, leading to possible off-season discharge events. We are currently in the planning phase to add additional capacity. We will also work to monitor the condition of the dam at Pine Lawn Park and address it as necessary.	Internal: PW Dept. Budget

City of Grand Meadow**Mitigation Action Chart**

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
11	Drought	Local Planning & Regulations / Education & Awareness Programs	Establish water use restrictions and conduct public outreach on water conservation measures during periods of drought.	New Moderate 2026-2031	City Admin	During periods of severe drought, the city will establish watering restrictions as per MN DNR guidance. We work to promote awareness to residents of the restrictions and water conservation measures.	Internal: City Gen. Operating Budget

City of Le Roy

Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
1	All-Hazards	Education & Awareness Programs	Encourage residents to be aware of and prepared for severe weather events, periods of extreme temperatures, and extended power outages.	Existing High 2026-2031	City Admin / City EM	The city shares information with the public by posting information on our city website and on the City Facebook page. We will work with Mower County Emergency Management to help us participate locally in sharing information during the NWS Severe Weather Awareness Week each April and Winter Hazards Awareness Week each November. In the past we have participated in the statewide tornado awareness program. The local school practices tornado and fire drills.	Internal: City Gen. Operating Budget
2	All-Hazards	Education & Awareness Programs	Encourage residents to sign up for the county's emergency notification system to receive alerts on severe weather events.	Existing High 2026-2031	City Admin / City EM	We encourage residents to sign up for the Code Red program. This will again be posted on the city website and on the City Facebook page.	Internal: City Gen. Operating Budget
3	All-Hazards	Local Planning & Regulations	Enforce city regulations that help to reduce the risk of storm damages to new development.	Existing High 2026-2031	City Admin	The city issues land use permits that need to be approved by the city council prior to the beginning of construction. It is stated in city ordinance that any construction is to be done by licensed contractors and according to the State Building Code.	Internal: City Gen. Operating Budget
4	All-Hazards	Local Planning & Regulations	Incorporate mitigation strategies across the city's long-term plans and policies for future growth and new development.	Existing Moderate 2026-2031	City Admin	The city has an approved wellhead protection plan in place that we keep updated. The city also approves any land use permits to make sure any construction is not done in a flood-prone area.	Internal: City Gen. Operating Budget

City of Le Roy

Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
5	Severe Winter & Summer Storms / Extreme Cold	Mitigation Preparedness & Response Support	Install standby generator connections (electrical, etc.) for the Community Center and another location to serve as emergency shelters.	New High 2026-2031	City PW / City EM	We need to get the electrical connections for a portable generator for the community center and one other location to be used as a designated mass care shelter. This could also be used in the case of severe winter weather / extreme cold if the city would lose electrical power. The city will work to purchase as funding is available in our budget.	Internal: City Gen. Operating Budget
6	Severe Summer Storms	Mitigation Preparedness & Response Support	Ensure that the city's outdoor warning sirens are maintained and functioning.	Existing High 2026-2031	City EM	The city has 2 outdoor warning sirens which we test monthly in coordination with the Mower County Sheriff's Office. Sirens are maintained on a regular basis.	Internal: City Gen. Operating Budget
7	Severe Summer Storms	Education & Awareness Programs	Encourage residents to be aware of severe windstorms and tornadic weather, to understand warning siren alerts, and to be prepared with personal evacuation or shelter plans.	Existing High 2026-2031	City Admin / City EM	The city will seek to work with Mower County to promote tornado awareness and safety during the NWS Severe Weather Awareness week each April.	Internal: City Gen. Operating Budget
8	Flooding	Structure & Infrastructure Projects	Work to address flood mitigation measures that help the city to handle future high rain events.	Existing High 2026-2031	City Public Works Dept.	Our public works dept. continues to address any issues with localized flooding or stormwater conveyance. A storm sewer system was installed in the south part of LeRoy in 2012; this collection system has helped with surface drainage. Recent home construction has included stormwater retention ponds.	Internal: PW Dept. Budget
9	Drought	Local Planning & Regulations / Education & Awareness Programs	Establish water use restrictions and conduct public outreach on water conservation measures during periods of drought.	New Moderate 2026-2031	City Admin	During periods of severe drought, the city will establish watering restrictions as per MN DNR guidance. We work to promote awareness to residents of the restrictions and water conservation measures.	Internal: City Gen. Operating Budget

City of Lyle

Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
1	All-Hazards	Education & Awareness Programs	Encourage residents to be aware of and prepared for severe weather events, periods of extreme temperatures, and extended power outages.	Existing High 2026-2031	City Admin / City EM	The city posts information on our website, post notices at City Hall, Post Office and Freeborn County Coop bulletin board, and Lyle Announcement Facebook page. We will work with Mower County Emergency Management to help us participate locally in sharing information during the NWS Severe Weather Awareness Week each April and Winter Hazards Awareness Week each November.	Internal: City Gen. Operating Budget
2	All-Hazards	Education & Awareness Programs	Encourage residents to sign up for the county's emergency notification system to receive alerts on severe weather events.	Existing High 2026-2031	City Admin / City EM	We can use our online and printed outreach efforts to encourage residents to sign up for the Code Red program.	Internal: City Gen. Operating Budget
3	All-Hazards	Local Planning & Regulations	Enforce city regulations that help to reduce the risk of storm damages to new development.	Existing High 2026-2031	City Admin	We have our own Zoning Ordinance and approve building permits for new construction, decks, fences and accessory buildings.	Internal: City Gen. Operating Budget
4	All-Hazards	Local Planning & Regulations	Incorporate mitigation strategies across the city's long-term plans and policies for future growth and new development.	Existing Moderate 2026-2031	City Admin	The city has a Wellhead Protection Plan in place that we keep updated. The city also approves any land-use permits to make sure any new construction is not done in a flood-prone area.	Internal: City Gen. Operating Budget
5	Severe Winter & Summer Storms	Mitigation Preparedness & Response Support	Obtain a new standby generator for our Emergency Services Building and City Hall/Community Center.	New High 2026-2031	City PW / City EM	The city will work to purchase new generators as available under our city budget. We may also seek to apply for outside grant funding if this would be an eligible project.	Internal: City Gen. Operating Budget External: FEMA HMGP, Other TBD

City of Lyle

Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
6	Severe Summer Storms	Mitigation Preparedness & Response Support	Ensure that the city's outdoor warning sirens are maintained and functioning.	Existing High 2026-2031	City EM	The city has 1 outdoor warning siren which we test monthly in coordination with the Mower County Sheriff's Office. The siren is maintained on a regular basis.	Internal: City Gen. Operating Budget
7	Severe Summer Storms	Education & Awareness Programs	Encourage residents to be aware of severe windstorms and tornadic weather, to understand warning siren alerts, and to be prepared with personal evacuation or shelter plans.	Existing High 2026-2031	City Admin / City EM	The city will seek to work with Mower County to promote tornado awareness and safety during the NWS Severe Weather Awareness week each April.	Internal: City Gen. Operating Budget
8	Extreme Cold	Mitigation Preparedness & Response Support	Be prepared to provide emergency sheltering to vulnerable residents during periods of extreme cold temperatures.	Existing High 2026-2031	City Admin, City EM	In the event of an extreme cold temperature event coupled with an extended power outage, the city will work with our fire department and Mower County Emergency Management to address any emergency sheltering that is needed for those who are most vulnerable.	Internal: City Gen. Operating Budget
9	Extreme Cold	Education & Awareness Programs	Conduct outreach to residents on how to avoid frozen pipes during periods of extreme cold.	Existing High 2026-2031	City Admin	We send reminders out with the utility bills in the winter on how to avoid freezing pipes.	Internal: City Gen. Operating Budget
10	Flooding	Structure & Infrastructure Projects	Work to address flood mitigation measures that help the city to handle future high rain events.	Existing High 2026-2031	City Public Works Dept.	We have some inflow and infiltration in our sanitary sewer system during heavy rain events that we are working on identifying. During heavy rain events we have one area that is prone to sewer backups. Our public works department continues to work on addressing these issues. We clean and televise ½ the city's sanitary sewer lines every year.	Internal: PW Dept. Budget

City of Lyle**Mitigation Action Chart**

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
11	Drought	Local Planning & Regulations / Education & Awareness Programs	Establish water use restrictions and conduct public outreach on water conservation measures during periods of drought.	New Moderate 2026-2031	City Admin	During periods of severe drought, the city will establish watering restrictions as per MN DNR guidance. We work to promote awareness to residents of the restrictions and water conservation measures.	Internal: City Gen. Operating Budget

City of Mapleview

Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
1	All-Hazards	Education & Awareness Programs	Encourage residents to be aware of and prepared for severe weather events, periods of extreme temperatures, and extended power outages.	Existing High 2026-2031	City Admin / City EM	We share information with our residents by posting information at City Hall, sending out letters and or providing information in the notes of our water bills which go out to every resident. We do not have a city website or Facebook page. We will work with Mower County Emergency Management to help us participate locally in sharing information during the NWS Severe Weather Awareness Week each April and Winter Hazards Awareness Week each November.	Internal: City Gen. Operating Budget
2	All-Hazards	Education & Awareness Programs	Encourage residents to sign up for the county's emergency notification system to receive alerts on severe weather events.	Existing High 2026-2031	City Admin / City EM	We will ask Mower County Emergency Management to provide us with a flyer about CodeRED that we can post at City Hall, and add a flyer to go out with our water bills.	Internal: City Gen. Operating Budget
3	All-Hazards	Local Planning & Regulations	Enforce city regulations that help to reduce the risk of storm damages to new development.	Existing High 2026-2031	City Admin	The city adopts and enforces the MN State Building Code. We have a building permit that must be completed and approved by the City Council before building can begin.	Internal: City Gen. Operating Budget
4	All-Hazards	Local Planning & Regulations	Incorporate mitigation strategies across the city's long-term plans and policies for future growth and new development.	Existing Moderate 2026-2031	City Admin	The city has a wellhead protection plan to prevent the water supply from being contaminated. We keep this plan updated.	Internal: City Gen. Operating Budget

City of Mapleview				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	Ensure the city has emergency generators and heating sources for city-critical services and buildings.	New High 2026-2031	City PW / City EM	We need to get a new standby generator for our Emergency Services Building / Community Center which is our designated community mass shelter. We also need 2 backup generators for our lift station & pump house. We also need 2 new sources of heat for them as well. The city will work to purchase a new generators and heating units as city funding is available. We are a small community with a limited budget; we would like seek external grant sources if we would be able to get funding for these purposes.	Internal: City Gen. Operating Budget External: FEMA HMGP, Other TBD
6	Severe Summer Storms	Education & Awareness Programs	Encourage residents to be aware of severe windstorms and tornadic weather, to understand warning siren alerts, and to be prepared with personal evacuation or shelter plans.	Existing High 2026-2031	City Admin / City EM	The city will seek to work with Mower County to promote tornado awareness and safety during the NWS Severe Weather Awareness week each April.	Internal: City Gen. Operating Budget
7	Extreme Cold	Mitigation Preparedness & Response Support	Be prepared to provide emergency sheltering to vulnerable residents during periods of extreme cold temperatures.	Existing High 2026-2031	City Admin, City EM	Our Community Center is our designated community mass care shelter. In the event of an extreme cold temperature event coupled with an extended power outage, we would use this facility. However, we are still working on obtaining a generator for backup power, so it is not yet fully functional as a shelter.	Internal: City Gen. Operating Budget
8	Extreme Cold	Education & Awareness Programs	Conduct outreach to residents to be aware of how to avoid frozen pipes during periods of extreme cold.	Existing High 2026-2031	City Admin, City Public Works	We use our utility bills to notify residents to avoid freezing pipes during sub-zero weather.	Internal: City Gen. Operating Budget

City of Mapleview

Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
9	Flooding	Structure & Infrastructure Projects	Work to address flood mitigation measures that help the city to handle future high rain events.	Existing High 2026-2031	City Public Works Dept.	The city has repaired stormwater infrastructure lining culverts and storm sewer pipes that were in poor condition and we continue to monitor and address any new concerns. In the past we have also worked with the Mower County SWCD /Cedar River Watershed District has worked with the city on water retention projects to hold water back during intensive water events. We will coordinate with these partners again in the future if necessary to address any flooding concerns.	Internal: PW Dept. Budget
10	Drought	Local Planning & Regulations / Education & Awareness Programs	Establish water use restrictions and conduct public outreach on water conservation measures during periods of drought.	New Moderate 2026-2031	City Admin	During periods of severe drought, the city will establish watering restrictions as per MN DNR guidance. We work to promote awareness to residents of the restrictions and water conservation measures.	Internal: City Gen. Operating Budget

City of Racine

Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
1	All-Hazards	Education & Awareness Programs	Encourage residents to be aware of and prepared for severe weather events, periods of extreme temperatures, and extended power outages.	Existing High 2026-2031	City Admin / City EM	The city shares information with the public by posting information on our community Facebook page, posting flyers at City Hall, and by making announcements at City Council meetings. We do not have a city website. We use our FB page to inform residents about issues such as freezing pipes, or to conserve water in drought or if we were to have well issues. We will work with Mower County Emergency Management to help us participate locally in sharing information during the NWS Severe Weather Awareness Week each April and Winter Hazards Awareness Week each November.	Internal: City Gen. Operating Budget
2	All-Hazards	Education & Awareness Programs	Encourage residents to sign up for the county's emergency notification system to receive alerts on severe weather events.	Existing High 2026-2031	City Admin / City EM	We will work with Mower County Emergency Management to provide us with information and a link that we could post at City Hall and the Post Office, share information on the City Facebook group, do direct mailing to all residents, or include a note on outgoing water/sewer bills.	Internal: City Gen. Operating Budget
3	All-Hazards	Local Planning & Regulations	Enforce city regulations that help to reduce the risk of storm damages to new development.	Existing High 2026-2031	City Admin	We inspect sewer and water hook ups. New construction is required to have a state electrical inspection.	Internal: City Gen. Operating Budget
4	All-Hazards	Local Planning & Regulations	Incorporate mitigation strategies across the city's long-term plans and policies for future growth and new development.	Existing Moderate 2026-2031	City Admin	The city has a wellhead protection plan which we keep updated.	Internal: City Gen. Operating Budget

City of Racine 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	Ensure the city has emergency generator backup power for city services and buildings.	New High 2026-2031	City PW / City EM	We have a generator in case of emergency for our water tower and another one for City Hall. We also have one lift station that has a generator on it. We continue to keep these generators maintained to ensure they are operational.	Internal: City Gen. Operating Budget
6	Severe Winter & Summer Storms	Mitigation Preparedness & Response Support	Work to reduce the risk of downed power lines and extended power outages resulting from severe storms.	Existing Moderate 2026-2031	City Public Works Dept.	The city is primarily powered through overhead electric lines except for the newer subdivisions which are underground. We will encourage our electric provider, Tri-County Electric Coop to convert existing overhead powerlines to underground if possible.	Internal: City Gen. Operating Budget External: Electric Coop
7	Severe Summer Storms	Education & Awareness Programs	Encourage residents to be aware of severe windstorms and tornadic weather, to understand warning siren alerts, and to be prepared with personal evacuation or shelter plans.	Existing High 2026-2031	City Admin / City EM	The city will seek to work with Mower County to promote tornado awareness and safety during the NWS Severe Weather Awareness week each April.	Internal: City Gen. Operating Budget
8	Extreme Cold	Mitigation Preparedness & Response Support	Be prepared to provide emergency sheltering to vulnerable residents during periods of extreme cold temperatures.	Existing High 2026-2031	City Admin, City EM	We have a designated place to serve as a community shelter and we have backup generator power. If the need for sheltering exceeded our capacity, we would work with Mower County Emergency Management for assistance if needed.	Internal: City Gen. Operating Budget
9	Flooding	Structure & Infrastructure Projects	Work to address flood mitigation measures that help the city to handle future high rain events.	Existing High 2026-2031	City Public Works Dept.	The city has continued to invest in stormwater infrastructure improvements. Our public works department has been putting catch basins in. We have two streets that are putting in curb and gutter, and we are redoing the understructure so we can control the water runoff better.	Internal: PW Dept. Budget

City of Racine**Mitigation Action Chart**

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
10	Drought	Local Planning & Regulations / Education & Awareness Programs	Establish water use restrictions and conduct public outreach on water conservation measures during periods of drought.	New Moderate 2026-2031	City Admin	During periods of severe drought, the city will establish watering restrictions as per MN DNR guidance. We would use our city Facebook page and other means to ask residents to conserve water in drought or if we were to have well issues.	Internal: City Gen. Operating Budget

City of Rose Creek

Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
1	All-Hazards	Education & Awareness Programs	Encourage residents to be aware of and prepared for severe weather events, periods of extreme temperatures, and extended power outages.	Existing High 2026-2031	City Admin / City EM	We share information on the city's website and Facebook page, via the city alert system (cell phone and email), postings at City Hall, the Post Office, and local businesses. We also use television alerts when needed. We will work with Mower County Emergency Management to help us participate locally in sharing information during the NWS Severe Weather Awareness Week each April and Winter Hazards Awareness Week each November.	Internal: City Gen. Operating Budget
2	All-Hazards	Education & Awareness Programs	Encourage residents to sign up for the county's emergency notification system to receive alerts on severe weather events.	Existing High 2026-2031	City Admin / City EM	We encourage the residents/businesses to sign up for the City's alert system thru our website and also the County's Code RED alert system.	Internal: City Gen. Operating Budget
3	All-Hazards	Local Planning & Regulations	Enforce city regulations that help to reduce the risk of storm damages to new development.	Existing High 2026-2031	City Admin	The city reviews and approves building permits for construction of homes.	Internal: City Gen. Operating Budget
4	All-Hazards	Local Planning & Regulations	Incorporate mitigation strategies across the city's long-term plans and policies for future growth and new development.	Existing Moderate 2026-2031	City Admin	The city has an approved wellhead protection plan. It was developed with the help of the Minnesota Department of Health to protect the city's water supply. City's engineers are diligently assisting us with attainment of loans/grants to update and improve the aging infrastructure and to address flooding issues.	Internal: City Gen. Operating Budget
5	Severe Winter & Summer Storms	Mitigation Preparedness & Response Support	Obtain new backup generators for our utilities lift station & pump house for emergency use during power outages.	New High 2026-2031	City PW / City EM	The city will work to purchase these necessary generators as city funding is available in our budget.	Internal: City Gen. Operating Budget
6	Severe Summer Storms	Mitigation Preparedness & Response Support	Ensure that the city's outdoor warning sirens are maintained and functioning.	Existing High 2026-2031	City EM	The city has 2 outdoor warning sirens which we test monthly in coordination with the Mower County Sheriff's Office. Sirens are maintained on a regular basis.	Internal: City Gen. Operating Budget

City of Rose Creek

Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
7	Severe Summer Storms	Education & Awareness Programs	Encourage residents to be aware of severe windstorms and tornadic weather, to understand warning siren alerts, and to be prepared with personal evacuation or shelter plans.	Existing High 2026-2031	City Admin / City EM	The city will seek to work with Mower County to promote tornado awareness and safety during the NWS Severe Weather Awareness week each April.	Internal: City Gen. Operating Budget
8	Extreme Cold	Mitigation Preparedness & Response Support	Be prepared to provide emergency sheltering to vulnerable residents during periods of extreme cold temperatures.	Existing High 2026-2031	City Admin, City EM	In the event of an extreme cold temperature event coupled with an extended power outage, the city will work with our fire department and Mower County Emergency Management to address any emergency sheltering that is needed for those who are most vulnerable.	Internal: City Gen. Operating Budget
9	Flooding	Structure & Infrastructure Projects	Work to update the city's outdated stormwater infrastructure to better handle future high rain events.	Existing High 2026-2031	City Public Works Dept.	Our city infrastructure is vintage and needs repairs/improvements. The city is currently working with an engineering firm to plan for water/wastewater/stormwater system improvements include adding another sewage pond for the city over the next several years, after successfully receiving funding.	Internal: PW Dept. Budget External: MN PFA, MPCA, MN DNR FHM, FEMA HMGP
10	Drought	Local Planning & Regulations / Education & Awareness Programs	Establish water use restrictions and conduct public outreach on water conservation measures during periods of drought.	New Moderate 2026-2031	City Admin	During periods of severe drought, the city will establish watering restrictions as per MN DNR guidance. We work to promote awareness to residents of the restrictions and water conservation measures.	Internal: City Gen. Operating Budget

City of Sargeant

Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
1	All-Hazards	Education & Awareness Programs	Encourage residents to be aware of and prepared for severe weather events, periods of extreme temperatures, and extended power outages.	Existing High 2026-2031	Mayor & City Council	We are a small city of 63 and do not have a city website or Facebook page. We share information with residents primarily in person at City Council meetings. Residents are encouraged to follow TV or internet for severe weather or emergency related information. We do have an outdoor warning siren that we set off when necessary.	Internal: City Gen. Operating Budget
2	All-Hazards	Education & Awareness Programs	Encourage residents to sign up for the county's emergency notification system to receive alerts on severe weather events.	Existing High 2026-2031	Mayor & City Council	We depend upon the county to do this outreach. We will work to make occasional announcements at City Council meetings reminder residents to go to the Mower County website to sign up.	Internal: City Gen. Operating Budget
3	All-Hazards	Local Planning & Regulations	Enforce city regulations that help to reduce the risk of storm damages to new development.	Existing High 2026-2031	Mayor & City Council	The city has a permit system in place for any new construction.	Internal: City Gen. Operating Budget
4	Severe Winter & Summer Storms	Mitigation Preparedness & Response Support	Ensure the city has emergency generator backup power for city services and buildings.	New High 2026-2031	Mayor & City Council	The city has purchased a generator for backup power. We keep this generator maintained to ensure it is operational for an emergency situation.	Internal: City Gen. Operating Budget
5	Severe Summer Storms	Mitigation Preparedness & Response Support	Ensure that the city's outdoor warning sirens are maintained and functioning.	Existing High 2026-2031	Mayor & City Council	The city has 1 outdoor warning siren which we test monthly in coordination with the Mower County Sheriff's Office. The siren is maintained on a regular basis.	Internal: City Gen. Operating Budget

City of Sargeant

Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
6	Severe Summer Storms	Education & Awareness Programs	Encourage residents to be aware of severe windstorms and tornadic weather, to understand warning siren alerts, and to be prepared with personal evacuation or shelter plans.	Existing High 2026-2031	Mayor & City Council	There are two residential sites that do not have basements for cover in an event. We will encourage these residents to be prepared to shelter in place or be prepared to go to a neighbor's house with a basement. The city will seek to work with Mower County to promote tornado awareness and safety during the NWS Severe Weather Awareness week each April.	Internal: City Gen. Operating Budget
7	Extreme Cold	Mitigation Preparedness & Response Support	Be prepared to provide emergency sheltering to vulnerable residents during periods of extreme cold temperatures.	Existing High 2026-2031	Mayor & City Council	The city has a community center that we would use if we need to shelter residents.	Internal: City Gen. Operating Budget
8	Flooding	Structure & Infrastructure Projects	Work to address flood mitigation measures that help the city to handle future high rain events.	Existing Low 2026-2031	Mayor & City Council	City does not have flooding issues. Flooding is of low priority with no local vulnerabilities. We will continue to monitor and address if we have any future issues for flooding or handling stormwater.	Internal: PW Dept. Budget
9	Drought	Local Planning & Regulations / Education & Awareness Programs	Establish water use restrictions and conduct public outreach on water conservation measures during periods of drought.	New Moderate 2026-2031	Mayor & City Council	During periods of severe drought, the city will establish watering restrictions as per MN DNR guidance. We work to promote awareness to residents of the restrictions and water conservation measures.	Internal: City Gen. Operating Budget

City of Taopi

Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
1	All-Hazards	Education & Awareness Programs	Encourage residents to be aware of and prepared for severe weather events, periods of extreme temperatures, and extended power outages.	Existing High 2026-2031	Mayor & City Council	We are a small city of 56 and do not have a city website or Facebook page. We share information with residents primarily in person at City Council meetings. Residents are encouraged to follow TV or internet for severe weather or emergency related information.	Internal: City Gen. Operating Budget
2	All-Hazards	Education & Awareness Programs	Encourage residents to sign up for the county's emergency notification system to receive alerts on severe weather events.	Existing High 2026-2031	Mayor & City Council	Our city does not do this currently; we could post a flyer in the local township building located in our city. We will ask for Mower County to provide us with an informational flyer.	Internal: City Gen. Operating Budget
3	All-Hazards	Local Planning & Regulations	Enforce city regulations that help to reduce the risk of storm damages to new development.	Existing High 2026-2031	Mayor & City Council	The city approves building permits for construction of homes.	Internal: City Gen. Operating Budget
4	Severe Summer Storms	Education & Awareness Programs	Encourage residents to be aware of severe windstorms and tornadic weather, to understand warning siren alerts, and to be prepared with personal evacuation or shelter plans.	Existing High 2026-2031	Mayor & City Council	The city will seek to work with Mower County to promote tornado awareness and safety during the NWS Severe Weather Awareness week each April.	Internal: City Gen. Operating Budget
5	Extreme Cold	Mitigation Preparedness & Response Support	Be prepared to provide emergency sheltering to vulnerable residents during periods of extreme cold temperatures.	Existing High 2026-2031	Mayor & City Council	In the event of an extreme cold temperature event coupled with an extended power outage, the city will work with Mower County Emergency Management to address any emergency sheltering that is needed for those who are most vulnerable.	Internal: City Gen. Operating Budget

City of Taopi**Mitigation Action Chart**

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
6	Flooding	Structure & Infrastructure Projects	Work to address flood mitigation measures that help the city to handle future high rain events.	Existing High 2026-2031	Mayor & City Council	The city is planning more culvert cleaning and waterway cleaning to prevent any flooding in new construction areas. The city has made culvert replacements to allow faster removal of stormwater. We also work to keep storm sewers clean to prevent flooding backup is an issue.	Internal: PW Dept. Budget
7	Flooding	Structure & Infrastructure Projects	Work with MnDot to clean, and repair, storm sewer drain along Highway 56 to prevent future flooding issues.	Existing High 2026-2031	Mayor & City Council	The city continues to be involved in the Hwy. 56 project with MnDOT.	External: MnDOT
8	Drought	Local Planning & Regulations / Education & Awareness Programs	Establish water use restrictions and conduct public outreach on water conservation measures during periods of drought.	New Moderate 2026-2031	Mayor & City Council	During periods of severe drought, the city will establish watering restrictions as per MN DNR guidance. We work to promote awareness to residents of the restrictions and water conservation measures.	Internal: City Gen. Operating Budget

City of Waltham

Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
1	All-Hazards	Education & Awareness Programs	Encourage residents to be aware of and prepared for severe weather events, periods of extreme temperatures, and extended power outages.	Existing High 2026-2031	Mayor & City Council	The city of Waltham primarily shares information with residents by posting information at the Government Center and during in-person City Council meetings. We do not have a city website or Facebook page. Residents are encouraged to follow TV or internet for severe weather or emergency related information.	Internal: City Gen. Operating Budget
2	All-Hazards	Education & Awareness Programs	Encourage residents to sign up for the county's emergency notification system to receive alerts on severe weather events.	Existing High 2026-2031	Mayor & City Council	We could put a flyer up in the post office and at the Government Center. We could also send a letter in the water bill to encourage sign up for CodeRED. We will work with Mower County Emergency Management to provide us with a flyer we can use to get the word out.	Internal: City Gen. Operating Budget
3	All-Hazards	Local Planning & Regulations	Enforce city regulations that help to reduce the risk of storm damages to new development.	Existing High 2026-2031	Mayor & City Council	Anyone requesting a building permit must submit the plans so the council can approve them first. The city approves building permits for the construction of homes.	Internal: City Gen. Operating Budget
4	All-Hazards	Local Planning & Regulations	Incorporate mitigation strategies across the city's long-term plans and policies for future growth and new development.	Existing Moderate 2026-2031	Mayor & City Council	The city has a wellhead protection plan in place. We also enforce the city's sump pump ordinance to minimize impact to storm sewers. If we have an issue with flooding, we have someone come in to make sure something is not plugged up and we work on keeping the creek cleaned out from brush.	Internal: City Gen. Operating Budget
5	Severe Winter & Summer Storms	Mitigation Preparedness & Response Support	Ensure the city has emergency generator backup power for city services and buildings.	New High 2026-2031	Mayor & City Council	We have a generator to service the community in the event of power outages. We keep the generator maintained to ensure it is operational.	Internal: City Gen. Operating Budget

City of Waltham

Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
6	Severe Summer Storms	Mitigation Preparedness & Response Support	Replace the city's outdoor warning siren.	Existing High 2026-2031	Mayor & City Council	The city has 1 outdoor warning siren which is outdated and has had some problems functioning properly. The city will work with Mower County Emergency Management to see if we would be able to apply for FEMA grant funding or other funding to purchase and install a new warning siren. We would like one that is tied to the county's remote activation system.	Internal: City Gen. Operating Budget External: FEMA HMGP, Other TBD
7	Severe Summer Storms	Education & Awareness Programs	Encourage residents to be aware of severe windstorms and tornadic weather, to understand warning siren alerts, and to be prepared with personal evacuation or shelter plans.	Existing High 2026-2031	Mayor & City Council	The city will seek to work with Mower County to promote tornado awareness and safety during the NWS Severe Weather Awareness week each April.	Internal: City Gen. Operating Budget
8	Extreme Cold	Mitigation Preparedness & Response Support	Be prepared to provide emergency sheltering to vulnerable residents during periods of extreme cold temperatures.	Existing High 2026-2031	Mayor & City Council	In the event of an extreme cold temperature event coupled with an extended power outage, the city will work with our fire department and Mower County Emergency Management to address any emergency sheltering that is needed for those who are most vulnerable.	Internal: City Gen. Operating Budget

City of Waltham**Mitigation Action Chart**

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
9	Flooding	Structure & Infrastructure Projects	Work to address flood mitigation measures to address localized flooding and stormwater infiltration issues.	Existing High 2026-2031	Mayor & City Council	We are working on purchasing new pumps for our lift station for wastewater treatment ponds. We are seeking funding to replace the water tower and piping in half our community; the other half has already been completed. Our lift station is prone to flooding; we are in process of updating the Wastewater Treatment infrastructure. We have some streets and private properties that are subject to flooding due to culverts. Our public works department continues to work on addressing stormwater infiltration issues.	Internal: PW Dept. Budget
10	Drought	Local Planning & Regulations / Education & Awareness Programs	Establish water use restrictions and conduct public outreach on water conservation measures during periods of drought.	New Moderate 2026-2031	Mayor & City Council	During periods of severe drought, the city will establish watering restrictions as per MN DNR guidance. We work to promote awareness to residents of the restrictions and water conservation measures.	Internal: City Gen. Operating Budget

Appendix I – Plan Maintenance & Monitoring Worksheets

During the five-year plan period, the Emergency Management Director (EMD) will require all relevant departments and jurisdictions to report on the status of their mitigation actions. This information will be used to track progress for the next plan update. Participating jurisdictions will use these worksheets to report on the mitigation activities listed in Appendix H.

Mitigation Action Tracking	
Name of Jurisdiction	
Reporting Period	
Describe the action or project.	
Who is responsible for the action?	
Project status:	☐ Complete ☐ In progress, anticipated completion date: _____ ☐ Not started ☐ Canceled
Progress Report	
Has there been any progress with this project so far?	
Are there any obstacles or challenges with this action so far?	
What steps do you need to take to complete this project?	
Other comments:	

Hazard Mitigation Plan Maintenance Schedule			
Plan Maintenance Step	When	How	Who
Monitoring	Twice per year.	Get status updates on jurisdictional mitigation actions, compile progress reports and identify any opportunities for improvement.	Emergency Management Director
Evaluating	Once a year or after a disaster event.	Use a standard form to review how the plan has been carried out so far and record lessons learned.	Emergency Management Director, Lead Jurisdiction Planning Department Manager
Updating	Every 5 years, or after a disaster event.	Review the plan and document necessary updates as necessary for the next plan update.	Emergency Management Director, Lead Jurisdiction Planning Department Manager

The EMD will also seek feedback from the Emergency Managers group on the following:

- Are there any new representatives from jurisdictions, agencies, or organizations that you feel should be included in our stakeholder outreach?
- Do you feel your community has any new vulnerabilities that may be impacted by hazard events? (critical infrastructure, systems, or populations)
- Has your community identified any new mitigation activities that would help reduce risk to future hazard events?
- Are there any funding opportunities or other resources that may be available to help implement local mitigation activities?
- How is your community integrating information from the mitigation plan into other planning mechanisms (such as plans, policies, or partnerships)?