

RED LAKE COUNTY MINNESOTA



2023

Hazard Mitigation Plan



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RED LAKE COUNTY MINNESOTA

HAZARD MITIGATION PLAN

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Section 1 – Introduction

1.1 Introduction

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

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

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

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

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

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

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

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

A dark red rectangular box containing the text "Red Lake County HMP website" in a yellow, italicized serif font.

[Red Lake County HMP website](#)

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

1.1.1 SCOPE

U-Spatial, University of Minnesota, was contracted by Minnesota Homeland Security and Emergency Management using FEMA Pre-Disaster Mitigation (PDM) grant funds to work with Red Lake County Emergency Management to facilitate an update to the 2016 Red Lake 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 Red Lake 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 Red Lake County, including the cities of Brooks, Oklee, Plummer, and Red Lake Falls. The Red Lake 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 Red Lake County after final approval by FEMA (see Appendix B).

Red Lake County has specified the following goals for this plan update:

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

1.1.2 HAZARD MITIGATION DEFINITION

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

- saving lives, protecting the health of the public, and reducing injuries

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

1.2 State Administration of Mitigation Grants

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

Section 2 – Public Planning Process

2.1 Planning Team Information

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

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

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

Table 1. Hazard Mitigation Planning (HMP) Team

Name	Agency/Organization	Participant Title
Mitch Bernstein	Red Lake County Sheriff's Office	County Sheriff/Emergency Management Director
Brad Johnson	Red Lake County Sheriff's Office	Chief Deputy
Kari Moyer	Red Lake County Highway Dept.	Highway Dept. Accountant
Randy Konickson	Red Lake County Highway Dept.	Maintenance Foreman
Mike Flaagan	Red Lake County Highway Dept.	Interim County Engineer
Tyler Amiot	Red Lake County Highway Dept.	County Engineer
Kurt Casavan	Red Lake County Environmental Services	Environmental Officer
Penny Grove	Red Lake County Social Services	Fiscal Supervisor/Security Coordinator
Michelle Nelson	Red Lake County	County Assessor
Allen Remick	Red Lake County	County Commissioner
Kayla Jore	Pennington & Red Lake County Public Health & Home Care	Director
Allison Matter	Inter-County Nursing Service	RN, PHEP Coordinator
Brandon Vogel	City of Plummer Fire Dept.	Fire Chief
Kathy Schmitz	City of Red Lake Falls	City Administrator
Matt Swendra	City of Red Lake Falls	Public Works Supervisor
Karl Kleven	City of Red Lake Falls Fire Dept.	Fire Chief
Kevin Reich	Browns Creek Township / Red Lake County Township Association	Township Supervisor / Township Association Chair
Lyndon Schultz	Louisville Township	Township Supervisor
Diane Kolstoe	Garnes Township	Township Clerk
Stephanie Johnson	Red Lake Electric Cooperative	General Manager
Jacob Ellefson	Otter Tail Power Company	Area Manager

Name	Agency/Organization	Participant Title
Don Nosbisch	MnDOT District 2	Maintenance Superintendent
Paul Konickson	MnDOT District 2	Assistant District Engineer
Jim Guetter	Red Lake County School District & Red Lake Falls School District	Superintendent
Tanya Waldo	Red Lake Soil and Water Conservation District	District Manager
Dan Carroll	MN DNR	NW MN Firewise Specialist
Catherine Johnson	Inter-County Community Council	Executive Director
Christopher Muller	Beltrami County Emergency Management	Emergency Management Director

2.2 Review of Existing Plans, Capabilities & Vulnerabilities

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

In the development of the Red Lake 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 Red Lake County emergency management director and other key county staff and local city officials to collect feedback on local mitigation capabilities and vulnerabilities that either support or hinder the ability to mitigate against natural hazards countywide and at the local level. Following is a summary of the assessment tools used to gather information on local capabilities and vulnerabilities during the planning process:

Capabilities Assessment (hazard-specific): In this assessment, detailed information was collected from Red Lake 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 Red Lake County to support mitigation.

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

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

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

2.3 Planning Process Timeline and Steps

In order to update the 2016 Red Lake County HMP, U-Spatial consultants worked in coordination with Red Lake County Emergency Management and members of the planning team. The updated plan includes new data documenting the types of hazards faced by Red Lake County residents and emergency planning officials as well as new thinking on how to address these hazards.

2.3.1 RED LAKE COUNTY STAKEHOLDER COORDINATION

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

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

To provide opportunity for public input, Red Lake County issued two news releases announcing the plan update and inviting public review and feedback on the draft plan. The news release provided information on where to view the plan and submit comments. The County HMP website, hosted by U-Spatial, and the feedback and mitigation action ideas survey will remain available through the five-year planning period to foster public engagement.

Table 2 documents dates of Hazard Mitigation update meetings and public outreach. The public feedback period for the draft plan was open from 10/17/23 to 10/31/23, for a period of 15 days. Appendix G provides documentation of the public outreach for feedback on the draft plan by Red Lake County and jurisdictions.

At the close of the public outreach period, the U-Spatial consultants worked with the Red Lake County Emergency Manager and members of the planning team to incorporate feedback from the public into the HMP. For more information on the planning process, see Sections 5 and 6.

Table 2. Red Lake County hazard mitigation update meetings and public outreach

Event	Date	Appendix
Kickoff Webinar	7/19/22	Appendix F, Planning Team Meetings
News Release #1	8/1/22	Appendix G, Public Outreach & Engagement Documentation
Planning Team Meeting #1	9/27/22	Appendix F, Planning Team Meetings
Planning Team Meeting #2	9/18/23	Appendix F, Planning Team Meetings
News Release #2	10/17/23	Appendix G, Public Outreach & Engagement Documentation

2.3.2 OVERVIEW OF JURISDICTIONAL PARTICIPATION

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

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

Cities participating in Red Lake 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. Red Lake County and U-Spatial were sensitive to these local challenges and worked to help these local governments to participate using the methods that worked best to accommodate them, such as phone interviews to complete local mitigation survey forms (see Appendix C).

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

Table 3. Jurisdictional participation in planning process

Jurisdiction (2022 Est. Population, Esri)	News Release #1	Planning Team Mtg. #1	Local Mitigation Survey	Mitigation Action Charts	Planning Team Mtg. #2	News Release #2 & Plan Review
Supporting Documentation	App. G	App. F	App. C	Sec. 5.3 App. H	App. F	App. G
Red Lake County (3,880)	X		X	X	X	X
City of Brooks (113)	X		X	X		
City of Oklee (400)	X		X	X		X
City of Plummer (272)	X	X	X	X	X	X
City of Red Lake Falls (1,359)	X	X	X	X	X	X
Neighboring Jurisdictions:						
Pennington County						
Polk County						
Clearwater County						
Beltrami County		X				

Section 3 – Risk Assessment and Vulnerability Analysis

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

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

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

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

3.1 Hazard Identification and Prioritization

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

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

3.1.1 HAZARD PRIORITIZATION

As part of the plan update process, the planning team reviewed, updated, and prioritized the hazards faced by residents of Red Lake County, updated the existing mitigation actions published in the 2016 HMP, and proposed new mitigation actions.

The team examined the hazards identified in the 2016 HMP and adjusted them to reflect the definitions of natural hazards used in the 2019 Minnesota State Hazard Mitigation Plan.

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

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

Table 4. Prioritization of hazards for 2023 Red Lake County HMP Update

Natural Hazards Addressed in the Last Plan	Priority
Tornadoes	Moderate
Winter Storms	Moderate
Extreme Cold	Moderate
Windstorms	Moderate
Hail	Moderate
Flooding	Moderate
Landslides	Moderate - Note, this was increased from low to moderate for the plan update as the city of Red Lake Falls is looking at six properties and a property in Red Lake Falls Township for home buyouts due to landslide risk.
Lightning	Low
Extreme Heat	Low
Wildfire	Low
Drought	Low
Subsidence/Erosion	Low
Dam/Levee Failure	Low

3.1.2 FEMA- AND MINNESOTA-DECLARED DISASTERS AND ASSISTANCE

Another historical perspective is derived from FEMA-declared disasters. Twenty major disasters and three emergency declarations in Red Lake County have been made between 1957 and September 2023; details of these can be viewed on the [Red Lake 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). Red Lake County was included in one State Disaster Declaration.

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

Table 5. Historical hazard mitigation funding awarded in Red Lake County

Project Identifier	Sub-Grantee	Project Type	Project Total	Federal Share
DR-4290-0005-R	Red Lake Falls	200.6: Acquisition of Private Real Property (Structures and Land) - Landslide	\$505,984	\$379,488
DR-1283-0009-R	Red Lake County	301.1: Shoreline Stabilization (Riprap, etc.)	\$24,360	\$18,270
DR-4069-0012-P	Red Lake County	91.1: Local Multihazard Mitigation Plan	\$27,850	\$20,888
DR-1419-0009-P	Northwest Regional Development Comm	91.1: Local Multihazard Mitigation Plan	\$90,000	\$67,500

SOURCE: (FEMA, 2023B)

3.2 Population Vulnerability

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

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

Agency for Toxic Substances & Disease Registry (ATSDR) defines social vulnerability as “...the resilience of communities when confronted by external stresses on human health, stresses such as natural or human-caused disasters, or disease outbreaks” (ATSDR, 2020). Exacerbating these stressors are the increasing number of extreme weather events attributed to Minnesota’s changing climate (MPCA, 2018).

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

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

3.3 Climate Change

Minnesota’s climate is currently changing in ways that are pushing us to adapt to weather patterns and extreme events that pose major threats to our health, homes, environment, and livelihoods. These events cost our state millions in property loss, damaged infrastructure, disrupted business, medical care, and support services, and put residents and responders at risk. Understanding how our weather is changing now and into the

[Climate Change and Natural Hazards](#)

future will help planners and decision-makers in emergency management and supporting fields extend our progress in climate adaptation and lead to more resilient communities (MDH, 2018).

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

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

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

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

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

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

3.4 Jurisdictional Change in Risk or Vulnerability Assessment

Jurisdictions in Red Lake 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, Red Lake County Emergency Management and each city jurisdiction were asked to provide a vulnerability assessment that described what structures, systems, populations, or other community assets were susceptible to damage and loss from specific hazard events. Following are examples of common responses related to noted local vulnerabilities (as preserved in Appendix C: Part A, Question 3) for each jurisdiction. This information was used to help tie local vulnerability back to the exposure of people, buildings, infrastructure, and the environment to the natural hazards listed in Table 4 and to assist local governments in development of related local mitigation actions to reduce risk.

Red Lake County

Flooding: The city of Red Lake Falls has a lift station that is vulnerable to flooding from the Clearwater River.

In the city of Red Lake Falls, Sportsman’s Park is vulnerable to flooding from the Clearwater River.

In the city of Plummer, People’s Park is vulnerable to flooding from the Clearwater River.

In the city of Oklee, Omar Sundrud Park is vulnerable to flooding from the Lost River.

Huot Park (Old Crossing & Treaty County Wayside Park) is vulnerable to flooding from Red Lake River.

City of Brooks

No vulnerabilities to report. We are a small community of 113.

City of Oklee

Flooding: The city’s Omar Sundrud Memorial Park is vulnerable to flooding from the Lost River.

City of Plummer

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

Tornadoes, Windstorms: We have one 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 also active during summer and fall months with RVs and campers and does not have a storm shelter.

Extreme Cold: Residents are susceptible to dangers from extreme cold, especially if the power goes down during winter storm events. We have a high population of senior citizens and low-income residents who are more vulnerable during these events. In the past we have experienced frozen water services. The city has experienced damages to roads from spring frost heaves.

Flooding: Our sanitary lift station is near the river and could be endangered from torrential rains.

City of Red Lake Falls

Tornadoes, Windstorms: We have 2 public campgrounds and a mobile home park that are vulnerable to high wind.

Extreme Cold: We have several homes that are affected by extreme cold and need to run water annually when the water temps reach 35 degrees. Power outages are always a concern with extreme cold.

Flooding: We have 2 lift stations and they have been prone to flooding during high rain events. We have had to sandbag at the arena several years. There have been several river banks sloughing and shifting of soil which has caused damage to many homes along the river.

Drought: The city receives its water from wells and in drought this can affect the water supply and residents will have to conserve.

Landslides: Because of the soil types along the river and within our community, landslides have been a major concern. We have several homes that have cracked windows, doors, loss of yards, severe shifting etc.

3.4.2 FUTURE DEVELOPMENT

Because Red Lake 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. Red Lake 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 Red Lake County HMP update, jurisdictions were asked to describe if there were any factors related to population growth, zoning, or development they felt have increased their community’s vulnerability to future severe weather or disaster events. Following is a compilation of common responses as noted in Appendix C: Part A, Question 5.

Red Lake County

No increases in vulnerability were noted by Red Lake County or city jurisdictions related to population growth, zoning, or new development.

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

Section 4 – Hazards

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

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

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

4.1 Flooding

Flooding is the most significant and costly natural hazard in Minnesota. Eighteen of the 20 federal disaster declarations in Red Lake County included flooding.

4.1.1 PROBABILITY OF OCCURRENCE

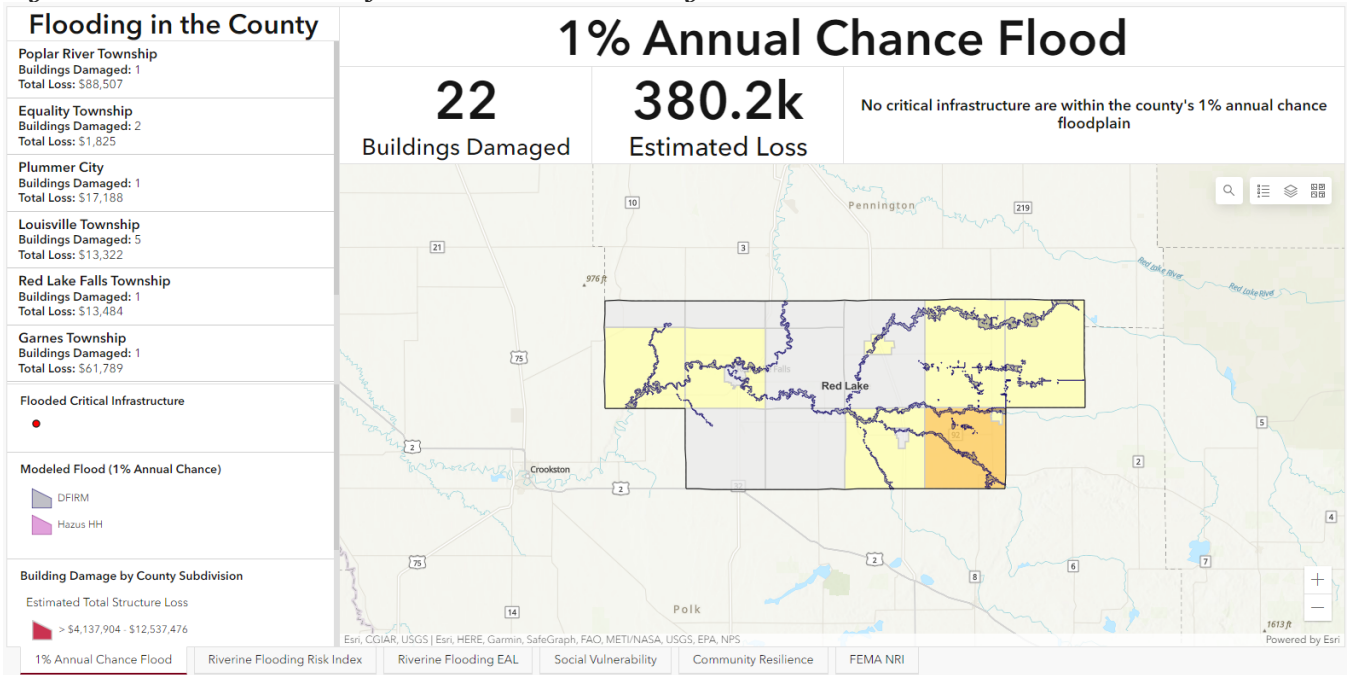
From 1997 to 2023, the NCEI Storm Events Database has recorded 20 flood and flash flood events. Red Lake County has experienced one flash flood event every 2.1 years and one riverine flood event every 3.8 years on average during this period.

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

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

1% annual chance flood boundary. Flood cross-section data were used to generate depth grids. The resulting Hazus 1% annual chance floodplain is shown in the Flood Vulnerability dashboard on the Red Lake County HMP website (Figure 1), where it is available in an interactive form.

Figure 1. 1% Annual chance flood in Red Lake County



4.1.2 VULNERABILITY

Potential economic loss estimates were based on county-specific building data. Red Lake 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 Red Lake 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, 4,674 points were input to Hazus to represent buildings with a total estimated building plus contents value of \$428,626,376. Approximately 56% of the buildings (and 47% of the building value) are associated with residential housing.

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

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

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

General Occupancy	County Total Buildings	County Building and Contents Value	Floodplain Total Buildings	Floodplain Building + Contents Value	Buildings with damage	Building + Contents Loss
Residential	2,637	\$203,439,258	10	\$1,065,300	10	\$122,339
Commercial	126	\$15,300,458	0	N/A	0	N/A
Other	1,911	\$209,886,660	14	\$2,866,800	12	\$257,842
Totals	4,674	\$428,626,376	24	\$3,932,100	22	\$380,181

SOURCE: (FEMA, 2023A)

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 Red Lake County.

Buildings identified as essential facilities for the Hazus flood analysis include hospitals, police and fire stations, and schools (often used as shelters). Loss of essential facilities are vulnerable to structural failure, extensive water damage, and loss of facility functionality during a flood, thereby negatively impacting the communities relying on these facilities’ services. Fortunately, none of Red Lake County’s essential facilities included in the Hazus flood analysis are located within the 1% annual chance floodplain.

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

It is important to identify any critical infrastructure within the 1% annual chance floodplain, given the higher risk of the facility or infrastructure being incapacitated or destroyed during a flood. None of Red Lake County’s critical infrastructure was determined to be in the 1% chance flood boundary using the available facility data.

Community Vulnerability

Potential economic losses were estimated by Census Minor Civil Division. Poplar River Township and Lambert Township would suffer significant estimated losses in the 1% annual chance flood. All jurisdictions with buildings identified in the 1% annual chance flood zone can also be viewed on the Red Lake County HMP website.

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

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

4.1.3 PROGRAM GAPS AND DEFICIENCIES

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

Increasing Culverts and Raising Roads: Some roads, bridges, and culverts within Red Lake County continue to need improvements as they are impacted by annual high rain events. The county needs funding assistance to improve roads and culverts that experience repetitive flooding.

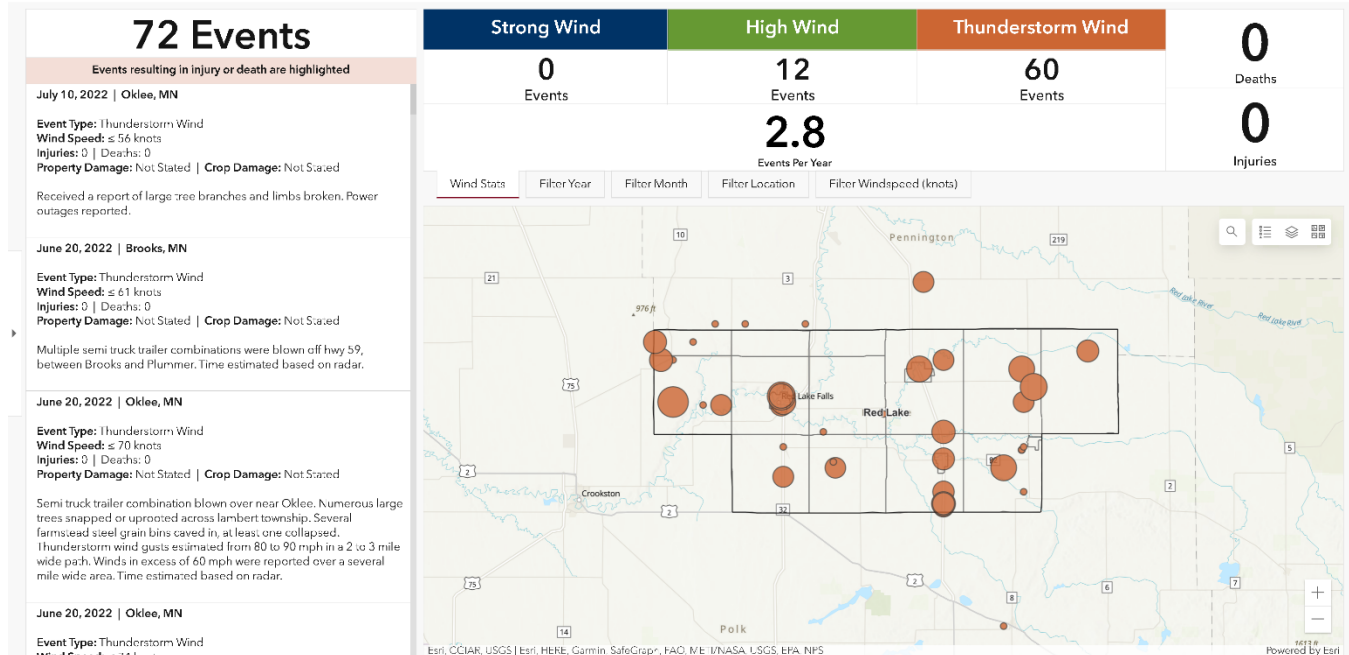
Road Infrastructure: Flood mitigation for county and township roads (e.g., culvert replacements, road repair) is an ongoing need. The county and many of our townships have limited funding for road infrastructure. Red Lake County continues to provide assistance on road infrastructure mitigation projects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

4.2 Windstorms

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

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

Figure 2. History of windstorms in Red Lake County



4.2.1 PROBABILITY OF OCCURRENCE

To determine the probability of future wind-related events in Red Lake County, records of previous wind-related events (strong wind, high wind, and thunderstorm wind) in Red Lake County were examined since 1996, the period of record all wind events have in common. The relative frequency of all wind-related events since January of 1996 is 2.8 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 of localized vulnerabilities to specific hazards.

4.2.3 PROGRAM GAPS AND DEFICIENCIES

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

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

Public Education: Ongoing public education is needed during tornado season to inform the public on what is a tornado watch/warning and what to do when outdoor warning sirens are activated. Red Lake 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.

Additional Storm Shelters/Tornado Safe Rooms: There are areas throughout Red Lake County without viable storm shelters or tornado safe rooms where there are populations vulnerable to high wind and

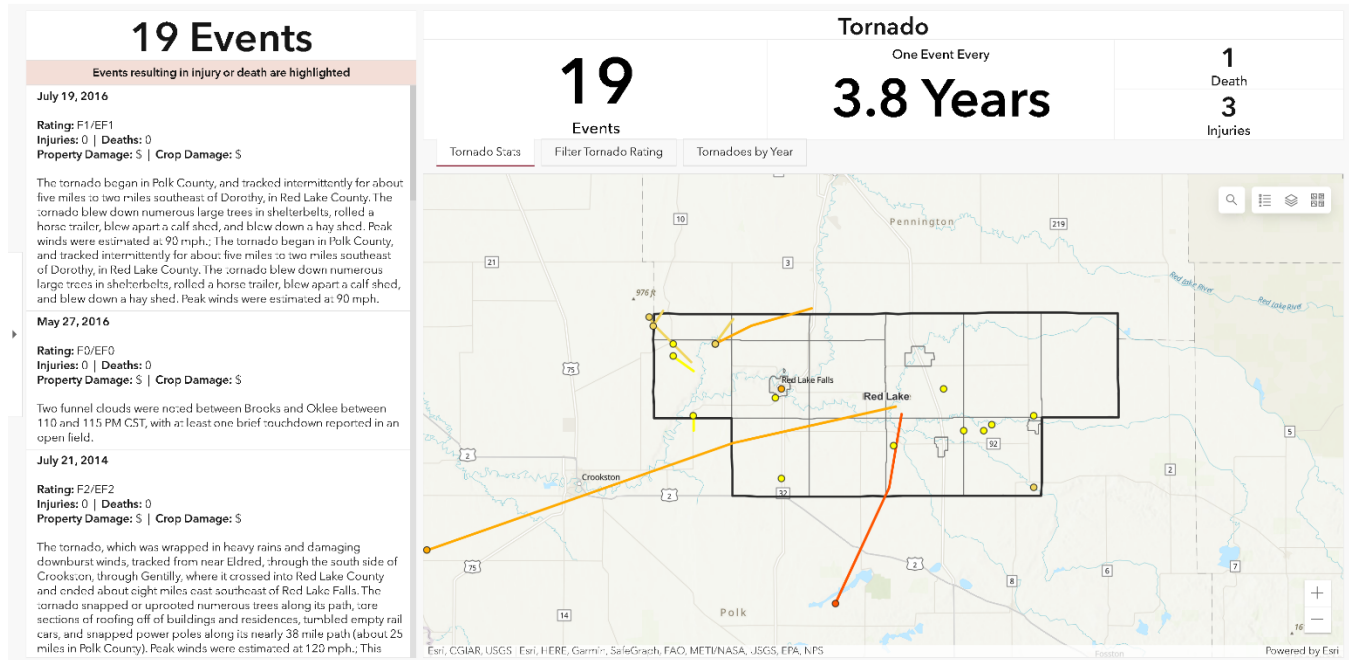
storm events, such as campgrounds, resorts, mobile home parks, schools, and other seasonal gathering locations. A coordinated approach is needed to identify where storm shelters or tornado safe rooms are needed and to evaluate whether new construction or a retrofit of facilities is appropriate. Finding funding for the implementation of such construction projects is also a barrier.

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

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

Figure 3. History of tornadoes in Red Lake County



4.3.1 PROBABILITY OF OCCURRENCE

Estimating the probability of future tornadoes in Red Lake County was done using two methods. The first method summed the total number of tornadoes which either touched down in or traveled through the county. This sum was divided by the number of years tornado data was recorded, resulting in the annual relative frequency of tornado occurrences in the county. Based on records in the NCEI Storm Events Database through May 2023, there has been one tornado every 3.8 years in Red Lake County. These 25 tornadic events occurred in 12 of the 72 years on record.

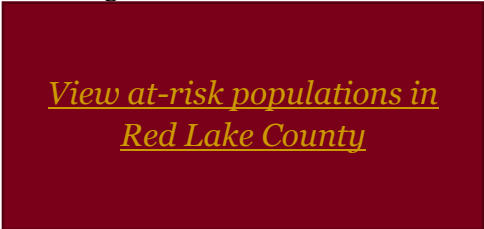
Because tornadoes often cross county lines and tornadic frequency may be better understood using events from a larger area, a second method was used to describe the frequency of tornadic events within a 50-mile radius of any location within the county. A grid of 900 square-meter cells was used to cover

Minnesota and 50 miles beyond its border. From the center of each cell, the number of tornadoes that intersected a 50-mile radius was counted. Each cell was assigned a total tornado line count, which was then divided by the tornado dataset's period of record, resulting in the annual relative frequency of tornadoes occurring within 50 miles of the respective cell.

For any location in Red Lake County, there was an annual frequency of 2–3 tornadoes within a 50-mile radius. 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 Red Lake County; however, certain populations may be more vulnerable and less resilient to the impacts of a tornado. In general, tornado casualties decrease when people receive adequate warnings with sufficient time to seek shelter in a reinforced structure. Because communication is critical before a tornadic event, certain residents may be more negatively impacted by a tornado, including those living in rural areas, individuals with limited mobility, people who do not live near an outdoor warning siren, or those who do not use social media. Section 3.4 provides jurisdictional responses of localized vulnerabilities to specific hazards.



People living in mobile homes are particularly vulnerable to tornadoes due to them not being able to withstand the strong winds produced by a tornado. 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 PROGRAM GAPS AND DEFICIENCIES

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

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

Public Education: Ongoing public education is needed during tornado season to inform the public on what is a tornado watch/warning and what to do when outdoor warning sirens are activated. Red Lake 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.

Additional Storm Shelters/Tornado Safe Rooms: There are areas throughout Red Lake County without viable storm shelters or tornado safe rooms where there are populations vulnerable to high wind and

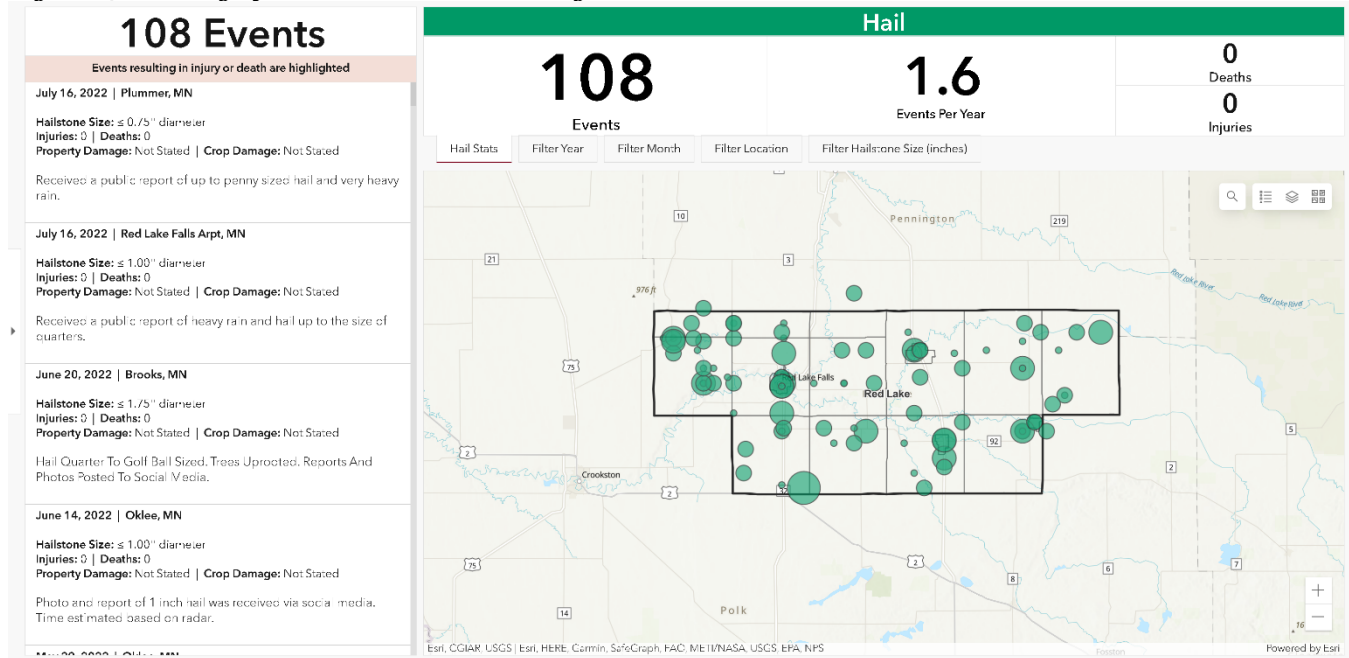
storm events, such as campgrounds, resorts, mobile home parks, schools, and other seasonal gathering locations. A coordinated approach is needed to identify where storm shelters or tornado safe rooms are needed and to evaluate whether new construction or a retrofit of facilities is appropriate. Finding funding for the implementation of such construction projects is also a barrier.

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

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

Figure 4. History of hail in Red Lake County



4.4.1 PROBABILITY OF OCCURRENCE

To determine the probability of future hailstorms in Red Lake County, records of previous hail events in the county were examined for the period of record. From January 1955 through May 2023, the relative frequency of hail events was 1.6 per year. This relative frequency can be used to infer the probability of hail events occurring in the future. Please note that public reports of hail are often secondary to those of thunderstorm winds or tornadoes because if either damaging winds or tornadoes occur, the damaging wind and/or tornado are more important to the reporter and may result in underreporting of hail events.

4.4.2 VULNERABILITY

Red Lake 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, Red Lake County reported \$6,016,658 in hail damages, ranking 48th among Minnesota counties in total hail damages. Red Lake county's losses are primarily due to crop damage reported at \$ 4,962,988, followed by \$1,053,671 property damages. Crop indemnity payments due to hail totaled \$ \$5,009,531 for the period of record spanning 1989–2022 (CEMHS, 2023).

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

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

4.4.3 PROGRAM GAPS AND DEFICIENCIES

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

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

Public Education: Ongoing public education is needed during tornado season to inform the public on what is a tornado watch/warning and what to do when outdoor warning sirens are activated. Red Lake 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.

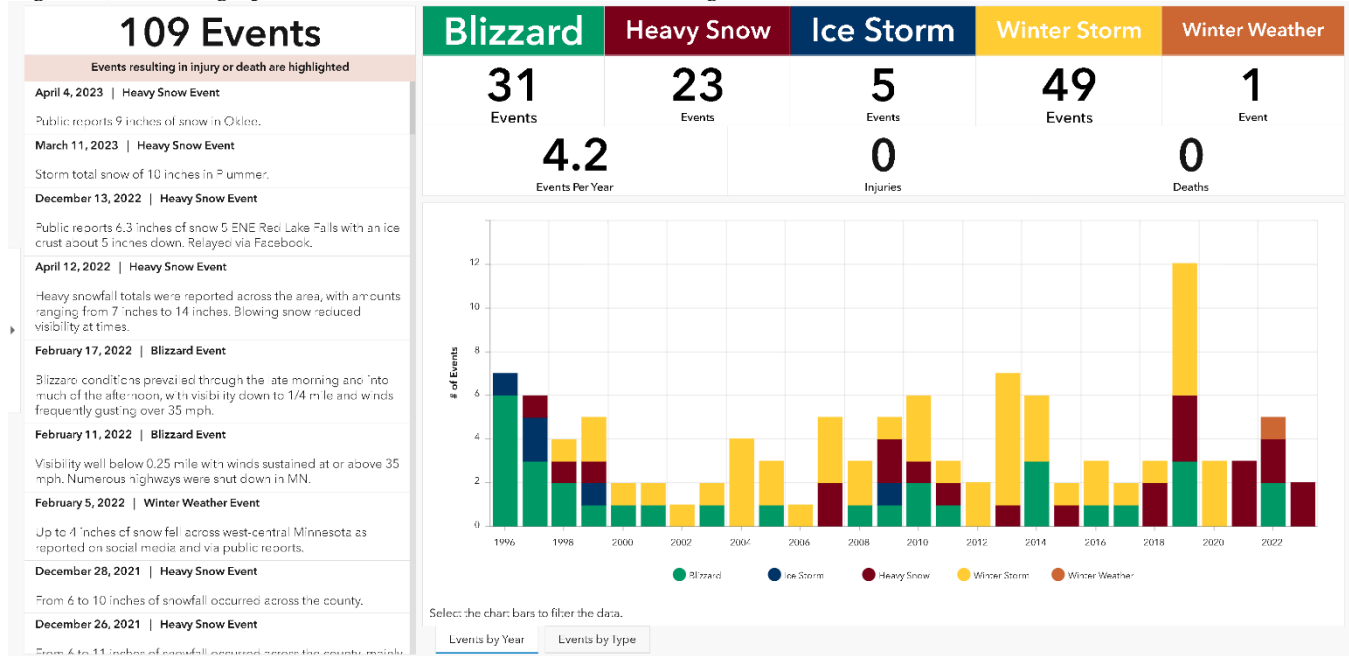
Additional Storm Shelters/Tornado Safe Rooms: There are areas throughout Red Lake County without viable storm shelters or tornado safe rooms where there are populations vulnerable to high wind and storm events, such as campgrounds, resorts, mobile home parks, schools, and other seasonal gathering locations.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

4.5 Winter Storms

Winter storms encompass a number of winter weather events which the National Weather Service (NWS) organizes into the following categories: blizzard, heavy snow, ice storm, winter storm, and winter weather. Winter weather events are common in Minnesota and can be costly. According to the Spatial Hazard Events and Losses Database (SHELDUS), winter weather events in Minnesota have cost more than \$1.02 billion dollars in damages since 1960 (CEMHS, 2023). The history of winter storms in Red Lake County is shown in Figure 5; an interactive version of this map can be found on the Red Lake County HMP website.

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

Figure 5. History of winter storms in Red Lake County



4.5.2 PROBABILITY OF OCCURRENCE

To determine the probability of future winter-related storm events in Red Lake County, records of previous events (blizzards, heavy snows, ice storms, winter storms, and winter weather) were summed and divided by the dataset’s period of record, resulting in the annual relative frequency of winter-related storms. Based on records in the NCEI Storm Events Database through May 2023, the relative frequency of winter-related storm events in Red Lake County is 4.2 per year. This relative frequency can be used to infer the probability of these events occurring in the future.

4.5.3 VULNERABILITY

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

4.5.4 PROGRAM GAPS AND DEFICIENCIES

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

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

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

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

4.6 Extreme Cold

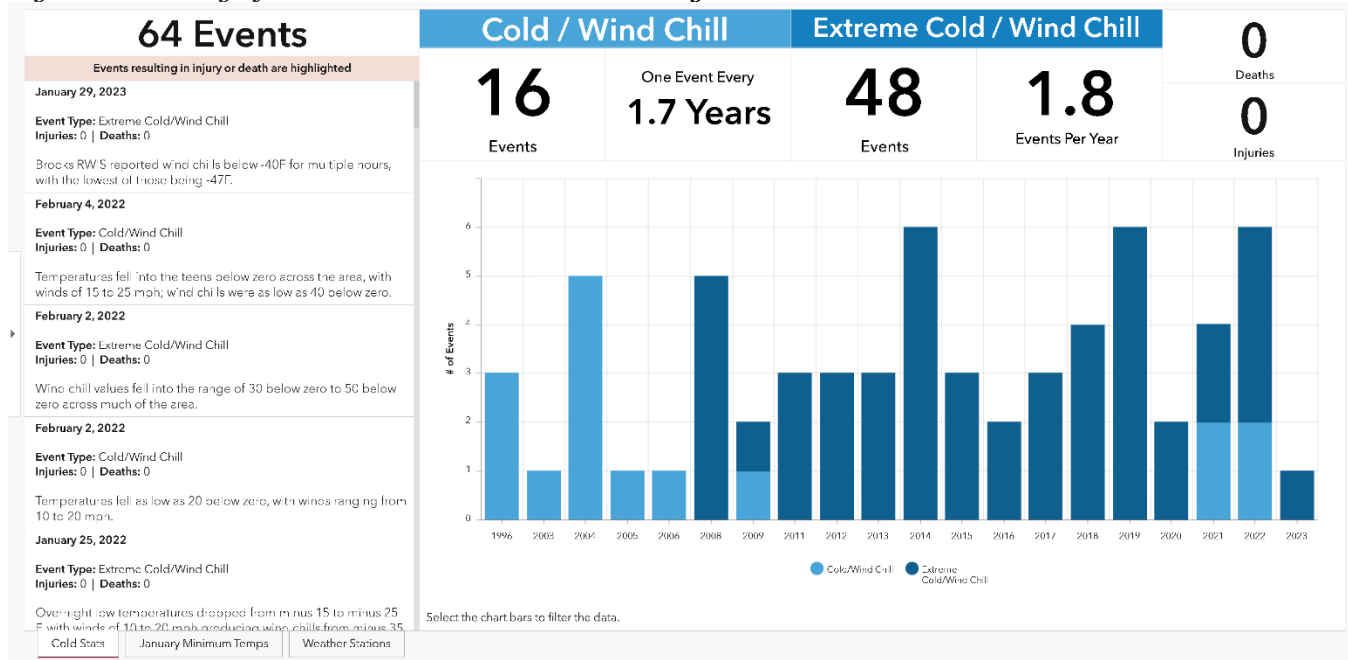
Due to Minnesota's position in the middle of the continent and subsequent climate, the state may experience extremely frigid temperatures in winter. Winter in Red Lake County can be especially dangerous when low temperatures and wind create arctic-like wind chills. The history of extreme cold in Red Lake County is shown in Figure 6; an interactive version of this dashboard can be found on the Red Lake County HMP website.

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

4.6.1 PROBABILITY OF OCCURRENCE

To determine the probability of future cold-related events in Red Lake County, records of previous cold/wind chill and extreme cold/wind chill events were summed and divided by the dataset's period of record, resulting in the annual relative frequency. Based on records in the NCEI Storm Events Database through May 2023, the relative frequency of extreme cold/wind chill events in Red Lake County is 1.8 per year (NCEI, 2023). This relative frequency can be used to infer the probability of these events occurring in the future.

Figure 6. History of extreme cold in Red Lake County



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)



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

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

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

4.6.3 PROGRAM GAPS AND DEFICIENCIES

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

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

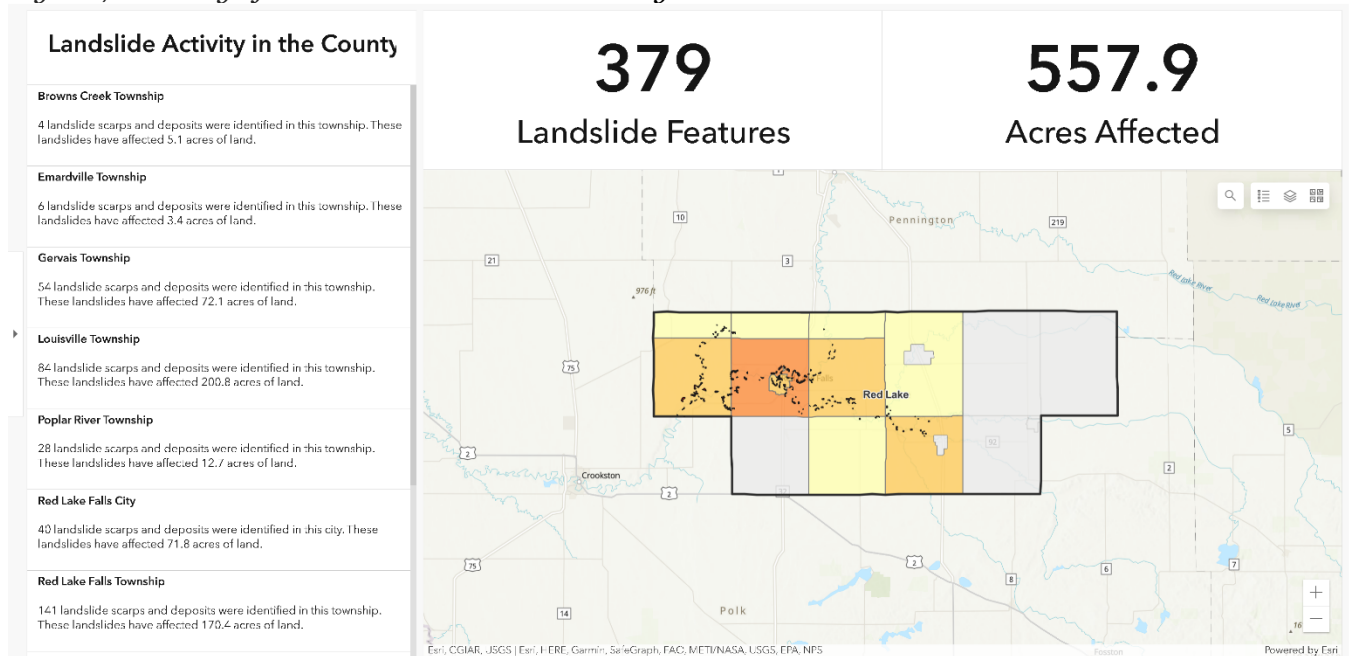
Public Education: Ongoing public education is needed to encourage residents to be prepared for extreme weather, including power outages during periods of extreme cold.

4.7 Landslides

The movement of a mass of rock, debris, or earth down a slope by the force of gravity is considered a landslide. They occur when the slope or soil stability changes from stable to unstable, which may be caused by earthquakes, storms, erosion, fire, or additional human-induced activities. Floods and landslides are closely related, and both involve precipitation, runoff, and ground saturation that may be the result of severe thunderstorms; however, landslides also take place over time and often take place when no natural disaster is evident. The history of landslides in Red Lake County is shown in Figure 7; an interactive version of this map can be found on the Red Lake County HMP website.

See interactive information about landslides on the Red Lake County HMP website

Figure 7. History of landslides in Red Lake County



4.7.1 PROBABILITY OF OCCURRENCE

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

The research found that over half of Red Lake County townships, specifically in the central and western regions, are most susceptible to landslides. This includes the townships of Wylie, Browns Creek, River, Louisville, Red Lake Falls, Gervais, Terrebonne, Poplar, and Emardville. These areas of central and west Marshall County show a low to moderate susceptibility to landslides.

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

4.7.2 VULNERABILITY

Given the lack of data on landslide incidents in Minnesota, the locations of Best Management Practices (BMPs) reported to the MN Board of Soil and Water Resources (BWSR) were used to identify areas in the State which may be more susceptible to landslides. BMPs are ways to manage land and activities to protect water quality and promote soil conservation, they can be a structure or part of a process. The BWSR identifies four BMPs which may be implemented to mitigate against erosion and slope failure issues that may result in landslides. Descriptions of these BMPs and the number of them installed in Red Lake County are in Table 7.

Table 7. Best Management Practices (BMP) affiliated with erosion, slope failure, and landslides

Practice Name	Code	Description	Count in County
Grade Stabilization Structure	410	A structure used to control the grade and head cutting in natural or artificial channels. Includes side-inlet controls for existing drainage ditches and/or streams.	8
Streambank and Shoreline Protection	580	Treatment(s) used to stabilize and protect banks of streams or constructed channels, and shorelines of lakes, reservoirs, or estuaries.	9
Stream Channel Stabilization	584	Measures used to stabilize the bed or bottom of a channel.	1
Water and Sediment Control Basin	638	An earth embankment, or combination ridge and channel, generally constructed across the slope and minor watercourses to form a sediment trap and water detention basin.	73

SOURCE: (MN BWSR, 2023)

Red Lake County contains a total of 192 best management practices, including 156 grade stabilization structures, nine streambank & shoreline protections, and 27 water & sediment control basins. The county has a series of large grade stabilization structure groups spread evenly throughout the county. In east Red Lake County, grade stabilization structures exist along Judicial Ditch 4 (200th St SE). North Red Lake County contains structures along 150th St SE, as well as 120th Ave SE. South Red Lake County contains structures, along Cyr Creek and 120th Ave SW. In West Red Lake County, structures exist along Black River, Judicial Ditch 6th, and the Polk County border. Streambank & shoreline protections exist in west Red Lake County near the townships of Huot and Red Lake Falls, as well as the northern region along Clearwater River. Water & sediment basins are located in clusters near central west Red Lake County, including Cyr Creek, Lower Badger Creek, and Terrebonne Creek.

4.7.3 PROGRAM GAPS AND DEFICIENCIES

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

Areas of Landslide Concern: There are concerns about landslides along the Red Lake River and Clearwater River in and around the city of Red Lake Falls. Red Lake County has applied for hazard mitigation funding to possibly buy out some properties. As of 2023, this is still in process.

4.8 Dam Failure

The MN DNR Dam Safety Program has the mission of protecting the life and safety of people by ensuring that dams are safe. Minnesota's Dam Safety Program sets minimum standards for dams and regulates the design, construction, operation, repair, and removal of both privately and publicly (non-federal) owned dams (MN DNR, 2020). The federal government is responsible for regulating and maintaining dam safety of federally owned dams. No single agency regulates all federally owned dams. 42% of federal dams are owned and managed by the U.S. Army Corp of Engineers (USACE) and the Bureau of Reclamation. The remaining federal dams are owned and managed by other federal agencies, including the Fish and Wildlife Service, Forest Service, the Department of Defense, and the Bureau of Indian Affairs, among others (Normand, 2019). The Federal Energy Regulatory Commission (FERC) Dam Safety Program is the largest dam safety program in the U.S. The Commission works with federal and state agencies to ensure and promote dam safety of over 3,000 dams across the U.S. The Commission inspects projects on an unscheduled basis to investigate potential dam safety problems; complaints about constructing and operating a project; safety concerns related to natural disasters; and issues concerning compliance with the term and conditions of a license (FERC, 2020).

Dam Inventory: There are eight dams and no levees in Red Lake County.

4.8.1 PROBABILITY OF OCCURRENCE

Extreme precipitation is only one factor contributing to dam failure, and the possibility of failure is dam specific, relating to both environmental and structural conditions. There are few incidents of dam failure in Minnesota and the likelihood of a dam failure in Red Lake County is very low. Dam failures are extremely unlikely if the dam is maintained in compliance with Minnesota's Dam Safety

Program. The dams in Red Lake County are all of low hazard potential, and the likelihood of failure in Red Lake County is also extremely low.

4.8.2 VULNERABILITY

Although dam regulatory authorities differ between various federal and state agencies, all authorities attempt to classify dams according to the potential impacts from a dam failure or mis-operation. In response to the numerous classification systems, FEMA’s Interagency Committee on Dam Safety created a downstream hazard potential classification system that is adaptable to any agency’s current system. Table 8 provides an overview of the main criteria agencies consider when determining a dam’s downstream hazard potential. This classification system does not imply that the dam is unsafe, but rather categorizes dams based on the probable loss of human life and the impacts on economic, environmental, and lifeline interests (FEMA, 2004).

Table 8. Downstream hazard potential classification criteria

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

SOURCE: (USACE, 2008)

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

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

There are no high hazard dams in Red Lake County.

4.8.3 PROGRAM GAPS AND DEFICIENCIES

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

Section 5 – Mitigation Strategy

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

5.1 Community Capability Assessments

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

- Appendix D: Lists the plans and programs in place in Red Lake County as related to hazard mitigation.
- Appendix C: As part of the Red Lake 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 Red Lake County.

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

5.1.1 NATIONAL FLOOD INSURANCE PROGRAM (NFIP)

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

Table 9 lists and describes jurisdictional participation in the National Flood Insurance Program (NFIP).

Table 9. NFIP participation in Red Lake County

FEMA Plan Requirements Plan Review Tool, Section C2		Description
Name of Community		RED LAKE COUNTY
Participation in the NFIP		Participating – entry date 07/02/87
FEMA Map		FEMA-mapped high-risk areas
Current Effective Map Date		3/9/2021
Total # of Buildings within Floodplain (including all townships and cities)		22
1. Adoption of NFIP minimum floodplain management criteria via local regulation		Adoption of current floodplain ordinance: 2/9/21
2. Adoption of the latest effective Flood Insurance Rate Map (FIRM), if applicable		2/9/21
3. Implementation and enforcement of local floodplain management regulations to regulate and permit development in SFHAs		Red Lake County enforces requirements of the NFIP through the county’s current floodplain ordinance adopted 2/9/21and published publicly 2/17/21. This ordinance establishes the flood plain district and zoning regulations and conditional uses permitted within the floodway, flood fringe, and general floodplain districts. The Environmental Services Department maintains and enforces the floodplain management ordinance for the county.
4. Appointment of a designee or agency to implement the addressed commitments and requirements of the NFIP		Floodplain Administrator: Kurt Casavan, Red Lake County Environmental Services Officer
5. Description of how participant implements the substantial improvement / substantial damage provisions of their floodplain management regulations after an event.		Following a flood event, the city would work with the MN DNR to use a form to track cumulative improvements and repetitive losses in the floodplain. The city would also review the MN DNR Minnesota Post-Flood Substantial Damage Playbook for Local Officials.
Name of Community		CITY OF BROOKS
Participation in the NFIP		NOT Participating
FEMA Map		FEMA-mapped high-risk areas
Current Effective Map Date		3/9/2021
Description of why community does not participate in the NFIP.		We are a small city and need assistance from the county and MN DNR to participate. Previously we fell under Red Lake County’s participation in the NFIP.
Name of Community		CITY OF OKLEE

FEMA Plan Requirements Plan Review Tool, Section C2	Description
Participation in the NFIP	NOT Participating
FEMA Map	FEMA-mapped high-risk areas
Current Effective Map Date	3/9/2021
Total # of Buildings within Floodplain	1
Description of why community does not participate in the NFIP.	New FEMA mapped high risk areas were added as of 3/9/21. The city has not enrolled in the NFIP yet. We need more information about our flood risk areas and assistance in getting enrolled.
Name of Community	CITY OF PLUMMER
Participation in the NFIP	Participating - entry date 06/22/84
FEMA Map	FEMA-mapped high-risk areas
Current Effective Map Date	3/9/2021
Total # of Buildings within Floodplain	1
1. Adoption of NFIP minimum floodplain management criteria via local regulation	Adoption of current floodplain ordinance: 3/1/21
2. Adoption of the latest effective Flood Insurance Rate Map (FIRM), if applicable	3/1/21
3. Implementation and enforcement of local floodplain management regulations to regulate and permit development in SFHAs	The city of Plummer enforces requirements of the NFIP through the city's current floodplain ordinance, adopted 3/1/21 and published publicly 3/3/21. This ordinance regulates development in the flood hazard areas of the city.
4. Appointment of a designee or agency to implement the addressed commitments and requirements of the NFIP	Floodplain Administrator: Kurt Casavan, Red Lake County Environmental Services Officer
5. Description of how participant implements the substantial improvement / substantial damage provisions of their floodplain management regulations after an event.	Following a flood event, the city would work with the MN DNR to use a form to track cumulative improvements and repetitive losses in the floodplain. The city would also review the MN DNR Minnesota Post-Flood Substantial Damage Playbook for Local Officials.
Name of Community	CITY OF RED LAKE FALLS
Participation in the NFIP	Participating - entry date 01/03/85

FEMA Plan Requirements Plan Review Tool, Section C2	Description
FEMA Map	FEMA-mapped high-risk areas
Current Effective Map Date	3/9/2021
Do you know of any existing buildings in the FEMA mapped floodplain?	Yes (our Hockey Arena)
1. Adoption of NFIP minimum floodplain management criteria via local regulation	Adoption of current floodplain ordinance: 11/23/20
2. Adoption of the latest effective Flood Insurance Rate Map (FIRM), if applicable	11/23/20
3. Implementation and enforcement of local floodplain management regulations to regulate and permit development in SFHAs	The city of Red Lake Falls enforces requirements of the NFIP through the city's current floodplain ordinance, adopted 11/23/20 and published publicly 12/1/20. This ordinance regulates development in the flood hazard areas of the city.
4. Appointment of a designee or agency to implement the addressed commitments and requirements of the NFIP	Floodplain Administrator: Kurt Casavan, Red Lake County Environmental Services Officer
5. Description of how participant implements the substantial improvement / substantial damage provisions of their floodplain management regulations after an event.	Following a flood event, the city would work with the MN DNR to use a form to track cumulative improvements and repetitive losses in the floodplain. The city would also review the MN DNR Minnesota Post-Flood Substantial Damage Playbook for Local Officials.

SOURCE: (CEIL STRAUSS, MN FLOODPLAIN MANAGER, PERSONAL COMMUNICATION, SEPTEMBER 22, 2023)

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

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

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

There are no repetitive loss properties in Red Lake County. For more on the areas that flood repeatedly in Red Lake County, see the [Red Lake County Flooding page](#).

5.1.2 PLANS AND ORDINANCES

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

5.1.3 PLANS AND PROGRAMS IN PLACE TO ADDRESS NATURAL HAZARDS

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

All Hazards

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

CodeRED Emergency Notification System and IPAWS: Red Lake County maintains the CodeRED Emergency Notification System which allows residents and visitors to sign up (“opt-in”) to receive severe weather alerts targeted to their location, along with other local emergency alerts. A link to sign up for the system is located on the Red Lake County Sheriff’s Office website page. Red Lake County also has IPAWS (Integrated Public Alert Warning System) which allows for both targeted and county-wide emergency notifications to both residents and visitors (not an “opt-in” service).

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

Preparedness Outreach & Public Education: Red Lake County utilizes the Red Lake County Emergency Management website page, the Red Lake County Sheriff’s Office Facebook page, and local news media to communicate with residents, visitors, schools, and long-term care facilities on emergency preparedness, severe weather, and other hazard conditions throughout the year. Red Lake County Public Health also helps to support preparedness outreach and public education using their communication platforms.

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

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

Backup Power: Red Lake County works to ensure the continuity of operations of county government services and critical infrastructure in the event of an extended power outage. Generator back-up power is in place for the Red Lake Falls Courthouse, the Red Lake Falls Fire Department (which is our designated EOC). We also have backup power at the Brooks City Hall and the Plummer City Hall.

Schools Support: Red Lake 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: Red Lake County Emergency Management works closely with the MN HSEM Region 3 regional program coordinator and county emergency managers on a range of planning, training, and exercises to support all-hazards preparedness, mitigation, response, and recovery capabilities. Red Lake County Emergency Management also collaborates with the Regional Healthcare Coalition to participate in exercises that address access and functional needs, as well as communication.

Severe Winter Storms

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

Winter Hazard Awareness Week: Red Lake County participates in the Winter Hazard Awareness Week campaign sponsored by MN HSEM and the NWS each November. The week-long effort

provides specific information each day covering the topics of winter weather, outdoor winter safety, indoor winter safety, and winter driving safety. Red Lake County Emergency Management promotes and shares information during the week via social media which communities, schools, churches or other civic programs are encouraged to share locally.

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

Severe Summer Storms

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

Outdoor Warning Sirens: There are 5 outdoor warning sirens in the county, located in the cities of Red Lake Falls (2), Oklee (1), Brooks (1), and Plummer (1). Red Lake County Sheriff's Office remotely tests all sirens on a regular basis.

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

Severe Weather Awareness Week: Red Lake 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. Red Lake County Emergency Management promotes and shares information during the week via social media which communities, schools, churches or other civic programs are encouraged to share locally.

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

Manufactured Home Parks Shelters & Evacuation Plans: Red Lake County Public Health works in coordination with the Minnesota Department of Health (MDH) to ensure that licensed manufactured home parks within the county meet the requirements of MN Statute 327.20 for

shelters and evacuation plans. Shelter and evacuation plans must be approved by the city or township in which they are located and submitted to the Minnesota Department of Health.

Extreme Cold

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

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

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

Landslides

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

Shoreland Program - Setback Requirements: The Red Lake County SWCD administers the Shoreland Program for Red Lake County. The Red Lake County Shoreland Ordinance was amended in 2018 and includes setback requirements for new development. New developments need to be built 100 feet from the top of the bluff; otherwise, new developments need to build 300' from the river unless they want to apply for a Shoreland Permit. If they build within the 300', there are additional setbacks that need to be followed before the Shoreland permit is approved by the Red Lake County Board of Commissioners.

Regional Watershed Planning: Red Lake County participates in and has adopted the Red Lake River One Watershed One Plan and the Clearwater River One Watershed One Plan. Both plans address numerous areas of concern for soil erosion, streambank and shoreline protection, livestock exclusion, best management practices to correct wind and water erosion, flood damage reduction goals, and much more. These plans replace the prior Red Lake County Comprehensive Local Water Management Plan, as well as the Red Lake River Watershed Districts 10-year Comprehensive Plan. The plans bring together neighboring counties, SWCDs, and the Red Lake Watershed District to develop a comprehensive plan that aligns the local water planning process

on major watershed boundaries. The 7 local units of government involved include Red Lake County, Polk County, Pennington County, Red Lake County SWCD, West Polk SWCD, Pennington SWCD, and the Red Lake River Watershed District.

Flooding

National Flood Insurance Program (NFIP): Red Lake County has FEMA-mapped high-risk areas and participates in the NFIP. Initial entry date into the program was 07/02/1987.

Floodplain Administrator: The Red Lake County Environmental Services Department director is the county's designated Floodplain Administrator, who is responsible to implement the requirements of the NFIP.

Flood Hazard Mitigation: The Red Lake River Watershed District is a local unit of government established under Minnesota 103D and is designated to address water quantity issues as it relates to reducing flood damages within Red Lake County.

Floodplain Ordinance: The Red Lake County Floodplain Ordinance (2021) establishes the flood plain district and zoning regulations and conditional uses permitted within the floodway, flood fringe, and general floodplain districts. The Environmental Services Department maintains and enforces the floodplain management ordinance for the county.

Floodplain Mapping: Red Lake County's current effective FEMA flood map date is 03/09/2021. The county's Environmental Services Department is the repository for the floodplain maps for the county. The department assists county residents in determining whether their property is affected by an officially mapped flood area. An overlay of the county's floodplain map is available on the Red Lake County GIS page.

Shoreland Regulations: The Red Lake County Shoreland Program is administered by the Red Lake County SWCD Office. The Red Lake County Shoreland Ordinance establishes regulations for land use near shorelands including stormwater management. Conditional uses allowable within shoreland areas are subject to review and approval procedures by the county's Environmental Services Department. The Red Lake County Shoreland Ordinance 2018 Amendment was approved by the Red Lake County Board of Commissioners on November 27, 2018.

Subdivision Ordinance: Red Lake County Shoreland Ordinance – Section 7.0, Subdivisions/Platting and Section 8.0, Planned Unit Developments (PUD's) are designed to encourage a high standard of development and are enforced by the Red Lake County Board of Commissioners. The ordinance addresses erosion control and stormwater management.

5-Year Transportation Plan: The Red Lake County Highway Department is responsible for engineering, design, reconstruction and repair of roads, bridges, and culverts throughout Red Lake County. This department develops a 5-year construction plan that identifies and schedules road improvement projects that include measures for flood mitigation. Red Lake County Highway

Department works in coordination with cities and township local governments and public works departments to plan for and implement local improvement projects.

Property Buyout Acquisitions: In the last 20 years, Red Lake County has conducted two rounds of property buyouts for flood prone properties. Approximately 5 to 10 properties were bought out during that time. These buyouts were all due to the Red Lake River undermining the hillsides around Red Lake Falls, and the resulting landslides and shifting of homes.

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

Regional Watershed Planning: Red Lake County participates in and has adopted the Red Lake River One Watershed One Plan and the Clearwater River One Watershed One Plan. Both plans address numerous areas of concern for soil erosion, streambank and shoreline protection, livestock exclusion, best management practices to correct wind and water erosion, flood damage reduction goals, and much more. These plans replace the prior Red Lake County Comprehensive Local Water Management Plan, as well as the Red Lake River Watershed Districts 10-year Comprehensive Plan. The plans bring together neighboring counties, SWCDs, and the Red Lake Watershed District to develop a comprehensive plan that aligns the local water planning process on major watershed boundaries. The 7 local units of government involved include Red Lake County, Polk County, Pennington County, Red Lake County SWCD, West Polk SWCD, Pennington SWCD, and the Red Lake River Watershed District.

Minnesota Buffer Law: Red Lake County has adopted the requirements of the Minnesota Buffer Law. The purpose and intent of the law is to protect state water resources from erosion and runoff pollution; to stabilize soils, shores and banks; and to protect or provide riparian corridors. The Buffer Law Program is administered by the Red Lake County SWCD Office. Enforcement the Buffer Law Program is handled by the Red Lake County Environmental Services Department.

Dam Failure

No noted plans or programs in place.

5.2 Mitigation Goals

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

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

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

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

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

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

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

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

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

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

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

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

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

5.3 Mitigation Action and Project Strategies

The mitigation actions in this plan are summarized into four main strategy types, as described in the FEMA publications *Local Mitigation Planning Handbook* (2013) and *Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards* (2013). A fifth strategy type was determined by Minnesota HSEM for use within the state: Mitigation Preparedness and Response. The strategies and example actions are listed in Table 10 below:

Table 10. Mitigation strategies and action types

Mitigation Strategy	Description	Example Mitigation Actions
Local Plans and Regulations	These actions include government authorities, policies, or codes, that influence the way land and buildings are developed and built.	<ul style="list-style-type: none"> • 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

Mitigation Strategy	Description	Example Mitigation Actions
Structure and Infrastructure Projects	<p>These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure.</p> <p>This type of action also involves projects to construct manmade structures to reduce the impact of hazards.</p> <p>Many of these types of actions are projects eligible for funding through the FEMA Hazard Mitigation Assistance program.</p>	<ul style="list-style-type: none"> • Stormwater management regulations and master plans • 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	<p>These are actions that minimize damage and losses and also preserve or restore the functions of natural systems.</p>	<ul style="list-style-type: none"> • Sediment and erosion control • Stream corridor restoration • Forest management • Conservation easements • Wetland restoration and preservation
Education and Awareness Programs	<p>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.</p>	<ul style="list-style-type: none"> • 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	<p>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.</p>	<ul style="list-style-type: none"> • Emergency operations plan • Flood fight plans and preparedness • Dam emergency action plans • Warning • Backup power • Emergency capabilities

Local leaders work together with the Red Lake 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 Red Lake 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 Red Lake County risks and mitigation activities identified also incorporate the concerns and needs of townships, school districts, and other entities participating in this plan. Appendix H contains the jurisdictional mitigation action charts for the cities of Brooks, Oklee, Plummer, and Red Lake Falls.

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

Number (#)

Each mitigation action is identified by a number.

Hazard

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

Mitigation Strategy

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

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

See Table 10 for a description of each mitigation strategy and related types of actions.

Mitigation Action

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

Status

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

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

Mitigation actions that have been completed or deleted from the 2016 Red Lake County Hazard Mitigation Plan are identified and reported on in Appendix H. Completed and deleted mitigation actions are not carried over into the updated mitigation action chart.

Priority

In the review and discussion of selected mitigation strategies and actions, the planning team ranked mitigation actions by priority for implementation. Table 11 provides criteria that were taken into consideration in the process.

Table 11. Criteria for Mitigation Action Priority Ranking

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

Time frame

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

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

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

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

Possible Funding

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

The Red Lake County Mitigation Action Chart is provided in Table 12.

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

Table 12. Red Lake County Mitigation Action Chart (2023–2027)

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

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
5	All-Hazards	Mitigation Preparedness & Response Support	VULNERABLE POPULATIONS Work in partnership with key partners on efforts to reduce risk to and benefit underserved communities or socially vulnerable populations within the county from the impacts of future natural hazard events.	Existing High Ongoing	RLCEM, RLC Public Health, RLC Social Services	RLCEM continues to strengthen collaboration with RLC Public Health and RLC Social Services on preparedness outreach and public education to maximize reaching the public with key information. RLCEM, RLCPH, and RLCSS work with local governments, school districts, hospitals, mobile home park (MHP) operators, long-term care and childcare facilities, MN Dept. of Health, American Red Cross, and the Salvation Army on emergency preparedness efforts that benefit those considered to be more vulnerable in the county from severe weather or extreme temperature events. This includes the elderly, disabled, students, and low-income residents. Example efforts include provision of energy assistance programs during periods of extreme cold, evacuation & shelter planning for long-term care facilities and MHP's, and delivery of education and awareness information in different formats. RLCEM and RLC GIS maintain data on location of vulnerable facilities which is incorporated in EM planning. RLCEM utilizes the RLCEM website page, the RLC Sheriff's Office Facebook page, and local news media to communicate with residents, visitors, schools, and long-term care facilities on emergency preparedness, severe weather, and other hazard conditions throughout the year. Red Lake County Public Health also helps to support preparedness outreach and public education using their communication platforms. RLCEM also participates in the NWS annual Winter Hazard Awareness Week and Severe Weather Awareness Week each November and April.	Red Lake County, other agencies & organizations
6	All-Hazards	Education & Awareness Programs	OUTREACH & EDUCATION Inform and educate residents through outreach and education programs to increase awareness and preparedness for severe weather events, periods of extreme cold, and extended power outages.	Existing High Ongoing	RLCEM		Red Lake County

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
7	Severe Winter Storms	Local Planning & Regulations	SNOW & ICE CONTROL Implement snow removal and ice control to ensure the safety of county roads impacted by winter storms.	Existing High Ongoing	Red Lake County Hwy. Dept.	The RLC Highway Department is responsible for the removal of snow and ice control for county roads, as well as some city and township roads based upon agreement. The department completes its snow removal process in accordance with the RLC Hwy Department Snow Removal Policy. MNDOT removes snow from State Highways as well as disperses salt/sand as needed.	Red Lake County
8	Severe Summer Storms	Education & Awareness Programs	SKYWARN TRAINING Work with the National Weather Service (NWS) to provide SkyWarn training and develop a network of trained Storm Spotters throughout the county.	Existing High Ongoing	RLCEM in coord with NWS	RLCEM works with the NWS to offer this training on an annual basis to local fire and law enforcement departments and local residents that wish to be trained as spotters.	National Weather Service
9	Severe Summer Storms	Mitigation Preparedness & Response Support	OUTDOOR WARNING SIRENS Ensure outdoor warning sirens are located where needed and functioning properly.	Existing High Ongoing	RLCEM in coord with local jurisdictions	Red Lake County Emergency Management and Red Lake County Sheriff's Office work in conjunction with communities where sirens are located to test them and ensure they are functioning properly. RLCEM will work with communities to close any gaps in warning siren coverage. Finding funding for the implementation of outdoor warning sirens is a barrier. Outside grant funding is necessary and can be difficult to obtain. Grant funding may be available for warning sirens from the USDA Rural Development Community Facilities Grant Program.	Red Lake County & local jurisdictions
10	Severe Summer Storms	Structure & Infrastructure Projects	STORM SHELTERS / TORNADO SAFE ROOMS Coordinate with local jurisdictions to address the need for the construction of storm shelters or tornado safe rooms in areas where residents or visitors are vulnerable to high wind events, such as mobile home parks and campgrounds.	Existing High Ongoing	RLCEM in coord with local jurisdictions	RLCEM will assist any communities in their effort to assess and address the need for construction of a storm shelter or tornado safe room. Grant funding may be available for tornado safe rooms from FEMA Hazard Mitigation Assistance (HMA) grant program funding, based on application approval.	Red Lake County, Local Gov't, FEMA HMA

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
11	Severe Summer Storms	Local Planning & Regulations	MHP SAFTEY Ensure that licensed manufactured home parks (MHP's) within the county meet the requirements of MN Statute 327.20 for shelters and evacuation plans.	Existing High Ongoing	RLC Public Health	RLC Public Health works in coordination with the Minnesota Department of Health (MDH) on this effort. Shelter and evacuation plans must be approved by the city or township in which they are located and submitted to the MDH.	Red Lake County, MDH
12	Severe Winter & Summer Storms	Structure & Infrastructure Projects	POWERLINE RETROFITS Encourage municipal and rural electric coops to address burying powerlines or strengthening power poles to avoid power outages from high wind events and storms.	Existing High Ongoing	RLCEM, local jurisdictions in coord with electric utility providers	RLCEM 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. RLCEM continues to work with county departments and local jurisdictions to secure portable or permanent backup generators to power critical facilities during extended power outages. County and local government funding to purchase generators is limited and obtaining generators can be a slow process. Where applicable, FEMA HMA grant funding may be applied for generators.	Electric Coops, FEMA HMA
13	Severe Winter & Summer Storms	Mitigation Preparedness & Response Support	GENERATOR BACKUPS Work with county departments and local jurisdictions to obtain generator backup power where needed for extended power outages due to storms.	Existing Moderate Ongoing	RLCEM in coord with county depts and local jurisdictions	RLCEM 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. RLCEM provides direct training or planning assistance as requested.	Red Lake County, Local Gov't, FEMA HMA
14	Severe Winter & Summer Storms	Mitigation Preparedness & Response Support	SEVERE WEATHER PLANS Encourage schools and other facilities that house senior citizens or other vulnerable populations to have emergency plans in place to deal with severe weather, extreme temperatures, and extended power outages.	Existing Moderate Ongoing	RLCEM in coord with local jurisdictions	RLCEM 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. RLCEM provides direct training or planning assistance as requested.	Red Lake County, Schools, LTC Facilities
15	Severe Winter & Summer Storms	Local Planning & Regulations	BUILDING SAFETY Ensure that new development projects follow state building codes in order to withstand the impacts of severe weather events, including roof collapse from heavy snow or damages from high wind events.	Existing Moderate Ongoing	RLC Envr. Services	Red Lake County Environmental Services enforces the MN State Building Code when issuing building permits for new development.	Red Lake County

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
16	Severe Winter & Summer Storms	Natural Systems Protection	VEGETATION MANAGEMENT Manage trees and other vegetation along roads from severe storm events to reduce risk to passing motorists.	Existing Moderate Ongoing	RLC Highway Dept., Local Utility Providers	The Red Lake County Highway Department regularly conducts vegetation management along county roads to reduce the risk of downed trees or branches resulting from severe spring and summer storm events. Local utility providers also work to manage vegetation near power lines to reduce the risk of downed lines and power outages.	County, Utilities
17	Extreme Cold Temps	Education & Awareness Programs	EXTREME COLD TEMPS PUBLIC OUTREACH Conduct public outreach and provide information to residents on safety measures when there are periods of extreme cold.	Existing High Ongoing	RLCEM	RLCEM works to share information received from the National Weather Service when periods of extreme cold are forecast and occurring. RLCEM utilizes the county EM website page, and Sheriff's Office Facebook page. 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.	Red Lake County
18	Landslides	Natural Systems Protection	SHORELAND AND BLUFF SETBACK REQUIREMENTS Enforce Shoreland and Bluff setbacks requirements are enforced to reduce risk where flooding or erosion could occur and increase risk for landslides.	New Moderate Ongoing	RLC Envr. Services	The Red Lake County Shoreland Program is administered by the Red Lake County SWCD Office. The RLC Shoreland Ordinance establishes regulations for land use near shorelands including stormwater management and setback requirements. Conditional uses allowable within shoreland areas are subject to review and approval procedures by the county's Environmental Services Department. The RLC Shoreland Ordinance 2018 Amendment was approved by the Red Lake County Board of Commissioners on November 27, 2018.	Red Lake County
19	Landslides	Natural Systems Protection	PROPERTY BUYOUTS Address areas of landslide concern in the city of Red Lake Falls and Red Lake Falls Township.	In-Progress High 2024-2029	RLCEM, RLC Envr. Services in coord with Local Gov't	Red Lake County has submitted an application for hazard mitigation funding to possibly buy out some properties in the city of Red Lake Falls and Red Lake Falls Township. As of 2023 this is still in process.	Red Lake County, City of RLF, RLF Township, FEMA HMA

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
20	Landslides	Local Planning & Regulations	MN STATE BUFFER LAW Enforce requirements of the MN State Buffer Law to help reduce impacts of erosion in areas that may be susceptible to landslides.	Existing Moderate Ongoing	RLC Envr. Services in coord with Red Lake SWCD	Red Lake County has adopted the requirements of the Minnesota Buffer Law. The purpose and intent of the law is to protect state water resources from erosion and runoff pollution; to stabilize soils, shores and banks; and to protect or provide riparian corridors. The Buffer Law Program is administered by the Red Lake County SWCD Office. Enforcement the Buffer Law Program is handled by the Red Lake County Environmental Services Department. Red Lake County has FEMA-mapped high-risk areas and participates in the NFIP. Initial entry date into the program was 07/02/1987. The RLC Floodplain Ordinance (2021) establishes the flood plain district and zoning regulations and conditional uses permitted within the floodway, flood fringe, and general floodplain districts. The Environmental Services Department maintains and enforces the floodplain management ordinance for the county.	Red Lake County, Red Lake SWCD
21	Flooding	Local Planning & Regulations	NATIONAL FLOOD INSURANCE PROGRAM Participate in the National Flood Insurance Program and enforce policies that address development in high-risk flood areas.	Existing High Ongoing	RLC Envr. Services	The RLC Highway Department is responsible for engineering, design, reconstruction and repair of roads, bridges, and culverts throughout Red Lake County. This department develops a 5-year construction plan that identifies and schedules road improvement projects that include measures for flood mitigation. The RLC Highway Department works in coordination with cities and township local governments and public works departments to plan for and implement local improvement projects.	Red Lake County
22	Flooding	Local Planning & Regulations / Structure & Infrastructure Projects	LOCALIZED FLOOD RISK REDUCTION Plan for and implement measures to address localized flood reduction projects for roads, bridges, and culverts throughout the county.	Existing High Ongoing	RLC Hwy. Dept.		Red Lake County

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
23	Flooding	Local Planning & Regulations	WATERSHED PLANNING Work with area watershed organizations to address mitigation plans and projects that address risk reduction for localized flooding and erosion.	Existing High Ongoing	RLCEM in coord with Watershed Districts, Red Lake SWCD	Red Lake County participates in regional watershed planning and has adopted the Red Lake River One Watershed One Plan and the Clearwater River One Watershed One Plan. The plans bring together neighboring counties, SWCDs, and the Red Lake Watershed District to develop a comprehensive plan that aligns the local water planning process on major watershed boundaries. The 7 local units of government involved include Red Lake County, Polk County, Pennington County, Red Lake County SWCD, West Polk SWCD, Pennington SWCD, and the Red Lake River Watershed District. There are properties in the City of Red Lake Falls and Red Lake Falls Township which are adjacent to the Clearwater River and have homes that are shifting due to erosion from high rain events. Red Lake County has submitted an application for hazard mitigation funding to possibly buy out some properties. As of 2023 this is still in process. In the last 20 years, Red Lake County has conducted two rounds of property buyouts for flood prone properties. Approximately 5 to 10 properties were bought out during that time. Future property buyouts will be considered as necessary.	Red Lake County, Watershed Orgs., Red Lake SWCD
24	Flooding	Local Planning & Regulations	PROPERTY BUYOUTS Conduct property buyouts to acquire homes affected by repetitive flooding and physically relocate or remove those homes to eliminate future flood damages.	Existing Moderate Ongoing	RLCEM, Local governments	RLC Environmental Services works in coordination with the Red Lake SWCD and area watershed districts on flood diversion and storage projects as needed for projects included in the Red Lake River One Watershed One Plan and the Clearwater River One Watershed One Plan. FEMA HMA grant funding may be sought for future eligible projects in the future.	Red Lake County, FEMA HMA
25	Flooding	Natural Systems Protection	RUNOFF STORAGE AND RESTORATION PROJECTS Conduct floodplain and stream corridor restoration in areas that are impacted by high rain events.	Existing Moderate Ongoing	RLC Envr. Services in coord with Red Lake SWCD and other watershed groups		Red Lake County, Watershed Districts, FEMA HMA

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
26	Dam/Levee Failure	Structure & Infrastructure Projects	DAM & LEVEE SAFETY Work with the MN DNR Dam Safety program to address any dams or levees that require repair.	Existing Low Ongoing	MN DNR	Red Lake County continues to be available to work with the MN DNR on any issues that may arise with these structures within the county. There are no high hazard potential dams within the county.	MN DNR

Section 6 – Plan Maintenance

6.1 Monitoring, Evaluation, and Updating the Plan

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

The Red Lake County emergency management director (EMD) is the individual responsible for leading all efforts to monitor, evaluate, and update the hazard mitigation plan within the five-year window. Throughout the five-year planning cycle, the Red Lake 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 the cities of Brooks, Oklee, Plummer, and Red Lake Falls, 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 Red Lake County EMD will conduct outreach to and communicate with the group on a quarterly basis on emergency management matters regarding severe weather awareness, local preparedness, mitigation, and response & recovery as needed. Additional stakeholders will be added based on need or in response to severe weather events.

If necessary, the Red Lake County EMD will convene the group to meet on a more regular basis to monitor plan implementation progress and reassess needs and opportunities. This could be done in response to funding cycles of programs that provide resources for hazard mitigation activities. If there is a need for a special meeting due to new developments or a declared disaster occurring in the county, the group will meet to update pertinent mitigation strategies. Depending on Red Lake 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 Red Lake County. In addition, state and federal policies will be reviewed to ensure they are addressing current and expected conditions. The group will also review the risk assessment portion of the plan to determine if this information should be updated or modified. The parties responsible for the various implementation actions will report on the status of their projects, and will include which implementation processes worked well, any difficulties encountered, how coordination efforts are proceeding, and which strategies should be revised.

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

Throughout the five-year window of the plan, each respective county department and jurisdiction will be required to report on the status of mitigation actions in their charts to the Red Lake County EMD so that progress notes may be maintained for the next plan update.

6.2 Implementation

Red Lake 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 Red Lake County and its jurisdictions (see Appendix H and Section 5.3). The cities of Brooks, Oklee, Plummer, and Red Lake Falls participated in the HMP planning process and identified the specific mitigation strategies that they would seek to implement in their communities during the five-year planning cycle. These mitigation actions are provided in Appendix H.

A number of implementation tools are available to address hazards. Many of these tools are below; however, in some cases additional discussion is needed in order to identify what strategies are most appropriate to use. This will be part of an ongoing discussion as Red Lake 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 Red Lake County. Regulation plays a particularly important role for land use, access to structures, and the protection of water resources and public health.

6.3 Continued Public Involvement

Continued public involvement is critical to the successful implementation of the HMP. The Red Lake County EMD 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.

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

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

- The Red Lake County HMP website link will be posted on the Red Lake 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, Red Lake 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 Red Lake County HMP website). Each respective jurisdiction will be required to report on the status of mitigation actions in their charts to the Red Lake County EMD.
- Red Lake County and its jurisdictions will use numerous means of public outreach to engage new public stakeholders in providing input on mitigation concerns, including those from underserved communities or socially vulnerable populations. Outreach methods may include presentations at city council or township board meetings, sharing information at special events, working with local schools and partner organizations, and posting information in areas that are used to communicate with the public (bulletin boards, websites, social media, and local media sources that communities use to inform and engage the public). As mitigation projects are implemented, jurisdictions will work to keep the public updated and engaged in those local efforts.

APPENDICES

Appendix A – References

Appendix B – Adopting Resolutions

Appendix C – Local Mitigation Survey Report

Appendix E – Past Mitigation Action Review Status Report

Appendix F – Planning Team Meetings

Appendix G – Public Outreach & Engagement Documentation

Appendix H – Mitigation Actions by Jurisdiction

Appendix A – References

References

- AMS. (2004, October 8). *Mobile Homes and Severe Windstorms*. American Meteorological Society. <https://www.ametsoc.org/index.cfm/ams/about-ams/ams-statements/archive-statements-of-the-ams/mobile-homes-and-severe-windstorms/>
- ATSDR. (2020, September 15). *CDC Social Vulnerability Index (SVI)*. ATSDR. https://www.atsdr.cdc.gov/placeandhealth/svi/at-a-glance_svi.html
- Borestein, S., Fassett, C., & Goldberg, M. (2023, July 28). *Mobile homes turn deadly when tornadoes hit. This year has been especially bad, AP analysis finds*. AP News. <https://apnews.com/article/tornado-mobile-home-death-crushed-b3a0e41ffd83a2681a92b8e4dadoef06>
- CDC. (2021). *Extreme Cold: A Prevention Guide to Promote Your Personal Health and Safety*. <https://www.cdc.gov/disasters/winter/pdf/extreme-cold-guide.pdf>
- Ceil Strauss, MN Floodplain Manager. (2023, September 22). *NFIP information for status in Hazard Mitigation Plan* [Personal communication].
- CEMHS. (2023). *Spatial Hazard Events and Losses Database for the United States*. Center for Emergency Management and Homeland Security, Arizona State University. <https://cemhs.asu.edu/sheldus>
- Climate Adaptation Partnerships. (2022). *CHaMP Tool*. <https://champ.rcc-acis.org/>
- DeLong, et al. (2022). *Landslides in Minnesota*. USGS. <https://doi.org/10.3133/fs20223007>
- Eaton, J. (2014, January 31). Propane Shortages Leave Many U.S. Homeowners in the Cold. *National Geographic*. <https://www.nationalgeographic.com/science/article/140129-us-propane-shortages-leave-homeowners-in-the-cold>
- FEMA. (2004). *Federal Guidelines for Dam Safety: Hazard Potential Classification System for Dams*. <https://www.ferc.gov/sites/default/files/2020-04/fema-333.pdf>
- FEMA. (2015). *National Preparedness Goal*. https://www.fema.gov/media-library-data/1443799615171-2aae90be55041740f97e8532fc680d40/National_Preparedness_Goal_2nd_Edition.pdf
- FEMA. (2021). *Hazard Mitigation Assistance Grants*. <https://www.fema.gov/grants/mitigation>
- FEMA. (2023a). *Hazus | FEMA.gov*. <https://www.fema.gov/flood-maps/products-tools/hazus#2>
- FEMA. (2023b, August 16). *Hazard Mitigation Assistance Projects—V2 | FEMA.gov*. OpenFEMA. <https://www.fema.gov/openfema-data-page/hazard-mitigation-assistance-projects-v2>
- FERC. (2020, July 21). *Dam Safety Program*. Hydropower. <https://www.ferc.gov/industries-data/hydropower>

- Hales, D., Hohenstein, W., Bidwell, M. D., Landry, C., McGranahan, D., Molnar, J., & Jadin, J. (2014). *Climate Change Impacts in the United States: The Third National Climate Assessment*. U.S. Global Change Research Program.
- Hogeback, J. (2020). *How Do Tornadoes Form?* Encyclopedia Britannica. <https://www.britannica.com/story/how-do-tornadoes-form>
- MDH. (2020, January 23). *Summary of General Requirements for Manufactured Home Parks: Manufactured Home Parks and Recreational Camping Areas: Environmental Health—Minnesota Dept. Of Health*. Minnesota Department of Health. <https://www.health.state.mn.us/communities/environment/mhprca/mhpgenreq.html>
- MDH. (2021, February). *Cold-related illness*. Minnesota Department of Health. https://data.web.health.state.mn.us/web/mndata/cold_related_illness#
- MN BWSR. (2023). *eLINK Guidance: Practices*. Minnesota Board of Water and Soil Resources. <https://bwsr.state.mn.us/elink-guidance-practices>
- MN DNR. (2020). *Dams and Dam Safety*. MN Department of Natural Resources. https://www.dnr.state.mn.us/waters/surfacewater_section/damsafety/index.html
- MN HSEM. (2019). *Minnesota State Hazard Mitigation Plan: Including Recommended Actions for Climate Change Adaptation*. <https://dps.mn.gov/divisions/hsem/hazard-mitigation/>
- MPCA. (2018, December 21). *Effects of climate change in Minnesota*. Minnesota Pollution Control Agency. <https://www.pca.state.mn.us/air/effects-climate-change-minnesota>
- Multi-Hazard Mitigation Council. (2019). *Natural Hazard Mitigation Saves: 2019 Report* (p. 658). National Institute of Building Sciences. https://www.nibs.org/files/pdfs/NIBS_MMC_MitigationSaves_2019.pdf
- NCEI. (2023). *Storm Events Database*. National Centers for Environmental Information, NOAA, Storm Events Database. <https://www.ncdc.noaa.gov/stormevents/>
- Normand, A. (2019). *Dam Safety Overview and the Federal Role* (p. 18). Congressional Research Service. <https://crsreports.congress.gov/product/pdf/R/R45981>
- NWS. (2020). *Storm Events Database*. NOAA National Centers For Environmental Information. <https://www.ncdc.noaa.gov/stormevents/>
- Pielke, R. (2012, February 2). *Windstorm*. Encyclopedia Britannica. <https://www.britannica.com/science/windstorm>
- Pryor, S. C., Barthelmie, R. J., Young, D. T., Takle, E. S., Arritt, R. W., Flory, D., Gutowski, W. J., Nunes, A., & Roads, J. (2009). Wind speed trends over the contiguous United States. *Journal of Geophysical Research*, 114(D14), D14105. <https://doi.org/10.1029/2008JD011416>
- Raiche, R. (2022). *Nowhere to Hide: Despite State Law, Mobile Home Residents Often Left Unprotected*. KSTP.Com 5 Eyewitness News. <https://kstp.com/5-investigates/nowhere-to-hide-despite-state-law-mobile-home-residents-often-left-unprotected/>

- Samanta, A., & Wu, T. (2017). *Hail: The Hidden Risk. An analysis of property exposure to damaging hail in 2017* (p. 9).
https://www.verisk.com/siteassets/media/campaigns/gated/underwriting/2017-hail-the-hidden-risk.pdf?__FormGuid=b105adc4-533b-41a0-8bc3-0ea9c9d1e6d&__FormLanguage=en-US&__FormSubmissionId=e0a36676-fdfc-4904-bof3-37284f4e41b3
- Sepic, M. (2017). *In storm season, mobile home park tenants seek better shelter*.
<https://www.mprnews.org/story/2017/06/14/in-storm-season-mobile-home-park-tenants-look-for-better-shelter>
- Smith, A. B. (2022). *2021 U.S. billion-dollar weather and climate disasters in historical context | NOAA Climate.gov*. <http://www.climate.gov/news-features/blogs/beyond-data/2021-us-billion-dollar-weather-and-climate-disasters-historical>
- USACE. (2008). *National Inventory of Dams Methodology: State and Federal Agency Manual*. U.S. Army Corps of Engineers.
<https://files.nc.gov/ncdeq/Public%20Records%20/DEMLR/NIDmanual2008.pdf>
- USGCRP. (2018). *Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II* (p. 1515). U.S. Global Change Research Program.
<https://doi.org/10.7930/NCA4.2018>

Appendix B – Adopting Resolutions

Appendix C – Local Mitigation Survey Report



Red Lake County Local Mitigation Survey Report

Overview

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

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

LMS Forms

Red Lake County	Yes
City of Brooks	Yes
City of Oklee	Yes
City of Plummer	Yes
City of Red Lake Falls	Yes

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

Red Lake County

LOCAL MITIGATION SURVEY

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

Name of Jurisdiction: RED LAKE COUNTY

Point of Contact:

Name: Mitch Bernstein
 Job Title: Red Lake County Sheriff / Emergency Management Director
 Phone: 218-253-2996
 Email: oklee06@yahoo.com

PART A: HAZARD IDENTIFICATION, RISK ASSESSMENT & VULNERABILITY ANALYSIS

HAZARD IDENTIFICATION

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

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

RECENT HAZARD EVENTS

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

April 2019: Overland and river flooding triggered a State Disaster Declaration.

April 2022: Overland and river flooding triggered a Federal Disaster Declaration.

LOCAL VULNERABILITIES

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

Natural Hazard (please list)	Vulnerability Assessment Describe <u>specific</u> community assets (infrastructure, systems, or populations) that are susceptible to damage or loss from hazard events.
Flooding	The city of Red Lake Falls has a lift station that is vulnerable to flooding from the Clearwater River.
Flooding	In the city of Red Lake Falls, Sportsman's Park is vulnerable to flooding from the Clearwater River.
Flooding	In the city of Plummer, People's Park is vulnerable to flooding from the Clearwater River.
Flooding	In the city of Oklee, Omar Sundrud Park is vulnerable to flooding from the Lost River.
Flooding	Huot Park (Old Crossing & Treaty County Wayside Park) is vulnerable to flooding from Red Lake River.

REDUCTION IN VULNERABILITY

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

None

INCREASE IN VULNERABILITY

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

In the past couple of years, we have received more reports from homeowners about landslide issues in the city of Red Lake Falls and in Red Lake Falls Township. Their homes are shifting, causing doors to not open or shut, affecting windows and foundations. These properties are all adjacent to the Clearwater River and shifting appears to be happening at an increased pace.

PART B: LOCAL MITIGATION CAPABILITIES ASSESSMENT

PUBLIC OUTREACH

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

Red Lake County utilizes the Red Lake County Emergency Management website page, the Red Lake County Sheriff's Office Facebook page, and local news media to communicate with residents, visitors, schools, and long-term care facilities on emergency preparedness, severe weather, and other hazard conditions throughout the year. Red Lake County Public Health also helps to support preparedness outreach and public education using their communication platforms.

EMERGENCY NOTIFICATION SYSTEM

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

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

LOCAL PLANS & AUTHORITIES

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

All Hazards Emergency Operations Plan: Red Lake 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.

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

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

Building Code Enforcement: Red Lake County Environmental Services enforces the MN State Building Code.

National Flood Insurance Program (NFIP): Red Lake County has FEMA Mapped High Risk Areas and participates in the NFIP. Initial entry date into the program was 07/02/1987.

Floodplain Ordinance: The Red Lake County Floodplain Ordinance (2021) establishes the flood plain district and zoning regulations and conditional uses permitted within the floodway, flood fringe, and general floodplain districts. The Environmental Services Department maintains and enforces the floodplain management ordinance for the county.

Shoreland Regulations: The Red Lake County Shoreland Program is administered by the Red Lake County SWCD Office. The Red Lake County Shoreland Ordinance establishes regulations for land use near shorelands including stormwater management. Conditional uses allowable within shoreland areas are subject to review and approval procedures by the county's Environmental Services Department. The Red Lake County Shoreland Ordinance 2018 Amendment was approved by the Red Lake County Board of Commissioners on November 27, 2018.

Subdivision Ordinance: Red Lake County Shoreland Ordinance – Section 7.0, Subdivisions/Platting and Section 8.0, Planned Unit Developments (PUD's) are designed to encourage a high standard of development and are enforced by the Red Lake County Board of Commissioners. The ordinance addresses erosion control and stormwater management.

5-Year Transportation Plan: The Red Lake County Highway Department is responsible for engineering, design, reconstruction and repair of roads, bridges, and culverts throughout Red Lake County. This department develops a 5-year construction plan that identifies and schedules road improvement projects that include measures for flood mitigation. Red Lake County Highway Department works in coordination with cities and township local governments and public works departments to plan for and implement local improvement projects.

Property Buyout Acquisitions: In the last 20 years, Red Lake County has conducted two rounds of property buyouts for flood prone properties. Approximately 5 to 10 properties were bought out during that time. These buyouts were all due to the Red Lake River undermining the hillsides around Red Lake Falls, and the resulting landslides and shifting of homes.

Minnesota Buffer Law: Red Lake County has adopted the requirements of the Minnesota Buffer Law. The purpose and intent of the law is to protect state water resources from erosion and runoff pollution; to stabilize soils, shores and banks; and to protect or provide riparian corridors. The Buffer Law Program is administered by the Red Lake County SWCD Office. Enforcement the Buffer Law Program is handled by the Red Lake County Environmental Services Department.

Regional Watershed Planning: Red Lake County participates in and has adopted the Red Lake River One Watershed One Plan and the Clearwater River One Watershed One Plan.

STAFF & PARTNERSHIPS

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

Red Lake County staff partner together to help accomplish mitigation goals, these staff include the RLC Sheriff/Emergency Management Director, Sheriff's Office administrative staff, RLC Highway Department, RLC County Public Health, RLC Social Services, RLC Environmental Services, RLC Assessor/County GIS and RLC Soil and Water Conservation District.

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

Red Lake 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.

Red Lake County Emergency Management works closely with the MN HSEM Region 3 regional program coordinator and county emergency managers on a range of planning, training, and exercises to support all-hazards preparedness, mitigation, response, and recovery capabilities. Red Lake County Emergency Management also collaborates with the Regional Healthcare Coalition to participate in exercises that address access and functional needs, as well as communication.

In the event of a disaster or other hazardous situation where temporary housing and basic human services are needed, Red Lake County Emergency Management works in coordination with local Fire and EMS, Red Lake County Public Health, and the American Red Cross to provide mass care services as needed.

Red Lake County participates in regional watershed planning and has adopted the Red Lake River One Watershed One Plan and the Clearwater River One Watershed One Plan. The plans bring together neighboring counties, SWCDs, and the Red Lake Watershed District to develop a comprehensive plan that aligns the local water planning process on major watershed boundaries. The 7 local units of government involved include Red Lake County, Polk County, Pennington County, Red Lake County SWCD, West Polk SWCD, Pennington SWCD, and the Red Lake River Watershed District.

PROGRAMS IN PLACE

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

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

National Weather Service – Severe Weather Awareness Weeks: Red Lake County participates in the annual Winter Hazard Awareness Week and Severe Weather Awareness Week campaigns sponsored by MN HSEM and the NWS each November and April. Each week-long effort provides specific information

each day covering the topics of severe weather winter weather, outdoor winter safety, indoor winter safety, and winter driving safety. Red Lake County Emergency Management promotes and shares information during the week via social media which communities, schools, churches or other civic programs are encouraged to share locally.

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

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

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

FUNDING & OTHER RESOURCES

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

The Red Lake SWCD applies for Federal and State grant dollars every year to address erosion and water quality issues throughout the county. This money is used to provide cost-share to landowners with erosion problems that otherwise would not be addressed due to the high cost of the projects. The County and individual cities have also pursued grant opportunities to secure funding for mitigation projects that would be too costly to fund with existing budget allotments. These grants would typically be for property buy outs for properties affected by landslides.

PART C: LOCAL MITIGATION PROJECTS

LOCAL MITIGATION PROJECTS

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

- Encourage all county residents to sign-up for the county's emergency notification alert system.

- Provide ongoing education and outreach to residents on personal preparedness for severe weather, extreme temperatures, and extended power outages. Coordinate with local jurisdictions to share information locally.
- Ensure the county's Emergency Operations Plan (EOP) is updated and addresses policies & procedures needed to support EM functions prior to, during, and following a disaster.
- Ensure designated facilities are in place and prepared for providing mass care sheltering and county staff are trained in sheltering operations.
- Continue to work with the Regional Healthcare Coalition to participate in exercises that address access and functional needs, as well as communication. Strengthen collaboration with Red Lake County Public Health on preparedness outreach and public education to maximize reaching the public with key information.
- Work with municipalities / rural electric coops to encourage them to address burying powerlines or strengthening power poles to avoid power outages from high wind events and storms.
- Address the safety of county, city, and township roads in winter through snow removal and ice control.
- Ensure there is a network of trained Storm Spotters throughout the county to support situational awareness of and public notification for dangerous storms such as severe thunderstorms and tornadoes.
- Work with county departments and local jurisdictions to acquire generator backup power to support critical infrastructure and delivery of essential services during an extended power outage due to storms.
- Encourage schools and long-term facilities that house senior citizens or other vulnerable populations to have emergency plans and generators in place to deal with severe weather, extreme temperatures and power outages.
- Work with owners of mobile home parks (MHP's) to ensure they are in compliance with Minnesota Department of Health (MDH) requirements for evacuation plans and storm shelters.
- Work with local governments to ensure the functionality of outdoor warnings sirens to warn residents of dangerous high wind or tornado events.
- Provide assistance to local jurisdictions that require purchase & installation of new outdoor warning sirens and ensure they are connected to the county's remote activation system.
- Work in coordination with local jurisdictions to address the need for the construction of storm shelters or tornado safe rooms in locations where residents and visitors are vulnerable to high wind events, such as mobile home parks, municipal campgrounds, and other public areas.

- Conduct outreach to residents to be aware of water restrictions, water conservation tips, and fire safety during periods of severe drought.
- Continue to participate in the National Flood Insurance Program and enforce policies that address development in high-risk flood areas.
- Continue to enforce the Minnesota State Building Code to ensure new development is built to construction standards that help to minimize damage from severe storms.
- Continue to enforce ordinances and policies within the county's code of ordinances to support reduction of risk to existing buildings, structures, and infrastructure as well as to limit risk to new development and redevelopment. This includes shoreland regulations, setback limits, and floodplain regulations.
- Plan for and implement measures to address localized flood reduction projects for roads, bridges, and culverts throughout the county such as hardening public roads, bridges, and installing high-flow culverts to mitigate recurring flood damages. Additional projects may include paving shoulders of roads, paving or adding riprap around culverts, and adding rip-rap to the banks of ditches and streams. These projects may be in coordination between the county, SWCD, and other area watershed districts and in accordance with other existing plans.
- Continue to work in partnership with the Soil & Water Conservation District and other watershed partners to address mitigation plans, policies, and projects that address risk reduction for localized flooding and erosion.
- Continue to address shoreland zoning regulations and stormwater management to mitigate impacts from high rain events, especially for areas of new development and population growth within the county.
- Conduct property buyouts to acquire homes affected by repetitive flooding and physically relocate or remove those homes to eliminate future flood damage.
- Conduct soil stabilization and slope management projects in unstable areas for sediment and erosion control resulting from high rain events.
- Conduct floodplain and stream corridor restoration in areas that are impacted by high rain events.
- Construct flood diversion and storage projects, where identified, as needed to reduce the impacts of high rain events on streams, rivers, or drainage systems which may result in localized or downstream flooding.
- Address areas of landslide concern along the Red Lake River and Clearwater River in and around the city of Red Lake Falls. Red Lake County has submitted an application for hazard mitigation funding to possibly buy out some properties. As of 2023 this is still in process.

GAPS OR DEFICIENCIES

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

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

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

Project Funding: Finding funding for the implementation of mitigation projects is a barrier. The county, townships, and cities have limited funding for mitigation activities such as infrastructure improvements for flood mitigation, updating outdoor warning sirens, or constructing storm shelter or tornado safe rooms in areas where people are vulnerable to high wind events. Outside grant funding is necessary and can be difficult to obtain.

PART D: NATIONAL FLOOD INSURANCE PROGRAM (NFIP) INFORMATION

Does your community participate in the NFIP?

Yes, Red Lake County participates in the NFIP.

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

N/A

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

1. NFIP. Adoption of NFIP minimum floodplain management criteria via local regulation.

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

05/20/1977

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

03/09/2021

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

03/09/2021

2. Contacts. Please provide names and emails for your:

- Floodplain Administrator: Kurt Casavan: kcasavan@co.red-lake.mn.us
- Engineering Contact (optional)
- Additional Floodplain Contact (optional)

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

- Do you know of any existing buildings in the FEMA mapped floodplain?

No

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

No

- Have you reviewed the **Local Official Playbook** substantial improvement/substantial damage ?

No

PART E: SURVEY PARTICIPANTS

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

Mitch Bernstein, Sheriff/EM Director, 3 hours

Kurt Casavan, County Environmental Officer, 1 hour

Red Lake County

LOCAL MITIGATION SURVEY

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

Name of Jurisdiction: CITY OF BROOKS

Point of Contact:

Name: Joyce Morinville
 Job Title: Clerk-Treasurer
 Phone: 218-698-4220
 Email: brooksmn@brooksmn.com

PART A: HAZARD IDENTIFICATION, RISK ASSESSMENT & VULNERABILITY ANALYSIS

HAZARD IDENTIFICATION

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

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

RECENT HAZARD EVENTS

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

Over the last 5 years the city has experienced standard seasonal high rain events, winter storms, and windstorms but nothing major of note that has caused damage.

LOCAL VULNERABILITIES

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

Natural Hazard (please list)	Vulnerability Assessment Describe <u>specific</u> community assets (infrastructure, systems, or populations) that are susceptible to damage or loss from hazard events.
	None.

REDUCTION IN VULNERABILITY

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

None

INCREASE IN VULNERABILITY

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

None

PART B: LOCAL MITIGATION CAPABILITIES ASSESSMENT

PUBLIC OUTREACH

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

The City of Brooks depends upon the Red Lake County Sheriff’s Department to get urgent info out to residents when required.

EMERGENCY NOTIFICATION SYSTEM

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

No. We depend upon Red Lake County Emergency Management to promote residents to sign up for the CodeRED emergency notification system.

LOCAL PLANS & AUTHORITIES

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

The city of Brooks relies on Red Lake County Emergency Management for guidance for emergency management. The city also works with the Red Lake County Highway Department to take care of all snow and ice removal as required.

STAFF & PARTNERSHIPS

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

The City of Brooks partners with Red Lake County staff to help accomplish mitigation goals. These staff include the RLC Sheriff/Emergency Management Director, Sheriff's Office administrative staff, RLC Highway Department, RLC County Public Health, RLC Social Services, RLC Environmental Services, RLC Assessor/County GIS and RLC Soil and Water Conservation District.

PROGRAMS IN PLACE

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

None. We depend upon Red Lake County Emergency Management to implement programs that reduce risk and educate the public.

FUNDING & OTHER RESOURCES

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

The city of Brooks is a small city of 113 people with a limited budget to address maintenance or repair of existing infrastructure as required. The Red Lake County Engineer and Red Lake County Highway Department also assist us when required.

PART C: LOCAL MITIGATION PROJECTS

LOCAL MITIGATION PROJECTS

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

- Work with Red Lake County and the MN DNR to get the city enrolled in the National Flood Insurance Program and to develop a floodplain ordinance.
- Encourage residents to be aware of and prepared for storm events.

GAPS OR DEFICIENCIES

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

Our city does not have its own website or Facebook page to do better outreach to our residents.

Not all city residents are signed up for the county's CodeRED Emergency Notification System or have NOAA weather radios. Continued public education needs to be done to encourage people to utilize these resources. We look to Red Lake County for help on this.

The city has limited funding and staff and depends upon help from the county or outside grant funding for any major projects.

PART D: NATIONAL FLOOD INSURANCE PROGRAM (NFIP) INFORMATION

Does your community participate in the NFIP?

No, the city of Brooks does not participate in the NFIP. The city had new FEMA Mapped High Risk Areas as of 3/9/21.

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

We are a small city and need assistance from the county and MN DNR to participate. Previously we fell under Red Lake County's participation in the NFIP.

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

1. NFIP. Adoption of NFIP minimum floodplain management criteria via local regulation.

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

05/20/1977 (Red Lake County)

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

03/09/2021 (Red Lake County)

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

3/9/2021 (Red Lake County)

2. Contacts. Please provide names and emails for your:

- Floodplain Administrator – Kurt Casavan, kcasavan@co.red-lake.mn.us
- Engineering Contact (optional)
- Additional Floodplain Contact (optional)

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

- Do you know of any existing buildings in the FEMA mapped floodplain?

No

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

No

- Have you reviewed the [Local Official Playbook](#) substantial improvement/substantial damage ?

No

PART E: SURVEY PARTICIPANTS

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

Joyce Morinville, Brooks City Clerk, 3 hours

Red Lake County

LOCAL MITIGATION SURVEY

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

Name of Jurisdiction: CITY OF OKLEE

Point of Contact:

Name: Derek Cross
 Job Title: City Clerk
 Phone: 218-796-5183
 Email: cityofoklee@gvtel.com

PART A: HAZARD IDENTIFICATION, RISK ASSESSMENT & VULNERABILITY ANALYSIS

HAZARD IDENTIFICATION

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

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

RECENT HAZARD EVENTS

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

Over the last 5 years the city has experienced standard seasonal high rain events, winter storms, and windstorms but nothing major of note that has caused damage.

LOCAL VULNERABILITIES

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

Natural Hazard (please list)	Vulnerability Assessment Describe <u>specific</u> community assets (infrastructure, systems, or populations) that are susceptible to damage or loss from hazard events.
Flooding	The city’s Omar Sundrud Memorial Park is vulnerable to flooding from the Lost River.

REDUCTION IN VULNERABILITY

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

None. We only minimal have local flood issues when ice is blocking the culverts and the water can’t drain away. We have no homes or infrastructure that are at risk to flooding.

We have a small mobile home park with about 6 trailers. These residents may use the City Hall for shelter if needed during inclement weather.

INCREASE IN VULNERABILITY

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

None

PART B: LOCAL MITIGATION CAPABILITIES ASSESSMENT

PUBLIC OUTREACH

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

The City of Oklee has its own Facebook Page, we also utilize Red Lake County Sheriff’s Department to get urgent info out to the residents when required.

EMERGENCY NOTIFICATION SYSTEM

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

We currently do not have a link to the CodeRED Emergency Notification System, this will be corrected shortly.

LOCAL PLANS & AUTHORITIES

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

The City of Oklee relies on Red Lake County Emergency Management for guidance for emergency management.

The city of Oklee works with the Red Lake County Highway Department to take care of all snow and ice removal as required.

Building permits are required and all work is required to be done to building code. Red Lake County Environmental Services enforces the MN State Building Code.

STAFF & PARTNERSHIPS

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

The City of Oklee partners with Red Lake County staff to help accomplish mitigation goals. These staff include the RLC Sheriff/Emergency Management Director, Sheriff's Office administrative staff, RLC Highway Department, RLC County Public Health, RLC Social Services, RLC Environmental Services, RLC Assessor/County GIS and RLC Soil and Water Conservation District.

PROGRAMS IN PLACE

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

Severe weather alerts are posted on the city of Oklee's Facebook page. The city also has a strong relationship with all local agencies, including RLC Sheriff/Emergency Management Director, Sheriff's Office administrative staff, RLC Highway Department, RLC County Public Health, RLC Social Services, RLC Environmental Services, RLC Assessor/County GIS and RLC Soil and Water Conservation District.

FUNDING & OTHER RESOURCES

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

The city of Oklee budgets for the any needs regarding any drainage problems and we do upkeep our existing infrastructure as required. The Red Lake County Engineer and Red Lake County Highway Department also assist us when required.

PART C: LOCAL MITIGATION PROJECTS

LOCAL MITIGATION PROJECTS

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

- Use our city Facebook page to encourage our residents to sign-up for the county's emergency notification alert system and to be prepared for severe weather events and extreme cold.
- Continue to have the City Hall available as a shelter for residents of the trailer park.
- Continue to address winter snow removal and ice treatments with help from the county.
- Work with Red Lake County and the MN DNR to get the city enrolled in the National Flood Insurance Program and to develop a floodplain ordinance.
- Try to obtain a backup generator for city use.

GAPS OR DEFICIENCIES

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

Not all City of Oklee residents are signed up for the county's CodeRED Emergency Notification System, have NOAA weather radios, or our city Facebook page to receive important messages. Ongoing continued public education needs to be done to encourage people to utilize these resources.

The city of Oklee only has emergency power for the water system, sewer and the drinking water supply. Having another backup portable generator for city use would be helpful.

The city has limited funding and staff and depends upon help from the county or outside grant funding for any major projects.

PART D: NATIONAL FLOOD INSURANCE PROGRAM (NFIP) INFORMATION

Does your community participate in the NFIP?

The city does not currently participate in the NFIP.

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

New FEMA mapped high risk areas were added as of 3/9/21. The city has not enrolled in the NFIP yet. We will reach out to Red Lake County and the MN DNR to get assistance in getting enrolled.

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

1. NFIP. Adoption of NFIP minimum floodplain management criteria via local regulation.

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

The city is not enrolled in the NFIP and at this time does not have a floodplain ordinance.

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

N/A

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

N/A

2. Contacts. Please provide names and emails for your:

- Floodplain Administrator: We have worked with Red Lake County - Kurt Casavan, Environmental Services officer kcasavan@co.red-lake.mn.us
- Engineering Contact (optional)
- Additional Floodplain Contact (optional)

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

- Do you know of any existing buildings in the FEMA mapped floodplain?

No

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

No

- Have you reviewed the [Local Official Playbook](#) substantial improvement/substantial damage ?

No

PART E: SURVEY PARTICIPANTS

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

Derek Cross, City Administrator, 5 hours

Red Lake County

LOCAL MITIGATION SURVEY

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

Name of Jurisdiction: CITY OF PLUMMER

Point of Contact:

Name: Margaret Peterson
 Job Title: Clerk/Treasurer
 Phone: 218-465-4231
 Email: cityplmr@gvtel.com

PART A: HAZARD IDENTIFICATION, RISK ASSESSMENT & VULNERABILITY ANALYSIS

HAZARD IDENTIFICATION

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

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

RECENT HAZARD EVENTS

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

In the spring of 2022 the city experienced a major rain event causing bypass at the lift station and emergency discharge at the wastewater ponds.

LOCAL VULNERABILITIES

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

Natural Hazard (please list)	Vulnerability Assessment Describe <u>specific</u> community assets (infrastructure, systems, or populations) that are susceptible to damage or loss from hazard events.
Flooding	Our sanitary lift station is near the river and could be endangered from torrential rains.
Ice Storms, Blizzards	Much of the city’s municipal electrical service consists of overhead power lines and electrical poles. Those overhead lines and power poles are prone to failure in ice storms and blizzards with heavy snowfall and high winds that may bring down trees and branches.
Windstorms and Tornadoes	We have 1 mobile home park within the city that does not have a storm shelter and residents are vulnerable to high wind and tornado events. Our municipal campground is active during summer and fall months with RVs and campers and does not have a storm shelter.
Extreme Cold	Residents are susceptible to dangers from extreme cold, especially if the power goes down during winter storm events. We have a high population of senior citizens and also low-income residents who are more vulnerable during these events. In the past we have experienced frozen water services. The city has experienced damages to roads from spring frost heaves.

REDUCTION IN VULNERABILITY

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

In 2022 the city completed a street reconstruction project which included adding more storm sewer and catch basins.

We have a small mobile home park and campground. These residents may use the City Hall for shelter if needed during inclement weather.

INCREASE IN VULNERABILITY

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

We are more prone to flooding due to agriculture ditching which has increased the water flow through town.

PART B: LOCAL MITIGATION CAPABILITIES ASSESSMENT

PUBLIC OUTREACH

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

We post information on bulletin boards at city hall and at the post office. We also utilize Red Lake County Sheriff's Department to get urgent info out to the residents when required.

EMERGENCY NOTIFICATION SYSTEM

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

Yes, we encourage residents to sign up for Red Lake County's CodeRED Emergency Notification System which allows residents and visitors to receive severe weather alerts targeted to their location along with other local emergency alerts. A link to sign up for the system is located on the Red Lake County Sheriff's Office website page.

LOCAL PLANS & AUTHORITIES

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

The City of Plummer relies on Red Lake County Emergency Management for guidance for emergency management.

The City of Plummer works with the Red Lake County Highway Department to take care of all snow and ice removal as required.

Building permits are required and all work is required to be done to building code. Red Lake County Environmental Services enforces the MN State Building Code.

STAFF & PARTNERSHIPS

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

The City of Plummer partners with Red Lake County staff to help accomplish mitigation goals. These staff include the RLC Sheriff/Emergency Management Director, Sheriff's Office administrative staff, RLC Highway Department, RLC County Public Health, RLC Social Services, RLC Environmental Services, RLC Assessor/County GIS and RLC Soil and Water Conservation District.

PROGRAMS IN PLACE

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

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

FUNDING & OTHER RESOURCES

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

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

PART C: LOCAL MITIGATION PROJECTS

LOCAL MITIGATION PROJECTS

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

- **Windstorms and Tornadoes** – Notify the residents in the trailer park and the campground that city hall is the designated storm shelter.
- **Flooding** - Implement new storm sewer upgrades as construction projects are implemented. Purchase additional pumps in the event of flooding. Enforce the city's sump pump ordinance to minimize impacts to the city's stormwater system
- **Severe Winter / Summer Storms** – Post information on the city's local bulletin boards to encourage residents to sign up for the county's emergency notification system. Participate in the National Weather Service's – Severe Weather Awareness Week. We have portable generator for our City Hall, which is our designated community mass care center
- **Extreme Cold** - Encourage residents to be prepared for periods of extreme cold and potential power outages. Alert residents to the dangers of extreme cold and freezing pipes.

GAPS OR DEFICIENCIES

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

Our city does not have its own website or Facebook page to do better outreach to our residents. We need to develop our city's long-range Comprehensive Plan to address considerations for future hazard events such as flooding. We are a small city with limited financial and staff resources to address local mitigation projects.

PART D: NATIONAL FLOOD INSURANCE PROGRAM (NFIP) INFORMATION

Does your community participate in the NFIP?

Yes, The City of Plummer participates in the NFIP.

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

N/A

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

1. NFIP. Adoption of NFIP minimum floodplain management criteria via local regulation.

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

June 22, 1984

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

March 1, 2021

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

The ordinance was published in the March 3, 2021 edition of the Oklee Herald

2. Contacts. Please provide names and emails for your:

- Floodplain Administrator – Kurt Casavan kcasavan@co.red-lake.mn.us
- Engineering Contact (optional)
- Additional Floodplain Contact (optional)

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

- Do you know of any existing buildings in the FEMA mapped floodplain?

Yes, 1.

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

No

- Have you reviewed the [Local Official Playbook](#) substantial improvement/substantial damage ?

No

PART E: SURVEY PARTICIPANTS

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

Margaret Peterson, City Clerk/Treasurer, 3 hours

Scott Larson, Water/Wastewater Superintendent, 1 hour

Red Lake County

LOCAL MITIGATION SURVEY

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

Name of Jurisdiction: CITY OF RED LAKE FALLS

Point of Contact:

Name: Kathleen Schmitz
 Job Title: City Administrator
 Phone: 218-253-2684
 Email: rdlkfals@gvtel.com

PART A: HAZARD IDENTIFICATION, RISK ASSESSMENT & VULNERABILITY ANALYSIS

HAZARD IDENTIFICATION

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

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

RECENT HAZARD EVENTS

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

In April 2019 and April 2022 we have experienced flooding. In 2019 it was mostly along the river. In 2022 it was several streets washed out and had sloughing of riverbanks in several areas along the river.

LOCAL VULNERABILITIES

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

Natural Hazard (please list)	Vulnerability Assessment Describe <u>specific</u> community assets (infrastructure, systems, or populations) that are susceptible to damage or loss from hazard events.
Flooding	We have 2 lift stations and they have been prone to flooding during high rain events. We have had to sandbag at the arena several years. There have been several river banks sloughing and shifting of soil which has caused damage to many homes along the river.
Windstorms, tornados	We have 2 public campgrounds and a mobile home park that are vulnerable to high wind.
Extreme Cold	We have several homes that are affected by extreme cold and need to run water annually when the water temps reach 35 degrees. Power outages are always a concern with extreme cold.
Drought	The city receives its water from wells and in drought this can affect the water supply and residents will have to conserve.
Landslides	Because of the soil types along the river and within our community Landslides have been a major concern. We have several homes that have cracked windows, doors, loss of yards, severe shifting etc.

REDUCTION IN VULNERABILITY

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

Replaced pumps at the Kankel lift and replaced one pump at the main lift. We added a generator at Kankel and have ordered a new generator for the Main lift station. In 2023 we are starting & cleaning & Inspection 5-year contract for our storm sewers.

We have residents run water when the water temps reach 35 degrees this prevents freezing to our water mains also.

We have adopted the Shoreline ordinance so homes are not built too close to the river.

INCREASE IN VULNERABILITY

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

We have not experienced any increase in vulnerability.

PART B: LOCAL MITIGATION CAPABILITIES ASSESSMENT

PUBLIC OUTREACH

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

We post on the city website; word of mouth on Facebook from fire department, civic and commerce and Sheriff Department. City Sirens for Tornado, Fire Department.

EMERGENCY NOTIFICATION SYSTEM

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

We promote CodeRED sign up with the local Sheriff's Office. We have community boards to post items on throughout the town.

LOCAL PLANS & AUTHORITIES

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

The Sheriff's department contacts the mobile home park and people in our campground if bad weather and the open the City Hall for a storm shelter. We have adopted the Shoreland Ordinance for building along the river. We have adopted a culvert ordinance in coordination with the Red Lake Watershed to permit and survey prior to putting in culverts to assure proper drainage.

STAFF & PARTNERSHIPS

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

Our local Sheriff's dept is responsible for emergency management and we work closely with them. Our City Council includes a Safety Committee. We have a city engineer and a public works supervisor that addresses road maintenance issues for flooding. The local Fire Department addresses concerns with fire risk.

PROGRAMS IN PLACE

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

Our city works with the county to test sirens and posting for severe weather. We have a street sweeper to clear gutters and storm drains. Each spring we have large item pickup to encourage residents to clean up their yards.

FUNDING & OTHER RESOURCES

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

We are a member of MnWARN. We do use our city budget to address mitigation projects as well as grants, bonding on large water, sewer street projects. We attended several meetings for the FEMA floodplain and updated the local ordinance. The city works with SWCD to address erosion issues. In 2019 the city received grant funding from FEMA Hazard Mitigation program to buyout 2 home that have been damaged by landslides.

PART C: LOCAL MITIGATION PROJECTS

LOCAL MITIGATION PROJECTS

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

Windstorms/Tornadoes

- Work to address construction of a storm shelter or tornado safe room at the city's 2 public campgrounds and the mobile home park.
- Continue to maintain the city's outdoor warning siren and educate residents about severe summer storms.

Extreme Cold

- Continue to educate residents on the dangers of extreme cold and power outages.
- Do outreach to residents with water pipes that are susceptible to freezing.

Drought

- Establish watering restrictions and promote water conservation during periods of extreme drought.

Flooding

- Continue to work with the RLWD to enforce the city's culvert ordinance as part of our stormwater management.
- Continue to enforce the city's Floodplain Management ordinance to restrict development in high-risk flood areas.
- Address flood mitigation measures for the city's hockey arena within the FEMA mapped floodplain.

Landslides

- Continue to enforce the city's Shoreland Ordinance to restrict new development in areas along the river.
- Work with willing property owners to conduct property buyouts of homes in areas at high risk of failure due to erosion. / Apply for grant money from MN DNR or FEMA to do these property acquisitions.

GAPS OR DEFICIENCIES

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

Our city does not have its own Facebook page but we use the sheriff dept, Fire dept and civic and commerce to reach out to the community. The city needs significant funding assistance to buy out residential properties that have experienced shifting along the river and other areas in town. We are small city with limited financial and staff resources to address local mitigation projects.

PART D: NATIONAL FLOOD INSURANCE PROGRAM (NFIP) INFORMATION

Does your community participate in the NFIP?

Yes, the city of Red Lake Falls participates in the NFIP.

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

N/A

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

1. NFIP. Adoption of NFIP minimum floodplain management criteria via local regulation.

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

January 3, 1985

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

November 23, 2020

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

December 1, 2020

2. Contacts. Please provide names and emails for your:

- Floodplain Administrator – Kurt Casavan 218-253-4121
- Engineering Contact (optional)
- Additional Floodplain Contact (optional)- Tanya Waldo tanya.hanson@redlake.mnswcd.org

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

- Do you know of any existing buildings in the FEMA mapped floodplain?

Our Hockey Arena

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

No

- Have you reviewed the [Local Official Playbook](#) substantial improvement/substantial damage ?

No

PART E: SURVEY PARTICIPANTS

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

Kathy Schmitz, City Administrator, 6 hours

Matt Swendra, Public Works, 2 hours

Appendix D – Plans & Programs in Place

Red Lake County

HMP Plans & Programs in Place Form

EMERGENCY PLANNING CAPABILITIES	Yes/No	Comments
Emergency Mass Notification System	Yes	CodeRED Emergency Notification System + IPAWS
Outdoor Warning Sirens	Yes	Red Lake Falls (2), Oklee (1), Brooks (1), and Plummer (1)
Emergency Operations Plan (EOP)	Yes	County EOP is updated annually
Mass Care Sheltering Plan / List of Shelter Facilities	Yes	Addressed in EOP
Tornado Safe Rooms / Storm Shelters	No	Local vulnerabilities are addressed in coordination with schools & jurisdictions
NWS Weather Ready Nation / StormReady Certification	No	
Coordination with Schools	Yes	Tornado Drills, other trainings
Coordination with Neighboring County/Tribal Jurisdictions	Yes	HSEM Region 3 regional planning & exercises annually
Coordination with Local / Regional Agencies involved in mitigation	Yes	SWCD, MN DNR, MnDOT, Rural and Municipal Electric Cooperatives
Coordination with organizations or agencies addressing disaster related issues and vulnerable populations, emergency preparedness, access and functional needs populations	Yes	Public Health, American Red Cross, Salvation Army
Hazard data and information	Yes	Damage information on file from past storm events and disaster declarations
<i>Other (please describe)</i>	Yes	Pennington & Red Lake County Public Health has preparedness plans in place

PLANNING & REGULATORY CAPABILITIES	Yes/No	Comments
Comprehensive/Land Use Plan	No	
Capital Improvements Plan	Yes	5-Year Construction Program

Economic Development Plan	Yes	Red Lake County Economic Development Corporation
Climate Adaptation Plan	No	
Continuity of Operations Plan (COOP)	Yes	Red Lake County Emergency Management (lead)
Transportation Plan (Roads, Bridges, Culverts, Ditches)	Yes	5-Year Transportation Plan, Highway Dept.
Stormwater Management Plan / Drainage Plan	Yes	Red Lake County Environmental Services
Burning Permits/Restrictions	Yes	RLC Sheriff's Office
Comprehensive Local Water Management Plan	Yes	Replaced by 1W1P's
Watershed Plan (One Watershed, One Plan)	Yes	RLC participates in the Red Lake River 1W1P and the Clearwater River 1W1P
Wellhead Protection Plan		Municipal level plans are done in coordination with MDH
Forest Management Plan	No	
Community Wildfire Protection Plan (CWPP)	No	
Participation in MN DNR Firewise Program	No	No formal participation in MN DNR program
Database of Dry Hydrants/Well Access	No	
<i>Other (please describe)</i>		

LOCAL POLICY / PROGRAM CAPABILITIES	Yes/No	Comments
Land Use, Planning, & Zoning Ordinance	No	
Subdivision Ordinance	Yes	RLC Shoreland Ordinance – Section 7.0, Subdivisions /Platting & Section 8.0, Planned Unit Developments
Building Codes	Yes	RLC Environmental Services enforces the MN State Building Code
National Flood Insurance Program (NFIP)	Yes	Red Lake County NFIP entry date 07/02/1987
Flood insurance rate maps	Yes	RLC Environmental Services Dept.

Floodplain Ordinance	Yes	Red Lake County Floodplain Ordinance (2021)
Shoreland Ordinance	Yes	Administered by the Red Lake County SWCD
Minnesota Buffer Law / Soil Erosion Ordinance	Yes	The Buffer Law Program is administered by the Red Lake County SWCD Office.
Home Buyouts for flood or erosion mitigation	Yes	In the last 20 years, Red Lake County has conducted two rounds of property buyouts for flood prone properties.
Other natural hazard specific ordinance (i.e., stormwater, steep slope, wildfire)	No	
Maintenance programs to reduce risk	Yes	Highway Dept. ROW maintenance and drainage systems
<i>Other (please describe)</i>		

ADMINISTRATIVE/TECHNICAL CAPABILITIES	Yes/No	Comments
Emergency Management Director	Yes	RLC Sheriff's Office
Sheriff/Police Department	Yes	RLC Sheriff's Office
Floodplain Administrator	Yes	RLC Environmental Services Department
Chief Building Official	Yes	RLC Environmental Services Department
County Engineer	Yes	RLC Highway Dept.
Mapping Specialist (GIS)	Yes	RLC Environmental Services Dept.
Public Health Coordinator/Department	Yes	Pennington & Red Lake County Public Health
Planning Commission	Yes	RLC Board of Commissioners
Soil and Water Conservation District	Yes	Red Lake SWCD
Minnesota Department of Natural Resources	Yes	MN DNR coordination as needed
Mitigation Planning Committee	Yes	2023 HMP Update Planning Team
Mutual Aid Agreements	Yes	Regional
<i>Other (please describe)</i>		

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

Appendix E – Past Mitigation Action Review Status Report

Red Lake County

Past Mitigation Action Review Status Report

Following is a report on the status of mitigation actions related to natural hazards included in the Red Lake County 2016 Hazard Mitigation Plan. This report identifies those actions that have been completed, are being deleted, or are considered as ongoing efforts. Mitigation actions that are noted as “ongoing” will be reviewed and revised as necessary for future implementation. This report covers the mitigation actions that were listed for implementation by the county and by city jurisdictions, as applicable.

Hazard	Mitigation Action	Responsibility	Status	Comments
All-Hazards	Decrease areas with no cell phone coverage	Red Lake County	Ongoing	RLC encourages our cell providers in the county to continue to ensure widespread coverage so that residents can receive emergency cell notifications.
All-Hazards	Assess the current siren warning system for the county on a regular basis	Red Lake County & All Cities	Ongoing	Red Lake County Emergency Management (RLCEM) tests all warning sirens on a monthly basis to ensure they are functioning.
All-Hazards	Utilize GIS and mapping technology	Red Lake County & All Cities	Ongoing	RLCEM continues to incorporate GIS into our emergency management program for different facets of all-hazards planning and post-disaster recovery.
All-Hazards	Hazard Education	Red Lake County & All Cities	Ongoing	RLCEM continues to use the county website, Sheriff's Office Facebook page and local media to share information with residents on severe storm conditions and hazards and personal preparedness. Local cities are encouraged to share this information locally using their own outreach methods.
Severe Winter & Summer Storms	Continue working with the National Weather Service to improve storm warning and awareness	Red Lake County & All Cities	Ongoing	RLCEM works with the NWS to provide annual SkyWarn training to local law enforcement and FD's. RLCEM also participates in the NWS's annual spring and winter severe weather awareness weeks.

Hazard	Mitigation Action	Responsibility	Status	Comments
Severe Winter & Summer Storms	Promote the weather radio use	Red Lake County & All Cities	Ongoing	RLCEM and cities continue to encourage residents and other facilities such as nursing homes and schools to have NOAA weather radios to be aware of hazardous conditions, especially in the event of a power outage.
Severe Winter & Summer Storms	Encourage no/limited travel during severe weather conditions.	Red Lake County & All Cities	Delete	Not a necessary mitigation action.
All-Hazards	Increase online and other communication technologies	Red Lake County & All Cities	Ongoing	RLCEM and cities utilize websites, Facebook, and local media to communicate with residents, as well as posting of flyers and making announcements at meetings to reach those such as the elderly that may not use computers or cell phones.
Flooding	Improve repetitively damaged roads	Red Lake County & All Cities	Ongoing	RLC Highway Dept. and cities continue to address road and infrastructure improvements as needed to mitigate damages to high rain or flooding events.
Flooding	Flood proof structures and roadways	Red Lake County	Ongoing	Same as above
Flooding	Improve culverts and bridges	Red Lake County	Ongoing	Same as above
Flooding	Utilize the ring dike program for affected areas	Red Lake County	Ongoing	Ongoing as appropriate
Flooding	Update floodplain ordinances.	Red Lake County & All Cities	Ongoing	RLC and cities keep floodplain ordinances updated and enforced.
Flooding	Enforce current floodplain and building ordinances.	Red Lake County & All Cities	Ongoing	Same as above.
Flooding	Improve efficient city drainage	All Cities	Ongoing	The cities of Brooks, Oklee, Plummer, and Red Lake Falls continue to address stormwater management and infrastructure improvements to handle high rain events and minimize damages.
Flooding	Replace old cast iron pipes as required	All Cities	Ongoing	Same as above.

Hazard	Mitigation Action	Responsibility	Status	Comments
All-Hazards	Combine emergency management plans with current watershed management plans & Eclectic Cooperative Plans	Red Lake County & All Cities	Ongoing	RLC and cities continue to work with the Red Lake Soil & Water Conservation District and the Red Lake Watershed District on related planning and projects related to flooding or erosion. We also continue to work with the local utility providers that serve Red Lake County to identify and reduce power outages. Watershed and utility providers are stakeholders included in the 2023 RLC HMP update.
Severe Winter & Summer Storms	Update and or Create nursing homes, hospitals, public events and schools storm plans	All Cities	Ongoing	RLCEM and city EM's continue to provide assistance as needed to facilities such as nursing homes, hospitals, and schools for severe weather awareness and emergency planning.
Severe Summer Storms	Ensure trailer courts have either an on-site shelter or an evacuation plan to a nearby shelter	Red Lake County & All Cities	Ongoing	RLCEM, PH, and local governments continue to work with mobile home park operators to ensure that they have updated evacuation plans and storm shelters in place as per MN State Statutes.
Severe Summer Storms	Encourage individuals to have a shelter plan in place.	Red Lake County & All Cities	Ongoing	This continues to occur under RLCEM and city outreach for severe weather awareness & preparedness outreach.
Severe Winter & Summer Storms	Provide critical with alternative power methods	Red Lake County & All Cities	Ongoing	RLC and cities continue to identify where backup power is needed for critical infrastructure or services and work to obtain generators as funding is available.
Severe Winter & Summer Storms	Maintain current backup generators	Red Lake County & All Cities	Ongoing	Ongoing as relevant for existing generators.

Hazard	Mitigation Action	Responsibility	Status	Comments
Severe Winter & Summer Storms	Create a large outage plan	Red Lake County & All Cities	Ongoing	RLC and cities continue to have plans and backup generators in place for extended power outages to ensure ability to operate government operations, critical facilities, and emergency services.
Severe Winter & Summer Storms	Bury and improve power line protection	Red Lake County & All Cities	Ongoing	Utility providers for Red Lake County continue to identify & address areas of vulnerability for power failure and determine what mitigation measures such as burying powerlines to reduce risk.
Severe Winter & Summer Storms	Create evacuation plan and identify emergency routes	Red Lake County	Delete	Not a necessary mitigation action. This is part of RLC emergency operations planning with law enforcement, fire departments, EMS, and local governments.
Severe Winter & Summer Storms	Familiarize local emergency response with the current facility storm response plan	Red Lake County	Delete	Same as above.
Severe Winter & Summer Storms	Ensure that Voyageur's View has multiple advanced storm notification methods	Red Lake County	Ongoing	RLCEM continues to work with the Voyageur's Campground to participate in the county's emergency notification system, to be signed up for the Sheriff's Office Facebook page, and to have NOAA weather radios in place.
Wildfire	Utilize fire breaks around affected CRP	Red Lake County	Delete	Wildfire deemed a low risk for RLC and not included in 2023 HMP update.
Wildfire	Utilize controlled burns	Red Lake County	Delete	Same as above
Wildfire	Provide information to landowners that may not know about fire prevention methods	Red Lake County	Delete	Same as above

Hazard	Mitigation Action	Responsibility	Status	Comments
Drought	Create A drought Plan	Red Lake County	Ongoing	Drought is considered a low risk in RLC, however the county and local jurisdictions continue to participate in conducting public outreach about drought conditions as necessary. The county and cities follow MN DNR guidance on establishing watering restrictions if needed.

Appendix F – Planning Team Meetings

Red Lake County HMP Update

Appendix F – Kickoff Meeting Documentation

Overview:

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

Attached Documentation:

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

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

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

Participating Jurisdictions

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

Overview of Update Process

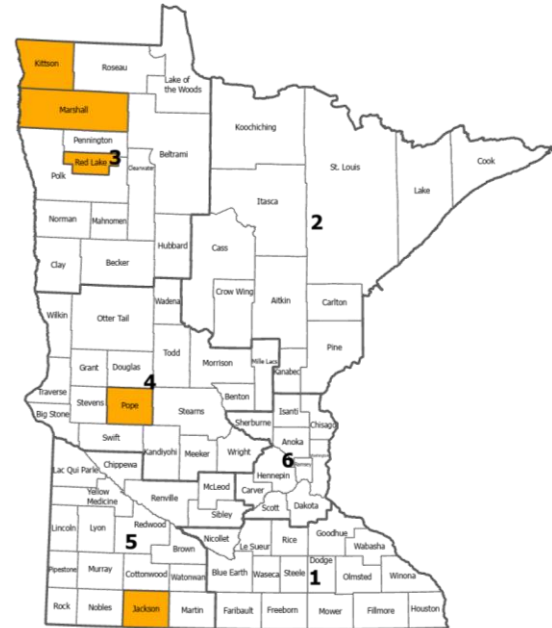
The U-Spatial@UMD team will coordinate with each Emergency Manager throughout the plan update process to engage participating jurisdictions and other stakeholders in the planning process. Following is an overview of key tasks that the U-Spatial@UMD team will facilitate to meet FEMA requirements in the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

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

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

Contact

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



Overview of the MHMP Update Process

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

Stage 1 Tasks (4-5 months)

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

Stage 2 Tasks (5-7 months)

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

Stage 3 Tasks (2-3 months)

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

Stage 4 Tasks (2-3 months)

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

Ongoing - Quarterly 25% Local Match Tracking Quarterly to HSEM

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

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



Webinar Purpose & Goals

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

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

Stacey Stark

Introductions

U-Spatial@UMD Project Team



Stacey Stark
Project Manager
U-Spatial@UMD



Bonnie Hundrieser
Emergency Management Planning Consultant
Hundrieser Consulting LLC



Zach Vavra
GIS Specialist and Researcher
U-Spatial@UMD



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



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

Emergency Managers:

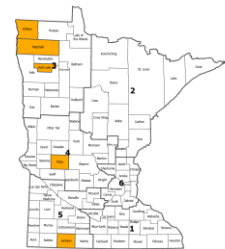
- Name, Title, and Jurisdiction
- Past Experience with MHMP?

Minnesota HSEM:

Jennifer Davis, MN HSEM
State Hazard Mitigation Officer

Project Overview

- 5 Counties:**
Jackson
Kittson
Marshall
Pope
Red Lake



Why U-Spatial@UMD?

➤ Proven experience

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

➤ Advanced Capabilities

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

➤ Ability to Expedite

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

➤ Planning Team

Our project team includes advanced GIS students and Hundrieser Consulting.

Purpose

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

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

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

MHMP's must be updated every 5 years.

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

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

Overview of MHMP Update Process

Bonnie Hundrieser

U-Spatial@UMD Team Roles & Responsibilities

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

EM Roles & Responsibilities

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

Local 25% Match

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

Notes:

- EM's are provided with a "Master Match Tracking" Excel Workbook to document match MHMP activities, participants, and amount accrued.
- Bonnie will assist with local match tracking on several task items.
- Regular reminders & guidance will be provided on tracking match.

MHMP Planning Team

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

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

Key Tasks

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

Public Outreach

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

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

Key Tasks

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

Hazard Risk Assessment and Vulnerability Analysis

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

Key Tasks

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

Key Task Assignments

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

Key Tasks

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

Mitigation Action Charts

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

Key Tasks

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

Draft Plan Review

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

Key Tasks

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

Plan Submission

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

Key Steps

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

Plan Adoption

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

Notes

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

Plan format and delivery

“Next Gen” - MN Hazard Mitigation Plans

- Contains almost all required elements
- No mapping
- Community outreach/input remains the same
- Includes appendices with jurisdictional outreach

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

Stacey Stark

Example Web Site

Example Web Site

Example Web Site

Timeline Overview

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

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

Next Steps

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

Notes:

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

Questions?

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

Contact Information

Stacey Stark, MS, GISP

U-Spatial@UMD

slstark@d.umn.edu

218-726-7438

Example Plans:

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

Red Lake County HMP Update

JURISDICTIONAL CONTACT LIST

COUNTY CONTACTS

Name	Title	Phone	Email
Mitch Bernstein	Red Lake County Sheriff/Emergency Management Director	(218) 253-2996	oklee06@yahoo.com
Brad Johnson	EM Assistant Director, Chief deputy	(218) 253-2996	shield07@yahoo.com
Michael Flaagan	Highway Department, Interim County Engineer FEB 2023	(218) 253-2697	mflaagan@co.pennington.mn.us
Kurt Casavan	Environmental Services Officer	(218) 253-4121	kacenv@co.red-lake.mn.us
Kayla Jore	Kayla Jore, Public Health Director for Pennington County and Red Lake County	(218) 253-4378	krjore@co.pennington.mn.us
Kristi Nelson	Social Services Director	(218) 253-4131, ext. 5	kbnelson@mail.co.red-lake.mn.us
Angie Lundeen	Human Resources Director	(218) 253-2590	hr@co.red-lake.mn.us
Shelly Nelson	County Assessor, GIS	(218) 253-2596	manelson@co.red-lake.mn.us
Anthony "Chuck" Flage	District 1 Commissioner	(218) 253-2106	rfmohr@gvtel.com
Ron Weiss	District 2 Commissioner	(218) 253-2908	sweiss@gvtel.com
Delane "John" Dudycha	District 3 Commissioner	(218) 465-4088	Susandudycha1@gmail.com
Allen Remick	District 4 Commissioner	(218) 253-4127	allen.r.remick@gmail.com
Anthony Gerardy	District 5 Commissioner	(218) 465-4353	tgerardy@gvtel.com

CITY CONTACTS

CITY OF BROOKS (POP. 113)

Name	Title	Phone	Email
Joyce Morinville	Clerk/Treasurer	(218) 698-4220	brooksmn@brooksmn.com
Ernest Kolling	Mayor	(218) 698-4464	(use city email)

CITY OF OKLEE (POP. 400)

Name	Title	Phone	Email
Derek Cross	City Clerk	(218) 796-5183	cityofoklee@gvtel.com
Lois Gulseth	Mayor	(218) 796-4551	lnvedbr@yahoo.com
Tyrone Olson	Fire Chief	(218) 686-7865	Plu21@hotmail.com

CITY OF PLUMMER (POP. 272)

Name	Title	Phone	Email
Margaret Peterson	City Clerk	(218) 465-4231	cityplmr@gvtel.com

James DuChamp	Mayor	(218) 465-4239	
Wade Westlake	Fire Chief	(218) 686-9027	wadewestlake@hotmail.com

CITY OF RED LAKE FALLS (POP. 1,359)

Name	Title	Phone	Email
Kathleen Schmitz	City Administrator	(218) 253-2684	rdlkfals@gvtel.com
Allen Bertilrud	Mayor	(218) 684-1315	allenbertilrud33@gmail.com
Karl Kleven	Fire Chief	(218) 689-4755	kkleven@unityins-inv.com

TOWNSHIP CONTACTS

Name of Township	Name & Title	Phone	Email
Red Lake County Township Officers Assn.	Kevin Reich, Chair	(218) 232-4556	kwrrlf@gmail.com
Browns Creek Township	Carol Schmitz, Town Clerk	(218) 253-2375	carolschmitz@msn.com
Emardville Township	Jeanette McMullen, Town Clerk, Eldon Vigstol Chairman	465-4286	trem12@hotmail.com Ejvigstol@hotmail.com
Equality Township	Janet Halvorson, Town Clerk	(218) 796-5303	halvor@gvtel.com
Garnes Township	Diane Kolstoe, Town Clerk	(218) 796-5282	Dkolstoe@gvtel.com
Gervais Township	Dan Konickson, Chairman	(218) 689-2465	Dl_konickson@hotmail.com
Lake Pleasant Township	Marie Chaput, Town Clerk	(218) 253-2240	mchaput@gvtel.com
Lambert Township	Danielle Paradis, Town Clerk	(218) 686-1307	drparadis@gmail.com
Louisville Township	Lori Schultz, Town Clerk	(218) 253-2620	lorischultz08@gmail.com
Poplar River Township	Pam Gieseke, Town Clerk	(218) 796-4554	pgieseke427@gmail.com
Red Lake Falls Township	Denelle Kees, Town Clerk	(218) 253-2243	rlftownship@gmail.com
River Township	Kristina Hesse, Town Clerk	(218) 686-2894	N/A
Terrebonne Township	Josie Myhre, Town Clerk	(218) 698-4615	josie@gvtel.com
Wylie Township	Dennis Haglund, Town Clerk	(218) 253-2394	wgf@gvtel.com

OTHER STAKEHOLDER CONTACTS

LOCAL & REGIONAL AGENCIES INVOLVED IN HAZARD MITIGATION

Name of Agency / Organization	Name & Title	Phone	Email
MN Homeland Security & Emergency Management	Andrew Tepfer, HSEM Region 3 Regional Program Coordinator	651-387-9997 cell 651-201-7491 Office	andrew.tepfer@state.mn.us
Red Lake Soil & Water Conservation District	Tanya Hanson, District Manager	(218) 253-2593	tanya.hanson@RedLake.mnswcd.org
Natural Resources Conservation Service (NRCS)	Roy Holmes, NRCS Civil Engineer Technician	(218) 253-2593	royholmes@usda.gov

Northwest Regional Development Commission	Jennifer Olson, Emergency Operations Planning Director	(218) 745-9114	jolson@nwrdc.org
USDA Rural Development Community Programs	Laura Pettit, Area Specialist	(218) 847-9392, ext 3299	laura.pettit@usda.gov
MnDOT District 2	J.T. Anderson, Transportation District Engineer	(218) 755-6549	j.t.anderson@state.mn.us
MN DNR Forestry – Firewise Program	Dan Carroll, Northwest MN Firewise Specialist	(218) 732-3309, ext 230	Dan.Carroll@state.mn.us
MN DNR Ecological and Water Resources Division	Stephanie Klamm, Region 1 Northwest Area Hydrologist	(651) 587-5448	Stephanie.Klamm@state.mn.us
Red Lake Watershed District	Myron Jesme, Administrator	(218) 686-9692	Myron.Jesme@redlakewatershed.org

REPRESENTATIVES OF BUSINESSES, ACADEMIA, AND OTHER PRIVATE ORGANIZATIONS

Name of Agency / Organization	Name & Title	Phone	Email
Red Lake Falls School District 630 and Red Lake County Central School District 2906	James Guetter, Superintendent	(218) 253-2163	RLCCandRLFsupt@gvtel.com
Red Lake Electric Cooperative	Stephanie Johnson, General Manager	(218) 253-2168	sjohnson@redlakeelectric.com
Otter Tail Power Crookston, MN	Tom Hrdlicka, System Operations Manager	(218) 739-8200	thrdlicka@otpc.com
American Red Cross Northwestern Minnesota	Mariane Jordan	(701) 364-1800	Marian.jordan@redcross.org
Salvation Army for Red Lake County	Sue Butkiewicz, Regional Service Representative	(218) 879-5447	Sue.butkiewicz@usc.salvationarmy.org

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

Name of Agency / Organization	Name & Title	Phone	Email
Northwest Regional Development Commission	Darla Waldner, Executive Director	(218) 745-9109	darla@nwrdc.org
Northwest Minnesota Foundation	Nate Dorr, VP For Advocacy and Dawn Ganje, Director for Community Philanthropy	218-759-2057	nated@nwmf.org dawng@nwmf.org
Red Lake County Economic Development Corporation	Allen Bertilrud, Chair	(218) 253-2897	allenbertilrud33@gmail.com
Inter-County Community Council	Cathryn Johnson, Director	1-888-778-4008, ext. 0	cjohnson@intercountycc.org

Red Lake Falls Community Food Shelf	Bev Phillion, Main Contact	218-253-2188	bevphillion@yahoo.com
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NEIGHBORING JURISDICTIONS

Name of Jurisdiction	Name & Title	Phone	Email
Pennington County	Erik Beitel, Emergency Management Director	(218) 683-7087	elbeitel@co.pennington.mn.us
Polk County	Jody Beauchane, Emergency Management Director	(218) 470-8263	jody.beauchane@co.polk.mn.us
Clearwater County	Candace Coulter, Emergency Management Director	(218) 694-1116	candace.coulter@co.clearwater.mn.us
Beltrami County	Chris Muller, Emergency Management Director	(218) 333-8386	chris.muller@co.beltrami.mn.us
Red Lake Band of Chippewa	Robert Neadeau Jr., EMD	218-679-3341	rneadeau@redlakenation.org

LOCAL MEDIA CONTACTS

Name of Local Media	Media Contact	Phone	Email
Grand Forks Herald	General News	(701) 780-1170	news@gfherald.com
Thief River Falls Times and Northern Watch	David Hill, Editor	(218) 681-4450	dhill@trftimes.com
Thief River Falls Radio	Main Office	(218) 681-1230	contact@trfradio.com
Crookston Times	Jess Bengtson, Managing Editor	(218) 275-2888	jbengtson@crookstontimes.com
Marshall Independent	Mike Lamb, News Editor	(507) 537-1551, ext. 126	mlamb@marshallindependent.com
Oklee Herald	Bonnie cote, Editor	(218) 796-5181	okleeherald@gmail.com
Red Lake Falls Gazette	Penny Williams, Editor	(218) 253-2594	redlakefallsgazette@hwy32publishing.com

Red Lake County MHMP Planning Team Meeting #1

9/27/2022 - Meeting Summary & Documentation

Summary: On Tuesday, September 27, 2022 Red Lake 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 Red Lake County Multi-Hazard Mitigation Plan (MHMP). The purpose of the meeting was to formally present information about the Red Lake County MHMP update and to discuss key items that would inform plan development. The meeting was held via Zoom webinar video conference and was facilitated by Stacey Stark and Bonnie Hundrieser of the U-Spatial@UMD project team.

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

Meeting Participants: A total of **23** people attended the meeting. Representation included elected officials and departmental staff from Red Lake County and the cities of Plummer and Red Lake Falls. The cities of Brooks and Oklee were unable to attend due to staff capacity. Other stakeholders, including neighboring jurisdictions, participated in the meeting. A participant list is included with this meeting summary.

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

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

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

- Yes, I have previously participated in in a hazard mitigation planning process. **(3/10) 30%**
- No, but I am familiar with hazard mitigation planning. **(2/10) 20%**
- No, and this is all new to me. **(5/10) 50%**

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

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

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

Hazard	2016 Plan	2022 Plan
Tornadoes	High	Moderate
Winter Storms	Moderate	Moderate
Extreme Cold	Moderate	Moderate
Windstorms	Moderate	Moderate
Hail	Moderate	Moderate
Flooding	Moderate	Moderate
Lightning	Low	Low
Extreme Heat	Low	Low
Wildfire	Low	Low
Drought	Low	Low
Subsidence	Low	Low
Erosion	Low	Low
Dam/Levee Failure	Low	Low
Landslides	Not Addressed	Moderate

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

Meeting Participant	Comment, Question or Mitigation Idea Submitted	Facilitator Feedback / How to be Addressed in Plan Update
Mitch Bernstein, Red Lake County Sheriff / Emergency Management Director	<i>Regarding discussion of tornadoes:</i> Suggest to decrease prioritization of tornadoes from high (2016) to moderate for 2022. They have not occurred that frequently and severity has not been that great.	Stacey Stark: Noted for re-prioritization in 2022 plan.
Mitch Bernstein, Red Lake County Sheriff / Emergency Management Director and Kathy Schmitz, City of Red Lake Falls City Administrator	<i>Regarding discussion of landslides:</i> Suggested to move this to a moderate priority ranking. The city of Red Lake Falls is looking at several property acquisitions for homes at risk from erosion, and one property outside of the city in Red Lake Falls County is also looking at a home buyout due to landslide risk.	Stacey Stark: Noted that landslides will be profiled in the 2022 plan. We will follow up directly with Kathy Schmitz and the Red Lake SWCD to get more detailed information for the concerns within the city of Red Lake Falls and any other areas within the county.

Following the discussion, participants were encouraged to fill out and return the “Mitigation Ideas” worksheet that they were provided with to Red Lake County Emergency Management to submit any

specific local concerns and related mitigation ideas. The meeting concluded with an overview of next steps and estimated timeline for completion.

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

- 9-27-22 Mtg. #1 Email Invitation
- 9-27-22 Mtg. #1 List of Participants
- 9-27-22 Mtg. #1 Power Point Slides
- 9-27-22 Mtg. #1 Handouts

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

From: mitch_bernstein
To: oklee06@yahoo.com; shield07@yahoo.com; ehove@co.red-lake.mn.us; kacenv@co.red-lake.mn.us; krjore@co.pennington.mn.us; kbnelson@mail.co.red-lake.mn.us; hr@co.red-lake.mn.us; manelson@co.red-lake.mn.us; rilmohr@gvtel.com; sweiss@gvtel.com; Susandudycha1@gmail.com; allen.r.remick@gmail.com; tgerardy@gvtel.com; brooksmn@brooksmn.com; cityofoklee@gvtel.com; lnvedbr@yahoo.com; Plu21@hotmail.com; cityplmr@gvtel.com; wadewestlake@hotmail.com; rdlkfals@gvtel.com; allenbertilrud33@gmail.com; kkleven@unityins-inv.com; kwrrf@gmail.com; carolschmitz@msn.com; trem12@hotmail.com; Ejvigstol@hotmail.com; halvor@gvtel.com; Dkolstoe@gvtel.com; DI_konickson@hotmail.com; mchaput@gvtel.com; drparadis@gmail.com; lorischultz08@gmail.com; pgieseke427@gmail.com; rlftownship@gmail.com; wgf@gvtel.com; Heather.Winkleblack@state.mn.us; tanya_hanson@RedLake.mnswcd.org; royholmes@usda.gov; jolson@nwrdc.org; laura.pettit@usda.gov; j.t.anderson@state.mn.us; Dan.Carroll@state.mn.us; Stephanie.Klamm@state.mn.us; Myron_Jesme@redlakewatershed.org; RLCCandRLFsupt@gvtel.com; sjohnson@redlakeelectric.com; thrdlicka@otpc.com; kolson@pkmcoop.com; jmarcotte@pkmcoop.com; Marian.jordan@redcross.org; Sue.butkiewicz@usc.salvationarmy.org; darla@nwrdc.org; jessicay@nwmf.org; cjohnson@intercountycc.org; elbeitel@co.pennington.mn.us; jody.beauchane@co.polk.mn.us; candace.coulter@co.clearwater.mn.us; chris.muller@co.beltrami.mn.us
Cc: [Bonnie K. Hundrieser](mailto:Bonnie.K.Hundrieser)
Subject: Red Lake County Multi-Hazard Mitigation Plan Update - Meeting Invitation
Date: Monday, August 15, 2022 12:44:05 PM

RED LAKE COUNTY

MULTI-HAZARD MITIGATION PLAN UPDATE – MEETING INVITATION

Greetings,

Your presence is requested at a virtual Planning Team Meeting for the update of the **Red Lake County Multi-Hazard Mitigation Plan**. You are requested to participate in this vital meeting because you have a position of administrative or departmental responsibility within either the county, a municipal government, or are a key stakeholder related to the planning process. Emergency Managers from neighboring jurisdictions are also encouraged to attend so we may strengthen our shared mitigation efforts.

We will be holding the meeting virtually using Zoom video/phone conferencing:

Date: Tuesday, September 27, 2022

Time: 9:00 a.m. – 11:00 a.m.

Zoom Link: https://umn-private.zoom.us/webinar/register/WN_T3Pis-nAR2SzDGQMEf5mvQ

Please Note: You must click on the link above to register. (Ctrl+Click to follow link) When you register, you will automatically be placed on an RSVP list. Please be sure to include the name, title and representation (jurisdiction/agency) for all persons planning to attend the meeting.

About the Plan

The update of the Red Lake County Multi-Hazard Mitigation Plan (MHMP) is a requirement by the State of Minnesota Department of Homeland Security & Emergency Management (HSEM) as well as the

Federal Emergency Management Agency (FEMA) every 5 years. Our last plan is due for an update and our planning is currently underway. The plan addresses the natural hazards that face Red Lake County and will result in the identification of mitigation actions that will help to reduce or eliminate the impact of future hazard events, such as flooding and severe winter or summer storms.

Your participation in this plan update is important for several reasons:

1. You will help to identify critical mitigation projects to implement at the county / municipal level, and how they can be integrated with existing plans, policies, or project efforts.
2. Participating jurisdictions will be eligible to apply for FEMA hazard mitigation grant funding.
3. Mitigation planning is necessary to keep our communities resilient against future disasters and reduce the costs of recovery.
4. FEMA requires documentation of how local government and key stakeholders participated in the planning process.

During this meeting we will review and prioritize the natural hazards that pose risk to Red Lake County and individual communities and discuss a range of mitigation measures for local implementation. The meeting will be facilitated by personnel from U-Spatial at the University of MN Duluth who are working closely with us on this project.

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

Thank you,

Mitch A. Bernstein
Red Lake County Sheriff # 1801
Red Lake County Sheriff's Office
PO Box 306
124 North Main Street
Red Lake Falls, MN 56750
tel: (218)253-2996
Fax: (218)253-2656
Cel: (218)684-1043

From: mitch_bernstein
To: oklee06@yahoo.com; shield07@yahoo.com; ehove@co.red-lake.mn.us; kacenv@co.red-lake.mn.us; krjore@co.pennington.mn.us; kbnelson@mail.co.red-lake.mn.us; hr@co.red-lake.mn.us; manelson@co.red-lake.mn.us; rilmohr@gvtel.com; sweiss@gvtel.com; susandudycha1@gmail.com; allen.r.remick@gmail.com; tgerardy@gvtel.com; brooksmn@brooksmn.com; cityofoklee@gvtel.com; lnvedbr@yahoo.com; plu21@hotmail.com; cityplmr@gvtel.com; wadewestlake@hotmail.com; rdlkfals@gvtel.com; allenbertilrud33@gmail.com; kkleven@unityins-inv.com; kwrrf@gmail.com; carolschmitz@msn.com; trem12@hotmail.com; ejvigstol@hotmail.com; halvor@gvtel.com; dkolstoe@gvtel.com; dl_konickson@hotmail.com; mchaput@gvtel.com; drparadis@gmail.com; lorischultz08@gmail.com; pgieseke427@gmail.com; rlftownship@gmail.com; wgf@gvtel.com; heather.winkleblack@state.mn.us; tanya.hanson@redlake.mnswcd.org; royholmes@usda.gov; jolson@nwrdc.org; laura.pettit@usda.gov; j.t.anderson@state.mn.us; dan.carroll@state.mn.us; stephanie.klamm@state.mn.us; myron.jesme@redlakewatershed.org; rlccandrifsupt@gvtel.com; sjohnson@redlakeelectric.com; thrdlicka@otpc.com; marian.jordan@redcross.org; sue.butkiewicz@usc.salvationarmy.org; darla@nwrdc.org; nated@nwmf.org; dawng@nwmf.org; cjohnson@intercountycc.org; elbeitel@co.pennington.mn.us; jody.beauchane@co.polk.mn.us; candace.coulter@co.clearwater.mn.us; chris.muller@co.beltrami.mn.us
Cc: [Bonnie K. Hundrieser](mailto:Bonnie.K.Hundrieser)
Subject: Meeting Reminder
Date: Monday, September 19, 2022 10:02:59 AM

Greetings,

This is an important reminder to please register for the upcoming Red Lake County hazard mitigation planning meeting coming up on Tuesday, Sept. 27th. Information on how to register is provided below. Your community / organization's representation and feedback during this meeting is critical to our plan update and meeting FEMA requirements. If you have not registered already, we hope you will do so.

Date: Tuesday, September 27, 2022

Time: 9:00 a.m. – 11:00 a.m.

Zoom Link: https://umn-private.zoom.us/webinar/register/WN_T3Pis-nAR2SzDGQMEf5mvQ

Please Note: You must click on the link above to register. (Ctrl+Click to follow link) When you register, you will automatically be placed on an RSVP list. Please be sure to include the name, title and representation (jurisdiction/agency) for all persons planning to attend the meeting.

Thank you,

Mitch A. Bernstein
Red Lake County Sheriff # 1801
Red Lake County Sheriff's Office
PO Box 306
124 North Main Street
Red Lake Falls, MN 56750
tel: (218)253-2996
Fax: (218)253-2656
Cel: (218)684-1043

Red Lake County

9/27/22 MHMP Planning Team Meeting #1

List of Participants (23)

	First Name	Last Name	Organization	Job Title
1	Mitch	Bernstein	Red Lake County Sheriff's Office	County Sheriff
2	Brad	Johnson	Red Lake County Sheriff's Office	Chief Deputy
3	Kari	Moyer	Red Lake County Highway Dept.	Highway Accountant
4	Randy	Konickson	Red Lake County Highway Dept.	Maintenance Foreman
5	Mike	Flaagan	Red Lake County Highway Dept.	Interim Engineer
6	Penny	Grove	Red Lake County Social Services	Fiscal Supervisor/Security Coordinator
7	Allen	Remick	Red Lake County	County Commissioner
8	Kayla	Jore	Pennington & Red Lake County Public Health & Home Care	Director
9	Allison	Matter	Inter-County Nursing Service	RN, Public Health Preparedness Coordinator
10	Wade	Westlake	City of Plummer Fire Dept.	Fire Chief
11	Kathy	Schmitz	City of Red Lake Falls	City Administrator
12	Matt	Swendra	City of Red Lake Falls	Public Works Supervisor
13	Karl	Kleven	City of Red Lake Falls Fire Dept.	Fire Chief
14	Kevin	Reich	Browns Creek Township / Red Lake County Township Association	Supervisor / Township Association Chair
15	Lyndon	Schultz	Louisville Township	Supervisor
16	Diane	Kolstoe	Garnes Township	Township Clerk
17	Stephanie	Johnson	Red Lake Electric Cooperative	General Manager
18	Don	Nosbisch	MnDOT	Maintenance Superintendent
19	Paul	Konickson	MnDOT - District 2	Assistant District Engineer
20	Jim	Guetter	ISD 2906 & ISD 630	Superintendent
21	Tanya	Waldo	Red Lake County SWCD	District Manager
22	Daniel	Carroll	MN DNR	NW MN Firewise Specialist
23	Christopher	Muller	Beltrami County Emergency Management	Emergency Management Director

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

September 27, 2022



U-SPATIAL
UNIVERSITY OF MINNESOTA DULUTH
Driven to Discover

Welcome & Introductions

U-Spatial@UMD Project Leads



Stacey Stark
Project Manager
U-Spatial@UMD



Bonnie Hundrieser
HM Planning Specialist
Hundrieser Consulting LLC

Red Lake County Project Lead

- Mitch Bernstein, Red Lake County Sheriff / Emergency Management Director



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

PRESENTER: STACEY STARK

Zoom Logistics

If you haven't yet, please type your name and jurisdiction or department in the Chat window

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

USE CHAT:



- Send a message to everyone
- Send a message to individuals or the presenters
- Send a message to host to ask for help or ask a question that isn't for the whole group. The host is Stacey Stark

ASK TO SPEAK:



PRESENTER: STACEY STARK

Meeting Purpose & Agenda



2019 Red Lake County flood event

The purpose of this meeting is to formally convene the **Red Lake County MHMP Planning Team** for a presentation of the plan update and discussion of key items.

Agenda:

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

PRESENTER: STACEY STARK

About your Project Team

U-SPATIAL
UNIVERSITY OF MINNESOTA DULUTH
Driven to Discover

U-Spatial at the University of Minnesota Duluth was contracted by MN HSEM to facilitate the development of this plan and to conduct spatial analysis, mapping and research for the plan.

Working with U-Spatial@UMD is **Bonnie Hundrieser**, who specializes in hazard mitigation planning.

We Bring:

- *Proven experience in county/tribal plan updates and State MHMP*
- *Advanced capabilities in GIS, HAZUS, and research*
- *Ability to expedite plan development and approval through consistent & proven approach*

PRESENTER: STACEY STARK

What is Hazard Mitigation?

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



Hazard Mitigation Planning:

- identifies risks and vulnerabilities
- develops a plan of action built on capabilities and partnerships.
- breaks the cycle of disaster and reconstruction.
- builds stronger & more resilient communities.

PRESENTER: BONNIE HUNDRIESER

MHMP Overview & Timeline



2018 Ice Storm

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

- ✓ The development of a local government plan is required in order to maintain eligibility for FEMA hazard mitigation grant programs.
- ✓ Plans must be updated every 5 years.
- ✓ Must address all jurisdictions and engage key stakeholders.
- ✓ Planning process must give an opportunity to the public to provide feedback.

Red Lake County MHMP Update 2022

- Last plan adopted in 2016.
- The updated plan will cover a 5-year window for implementation.
- Documentation of county and local-level government participation is required for plan approval.

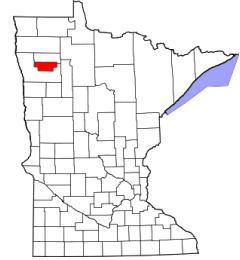
PRESENTER : BONNIE HUNDRIESER

Who the Plan Covers



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

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



PRESENTER : BONNIE HUNDRIESER

MHMP Planning Team



Red Lake County Planning Team

- Red Lake County Emergency Management
- Key County Officials & Staff
- City & Township Officials & Staff
- Neighboring Jurisdictions
- Other Related Agency or Organizational Stakeholders

- Participate in 2 planning team meetings.
- Assist with public outreach (2 news releases) using websites, social media & bulletin boards.
- Provide information to inform plan update.
- Help develop & review local mitigation action charts.
- Review the draft plan.
- Facilitate local-level adoptions.

PRESENTER : BONNIE HUNDRIESER

What Hazards are Addressed in the Plan?



- Natural hazards that pose risk to the county and its jurisdictions.
- Manmade hazards are not required to be addressed (per the DMA 2000).
- Hazards that are deemed to be of low risk may be omitted from the plan.
- Hazard risk may differ in cities and the county overall.

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

Natural hazard categories for Minnesota MHMPs.

PRESENTER : BONNIE HUNDRIESER

Comments and Questions?

The structure of the HMP

PDF document

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

Website companion

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



Hazard Risk Assessment and Vulnerability Analysis

The U-Spatial@UMD Team will work closely with the county and each city to provide information as needed.

- Inventory of critical infrastructure.
- Identify specific, local-level impacts and vulnerabilities.
- Identify any factors (i.e., new development) that may increase the community's vulnerability.
- Review social vulnerability factors.
- Identify if and how risk priorities have changed since the last plan. (Increased / Decreased)



PRESENTER : STACEY STARK

Red Lake County Review of Hazard Risk Prioritization

Hazard	2016 Plan
Tornadoes	High
Winter Storms	Moderate
Extreme Cold	Moderate
Windstorms	Moderate
Hail	Moderate
Flooding	Moderate
Lightning	Low
Extreme Heat	Low
Wildfire	Low
Drought	Low
Subsidence	Low
Erosion	Low
Dam/Levee Failure	Low
Landslides	Not Addressed

Considerations for changes in hazard prioritizations since last plan:

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

PRESENTER : STACEY STARK

Tornadoes (High)



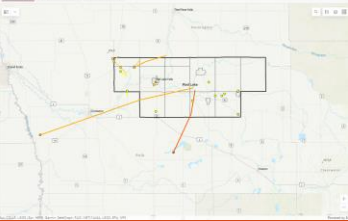
19 Events

19 Events

One Event Every 3.6 Years

1 Death

3 Injuries



PRESENTER : STACEY STARK

Winter Storms (Moderate)



105 Events

Blizzard 31 Events

Heavy Snow 19 Events

Ice Storm 5 Events

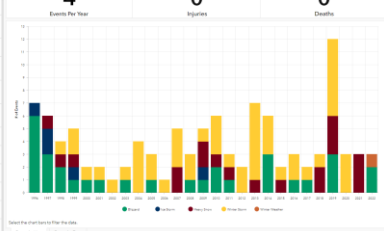
Winter Storm 49 Events

Winter Weather 1 Event

4 Events Per Year

0 Injuries

0 Deaths



PRESENTER : STACEY STARK

Flooding (Moderate)

19 Events

Flash Flood 12 Events

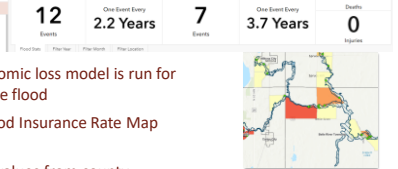
One Event Every 2.2 Years

Flood 7 Events

One Event Every 3.7 Years

0 Deaths

0 Injuries



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

PRESENTER : STACEY STARK

Windstorms, Hail (Moderate) Lightning (Low)



66 Events

Strong Wind 0 Events

High Wind 11 Events

Thunderstorm Wind 55 Events

0 Deaths

0 Injuries

2.5 Events Per Year

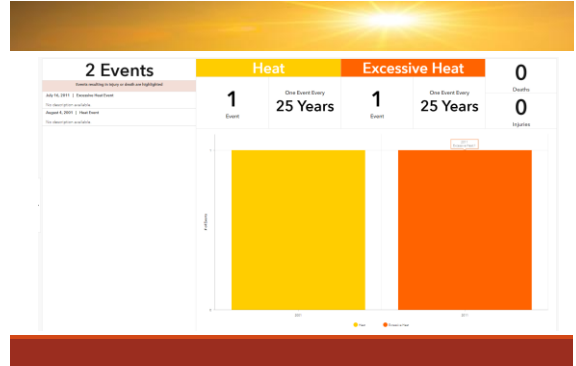


PRESENTER : STACEY STARK

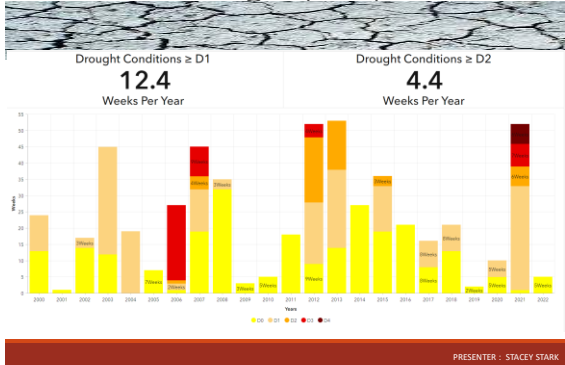
Extreme Cold (Moderate)



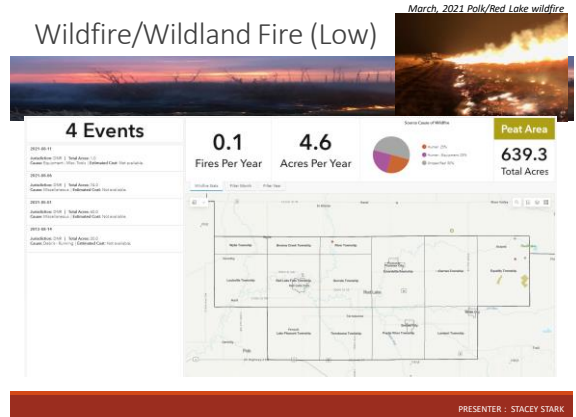
Extreme Heat (Low)



Drought (Low)



Wildfire/Wildland Fire (Low)



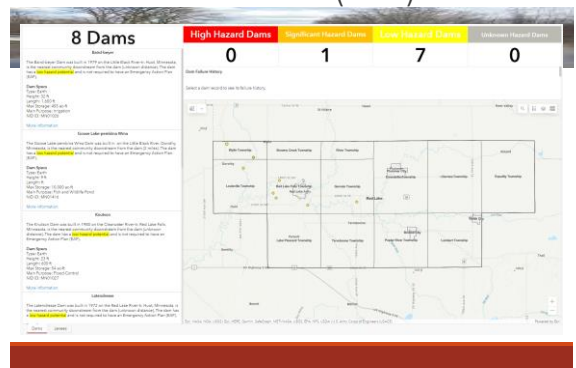
Landslides (Not Addressed)



- Subsidence and Erosion (Landslides) were both ranked as a low priority hazard in 2016 plan.
- Hazards deemed low risk and without significant mitigation actions, can be dropped from the plan.

PRESENTER: STACEY STARK

Dam Failure (Low)



Red Lake County Review of Hazard Risk Prioritization

Hazard	2016 Plan	2022 Plan
Tornadoes	High	
Winter Storms	Moderate	
Extreme Cold	Moderate	
Windstorms	Moderate	
Hail	Moderate	
Flooding	Moderate	
Lightning	Low	
Extreme Heat	Low	
Wildfire	Low	
Drought	Low	
Subsidence	Low	
Erosion	Low	
Dam/Levee Failure	Low	
Landslides	Not Addressed	

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

PRESENTER : STACEY STARK

Mitigation Strategies & Example Actions



See Handout: Mitigation Strategies & Action Types

PRESENTER : BONNIE HUNDRIESER

#1 - Local Planning & Regulations



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

EXAMPLES:

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



PRESENTER : BONNIE HUNDRIESER

#2 – Structure and Infrastructure Projects



These actions involve modifying existing structures to protect them from a hazard or remove them from a hazard area. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.

EXAMPLES:

- Property acquisitions (repetitive flooding/erosion risk)
- Structural elevations (flooding)
- Constructing floodwalls & retaining walls
- Improving culverts, roads & bridges
- Green infrastructure projects
- Tornado Safe Rooms
- Utility undergrounding



PRESENTER : BONNIE HUNDRIESER

Tornado Safe Rooms

- Are eligible for FEMA HMA grant funding
- Include new construction or retrofit of existing facilities
- Should be considered for vulnerable areas such as MHPs, schools, parks, and campgrounds



1998 Tornado damage to MHP in Le Center, MN.



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



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

PRESENTER : BONNIE HUNDRIESER

Utility Undergrounding

- Converting vulnerable overhead powerlines to underground is eligible for FEMA HMA grant funding.
- Include municipal and rural electric cooperatives in the planning process to document participation and establish eligibility for potential future project applications.



PRESENTER : BONNIE HUNDRIESER

#3 – Natural Systems Protection



These are actions that minimize damage and losses and also preserve or restore the functions of natural systems.

EXAMPLES:

- Slope management for soil stabilization
- Shoreland restoration
- “Living Fences” for wind/erosion reduction or snow buffer
- Forest management for wildfire mitigation (fuels reduction)
- Flood diversion and storage



PRESENTER : BONNIE HUNDRIESER

#4 – Education & Awareness Programs

These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them.

EXAMPLES:

- Promoting sign-up for emergency notifications
- Educate on use of outdoor warning sirens and response
- Participation in the NWS Severe Weather Awareness Weeks
- SKYWARN Storm Spotter Training
- Turn Around Don't Drown
- Promoting personal & family emergency preparedness (i.e. Ready.gov)



PRESENTER : BONNIE HUNDRIESER

#5 – Mitigation Preparedness & Response Support

These are actions that help to protect life and property prior to, during, and immediately after a disaster or hazard event.

EXAMPLES:

- Emergency Operations Plans
- Outdoor warning sirens
- Shelter Planning
- Flood fight plans & equipment
- Training local elected officials in EM responsibilities
- Obtaining backup generators for critical facilities

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



PRESENTER : BONNIE HUNDRIESER

FEMA HMA Grant Program

See Handout: HSEM HMA Grants Program Overview

- ✓ All applicants must have or be covered under an approved MHMP.
- ✓ Eligible applicants: State & local governments, Tribal Communities, and certain private non-profit organizations or institutions.
- ✓ Cost Share: Federal 75%/ Applicant 25%
- ✓ Eligible projects must be identified in the local MHMP.

Examples of Eligible Activities

- Property Acquisition/Relocation
- Tornado Safe Room Construction
- Minor Localized Flood Risk Reduction
- Green Infrastructure
- Infrastructure Retrofits
- Soil Stabilization
- Wildfire Mitigation
- 5% Initiative Projects

PRESENTER : BONNIE HUNDRIESER

Mitigation Ideas

See Handout: Mitigation Ideas Worksheet

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

PRESENTER : BONNIE HUNDRIESER



Oct. 2022 – Feb., 2023

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

Lead: Bonnie Hundrieser

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

PRESENTER : BONNIE HUNDRIESER



(Concurrent)
Oct. 2022 – Feb., 2023

Critical Infrastructure Inventory, Risk Assessment and Vulnerability Analysis

Lead: U-Spatial

- Updated risk assessment & vulnerability analysis
- Update of CI inventory
- Development of hazard profiles (history, probability, impacts of climate change)
- GIS mapping
- HAZUS analysis

PRESENTER : BONNIE HUNDRIESER



March – May, 2023

Development of Local Mitigation Action Charts

Lead: Bonnie Hundrieser

- County and City-Specific MACs
- 5-year window
- Mitigation actions must address high and moderate risk hazards.
- Mitigation actions must incorporate local capabilities & planning mechanisms.
- Include projects eligible for FEMA HMA grant funding.

PRESENTER : BONNIE HUNDRIESER



June – July, 2023

Hold Planning Team Meeting #2

Lead: U-Spatial & Bonnie Hundrieser

- **Planning Team Mtg. #2**
 - Outreach to stakeholders
 - Presentation of risk assessment & vulnerability analysis, hazards prioritizations
 - Overview of Mitigation Action Charts and FEMA grant funding.
 - Finalize draft MACs

PRESENTER : BONNIE HUNDRIESER



Aug. – Sept., 2023

EM review of Draft Plan + Public Review & Comment Period

Lead: U-Spatial & Bonnie Hundrieser

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

PRESENTER : BONNIE HUNDRIESER



Oct. – Dec., 2023

Draft Plan Submission to HSEM & FEMA for Approval

Lead: U-Spatial

- Draft plan will be submitted first to HSEM and then to FEMA for approval for meeting all Federal requirements.
- Typically requires 1-2 months.
- APA letter
- EM coordination of adopting resolutions and submission to HSEM
- Final Letter of Approval

PRESENTER : BONNIE HUNDRIESER

Questions?

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

PRESENTER : STACEY STARR

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, Consultant

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HUNDRIESER
CONSULTING LLC

PRESENTER : STACEY STARK

Mitigation Strategies & Action Types

Following are the five types of mitigation strategies that will be used in the update of the Multi-Hazard Mitigation Plan with examples of related mitigation actions. Minnesota HSEM recommends the use of these mitigation strategies to be in alignment with the State plan and those recommended by FEMA. The first four strategies listed are taken from the FEMA publications *Local Mitigation Planning Handbook* (2013) and *Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards* (2013). The fifth strategy type was determined by Minnesota HSEM for use within the state.

These strategies will provide the framework for identification of new jurisdictional-level mitigation actions for implementation over the next 5-year planning cycle.

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

Mitigation Strategy	Description	Example Mitigation Actions
<p>Natural Systems Protection</p>	<p>These are actions that minimize damage and losses and also preserve or restore the functions of natural systems.</p>	<ul style="list-style-type: none"> • Soil stabilization for sediment and erosion control • Floodplain and Stream corridor restoration • Slope management • Forest management (defensible space, fuels reduction, sprinkler systems) • Conservation easements • Wetland restoration and preservation • Aquifer Storage & Recovery • Flood Diversion and Storage <p><i>Many of these types of actions are projects eligible for funding through FEMA HMA grant programs.</i></p>
<p>Education and Awareness Programs</p>	<p>These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady or Firewise Communities. Although this type of mitigation reduces risk less directly than structural projects or regulation, it is an important foundation. A greater understanding and awareness of hazards and risk among local officials, stakeholders, and the public is more likely to lead to direct actions that support life safety and lessen property damage.</p>	<ul style="list-style-type: none"> • Radio or television spots • Websites with maps and information • Social media outreach • Promotion of sign-up for emergency warnings • Real estate disclosure • Promotion of NFIP insurance to property owners • Presentations to school groups or neighborhood organizations • Mailings to residents in hazard-prone areas. • NWS StormReady Program • Firewise Communities <p><i>Some of these types of actions may be projects eligible for funding through the FEMA HMA "5 Percent Initiative Program".</i></p>
<p>Mitigation Preparedness and Response Support</p>	<p>This is a State of Minnesota mitigation strategy with the intent of covering emergency preparedness actions that protect life and property prior to, during, and immediately after a disaster or hazard event. These activities are typically not considered mitigation, but support reduction of the effects of damaging events.</p>	<ul style="list-style-type: none"> • Emergency Operations Plan • Flood fight plans and preparedness measures • Dam emergency action plans • Emergency Warning Systems (i.e., CodeRed, warning sirens) • Generator backup power • NWS Storm Spotter Training • Training and education for local elected officials and key partners.



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

HAZARD MITIGATION ASSISTANCE

Hazard Mitigation Assistance (HMA) grant programs provide funding with the aim to reduce or eliminate risk to property and loss of life from future natural disasters. HMA programs are typically a 75%/25% cost share program. The federal share is 75% of total eligible project reimbursement costs. The local applicant is responsible for 25% of the project costs. The amount of HMGP funds availability is based on a percent of Public Assistance provided by Federal Emergency Management Agency (FEMA).

- Hazard Mitigation Grant Program (HMGP) funds assists in implementing long-term hazard mitigation measures following a Presidential major disaster declaration.
- Pre-Disaster Mitigation (PDM) provides funds for hazard mitigation planning and projects on an annual basis.
- Flood Mitigation Assistance (FMA) provides funds on an annual basis to reduce or eliminate risk of flood damage to buildings that are insured under the National Flood Insurance Program (NFIP).

Who is eligible for grant funding?

All applicants must have or be covered under an approved Hazard Mitigation Plan. Eligible applicants include: State and local governments; certain private non-profit organizations or institutions; and Tribal Communities

What types of projects can be funded?

All projects must be eligible, technically feasible, and cost-effective. All projects are subject to environmental and cultural resource review. Examples of projects include:

- **Advance Assistance** may be used to develop mitigation strategies and obtain data, including for environmental and historic preservation compliance considerations, and develop complete project applications in a timely manner.
- **Aquifer Storage and Recovery** (ASR) projects serve primarily as a drought management tool, but can also be used to reduce flood risk and restore aquifers that have been subject to overdraft. The concept is to capture water when there is an abundant supply, store the water in subsurface aquifers, and recover water from the storage aquifer when needed. Storing water underground can help protect it from pollutants, evaporation, and weather events.
- **Floodplain and stream restoration** (FSR) projects are used primarily to reduce flood risk and erosion by providing stable reaches, and may also mitigate drought impacts. FSR projects restore and enhance the floodplain, stream channel and riparian ecosystem's natural function. They provide base flow recharge, water supply augmentation, floodwater storage, terrestrial and aquatic wildlife habitat, and recreation opportunities by restoring the site's soil, hydrology and vegetation conditions that mimic pre-development channel flow and floodplain connectivity.
- **Flood Diversion and Storage** (FDS) projects often are used to reduce flood risk, but also can be used to mitigate drought and improve ecosystem services. These projects involve diverting floodwaters from a stream, river, or other body of water into a conduit such as a canal, pipe, or wetland and storing them in an above-ground storage facility. Water is then slowly released, reducing flood risk.

- **Green Infrastructure Methods** are a sustainable approach to natural landscape preservation and storm water management. Include in *eligible hazard mitigation activities* as well as provide additional ecosystem benefits. Ecosystem-based approach to replicate a site's pre-development, natural hydrologic function. Benefits include: Increase water supply, improved water quality, can be scaled to size and designed to fit site conditions.
- **Property Acquisition and Structure Demolition or Relocation** – The voluntary acquisition of an existing at-risk structure and the underlying land, and conversion of the land to open space through the demolition or relocation of the structure. The property must be deed-restricted in perpetuity to open space uses to restore and/or conserve the natural floodplain functions.
- **Retrofit Flood-Prone Residential Structures** are changes made to an existing structure to reduce or eliminate the possibility of damage to that structure from flooding, erosion, or other hazards. Examples of this mitigation are primarily elevation of structures above flood levels and floodwalls.
- **Safe Room Construction** - Safe room construction projects are designed to provide immediate life-safety protection for people in public and private structures from tornado and severe wind events. Includes retrofits of existing facilities or new safe room construction projects, and applies to both single and dual-use facilities
- **Minor Localized Flood Reduction Projects** - Projects to lessen the frequency or severity of flooding and decrease predicted flood damages, such as the installation or up-sizing of culverts, and stormwater management activities, such as creating retention and detention basins. These projects must not duplicate the flood prevention activities of other Federal agencies and may not constitute a section of a larger flood control system.
- **Infrastructure Retrofit** - Measures to reduce risk to existing utility systems, roads, and bridges.
- **Soil Stabilization** - Projects to reduce risk to structures or infrastructure from erosion and landslides, including installing geotextiles, stabilizing sod, installing vegetative buffer strips, preserving mature vegetation, decreasing slope angles, and stabilizing with rip rap and other means of slope anchoring. These projects must not duplicate the activities of other Federal agencies. *New tools for Bioengineered Shoreline Stabilization, Bioengineered Streambank Stabilization.*
- **Wildfire Mitigation** - Projects to mitigate at-risk structures and associated loss of life from the threat of future wildfire through: Defensible Space for Wildfire, Application of Ignition-resistant Construction and Hazardous Fuels Reduction. *New tool for Bioengineered Wildfire Mitigation.*
- **HMGP only - 5 Percent Initiative Projects** – These projects, which are only available pursuant to an HMGP disaster, provide an opportunity to fund mitigation actions that are consistent with the goals and objectives of approved mitigation plans and meet all HMGP program requirements, but for which it may be difficult to conduct a standard Benefit-Cost Analysis (BCA) to prove cost-effectiveness.

How do I apply?

Start by submitting a Notice of Interest, available on HSEMs website at:

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

Where can I obtain further information?

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

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

MITIGATION IDEAS WORKSHEET

Please use the following worksheet to list your ideas for mitigation actions that you feel will help reduce the impact of future natural hazard events to the county or to your jurisdiction. Following the MHMP planning team meeting, please return this form via email to your county Emergency Manager to submit your feedback.

NAME OF JURISDICTION:

CONTACT INFORMATION

Name:

Phone:

Email:

Hazard	Description of Concern or Proposed Mitigation Action

Red Lake County HMP Planning Team Meeting #2

September 18, 2023 - Meeting Summary & Documentation

Summary: On Monday, September 18, 2023, Red Lake 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 Red Lake County Hazard Mitigation Plan (HMP). The purpose of the meeting was to formally convene the Red Lake County HMP Planning Team for a presentation on the draft plan and discussion of key items prior to public review and submission of the plan to HSEM and FEMA. The meeting was held via Zoom webinar video conference and was facilitated by Stacey Stark and Bonnie Hundrieser of the U-Spatial@UMD project team.

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

Meeting Participants: A total of 11 people attended the meeting. Representation included elected officials and departmental staff from Red Lake County and the cities of Plummer and Red Lake Falls. Representatives from the cities of Brooks and Oklee were not available to participate and were not in attendance. Other agency and organizational stakeholders also participated in the meeting. A participant list is included with this meeting summary.

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

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

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

Discussion Notes: Following is an overview of key discussion points, questions, or mitigation ideas that were shared during the presentation and how they will be incorporated into the plan update.

Meeting Participant	Comment, Question or Mitigation Idea Submitted	Facilitator Feedback / How to be Addressed in Plan Update
Jake Ellefson - Otter Tail Power Company	<i>Regarding the prioritization of hazards:</i> I think that Flooding could be increased from moderate to Moderate-High. We have dealt with several in the past few years and they are very costly.	Mitch Bernstein, RLC Sheriff/EMD: Agreed it is appropriate to move flooding to High priority. Flood events have become more common and they are costly.
Catherine Johnson, Inter-County Community Council	<p><i>Regarding the prioritization of hazards:</i> I think that we could increase Extreme Cold from moderate to high. During extreme cold periods with power outages our organization does get phone calls from people who have special needs who need backup power. We do have a plan for space heaters that can be distributed during cold periods.</p> <p>The Red Lake Falls Community Food Shelf is another organization I recommend be contacted as they work with those who are more vulnerable in the community. (provided contact information)</p>	<p>Mitch Bernstein, RLC Sheriff/EMD: Agreed it would be appropriate to increase Extreme Cold from moderate to high.</p> <p>Bonnie Hundrieser: Noted on including the Red Lake Food Shelf to seek any feedback on hazard risks and mitigation measures for those they provide services to. I will follow up with the contact provided.</p>

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

Attached are the following documentation items for the Red Lake County HMP Meeting #2:

- Meeting Invitation to Stakeholders
- List of Meeting Participants
- PowerPoint Presentation Slides
- Information Handouts

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

From: mitch_bernstein
To: oklee06@yahoo.com; shield07@yahoo.com; ehove@co.red-lake.mn.us; kacenv@co.red-lake.mn.us; krjore@co.pennington.mn.us; kbnelson@mail.co.red-lake.mn.us; hr@co.red-lake.mn.us; manelson@co.red-lake.mn.us; rilmohr@gvtel.com; sweiss@gvtel.com; Susandudycha1@gmail.com; allen.r.remick@gmail.com; tgerardy@gvtel.com; brooksmn@brooksmn.com; cityofoklee@gvtel.com; lnvedbr@yahoo.com; Plu21@hotmail.com; cityplmr@gvtel.com; wadewestlake@hotmail.com; rdlkfals@gvtel.com; allenbertilrud33@gmail.com; kkleven@unityins-inv.com; kwrrf@gmail.com; carolschmitz@msn.com; trem12@hotmail.com; Ejvigstol@hotmail.com; halvor@gvtel.com; Dkolstoe@gvtel.com; DI_konickson@hotmail.com; mchaput@gvtel.com; drparadis@gmail.com; lorischultz08@gmail.com; pgieseke427@gmail.com; rlftownship@gmail.com; wgf@gvtel.com; Heather.Winkleblack@state.mn.us; tanya.hanson@RedLake.mnswcd.org; royholmes@usda.gov; jolson@nwrdc.org; laura.pettit@usda.gov; j.t.anderson@state.mn.us; Dan.Carroll@state.mn.us; Stephanie.Klamm@state.mn.us; Myron.Jesme@redlakewatershed.org; RLCCandRLFsupt@gvtel.com; sjohnson@redlakeelectric.com; thrdlicka@otpc.com; Marian.jordan@redcross.org; Sue.butkiewicz@usc.salvationarmy.org; darla@nwrdc.org; nated@nwmf.org; dawng@nwmf.org; cjohnson@intercountycc.org; elbeitel@co.pennington.mn.us; jody.beauchane@co.polk.mn.us; candace.coulter@co.clearwater.mn.us; chris.muller@co.beltrami.mn.us; rneadeau@redlakenation.org
Cc: [Bonnie K. Hundrieser](mailto:Bonnie.K.Hundrieser)
Subject: Hazard Mitigation
Date: Monday, August 21, 2023 10:09:35 AM

RED LAKE COUNTY HAZARD MITIGATION PLAN UPDATE – MEETING INVITATION

Greetings,

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

We will be holding the meeting virtually using Zoom webinar:

Date: Monday, September 18, 2023
Time: 1:00 p.m. – 2:30 p.m.
Zoom Link: https://umn-private.zoom.us/webinar/register/WN_vxOc41EBQP6UChClrXXnVg

Please click on the link above to register. (Ctrl + click to follow link)

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

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

When you register, you will automatically be placed on an RSVP list. If you are not able to attend,

please consider sending another representative in your stead.

Mitch A. Bernstein
Red Lake County Sheriff # 1801
Red Lake County Sheriff's Office
PO Box 306
124 North Main Street
Red Lake Falls, MN 56750
tel: (218)253-2996
Fax: (218)253-2656
Cel: (218)684-1043

Red Lake County

9/18/23 HMP Planning Team Meeting #2

List of Meeting Participants (11)

	Name	Organization	Job Title
1	Mitch Bernstein	Red Lake County Sheriff's Office	County Sheriff / Emergency Management Director
2	Taylor Amiot	Red Lake County Highway Dept.	Engineer
3	Kurt Casavan	Red Lake County Environmental Services	Environmental Officer
4	Michelle Nelson	Red Lake County Assessor's Office	County Assessor
5	Allison Matter	Pennington & Red Lake County Public Health	PHEP Coordinator
6	Allen Remick	Red Lake County	Commissioner
7	JIM GUETTER	RLC Central ISD #2906 & Red Lake Falls ISD #630	Superintendent
8	Brandon Vogel	Plummer Fire Department	Chief
9	Kathy Schmitz	City of Red Lake Falls	City Administrator
10	Jacob Ellefson	Otter Tail Power Company	Area Manager
11	Catherine Johnson	Inter-County Community Council	Executive Director

RED LAKE COUNTY Hazard Mitigation Plan Update 2023 Planning Team Meeting #2

September 18, 2023



U-SPATIAL
UNIVERSITY OF MINNESOTA DULUTH
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Welcome & Introductions

U-Spatial@UMD Project Leads



Stacey Stark
Project Manager
U-Spatial@UMD



Bonnie Hundrieser
HMP Planning Specialist
Hundrieser Consulting LLC

Red Lake County Project Lead

- Mitch Bernstein, Red Lake County Sheriff / Emergency Management Director



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

PRESENTER: STACEY STARK

Zoom Logistics

If you haven't yet, please type your name and jurisdiction or department in the Chat window

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

USE CHAT:

- > Send a message to everyone
- > Send a message to individuals or the presenters
- > Send a message to host to ask for help or ask a question that isn't for the whole group. The host is Stacey Stark



ASK TO SPEAK:



PRESENTER: STACEY STARK

Meeting Purpose & Agenda



The purpose of this meeting is to formally convene the **Red Lake County HMP Planning Team** for a presentation on the draft plan and discussion of key items prior to public review and submission of the plan to HSEM and FEMA.

Agenda

- > Welcome & Introductions
- > Recap of Key HMP Points
- > Review of Website and Hazard Analysis
- > Overview of FEMA HMA Funding and Mitigation Action Charts
- > Review & Feedback
- > Next Steps

PRESENTER: STACEY STARK

Overview of Plan Update

Red Lake County is updating its **Hazard Mitigation Plan (HMP)** to fulfill a state & federal requirement. The plan must be updated every 5 years. The last plan was adopted in 2016.

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



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

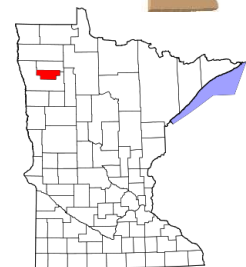
PRESENTER: BONNIE HUNDRIESER

Who the Plan Covers



This is a **multi-jurisdictional plan** that covers Red Lake 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 Needs to Participate



Key Stakeholders

It is required to provide an opportunity for local county & municipal government, related agency stakeholders and neighboring jurisdictions to participate in the plan update.

- 2 Planning Team Meetings
- Local Mitigation Survey
- Provision of key data
- MAC Review & Feedback
- Review of Draft Plan

The Public

It is required to provide an opportunity for the public to learn about the plan update, ask questions and provide input that may be incorporated into the plan update.

- 2 News Releases
- Outreach conducted via websites, social media, bulletin boards, and local media
- Online public review & comment period for draft plan

PRESENTER: BONNIE HUNDRIESER

The structure of the HMP

PDF document:

- Contains all FEMA required elements
- Limited figures & images
- Summary of Hazard Identification
- Local Mitigation Summary Report
- Plans & Programs in Place
- Past Mitigation Action Review
- Planning Team Meetings
- Public Outreach & Engagement Documentation
- Mitigation Actions by Jurisdiction



Website companion:

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

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 jurisdictional vulnerability
- Informs Mitigation Actions in the HMP



PRESENTER: STACEY STARK

Prioritization of Hazards for Red Lake County



Prioritization of hazards by the Red Lake County planning team included consideration of:

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

Hazard	2023 Priority
Winter Storms	Moderate
Extreme Cold	Moderate
Tornadoes	Moderate
Windstorms	Moderate
Hail	Moderate
Flooding	Moderate
Landslides	Moderate
Extreme Heat	Low
Lightning	Low
Wildfire	Low
Drought	Low
Dam/Levee Failure	Low

PRESENTER: BONNIE HUNDRIESER

Comments and Questions?

Overview of Mitigation Action Charts



Mitigation Action Charts identify activities to reduce future risk to natural hazard events. MAC's include:

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

Mitigation Action Charts are the end product of the HMP.

Mitigation actions are specific.

Mitigation actions address known vulnerabilities.

Mitigation actions utilize capabilities to reduce risk.

★ Eligible project activities must be identified for future FEMA HMA Grants!

FEMA HMA Grant Funding



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

Example Eligible Activities:

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

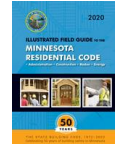
PRESENTER: BONNIE HUNDRIESER

Local Planning & Regulations



Red Lake County Examples:

- Enrollment in the NFIP and enforcement of county and local floodplain ordinances.
- Participation in regional One Watershed, One Plan (1W1P) and partnership projects
- Working with mobile home parks to be in compliance with Minnesota State statutes for storm shelters & evacuation plans.
- Permitting for new development and adhering to MN state building codes to reduce impacts of severe weather to structures.



PRESENTER: BONNIE HUNDRIESER

Structure & Infrastructure Projects

Red Lake County Examples:

- Installation of new outdoor warning sirens
- Construction of safe rooms / storm shelters
- Burying powerlines to reduce power failure
- Conducting property buyouts for landslide risk properties (City of RLF and RLF Township)
- Addressing road, bridge, culvert, and drainage ditch improvements to reduce localized flood risks
- Protection of vulnerable critical infrastructure such as lift stations, WWTPs, Fire Halls



PRESENTER: BONNIE HUNDRIESER

Natural Systems Protection

Red Lake County Examples:

- Conduct vegetation management along roads to reduce the risk of downed trees and branches resulting from severe storms. (County, Local, Electric Coop)
- Other examples:
 - Planting Living Snow Fences to reduce snow drifting
 - Installing Rain Gardens to reduce impacts of high rain events



PRESENTER: BONNIE HUNDRIESER

Education & Awareness Programs

Red Lake County Examples:

- Promoting sign-up for the county's emergency notification system and Sheriff's Office Facebook page.
- Providing presentations and information on preparedness at schools, special facilities, and public events.
- Participation in the NWS Severe Weather Awareness Weeks and SKYWARN Storm Spotter Training
- Outreach to vulnerable populations



PRESENTER: BONNIE HUNDRIESER

Mitigation Preparedness & Response Support

Red Lake County Examples:

- Acquire generators for backup power of critical infrastructure and key facilities
- Update of county EOP
- Conduct local and regional shelter planning
- Preparation for extended power outages and evacuation of vulnerable populations.
- Testing of outdoor warning sirens.
- Participate in regional EM planning, training, and exercising



PRESENTER: BONNIE HUNDRIESER

Comments and Questions?



Fall 2023

MAC Review, EM Review of Draft Plan and Public Review & Comment Period



Following Planning Team Mtg. #2

- > Jurisdictional MAC Review
- > EM review of draft plan
- > Public review & comment period (News Release #2)
- > Document public outreach
- > Incorporate public feedback as appropriate.

PRESENTER: BONNIE HUNDRIESER



Winter 2023

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

- > Draft plan will be submitted first to HSEM and then to FEMA for approval for meeting all Federal requirements.
- > Typically requires 1-2 months.
- > APA letter
- > EM coordination of adopting resolutions from each city.

PRESENTER: BONNIE HUNDRIESER

Questions?

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

PRESENTER: STACEY STARK

Contact Information

Stacey Stark, MS, GISP

U-Spatial@UMD

slstark@d.umn.edu

218-726-7438

Bonnie Hundrieser, HM Planner

Hundrieser Consulting LLC

hundrieserconsulting@outlook.com

218-343-3468



PRESENTER: STACEY STARK



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

HAZARD MITIGATION ASSISTANCE

Hazard Mitigation Assistance (HMA) grant programs provide funding with the aim to reduce or eliminate risk to property and loss of life from future natural disasters. HMA programs are typically a 75%/25% cost share program. The federal share is 75% of total eligible project reimbursement costs. The local applicant is responsible for 25% of the project costs. The amount of HMGP funds availability is based on a percent of Public Assistance provided by Federal Emergency Management Agency (FEMA).

- Hazard Mitigation Grant Program (HMGP) funds assists in implementing long-term hazard mitigation measures following a Presidential major disaster declaration.
- Pre-Disaster Mitigation (PDM) provides funds for hazard mitigation planning and projects on an annual basis.
- Flood Mitigation Assistance (FMA) provides funds on an annual basis to reduce or eliminate risk of flood damage to buildings that are insured under the National Flood Insurance Program (NFIP).

Who is eligible for grant funding?

All applicants must have or be covered under an approved Hazard Mitigation Plan. Eligible applicants include: State and local governments; certain private non-profit organizations or institutions; and Tribal Communities

What types of projects can be funded?

All projects must be eligible, technically feasible, and cost-effective. All projects are subject to environmental and cultural resource review. Examples of projects include:

- **Advance Assistance** may be used to develop mitigation strategies and obtain data, including for environmental and historic preservation compliance considerations, and develop complete project applications in a timely manner.
- **Aquifer Storage and Recovery** (ASR) projects serve primarily as a drought management tool, but can also be used to reduce flood risk and restore aquifers that have been subject to overdraft. The concept is to capture water when there is an abundant supply, store the water in subsurface aquifers, and recover water from the storage aquifer when needed. Storing water underground can help protect it from pollutants, evaporation, and weather events.
- **Floodplain and stream restoration** (FSR) projects are used primarily to reduce flood risk and erosion by providing stable reaches, and may also mitigate drought impacts. FSR projects restore and enhance the floodplain, stream channel and riparian ecosystem's natural function. They provide base flow recharge, water supply augmentation, floodwater storage, terrestrial and aquatic wildlife habitat, and recreation opportunities by restoring the site's soil, hydrology and vegetation conditions that mimic pre-development channel flow and floodplain connectivity.
- **Flood Diversion and Storage** (FDS) projects often are used to reduce flood risk, but also can be used to mitigate drought and improve ecosystem services. These projects involve diverting floodwaters from a stream, river, or other body of water into a conduit such as a canal, pipe, or wetland and storing them in an above-ground storage facility. Water is then slowly released, reducing flood risk.

- **Green Infrastructure Methods** are a sustainable approach to natural landscape preservation and storm water management. Include in *eligible hazard mitigation activities* as well as provide additional ecosystem benefits. Ecosystem-based approach to replicate a site's pre-development, natural hydrologic function. Benefits include: Increase water supply, improved water quality, can be scaled to size and designed to fit site conditions.
- **Property Acquisition and Structure Demolition or Relocation** – The voluntary acquisition of an existing at-risk structure and the underlying land, and conversion of the land to open space through the demolition or relocation of the structure. The property must be deed-restricted in perpetuity to open space uses to restore and/or conserve the natural floodplain functions.
- **Retrofit Flood-Prone Residential Structures** are changes made to an existing structure to reduce or eliminate the possibility of damage to that structure from flooding, erosion, or other hazards. Examples of this mitigation are primarily elevation of structures above flood levels and floodwalls.
- **Safe Room Construction** - Safe room construction projects are designed to provide immediate life-safety protection for people in public and private structures from tornado and severe wind events. Includes retrofits of existing facilities or new safe room construction projects, and applies to both single and dual-use facilities
- **Minor Localized Flood Reduction Projects** - Projects to lessen the frequency or severity of flooding and decrease predicted flood damages, such as the installation or up-sizing of culverts, and stormwater management activities, such as creating retention and detention basins. These projects must not duplicate the flood prevention activities of other Federal agencies and may not constitute a section of a larger flood control system.
- **Infrastructure Retrofit** - Measures to reduce risk to existing utility systems, roads, and bridges.
- **Soil Stabilization** - Projects to reduce risk to structures or infrastructure from erosion and landslides, including installing geotextiles, stabilizing sod, installing vegetative buffer strips, preserving mature vegetation, decreasing slope angles, and stabilizing with rip rap and other means of slope anchoring. These projects must not duplicate the activities of other Federal agencies. *New tools for Bioengineered Shoreline Stabilization, Bioengineered Streambank Stabilization.*
- **Wildfire Mitigation** - Projects to mitigate at-risk structures and associated loss of life from the threat of future wildfire through: Defensible Space for Wildfire, Application of Ignition-resistant Construction and Hazardous Fuels Reduction. *New tool for Bioengineered Wildfire Mitigation.*
- **HMGP only - 5 Percent Initiative Projects** – These projects, which are only available pursuant to an HMGP disaster, provide an opportunity to fund mitigation actions that are consistent with the goals and objectives of approved mitigation plans and meet all HMGP program requirements, but for which it may be difficult to conduct a standard Benefit-Cost Analysis (BCA) to prove cost-effectiveness.

How do I apply?

Start by submitting a Notice of Interest, available on HSEMs website at:

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

Where can I obtain further information?

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

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

Mitigation Strategies & Action Types

Following are the five types of mitigation strategies that will be used in the update of the Multi-Hazard Mitigation Plan with examples of related mitigation actions. Minnesota HSEM recommends the use of these mitigation strategies to be in alignment with the State plan and those recommended by FEMA. The first four strategies listed are taken from the FEMA publications *Local Mitigation Planning Handbook* (2013) and *Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards* (2013). The fifth strategy type was determined by Minnesota HSEM for use within the state.

These strategies will provide the framework for identification of new jurisdictional-level mitigation actions for implementation over the next 5-year planning cycle.

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

Mitigation Strategy	Description	Example Mitigation Actions
<p>Natural Systems Protection</p>	<p>These are actions that minimize damage and losses and also preserve or restore the functions of natural systems.</p>	<ul style="list-style-type: none"> • Soil stabilization for sediment and erosion control • Floodplain and Stream corridor restoration • Slope management • Forest management (defensible space, fuels reduction, sprinkler systems) • Conservation easements • Wetland restoration and preservation • Aquifer Storage & Recovery • Flood Diversion and Storage <p><i>Many of these types of actions are projects eligible for funding through FEMA HMA grant programs.</i></p>
<p>Education and Awareness Programs</p>	<p>These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady or Firewise Communities. Although this type of mitigation reduces risk less directly than structural projects or regulation, it is an important foundation. A greater understanding and awareness of hazards and risk among local officials, stakeholders, and the public is more likely to lead to direct actions that support life safety and lessen property damage.</p>	<ul style="list-style-type: none"> • Radio or television spots • Websites with maps and information • Social media outreach • Promotion of sign-up for emergency warnings • Real estate disclosure • Promotion of NFIP insurance to property owners • Presentations to school groups or neighborhood organizations • Mailings to residents in hazard-prone areas. • NWS StormReady Program • Firewise Communities <p><i>Some of these types of actions may be projects eligible for funding through the FEMA HMA "5 Percent Initiative Program".</i></p>
<p>Mitigation Preparedness and Response Support</p>	<p>This is a State of Minnesota mitigation strategy with the intent of covering emergency preparedness actions that protect life and property prior to, during, and immediately after a disaster or hazard event. These activities are typically not considered mitigation, but support reduction of the effects of damaging events.</p>	<ul style="list-style-type: none"> • Emergency Operations Plan • Flood fight plans and preparedness measures • Dam emergency action plans • Emergency Warning Systems (i.e., CodeRed, warning sirens) • Generator backup power • NWS Storm Spotter Training • Training and education for local elected officials and key partners.

Appendix G – Public Outreach & Engagement Documentation

Red Lake County MHMP News Release #1 Record of Public Input & Incorporation

Overview: On **August 1, 2022**, Red Lake County Emergency Management put out a news release titled **“Public Input Wanted as County Updates Multi-Hazard Mitigation Plan”** to announce the start of the county’s Multi-Hazard Mitigation Plan. The news release provided information on the purpose and content of the plan, who the plan covers, stakeholders involved in the plan update and examples of hazard mitigation activities. Red Lake County used the news release to gather feedback from residents and businesses from across the county to incorporate into the plan, inviting feedback to the following:

- What are the natural hazards you feel pose the greatest risk to your community?
- What concerns do you have, and what sorts of mitigation actions or projects do you feel would help to reduce the damages of potential future events for your personal property, your community, or the County as a whole?

The public was strongly encouraged contact Red Lake County Emergency Management to submit comments, concerns, or questions regarding natural disasters and potential mitigation actions to be included into the plan update process. The public was also able to post comments electronically on county or city Facebook sites where the news release was posted.

Distribution: The news release was sent via email to the county’s MHMP Jurisdictional Contact List, which includes the names, titles, phone numbers, and email addresses of key stakeholders to be engaged in the MHMP update, including County Contacts, City Contacts, Township Contacts, Other Stakeholder Contacts, and Neighboring Jurisdiction Contacts. (A copy of the Jurisdictional Contact List can be found in Appendix F). The news release was additionally sent to local media contacts with a request to carry the news release.

Postings: Attached is documentation of the news release postings by Red Lake County, participating jurisdictions, local media, and other stakeholders. Cities and townships were encouraged to help share the news release locally by posting it on their websites, social media, or community bulletin boards.

Public Input & Incorporation:

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

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

From: [mitch_bernstein](#)
To: [oklee06@yahoo.com](#); [shield07@yahoo.com](#); [ehove@co.red-lake.mn.us](#); [kacenv@co.red-lake.mn.us](#); [krjore@co.pennington.mn.us](#); [kbnelson@mail.co.red-lake.mn.us](#); [hr@co.red-lake.mn.us](#); [manelson@co.red-lake.mn.us](#); [rlfmohr@gvtel.com](#); [sweiss@gvtel.com](#); [susandudycha1@gmail.com](#); [allen.r.remick@gmail.com](#); [tgerardy@gvtel.com](#); [brooksmn@brooksmn.com](#); [cityofoklee@gvtel.com](#); [lnvedbr@yahoo.com](#); [plu21@hotmail.com](#); [cityplmr@gvtel.com](#); [wadewestlake@hotmail.com](#); [rdlkfals@gvtel.com](#); [allenbertilrud33@gmail.com](#); [kkleven@unityins-inv.com](#); [kwrrf@gmail.com](#); [carolschmitz@msn.com](#); [trem12@hotmail.com](#); [ejvigstol@hotmail.com](#); [halvor@gvtel.com](#); [dkolstoe@gvtel.com](#); [dl_konickson@hotmail.com](#); [mchaput@gvtel.com](#); [drparadis@gmail.com](#); [lorischultz08@gmail.com](#); [pgieseke427@gmail.com](#); [rlftownship@gmail.com](#); [wgf@gvtel.com](#); [heather.winkleblack@state.mn.us](#); [tanya.hanson@redlake.mnswcd.org](#); [royholmes@usda.gov](#); [jolson@nwrdc.org](#); [laura.pettit@usda.gov](#); [j.t.anderson@state.mn.us](#); [dan.carroll@state.mn.us](#); [stephanie.klamm@state.mn.us](#); [myron.jesme@redlakewatershed.org](#); [rlccandrifsupt@gvtel.com](#); [sjohnson@redlakeelectric.com](#); [thrdlicka@otpc.com](#); [kolson@pkmcoop.com](#); [jmarcotte@pkmcoop.com](#); [marian.jordan@redcross.org](#); [sue.butkiewicz@usc.salvationarmy.org](#); [darla@nwrdc.org](#); [jessicay@nwmf.org](#); [cjohnson@intercountycc.org](#); [elbeitel@co.pennington.mn.us](#); [jody.beauchane@co.polk.mn.us](#); [candace.coulter@co.clearwater.mn.us](#); [chris.muller@co.beltrami.mn.us](#)
Cc: [Bonnie K. Hundrieser](#)
Subject: Hazard Mitigation News Release and Letter
Date: Monday, August 1, 2022 2:39:19 PM
Attachments: [MHMP News Release 1.docx](#)

Red Lake County News Release

Greetings,

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

Your assistance is requested to post this news release in order to help notify the public about the plan update and have an opportunity to provide feedback:

[Participation by all cities is required in order to help fulfill required documentation to FEMA for the plan update.](#) Townships, businesses, and other agencies or organizations are also encouraged to participate to help reach out to the public.

INSTRUCTIONS:

Please post this news release using the outreach methods best available to you (your website, Facebook, community bulletin boards). We welcome as many of ways of posting that you can cover.

- **Electronic Postings** - If you are posting to a website and/or Facebook page, please send me an email with information on the [date, location, and website link](#) of the posting. We will need to get a screenshot of the posting for documentation.

- **Hardcopy Postings** - If you are posting it as a printed hardcopy in a visible location such as City Hall, Post Office or a Community Center, please send me the date and location of the posting. No photo is required.

The timely return of your posting documentation is appreciated. We will be working to wrap this up before the end of August.

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

If you have any questions, please let me know.

Mitch A. Bernstein
Red Lake County Sheriff # 1801
Red Lake County Sheriff's Office
PO Box 306
124 North Main Street
Red Lake Falls, MN 56750
tel: (218)253-2996
Fax: (218)253-2656
Cel: (218)684-1043

From: mitch_bernstein
To: news@gfherald.com; dhill@trftimes.com; contact@trfradio.com; mlamb@marshallindependent.com; [Jess Bengtson](#); [Oklee Herald](#); [Red Lake Falls Gazette](#)
Cc: [Bonnie K. Hundrieser](#)
Subject: News Release
Date: Monday, August 1, 2022 1:56:52 PM
Attachments: [MHMP News Release 1.docx](#)

Please carry this attached release in your online or printed news. Thanks, Mitch.

Mitch A. Bernstein
Red Lake County Sheriff # 1801
Red Lake County Sheriff's Office
PO Box 306
124 North Main Street
Red Lake Falls, MN 56750
tel: (218)253-2996
Fax: (218)253-2656
Cel: (218)684-1043

Red Lake County Sheriff's Office

Mitch Bernstein, Sheriff

124 N. Main Ave. PO Box 306

Red Lake Falls, MN 56750

Phone 218-253-2996 Fax 218-253-2656

E-mail: mbernstein@sheriff.co.red-lake.mn.us



RED LAKE COUNTY NEWS RELEASE

August 1, 2022

Public Input Wanted as County Updates Multi-Hazard Mitigation Plan

Red Lake County residents, business owners, nonprofit members, and community leaders now have an organized opportunity to share how severe weather events impact their property and lives. There is also an opportunity to share their ideas on how to reduce the impact in the future.

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

The Red Lake County MHMP is a multi-jurisdictional plan that covers Red Lake County, including the cities of Brooks, Oklee, Plummer, and Red Lake Falls. The Red Lake County MHMP also incorporates the concerns and needs of townships, school districts, and area agencies or organizations participating in the plan. The plan will be updated by a planning team made up of representatives from county departments, local municipalities, school districts and other key stakeholders.

“Hazard mitigation planning is a central part of our emergency management program,” said Mitch Bernstein, Red Lake County Sheriff and Emergency Management Director. “Understanding the natural hazards that can cause serious impact to our communities and taking action to reduce or eliminate the impact of future disasters makes us more resilient. Hazard mitigation helps us to break the cycle of damage and repair caused by things like flooding, ice storms, and severe wind events that can damage property, stress economies, and threaten life safety in our county.”

Examples of hazard mitigation include:

- improvement of roads and culverts that experience repetitive flooding
- construction of safe rooms at campgrounds, public parks, mobile home parks or schools to protect lives in the event of tornados or severe wind events
- burying powerlines that may fail due to heavy snow, ice, or windstorms
- ensuring timely emergency communication to the public through warning sirens and mass notification systems
- conducting public awareness and education campaigns to help people be prepared to take safe action before, during, or following a hazard event.

Some mitigation activities may be eligible for future FEMA Hazard Mitigation Assistance grant funding.

***To Protect and Serve ***

Red Lake County Sheriff's Office

Mitch Bernstein, Sheriff

124 N. Main Ave. PO Box 306

Red Lake Falls, MN 56750

Phone 218-253-2996 Fax 218-253-2656

E-mail: mbernstein@sheriff.co.red-lake.mn.us



Public input is an essential part of the plan update. As part of the planning process, Red Lake County is seeking feedback from residents and businesses from across the county to incorporate into the plan:

- What are the natural hazards you feel pose the greatest risk to your community?
- What concerns do you have, and what sorts of actions or projects do you feel would help to reduce the damages of potential future events for your personal property, your community, or the county as a whole?

Comments, concerns, or questions regarding natural disasters and potential mitigation actions to be included into the plan update process should be submitted to Red Lake County Emergency Management by phone or email. Comments may also be submitted on the Red Lake County Sheriff's Office Facebook page where this news release will be posted.

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

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

Contact

Mitch Bernstein

Red Lake County Sheriff/Emergency Management Director

Phone: 218-253-2996

Email: oklee06@yahoo.com

***To Protect and Serve ***

Red Lake County HMP News Release #1 – August 1, 2022
Chart Documentation of News Release Postings

Jurisdiction or Agency	Posting Representative	Date & Location of News Release Posting
Red Lake County	Mitch Bernstein, Red Lake County Sheriff / EM Director	8/1/22, Red Lake County website, Sheriff's Office Facebook page
City of Brooks	Joyce Morinville, City Clerk,	8/8/22, Brooks Community Center and Post Office bulletin boards
City of Oklee	Derek Cross, City Clerk	8/17/22, City Hall bulletin board
City of Plummer	Margaret Peterson, City Clerk	8/1/22, Post Office, Bank, and City Hall bulletin board. It was also forwarded to city council members by the city clerk.
City of Red Lake Falls	Kathleen Schmitz, City Administrator,	8/9/22 City Hall and Post Office bulletin boards, city website
Garnes Township	Diane Kolstoe, Twp. Clerk	8/2/22, Garnes Town Hall bulletin board
Red Lake County Soil & Water Conservation District	Tanya Waldo, District Manager	8/1/22, Red Lake SWCD website and Facebook page
Crookston Times	News Editor	8/3/22, Crookston Times online news

Red Lake County MHMP News Release #2 Record of Public Input & Incorporation

Overview: On October 17, 2023 Red Lake 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 Red Lake 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 10/17/23 to 10/31/23 for a total of 15 days.

Distribution: The news release was sent via email to the county’s HMP Jurisdictional Contact List, which includes the names, titles, phone numbers, and email addresses of key stakeholders to be engaged in the HMP update, including County Contacts, City Contacts, Township Contacts, Other Stakeholder Contacts, and Neighboring Jurisdiction Contacts. (A copy of the Jurisdictional Contact List can be found in Appendix F). The news release was additionally sent to local media contacts such as area newspapers, radio and television channels with a request to carry the news release.

Postings: Attached is documentation of the news release postings by Red Lake 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 Red Lake County news release and how the input will be incorporated into the plan update, and if not relevant to be addressed, why.

Submitted By	Comment	How Incorporated into the Plan
Derek Cross, City Clerk, City of Oklee	Email Response: <i>“It’s on our Facebook page now.”</i>	No incorporation needed. This email comment was responding to a request for local jurisdictions to post the news release for local residents.
Kathleen Schmitz, City Administrator, City of Red Lake Falls	Online Survey Response: <i>“Reviewed did not note any changes.”</i>	No incorporation needed.

From: mitch_bernstein
To: oklee06@yahoo.com; shield07@yahoo.com; ehove@co.red-lake.mn.us; kacenv@co.red-lake.mn.us; krjore@co.pennington.mn.us; kbnelson@mail.co.red-lake.mn.us; hr@co.red-lake.mn.us; manelson@co.red-lake.mn.us; rilmohr@gvtel.com; sweiss@gvtel.com; Susandudycha1@gmail.com; allen.r.remick@gmail.com; tgerardy@gvtel.com; brooksmn@brooksmn.com; cityofoklee@gvtel.com; lnvedbr@yahoo.com; Plu21@hotmail.com; cityplmr@gvtel.com; wadewestlake@hotmail.com; rdlkfals@gvtel.com; allenbertilrud33@gmail.com; kkleven@unityins-inv.com; kwrrf@gmail.com; carolschmitz@msn.com; trem12@hotmail.com; Ejvigstol@hotmail.com; halvor@gvtel.com; Dkolstoe@gvtel.com; DI_konickson@hotmail.com; mchaput@gvtel.com; drparadis@gmail.com; lorischultz08@gmail.com; pgieseke427@gmail.com; rlftownship@gmail.com; wgf@gvtel.com; andrew.tepfer@state.mn.us; tanya.hanson@RedLake.mnswcd.org; royholmes@usda.gov; jolson@nwrdc.org; laura.pettit@usda.gov; j.t.anderson@state.mn.us; Dan.Carroll@state.mn.us; Stephanie.Klamm@state.mn.us; Myron.Jesme@redlakewatershed.org; RLCCandRLFsupt@gvtel.com; sjohnson@redlakeelectric.com; thrdlicka@otpc.com; Marian.jordan@redcross.org; Sue.butkiewicz@usc.salvationarmy.org; darla@nwrdc.org; nated@nwmf.org; dawng@nwmf.org; cjohnson@intercountycc.org; elbeitel@co.pennington.mn.us; jody.beauchane@co.polk.mn.us; candace.coulter@co.clearwater.mn.us; chris.muller@co.beltrami.mn.us; rneadeau@redlakenation.org; bevphilion@yahoo.com
Cc: [Bonnie K. Hundrieser](mailto:Bonnie.K.Hundrieser)
Subject: Red Lake County News Release - Public Comment Sought for Hazard Mitigation Plan
Date: Monday, October 16, 2023 1:34:55 PM

Greetings,

Attached is a news release announcing the public review and comment period is open for the Red Lake County Hazard Mitigation Plan from **October 17 – October 31** prior to submission of the plan to FEMA. As a jurisdiction, related agency, or neighboring jurisdiction involved in the Red Lake County plan update, your assistance is requested to help post the news release and also to review the draft plan. Your assistance requested on the following items below in order to document to FEMA your participation in this important public outreach process:

- **PLEASE POST THE NEWS RELEASE**

Each city jurisdiction within the county is requested to post the news release. Townships and other agency stakeholders are also encouraged to participate in posting the news release. Please post to areas such as your website, Facebook page, public bulletin boards, or other locations. Please note that photos or screenshots are not necessary. **Please email me to notify me of when and where you posted the news release.**

- **PLEASE REVIEW THE PLAN**

All recipients of this notice are encouraged to review the plan and provide comment. Please also share with your local governments or agency partners to review. There are website links as well as QR codes in the news release that will take you to PDF of the plan, interactive website, and mitigation action charts. There is also an online feedback form where you are encouraged to provide any comments, questions, or other feedback. **Please email me the names & titles of who reviewed the plan.**

- **PLEASE RESPOND BY OCT. 31st**

As this is a 15-day review period, your timeliness to post the news release and review the plan is very important. Please respond to me with the requested information above no later than October 31, which will be the end of the public review and comment period. Everyone's participation in posting the news release and reviewing the plan will help to count towards the county's 25% local match.

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

Thank you,

[Download all attachments as a zip file](#)

- [10-17-23 Red Lake County News Release - Hazard Mitigation Plan Public Review.pdf](#)
136.4kB
- [10-17-23 Red Lake County News Release - Hazard Mitigation Plan Public Review.docx](#)

Mitch A. Bernstein
Red Lake County Sheriff # 1801
Red Lake County Sheriff's Office
PO Box 306
124 North Main Street
Red Lake Falls, MN 56750
tel: (218)253-2996
Fax: (218)253-2656
Cel: (218)684-1043

From: [Stacey Stark, U-Spatial](#)
To: hundrieserconsulting@outlook.com
Subject: Your input is requested for the Red Lake County Hazard Mitigation Plan!
Date: Thursday, November 2, 2023 8:33:35 AM

Dear Bonnie,

I am writing to let you know that **Red Lake County has an updated draft of its Hazard Mitigation Plan (HMP)** available for review.

These plans are required by FEMA in order for county governments to mitigate damage and injury due to natural disasters, as well as be able to apply for certain funding programs from the federal government. The plans are updated every five years, so this is the county's last opportunity to make changes before the next update in 2028.

Planning team and stakeholder input is vital to the success of the plan, but thus far the plan has received very little feedback. If you have not yet had time to do so, please take some time to review the Red Lake HMP Update. Opportunities for review and feedback are required prior to submitting the plan to the State of Minnesota and the Federal Emergency Management Agency (FEMA).

Your feedback may be provided via the online comment forms or directly to Red Lake County Emergency Management. Please **respond by November 8**.

You will find the draft plan on the County Hazard Mitigation Plan website here:
<https://z.umn.edu/RedLakeHMP>

Use the Public Comment Feedback Form to submit feedback:
https://z.umn.edu/CountyHMP_Feedback

Feedback may be also be provided directly to the County HMP Contact:

Mitch Bernstein
Red Lake County Sheriff/Emergency Management Director
Phone: 218-253-2996
Email: oklee06@yahoo.com

Thank you for your attention.

Stacey Stark
U-Spatial, UMN
County Hazard Mitigation Plan Project Manager

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Stacey Stark, MS, GISP
Associate Director | U-Spatial | uspatial.umn.edu
Research Computing | Office of the Vice President for Research
389 Kirby Plaza
University of Minnesota Duluth | d.umn.edu
slstark@d.umn.edu | 218-726-7438

Red Lake County Sheriff's Office

Mitch Bernstein, Sheriff

124 N. Main Ave. PO Box 306

Red Lake Falls, MN 56750

Phone 218-253-2996 Fax 218-253-2656

E-mail: mbernstein@sheriff.co.red-lake.mn.us



RED LAKE COUNTY NEWS RELEASE

October 17, 2023

Public Comment Sought for County's Hazard Mitigation Plan

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

All county residents, as well as other interested agency or organizational stakeholders are strongly encouraged to review and offer feedback on the interactive website, PDF of the draft plan, and proposed local mitigation actions. The review and comment period is open for a period of 15 days through Tuesday, October 31, 2023. The public can access the plan using the following links:

[Red Lake County HMP Website \(https://red-lake-county-hmp-umn.hub.arcgis.com/\)](https://red-lake-county-hmp-umn.hub.arcgis.com/)

[Mitigation Action Charts \(https://red-lake-county-hmp-umn.hub.arcgis.com/\)](https://red-lake-county-hmp-umn.hub.arcgis.com/)

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

The Red Lake County HMP is a multi-jurisdictional plan that covers Red Lake County, including the cities of Brooks, Oklee, Plummer, and Red Lake Falls. The Red Lake County HMP also incorporates the concerns and needs of townships, school districts, and other stakeholders participating in the plan.

Update of the plan has been under direction of Red Lake County Emergency Management in cooperation with U-Spatial at the University of Minnesota Duluth and representatives from county departments, city and township governments, school districts, and other key stakeholders. Together, the planning team worked to identify cost-effective and sustainable actions to reduce or eliminate the long-term risk to human life or property from natural hazards. Examples include improvement of roads and culverts that experience repetitive flooding; construction of safe rooms in areas where residents and visitors are vulnerable to tornadoes and severe storm events; burying powerlines that may fail due to heavy snow, ice or wind storms; ensuring timely emergency communication to the public through warning sirens and mass notification systems; and conducting outreach to increase public awareness of severe weather and personal preparedness.

Hazard mitigation planning helps Red Lake 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,

***To Protect and Serve ***

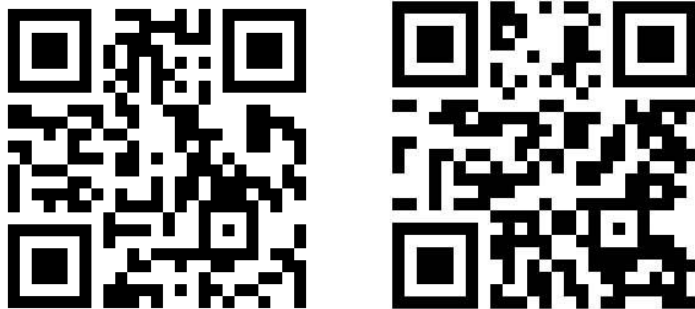
and breaks the cycle of response and recovery. Updating the plan further allows Red Lake County and its jurisdictions to be eligible to apply for future FEMA Hazard Mitigation Assistance grant program funding for projects that help to reduce or eliminate the impacts of future natural hazard events.

Community feedback is vital to the success of the plan. Red Lake County invites public review and feedback of the draft plan prior to submitting it to the State of Minnesota and the Federal Emergency Management Agency (FEMA) for review. Feedback may be provided via the online comment forms or directly to Red Lake County Emergency Management.

Contact

Mitch Bernstein
Red Lake County Sheriff/Emergency Management Director
Phone: 218-253-2996
Email: oklee06@yahoo.com

Please scan the following QR code to go directly to the Red Lake County Hazard Mitigation Plan interactive website and online feedback form:



Red Lake County HMP News Release #2 – October 17, 2023
Chart Documentation of News Release Postings

Jurisdiction or Agency	Posting Representative	Date & Location of News Release Posting
Red Lake County	Mitch Bernstein, Red Lake County Sheriff / EM Director	10/17/23, Red Lake County Website and Sheriff's Office Facebook Page
City of Brooks		
City of Oklee	Derek Cross, City Clerk	10/18/23, City of Okelee Facebook page
City of Plummer	Margaret Peterson, City Clerk	10/19/23, posted on Plummer U.S. Post Office bulletin board
City of Red Lake Falls	Kathleen Schmitz, City Administrator,	10/17/23, City of Red Lake Falls website
Red Lake Falls School District 630 and Red Lake County Central School District 2906	James Guetter, Superintendent	10/18/23, Posted at Schools bulletin boards and on district RLF Schools Facebook page

Appendix H – Mitigation Actions by Jurisdiction

CITY OF BROOKS

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 cold, and extended power outages.	Existing High 2024-2029	City Admin, City EM	Our city does not have its own website or Facebook page to do better outreach to our residents. The City of Brooks depends upon the Red Lake County Sheriff's Department to get urgent info out to residents when required. We will seek to make announcements at City Council meetings or post information locally to encourage residents to sign up for the CodeRED system. We encourage all residents to be aware of and take precautions for periods of extreme cold.	City
2	Flooding	Flooding	Enroll the City of Brooks in the National Flood Insurance Program and develop a floodplain ordinance.	New High 2024-2029	City Admin in coord with MN DNR	The city had new FEMA Mapped High Risk Areas as of 3/9/21. The city will work with the county and the MN DNR to get the city enrolled in the National Flood Insurance Program and to develop a floodplain ordinance.	City, MN DNR

CITY OF OKLEE

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 cold, and extended power outages.	Existing High 2024-2029	City Admin, City EM	The City of Oklee has its own Facebook Page, we also utilize Red Lake County Sheriff's Department to get urgent info out to the residents when required. We currently do not have a link to the CodeRED Emergency Notification System, but plan to do so going forward. We encourage all residents to be aware of and take precautions for periods of extreme cold.	City
2	Severe Winter & Summer Storms	Mitigation Preparedness & Response Support	Obtain backup generator power for city use during extended power outages.	New Moderate 2014-2029	City Admin, City EM	The city of Oklee only has emergency power for the water system, sewer and the drinking water supply. Having another backup portable generator for city use would be helpful. We will work with RLC Emergency Management for assistance on this effort.	City
3	Severe Winter & Summer Storms	Local Planning & Regulations	Ensure new development is built to guidelines to reduce risk of damage or failure from extreme storm events.	Existing High 2024-2029	City Admin, City Public Works	Building permits are required and all work is required to be done to building code. Red Lake County Environmental Services enforces the MN State Building Code.	City
4	Severe Winter & Summer Storms	Structure & Infrastructure Projects	Reduce the risk of downed power lines and extended power outages from the impacts of heavy snow, ice, or high wind events.	Existing High 2024-2029	City Maintenance	The city regularly trims trees in the city right-of-way as needed to keep limbs away from power lines.	City
5	Severe Summer Storms	Local Planning & Regulations	Ensure evacuation and sheltering plans are in place for residents of the mobile home park within the city.	Existing High 2024-2029	City Admin, City EM	The city has plans in place for the residents to use the City Hall for shelter if needed during inclement weather.	City
6	Flooding	Structure & Infrastructure Projects	Implement stormwater system improvement to reduce the risk of localized flooding to homes and the city storm sewer system.	Existing High 2024-2029	City Admin, City Public Works	The city of Oklee budgets for the any needs regarding any drainage problems and we do upkeep our existing infrastructure as required. The Red Lake County Engineer and Red Lake County Highway Department also assist us when required.	City

CITY OF OKLEE**Mitigation Action Chart**

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
7	Flooding	Local Planning & Regulations	Enroll the city of Oklee in the National Flood Insurance Program and develop a floodplain ordinance.	New High 2024-2029	City Admin	New FEMA mapped high risk areas were added as of 3/9/21. The city will work with Red Lake County and the MN DNR to get the city enrolled in the National Flood Insurance Program and to develop a floodplain ordinance.	
8	Flooding	Local Planning & Regulations	Assess and address ways to reduce flooding to the Omar Sundrud Park.	Existing High 2024-2029	City Admin, City Public Works	In the city of Oklee, Omar Sundrud Park is vulnerable to flooding from the Lost River. The city will work with RLC Emergency Management and the MN DNR on how to address flood reduction measures for this area along the river.	City, County, MN DNR
9	Extreme Cold	Mitigation Preparedness & Response Support	Be prepared to provide emergency sheltering to vulnerable residents during extreme cold temperature events.	Existing High 2024-2029	City Admin, City EM	In the event of an extreme cold event the city of Oklee would work as with our local fire department and Red Lake County emergency management to address any needed evacuation of vulnerable residents and provision of temporary sheltering.	City, County

CITY OF PLUMMER

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 cold, and extended power outages.	Existing High 2024-2029	City Admin, Red Lake County EM	We post information on bulletin boards at city hall and at the Post Office. We also utilize Red Lake County Sheriff's Department to get urgent info out to the residents when required. We encourage residents to sign up for Red Lake County's CodeRED Emergency Notification System and direct them to the county website to sign up. We encourage all residents to be aware of and take precautions for periods of extreme cold.	City
2	Severe Winter & Summer Storms	Local Planning & Regulations	Ensure new development is built to guidelines to reduce risk of damage or failure from extreme storm events.	Existing High 2024-2029	City Admin, City Public Works	Building permits are required and all work is required to be done to building code. Red Lake County Environmental Services enforces the MN State Building Code.	City
3	Severe Winter & Summer Storms	Structure & Infrastructure Projects	Reduce the risk of downed power lines and extended power outages from the impacts of heavy snow, ice, or high wind events.	Existing High 2024-2029	City Maintenance	The city works with our utility provider, Otter Tail Power Company to address power lines that may be at risk to failure from severe storm events.	OTPC
4	Severe Summer Storms	Structure & Infrastructure Projects	Address the need for construction of a storm shelter at locations where residents and visitors are vulnerable to high wind and severe storm events.	New High 2024-2029	City Admin, Red Lake County EM	The city will work with RLC Emergency Management to determine how to address the need for a storm shelter or tornado safe room for the MHP and local campground. FEMA HMA grant funding may be applied for if a tornado safe room is deemed appropriate. Currently MHP residents and campground users may use the City Hall for shelter if needed during inclement weather.	City, County, FEMA HMA

CITY OF PLUMMER

Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
5	Extreme Cold	Mitigation Preparedness & Response Support	Be prepared to provide emergency sheltering to vulnerable residents during extreme cold temperature events.	Existing High 2024-2029	City Admin, Red Lake County EM	We have a high population of senior citizens and also low-income residents who are more vulnerable during these events. In the event of an extreme cold event with an extended power outage the city would work as with our local fire department and Red Lake County emergency management to address any needed evacuation of vulnerable residents and provision of temporary sheltering.	
6	Flooding	Structure & Infrastructure Projects	Implement stormwater system improvement to reduce the risk of localized flooding to homes and the city storm sewer system.	Existing High 2024-2029	City Admin, City Public Works	The city plans to implement new storm sewer upgrades as construction projects are done.	City
7	Flooding	Local Planning & Regulations	Enforce city ordinances that reduce the impacts of high rain events and risk of flooding to areas of new development.	Existing Moderate 2024-2029	City Admin	The city of Plummer enforces requirements of the NFIP through the city's current floodplain ordinance, adopted 3/1/21 and published publicly 3/3/21. This ordinance regulates development in the flood hazard areas of the city. The city also enforces a sump pump ordinance to minimize impacts to the city's stormwater system	City
8	Flooding	Local Planning & Regulations	Assess and address ways to reduce flooding to the People's Park.	Existing High 2024-2029	City Admin	In the city of Plummer, People's Park is vulnerable to flooding from the Clearwater River. The city will work with RLC Emergency Management and the MN DNR on how to address flood reduction measures for this area along the river.	City, MN DNR

CITY OF RED LAKE FALLS

Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
1	All-Hazards	Education & Awareness Programs	Encourage residents to be aware of and prepared for severe weather events, periods of extreme cold, and extended power outages.	Existing High 2024-2029	City Admin, City EM	We post information for the public on the city website and our Fire Department Facebook page. We promote CodeRED sign up with the local Sheriff's Office. We have community boards to post items on throughout the town. We encourage all residents to be aware of and take precautions for periods of extreme cold.	City
2	Extreme Cold	Education & Awareness Programs	Conduct outreach to residents with water pipes that are susceptible to freezing.	Existing High 2024-2029	City Admin	We have several homes that are affected by extreme cold and need to run water annually when the water temps reach 35 degrees. The city puts out reminders on this to the homeowners. This prevents freezing to our water mains also.	City
3	Severe Summer Storms	Mitigation Preparedness & Response Support	Ensure that plans are in place for emergency sheltering for residents of the mobile home park and campgrounds.	Existing High 2024-2029	City Admin, City EM	We have 2 public campgrounds and a mobile home park that are vulnerable to high wind. The RLC Sheriff's department contacts the mobile home park and people in our campground if bad weather is occurring and opens City Hall for a storm shelter.	City
4	Severe Summer Storms	Structure & Infrastructure Projects	Work to address construction of a storm shelter or tornado safe room at the city's 2 public campgrounds and the mobile home park.	New High 2024-2029	City Admin, City EM	The city of RLF will work with the RLC Emergency Management Director on this effort. FEMA HMA grant funding may be applied for to support construction of any tornado safe room projects.	City, County, FEMA HMA
5	Severe Summer Storms	Mitigation Preparedness & Response Support	Ensure the functionality of the city's outdoor warning siren for high wind events.	Existing High 2024-2029	City EM	The city works with the RLC Sheriff's Office to test our outdoor warning sirens on a monthly basis.	City, County

CITY OF RED LAKE FALLS

Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
6	Landslides	Local Planning & Regulations / Structure & Infrastructure Projects	Address properties at risk of failure due landslide concern along the Red Lake River and Clearwater River in and around the city of Red Lake Falls.	In-Progress High 2024-2029	City Admin in coord with RLC Emergency Management	The city of RLF has been working with RLC Emergency Management and private property owners with homes that have been experiencing accelerated erosion. Red Lake County has submitted an application to FEMA for hazard mitigation funding to possibly buy out some properties. As of 2023 this is still in process. Funding may also be sought from the MN DNR flood risk reduction grant program. The city has adopted and enforces a Shoreline ordinance so homes are not built too close to the river.	City, FEMA HMA, MN DNR
7	Flooding	Local Planning & Regulations	Assess and address ways to reduce flooding to the Riverside Park.	Existing High 2024-2029	City Admin	In the city of Red Lake Falls, Riverside Park is vulnerable to flooding from the Clearwater River. The city will work with RLC Emergency Management and the MN DNR on how to address flood reduction measures for this area along the river.	City, MN DNR
8	Flooding	Local Planning & Regulations	Enforce city ordinances that reduce the impacts of high rain events and risk of flooding to areas of new development.	Existing Moderate 2024-2029	City Admin	The city of Red Lake Falls enforces requirements of the NFIP through the city's current floodplain ordinance, adopted 11/23/20 and published publicly 12/1/20. This ordinance regulates development in the flood hazard areas of the city. We have also adopted a culvert ordinance in coordination with the Red Lake Watershed to permit and survey prior to putting in culverts to assure proper drainage.	City

CITY OF RED LAKE FALLS

Mitigation Action Chart

#	Hazard	Mitigation Strategy	Mitigation Action	Status Priority Timeframe	Responsibility	Comments on Implementation & Integration	Possible Funding
9	Flooding	Structure & Infrastructure Projects	Implement stormwater system improvement to reduce the risk of localized flooding to homes and the city storm sewer system.	In-Progress High 2024-2029	City Admin, City Public Works	We have 2 lift stations and they have been prone to flooding during high rain events. The city is addressing improvements to these lift stations. The city has replaced pumps at the Kankel Lift and is replacing the 2nd pump in 2024 for the main lift station. We added a generator at Kankel and are adding a new generator in fall of 2023 for the Main Lift Station. In 2023 we are starting a cleaning & inspection 5-year contract for our storm sewers.	City
10	Flooding	Structure & Infrastructure Projects	Address flood mitigation measures for the city's hockey arena within the FEMA mapped floodplain.	In-Progress High 2024-2029	City Admin, City Public Works	The city is currently working to assess how to reduce flood risk to the hockey arena in coordination with the county. Outside grant funding may potentially be sought from the MN DNR or FEMA to assist in mitigation efforts.	City, MN DNR, FEMA
11	Drought	Local Planning & Regulations / Education & Awareness Programs	Establish watering restrictions during drought conditions and raise public awareness of water conservation measures.	New Moderate 2024-2029	City Admin	The city will establish and enforce a water conservation ordinance as per MN DNR guidelines during periods of severe drought. The city will do local outreach to help make residents aware of the ordinance and the limitations on non-essential water usage.	City