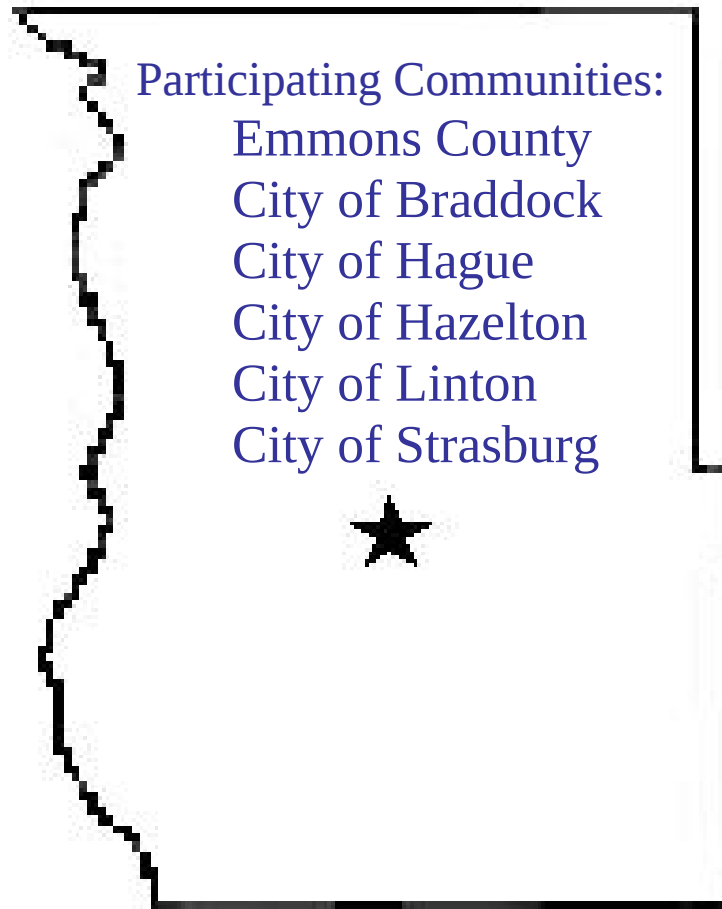


Emmons County Multi-Hazard Mitigation Plan



FEMA Approved: July 9, 2026 – July 8, 2031

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Introduction

The Emmons County Multi-Jurisdictional Multi-Hazard Mitigation Plan (MHMP) was originally developed and approved by the Federal Emergency Management Agency (FEMA) in 2003 and subsequently approved in 2010 and 2015 to address the needs of the community of Emmons County and the five incorporated cities: Braddock, Hague, Hazelton, Linton and Strasburg. The communities of Kintyre, Temvik, and Westfield are unincorporated cities and fall under the jurisdiction of Emmons County.

Purpose: Reduce the vulnerability of potential harm to life, information, operations, environment, and/or property in Emmons County from the impacts of natural, technological, or human-caused occurrences.

Authority: The Emmons County Multi-Hazard Mitigation Plan has been prepared in accordance with federal laws, including:

Laws

[Robert T. Stafford Disaster Relief and Emergency Assistance Act](#) (Stafford Act), as amended
[National Flood Insurance Act of 1968](#), as amended
[National Dam Safety Program Act](#) (Pub. L. 92-367), as amended

Regulations

[44 CFR Part 201 Mitigation Planning](#)
[44 CFR, Part 60, Subpart A, including § 60.3 Flood plain management criteria for flood-prone areas](#)
[44 CFR Part 77 Flood Mitigation Grants](#)
[44 CFR Part 206 Subpart N. Hazard Mitigation Grant Program](#)

Section 322 of the [Disaster Mitigation Act of 2000](#) requires each mitigation plan developed by a local government shall:

- (1) describe actions to mitigate hazards, risks, and vulnerabilities identified under the plan; and
- (2) establish a strategy to implement those actions.

The [North Dakota Century Code 37-17.1-07](#) (Local or regional emergency management organizations.) states that “Each local or regional emergency management organization shall prepare and keep current a local disaster or emergency operational plan for its area.” Emmons County and incorporated cities consider the Mitigation Plan an integral part of the Emmons County Emergency Management Program.

Planning Process

The planning process included the following activities:

- Public Input Survey
- Public Meetings
- Meetings with jurisdictions (review data, risk assessment, and mitigation actions)
- Jurisdictional review of proposed MHMP

Additional emails and conversations were completed via phone and email to complete the final draft. Throughout the process, research was completed along with data gathering and outreach (phone calls, meetings, and/or emails) to regulatory agencies and other governmental entities (US Army Corps of Engineers, ND Department of Water Resources, Emmons County Water Resource Board, ND Forest Service, ND Fire Marshal's Office, US National Weather Service).

Planning Team Members

Jurisdiction	Contact	Title	Agency
Emmons County	Mary Senger	Emergency Manager	Emmons County Emergency Mgt
Emmons County	Dan Materi	Commissioner	Emmons County Commission
Emmons County	Lisa Edholm-Moch	Administrator	Emmons County Public Health
Emmons County	Russ Lawler	Road Supervisor	Emmons County Road Dept
Emmons County	Gary Sanders	Sheriff	Emmons County Sheriff's Dept
Emmons County	Glenn Geffre	Chair, Floodplain Administrator	Emmons County Water Board
City of Linton	Dan Imdieke	Mayor	City of Linton
City of Linton	Sharon Jangula	Administrator, Development Coordinator, Floodplain Administrator	City of Linton
City of Linton	Tyler Gorss	Supervisor	Linton Public Works
City of Linton	Nolan Anderson	Chief	Linton Fire Dept
City of Braddock	Ted Reamann	Mayor	City of Braddock
City of Braddock	Audrey Rambough	Auditor	City of Braddock
City of Hague	Chris Baumgartner	Mayor	City of Hague
City of Hague	Joyce Pfeifer	Auditor	City of Hague
City of Hazelton	Joshua Malard	Mayor	City of Hazelton
City of Hazelton	Terry Macdonald	Auditor	City of Hazelton
City of Strasburg	Sonya Schumacher	Mayor	City of Strasburg
City of Strasburg	Mary Vickers	Auditor	City of Strasburg
City of Strasburg	Kevin Gabriel	Chief	Strasburg Fire Department

Multi-hazard mitigation planning is a continuous process whereby risk analyses, updating the situation assessment, research, coordinating, disaster response or other activities are occurring simultaneously.

The goal is to maintain the Emmons County Hazard Mitigation Plan and obtain federal approval every five years. The original plan was developed in 2003 and subsequently updated in 2009, 2015, and 2020. The current plan update process began 2025 with the Emergency Manager collecting data and soliciting technical advice and guidance from the ND Department of Emergency Services' Mitigation Division prior to the beginning of the official update plan process. In addition, throughout 2025-2026, the Emergency Manager hosted and/or attended public meetings to revisit the current Multi-Hazard Mitigation Plan and incorporate information where applicable.

The plan update process began early in 2025. Ensuing months involved research, data gathering and outreach to regulatory agencies and other governmental entities (US Army Corps of Engineers, ND Department of Water Resources, Emmons County Water Resource Board, ND Forest Service, ND Fire Marshal's Office, US National Weather Service). Additionally, a vast amount of phone calls and emails were utilized to elicit feedback from the participating jurisdictions.

March 3, 2025—Emmons County Water Resource District Meeting. Emergency Manager discussed the Mitigation Plan and update process at their regularly scheduled, publicized meeting. General review of information in the plan as well as projects were discussed.

March 10, 2025—Draft plan update published on the website.

March 25, 2025—Flood Annex review with plan stakeholders and solicited mitigation projects.

November 18, 2025—Hosted the Local Emergency Planning Committee Meeting which also served as the Multi-Hazard Mitigation Plan kickoff/planning meeting combined with review of the Emergency Operations Plan. Also discussed the "Shelter in Place" brochure as an item included as ongoing mitigation project to promote community preparedness and response to hazards in Emmons County. An adequate supply is maintained through Emergency Management and available on the Emmons County website.

March 2, 2026—Emmons County Water Resource District Meeting. Emergency Manager discussed the Mitigation Plan and update process at their regularly scheduled, publicized meeting. Attendees were updated regarding the plan purpose, ongoing process, an electronic survey. Previous projects reviewed and no new projects added.

March 2, 2026—Meeting with the City of Linton Administration, Linton Industrial Development Committee and discussed the Mitigation Plan and update process as well as previous projects and the potential for new projects.

March 2, 2026—Meeting with Sheriff Sanders to discuss law enforcement activities in Emmons County. There is a continued increase in drug activity compiled with decreased staffing and struggle to obtain staff.

March 2, 2026—Meeting with Emmons County Auditor and discussed the Mitigation Plan and update process, capabilities, as well as previous projects, priorities, and the potential for new projects.

March 2, 2026—Draft plan update published on the website.

March 3, 2026—Multi-Hazard Mitigation Plan survey published on website and social media and emailed to a large group of community stakeholders.

March 12, 2026—Emmons County Record published the “input on mitigation plan update” and included website to access to the electronic survey.

April 10, 2026—Meeting with City of Strasburg Auditor and discussed the Mitigation Plan and update process, capabilities, as well as projects, priorities, and the potential for new projects.

April 10, 2026—Meeting with City of Hazelton Auditor and discussed the Mitigation Plan and update process, capabilities, as well as previous projects, priorities, and the potential for new projects.

May 28, 2026—Meeting with City of Braddock Auditor and discussed the Mitigation Plan and update process, capabilities, as well as previous projects, priorities, and the potential for new projects.

May 28, 2026—Meeting with City of Hague Auditor and discussed the Mitigation Plan and update process, capabilities, as well as previous projects, priorities, and the potential for new projects.

May 29, 2026—Final draft published on the website.

Outreach to contiguous counties (Burleigh, Kidder, Logan, McIntosh, Morton, and Sioux) was accomplished through survey invitations.

Participating Jurisdictions

Jurisdictions Located within Emmons County	Jurisdictions Asked to Participate in the Plan	Jurisdictions Represented in the Plan	Participation Status
Emmons County	Emmons County	Emmons County	Continuing Participation (2003, 2009, 2014, 2020, 2026)
City of Braddock	City of Braddock	City of Braddock	Continuing Participation (2003, 2009, 2014, 2020, 2026)
City of Hague	City of Hague	City of Hague	Continuing Participation (2003, 2009, 2014, 2020, 2026)
City of Hazelton	City of Hazelton	City of Hazelton	Continuing Participation (2003, 2009, 2014, 2020, 2026)
City of Linton	City of Linton	City of Linton	Continuing Participation (2003, 2009, 2014, 2020, 2026)
City of Strasburg	City of Strasburg	City of Strasburg	Continuing Participation (2003, 2009, 2014, 2020, 2026)

All jurisdictions were invited to participate in the update process. If they were unable to attend, the Emergency Manager did outreach to obtain input on the overall plan and mitigation opportunities.

Outreach to contiguous counties was accomplished through phone, meeting invites, and online survey invitation.

Adoption

Emmons County

2026 Emmons County Multi-Hazard Mitigation Plan

Whereas Emmons County recognizes the threat that natural, man-made or technological hazards pose to people and property within Emmons County; and

Whereas Emmons County has prepared the 2026 “Emmons County Multi-Hazard Mitigation Plan” in accordance with federal laws, including the [Robert T. Stafford Disaster Relief and Emergency Assistance Act](#), as amended; the [National Flood Insurance Act of 1968](#), as amended; and the [National Dam Safety Program Act](#), as amended; and

Whereas the 2026 “Emmons County Multi-Hazard Mitigation Plan” identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in Emmons County from the impacts of future hazards and disasters; and

Whereas adoption by Emmons County demonstrates its commitment to hazard mitigation and achieving the goals outlined in the 2026 “Emmons County Multi-Hazard Mitigation Plan”.

Now, therefore, be it resolved, by the Emmons County Commission, North Dakota, that:

The Emmons County Commission adopts the 2026 “Emmons County Multi-Hazard Mitigation Plan”. While content related to Emmons County may require revisions to meet the plan approval requirements, changes occurring after adoption will not require Emmons County to re-adopt any further iterations of the plan. Subsequent plan updates following the approval period for this plan will require separate adoption resolutions.

Signed this 2nd day of June 2026


Dan Materi, Chairperson
Emmons County Commission

City of Braddock**2026 Emmons County Multi-Hazard Mitigation Plan**

Whereas the City of Braddock recognizes the threat that natural, man-made or technological hazards pose to people and property within the City of Braddock; and

Whereas Emmons County has prepared the 2026 "Emmons County Multi-Hazard Mitigation Plan" in accordance with federal laws, including the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended; the National Flood Insurance Act of 1968, as amended; and the National Dam Safety Program Act, as amended; and

Whereas the 2026 "Emmons County Multi-Hazard Mitigation Plan" identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in the City of Braddock from the impacts of future hazards and disasters; and

Whereas adoption by the City of Braddock demonstrates its commitment to hazard mitigation and achieving the goals outlined in the 2026 "Emmons County Multi-Hazard Mitigation Plan".

Now, therefore, be it resolved, by the City of Braddock, North Dakota, that:

The City of Braddock Commission adopts the 2026 "Emmons County Multi-Hazard Mitigation Plan". While content related to the City of Braddock may require revisions to meet the plan approval requirements, changes occurring after adoption will not require the City of Braddock to re-adopt any further iterations of the plan. Subsequent plan updates following the approval period for this plan will require separate adoption resolutions.

Signed this 8 day of June, 2026



Theodore Nanden, Mayor
City of Braddock Commission

City of Hague**2026 Emmons County Multi-Hazard Mitigation Plan**

Whereas the City of Hague recognizes the threat that natural, man-made or technological hazards pose to people and property within the City of Hague; and

Whereas Emmons County has prepared the 2026 “Emmons County Multi-Hazard Mitigation Plan” in accordance with federal laws, including the Emergency Management and Prevention Act, as amended; the Emergency Management and Prevention Act, as amended; and the Emergency Management and Prevention Act, as amended; and

Whereas the 2026 “Emmons County Multi-Hazard Mitigation Plan” identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in the City of Hague from the impacts of future hazards and disasters; and

Whereas adoption by the City of Hague demonstrates its commitment to hazard mitigation and achieving the goals outlined in the 2026 “Emmons County Multi-Hazard Mitigation Plan”.

Now, therefore, be it resolved, by the City of Hague, North Dakota, that:

The City of Hague Commission adopts the 2026 “Emmons County Multi-Hazard Mitigation Plan”. While content related to the City of Hague may require revisions to meet the plan approval requirements, changes occurring after adoption will not require the City of Hague to re-adopt any further iterations of the plan. Subsequent plan updates following the approval period for this plan will require separate adoption resolutions.

Signed this 1st day of June, 2026

Christopher Baumgartner
Christopher Baumgartner, Mayor
City of Hague Commission

City of Hazelton**2026 Emmons County Multi-Hazard Mitigation Plan**

Whereas the City of Hazelton recognizes the threat that natural, man-made or technological hazards pose to people and property within the City of Hazelton; and

Whereas Emmons County has prepared the 2026 “Emmons County Multi-Hazard Mitigation Plan” in accordance with federal laws, including the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended; the National Flood Insurance Act of 1968, as amended; and the National Dam Safety Program Act, as amended; and

Whereas the 2026 “Emmons County Multi-Hazard Mitigation Plan” identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in the City of Hazelton from the impacts of future hazards and disasters; and

Whereas adoption by the City of Hazelton demonstrates its commitment to hazard mitigation and achieving the goals outlined in the 2026 “Emmons County Multi-Hazard Mitigation Plan”.

Now, therefore, be it resolved, by the City of Hazelton, North Dakota, that:

The City of Hazelton Commission adopts the 2026 “Emmons County Multi-Hazard Mitigation Plan”. While content related to the City of Hazelton may require revisions to meet the plan approval requirements, changes occurring after adoption will not require the City of Hazelton to re-adopt any further iterations of the plan. Subsequent plan updates following the approval period for this plan will require separate adoption resolutions.

Signed this 10th day of July 2026


Joshua Malard, President
City of Hazelton Commission

City of Linton**CITY OF LINTON RESOLUTION TO ADOPT THE
2026 EMMONS COUNTY MULTI-HAZARD MITIGATION PLAN**

Whereas the City of Linton recognizes the threat that natural, man-made or technological hazards pose to people and property within the City of Linton; and

Whereas Emmons County has prepared the 2026 “Emmons County Multi-Hazard Mitigation Plan” in accordance with federal laws, including the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended; the National Flood Insurance Act of 1968, as amended; and the National Dam Safety Program Act, as amended; and

Whereas the 2026 “Emmons County Multi-Hazard Mitigation Plan” identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in the City of Linton from the impacts of future hazards and disasters; and

Whereas adoption by the City of Linton demonstrates its commitment to hazard mitigation and achieving the goals outlined in the 2026 “Emmons County Multi-Hazard Mitigation Plan”.

Now, therefore, be it resolved, by the City of Linton, North Dakota, that:

The Linton City Council adopts the 2026 “Emmons County Multi-Hazard Mitigation Plan”. While content related to the City of Linton may require revisions to meet the plan approval requirements, changes occurring after adoption will not require the City of Linton to re-adopt any further iterations of the plan. Subsequent plan updates following the approval period for this plan will require separate adoption resolutions.

Signed this 1st day of June, 2026


Daniel Imdieke, Mayor
City of Linton

City of Strasburg**2026 Emmons County Multi-Hazard Mitigation Plan**

Whereas the City of Strasburg recognizes the threat that natural, man-made or technological hazards pose to people and property within the City of Strasburg; and

Whereas Emmons County has prepared the 2026 “Emmons County Multi-Hazard Mitigation Plan” in accordance with federal laws, including the [Robert T. Stafford Disaster Relief and Emergency Assistance Act](#), as amended; the [National Flood Insurance Act of 1968](#), as amended; and the [National Disaster Preparedness Act](#), as amended; and

Whereas the 2026 “Emmons County Multi-Hazard Mitigation Plan” identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in the City of Strasburg from the impacts of future hazards and disasters; and

Whereas adoption by the City of Strasburg demonstrates its commitment to hazard mitigation and achieving the goals outlined in the 2026 “Emmons County Multi-Hazard Mitigation Plan”;

Now, therefore, be it resolved, by the City of Strasburg, North Dakota, that:

The City of Strasburg Commission adopts the 2026 “Emmons County Multi-Hazard Mitigation Plan”. While content related to the City of Strasburg may require revisions to meet the plan approval requirements, changes occurring after adoption will not require the City of Strasburg to re-adopt any further iterations of the plan. Subsequent plan updates following the approval period for this plan will require separate adoption resolutions.

Signed this 1st day of June, 2026



Sonya Schumacher, Mayor
City of Strasburg Commission

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Existing Plans, Studies, Reports, and Technical Information

The Emmons County Multi-Hazard Mitigation Plan was developed in coordination with local, state, and federal agencies, non-profit organizations, local businesses, schools, and the public. The Cities of Braddock, Hague, Hazelton, Linton, and Strasburg support county-led planning initiatives. Additionally, the Planning Team will continue to ensure the Mitigation Plan informs the plans and programs listed below by incorporating risk assessment data and mitigation actions.

Agency	Plans and Programs
American Red Cross (West Dakota)	• Shelter • Mass Care • Windshield Damage Assessment • Disaster Recovery
Braddock City Commission	• Disaster/Emergency Declarations • Budget Allocations • City Ordinances
Emmons County Emergency Management	• Local Emergency Operations Plan • Multi-Hazard Mitigation Plan • Evacuation Annex • Shelter Annex • Mass Care Annex • Public Information Officer • Social Media Coordination • Disaster Recovery • Audit Lead • Local Emergency Planning Committee • Grants Coordination • Emergency Notification
Emmons County Auditor	• Fiscal Management • Emergency Reserve Fund
Emmons County Board of Health	• Public Health Programs
Emmons County Commission	• Disaster/Emergency Declarations • Budget Allocations • County Ordinances • Planning and Zoning
Emmons County Extension Service	• Animal Health • Plant Health • Community Education
Emmons County GIS	• Hazard Mapping • Site Map Assistance
Emmons County Ministerial Association	• Mental Health • Disaster Recovery

Agency	Plans and Programs
Emmons County Planning Commission	• Revive meetings • Develop Comprehensive Plan
Emmons County Public Health	• Shelters • Community Education • Vulnerable Populations
Emmons County Road Department	• Primary Routes • Bridges • Debris Removal • Self-Fill Sandbag Sites
Emmons County School Superintendent	• Curriculum Standards (safety drills)
Emmons County Schools	• Curriculum Standards (safety drills)
Emmons County Sheriff's Department	• Traffic Control and Safety • Evacuation Routes • Emergency Notification
Emmons County State's Attorney	• Legal Review
Emmons County Zoning Ordinance	• Permitted Uses • Planning and Zoning Commission
Emmons County Water Resource Board	• Floodplain Management • Voices for Lake Oahe/Beaver Bay Project • South Central Regional Water Project • Missouri River Joint Water Resource • ND Flood Risk Management Study • Beaver Creek Impediments
Hague City Commission	• Disaster/Emergency Declarations • Budget Allocations • City Ordinances
Hazelton City Commission	• Disaster/Emergency Declarations • Budget Allocations • City Ordinances
Lewis and Clark Regional Development Council	• Comprehensive Economic Development Strategy
Linton City Attorney	• Legal Review
Linton City Commission	• Disaster/Emergency Declarations • Budget Allocations • Building Inspector • City Ordinances • Zoning and Planning
National Climatic Data Center (NCDC)	• Weather Event Statistics
National Fire and Incident Reporting System (NFIRS)	• Fire Incident Statistics

Agency	Plans and Programs
ND Department of Agriculture	• Plant and Animal Statistics
ND Department of Emergency Services	• Enhanced Multi-Hazard Mitigation Plan • Review • Technical Assistance
ND Department of Health	• Disease Statistics
ND Department of Transportation	• Traffic Statistics
ND Forest Service	• Fire Incident Statistics
ND Pipeline Association	• Maps • Education/Training • Planning and Zoning
ND State Water Commission	• Dam Inventory • NFIP Data • Water Basin Data • Strasburg Slough Preliminary Findings Report
Salvation Army	• Shelter • Mass Care • Windshield Damage Assessment • Disaster Recovery
South Central Regional Water	• Rural Water • Planning
Southwest Central Emergency Preparedness	• Points of Distribution • Mass Inoculation • SWC Regional Strategic National Stockpile • SWC Regional EOP Mental Health • SWC Regional EOP Pandemic Influenza • SWC Regional EOP Mass Fatality
Strasburg City Commission	• Disaster/Emergency Declarations • Budget Allocations • City Ordinances
US Army Corps of Engineers	• Planning Assistance (Section 22) • Beaver Creek Study (underway)
US Census	• Demographics • Population Estimates
US Drought Monitor	• Drought Statistics • Maps
US Geological Survey	• Creek/River Gages
US National Weather Service	• Weather Advisories • Hazard Advisories

The American Red Cross includes the shelter information provided by Emmons County Emergency Management within their National Shelter System.

The Emmons County Commission and Emmons County Road Department utilize the mitigation projects as appropriate when developing future budgets and road priorities.

Flood mitigation projects are closely tied to the Emmons County Water Resource Board and their continuing discussions as well as the Emmons County Flood Annex. The Emmons County Zoning Floodplain Ordinance is evaluated and based on NFIP guidelines.

Information from the 2020 Mitigation Plan and actions were integrated into Homeland Security grants requests for the Emmons County Courthouse, Emmons County Highway Department, and the Emmons County Sheriff's Office. Information from the 2020 Mitigation Plan was also considered when updating the 2025 Emmons County Flood Annex. Risk assessment and capabilities for all jurisdictions is considered during updates of the Emmons County Emergency Operations Plan.

Communicable Disease activities parallel the Southwest Central Emergency Preparedness planning efforts.

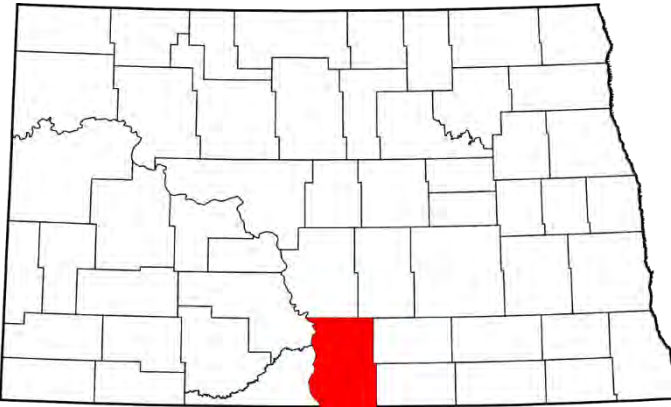
The US National Weather Service (Bismarck Office) remains in close contact with Emmons County Emergency Management and Skywarn Spotters to "truth" forecasts and/or impacts.

All jurisdictions have a Planning and Zoning Board/Commission except Braddock, Hague, Hazelton, and Strasburg (rely on City Ordinances).

Other integrations that correlate, not primarily based on this plan, are based on established rules, regulations and/or codes.

Community Profile

Emmons County is in south-central North Dakota with the Missouri River as the western boundary. The County seat is Linton.



Picture Source: Wikipedia [website](#)

City	Population
Braddock	18
Hague	70
Hazleton	223
Linton	1,071
Strasburg	379

Source: [US Census Bureau](#)

Emmons County has 1,510 square miles of land area and is the 14th largest county in North Dakota by total area with a population of 3,301

Emmons County is on the western side of the continental divide and drains through the Missouri River drainage system.

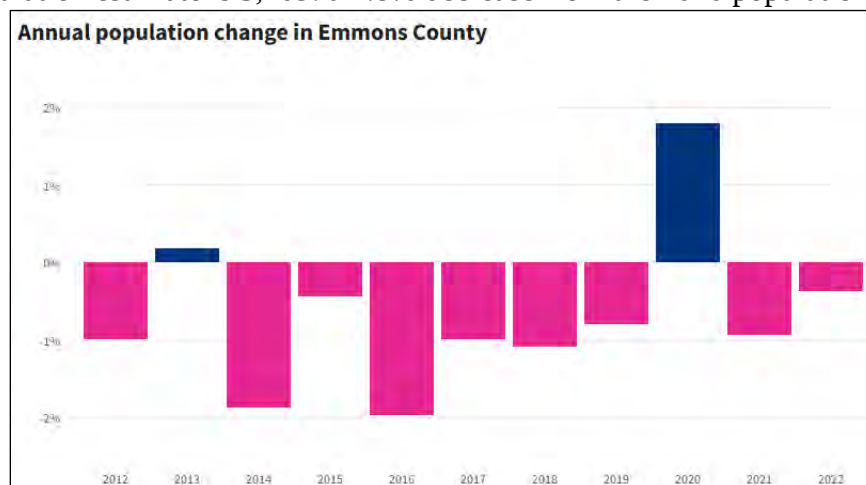
Rivers

Missouri River, Beaver Creek, and Spring Creek

Emmons County serves as a drainage basin for water flowing from McIntosh, Logan, and Emmons Counties to the Missouri River. The Beaver Creek Watershed (483,000 acres of land) and Spring Creek drain through Linton, located in the center of Emmons County.

Demographics

The 2024 population estimate is 3,209: a 2.8% decrease from the 2020 population of 3,301.



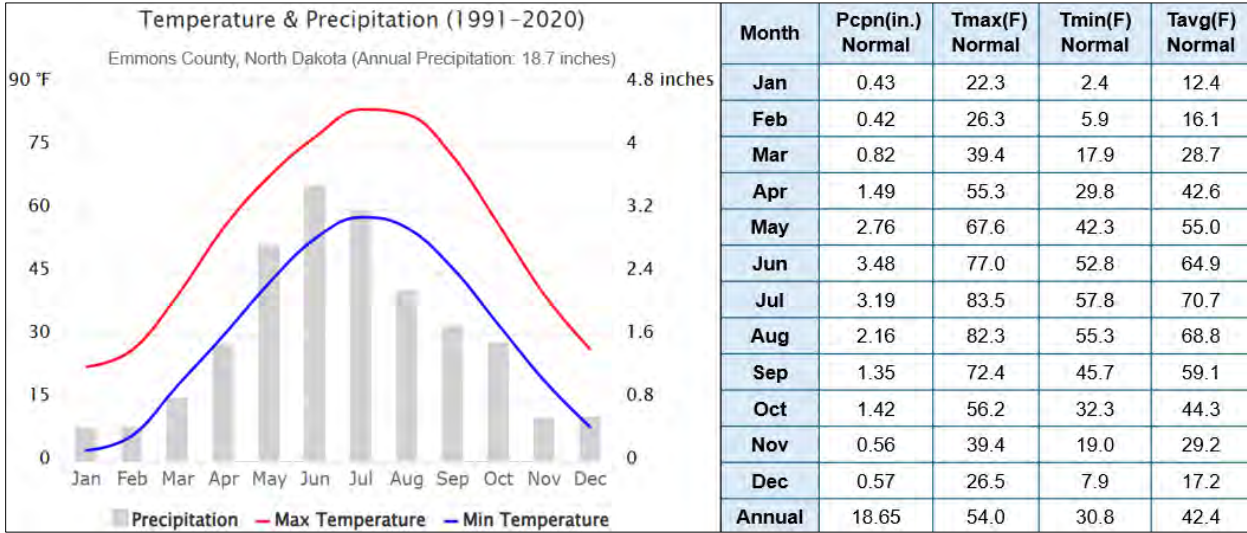
Source: [US Census Bureau](#)

Climate

General Climate Type - Continental. Temperature and precipitation are the two parameters traditionally used to describe general, large-scale climate types

Temperature. The Northern Great Plains (NGP) region in general and South-central North Dakota (Emmons County) in particular, has an extreme [continental climate](#) characterized by a very high annual variation in temperature (warm summers and cold winters) and a high daily range in temperatures, as compared to maritime climates. These high ranges in temperature are mainly due to the area’s location: in the mid-north latitudes (between 45.935° and 49.00° N), along the north border of the continental United States, centered in the North American Continent, and far from the modifying effect of oceans.

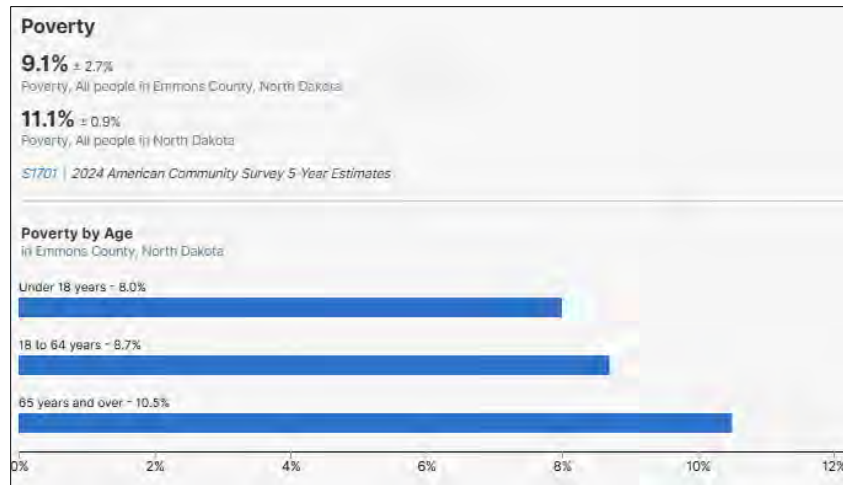
Precipitation. Moisture is a second key component of climate, with North Dakota effectively straddling “the transition from the moist eastern United States and the semiarid West” ([Frankson, 2022](#)). A high daily range in temperature is primarily due to the lower [heat capacity](#) of dry air and dry soils as compared to humid air and either moist soils or large bodies of water, so that dryer air and dryer soil will both warm and cool at a faster rate than wetter air or soil ([Wikipedia: Climate of ND](#), 2023).



The figure above shows the average monthly precipitation and the range of monthly average high and low temperatures for the Emmons County area during the most recent 30-year climate normal period, 1991-2020 ([XM-ACIS](#), 2025; [Climate Toolbox](#), 2024; [NOAA/CAAG](#), 2025).

Economy

According to the [US Census Bureau 2024 American Community Survey](#), the largest percentage of the population 48.6% is employed in the category of “Employee of private company workers” followed by 21.8% in the category of “Self-employed in own not incorporated business workers and unpaid family workers”.



Source: [US Census Bureau 2024 American Community Survey](#)

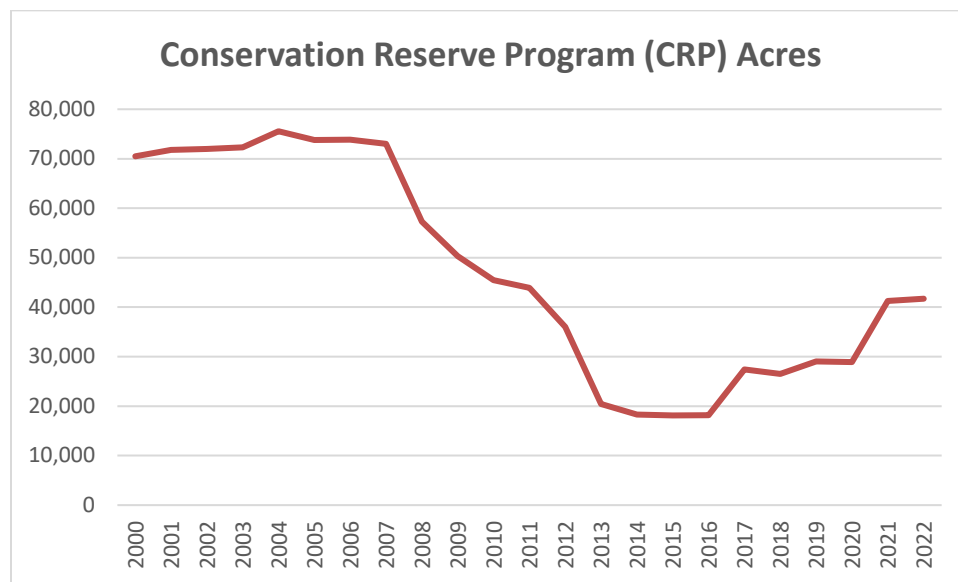


Linton is the County seat.

Land Use Concerns

The predominant landscape of Emmons County, 94%, is split between rolling cropland (55%) and pastureland (39%). Of the remainder, less than 3 percent is developed as residential or commercial property and about 3 percent is wetlands, sloughs, or small lakes ([USDA](#), 2022; [Wroblewski](#), 1980). Woodlands make up less than 1 percent of the landscape in the county, primarily as homestead shelterbelts or urban plantings ([Claeys](#), 2020). Corn and soybeans are the leading crops, with sunflowers, wheat, and hay/forage all vying for third place.

There were 510 farms in 2012 (1% decrease from 2017) that average 1,885 acres per farm. (Source: [USDA Census of Agriculture](#)) Soil erosion due to wind and water remains a problem. On steep gradients, rain washes out gullies in cultivated fields, and fields cultivated in the fall suffer extensive damage from wind. The county has 41,744 acres enrolled in the Conservation Reserve Program (CRP) which has helped mitigate the erosion problem.



Data Source: [US Department of Agriculture, Farm Service Agency](#)

Emmons County continues to study a variety of mitigation activities. Soil erosion, water supply, and water quality are major land use concerns of the county.

The Emmons County floodplain ordinance was last updated in 2026. Additionally, the Emmons County Water Resource District utilizes previous flood event data when considering flood control projects and includes non-structural project recommendations such as amending floodplain ordinances in direct correlation with National Flood Insurance Program recommendations and FEMA's flood insurance rate map data.

Development

The Linton Industrial Development Corporation leads economic development in the Linton area. The nonprofit corporation was formed in 1984 and is focused on assisting new business development and moving or expanding businesses into the community.

Many of the local jurisdictions have economic development committees to attempt to bring industry to their jurisdiction. Emmons County has many miles of lake and river shore, respectively, along the Oahe Dam and Missouri River, which are being developed for recreational purposes.

Building Permits				
Year	Type	Buildings	Housing Units	Construction Cost
2020	Single Family		7	\$1,400,000
2021	Single Family		19	\$5,625,000
2022	Single Family		4	\$1,334,000
2023	Single Family		16	\$5,708,000
2024	Single Family		15	\$4,479,000
2020	Commercial	2		\$2,040,000
2021	Commercial	3		\$230,000
2022	Commercial	0		0
2023	Commercial	0		0
2024	Commercial	5		\$7,264,200

(Source: Emmons County Tax Director)

Emmons County is experiencing a decrease in population due to outmigration and aged population. The 2024 census data identifies persons 65+ at 17.6% in North Dakota, and Emmons County is at 29.7%. (Source: [US Census Bureau 2024 American Community Survey](#))

Outreach to the Linton City Administrator and Linton Industrial Development Corporation provided information on lack of housing ability coupled with outside investors buying the properties as secondary homes and/or renting them. In the last five years, the Family Dollar store closed in 2024. Other closures resulted in new buyers and business development. The housing industry is extremely tight with many homes being sold before going on the market. Buyers are from out-of-state as well as local. City of Linton staffing is at 100% with no issues filling vacant positions. Commercial development included the 2020 oil pumping station and 2024 grain receiving plant.

The ND Public Service Commission approved a \$181M, 140-megawatt battery energy storage project (Emmons-Logan Energy Storage) which will be the state's first facility. Developed by NextEra, it will cover 10-24 acres near Linton (20 miles northeast of Linton) to store excess wind emergency, with operation targeted for late 2026. In 2025, the Emmons County Board of Commissioners voted to approve a conditional use permit for the Emmons County Logan Energy Storage Project, a battery energy storage facility proposed by NextEra, and accepted a negotiated permit fee of \$3,960,000 (3% of the project's infrastructure cost) in August 2025.

Emergency Management and first responders are waiting for the emergency response plan which will address potential "thermal runaway" risk.



Source: [Emmons County Record](#)

Risk Assessment

The 15 hazards identified by the ND Department of Emergency Services were utilized for the risk assessment. (Source: [ND Enhanced Mitigation Mission Area Operations Plan, 2024-2029](#))

Natural Hazards	Technological Hazards	Human-Caused Incidents
Drought	Dam Failure	Civil Disturbance
Flood	Hazardous Materials Release	Criminal Attack
Geologic Hazards	Transportation Incident	Cyberattack
Infectious Disease and Pest Infestation		Terrorist or Nation-State Attack
Severe Summer Weather		
Severe Winter Weather		
Space Weather		
Wildfire/Urban Fire		

- **Natural hazards:** acts of nature. The natural hazards identified in this plan are Flood, Fire, Drought, Severe Winter Weather, Severe Summer Weather, Infectious Disease and Pest Infestation, Space Weather and Geologic Hazards.
- **Technological hazards:** accidents or the failures of systems and structures. Technological hazards in this plan include Dam Failure, Hazardous Material Release, and Transportation Incidents.
- **Human-caused incidents:** the intentional actions of an adversary. Human-caused incidents in this plan include Cyberattack, Criminal Attack, Civil Disturbance and Terrorist or Nation-State Attack.

Risk Assessment by Jurisdiction						
Hazard	Emmons County	Braddock	Hague	Hazleton	Linton	Strasburg
Civil Disturbance	X	X	X	X	X	X
Criminal, Terrorist, or Nation-State Attack	X	X	X	X	X	X
Cyberattack	X	X	X	X	X	X
Dam Failure	X					
Drought	X	X	X	X	X	X
Fire (urban and wildland)	X	X	X	X	X	X
Flood	X	X	X	X	X	X
Geologic Hazards	X					
Hazardous Materials Release	X	X	X	X	X	X
Infectious Disease and Pest Infestations	X	X	X	X	X	X
Severe Summer Weather	X	X	X	X	X	X
Severe Winter Weather	X	X	X	X	X	X
Space Weather	X	X	X	X	X	X
Transportation Incident	X	X	X	X	X	X

The jurisdictions are affected by the hazards with slight variances in susceptibility. Changes in development and land use has not affected community vulnerability.

Civil Disturbance and Criminal, Terrorist, or Nation/State Attack

All jurisdictions could be impacted; however, greater vulnerability would be anticipated in the most populous city—City of Linton. The greatest threat would be significant impact to critical facilities and/or infrastructure.

Dam Failure

The western portion of Emmons County would be most vulnerable dam failure from Garrison Dam, located approximately 130 miles northwest of the City of Linton, Emmons County.

All the dams in Emmons County are classified as “Low Hazard Potential” with the exception of Nieuwsma Dam which is classified as “Significant” and has an Emergency Action Plan which identifies 11 homes in the area. Dam failure for “Low Hazard” dams may result in low economic, environmental, and lifeline losses generally limited to the owner with no expected loss of human life. Failure of the Nieuwsma Dam would result in economic, environment, and lifelines losses with no expected loss of human life.

Drought

Although many rural residents have their own wells, rural Emmons County would suffer great agricultural losses in drought. Grain elevators in Braddock, Hague, Linton, and Strasburg as well as Hazelton’s Cenex-Agronomy may suffer losses due to drought and loss of crops.

Water Supplies: The South Central Regional Water District is the major supplier for Emmons County along with Web Water (rural water) for the southern half of Emmons County. The incorporated cities (excluding Hazelton) have access to a water treatment plant along the Missouri River at Beaver Bay into Lake Oahe (2.5 million gallon per day water treatment plant and a 500,000-gallon storage reservoir). Water supply is adequate with rare requests to decrease water consumption during periods of drought/extreme heat.

In addition to South Central Regional Water:

- The City of Hazelton has a 50,000-gallon water tower with a backup generator.
- The City of Linton has two underground water tanks—one holds 150,000 gallons and the other holds 250,000. The tanks are fed from South Central Regional Water.
- Strasburg has a 75,000-gallon water tank which can be hooked up to a portable generator.
- Braddock and Hague rely solely on South Central Regional Water.

Resources for potable water supplies are identified in the Emmons County Emergency Operations Plan.

Fire

The impacts of drought and wildland fire could impact several ways; however, rural Emmons County is more susceptible to these hazards due to open prairie and agricultural activities especially in the areas around the cities (wildland urban interface). The incorporated cities are more vulnerable to urban fire with losses greater in the more populated cities.

Fire Departments continue to lose volunteers and could run the risk of disbanding. All fire departments in Emmons County are 100% volunteer personnel. Additional and/or replacement equipment is always needed and sought through fundraising, donations, and grants.

Flood

The following figure displays that no jurisdiction is immune to flood vulnerability and has either experienced the vulnerability or has the increasing susceptibility to experience the vulnerability. Additionally, inundation maps show the vulnerability and can be found in the Attachments.

Flood Vulnerabilities by Jurisdiction						
	Emmons County	Braddock	Hague	Hazelton	Linton	Strasburg
River Flooding	X	X			X	X
Overland Flooding	X	X	X	X	X	X
Ice Jam Flooding	X				X	X
Lift Stations					X	
Lagoon Overruns			X	X		X
Road Washouts	X	X	X	X	X	X

Overland or flash flooding and road washouts are common to all jurisdictions. Hague and Hazelton are not susceptible to creek/river flooding and ice jam flooding since they are not located adjacent to a creek or river. While Emmons County, Braddock, and Linton are not near lagoons.

Emmons County remains prepared through review and update of the [Emmons County Flood Annex](#). Affected areas are provided in the [Emmons County Flood Annex](#) through the Beaver Creek stages and response primarily affecting the center of Linton and southern Emmons County. As stated in the [Emmons County Flood Annex](#), the County Road Department, Sheriff, Emergency Management, local support agencies (Linton Rural Fire, Hazelton Rural Fire, and Strasburg Rural Fire) will help to monitor rural areas and the smaller communities for localized overland or flash flooding issues, in addition to monitoring the more frequent flood risk areas along rivers and creeks.

Geological Hazards

No jurisdictions have significant history of this hazard; however, the western edge of Emmons County is the most susceptible along the Missouri River.

The only jurisdiction affected would be rural Emmons County. Approximately 30 farmsteads could experience some land erosion as well as the following recreational areas: Badger Bay, Bayside Resort/Beaver Bay, Cattail Resort, Hazelton Recreation Area, and Langeliers Bay.

Hazardous Materials Release and Transportation Accident

Varied levels of susceptibility are apparent for all jurisdictions. Highway 83 runs through the middle of Emmons County (including Hazelton, Linton, and Strasburg). Additionally, County Highway 34 runs through Hazelton, and County Highway 10 runs through Hague. Railroad tracks run through Braddock. Throughout the year, farmers transport anhydrous ammonia in pup tanks.

The City of Linton is far more susceptible to the hazards due to being an urban center with the highest population density in Emmons County. Other factors increasing susceptibility include:

- County Seat
- Governmental Buildings (local, state, and federal)
- Hospital
- Increased Transportation Flow

Hazardous Materials Release and Transportation Accident						
	Emmons County	Braddock	Hague	Hazelton	Linton	Strasburg
Anhydrous Ammonia	X	X	X	X	X	X
Bulk Fuel	X	X	X	X	X	X
Bulk Fertilizer	X	X	X	X	X	X
Farm Chemicals	X		X		X	
Propane	X			X		X
Fuel and Gas	X	X	X	X	X	X
Natural Gas					X	
Major Transportation Route	X		X	X	X	X
Railroad	X	X				

Infectious Disease

Each jurisdiction is susceptible to infectious diseases and pest infestations; however, the more rural communities of Braddock, Hague, and unincorporated Emmons County are particularly susceptible to diseases that impact plants and animals. The cities are more susceptible to communicable disease due to population density.

Severe Summer Weather

All jurisdictions are impacted by severe summer weather and its subtypes with frequency during the core summer months of June, July and August, but can start as early as March or April, usually by mid-May, and persist past mid-September, even into early November (tornadoes occurred in Bismarck on November 1, 2000). Severe summer weather incidents may cause major economic losses based on the level of impact. Windstorms may result in downed power lines coupled with damage from flying debris and damage to facilities. Mobile home dwellings are encouraged to have tie-downs. The communities Linton and Strasburg each maintain an outdoor warning siren with remote activation. All sirens are utilized to alert fire or ambulance crews and to signify a tornado. The Cities of Braddock, Hague, and Hazelton do not maintain an outdoor warning siren and rely on alternate resources (all-hazards radio, traditional media).

The Emmons County Courthouse Auditorium is available as a shelter during periods of power outages caused by extreme summer weather events.

Severe Winter Weather

All jurisdictions are impacted by severe winter weather and its subtypes with frequency generally during the period from mid-November through early April. Severe winter weather often results in blocked roads and can affect each jurisdiction and may lead to economic loss dependent upon severity and length of time. Rural Burleigh County residents have backup power sources (generators and/or coal or wood-burning stoves) and extra fuel sources (gas and propane). Windstorms may result in downed power lines coupled with damage from flying debris and damage to facilities.

The Emmons County Courthouse Auditorium is available as a shelter or temporary warming center during periods of power outages caused by extreme winter weather events.

Space Weather

No jurisdictions have any significant history of this hazard. Disruption of critical facilities and infrastructure would have a significant effect on each jurisdiction to include medical, law, fire, and facilities dependents on satellite data. Emergency services will continue to operate in a diminished capacity if there is a disruption to communications technology.

Critical facilities with backup power:

Linton/Emmons: Linton Hospital, Linton City Hall, Linton Lift Station, and the Emmons County Courthouse (Sheriff's Department, Emergency Operations Center). The Emmons County Road Department also has two portable generators.

Braddock: None

Hague: None

Hazelton: Fire Department

Strasburg: Strasburg Care Center

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Critical Facilities

Critical facilities and infrastructure are assets essential to public safety and continuity of government operations. Damaged or destroyed facilities or infrastructure could have debilitating effects on safety, security, public health, or the economy in Emmons County, including Braddock, Hague, Hazelton, Strasburg, and Linton.

The hazards most likely to impact critical facilities are cyberattack, flood, hazardous materials release, severe summer weather, severe winter weather, and space weather.

- **Cyberattack:** Critical facilities utilize computerized system(s) as a main function of providing services.
- **Flood:** Flooding of Beaver Creek would mainly cause damage to the areas south of the Emmons County Courthouse as well as farmland and rural homes along the creek areas until it meets the Missouri River. During flooding events, roads may become inundated with water and cut off accessibility to critical facilities.
- **Hazardous Materials Release:** Hazardous materials are transported into and within Emmons County through Highways. Dependent upon location of release, critical facilities could be affected with damage or complete loss.
- **Space Weather:** Solar flares would impact communications, solar radiation storms will impact satellites, and geomagnetic storms will cause the greatest damage—disrupting navigation systems such as the Global Navigation Satellite System (GNSS) and creating harmful geomagnetic-induced currents (GICs) in the power grid and pipelines. It's possible for these storms to cause power grid energy spikes, which could trigger fires, power blackouts and physically harm individuals coming into contact with storm-spiked wires or pipelines.
- **Summer Weather:** Extreme heat, hail, lightning, high winds, and tornadoes may cause damage or complete loss to some critical facilities in Emmons County.
- **Winter Weather:** Major arterials are vulnerable to becoming blocked with snow making them impassible. Many county and township roads become blocked during winter storms and cities are largely affected by winter storms.

Major facilities and infrastructure:

Category	Type
Communications	Cell Towers Communication Towers Media
Emergency Services	Law Fire Emergency Medical Services (EMS) ND National Guard Public Works
Energy/Utility	Electric Power Generation and Substations Pipelines Transmission Lines Utility Companies Water Distribution Systems Water Towers Lagoons/Water Treatment
Financial Institutions	Banks Credit Unions
Government	Courthouses Jail Schools
Industrial and Storage	Food Processing and/or Storage Fuel Health and Medical Supplies Major Industries
Medical	Clinics Hospitals Long-Term Care Facilities Pharmacies
Transportation	Airport Highways/Bridges Railroad

Hazards Excluded from this Plan

Hazard	Notes
Avalanche	Avalanches require slopes that generally do not exist in Emmons County. Emmons County is not covered by the National Avalanche Center and has no history of declared avalanche disasters.
Climate Change	Climate change is addressed as a condition that impacts most hazards and not as a separate hazard.
Coastal Erosion	Emmons County does not have an ocean coastline.
Coastal Storm	Emmons County does not have an ocean coastline.
Hurricane	Emmons County does not have an ocean coastline.
Public Utility Failure	Utility failure is viewed as a consequence of other hazards and not as a separate hazard.
Shortage/Outage of Critical Materials	Lack of critical materials is viewed as a consequence of other hazards and not as a separate hazard.
Tsunami	Emmons County does not have an ocean coastline.
Volcano	Emmons County has no identified volcanoes; however, volcanic ashfall can occur over Emmons County, but the frequency is rare, and the potential impacts are not expected to exceed local capabilities. The impact of an external volcano is discussed in geologic hazards.
Windstorm	Windstorms are identified in severe summer and severe winter weather hazards.

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Risk Analysis Worksheet

Frequency: How often is this hazard likely to develop in this area?

Highly Likely	Nearly 100% probability in the next year
Likely	10–100% probability in the next year, or at least 1 chance in next 10 years
Possible	1–10% probability in the next year, or at least 1 chance in next 100 years
Unlikely	Less than 1% probability in next 100 years

Severity: What is the expected extent of damage caused by this type of hazard?

Catastrophic	More than 50% of jurisdiction affected
Critical	25–50% of jurisdiction affected
Limited	10–25% of jurisdiction affected
Negligible	Less than 10% of jurisdiction affected

	Highly Likely	C	B	A	A
	Likely	C	C	B	A
	Possible	D	C	B	B
	Unlikely	D	D	C	C
		Negligible	Limited	Critical	Catastrophic

(Source: [Risk Assessment Matrix](#) and [FEMA Multi-Hazard Identification and Risk Assessment, January 1, 1997, Risk Assessment Approaches – Chapter/Section Number: Part 3](#))

Risk Class: Classification of the overall risk posed to the jurisdiction and immediacy of necessary action:

Seasonal Pattern: When is the type of hazard most likely to occur?

Probable Duration: How long will this event typically have an impact on the community?

Speed of Onset: How much advance warning does the community have for this type of event?

Location/Jurisdiction: Which areas are affected?

Risks: Types of situations that might result from the hazard.

Hazard
Frequency: _____
Severity: _____
Risk Class: _____
Seasonal Pattern: _____
Duration: _____
Speed of Onset: _____

DESCRIPTION:

IDENTIFIED IMPACTS:

HISTORY:

Emmons County Hazard Risk Analysis Chart with Vulnerabilities for each Hazard

Risk Class:	C	C	A	D	B	D	C	C	B	B	B	A	B	C
HAZARD	Civil Disturbance	Criminal, Terrorist, or Nation/State Attack	Cyberattack	Dam Failure	Drought	Fire	Flood	Geologic Hazards	Hazardous Materials Release	Infectious Disease and Pest Infestations	Severe Summer Weather	Severe Winter Weather	Space Weather	Transportation Accident
Agriculture	X		X	X	X	X	X	X	X	X	X	X	X	X
Blocked Roads	X	X	X	X		X	X	X			X	X	X	X
Building Collapse				X		X		X			X	X		X
Business Interruptions	X	X	X	X	X	X	X	X		X	X	X	X	X
Delayed Emergency Response	X	X	X	X		X	X	X		X	X	X	X	X
Downed Power Lines		X		X		X	X	X			X	X		
Downed Trees				X		X	X	X			X	X		
Evacuation (Full)		X												
Evacuation (Localized)	X	X		X		X	X	X	X	X	X	X		X
Explosion		X				X		X	X					X
Flooding (Street)				X			X				X			
Flooding (Structure)				X			X				X			
HAZMAT Release		X		X		X	X	X	X		X	X		X
Increased Fire Potential		X			X	X	X	X	X		X	X	X	X
Increased Public Safety Runs	X	X		X		X	X	X	X	X	X	X	X	X
Livestock Injury/Death		X		X	X	X	X		X	X	X	X		
Loss of Economy		X	X	X	X	X	X	X	X	X	X	X	X	X
Loss/Overcrowded Medical Facilities		X				X	X	X	X	X	X		X	X
Loss of Potable Water		X		X	X		X	X	X	X	X	X		X
Loss of Power		X	X	X		X	X	X			X	X	X	
Mass Casualties		X		X		X		X	X	X	X		X	X
Personal Injury/Death Risk	X	X		X	X	X	X	X	X	X	X	X	X	X
Property Damage		X		X	X	X	X	X	X		X	X	X	X
School Closure		X		X		X		X	X	X	X	X		X
Sewer Backup				X			X				X			
Wind Chill	X											X		

Overall Vulnerability Summary

HAZARD	Description
Civil Disturbance	No change.
Criminal, Terrorist or Nation-State Attack	No change.
Cyberattack	Changed from Possible to Highly Likely due to history and trends
Dam Failure	No change.
Drought	No change.
Fire	No change.
Flood	No change.
Geologic Hazards	Changed from Likely to Highly Likely due to radon inclusion
Hazardous Materials Release	No change.
Infectious Diseases and Pest Infestations	No change.
Severe Summer Weather	No change.
Severe Winter Weather	No change.
Space Weather	Change from Possible to Likely due to history
Transportation Accident	No change.

THIRA Survey Results

		Very Likely	Likely	Possible	Unlikely	Improbable
	Score	5	4	3	2	1
Catastrophic	5				• Nuclear Terrorism Attack	
Significant	4					
Moderate	3			• Animal Disease Outbreak	• Chemical Terrorism Attack • Explosives Terrorism Attack • Biological Terrorism Attack	
Minor	2			• Armed Assault • Human Pandemic Outbreak • Biological Food Contamination • Chemical Substance Spill/Release	• Chemical/Biological Food or Food Production Attack • RDD Terrorism Attack	
None/ Negligible	1	• Winter Storms • Wildfire	• Summer Storms • Flood	• Cyber Attack	• Dam Failure • Aircraft as a Weapon • Radiological Substance Release	

*Based on 9 responses

THIRA Step 2 complete. THIRA Steps 3-4 completed in 2020 and reviewed in 2024.

Emmons County Disaster Declarations

Number	Declared	State	Description
4895	10-22-2025	North Dakota	Severe Storms, Straight-Line Winds
4888	09-11-2025	North Dakota	Severe Storm, Tornadoes, and Straight-line Winds
4613	09-01-2021	North Dakota	Severe Storms and Wind
4509	04-01-2020	North Dakota	Covid-19 Pandemic
4475	01-21-2020	North Dakota	Flooding
4444	06-12-2019	North Dakota	Flooding
1907	04-30-2010	North Dakota	Flooding
1879	02-26-2010	North Dakota	Severe Winter Storm
1829	03-24-2009	North Dakota	Severe Storms, Flooding
1334	06-27-2000	North Dakota	Severe Storms, Flooding
1279	06-08-1999	North Dakota	Severe Storms, Tornadoes, Snow and Ice, Flooding, Ground Saturation, Landslides and Mudslides
1174	04-07-1997	North Dakota	Severe Storms, Flooding
1157	01-12-1997	North Dakota	Severe Winter Storms, Blizzards
1118	06-05-1996	North Dakota	Flooding
1050	05-16-1995	North Dakota	Flooding, Ground Saturation
1001	07-26-1993	North Dakota	Flooding, Severe Storms
581	04-26-1979	North Dakota	Snowmelt, Flooding
554	04-17-1978	North Dakota	Ice Jams, Snowmelt, Flooding
434	05-14-1974	North Dakota	Heavy Rains, Snowmelt, Flooding
287	06-05-1970	North Dakota	Severe Storms, Flooding
256	04-18-1969	North Dakota	Flooding

Source: Source: <http://www.fema.gov/disasters>

Emmons County Emergency Declarations

Number	Declared	State	Description
3477	03-13-2020	North Dakota	North Dakota Covid-19
3309	03-14-2010	North Dakota	Flooding
3247	09-13-2005	North Dakota	Hurricane Katrina Evacuation
3061	02-16-1978	North Dakota	Blizzard, Snowstorms
3016	07-21-1976	North Dakota	Drought

Source: Source: <http://www.fema.gov/disasters>

US Department of Agriculture Secretarial Disaster Declarations

USDA Secretarial Disaster Declarations – Emmons County Crop Disaster Losses by Crop Year														
Crop Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Primary	X	X		X	X	X	-		-	X	X	-		
Contiguous		-				-			X				-	

Source: USDA/FSA, 2025. (<https://www.fsa.usda.gov/resources/disaster-assistance-program/disaster-designation-information>)

Hazards

Civil Disturbance

Frequency	Likely (10-100% probability in the next year, or at least 1 chance in next 10 years)
Severity	Limited (10-25% of jurisdiction affected)
Risk Class	C
Seasonal Pattern	None
Duration	Hours/Days
Speed of Onset	No warning
Location	Countywide
Impacts	Blocked Roads, Business Interruptions, Delayed Emergency Response, Increased Public Safety Runs, Property Damage

Description

Civil disturbances are defined as group acts of violence and disorders prejudicial to public law and order; terrorist incidents, a form of civil disturbance, are defined as distinct criminal acts committed or threatened to be committed by a group or individual to advance a political objective. (Source: [U.S. Department of Justice Office of Justice Programs](#))

Civil disturbances can occur anywhere in Emmons County. Most civil disturbances are local in scale and within the capability and responsibility of local law enforcement. It is not possible to predict the location of a civil disturbance; however, large venue locations such as stadiums, government facilities, industrial facilities, and locations with correctional facilities may be more susceptible to such incidents.

History

Smaller-scale protests can and have occurred within Emmons County:

- Emmons County Courthouse
- DAPL (pipeline pad located west of Temvik along the Missouri River)

November 13-14, 2019: The ND Public Service Commission held a public hearing regarding the addition of a pump station to the existing Dakota Access Pipeline. The public hearing started on November 13th at the Emmons County Courthouse and ended at 12:30 AM on November 14, 2019. The event involved approximately 40 entities and included protestors in favor and against the pump station.

2016: The Dakota Access Pipeline (DAPL) project resulted in multiple criminal activities including acts of vandalism, trespassing, riots, vehicles, hay bales and tires set on fire, and the arrest of 709 protesters. The protestors gathered to express concern about the installation of an 1134-mile-long crude oil pipeline across North Dakota and other states. The protest transitioned into an unlawful assembly and civil disorder on August 10, 2016, when individuals attempted to block access to construction activities associated with the pipeline. Originally an environmental-focused event, it quickly grew from a few hundred participants to numbers estimated near 10,000. It also expanded its scope to include real or perceived concerns surrounding Native American rights, as well as a myriad of other environmental concerns not necessarily associated with construction of the DAPL. Widespread criminal activity spawned from the protest, to include vandalism, terroristic threats, and intimidation tactics directed at local landowners as well as law enforcement and their families, doxing of law enforcement and other officials (doxing is the Internet-based practice of researching and broadcasting private or identifiable information), arson, poaching, and the theft and killing of livestock in the area. Many activities occurred in Morton and Sioux Counties; however, Burleigh and Emmons Counties also experienced activity on a smaller scale. (Source: ND State Emergency Operations Plan, December 2018)

Criminal, Terrorist, or Nation/State Attack

Frequency	Likely (10-100% probability in the next year, or at least 1 chance in next 100 years)
Severity	Limited (10-25% of jurisdiction affected)
Risk Class	C
Seasonal Pattern	None
Duration	Hours/Days
Speed of Onset	No warning
Location:	Countywide
Impacts	Blocked Roads, Building Collapse, Business Interruptions, Delayed Emergency Response, Downed Power Lines, Evacuation (Localized), Explosion, HAZMAT Release, Increased Public Safety Runs, Livestock Injury/Death, Loss of Economy, Loss/Overcrowded Medical Facilities, Loss of Potable Water, Loss of Power, Mass Casualties, Property Damage, School Closure

Description

[International Humanitarian Law](#) defines attacks as acts of violence against the adversary, whether in offense or defense in whatever territory conducted. Criminal attack can occur anywhere, including a residence. Mass attacks, such as shooting, are more likely to occur where there is a gathering of people with the potential to be victims.

The [Federal Bureau of Investigation \(FBI\)](#) identifies two categories:

International terrorism: Violent, criminal acts committed by individuals and/or groups who are inspired by, or associated with, designated foreign terrorist organizations or nations (state-sponsored)

Domestic terrorism: Violent, criminal acts committed by individuals and/or groups to further ideological goals stemming from domestic influences, such as those of a political, religious, social, racial, or environmental nature

The most populated area, City of Linton, is far more susceptible to this risk than other jurisdictions within the County.

History

Although there have been no National Security Emergencies specific to Emmons County, any suspicious activity is reported to the ND State and Local Intelligence Center.

Jurisdiction	Number of Crimes		
	2023	2022	2021
Emmons County Sheriff’s Office	125	126	128

Source: [ND Bureau of Criminal Investigation](#)

August 10, 2016 - March 23, 2017: One of the longest unlawful assemblies and civil disorders in United States history occurred in response to the construction of the Dakota Access Pipeline, which connected the Bakken and Three Forks production areas in North Dakota to Patoka, Illinois. Individuals first lawfully protested this construction project, believing that a pipeline leak would contaminate the water supply on the nearby Standing Rock Reservation. The protest escalated December 20, 2018, 56 into an unlawful assembly and civil disorder on August 10, 2016. This occurred along North Dakota State Highway 1806, just north of Cannonball, North Dakota. Many activities occurred in Morton and Sioux Counties; however, Burleigh and Emmons Counties also experienced activity on a smaller scale. (Source: ND State Emergency Operations Plan, December 2018)

Cyberattack

Frequency	Highly Likely (Nearly 100% probability in the next year)
Severity	Critical (25-50% of jurisdiction affected)
Risk Class	A
Seasonal Pattern	None
Duration	Days/Weeks
Speed of Onset	None
Location	Countywide
Impacts	Agriculture, Blocked Roads, Business Interruptions, Delayed Emergency Response, Loss of Economy, Loss of Power

Description

Hacker, attacker, or intruder — These terms are applied to the people who seek to exploit weaknesses in software and computer systems for their own gain. Although their intentions are sometimes benign and motivated by curiosity, their actions are typically in violation of the intended use of the systems they are exploiting. The results can range from mere mischief (creating a virus with no intentionally negative impact) to malicious activity (stealing or altering information). Source: [Cybersecurity and Infrastructure Security Agency](#)

Unified Cybersecurity Approach

April 11, 2019: [Senate Bill 2110](#) was signed by the Governor to make ND the first state to authorize a central, shared service approach to cybersecurity strategy across all aspects of state government including state, local, legislative, judicial, K-12 education and higher education. The state network has 252,000 daily users and more than 400 entities.

History

Cyberattacks against North Dakota state government nearly tripled last year. “Shawn Riley, North Dakota's chief information officer and head of the information technology department, said there were more than 15 million cyberattacks against the state's government per month in 2019, a 300 percent increase since 2018. In 2018, there were about 5 million attempted cyberattacks per month.” (Source: [The Hill](#), January 18, 2020)

Cyberattacks occur daily and are mitigated through protected networks and servers through the ND Department of Information Services. State officials estimate the state sees roughly five million cyberattack attempts each month. (Source: [Government Technology](#), April 12, 2019)

Publicly Known Attacks

In May 2020, the state's largest fiberoptic network, Dakota Carrier Network (DCN), was hit with a ransomware attack launched by the Maze cybercriminal outfit (Martin, 2020). Among DCN's clients are the state government and 400 other public entities. The data being held for ransom was determined not to be critical to protecting customers; the company refused the ransom request.

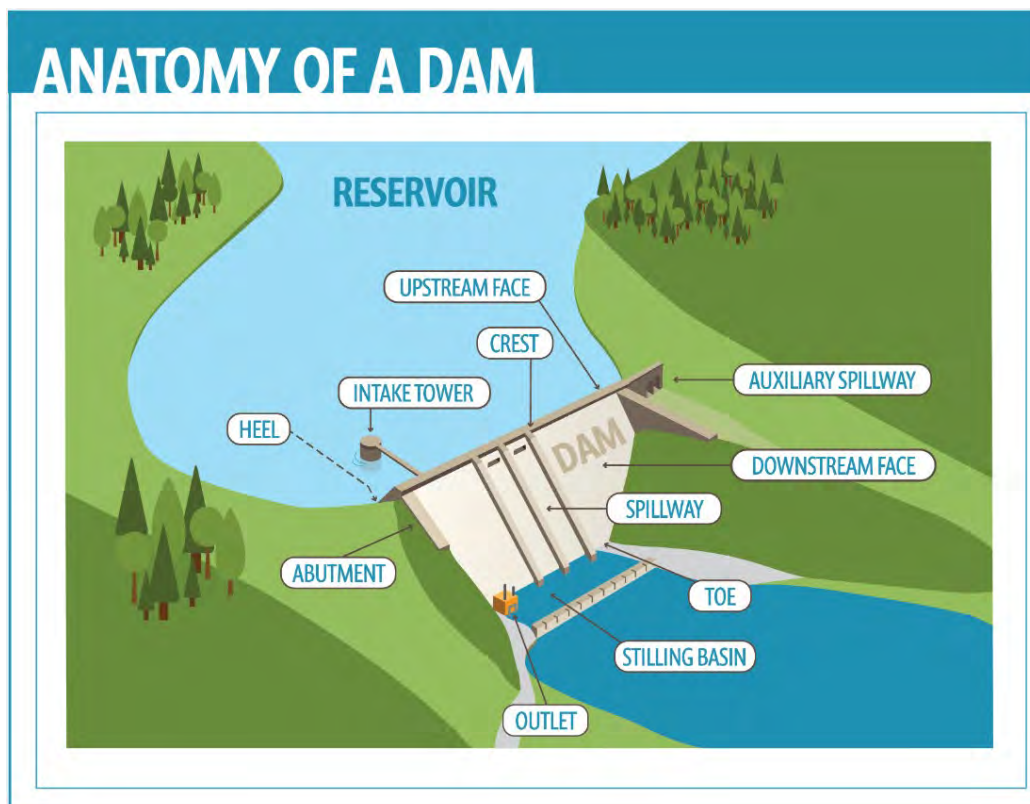
2016: During the Dakota Access Pipeline (DAPL) criminal protests, unknown individual(s) released personally identifying information of local officials and law enforcement officers who assisted in the protest response with the intent to have others harass and/or intimidate them or their families. This attack was accomplished through Doxing emails and social media posts, which publicly identifies or publishes private information about someone, especially as a form of punishment or revenge.

Dam Failure

Frequency	Possible (1-10% probability in next year, or at least 1 chance in next 100 years)
Severity	Less than 10% of jurisdiction affected
Risk Class	D
Seasonal Pattern	Spring/Summer
Duration	Days/Weeks
Speed of Onset	Little Warning
Location	Western Boundary of Emmons County and Nieuwsma Dam Area
Impacts	Blocked Roads, Building Collapse, Business Interruptions, Delayed Emergency Response, Downed Power Lines, Downed Trees, Evacuation (Localized), Flooding (Street), Flooding (Structure), HAZMAT Release, Increased Public Safety Runs, Livestock Injury/Death, Loss of Economy, Loss of Potable Water, Loss of Power, Mass Casualties, Property Damage, School Closure, Sewer Backup

Description

A dam is a structure that is built across a river or body of water to hold, divert, or regulate water. Often the body of water stored behind a dam is referred to as the reservoir or lake.



Source: [United States Army Corps of Engineers National Inventory of Dams](#)

Two low-head dams are located in Emmons County (all within five miles from the City of Linton). The [ND Department of Water Resources definition](#): “Low head dams are usually simple concrete or rock masonry structures that span the width of the river or stream, raising the water level behind them until it reaches a height sufficient to flow over the dam. These low head dams can create dangerous conditions that the public may not be aware of or may underestimate. Under the right conditions, water flowing over the dam can cause a “roller effect” on the downstream side of the dam. Strong recirculating currents can trap and drown boaters, swimmers, or other members of the public.”



Because low head dams are known to be dangerous, the ND Department of Water Resources provides free cautionary safety signs to the owners of these dams. Multiple signs per dam will be provided; however, installation is a local responsibility.



Beaver Creek low-head dam west of the City of Linton.

The [ND Department of Water Resources](#) identifies 187 dams (structure type) in Emmons County. All dams have an element of hazard to cause loss of life and property damage should the dam fail. Emmons County has no high-hazard dams within the county, but portions of far western rural Emmons County are affected by Garrison Dam (Emergency Action Plan in place), located upstream of the county. Emmons County has one significant-hazard dam, Nieuwsma Dam (Emergency Action Plan in place), which main affects portions of far southcentral Emmons County and several low-hazard structures. Rural Emmons County and portions of the Cities of Hague and Linton may be at risk for increased flooding due to the failure of low-hazard dams, Eberly Dam and Temvik Dam (no Emergency Action Plans in place for any of the low-hazards dams in Emmons County), while the Cities of Braddock, Hazelton, and Strasburg are not considered at risk due to dam failure. No other dam failures in the jurisdiction affect critical infrastructure but may cause agricultural or environmental damage.

Dam failure hazard classifications (High, Significant, Low) assess the potential consequences of a dam failure, specifically risks to human life and economic/environmental damage downstream, rather than the dam's physical condition or structural integrity. These classifications determine maintenance standards, emergency action planning, and regulatory oversight.

Hazard Classifications ([FEMA Federal Guidelines for Dam Safety](#))

- **LOW HAZARD POTENTIAL** Dams assigned the low hazard potential classification are those where failure or misoperation results in no probable loss of human life and low economic and/or environmental losses. Losses are principally limited to the owner's property.
- **SIGNIFICANT HAZARD POTENTIAL** Dams assigned the significant hazard potential classification are those dams where failure or mis-operation results in no probable loss of human life but can cause economic loss, environmental damage, disruption of lifeline facilities, or can impact other concerns. Significant hazard potential classification dams are often located in predominantly rural or agricultural areas but could be located in areas with population and significant infrastructure.
- **HIGH HAZARD POTENTIAL** Dams assigned the high hazard potential classification are those where failure or mis-operation will probably cause loss of human life.

Location	Type	Structure Name	Purpose	Federal Hazard Class
12907527AAA	Dam	Nieuwsma Dam	Recreation	Significant
13107733DB	Dam	Welk	Recreation	Low

Source: [ND Department of Water Resources](#)

The Nieuwsma Dam is classified as “Significant” and is located 5 miles south, 1 mile east, and 1 mile north of the intersection of US Highway 83 & ND 11. It is a recreational purpose dam and a popular fishing area in Emmons County. Failure of the rural dam would most likely result in agricultural loss due to location and three farmsteads with multiple structures.



Source: ND Game and Fish [website](#)

History

July 15, 1995—Dam Failure. Reports of up to 10 inches of rain caused the Appert Lake Dam (located Southeast of Hazelton. Latitude: 46.45682, Longitude: -100.22379) to fail. The dam was 12 feet height and stored 1340 ac-ft of water. Minimal damage occurred to a state highway and downstream agricultural areas. The project is owned by the U.S. Fish and Wildlife. No reports of property damage were received.

Drought

Frequency	Likely (10-100% probability in the next year, or at least 1 chance in next 10 years)
Severity	Critical (25-50% of jurisdiction affected)
Risk Class	B
Seasonal Pattern	Summer
Duration	Weeks/Months
Speed of Onset	Slow Onset
Location	Countywide
Impacts	Business Interruptions, Increased Fire Potential, Livestock Injury/Death, Loss of Economy, Loss of Potable Water, Property Damage

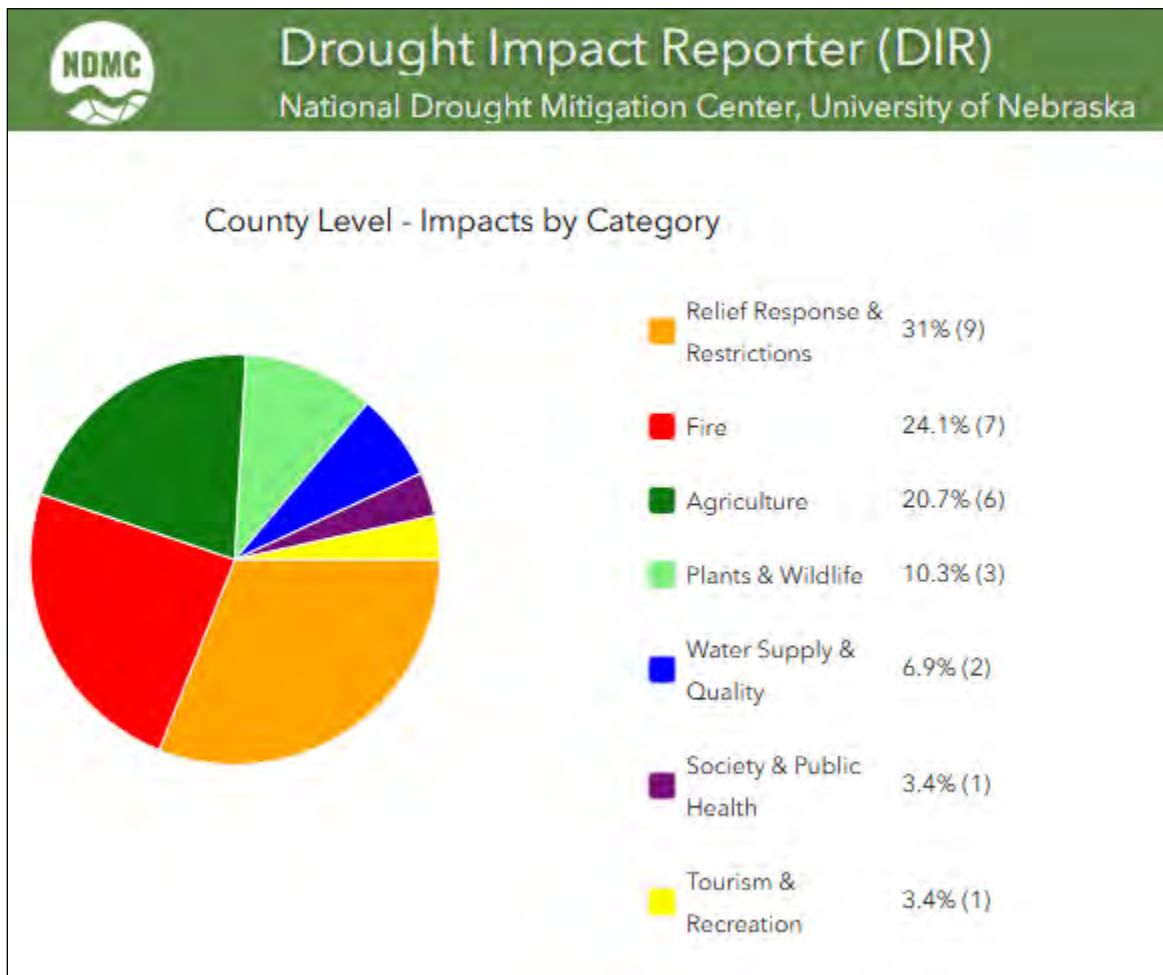
Description

In the most general sense, drought is defined as a deficiency of precipitation over an extended period of time (usually a season or more), resulting in a water shortage. (Source: [National Drought Mitigation Center](#))

The [National Integrated Drought Information System](#) identifies types of drought:

- **Meteorological Drought** is based on the degree of dryness or rainfall deficit and the length of the dry period.
- **Hydrological Drought** is based on the impact of rainfall deficits on the water supply such as stream flow, reservoir and lake levels, and ground water table decline.
- **Agricultural Drought** refers to the impacts on agriculture by factors such as rainfall deficits, soil water deficits, reduced ground water, or reservoir levels needed for irrigation.
- **Socioeconomic Drought** considers the impact of drought conditions (meteorological, agricultural, or hydrological drought) on supply and demand of some economic goods such as fruits, vegetables, grains and meat. Socioeconomic drought occurs when the demand for an economic good exceeds supply as a result of a weather-related deficit in water supply.

The [Drought Impact Reporter](#) presents drought impacts recorded for states, counties, and cities with earliest impacts dated 1850.



Emmons County ten-year impact
Source: [National Drought Mitigation Center](#)

History

June-August, 2017—Extreme drought in Emmons County. Severity similar to 2006.

June 26, 2006—Emmons County declared a drought emergency. Extreme dry conditions caused lack of feed and water shortages for livestock, crop failures, water quality problems, and extreme danger of rural fires. Emmons County was declared a disaster area due to drought conditions.

June, 2002—Emmons County declared a drought emergency. Extreme dry conditions caused lack of feed and water shortages for livestock, crop failures, water quality problems, and extreme danger of rural fires.

June 12, 1992—Emmons County was declared a disaster area due to drought conditions.

May 1, 1990—Emmons County continues to experience drought since 1988 and was again declared a disaster area.

June 7, 1988—Emmons County was declared a disaster area due to drought conditions because of high temperatures and lack of rain. A burning ban was issued for all private and public fireworks. Cattlemen were forced to sell some of their livestock because of lack of feed. This drought extended into 1989.

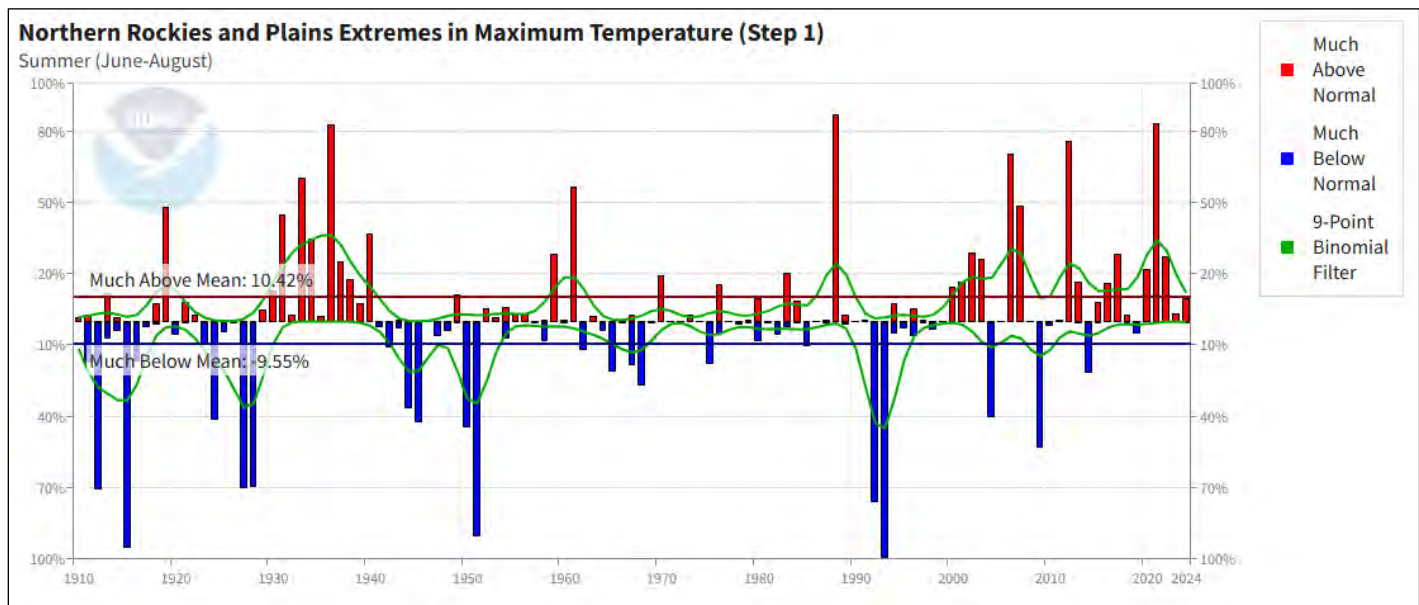
July 21, 1976—Emmons County included in Federal Emergency Declaration.

Excessive Heat

Location	Date	Time	T.Z.	Type	Dth	Inj	PrD	CrD
EMMONS (ZONE)	07/16/2011	11:00	CST-6	Excessive Heat	0	0	0.00K	0.00K
Totals:					0	0	0.00K	0.00K

Source: National Oceanic and Atmospheric Administration National Climatic Data Center [Website](#) (01/1950 to 10/2025)

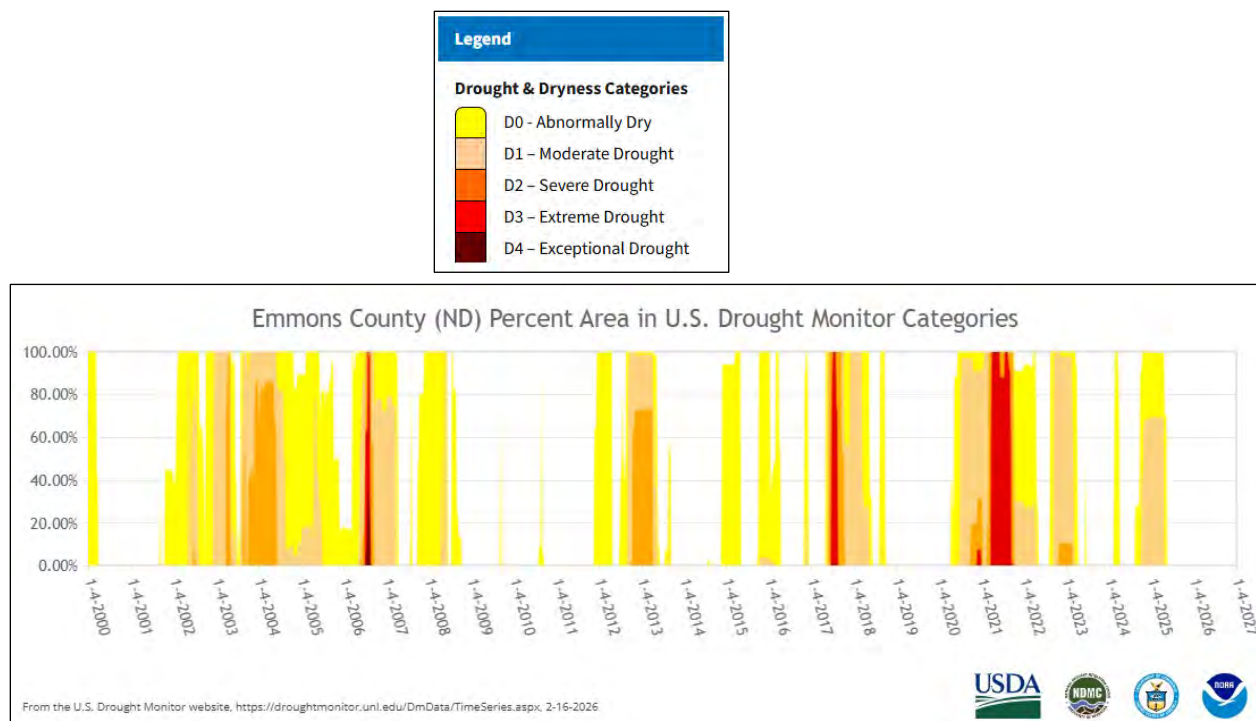
U.S. Climate Extremes Index (CEI)



Source: [National Centers for Environmental Information](https://www.noaa.gov/data/monitoring-assessments/cei/)

United States Drought Monitor

The U.S. Drought Monitor started in 2000. The longest and most intense drought period in Emmons County was 75 weeks (April 6-2020 through September 18, 2021).



Source: www.drought.gov

Fire

Frequency	Highly Likely (Nearly 100% probability in the next year)
Severity	Negligible (Less than 10% of jurisdiction affected)
Risk Class	D (Low risk condition, to be considered in planning)
Seasonal Pattern	None
Duration	Hours
Speed of Onset	No warning
Location	Countywide
Impacts	Agriculture, Blocked Roads, Building Collapse, Business Interruptions, Delayed Emergency Response, Downed Power Lines, Downed Trees, Evacuation (Localized), Explosion, HAZMAT Release, Increased Fire Potential, Increased Public Safety Runs, Livestock Injury/Death, Loss of Economy, Loss/Overcrowded Medical Facilities, Loss of Power, Mass Casualties, Personal Injury/Death Risk, Property Damage, School Closure

Descriptions

Source: [National Fire Protection Association Glossary of Terms](#)

Urban

“An incorporated or unincorporated area with a population of over 30,000 people and/or a population density over 1,000 people per square mile but less than 2,999.”

Structure Collapse (Fire Fighting)

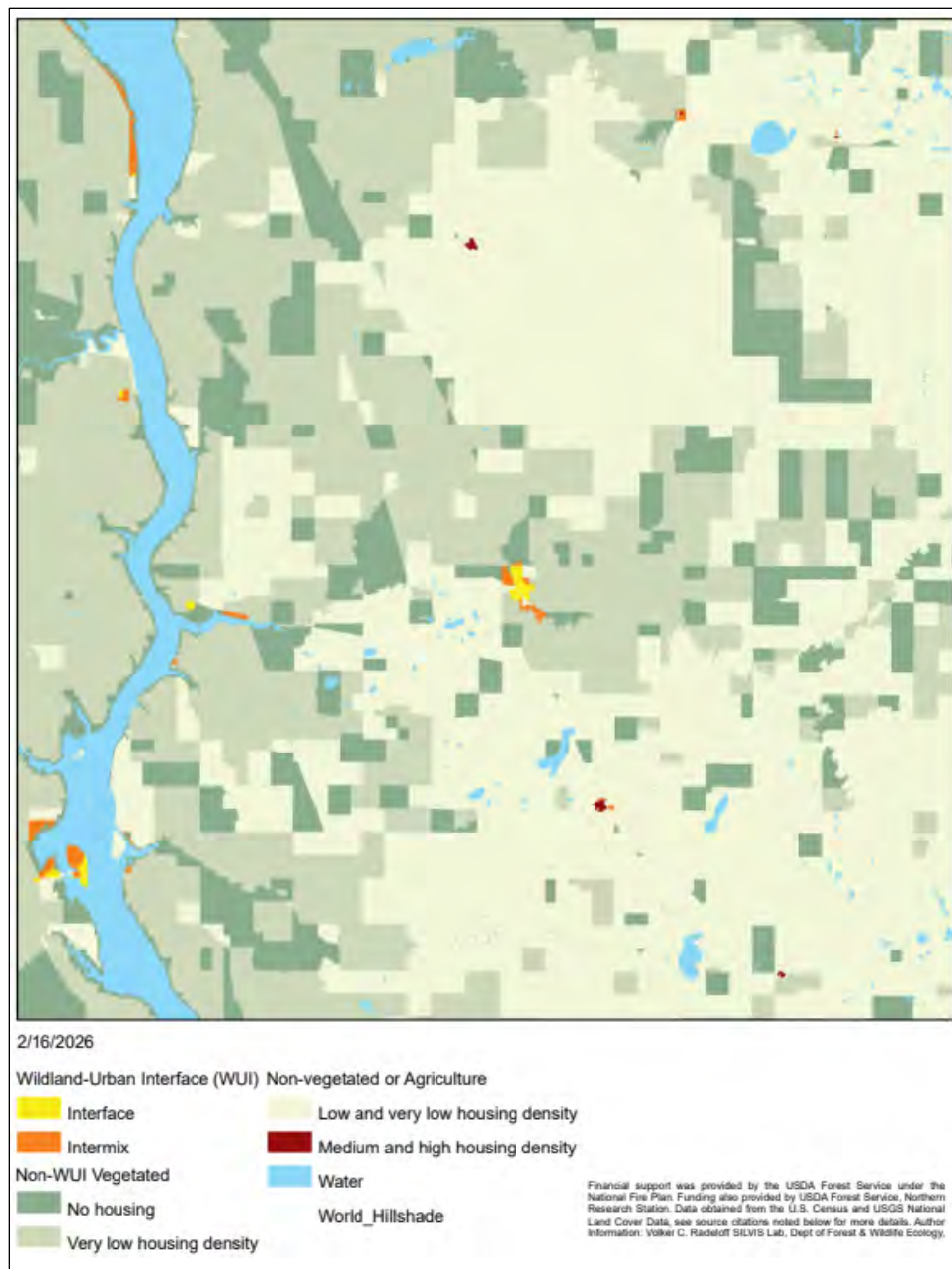
“The activities of rescue, fire suppression, and property conservation in buildings or other structures, vehicles, rail cars, marine vessels, aircraft, or like properties.”

Wildland Fire (Wildfire)

“An event dealing with a fire in the wildland; originating from an unplanned ignition, such as lightning, volcanos, unauthorized and accidental human-caused fires, and prescribed fires that are declared wildfires.”

Wildland/Urban Interface

“A geographical area where structures and other human development meet or intermingle with wildland or vegetative fuels, resulting in the potential for ignition of the structures within the area from flames or firebrands of a wildland fire.”

Emmons County Wildland Urban Interface

Source: [USDA US Forest Service](#)

Size Class of Fire

Class A - one-fourth acre or less;

Class B - more than one-fourth acre, but less than 10 acres;

Class C - 10 acres or more, but less than 100 acres;

Class D - 100 acres or more, but less than 300 acres;

Class E - 300 acres or more, but less than 1,000 acres;

Class F - 1,000 acres or more, but less than 5,000 acres;

Class G - 5,000 acres or more

Source: [National Wildfire Coordinating Group \(December 15, 2025\)](#)

History

Urban fires are rare in occurrence and affect the more populated areas with the City of Linton having the highest population density.

Rural Emmons County experiences wildland fires every year. Factors influencing the potential include amounts and conditions of fuel supply (vegetation), temperatures, wind conditions, precipitation patterns, humidity levels, topography, and levels of human activity on the land.

The main fire season normally begins when weather warms significantly, and precipitation is limited. This longer and more dangerous season extends until about October 30th or until the first significant snow cover.

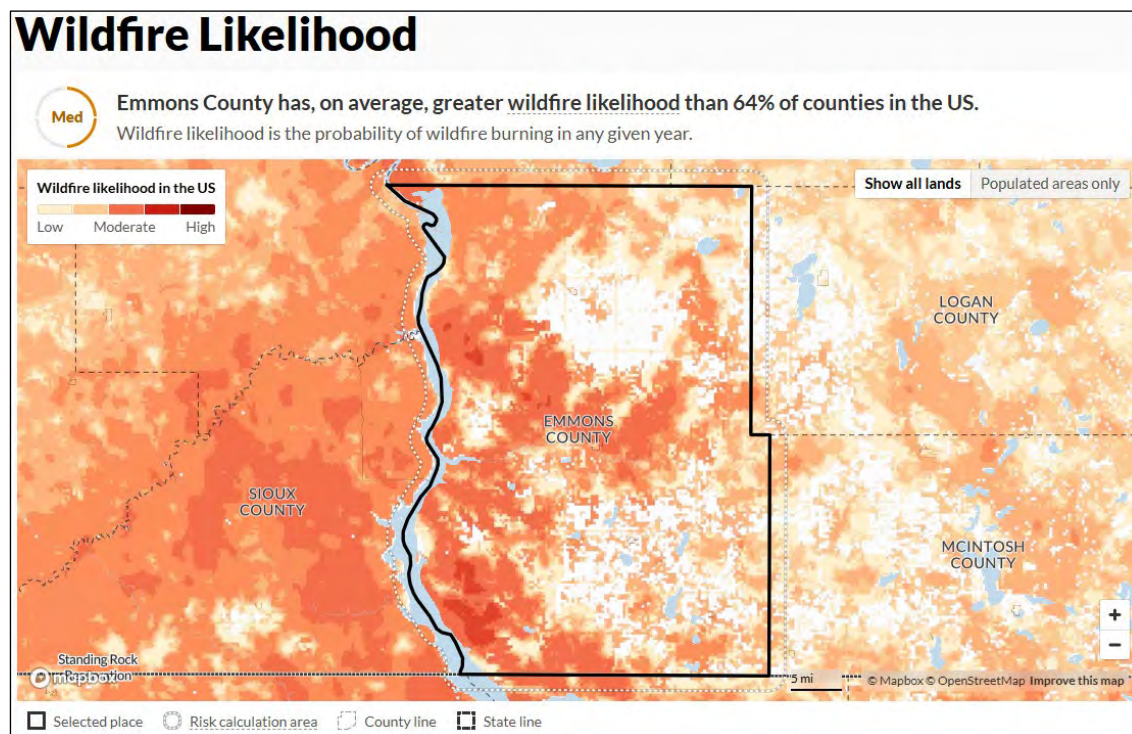
Most wildland fires result from activities such as controlled burns of sloughs, ditches, and fields by landowners; recreational activity such as camping, hunting, and other off-road vehicle travel; and use of fireworks preceding and immediately following the 4th of July.

National Risk Index Data

COUNTY	POPULATION	BUILDVALUE	AGRIVALUE	AREA
Emmons	3,301	\$ 5,490,769,998.00	\$ 208,655,227.00	1571.013

Source: [FEMA National Risk Index Data](#)

Wildfire Risk to Communities



Source:

[USDA, US Forest Service](#)

Response to Wildfire 8.5 Miles Southwest of Moffit

Resources (Central Dakota Communications Center, Burleigh and Emmons Emergency Management, Hazelton Fire, Braddock Fire, Linton Fire, Sterling Fire, Bismarck Rural Fire, Mandan Rural Fire, ND Forest Service, ND State Radio Task Force, Emmons County Sheriff's Department, Emmons County Ambulance, ND Game and Fish, ND Highway Patrol, ND National Guard, Crisis Care Chaplaincy) responded to a wildfire on April 12, 2025, during a "High" Fire Danger Index.



<u>Location</u>	<u>County/Zone</u>	<u>Date</u>	<u>Time</u>	<u>T.Z.</u>	<u>Type</u>	<u>Mag</u>	<u>Dth</u>	<u>Inj</u>	<u>PrD</u>	<u>CrD</u>
<u>LINTON</u>	EMMONS CO.	04/09/2003	14:14	CST	Wildfire		0	0	0.00K	0.00K
Totals:							0	0	0.00K	0.00K

Source: National Oceanic and Atmospheric Administration National Climatic Data Center [Website](#) (01/1950 to 10/2025)

In the past there have been a number of urban structures that burned in Emmons County. Elevators in the cities of Linton, Braddock, Strasburg, and Hague have all been destroyed due to fire.

Several wildland fires occur annually; some of the more significant incidents are listed below and were obtained from the Fire Districts and the Emmons County Record:

April 12, 2025 - Wildfire southwest of Moffit during High Fire Index causing response from local, state, and mutual aid—include National Guard Blackhawk support. Compensation for expenses sought from four individuals responsible for the fire.

July 5, 2023 - Electrical service line pole and two garbage containers on fire in Linton (alley on East Walnut Avenue) due to fireworks that were not properly discarded.

March 31, 2021 - Pipe bomb found along ND Highway 1804 near mile marker 45 by employee doing maintenance. Object rendered safe by the Bismarck Bomb Squad and turned over to Bureau of Alcohol, Tobacco, Firearms and Explosives for examination.

July 3, 2019 - Flash fire from pickup truck and all-terrain vehicle collision. The accident was on a gravel roadway near 88th Street and 12th Avenue (east of Strasburg). The collision caused the fuel cap of the ATV to break and create a flash fire. One person suffered burns to scalp and leg.

March 26, 2017 - Prairie fire 12 miles west and 6 miles north of Linton. Fire from a garbage pit escaped and spread to a nearby stubble field.

November 26, 2016 - A vehicle was destroyed by fire at a Linton residence near NE 3rd Street and Oak Avenue. Linton Fire & Rescue and the Emmons County ALS Ambulance responded to find a smoke-filled garage and pushed the vehicle out of the garage. Car was a total loss, and garage sustained light smoke damage. Fire was caused when the vehicle's engine and exhaust ignited cardboard pieces that were under the engine compartment to catch oil drips.

October 11, 2016 - Several hay bales burned in fire about five miles northeast of Linton. Cause of fire suspected to be either a cigarette thrown out of passing vehicle or spark from tractor exhaust system.

August 18, 2016 - Combined destroyed by fire in field two miles south of Hazelton. Approximately 40 acres (50 bushels) of remaining crop burned.

July 19, 2016 - Linton business complex (Lisa McCrory, CPA, Dakota Eye Institute, Wangler Chiropractic Clinic, and John R. Beck Insurance) on North Broadway damaged by fire caused by an outlet short circuit which operated a timer for an eyeglass heater.

July 14, 2016 - Exterior fire at Road Hawg Grill in Hazelton was contained and caused damage to siding and insulation and minor smoke damage inside the restraint. Cause of fire was thought to be a smoldering cigarette in dry grass.

March 30, 2016 - Two hours after 'not guilty' verdict issued, defendant's home and vehicle are destroyed in Hazelton. State Fire Marshal initial determination was a suspicious fire started on the exterior of the building.

Flood

Frequency	Likely (10-100% probability in the next year, or at least 1 chance in next 10 years)
Severity	Limited (10-25% of jurisdiction affected)
Risk Class	C
Seasonal Pattern	Spring and Summer
Duration	1 to 10 days
Speed of Onset	More than 24 hours warning
Location	Countywide
Impacts	Agriculture, Blocked Roads, Business Interruptions, Delayed Emergency Response, Downed Power Lines, Downed Trees, Evacuation (Localized), Flooding (Street), Flooding (Structure), HAZMAT Release, Increased Fire Potential, Increased Public Safety Runs, Livestock Injury/Death, Loss of Economy, Loss/Overcrowded Medical Facilities, Loss of Potable Water, Loss of Power, Personal Injury/Death Risk, Property Damage, School Closure, Sewer Backup

Description

Flooding is the flow of water over normally dry land areas. It can be caused by the overflow of inland waters, heavier rainfall than normal during a particular period, snowmelt, or the runoff of surface waters from any source. Floods are typically a natural phenomenon but are often intensified by the alteration of natural conditions by human activities

Three types common to Emmons County are Riverine, Overland, and Flash Flooding. Where Riverine is constrained to the river and creek channels and immediate area (flood when their levels rise enough to cover normally dry land areas), Overland and Flash Flooding (fast-moving, high volume of water flows into a normally dry area causing water levels to rapidly increase in a short period of time) can occur anywhere in the county. The main difference being that Flash Flooding has a more rapid onset (within 6 hours of the cause) and shorter duration (usually less than 12 hours) than Overland Flooding.

In simple terms, a flood is an excess of water on land that normally is dry. For example, water damage to your home from a river that overflowed into nearby streets and yards would be a direct result of flooding. (Source: [Federal Emergency Management Agency, National Flood Insurance Program](#))

Flash Flood: Inundation or depth based on soil saturation and rainfall rate using [Flash Flood Guidance](#).

Areal Flood: Inundation or depth based on saturation, rainfall, and [inundation](#) using [Flash Flood Guidance](#).

Extent for Flash or Areal/Overland Flooding

Class	IBW Tag*	Description
Minor	Base (no tag)	Use most of the time, when flash (areal) flood impact damage is possible.
Moderate	Considerable	Use rarely, when there are indications flash (areal) flooding capable of unusual severity or impact is imminent or ongoing and urgent action is needed to protect lives and property.
Major	Catastrophic	Use exceedingly rarely when a flash (areal) flood threat to life and catastrophic damage is occurring or is imminent, and floodwaters have risen or will rise to levels rarely if ever seen.

Missouri River Basin

The Missouri River was once free flowing with meandering braided channels, sand bars, and expansive tree-covered riparian areas. The river was free to make its own banks, which were ever changing, and seasonal flooding was a common occurrence.

Today, six dams and reservoir projects make up the Missouri River reservoir system. All these dams were constructed by the federal government and are maintained and operated by the USACE for the following authorized purposes:

- Flood Control
- Water Supply
- Recreation
- Irrigation
- Hydropower
- Water Quality
- Fish and Wildlife
- Navigation

The first dam that was constructed was Fort Peck in Montana. Fort Peck was constructed under Congressional authorization from the Rivers and Harbors Act of 1935. The other five mainstem dams on the Missouri River were later built in cooperation between the USACE and the Bureau of Reclamation under the Pick-Sloan Plan. The Pick-Sloan Plan was part of the Flood Control Act of 1944. (Source: [Missouri River Today Brochure](#))

Beaver Creek Watershed

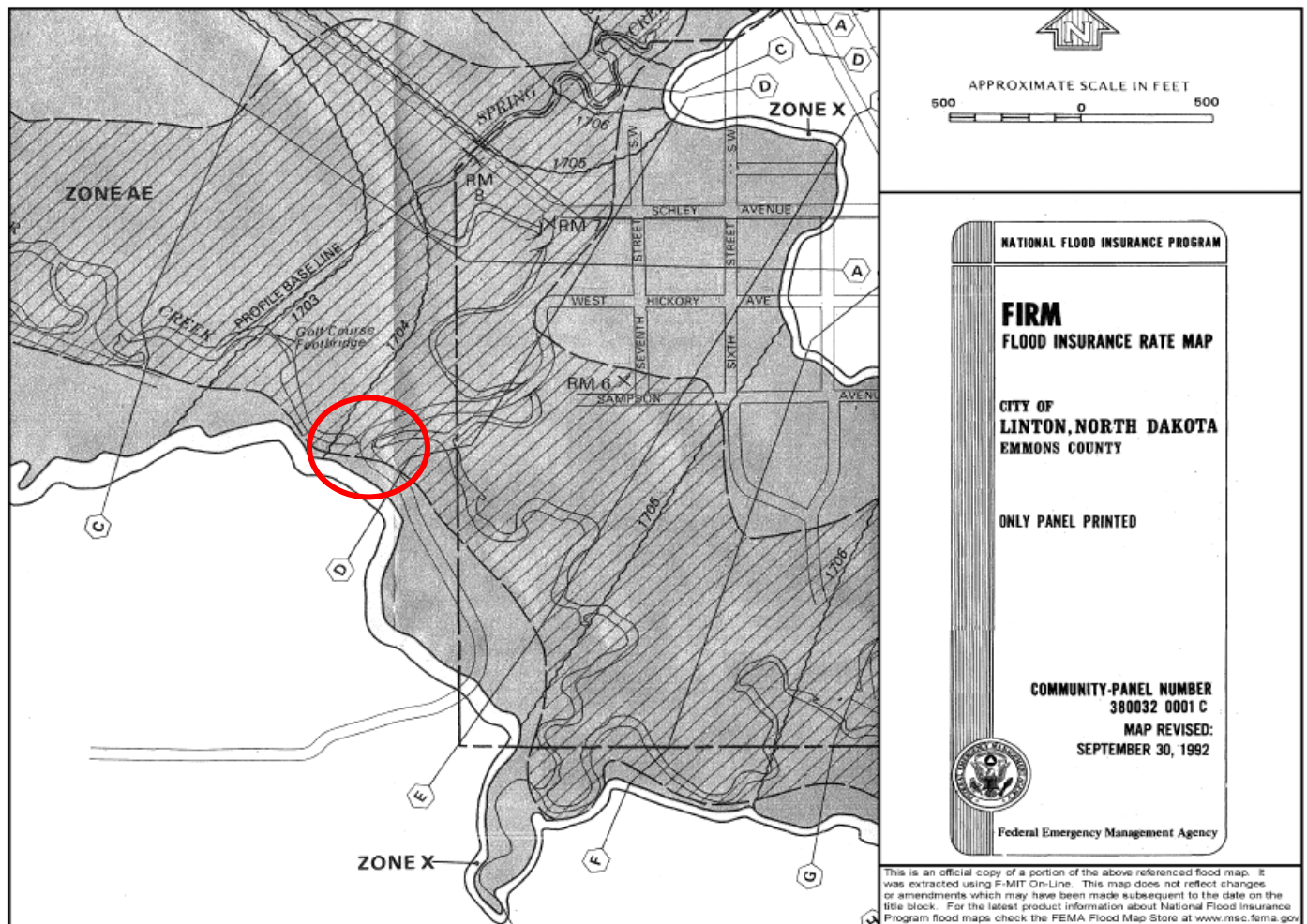
Beaver Creek drains parts of Emmons, Logan and McIntosh Counties in North Dakota.



(Source: [ND State Water Commission, Beaver Creek Hydrology Report, SWC Project #558, August 2016](#))

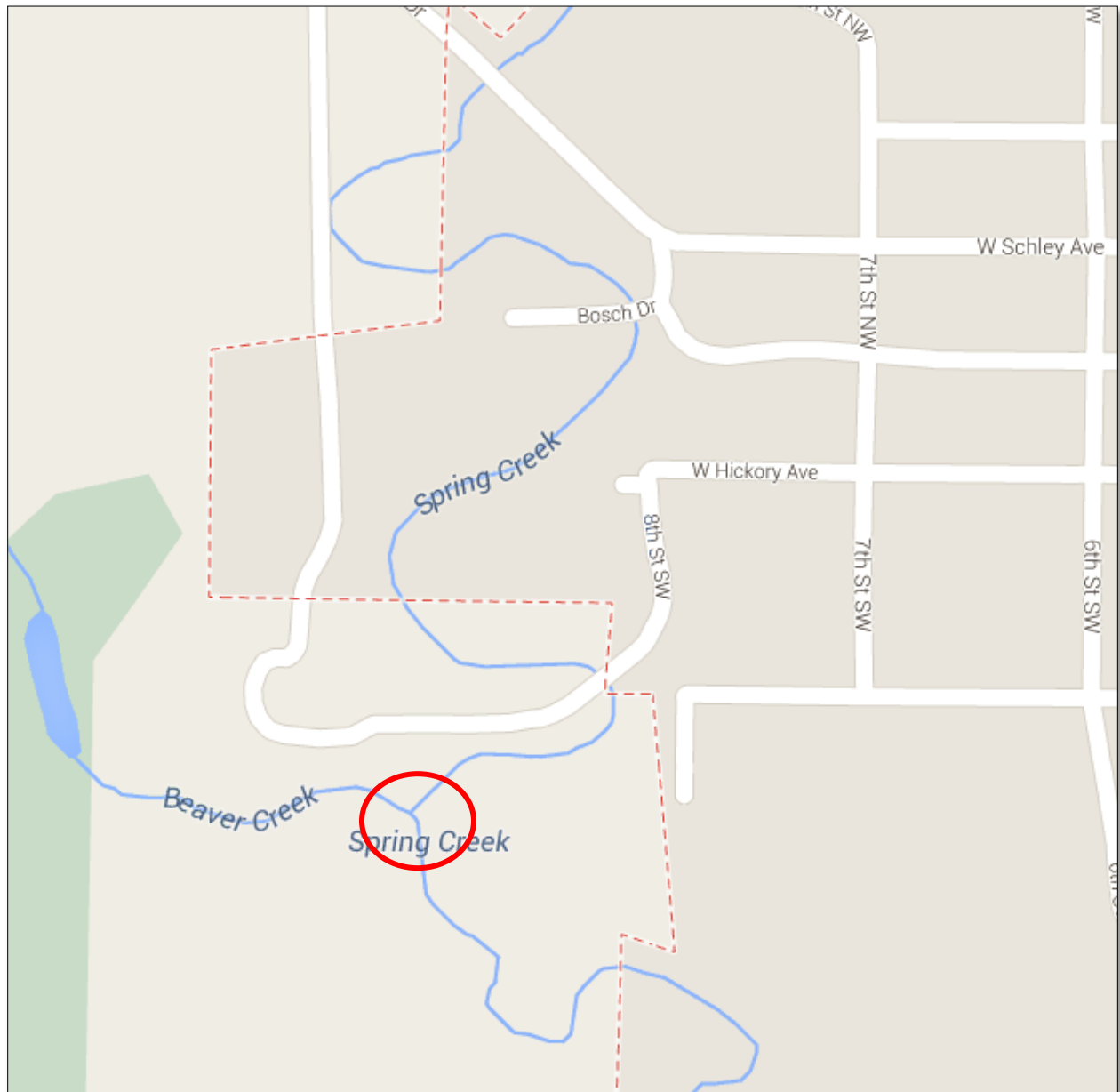


(Source: [ND State Water Commission, Beaver Creek Hydrology Report, SWC Project #558, August 2016](#))

Beaver Creek and Spring Creek Confluence

Source: FEMA Map Service Center [website](http://www.msc.fema.gov)

The potential remains for the Beaver Creek and Spring Creek confluence to exacerbate flood events during torrential rain events and/or spring thaw. Approximately 50 structures would be impacted from confluence flooding to the north and south. Historically, Beaver Creek and Spring Creek do not thaw simultaneously in the Spring.



Source: Google Maps [website](#)

FEMA Map Service Center

The FEMA Flood Map Service Center (MSC) is the official public source for flood hazard information produced in support of the National Flood Insurance Program (NFIP). Use the MSC to find your official flood map, access a range of other flood hazard products, and take advantage of tools for better understanding flood risk.



ND Risk Assessment Map Service (NDRAM)

NDRAM allows users to zoom in and visually display current flood risks, both approximate floodplains from BLE and effective regulatory floodplains from FEMA's NFIP. This new tool also provides users with water surface elevations, flood depths, and the ability to download engineering model data and print customized maps making it useful for planning, mitigation, and disaster recovery actions.

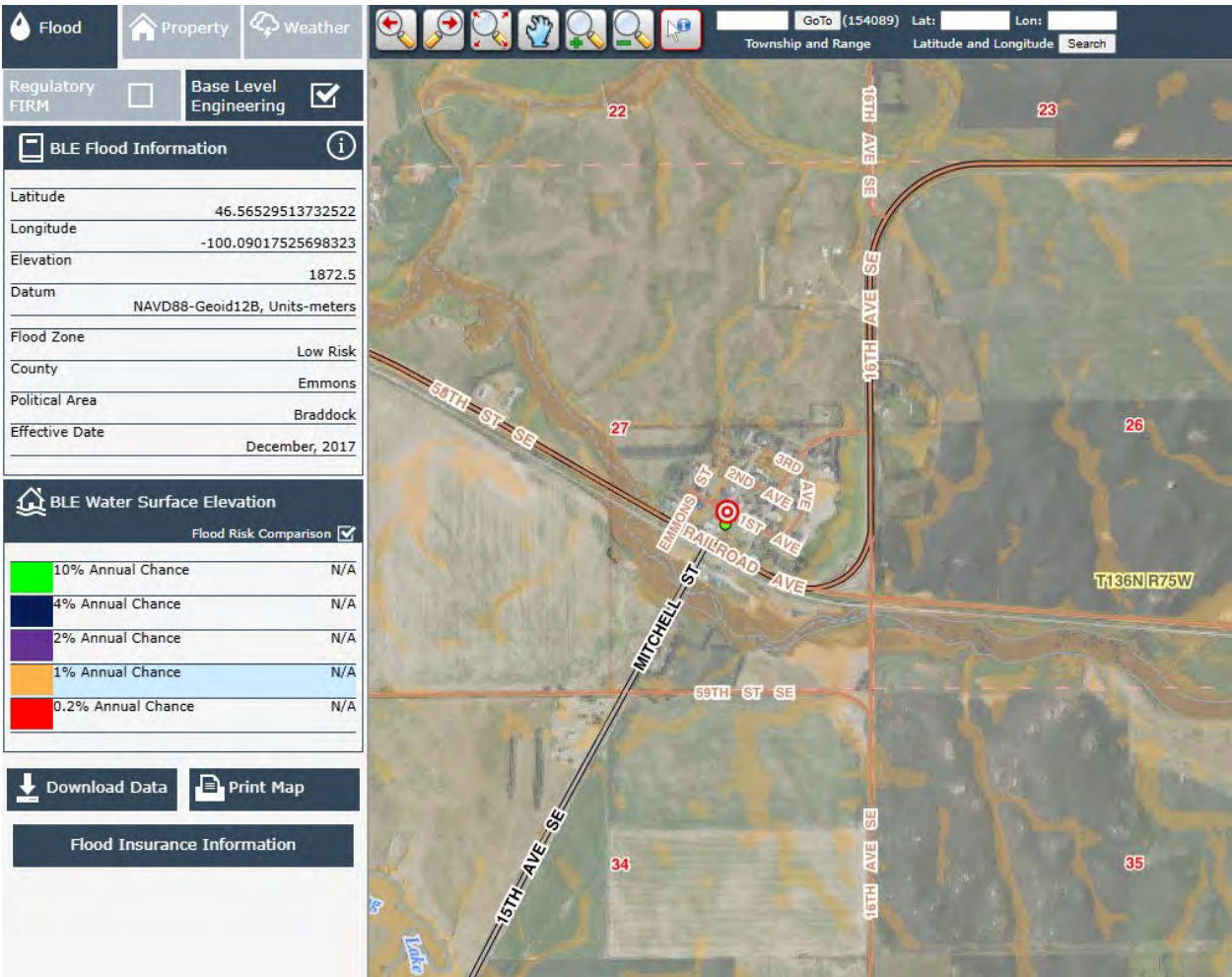
Emmons County



Emmons County has 10 Flood Insurance Rate Map Panels

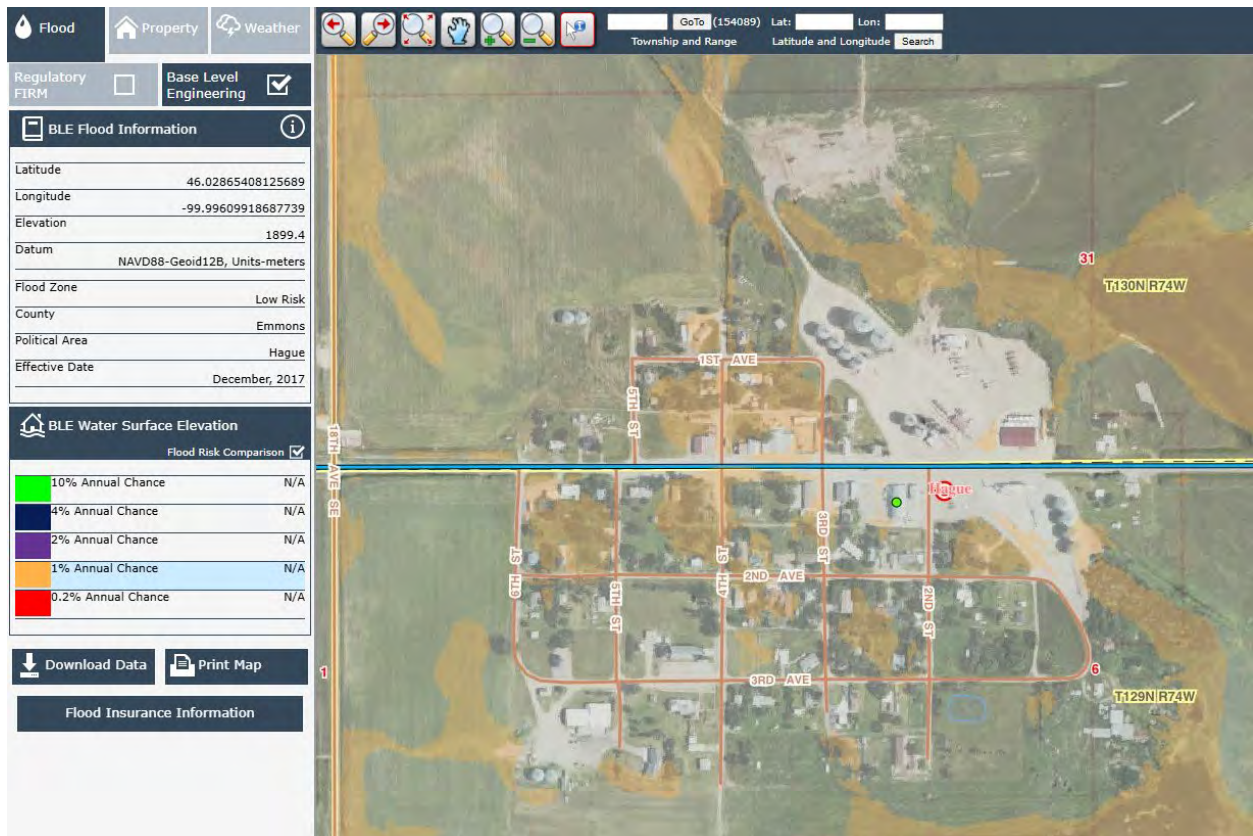
Source: [FEMA Map Service Center](https://www.fema.gov/flood-map-service-center)

City of Braddock



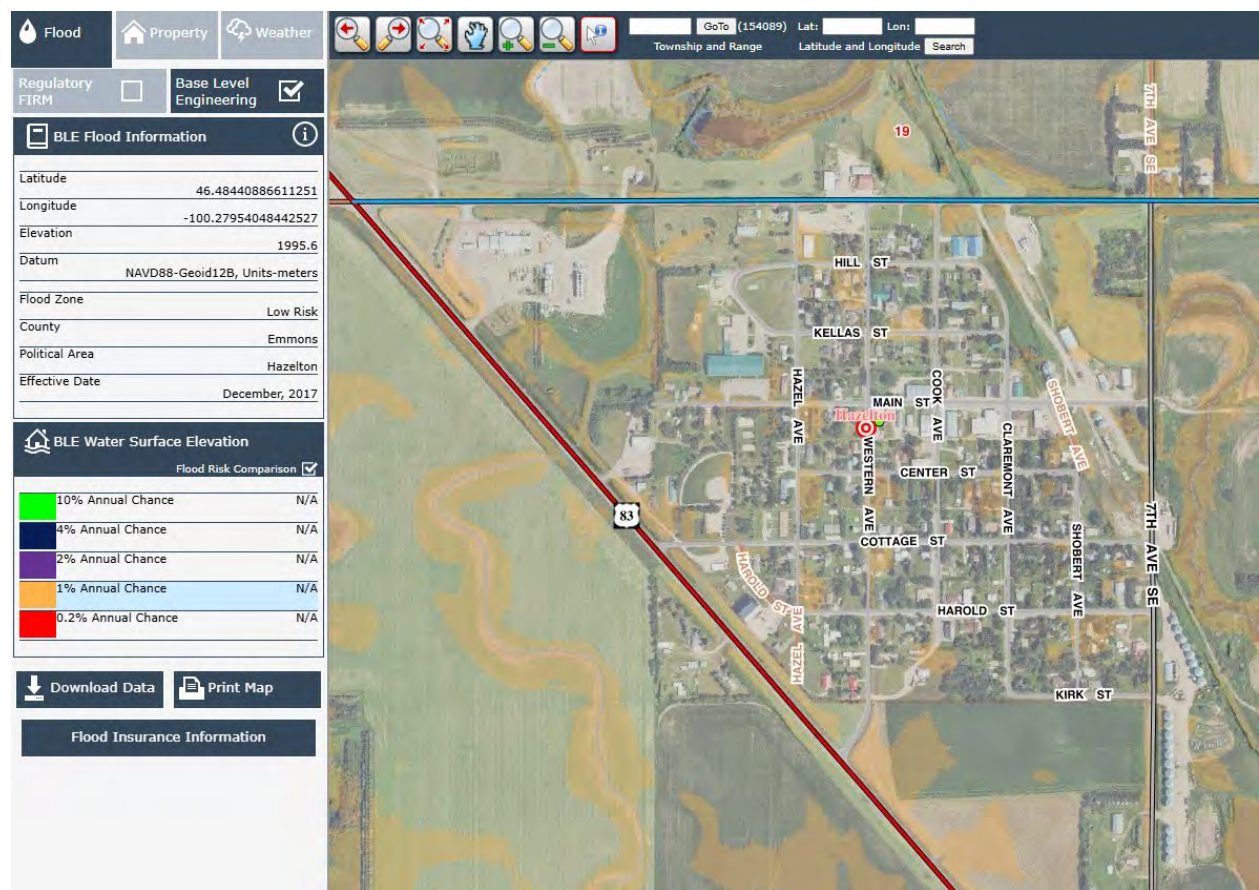
Source: ND Department of Water Resources [ND Risk Assessment MapService](#)

City of Hague



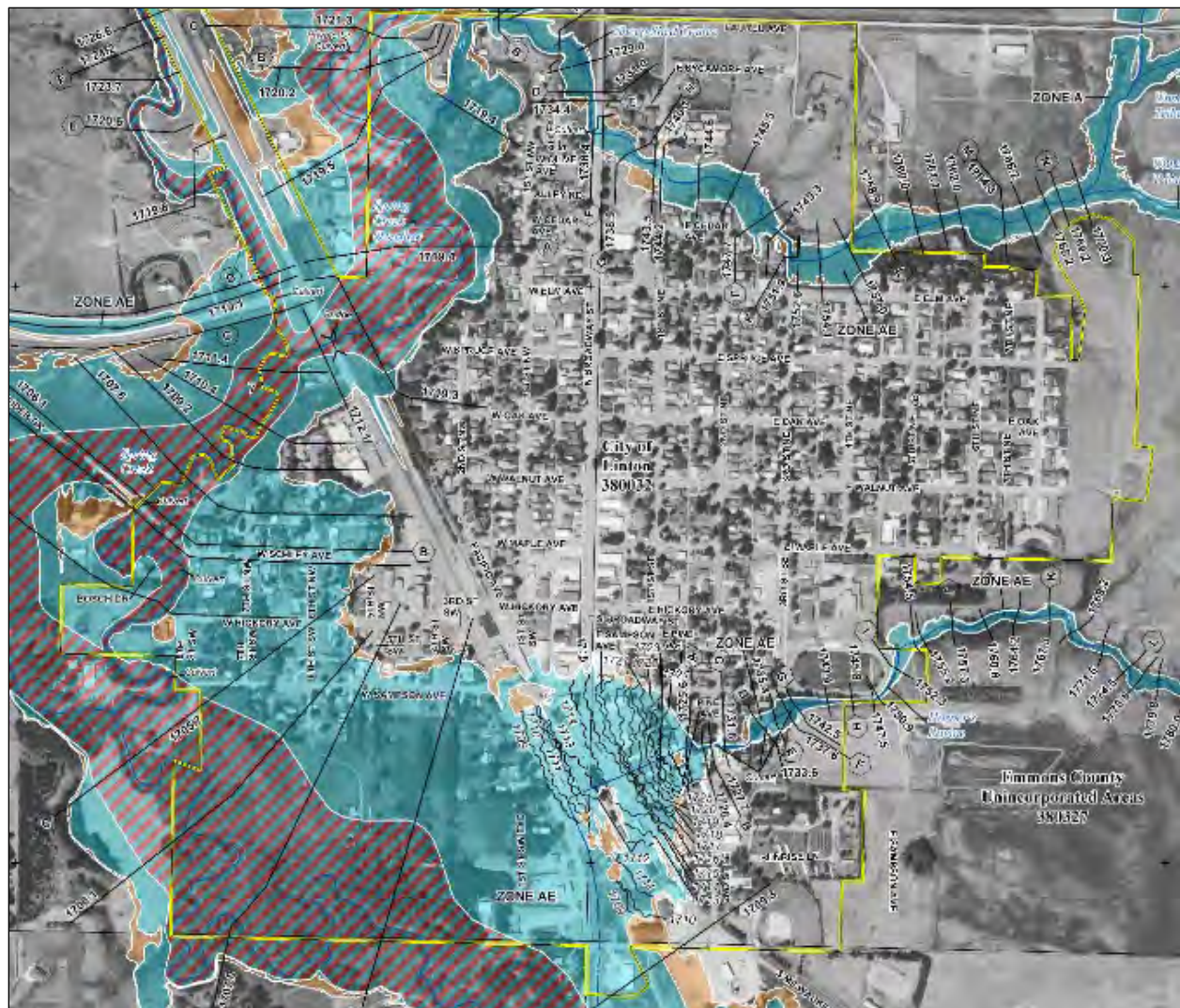
Source: ND Department of Water Resources [ND Risk Assessment MapService](#)

City of Hazelton



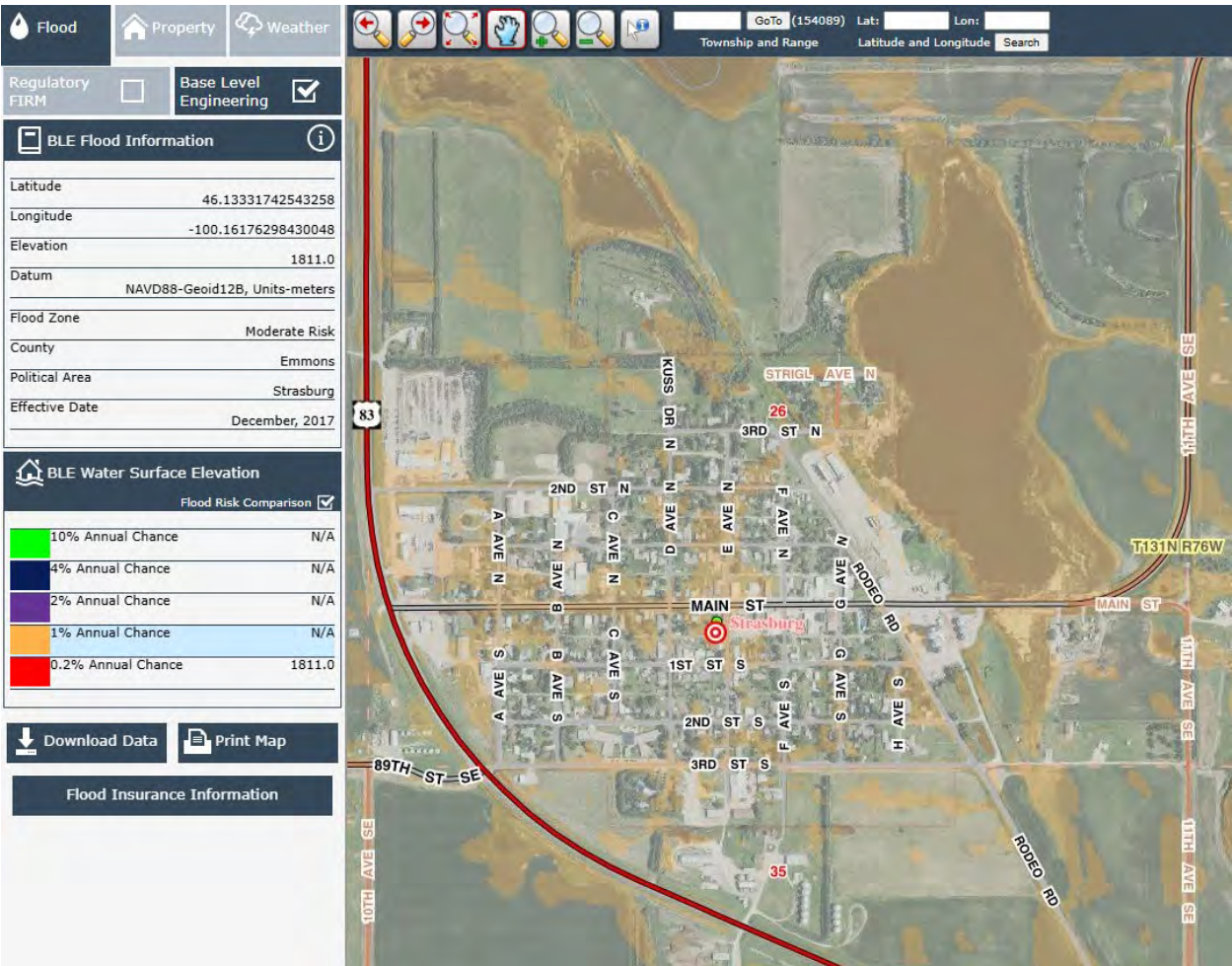
Source: ND Department of Water Resources [ND Risk Assessment MapService](#)

City of Linton



Source: [FEMA Map Service Center](#)

City of Strasburg



Source: ND Department of Water Resources [ND Risk Assessment MapService](#)

History

<u>Location</u>	<u>Date</u>	<u>Time</u>	<u>T.Z.</u>	<u>Type</u>	<u>Mag</u>	<u>Dth</u>	<u>Inj</u>	<u>PrD</u>	<u>CrD</u>
HAZELTON	04/01/2009	00:00	CST-6	Flood		0	0	300.00K	0.00K
HAZELTON	03/06/2009	00:00	CST-6	Flood		0	0	748.00K	0.00K
EMMONS (ZONE)	03/21/1997	08:00	CST	Flood		0	0	0.00K	0.00K
Totals:						0	0	1.048M	0.00K

Source: National Oceanic and Atmospheric Administration National Climatic Data Center [Website](#) (01/1950 to 10/2025)

Significant events include:

March 2020 – Winter/Spring Flood: Following the wettest fall on record in 125 years, saturated soils and high base stream flows led to widespread overland flooding in March 2020. Emmons County was added to a federal disaster declaration (FEMA-4475-DR) in April 2020 specifically due to this flooding.

October 28, 2019 – Flood Emergency Declaration approved by the Emmons County Commission due to excessive rainfall, fall blizzard, high water tables, seepage, overland flooding, and road damage. Event became Presidential Declaration 4444.

April 8, 2019 – Beaver Creek crested at 14'. The City of Linton declared a flood emergency on April 1st, and Emmons County declared on April 2nd. Numerous roads were closed, and a self-fill sandbag site was established. Residents experienced seepage and pumped basements (especially areas in “Old Town” and along Highway 83).



Sampson Avenue looking West.

April 6, 2011 – Beaver Creek crested at 12.71'. Earlier projections showed an exceedance probability of 10-50% for reaching Moderate Flood Stage. A planning meeting was hosted on February 25, 2011 and again on April 5, 2011.

March 19, 2010 – Beaver Creek crested at 13.63'. Winter season brought snowfall atop saturated soils, and a public forum was hosted (February 10, 2010) to discuss flood forecasting services for Linton. Beaver Creek in Linton was not a forecast point until March, 2010.

March 13, 2009 to August 10, 2009—Major Disaster Declaration declared on March 24, 2009 (DR-1829). Significant flooding occurred as a result of spring thaw, snow, and torrential rains. Numerous bridges and roads were damaged and washed out. Significant numbers of livestock perished. The ND National Guard evacuated 20 residents of Linton, many from the “Old Town” area. Several homes were purchased in Linton and Emmons County as part of the mitigation process.

March-April 1997 – Spring runoff and ice jams caused flooding along Beaver Creek and low-lying areas. Flooding occurred in the southwest portion of the city of Linton. Roads were washed out and culverts became undermined. Five concrete bridges over Beaver Creek were damaged. Homes along Beaver Creek experienced water seepage. Four farm homes were abandoned. One dairy farmer was forced to completely disperse of his herd.

March 1996 – Spring runoff and ice jams caused flooding along Beaver Creek. The west side of the city of Linton also experienced flooding. Major damage was done to rural roads that became submerged. There was also major damage to the Seaman Park bridge.

June 15, 1995 – The City of Hague suffered damage to their city lagoon due to high water and heavy rainfall.

March 1995 – Spring runoff and ice jams caused flooding along Beaver Creek. Highway 83 in the city of Linton overflowed and was closed for a four-hour period. The southwest area of the city of Linton was flooded with several basements flooding. Many county roads washed out in low-lying areas and some bridges were also damaged.

August 1, 1993 – Flood. Deaths: 1. Property Damages of \$50,000. Crop Damages of \$50,000. The heavy rains of July swelled Beaver Creek. On the evening of the first, a vehicle attempted to cross the spillway in Linton. When the attempt was unsuccessful, the occupants got out of their vehicle. One of the occupants lost her footing, fell into the creek, and drowned.

July 15, 1993 – During the late evening hours heavy rain fell in Emmons County causing flash flooding in the northern third of the county. Major damage was done to roads, bridges, culverts, farmlands, homes, businesses and other public facilities. On August 1, 1993, one woman trying to cross the spillway with her bicycle was swept off the spillway and drowned.

April 9, 1969 – Beaver Creek hit 17-year high. At the John Deere Implement Shop, water reached the door, which was sandbagged. At the Linton Hatcher, water was up to one foot from the foundation. In the Old Town section, Sampson Avenue was flooded from the MDU building to the creek. Beaver Creek was crossing over the road south of the cemetery and was approximately two-blocks wide. Water in the backyards of several homes along the west side of U.S. Highway 83 ranged from approximately 12- to 16-inches below the 1952 flood.

April, 1952 – (Maximum flood of record; slightly higher than 50-year frequency) Rapid melting of snow in the Beaver Creek basin resulted in the most damaging flood of record at Linton. Forty-one families were forced to evacuate the low-lying Old Town section of Linton, and water reached a depth of 4 feet. The U.S. Highway 83 bridge spanning Beaver Creek was weakened by floodwaters.

April, 1950 – Peak flows of Beaver Creek inundated homes along U.S. Highway 83 and in the Old Town section of Linton.

March, 1948 – High flows on Beaver Creek inundated portions of Old Town. Subsequent to the flood Beaver Creek, high stages occurred on Spring Creek, and portions of Old Town were again flooded.

April, 1944 – Floodwaters inundated the greater part of Old Town and washed out a section of U.S. Highway 83 at Linton.

March, 1943 – Spring Creek overflowed its banks on March 23, inundating a 9-square block area in Old Town in one of the worst floods of history on Spring Creek. Shortly after the Spring Creek overflow, Beaver Creek overflowed, again inundating Old Town.

June, 1934 – Cloudburst rains caused Beaver Creek to overflow, inundating highways and flooding basements in Linton.

March, 1929 – Heavy snows and continuous warm weather during the middle of the month caused Beaver Creek to overflow and flood Old Town.

May, 1927 – Runoff from heavy rainfall caused Spring Creek to overflow, inundating a large section of Old Town.

March, 1916 – On March 29, snowmelt flows of Beaver Creek inundated most of the Old Town section of Linton.

June, 1914 – On June 26, runoff from a three-hour cloudburst inundated most of Old Town when a railroad grad north of the city failed and released impounded water.

Special Flood Hazard Areas (SFHA) are land areas identified by FEMA that will be inundated by a flood event with a 1% chance of being equaled or exceeded in any given year. These areas, also called the 100-year floodplains, have high flood risk and are subject to mandatory flood insurance requirements for properties with federally backed mortgages. SFHAs are depicted on Flood Insurance Rate Maps (FIRMs) with designations typically including the letter "A" or "V". Portions of unincorporated Emmons County and the City of Linton include Special Flood Hazard Areas (SFHAs).

Floodplain administrators follow the permitting ordinances outlined by the NFIP Guidance and [North Dakota Century Code 81-16.2 Floodplain Management](#). After an event, NFIP "substantial damage" is when the cost of repairing a damaged building is 50% or more of its market value before the damage. This determination is made by the floodplain administrator and triggers a requirement that the building be brought up to current floodplain management standards to be repaired or rebuilt.

Emmons County encourages property owners to purchase flood insurance through the National Flood Insurance Program (NFIP).

Repetitive loss structure means a structure covered under an NFIP flood insurance policy that has incurred flood-related damage on two occasions, in which the cost of repair, on average, equaled or exceeded 25% of the value of the structure at the time of each such flood event; and at the time of the second incidence of flood-related damage, the contract for flood insurance contains increased cost of compliance coverage. ([44 CFR § 77.2\(i\)](#)) Emmons County has four repetitive loss properties: one nonresidential and three single-family residential properties.

Severe repetitive loss structure means a structure that is covered under an NFIP flood insurance policy and has incurred flood-related damage for which four or more separate claims have been made under flood insurance coverage, with the amount of each claim (including building and contents payments) exceeding \$5,000 and with the cumulative amount of such claims payments exceeding \$20,000; or for which at least two separate flood insurance claims payments (building payments only) have been made, with cumulative amount of such claims exceeding the value of the insured structure. ([44 CFR § 77.2\(j\)](#)) Emmons County has two nonresidential severe repetitive loss properties.

Flood Ordinance updates

Emmons County updated their floodplain ordinance:

January 2, 2024, after the FEMA Flood Insurance Rate Maps were updated.

March 2, 2026, Emmons County Water Board approved an ordinance to update the authority language as provided by the State Floodplain Coordinator in accordance with SB2027.

March 18, 2026, City of Linton approved an ordinance to update the authority language.

March 13, 2026, City of Hague approved an ordinance to update the authority language.

April 22, 2026, City of Hazelton approved an ordinance to update the authority language.

Flood insurance is available to property owners whose jurisdiction participates in the NFIP.

 Community Status Book Report Communities Participating in the National Flood Program  NORTH DAKOTA											
CID	Community Name	County	Init FIRM Identified	Init FHBM Identified	Curr Eff Map Date	Tribal	Reg-Emer Date	CRS Entry Date	Curr Eff Date	Curr Class	% Disc
380260A	BRADDOCK, CITY OF	EMMONS COUNTY				No	03/29/99(E)				
380327A	EMMONS COUNTY*	EMMONS COUNTY		2/4/1987	(All Zone D)	No	2/4/1987				
380232A	HAZELTON, CITY OF	EMMONS COUNTY	1/17/1975		(NSFHA)	No	1/30/1984				
380032A	LINTON, CITY OF	EMMONS COUNTY	6/28/1974	11/19/1980	2/22/2024	No	11/19/1980				
380252A	STRASBURG, CITY OF	EMMONS COUNTY	2/14/1975		(NSFHA)	No	4/25/1997				

Source: [FEMA.gov](https://www.fema.gov)

Floodplain Administrators

JURISDICTION	ADMINISTRATOR - NAME	POSITION
EMMONS COUNTY	GLEN GEFFRE	WATER BOARD CHAIR
CITY OF BRADDOCK	AUDREY RAMBOUGH	MAYOR
CITY OF HAZELTON	GARY GRIFFIN	PRESIDENT
CITY OF LINTON	SHARON JANGULA	ECONOMIC DEVELOPMENT
CITY OF STRASBURG	JUDY PFEIFER	AUDITOR

Source: [ND Department of Water Resources](https://www.nd.gov/departments/water-resources/)

Emmons County continues to foster participation from the City of Hague. Additional NFIP strategies are listed in the Appendices.

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Geologic Hazards

Frequency	Nearly 100% probability in the next year
Severity	Negligible (Less than 10% of jurisdiction affected)
Risk Class	C
Seasonal Pattern	Spring and Summer
Duration	1 to 10 days
Speed of Onset	Hours to days
Location	Countywide (areas along Missouri River and Creeks)
Impacts	Agriculture, Blocked Roads, Building Collapse, Business Interruptions, Delayed Emergency Response, Downed Power Lines, Downed Trees, Evacuation (Localized), Explosion, HAZMAT Release, Increased Fire Potential, Increased Public Safety Runs, Loss of Economy, Loss/Overcrowded Medical Facilities, Loss of Potable Water, Loss of Power, Mass Casualties, Personal Injury/Death Risk, Property Damage, Sewer Backup,

Description

Erosion is the geological process of wearing away and transporting soil, rock, and sediment by natural forces—primarily water, wind, ice, and gravity.

Water related erosion can be exacerbated by periods of intense rainfall, rapid river rises, or overland flooding. Both wind and water erosion can increase during and after periods of drought or following wildland fire scarring, as natural vegetative cover is removed.

The exposure to Soil Erosion is countywide but primarily driven by those locations where dirt is exposed to strong winds, hard rains, and flowing water. According to the Natural Resources Defense Council ([Mulvihill](#), 2021), “Soil erosion occurs primarily when dirt is left exposed to strong winds, hard rains, and flowing water. In some cases, human activities, especially farming and land clearing, leave soil vulnerable to erosion. For example, when farmers till (plow) the soil before or after growing a season of crops, they may leave it exposed to the elements for weeks or months. The overgrazing of farm animals like cattle and sheep can also leave large areas of land devoid of ground-covering plants that would otherwise hold the soil in place.” According to the USGS ([2025](#)), recent wildfires can increase the risk of both wind and water erosion by removing groundcover, exposing fragile topsoil, and even changing the nature of the topsoil particles, making them more susceptible to erosion.

Soil Loss Tolerance tons/acres/year	Acres	% of County	Water Erosion Potential	Acres	Percent	Wind Erosion Potential	Acres	Percent
2	174,183	17.50%	Very low water erosion potential	278,548	27.98%	Not limited	754,699	75.81%
3	258,094	25.92%	Low water erosion potential	368,339	37.00%	Somewhat limited	41,108	4.13%
4	5,646	0.57%	Moderate water erosion potential	233,221	23.43%	Very limited	199,770	20.07%
5	520,853	52.32%	High water erosion potential	78,668	7.90%	Total for Emmons County	995,577	100.00%
<Null>	36,801	3.70%	Not rated	36,801	3.70%			
Total for Emmons County	995,577	100.00%	Total for Emmons County	995,577	100.00%			

Source: USDA – Bismarck Field Office

Expansive Soils

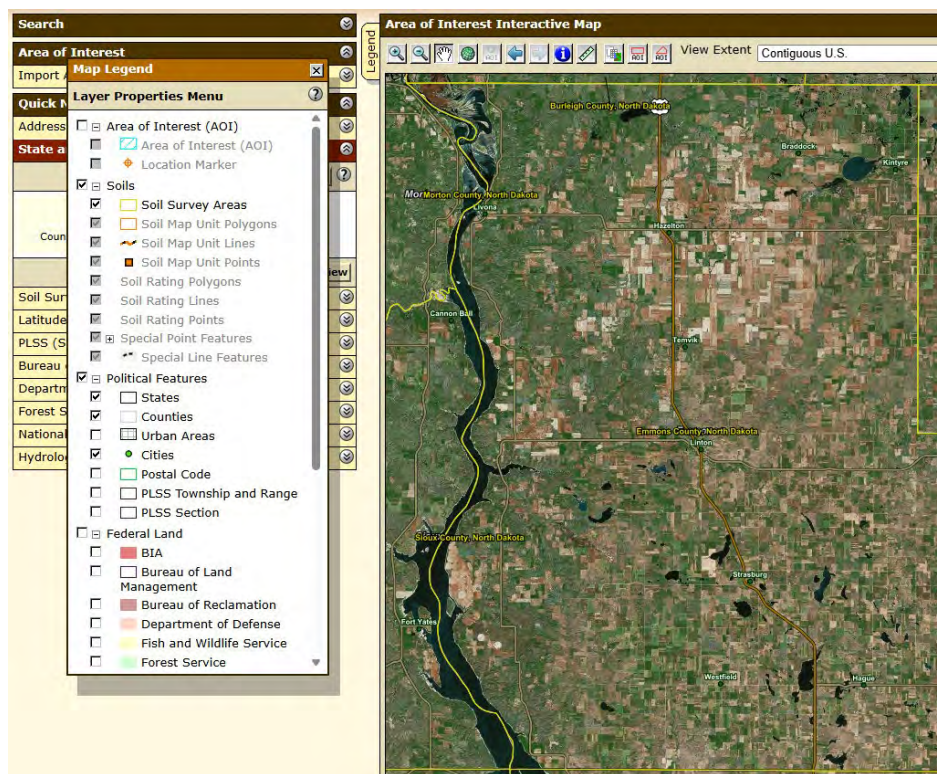
Through the end of this century in North Dakota, expect more frequent, larger, and more intense geologic hazards, such as landslides, riverbank collapse, sink holes, and expansive (clay) soils. Both Drought and Heavy Precipitation events are projected to occur more frequently, which is expected to contribute to an increased frequency of expansive soils alternately cracking and swelling, landslides where steep slopes are present, or to riverbank collapse where undercutting due to subsoil flow and/or antecedent flooding is possible. Both extremes also increase the potential for wind and water erosion. Increased development pressure and the impacts of future climate conditions may increase the risk to a variety of state infrastructure and assets if constructed or situated in areas prone to geologic hazards.

Emmons County lies in the glaciated Missouri Plateau Section, with the far northeast and southeast sections of the county in the Missouri Coteau District and the remainder in the Coteau Slope District ([Bluemle](#), 1984; [Wroblewski](#), 1980). The northeast and southeast corners, within the Missouri Coteau District, have more irregular slopes with areas of glacial deposits which include the dark brown Williams Series soils. These soils are generally more than 6 feet thick, have a high calcium content, and have a long history as short grass prairie resulting in soils that have high natural fertility and organic matter content – considered excellent for cropland ([SSSA](#), 2025). Most of the central and western portions of the county, within the Coteau Slope District, have dominant areas of exposed bedrock, often soft shale and sandstone, where glacial deposits are thin to negligible. As a result, much of this area has windblown silt and fine clay, or loess rich soils which include the light to dark grey soils of the Regan, Regent, and Heil Series.

Expressed as a characteristic of the relative clay-mineral content in the soil. In engineering and agriculture applications this may be the [Shrink-Swell Class](#), a Linear Extensibility Percent (LE/LEP), or a Coefficient of Linear Extensibility (CL/COLE). Expansive/contractive soils can produce soil heaving/cracking during protracted wet/dry conditions. According to Wikipedia (Shrink-swell capacity, 2025), cracking soils can break critical plant root structure leading to crop failures. Bridges, roadbeds, building foundations, and pipelines can fail due to the heaving, settling, or cracking of soils.

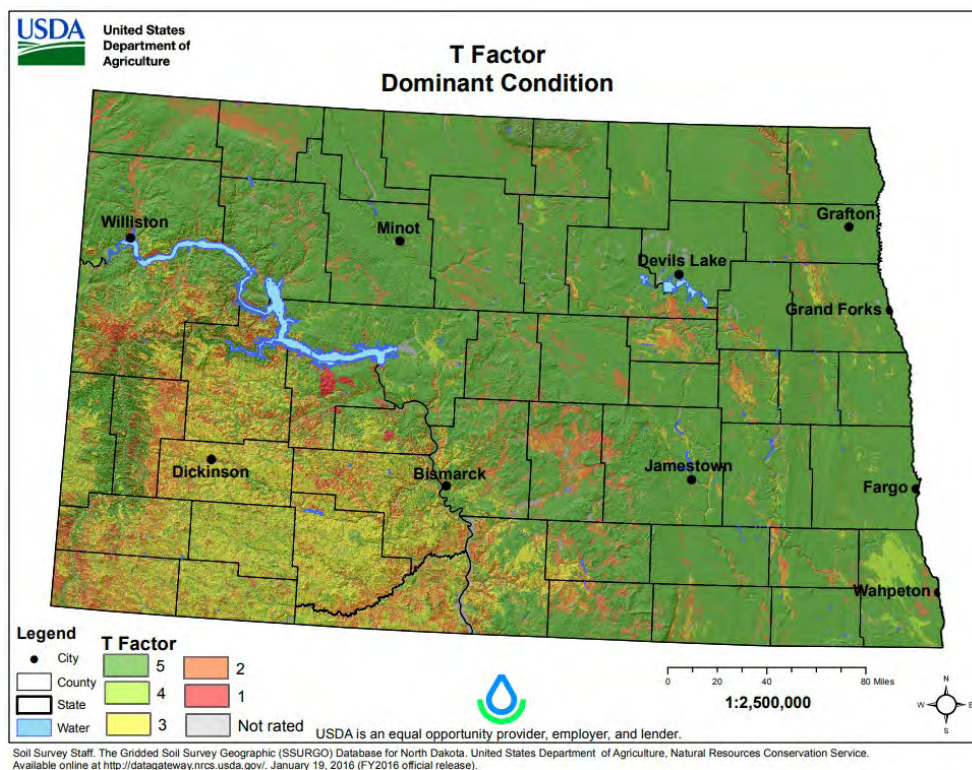
Shrink-Swell Class	LEP	COLE
Low	< 3.0	< 0.03
Moderate	3.0–5.9	0.03–0.06
High	6.0–8.9	0.06–0.09
Very High	≥ 9.0	≥ 0.09

Source: [NRCS/USDA National Soil Survey Handbook](#), Page 57



Source: [Web Soil Survey](#)

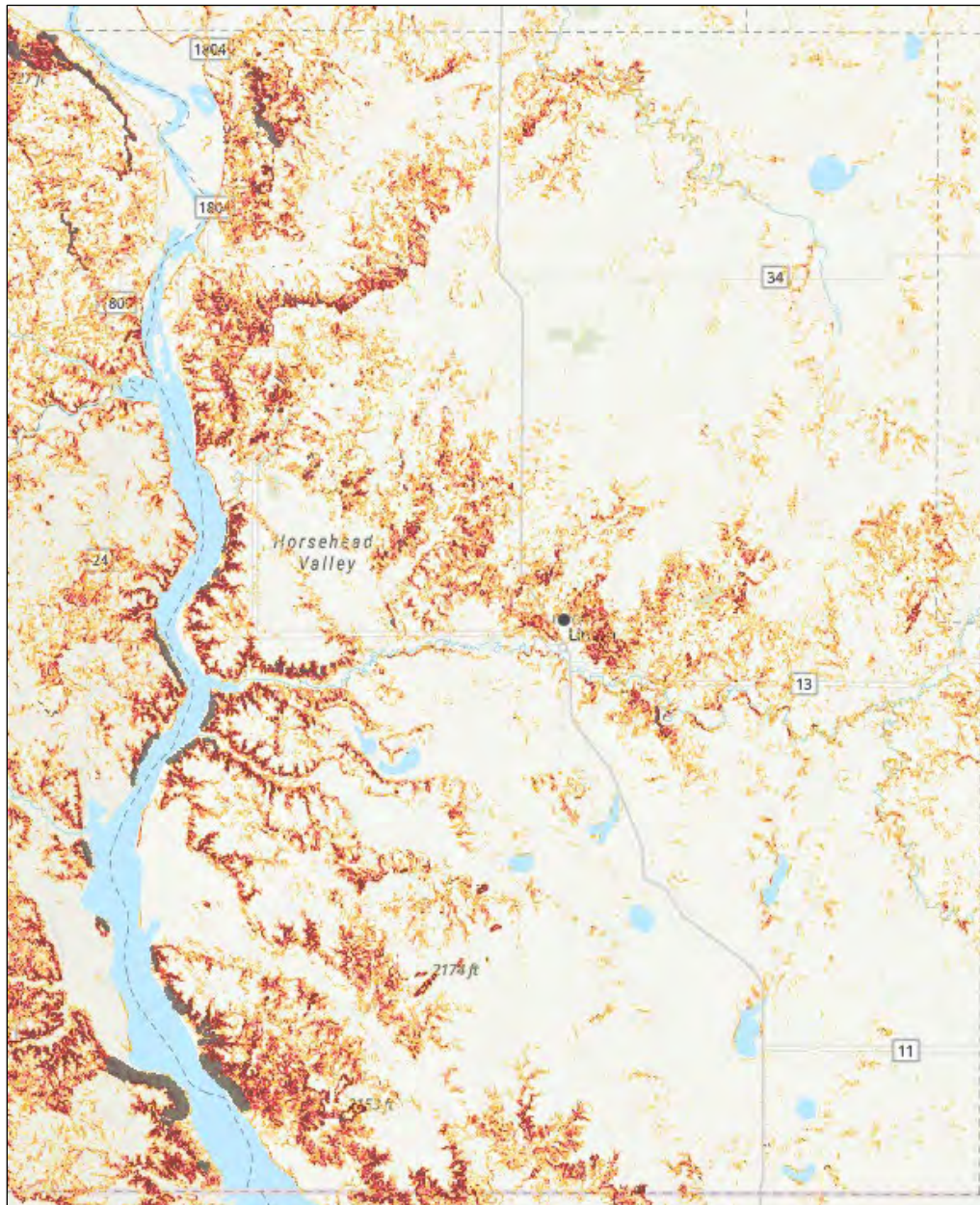
The T factor is an estimate of the maximum average annual rate of soil erosion by wind and/or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.



Source: [USDA](#)

Landslide

[United States Geological Survey](#) definition: “Landslides are the downslope movement of earth materials (rock, debris, and soil) at rates that range from inches per year to tens of miles per hour. Some landslides can move faster than a person can run. Landslides can happen with no notice or can take place over a period of days, weeks, or longer.”



Increasing Susceptibility



Areas without colored shading represent very low landslide potential

Source: [USGS ArcGIS](#)

Radon

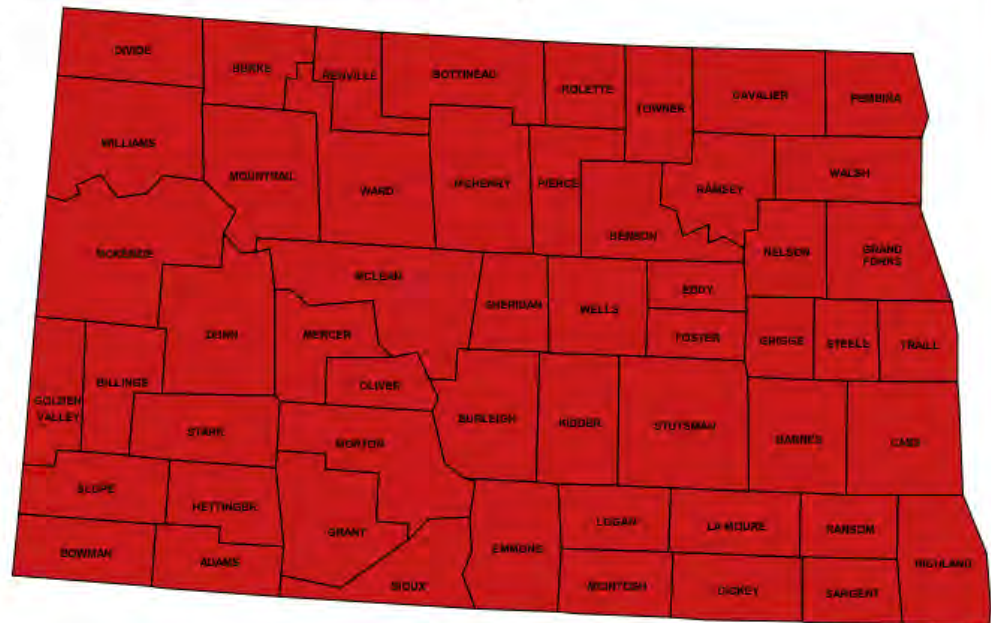
[United States Environmental Protection Agency](https://www.epa.gov/radon) defines radon: “Radon is a radioactive gas that forms naturally when uranium, thorium, or radium, which are radioactive metals break down in rocks, soil and groundwater. People can be exposed to radon primarily from breathing radon in air that comes through cracks and gaps in buildings and homes. Because radon comes naturally from the earth, people are always exposed to it.”

NORTH DAKOTA - EPA Map of Radon Zones

<https://www.epa.gov/radon/epa-map-radon-zones>

The Map of Radon Zones was developed in 1993 to identify areas of the U.S. with the potential for elevated indoor radon levels. The map is intended to help governments and other organizations target risk reduction activities and resources. The Map of Radon Zones should not be used to determine if individual homes need to be tested. No matter where you live, test your home for radon—it's easy and inexpensive. Fix your home if your radon level is 4 picocuries per liter (pCi/L) (150 becquerels per meter cubed (Bq/m³)) or higher. Consider fixing if your level is between 2 and 4 pCi/L (75 - 150 Bq/m³).

The Map of Radon Zones was developed using data on indoor radon measurements, geology, aerial radioactivity, soil parameters, and foundation types. The EPA recommends that this map be supplemented with any available local data to further understand and predict the radon potential for a specific area. **All homes should be tested, regardless of zone designation.**



What do the colors mean?

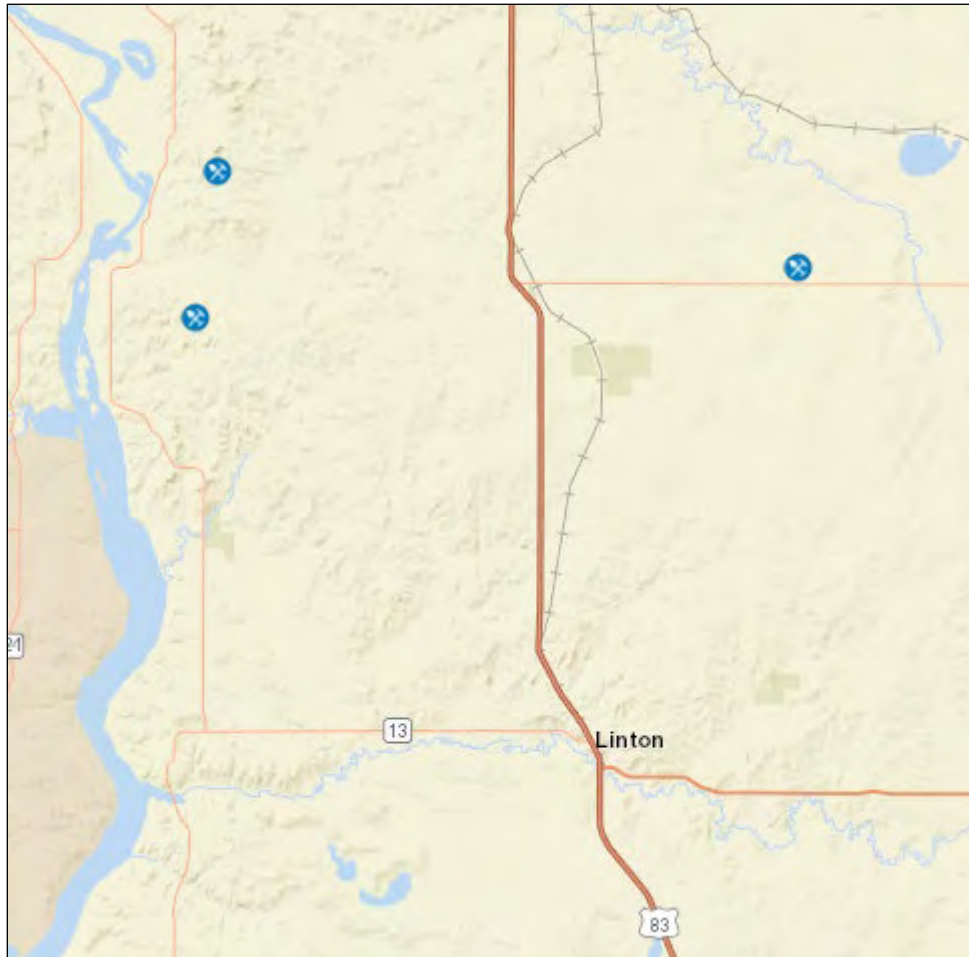
Zone	Zone 1 (red zones)	Zone 2 (orange zones)	Zone 3 (yellow zones)
Color			
Description	Highest potential Counties have a predicted average indoor screening level > (Greater than) 4 pCi/L (picocuries per liter) (150 Bq/m ³ (becquerels per meter cubed))	Moderate potential Counties have a predicted average screening level ≥ (Greater than and equal to) 2 pCi/L (75 Bq/m ³) and ≤ (less than and equal to) 4 pCi/L (150 Bq/m ³)	Low potential Counties have a predicted average indoor screening level < (Less than) 2 pCi/L (75 Bq/m ³)

IMPORTANT: Consult the publication entitled "Preliminary Geologic Radon Potential Assessment of North Dakota" (USGS Open-file Report 93-292-H) before using this map. See <https://doi.org/10.3133/ofr93292H>. This document contains information on radon potential variations within counties. The EPA also recommends that this map be supplemented with any available local data in order to further understand and predict the radon potential of a specific area.

Subsidence

Subsidence is the sinking or settling of the ground surface, caused by the compaction of underground materials due to natural processes or human activity like groundwater extraction, mining, and soil consolidation. It causes significant structural damage to infrastructure—including cracked walls, uneven floors, and broken pipelines—often requiring costly, specialized repairs.

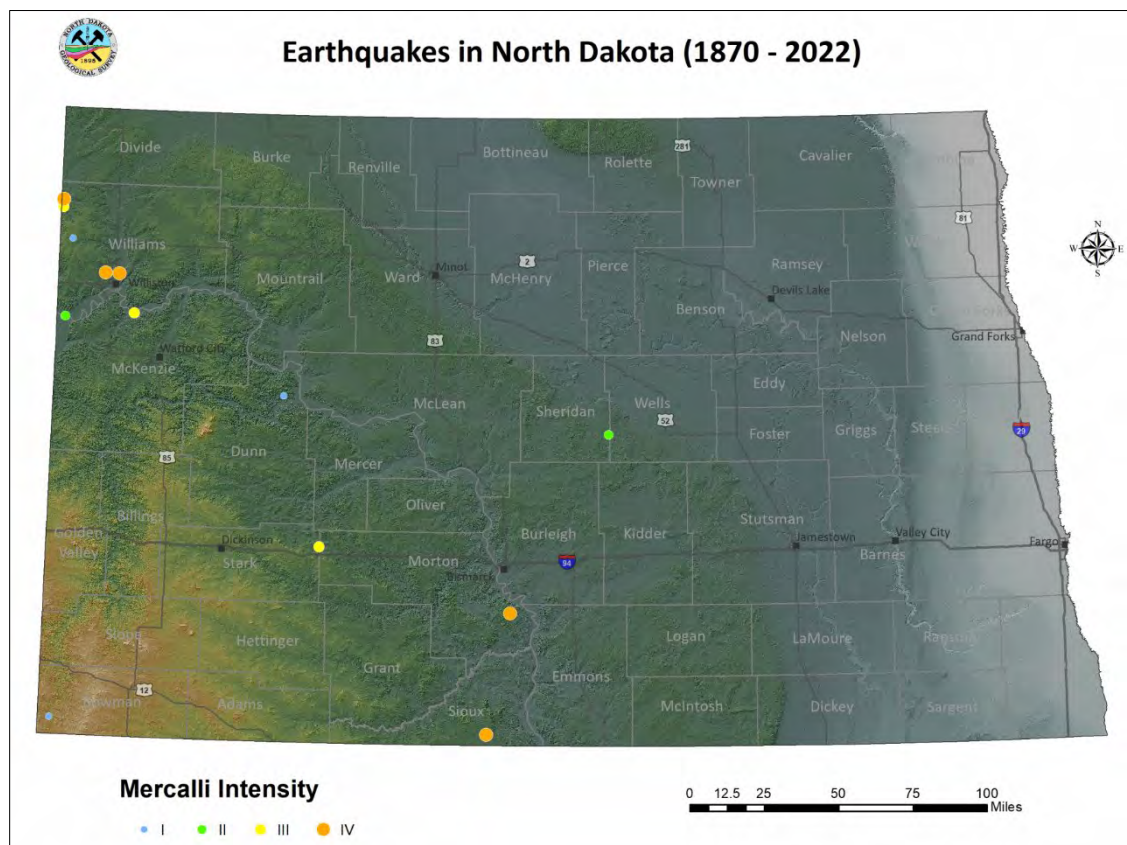
There are three abandoned coal mines in Emmons County which are managed by the North Dakota Public Service Commission's Abandoned Mine Lands Division to eliminate dangers such as subsidence. Abandoned underground lignite mines can cause sinkholes and subsidence, rendering land unusable.



Source: [ND Public Service Commission](#)

Earthquake

There is no record of earthquakes in Emmons County; however, the [ND Department of Mineral Resources](#) provides information on an earthquake in Morton County on July 8, 1968, that was felt in various areas of Emmons County.



July 8, 1968 M 4.4 Earthquake near Huff, North Dakota

A magnitude M 4.4 earthquake was recorded five miles southwest of Huff in eastern Morton County in south-central North Dakota during the morning of Monday, July 8, 1968 at an estimated depth of 20.5 miles. This earthquake was the first instrumentally verified earthquake recorded in North Dakota and was reported to have been felt over approximately 3,000 square miles of south-central North Dakota. It was reported that “a television set shifted and sounds like thunder were heard.” Additionally, Mercalli earthquake intensity IV effects were noted at Bismarck, Fort Rice, Huff, Linton, Mandan, Menoken, and Moffit; and Mercalli intensity I-III effects at Almont, Flasher, Halliday, and St. Anthony (Coffman and Cloud, 1970).

Day	Date	Time (local)	Time (UTC)	Magnitude	Depth (miles)	MMI	T & R	Longitude	Latitude
Monday	07/08/1968	10:50:12	16:50:12	4.4	20.5	IV	136-80	-100.74	46.59

Source: [ND Earthquake Catalog \(1870 – 2015\)](#)

Modified Mercalli Intensity Scale

By [Earthquake Hazards Program](#)

Intensity	Shaking	Description/Damage
I	Not felt	Not felt except by a very few under especially favorable conditions.
II	Weak	Felt only by a few persons at rest, especially on upper floors of buildings.
III	Weak	Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibrations similar to the passing of a truck. Duration estimated.
IV	Light	Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.
V	Moderate	Felt by nearly everyone; many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.
VI	Strong	Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight.
VII	Very strong	Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken.
VIII	Severe	Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned.
IX	Violent	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.
X	Extreme	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent.

Source: [USGS](#)

History

There is no identified history of geologic hazards for Emmons County; however, the landslide susceptibility has been identified for the western edge of Emmons County which borders the Missouri River.

Hazardous Materials Release

Frequency	Highly Likely (Nearly 100% probability in the next year)
Severity	Limited (10-25% of jurisdiction affected)
Risk Class	B
Seasonal Pattern	None
Duration	Hours/Days
Speed of Onset	No warning
Location	Countywide (areas variable by sub-type)
Impacts	Agriculture, Evacuation (Localized), Explosion, HAZMAT Release, Increased Fire Potential, Increased Public Safety Runs, Livestock Injury/Death, Loss of Economy, Loss/Overcrowded Medical Facilities, Loss of Potable Water, Mass Casualties, Personal Injury/Death Risk, Property Damage, School Closure

Description

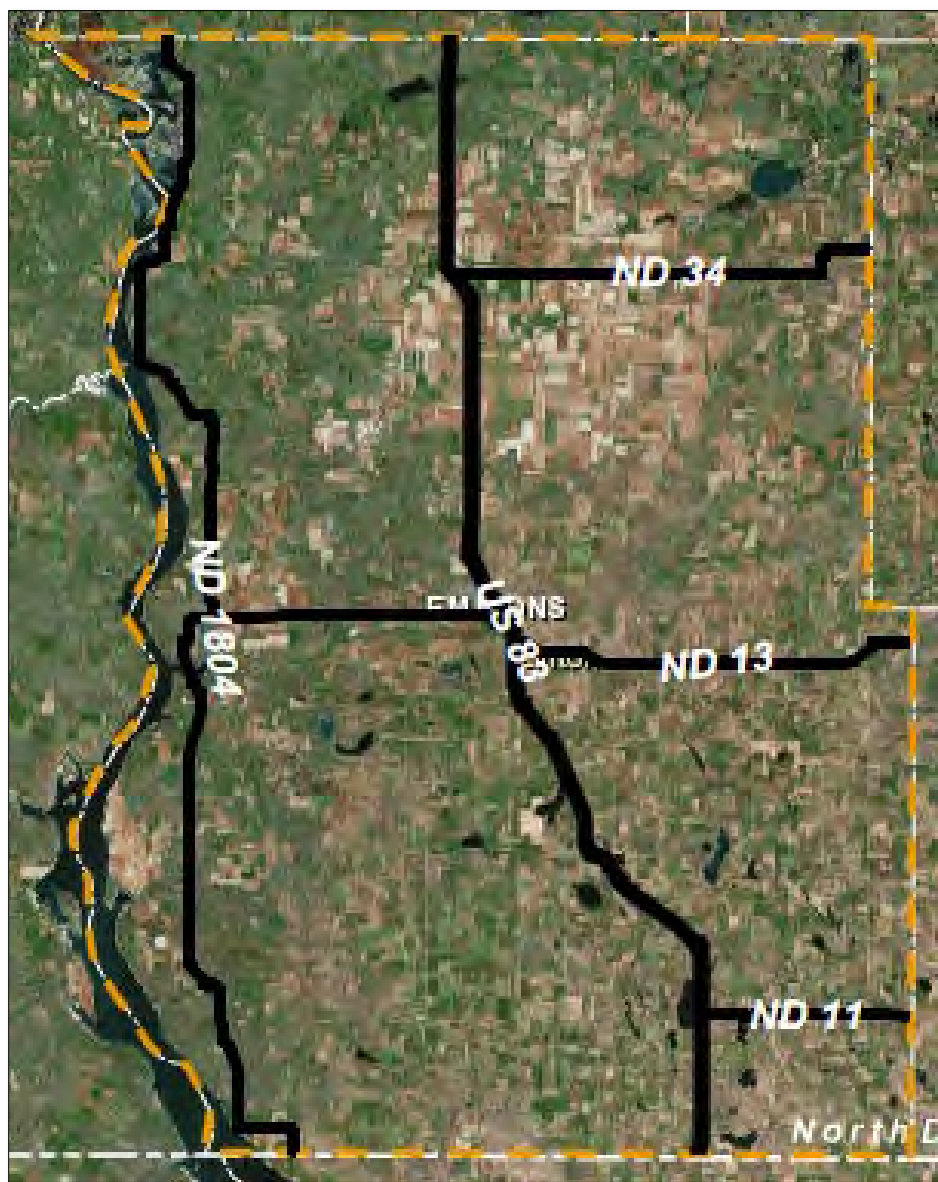
Hazardous materials are any substances in any quantity or form which may pose an unreasonable risk to the safety, health, environment, and property of citizens. The term “hazardous materials” covers a wide array of products, from relatively innocuous ones such as hair spray in aerosol dispensers and wash preservatives such as creosote to highly toxic or poisonous materials such as anhydrous ammonia and phosgene gas. The potential severity of hazards of these materials is varied, but the primary reason for their designation is their risk to public safety. Tier II forms are on file with Emmons County Emergency Management.

The County is exposed to and is at risk from accidents and/or incidents involving hazardous materials. The economy is based upon agriculture, manufacturing, and industry. All of these rely on the production, use, storage, transportation, etc. of hazardous materials. Explosives, flammable liquids, flammable solids, gases, poisons, pesticides, oxidizing substances, miscellaneous dangerous substances, and radioactive materials are either used in or transported through Emmons County.

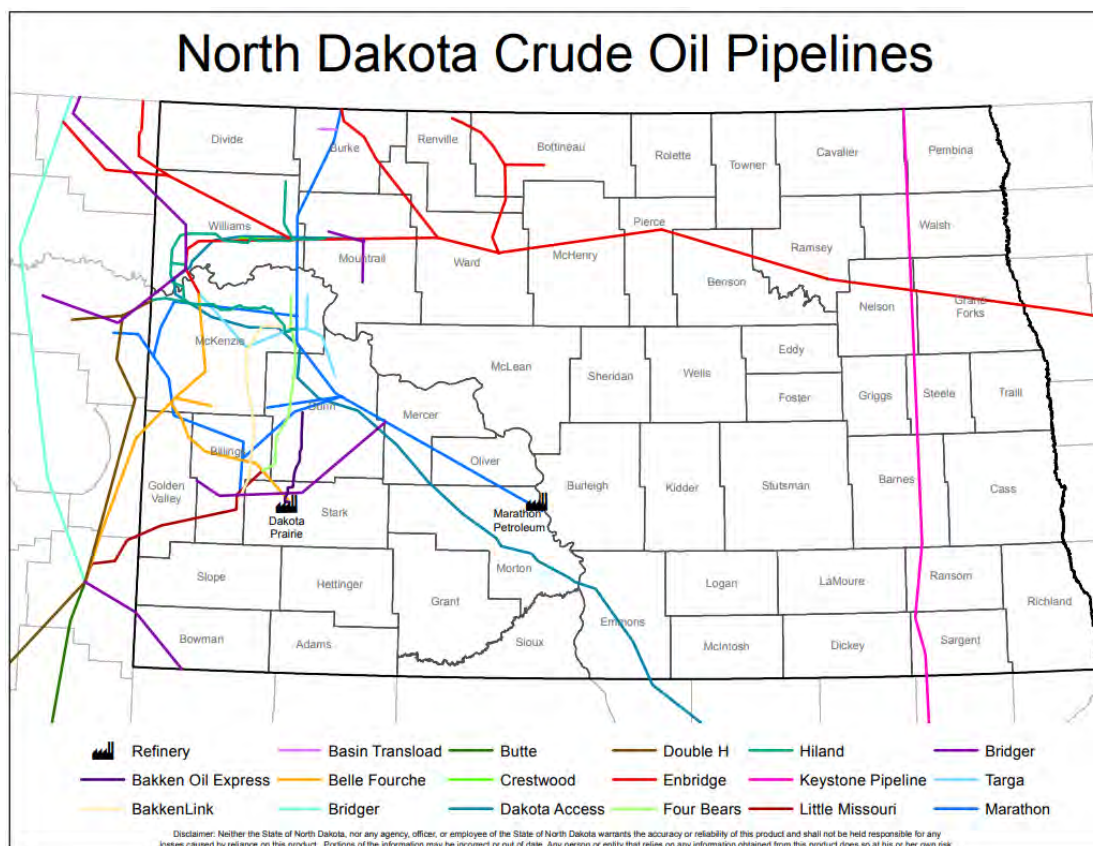
Hazardous materials are transported via two modes into and within Emmons County:

- Highways: US-83 runs north-south through the middle of the county. ND 1804 runs north-south on the western edge of the county. ND 11, 13 34 run east-west through the county.
- Pipeline: Crude Oil
Natural Gas

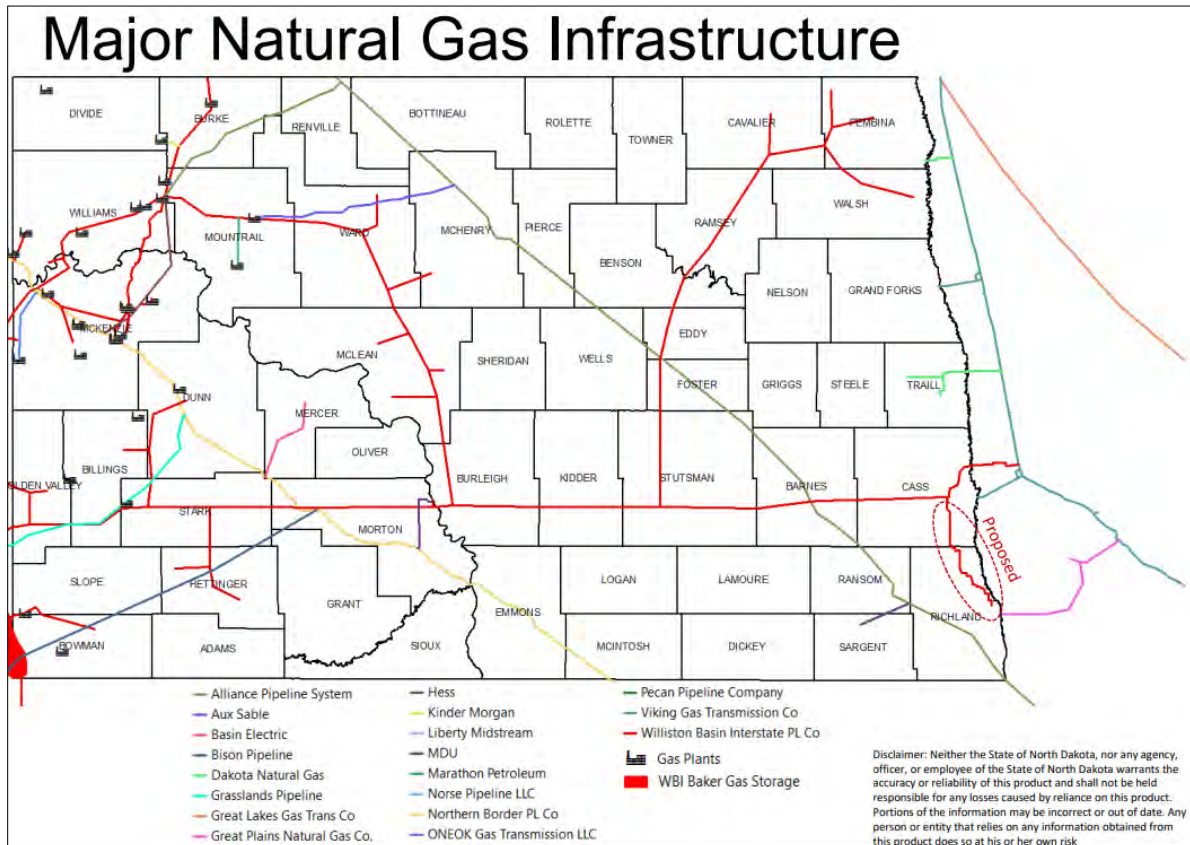
Major Roadways in Emmons County



Source: Emmons County GIS



Source: [ND Pipeline Authority](#)



Source: [ND Pipeline Authority](#)

History

The ND Department of Environmental Quality maintains a Spill Investigation Program for environmental incident reports. Emmons County incident reports 2021 – Present:

Incident ID	Incident Type	Incident Date	Contained	Date Reported	Chemicals	Section	Twp	Range
5180	Environmental Incident	8/10/2025	Yes	8/11/2025	Fuel - 10 gal	23	135 N	74 W
4694	Environmental Incident	2/24/2025	No	2/24/2025	Saltwater - 11500 gal	17	132 N	76 W
3381	Oil/Gas Spill	1/18/2024	Yes	1/18/2024	Diesel - 100 gal	7	132 N	76 W
2308	Environmental Incident	2/15/2023	Yes	2/15/2023	Diesel - 1 gal	7	132 N	76 W
63	Oil/Gas Spill	1/20/2021	Yes	2/2/2024	Crude Oil - 20 gal	26	131 N	76 W

Source: [ND Department of Environmental Quality](#)

March 31, 2021 - Pipe bomb found along ND Highway 1804 near mile marker 45 by employee doing maintenance. Object rendered safe by the Bismarck Bomb Squad and turned over to Bureau of Alcohol, Tobacco, Firearms and Explosives for examination.

Infectious Disease and Pest Infestations
(Including human, animal, and plant diseases)

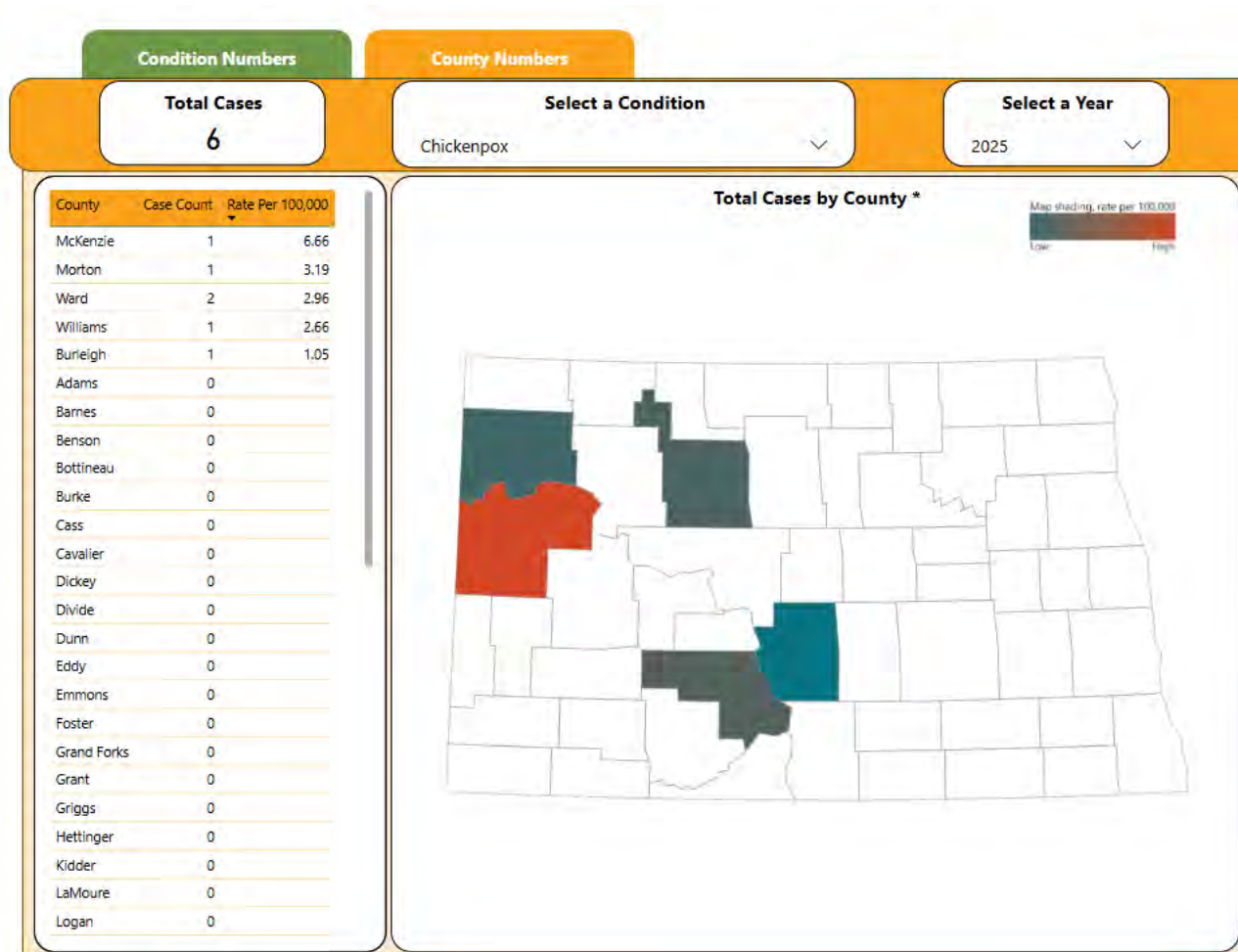
Frequency	Likely (10-100% probability in the next year, or at least 1 chance in next 10 years)
Severity	Critical (25-50% of jurisdiction affected)
Risk Class	B
Seasonal Pattern	None
Duration	Hours/Days
Speed of Onset	No warning
Location	Countywide
Impacts	Agriculture, Business Interruptions, Delayed Emergency Response, Evacuation (Localized), Increased Public Safety Runs, Livestock Injury/Death, Loss of Economy, Loss/Overcrowded Medical Facilities, Loss of Potable Water, Mass Casualties, Personal Injury/Death Risk, School Closure

Description

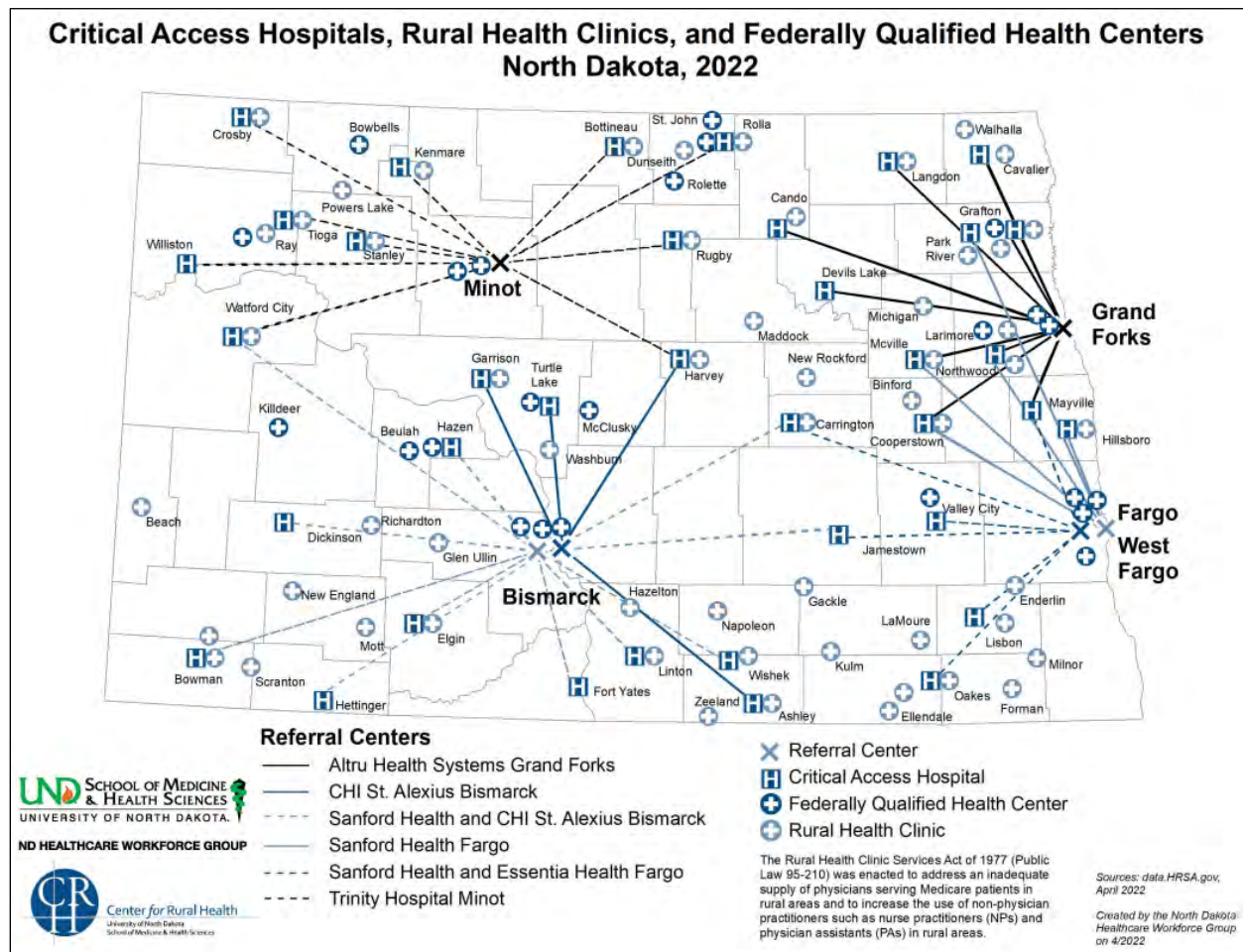
Naturally occurring biological diseases in humans as well as those biological agents found in the environment, or diagnosed in animals, that have the potential for transmission to humans.

The probability of communicable disease in Emmons County presents challenges due to a limited history of outbreaks. Medical advances over the past fifty years have prevented many disease outbreaks, yet the potential remains. Emmons County is primarily a rural setting and somewhat isolated from the rapid spread of global diseases, however, international and domestic travel is so common that, like the Spanish Influenza Pandemic of 1918, North Dakotans would most likely be affected at some point. The urban areas could see rapid spread of such diseases through their populations.

The ND Department of Health and Human Services maintains a listing of “[Diseases, Conditions and Immunization](#)” as well as “[Disease Report Dashboard](#)”.



ND is primarily rural with access to networked medical care:



Source: [Center for Rural Health](https://www.centerforruralhealth.org/), University of North Dakota School of Medicine & Health Sciences

Most Significant Health Needs

Linton Hospital and Emmons County Public Health

2023

Availability of mental health services

Attracting and retaining young families

Depression/anxiety (all ages)

Substance abuse (all ages)

2020-2022

Availability of mental health services

Having enough child daycare services

Adult alcohol use and abuse

Source: <https://ruralhealth.und.edu/projects/community-health-needs-assessment/community-needs>

Emmons County has experienced one pandemic (COVID-19 in 2020) in recent years, and seasonal influenza outbreaks occur annually—both are tracked by the ND Department of Health and Human Services.



North Dakota has had three influenza pandemics in the 20th century: 1918 caused 5,100 deaths in North Dakota, 500,000 deaths in the United States; 1957 resulted in 70,000 deaths in the United States; and 1968 resulted in 34,000 deaths in the United States.

Spanish Influenza Pandemic of 1918

The magnitude of a communicable disease outbreak varies from everyday disease occurrences to widespread infection. During the 1918 Influenza Pandemic, infection rates approached 28% in the United States. (Billings, 1997). Other pandemics produced infections rates as high as 35% of the total population. (World Health Organization, 2007). Such a pandemic affecting North Dakota represents a severe magnitude event. Almost any highly contagious, incapacitating disease that enters the North Dakota population would quickly overwhelm local and state health resources. Similarly, any rapidly spreading bioterrorism event for which little vaccination or containment capability exists is a high magnitude event.

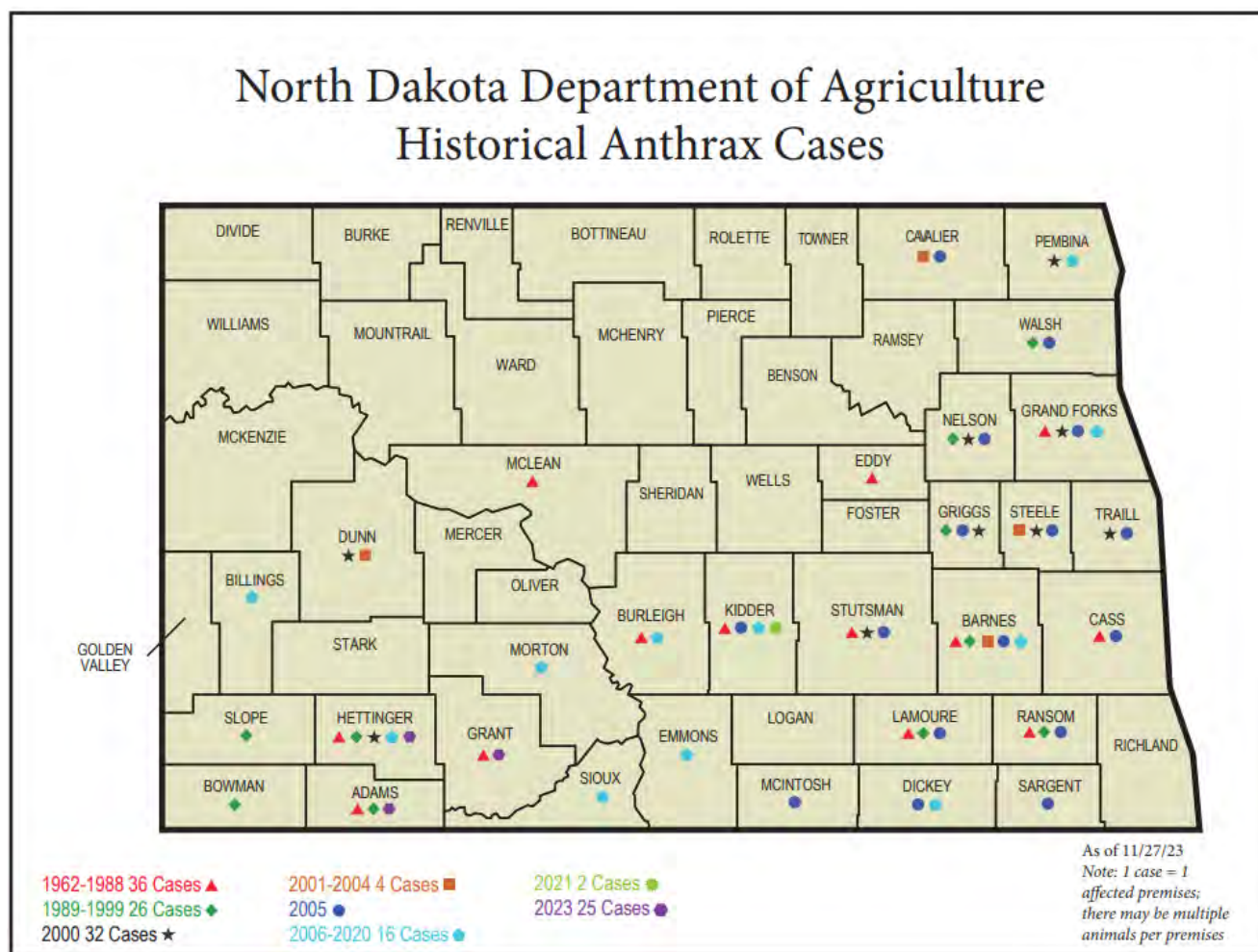
Agricultural Diseases, Noxious Weeds, and Pests

A comprehensive disease list ([reportable disease, related pests diseases or noxious weeds, disease](#)) maintained by the ND Department of Agriculture.

Anthrax

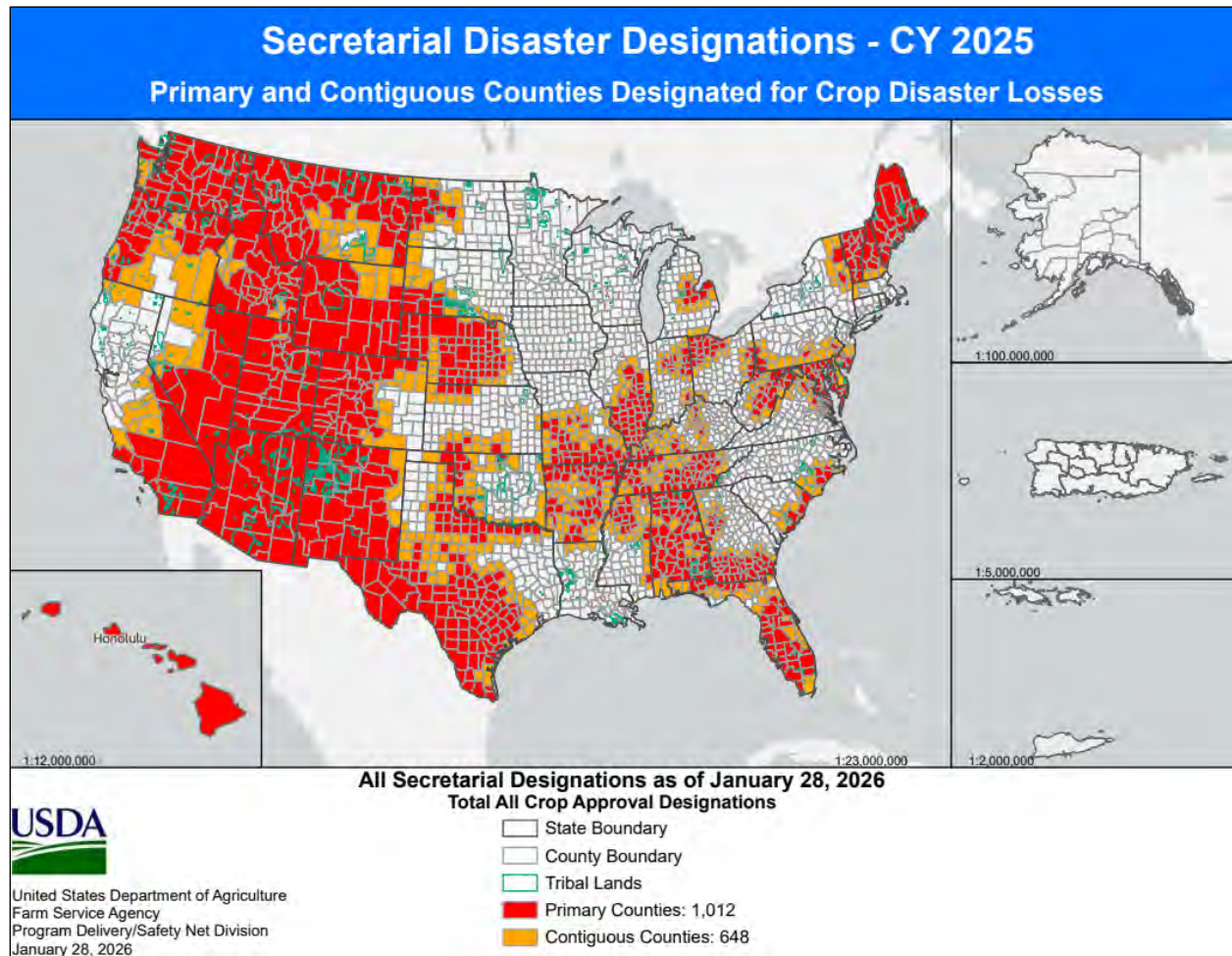
“Anthrax occurs worldwide and is associated with sudden death of cattle and sheep. Anthrax can infect all warm-blooded animals, including humans. The bacteria that cause anthrax (*Bacillus anthracis*) can form spores which are resistant to heat, cold, chemical disinfectants and drying. The anthrax spore may live indefinitely in the soil of a contaminated pasture or yard. Anthrax is more commonly seen in areas after periods of extended dryness or excessive rain. People may develop cutaneous anthrax after exposure to infected animals and animal products including hides, hair, and wool and may develop a more serious form of anthrax after eating contaminated undercooked meat or by inhaling the spores during a necropsy or disposal of opened carcasses. A vaccine is available for cattle and recommended for use annually in areas of historically high infection rates or when environmental factors increase the risk of anthrax in a new area.” (Source: [ND Department of Agriculture](#))

Emmons County has a low case history:



Source: [ND Department of Agriculture](#)

Agriculture-related disasters and disaster designations are quite common. Disaster designation information and fact sheets are provided by the United States Department of Agriculture.



Source: [United States Department of Agriculture Farm Service Agency](https://www.fsa.usda.gov/programs-and-services/disaster-assistance/secretarial-disaster-designations)

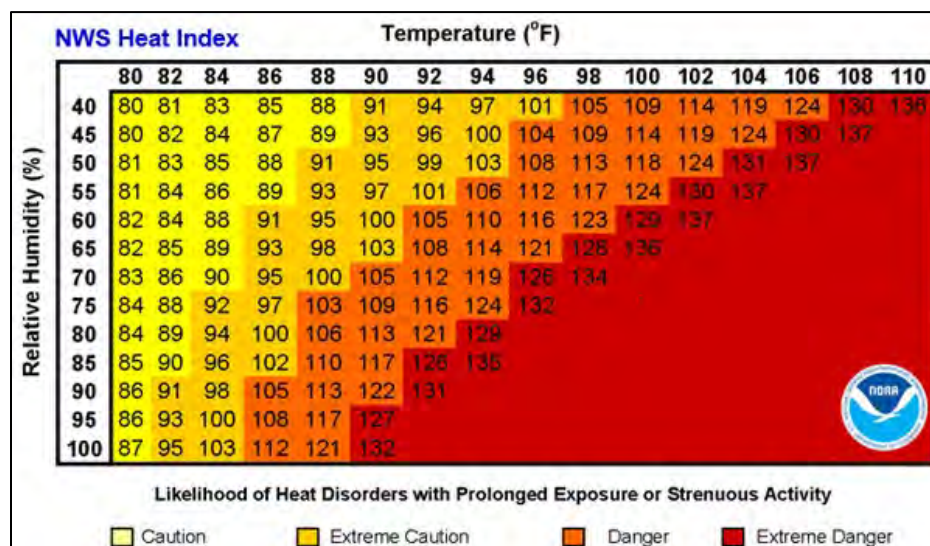
Severe Summer Weather

Frequency	Highly Likely (Nearly 100% probability in the next year)
Severity	Limited (10-25% of jurisdiction affected)
Risk Class	B
Seasonal Pattern	April to November
Duration	2 to 5 hours
Speed of Onset	Little to no warning
Location	Countywide
Impacts	Agriculture, Blocked Roads, Building Collapse, Business Interruptions, Delayed Emergency Response, Downed Power Lines, Downed Trees, Evacuation (Localized), Flooding (Street), Flooding (Structure), HAZMAT Release, Increased Fire Potential, Increased Public Safety Runs, Livestock Injury/Death, Loss of Economy, Loss/Overcrowded Medical Facilities, Loss of Potable Water, Loss of Power, Mass Casualties, Personal Injury/Death Risk, Property Damage, School Closure, Sewer Backup

Description

Severe summer storms are generated by temperature imbalances in the atmosphere, and as warm, moist air rises, the thunderstorm develops. These conditions will produce updrafts and downdrafts which are the reason for gust fronts, heavy rain (flash flooding), lightning, hail, and high winds. Downburst or straight-line winds can be as deadly as tornadoes. If the thunderstorm continues to intensify, a tornado may develop.

Extreme Heat: Period of abnormally hot and dangerous temperatures—often with high humidity—that can cause significant negative impacts on people, animals, and infrastructure. Generally characterized by heat index values reaching 105°F to 110°F or higher, typically lasting for at least two days, often with nighttime temperatures not dropping below 75 F.



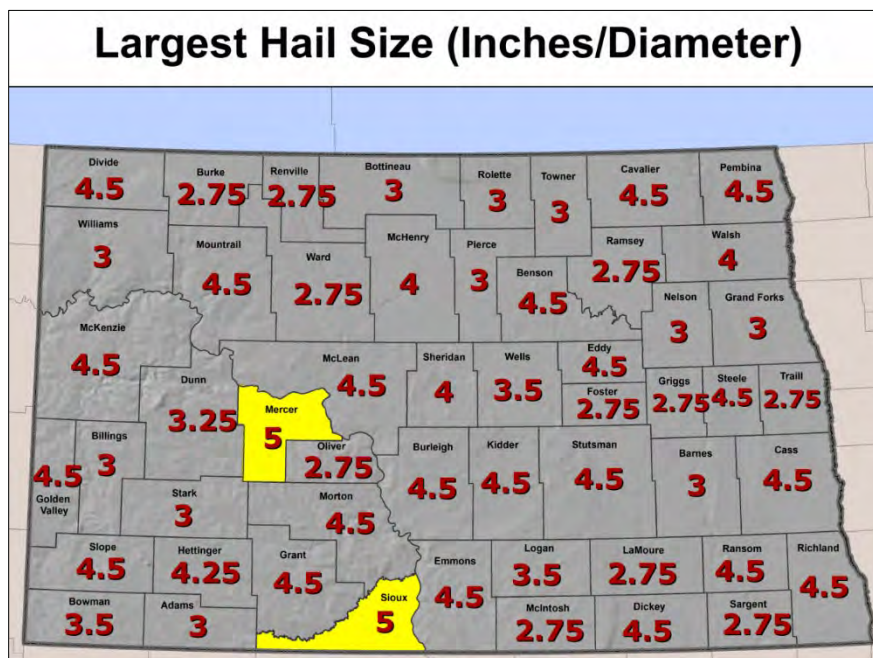
Lightning:

- Causes an average of 55-60 fatalities and 400 injuries each year
- Occurs with all thunderstorms
- Costs more than \$1 billion in insured losses each year

High Winds:

- Pressure gradient, non-thunderstorm winds which occur both in summer-season (May-Oct) and winter-season (Nov-Apr).
- High Winds are sustained winds at GTE 40 mph or occasional winds gusts GTE 58 mph, without thunderstorms present.

Hail: Hail is larger than sleet and forms only in thunderstorms. Hail stones can range from pea size to the size of a grapefruit. Hail has the potential to be life-threatening due to falling from great heights; large hailstones can fall at speeds faster than 100 mph! The major hazard is to crops, aircraft, automobiles, roofs, windows, etc. The destructiveness of hailstorms is not due to the hailstones alone. Hail damage is difficult to determine, as hail, wind, and rain frequently occur at the same time.



Source: [National Weather Service Weather Forecast Office](https://www.weather.gov/bismarck/), Bismarck, ND

Hail Size Description Chart		
Hailstone size	Measurement	
	in.	cm.
bb	< 1/4	< 0.64
pea	1/4	0.64
dime	7/10	1.8
penny	3/4	1.9
nickel	7/8	2.2
quarter	1	2.5
half dollar	1 1/4	3.2
golf ball	1 3/4	4.4
billiard ball	2 1/8	5.4
tennis ball	2 1/2	6.4
baseball	2 3/4	7.0
softball	3.8	9.7
Compact disc / DVD	4 3/4	12.1

Note: Hail size refers to the **diameter** of the hailstone.

Source: [National Weather Service](https://www.weather.gov/mli/hail)

Thunderstorm Winds:

Thunderstorm Winds are all considered downburst wind gusts (3-second gusts GTE 58 mph), and are distinguished by the size of the outflow, as microburst (smaller than 2.5 mi diameter) or macroburst (larger than 2.5 mi diameter). Much larger footprint downburst winds can result from thunderstorm Squall-lines, up to and including Derecho-scale winds. Such large-scale thunderstorm winds are often referred to as straight-line winds, to distinguish them from the smaller-scale tornadoes cyclonic winds.

Straight-line Winds:

- Any thunderstorm wind that is not associated with rotation, and is used mainly to differentiate from tornadic winds
- Can exceed 125 mph
- Can cause destruction equal to a tornado
- Are extremely dangerous to aviation

Downburst:

- A strong, localized downdraft from a thunderstorm that produces damaging "straight-line" winds upon hitting the ground.
- Winds can exceed 150 mph, causing damage similar to tornadoes.
- Classified as microbursts (smaller than 2.5 miles) or macrobursts (larger than 2.5 miles).

Beaufort Wind Chart – Estimating Winds Speeds				
Beaufort Number	MPH		Terminology	Description
	Range	Average		
0	0	0	Calm	Calm. Smoke rises vertically.
1	1-3	2	Light air	Wind motion visible in smoke.
2	4-7	6	Light breeze	Wind felt on exposed skin. Leaves rustle.
3	8-12	11	Gentle breeze	Leaves and smaller twigs in constant motion.
4	13-18	15	Moderate breeze	Dust and loose paper is raised. Small branches begin to move.
5	19-24	22	Fresh breeze	Smaller trees sway.
6	25-31	27	Strong breeze	Large branches in motion. Whistling heard in overhead wires. Umbrella use becomes difficult.
7	32-38	35	Near gale	Whole trees in motion. Some difficulty when walking into the wind.
8	39-46	42	Gale	Twigs broken from trees. Cars veer on road.
9	47-54	50	Severe gale	Light structure damage.
10	55-63	60	Storm	Trees uprooted. Considerable structural damage.
11	64-73	70	Violent storm	Widespread structural damage.
12	74-95	90	Hurricane	Considerable and widespread damage to structures.

Source: [National Weather Service](https://www.noaa.gov/jetstream/1-3/beaufort/)

Thunderstorm Damage Threat (tag category)	Wind	Hail diameter
Base (no tag; default)	58 mph (60 mph will appear in the warning)	1.00 inch (U.S. quarter)
Considerable	70 mph	1.75 inch (golfball)
Destructive	80 mph	2.75 inch (baseball)

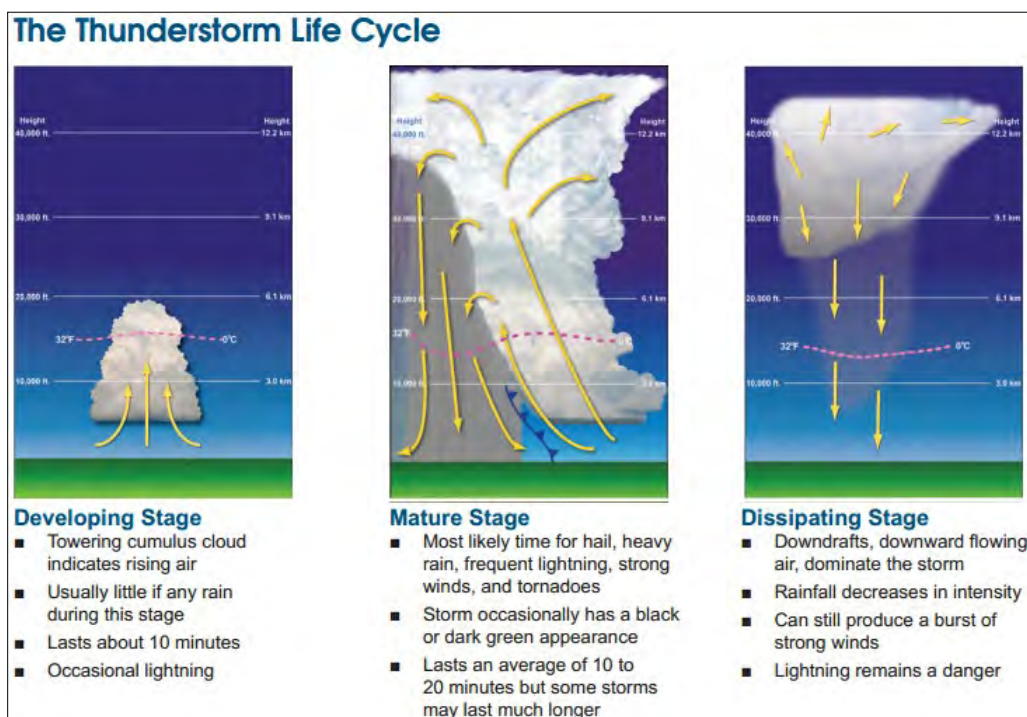
Source: [National Weather Service](https://www.noaa.gov/jetstream/1-3/beaufort/)

Thunderstorm Probability and Related Lightning Activity Level (LAL)

Thunderstorm Probability	Thunderstorm Category	Rain Intensity	LAL	Lightning Characteristics (CG: Cloud-to-Ground)
None	None	Variable	1	None
10%	Isolated	Light Rain occasionally reaching the ground	2	1 to 5 CG lightning strikes in 5-minute period
20%	Widely Scattered	Light to moderate rain reaching the ground	3	6 to 10 CG lightning strikes in a 5-minute period
30-50%	Scattered	Moderate rain is common	4	Frequent, 11 to 15 CG strikes in 5-minute period
60-70%	Numerous	Moderate to heavy rainfall	5	Frequent and intense, 15+ CG strikes in 5-minute period
20% (Dry)	Dry Lightning	Little to no rain	6	Like LAL 3 but without rain, w/higher wildland fire threat

Source: Compiled from National Weather Service Glossary, 2023

Straight-line winds are any winds not associated with the rotation of a tornado and are responsible for most thunderstorm damage. The winds can exceed 125 mph! A downburst is a small area of rapidly descending air beneath a thunderstorm and can cause damage equivalent to a strong tornado and can be extremely hazardous to aviation. The number one cause of wind damage in North Dakota is from downburst winds, not tornadoes.



Source: [Thunderstorms, Tornadoes, Lightning](#), A Preparedness Guide, US Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service

Tornadoes:

- A rotating column of air, in contact with the ground and pendant (attached) to the base of a thunderstorm.
- Cause an average of 60-65 fatalities and 1,500 injuries each year
- Can produce wind speeds in excess of 200 mph
- Can be 1 mile wide and stay on the ground over 50 miles

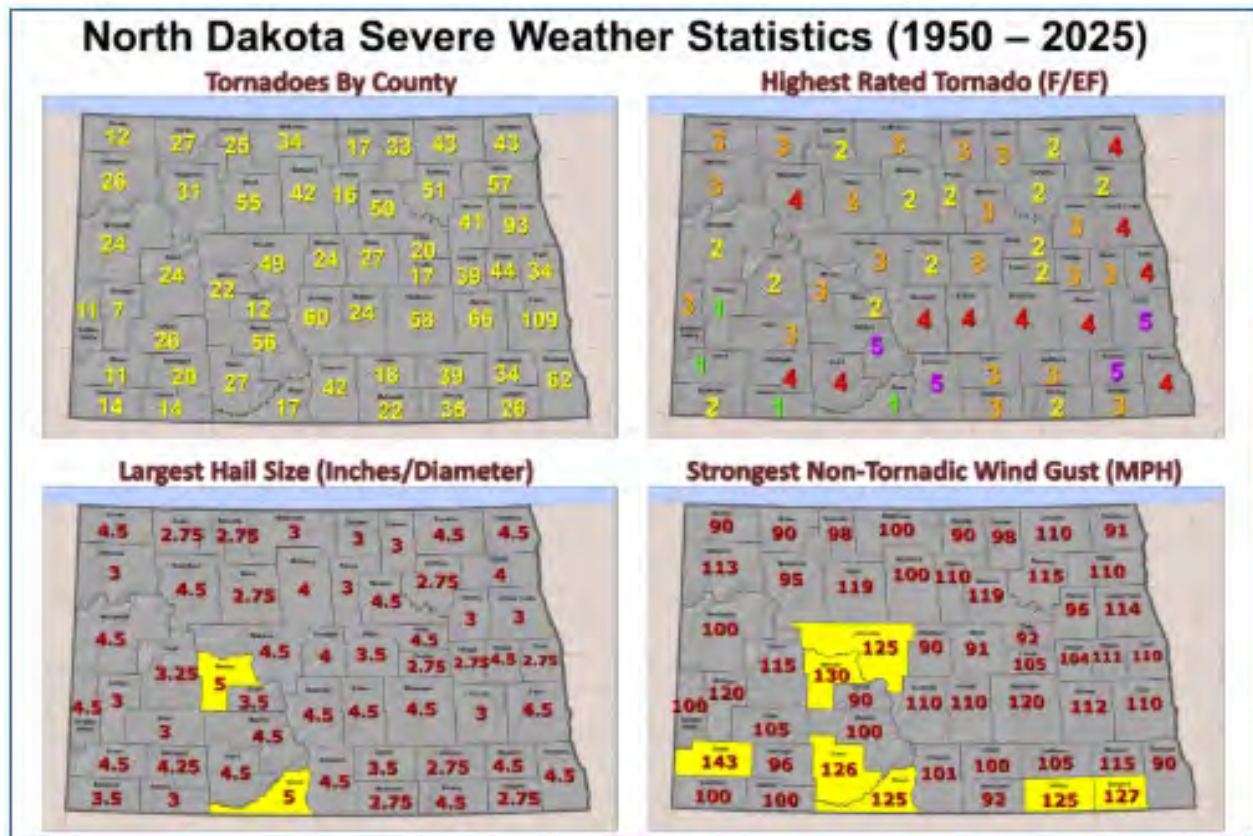
A thunderstorm affects a relatively small area when compared to a winter storm. The typical thunderstorm is 15 miles in diameter and lasts an average of 30 minutes. Despite their small size, all thunderstorms are dangerous! Every thunderstorm needs:

- Moisture—to form clouds and rain
- Unstable air—warm air that can rise rapidly
- Lift—caused by cold or warm fronts, sea breezes, mountains, or the sun's heat.

The Enhanced Fujita Scale (EF Scale)

EF SCALE	
EF Rating	3 Second Gust (mph)
0	65-85
1	86-110
2	111-135
3	136-165
4	166-200
5	Over 200

Source: [National Weather Service](#)



Source: [National Weather Service Weather Forecast Office](https://www.weather.gov/bis/), Bismarck, ND

History

Extreme Heat

<u>Location</u>	<u>Date</u>	<u>Time</u>	<u>T.Z.</u>	<u>Type</u>	<u>Mag</u>	<u>Dth</u>	<u>Inj</u>	<u>PrD</u>	<u>CrD</u>
EMMONS (ZONE)	07/16/2011	11:00	CST-6	Excessive Heat		0	0	0.00K	0.00K
Totals:						0	0	0.00K	0.00K

Source: [National Oceanic and Atmospheric Administration National Climatic Data Center](#) (01/1950 to 11/2025)

Lightning

No history

<u>Location</u>	<u>County/Zone</u>	<u>St.</u>	<u>Date</u>	<u>Time</u>	<u>T.Z.</u>	<u>Type</u>	<u>Mag</u>	<u>Dth</u>	<u>Inj</u>	<u>PrD</u>	<u>CrD</u>
Totals:								0	0	0.00K	0.00K

Source: [National Oceanic and Atmospheric Administration National Climatic Data Center](#) (01/1950 to 11/2025)

High Wind

(ten-year history, May-Oct, plus previous events including death, injury, or damage)

<u>Location</u>	<u>Date</u>	<u>Time</u>	<u>T.Z.</u>	<u>Type</u>	<u>Mag</u>	<u>Dth</u>	<u>Inj</u>	<u>PrD</u>	<u>CrD</u>
EMMONS (ZONE)	10/17/2023	17:00	CST-6	High Wind	51 kts. MG	0	0	0.00K	0.00K
EMMONS (ZONE)	10/13/2022	10:00	CST-6	High Wind	52 kts. EG	0	0	0.00K	0.00K
EMMONS (ZONE)	05/13/2022	05:00	CST-6	High Wind	52 kts. EG	0	0	0.00K	0.00K
EMMONS (ZONE)	09/02/2020	18:00	CST-6	High Wind	52 kts. EG	0	0	0.00K	0.00K
EMMONS (ZONE)	08/22/2015	18:00	CST-6	High Wind	61 kts. EG	0	0	10.00K	0.00K
EMMONS (ZONE)	07/13/2009	23:55	CST-6	High Wind	52 kts. EG	0	0	5.00K	0.00K
Totals:						0	0	15.00K	0.00K

Source: [National Oceanic and Atmospheric Administration National Climatic Data Center](#) (01/1950 to 11/2025)

Thunderstorm Winds (Damaging Downburst)

(ten-year history, May-Oct, plus previous events including death, injury, or damage)

<u>Location</u>	<u>Date</u>	<u>Time</u>	<u>T.Z.</u>	<u>Type</u>	<u>Mag</u>	<u>Dth</u>	<u>Inj</u>	<u>PrD</u>	<u>CrD</u>
HAZELTON	08/08/2025	00:40	CST-6	Thunderstorm Wind	52 kts. MG	0	0	0.00K	0.00K
TEMVIK	06/20/2025	20:40	CST-6	Thunderstorm Wind	83 kts. MG	0	0	0.00K	0.00K
HAZELTON	06/20/2025	20:40	CST-6	Thunderstorm Wind	66 kts. MG	0	0	0.00K	0.00K
HAZELTON	06/20/2025	20:36	CST-6	Thunderstorm Wind	70 kts. EG	0	0	50.00K	0.00K
TEMVIK	06/20/2025	20:35	CST-6	Thunderstorm Wind	88 kts. MG	0	0	0.00K	0.00K
LINTON ARPT	06/20/2025	20:35	CST-6	Thunderstorm Wind	56 kts. MG	0	0	0.00K	0.00K
HAZELTON	06/20/2025	20:20	CST-6	Thunderstorm Wind	58 kts. MG	0	0	0.00K	0.00K
KINTYRE	07/29/2024	19:58	CST-6	Thunderstorm Wind	51 kts. MG	0	0	0.00K	0.00K
TEMVIK	07/29/2024	19:49	CST-6	Thunderstorm Wind	56 kts. MG	0	0	0.00K	0.00K
WESTFIELD	05/19/2024	19:12	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
HAZELTON	07/09/2022	10:40	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	25.00K
LINTON	06/29/2022	21:10	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
HAGUE	06/19/2022	21:35	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
HAGUE	06/19/2022	19:50	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
WESTFIELD	05/12/2022	03:55	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
TEMVIK	07/23/2021	19:54	CST-6	Thunderstorm Wind	50 kts. MG	0	0	0.00K	0.00K
HAZELTON ARPT	08/14/2020	05:20	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
TEMVIK	07/25/2020	19:30	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
STRASBURG	07/25/2020	19:18	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
TEMVIK	07/25/2020	19:02	CST-6	Thunderstorm Wind	57 kts. MG	0	0	0.00K	0.00K
STRASBURG	06/28/2019	08:20	CST-6	Thunderstorm Wind	56 kts. EG	0	0	10.00K	0.00K
TEMVIK	07/08/2018	00:35	CST-6	Thunderstorm Wind	50 kts. MG	0	0	0.00K	0.00K
HAZELTON	07/08/2018	00:31	CST-6	Thunderstorm Wind	78 kts. EG	0	0	200.00K	0.00K
WESTFIELD	07/03/2018	04:50	CST-6	Thunderstorm Wind	70 kts. EG	0	0	90.00K	0.00K
KINTYRE	07/03/2018	04:30	CST-6	Thunderstorm Wind	74 kts. EG	0	0	300.00K	0.00K
TEMVIK	06/14/2018	20:31	CST-6	Thunderstorm Wind	62 kts. MG	0	0	0.00K	0.00K
BRADDOCK	07/21/2017	22:36	CST-6	Thunderstorm Wind	61 kts. EG	0	0	8.00K	0.00K
HAZELTON	07/21/2017	22:22	CST-6	Thunderstorm Wind	52 kts. EG	0	0	5.00K	0.00K
STRASBURG	07/18/2017	02:45	CST-6	Thunderstorm Wind	56 kts. EG	0	0	15.00K	0.00K
STRASBURG	07/05/2017	18:05	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
STRASBURG	08/09/2016	23:30	CST-6	Thunderstorm Wind	70 kts. EG	0	0	200.00K	50.00K
TEMVIK	08/09/2016	23:26	CST-6	Thunderstorm Wind	70 kts. MG	0	0	0.00K	0.00K
STRASBURG	08/09/2016	23:20	CST-6	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
LINTON	08/09/2016	23:18	CST-6	Thunderstorm Wind	65 kts. EG	0	0	100.00K	50.00K
HAZELTON	08/09/2016	23:15	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
TEMVIK	07/11/2016	01:29	CST-6	Thunderstorm Wind	53 kts. MG	0	0	0.00K	0.00K
HAZELTON ARPT	06/22/2016	00:25	CST-6	Thunderstorm Wind	83 kts. EG	0	0	100.00K	0.00K

HAZELTON	06/19/2015	20:35	CST-6	Thunderstorm Wind	52 kts. EG	0	0	5.00K	0.00K
LINTON	08/20/2014	20:45	CST-6	Thunderstorm Wind	52 kts. EG	0	0	2.00K	0.00K
HAZELTON	07/06/2014	22:14	CST-6	Thunderstorm Wind	65 kts. EG	0	0	45.00K	0.00K
LINTON	06/07/2012	19:10	CST-6	Thunderstorm Wind	70 kts. EG	0	0	35.00K	0.00K
LINTON	07/22/2011	22:50	CST-6	Thunderstorm Wind	61 kts. EG	0	0	35.00K	0.00K
HAZELTON ARPT	07/10/2011	13:24	CST-6	Thunderstorm Wind	61 kts. EG	0	0	25.00K	0.00K
HAZELTON	07/10/2011	13:15	CST-6	Thunderstorm Wind	83 kts. MG	0	0	150.00K	0.00K
KINTYRE	06/02/2011	23:53	CST-6	Thunderstorm Wind	78 kts. EG	0	0	200.00K	0.00K
KINTYRE	06/02/2011	23:52	CST-6	Thunderstorm Wind	78 kts. EG	0	0	125.00K	0.00K
KINTYRE	06/02/2011	23:50	CST-6	Thunderstorm Wind	87 kts. EG	0	0	350.00K	0.00K
LINTON	06/02/2011	23:37	CST-6	Thunderstorm Wind	83 kts. EG	0	0	35.00K	0.00K
LINTON MUNI ARPT	06/02/2011	23:35	CST-6	Thunderstorm Wind	82 kts. MG	0	0	100.00K	0.00K
LINTON	08/12/2010	22:50	CST-6	Thunderstorm Wind	70 kts. EG	0	0	15.00K	0.00K
WESTFIELD	06/26/2010	18:24	CST-6	Thunderstorm Wind	65 kts. EG	0	0	6.00K	0.00K
HAZELTON	06/22/2010	01:45	CST-6	Thunderstorm Wind	70 kts. EG	0	0	20.00K	0.00K
STRASBURG	05/24/2010	19:51	CST-6	Thunderstorm Wind	56 kts. EG	0	0	20.00K	0.00K
LINTON	05/24/2010	19:40	CST-6	Thunderstorm Wind	70 kts. EG	0	0	90.00K	0.00K
LINTON	05/22/2010	03:00	CST-6	Thunderstorm Wind	70 kts. EG	0	0	50.00K	0.00K
BRADDOCK	06/11/2008	02:35	CST-6	Thunderstorm Wind	61 kts. EG	0	0	35.00K	0.00K
LINTON	08/04/2006	18:00	CST	Thunderstorm Wind	78 kts. ES	0	0	200.00K	0.00K
LINTON	08/04/2006	17:47	CST	Thunderstorm Wind	61 kts. EG	0	0	5.00K	0.00K
STRASBURG	07/06/1998	16:40	CST	Thunderstorm Wind	87 kts.	0	0	200.00K	80.00K
LINTON	10/11/1997	20:10	CST	Thunderstorm Wind	85 kts.	0	0	150.00K	0.00K
CANNONBALL	05/16/1996	22:50	CST	Thunderstorm Wind	65 kts.	0	0	50.00K	0.00K
Linton	08/28/1993	16:15	CST	Thunderstorm Wind	60 kts.	0	0	50.00K	50.00K
Totals:						0	0	3.076M	255.00K

Source: [National Oceanic and Atmospheric Administration National Climatic Data Center](#) (01/1950 to 11/2025)

Tornado (F1/EF1 and stronger)

(ten-year history plus previous events including death, injury, or damage)

<u>Location</u>	<u>Date</u>	<u>Time</u>	<u>T.Z.</u>	<u>Type</u>	<u>Mag</u>	<u>Dth</u>	<u>Inj</u>	<u>PrD</u>	<u>CrD</u>
HAZELTON	09/14/2025	13:54	CST-6	Tornado	EFU	0	0	0.00K	0.00K
LINTON	09/14/2025	13:08	CST-6	Tornado	EF2	0	0	400.00K	50.00K
WESTFIELD	09/14/2025	12:26	CST-6	Tornado	EFU	0	0	0.00K	0.00K
TEMVIK	06/27/2025	21:18	CST-6	Tornado	EF2	0	0	200.00K	0.00K
TEMVIK	06/27/2025	21:12	CST-6	Tornado	EF1	0	0	300.00K	0.00K
LINTON	07/16/2011	20:47	CST-6	Tornado	EF0	0	0	30.00K	50.00K
HAZELTON	06/09/2001	18:10	CST	Tornado	F1	0	1	0.00K	0.00K
LINTON	08/03/1996	22:30	CST	Tornado	F0	0	0	750.00K	0.00K
STRASBURG	07/10/1996	21:40	CST	Tornado	F0	0	0	25.00K	0.00K
EMMONS CO.	08/01/1988	14:35	CST	Tornado	F1	0	0	25.00K	0.00K
EMMONS CO.	08/01/1988	14:07	CST	Tornado	F1	0	0	25.00K	0.00K
EMMONS CO.	07/02/1983	15:20	CST	Tornado	F0	0	0	0.03K	0.00K
EMMONS CO.	04/28/1981	18:30	CST	Tornado	F0	0	0	0.25K	0.00K
EMMONS CO.	07/12/1976	23:45	CST	Tornado	F0	0	2	0.00K	0.00K
EMMONS CO.	06/11/1976	23:10	CST	Tornado	F0	0	0	25.00K	0.00K
EMMONS CO.	06/11/1976	21:30	CST	Tornado	F1	0	0	25.00K	0.00K
EMMONS CO.	08/19/1974	18:15	CST	Tornado	F2	0	0	25.00K	0.00K
EMMONS CO.	05/26/1974	22:30	CST	Tornado	F2	0	0	25.00K	0.00K
EMMONS CO.	08/17/1967	15:00	CST	Tornado		0	0	25.00K	0.00K
EMMONS CO.	05/05/1964	21:05	CST	Tornado	F2	0	0	250.00K	0.00K
EMMONS CO.	07/24/1960	15:00	CST	Tornado		0	0	2.50K	0.00K
EMMONS CO.	07/01/1955	17:10	CST	Tornado	F3	0	0	25.00K	0.00K
EMMONS CO.	05/29/1953	17:30	CST	Tornado	F5	0	0	250.00K	0.00K
Totals:						0	3	2.408M	100.00K

Source: [National Oceanic and Atmospheric Administration National Climatic Data Center](#) (01/1950 to 11/2025)

Hail

(ten-year history plus previous events including death, injury, or damage)

<u>Location</u>	<u>Date</u>	<u>Time</u>	<u>T.Z.</u>	<u>Type</u>	<u>Mag</u>	<u>Dth</u>	<u>Ini</u>	<u>PrD</u>	<u>CrD</u>
HAZELTON	07/26/2025	21:38	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
TEMVIK	06/27/2025	22:46	CST-6	Hail	1.25 in.	0	0	0.00K	0.00K
LINTON	06/18/2025	17:25	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
TEMVIK	08/28/2024	21:56	CST-6	Hail	1.25 in.	0	0	0.00K	0.00K
LINTON	08/28/2024	21:38	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
STRASBURG	05/23/2024	17:08	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
LINTON	05/23/2024	17:05	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
LINTON	05/23/2024	16:27	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
STRASBURG	05/23/2024	16:23	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
HAGUE	05/02/2024	17:00	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
STRASBURG	07/21/2022	17:55	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
LINTON	07/21/2022	17:45	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
HAZELTON	07/10/2022	04:55	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
HAZELTON	07/10/2022	04:39	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
HAZELTON	07/10/2022	04:30	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
BRADDOCK	07/09/2022	10:49	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
HAZELTON	07/09/2022	10:23	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
HAZELTON ARPT	06/08/2021	10:45	CST-6	Hail	1.50 in.	0	0	0.00K	0.00K
KINTYRE	08/14/2020	04:05	CST-6	Hail	1.50 in.	0	0	0.00K	0.00K
STRASBURG	06/02/2020	06:00	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
LINTON ARPT	06/02/2020	05:25	CST-6	Hail	2.00 in.	0	0	0.00K	0.00K
LINTON	09/20/2019	15:36	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
WESTFIELD	08/06/2019	16:50	CST-6	Hail	2.00 in.	0	0	50.00K	100.00K
WESTFIELD	08/06/2019	16:46	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
STRASBURG	08/06/2019	16:45	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
KINTYRE	05/15/2019	18:10	CST-6	Hail	1.25 in.	0	0	0.00K	0.00K
HAZELTON	05/15/2019	17:40	CST-6	Hail	1.50 in.	0	0	0.00K	0.00K
HAZELTON	05/15/2019	17:34	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
HAZELTON	05/15/2019	17:25	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
HAZELTON	05/15/2019	17:15	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
HAZELTON	06/14/2018	20:44	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
HAGUE	07/21/2017	18:30	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
STRASBURG	08/01/2016	15:27	CST-6	Hail	1.25 in.	0	0	0.00K	0.00K
STRASBURG	08/01/2016	15:03	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K

HAGUE	07/22/2016	11:30	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
LINTON ARPT	07/22/2016	10:57	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
LINTON	07/11/2016	03:16	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
KINTYRE	07/11/2016	01:55	CST-6	Hail	1.75 in.	0	0	0.00K	150.00K
LINTON	07/11/2016	00:12	CST-6	Hail	2.00 in.	0	0	50.00K	20.00K
LINTON	06/20/2013	17:55	CST-6	Hail	2.75 in.	0	0	250.00K	50.00K
LINTON	06/20/2013	17:35	CST-6	Hail	1.75 in.	0	0	75.00K	0.00K
HAZELTON	07/14/2010	01:30	CST-6	Hail	1.75 in.	0	0	20.00K	50.00K
LINTON	07/14/2010	00:15	CST-6	Hail	2.50 in.	0	0	500.00K	650.00K
HAGUE	06/26/2010	19:00	CST-6	Hail	1.00 in.	0	0	0.00K	75.00K
KINTYRE	06/24/2010	22:01	CST-6	Hail	1.75 in.	0	0	0.00K	100.00K
LINTON	07/27/2008	02:20	CST-6	Hail	3.00 in.	0	0	500.00K	25.00K
DANA	07/19/2008	20:30	CST-6	Hail	2.00 in.	0	0	65.00K	90.00K
HAZELTON	06/30/2006	17:45	CST	Hail	1.75 in.	0	0	1.00K	0.00K
LINTON	06/21/1999	06:20	CST	Hail	1.75 in.	0	0	130.00K	0.00K
HAZELTON	07/06/1998	20:30	CST	Hail	0.75 in.	0	0	0.00K	800.00K
HAGUE	07/06/1998	17:00	CST	Hail	1.00 in.	0	0	50.00K	100.00K
HAZELTON	05/31/1996	15:45	CST	Hail	0.75 in.	0	0	1.00K	0.00K
HAZELTON	05/31/1996	15:00	CST	Hail	1.25 in.	0	0	12.00K	5.00K
Totals:						0	0	1.704M	2.215M

Source: [National Oceanic and Atmospheric Administration National Climatic Data Center](#) (01/1950 to 11/2025)

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Severe Winter Weather
(Including blizzards, extreme cold, heavy snow, ice storms)

Frequency	Highly Likely (Nearly 100% probability in the next year)
Severity	Critical (25-50% of jurisdiction affected)
Risk Class	A
Seasonal Pattern	November to April
Duration	2 to 5 days
Speed of Onset	12 to 24 hours warning
Location	Countywide
Impacts	Agriculture, Blocked Roads, Building Collapse, Business Interruptions, Delayed Emergency Response, Downed Power Lines, Downed Trees, Evacuation (Localized), HAZMAT Release, Increased Fire Potential, Increased Public Safety Runs, Livestock Injury/Death, Loss of Economy, Loss of Power, Personal Injury/Death Risk, Property Damage, School Closure, Wind Chill

Description

Winter storms occur in many forms and vary significantly in size, strength, intensity, duration, and impact. The winter season can begin as early as September and last into May. Generally, a period from mid-November through early April provides the bulk of winter storms.

Heavy snow can paralyze a community by stranding travelers, stopping the flow commodities, and disrupting emergency services. The weight of snow can cause roofs to collapse and knock down trees and utility lines. Homes and farms may be isolated for days, and unprotected livestock may die. The cost of snow removal, damage repair, and loss of business can have economic impacts on communities.

Blizzard: A storm which contains large amounts of snow OR blowing snow, with winds in excess of 35 mph and visibilities of less than 1/4 mile for an extended period of time (at least 3 hours) as defined by the [National Weather Service](#).

Extreme Cold: Dangerously low temperatures and wind chills capable of causing frostbite and hypothermia (ND Criteria for Extreme Cold is “An apparent temperature of -40F, based on the combination of actual air temp and/or wind chill”).

Heavy Snow: Snowfall of 6” or more in 12 hours or 8” or more in 24 hours.

Ice Storm: A winter event with significant accumulations of ice (typically ¼” or more).

Winter Storm: A hazardous, life-threatening event featuring significant snow, sleet, or freezing rain, often accompanied by strong winds and low temperatures.

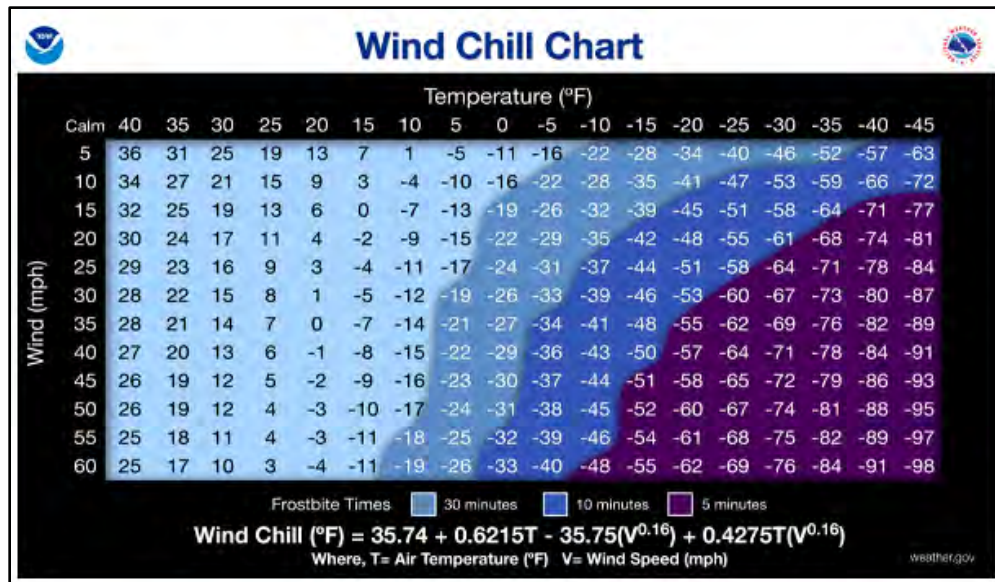
Snow Squall: A brief, intense burst of heavy snow and strong, gusty winds that causes quick, significant reductions in visibility (whiteout conditions), rapidly falling temperatures, and sudden flash freezes on roads.

High Wind: Sustained winds reach or exceed 40 mph for at least one hour, or when instantaneous gusts reach 58 mph or higher for any duration.

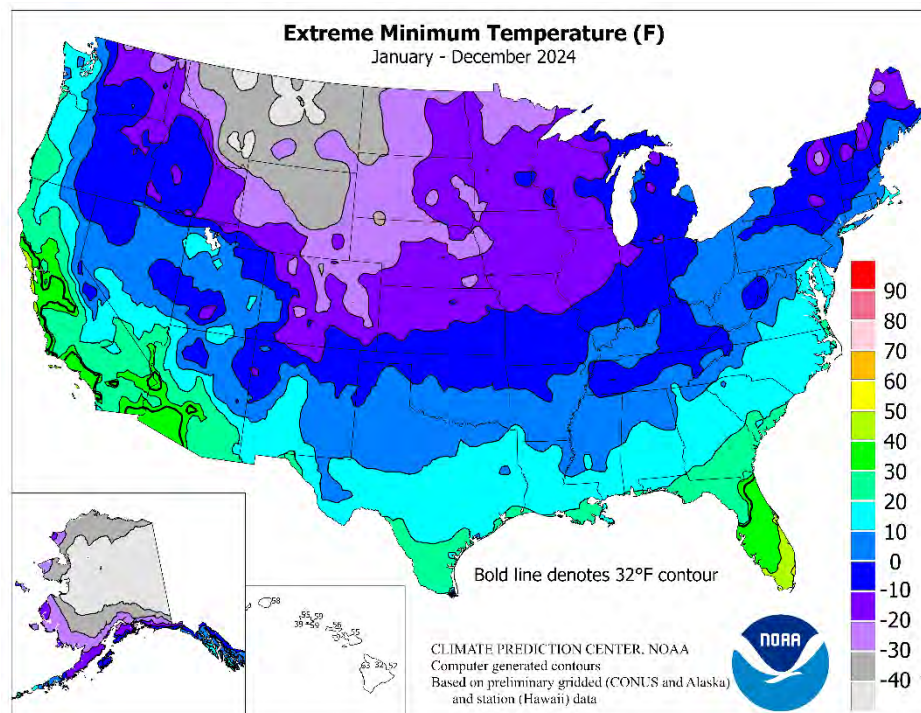
Beaufort Wind Chart – Estimating Winds Speeds				
Beaufort Number	MPH		Terminology	Description
	Range	Average		
0	0	0	Calm	Calm. Smoke rises vertically.
1	1-3	2	Light air	Wind motion visible in smoke.
2	4-7	6	Light breeze	Wind felt on exposed skin. Leaves rustle.
3	8-12	11	Gentle breeze	Leaves and smaller twigs in constant motion.
4	13-18	15	Moderate breeze	Dust and loose paper is raised. Small branches begin to move.
5	19-24	22	Fresh breeze	Smaller trees sway.
6	25-31	27	Strong breeze	Large branches in motion. Whistling heard in overhead wires. Umbrella use becomes difficult.
7	32-38	35	Near gale	Whole trees in motion. Some difficulty when walking into the wind.
8	39-46	42	Gale	Twigs broken from trees. Cars veer on road.
9	47-54	50	Severe gale	Light structure damage.
10	55-63	60	Storm	Trees uprooted. Considerable structural damage.
11	64-73	70	Violent storm	Widespread structural damage.
12	74-95	90	Hurricane	Considerable and widespread damage to structures.

Source: [National Weather Service](https://www.weather.gov/mfr/Beaufort)

Wind Chill: The wind chill temperature is how cold people and animals feel when outside. Wind chill is based on the rate of heat loss from exposed skin caused by wind and cold. As the wind increases, it draws heat from the body, driving down skin temperature and eventually the internal body temperature. Therefore, the wind makes it FEEL much colder. If the temperature is 0°F and the wind is blowing at 15 mph, the wind chill is -19°F. At this wind chill temperature, exposed skin can freeze in 30 minutes.



Source: [National Weather Service](https://www.weather.gov), National Oceanic and Atmospheric Administration



Source: [Climate Prediction Center](https://climatepredictioncenter.noaa.gov)

History

Severe Winter Weather Events
Blizzard, Heavy Snow, Ice Storm, Winter Storm, Winter Weather
 (ten-year history plus previous events including death, injury, or damage)

<u>Location</u>	<u>Date</u>	<u>Time</u>	<u>T.Z.</u>	<u>Type</u>	<u>Mag</u>	<u>Dth</u>	<u>Inj</u>	<u>PrD</u>	<u>CrD</u>
EMMONS (ZONE)	02/07/2025	14:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
EMMONS (ZONE)	03/24/2024	03:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
EMMONS (ZONE)	12/26/2023	00:00	CST-6	Ice Storm		0	0	25.00K	0.00K
EMMONS (ZONE)	10/26/2023	06:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
EMMONS (ZONE)	04/04/2023	14:00	CST-6	Blizzard		0	0	0.00K	0.00K
EMMONS (ZONE)	03/17/2023	12:00	CST-6	Winter Weather		0	0	0.00K	0.00K
EMMONS (ZONE)	03/11/2023	14:00	CST-6	Blizzard		0	0	0.00K	0.00K
EMMONS (ZONE)	03/05/2023	06:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
EMMONS (ZONE)	03/01/2023	00:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
EMMONS (ZONE)	02/28/2023	13:00	CST-6	Winter Weather		0	0	0.00K	0.00K
EMMONS (ZONE)	02/22/2023	19:00	CST-6	Blizzard		0	0	0.00K	0.00K
EMMONS (ZONE)	12/22/2022	04:00	CST-6	Blizzard		0	0	0.00K	0.00K
EMMONS (ZONE)	12/15/2022	12:00	CST-6	Blizzard		0	0	0.00K	0.00K
EMMONS (ZONE)	12/13/2022	08:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
EMMONS (ZONE)	11/10/2022	06:00	CST-6	Blizzard		0	0	0.00K	0.00K
EMMONS (ZONE)	04/12/2022	06:00	CST-6	Blizzard		0	0	0.00K	0.00K
EMMONS (ZONE)	02/20/2022	21:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
EMMONS (ZONE)	12/26/2021	12:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
EMMONS (ZONE)	10/21/2020	23:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
EMMONS (ZONE)	04/02/2020	00:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
EMMONS (ZONE)	12/28/2019	08:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
EMMONS (ZONE)	10/10/2019	21:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
EMMONS (ZONE)	04/11/2019	10:00	CST-6	Winter Storm		0	0	0.00K	0.00K
EMMONS (ZONE)	12/26/2018	09:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
EMMONS (ZONE)	03/05/2018	07:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
EMMONS (ZONE)	01/02/2017	09:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
EMMONS (ZONE)	01/25/2010	09:00	CST-6	Blizzard		0	0	1.100M	0.00K
EMMONS (ZONE)	04/04/1997	18:00	CST	Blizzard		1	1	1.750M	0.00K
EMMONS (ZONE)	01/09/1997	04:00	CST	Blizzard		0	1	1.530M	0.00K
EMMONS (ZONE)	01/04/1997	06:00	CST	Blizzard		0	0	250.00K	0.00K
Totals:						1	2	4.655M	0.00K

Source: [National Oceanic and Atmospheric Administration National Climatic Data Center](#) (01/1950 to 11/2025)

Extreme Cold

(ten-year history plus previous events including death, injury, or damage)

<u>Location</u>	<u>Date</u>	<u>Time</u>	<u>T.Z.</u>	<u>Type</u>	<u>Mag</u>	<u>Dth</u>	<u>Inj</u>	<u>PrD</u>	<u>CrD</u>
EMMONS (ZONE)	02/16/2025	18:00	CST-6	Extreme Cold/wind Chill		0	0	0.00K	0.00K
EMMONS (ZONE)	02/10/2021	20:00	CST-6	Extreme Cold/wind Chill		0	0	0.00K	0.00K
EMMONS (ZONE)	01/29/2019	00:00	CST-6	Extreme Cold/wind Chill		0	0	0.00K	0.00K
EMMONS (ZONE)	01/29/2008	02:00	CST-6	Extreme Cold/wind Chill		0	0	0.00K	0.00K
Totals:						0	0	0.00K	0.00K

Source: [National Oceanic and Atmospheric Administration National Climatic Data Center](#) (01/1950 to 11/2025)**High Wind (November-April)**

(ten-year history plus previous events including death, injury, or damage)

<u>Location</u>	<u>Date</u>	<u>Time</u>	<u>T.Z.</u>	<u>Type</u>	<u>Mag</u>	<u>Dth</u>	<u>Inj</u>	<u>PrD</u>	<u>CrD</u>
Totals:						0	0	35.00K	0.00K
EMMONS (ZONE)	03/10/2025	10:00	CST-6	High Wind	52 kts. EG	0	0	0.00K	0.00K
EMMONS (ZONE)	11/06/2022	03:00	CST-6	High Wind	52 kts. EG	0	0	0.00K	0.00K
EMMONS (ZONE)	04/06/2022	10:00	CST-6	High Wind	52 kts. EG	0	0	0.00K	0.00K
EMMONS (ZONE)	02/01/2022	00:00	CST-6	High Wind	51 kts. MG	0	0	0.00K	0.00K
EMMONS (ZONE)	01/31/2022	18:00	CST-6	High Wind	53 kts. MG	0	0	0.00K	0.00K
EMMONS (ZONE)	11/17/2021	00:00	CST-6	High Wind	52 kts. EG	0	0	0.00K	0.00K
EMMONS (ZONE)	11/13/2021	15:00	CST-6	High Wind	52 kts. EG	0	0	0.00K	0.00K
EMMONS (ZONE)	11/11/2021	07:00	CST-6	High Wind	52 kts. EG	0	0	0.00K	0.00K
EMMONS (ZONE)	03/29/2021	12:00	CST-6	High Wind	37 kts. MS	0	0	0.00K	0.00K
EMMONS (ZONE)	01/14/2021	00:00	CST-6	High Wind	52 kts. MG	0	0	0.00K	0.00K
EMMONS (ZONE)	12/22/2020	22:00	CST-6	High Wind	35 kts. ES	0	0	0.00K	0.00K
EMMONS (ZONE)	01/27/2019	17:00	CST-6	High Wind	52 kts. EG	0	0	0.00K	0.00K
EMMONS (ZONE)	03/07/2017	06:00	CST-6	High Wind	52 kts. MG	0	0	0.00K	0.00K
EMMONS (ZONE)	01/30/2017	09:00	CST-6	High Wind	35 kts. ES	0	0	0.00K	0.00K
EMMONS (ZONE)	02/07/2016	00:00	CST-6	High Wind	37 kts. MS	0	0	0.00K	0.00K
EMMONS (ZONE)	02/13/2011	09:00	CST-6	High Wind	35 kts. ES	0	0	20.00K	0.00K

Source: [National Oceanic and Atmospheric Administration National Climatic Data Center](#) (01/1950 to 11/2025)

Space Weather

Frequency	Likely (10–100% probability in the next year, or at least 1 chance in next 10 years)
Severity	Critical (25-50% of jurisdiction affected)
Risk Class	B
Seasonal Pattern	None
Duration	Days/Weeks
Speed of Onset	Little to no warning
Location	Countywide
Impacts	Agriculture, Blocked Roads, Business Interruptions, Delayed Emergency Response, Increased Fire Potential, Increased Public Safety Runs, Loss of Economy, Loss/Overcrowded Medical Facilities, Loss of Power, Mass Casualties, Personal Injury/Death Risk, Property Damage, School Closure

Description

Space Weather refers to variations in the space environment between the sun and Earth (and throughout the solar system) that can affect technologies in space and on Earth. Space weather is primarily driven by solar storm phenomenon that include coronal mass ejections, solar flares, solar particle events and solar wind. These phenomena can occur in various regions on the sun's surface, but only Earth directed solar storms are potential drivers of space weather events on Earth. An understanding of solar storm phenomena is an important component to developing accurate space weather forecasts (event onset, location, duration, and magnitude).

Why does space weather matter?

Space weather is a global issue. Unlike terrestrial weather events, like a hurricane, space weather has the potential to impact not only the United States, but wider geographic regions. These complex events can have significant economic consequences and have the potential to negatively affect numerous sectors, including communications, satellite and airline operations, manned space flights, navigation and surveying systems, as well as the electric power grid.

Source: [NOAA Space Weather Prediction Center](#)

NOAA Space Weather Scales

Source: [NOAA National Weather Service Space Weather Prediction Center](#)

The NOAA Space Weather Scales were introduced as a way to communicate to the general public the current and future space weather conditions and their possible effects on people and systems. Many of the SWPC products describe the space environment, but few have described the effects that can be experienced as the result of environmental disturbances. These scales are useful to users of our products and those who are interested in space weather effects. The scales describe the environmental disturbances for three event types: geomagnetic storms, solar radiation storms, and radio blackouts. The scales have numbered levels, analogous to hurricanes, tornadoes, and earthquakes that convey severity. They list possible effects at each level. They also show how often such events happen and give a measure of the intensity of the physical causes.

Geomagnetic Storm

Scale	Description	Effect	Physical measure	Average Frequency (1 cycle = 11 years)
G 5	Extreme	Power systems: Widespread voltage control problems and protective system problems can occur, some grid systems may experience complete collapse or blackouts. Transformers may experience damage. Spacecraft operations: May experience extensive surface charging, problems with orientation, uplink/downlink and tracking satellites. Other systems: Pipeline currents can reach hundreds of amps, HF (high frequency) radio propagation may be impossible in many areas for one to two days, satellite navigation may be degraded for days, low-frequency radio navigation can be out for hours, and aurora has been seen as low as Florida and southern Texas (typically 40° geomagnetic lat.).	Kp = 9	4 per cycle (4 days per cycle)
G 4	Severe	Power systems: Possible widespread voltage control problems and some protective systems will mistakenly trip out key assets from the grid. Spacecraft operations: May experience surface charging and tracking problems, corrections may be needed for orientation problems. Other systems: Induced pipeline currents affect preventive measures, HF radio propagation sporadic, satellite navigation degraded for hours, low-frequency radio navigation disrupted, and aurora has been seen as low as Alabama and northern California (typically 45° geomagnetic lat.).	Kp = 8, including a 9-	100 per cycle (60 days per cycle)
G 3	Strong	Power systems: Voltage corrections may be required, false alarms triggered on some protection devices. Spacecraft operations: Surface charging may occur on satellite components, drag may increase on low-Earth-orbit satellites, and corrections may be needed for orientation problems. Other systems: Intermittent satellite navigation and low-frequency radio navigation problems may occur, HF radio may be intermittent, and aurora has been seen as low as Illinois and Oregon (typically 50° geomagnetic lat.).	Kp = 7	200 per cycle (130 days per cycle)
G 2	Moderate	Power systems: High-latitude power systems may experience voltage alarms, long-duration storms may cause transformer damage. Spacecraft operations: Corrective actions to orientation may be required by ground control; possible changes in drag affect orbit predictions. Other systems: HF radio propagation can fade at higher latitudes, and aurora has been seen as low as New York and Idaho (typically 55° geomagnetic lat.).	Kp = 6	600 per cycle (360 days per cycle)
G 1	Minor	Power systems: Weak power grid fluctuations can occur. Spacecraft operations: Minor impact on satellite operations possible. Other systems: Migratory animals are affected at this and higher levels; aurora is commonly visible at high latitudes (northern Michigan and Maine).	Kp = 5	1700 per cycle (900 days per cycle)

Solar Radiation Storms

Scale	Description	Effect	Physical measure (Flux level of ≥ 10 MeV particles)	Average Frequency (1 cycle = 11 years)
S 5	Extreme	Biological: Unavoidable high radiation hazard to astronauts on EVA (extra-vehicular activity); passengers and crew in high-flying aircraft at high latitudes may be exposed to radiation risk. Satellite operations: Satellites may be rendered useless, memory impacts can cause loss of control, may cause serious noise in image data, star-trackers may be unable to locate sources; permanent damage to solar panels possible. Other systems: Complete blackout of HF (high frequency) communications possible through the polar regions, and position errors make navigation operations extremely difficult.	10^5	Fewer than 1 per cycle
S 4	Severe	Biological: Unavoidable radiation hazard to astronauts on EVA; passengers and crew in high-flying aircraft at high latitudes may be exposed to radiation risk. Satellite operations: May experience memory device problems and noise on imaging systems; star-tracker problems may cause orientation problems, and solar panel efficiency can be degraded. Other systems: Blackout of HF radio communications through the polar regions and increased navigation errors over several days are likely.	10^4	3 per cycle
S 3	Strong	Biological: Radiation hazard avoidance recommended for astronauts on EVA; passengers and crew in high-flying aircraft at high latitudes may be exposed to radiation risk. Satellite operations: Single-event upsets, noise in imaging systems, and slight reduction of efficiency in solar panel are likely. Other systems: Degraded HF radio propagation through the polar regions and navigation position errors likely.	10^3	10 per cycle
S 2	Moderate	Biological: Passengers and crew in high-flying aircraft at high latitudes may be exposed to elevated radiation risk. Satellite operations: Infrequent single-event upsets possible. Other systems: Small effects on HF propagation through the polar regions and navigation at polar cap locations possibly affected.	10^2	25 per cycle
S 1	Minor	Biological: None. Satellite operations: None. Other systems: Minor impacts on HF radio in the polar regions.	10	50 per cycle

Radio Blackouts Scale

Scale	Description	Effect	Physical measure	Average Frequency (1 cycle = 11 years)
R 5	Extreme	HF Radio: Complete HF (high frequency) radio blackout on the entire sunlit side of the Earth lasting for a number of hours. This results in no HF radio contact with mariners and en route aviators in this sector. Navigation: Low-frequency navigation signals used by maritime and general aviation systems experience outages on the sunlit side of the Earth for many hours, causing loss in positioning. Increased satellite navigation errors in positioning for several hours on the sunlit side of Earth, which may spread into the night side.	X20 (2×10^{-3})	Less than 1 per cycle
R 4	Severe	HF Radio: HF radio communication blackout on most of the sunlit side of Earth for one to two hours. HF radio contact lost during this time. Navigation: Outages of low-frequency navigation signals cause increased error in positioning for one to two hours. Minor disruptions of satellite navigation possible on the sunlit side of Earth.	X10 (10^{-3})	8 per cycle (8 days per cycle)
R 3	Strong	HF Radio: Wide area blackout of HF radio communication, loss of radio contact for about an hour on sunlit side of Earth. Navigation: Low-frequency navigation signals degraded for about an hour.	X1 (10^{-4})	175 per cycle (140 days per cycle)
R 2	Moderate	HF Radio: Limited blackout of HF radio communication on sunlit side, loss of radio contact for tens of minutes. Navigation: Degradation of low-frequency navigation signals for tens of minutes.	M5 (5×10^{-5})	350 per cycle (300 days per cycle)
R 1	Minor	HF Radio: Weak or minor degradation of HF radio communication on sunlit side, occasional loss of radio contact. Navigation: Low-frequency navigation signals degraded for brief intervals.	M1 (10^{-5})	2000 per cycle (950 days per cycle)

Impacts

Source: [NOAA National Weather Service Space Weather Prediction Center](#)



Space Weather Impacts on Climate

All weather on Earth, from the surface of the planet out into space, begins with the Sun. Space weather and terrestrial weather (the weather we feel at the surface) are influenced by the small changes the Sun undergoes during its solar cycle.

The most important impact the Sun has on Earth is from the brightness or irradiance of the Sun itself. The Sun produces energy in the form of photons of light. The variability of the Sun's output is wavelength dependent; different wavelengths have higher variability than others. Most of the energy from the Sun is emitted in the visible wavelengths (approximately 400 – 800 nanometers (nm)). The output from the sun in these wavelengths is nearly constant and changes by only one part in a thousand (0.1%) over the course of the 11-year solar cycle.

Electric Power Transmission

The electric power grid, and consequently the power to your home and business, can be disrupted by space weather. One of the great discoveries of the 19th century was the realization that a time-varying magnetic field is able to produce an electrical current in a conducting wire. The basic idea is that the time rate of change of the magnetic flux (i.e., lines of magnetic force) passing through a current loop is proportional to the current that is generated around the loop. A slightly earlier but equally important discovery was that a current-carrying wire produces a magnetic field. The application of these principles is widely prevalent in modern society in electrical power generators, electrical power transformers, and electrical motors, for example.

HF Radio Communications

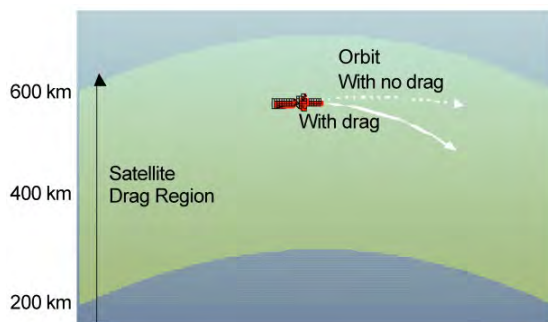
Space weather impacts radio communication in a number of ways. At frequencies in the 1 to 30 mega Hertz range (known as “High Frequency” or HF radio), the changes in ionospheric density and structure modify the transmission path and even block transmission of HF radio signals completely. These frequencies are used by amateur (ham) radio operators and many industries such as commercial airlines. They are also used by a number of government agencies such as the Federal Emergency Management Agency and the Department of Defense.



Satellite Communications

Satellite communication refers to any communication link that involves the use of an artificial satellite in its propagation path. Satellite communications play a vital role in modern life. There are over 2000 artificial satellites in use. They can be found in geostationary, Molniya, elliptical, and low Earth orbits and are used for traditional point-to-point communications, mobile applications, and the distribution of TV and radio programs.

Satellite Drag



Drag is a force exerted on an object moving through a fluid, and it is oriented in the direction of relative fluid flow. Drag acts opposite to the direction of motion and tends to slow an object. As an example, think of running against a high wind and feeling the drag pushing you back in the direction of relative fluid flow. This same force acts on spacecraft and objects flying in the space environment. Drag has a significant impact on spacecraft in low Earth orbit (LEO), generally defined as an orbit below an

altitude of approximately 2,000 kilometers (1,200 mi). Although the air density is much lower than near the Earth’s surface, the air resistance in those layers of the atmosphere where satellites in LEO travel is still strong enough to produce drag and pull them closer to the Earth. The International Space Station (ISS) and the Hubble Space Telescope are examples of spacecraft operating in LEO.

Space Weather and GPS Systems

The use of single and dual frequency satellite radio navigation systems, like the Global Positioning System (GPS), has grown dramatically in the last decade. GPS receivers are now in nearly every cell phone and in many automobiles, trucks, and any equipment that moves and needs precision location measurements. High precision dual frequency GPS systems are used for farming, construction, exploration, surveying, snow removal and many other applications critical to a functional society. Other satellite navigation systems in orbit include the European Galileo system and the Russian GLONASS system.

History

There is no significant history of space weather within the County.

For G4/S4/R4 or higher events (at least 1 in next 10 years, documented 5 in last 5 years). Space Weather article in the [2025 ND Mitigation Progress Report](#) (pp.32-38), and [2024 ND eMAOP](#) (pp.518-522).

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Transportation Accident

Frequency	Likely (10-100% probability in the next year, or at least 1 chance in next 100 years.)
Severity	Negligible (Less than 10% of jurisdiction affected)
Risk Class	C
Seasonal Pattern	None
Duration	Hours
Speed of Onset	No warning
Location	Countywide
Impacts	Agriculture, Blocked Roads, Building Collapse, Business Interruptions, Delayed Emergency Response, Evacuation (Localized), Explosion, HAZMAT Release, Increased Fire Potential, Increased Public Safety Runs, Loss of Economy, Loss/Overcrowded Medical Facilities, Loss of Potable Water, Mass Casualties, Personal Injury/Death Risk, Property Damage, School Closure

Description

A transportation accident is any large-scale aircraft, railroad, or vehicular accident involving mass casualties.

Emmons County has one airport, a freight service rail line, and one major highway.

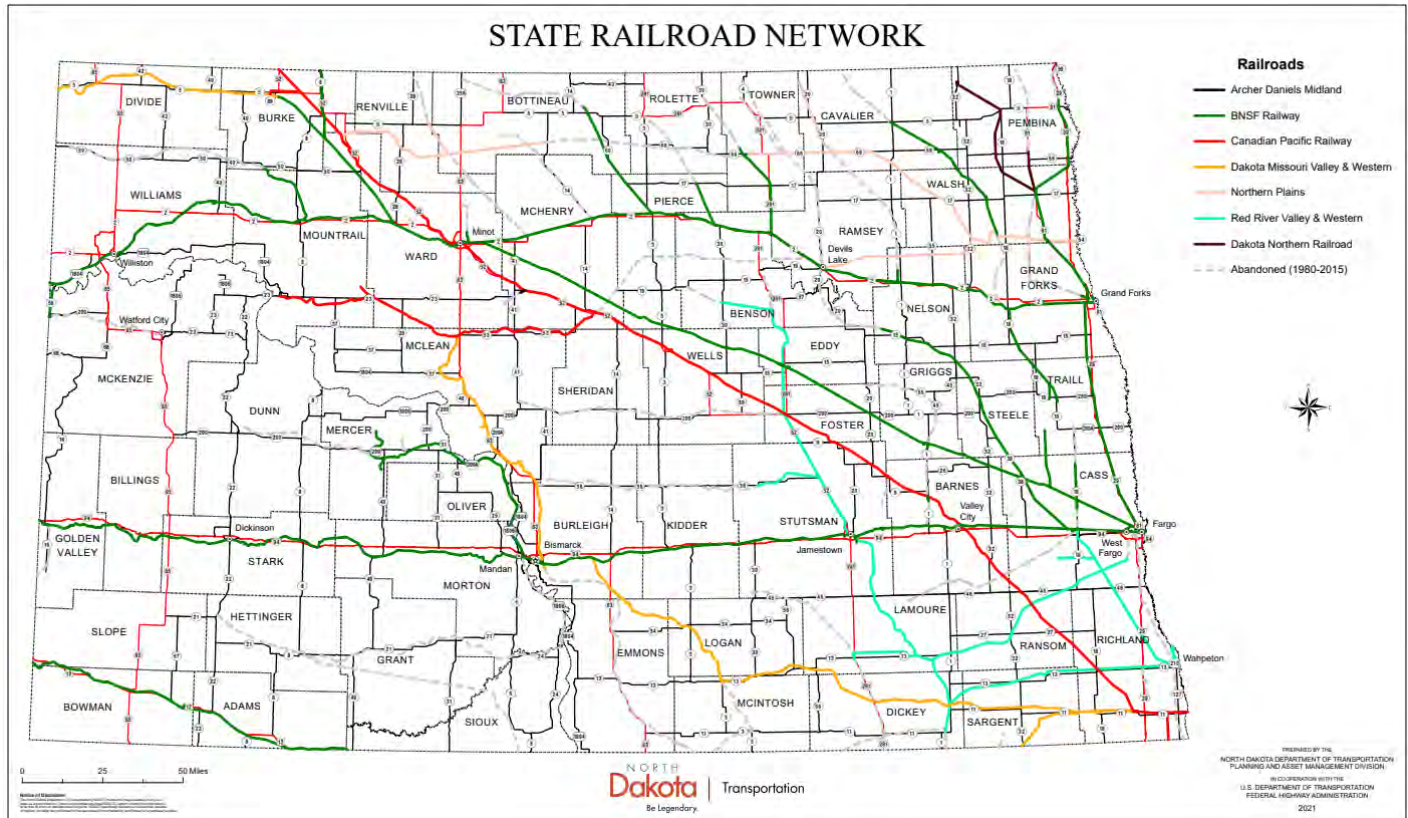
Vehicle

U.S. Highway 83 is a major, north/south transportation route intersecting Emmons County and the Cities of Hazelton and Linton thereby increasing the probability of an event. Highway 83 is the second most utilized route through Burleigh County which is north of Emmons County. The most predominant products observed in the study were anhydrous ammonia and gasolines. (See Attachment 3, Major Roadways Map in Emmons County)

Railroad

One railroad traverses the county: Dakota, Missouri Valley Western Railroad (DMVW).

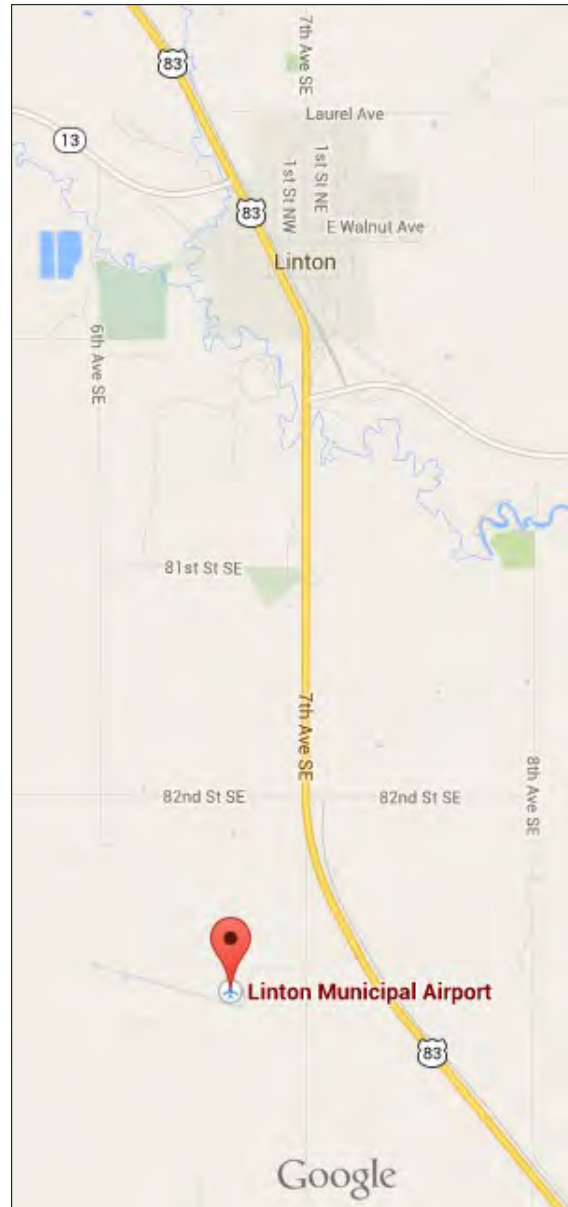
Emmons County has limited railroad service, freight service only. The Dakota Missouri Valley and Western Railroad (DMVW) provides freight services, mostly for the transport of agricultural products, in North Dakota, South Dakota and Montana. In Emmons County, DMVW passes by the communities of Braddock, Kintyre, into Logan County to the east.



Source: [ND Department of Transportation](https://www.nd.gov/transportation)

Airport

Emmons County has one airport: The [Linton Municipal Airport](#). It is located 2 miles south of Linton. The airport's focus is on small aircraft and has a 3,700-foot lighted runway.



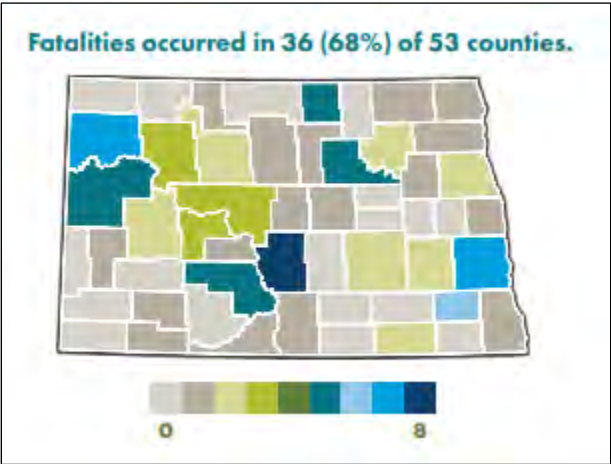
Source: Google Maps [website](#)

History

There is no history of mass casualty within Emmons County.

Vehicle

Emmons County had 31 crashes, 1 fatality, and 18 injuries in 2024.

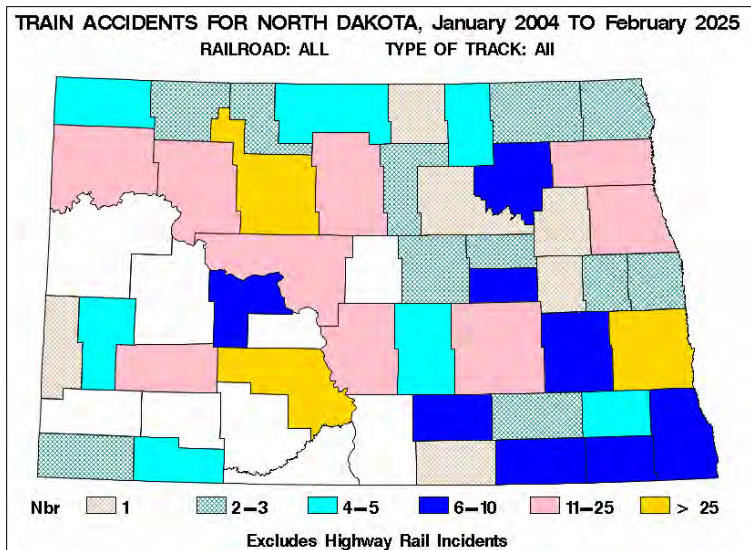


North Dakota Vehicle Crashes, Fatalities and Injuries 2015-2024

Year	Crashes	Fatalities	Injuries
2015	15,077	131	4,917
2016	15,017	113	4,614
2017	15,280	116	4,432
2018	15,242	105	4,230
2019	14,221	100	4,258
2020	8,820	100	3,426
2021	9,585	101	3,947
2022	10,734	98	3,763
2023	10,475	106	2,828
2024	9,803	89	3,592

Source: [2024 North Dakota Crash Summary](#), North Dakota Department of Transportation

Railroad

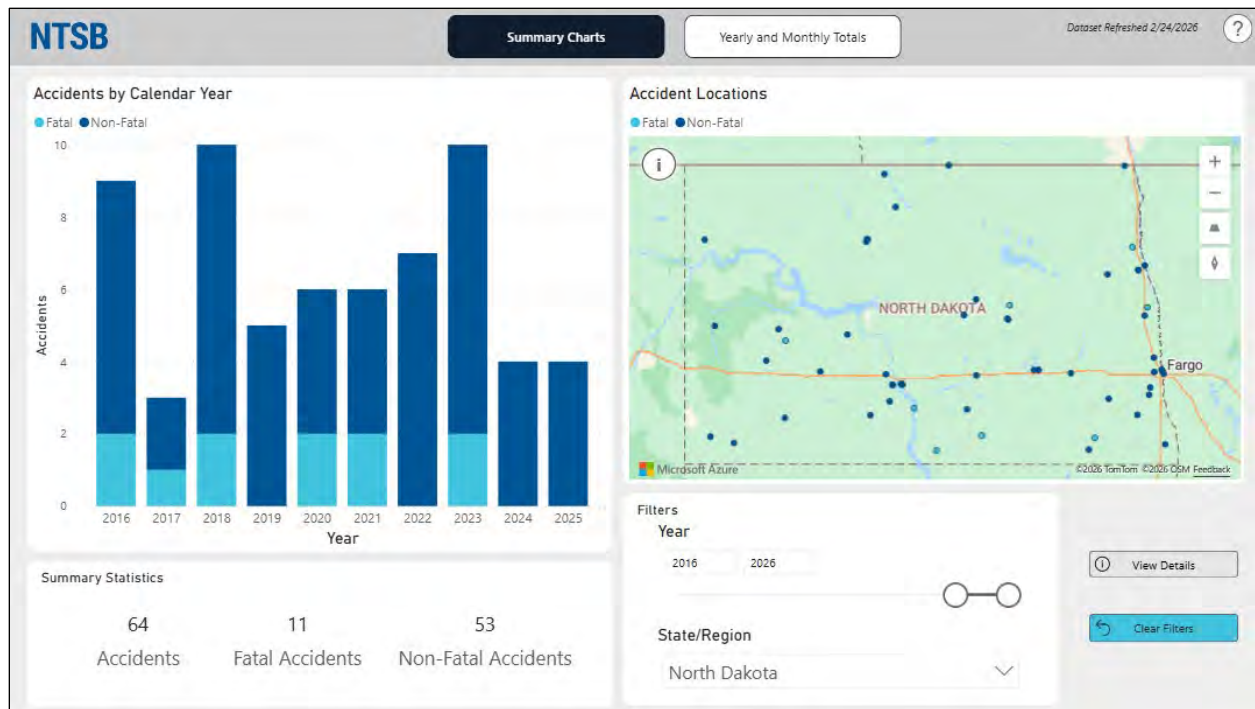


County	Totals				Type of Accident			Causes			
	Accs	Kld	Inj	Reportable Damage	Coll	Der	Othr	Eqp	Hmn	Othr	Trk
ADAMS	4	0	0	1,905,543	-	4	-	1	1	1	1
BARNES	6	0	0	1,009,060	-	6	-	3	1	-	2
BENSON	1	0	0	1,075,302	-	1	-	-	-	-	1
BILLINGS	4	0	0	3,204,620	-	4	-	2	1	-	1
BOTTINEAU	4	0	0	1,177,070	-	4	-	-	-	1	3
BOWMAN	2	0	0	357,226	-	2	-	1	-	-	1
BURKE	3	0	0	54,167	-	3	-	1	1	-	1
BURLEIGH	11	0	0	7,033,571	-	10	1	2	2	1	6
CASS	38	0	5	25,130,993	1	32	5	9	9	3	17
CAVALIER	3	0	0	162,732	-	3	-	-	-	1	2
DICKEY	6	0	0	1,276,088	-	6	-	-	2	-	4
DIVIDE	4	0	0	512,544	-	4	-	-	1	-	3
EDDY	2	0	0	270,508	-	1	1	-	1	-	1
FOSTER	9	0	2	10,217,044	-	8	1	1	3	1	4
GOLDEN VALLEY	1	0	0	36,928	-	1	-	-	1	-	-
GRAND FORKS	24	0	0	1,439,397	3	18	3	3	14	-	7
GRIGGS	1	0	0	4,557,879	-	1	-	-	-	1	-
KIDDER	4	0	0	3,361,700	-	4	-	2	-	1	1
LA MOURE	3	0	0	79,427	-	3	-	-	-	-	3
LOGAN	7	0	0	346,726	-	5	2	-	1	2	4
MCHENRY	11	0	0	2,859,260	-	8	3	3	2	2	4
MCINTOSH	1	0	0	131,750	-	1	-	-	-	-	1
MCLEAN	16	1	2	2,399,041	-	16	-	2	2	2	10
MERCER	9	0	0	647,139	-	9	-	1	-	2	6
MORTON	31	0	0	3,703,220	4	19	8	3	20	2	6
MOUNTRAIL	18	0	0	7,015,267	-	15	3	3	5	2	8
NELSON	1	0	0	130,000	1	-	-	-	1	-	-
PEMBINA	2	0	0	278,052	-	2	-	-	-	-	2
PIERCE	3	0	0	878,183	-	3	-	-	-	-	3
RAMSEY	7	0	1	420,203	-	6	1	1	2	1	3
RANSOM	4	0	0	179,048	-	2	2	-	2	1	1
RENVILLE	2	0	0	68,800	-	2	-	-	-	1	1
RICHLAND	9	0	0	3,505,454	-	9	-	1	4	1	3
ROLETTE	1	0	0	24,280	-	1	-	-	-	1	-
SARGENT	7	0	0	2,615,366	-	7	-	-	-	1	6
STARK	13	0	0	2,519,196	-	13	-	1	7	3	2
STEELE	2	0	0	305,052	-	2	-	-	1	-	1
STUTSMAN	23	0	0	4,027,990	-	21	2	6	2	6	9
TOWNER	4	0	0	1,179,669	-	4	-	-	1	1	2
TRAILL	3	0	0	759,955	-	3	-	-	1	-	2
WALSH	11	0	0	2,171,117	-	11	-	1	-	-	10
WARD	56	0	0	7,187,953	3	43	10	10	32	-	14
WELLS	3	0	0	3,579,352	-	2	1	2	1	-	-
WILLIAMS	21	1	0	14,747,938	1	16	4	2	9	3	7

Causes: Eqp=Equipment Defect Hmn=Human factor Sig=Signal Defect Trk=Track Defect Othr=Other
Excludes Highway Rail Incidents

Source: [Federal Railroad Administration Office of Safety Analysis](#)

Aviation



Source: [National Transportation Safety Board](https://www.ntsb.gov/)

There was one event in Emmons County from 2016-2025 with one fatality.

August 10, 2021, Strasburg, 1 fatality, aerial application flight

Plan Maintenance

Monitoring, Evaluating, and Updating the Plan

Plan Maintenance Schedule			
Maintenance Step	When	How	Who
Monitoring	Yearly	Obtain status updates on mitigation actions and identify possible mid-course corrections.	Emergency Manager
Evaluating	Yearly or after a disaster event	Review plan and any lessons learned	Emergency Manager Planning Department
Updating	Every 5 years	Review and update plan as necessary	Emergency Manager Planning Department

The plan will be evaluated annually by the Emmons County Emergency Manager with input from planning committee members. As a means of monitoring the plan and progress made on the projects, the Emmons County Emergency Manager will collaborate with planning committee members and representatives identified as “lead agencies” to discuss progress of the projects, existing and potential grant opportunities, how effective they think the process was and the actual action implementation, and any changes in regulations. It will be the responsibility of the Emergency Manager to update the hazard history sections on an annual basis as events occur. The Emmons County Emergency Manager will also lead a comprehensive update every five years seeking Federal Emergency Management Agency approval.

All disaster or emergency incidents will be evaluated for general/specific mitigation recommendations to be added to the plan as they occur. A comprehensive plan review by the planning committee will occur every five years unless the need arises earlier through aforementioned reviews and actions.

The approved plan is available on the Emmons County [website](#) for review by stakeholders and the public along with the opportunity to submit mitigation ideas at any time. Emmons County Emergency Management will continue to promote mitigation actions and seek projects through speaking engagements, social media, and after actual events.

**Emmons County Emergency Management**

100 4th St NW
Linton ND 58552
(701) 222-6727

Mitigation Project Monitoring

Project _____

Responsible Agency/Lead _____

Status Not Started In-Progress Completed Deleted Ongoing

Timeline/Completion Date _____

Progress Notes/Comments _____

Funding Source _____

Cost Estimate _____

Date _____

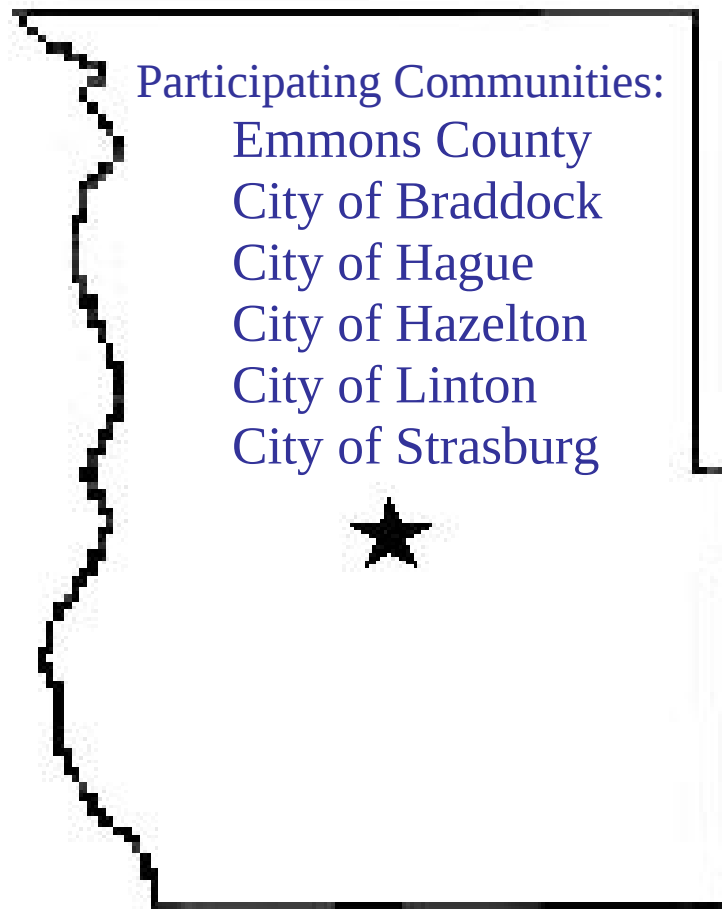
Completed By _____

Plan Integration: The Emmons County Multi-Hazard Mitigation Plan will be considered as building codes are developed and/or updated. The awareness of the hazards and vulnerability may affect future development in hazard-prone areas.

The Cities of Braddock, Hazelton, Linton, and Strasburg will incorporate data from this plan when reviewing their planning and regulatory capabilities (Attachment 4). The City of Hague does not have the funding and staffing to incorporate robust activities in their regulations, plans, and programs. They may rely on neighboring jurisdictions for assistance and/or contract with outside entities to fill gaps.

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Emmons County Multi-Hazard Mitigation Plan Attachments



FEMA Approved: July 9, 2026 – July 8, 2031

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ATTACHMENT 1: MITIGATION PROJECTS

Mitigation opportunities submitted on priority basis except where urgent/special circumstances warrant highest priority. The emphasis may be the cost benefit review of the proposed mitigation project and the lead agency's ability to provide funding. Implementation and administration of the projects will be through the Emmons County Emergency Manager unless dictated by the unique specialty or level of expertise needed for the project.

The goals (priorities) remain unchanged from the previous plan. Three goals were identified to provide the general guidance for mitigation activities:

- Protect public health and safety.
- Minimize damage to existing and future property.
- Minimize economic losses and disruption of essential community services.

Projects were prioritized (low, medium, high) during groups meetings, individual input, and group e-mails. Processes included looking at previous history as well as current and projected conditions.

Changes

Emmons County

- Continue snagging and clearing on Beaver Creek

City of Braddock

- Added susceptibility to river/creek flooding
- Verified projects

City of Hague

- No changes
- Verified projects

City of Hazelton

- February 2024 CDBG \$1,235,882.60 funding for essential sewer upgrades (completed in 2025). Increased charge on utility bills to help pay for sewer project and received Clean Water State Resolving Fund (loan) in June 2025 to rehabilitate the sanitary sewer system. July 2025 Alarm system and new pump in well, pump and pipe replacement in well, rewiring in well house, shed for storing generator, well house wired for generator completed.
- 2024 Handicap Ramp for City Hall completed

City of Linton

- Verified projects
- Continue pursuit of siren replacements and relocation through current HMGP application

City of Strasburg

- No changes
- Lagoon system upgrade completed

Public Input:

The three highest hazards deemed “Highly Likely” (Severe Summer Weather, Fire, and Severe Winter Weather) through the online survey and stakeholder input. Majority of responses indicated recommendations for education, preparedness, burn restrictions which align with existing projects.

Items removed not deemed mitigation projects with long term risk reduction:

- Vulnerable Population Registry—Identification of vulnerable populations for utilization in emergency/disaster situations.
- Evaluate Quarantine and Isolation Plans
- Mass Dispensing—Planning, training, and exercises.

Project	Hazard															Jurisdiction						Priority		
	Civil Disturbance	Criminal Terrorist Nat'l Attack	Cyberattack	Dam Failure	Drought	Fire	Flood	Geologic Hazards	Hazardous Materials Release	Infectious Disease and Pest Infestations	Severe Summer Weather	Severe Winter Weather	Space Weather	Transportation Accident	Emmons County	Braddock	Hague	Hazleton	Linton	Strasburg	Low	Medium	High	
Community Outreach	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		
All Hazards Radio: Outreach	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		
Three-Day Supply: Promote	X	X	X							X	X	X			X	X	X	X	X	X		X		
Multi-Hazard Mitigation Plan: Maintain	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		
Backup Generator: Braddock Fire	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X							X	
Backup Generator: Hague Fire	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X						X	
Backup Generator: Linton Fire	X	X	X	X	X	X	X	X	X	X	X	X	X	X					X				X	
Backup Generator: Linton School	X	X	X	X	X	X	X	X	X	X	X	X	X	X					X			X		
Backup Generator: Strasburg Fire	X	X	X	X	X	X	X	X	X	X	X	X	X	X						X			X	
Report Suspicious Activity	X	X													X	X	X	X	X	X		X		
National Flood Insurance Program				X			X								X	X	X	X	X	X		X		
Dam Inspections				X											X							X		
Drought Awareness					X										X	X	X	X	X	X		X		
Water and Soil Conservation					X										X	X	X	X	X	X		X		
Fire Index/Drought Conditions					X	X									X	X	X	X	X	X		X		
Defensible Space						X									X	X	X	X	X	X	X			
Fire Lines						X									X	X	X	X	X	X	X			
Rice Lake Survey							X								X								X	
Schwan Lake Outlet							X								X								X	
Texas Crossing Evaluation							X								X						X			
Floodplain Ordinance							X								X				X			X		
Re-evaluate Braddock Dam				X			X								X						X			
Snagging and Clearing Channels							X								X				X			X		
Prevent Flooding Beaver Creek & Spring Creek							X								X				X		X			
Re-evaluate Welk Dam							X													X	X			
Floodplain Ordinance							X										X					X		
Culvert Cleaning							X											X				X		
Clean Sewer Main							X												X			X		
Strasburg Slough Remediation							X													X			X	
Community Outreach - Geologic								X							X	X	X	X	X	X	X			
Landslide Activity								X							X				X		X			
Hazmat Awareness									X						X	X	X	X	X	X		X		
Communicable Disease Outreach										X					X	X	X	X	X	X		X		
Immunizations/Vaccinations										X					X	X	X	X	X	X		X		
Surveillance										X					X	X	X	X	X	X		X		
Monitoring Communicable Disease										X					X	X	X	X	X	X		X		
Severe Summer Weather Awareness											X											X		
Living Snow Fences												X										X		
Cut Trees/Limbs												X									X			
Severe Winter Weather Awareness													X									X		
Snow Fencing													X								X			
Space Weather														X	X	X	X	X	X	X	X			
Mass Casualty Planning														X								X		

Mitigation Projects									
Jurisdiction	Hazard	Description	Range of Actions (preferred action shown first if more than one listed)	Lead and Support Agency(s)/Position(s) Leads in Bold	Cost	Funding Source	Time- frame	Progress	Priority
Emmons County, All Cities	All	Community Outreach: Timely, informational campaigns to inform and educate the public on hazards emergency preparedness.	Maintain public education through workshops, training, and/or newspaper, website, and social media.	Emmons Emergency Manager Fire Districts (Braddock, Hague, Hazelton, Linton, Strasburg) Public Health Sheriff's Department	\$2,000	Emmons County Emergency Management Budget Hazard Mitigation Grant Program	Annually	Annually	Medium
Emmons County, All Cities	All	All Hazards Radio: Promote the purchase and use of an all-hazards radio	Coordinate with ongoing campaigns for Severe Summer Weather, Severe Winter Weather, and National Preparedness Month.	Emmons Emergency Manager	\$500	Emmons County Emergency Management Budget	Annually	Annually	Medium
Emmons County, All Cities	All	Three-Day Supplies: Help the community prepare for an event whereby assistance may not be readily attainable.	Campaign to promote 3-day supply for each person	Emmons Emergency Manager	\$100	Emmons County Emergency Management Budget	Annually	Annually	Medium
Emmons County, All Cities	All	MHMP Evaluation: Evaluate information in the plan and update every five years.	Maintain plan with in-house employees. Contract the 5-year update	Emmons Emergency Manager	\$200	Emmons County Emergency Management Budget	Annually	Annually	Medium
Braddock	All	Backup Generator (10kW)- Braddock Fire Department	Braddock Fire Department has no permanent backup power source. The location hosts several training events and could serve as an interim shelter.	Braddock Fire Department	\$25,000	Braddock Fire Budget Braddock General Fund Hazard Mitigation Grant Program	Ongoing	Ongoing	High
Hague	All	Backup Generator (10kW) - Hague Fire Department	Hague Fire Department has no permanent backup power source. The location hosts several training events and could serve as an interim shelter.	Hague Fire Department	\$25,000	Hague Fire Budget Hague General Fund Hazard Mitigation Grant Program	Ongoing	Ongoing	High
Linton	All	Backup Generator (20kW) - Linton Fire Department	Linton Fire Department is the largest Fire Department in Emmons County and has no permanent backup power source. The location hosts several training events and could serve as an interim shelter.	Linton Fire Department	\$30,000	Linton Fire Budget Linton General Fund Hazard Mitigation Grant Program	Ongoing	Ongoing	High
Linton	All	Backup Generator (Linton School): Purchase and install a backup generator for the designated shelter at the Linton School.	Continue to research grant availability.	Linton School	\$150,000	Linton School General Fund Hazard Mitigation Grant Program	Annually	Annually	Medium
Strasburg	All	Backup Generator (20kW) - Strasburg Fire Department	Strasburg Fire Department has no permanent backup power source. The location hosts several training events and could serve as an interim shelter.	Strasburg Fire Department	\$30,000	Strasburg Fire Budget Strasburg General Fund Hazard Mitigation Grant Program	Ongoing	Ongoing	High

Mitigation Projects									
Jurisdiction	Hazard	Description	Range of Actions (preferred action shown first if more than one listed)	Lead and Support Agency(s)/Position(s) Leads in Bold	Cost	Funding Source	Time- frame	Progress	Priority
Emmons County, All Cities	Civil DisturbanceCriminal Terrorist National Attack	Report Suspicious Activity: Urge residents to report suspicious activity of any kind to law enforcement.	Continue to work with the ND State and Local Intelligence Center	Sheriff's Department	Staff Time	Sheriff's Department Budget	Annually	Annually	Medium
Emmons County, All Cities	Dam Failure Flood	National Flood Insurance Program: Promote participation in the program.	Continue to inform public regarding flood insurance.	City Mayors County Commission Chair Emmons Emergency Manager Water Resource Board	\$500	Emmons County General Fund	Annually	Annually	Medium
Emmons County	Dam Failure	Request inspection of Dams through the ND State Water Commission. Nieuwsma Dam Temvik Dam Braddock Dam Welk Dam	Determine any level of deterioration and possible mitigation	Water Resource Board Emmons County Commission ND Water Commission	Staff Time	Water Resource Budget ND Dept of Water Resources	1-3 years	As Needed	Medium
Emmons County, All Cities	Drought	Drought Awareness: Inform public of critical water supplies and water bans during drought.	Publish information via flyers, newspaper, website, and social media. Encourage installation of water- saving devices.	City Mayors County Commission Chair Emmons Emergency Manager	\$100	Emmons County General Fund	As Needed	As Needed	Medium
Emmons County, All Cities	Drought	Water and Soil Conservation: Encourage the agricultural community to implement water and soil conservation practices	Continue to inform agricultural participants on the value of crops and livestock preservation during drought.	Extension Service	\$500	Extension Budget	Ongoing	Ongoing	Medium
Emmons County, All Cities	Drought Fire	Fire Index/Drought Conditions: Inform community of fire danger index, burning regulations, and burn bans (when instituted)	Continue to provide information via newspaper, website, and social media	Emmons Emergency Manager Fire Districts (Braddock, Hague, Hazelton, Linton, Strasburg) Sheriff's Department	\$100	Emmons County General Fund	As Needed	As Needed	Medium
Emmons County, All Cities	Fire	Defensible Space: Evaluate and/or create defensible space around structures to include removing debris accumulation.	Promote firewise safety practices. Evaluate and/or create defensible space around structures to include removing debris accumulation.	Fire Districts (Braddock, Hague, Hazelton, Linton, Strasburg)	Staff Time	Braddock Fire Budget Hague Fire Budget Hazelton Fire Budget Linton Fire Budget Strasburg Fire Budget Emmons County Emergency Management Budget	Annually	Annually	Low

Mitigation Projects									
Jurisdiction	Hazard	Description	Range of Actions (preferred action shown first if more than one listed)	Lead and Support Agency(s)/Position(s) Leads in Bold	Cost	Funding Source	Time- frame	Progress	Priority
Braddock	Fire	Fire Lines: Promote the utilization of fire lines into heavily wooded areas and/or inaccessible areas.	Promote firewise safety practices.	Fire Districts (Braddock, Hague, Hazelton, Linton, Strasburg)	\$5,000	Braddock Fire Budget Hague Fire Budget Hazelton Fire Budget Linton Fire Budget Strasburg Fire Budget Emmons County Emergency Management Budget Hazard Mitigation Grant Program	Annually	Annually	Low
Emmons County	Flood	Rice Lake Survey: Water level has been rising the 1932, but has significantly increased over the past few years, resulting in its connection with downstream waterbodies in early 2020. Concern for nearby homes, critical roads, and agricultural land.	Phase 1: Survey conducted by State Water Commission (field data, existing conditions, control points, evaluate topography of downstream flow path)--completed August 2020. Phase 2: Study hydrology of the lake and analyze mitigation alternatives and downstream impacts.	Water Resource Board ND State Water Commission	\$50,000	Water Resource Budget ND Dept of Water Resources	1-3 Years	Annually	High
Emmons County	Flood	Schwan Lake Outlet: Over the past few "wet" years, the lake has overflowed affecting road access and nearby homes as well as agricultural.	Phase 1: Engineering Study Phase 2: Construct Outlet	Water Resource Board	\$1-3M	Water Resource Budget ND Dept of Water Resources	1-3 Years	Annually	High
Emmons County	Flood	Texas Crossing Evaluation: Evaluate current crossings for improvement.	Review the existing crossings that are major arterials and determine if increased culvert sizes are needed and/or raising the road to provide increases usage. 21st Av SE/82nd St SE (S of Hwy 13)--\$246,000	Road Department	\$246,000	Road Department Budget Hazard Mitigation Grant Program	1-3 years	Annually	Low
Emmons County, All Cities	Flood	Floodplain Ordinance: Update existing ordinances, and develop ordinance for the County other cities.	Update Linton ordinance and work with the County and other Cities to adopt floodplain ordinances. Continue to inform public regarding flood insurance.	City Mayors County Commission Chair Emmons Emergency Manager Water Resource Board	\$500	Emmons County General Fund	1-3 Years	Ongoing	Medium
Emmons County, Hazelton	Flood	Re-evaluate Braddock Dam—\$50,000 (located northeast of Hazelton and would result in overland flooding)	Re-evaluate and continue to study and act when grants allow.Gather public input to discuss project(s).	Water Resource Board ND State Water Commission	\$100,000+	Emmons County General FundHazelton General FundND Dept of Water Resources	Ongoing	Ongoing	Low
Emmons County, Linton	Flood	Snagging and Clearing Channels: Remove impediment debris from affected channels.	Contract signed for 2020 for area on south side of Hwy 13 to Spring Creek and clear overgrowth near smaller bridge on 6th Avenue)	Water Resource Board	\$39,000	Water Resource Budget ND Dept of Water Resources	1-2 Years	1-2 Years	Medium

Mitigation Projects									
Jurisdiction	Hazard	Description	Range of Actions (preferred action shown first if more than one listed)	Lead and Support Agency(s)/Position(s) Leads in Bold	Cost	Funding Source	Time-frame	Progress	Priority
Emmons County, Linton	Flood	Prevent flooding at the Beaver Creek/Spring Creek confluence. Homes and businesses would be flooded in Linton and Emmons County. • Spring Creek Diversion, \$770,000 (Spring Creek drains 41-square mile area north of Linton and joins Beaver Creek at western edge of Linton, composed of rangeland and cultivated field. Beaver Creek is 30 miles wide and 55 miles long with drainage area of @1,000 square miles. It flows westerly and enters the Oahe Reservoir.) • Retaining Dam, Horner’s Ravine, \$330,000 (Located on the northeast boundary of City of Linton.) • Retaining Dam, Unnamed Coulee, \$550,000 (Located on the southwest boundary of City of Linton) • Retaining Dam, Spring Creek, \$1,540,000	Continue to study and act when grants allow. Gather public input to discuss project(s).	Water Resource Board ND State Water Commission	\$3 million+	Linton General Fund Emmons County General Funds Water Resource Budget ND Dept of Water Resources	Ongoing	Ongoing	Low
Emmons County, Strasburg	Flood	Re-evaluate Welk Dam—\$50,000 (located southeast of Strasburg and would result in overland flooding)	Re-evaluate and continue to study and act when grants allow. Gather public input to discuss project(s).	Water Resource Board ND State Water Commission	\$50,000+	LEPC	Ongoing	Ongoing	Low
Hague	Flood	Floodplain Ordinance: Evaluate and pursue NFIP for the City of Hague.	Work with the City of Hague to adopt floodplain ordinances.Continue to inform public regarding flood insurance.	City Mayor Emmons Emergency Manager Water Resource Board	Staff Time	Emmons County Emergency Management Budget Water Resource Budget	1-3 Years	Ongoing	Medium
Hazelton	Flood	Culvert Cleaning	Ensure culverts are clear of debris for water flow.	City Commission	Staff Time Contract	Linton General Fund	Ongoing	Ongoing	Medium

Mitigation Projects									
Jurisdiction	Hazard	Description	Range of Actions (preferred action shown first if more than one listed)	Lead and Support Agency(s)/Position(s) Leads in Bold	Cost	Funding Source	Time- frame	Progress	Priority
Linton	Flood	Clean Sewer Main: Ability to transport increased flow and reduce damages to structures while stopping the release into the River during emergency situations.	Sewer jetter purchased to help maintain portions every year.	City of Linton	Staff Time	Linton General Fund	Annually	Annually	Medium
Strasburg	Flood	Strasburg Slough Remediation: High water elevates the slough level	Continue working with the ND State Water Commission on feasible solutions 2019 Slough was pumped down and berm built up on north end @\$60,000	City of Strasburg Water Resource Board	\$1 million+	Strasburg General Fund ND Dept of Water Resources	Annually	Annually	High
Emmons County, All Cities	Geologic Hazards	Community Outreach: •Education and mitigation methods related to radon •Erosion reduction education for ag producers, those living on steep grade areas, and river slumping potential impacts	Establish information and cyclical cycles of education at extension trainings, fairs, and social media	Extension Emmons Emergency Manager	\$500	Emmons County Emergency Management Budget Extension Budget Hazard Mitigation Grand Program	Annually	Annually	Low
Emmons County, Linton	Geologic Hazards	Landslide Activity: Monitor embankments along Missouri River for potential landslide activity.	Establish and maintain a monitoring practice.	Water Resource Board	\$500	Emmons County General Fund Water Resource Budget	Annually	Annually	Low
Emmons County, All Cities	Hazardous Materials	Hazmat Awareness: Community should understand the hazards and protective measures.	Maintain and update the Shelter-in- Place brochure as necessary	Emmons Emergency Manager Fire Districts Sheriff’s Department	\$200	LEPC	Annually	Annually	Medium
Emmons County, All Cities	Infectious Disease and Pest Infestations	Communicable Disease Outreach: Make public aware of the dangers of communicable disease to people, crops, and livestock	Advertising campaign to include current diseases in the area (if applicable) and promote inoculations	Public HealthExtension Service	\$500	Emmons County General Fund Public Healthand/or Grants	Annually	Annually	Medium
Emmons County, All Cities	Infectious Disease and Pest Infestations	Immunization/Vaccinations	Immunization clinics.	Public Health	Staff Time	Emmons County General Fund Public Health Budget NDHHS	Annually	2014 and Ongoing	Medium
Emmons County, All Cities	Infectious Disease and Pest Infestations	Surveillance: Monitoring trends in clinics, hospitals, and emergency rooms.	Continue surveillance program.	ND Department of Health Public Health	Staff Time	Emmons County General Fund Extension Budget Public Health Budget NDHHS	Annually	2014 and Ongoing	Medium
Emmons County, All Cities	Infectious Disease and Pest Infestations	Monitoring: Case management of communicable diseases.	Continue monitoring program.	ND Department of Health Public Health	Staff Time	Emmons County General Fund Public Health Budget NDHHS	Annually	2014 and Ongoing	Medium
Emmons County, All Cities	Severe Summer Weather	Severe Summer Weather Awareness: Skywarn Training for awareness and potential storm spotters	Maintain bi-annual training as part of the Severe Summer Weather Awareness Campaign	Emmons Emergency Manager	\$500	Emmons County Emergency Management Budget	Bi-Annually	Bi-Annually	Medium

Mitigation Projects									
Jurisdiction	Hazard	Description	Range of Actions (preferred action shown first if more than one listed)	Lead and Support Agency(s)/Position(s) Leads in Bold	Cost	Funding Source	Time- frame	Progress	Priority
Emmons County, All Cities	Severe Summer Weather Severe Winter Weather	Living Snow Fences: Continue to promote living snow fences and shelterbelts to prevent snow drifting and protection from severe summer weather and windstorms.	Continue to work with agricultural community to promote this field protective practice.	Extension Service	\$500	Emmons County Emergency Management Budget Extension Budget	Annually	Annually	Medium
Emmons County, All Cities	Severe Summer Weather Severe Winter Weather	Cut Trees/Limbs: Trim and our cut trees and foliage around structures and utilities to reduce and potentially eliminate damages from weather events.	Continue to work with community to promote this protective practice.	Extension Service	\$500	Emmons County Emergency Management Budget Extension Budget	Annually	Annually	Low
Emmons County, All Cities	Severe Winter Weather	Severe Winter Weather Awareness: Prepare community for the hazards of severe winter weather (blizzards, ice storm, windchill, etc)	Maintain annual campaign via newspaper, website, and social media.	Emmons Emergency Manager	\$100	Emmons County Emergency Management Budget	Annually	Annually	Medium
Emmons County, Hazelton, Linton	Severe Winter Weather	Snow Fencing: Protection of areas where snow historically "drifts"	Highway 83 - north and south of Hazelton and north and south of Linton	Road Department	\$500-\$1,000	Hazelton General FundLinton General Fund	Annually or As Needed	2015 and Ongoing	Low
Emmons County, All Cities	Space Weather	Space Weather: Outreach	Communicate potential risks to community based on forecasts.	Emmons Emergency Manager	Staff Time	Emmons County General Fund	As Needed	2019 and Ongoing	Low
Emmons County, All Cities	Transporta- tion Accident	Mass Casualty Planning: Update plan on a regular basis.	Continue to work with local stakeholders on plan maintenance.	Emmons Emergency Manager Public Health Sheriff’s Department	\$200	Emmons County General Fund Public Health Budget NDHHS	Annually	Annually	Medium

ATTACHMENT 2: MITIGATION PROJECTS COMPLETED

Mitigation Projects Completed								
Jurisdiction	Hazard	Description	Range of Actions (preferred action shown first if more than one listed)	Lead Agency(s)	Cost	Funding Source	Timeframe	Progress
Emmons County, All Cities	All	Automatic Notification System: County currently does not have an automated warning system.	Contract with the State Radio to cost share in their systems. Purchase stand-alone system.	Sheriff's Department	\$3,000	General Fund	2015-2020	Completed 2016 Contracted with State Radio
Emmons County	All	Backup Generator (Courthouse): Purchase and install a backup generator for the Emmons County Courthouse (EOC, Shelter, COG, COOP).	Continue to research grant availability.	Emergency Management	\$35,000	SHSP Grant	2014-2017	Completed 2015
Hazelton	All	Generator (20kW) and hookup up for City Hall and Fire Department	Hazelton City Hall and Fire Department are co-located with no permanent generator. City Hall hosts all the Commission Meetings, voting site, and Emergency Operations Center.	City Commission	Unknown	General Fund Hazelton Fire	Medium	Completed 2026
Hazelton	All	Sewer upgrades, well pump repairs	Upgrade and/or replace portions that are failing and continue to fail	City Commission	\$1.235M	CDBG Clean water State Revolving Fund (Loan)	High	Completed 2025
Hazelton	All	ADA access directly to City Hall without going through the Fire Department, steps redone	City Hall also serves as the Emergency Operations Center and voting location.	City Commission	\$9,600	General Fund	Medium	Completed 2024

Mitigation Projects Completed								
Jurisdiction	Hazard	Description	Range of Actions (preferred action shown first if more than one listed)	Lead Agency(s)	Cost	Funding Source	Timeframe	Progress
Emmons County	Dam Failure	Rehabilitation of Nieuwsma Dam	New concrete spillway apron, gunite spillway face, embankment repair, and a downstream plunge pool.	Water Resource Board ND Game & Fish Dept ND Water Commission	\$83,000	General Fund and Grants	2007	Completed 2007
Emmons County, Braddock, Hague, Linton, Strasburg	Drought Shortage or Outage of Critical Materials	Water Treatment Facility: For over 10 years, the community has relied on individual wells.	Phase One: Tube intake along the Missouri River at Beaver Bay into Lake Oahe, constructing a 2.5 million gallon per day water treatment plant, building a 500,000- gallon storage reservoir, and laying 21 miles of transmission lines.	American Recovery and Reinvestment Act funds (stimulus funds) US Dept of Agriculture	\$29 Million+	Grants	2010-2012	Completed 2012
Emmons County, Braddock, Hague, Linton, Strasburg	Drought Shortage or Outage of Critical Materials	Water Treatment Facility: For over 10 years, the community has relied on individual wells.	Phase Two: Laying 275 miles of transmission lines, the building of two booster stations, the purchase and installation of bulk user meters and telemetry equipment, and the building of a 200,000-gallon storage reservoir. The last phases will continue to expand services in the area. In 2015, the last two phases of the project will be completed serving 10,000 people in the Emmons, Logan, McIntosh area.	South Central Regional Water American Recovery and Reinvestment Act funds (stimulus funds) US Dept of Agriculture	\$29 Million+	Grants (South Central Regional Water 25% share of project)	2012-2015	Completed 2014

Mitigation Projects Completed								
Jurisdiction	Hazard	Description	Range of Actions (preferred action shown first if more than one listed)	Lead Agency(s)	Cost	Funding Source	Timeframe	Progress
Emmons County	Flood	Texas Crossing Evaluation: Evaluate current crossings for improvement.	Review the existing crossings that are major arterials and determine if increased culvert sizes are needed and/or raising the road to provide increases usage. 78th St SE (E of Hwy 83)-- \$274,000 83rd St SE (E of 19th Av SE)-- \$216,000 15th Av SE (S of 60th St SE)-- \$363,000	Road Department	\$850,000	General Fund	2-4 years	Completed 2016
Emmons County, Linton	Flood	Flood Feasibility Study: Determine long-term solutions to flood problems.	Section 22 Study through the US Army Corps of Engineers.	Water Resource Board ND Water Commission	\$245,408	State Water Commission, Water Board (in kind)	2010-2019	Completed 2020
Linton	Flood	Ponding west of Highway 83 and South of Sampson	Clean drainage area and replace four culverts. Area: 584' between Patriot Fuels & Spring Creek Coffee, 660' south of Don's Motel, 790' East side of Highway 83 (Across from Don's Motel to Nodak True Value approach)	City of Linton	\$58,949	Sewer Project Fund	3-5 Years	Completed 2020

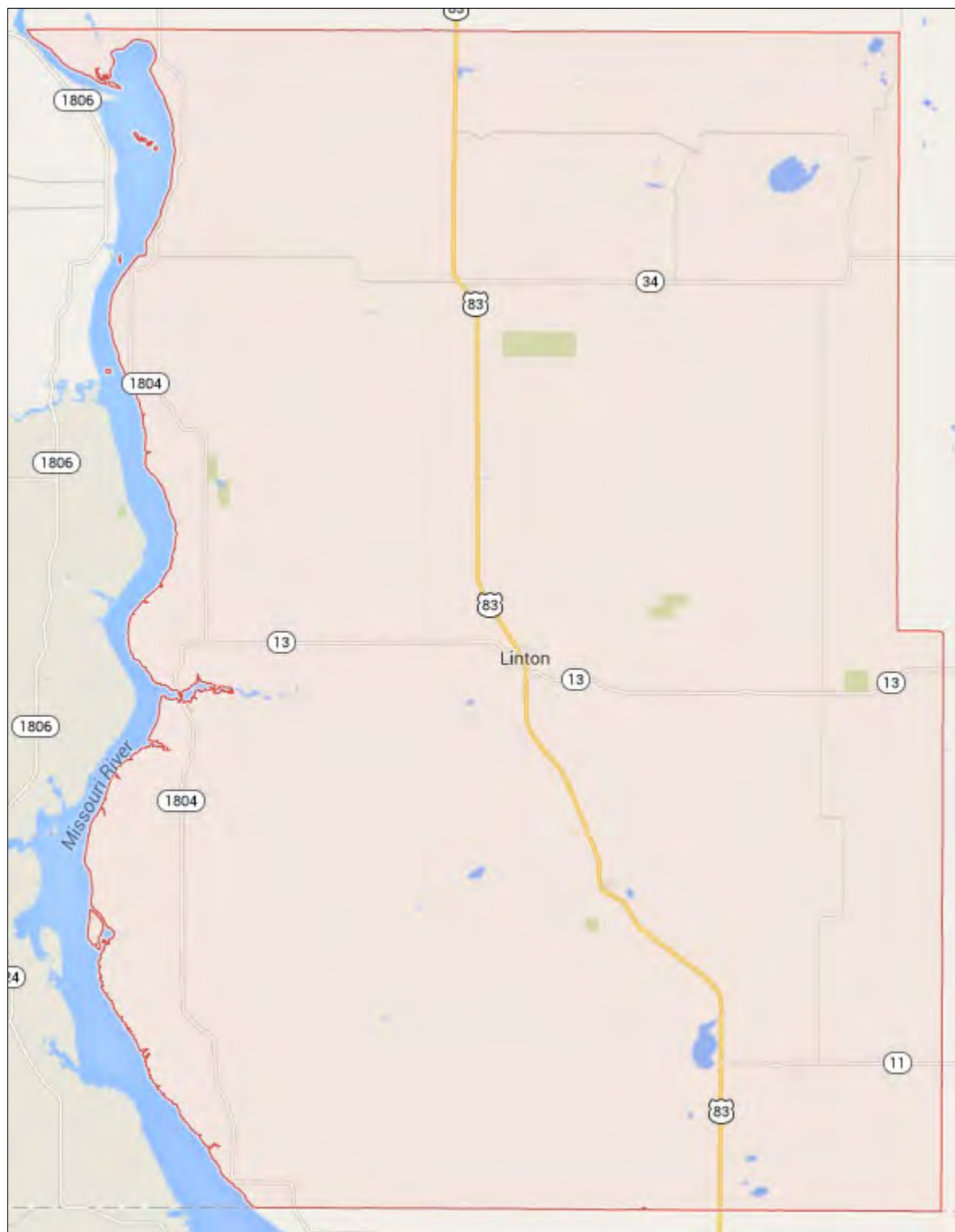
Mitigation Projects Completed								
Jurisdiction	Hazard	Description	Range of Actions (preferred action shown first if more than one listed)	Lead Agency(s)	Cost	Funding Source	Timeframe	Progress
Linton	Flood	Clean Sewer Main: Ability to transport increased flow and reduce damages to structures while stopping the release into the River during emergency situations.	Sewer lines relined. Purchased a sewer jetter to maintain (\$57,000).	City of Linton	\$2M+	Sewer Project Fund (loan/grant)	2016-2019	Completed 2019
Linton	Flood	Auxiliary Pump: Purchase a back up to utilize during flood events.	Pump purchased.	City of Linton	\$47,000	General Fund and/or Grants	1-3 Years	2018
Linton	Flood	Snagging and Clearing Channels: Remove impediment debris from affected channels. Portion 1: Seaman Park to 6th Avenue Bridge Portion 2: Spring Creek from Hwy 13 to/83 to confluence	Maintain every 1-2 years.	Water Resource Board	\$140,000	Water Board, State Water Commission	3-5 Years	2019 Completed
Linton	Flood	Remove City-owned lots from market in the floodway	Continue to sell in area where previous homes were purchased through NFIP Remove homes from market to dissuade development in the floodway.	Linton Commission	Unknown	General Fund	2019	Completed 2020

Mitigation Projects Completed								
Jurisdiction	Hazard	Description	Range of Actions (preferred action shown first if more than one listed)	Lead Agency(s)	Cost	Funding Source	Timeframe	Progress
Emmons County, Linton	Flood	Property Acquisition: Acquire properties to permanently reduce flood losses.	Purchase properties through volunteer participation. Wait until next flood for increased opportunity due to repetitive losses.	City Mayor County Commission Chair Public Health Sheriff’s Department	\$500,000	General Fund and FEMA Grant	1-3 Years	Completed 2014
Emmons County, Linton	Flood	Beaver Creek Flood Categories: Minor, Moderate, and Major Flood categories are not accurate.	Monitor the Creek and affects for two years (document and take pictures)	City Mayor County Commission Chair Emergency Management Road Department Sheriff’s Department	Staff Time	General Fund	1-3 Years	Completed 2014
Strasburg	Flood	Temporary Berm for slough overflow to prevent encroachment on private property.	Temporary berm while permanent solutions are reviewed.	City Commission	\$78,600	General Fund and FEMA Disaster Reimbursement (\$66,810)	Immediate	Completed 2019
Strasburg	Flood	Construct a three-cell facultative treatment lagoon system with new sanitary sewer, force main, lift station modifications	Current lagoon is a grandfathered one-cell lagoon and is adjacent to the slough. Slough has been running high and overflowing which could affect the lagoon.	City of Strasburg Water Resource Board	\$3 million+	General Fund USACE Grant NDDEQ Grant	High	Completed 2023

Mitigation Projects Completed								
Jurisdiction	Hazard	Description	Range of Actions (preferred action shown first if more than one listed)	Lead Agency(s)	Cost	Funding Source	Timeframe	Progress
Emmons County, All Cities	Hazardous Materials	Develop Shelter-In Place Brochure: Community may not be aware of the presence or hazardous materials and safety precautions to take during an incident.	Develop brochure and distribute within the community.	Emergency ManagementFire Districts	\$500	General Fund	1-3 Years	Completed 2013

ATTACHMENT 3: MAPS

Emmons County



Source: Google Maps [website](#)

City of Braddock



Source: Google Maps [website](#)

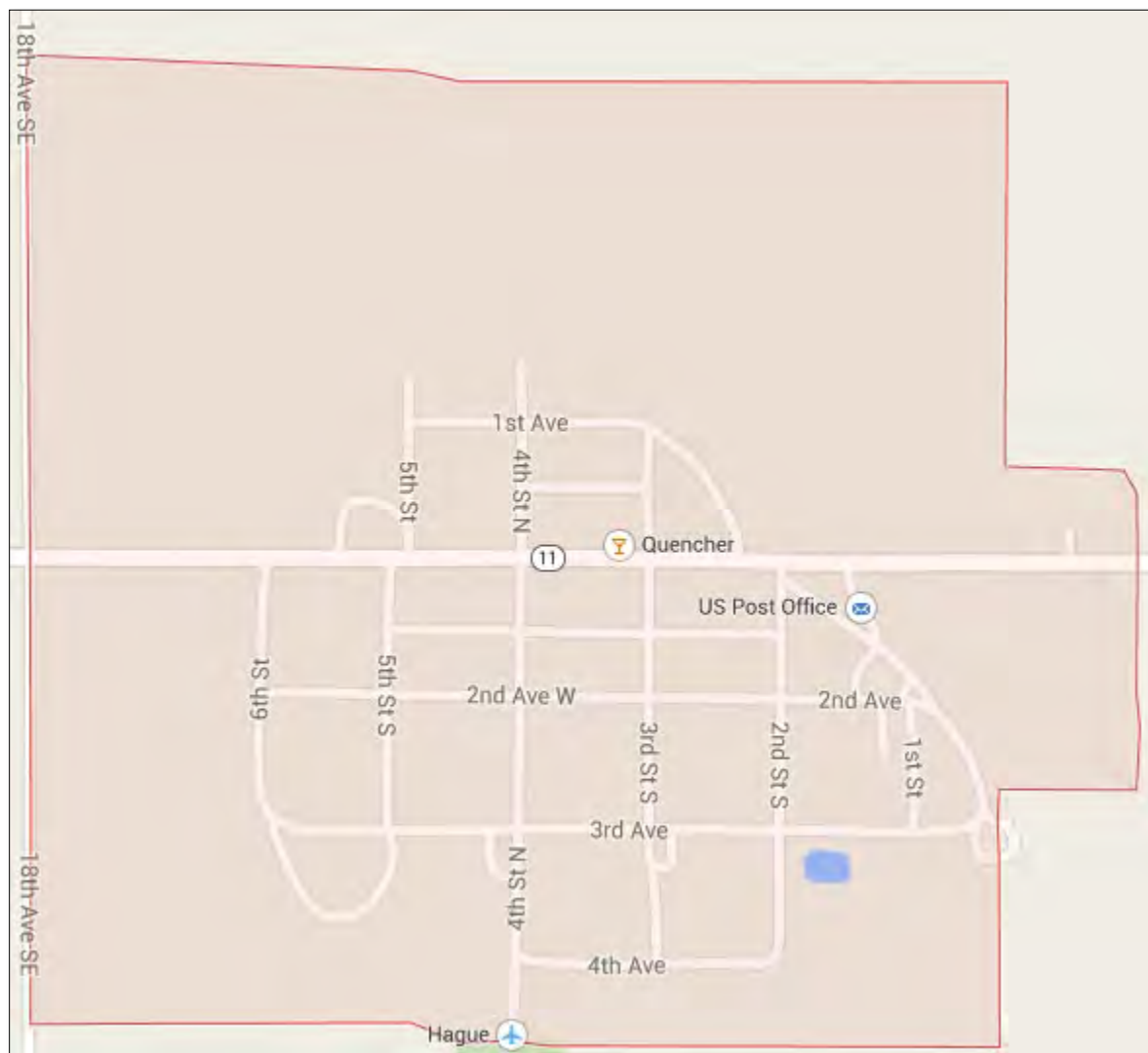


Source: Google Maps [website](#)

City of Hague



Source: Google Maps [website](#)

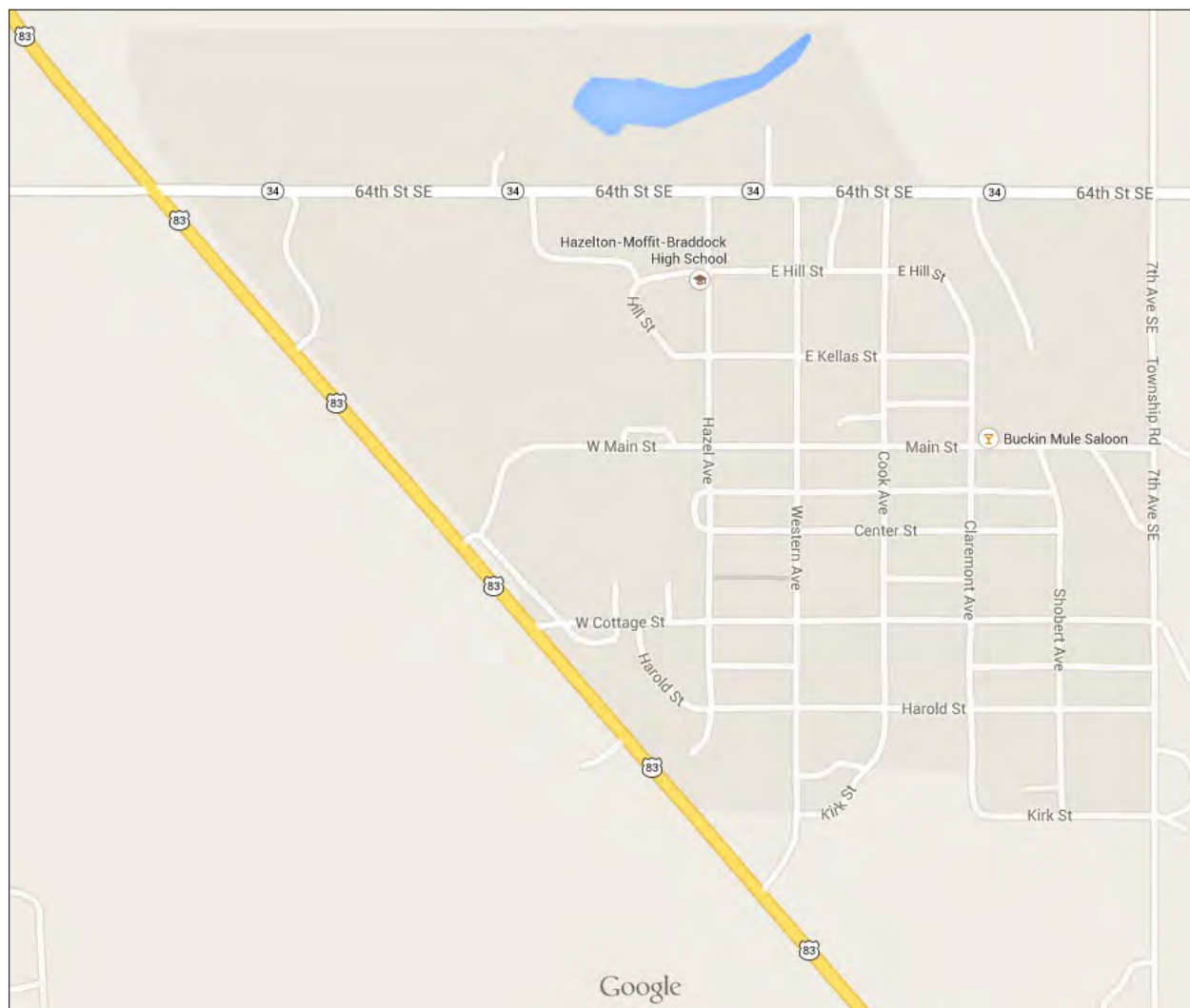


Source: Google Maps [website](#)

City of Hazelton



Source: Google Maps [website](#)



Source: Google Maps [website](#)

City of Linton



Source: Google Maps [website](#)

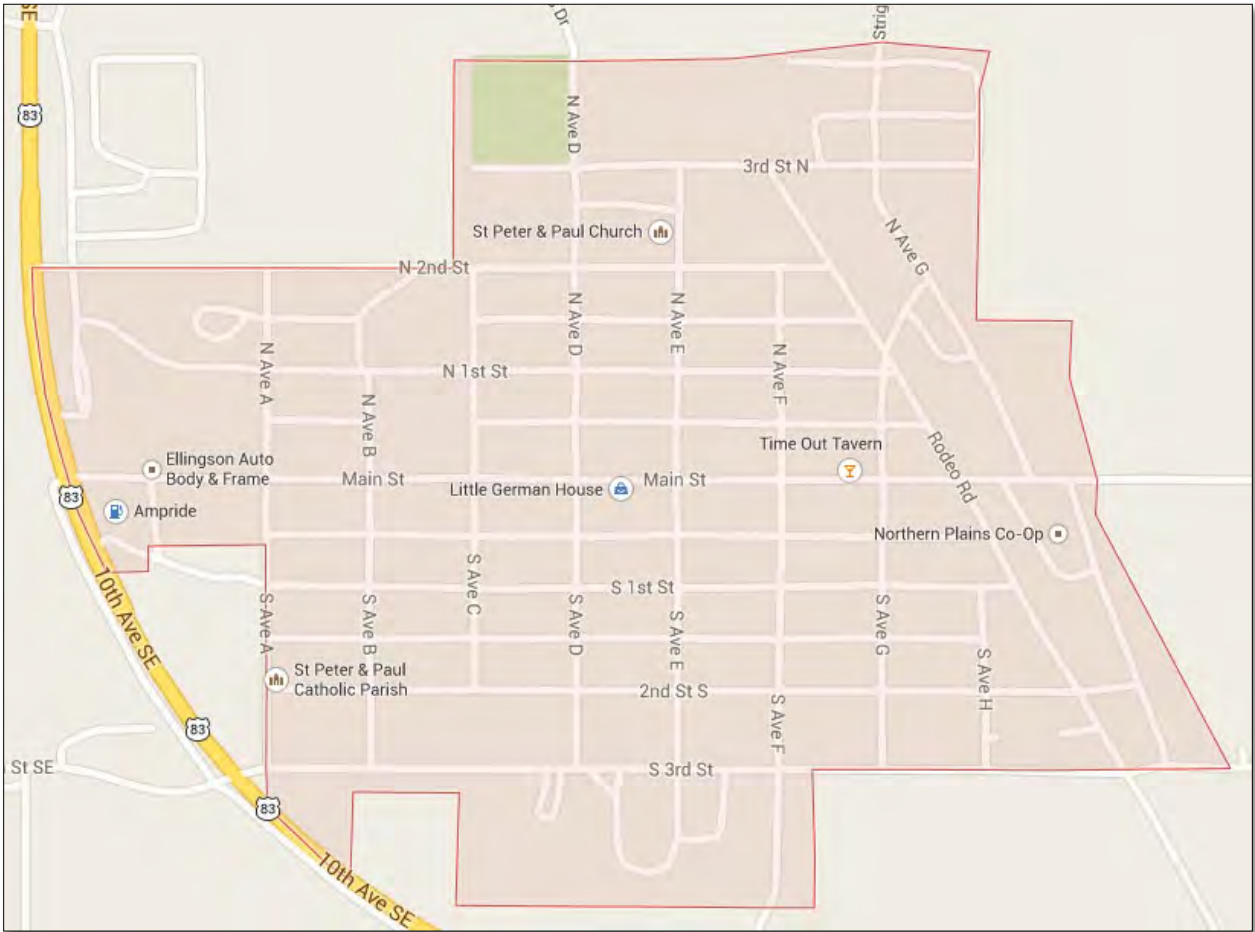


Source: Google Maps [website](#)

City of Strasburg

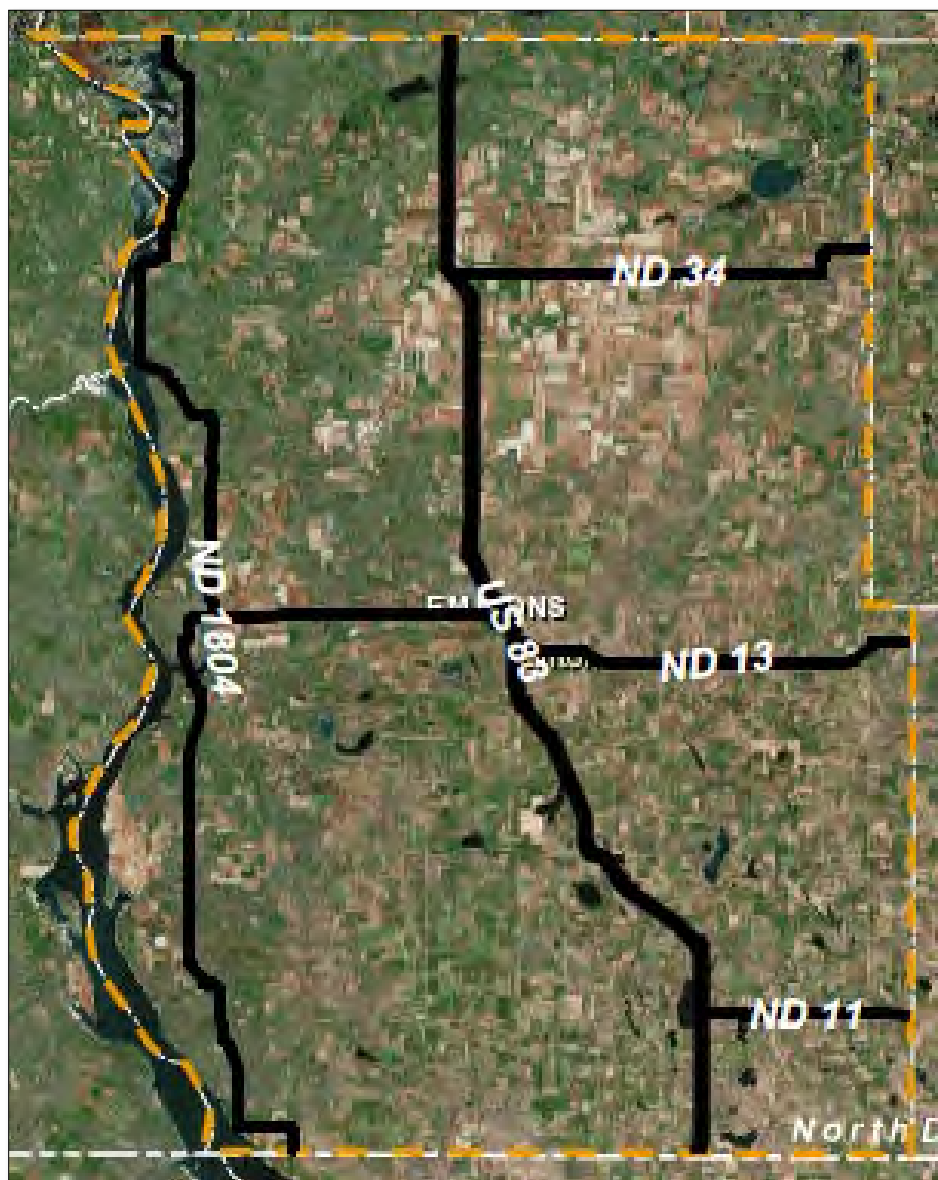


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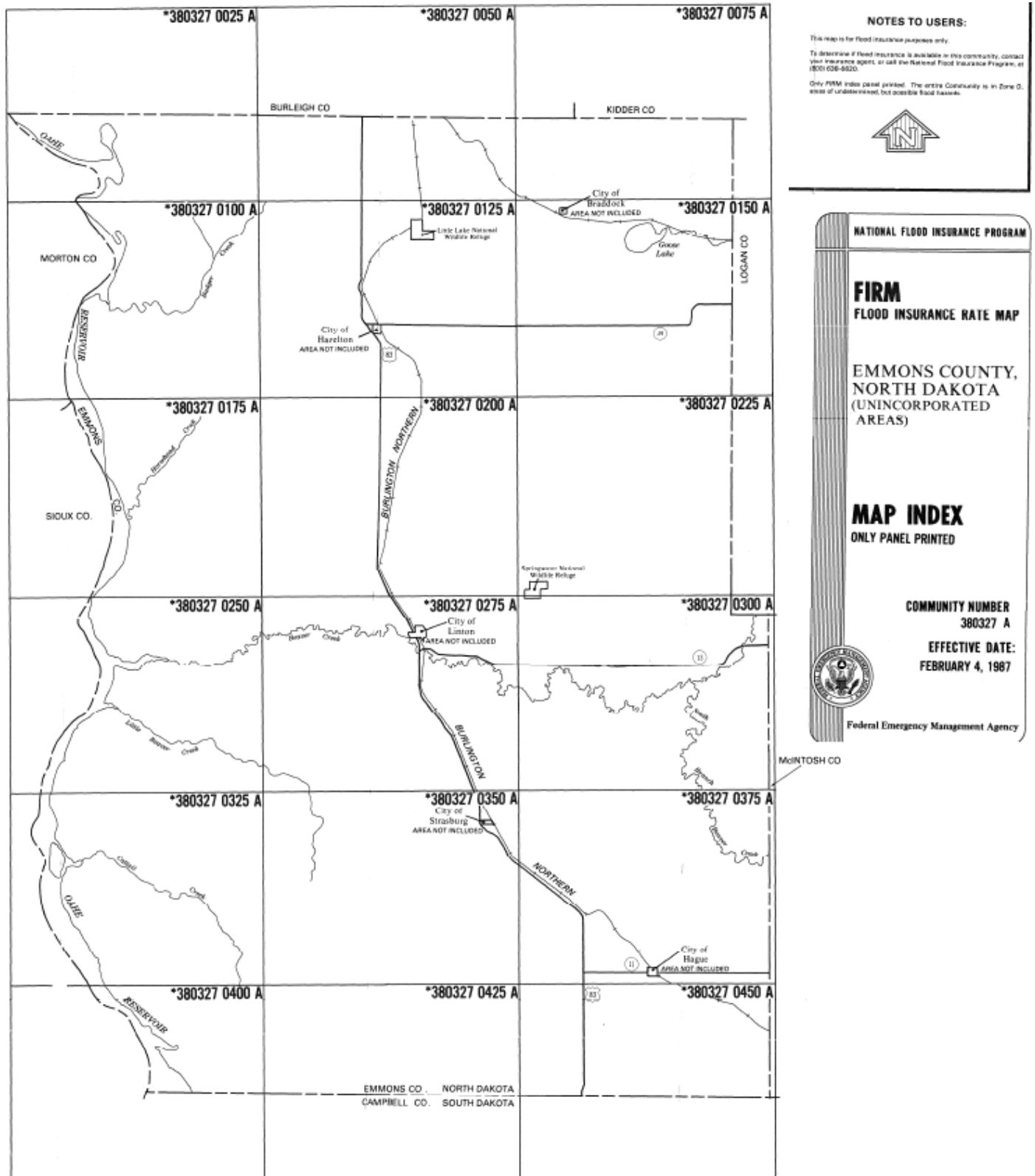
Source: Google Maps [website](#)

Major Roadways in Emmons County



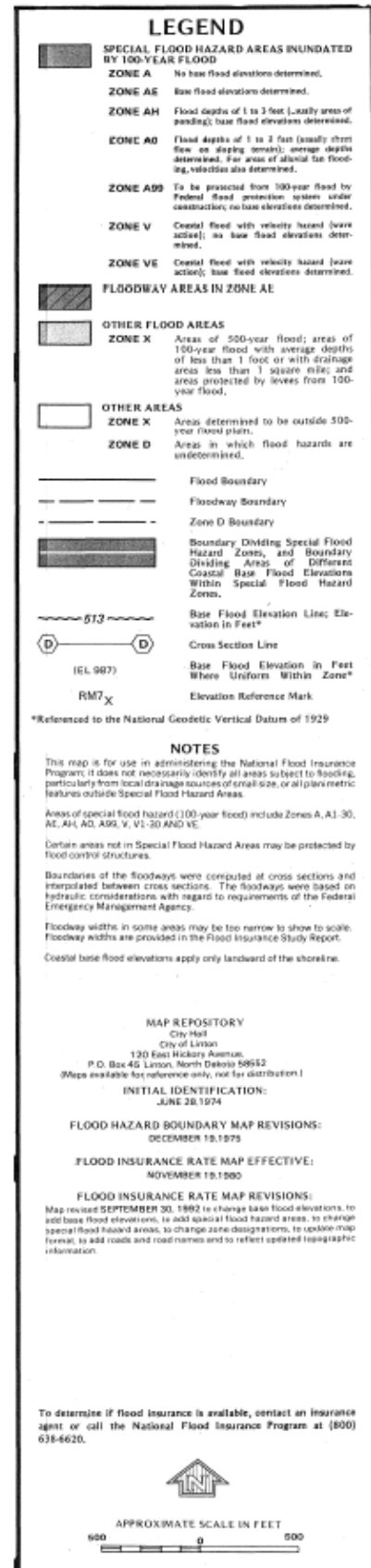
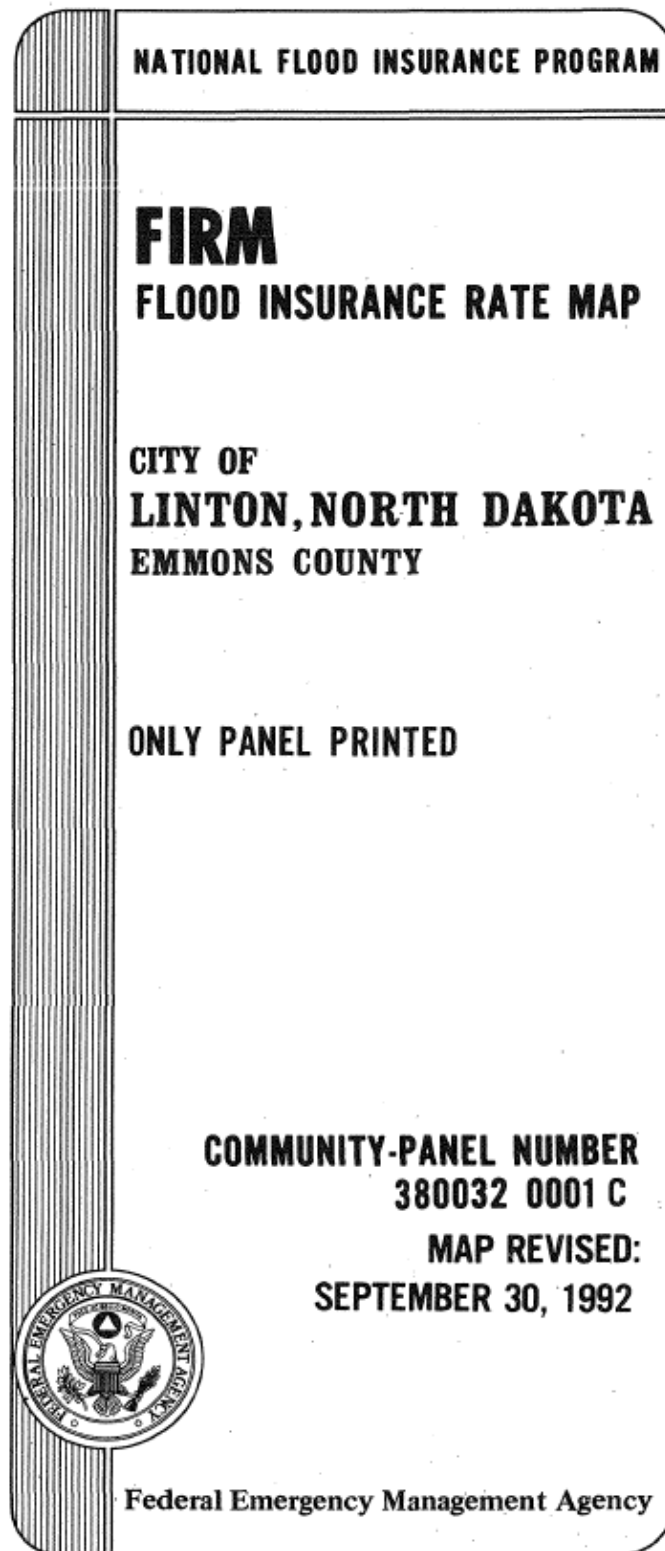
Source: Emmons County GIS

Flood Insurance Rate Map for Emmons County



Source: Federal Emergency Management Agency, Map Service Center [website](#)

Flood Insurance Rate Map for City of Linton



ATTACHMENT 4: MITIGATION CAPABILITIES

Based on funding and staffing, improvements or ability to expand capabilities are lacking for all communities; however, Braddock, Hague, and Strasburg are affected the most due to their extremely small populations.

Planning and Regulatory

Types of regulations, plans, and programs utilized. Emmons County has not formally adopted a building code and recently established their Planning and Zoning Committee. The City of Linton adopted the 2024 ND State Building Code (International Building Code, International Residential Code, International Mechanical Code, International Fuel Gas Code, International Energy Conservation Code, and the International Existing Building Code as published by the International Code Council) through their [City Ordinance 07-12-1](#).

Braddock, Hague, Hazelton, and Strasburg have not adopted a building code.

	Planning and Regulatory Capabilities					
	Emmons County	Braddock	Hague	Hazelton	Linton	Strasburg
Annual Budget	*	*	*	*	*	*
Building Code	**	***	***	***	**	***
Burn Restrictions Protocol	*	*	*	*	*	*
Comprehensive Plan	?	***	***	***	***	***
Emergency Operations Plan	*	C	C	C	C	C
Stormwater Management Plan	*	***	***	***	***	***
Zoning Ordinance	*	***	***	***	*	***
*Fully utilize **Partially utilize ***No need ****Lack of funds or staff ? Unknown C Covered by County						

Planning Mechanism	Supports	Emmons County	Braddock	Hague	Hazelton	Linton	Strasburg
Comprehensive Plan	Land use planning Mitigation actions Risk assessment	X					
Emergency Operations Plan	Risk Assessment Capability Assessment	X	X	X	X	X	X
Emergency Action Plan (EAP) for Dams	Nieuwsma Dam Garrison Dam	X					
Land Use Ordinances	Develop planning Risk Assessment Capability Assessment	X				X	
Mitigation Plan	Capability Assessment Risk Assessment Mitigation Actions	X	County	County	County	County	County

The County Emergency Manager maintains the Emergency Operations Plan which is reviewed every two years with a comprehensive update every five years.

The Emergency Action Plan for Nieuwsma Dam is maintained by the Emmons County Water Resource District with input from the County Emergency Manager. The Garrison Dam EAP is reviewed on an irregular basis with the US Army Corps of Engineers.

Land Use Ordinance also utilize knowledge and data from the mitigation plan for planning—especially floodplain ordinances.

The mitigation plan is reviewed after incidents, and yearly, with a major update every five years by the Emergency Manager with input from all jurisdictions.

Administrative and Technical

All communities have staffing and funding limitations which limit their capabilities. Engineering services are contracted on an “as needed” basis for all jurisdictions.

	Administrative & Technical Capabilities					
	Emmons County	Braddock	Hague	Hazelton	Linton	Strasburg
Auditor	*	*	*	*	*	*
Emergency Manager	*	C	C	C	C	C
Engineering Staff	**	***	***	**	**	**
Ambulance	*	***	***	*	**	*
Public Works Staff	*	***	**	*	*	**
Fire Department	*	*	*	*	*	*
Law Enforcement	*	C	C	C	C	C
Governing Body	*	*	*	*	*	*
Water Resource Board	*	***	***	***	***	***
*Fully utilize **Partially utilize ***No need ****Lack of funds or staff ? Unknown C Covered by County						

Education and Outreach

Communication capabilities for each jurisdiction.

	Education & Outreach					
	Emmons County	Braddock	Hague	Hazelton	Linton	Strasburg
Website	*	****	****	****	*	****
Social Media	*	****	****	*	*	*
StormReady	*	C	C	C	C	C
Outdoor Sirens	***	****	*	****	*	*
Automatic Notification System	*	C	C	C	C	C
*Fully utilize **Partially utilize ***No need ****Lack of funds or staff ? Unknown C Covered by County						

Financial

General fund is the main source for each jurisdiction.

	Financial					
	Emmons County	Braddock	Hague	Hazelton	Linton	Strasburg
Sales tax	*	**	**	*	**	**
General fund	*	*	*	*	*	*
Community Development Block Grant	**	*	*	*	*	**
Federal funding	*	**	*	*	*	*
State funding	*	**	*	*	*	*
*Fully utilize **Does not utilize						

Emmons County Emergency Management

1. Mitigation and Risk Reduction: (including agency's role, capabilities, and programs that support mitigation actions.)
 - a. Coordinate emergency planning and response activities with numerous county agencies. Planning encompasses preparedness, response, recovery, and mitigation.
 - b. Responsible for daily operations of the Emergency Operations Center.
 - c. Update and exercise emergency operations and mitigation plans.
 - d. Coordinate State-sponsored training for county agencies including; law enforcement, public health, social services, fire departments, emergency medical services, etc.
 - e. Coordinate the County's Local Emergency Planning Committee.
 - f. Coordinate the County's Tier II reporting for hazardous materials.
 - g. Coordinate public awareness and educational programs via newspapers, radio, website, and social media to decrease vulnerability to hazards.
 - h. Coordinate timely and effective public information during emergency situations.
 - i. During a disaster declaration, emergency management will have all county resources at their disposal including manpower, communications, and equipment.
 - j. With effective planning, training, and exercising, emergency management can help to mitigate potential hazards within the county.
 - k. Assist in damage assessment and coordinate with state and federal agencies for recovery assistance.
2. Responsibility and authority in the regulating, inspecting, or funding of projects:
 - a. Assist with applications for federal and state funding such as the Hazard Mitigation Grant Program.
3. Leadership and coordination with other government agencies:
 - a. Local Agencies: Emmons County Emergency Management coordinates with appropriate local agencies to ensure preparedness, response, recovery, and mitigation. These agencies include: Emmons County Commissioners, Emmons County Public Health, Emmons County Road Department, Emmons County Sheriff's Department, and various other law enforcement, fire, communication, and emergency medical agencies.
 - b. Non-local Agencies: Emmons County Emergency Management coordinates with numerous state and federal agencies. These agencies include the ND Department of Emergency Services, ND Highway Patrol, ND Health Department, Department of Transportation, and the Federal Emergency Management Agency.
4. General recommendations/Emergency Management concerns
 - a. A listing of eligible mitigation projects maintained for available grant funds.
 - b. Emmons County is constantly striving to improve planning and exercise activities and response capabilities. Increased traffic on Highway 83 raises the hazardous materials threat and increases the need for training, and awareness.

Emmons County Emergency Medical Services

1. Mitigation and Risk Reduction: (including agency's role, capabilities, and programs that supports mitigation actions.)
 - a. Respond to assist the sick and injured.
 - b. Respond for standby at emergency situations.
 - c. Provide training for department members to enable them to effectively and efficiently carry out their respective duties and responsibilities.
 - d. Provide community educational classes.
 - e. Provide standard EMS manpower and equipped ambulances
 - f. Respond to emergencies resulting from natural occurrences.
 - g. In disaster situations, provide assistance in warning, rescue, evacuation, and situation updates.
2. Responsibility and authority in regulating, inspecting, or funding of projects:
 - a. None
3. Leadership and coordination with other government agencies:
 - a. Local agencies: In efforts to decrease vulnerability to the sick and injured, EMS will coordinate with local agencies. The agencies may include: Emmons County Sheriff's Department, Emmons County Emergency Management, Linton City Police Departments, local fire districts, local Public Works, local EMS, local city governments, and Emmons County Commissioners.
 - b. Non-local Agencies: North Dakota State Health Department, North Dakota EMS and Trauma Department, EMS agencies outside of Emmons County.

Emmons County Extension Service

1. Mitigation and Risk Reduction: (including agency's role, capabilities, and programs that support mitigation actions.)
 - a. The Emmons County Extension Service is linked in a unique partnership with North Dakota State University to provide practical, research-based information and educational programs to address critical issues facing individuals, families, agricultural producers, business operators, and communities.
 - b. County Extension Agents serve as subject-matter experts, educational planners, adult and youth teachers and community facilitators in several areas including agriculture and natural resources, horticulture, family and consumer sciences, 4-H and youth community development.
 - c. Provide planning, designing, implementing, and evaluating of educational programs for livestock and forage clientele.
 - d. Areas of responsibility include beef and dairy cattle, swine, other livestock, water quality, waste management, and forages.
 - e. Provide programming for county citizens in the areas of family financial management, environmental concerns, housing, health and wellness, aging, foods and nutrition, parenting, and human development.
 - f. Serve as an information resource in dealing with drought, winter storms, summer storms etc. in relation to agriculture, environment, water resources, etc.
 - g. Assist with damage assessment related to agriculture.
2. Responsibility and authority in regulating, inspecting, or funding of projects:
 - a. Authority is at federal level.
3. Leadership and coordination with other government agencies:
 - a. Local Agencies: Emmons County Emergency Management and Emmons County District Health Unit.
 - b. Non-local Agencies: North Dakota State University, North Dakota State Health Department, United States Department of Agriculture, and Farm Service Agency.
4. General recommendations/Emergency Management concerns:
 - a. Urban development taking over agricultural lands.

Emmons County Fire Departments

1. Mitigation and Risk Reduction: (including agency's role, capabilities, and programs that supports mitigation actions.)
 - a. Respond to fire calls in order to protect lives, limit injuries, and minimize damage to property and the environment.
 - b. Respond to accidents in order to assist with rescue and provide fire suppression.
 - c. Assist EMS in providing assistance to the sick and injured.
 - d. Provide standard firefighting manpower and equipment including, fire fighters and fire suppression equipment.
 - e. Respond to spills and releases of hazardous materials and assist in mitigating the detrimental human and environmental effects of these occurrences.
 - f. Respond to emergencies resulting from natural occurrences such as storms, floods, etc., and assist in mitigating the detrimental results of these occurrences.
 - g. Provide training for department members, which enable them to effectively and efficiently carry out their respective duties and responsibilities.
 - h. Develop and provide educational programs that promote the prevention of fires and encourage fire-safe and fire-smart activities.
 - i. Assist with enforcement of city fire ordinances.
 - j. Conduct Fire Investigations.
 - k. Provide assistants to other jurisdictions as resources and commitments allow.
 - l. Conduct inspections and preplanning within the fire districts to reduce hazards and aid in fire prevention.
 - m. Assist with the county tier two reporting. (Hazmat storage sites).
 - n. In disaster situations, provide assistance in warning, rescue, evacuation, and situation updates.
2. Responsibility and authority in regulating, inspecting, or funding of projects:
 - a. None
3. Leadership and coordination with other government agencies:
 - a. Local agencies: In efforts to decrease vulnerability to rescue hazards the fire departments will coordinate with local agencies. The agencies may include: Emmons County Sheriff's Office, Emmons County Emergency Management, Linton Police Department, Strasburg Fire Department, Hazelton Fire Department, Braddock Fire Department, Hague Fire Department, Pollock, S.D. Fire Department, Southwest Fire District, Zeeland Fire Department, Napoleon Fire Department, local Public Works, local EMS, local city governments, and Emmons County Commissioners.
 - b. Non-local Agencies: North Dakota State Fire Marshal's Office, North Dakota Forest Service, FEMA, and other fire districts outside of Emmons County.

Emmons County Public Health

1. Mitigation and Risk Reduction: (including agency's role, capabilities, and programs that support mitigation actions)
 - a. Deal with real-event health hazards using cause and effect in those areas for both mitigation and risk reduction. If it is a hazard affecting any number of persons and within the scope of public health, Emmons County Public Health will mitigate or exercise risk reduction through several methods ranging from enforcement of statutes to immunization programs.
 - b. Environmental Health has the knowledge and also access to the State Health Department for mitigation of incidents with hazardous or toxic wastes.
 - c. Programs may include; waste water treatment, water pollution, public health nursing, immunization programs, solid waste regulation, food establishment inspections, air quality, disease surveillance and vector control.
2. Responsibility and authority in the regulating, inspecting or funding of projects.
 - a. Emmons County Public Health is a political subdivision that operates through agreements or Memorandums of Understanding with the North Dakota Department of Health to enforce state public health statutes within the county. Tax levies provide funding in addition to federal and state grants.
3. Leadership and coordination with other government agencies:
 - a. Local Agencies: Within the scope of public health, Emmons County Public Health coordinates with the following local agencies; Emmons County Commissioners, Other County Agencies, Emmons County Emergency Management, local law enforcement agencies (city and county), local hospital and medical agencies, and city jurisdictions within Emmons County.
 - b. Non-local Agencies: Within the scope of public health, Emmons County Public Health coordinates with the following agencies; North Dakota Department of Health and state and federal law enforcement agencies.
4. General recommendations/Emergency Management concerns:
 - a. Public Health is underfunded and understaffed and will not be able to manage a wide-spread public health emergency or disaster without assistance and support from other agencies. Memorandums of Understanding exist between Regional and other surrounding Public Health units for use of staff and other resources during an emergency.
 - b. Public health agencies should be included in equipment usage/storage and have access to this equipment during an emergency or disaster. For example, radio equipment that belongs to FEMA is based at the county emergency management office, the same could be done with air sampling equipment or other instruments/kits, etc. which could be used by public health both for daily work and at a time of emergency or disaster.

Emmons County Rescue

1. Mitigation and Risk Reduction: (including agency's role, capabilities, and programs that supports mitigation actions.)
 - a. Respond to rescue calls in order to protect lives and limit injuries,
 - b. Respond to any type of accident or incident to safely provide rescue assistance
 - c. Assist EMS in providing assistance to sick and injured.
 - d. Provide standard rescue manpower and equipment including rescue units, rescue equipment, and fire suppression equipment.
 - e. Respond to spills and releases of hazardous materials and assist in mitigating the detrimental human and environmental effects of these occurrences.
 - f. Respond to emergencies resulting from natural occurrences such as storms, floods, etc., and assist in mitigating the detrimental results of these occurrences.
 - g. Provide training for department members, which enables them to effectively and efficiently carry out their respective duties and responsibilities.
 - h. In disaster situations, provide assistance in warning, rescue, evacuation, and situation updates.
2. Responsibility and authority in regulating, inspecting, or funding of projects:
 1. None
3. Leadership and coordination with other government agencies:
 - a. Local agencies: In efforts to decrease vulnerability to rescue hazards the fire departments will coordinate with local agencies. The agencies may include: Emmons County Sheriff's Department, Emmons County Emergency Management, Linton City Police Departments, local fire districts, local Public Works, local EMS, local city governments, and Emmons County Commissioners.
 - b. Non-local Agencies: Fire districts outside of Emmons County.

Emmons County Road Department

1. Mitigation and Risk Reduction: (including agency's role, capabilities, and programs that support mitigation actions)
 - a. Design culverts and overflow sections. The County Road Department follows a very detailed list of design standards for all projects within the county.
 - b. With the Department of Transportation continue working on various projects since the DOT dispenses federal funding. While the DOT provides technical advice concerning guidelines and standards, they do not provide equipment, materials, or personnel.
2. Responsibility and authority in the regulating, inspecting or funding of projects:
 - a. Responsible for and have authority to regulate and inspect all projects completed within the county.
 - b. All projects funded by the state or federal government are designed by a consulting engineer and meet the usual acceptable federal standards. Inspection of federal aid projects is the responsibility of the consulting engineering company and is overseen by the county to ensure standards are met. Many county projects are designed with in-house expertise and engineers are consulted if problems arise.
 - c. All funding comes through the county, whether it is a certain percentage of the federal aid project or 100% of the county projects.
3. Leadership and coordination with other government agencies:
 - a. Local Agencies: The County Road Department interacts with the County Commission, Sheriff's Department and Emergency Management. They coordinate with various county agencies concerning right-of-way and right-of-way acquisitions. The legal aspect of right-of-way acquisitions is overseen by the State's Attorney Office. The land values are usually developed by the Tax Equalization Office and approved by the County Commission.
 - b. Non-local Agencies: The County Road Department coordinates with various State and Federal agencies for technical assistance, permitting, environmental concerns, archeological sites and cultural issues. These agencies include the North Dakota Department of Transportation, US Fish and Wildlife, Corp of Engineers, and the North Dakota Historical Society.
4. General recommendations/Emergency Management concerns:
 - a. Emmons County Road Department should assist local government with floodplain management and water development permitting.
 - b. Debris removal.
 - c. Damage assessment.

Emmons County Sheriff's Department

1. Mitigation and Risk Reduction: (including agency's role, capabilities, and programs that support mitigation actions.)
 - a. Responsible for various law enforcement activities and duties including criminal investigations, traffic enforcement and safeguarding lives and property in Emmons County and its various communities.
 - b. Provide emergency operations and communications during a disaster or other emergency incident event.
 - c. Provide standard law enforcement manpower and equipment.
 - d. In disaster situations, provide; warning, rescue assistance, evacuation assistance, security, traffic control, and information assistance.
 - e. Have mutual aid agreements with all surrounding counties and the North Dakota State Highway Patrol.
2. Responsibility and authority in the regulating, inspecting, or funding of projects:
 - a. None
3. Leadership and coordination with other government agencies:
 - a. Local Agencies: Within the scope of law enforcement, the Emmons County Sheriff's Office coordinates with various local agencies including Emmons County Emergency Management, the Linton Police Dept. and the various municipalities within Emmons County.
 - b. Non-local Agencies: The Emmons County Sheriff's Office coordinates with appropriate state and federal agencies including; North Dakota Highway Patrol, North Dakota Attorney General's Office, North Dakota Bureau of Criminal Investigation, North Dakota Game and Fish, North Dakota State Radio, North Dakota Department of Transportation, North Dakota Health Department, North Dakota National Guard, Federal Bureau of Investigation, Department of Homeland Security and the US Border Patrol.
4. General recommendations/Emergency Management concerns:
 - a. None.

Emmons County Water Resource Board

1. Mitigation and Risk Reduction
 - a. Assist with water damage assessment
 - d. Provide maps
 - e. Floodplain Administrator
2. Non-local agencies – State Water Commission

Linton Hospital

1. Mitigation and risk reduction: (including agency's role, capabilities, and programs that support mitigation actions)
 - a. Provides a level V trauma emergency room.
 - b. Staffed with nursing services 24 hour a day 7 days a week.
 - c. Physician on call 24 hours a day 7 days per week.
 - d. Communications with law enforcement
 - e. Communications with EMS services.
 - f. Communications with County Emergency Services.
 - g. Communications with public health.
 - h. Maintain mutual aid agreements for alternative site in event of disaster to the facility.
 - i. Continued education provided to staff to fulfill requirements of trauma level certification.
 - j. Participates in local emergency planning committee.

Other Agency Resources

Local Agencies Serving Emmons County

1. Fire Departments: Braddock, Hague, Hazelton, Linton, Napoleon, Pollock, Strasburg, and Zeeland.
2. BLS Ambulance Services: Napoleon.
3. ALS Ambulance Services: Emmons County ALS Ambulance Service, Metro Area Ambulance Service.
4. First Responder Services: Hazelton First Responders, Strasburg First Responders, Pollock First Responders, Zeeland First Responders.
5. Other Fire Agencies: North Dakota State Fire Marshal's Office, North Dakota Forestry Service.

ND Department of Agriculture

1. Mitigation and Risk Reduction
 - a. Assists with situation and damage assessment on agricultural lands; coordination with USDA; hazmat technical assistance; state land use program.
 - b. USDA agencies with local presence include NDSU Extension Service, Farm Service Agency (FSA), and Natural Resource and Conservation Service (NRCS).
 - c. When natural disasters occur, a County Emergency Board which includes Extension Service, FSA, and NRCS representatives meet. They assess, locate, and estimate damages and agricultural losses that occur as a result of events such as hail storms, floods, untimely freezes, tornado, high winds.
 - d. Damage assessment reports are assembled and submitted to state level offices of the respective USDA agencies so that information is readily available at a state level. This permits timely situation reports and provides local information for decisions to make disaster declarations. Such declarations may be made by governor, Secretary of Agriculture, or Presidential declaration.

ND State Radio Communications

1. Mitigation and Risk Reduction
 - a. Provides 911 dispatch services to all of Emmons County
 - b. Provides statewide emergency radio communications and dispatching to the various local and state first responders including: Law Enforcement, Fire and EMS.

Relief Agencies

1. Salvation Army
2. Red Cross
3. West Central Social Services
4. Emmons County Social Services
5. Emmons County Ministerial Association

Utilities

South Central Regional Water District: Delivers a reliable supply of safe, affordable, high-quality water to members in a five-county area in central North Dakota including rural Burleigh County.

KEM Electric Coop Inc.: Service to rural areas.

Montana-Dakota Utilities: Service to incorporated cities.

Northern Border Pipeline

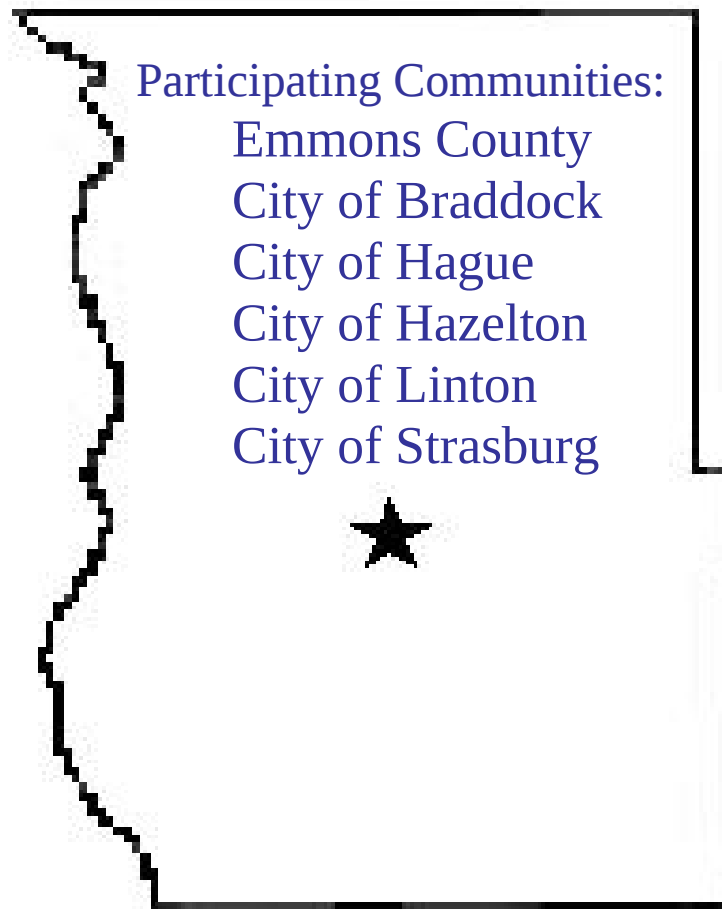
BEK Communications

- a. Mitigation and Risk Reduction
 - 1) Restoration of BEK network
 - 2) Restoration of the service for first responders, state radio, cellular towers & mass media communications (TV)
 - 3) Provisioning of communications needs for the County Emergency Manager
 - 4) Provisioning of communications needs for the displaced public
- b. Commitment to Emmons County in a disaster event upon notice from Emergency Manager.
 - 1) County Disaster Notification (CDN)-Notify BEK at 701-475-2361 (24-hour call center coverage) and specify this is a County Emergency. Ask for it to be escalated to the highest level as fast as possible and be sure to include specific contact and reporting location information to be passed along to BEK's Disaster Response Manager (DRM). In the event this fails to deliver a correct response, notify any BEK employee and request escalation.
 - 2) Disaster Response Manager (DRM) – Upon notification, BEK will have the DRM on site in four hours or less
 - 3) Disaster Response Mobilization – BEK is committed to be fully mobilized in no more than eight hours of notification to the DRM.
 - 4) Disaster Response Services – we have identified a list of services and assets that BEK is committed to deliver during a mobilization at the discretion of the Emergency Manager
1. Emergency Manager Services
 - a. Fixed line phone service – quality and location specified by the Emergency Manager with long-distance charges paid by the County.
 - b. Broadband – speed and location defined by the Emergency Manager, both wired and wireless using 802.11 protocol, subject to the limitations of available infrastructure.
 - c. TV Production – production and broadcasting services at locations and times specified by the Emergency Manager.
 - d. Broadcasting – BEKTV broadcasting services at times and on channels specified by the Emergency Manager.
 - e. Community Channel – use of the BEK Bulletin Board (Community Channel) to post notices with content and frequency as specified by the Emergency Manager.
 - f. Email Notification – use of BEK email infrastructure for distribution of electronic messages and times to the recipient list as provided by the Emergency Manager.
 - g. Internet Website Notice – posting of notices on the BEK website with the content and frequency specified by the Emergency Manager.

2. Displaced Public Services

- a. Public Phones – fixed line phone service of the quality and at the location(s) to be specified by the Emergency Manager, with long distance charges paid by the member.
- b. Public Computers – Internet connected computers at the location(s) to be defined by the Emergency Manager, both wired and wireless using 802.11 protocol.
- c. Public Television – BEKTV digital and/or analog services with large screen TVs at the location(s) as specified by the Emergency Manager.

Emmons County Multi-Hazard Mitigation Plan Appendices



FEMA Approved: July 9, 2026 – July 8, 2031

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APPENDIX A: INVITED STAKEHOLDERS AND PARTICIPATION

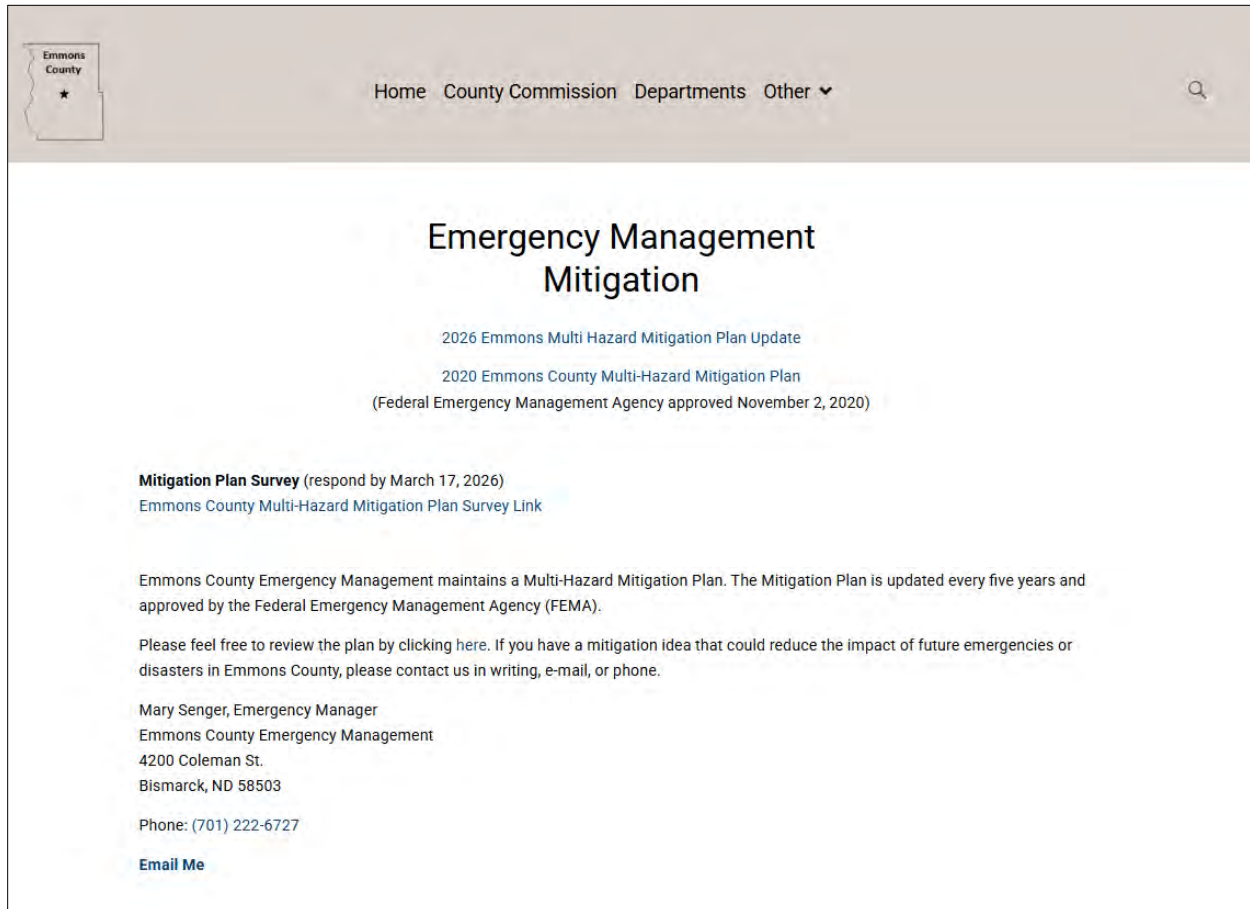
Stakeholder Participation	Water Board Meeting 03-03-2025	Flood Annex Review 03-25-2025	LEPC & Kickoff (Invited) 11-18-2025	LEPC & Kickoff (Attended) 11-18-2025	Water Board Meeting 03-02-2026	Emmons County Meeting 03-02-2026	Emmons County Public Survey Published (Invited) 03-03-2026	Linton Meeting 03-02-2026	Hazelton Meeting 04-10-2026	Strasburg Meeting 04-10-2026	Braddock Meeting 05-28-2026	Hague Meeting 05-28-2026
Media			X				X					
Public			X	X	X		X					
Agtegra Strasburg			X									
BEK Communications Coop			X	X			X					
Braddock Fire Department			X				X					
Burleigh County Emergency Mgt							X					
City of Braddock			X				X				X	
City of Hague			X				X					X
City of Hazelton			X				X		X			
City of Linton		X	X				X	X				
City of Linton Public Works		X	X				X					
City of Strasburg			X				X			X		
Emmons County Ambulance		X	X	X			X					
Emmons County Auditor			X			X	X					
Emmons County Commission			X				X					
Emmons County Emergency Mgt	X	X	X	X	X	X	X	X	X	X	X	X
Emmons County Extension		X	X	X			X					
Emmons County GIS		X					X					
Emmons County Public Health		X	X				X					

Stakeholder Participation	Water Board Meeting 03-03-2025	Flood Annex Review 03-25-2025	LEPC & Kickoff (Invited) 11-18-2025	LEPC & Kickoff (Attended) 11-18-2025	Water Board Meeting 03-02-2026	Emmons County Meeting 03-02-2026	Emmons County Public Survey Published (Invited) 03-03-2026	Linton Meeting 03-02-2026	Hazelton Meeting 04-10-2026	Strasburg Meeting 04-10-2026	Braddock Meeting 05-28-2026	Hague Meeting 05-28-2026
Emmons County Record			X				X					
Emmons County Road Dept		X	X				X					
Emmons Senior Services							X					
Emmons County Sheriff Dept		X	X			X	X					
Emmons County Soil Conservation			X									
Emmons County States Attorney							X					
Emmons County Supt of Schools			X				X					
Emmons County Tax Equalization							X					
Emmons County Veterans Service							X					
Emmons County Water Resource Board	X	X	X		X		X					
Energy Transfer Partners (Dakota Access Pipeline)			X				X					
Hague Elevator							X					
Hague Fire Department			X				X					
Hazelton Fire Department			X				X					
Hazelton-Moffit-Braddock School							X					
KEM Electric Cooperative Inc			X				X					
Kidder County Emergency Mgt							X					
Linton Fire Department			X	X			X					
Linton Municipal Airport							X					
Linton Public School							X					

Linton Regional Medical Center			X	X			X					
Stakeholder Participation	Water Board Meeting 03-03-2025	Flood Annex Review 03-25-2025	LEPC & Kickoff (Invited) 11-18-2025	LEPC & Kickoff (Attended) 11-18-2025	Water Board Meeting 03-02-2026	Emmons County Meeting 03-02-2026	Emmons County Public Survey Published (Invited) 03-03-2026	Linton Meeting 03-02-2026	Hazleton Meeting 04-10-2026	Strasburg Meeting 04-10-2026	Braddock Meeting 05-28-2026	Hague Meeting 05-28-2026
Linton Industrial Dev Corp			X			X	X	X				
Logan County Emergency Mgt							X					
McIntosh County Emergency Mgt							X					
Montana Dakota Utilities			X				X					
Morton County Emergency Mgt							X					
Nextera Energy Resources (Emmons-Logan Wind LLC)			X				X					
ND Department of Emergency Services			X	X			X					
Northern Border Pipeline			X									
Red Cross							X					
Salvation Army							X					
Sannes Feist Family Funeral Home			X				X					
Sioux County Emergency Mgt							X					
South Central Regional Water			X									
Strasburg Care Center			X				X					
Strasburg Fire Department		X	X	X			X					
Strasburg School							X					
United Methodist Church							X					
USDA Farm Service Agency			X									
Web Water Development			X									

APPENDIX B: PUBLIC INFORMATION

The Multi-Hazard Mitigation Plan is always available on the Emmons County website:
Draft published March 10, 2025, and March 2, 2026
Final draft published May 29, 2026



March 3, 2025

EMMONS COUNTY WATER RESOURCES

PO BOX 643
Linton ND 58552-0643

Phone: 701-254-4802

Glenn Geffre, Chairman
Joe Kalberer
Richard Keller
Tim Weber
John C Deboer

March 3, 2025
AGENDA
10:00 AM

1. CALL TO ORDER
2. ROLL CALL
3. APPROVE MINUTES FROM DECEMBER 16, 2024, REGULAR MEETING
4. TREASURER'S REPORT/HORSEHEAD REPORT
5. OLD BUSINESS
 - A. Snagging & Clearing of Beaver Creek
 - B. Moore Engineering (Investigation)
 - C. Missouri River Joint Water Resource
 - D. Horsehead Irrigation District
 - E. Drain Tilling on 80 Acres or less (Draft)
 - F. Schwahn Lake
6. NEW BUSINESS
 - A. Richard Keller was re-appointed 1-1-2025
 - B. Re-Election of Officers
 - C. Multi-Hazard Mitigation Plan Update (Mary)
7. ADJOURN

November 18, 2025



**Emmons County
Local Emergency Planning Committee**
100 4th St NW
Linton, ND 58552
(701) 222-6727

Mark Pearson
Chairperson
Strasburg Fire Department
701-336-7652
jamzpear@bektel.com

Nolan Anderson
Vice-Chairperson
Linton Fire Department
701-254-4511
firemedic@bektel.com

Mary Senger
Secretary/Treasurer
Emmons County Emergency Manager
100 4th St NW
Linton, ND 58552
701-222-6727
msenger@nd.gov

MEMORANDUM

TO: Local Emergency Planning Committee Member
FROM: Mary H. Senger, Emergency Manager
DATE: November 8, 2025
SUBJECT: NEXT MEETING

Section 303(a) of SARA Title III (Superfund Amendment and Reauthorization Act of 1986) requires that each Local Emergency Planning Committee conduct meetings as required. Our next meeting will be held November 18, 2025, 1:00 PM in the Emmons County Auditorium.

Agenda

1. Approval of November 21, 2024, minutes
2. Community Right to Know Act
3. Tier II reporting
4. Committee membership
5. Financial report
6. Requests for expenditures
7. Public education
8. Emmons County HazMat Response Plan Review ([link](#))
9. Multi-Hazard Mitigation Plan Update ([link](#))
10. Election of officers
11. Any other items

March 2, 2026

EMMONS COUNTY WATER RESOURCES

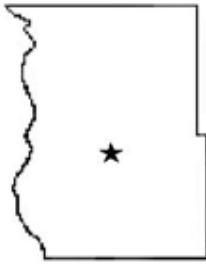
PO BOX 643
Linton ND 58552-0643
Phone: 701-254-4802

Glenn Geffre, Chairman
Joe Kalberer
Richard Keller
Tim Weber
John C Deboer

March 2, 2026
AGENDA
10:00 AM

1. CALL TO ORDER
2. ROLL CALL
3. APPROVE MINUTES FROM DECEMBER 11, 2025, REGULAR MEETING
4. TREASURER'S REPORT/HORSEHEAD REPORT
5. OLD BUSINESS
 - A. Snagging & Clearing of Beaver/Spring Creek
 - B. Missouri River Joint Water Resource
 - C. Horsehead Irrigation District
 - D. Drain Tilling on 80 Acres or less
6. NEW BUSINESS
 - A. Appointed Weber, Kalberer and DeBoer for 2026 through 2028, 3 year terms.
 - B. Re-Election of Officers
 - C. Public Comment Opportunity Pursuance to SB 2180
 - D. Multi-Hazard Mitigation Plan**
7. ADJOURN

March 2, 2026



Emmons County Emergency Management
100 4th St NW
Linton, ND 58552
(701) 222-6727

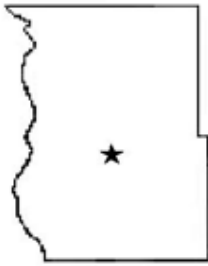
Multi-Hazard Mitigation Plan Review

March 2, 2026
Emmons County

A G E N D A

1. Review draft mitigation plan (<https://emmonsnd.com/departments/emergency-management/mitigation/>)
 - a. Layout and content
 - b. Mitigation Projects (status and anything new) and priorities
 - c. Mitigation capabilities
2. Approval process
3. Grant opportunities

March 2, 2026



Emmons County Emergency Management
100 4th St NW
Linton, ND 58552
(701) 222-6727

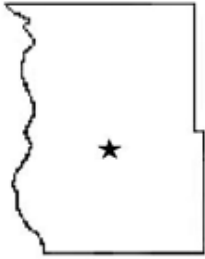
Multi-Hazard Mitigation Plan Review

March 2, 2026
City of Linton

A G E N D A

1. Review draft mitigation plan (<https://emmonsnd.com/departments/emergency-management/mitigation/>)
 - a. Layout and content
 - b. Mitigation Projects (status and anything new) and priorities
 - c. Mitigation capabilities
2. Approval process
3. Grant opportunities

April 10, 2026



Emmons County Emergency Management
100 4th St NW
Linton, ND 58552
(701) 222-6727

Multi-Hazard Mitigation Plan Review

April 10, 2026
City of Hazelton

A G E N D A

1. Review draft mitigation plan (<https://emmonsnd.com/departments/emergency-management/mitigation/>)
 - a. Layout and content
 - b. Mitigation Projects (status and anything new) and priorities
 - c. Mitigation capabilities
2. Approval process
3. Grant opportunities

April 10, 2026



Emmons County Emergency Management
100 4th St NW
Linton, ND 58552
(701) 222-6727

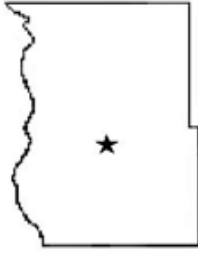
Multi-Hazard Mitigation Plan Review

April 10, 2026
City of Strasburg

A G E N D A

1. Review draft mitigation plan (<https://emmonsnd.com/departments/emergency-management/mitigation/>)
 - a. Layout and content
 - b. Mitigation Projects (status and anything new) and priorities
 - c. Mitigation capabilities
2. Approval process
3. Grant opportunities

May 28, 2026



Emmons County Emergency Management
100 4th St NW
Linton, ND 58552
(701) 222-6727

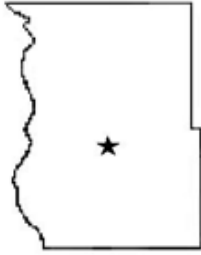
Multi-Hazard Mitigation Plan Review

May 28, 2026
City of Hague

A G E N D A

1. Review draft mitigation plan (<https://emmonsnd.com/departments/emergency-management/mitigation/>)
 - a. Layout and content
 - b. Mitigation Projects (status and anything new) and priorities
 - c. Mitigation capabilities
2. Approval process
3. Grant opportunities

May 28, 2026



Emmons County Emergency Management
100 4th St NW
Linton, ND 58552
(701) 222-6727

Multi-Hazard Mitigation Plan Review

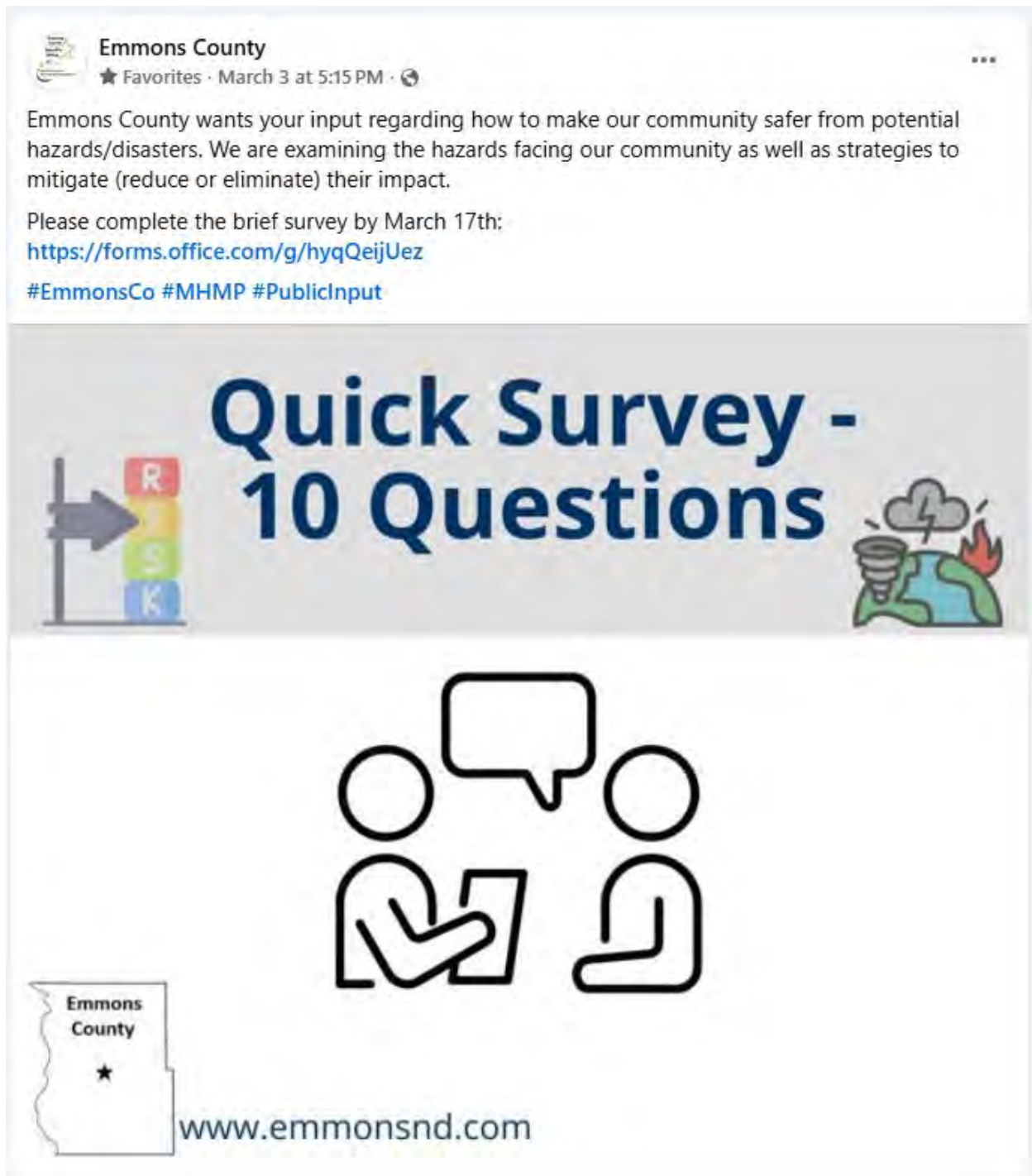
May 28, 2026
City of Braddock

A G E N D A

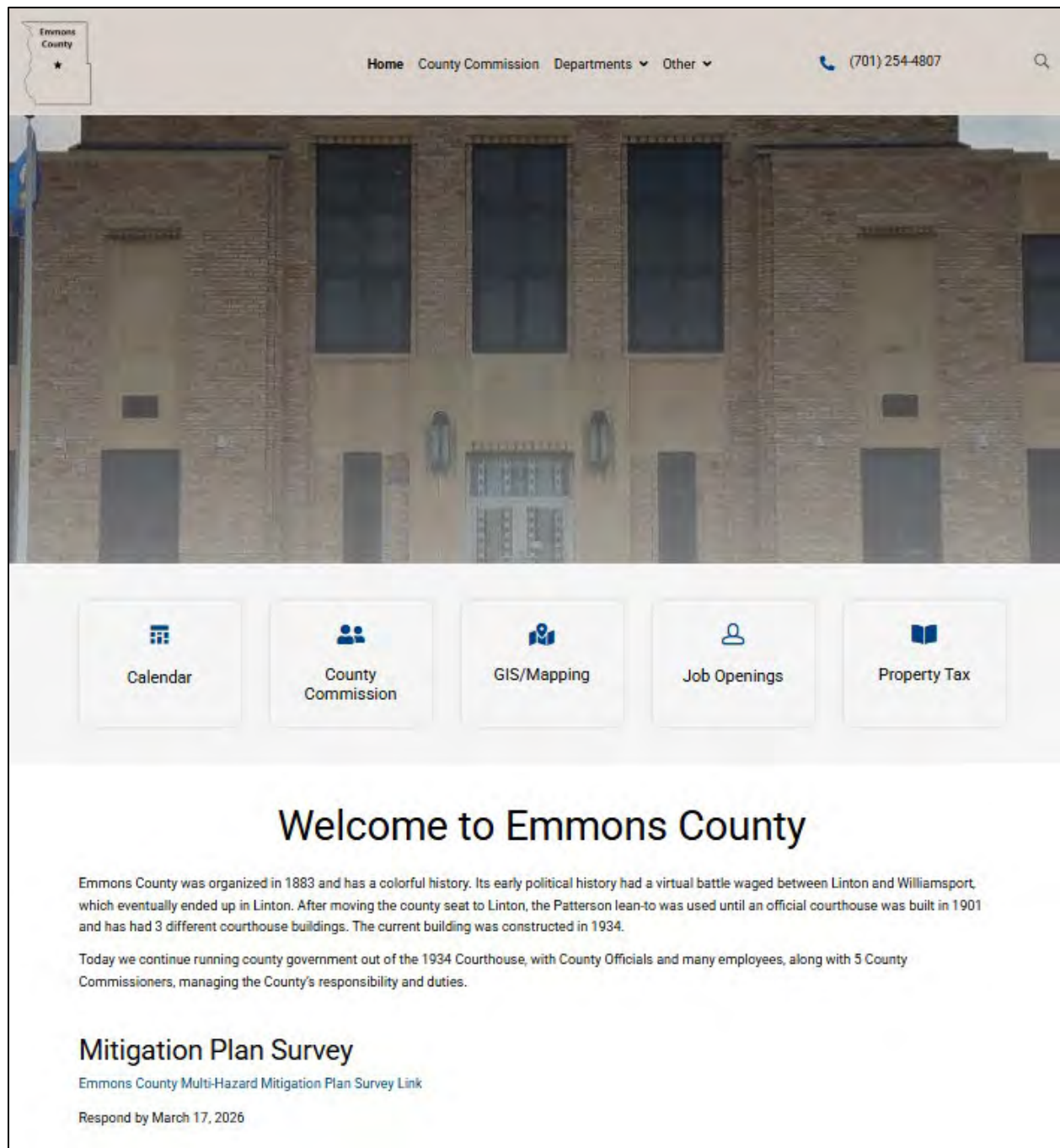
1. Review draft mitigation plan (<https://emmonsnd.com/departments/emergency-management/mitigation/>)
 - a. Layout and content
 - b. Mitigation Projects (status and anything new) and priorities
 - c. Mitigation capabilities
2. Approval process
3. Grant opportunities

APPENDIX C: PUBLIC SURVEY

March 3, 2026: Social Media Post



March 3, 2026: Website Post



March 12, 2026: Emmons County Record Public of Survey

County calls for community input in mitigation plan

Residents have until
March 17 to complete survey

By Kelli Ameling
Associate Publisher
Kelli@mobridgepublishing.com

Emmons County is requesting residents to complete a survey regarding the county's mitigation plan.

The deadline to do so is March 17.

According to a press release issued by Emmons County Emergency Manager Mary Senger on March 3, she stated the county wants input on how to make the community safer from potential hazards/disasters.

"We are examining the hazards facing our community as well as strategies to mitigate (reduce or eliminate) their impact," Senger stated. "Our current plan was approved by the Federal Emergency Management Agency and requires an update every five years."

In the release, Senger explained "mitigation" is defined by any action taken before an incident occurs to



The QR code can be utilized for Emmons County residents wanting to give input on the county's mitigation plan.

reduce the loss of life and property.

Mitigation's value to society includes:

- Creating safer communities by reducing losses of life and property.
- Enabling individuals and communities to recover more rapidly from disasters.
- Lessening the financial impact of disasters on individuals and communities.

Those interested in giving input on the mitigation can do so by visiting www.emmonsnd.com or going to the QR code presented here.

Survey



Emmons County Seeks Community Input on Mitigation Plan Update

Public Input is requested to assist in the update the Emmons County Multi-Hazard Mitigation Plan. Mitigation is defined as an action that reduces or eliminates potential impact from hazards identified within the mitigation plan.

2020 Emmons County Multi-Hazard Mitigation Plan: <https://emmonsnd.com/mitigation/>

An updated 2026 draft is also available for review.

The plan is updated every 5 years and is required to sustain eligibility for various mitigation grant programs.

Questions regarding the survey:

Mary Senger, Emmons County Emergency Manager, msenger@nd.gov, 701-222-6727

* Required

1. Where do you live? *

- ☐ City of Braddock
- ☐ City of Hague
- ☐ City of Hazelton
- ☐ City of Linton
- ☐ City of Strasburg
- ☐ Unincorporated Emmons County
- ☐ Other

2. Select three hazards you feel are the highest threat to your area. *

Please select at most 3 options.

- ☐ Civil Disturbance
- ☐ Criminal, Terrorist, or Nation/State Attack
- ☐ Cyberattack
- ☐ Dam Failure
- ☐ Drought
- ☐ Fire (including urban fire or and wildland fire)
- ☐ Flood (including riverine, levee failure, ice jam, and flash floods)
- ☐ Geologic Hazards (including landslide, abandoned land mines, expansive/unstable soils, environmental minerals, meteorite falls)
- ☐ Hazardous Materials Release
- ☐ Infectious Disease and Pest Infestations (including human, animal, and plant diseases)
- ☐ Severe Summer Weather (including downbursts, extreme heat, hail, lightning, high wind, and tornado)
- ☐ Severe Winter Weather (including blizzards, extreme cold/wind chill, heavy snow, ice storms, structure collapse)
- ☐ Space Weather
- ☐ Transportation Incident (including vehicular, railway, and aircraft accidents)

3. What potential impacts concern you most relating to the hazards you selected above?

4. What preventative measure(s) would you recommend for any of the hazards you selected above to minimize or eliminate the potential impacts?

5. If you or a family member are considered an at-risk population (such as a senior citizen, individual with disabilities), what are your concerns during an incident?

6. Is your home located in a floodplain? *

- ☐ Yes
- ☐ No
- ☐ I don't know

7. Do you have flood insurance? *

- ☐ Yes
- ☐ No
- ☐ I don't know

8. If "No," why not?

- ☐ Not located in floodplain
- ☐ Too expensive
- ☐ Other

9. What is the most effective way for you to receive information about how to make your home and area more resistant to hazards? *

- ☐ Newspaper
- ☐ Television
- ☐ Radio
- ☐ Email
- ☐ Social Media
- ☐ Regular Mail
- ☐ Websites
- ☐ Other

10. This survey may be submitted anonymously; however, if you provide us with your contact information (name, phone number, email), we will have the ability to follow up with you to learn more about your ideas or concerns (optional):

Survey Results

Responses Overview

Closed

Responses

36



Average Time

221:10



Duration

10 Days



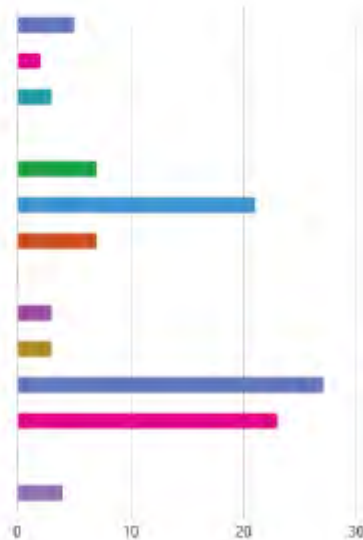
1. Where do you live?

City of Braddock	2
City of Hague	1
City of Hazelton	4
City of Linton	16
City of Strasburg	2
Unincorporated Emmons County	7
Other	4



2. Select three hazards you feel are the highest threat to your area.

Civil Disturbance	5
Criminal, Terrorist, or Nation/State Attack	2
Cyberattack	3
Dam Failure	0
Drought	7
Fire (including urban fire or and wildland fire)	21
Flood (including riverine, levee failure, ice jam, and flash floods)	7
Geologic Hazards (including landslide, abandoned land mines, expansive/unstable soil...)	0
Hazardous Materials Release	3
Infectious Disease and Pest Infestations (including human, animal, and plant diseases)	3
Severe Summer Weather (including downbursts, extreme heat, hail, lightning, high wind, and...)	27
Severe Winter Weather (including blizzards, extreme cold/wind chill, heavy snow, ice storm,...)	23
Space Weather	0
Transportation incident (including vehicular, railway, and aircraft accidents)	4



3. What potential impacts concern you most relating to the hazards you selected above?

29
Responses

Latest Responses:
"Infrastructure loss"
"Economic losses including agriculture"
...

4. What preventative measure(s) would you recommend for any of the hazards you selected above to minimize or eliminate the potential impacts?



5. If you or a family member are considered an at-risk population (such as a senior citizen, individual with disabilities), what are your concerns during an incident?



6. Is your home located in a floodplain?



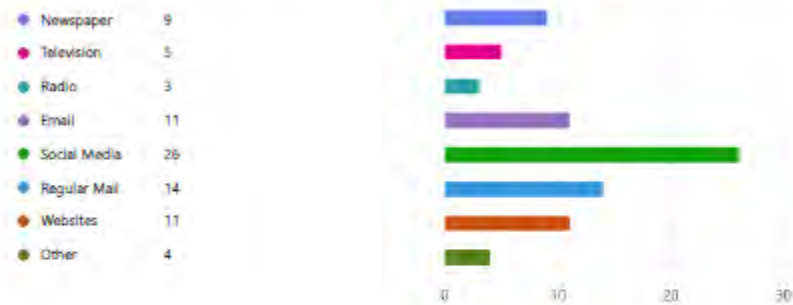
7. Do you have flood insurance?



8. If "No," why not?



9. What is the most effective way for you to receive information about how to make your home and area more resistant to hazards?



10. This survey may be submitted anonymously; however, if you provide us with your contact information (name, phone number, e-mail), we will have the ability to follow up with you to learn more about your ideas or concerns (optional):

4
Responses

Latest Responses

...