

2026

# Otter Tail Power Company Wildfire Mitigation Plan

VERSION 2.0 EFFECTIVE MARCH 5, 2026  
EFFECTIVE MARCH 5, 2026

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# 1. Overview

For more than a century, Otter Tail Power Company has powered our communities with safety and reliability at the forefront. And we'll keep striving to provide the safe, reliable, low-cost electricity our customers depend on. Keeping our customers, communities, and employees safe—while improving reliability—includes decreasing risks associated with events like storms and wildfires.

One of the risks all utilities face is that their systems or operations could ignite wildfire or make an existing wildfire worse. The growing threats resulting from changing regional weather patterns, increased drought conditions, declining forest health, aging electric infrastructure, and increased human population development in wildland areas have made preventing wildfires, protecting the communities we serve, and utility facilities, a major priority for utilities in many regions of the United States. Like other utilities, we also face wildfire risks and liabilities from our systems and operations.

Wildfire is an unplanned fire burning in natural or wildland areas such as forests, shrub lands, grasslands, or prairies. A wildfire becomes a disaster fire when it spreads into urban or populated areas, where it poses a grave risk to human life and structures.

Wildfire poses an increasing risk here in the Midwest and Northern Great Plains. Increased property development is expanding the amount of wildland-urban interface and increases the threat of wildfire to our customers, communities, employees, electric facilities, and landscape. Many of our generators, substations, and power lines are in rural forested or prairie areas with greater exposure to wildfires compared to urban and suburban areas. In keeping with our mission and values, we are striving to raise awareness of wildfire risk and prevention in the communities we serve, taking steps to reduce the risk that our equipment might ignite a wildfire, and partnering with our communities to protect our customers and equipment from wildfires, while continuing to provide reliable electricity at a reasonable cost.

In this Wildfire Mitigation Plan (WMP), we describe our current state of wildfire risk and document the wildfire risk reduction programs and policies currently in place. We address the risks associated with the nature of our service area and the potential for infrastructure and operations to cause, worsen, and be impacted by wildfires. We also outline how we'll address wildfire emergencies within our service area, should they occur, to reduce the potential impact of wildfire on people and property. As we continue to mature our wildfire mitigation capabilities, we'll update and expand this plan.

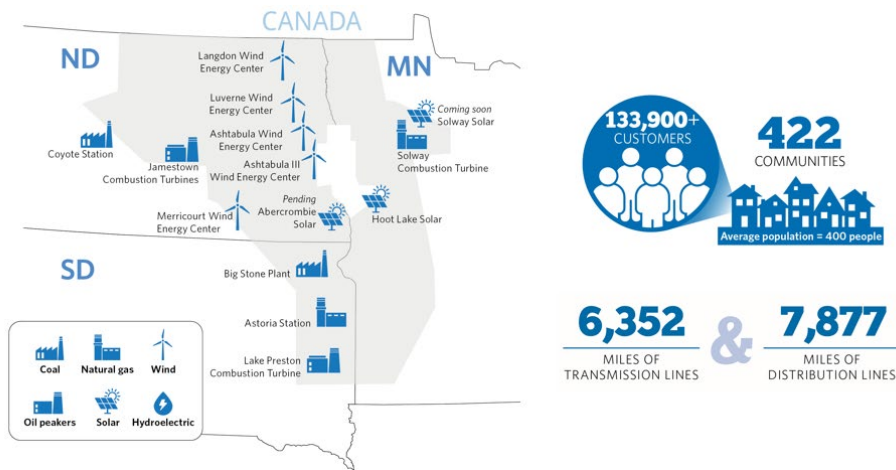
## **2. Purpose**

Our WMP outlines assessment and mitigation of wildfire risk in our service area, serving as a living document for advancing wildfire risk mitigation and response. It identifies the wildfire risks we face, the programs and policies we're using to mitigate wildfire risk, the steps we'll take when there is a wildfire emergency, the stakeholders we work with, the tools we use to measure our progress, and the costs associated with implementing these plans, programs and policies .

### 3. Who We Are

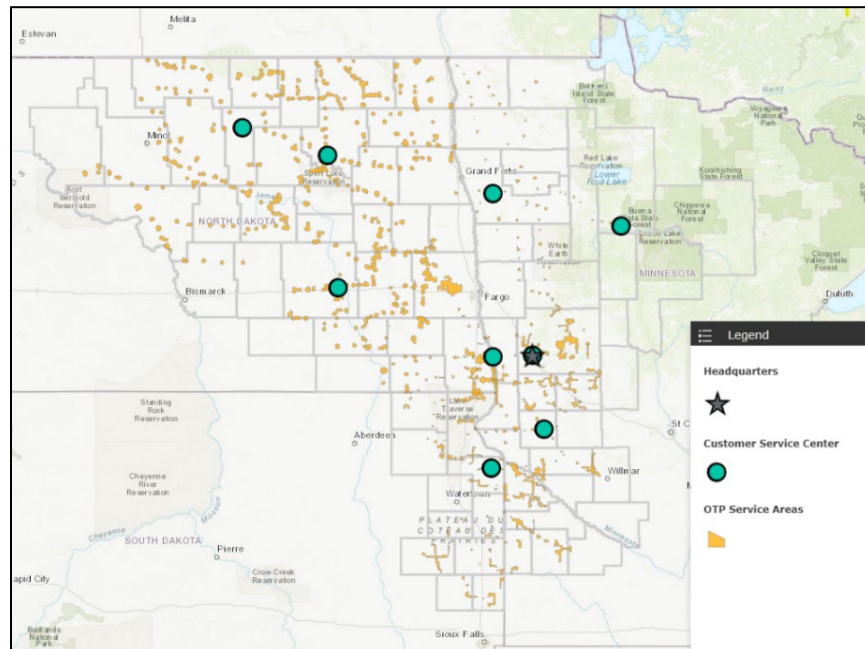
Otter Tail Power Company is a subsidiary of investor-owned Otter Tail Corporation. We generate, transmit, and distribute electricity to approximately 133,900 customers in 422 communities across 70,000 square miles in Minnesota, North Dakota, and South Dakota. Our service area is predominantly rural and agricultural. Headquartered in Fergus Falls, Minnesota, we employ more than 800 people who live in the states we serve.

Figure 1 - Who We Serve



We create electricity from coal, hydroelectric, natural gas, oil, solar, and wind facilities. But generating energy is only the first step in providing electricity to our customers. The second step is safely, efficiently, and reliably delivering that electricity to our customers via our wholly or jointly owned 6,352 miles of transmission lines and 7,877 miles of distribution lines. Below, in Figure 2, is a more detailed map showing the locations we serve and the locations of our service centers.

Figure 2 - Detailed Service Area Map



Within the footprint of our service area, we don't provide all electric services: There are other investor-owned, cooperative, and municipal utilities whose footprints overlap with ours.

## 4. Statutory Compliance

Our Wildfire Mitigation Plan complies with North Dakota Century Code § 49-25-03. Pursuant to that statute, the Plan includes descriptions of each of the elements set forth in § 49-25-03(2)(a-i) and (3). Descriptions addressing each section may be found in this document in the following locations:

*Table 1- Statute to Plan Comparison*

49-25-03	Statutory Requirement	Location(s) in WMP
2.a.	Areas within the service territory of the qualified utility which may be subject to a heightened risk of wildfire	§ 6.3 Landscape Wildfire Risk Assessment § 6.4 Location of Utility Facilities § 6.5 Geographical Risk Assessment
2.b.	The procedures, standards, and time frames the qualified utility will use to safely and reliably operate and inspect its infrastructure affected by hazardous vegetation;	§ 7.1 Assessing Asset Condition and Risk § 7.4 Vegetation Management
2.c.	The procedures and standards the qualified utility will use to perform vegetation management	§ 7.4 Vegetation Management
2.d.	The modifications or upgrades to facilities and preventative programs the qualified utility will implement to reduce the risk of its electric facilities initiating a wildfire	§ 7.3 Grid Hardening Programs
2.e.	Procedures for disabling reclosers to mitigate potential wildfires taking into consideration:	§ 8.2 Operational Changes and Risk Adjusted Work Practices for Triggered Levels
	(1) The ability of the qualified utility to reasonably disable reclosers and access the proposed power line if it becomes de-energized;	§ 8.2.3 Operational Changes
	(2) The balance of the risk of wildfire with the need for continued supply of electricity to a community; and	§ 8.2.1 Wildfire Safety Operations Level 1; § 8.2.3 Operational Changes
	(3) Any potential impact to public safety, first responders, and health and communication infrastructure	§ 8.2.1.2 Breaker Operation Events; § 8.2.3 Operational Changes

2.f.	Procedures the qualified utility intends to use to restore its electrical system in the event of a wildfire	§ 8.3 Emergency Management Plans
2.g.	The costs for implementation of the plan, including system improvements and upgrades	§ 11 Wildfire Mitigation Related Costs
2.h.	Community outreach and public awareness efforts before and during a wildfire season	§ 8.4 Operational Coordination § 9.2 Customer, Community, and Emergency Managers
2.i.	Potential participation with state or local wildfire protection or mitigation plans.	§ 9.3 Utilities and Agencies
3.	The procedures and standards under this section must be compliant with the American national standards institute standard A300, part 7, and the 2023 national electrical safety code	§ 7 Wildfire Risk Mitigation

## 5. Plan Outline

Our Wildfire Mitigation Plan consists of five components, each addressed in more detail in its own section. The five components are defined below.

### **RISK ASSESSMENT**

This section discusses risk from several perspectives, including (a) the relative level of risk associated with the different types of land and land uses in our service area, (b) risks posed by our operations within that area, meaning the risk that our facilities or employees might cause an ignition, and (c) the risk that wildfires in or near our service territory may cause an interruption of service to our customers or damage our system.

### **WILDFIRE RISK MITIGATION**

This section discusses actions that we are taking to (a) reduce the risk of our equipment causing or contributing to a wildfire, (b) reduce the risk of our operations causing or contributing to a wildfire, and (C) reduce the risk of wildfire causing service interruptions to customers and damaging our system.

### **OPERATIONAL RESPONSE**

This section discusses actions we are taking to plan for, prepare for, monitor, and respond to high-risk conditions occurring in our operating environment.

### **STAKEHOLDER ENGAGEMENT**

This section explains who our stakeholders are and the actions we're taking to (a) train our employees, (b) raise awareness for our employees, customers, and communities, and (c) engage with emergency response organizations, other utilities, and agencies.

### **GOVERNANCE AND ACCOUNTABILITY**

This section discusses (a) the actions we're taking to provide oversight of the WMP, including designation of internal leaders and organizations responsible for execution of the WMP, (b) metrics we are using to monitor and measure progress of the WMP strategy, and (c) procedures we'll use for incorporating lessons learned to improve our strategy.

### **COSTS OF IMPLEMENTATION**

This section discusses the costs associated with historical and forecasted spending in areas that affect the safety and reliability of our infrastructure, including wildfire mitigation planning.

## 6. Risk Assessment

The North American Electric Reliability Corporation (NERC) is a non-profit organization responsible for issuing and ensuring compliance with electric reliability standards for the bulk power system. NERC explains that it defines wildfires “as unplanned, uncontrolled fires fueled by an area of combustible vegetation.”<sup>1</sup> Like all fires, wildfires require three fundamental elements to exist: fuel, oxygen, and heat. NERC explained why there is more fuel for wildfires at present than at any time before:

The fuel supply across North America has increased over the past few decades due to political policies around fire suppression and forest management, the introduction of non-native grasses, and dryer climates and droughts that left forests damaged by insects and disease.<sup>2</sup>

The oxygen, NERC explained, “often comes in the form of high winds that can spread the fires quickly.” Heat in this context refers to an ignition source: “The sparks that initiate the fires are primarily generated from human activities and weather, but about 10% of wildfire ignitions are sparked by faults on electrical infrastructure or electric equipment failure.”<sup>3</sup>

This section discusses our wildfire risk from several perspectives, including (a) the relative level of risk associated with the different types of land and land uses in our service area, (b) risks posed by our operations within that area, meaning the risk that our facilities or employees might cause an ignition, and (c) the risk that wildfires in or near our service territory may cause an interruption of service to our customers or damage our system.

### 6.1. Factors Impacting Service Area Risk

Our service area stretches across portions of Minnesota, North Dakota, and South Dakota. Private citizens, companies, tribes, and state and federal agencies own the land. To assess the risks associated with the land in our service area, we consider the impacts of several factors.

#### 6.1.1 Environmental Factors

Our service area covers portions of western Minnesota, in the Midwest region of the United States, and portions of eastern North Dakota and northeastern South Dakota, in the Northern Great Plains region of the United States. Nearly all of the Midwest and portions of the Northern Great Plains, and all of our service area, has a humid continental climate, which is characterized by temperatures that vary greatly from summer to winter and appreciable precipitation year-round.<sup>4</sup> Most of our service area is in the sub-climate group of warm-summer humid continental, with a small portion of our service area in the sub-climate of hot-summer humid continental. The Midwest and Northern Great Plains are two of the most productive agricultural areas in the world. In part because of their extreme temperature variation and humidity, the Midwest and Northern Great Plains

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<sup>1</sup> NERC Wildfire Mitigation Reference Guide, accessed December 30, 2025 at: [https://www.nerc.com/comm/RSTC\\_Reliability\\_Guidelines/Wildfire\\_Mitigation\\_Ref\\_Guide\\_July2025.pdf](https://www.nerc.com/comm/RSTC_Reliability_Guidelines/Wildfire_Mitigation_Ref_Guide_July2025.pdf).

<sup>2</sup> *Id.*

<sup>3</sup> *Id.*

<sup>4</sup> Climate of the Midwestern U.S. — Earth@Home, accessed December 30, 2025 at <https://earthathome.org/ho/mw/climate/>; Climate in the Northwest-central United States — Earth@Home, accessed January 10, 2025 at <https://earthathome.org/ho/nwc/climate>.

experience nearly every variety of severe weather. Because the states are so far from the coasts, they rarely experience hurricanes, but heat waves and cold snaps, droughts, floods, blizzards, and tornados are all fairly regular events.

Studies conducted by the U.S. Global Change Research Program (USGCRP)<sup>5</sup> show that the Midwest and Northern Great Plains climates are changing right now. The USGCRP published the 4th National Climate Assessment (4NCA) report in 2018 (revised in 2019) “to help inform decision-makers, utility and natural resource managers, public health officials, emergency planners, and other stakeholders by providing a thorough examination of the effects of climate change on the United States.”<sup>6</sup> 4NCA projections indicate an average temperature increase of at least about 4°F for the Midwest, and at least 6°F for the Northern Great Plains, relative to the period 1976-2005.<sup>7</sup> The number of days of extreme heat, defined as days when the maximum temperature is greater than 90°F, is also projected to rise, bringing increased stress on ecosystems, agriculture, built infrastructure, and energy demand and production.<sup>8</sup> The 4NCA also projects precipitation to increase in the Midwest. Even with increased precipitation, more frequent and extreme droughts are likely in the Midwest. This is because higher air temperatures lead to more evaporation of soil moisture, and hence drying out of the soil, and the effect of this increased evaporation will likely outweigh the increase in rainfall.<sup>9</sup>

The USGCRP’s 5<sup>th</sup> National Climate Assessment (5NCA), published in late 2023, states that “Rising temperatures, extreme precipitation, drought, and other climate-related events in the Midwest are impacting agriculture, ecosystems, cultural practices, health, infrastructure, and waterways.”<sup>10</sup> Observations include that, in the Midwest, overall increases in temperature are happening in the winter months rather than the summer

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<sup>5</sup> USGCRP began as a presidential initiative under the Reagan Administration in 1989 and was established by Congress under the Global Change Research Act of 1990, which mandates that the U.S. Global Change Research Program (USGCRP) deliver a report to Congress and the President no less than every four years that “1) integrates, evaluates, and interprets the findings of the Program...; 2) analyzes the effects of global change on the natural environment, agriculture, energy production and use, land and water resources, transportation, human health and welfare, human social systems, and biological diversity; and 3) analyzes current trends in global change, both human-induced and natural, and projects major trends for the subsequent 25 to 100 years.”

<sup>6</sup> The Fourth National Climate Assessment (4NCA) was published in two volumes, covering climate science (Vol. I, 2017) and climate impacts, risks, and adaptation strategies (Vol. II, 2018). D. J. Wuebbles et al., eds., *Climate Science Special Report: Fourth National Climate Assessment, Volume I*, USGCRP, 2017; D. R. Reidmiller et al., eds., *Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II*, USGCRP, 2018. *Climate Science Special Report: Fourth National Climate Assessment, Volume I*, accessed December 16, 2025 at <https://repository.library.noaa.gov/view/noaa/19486>, and Volume II, accessed December 16, 2025 at <https://repository.library.noaa.gov/view/noaa/19487>.

<sup>7</sup> *Climate of the Midwestern U.S.* – Earth@Home, accessed December 30, 2025 at <https://earthathome.org/ho/mw/climate/>; *Climate in the Northwest-central United States* – Earth@Home, accessed December 30, 2025 at <https://earthathome.org/ho/nwc/climate/>; 4NCA accessed December 16, 2025 at <https://repository.library.noaa.gov/view/noaa/19486>, Chapter 21 – Midwest and Chapter 22 – Northern Great Plains.

<sup>8</sup> *Climate of the Midwestern U.S.* – Earth@Home, accessed December 30, 2025 at <https://earthathome.org/ho/mw/climate/>; 4NCA accessed December 16, 2025 at <https://repository.library.noaa.gov/view/noaa/19486>, Chapter 21 – Midwest.

<sup>9</sup> *Climate of the Midwestern U.S.* – Earth@Home, accessed December 30, 2025 at <https://earthathome.org/ho/mw/climate/>; 4NCA accessed December 16, 2025 at <https://repository.library.noaa.gov/view/noaa/19486>, Chapter 21 – Midwest and Chapter 22 – Northern Great Plains.

<sup>10</sup> C. W. Avery et al., eds., *Fifth National Climate Assessment*, USGCRP, 2023, accessed December 16, 2025 at <https://nca2023-globalchange.govarchive.us>, at Chapter 24 – Midwest. Also available at [https://toolkit.climate.gov/sites/default/files/2025-07/NCA5\\_2023\\_FullReport.pdf](https://toolkit.climate.gov/sites/default/files/2025-07/NCA5_2023_FullReport.pdf), accessed December 16, 2025.

months contributing to earlier snowmelt, which can exacerbate drier summer periods, and noted more extreme and “rapid oscillations between extreme wet and dry periods,” which contribute to expected decreases in soil moisture and increased drought conditions.<sup>11</sup> The 5NCA states “The Northern Great Plains is experiencing unprecedented climate-driven extremes, including severe drought, floods, and wildfires. These changes threaten economic sectors such as agriculture and recreation and affect the health, well-being, and livelihood of the region’s residents.”<sup>12</sup> The 5NCA notes that “Driven by increased temperature and decreased relative humidity, fire potential in this region is projected to increase under future climate change (HadCM3-HRM3 model), especially in summer and autumn, with fire seasons becoming longer.”<sup>13</sup> The report also noted that over the four preceding years, large wildfire incidents actually decreased in the eastern portion of the Northern Great Plains.<sup>14</sup> Like the Midwest, the Northern Great Plains is also expecting to experience shorter winters with earlier snow/ice melt, loss of soil moisture, and more frequent oscillations between wet and dry conditions, all of which may increase the risk associated with more frequent drought or very dry conditions.<sup>15</sup>

What does all this mean for Otter Tail Power? We’ll need to be prepared for drier conditions and more frequent and longer droughts than we have experienced historically within our service area. We need to plan for a wider variety of climate-related phenomena than ever before. And we’ll have to assess the level of wildfire risk in our service area on a frequent basis.

### 6.1.2 Human Development

Human population growth and development in the Midwest, in or near vegetated wildland areas, known as the Wildland-Urban Interface (WUI), can put residents and structures in danger from wildfires and compel firefighting agencies to distribute suppression resources toward protecting homes, where damages and fatalities are expected to be greater. For example, approximately 15 to 30 percent of homes in Minnesota are located in the WUI.<sup>16</sup> According to the United States Forest Service (USFS), the WUI is the fastest growing land-use type in the U.S., with residential construction increasing by 12 million homes from 1990 to 2010 and Minnesota, North Dakota, and South Dakota have experienced an increase of the WUI.<sup>17</sup> There are two types of WUI: 1) the intermix, where there is at least 50 percent vegetation cover surrounding buildings, and 2) the interface, where buildings are within 2.4 kilometers of a patch of vegetation at least 5 square kilometers in size that contains at least 75 percent vegetation. Both classes require a minimum building density of 6.17 buildings per square kilometer.<sup>18</sup>

Our service area is highly rural and sparsely populated. Over 70,000 square miles (an area roughly the size of the state of Wisconsin), we serve approximately 133,900 customers, sprinkled across our footprint. This includes 422 communities with an

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<sup>11</sup> *Id.*

<sup>12</sup> 5NCA – Chapter 25 – Northern Great Plains, accessed December 16, 2025 at <https://nca2023-globalchange.govarchive.us/>.

<sup>13</sup> *Id.*

<sup>14</sup> *Id.*

<sup>15</sup> *Id.*

<sup>16</sup> Minnesota DNR, Firewise in Minnesota, accessed December 30, 2025 at <https://www.dnr.state.mn.us/firewise/index.html>.

<sup>17</sup> U.S. Forrest Service, “Rapid growth of the US wildland-urban interface raises wildfire risk” accessed December 30, 2025 at [https://www.fs.usda.gov/nrs/pubs/jrnl/2018/nrs\\_2018\\_radeloff\\_001.pdf](https://www.fs.usda.gov/nrs/pubs/jrnl/2018/nrs_2018_radeloff_001.pdf).

<sup>18</sup> Science Base, Wildland-urban interface maps for the conterminous U.S. based on 125 million building locations, accessed at <https://www.sciencebase.gov/catalog/item/617bfb43d34ea58c3c70038f> on December 30, 2025.

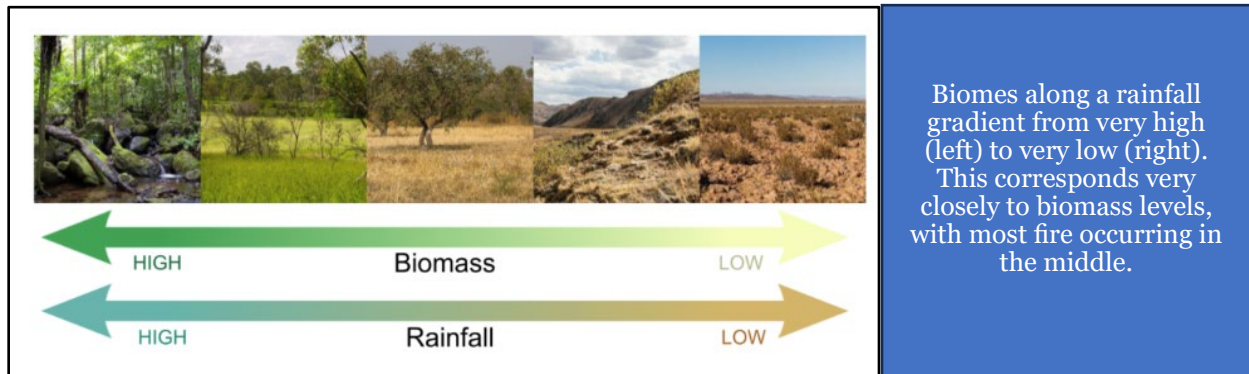
average population of 400 people. Of these communities, three are small cities, each with a population above 10,000 but less than 15,000. Population density, meaning the number of people living within an area, can affect the risks associated with wildfire. This is because lower density means that typically, structures like homes tend to be farther apart with less risk of fire spreading from building to building. However, very low population density also means that more homes are isolated and are often closer to the WUI. This can also mean that isolated structures may be far away from fire-suppression infrastructure. Firefighting in these areas is different from urban or suburban areas. The challenges include longer response times due to the distance to remote locations, which results in longer burn times, and access issues such as steep driveways and narrow roadways. Additionally, the lack of water access in remote areas means that fire departments may need to respond with water tenders, which have limited water capacity and may need to refill at hydrants miles away or from lakes, ponds, or rivers. Rural fire departments often struggle to staff fires due to the difficulty in finding and keeping members. This can lead to unique firefighting problems and increased fire risk.

Our service area is mostly accessible by road, trail, or cross country. Large wetlands, rivers, and lakes may impede direct access. Accessibility helps in fire suppression, but the ruralness of the service area may contribute to extended response times for fire suppression efforts.

### 6.1.3 Geography of our Service Territory

Our service area covers portions of three states with different types of landscape and plant life. A biome is a classification of the type of climate, landscape and plant life found in a geographical area. The biomes that make up our service area have different vulnerabilities to wildfires. To show how biomes relate to fire risk, Figure 3<sup>19</sup> below shows how different biomes fare.

Figure 3 - How Biomes Relate to Fire Risk



Our service area consists of a combination of biomes: agricultural ground, prairie, wooded prairie, and forested land. Agricultural, prairie, and wooded prairie make up most of the service area with part of the northeast corner of our Minnesota footprint that is heavily forested. Each biome in our service area is defined below.

<sup>19</sup> Sust Global | Wildfire risk: predicting an unusual future? Accessed December 30, 2025 at <https://www.sustglobal.com/insights/wildfire-risk-predicting-unusual-future>.

### 6.1.3.1 Agricultural land

Agricultural land is land that has been adapted to support “an artificial system created for livestock and croplands production (food, feed, fibre, energy).”<sup>20</sup>

### 6.1.3.2 Prairie land AKA grassland

A prairie in North America is known as a temperate grassland biome.<sup>21</sup> Grassland may be defined as ground covered by vegetation dominated by grasses, with little or no tree cover. United Nations Educational, Scientific and Cultural Organization (UNESCO) defines grassland as “land covered with herbaceous plants with less than 10 percent tree and shrub cover.” Prairies are defined by the plant communities that have a dominance of grasses and forbs and upland sedges. The prairie plants are defined by very deep root system that is very effective at breaking down soils and mineral soils to build rich agriculture soils that we see in the area. The black soil comes from those active systems and the amount of biomass that a prairie develops that contributes to soil formation.<sup>22</sup>

### 6.1.3.3 Wooded prairie

The wooded prairie biome, also known as ‘wooded grassland,’ is like the prairie biome, and is defined by UNESCO as ground covered by vegetation dominated by grasses, with no more than 10 to 40 percent tree and shrub cover.

### 6.1.3.4 Forested land

The forest biome encompasses any habitat on land dominated by trees and the characteristic communities of plants, animals, and other organisms that inhabit these regions. Forested land can be temperate, tropical, or boreal. The forested land in our service territory is of the temperate type. The temperatures of temperate forests vary throughout the year because of the four distinct seasons at these latitudes. Forests support diverse flora especially broad-leaved trees like maples, oaks, and birch.<sup>23</sup>

The following table shows the land use makeup of our service territory.

*Table 2 - Land Use*

<b><u>Land Use</u></b>	<b><u>Area Sq Miles</u></b>	<b><u>Percent of Total</u></b>
Cultivated Crops	42248	60.2
Pasture/Hay	6283	9.0
Grassland/Herbaceous	6237	8.9
Emergent Herbaceous Wetlands	4878	7.0
Open Water	3511	5.0
Deciduous Forest	2499	3.6

<sup>20</sup> Agricultural Land, “Spatial analysis, geospatial data and land-change models for modelling agricultural land changes” citing Dillon & McConnell, 1997 accessed on December 30, 2025 at <https://www.sciencedirect.com/topics/social-sciences/agricultural-land>.

<sup>21</sup> A prairie in North America is known as a temperate grassland biome. Britannica, North America - Prairies, Steppes, Savannas, accessed December 30, 2025 at <https://www.britannica.com/place/North-America/Temperate-grasslands>.

<sup>22</sup> Minnesota State University, Mankato, Minnesota Diver Basin Data Center, “Prairie Overview,” accessed on December 30, 2025 at [https://mrbdc.mnsu.edu/sites/mrbdc.mnsu.edu/files/public/pdf/askexpert/prairie\\_overview.pdf](https://mrbdc.mnsu.edu/sites/mrbdc.mnsu.edu/files/public/pdf/askexpert/prairie_overview.pdf).

<sup>23</sup> National Geographic Education Encyclopedic Entry, Forest Biome, accessed December 30, 2025 at <https://education.nationalgeographic.org/resource/forest-biome/>.

Developed Open Space	2048	2.9
Woody Wetlands	1107	1.6
Developed Low Intensity	589	0.8
Mixed Forest	263	0.4
Evergreen Forest	200	0.3
Developed Medium Intensity	152	0.2
Shrub/Scrub	63	0.1
Barren Land	42	0.1
Developed High Intensity	40	0.1
<b>Total</b>	<b>70158</b>	<b>100</b>

Different land uses have different risk levels. Our risk assessment considers the different biomes and land uses found in our service territory.

## 6.2 FEMA National Risk Index

The Federal Emergency Management Agency (FEMA) publishes and maintains a Resilience Analysis and Planning Tool (RAPT) (formerly known as the National Risk Index), which is a geographic information system (GIS) dataset and online tool to help illustrate the U.S. communities most at risk for 18 natural hazards.<sup>24</sup> FEMA designed and built the National Risk Index in close collaboration with various stakeholders and partners in academia; local, state, and federal government; and private industry.<sup>25</sup>

In the National Risk Index, risk is defined as the potential for negative impacts as a result of a natural hazard. The risk equation behind the Risk Index includes three components: a *natural hazards component* (Expected Annual Loss), a *consequence enhancing component* (Social Vulnerability), and a *consequence reduction component* (Community Resilience). The dataset supporting the natural hazards component provides estimates measured in 2022 U.S. dollars.<sup>26</sup>

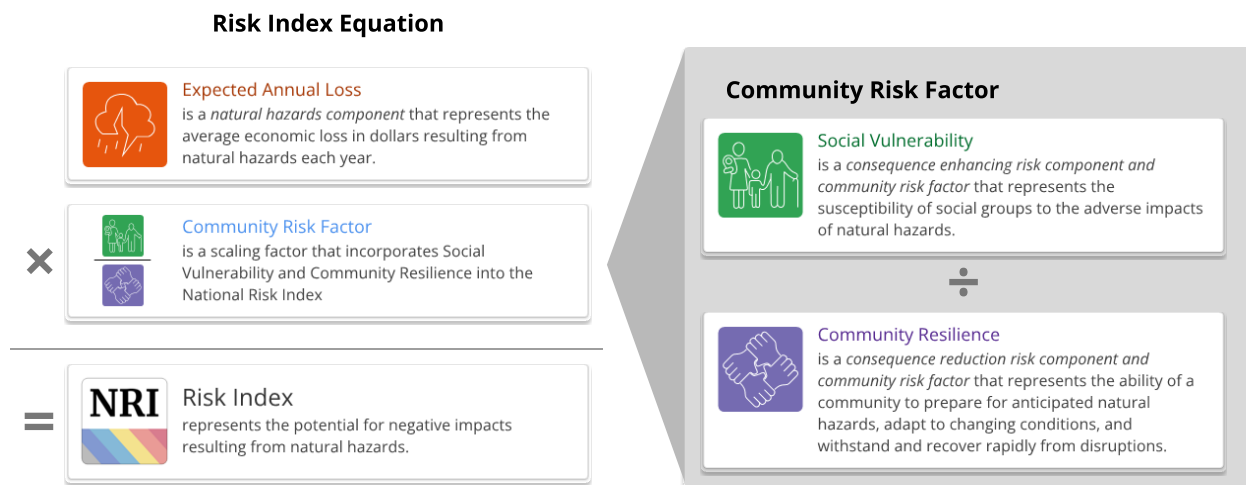
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<sup>24</sup> FEMA, “Accessing the National Risk Index Dataset in the Resilience Analysis and Planning Tool – User Guide” at p. 2, accessed December 30, 2025 at [https://www.fema.gov/sites/default/files/documents/fema\\_national-risk-index-rapt-user-guide\\_2025.pdf](https://www.fema.gov/sites/default/files/documents/fema_national-risk-index-rapt-user-guide_2025.pdf).

<sup>25</sup> Federal Emergency Management Agency (FEMA), National Risk Index Dataset: National Risk Index County National Risk Index Rating Composite - v1.20. Retrieved on December 30, 2025 at 3:33 PM CST from <https://fema.maps.arcgis.com/home/item.html?id=5771b821a2124413b2ee590a73ca338d>. This product uses the FEMA National Risk Index dataset API or downloadable datasets but is not endorsed by FEMA. The Federal Government or FEMA cannot vouch for the data or analyses derived from these data after the data have been retrieved from the Agency’s website(s).

<sup>26</sup> FEMA National Risk Index v1.20 Technical Document, pp. 3-1, 4-1, accessed December 30, 2025 at [https://www.fema.gov/sites/default/files/documents/fema\\_national-risk-index\\_technical-documentation.pdf](https://www.fema.gov/sites/default/files/documents/fema_national-risk-index_technical-documentation.pdf).

Figure 4 - FEMA Risk Equation



One of the 18 hazards FEMA tracks is wildfire. FEMA defines wildfire as “an unplanned fire burning in natural or wildland areas such as forests, shrub lands, grasslands, or prairies.”<sup>27</sup>

In the National Risk Index, a Wildfire Risk Index score and rating represent a community’s relative risk for wildfires, taking into account the relative vulnerability of the community when compared to the rest of the U.S. A Wildfire Expected Annual Loss score and rating represent a community’s relative level of expected building and population loss each year due to wildfires when compared to the rest of the U.S.<sup>28</sup> In calculating the Wildfire Risk Index score, FEMA considers a wildfire exposure value, which represents a community's building value (in dollars), population (in both people and population equivalence), and agriculture value (in dollars) exposed to wildfires. It also applies a wildfire annualized frequency value to represent the modeled frequency of wildfire hazard occurrences (events) per year.<sup>29</sup>

FEMA periodically updates its National Risk Index – Wildfire map. The current iteration of the wildfire map, published in December 2025, is based upon data published in 2024 by the U.S. Forest Service.<sup>30</sup> The FEMA Wildfire Risk Index, shown below in Figure 4, displays the Wildfire Risk Index by U.S. Census tract.

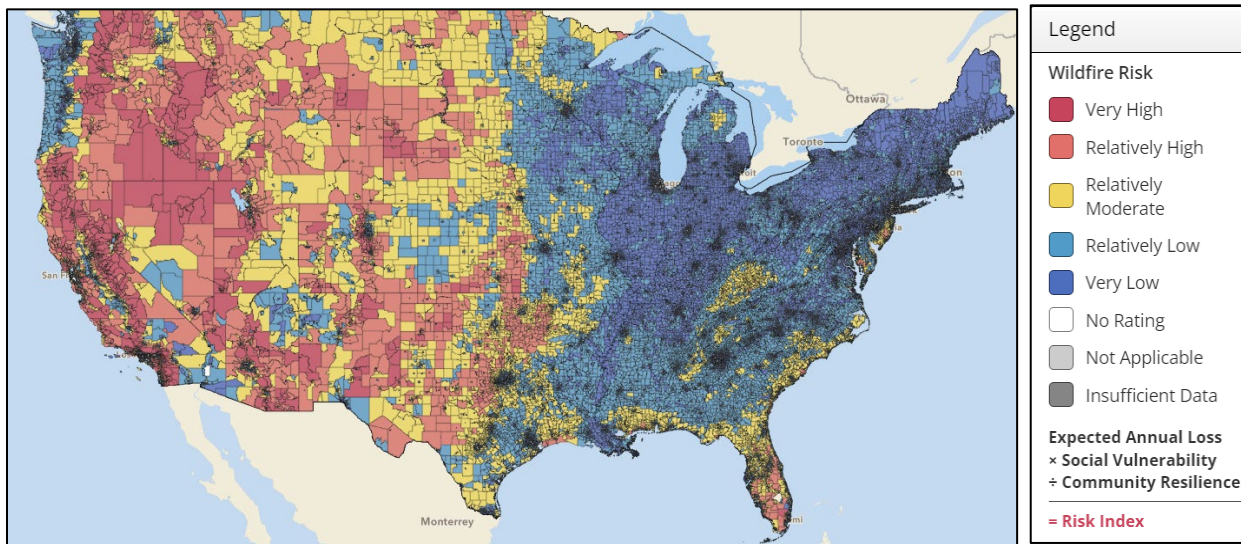
<sup>27</sup> *Id.* at p. 22-1.

<sup>28</sup> *Id.* at p. 22-12.

<sup>29</sup> *Id.* at p. 22-3.

<sup>30</sup> *Id.* at 22-1, citing “Spatial datasets of probabilistic wildfire risk components for the United States (3<sup>rd</sup> Edition)” available at <https://www.fs.usda.gov/rds/archive/catalog/RDS-2016-0034-3>, accessed December 30, 2025.

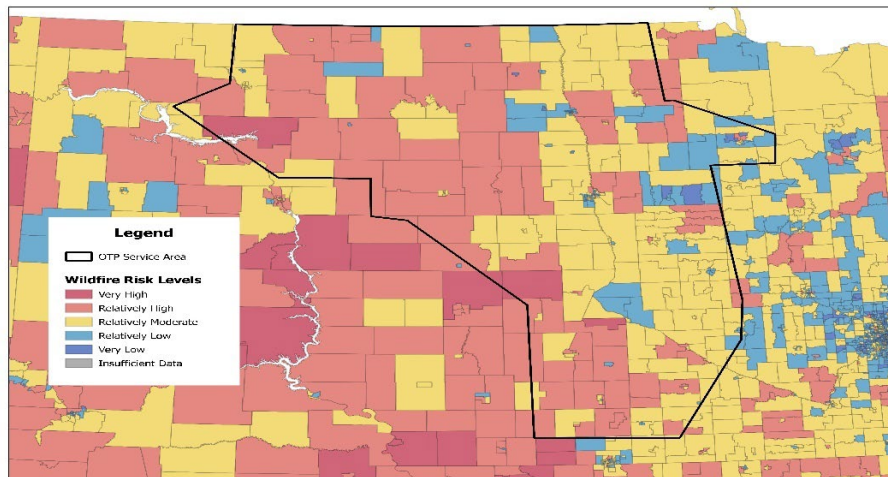
Figure 5 - FEMA Wildfire Risk Index – By US Census<sup>31</sup>



This map shows that there are areas of the U.S. that have higher wildfire risk than others, with highest risk areas concentrated in the west and in the south-eastern coastal areas. Our service area falls in the easternmost areas of the Great Plains, and the westernmost areas of the Midwest. Our service area in the Great Plains show slightly lower levels of risk than the rest of the Great Plains. The midwestern portion of our service area shows higher levels of risk than the rest of the Midwest, on average.

Figure 5, below, takes a closer look at the Wildfire Risk Index, with our service area overlaid on the map.

Figure 6 - FEMA Wildfire Risk Index by Census Tract - Detail



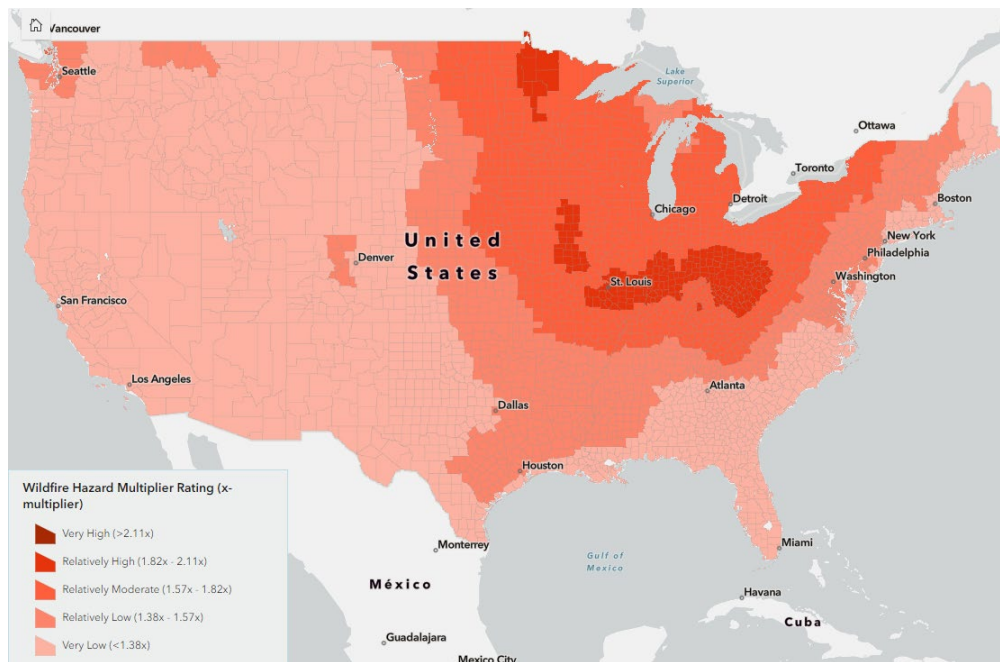
<sup>31</sup> Federal Emergency Management Agency (FEMA), National Risk Index Dataset: National Risk Index County\_National Risk Index\_Rating\_Composite - v1.20. Retrieved on December 30, 2025 at 3:33 PM CST from <https://fema.maps.arcgis.com/home/item.html?id=5771b821a2124413b2ee590a73ca338d>. This product uses the FEMA National Risk Index dataset API or downloadable datasets but is not endorsed by FEMA. The Federal Government or FEMA cannot vouch for the data or analyses derived from these data after the data have been retrieved from the Agency’s website(s).

According to this map, we currently have a mixture of Very Low, Relatively Low, Relatively Moderate, Relatively High, and Very High-risk areas.<sup>32</sup>

While the FEMA Wildfire Risk Index is a helpful tool for utilities to make general assumptions about the general level of risk, it is not designed to provide actionable data for utilities. Nor is it based on the most current fire and geographical data. FEMA recently updated the map incorporating 2024 landscape conditions and fire management practices.<sup>33</sup>

In December of 2024, FEMA published its National Risk Index: Future Risk Prototype, which predicted that by mid-century, the wildfire risk rating applicable to our service area is expected to increase by a multiplication factor of between 1.57x and 2.11x, using its most conservative metric.<sup>34</sup> This means that FEMA predicted its Wildfire Risk Index scores, in our service area, may be almost twice as high as current by mid-century.

Figure 7 - National Risk Index: Wildfire Hazard Multiplier Rating – Mid-Century Lower Mean Global Temperature<sup>35</sup>



The wildfire hazard multiplier rating map showed that, using its most conservative mid-century projections, FEMA expected the wildfire risk to increase the most in the central, midwestern, and eastern parts of the country.

<sup>32</sup> *Id.*

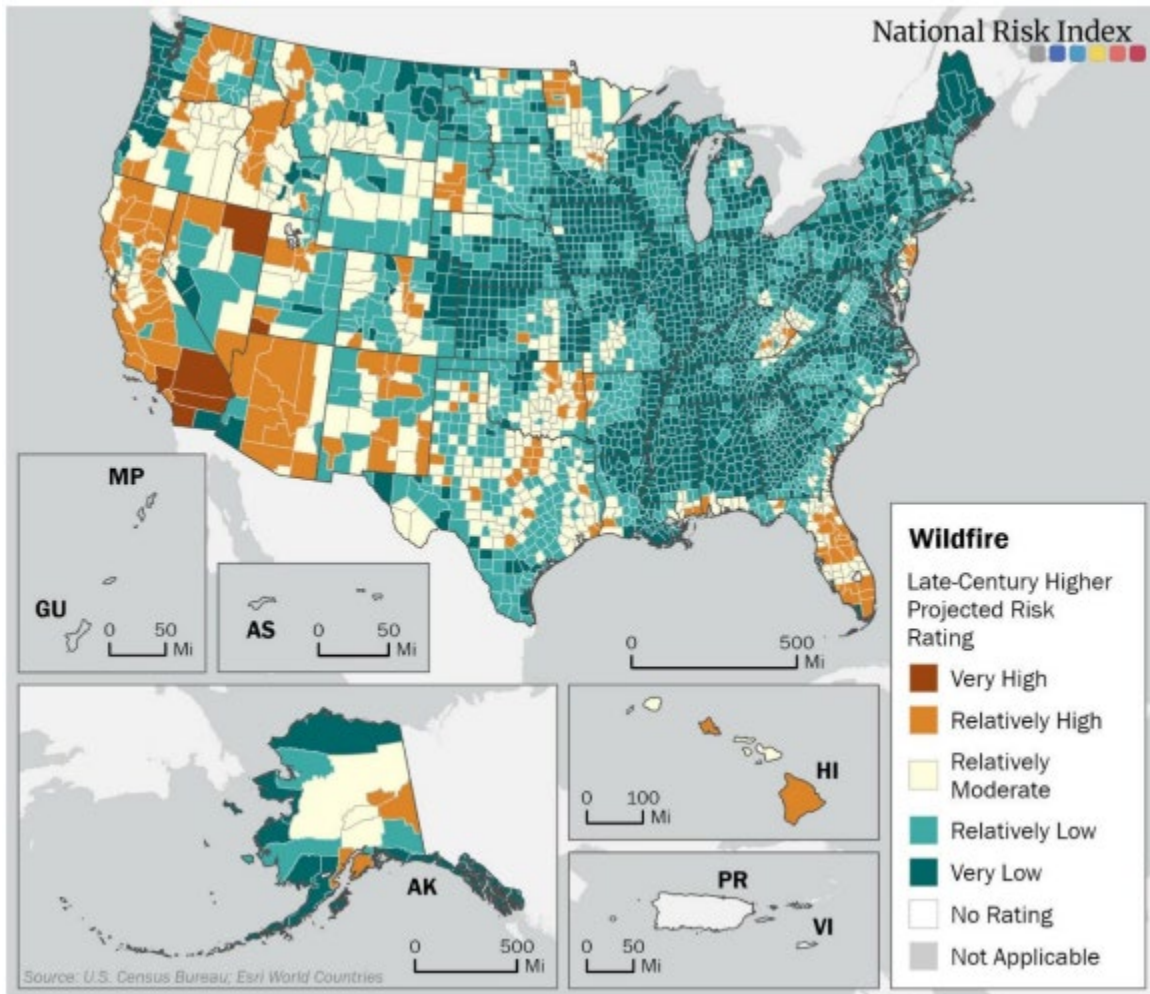
<sup>33</sup> National Risk Index v1.20 Technical Document, accessed December 16, 2025, at [https://www.fema.gov/sites/default/files/documents/fema\\_national-risk-index\\_technical-documentation.pdf](https://www.fema.gov/sites/default/files/documents/fema_national-risk-index_technical-documentation.pdf).

<sup>34</sup> FEMA, National Risk Index: Future Risk Prototype, accessed January 10, 2025 at [https://experience.arcgis.com/experience/d41df9a4c73a4e0ea540554c5a867f60/page/CIF-Page/?views=View-5#data\\_s=id%3AdataSource\\_71-1934fc36342-layer-5%3A6956](https://experience.arcgis.com/experience/d41df9a4c73a4e0ea540554c5a867f60/page/CIF-Page/?views=View-5#data_s=id%3AdataSource_71-1934fc36342-layer-5%3A6956). FEMA's Future Risk Prototype is no longer directly available from FEMA. It has been rebuilt and is available at [Future Climate Risk Index](https://fulton-ring.github.io/nri-future-risk/), accessed December 17, 2025 at <https://fulton-ring.github.io/nri-future-risk/>.

<sup>35</sup> *Id.*

FEMA also expected future risk to be significantly higher by late-century.<sup>36</sup>

Figure 8 - FEMA Projected Risk Ratings - Late-Century Higher Mean Global Temperature<sup>37</sup>



When compared to Figure 5, FEMA’s late-century projections show increases in the number of areas in our service territory that could fall into the Very High, Relatively High and Relatively Moderate risk categories.

### 6.3 Landscape Wildfire Risk Assessment

To gain further understanding of the risk exposure in our service area, we engaged a consultant to conduct a third-party environmental fire risk assessment and create a Wildfire Risk Map of our service area. The purpose of the Wildfire Risk Map is to identify Hazardous Fire Areas (HFAs), which are areas within our operating area that are susceptible to high intensity, consequential wildfire behavior, based on potential damage should a wildfire originate or burn in the vicinity. The higher the rating, the greater the potential for fire to spread and cause damage. Put another way, HFAs are areas where, if







<sup>36</sup> Zuzak, C., E. Gonzalez-Santin, K. Landers, D. Vikram, J. Kidder, P. McGuire, J. Ordog. 2024. National Risk Index: Future Risk Technical Documentation. Federal Emergency Management Agency, Washington, DC., Figure 21 accessed December 17, 2025 at [National Risk Index: Future Risk Technical Document](#).

<sup>37</sup> *Id.*

a wildfire ignites for any reason, the land is more susceptible to a wildfire spreading and becoming a major event.

Our consultant considered many factors in conducting the fire risk assessment including historical fires, landcover fuel models, flame length intensity, elevations, slope, aspect, structures, population density, critical customers, and sensitive lands. They performed the risk analysis by building a landscape model using 0.53-acre (30-meter) hexagons, evaluating the risk in each hexagon, and assigning appropriate risk attributes to each hexagon. We established boundaries by creating a five-mile buffer to each side of the centerline of and in a radius around our facilities. The table below, Figure 7, accounts for the land area (i.e., number of square miles) included in the landscape/population wildfire risk analysis by HFA risk classification and the associated percentages for each HFA rank.

Table 3 - HFA Distribution in OTP Service Area

Fire Risk Levels		HFA Distribution	
Color	HFA Rank	Square Miles by HFA Rank	Percent Square Miles
	Fire Resistant	22,087.88	43.09%
	Very Low	15,781.93	30.79%
	Low	10,088.51	19.68%
	Moderate	1,953.20	3.81%
	High	993.38	1.94%
	Very High	355.71	0.69%
	Total	51,260.62	100.00%

\*Note: The definition of Fire-Resistant includes agricultural farmland. At times we know that these lands contain dry, ready-to-harvest crops.

Our wildfire risk map differs from the FEMA map because we evaluated additional factors specific to our service area, including the landscape, fire fuel, and urban interface. The raw datasets our consultants used to develop the wildfire risk map outputs are available from wildfirerisk.org (WRO). These data sets were created by the U.S. Department of Agriculture Forest Service (USFS) at the direction of Congress for the expressed purpose of providing guidance and mitigation prioritization assistance to elected officials, land use planners, fire managers, and others. The WRO datasets were built from nationally consistent data and use the best available science, including vegetation cover and fire-behavior fuel models, topography, historical and recent fire weather patterns, and long-term simulations of large wildfire behavior. It is based on techniques developed by the Missoula Fire Sciences Laboratory of the Rocky Mountain Research Station. Baseline data informing the model includes, but is not limited to, the following (WRO, 2024):

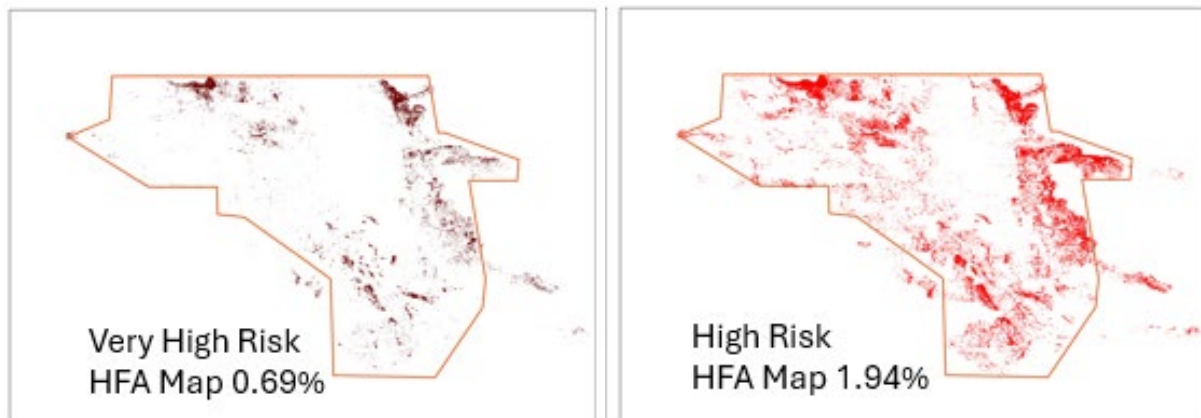
- Vegetation cover and fire-behavior fuel models from the interagency LANDFIRE program, which leverages the Scott and Burgan 40 Fire Behavior Fuel Models.
- Topographic data from the U.S. Geological Survey.
- Historical weather patterns from the National Weather Service (NWS).
- Long-term simulations of large wildfire behavior from the USFS.
- Community data from the U.S. Census Bureau and Department of Energy (DOE).

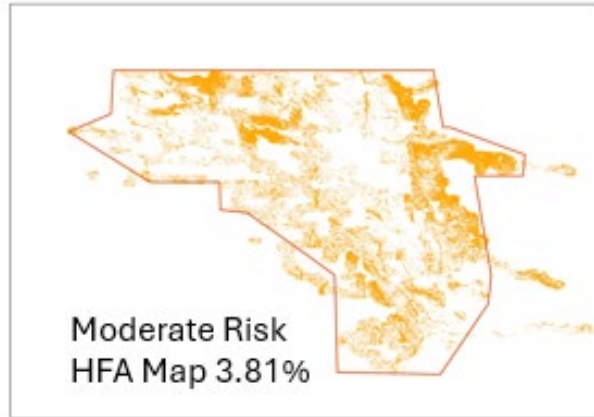
We leveraged the following baseline data in developing our wildfire risk map:

- **Wildfire Hazard Potential (WHP):** “An index that quantifies the relative potential for wildfire that may be difficult to control, used as a measure to help prioritize where fuel treatments may be needed” (WRO, 2024).
- **Burn Probability (BP) (or Wildfire Likelihood):** “The annual probability of wildfire burning in a specific location” (WRO, 2024).
- **Conditional Flame Length (CFL):** “Most likely flame length at a given location if a fire occurs, based on all simulated fires; an average measure of wildfire intensity” (WRO, 2024).
- **Risk to Potential Structures (RPS) (or Risk to Homes):** “A measure that integrates wildfire likelihood and intensity with generalized consequences to a home on every pixel. For every place on the landscape, it poses the hypothetical question, ‘What would be the relative risk to a house if one existed here?’” (WRO, 2024).
- **Housing Unit Risk (HU Risk):** “This layer incorporates all primary elements of wildfire risk. It integrates wildfire likelihood and intensity with the generalized susceptibility of homes, and it also incorporates housing density” (WRO, 2024).

Our Wildfire Risk Map provides detailed information on which parts of our service area provide the riskiest locations for a wildfire to originate. We’ll use this information to evaluate risk, prioritize future infrastructure improvements, enhance patrolling, and implement our non-reclose program. An overview of our Wildfire Risk Map showing our HFAs are below in Figure 8. The HFA risk levels are shown in separate snips of the service area to provide a clearer understanding of our hazardous fire areas.

*Figure 9 - HFA Distribution in our Service Area*





We completed our first full assessment of our service area and produced our detailed Wildfire Risk Map in the 4<sup>th</sup> quarter of 2024. Beginning in the spring of 2025, we began reviewing our existing policies and procedures to determine the best way to incorporate the location of facilities in HFA moderate, high, and very high-risk areas into our infrastructure inspections, maintenance, and construction programs. This effort will be ongoing.

#### 6.4 Location of Utility Facilities

Our electric generation facilities are located across our service area in areas with diverse land usage and ground cover. Many of our renewable resources have grass coverage or are in the center of agricultural land. These resources are closer to the wildland interface than our fossil fuel generators, which we typically enclose in structures and surround with hard surfaces. Hard surfaces, like concrete and gravel, are less susceptible to fire damage.

We designed our electric transmission and distribution systems to transport electricity efficiently and safely from our energy generation facilities to customers. Because our service area is mostly rural, with considerable distance between communities, many of our electric facilities are in remote areas. Our transmission lines and distribution lines route across grasslands, or a mix of wooded and grassland, or across agricultural lands, or through forested country, or through small towns and cities. The abundance of grassland and wooded grassland in our service area means that there are many miles of electric lines in the WUI. The WUI is where human development meets wild land. The table below displays the miles of line we own and how much of it is in the moderate to very-high HFA. We operate very little transmission class underground.

Table 4 - Circuit Miles in Elevated Fire Risk Areas

Asset Type	Total Circuit Miles	Circuit miles in Elevated Fire Risk HFA	Percent of Total miles
Transmission Overhead	6351	376	5.9%
Distribution Overhead	4250	258	6.1%
Distribution Underground	1517	123	8.1%

We developed the electric infrastructure that serves our customers over the last 100 years, growing with the development of our communities. Industry standards for construction of transmission and distribution lines changes over time, and so our transmission structures and distribution structures are various materials and designs that reflect the

industry standards in place when we constructed them. The primary material we used to construct transmission and distribution structures is wood. Poles and other structures help us keep high-voltage conductors and power lines separated from their surroundings and from each other. Like any other structure constructed from wood, fire can damage or destroy wood poles. We’ve kept up with changing industry standards, and many of our newer poles and structures use more fire-resistant materials such as ductile iron and steel. Due to the remote nature of our service area, wildfire damage to our electric facilities can cause widespread service interruptions to customers, communities, homes, businesses, and farms. Power may stay off for an extended period until we can repair or replace burned structures and lines.

We also have communications equipment placed throughout our service area. The equipment may share space on transmission or distribution poles, or we may mount it on a free-standing tower. Additionally, we have cabinets along the utility right-of-way that houses communications equipment. We use many modes of communication, including licensed and unlicensed radio, microwave, fiber-optic, and leased lines. Our communication network has many functions, including sophisticated system protection schemes, control, telemetry, security, and other functions vital to providing service. We use many different types of material in our communications infrastructure, many of which fire can damage. If fire damages or destroys communications infrastructure, we may lose the ability to control aspects of our service, or we might even lose power nearby. Power may stay off until we can repair or replace communications infrastructure.

## 6.5 Geographical Risk Assessment

Utilizing the Hazardous Fire Area (HFA) data and map, our team conducted rigorous reviews and analysis to identify equipment and other infrastructure in or adjacent to HFAs. This evaluation provided us with data that enabled us to prioritize line maintenance, line work, the non-reclose program, and operations that occur in or adjacent to HFAs.

We also evaluated land use and ownership in our service area in and around HFAs to gain further understanding of how people and businesses use or occupy the land. This research helped us identify stakeholders to collaborate with for the management and mitigation of wildfire risk. The review of land use overlap between the HFAs and large Federal, State, DNR, and Trust lands is displayed in the table below. Federal, State, and DNR lands are typically managed tracts of land.

*Table 5 - Land Ownership Overlaps with HFA*

State	Sq Miles of High and Very High Risk HFA ground	Sq miles of overlap between (Federal, State, DNR, Trust) Lands	Percentage of total
MN	637.3	171.8	27%
ND	522.3	134.9	26%
SD	172.1	31.7	18%

## 6.6 Risk Posed by Operations

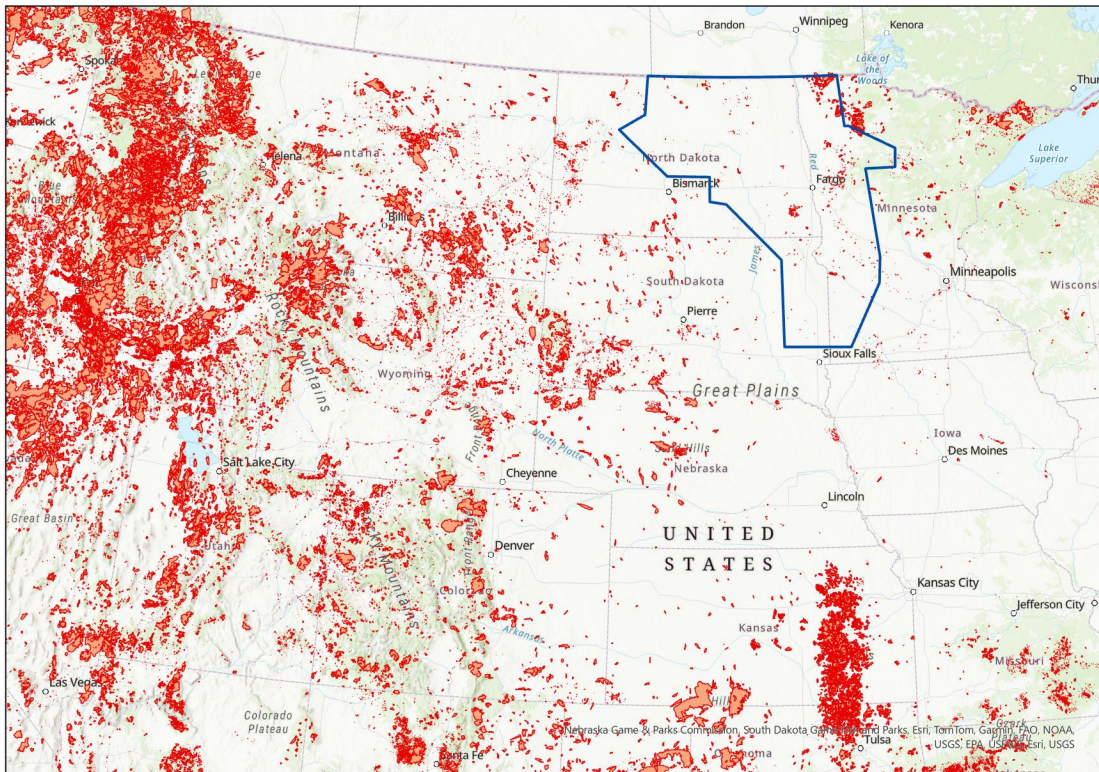
Because our electrical infrastructure is often found in wildland areas, our employees and contractors need to work in wildland areas. Inspecting, constructing, and maintaining our

electrical infrastructure requires us to place both personnel and equipment in wildland areas, some of which are also in HFAs. When we work on our electrical and communications infrastructure, it's possible for our operation of trucks, equipment, and electrical gear to create heat or hot surfaces and waste materials. It's possible for these hot surfaces or waste materials to be an ignition source for a wildfire, especially if we are performing work in an HFA.

## 6.7 Historical Experience

Historically, there have been few major wildfires in our service area. Firefighters have typically been able to bring wildland fires under control without major incident. Figure 8, below, is a U.S. Geological Survey (USGS) map displaying the wildfire datasets for the U.S. from 1878 to 2019, focused in to show our service area. The area outlined in blue is our service area perimeter and the areas shaded in red are locations and areas burned by historic wildfires:

Figure 10 - USGS Wildfires 1878-2019<sup>38</sup>



However, recent drought conditions in relatively high-risk or very high-risk areas in our service area suggest that risks are higher now than in the past and impacts from fires may be more extensive than before. Compounding the risk of catastrophic fire are environmental conditions and increased urban development or expansion into the wildland areas that increases the WUI. The WUI has continued to grow as people move

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<sup>38</sup> U.S. Geological Survey Data Release, Combined Wildfire Datasets for the United States and Certain Territories, 1878-2019, accessed December 30, 2025 at <https://www.usgs.gov/news/data-release-combined-wildfire-datasets-united-states-and-certain-territories-1878-2019>.

out of metropolitan areas into rural areas to develop and inhabit open rural spaces. Increases in the WUI increase exposure to wildfire risk.

## 6.8 Risk to Utility Operations

Wildfires have many different causes, according to Wildfire Today, Wildfire News and Opinion. An article by Hunter Bassler, April 14, 2024, highlights the top causes of wildfires in 2022 and 2023 shown in the table below.<sup>39</sup>

*Table 6 - 2022 and 2023 causes of wildfires*

<b>Cause</b>	<b>2022</b>	<b>2023</b>
Debris and open burning	1120	1302
Equipment and vehicle use	627	507
Power generation/transmission/distribution	303	390
Arson	294	364
Other Causes	373	300
Undetermined	211	217
Recreation and ceremony	113	86
Railroad operations and maintenance	68	57
Fireworks	112	45
Smoking	63	45
Misuse of fire by a minor	38	45
Firearms and explosives use	18	9
<b>Total Number of Wildfires</b>	<b>5362</b>	<b>5390</b>

Regardless of the cause of a wildfire, the fire has the power to damage or destroy utility infrastructure. Utility infrastructure located in and adjacent to HFAs is at higher risk of sustaining damage from wildfire. Even where wildfire does not directly cause damage to utility infrastructure causing a power outage, the presence of even a contained wildfire can cause delays in our ability to access our infrastructure to inspect, construct, and perform maintenance. Wildfires or localized fires can produce smoke dense enough to cause faults for a high-voltage line operating in the proximity of the fire. Unplanned interruptions to high-voltage lines may cause other disruptions or curtailments on the power system. Additionally, the wildfires and potential power disruptions may create hardships and operational risks for emergency response efforts.

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<sup>39</sup> Wildfire Today, “Humans are by far the main cause of wildfires,” accessed December 30, 2025 at <https://wildfiretoday.com/humans-are-by-far-the-main-cause-of-wildfires/>.

## 7. Wildfire Risk Mitigation

Throughout the U.S., utilities are facing a twofold wildfire risk: the risk that our infrastructure or operation might cause a wildfire and the risk that a wildfire might damage our infrastructure and cause significant power outages. Wildfire Risk Mitigation is a collection of practices, policies, and programs that seek to reduce both of these risks. This section will explain which practices, policies, and programs we will use to reduce the risk that we might cause a wildfire and reduce the risk that our customers might experience a power outage due to wildfire. We'll accomplish this through inspection programs, vegetation management programs, infrastructure improvements or system hardening, increased situational awareness, operational strategies, training, stakeholder engagement, education, and the evaluation of new technologies, policies, and programs. Many of these initiatives will also enhance overall system reliability and resiliency by reducing the likelihood of outages in general.

This section applies to our distribution and wholly owned transmission assets. This section does not necessarily apply to co-owned transmission assets. Nor does this section apply to assets that we own that interconnect to another utility in a manner that requires real-time coordination of operations and maintenance activities between the two utilities. These assets may be subject to different standards or the WMP of another co-owner or other party who is contractually responsible for maintenance or operation of the transmission asset or may be outside of our ability to control.

The procedures and standards under this section are compliant with the American national standards institute standard A300, part 7, and the 2023 National Electrical Safety Code.

### 7.1. Assessing Asset Condition & Risk

We assess the condition of the transmission, distribution, substation, communication, and generation assets through inspection and testing. Each of these areas has teams dedicated to keeping a high level of safety, security, reliability, resilience, and efficiency.

Our primary inspection method is visual inspection from the ground, performed on a periodic basis. We also patrol from the air (using helicopters, planes, and Uncrewed Aerial Systems (UAS) with high-definition cameras), primarily for transmission lines 100 kV and above and for all infrastructure where arial perspective is necessary. Inspections aim to confirm the operational and structural integrity of the structure, hardware, and groundline installation by looking for the following risk factors:

- Physical structural damage
- Insulation damage
- Vegetation encroachment
- Corrosion
- Bent, broken or loose hardware
- Mechanical damage to components

We perform added testing to evaluate the condition of our transmission and substation assets. This testing includes technologies such as:

- Partial discharge detection, which detects radio frequency emissions from defective electrical components.

- Thermal imaging, which we use to find hot spots in electrical connections that may signal a higher risk of failure.
- Ground line inspection and pole boring, which measures the density of wood and can identify weakened poles. Our Ground Line Inspection Policy covers both transmission and distribution poles and documents this work.
- Light Detection and Ranging (LiDAR), performed periodically by helicopter or Uncrewed Aerial System (UAS), which we use to measure the distances of the transmission conductors from the ground and surrounding vegetation to ensure we're maintaining all required clearances.

We continually evaluate inspection and replacement cycles for transmission and distribution assets. Our Transmission Line Patrolling, Substation Inspection, and Distribution Inspection Policies provide further details about inspections.

### **7.1.1. Communications System Inspections**

We inspect our communications systems annually. Our Telecommunications team uses an internal ticket system to automatically generate preventative maintenance tickets each year. Our electronic technicians respond to the tickets and oversee and document field inspections. We archive documentation from these annual inspections in our ticketing system. If an electronic technician finds any corrective actions or repairs, they record that in the ticket worklog. The system then automatically creates a ticket and assigns it to a specific individual to address the corrective action or repair. We also inspect communication towers and anchors every two to three years, or as resources permit. We report any actions taken or needed and archive these reports for future reference.

### **7.1.2. Generation Site Inspections**

We also perform Renewable Energy Site Inspections. The inspections range in frequency from every week to annually. The solar generation sites range in size from 40 kW to near 50 MW. The smaller remote sites are inspected less frequently than the large sites. We use an inspection form to document and record facility equipment conditions and security status. We continuously monitor the operation of these units electronically, as each supplies energy to our system. Regular site inspections and performance monitoring enable us to keep our wind turbines and solar panels performing as expected, and alert us to any problems as they arise.

Our coal-fired plants are manned continuously to ensure safe operation, and each plant has extensive fire protocols and equipment on site to make certain that any fire that may arise is quickly contained and extinguished. We train our plant employees extensively on fire protocols.

We also have some peaking turbines that are unmanned because they don't run all the time. However, we have employees on site with regular frequency and many times while the units are running.

### **7.1.3. Pole Inspections**

We perform a groundline inspection on poles supporting high voltage lines (115 kV and above) based on an approximate 10-year cycle. This method of inspection includes boring the pole for strength. For poles supporting lower-voltage lines (41.6 kV and distribution) we complete ground line inspections on closer to an approximate 15-year cycle.

Additional information regarding ground line inspection and pole boring may be found in our Ground Line Inspection Policy.

#### **7.1.4. Transmission Line Inspections**

We perform annual inspections of all transmission lines 41.6 kV and above. Additional information regarding transmission line patrolling and inspections may be found in our Transmission Line Patrolling and Substation Inspection Policies. Transmission lines 200 kV and above are also subject to the requirements of our Transmission Vegetation Management Plan (NERC Reliability Standard FAC-003-3).

#### **7.1.5. Distribution Line Inspections**

OTP engages in opportunistic inspection of its distribution assets, in accordance with NESC Rule 214. When field personnel are on a site for maintenance, installation, or other purposes, such personnel shall also perform a visual, on-the-spot assessment of utility poles and attachments to check for obvious safety and compliance issues looking for clearance violations, pole integrity, grounding issues, equipment condition, and attachment compliance.

Beginning in 2026, we will accelerate all visual inspections on distribution feeders that transverse medium, high, and very high-risk areas. We will complete an advanced visual distribution inspection for all distribution feeders in wildfire risk areas on at least a biennial basis and perform any mitigations that arise from those inspections. More information regarding our inspection policies is available in the Wildfire Playbook and in our Distribution Line Inspection and Patrol Program.

Our robust inspection programs provide us with vital information that allows us to maintain and safely operate our system. We use the data collected during inspection to identify system deficiencies, scope projects and identify maintenance needs. We prioritize the projects and maintenance tasks based on urgency and risk. This effort allows us to address problems early and identify equipment that we may need to repair or replace to avoid conditions that may lead to infrastructure failures, which may cause arcing, contact, or excess heat that could be an ignition source for wildfire.

### **7.2. Understanding Asset Failures and Ignition Risk**

To better understand equipment failure, we investigate system interruptions and outages and track data on component failure and the reliability performance of our generation, communication, transmission, and distribution systems. Failures of electrical infrastructure components, whether in-service failures or components in danger of imminent failure, present a risk to reliability and a risk of wildfire ignition from potential arcing or wires falling to the ground. We track transmission and distribution component failures and reliability performance through the Dispatcher Logging System, Outage Management System, and the Energy Management System. Tracking of the interruption causes allows trending and enhanced inspections, which help to identify material failure and promote project identification.

Recently we commissioned our new Advanced Meter Infrastructure (AMI) system, which allows us to access new analytics tools for tracking and documentation of system performance. These analytics tools, coupled with the AMI automatic reporting of interruptions in the distribution system, will provide superior accuracy and granularity regarding the presence of distribution interruptions. These analytic tools will help us to locate the problem and identify the possible cause of the interruption. The collection of

this interruption-cause data will enable additional data and trending capabilities in the future.

By analyzing circuit breaker and recloser automatic-reclosing activities on overhead lines, we better understand our ignition risk. Automatic reclosing occurs when there is a circuit breaker or recloser trip causing a power interruption. The circuit breaker or recloser closes automatically after a determined period, which turns the power back on. Auto-reclosing, relay-protection schemes, and system operator-initiated reclosing on transmission and distribution circuits enhance stability and increase system reliability.

Reliability is often measured in duration. Automatic reclosing decreases outage durations because we are able to restore power much faster than if we had to do so manually. A “momentary” interruption on the transmission system is shorter than 60 seconds. A “sustained” interruption is 60 seconds or longer. There are many more momentary interruptions than sustained interruptions. In 2025, we experienced 528 momentary and 260 sustained interruptions affecting the transmission system. Monitoring these reclosing activities has provided insight into the interaction between electric lines and faults. If a permanent fault occurs, it requires personnel to mobilize and fix a problem, and the fault is unlikely to recur. Every thermal event presents some level of ignition risk. Frequent causes of reclosing events on our system are vegetation, animals, and foreign objects (such as Mylar balloons). We track reclosing operations in the Energy Management System and Outage Management System.

### **7.3. Grid Hardening Programs**

We have a portfolio of programs to proactively improve facilities and replace assets to improve safety, increase reliability, and reduce the risk of wildfire. Our Capital Improvement Program provides funding for repairing, upgrading, and expanding infrastructure to improve reliability of service and also to reduce the risk of infrastructure causing wildfires or other safety concerns. Within the Capital Improvement Program, there are a suite of programs focused on particular areas of capital improvement.

#### **7.3.1. Transmission Line Reliability Program Extenda-Life and Line Rebuild Programs**

Our company has approximately 6,300 miles of transmission lines across our service area. Of those, approximately 3,800 miles are 41.6-kV transmission lines, which are a core part of how we serve customers. We focus on assessing overall transmission asset health conditions, which has led to the development of our Extenda-Life and Line Rebuild programs. Through our operations and maintenance (O&M) and capital programs, we look to extend the life of line sections to the greatest extent possible. However, once the overall condition and performance of a line reaches certain deterioration levels, we need to replace it, and we will include the line in the Line Rebuild program. Prior to deciding to replace a line, we consider whether we might refurbish the line instead. Refurbishing of line sections can include a combination of activities including, but not limited to, changing out rotting cross arms, replacing failed insulators, replacing poles that have failed strength tests, applying ground treatment for poles that pass strength tests, mitigating vegetation issues, and reattaching guy wires. We refer to these refurbishment projects internally as Extenda-Life projects. We consider several factors in determining when a replacement is needed, including line framing style and pole height, reliability performance, hard-to-access areas (e.g., in or around water), conductor condition, and overall line vintage

Although the Extenda-Life and Rebuild programs differ, each improves the reliability of the transmission system. Any time replacement of equipment along an existing line or replacement of the entire line occurs, the line has inherently better performance. This is not only due to new assets performing better, but also because we implement updated construction and material standards. The newest construction and material standards include new framing styles. More specifically, our new standards include higher rated insulators (72 kV rather than 45 kV) (reduces number of faults), different conductors, more spacing between energized conductors (less risk of contact), as well as a static wire above the energized conductors. This static wire protects against interruptions caused by weather events, such as lightning. Lastly, the current standard for our 41.6 kV lines is T2 (twisted pair) conductor that improves the line's performance during icing and frost conditions over the standard single conductor utilized in older lines. Applying Otter Tail Power's current construction and material standards to existing lines results in improved reliability of the lower voltage (41.6 kV) transmission system.

Both the Extenda-Life and Rebuild programs reduce ignition risk on the transmission system by reducing and/or preventing faults (thermal events on a line). These programs also greatly reduce the risk of ignitions from flashover insulators, failed cross arms, failed poles, vegetation encroachment, and lighting.

### **7.3.2. Transmission Line Switch Improvement Program**

Inadequate or malfunctioning transmission switches have the potential to be an ignition source. We monitor transmission switches for functional performance and system adequacy. We perform switch maintenance to adjust and align moving parts and replace worn parts of the switch for proper contact mating during switch opening and closing. We make switch improvements by adding vacuum bottle interrupters for improved line disconnection. We will schedule replacement of the switch if we can't make repairs or if the switch is not adequate for the switching duty it is required to perform. We equip planned new switch installations and replacements with vacuum bottle interrupters. Vacuum bottle interrupters remove the presence of an arc during the operation of the switch, which removes a common source of ignition.

### **7.3.3. Ground Fault Neutralizers**

We've deployed Ground Fault Neutralizers (GFNs) in multiple substations throughout our 41.6-kV system for nearly 30 years. GFNs are effective at reducing or preventing arcs due to a temporary ground fault on the electrical system. The reduction in arc or fault current reduces the amount of energy available to ignite a wildfire.

### **7.3.4. Transmission Wooden Pole Replacement**

Our transmission facilities are predominantly supported by wooden poles. In ecologically sensitive areas, we are strategically replacing wooden poles with steel and ductile iron poles, which are more fire resistant, thereby reducing potential damage from wildfires.

### **7.3.5. Transmission and Distribution Pole Integrity Program**

Additionally, we have both a transmission and distribution pole integrity program. This program uses sounding and boring techniques to identify poles that no longer have the structural integrity they were originally designed for. We then replace these poles, which reduces the risk of a structure failure and subsequent ignition.

### **7.3.6. Transmission and Distribution Structure Design**

We evaluate and improve our construction standards to provide greater resistance to animal contact. We use avian protection standards and guidance from “Suggested Practices for Avian Protection On Power Lines” published by the Avian Power Line Interaction Committee (APLIC) to establish phase spacings and avian protection standards, which it designed to mitigate wildlife interactions with energized facilities. We also use wildlife barriers and markers across the system to reduce wildlife interactions and contact with energized parts. There are times when animals build nests on power line structures. We work with governmental agencies to relocate nests to alternative nesting structures. These practices reduce wildfire risk by reducing and preventing the chances of animal-induced arc or fire.

### **7.3.7. Distribution Undergrounding Program**

Moving overhead infrastructure to an underground system significantly reduces the risk of wildfire by eliminating arcs that can cause ignitions. If a fault occurs in an underground system, the arc is contained below ground, minimizing the potential for fire. While undergrounding the entirety of our thousands of miles of transmission is not currently feasible, we take a proactive and strategic approach to enhancing system safety. Our undergrounding program targets overhead infrastructure in areas where reliability is affected by repeated environmental challenges such as frequent contact with vegetation and/or animals, and in locations identified as having higher fire risk. We will not underground all portions of distribution lines that are in higher fire risk areas. Through this program, we evaluate the system and prioritize undergrounding where it will have the greatest impact on wildfire mitigation and reliability.

### **7.3.8. Substation Breaker and Recloser Replacement Program**

Circuit breakers and reclosers are essential electrical safety devices designed to protect an electrical circuit from damage caused by overcurrent, short circuits, or overloads. Circuit breakers and reclosers can be operated either manually or automatically to control and protect power systems by interrupting fault currents.

Circuit breakers and reclosers enhance electrical system safety by preventing equipment damage, fire hazards, and power outages. They also allow for selective isolation and switching of different parts of the power system for maintenance and control purposes

Our Substation Breaker and Recloser Replacement Program funds the review of our inventory of approximately 400 transmission and distribution voltage circuit breakers and reclosers. Through this program we determine which have the greatest wear, gas or oil leaks, maintenance cost, service stress, and fault interrupting history. We replace circuit breakers with the highest failure risk. By ensuring circuit breakers are in good working order, we reduce the risk of a fault not clearing. When a fault is not cleared properly, there is a greater chance for more thermal energy to be created, which can lead to ignition and in turn cause a wildfire.

### **7.3.9. Substation Equipment Improvement Program**

Properly operating equipment in our substations is critical to reducing the risk of wildfire and responding to wildfires that do occur. Through our Substation Equipment Improvement Program, we add, replace, and upgrade substation equipment, including remote control and monitoring equipment, at the System Operations Center. These upgrades improve response times to correct problems or respond to outages. Additionally,

improved remote control of substation equipment may facilitate grid modernization and the implementation of our non-reclose program. Non-reclose is a control feature where the automatic closing function of the circuit breaker or recloser is blocked or turned off. The circuit breaker or recloser will then have to be closed manually. Our non-reclose program targets facilities in HFAs. In these areas, when there are red flag warnings, we will disable the reclose feature. We will respond to any circuit breaker or recloser trips and inspect prior to manually closing them to restore power. While this may introduce some delay in restoring power, it will also ensure that we do not restore power under circumstances where, for example, there is vegetation in contact with the line and restoring power could cause an ignition.

#### **7.3.10. Trip Saver Deployment**

We have begun deploying Trip Savers. A Trip Saver is a vacuum interrupter, mounted in place of a cutout fuse door. Due to the interrupting function of the device, no arc or expulsion occurs during operation, removing a potential ignition source of a fire. We currently have approximately 30 of these devices deployed and will continue to deploy these new technology devices across the distribution system when circumstances warrant. Currently Trip Savers are used for reliability purposes, and we have begun evaluating whether they would be a possible wildfire mitigation tool for future WMPs.

### **7.4. Vegetation Management**

Vegetation management includes inspecting rights-of-way to identify encroaching vegetation, trimming/removing incompatible vegetation, and promoting compatible vegetation to reduce incidences of service interruption and the risk of causing wildfires or of wildfires damaging transmission and distribution lines.

#### **7.4.1. Transmission Vegetation Management**

Our Transmission Vegetation Management Program is a management framework that, through routine inspection, maintenance and documentation, can reduce the risk of wildfire, increase the reliability of electric service, and improve safety for surrounding communities. When trees come into contact with energized facilities, they cause interruptions and damage to electrical lines. Vegetation contact is a main cause of damage to electrical lines and poses a risk of triggering ignitions and wildfire.

Our Transmission Vegetation Management Program includes:

- Annual right-of-way patrols and inspections.
- Routine, cyclical vegetation management to achieve required clearances.
- Routine, cyclical right-of-way maintenance.
- Danger tree removal.
- Quality assurance.

Our vegetation management strategy uses the Integrated Vegetation Management approach, an industry standard practice,<sup>40</sup> which employs a variety of manual, chemical, biological, and cultural techniques to promote desirable, stable, low-growing plant communities near our transmission lines.

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<sup>40</sup> See ANSI A300, part 7.

#### **7.4.1.1. Transmission Line Vegetation Inspection**

We patrol our bulk electric system (BES) transmission system once every calendar year to:

- Assess the condition of the transmission right-of-way.
- Identify potential encroachments, including new construction that could conflict with the safe operation of the transmission system.
- Identify changes in vegetation and tree conditions along the right-of-way.
- Identify potential damage to transmission access and roadways.
- Assess and report any concerns related to the transmission assets.

#### **7.4.1.2. Vegetation Clearance**

We designed our Transmission Vegetation Management Program to comply with the requirements of the North American Electric Reliability Corporation reliability standards, including FAC-003,14, which addresses all transmission circuits rated at 200 kV or higher. We also use guidelines from the National Electric Safety Code, Rule 218, and consider the annual growth rates of vegetation. If we find any issues or concerns during the inspection process, we document them and prioritize mitigation. We assign contractors to:

- Selectively remove and control tall-growing species with as little impact as possible to native and other low-growing species. Work is done according to our minimum standing vegetation clearances. This work includes removing deciduous trees in a way that prevents resprouting.
- Develop new plant communities through seeding and planting with compatible species.
- Seed or fertilize existing or disturbed areas with compatible species.

#### **7.4.1.3. Tree Risk Assessment and Mitigation**

We define a “danger tree” as a tree that is structurally unsound and poses a risk of falling, especially in areas where people or property could be harmed. Danger trees are located on or off the right-of-way and are tall enough to contact or strike our facilities by growing into, falling into, or swaying into or through electrical lines. A “hazard tree,” is a subset of “danger tree,” which we define as a tree that has a defect that makes it predisposed to failure, and its failure could result in damage to people or property. In assessing vegetation for removal, crews consider the overall health of the tree, the stability of the ground surrounding the tree, the tree location and proximity to power lines, and the criticality of the power line. Trimming or removal of danger trees or hazard trees often requires consultation and permission from the owners of the adjacent property. We continue to build and foster relationships with property owners who host our facilities to improve the safety and reliability of the transmission system.

#### **7.4.1.4. Quality Assurance and Control**

Our Transmission Vegetation Management Program includes a quality assurance and control component. After crews complete vegetation management work, we conduct a field inspection to verify quality. We document these inspections and store them for future reference within our Geographic Information System (GIS).

## **7.4.2. Distribution Vegetation Management**

Our current Distribution Vegetation Management Program includes trimming, on average, approximately 480 miles of primary distribution lines per year. This includes both feeder trimming and hot spot/focused trimming. Our Distribution Vegetation Management Program includes the same Vegetation clearances found above in Section 7.4.1.2, and definitions of “danger/hazard trees” found in Section 7.4.1.3 above.

### **7.4.2.1. Feeder Trimming**

A full-feeder trim means that the entire length of the feeder has been inspected for vegetation and trimmed to current specifications, found in our Vegetation Trim Specification Policy. Our Distribution tree trimming cycle measures the length of time between full-feeder trims. Each year as we schedule full-feeder trims we prioritize various factors such as past trim dates, reliability performance, and feeders in higher fire risk areas.

### **7.4.2.2. Hot Spot/Focused Trimming**

In between full-feeder trims, we continue to periodically inspect, as described in Section 7.1.5, including observation of areas where vegetation growth creates a risk of near-term impacts. If we identify risky vegetation, we remediate those issues through hot spot/focused trimming. This helps us to maintain reliability and safety in the near term.

## 8. Operational Response

Operational Response refers to changes in the way we operate our business in response to conditions and situations that arise in and around our service area. Situational awareness is vital to efficient operational response. Situational awareness refers to our ability to know what is happening at any given time in and around our service area and includes things we cannot control, like weather and natural disasters, and things we can control, like our response to outages and faults on the system, and everything in between.

We have outfitted our trucks with fire-mitigation tools, like pump operated water sprayers, fire/welding blankets, and electric string trimmers to facilitate mitigation practices and begin suppression efforts if a fire does occur.

One operational response that we use is implementation of risk adjusted work practices when fire risk is high. These operational changes reduce the risk of fieldwork or electrical lines causing wildfires.

Another important component of operational response is emergency management. Emergency management involves actions to plan for, prepare for, monitor, and respond to high-risk conditions occurring in our operating environment. When severe or extreme conditions or events occur, we have prepared and are ready to respond to those conditions or events. Often this emergency management includes the plans and actions that we will take in coordination with city, county, and state agencies.

We're prepared to operate through and recover from a wildfire that threatens to spread into or is already uncontrolled in our service area. We'll respond upon request of emergency responders and provide requested support if possible. While we are not a fire suppression company, there are actions we can take in the face of a wildfire that threatens to affect electrical operations. This preparation and planning is all a part of our operational response.

### 8.1. Situational Awareness

Situational awareness comprises actions, data collection, and analysis we take to better understand current and forecast weather conditions, the current state of our assets, operating conditions, and the current and forecast wildfire risk conditions. Additionally, situational awareness includes ensuring we are aware of the potential that our transmission and distribution lines may be operating in adverse conditions or may be impacted by wildfires.

#### 8.1.1. Weather Forecasting

Our System Operations department and Customer Service team monitor meteorological and environmental conditions and forecasts from various sources to support operations. These include weather data and forecasts from public and subscribed services that include both local and regional information, particularly forecasted wind events, and soil moisture and drought conditions information. We also monitor publicly available wildfire maps and forecasts during wildfire season, such as:

- National Weather Service - Storm Prediction Center Fire Weather Forecasts<sup>41</sup>

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<sup>41</sup> National Weather Service - <https://www.weather.gov/>, Storm Prediction Center Fire Weather Forecasts – accessed December 30, 2025 at [https://www.spc.noaa.gov/products/fire\\_wx/](https://www.spc.noaa.gov/products/fire_wx/).

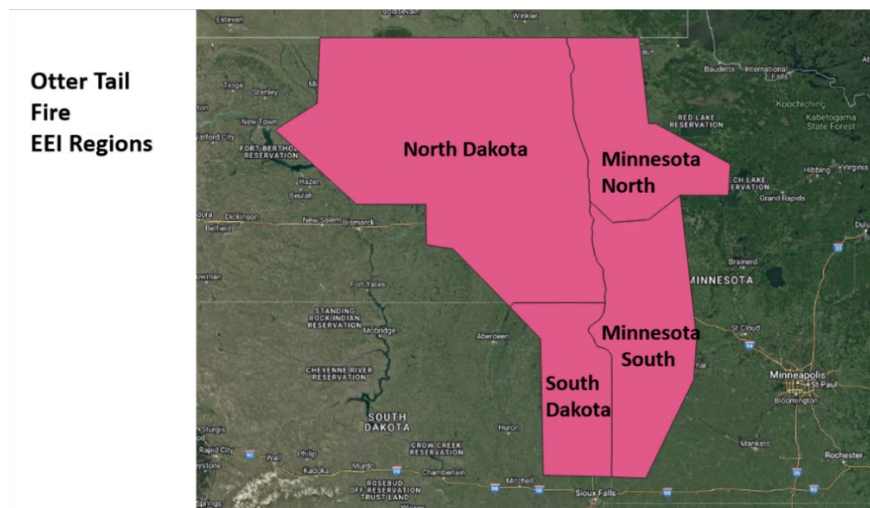
- National Interagency Coordination Center’s 7-Day Significant Fire Potential Map<sup>42</sup>
- AirNow Fire and Smoke Map<sup>43</sup>
- MN DNR Fire Danger and Burning Restrictions<sup>44</sup>
- ND Response Burn Restriction and Fire Danger Maps<sup>45</sup>
- SD Grassland Fire Danger Map<sup>46</sup>
- National Significant Wildland Fire Potential Outlook<sup>47</sup>
- US Drought Monitor<sup>48</sup>

We collect and evaluate information from these data sources and may add others as we review and approve them for use.

### 8.1.2. Fire Weather Forecast Trigger Levels

To increase our situational awareness regarding how current or imminent fire weather conditions may affect our system, we also subscribe to DTN WeatherSentry. Every day, DTN sends our System Operations team a five-day fire weather forecast. The forecast provides an Energy Event Index (EEI) which indexes and rates fire weather risk in the four regions in our service area. The four regions are North Dakota, South Dakota, Minnesota North, and Minnesota South (see Figure 11 below).

Figure 11 - OTP Fire EEI Regions



<sup>42</sup> National Interagency Coordination Center, 7-Day Significant Fire Potential Map, accessed December 30, 2025 at <https://fsapps.nwgc.gov/psp/npsg/forecast/home/#/outlooks?state=map>.

<sup>43</sup> AirNow Fire and Smoke Map, accessed December 30, 2025 at <https://fire.airnow.gov/#5.56/45.499/-96.919>.

<sup>44</sup> MN DNR Fire Danger and Burning Restrictions, accessed December 30, 2025 at [https://www.dnr.state.mn.us/forestry/fire/firerating\\_restrictions.html](https://www.dnr.state.mn.us/forestry/fire/firerating_restrictions.html).

<sup>45</sup> ND Response Burn Restriction and Fire Danger Maps, accessed December 30, 2025 at <https://experience.arcgis.com/experience/c5da309af17b4c48a3b953675a77f654>

<sup>46</sup> SD Grassland Fire Danger Map, accessed December 30, 2025 at <https://www.weather.gov/unr/rfd>.

<sup>47</sup> National Significant Wildland Fire Potential Outlook (nifc.gov) accessed December 30, 2025 at [https://www.nifc.gov/nicc-files/predictive/outlooks/monthly\\_seasonal\\_outlook.pdf](https://www.nifc.gov/nicc-files/predictive/outlooks/monthly_seasonal_outlook.pdf).

<sup>48</sup> US Drought Monitor accessed December 30, 2025 at <https://droughtmonitor.unl.edu/CurrentMap.aspx>.

DTN's daily alerts provide four separate forecasts to specifically describe the risk in each region. When fire risks are elevated, we'll actively monitor the National Weather Service (NWS) Fire Weather Hazard Overview Map, along with Active Alerts. We'll also check State Fire Danger levels.

We use the EEI index, coupled with the NWS Hazards Wildfire Forecast or State Fire Danger levels, to trigger awareness communications, prompt risk adjusted work practices, and execute risk mitigation measures. Below we describe risk levels, warnings, and forecast periods:

- Wildfire Safety Operations Level 1
  - EEI Risk 3 (High), and an NWS watch, or State Fire Danger Level High or Very High
  - When possible, the notification will be sent based on the 2-day forecast (i.e. two days ahead of the forecasted weather)
- Wildfire Safety Operations Level 2
  - EEI Index 4 (Severe), and an NWS Red Flag Warning, or State Fire Danger Level Extreme
  - When possible, the notification will be sent based on the 2-day forecast (i.e. two days ahead of the forecasted weather)

More details about the process we use when conditions warrant wildfire safety operations are set out in our Wildfire Safety Playbook. The Playbook provides specific directions and communications protocols that we'll use when the above thresholds are met. Upon declaration of one of the operating modes, we'll communicate with designated personnel for execution and oversight.

## **8.2. Operational Changes and Risk Adjusted Work Practices for Triggered Levels**

We operate with two trigger levels, Wildfire Safety Operations Level 1 and Wildfire Safety Operations Level 2. This section summarizes the two wildfire safety levels. The Wildfire Safety Playbook details these operations. The Wildfire Safety Playbook will be the reference our employees use to respond to severe wildfire weather conditions and the specific methods they will use to work safely under those conditions.

This section applies to our distribution and wholly owned transmission assets. This section does not apply to co-owned transmission assets. Co-owned assets may be subject to different standards or the WMP of the co-owner who is contractually responsible for maintenance or operation of the co-owned transmission asset.

### **8.2.1. Wildfire Safety Operations Level 1**

Operations during Level 1 are focused on increased caution and awareness. Level 1 does not include any restrictions on what work we do but does require us to do our work with extra precautions and safety protocols. Project work during periods when we are operating under Wildfire Safety Operations Level 1 will take extra time and consideration when working in triggered fire weather warning areas.

We'll advise crews of heightened wildfire risk via email, beginning two days ahead of the event, to the extent this is possible. Once in the field, crews will be vigilant and make

sound judgements whether the conditions are safe to execute the task scheduled. Crews will collaborate with their supervisors to prioritize work and consider alternative tasks if the risks are high. Each crew will designate a team member whose duty will be to call 911 in the event of an ignition. That team member will keep the project location address available for easy reference in the event of the need to alert emergency services with the location of a fire.

Additional consideration and care shall be given for:

- Off-road vehicle travel.
- Work that may produce sparks or hot waste materials, i.e. welding, grinding, drilling, and cutting of metals.
- Hot-line work, due to concern of inadvertent line contact or dropped energized conductor.
- Switching with live exposed parts.

While working, crews will have fire extinguishing equipment readily available on the worksite and be on the lookout for an ignition. Should an ignition take place, the crews will try to extinguish the fire if they feel it is safe to do so while the designated team member calls 911. We'll call the Fire Department and request a response.

#### **8.2.1.1. Fire Watch**

Crews will post a Fire Watch once operations have ceased at the site or for the day. A team member will be designated as the fire watch monitor and will remain on site for 30 minutes after cessation of operations for fire watch. The fire watch monitor will have fire extinguishing equipment at hand. Should a fire ignite, the fire watch monitor will call 911 to report the fire and then attempt to extinguish the fire if they feel it is safe to do so.

#### **8.2.1.2. Breaker Operation Events**

We will investigate all known Breaker Operation Events in the identified triggered area(s). We will send a patrol out to investigate the potential cause of the breaker event and to look for a possible ignition. Should the breaker go to lock out, we will not energize the line until we have executed a complete line patrol, unless it is necessary to do so when power is needed to preserve human life or property, e.g. fire suppression. Crews on scene have the discretion to attempt to energize the line if (1) they are reasonably certain of the location of the fault and have cleared or isolated the fault, and (2) where power is necessary for emergency responders to preserve human life or property (for example if a fire threatens structures and firefighters cannot access water to fight the fire without power to pumping stations). In this event, crews on scene may make one (1) attempt to reenergize without first executing a complete line patrol. If the attempt to reenergize the line is successful, a complete line patrol is still required and must be completed as soon as possible following reenergization. If the attempt to reenergize the line is not successful, another attempt may not be made until a complete line patrol has been completed.

#### **8.2.2. Wildfire Safety Operations Level 2**

Risk Adjusted Work Practices and Operational Changes will direct daily operations for a Wildfire Safety Operation Level 2. The same cautions and directions for Wildfire Safety Operations Level 1 are in effect.

In addition to all cautions and directions included in Wildfire Safety Operation Level 1, the following activities are **restricted** during Wildfire Safety Operations Level 2:

- Off-road vehicle travel.
- Work that may produce sparks or hot waste materials, i.e. welding, grinding, drilling, and cutting of metals.
- Hot-line work.
- Switching with live exposed parts.

In addition to all instructions and requirements in Wildfire Safety Operation Level 1, we will also instruct crews not to perform any restricted work unless special circumstances exist that make the work necessary despite adverse conditions. Our Wildfire Playbook sets out detailed mitigations for each category of restricted work setting out modified practices and safety protocols that our crews must use. In general, crews will not perform restricted activities if they can safely be postponed.

### **8.2.3. Operational Changes**

During Wildfire Safety Operations Level 2, we'll make the following changes to our system operations:

- Transmission Line Reclosing will be turned OFF for designated lines where the line exists in a Wildfire Operation Trigger Area.
- Distribution Line Reclosing will be turned OFF for designated feeders where the line exists in a Wildfire Operation Trigger Area.
  - Local Personnel have discretion to turn Reclosing Off in areas outside the Wildfire Operation Trigger Area if circumstances warrant the action.

Our service territory is comprised of largely open lands, grass lands, and forested areas, on flat ground or hills. We can reasonably access transmission and distribution lines throughout our territory. We do not have mountainous areas that are difficult to access by regular means. Further, our transmission system's reclosers are controlled from our control room. Distribution line reclosing is currently manual only. If a line becomes deenergized, we have multiple methods to access it, including off-road vehicles, snow machines, and other means. Further, if a line becomes deenergized, Breaker Operations Event procedures apply (see Section 8.2.1.2).

We provide an essential service to communities and customers, and the safety of our employees and the communities we serve is at the front of our decision making. We have carefully considered the appropriate balance of the risk of wildfire with the need for continued supply of electricity to the communities we serve. While executing recloser off procedures does not mean that there will be an outage, it does mean that if there is a fault on a line with recloser off, there will be an outage, and it will not be just a momentary outage. We believe the Breaker Operations Event procedures for investigating and inspecting lines during Wildfire Safety Operations Levels 1 and 2 give our personnel in the field the flexibility to address the emergency needs of first responders and communities when it is necessary to protect life or property.

The Wildfire Safety Operations Playbook provides more details and specifies methods and means to work in a restrictive environment during heightened fire risk events.

### 8.3. Emergency Management Plans

We operate around the clock with operations staff trained and prepared to respond to and recover from any emergency that could adversely affect the health and safety of our employees, customers, visitors, and system infrastructure. Electricity is an essential resource and delivery to customers is a measure of emergency response. Our Customer Outage Response Charter documents how our departments coordinate emergency management–related actions, resources, and activities with county, regional, state, federal, private sector, and nongovernmental organizations.

Our operational procedures provide the foundation for Emergency Support Functions, the various Support Operations, and the Incident Operations Plans. We'll respond and support efforts to save lives, protect property, and stabilize an incident. Our operational procedures describe how coordination is managed among the many departments and organizations, including our own, that may be involved in response to achieve unity of effort.

Our Customer Outage Response Charter provides a clearly defined and structured approach to restorations following an incident that results in an outage event. This plan ensures that we perform restoration efforts in an effective and coordinated manner, enhancing our ability to restore electrical systems and essential services to our customers. The plan has four missions:

- Protection, of physical infrastructure and cyber security.
- Mitigation, to identify vulnerabilities and reduce them.
- Response, which maintains a strong capability to address emergencies.
- Recovery, which gets our customers back to normal.

Our Customer Outage Response Charter is a guide for decision-making actions involving damage assessment, identification of restoration tasks, development of metrics, and activation levels during restoration efforts. We distribute the plan to all staff who have restoration responsibilities. To ensure effective coordination during restoration efforts, we share the plan as necessary with local emergency response and management agencies, designated emergency coordination officers, emergency management directors, emergency management planners, and other affected parties. The plan:

- Describes the basic strategy and tactics for responding to outage events and demobilizing after completion of restoration efforts.
- Defines storm, event, and disaster activation modes, trigger points and expected actions of various operating centers.
- Outlines the basic restoration response organization.
- Outlines the roles and responsibilities for our personnel to respond to emergencies in a coordinated effort to restore power to customers.
- Identifies restoration event and response levels.
- Provides notification and mobilization procedures for our response personnel.
- Establishes overall restoration procedures and policies.

We activate the Customer Outage Response Charter and take necessary actions, in coordination with emergency disaster plans under the following circumstances:

1. If the event meets definitions, is widespread or is a significant interruption of electrical service to our customers, or
2. Failure of generation, transmission or distribution facilities that affect overall public safety and cause property damage that requires our emergency response.

#### **8.4. Operational Coordination**

We supply our customers with electricity using both distribution and transmission lines. We own and operate many of the transmission lines we use, and others are owned by other electric providers or utilities. Some of our transmission lines are co-owned with another utility. When we co-own a transmission line with another utility, we must coordinate with that utility about wildfire operations. This means that we cooperate with neighboring utilities and co-owners when wildfire conditions require us to de-energize a line. This may happen for the following reasons:

- To avoid arcing or flashover due to smoke when wildfires and dense smoke are in the vicinity. Arcing or flashover can cause a secondary ignition or reignition point.
- To avoid fire-damaged structures from failing and causing contact between an energized line and structures, vegetation, or the ground, which could cause a secondary ignition or reignition point.
- To ensure the safety of firefighters and firefighting activities occurring near our facilities.

Because of the networked nature of the transmission grid, such de-energizations do not necessarily result in customer outages. Our System Operations personnel have secure communication means with other utility system-operations personnel, and these existing communication channels are integral in case of such de-energization. We would make the decision to de-energize transmission in collaboration with the Transmission Control Center, Regional Operator, and field personnel performing inspections, or during coordination through an incident command structure. It is also possible that protective relaying might trip lines out of service during an event, depending on the proximity of the fire to the transmission lines.

Coordinated response encompasses managing transmission operations to mitigate wildfire risks and addressing externally triggered wildfires within our Operations Control Center and Customer Outage Restoration Charter.

In addition, to ensure a unified, interoperable approach to resource sharing, coordination, incident management and information dissemination, we employ the Incident Command System under the FEMA National Response Framework.

## 9. Stakeholder Engagement

Stakeholder engagement includes training and awareness for our employees as well as outreach to the communities we serve, emergency response organizations, and other utilities and agencies. We've built our stakeholder engagement plan to help highlight the importance of wildfire prevention, outline best practices for reducing wildfire risk, and work in tandem with emergency response agencies if wildfires do occur.

Our Customer Outage Response Charter documents how we coordinate emergency management-related actions, resources, and activities with county, regional, state, federal, private sector, and nongovernmental organizations. Our Customer Outage Response Charter provides a clearly defined and structured approach to power restorations following any incident that results in an outage, including wildfire.

### 9.1. Employee Awareness and Training

We equip employee groups with the knowledge and skills necessary to effectively implement our WMP.

#### 9.1.1. Training for All Employees

During the first half of 2025, we developed a plan for training all employees. Employee training of front-line employees began in early 2025 and for all employees in the fourth quarter of 2025.

We provide safety information on a regular basis to increase awareness on a variety of topics for all employees. In August of 2025, we began including wildfire safety and wildfire mitigation information in our ongoing periodic employee communications:

- Employee newsletter
- Safety Monthly Outline
- Safety Leadership meeting
- Customer Service Center Safety Meetings
- Intranet Safety and Emergency pages

Awareness includes educating employees on the causes and impacts of wildfires, with a focus on the role of electric utility infrastructure in wildfire ignition and propagation.

#### 9.1.2. Training for Customer Service Representatives

Customer Service Representatives are a frontline communication path with customers during a wildfire event causing electrical service disruptions. Training is focused on safety and communication necessary and needed to convey information to customers, community officials, and other stakeholders.

#### 9.1.3. Training for Field Employees

Field employees are frontline representatives of our company. Field employees may be responding to disruptions during high-risk periods or while wildfire events occur and may assist emergency response organizations with suppression. We train field employees on Wildfire Safety Operations. We also train on other wildfire-related topics including:

- Response actions
- Wildland fire safety
- Wildland fire suppression
- Fire prevention
- Wildland fire suppression tools
- Wildland fire suppression tactics
- Review of wildfire safety awareness
- Review of wildfire safety operations risk adjusted work practices
- Use and maintenance of fire suppression equipment
- Wildfire event liaison

This list is non-exhaustive, and we may periodically add, combine, or change the titles and contents of our trainings.

#### **9.1.4. Evaluation**

We evaluate training and learning to ensure employees understand wildfire risk factors and our role in preventing wildfires. We also use participation rates and knowledge assessments to measure our training progress.

## **9.2. Communications with Customers, Communities, and Emergency Managers**

OTP has enhanced and expanded our communications and collaboration with customers, stakeholders, and external partners to help manage wildfire risk across our service area.

The goal of outreach and engagement regarding wildfire is to confirm, identify, and/or address the unique energy or preparedness requirements of our customers and communities. Our outreach and engagement efforts focus on preparedness and strive to educate customers, communities, and other stakeholders more broadly on our wildfire mitigation efforts, including programs like vegetation management, infrastructure replacement and hardening, and wildfire safety. We also provide information to customers about how they can help prevent wildfires before and during each fire season.

OTP actively collaborates with emergency management and response agencies to strengthen wildfire preparedness and resilience. Regular meetings with these agencies focus on raising awareness of wildfire risks, proposing joint training sessions and exercises, and ensuring alignment between hazard mitigation plans. These proactive partnerships help establish critical contacts and fosters coordinated planning, so that response strategies are well-rehearsed and ready to deploy if an emergency occurs. By working together, OTP and its partners enhance community safety and operational continuity in the face of wildfire threats. For instance, in 2025, we have participated in the Minnesota Public Private Partnership, Otter Tail County hazard mitigation advisory committee, the North Dakota State Emergency Services group, and begun attending Minnesota Regional Emergency Management quarterly meetings, and attending local fire chiefs' meetings, among many others.

### **9.2.1. Continuing Communications**

Throughout the year we incorporate wildfire prevention information into our ongoing safety messaging to customers, communities, stakeholders, and external partners. We share information through a variety of communication channels and tools, which may include:

- Web content at [otpc.com/safety](http://otpc.com/safety).
- Customer Connection newsletter (sent via bill insert or email).
- Social media.
- Employee awareness and training, with enhanced training for customer-facing employees.
- Annual Impact Report.

### **9.2.2. Communications Before and During Wildfire Seasons**

In our service area, spring and fall have the highest general wildfire risk. Early spring, typically from March through May, after snowmelt but before green-up, can bring very dry conditions to our service area. Likewise, late summer through fall, the time up to and through harvest but before snowfall, generally from July to November, can pose very dry conditions. Before and during these more fire-sensitive seasons, we'll communicate educational content about wildfire prevention and our efforts to mitigate wildfire risk using the communications channels and tools outlined above and may also incorporate:

- Partnership opportunities with local fire departments.
- Paid advertising.
- Talk shows, podcasts, and/or radio remotes.
- Blog posts and news releases.
- Webinars, which provide opportunities for customers to ask questions live.
- Proactive conversations via our sales team for business customers.

These tactics can provide additional support and awareness to our continuous wildfire prevention information.

### **9.2.3. Communications During Wildfire-Related Outages**

During wildfire-related outages, we'll ensure updates and information are readily available through:

- Incoming calls.
  - Our Integrated Voice Response (IVR) system lets customers know to call 911 for any emergency situations.
  - We may also post custom, event-specific messages to our IVR in an emergency situation.
- Outbound calls and texts via our Outage Management System.

- Web content at [otpc.com/safety](http://otpc.com/safety).
- Social media.
- Media relations.

Overall, we partner with our communities and stakeholders to identify our shared roles in preventing wildfires.

### **9.3. Utilities and Agencies**

We maintain ongoing communications and coordination with adjacent utilities; municipalities; local, state, and federal agencies; and other organizations regarding a wide range of planning and operational subjects impacting our WMP.

We'll collaborate with organizations overseeing wildlife management areas (i.e., U.S. Fish & Wildlife, Department of Natural Resources) in our service territory on burning schedules and wildfire prevention plans going forward.

## **10. Governance and Accountability**

We have appointed an Executive Steering Committee to oversee our WMP. Reporting directly to the Executive Steering Committee is our manager-level Wildfire Management Team (WMT). The WMT will review any wildfire events that occur and report to the Executive Steering Committee. Together the Executive Steering Committee and WMT will conduct an annual review of our WMP to ensure that it remains up to date.

In addition, the WMT oversees the WMP directly and is responsible for advancing the WMP. The WMT will manage, review, edit, and seek approval from the Executive Steering Committee for modifications to the WMP.

### **10.1. Performance and Monitoring**

We'll monitor the physical performance of the WMP through after-action reporting. Firsthand accounts from personnel who participated in the event will aid in the identification of areas where we can improve and identify policies and programs that are performing well. We plan to utilize the control room software, Versify, to log and track Wildfire Safety Operation events. We will log any Wildfire Events and document lessons learned.

In 2025 we began collecting data and during 2026 we will begin work to develop performance metrics based on the WMP and review of data logged in Versify. Metrics tracking will help us trend details to identify assets most susceptible to severe fire weather risks. The performance details we collect and analyze include:

- Number and duration of Red Flag Warning Events in our service area
- Locations (Counties) of Red Flag Warning Events in our service area
- Number of utility interruptions in affected areas during Red Flag Warnings
- Utility equipment caused ignitions

The WMT will review these performance details and will endeavor to use them to identify any areas for improvement in future iterations of the WMP.

### **10.2. Plan Accountability and Program Changes**

We will review and document each event. And we'll create and maintain after-action reports after each event for assessing lessons learned and for historical review. An event is any declaration of the Wildfire Safety Operations Level 1 or 2, or any ignition we may cause. We will analyze and assess the performance of our WMP with an eye towards reinforcing parts of the plan that are working well and recommending corrections or modifications to make the WMP better. The WMT will report on the progress of our WMP, propose any necessary changes and seek approval of any recommendations through the Executive Steering Committee.

# 11. Costs of the Wildfire Mitigation Plan

As explained more fully in Section 7.3, grid hardening programs, internally also called asset health programs, provide benefits for both system reliability and wildfire mitigation. New equipment is less likely to fail, which reduces the risk of faults that could lead to wildfire ignition. Vegetation management likewise reduces risk by limiting vegetation contacts, resulting in fewer faults and fewer outages. Similarly, all expenses related to maintaining overhead transmission and distribution lines help to reduce wildfire risk. Below is a table showing historical and forecast spending in the categories of grid hardening, maintenance, and wildfire mitigation planning. The Maintenance category includes the two FERC accounts where transmission and distribution (T&D) maintenance is recorded and forecasted. These accounts also include vegetation management costs. All spends are rounded to the nearest \$100,000.

Table 7 - Historical System Grid Hardening, Maintenance and Wildfire Mitigation Planning Spends

<b>Historical System Grid Hardening, Maintenance and Wildfire Mitigation Planning Spends</b>					
<b>Grid Hardening – T&amp;D Capital Spend (Actuals)</b>					
	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>
Other Asset Health Programs	\$22.6	\$33.1	\$27.6	\$29.9	\$50.5
Overhead to Underground Replacement Program	\$3.0M	\$5.1M	\$6.4M	\$10.3M	\$8.7M
Transmission Rebuilds and Extenda-Life Programs	\$10.2M	\$12.0M	\$10.3M	\$9.0M	\$7.0M
<b>Total Grid Hardening Spend</b>	<b>\$35.8M</b>	<b>\$50.2M</b>	<b>\$44.3M</b>	<b>\$49.2M</b>	<b>\$66.2M</b>
<b>T&amp;D Maintenance Spend (Includes Vegetation Management) (Actuals)</b>					
FERC Account 57100 - Transmission	\$1.2M	\$2.0M	\$2.8M	\$2.9M	\$2.4M
FERC Account 59300 – Distribution	\$4.6M	\$6.1M	\$7.6M	\$5.9M	\$4.8M
<b>Total Maintenance Spend</b>	<b>\$5.8M</b>	<b>\$8.1M</b>	<b>\$10.4M</b>	<b>\$8.8M</b>	<b>\$7.2M</b>
<b>Wildfire Mitigation Planning Spend (Actuals)</b>					
Wildfire Mitigation Planning <sup>49</sup>	\$ -	\$ -	\$ -	\$0.1M	\$0.2M
<b>Total Historical Grid Hardening, Maintenance and Wildfire Mitigation Planning</b>	<b>\$41.6M</b>	<b>\$58.3</b>	<b>\$54.7M</b>	<b>\$58.1M</b>	<b>\$73.6M</b>

<sup>49</sup> These costs included retention of subject matter experts to assess wildfire risk in our service area and aid in developing our first wildfire mitigation plan, plan development, subscriptions to weather services, acquisition of fire suppression tools, training, and labor associated with performing adjusted work practices and executing on the recloser-off requirements of the WMP.

In 2026, in addition to existing grid hardening programs, vegetation management, and inspection activities, we will make targeted investments in grid hardening and increase the frequency of asset inspections in HFAs with elevated wildfire risk. This means that we will be prioritizing projects that are in the highest risk HFAs within our grid hardening and maintenance budgets.

Table 8 - 2026 Forecasted Grid Hardening, Maintenance and Wildfire Mitigation Planning Spend

<b>2026 Forecasted Grid Hardening, Maintenance and Wildfire Mitigation Planning Spend</b>	
<b>Grid Hardening – T&amp;D Capital Forecast</b>	
Other Asset Health Programs	\$38.9M
Overhead to Underground Replacement Program	\$5.8M
Transmission Rebuilds and Extenda-Life Programs	\$8.0M
<b>Total Forecasted 2026 Grid Hardening</b>	<b>\$52.7M</b>
<b>T&amp;D Maintenance (Includes Vegetation Management) Forecast</b>	
FERC Account 57100 – Transmission Maintenance	\$3.9M
FERC Account 59300 – Distribution Maintenance	\$9.1M
<b>Total Forecasted 2026 Maintenance</b>	<b>\$13.2M</b>
<b>Wildfire Mitigation Planning Forecast</b>	
Wildfire Mitigation Planning Expense <sup>50</sup>	\$0.2M
<b>Total Forecasted 2026 Grid Hardening, Maintenance and Wildfire Mitigation Planning Spend</b>	<b>\$65.9M</b>

Otter Tail Power is a regulated public utility. This means that we can only charge rates that are just and reasonable, and that our federal and state regulators have approved. Utilities obtain revenues to fund capital programs, and operations and maintenance, through rates.

We are currently between rate cases in North Dakota and our most recent North Dakota rate case, filed in 2023, did not include any wildfire-specific or HFA-targeted capital projects or expenses. Nor are any wildfire-specific or HFA-targeted 2026 capital projects or expenses included in our current South Dakota rate case, which used a 2024 historic test year. In Minnesota, our rate case pending before the Minnesota Public Utilities Commission (MPUC) in Docket No. 25-359, seeks approval to include incremental costs associated with HFA-targeted grid hardening capital projects, HFA-targeted vegetation management expenses, and grid modernization initiatives, including a Supervisory Control and Data Acquisition (SCADA) distribution connectivity program. These costs

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<sup>50</sup> These costs include retention of subject matter experts to assess asset risk and wildfire risk in our service area, plan development, subscriptions to weather services, training, and labor associated with performing adjusted work practices and executing on the recloser-off requirements of the WMP.

and expenses are incremental to those included in the above 2026 estimates. The MPUC has not yet issued a decision regarding cost recovery for these programs. We will implement these new and incremental programs consistent with approved cost recovery, and we will reflect these programs in future revisions of the WMP as we achieve regulatory certainty in each jurisdiction.

## 12. Version

Version	Change Description	Effective Date
1.0	Initial Release	August 1, 2025
2.0	Substantial rewrite including addition of statutory compliance section, version section, modification of various policies and procedures, and general rewrite.	March 4, 2026

## 13. Appendix

### 13.1. Acronym List

AMI	Advanced Metering Infrastructure
APLIC	Avian Power Line Interaction Committee
BES	Bulk Electric System
CB	Circuit Breaker
EDM	EDM International, Inc.
EEI	Energy Event Index
FEMA	Federal Emergency Management Agency
GFN	Ground Fault Neutralizer
GIS	Geographic Information System
HFA	Hazardous Fire Area
IVR	Integrated Voice Response
MEOP	Minnesota Emergency Operations Plan
MPUC	Minnesota Public Utilities Commission
NERC	North American Electric Safety Council
OTP	Otter Tail Power Company
PSPS	Public Safety Power Shutoff
RAPT	FEMA - Resilience Analysis and Planning Tool
SCADA	Supervisory Control and Data Acquisitions
SEOC	State Emergency Operating Center
UAS	Uncrewed Aerial Systems
UNESCO	United Nations Educational, Scientific and Cultural Organization
USGCRP	U.S. Global Change Research Program
USGS	U.S. Geological Survey
WMP	Wildfire Mitigation Plan
WRO	Wildfire Risk Organization
WUI	Wildland Urban Interface

## 13.2. Definitions

**Avian Protection Plan (APP):** A utility-specific document that delineates a program designed to reduce the operational and avian risks that result from avian interactions with electric utility facilities.

**Conductor:** An object or type of material, usually a metal, that allows the free flow of electric current in one or more directions.

**De-Energized:** A term used to describe an electrical conductor that does not have power flowing through it.

**Distribution:** The portion of the electrical system that delivers power to an end user.

**Electric power distribution:** The final stage in the delivery of electric power; it carries electricity from the transmission system to individual consumers.

**Energy Event Index (EEI):** An index published by DTN (Weather Sentry) daily that tracks weather and wildfire condition. DTN's meteorologists watch wildfire conditions for each region or zone based on the current conditions and forecast to issue an EEI score using the following scale:

- Level 1 - Low: All parameters, especially burning index are far better than risk thresholds.
- Level 2 - Moderate: Moderate winds are present and relative humidity is lower, stay aware.
- Level 3 – High: Higher winds are present and relative humidity is lower; monitor closely.
- Level 4 – Severe: All parameters show extreme wildfire risk; follow all mitigation protocols.

**Energized:** A term used to describe the status of an electrical conductor as having power flowing through it.

**Fault:** Fault in electrical equipment or apparatus is defined as an imperfection in the electrical circuit due to which current is deflected from the intended path. In other words, the fault is an abnormal condition of the electrical system which can damage electrical equipment and disturbs the normal flow of the electric current.

**Fire Event:** Combustion of fuel releasing light and heat.

**Fire Watch:** A crewmember tasked to monitor the work area looking for smoking or smoldering materials. This may require the periodic walking through the construction.

**Fire Weather Watch (FWW):** Issued when the combination of dry fuels and weather conditions support extreme fire danger, and a National Weather Service forecast confidence is high that Red Flag Warning criteria will be met within 72 hours. Often will be issued before a Red Flag Warning.

**Fire Extinguishing equipment:** Any one or combination of the following: fire Extinguisher, shovel, rake, McLeod, Pulaski, bladder bag/water bag with hand pump

**Fire-Resistant:** Areas with significant human development and surfaces resistant to fire. Examples of Fire-Resistant areas include bodies of water and waterways (e.g., lakes,

ivers, etc.), dense urban areas covered by buildings and surfaces covered in asphalt/concrete (e.g., parking lots, surface streets, freeways, etc.), irrigated agricultural fields, industrial areas, and other fire-resistant surfaces.

**Flammable vegetation:** Native or decorative plants (grass, bushes, trees) that can readily burn.

**Hazard:** Any real or potential condition that can cause injury, illness or death of personnel, or damage to, or loss of equipment or property.

**Hazard assessment:** Assess hazards to determine risks in terms of potential loss, cost, or strategy and goals based on probability and severity.

**Hazardous Fire Area (HFA):** Geospatial polygon areas referencing wildfire risk categories that are set by analyzing and processing data from the Wildfire Risk to Communities (WRO) datasets focusing on utility-specific risk.

**High – Very High Risk Area:** Areas where fuel continuity and population density are such that a wildfire is more likely to become a destructive or catastrophic event.

**Ignition Management Plan (IMP):** A structured process designed to harvest useful data from service calls and outages to help inform future risk reduction efforts.

**Incident Command System (ICS):** A standardized on-scene emergency management concept designed to allow its user(s) to adopt an integrated organizational structure without being limited by jurisdictional boundaries.

**Moderate:** Areas where wildfire may cause significant damage to human infrastructure due to fuel continuity and/or terrain.

**Non-Expulsion:** A term used to describe an electrical fuse that will not expel materials when it operates. The fuse link is embedded in noncombustible and nonconductive materials to extinguish the arc.

**Off-Road:** Off-road is considered to be any land or surface not designated as a maintained road or drive. To be a maintained road, the surface will be fire resistant cement, asphalt, gravel, and will be free of any combustible fuel.

**Phase-to-Ground:** Voltage which exists between a single phase of a power system and ground.

**Phase-to-Phase:** The electrical potential (voltage) between two conductors, each having its own electric potential relative to ground.

**Recloser:** An automatic, high-voltage electric switch. Like a circuit breaker on household electric lines, it shuts off electric power when trouble occurs, such as a short circuit.

**Red Flag Warning (RFW):** A weather condition issued by the National Weather Service (NWS) when weather and fuel conditions combine to produce critical burning conditions where fires can grow rapidly and may be difficult or impossible to control.

**Risk:** The chance of fire starting as determined by the presence and activity of causative agents and/or the chance of suffering harm or loss.

**Situational Awareness (SA):** Awareness of current conditions and the anticipated future events that could happen given the elements in the environment. For example, the heat, fuel, and oxygen sources in an area viewed at a particular time can lead to the conclusion that a fire is likely to happen.

**Substation:** A substation is a part of an electrical generation, transmission, and distribution system. Substations transform voltage from high to low, or the reverse, or perform any of several other important functions. Between the generating station and consumer, electric power may flow through several substations at different voltage levels.

**Supervisory Control and Data Acquisition (SCADA):** A system of software and hardware elements that allows industrial organizations to 1. Control industrial processes locally or at remote locations 2. Monitor, gather, and process real-time data 3. Directly interact with devices such as sensors, valves, pumps, motors, and more through human-machine interface.

**Tailboard Meeting:** The assembly of the workers to discuss and document hazards that might be encountered during the day's work and mitigations appropriate for them.

**Thermal Event:** A condition where the temperature exceeds the maximum operating temperature of the equipment and damage occurs. This may lead to a failed connection, wire or conductor failure, or an arc, but no fire occurs.

**Triggered Area:** The region of the service area identified by weather service agencies with elevated fire condition risks.

**Transmission:** A system of structures, wires, insulators, and associated hardware that carry electric energy from one point to another in an electric power system. Lines are operated at relatively high voltages varying from 69 kV up to 765 kV and can transmit large quantities of electricity over long distances.

**Very Low – Low Risk Area:** Areas of human development and disturbance that reduce the likelihood of a large, destructive wildfire. In general, urban and semi-urban areas can be classified as Very Low or Low, as well as barren ground, gravel pits, plowed / irrigated fields, feed lots, railroad yards, and other areas of broken fuel continuity. Catastrophic wildfires are still possible in areas designated as Very Low or Low depending on conditions severity and duration, and fire suppression resource availability.

**Wildfire:** An unplanned fire burning in natural or wildland areas such as forests, shrub lands, grasslands, or prairies

**Wildland Urban Interface (WUI):** The line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels.

### 13.3. Service Area Counties

County	State
BECKER	MN
BELTRAMI	MN
BIG STONE	MN
CASS	MN
CHIPPEWA	MN
CLAY	MN
CLEARWATER	MN
DOUGLAS	MN
GRANT	MN
HUBBARD	MN
KANDIYOHI	MN
KITTSOON	MN
LAC QUI PARLE	MN
LINCOLN	MN
LYON	MN
MAHNOMEN	MN
MARSHALL	MN
NORMAN	MN
OTTER TAIL	MN
PENNINGTON	MN
POLK	MN
RED LAKE	MN
REDWOOD	MN
ROSEAU	MN
PIERCE	ND
RAMSEY	ND
RANSOM	ND
RENVILLE	ND

County	State
STEVENS	MN
SWIFT	MN
TODD	MN
TRAVERSE	MN
WILKIN	MN
YELLOW MEDICINE	MN
BARNES	ND
BENSON	ND
BOTTINEAU	ND
BURLEIGH	ND
CASS	ND
CAVALIER	ND
DICKEY	ND
EDDY	ND
FOSTER	ND
GRAND FORKS	ND
GRIGGS	ND
LAMOURE	ND
LOGAN	ND
MCHENRY	ND
MCLEAN	ND
MOUNTRAIL	ND
NELSON	ND
PEMBINA	ND
RICHLAND	ND
ROLETTE	ND
SARGENT	ND
SHERIDAN	ND

STEELE	ND
STUTSMAN	ND
TOWNER	ND
TRAILL	ND
WALSH	ND
WARD	ND
WELLS	ND
BROOKINGS	SD
CODINGTON	SD
DAY	SD
DEUEL	SD
GRANT	SD
HAMLIN	SD
KINGSBURY	SD
LAKE	SD
MARSHALL	SD
MOODY	SD
ROBERTS	SD