WILDFIRE MITIGATION PLAN

2026

ALTALINK®

CONTENTS

PROTECTING COMMUNITIES AND CUSTOMERS WHILE DELIVERING SAFE, RELIABLE AND AFFORDABLE POWER

AltaLink's response to wildfire risks

With wildfires increasing in frequency and intensity, AltaLink's priority is protecting the communities and customers we serve while delivering safe, reliable and affordable power.

As Alberta's largest regulated electricity transmission provider, with approximately 13,400 kilometres of transmission lines and 310 substations across the province, reducing the likelihood that our system contributes to wildfires is a critical part of our job. Guiding this work is our Wildfire Mitigation Plan (WMP).

AltaLink launched its WMP in 2019 – the first for an electric utility in Canada. The WMP leverages data and risk modelling to guide operational actions and system enhancements that will cost-effectively reduce the risk of our transmission system contributing to the ignition of a wildfire.

The risk model, which was created by AltaLink as well as external wildfire experts, helps AltaLink to identify transmission structure and right-of-way upgrades in AltaLink's service territory where they will most cost effectively mitigate wildfire risks.

This document provides an overview of AltaLink's WMP and the actions we're taking to reduce wildfire risk in our service territory.

Transmission lines are Alberta's electric highway, linking the places where power is generated to where power is used. Transmission lines transport large amounts of power over long distances across the province. After transmission lines bring the electricity from power plants to substations, the voltage is reduced so that distribution lines carry the lower voltage electricity to homes, farms and businesses.

Recent fire weather trends

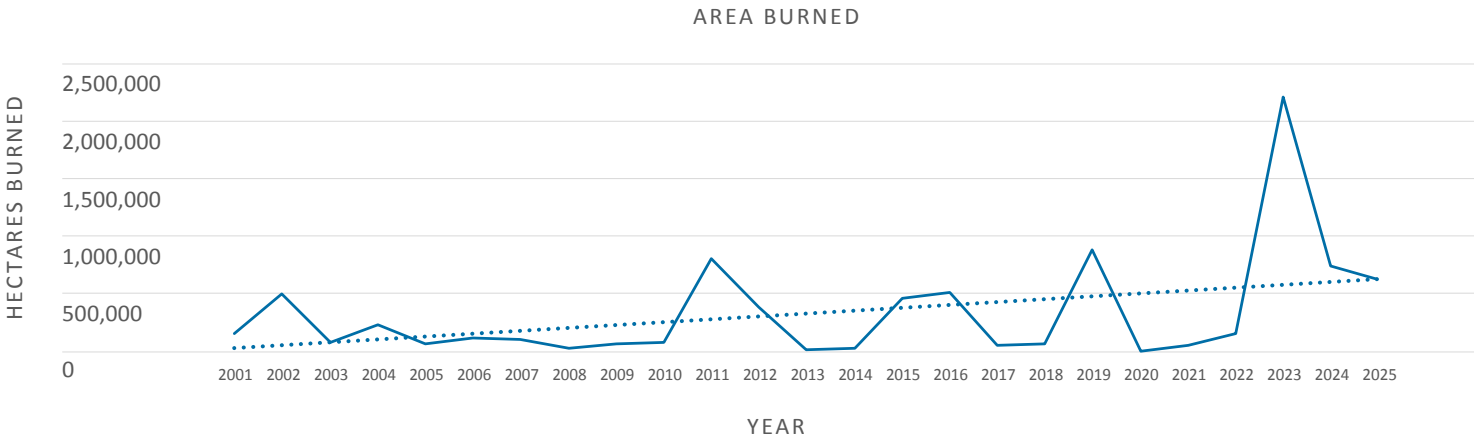
On average, hectares burned in Alberta in recent years exceed previous averages with a similar number of fires.

From 2015 to 2022, the annual averages for wildfires in Alberta were approximately 1,200 wildfires, burning 283,000 hectares. In 2023 and 2024, Alberta experienced record-breaking wildfire seasons, with more than 2.9 million hectares burned and 2,200 wildfires reported (see Figure 1). During the 2023 wildfires, 48 communities in Alberta were impacted with more than 38,000 Albertans evacuated. While not caused by AltaLink's electrical infrastructure, these fires resulted in AltaLink's single greatest loss of assets and required our largest restoration effort to date. In 2025, Alberta experienced 1,225 wildfires and more than 680,000 hectares burned.

AltaLink continues to learn from past wildfire events to identify risk mitigation opportunities and further mature our plans to reduce the likelihood of an ignition event occurring from our transmission system.

Figure 1: (below) *Hectares burned in Alberta 2001 to 2025*

WILDFIRE ACTIVITY IN ALBERTA 2001-2025



Data provided by Alberta Wildfire

A comprehensive, data-driven approach to mitigate wildfire risk

Our WMP includes safety measures and system enhancements to reduce risk through a number of activities. These activities include:

- **improving** situational awareness through enhanced weather forecasting and wildfire risk monitoring
- **increased** line inspections in HRFAs
- **strengthening** (or hardening) assets through modifications and upgrades
- **increasing** vegetation management activities
- **expanding** emergency preparedness through ongoing stakeholder engagement

During extreme and dangerous weather conditions, where the threat of sparking a fire is extreme or a fire is already burning near our facilities, we may proactively take operational actions like a Public Safety Power Shutoff (PSPS) – shutting off power to impacted lines – to ensure public safety.

AltaLink's WMP activities are illustrated in Figure 2 and are further described in the sections that follow.

Figure 2: (below) *AltaLink Wildfire Safety Framework*

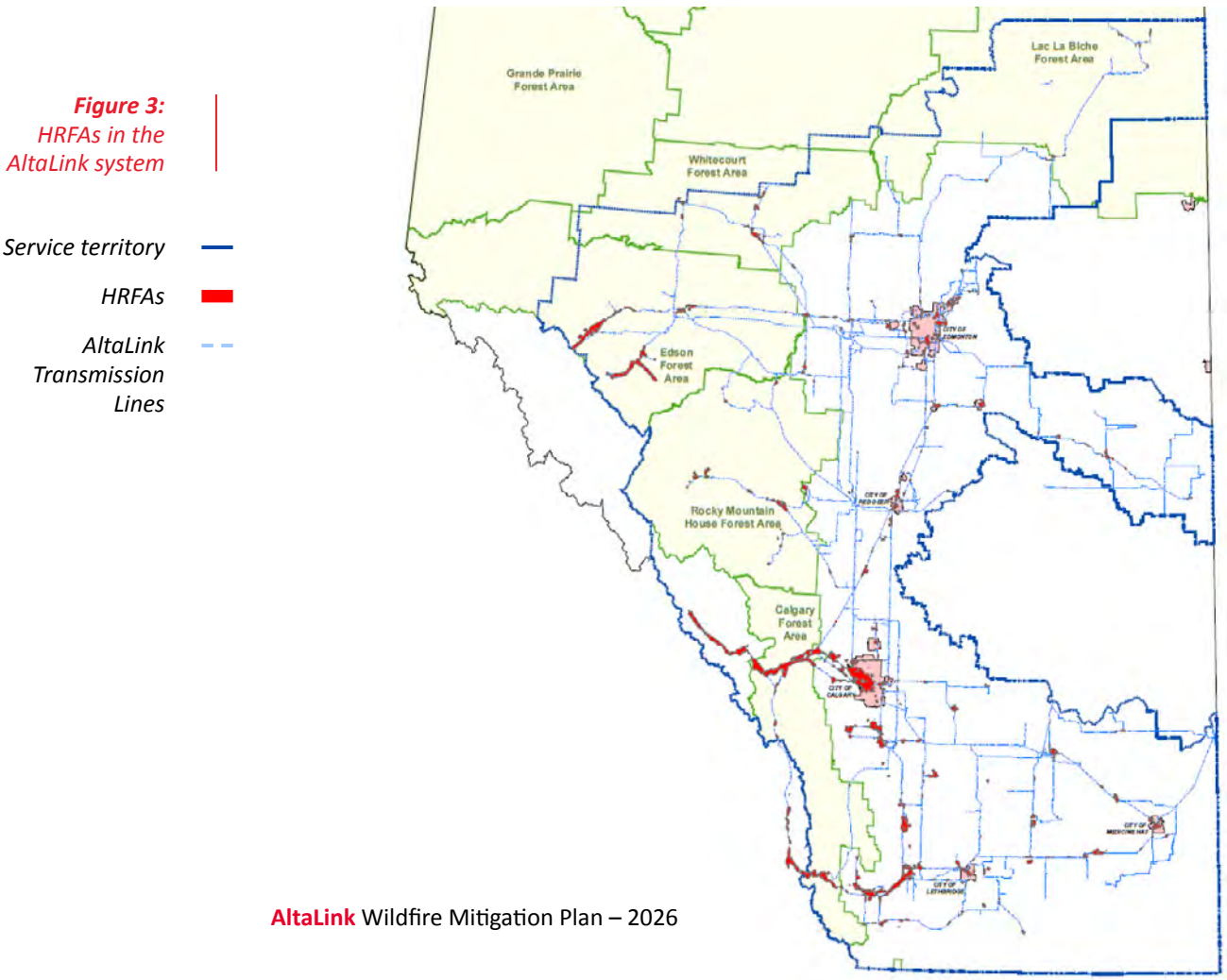
1 WILDFIRE RISK MODELLING

High-Risk Fire Areas (HRFAs)

HRFAs represent the highest risk locations where the potential impact of wildfires caused by AltaLink assets are most significant. We work with experts in fire weather science and wildfire risk modelling to simulate the spread and impact of wildfires originating from our assets. HRFA maps are key to understanding areas of high risk in our service territory.

The HRFA map for our service territory is shown in Figure 3, with the red areas being the HRFAs. Of the 13,400 kilometres of transmission lines owned and operated by AltaLink, 2,018 kilometres are located in HRFAs, or approximately 15 per cent of our transmission system.

Figure 3: *HRFAs in the AltaLink system*



AltaLink's science-based approach to wildfire modelling

We use multiple risk modelling tools to enhance situational awareness, drive operational actions and identify capital investments to mitigate risk. These models identify the risk of ignitions caused by our assets and the risk of a wildfire on the landscape impacting our assets. Our wildfire modelling includes:

- **Wildfire Risk Model:** Models the probability of sparks and ignitions starting from our transmission lines and the consequence of wildfire impact. The consequence is modelled by simulating wildfires igniting from our assets using historical weather conditions, burnable fuels and topography to determine the consequence of a wildfire at that location based on structures impacted and suppression requirements. This allows us to prioritize capital mitigation projects to cost-effectively reduce and manage wildfire risk with targeted mitigations at high-risk locations.
- **Vegetation Wildfire Risk Model:** Models the areas where danger trees (trees/vegetation at risk of contacting our transmission lines) can fall over and contact a transmission line and the consequence of wildfire impact. The consequence follows the same process in the Wildfire Risk Model.
- **Dynamic Wildfire Risk Model:** Simulates wildfire spread using current and forecast weather to support operational decision making. This allows us to assess the risk of wildfire igniting in real-time and the risk of active wildfires already burning on the landscape spreading into our infrastructure. Through our collaboration with the Government of Alberta and Alberta Wildfire, we will share our data and real-time updates on wildfire conditions to enable rapid and informed operational decisions.

2 TARGETED WILDFIRE ASSET HARDENING

AltaLink reduces the risk of its assets igniting a wildfire by strengthening our system through targeted replacements, upgrades or rebuilds of our transmission lines and their components. Our wildfire transmission structure hardening program focuses on the following activities to mitigate risk:

- **Wildfire component and structure replacements:** Targeting replacements of known component and structure deficiencies found during inspections to reduce the risk of these deficiencies creating a spark that ignites and turns into a wildfire.
- **Wildfire line upgrades:** Upgrading older transmission line components, such as insulators and wood cross-arm systems, to reduce the risk that these components fail and create a spark that ignites and turns into a wildfire.

The activities from each of the subprograms target specific improvements to prevent failures. For example, Figure 4 shows a wood cross-arm with visible charring and deterioration, which was replaced as part of the wildfire transmission structure hardening program. By hardening assets to reduce wildfire risks, we ensure our facilities continue to operate safely and reliably to protect people and communities.

Figure 4: *End-of-life wood cross-arm*

3 VEGETATION MANAGEMENT

Vegetation management is a critical part of the work we do to protect communities while delivering safe and reliable power. A tree making contact with a transmission line can potentially ignite a fire and lead to an interruption in power.

Our enhanced vegetation management practices within the WMP focus on ensuring safe clearance distances around our transmission lines in HRFAs to reduce the risk of trees and other vegetation coming into contact with transmission lines. This includes performing vegetation inspections, removing danger trees outside the existing right-of-way (ROW), and widening ROWs. Using the Vegetation Wildfire Risk Model, we can quantity risk in order to prioritize ROW upgrades.

LiDAR data and analysis

To identify danger trees in or near our ROWs, we collect aerial LiDAR data, which measures clearances between our transmission lines and nearby vegetation, buildings and structures. Figure 5 is an example of how LiDAR can be visualized and applied to our ROWs.

We use engineering software to visualize and analyze the clearances between vegetation and our transmission lines. This software allows us to simulate various danger tree conditions, such as risk that vegetation will fall over into a transmission line, and identify potential clearance issues under a variety of weather and growth conditions. Trees within HRFAs determined to be at risk for falling into our transmission lines are prioritized and planned for removal through our wildfire ROW improvements program. We use a vegetation wildfire risk model to quantify the identified risk to ensure the work is cost effective.

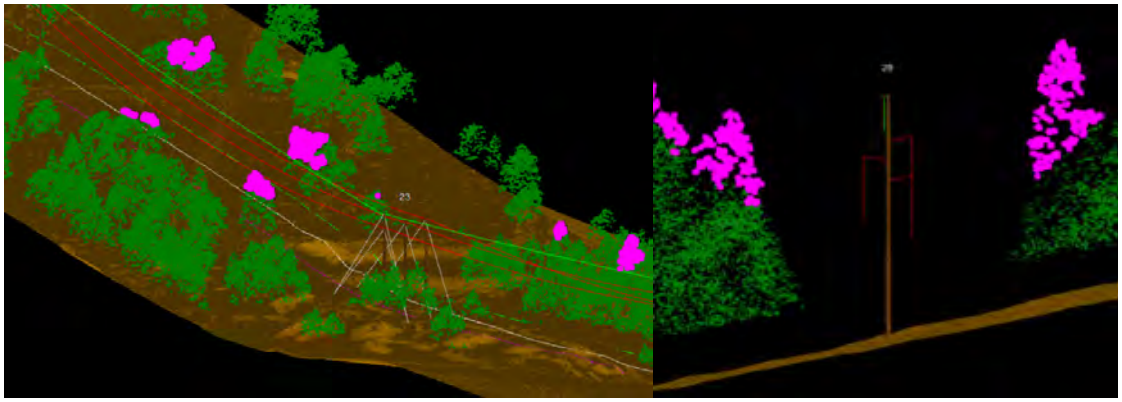


Figure 5: *Visualization of LiDAR data showing danger trees (purple areas) at risk of falling into the transmission line.*

4 TRANSMISSION LINE INSPECTIONS

To maintain the safe operation of our electrical assets, the WMP includes a comprehensive asset inspection program that involves additional patrols of transmission lines in HRFAs to identify deficient assets and vegetation that needs to be removed.

Our HRFA inspection program includes both ground-based and aerial inspections of AltaLink assets and ROWs, and leverages advanced technology such as high-resolution imaging, thermography and LiDAR. The inspection program provides us with an assessment of asset conditions so that we can plan mitigations accordingly.

Additionally, prior to re-energizing assets after transmission line interruptions during high-risk conditions, or after a proactive line de-energization, AltaLink has policies in place to inspect transmission lines to ensure they are in good condition before turning the power back on.

5 SITUATIONAL AWARENESS

WMP technology and innovation

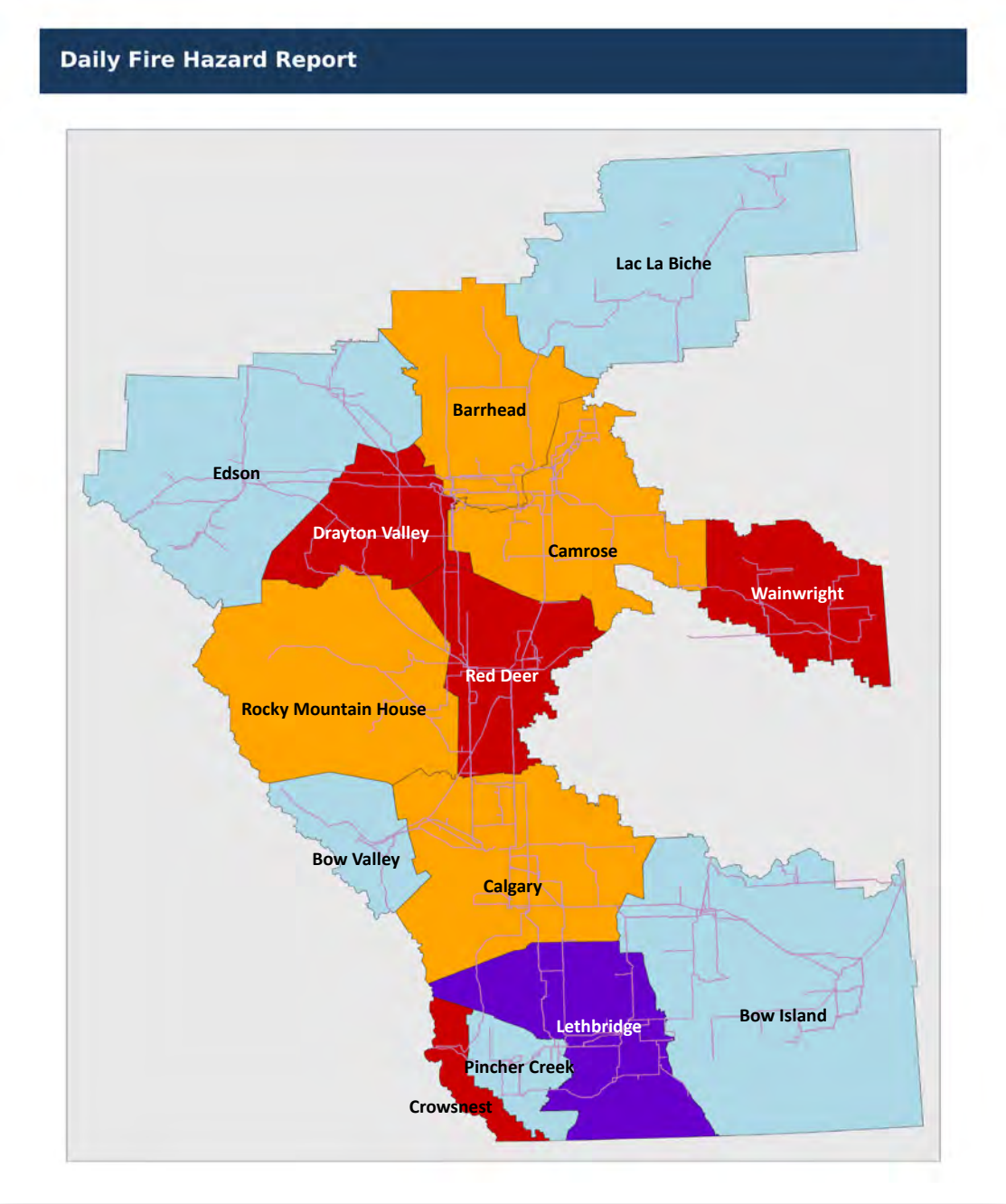
Situational awareness supports improved operational decisions by providing real-time assessments of wildfire risk. It includes investments in advanced tools and technology that enable us to monitor and respond to wildfire and asset conditions.

Our situational awareness program aims to improve our detection and response to fire weather conditions and active wildfires. This includes using weather stations and wildfire detection cameras to monitor fire weather conditions and active wildfires across the landscape and receiving a daily hazard forecast report from external fire behaviour analysts.

The daily hazard forecast report provides the current day forecast and the forecast for the next six days of weather and fire hazard conditions throughout our service territory. The data is obtained from over 100 public weather stations throughout our service territory, combined with our own weather stations.

These forecasts include multiple fire weather indices, wind and extreme weather conditions, to inform our approach to operational activities, both in our control centre and onsite with field work. An example of the daily hazard forecast report can be found in Figure 6 on the next page.

Figure 6: *Example of the AltaLink daily hazard forecast report*



	LOW	ELEVATED	HIGH	EXTREME
Fire Weather Index (FWI)	0-10.5	10.5-29.5	29.5-59.5	≥59.5
Head Fire Intensity (HFI) (kW/m)	0-500	500-4000	4000-10000	≥10000

AltaLink's weather stations

To collect fire weather condition information in key areas across our transmission system, we have installed 17 weather stations, with plans to add more in the coming years. Our weather stations provide real-time temperature, wind speed and direction, humidity and precipitation data, all of which helps to better understand wildfire risk. An example of one of our weather stations is shown in Figure 7.

Data collected by our weather stations supports the daily hazard forecast report, shown in Figure 6. We share our weather station data through our partnership with Alberta Wildfire to bolster and support the provincial network and data available. We continue to expand our weather station network to better monitor wildfire weather hazards.

Wildfire detection cameras

We also use wildfire detection cameras to support situational awareness and monitor wildfire hazards. Currently, 17 cameras have been installed across our transmission system. An example of an AltaLink camera is shown in Figure 8.

AltaLink is currently piloting artificial intelligence (AI) fire detection to autonomously detect ignitions and alert provincial fire responders when wildfires are found. By leveraging AI detection with cameras, smoke plumes can be detected during the early stages of a wildfire ignition for rapid response and suppression. This technology provides timely alerts when an ignition occurs, enhancing overall wildfire situational awareness.

Feeds from two cameras in our service area are live on the publicly available AlertWest system (www.alertwest.org) as part of the pilot project. We are exploring ways to share this data with municipal and provincial agencies to contribute to the safety and well-being of communities.

Left to right

Figure 7: *AltaLink weather station*

Figure 8: *AltaLink wildfire detection cameras*

Figure 9: *Image from an AltaLink camera on the AlertWest system*

AltaLink Situational Awareness Portal (ASAP)

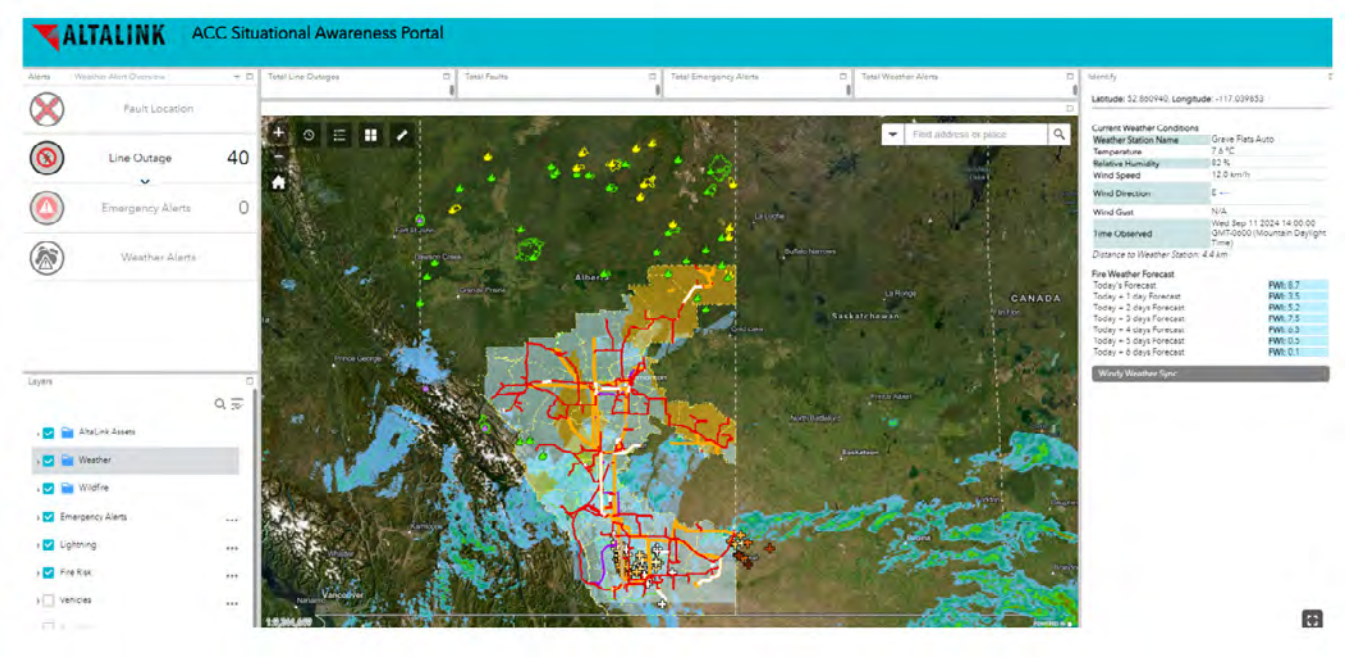
AltaLink created and designed ASAP, which is a centralized Geographic Information System (GIS) platform used in our control centre to provide enhanced situational awareness.

ASAP aggregates data from multiple sources and then overlays the data on our GIS map to provide AltaLink power system operators with wildfire hazard and fire weather data. This information allows them to make informed decisions and respond in real-time to wildfire conditions.

ASAP can display information such as weather station data, lightning data, daily hazard forecast report information, fire weather conditions, satellite imagery showing hotspot information, Alberta emergency alerts and active wildfire information and conditions from Alberta Wildfire's map. The ASAP system alerts operators when active wildfires are identified, allowing operators to respond appropriately.

Figure 10 (below): *AltaLink ASAP GIS tool*

The portal is a key tool to ensure we monitor all hazards in real-time. In coordination with our risk modelling tools, ASAP enhances situational awareness and ensures that we make informed, timely operational actions to mitigate wildfire risk throughout our service territory.



In the Figure 10 snapshot of the ASAP tool, operators could see the real-time conditions at the time near AltaLink transmission lines (shown with the various coloured lines). The snapshot shows active wildfires in the north and west, lightning in the south, precipitation and shaded areas with fire risk. The table on the right also shows wind, temperature, and the fire weather forecast for the next seven days.

6 WILDFIRE OPERATIONAL PRACTICES

AltaLink uses data from various sources to assess fire weather conditions and determine what operational actions are appropriate. These operational actions will vary from normal operation to recloser blocking and proactively de-energizing transmission lines based on an encroaching wildfire or extreme fire hazard conditions.

Recloser blocking

Automatic reclosers are devices designed to quickly restore power after a temporary fault on the line. However, under high fire hazard conditions, automatically re-energizing a line could result in an ignition if vegetation remains in contact with the line, or if the line is on the ground.

During periods of high fire hazard conditions, we proactively block automatic reclosers. This action is taken to reduce the risk of an AltaLink asset igniting a wildfire following an interruption on an AltaLink transmission line.

Public Safety Power Shutoff (PSPS)

During extreme and dangerous wildfire hazard conditions, when the threat of sparking a wildfire is extreme, we may proactively shut off power to our impacted transmission lines until conditions are safe to turn it back on. This event is called a Public Safety Power Shutoff (PSPS). Depending on the system configuration, this may also involve de-energizing the electricity distribution system in the area.

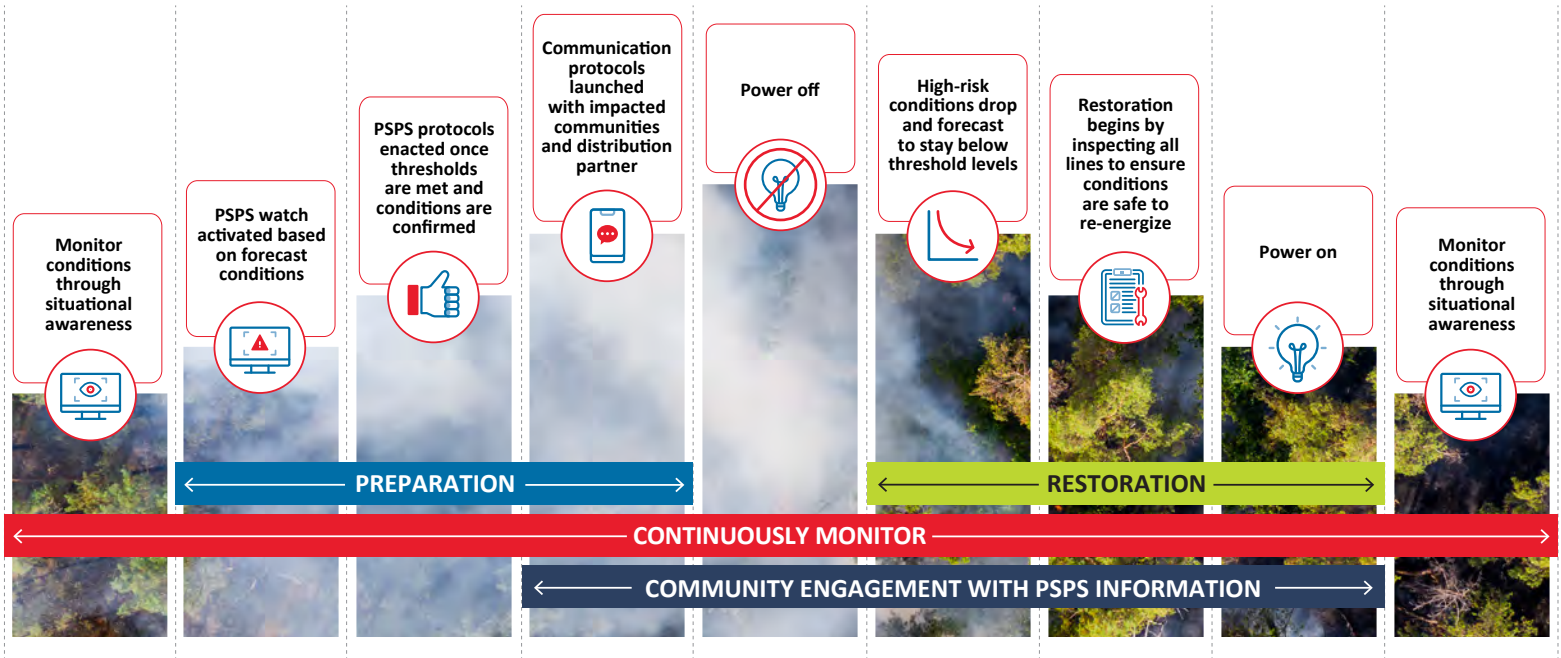
PSPS is intended as a last resort preventative measure to ensure public safety. Each situation is unique and no single factor drives a PSPS. We monitor a range of factors before executing a PSPS, including:

Figure 11 describes the PSPS process. PSPS decision-making is supported by AltaLink's situational awareness tools. Wildfire conditions can change rapidly, so there is no set timeline for a PSPS. However, we are committed to providing advanced notice to impacted customers and communities, where possible, and sharing timely updates through a variety of communications channels such as social media, website updates, media advisories and outbound calls. We work closely with our electricity distribution partners to communicate with customers in the areas where we operate.

Figure 11: (below)
PSPS process

Communication and coordination before, during and after a potential PSPS event includes local emergency services and municipalities, wildfire behaviour analysts and fire responders, and industry partners.

PSPS PROCESS



Encroachment procedures

A wildfire encroachment event is when an active wildfire on the landscape threatens to spread to and potentially damage an AltaLink transmission line. During a wildfire encroachment, we may proactively de-energize our infrastructure to reduce the safety risk to first responders and the public, as well as to prevent the potential for a secondary ignition from our infrastructure.

To understand whether a wildfire is encroaching on our assets, we use a dynamic wildfire modelling tool, ASAP, and assess wind and fire conditions. We also collaborate with Alberta Wildfire and other fire responders to assess the risk.

The dynamic wildfire modelling tool is a key tool to rapidly analyze weather and nearby fuels (such as dry vegetation) to determine if there is a risk a wildfire could spread into an AltaLink transmission line. The tool provides live simulation of predicted wildfire growth and behaviour, and integrates wildfire location, fuels, topography, and wildfire weather to project how wildfires may spread and encroach on infrastructure.

Figure 12: (below) *Dynamic wildfire modelling tool*

We coordinate with Alberta Wildfire and other fire responders to learn the status of wildfires and understand the suppression and response plan. Using tools, such as the dynamic wildfire modelling tool, and having relationships with first responders, such as Alberta Wildfire, are critical for us to respond to wildfire risks efficiently and effectively.

In Figure 12, the white dotted lines in the image illustrate a wildfires' predicted growth, behaviour and potential encroachment on AltaLink infrastructure (purple lines). A time-slider at the bottom of the image allows users to step through forecast conditions and assess how fire progression and asset exposure evolve over time.

7 STAKEHOLDER OUTREACH AND ENGAGEMENT

We recognize the importance of collaboration and knowledge sharing to support municipal, provincial and federal wildfire mitigation efforts and industry best practices. In support of this, we engage with local and international stakeholders and partners, including the governments of Alberta and Canada, provincial and international industry peers, municipalities, customers and the public.

Agency and industry partnerships

AltaLink is an active participant in industry forums and best practice initiatives, including:

- Collaborating with the Government of Alberta and Alberta Wildfire through the Power Line Wildfire Risk Mitigation Task Force. This includes supporting the development of the Alberta Wildfire Mitigation Strategy and sharing data and real-time updates on wildfire conditions to enable rapid and informed operational decisions.
- Working with industry partners as a founding member of the Alberta Wildfire Utility Coalition, along with ATCO and FortisAlberta, to share best practices and advocate for reasonable and consistent industry standards to reduce wildfire risk and increase resiliency.
- Collaborating with industry colleagues across Canada through Electricity Canada working groups. In 2020, AltaLink partnered with Electricity Canada to develop a best practice guide for utilities on mitigating wildfire risk and promoting industry resilience.
- Leveraging external expertise with industry peers across North America through ongoing collaboration, industry meetings and conferences.

PSPS and emergency tabletop exercises

To strengthen PSPS and other wildfire response coordination and preparedness, AltaLink organizes tabletop exercises involving directors of emergency management, municipal fire chiefs, government agencies and utility partners. These exercises facilitate discussions around wildfire response procedures, including PSPS, and support emergency preparedness by ensuring alignment of action plans and collaborative decision-making during wildfire events. Feedback from exercises has also led to new processes, such as the launch of a weekly PSPS conditions status email that is now distributed to various emergency and municipal stakeholders.

Community outreach and municipality surveys

Since launching our WMP, we have delivered a series of wildfire presentations to municipalities and Indigenous communities where we operate. These proactive engagements help to increase awareness and understanding of AltaLink's wildfire risk mitigation strategies and identify opportunities to coordinate and align our emergency planning and response efforts. Following the historical 2023 wildfire season in Alberta, we conducted surveys across more than 45 different municipalities to gather information on their respective emergency response plans and preparedness activities to support our evolving outreach and coordination efforts.

These collaborative discussions reflect the collective importance we're all placing on continuous emergency preparedness, response planning, community resilience, and the need for ongoing communication and coordination.

Direct-connect customer engagement

AltaLink actively communicates with customers who are directly connected to the transmission system and that may be affected by our operational actions to mitigate wildfire risk. We provide customers with individualized reports about our procedures and wildfire mitigation strategies to ensure they are well-informed and prepared for high-risk fire situations. Our wildfire mitigation strategies are proactively communicated to customers through annual customer meetings.

This direct engagement fosters trust and collaboration to ensure safe and coordinated response to wildfires, which is critical during emergency situations.

Public awareness campaigns

Community engagement and awareness is an important part of wildfire safety and preparedness. We want to ensure that communities in HRFAs understand what AltaLink is doing to respond to wildfire risk, including the potential of activating a PSPS, and what they can do to prepare.

To increase broader public awareness and understanding, we launch annual wildfire awareness and preparedness advertising campaigns aligned with wildfire season in Alberta.

Ongoing commitment to engagement

AltaLink values the insights gathered from all interactions with stakeholders and communities and is committed to reviewing and considering feedback for future inclusion in our WMP. Enhancing community outreach, fostering partnerships with local agencies and ensuring clear communication about PSPS and wildfire risk mitigation efforts remains at the forefront of our priority of delivering safe, reliable and affordable transmission service.

8 WILDFIRE RISK GOVERNANCE AT ALTALINK

Obtaining support and approval for investments in wildfire mitigation

AltaLink is regulated by the Alberta Utilities Commission (AUC) and is subject to regulations and rulings put in place by the AUC.

AltaLink files a General Tariff Application (GTA) with the AUC every two or more years to review the costs required to operate our business. Through a public process, the AUC tests our forecast for the reasonableness of the revenue requirement required to operate AltaLink's transmission system, including our proposed capital and operating costs to mitigate wildfire risk.

Since 2019, when we filed our first WMP, the AUC has approved capital and operating costs in each of AltaLink's GTAs to support wildfire risk mitigation.

AltaLink wildfire team

In 2024, we furthered the maturity and capability of our wildfire risk management by creating a dedicated wildfire team, drawing on many years of expertise from across the company.

The wildfire team is a diverse and skilled group of professionals, including project managers, transmission line engineers, system operation engineers, environmental specialists and others. Creating a dedicated, multidisciplinary wildfire team ensures our wildfire mitigation program is comprehensive, well-informed and able to address all aspects of wildfire risk management.

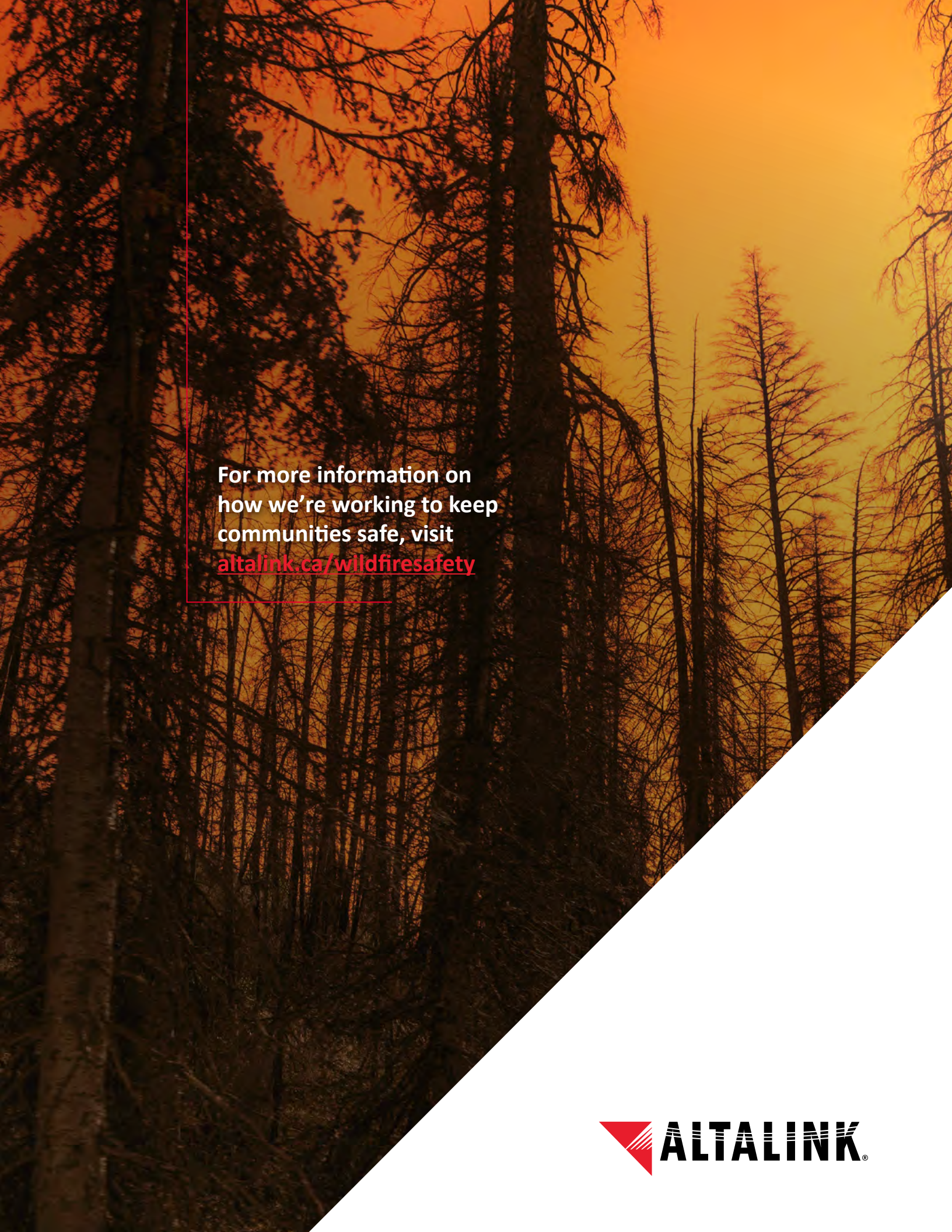
Contact Information

If you are looking for more information or would like to discuss our WMP, please reach out to stakeholderrelations@altalink.ca and you will be connected to the appropriate contact.

APPENDIX

CAPITAL IMPROVEMENTS	2019-2025
Situational Awareness:	
# of situational awareness cameras installed	17
# of situational awareness cameras with AI fire detection	2
# of weather stations installed	17
Asset Strengthening (Hardening):	
Wildfire targeted component and structure replacements (# of known deficiencies addressed)	2,511
Wildfire line upgrades (# of components upgraded)	700
Wildfire line rebuilds (kms)	27
Vegetation Management:	
# of spans (sections between transmission structures) completed	1,457

OPERATIONAL PROCEDURES	2019-2025
# of reclosers blocked	1,186
# of lines proactively de-energized from encroachment	20
# of lines proactively de-energized from PSPS	0



For more information on how we're working to keep communities safe, visit altalink.ca/wildfiresafety

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