

Attachment A

Washington

2022 Wildfire Mitigation Update

November 3, 2022

Presenter: Allen Berreth, VP of T&D Operations



Risk Model



Situational
Awareness



System
Hardening



Communication

WILDFIRE SAFETY



Pacific Power
Rocky Mountain Power

Agenda

- ✓ Plan Development and Journey
- ✓ Wildfire Mitigation Plan Foundation & Elements
 - ✓ Baseline Risk Assessment
 - ✓ Strategic Programs & System Hardening
 - ✓ Dynamic Risk through Situational Awareness
 - ✓ Public Safety Power Shut-Off Protocols
 - ✓ Community Outreach & Education

WILDFIRE SAFETY PACIFIC POWER

Staying safe during wildfire season

As wildfires become more frequent and intense throughout the West, our focus is on keeping you and your community safe. Protecting you from this increasing threat, while providing you with safe, reliable power, is our highest priority.

Here's what we're doing, and what you can do to stay prepared.

What we're doing

Reducing wildfire risks

We're taking additional steps to reduce wildfire risk by:

- Making routine maintenance and tree-trimming along transmission power lines. We're improving the reliability of our systems, reducing operational outages and working with local emergency services to ensure priority during conditions where there could be a risk to public safety.

Other steps we're taking include:

- Guarding the wildfire zone at our line
- Installing fire cameras, in the field
- Following on-call fire requests
- Improving equipment reliability
- Training and equipping our field

Preparing for emergencies

While it is impossible to eliminate all wildfire risks, we're working on local agencies to expand and enhance existing emergency response as a higher risk of hot-spreading fires, which increases the chance of a Public Safety Power Shutoff. This is a new protocol and necessary in these high risk areas, so you can be safe and prepared during any dangerous weather conditions. This service will only be used to protect your safety.

Keeping you informed

Communication is an essential part of any emergency plan. Please to make sure your Pacific Power account is up to date so you can keep you informed about:

- Emergency alerts
- Power outages
- Updates on power restoration

PUBLIC SAFETY POWER SHUTOFF PACIFIC POWER

Understanding public safety power shutoffs

We're taking proactive steps to keep the communities we serve safe. To prevent wildfires from igniting in high fire risk areas, we may turn off power along specific circuits. This is called a Public Safety Power Shutoff.

Why would a Public Safety Power Shutoff happen?

No amount of preparation can eliminate all wildfire risks. While we work hard to clear plants away from our power lines, debris can build up over several years between upsets. Even during times of high winds when strong winds are combined with high temperatures, low humidity and other conditions, the risk of sparks that might ignite a wildfire.

In these cases, turning power off in affected areas may be necessary to ensure the safety of your community. We take the decision to proactively shut off in high fire risk areas very seriously and we expect that Public Safety Power Shutoff will be a very rare occurrence.

What risk factors do we monitor?

Public Safety Power Shutoffs will be initiated only in specific, pre-planned areas when on-the-ground conditions create an extreme wildfire risk.

We monitor a range of factors before triggering a Public Safety Power Shutoff including:

- DRY VEGETATION** and other combustible fuels
- HIGH WINDS**
- LOW HUMIDITY**
- REAL TIME OBSERVATION** by on-the-ground field agents

Service Territory

Fire High Consequence Area

Plan Development and Journey

- PacifiCorp's 2022 Wildfire Mitigation Plan (WMP) builds upon multiple years of experience, program development, and formal rulemaking and process across various states



2022 Fire Season Activity

Fire Name	Acreage	Date of Origin	Service Area	County	Distance from Fire	Infrastructure Damage
Touchet North	2,153	6/28/2022	Walla Walla	Walla Walla	1.9 miles	No
Van Ausdle	843	7/29/2022	Walla Walla	Walla Walla	0.9 mile	No
Cow Canyon	5,832	8/3/2022	Yakima	Yakima	0 mile	No
Canyon Road	1,033	8/10/2022	Yakima	Yakima	0 mile	No
Medicine Valley	300	8/26/2022	Yakima	Yakima	0.1 mile	No

Key Changes in 2022

- ✓ Development of Meteorology Department
- ✓ Weather Station Network Buildout
- ✓ Increased Forecasting Capability
- ✓ Situational Awareness Tool Development

Wildfire Protection Plan Foundation & Elements

Situationally aware of environmental risks

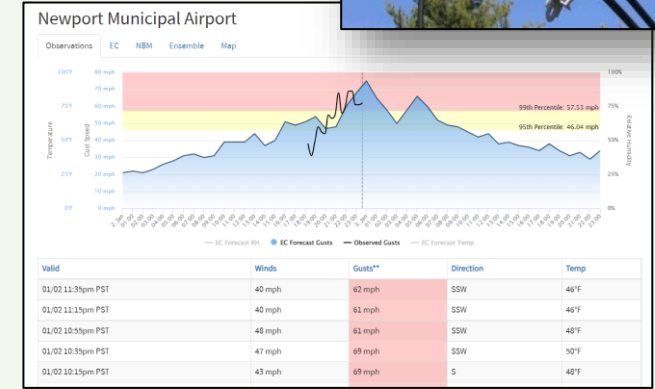
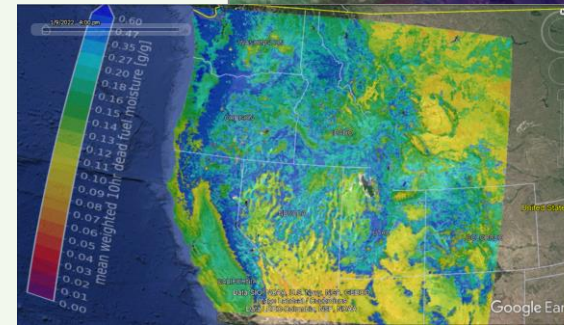
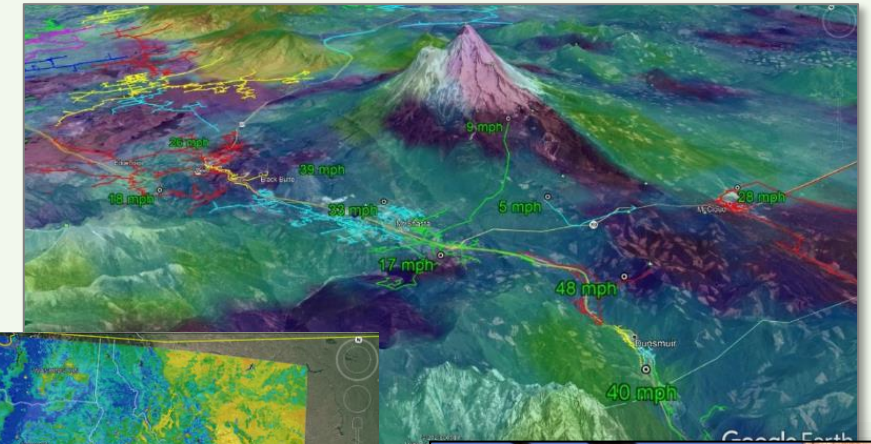
- Baseline risk modeling to inform strategic programs and investments
- Dynamic seasonal risk modeling to inform operational protocols
 - ✓ Fire weather condition monitoring
 - ✓ Meteorology department & forecasting

Resilient system to limit potential for ignition

- Enhanced inspection programs and accelerated correction of certain conditions
- Enhanced vegetation management practices
- Deployment of covered conductor / line rebuilds

Rapid response to fault events

- Deploy Enhanced Fire Risk (EFR) protection and control schemes
- Replace fuse locations with non-expulsion equipment
- Implement operational strategies during fire risk periods
- Install additional fault indicators



Baseline Risk Mapping for Strategic Investment

General Stats

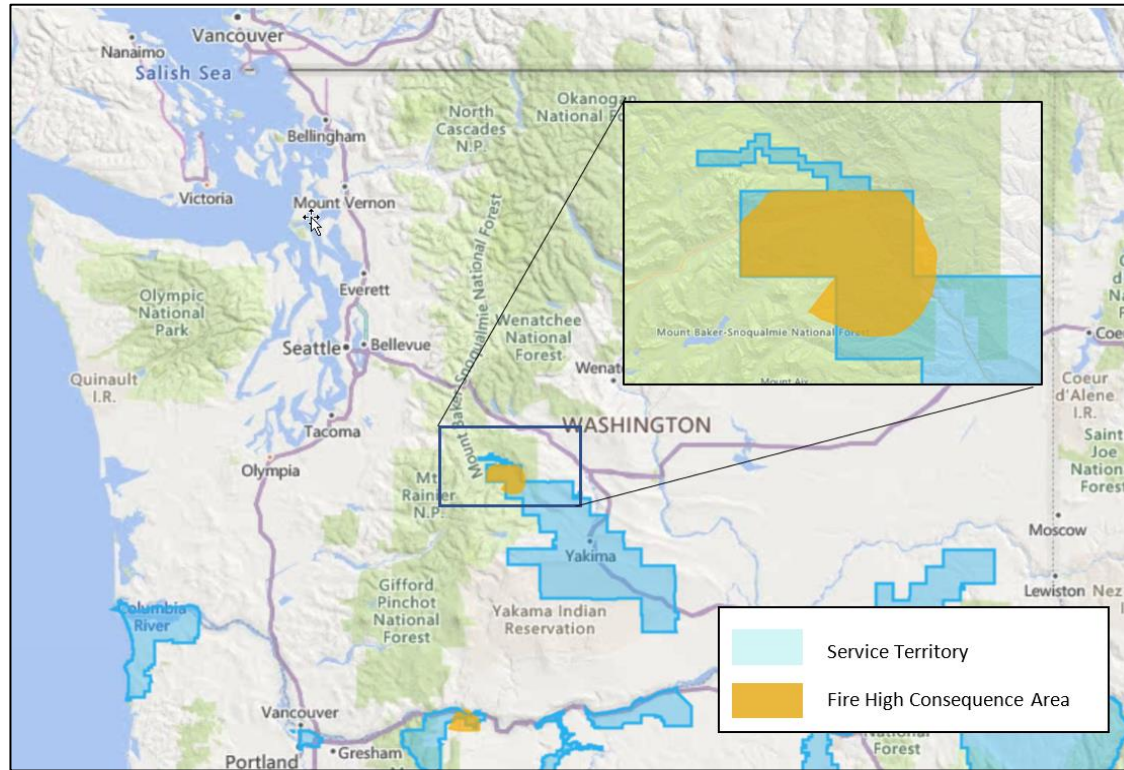
PacifiCorp provides electricity to approximately **140,000 Washington customers** via **49 substations**, **3,400 miles** of distribution lines, and about **600 miles** of transmission lines across nearly **2,700 square miles**

System Wide Initiatives

- ✓ Weather Stations
- ✓ Situational Awareness
- ✓ Operational Protocols
- ✓ Community Education and Outreach



Washington Service Territory



FHCA

Heightened Risk of Wildfire



Approximately **20 miles** or 1% of all **overhead lines** are located within the FHCA

20 miles of overhead distribution in the FHCA;

0 miles of overhead transmission in the FHCA

Programmatic Shifts

- ✓ Increased Frequency of Asset Inspections
- ✓ Accelerated Condition Correction
- ✓ Enhanced Vegetation Management

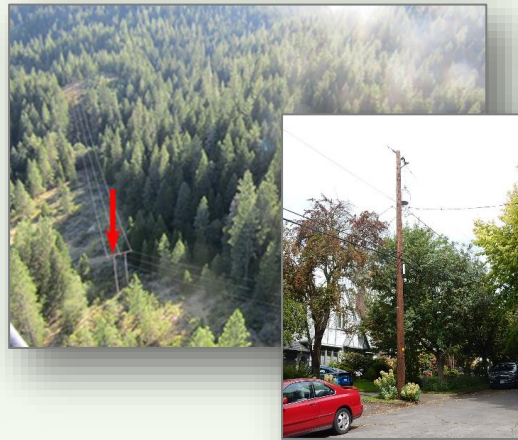
Prioritized System Hardening

- ✓ Line rebuilds
- ✓ Covered Conductor
- ✓ Advanced Protection and Control

Strategic Programs & Long-Term Investment

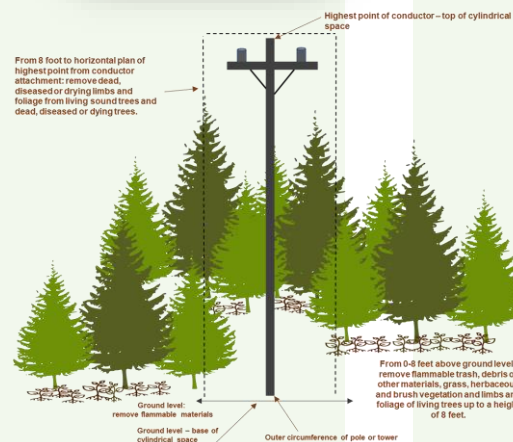
Asset Inspections

- ✓ Increased frequency of inspections in the FHCA
- ✓ Accelerated correction of Fire Threat Conditions



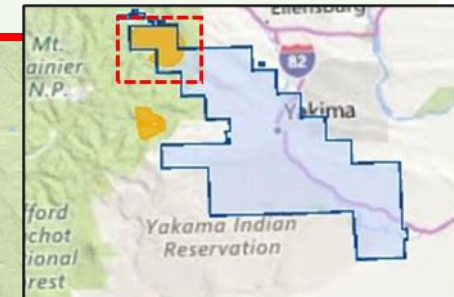
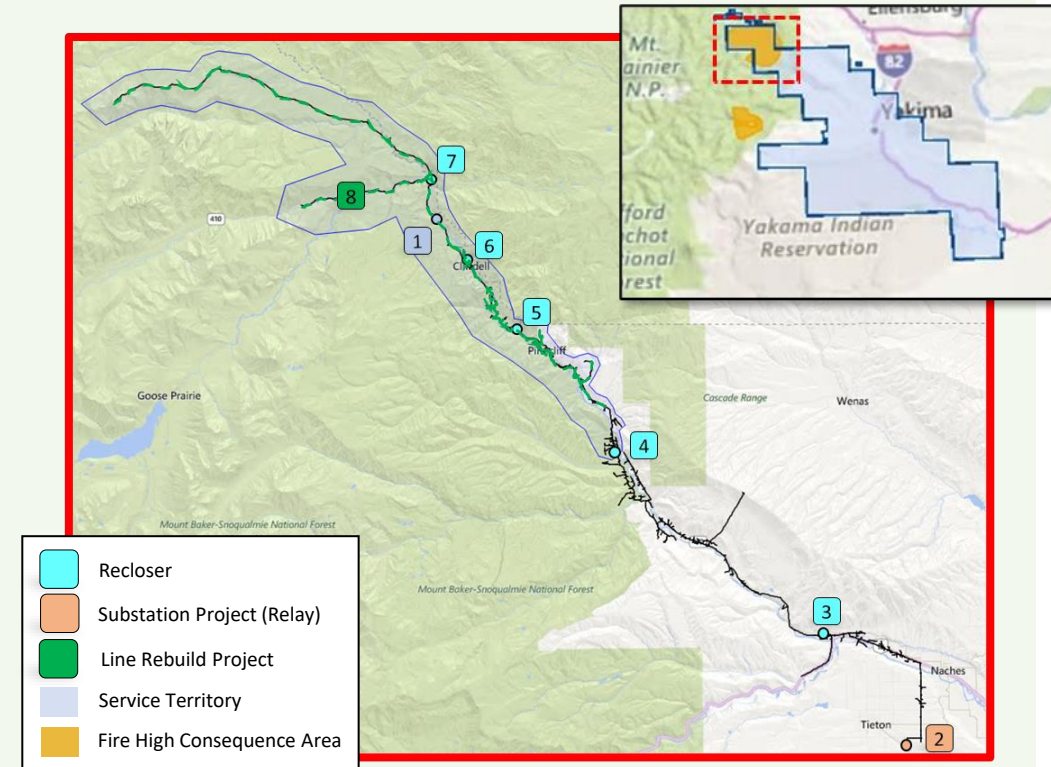
Vegetation Management

- ✓ Annual inspection in the FHCA
- ✓ Annual pole clearing of equipment poles



System Hardening

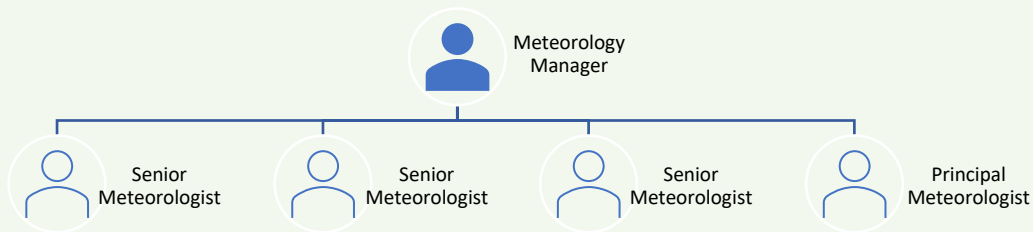
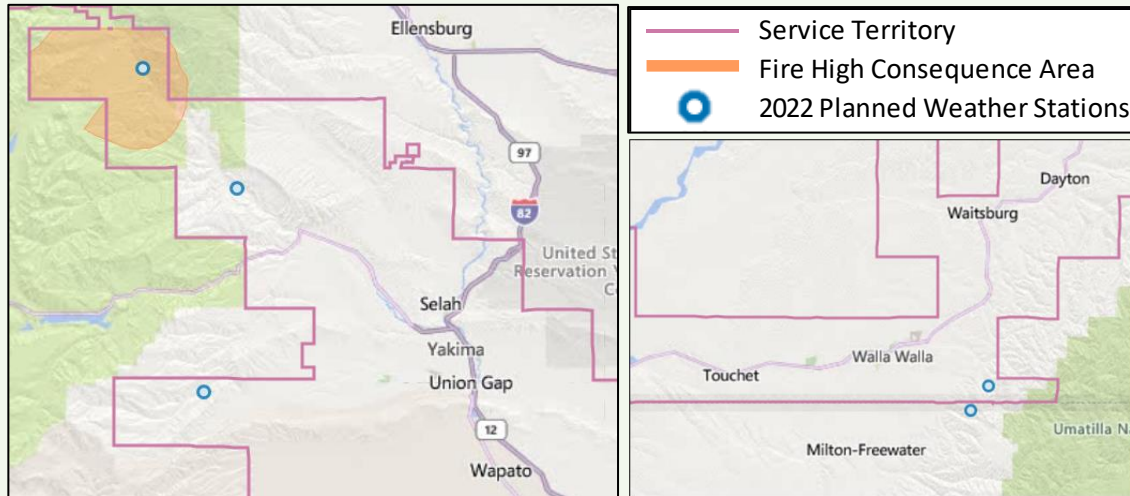
- ✓ Multi-year investment
- ✓ Line Rebuild Program
- ✓ Advanced Protection and Control



Dynamic Risk Assessment through Situational Awareness

Weather Station Network

- 8 stations operational in Washington by EOY 2022
- Continued expansion for added granularity

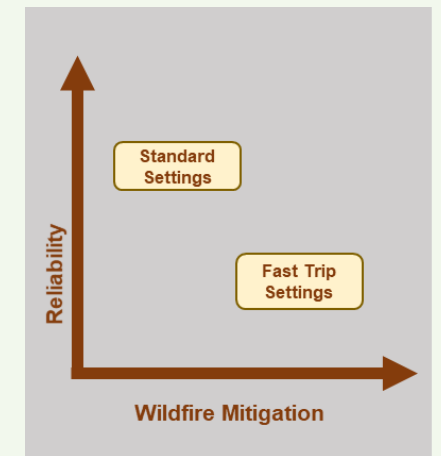


Augmented Work Practices

- Acquire and maintain key equipment (water trucks and personal suppression equipment)
- Implement risk-based work practices and resource adjustments

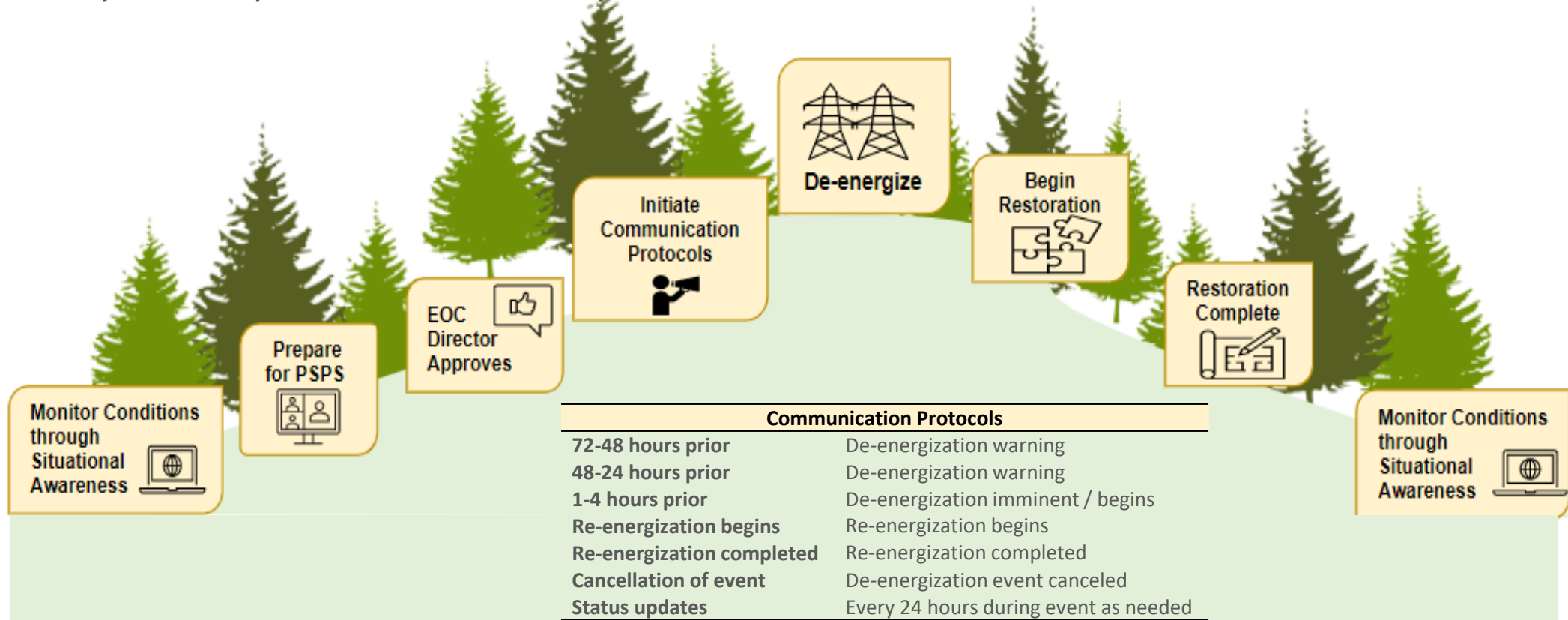
Enhanced Fire Risk (EFR) Protection and Control Settings

- Risk based deployment of alternate settings
 - *Faster tripping*
 - *Increased open times*
 - *Reduced reclosing*



PSPS Implementation Protocols

- Conditions are continuously monitored to assess risk
- Decision incorporates multiple factors:
 - ✓ Real Time Monitoring of Local Conditions
 - ✓ Weather Forecasting & Risk
 - ✓ Dynamic input from Public Safety Partners



Community Outreach and Education

- Tabletop exercises with Public Safety Partners
- Wildfire safety and preparedness campaign
- Brochures, flyers and other collateral
- Customer service training
- Webpage
- Webinars

Public safety power shutoff forecasting

This table shows the Public Safety Power Shutoff status.

NAME	6 DAYS OUT
Azalea / Glendale / Wolf Creek / Sunny Valley	Normal
Cascade-Siskiyou NM	Normal
Dunsmuir	Normal
Happy Camp	Normal

WILDFIRE SAFETY

Staying safe during wildfire season

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What we're doing

Reducing wildfire risks
We're taking additional steps to reduce wildfire risk by increasing vegetation management and tree-trimming programs across power lines. We're providing the readiness of our systems, including operational readiness and working with local emergency services to ensure power shutoffs can be done safely and quickly. We're also working with local emergency services to ensure power shutoffs can be done safely and quickly. We're also working with local emergency services to ensure power shutoffs can be done safely and quickly.

Other steps we're taking include:

- Working to minimize tree and vegetation clearance around our lines
- Installing HD cameras at the field for real-time assessment
- Following on-call tree-trimming teams
- Improving equipment maintenance and repair
- Thanking equipment field crews for wildfire suppression

Preparing for emergencies

While it is impossible to eliminate all wildfire risk, we're working closely with federal, state and local agencies to expand and enhance existing emergency response plans. For areas at a higher risk of high-severity fires, we've introduced a new proactive measure—a Public Safety Power Shutoff. This is a new process designed to help keep people and communities safe by temporarily shutting off power during extreme and dangerous weather conditions. This measure will only take effect as a last resort to help protect your safety.

Keeping you informed

Communication is an essential part of your emergency plan. Please be sure your Pacific Power account contact information is up to date so we can keep you informed about:

- Emergency alerts
- Potential power outages
- Updates on power restoration

PUBLIC SAFETY POWER SHUTOFF

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Why would a Public Safety Power Shutoff happen?

No amount of preparation can eliminate all wildfire risk. While we work hard to clear areas away from power lines, debris, tree limbs and other material can be blown up onto lines during times of high winds. Strong winds are combined with high temperatures, low humidity and other conditions, the risk of sparks might ignite a wildfire.

In those areas, turning power off in affected areas may be necessary to ensure the safety of your community. We make the decision to proactively shut off in high fire risk areas very strategically and we expect that the Safety Power Shutoff will be a very rare occurrence.

What risk factors do we monitor?

Public Safety Power Shutoffs will be initiated only in specific, pre-planned areas when on-the-ground conditions create an extreme wildfire risk.

We monitor a range of factors before triggering a Public Safety Power Shutoff including:

- DRY VEGETATION** and other potential wildfire fuel
- HIGH WINDS**
- LOW HUMIDITY**
- REAL-TIME OBSERVATION** by on-the-ground field agents

Staying Safe in Wildfire Season

Wildfire season is here, and safety is top of mind for you and us.

As wildfire season nears, it's important to take steps to help you and your family stay safe. We're working on additional measures to help you stay safe, including:

- Working with local emergency services to ensure power shutoffs can be done safely and quickly.
- Improving equipment maintenance and repair.
- Thanking equipment field crews for wildfire suppression.

To find out more about what we're doing, and what you can do to be prepared, visit us at PacificPower.net/wildfiresafety.

Safety and preparedness resources

Use these safety and preparedness resources to guide your emergency plans. In preparation for wildfires, storms and other disasters.

Health

- Home use medical devices: How to prepare for and handle power outages - U.S. Food and Drug Administration (FDA)
- Checklist: Emergency power planning for people who use electricity and battery dependent assistive technology and medical devices - Pacific ADA Center
- Power outage during extreme heat - Centers for Disease Control and Prevention
- Tips for preventing heat-related illness - Centers for Disease Control and Prevention
- Food and water safety during a power outage - U.S. Food & Drug Administration

Personal and home preparedness guides

- Building an emergency kit - Ready.gov
- Making an emergency plan - Ready.gov
- [VIDEO] How to make your home and property fire safe - Oregon Department of Forestry and Keep

Thank you