

# **Attachment A**

# Washington

## 2022 Wildfire Mitigation Plan

April 27, 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 risks by increasing our fire monitoring and removing vegetation around power lines. We're improving the reliability of our systems, making our personnel safer and working with local emergency services teams to jointly develop coordination plans should we need to initiate a preventable Public Safety Power Shutoff.

**Other steps we're taking today**

- Inspecting the wilderness zone of our lines
- Installing HD cameras in the field
- Replacing our fire detection systems
- Improving equipment maintenance
- Training and equipping our field

**Preparing for emergencies**

While it is impossible to eliminate all wildfire risks, we're working and local agencies to expand and enhance existing emergency preparedness as a higher level of risk spreading lines, we've introduced a new measure - a Public Safety Power Shutoff. This is a last resort measure and occurs only in high risk areas, so we power up the line and dangerous weather conditions. This measure will only be used to protect your safety.

**Keeping you informed**

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

- Increased fire risks
- Potential power outages
- Updates on power restoration

**PUBLIC SAFETY POWER SHUTOFF** **PACIFIC POWER**

### Understanding public safety power shutoffs

We're taking proactive steps to lessen the consequences of service cuts. To prevent wildfires, especially 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, tree limbs and other material can be blown up onto lines 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 trust the decision to proactively shut off in high fire risk areas very seriously and we expect that Public Safety Power Shutoffs 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** We monitor weather conditions that create a high risk of wildfire.
- HIGH WINDS**
- LOW HUMIDITY**
- REAL TIME OBSERVATION** by on-the-ground field experts.

**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

2018  
 Rulemaking in CA  
 Initial program development

2019  
 Initial WMP in California  
 Programs initiated in Oregon & Washington

2020  
 Programs Expanded in Oregon & Washington  
 Initial WPP in Utah  
 Updates to California Plan

2021  
 Develop WPP in Oregon  
 Draft WA WMP  
 Continued expansion of and updates to programs  
 Updates to Utah & California Plans

2022  
**Updates to Oregon, Washington, Utah, and California plans**

## 2021 Fire Season Activity

Fire Name	Acreage	Date of Origin	Service Area	County	Distance from Fire	Infrastructure Damage
Hair Road Fire	7,255	June 21, 2021	Walla Walla	Walla Walla	11.8mi	No
Green Ridge Fire	43,694	July 7, 2021	Walla Walla	Columbia Garfield	9.9mi	No
Lick Creek	80,421	July 7, 2021	Walla Walla	Garfield Asotin	12.0mi	No
Burbank Fire	13,000	July 10, 2021	Yakima	Yakima	0mi	No
Schneider Springs Fire	107,322	August 4, 2021	Yakima	Yakima	0mi	<b>Yes</b>

## 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

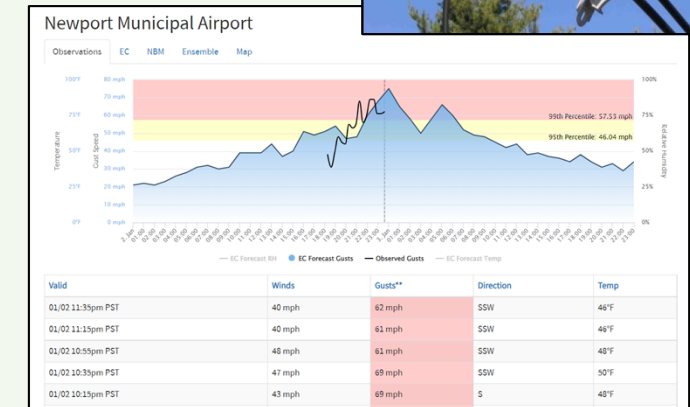
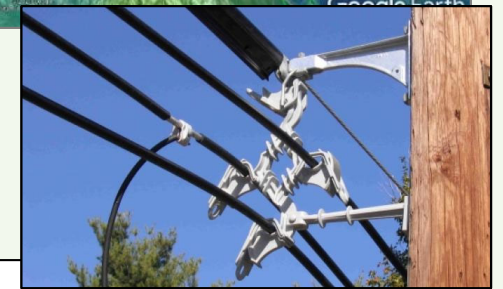
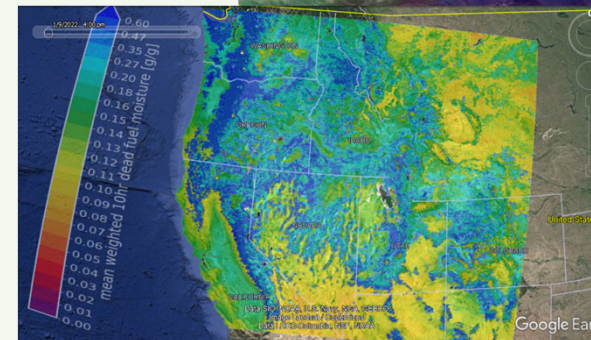
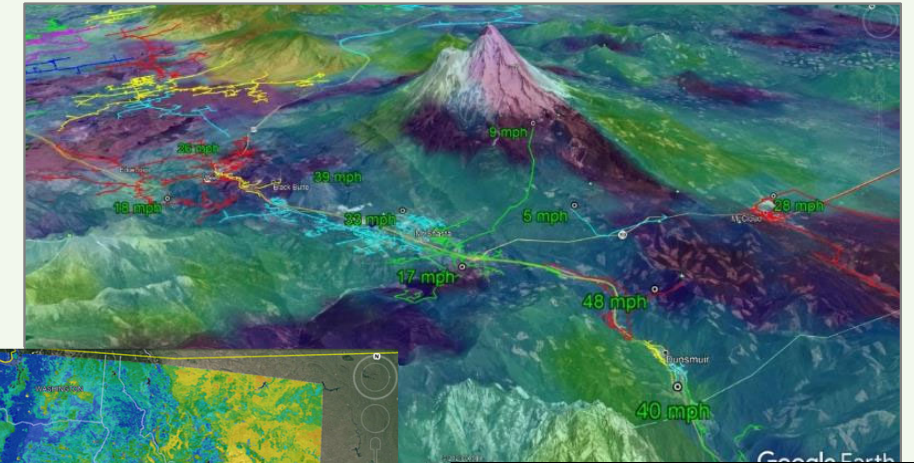
- Baseline risk modeling to inform strategic programs and investments
- Dynamic seasonal risk modeling to inform operational protocols
  - ✓ Fire weather condition monitoring
  - ✓ Meteorology department & forecasting

## 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

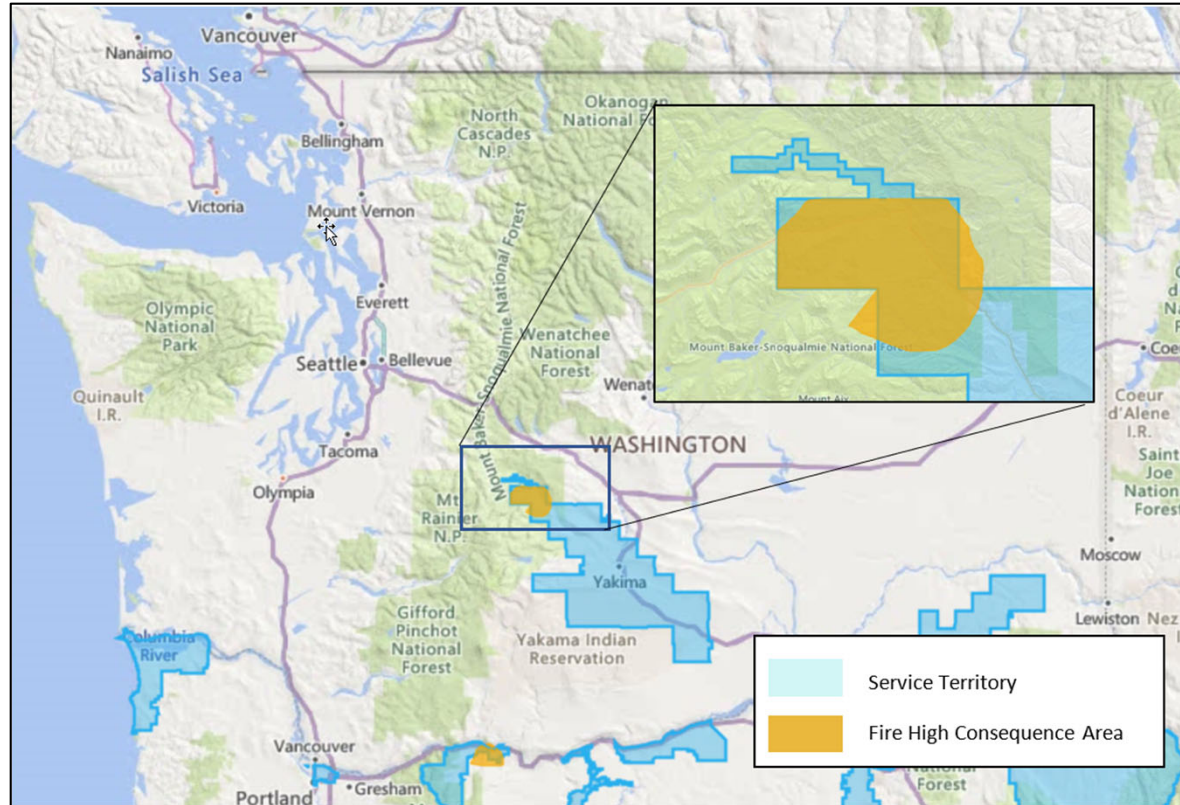
PacifiCorp provides electricity to approximately **140,000 Washington customers** via **49 substations**, **3,400 miles** of distribution lines, and about **600 miles** of transmission lines across nearly **2,700 square miles**

### 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



## PSPS Zones

*Extreme Risk of Wildfire*

Approximately **50 miles** or 2% of all **overhead distribution lines** are located within **1 individual PSPS Zone**

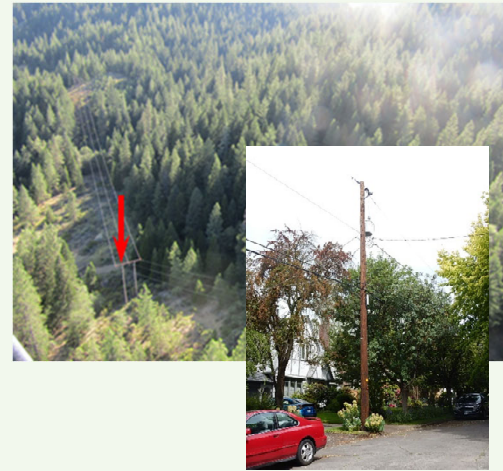
### Prioritized System Hardening

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

# Strategic Programs & Long-Term Investment

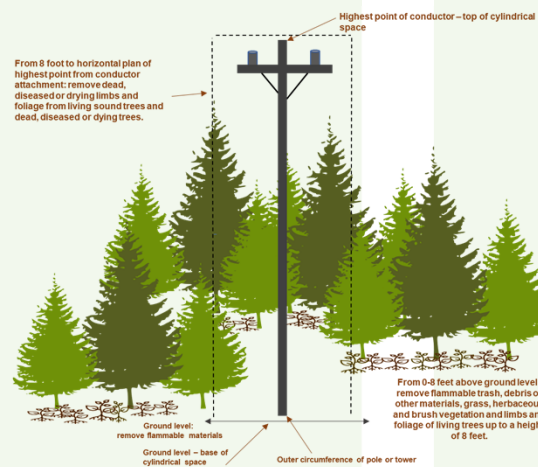
## Asset Inspections

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



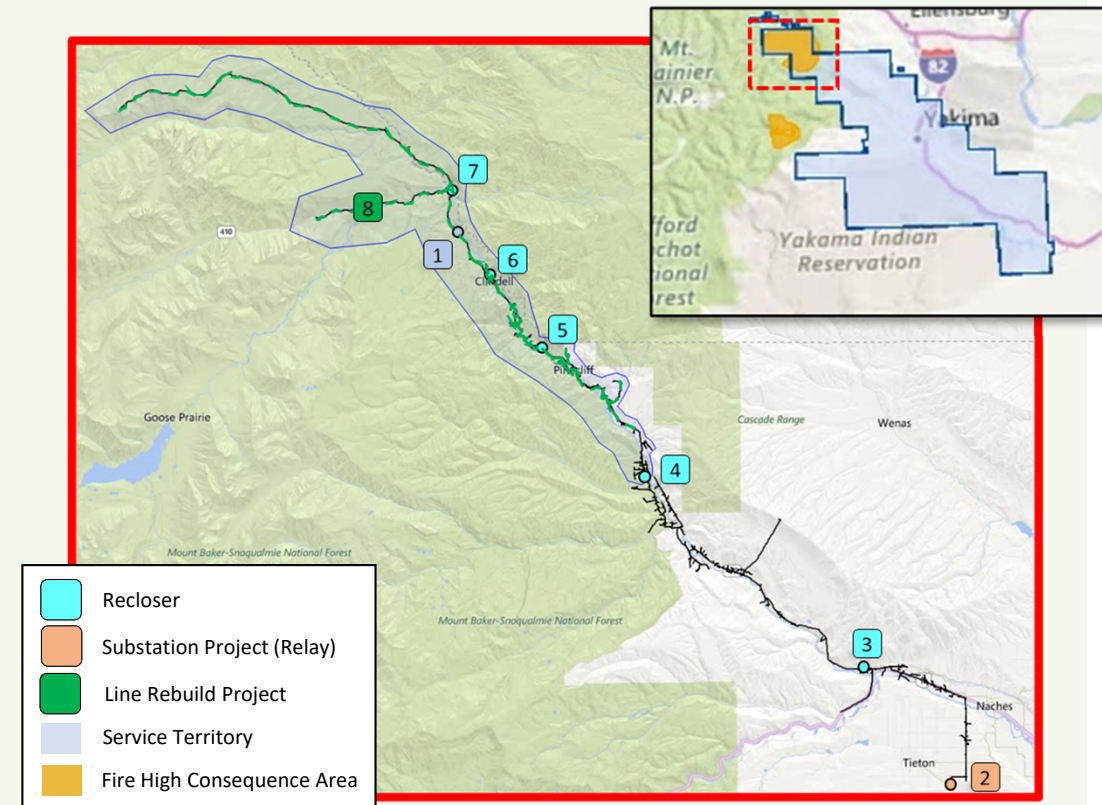
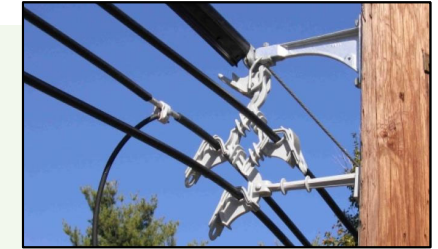
## Vegetation Management

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



## System Hardening

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



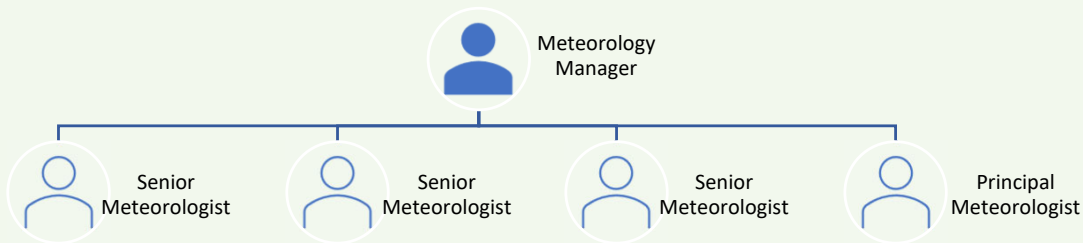
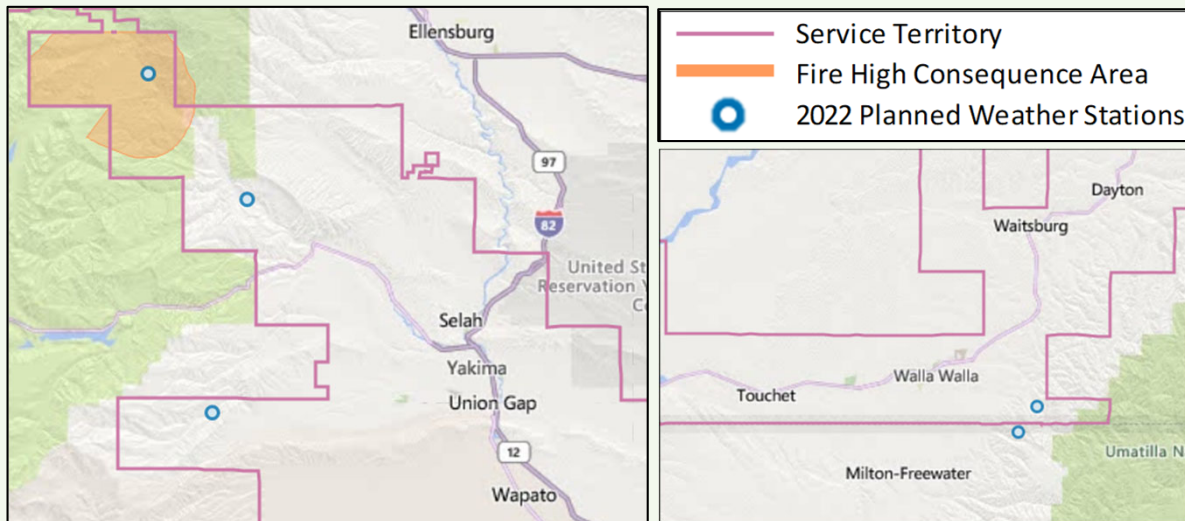


# Dynamic Risk Assessment through Situational Awareness

## Weather Station Network

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

Current Number of Weather Stations	2022 Planned	EOY Projected Total
3	5	8

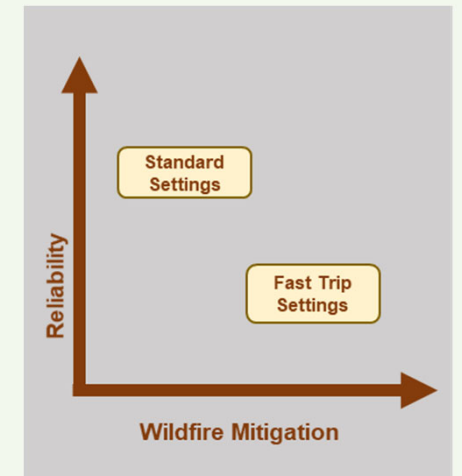


## Augmented Work Practices

- 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

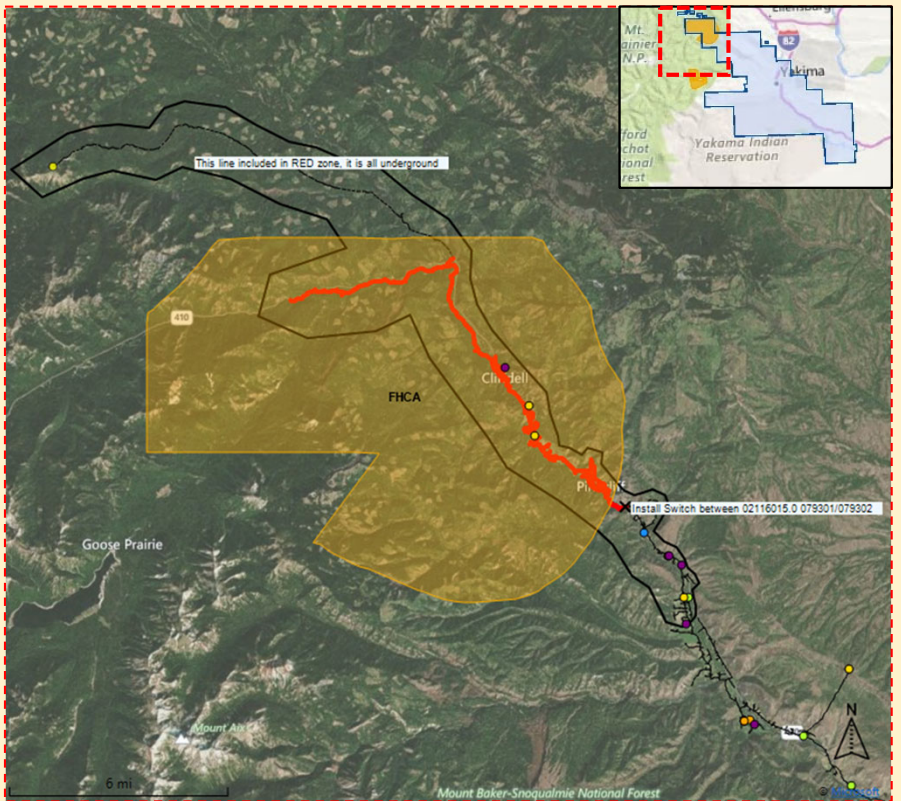
- Risk based deployment of alternate settings
  - *Faster tripping*
  - *Increased open times*
  - *Reduced reclosing*





# PSPS Implementation Protocols

## PSPS Zones Reflect Extreme Risk

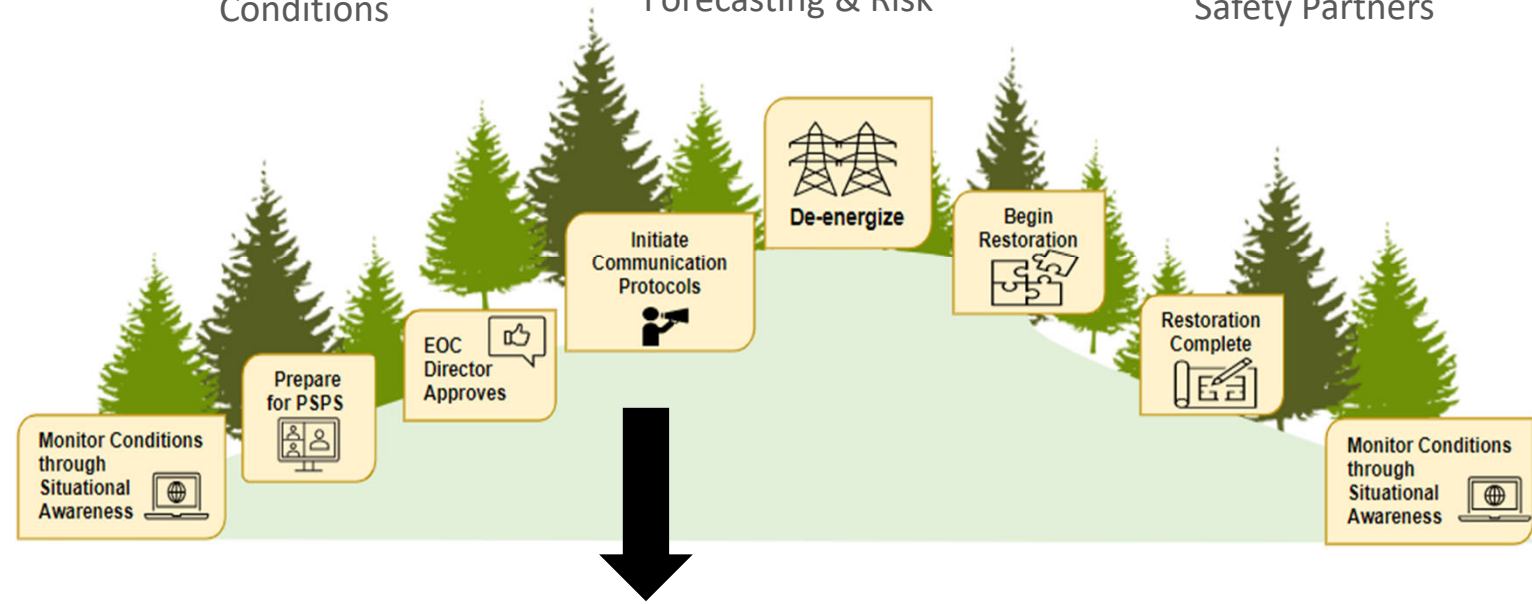


PSPS Zone Name	Customers	OH Distribution	UG Distribution	# of Circuits
Nile	721	48	42	1

Map of Public Safety Power Shut Off Zone

- 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



Communication Protocols	
72-48 hours prior	De-energization warning
48-24 hours prior	De-energization warning
1-4 hours prior	De-energization imminent / begins
Re-energization begins	Re-energization begins
Re-energization completed	Re-energization completed
Cancellation of event	De-energization event canceled
Status updates	Every 24 hours during event as needed

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

**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.

**What we're doing**

**Reducing wildfire risks**  
We're taking additional steps to reduce wildfire risk by increasing power line monitoring and training our crews along power lines. We're improving the reliability of our systems, enhancing operational practices and working with local emergency services teams to jointly develop coordinated plans should you need to evacuate, evacuate during a Public Safety Power Shutoff.

**Other steps we're taking include:**

- Clearing the wildfire zone and vegetation clearance around our lines
- Installing LED cameras, a fire risk for real-time assessment
- Utilizing our fire detection towers
- Improving automatic faulting and trip-testing
- Training and equipping our field crews for wildfire suppression

**Preparing for emergencies**  
While it is impossible to eliminate all wildfire risks, 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 fast-spreading fires, we've introduced a new prevention measure — a Public Safety Power Shutoff. This is a new protocol designed to help keep people and communities in these high-risk areas safe, by proactively shutting off power during extreme and dangerous weather conditions. This measure will only be taken as a last resort to help protect your safety.

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

- Increased fire risks
- Potential power outages
- Updates on power restoration

**Understanding public safety power shutoffs**  
We're taking proactive steps to ensure the communities we serve stay safe. To prevent wildfire ignition 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 power lines, debris, tree limbs or 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 cases, turning power off in affected areas may be necessary to ensure the safety of our customers. We have the decision to proactively shut off in high fire risk areas very seriously 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** - Wet or recently watered
- HIGH WINDS**
- LOW HUMIDITY**
- REAL TIME OBSERVATION** - by on-the-ground field agents

**Reducing wildfire risks**  
Safety is our top priority. Learn what we're doing to reduce wildfire risks and prepare for emergencies. **Learn more**

**WILDFIRE SAFETY** **PACIFIC POWER**

**Staying Safe in Wildfire Season**  
Wildfire season is here, and safety is top of mind for you and us.

As wildfires become more frequent and intense, we're taking more steps to help you stay safe—especially in areas with higher fire risk. While it's not possible to eliminate wildfire risk, we're working with you to help you prepare for wildfire season by working with us to create and boost your emergency plan.

To find out more about what we're doing and what you should do to be prepared, visit us at [PacificPower.net/wildfiresafety](http://PacificPower.net/wildfiresafety)

**MY ACCOUNT** **OUTAGES & SAFETY** **SAVINGS & ENERGY CHOICES**

**Safety and preparedness resources**  
Use these safety and preparedness resources to guide your emergency plans, or prepare 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 outages 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