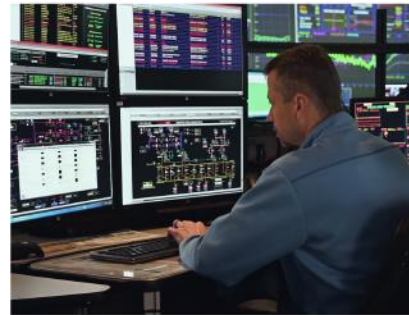


# 2024 Oregon Wildfire Mitigation Plan

UM 2207

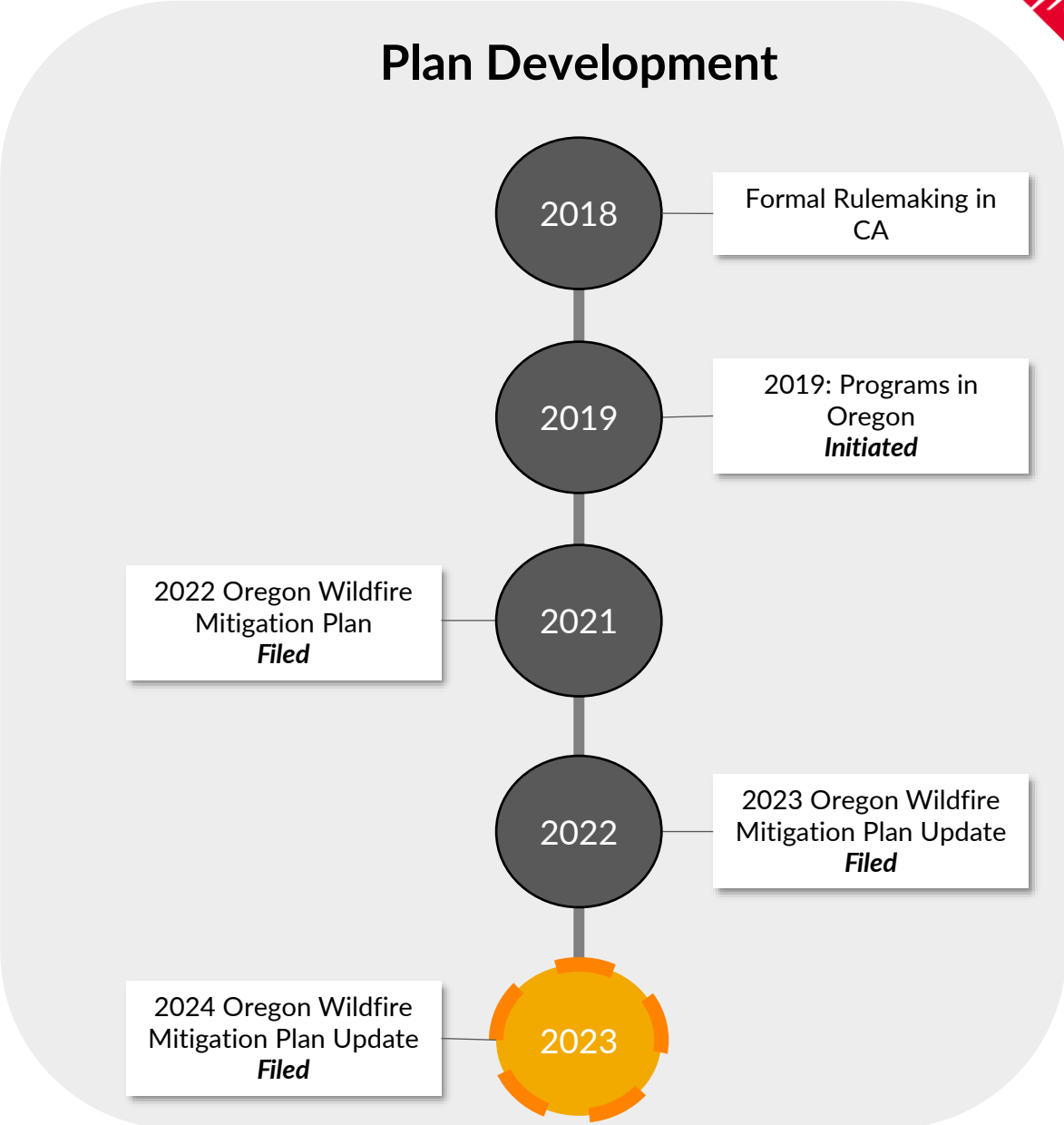
March 19, 2024

Presenter: Megan Buckner, Director, Wildfire Mitigation Program Delivery



# Agenda

- Plan Foundation & Elements
- Accomplishments and 2024 Updates
- Baseline Risk Map Update
- Situational Awareness & Operational Programs
- System Resiliency
- Public Safety Power Shutoff (PSPS) Program
- Customer Outreach & Communications



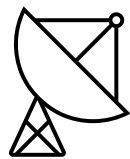


# Plan Foundation & Elements



## Engagement

- Public Safety Partner Engagement
- Customer engagement
- Industry collaboration
- Public Utility Commission (PUC) Staff



## Situational Awareness

- **Baseline risk modeling** to inform strategic programs and investments
- Dynamic **seasonal risk modeling** to inform operational protocols



## Operational Practices

- Deploy more sensitive protective coordination equipment
- Replace fuse locations
- Implement operational strategies during fire risk periods
- Installation of new fault indicators



## System Resiliency

- Enhanced inspections and accelerated correction of certain conditions
- Enhanced vegetation management practices
- Line rebuilds









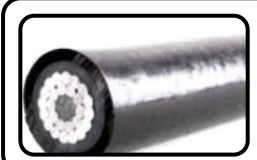

# Accomplishments and 2024 Updates

## 2023 Accomplishments

(Values are approximate and incremental wildfire mitigation values)

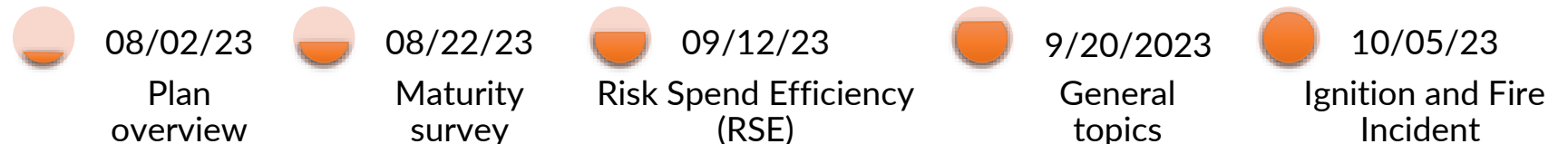
- ✓ **1,700 incremental miles** of vegetation management and inspection complete,
- ✓ Over **14,000 incremental trees pruned or removed**, 1.8 acres of brush removed and over **25,000 poles cleared**
- ✓ **125 miles** of covered conductor initiated
- ✓ **Rebuilt 82 miles** overhead lines with covered conductor
- ✓ Replacement of **8,000 expulsion fuses**
- ✓ **Upgraded 75** relays and reclosers
- ✓ **9 PSPS planning sessions** with public safety partners
- ✓ **5 forums** for public engagement
- ✓ **5 workshops** hosted for Oregon Public Utilities Commission staff

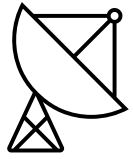
## 2024 Updates

|   |   |
|---|---|
|  | <p>Increased staff engagement<br/>                 Seeking grant opportunities<br/>                 Joint IOU RSE Discussions</p>  |
|  | <p>Baseline (FHCA/HFRA) map refresh<br/>                 Wildfire cameras</p>    |
|  | <p>Expansion of Operational Programs<br/>                 Encroachment De-Energization</p>   |
|  | <p>Planned installation of 125 line miles of rebuild<br/>                 Upgrading 81 relays and reclosers</p>                    |

## Oregon Public Utilities Commission Staff Recommendation Engagement

29 staff recommendations discussed and incorporated into the 2024 plan update





# Baseline Risk Map Update

## General Stats

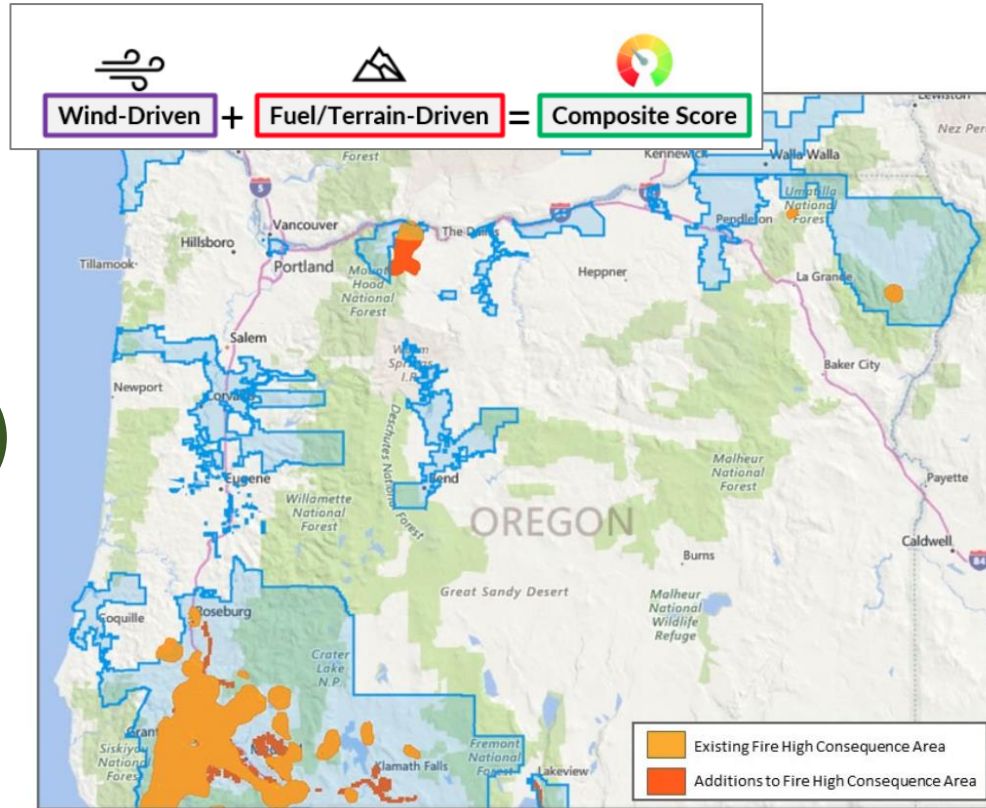
PacifiCorp provides electricity to approximately **630,000 Oregon customers** via **290 substations**, **20,000 miles** of distribution lines, and about **3,000 miles** of transmission lines across nearly **21,000 square miles**



### System Wide Initiatives

- ✓ Weather Stations
- ✓ **Situational Awareness**
- ✓ **Operational Protocols (EFR, PSPS)**
- ✓ Community Education and Outreach

## Oregon Service Territory



NOTE: Update to baseline risk map (Fire High Consequence Areas) in progress.

## FHCA

*Heightened Risk of Wildfire*

Approximately **3,600 miles** or 21% of all **overhead lines** are located within the FHCA  
**3,000 miles of overhead distribution** in the FHCA;

### Expanded Programs

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



### 2024 Updates

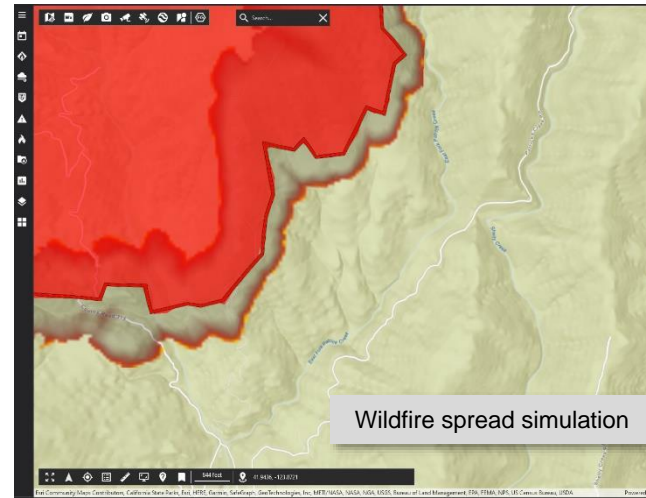
- FireSight risk modeling
- Advanced Data Analytics
- Evaluation of Climate Change Impacts on Risk Models**
- Fire Incident Root Cause Evaluation**



# Situational Awareness & Operational Programs

## Situational Awareness

- ✓ Implemented an impacts-based forecasting system and suite of wildfire risk modeling and simulation tools to inform whether to implement EFR settings or risk-based work practices and resource adjustments
- ❑ Plan to install **5 wildfire cameras**



**PACIFIC POWER SYSTEM IMPACTS FORECAST MATRIX**  
Weather-related Outage Potential (WOP) and Wildfire Risk (WFR)

| WOP Area     | WOP Category | 1/24 (Sun) |   |   |   | 1/25 (Mon) |   |   |   | 1/26 (Tue) |   |   |   | 1/27 (Wed) |   |   |   |
|--------------|--------------|------------|---|---|---|------------|---|---|---|------------|---|---|---|------------|---|---|---|
|              |              | W          | F | C | D | W          | F | C | D | W          | F | C | D | W          | F | C | D |
| Central Area | Central      | W          | F | C | D | W          | F | C | D | W          | F | C | D | W          | F | C | D |
| North Area   | North        | W          | F | C | D | W          | F | C | D | W          | F | C | D | W          | F | C | D |
| South Area   | South        | W          | F | C | D | W          | F | C | D | W          | F | C | D | W          | F | C | D |

| WEATHER-RELATED OUTAGE POTENTIAL (WOP) |            |
|--|------------|
| WOP Potential                          | WOP Legend |
| WOP Legend                             | WOP Legend |

| WEATHER-RELATED HAZARDS |            |
|-------------------------|------------|
| WOP Legend              | WOP Legend |

| WILDFIRE RISK (WFR) |            |
|---------------------|------------|
| WFR Legend          | WFR Legend |

| OPERATIONAL RESPONSE        |                             |
|-----------------------------|-----------------------------|
| Operational Response Legend | Operational Response Legend |

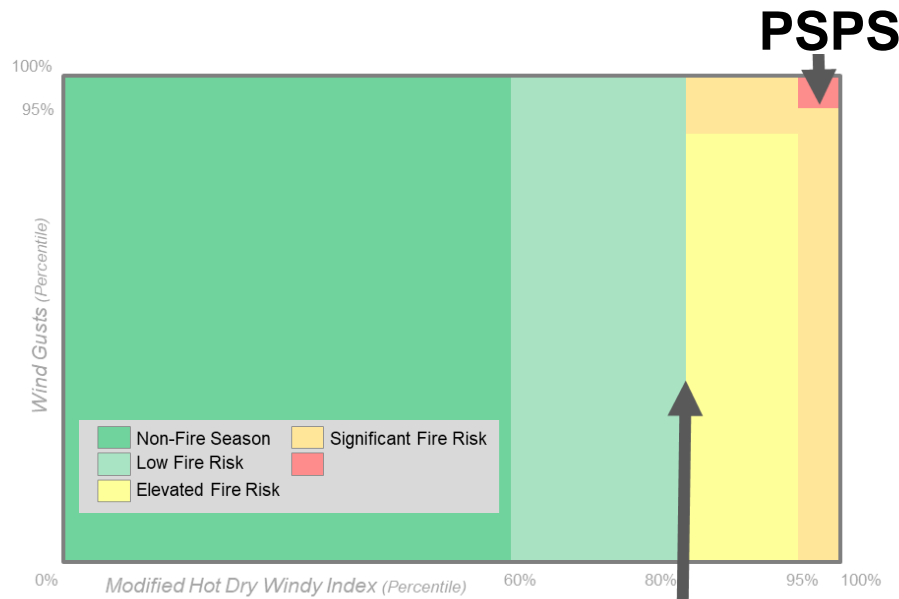
  

**ECC / DOC**

Department Operations Center (DOC) - A tactical function, provides coordination point for a department for response activities during major incidents normally established prior to an ECC activation.

Emergency Coordination Center (ECC) - A strategic and support function, provides operational guidance and support to one or more DOC activations. Also reports current situational information to the Executive Policy Group.

System impacts forecast



**EFR** is enabled when weather conditions reach **yellow** for a given area and stay on for Fire High Consequence Area (FHCA) throughout the fire season. Providing a safety buffer between enablement and when wildfire impacts are historically experienced

**PACIFIC POWER.**

**Wildfire safety precautions in place for your area**

Due to elevated wildfire risk in your area, we are taking additional safety precautions. Among other measures, we may use protective devices on our lines with more sensitive settings that will de-energize power equipment when there is a short circuit detected.

A power outage is more likely to occur when these settings are utilized. For the 2023 wildfire season, based on elevated conditions in the region, we are using more sensitive protective settings in your area. As a result, if an outage occurs during the 2023 wildfire season, you may experience a longer-than-typical outage as our field personnel work to confirm that power can be safely turned back on. These measures are intended to promote public safety, and we appreciate your patience.

Our system is built to withstand extreme weather events and other unforeseen issues, however, outages can happen. It is important to:

- Plan ahead and be prepared year-round.
- Create a plan with your medical provider for appropriate back-up power if you have medical devices that rely on electricity in your house.
- Review your contact information, so we can reach you if necessary.
- If an outage does occur, find restoration information on the Pacific Power outage map.

We appreciate your patience and understanding. Providing safe, reliable service is our highest priority at Pacific Power. If you have questions, please call us anytime at 1-888-221-7079 or visit [PacificPower.net/Ready](#) for emergency preparedness and wildfire safety information.

EFR Customer Communication

## Elevated Fire Risk (EFR) Settings

- ✓ During the peak of the 2023 fire season **24% of all overhead circuits** were placed in EFR settings
- ✓ EFR settings are **enabled across the service territory**; well in advance of weather conditions that have historically been related to catastrophic fires

## Expansion of Operational Protocols

- ✓ Fires within a specified distance of assets (based on voltage and material) results in immediate de-energization

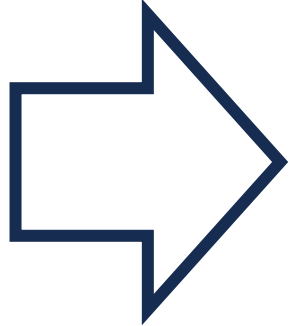
# System Resiliency

 87,000 planned line miles inspected

 1,676 vegetation management line miles

 Planned installation of 125 line miles of rebuild

 Upgrading 81 relays and reclosers



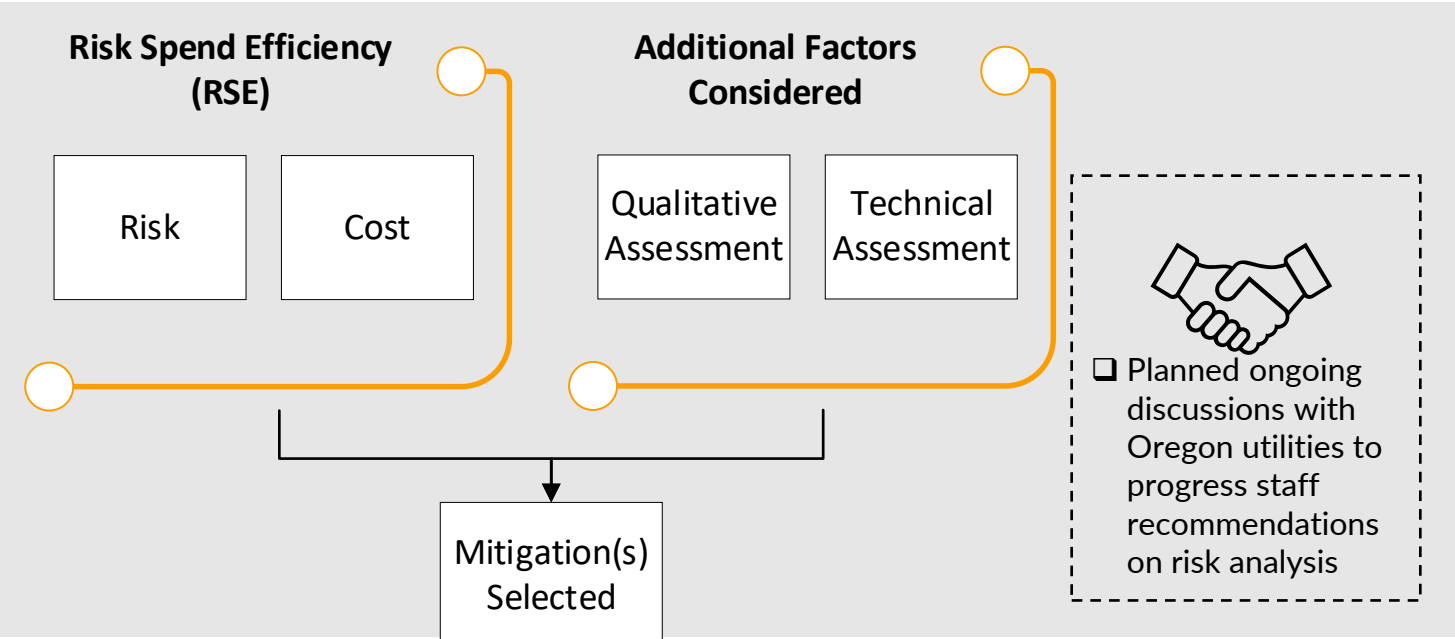
## Prioritization

Baseline risk analysis supports identification of areas of utility-ignition risk from overhead equipment.

This supports prioritization of locations for mitigation efforts such as grid hardening.

## Mitigation Selection

(Alternative Analysis for Capital projects)



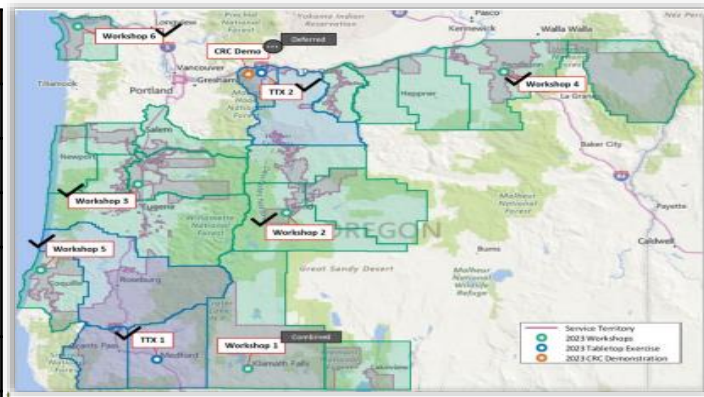
- 2024 Updates
- Annual Mitigation Selection Planning Process
- Risk Spend Efficiency Model Update



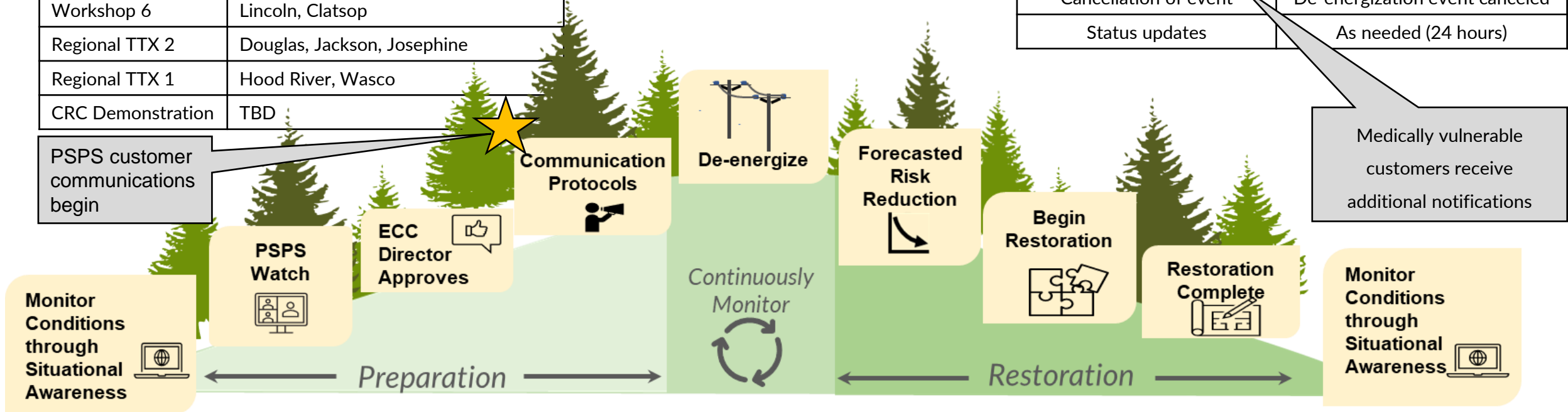
# Public Safety Power Shutoff (PSPS) Program

## 2024 Planned Events

| Event             | Target County                               |
|-------------------|---|
| Workshop 1        | Klamath, Lake                               |
| Workshop 2        | Deschutes, Jefferson, Crook                 |
| Workshop 3        | Lane, Marion, Linn, Benton, Polk            |
| Workshop 4        | Umatilla, Wallowa, Sherman, Gilliam, Morrow |
| Workshop 5        | Coos  |
| Workshop 6        | Lincoln, Clatsop                            |
| Regional TTX 2    | Douglas, Jackson, Josephine                 |
| Regional TTX 1    | Hood River, Wasco                           |
| CRC Demonstration | TBD   |



| PSPS Communication Protocol |                                   |
|-----------------------------|-----------------------------------|
| 48-72 hours prior           | De-energization warning           |
| 24-48 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              | As needed (24 hours)              |







# Customer Outreach & Communications

- Conduct customer outreach across various mediums to reach all customers in Oregon:
  - Video and social media ad campaign
  - Support collateral, brochures, checklists, flyers
  - Webpages, online resources

Numbers indicate that Pacific Power customers were more engaged generally in 2023 compared to 2022, specifically regarding social media outreach.

Tracked metrics indicate level of customer engagement with the type of outreach:

| Metric                      | Measurement              | Baseline (2022) | 2023  |
|-----------------------------|--------------------------|-----------------|-------|
| Social Media Engagement     | Clicks/Impressions       | .6%             | .9%   |
| Video Completion Rate (VCR) | Video completions/clicks | 63%             | 53.5% |

## 2024 WMP Engagement Forums

| Community                 | Event Date | Event Type              |
|---------------------------|------------|-------------------------|
| Medford                   | May 2024   | Public Engagement Forum |
| Coos Bay                  | May 2024   | Public Engagement Forum |
| Pendleton                 | May 2024   | Public Engagement Forum |
| Sherman or Gilliam County | May 2024   | Public Engagement Forum |
| Hood River                | May 2024   | Public Engagement Forum |
| Bend                      | June 2024  | Public Engagement Forum |
| Linn County               | June 2024  | Public Engagement Forum |
| Lincoln City              | June 2024  | Public Engagement Forum |
| Cannon Beach              | June 2024  | Public Engagement Forum |



# Thank You!

For additional comments and questions,  
email us at:

[wildfiresafety@pacificorp.com](mailto:wildfiresafety@pacificorp.com)