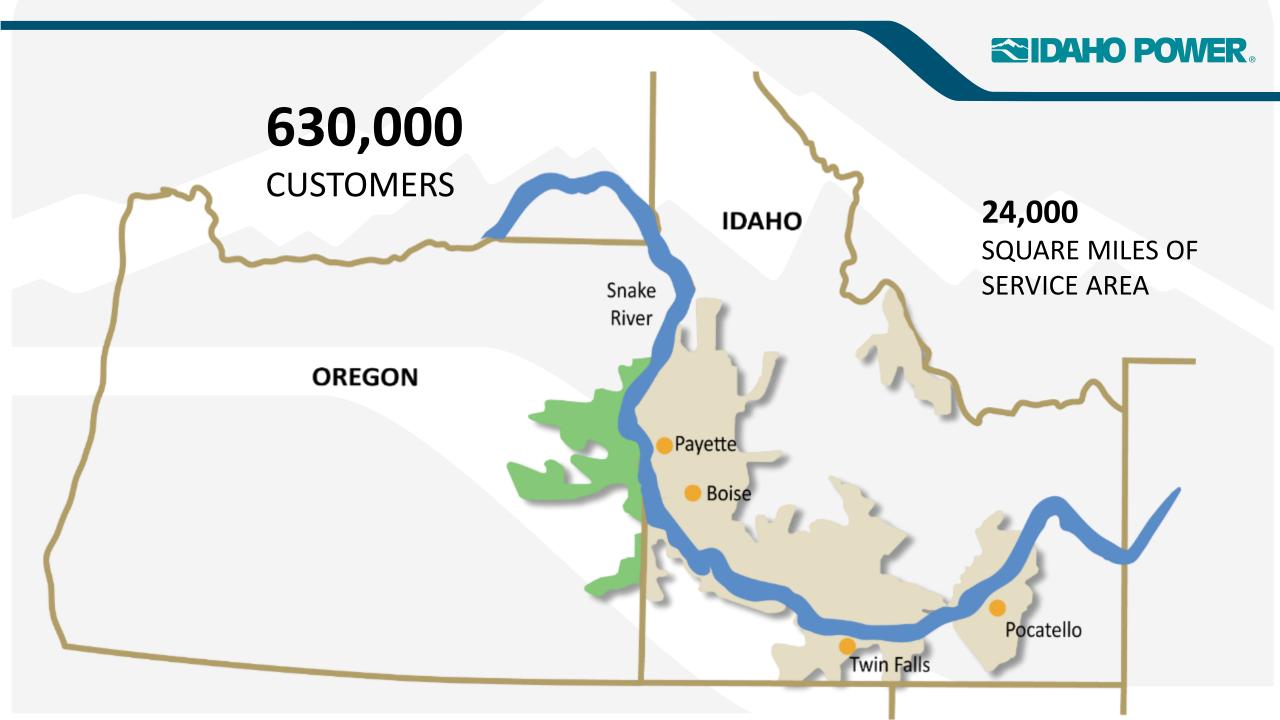


# 2024

# Wildfire Mitigation Plan

Jon Axtman, Senior Manager Transmission and Distribution Engineering and Reliability

**Dani Southard,** *Wildfire Mitigation Program Manager* 





### AGENDA

- Our Approach to Wildfire Mitigation
- Update to Baseline Risk Modeling
- Wildfire Mitigation Zones
- Key Achievements
- Oregon Project Highlights
- Communications and Outreach
- New Developments
- 2024 Wildfire Season Readiness





#### **Approach**

Idaho Power deploys a multi-pronged approach to achieve its wildfire mitigation objectives. The company's activities and actions are focused on:

- 1) Reducing the likelihood of wildfire
- 2) Reducing the intensity of wildfire
- Reducing the susceptibly of wildfire

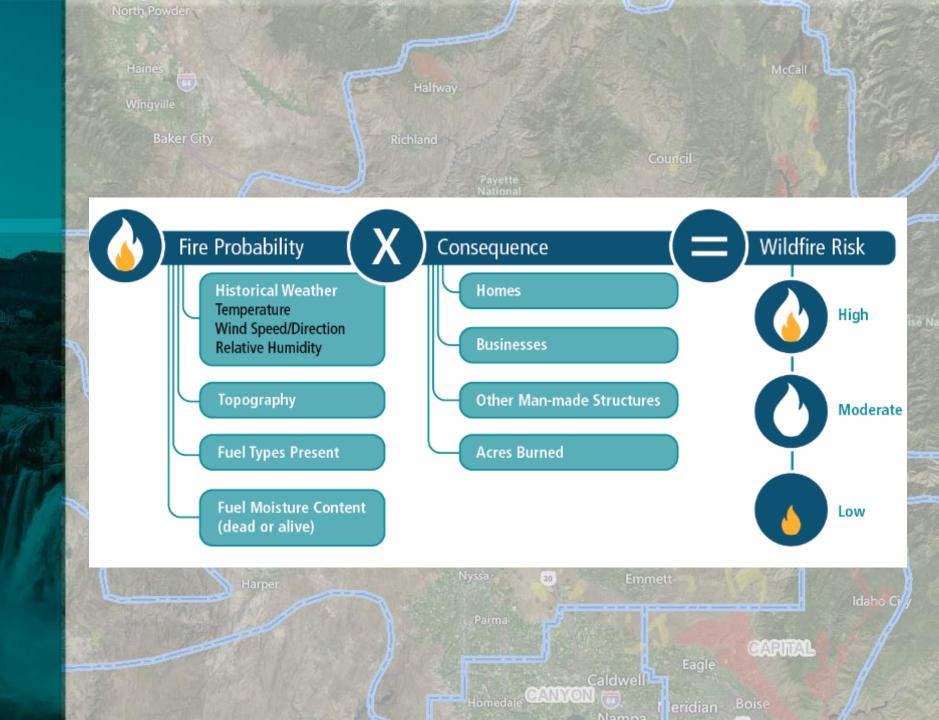
**Feeder Hardening Asset Inspections** Fuel Reduction - Shared Stewardship **Vegetation Management Pole Clearing Protection Changes** ikelihood Wildfire Detection Cameras Proactive De-energization Vegetation Management **Underground Conversions** Wildfire Risk Susceptibility **Public Meetings Education and Preparedness** Partnering with Fire Agencies and Firewise Fire Mesh Wrap



# Baseline Wildfire Risk Mapping

### 2023 Model Updates

- New Climatology Datasets
- Updated Idaho Power Infrastructure & Outage Information
- Updated Structural Data
- New Vegetation Classification (LANDFIRE 2.3.0)



Wildfire Mitigation Plan (WMP) Reference: Section 3. Quantifying Wildland Fire Risk

# Baseline Risk Mapping Evaluation Process

Wildfire Risk Model

Review potential consequences from probabilistic fire spread model.

**Ground Review** 

- Vegetation condition
- Ingress/egress routes
- Defensible space
- Situational awareness capability

Localized Input

- Federal and State resource agencies
- Fire professionals
- Suppression capability
- Response time

Risk Zone Calibration

Customer

Input

Wildfire

Risk Zone

Determination







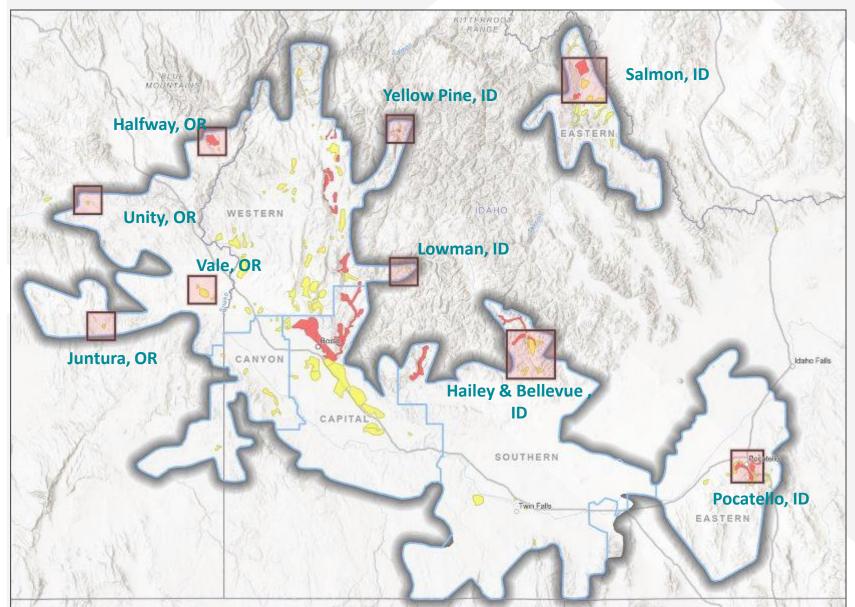
# Notable Input to WMP and Risk Zone Updates

- Oregon Fire Departments and Rural Fire Protection Districts including: Vale, Unity, La Grande, and Halfway
- Bureau of Land Management (BLM) Fire and Natural Resource Professionals (Oregon and Idaho)
- Emergency Managers for Baker, Malheur, and Union counties
- U.S. Forest Service (Idaho)
- Oregon Department of Forestry
- Idaho Department of Lands
- Oregon State Fire Marshal



## 2024 Wildfire Risk Zones



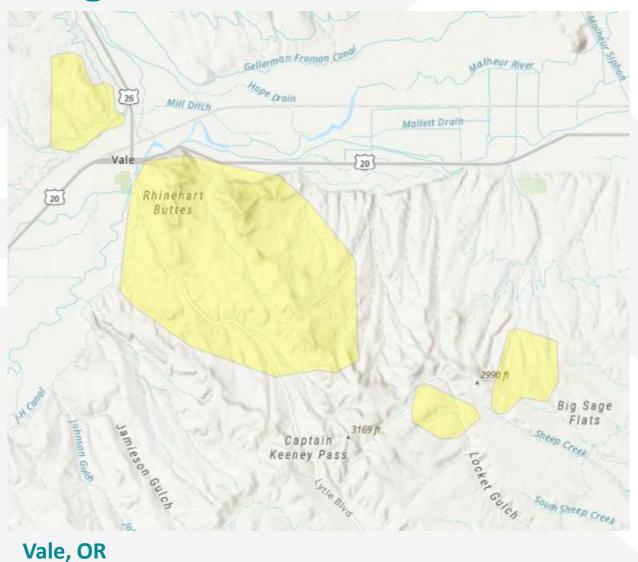


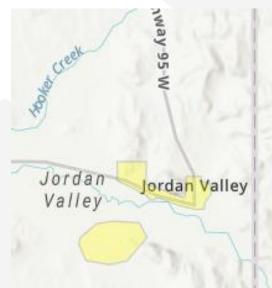
#### **Zone Changes**

State	New Tier 2 Zone	New Tier 3 Zone	Zone elevated from Tier 2 to Tier 3
Oregon	3	1	
Idaho	2	-	6
Totals	5	1	6

# Oregon Wildfire Risk Zones







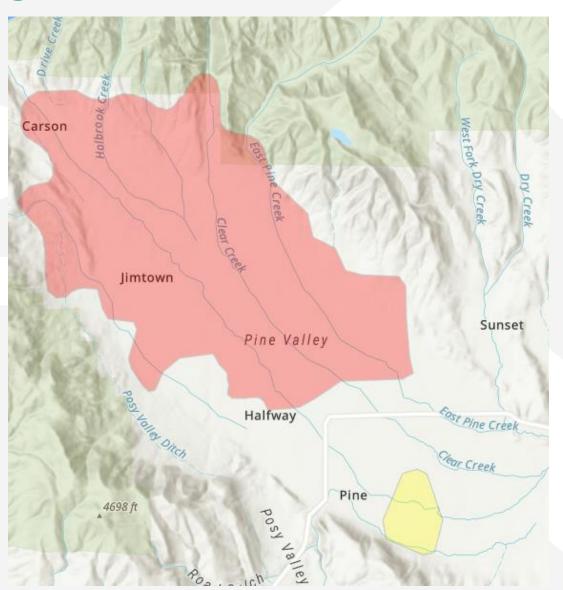
Jordan Valley, OR



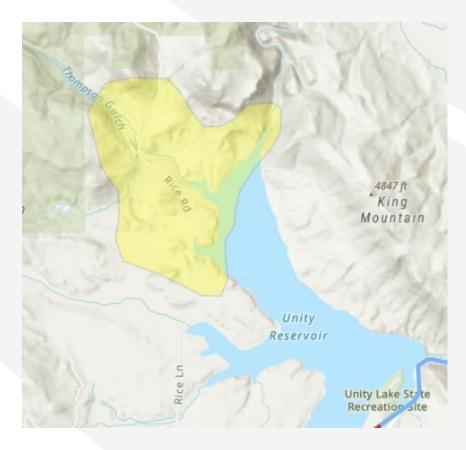
Juntura, OR

# Oregon Wildfire Risk Zones





#### Halfway, OR



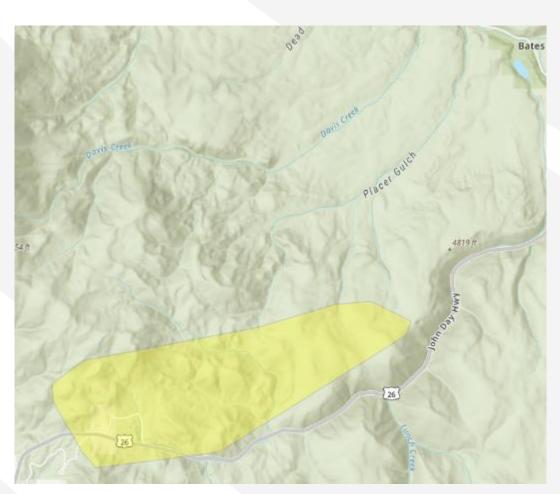
**Unity, OR** 

# Oregon Wildfire Risk Zones

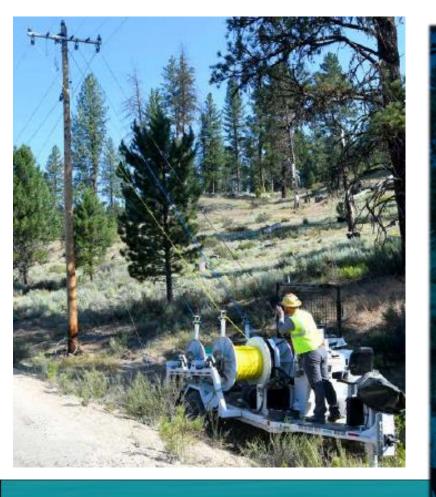




Tollgate, OR



John Day Highway (near Austin Junction), OR



## **Grid Hardening**

The Grid Hardening Program was expanded by 40% from 2022 to 2023, resulting in the hardening of 69 new line miles across Idaho Power's Tier 3 zones.

The 2024 goal includes completion of an additional 74 line miles

### Segmentation

In 2023, as part of an effort to isolate circuit segments, Idaho Power installed eight automatic reclosing devices in Tier 3 zones.

In 2024, Idaho Power plans to install an additional 25 automatic reclosing devices in Tier 2 and Tier 3 wildfire risk zones throughout the service area.

The company is also working to improve remote communication capabilities to distant segmentation devices

## **KEY Achievements in 2023**

Idaho Power met or exceeded all of it WMP goals within the company's wildfire risk zones





# **Enhanced Vegetation Management**

Idaho Power completed all planned enhanced vegetation management activities in wildfire risk zones, including annual patrols and mid-cycle pruning.

The company piloted additional monitoring tools in 2023, such as the use of a LiDAR-based approach for vegetation encroachment detection.

The company continues to make progress toward the long-term goal of achieving a three-year pruning cycle across its entire service area.

#### **Asset Inspections**

In 2023, Idaho Power met or exceeded its established goals for WMP asset inspections.

Asset inspection initiatives include condition-based aerial visual inspections, ground visual inspections, detailed visual inspections (generally using high resolution photography), thermography inspections, and wood pole inspection and treatment.

### **KEY Achievements in 2023**



Idaho Power met or exceeded all of it WMP goals within the company's wildfire risk zones

#### **Wildfire Detection Cameras**

Idaho Power is a participant of Oregon Wildfire Detection Camera Interoperability Committee.

The company is collaborating with agencies in Idaho for wildfire camera buildout planning

Idaho Power has six planned installations with ALERTWest across the service area in 2024



**Situational Awareness** 

# Weather Station Installations

Five fire weather stations were installed in 2023 with an additional five planned for 2024.

Idaho Power is evaluating installation of broader weather station network

## **KEY Achievements in 2023**

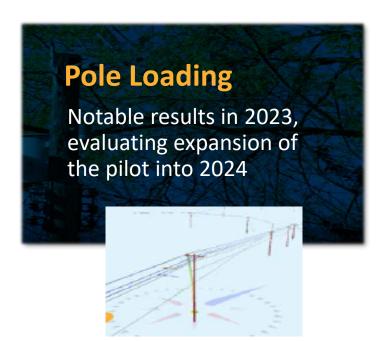
Idaho Power met or exceeded all of it WMP goals within the company's wildfire risk zones



#### **Covered Conductor**

Training yard evaluation completed in 2023 advancing to field trial in Idaho





### **Shared Stewardship**

Cross-boundary fuel reduction project on Boise and Payette National Forest associated with the Forest Service's National Wildfire Crisis Strategy



# 2023 WMP Pilot Initiatives

Research



Validate



Operationalize



Idaho Power uses pilot initiatives to evaluate technology or new solutions to mitigate risk

WMP References: Section 4.5 Costs & Benefits of Wildfi



## Oregon Project Highlights

#### **Huntington to Quartz Transmission Line Rebuild**

- Transmission line rebuild from the Huntington
   Substation to the Quartz Substation in eastern Oregon
- Transmission line was originally built in 1951
- Rebuilding with tubular steel 138 kilovolt (kV) H-frame structures with shield wire and optical fiber composite overhead ground wire for lightning protection
- Project began in July 2023 and is scheduled for completion in December 2024









# Oregon Project Highlights

# Vale to Drewsey Transmission Line Maintenance

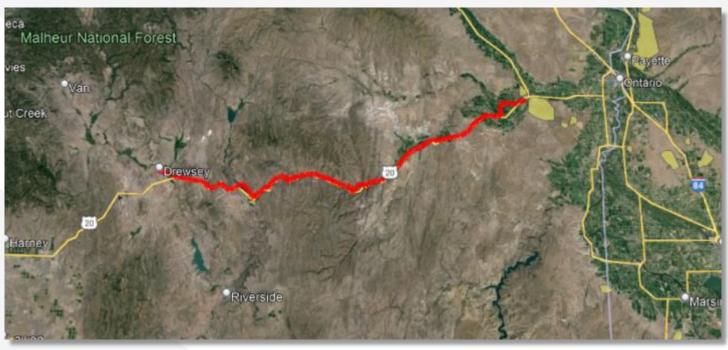
- Transmission line maintenance project from the Vale Substation to the Drewsey Substation
- Originally built in 1947
- Idaho Power's wildfire team worked with the BLM Vale District in 2023 to clear backlogged Idaho Power requests to complete maintenance
- There were 134 structure replacements in 2023
- An additional 447 structures are scheduled for replacement in 2024

#### **Transmission Fire Mesh Wrap**

 205 wood poles were wrapped in Oregon in 2023









## **WMP Communications**

Idaho Power communicates with employees, customers, government officials, the public, and other stakeholders before and throughout wildfire season.





Approaches to customer communication and outreach include public events, meetings, social media, radio, flyers, postcards, letters, and voice and text messaging.

## **WMP Communications**



## Core messages and topics include:

- Idaho Power's commitment to safety
- Wildfire prevention tips for customers
- Wildfire mitigation efforts at Idaho Power
- PSPS considerations and impacts
- Emergency and outage preparedness tips and checklists
- Where to find outage information
- Importance of updating contact information

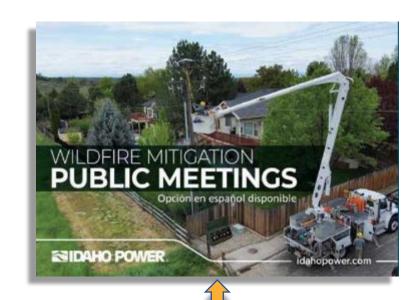




### 2024 WMP Developments: Engagement,

#### **EXIDAHO POWER**®

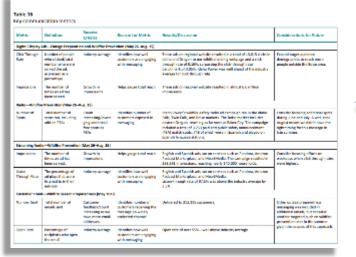
#### **Outreach & Communications**



In 2023, the company conducted more than 30 WMP and Public Safety Power Shutoff (PSPS) plan presentations. The 2024 plan aims to significantly expand outreach efforts to include public meetings in each county where a wildfire risk zone exists.

25 ongoing forums for wildfire mitigation that span across industry, government, and fire science fields. These engagements support the company's commitment to gaining knowledge of emerging mitigation approaches and inform the continuous improvement of Idaho Power's WMP.







The 2024 plan incorporates a new *Key Metrics* section that discusses success criteria, 2023 results, and considerations for future communications and outreach efforts.

<sup>\*</sup> WMP References: Section 2. Government, Industry, and Peer Utility Engagement, Section 10. Communicating About Wildfire



# 2024 WMP Developments: Engagement with Oregon IOUs toward a common RSE framework

Scoping

- Joint IOUs meet regularly to discuss Risk Spend Efficiency (RSE)
- Reviewing methodologies
- Determining how each investor owned utility (IOU) plans to use RSE as part of a risk-based decision-making framework

Defining Inputs

- Baseline risk quantification
- Anticipated post mitigation risk reduction
- Benefits
- Costs

Roadmap

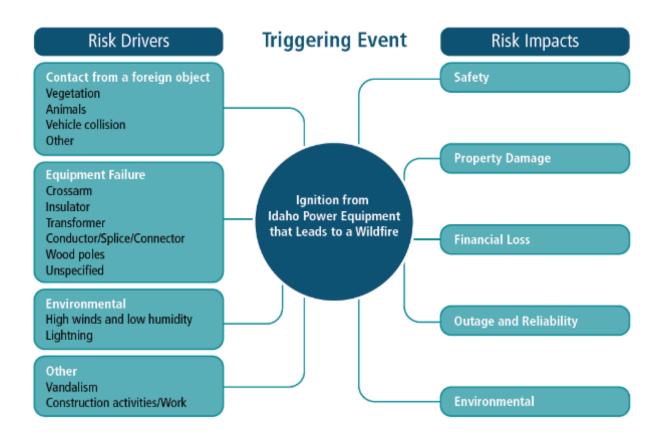
- Formulate a common roadmap for RSE implementation
- Could have different inputs and outputs, as appropriate for each utility
- Expectation for Public Utility Commission of Oregon (OPUC) Staff involvement
- RSE will be one of multiple inputs for risk-based decision making for mitigation selection



### **2024 WMP Developments:**

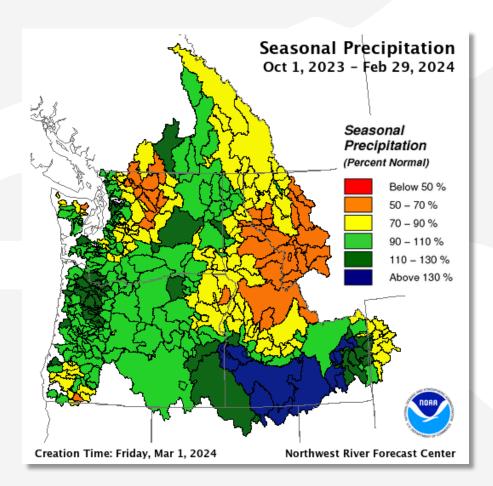
## **Ignition Tracking and Analysis**

- Refinement of risk drivers, risk impacts, and mitigation solutions
- Development of preliminary probabilistic operational risk models to inform likelihood of occurrence
- Roadmap for advancing ignition tracking and analysis capabilities





## Wildfire Season Readiness



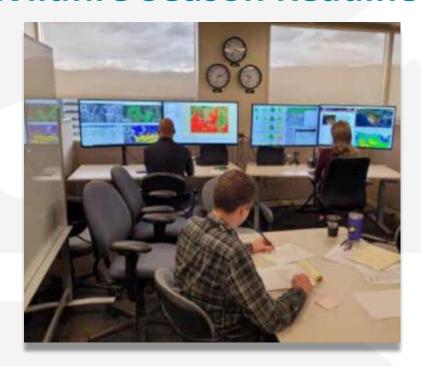
In southern Idaho and eastern Oregon, precipitation has been near to above normal for the water year (October through February) to date.

#### Seasonal Outlook for Idaho Power Service Area

- Fire activity remains low in the Great Basin due to the time of year with shorter daytime hours, fuels in dormancy, and cold frontal passages bringing cooler temperatures, higher humidity, and precipitation.
- Fire activity is expected to remain low and normal for the time of year through April and pick up in May and June from south to north, exhibiting normal trends.
- There is a potential for upticks in fire potential on windy days in areas that have prolonged dryness and above normal grass crops in the lower elevations, depending on weather conditions.



#### Wildfire Season Readiness



- Creating PSPS switching plans for all wildfire risk zones
- Training Idaho Power field teams on Wildland Fire Preparedness and Prevention Plan
- Expanding outreach and public engagement activities to all counties with wildfire risk zones
- Coordination with adjacent utilities
- Initiate fire weather forecasting in May (FPI generation)

Western Region         06/12   06/12   06/13   06/13   06/13   06/13   06/13   06/14   06/14   06/14   06/14   06/14   06/15	
WPS1	
WPS2         3         3         3         3         3         3         3         3         3         3         3         7         6         4         4         5           Capital Region         06/12         06/12         06/13         06/13         06/13         06/14         06/14         06/14         06/14         06/15	Region
Capital Region         06/12 06/12 06/13 06/13 06/13 06/13 06/13 06/14 06/14 06/14 06/14 06/14 06/15	WPS1
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Region         12:00         18:00         00:00         06:00         12:00         18:00         00:00         12:00         12:00         18:00         00:00         12:00 <t< td=""><td>CPS2</td></t<>	CPS2
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	Region
Eastern 06/12 06/12 06/13 06/13 06/13 06/13 06/14 06/14 06/14 06/14 06/15 06/15 06/15 06/15	SPS1
	Eastern
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EPS2 8 7 7 7 7 7 7 10 10 9 10 10	EPS2
EPS3 9 7 7 7 8 7 7 10 10 10 10 10	
EPS4 8 6 6 6 7 6 6 6 9 9 9 9 9	EPS3





# **Enhanced Protection Settings (EPS)**

Working to expand protection capabilities

- Seasonal change non reclose
- Decrease time delay on high fire potential days

Continue segmentation projects with recloser installs and communication

Our goal is to ensure that PSPS is only used as a last resort





## **Public Safety Power Shutoff (PSPS)**

#### **PSPS Considerations**











High Temperature L

Low Humidity

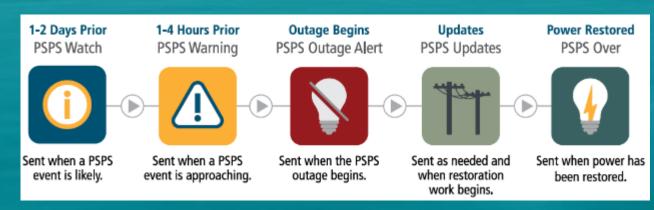
High Winds

Dry Vegetation

Public Safety

- Annual functional exercise (May 6<sup>th</sup>)
- Outage Playbook guides activities
- Idaho Power deploys field observers as needed
- Assessment team monitors conditions
- Ongoing engagement and communication
  - Public safety partners
  - Critical facilities
  - Customers

PSPS: Stages of Customer Communication







# **Upcoming Oregon Public Meeting and Event Schedule**

- ➤ Halfway Public Safety Fair- February 28<sup>th</sup> 3-6pm (complete)
- ➤ Vale, Malheur County May 2<sup>nd</sup>, 6-8pm Vale Senior Center
- ➤ Jordan Valley, Malheur County May 15<sup>th</sup>, 6-8pm Jordan Valley Lions Hall
- Nyssa, Malheur County– May 16<sup>th</sup>, 6-8pm Nyssa High School
- ➤ Homedale, Owyhee County (ID) May 22<sup>nd</sup> 6-8pm Homedale High School (will include Adrian OR residents)
- ➤ Unity, Baker County May 23<sup>rd</sup> 6-8pm Burnt River High School
- ➤ Halfway, Baker County May 29<sup>th</sup> 6-8pm Lions Club



## **Thank You**

For more information and to read our full WMP, please visit:

www.ldahoPower.com/wildfire

