Wildfire Resiliency Fall Update
Washington Utilities and Transportation Commission Open Meeting

David Howell, Director of Operations

November 21, 2023

Guiding Principles

- Promote public and worker safety around the impacts of wildfire

- Protect Avista from financial or reputational liability associated with wildfire

- Minimize service disruptions caused by wildfires and other extreme weather events

Presentation Agenda

Avista Wildfire Resiliency

- 2023 Fire Season Review
- 2023 Wildfire Events
- Communications
- Grants
- Insurance
- 2023 Recap
- 2024 Plans

2023 Fire Season Review

2023 Washington Wildfire Conditions

Washington Drought Conditions

Drought Map as of November 2023
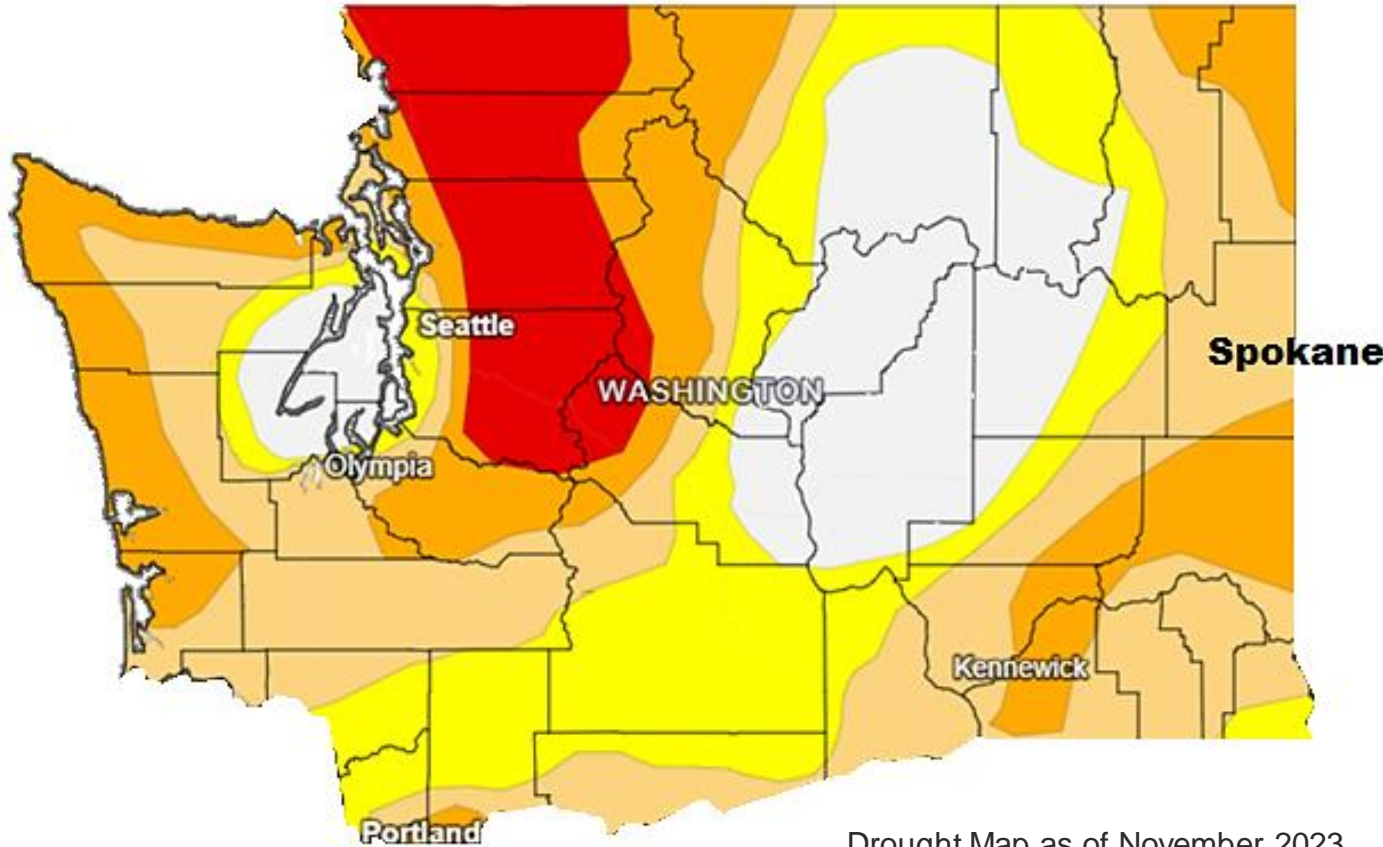
Drought & Dryness Categories	% of WA
D0 – Abnormally Dry	19.2%
D1 – Moderate Drought	36.5%
D2 – Severe Drought	26.2%
D3 – Extreme Drought	9.8%
D4 – Exceptional Drought	0.0%
Total Area in Drought (D1–D	72.6%

2023 Washington Wildfires

Washington DNR Number of Fires

199% of Normal

Washington DNR Acres Burned

753,100
Ave: 188,730 acres
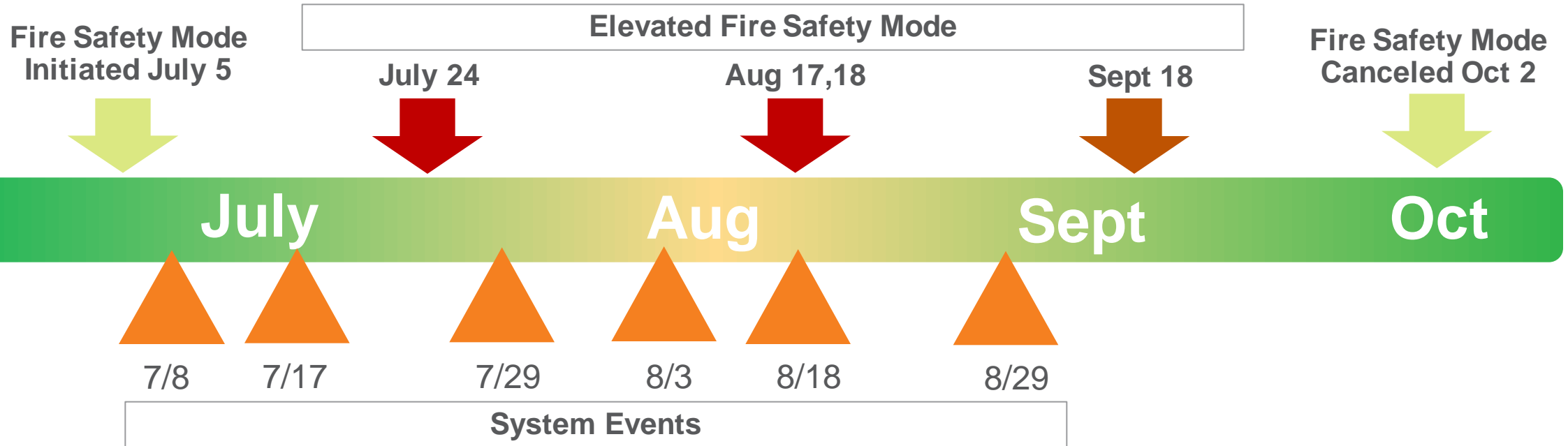88% of Normal
165,365
54,000

DNR Fire Causes 2023
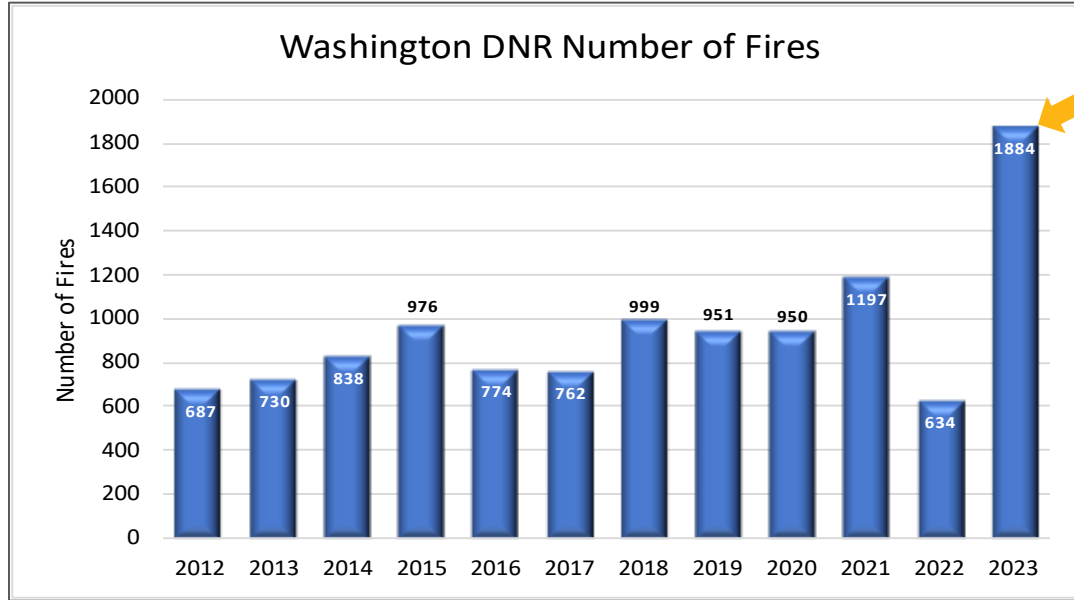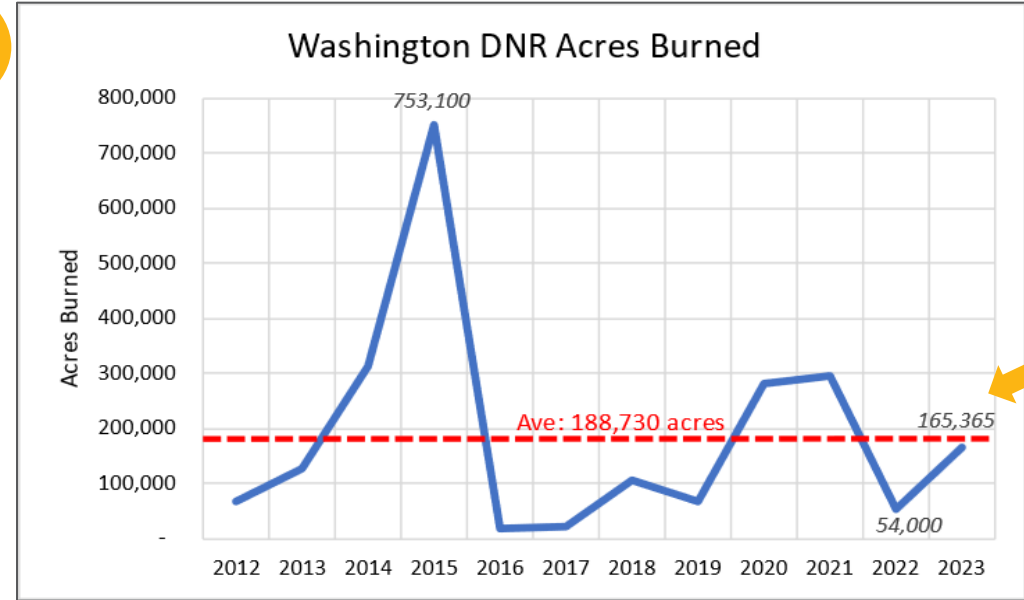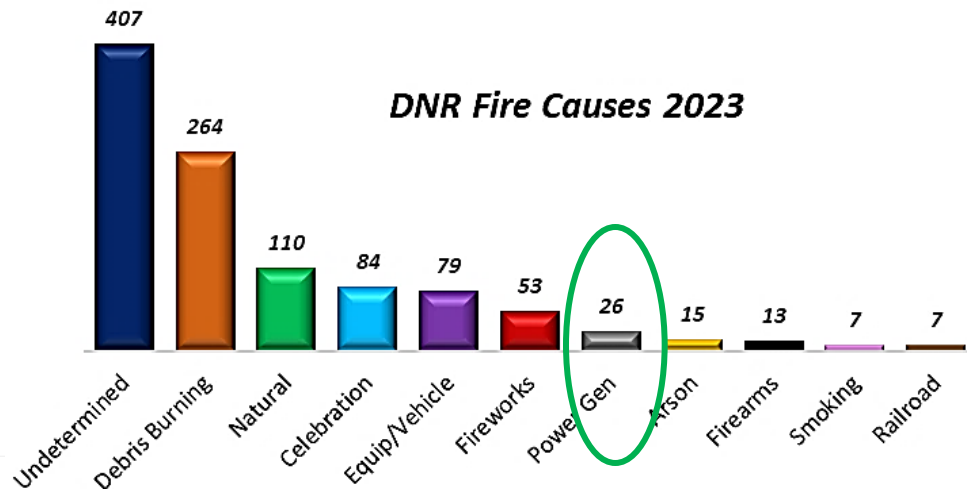
"40 air resources pre-positioned in every corner of the state has helped us leverage getting on initial attack, containing those fires so they didn't grow past 10 acres."

- Hillary Franz, Fall 2023

2023 Avista Wildfire Events

# Regional Fire and Operational Summary

Evaluating Risk During Fire Season

Snapshot: Fire Risk Scores for Four Feeders We Moved Into Elevated Protection Modes

✓ *Correlation between the Dashboard predictions and actual outcomes was strong*

✓ *Timing of moving to elevated protection was aligned with actual fire activity*

Elevated Protection Settings

Maximum Fire Risk Potential Identified

Number of Actual Acres Burned
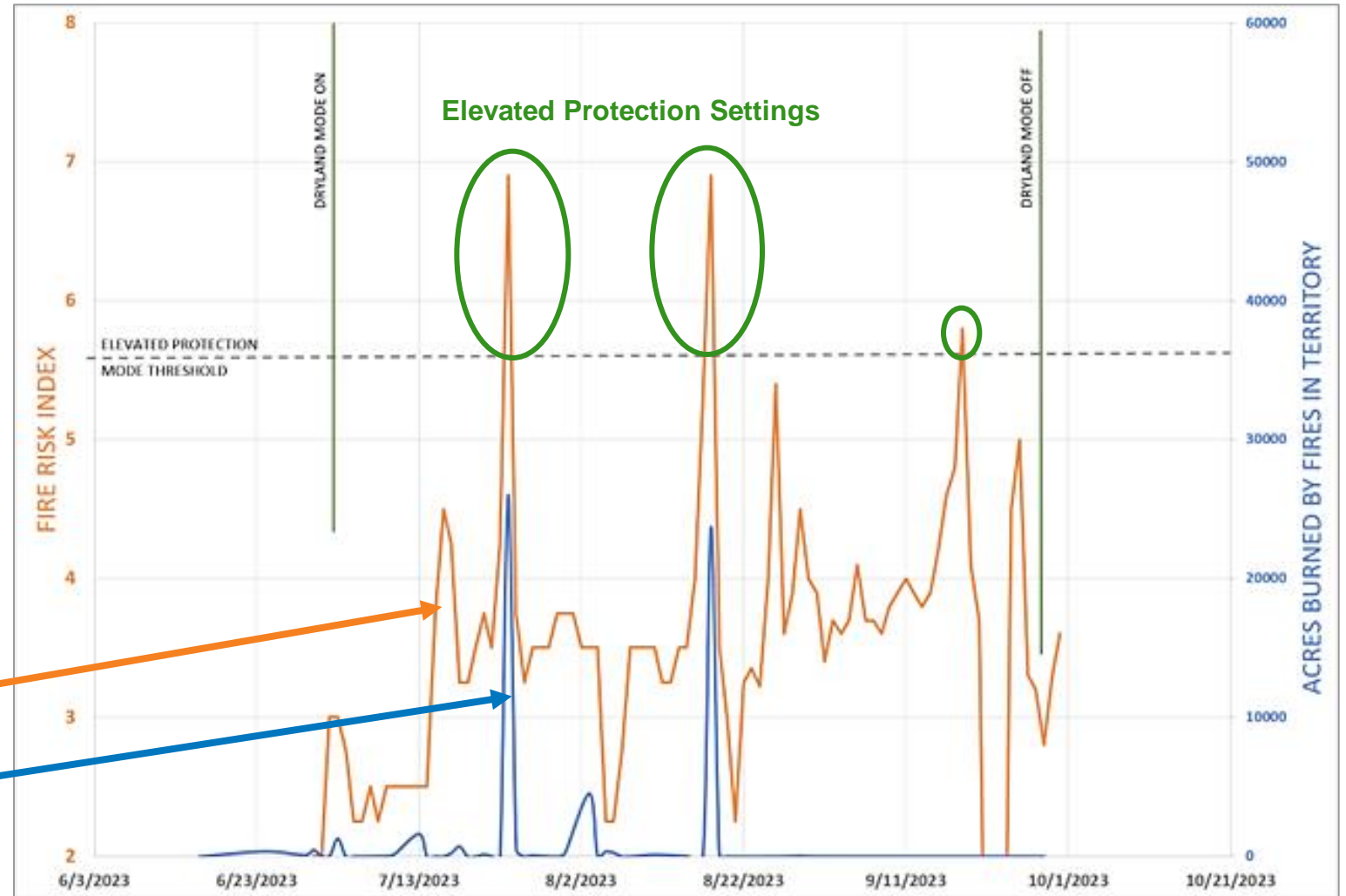
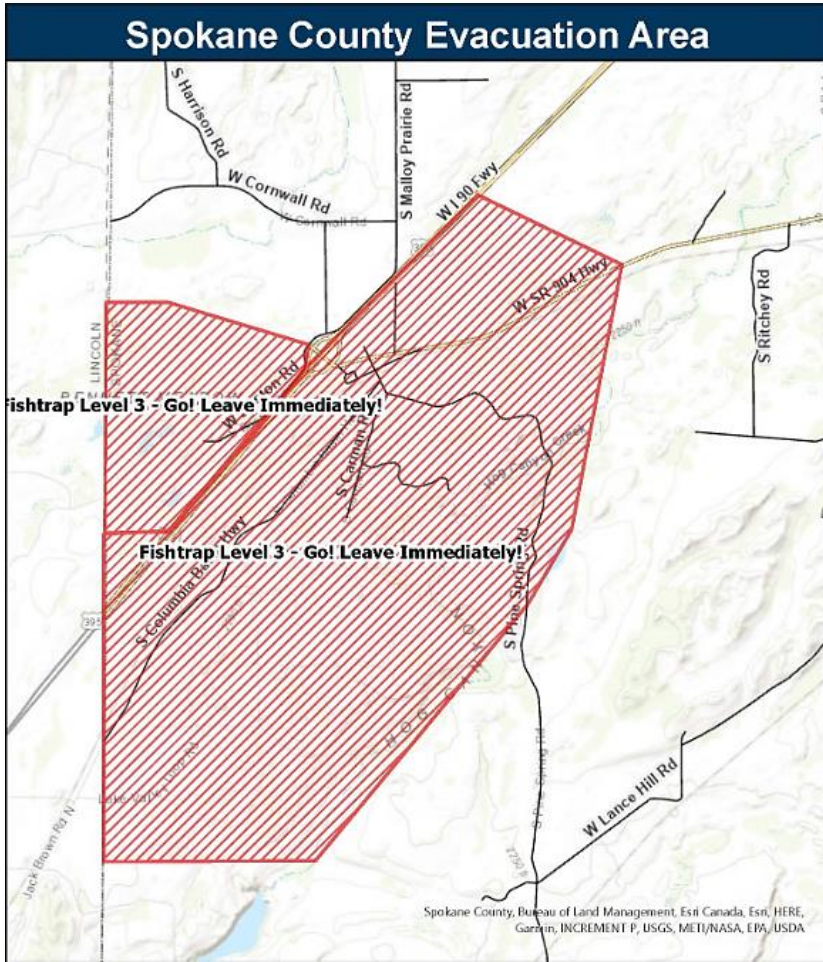# Noxon-Pine Creek 230 kV – July 8th

- About 1 acre
- Pole fire
- Burned trees and brush
- Fire resistant mesh protected pole, only repairs required

Ritzville, WA - July 17th

Spokane County Evacuation Area

- 250 Acres
- Believed to a combine-caused fire
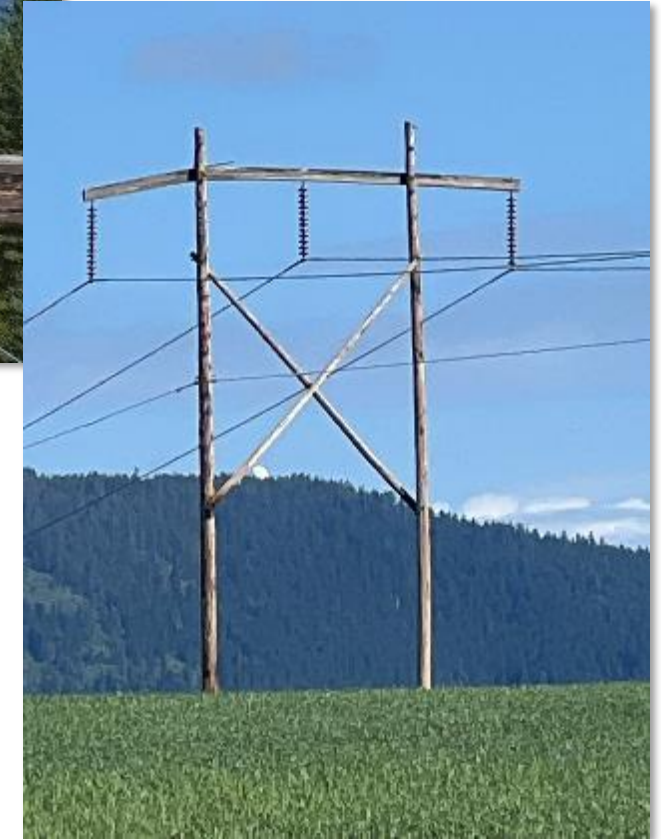- 2 abandoned buildings lost
- Destroyed 9 distribution poles

Scenes from the Ritzville fire

Benewah-Pine Creek 115 kV – July 29th

Plummer Substation

- Fire about 20 feet in diameter
- Right outside Plummer Substation
- Broken transmission crossarm
- No public structures damaged
- Burned brush
- Quick response by fire department

Examples of damaged crossarms

Shawnee-Sunset 115 kV – August 3rd

- About 1 acre in size
- Outside Spangle Substation
- Damaged 1 transmission structure
- No public structures damaged
- Burned brush

Damage on Shawnee-Sunset

Gray Fire – Medical Lake, WA - August 18th
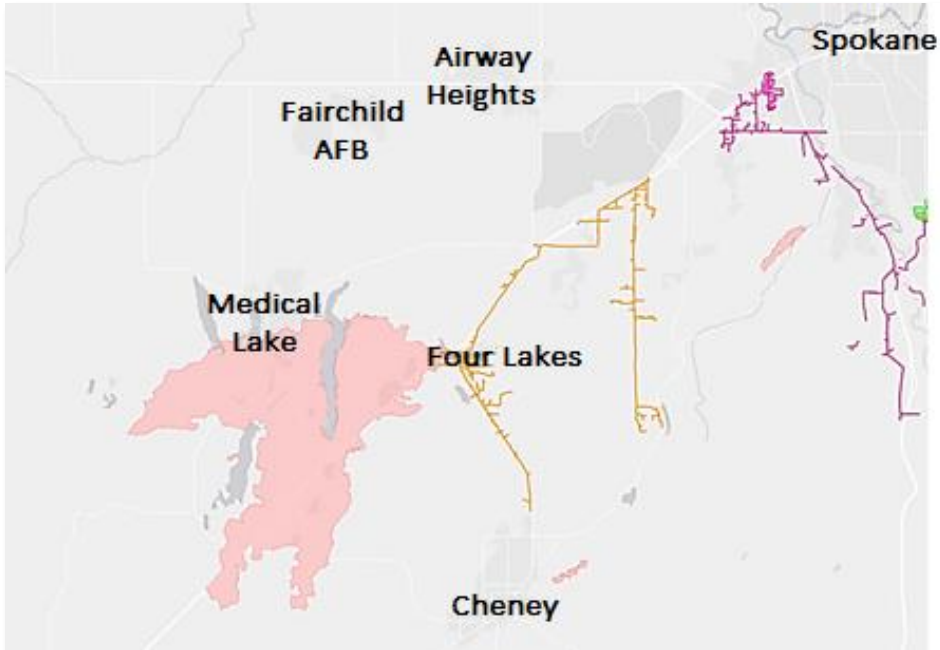
The restoration process involved 150 Avista employees, 13 crews, 50 Veg. Management Contractors. We lost 255 poles and 1,692 customers had outages.

- 10,085 Acres
- Cause under investigation
- 250+ homes lost
- 1 fatality
- 255 distribution poles lost

Scenes from the Gray fire

Hospital Fire - Orofino, ID - August 29th

- 53 Acres
- Unknown Cause
- Destroyed 6 homes & multiple outbuildings
- Destroyed 1 transmission H-Frame
- Damaged Avista's Orofino Substation

Scenes from the Hospital fire

Communications

Community Outreach

- Washington DNR
- Nez Perce Tribe
- Spokane Tribe
- Colville Tribe
- Telephone Townhall Meetings
- Spokane County
- Stevens County
- Kootenai County
- Benewah County
- N. Idaho Fire Chiefs

- **90,422 Customers Reached**
- **16 Counties in Tier 2 and 3**
- **640 Public Safety Partners & Key Community Leaders**
- **Multi-Language Communications**

2023 Telephone Town Hall Meetings

Identify and notify individual customers on impacted feeders
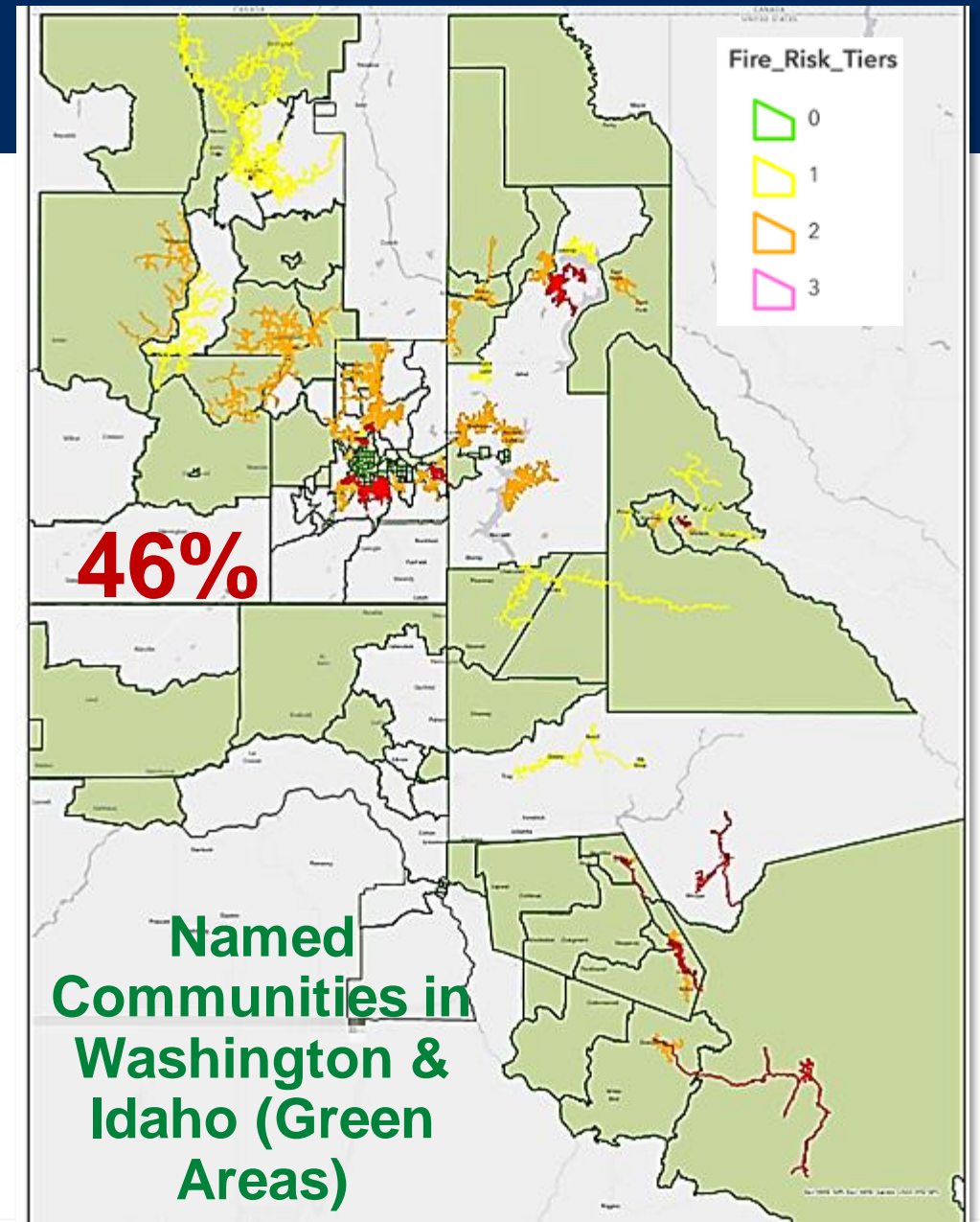
Identify critical infrastructure customers

Avista's Named Communities

- **46% of Avista's Washington Customers:**
  - *Highly Impacted Communities*
  - *Vulnerable Populations*

  - *Communication*
  - *Outreach*
  - *Support*

Fire_Risk_Tiers
- 0
- 1
- 2
- 3

46%

Named Communities in Washington & Idaho (Green Areas)

Reaching Our Most Vulnerable Customers

- **Identifying vulnerable customers**

- **Partnering with external agencies**

- **Special outreach to Tribes**

- **Pro-active outreach**

- **Employee Community Response Team**

- **Rapid-acquisition customer lists**

- **Non-English outreach materials**

- **Mapping vulnerable customer locations**

Equality   doesn't mean   Equity
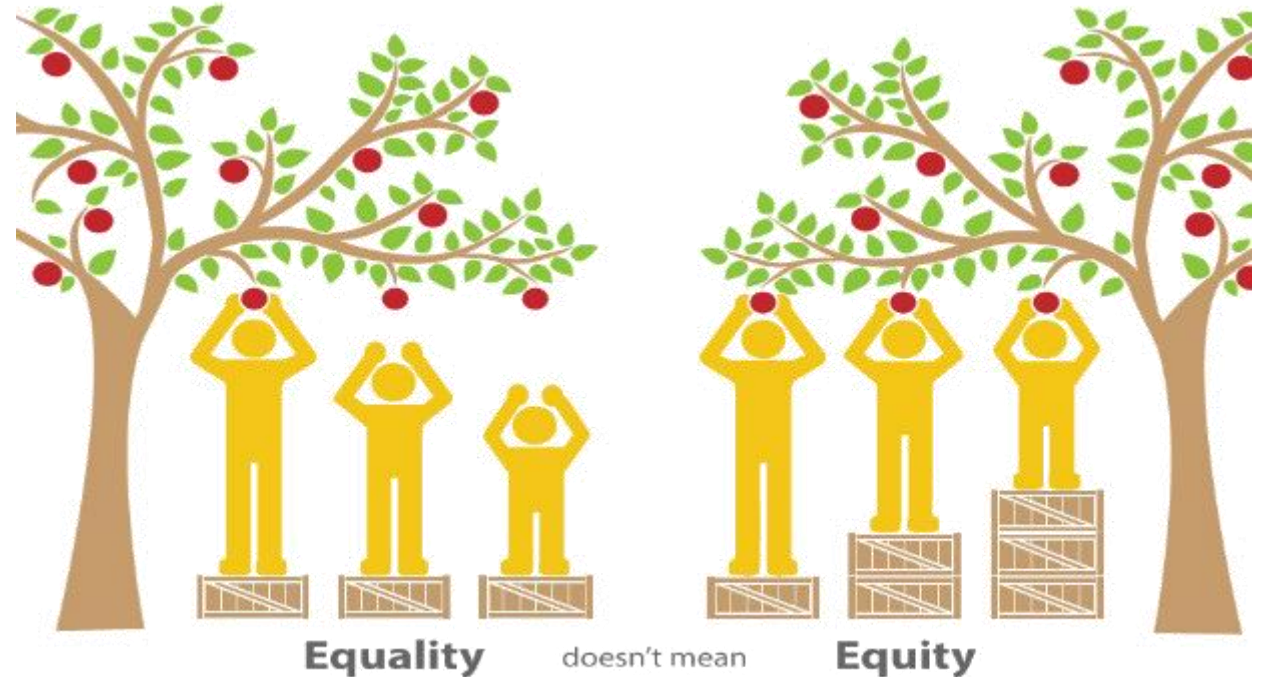
External Partner Outreach

- **Cross-training**

- **Local Emergency Management**

- **Partnering with first responders**
  - **Local**
  - **State**

- **Fire Weather Dashboard sharing**

- **Imbedding with fire critical incident response**

- **Fuel Reduction Partnerships Program**

- **Coordination with peer utilities**

Tabletop Exercise Wildfire Scenario

- **Included External Partners**
- **Valuable Lessons:**
  - *Learned each other's "language"*
  - *Strengthened relationships*
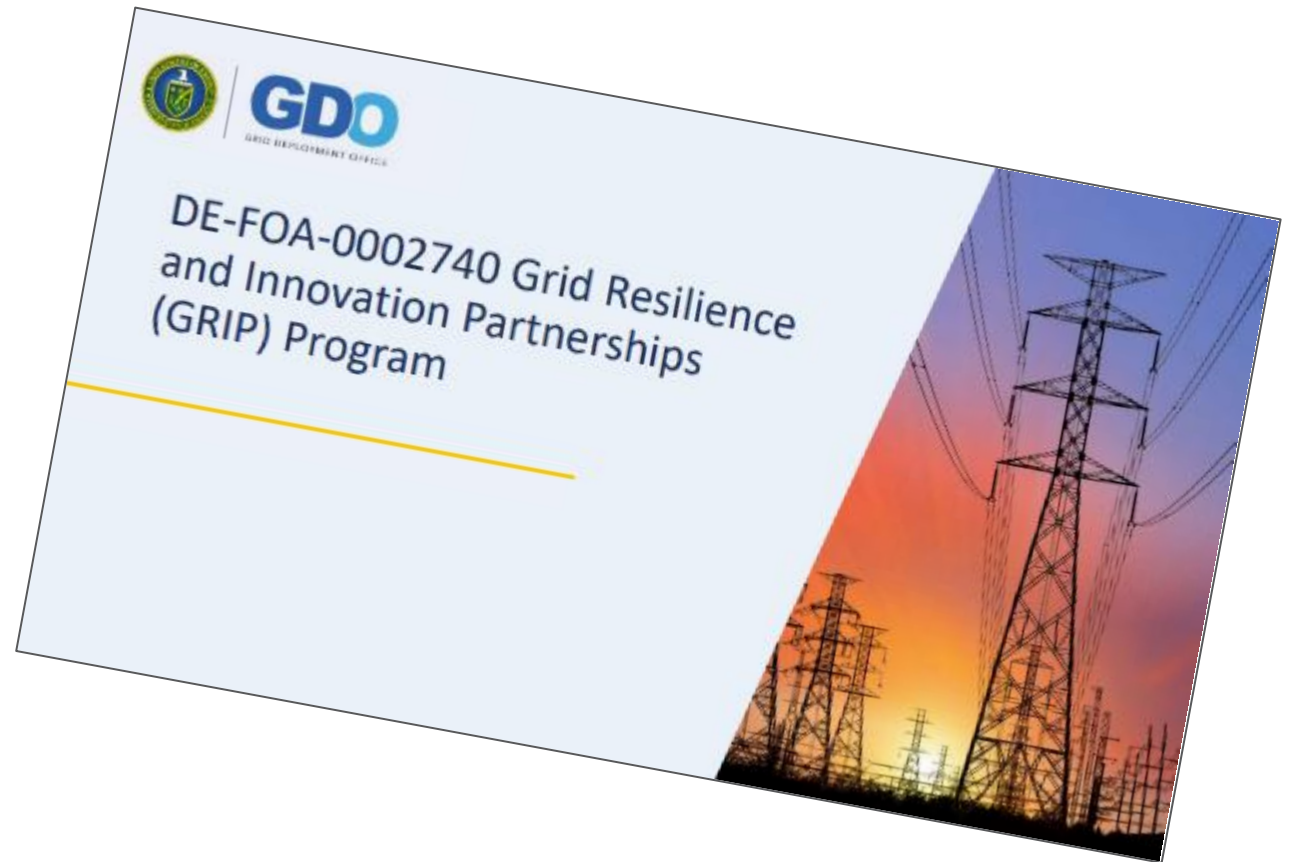 - *Value of embedding Avista with fire incident response*

Wildfire Related Grants

Grid Hardening

Applied for two grants:

- **$129 million: Convert 25% of planned overhead grid hardening to underground**

- **$70 million: Reinforce existing overhead lines**

DE-FOA-0002740 Grid Resilience and Innovation Partnerships (GRIP) Program

Wildfire Identification Cameras

- ## PanoAI Camera Installations
  - *Early Detection = Expedited Response*

| LEGACY APPROACH | Bystander sees fire and calls 911 | Initial resources are deployed to confirm incident & location | Confirmation and dissemination by radio | Full containment resources deployed + utilities notified |

| WITH PANO | Pano Stations **automatically detect smoke** | First responders & *utilities are notified* + receive live video through Pano 360 | Full containment resources deployed | & **Accelerate utility wildfire mitigation plans + activities** |

Wildfire Insurance

Insurance Update

Avista General Liability Premiums
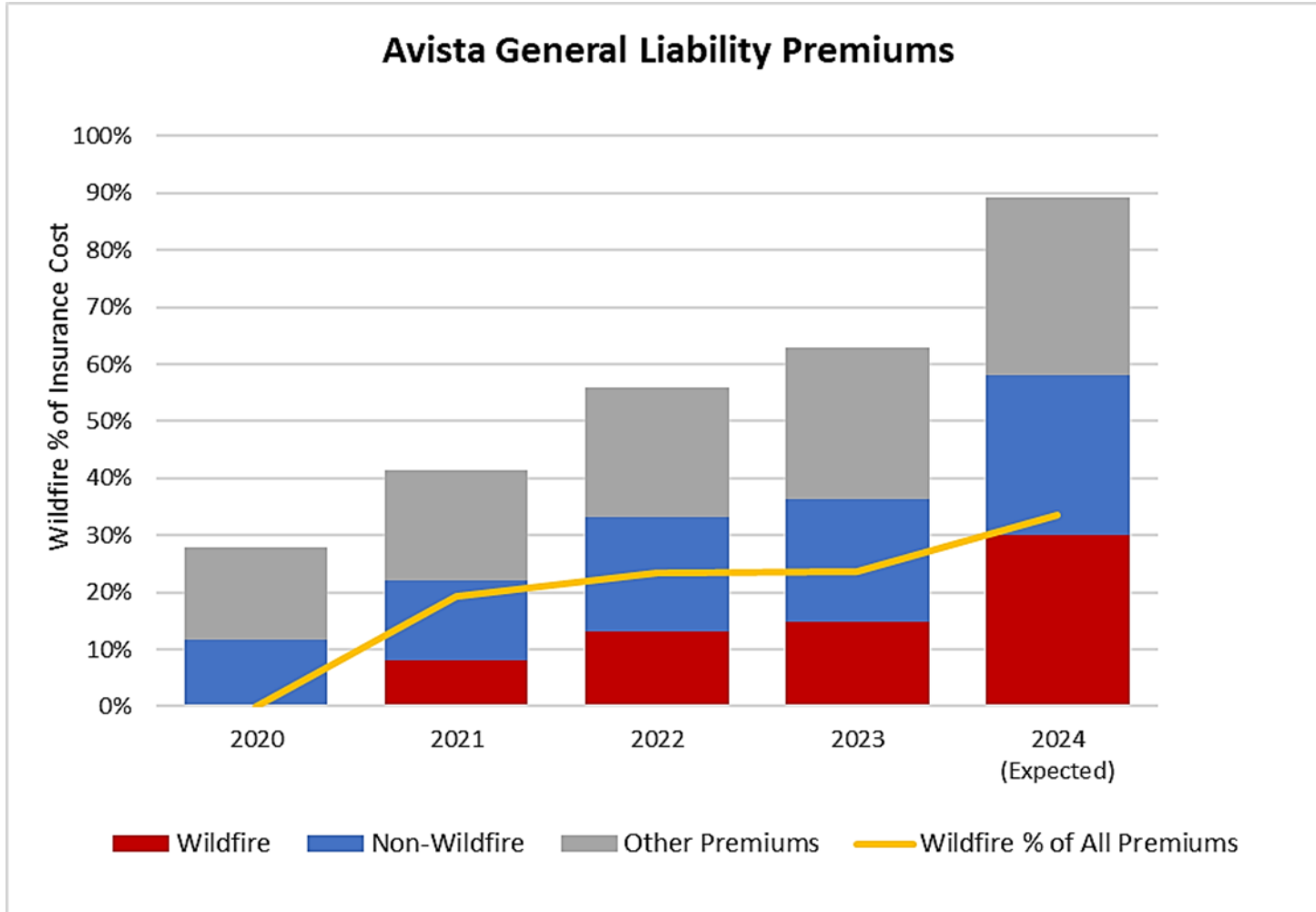
| Jurisdiction	Insurance Balancing Account Mechanism
Washington	Yes
Idaho	Yes

2023 Recap

Avista's Wildfire Resiliency Plan Status

2023 Accomplishments

- **Implemented Fire Safety Mode Successfully**

- **Expedited Response covers nearly 100% of our service territory**

- **Developed & Tested Formalized Wildfire EOP**

- **Enhanced & Improved Customer Outreach**

- **Updates to WUI Map**

- **Enhanced Fire Weather Dashboard**

- **Public Safety Power Shutoffs: Initiated Planning**
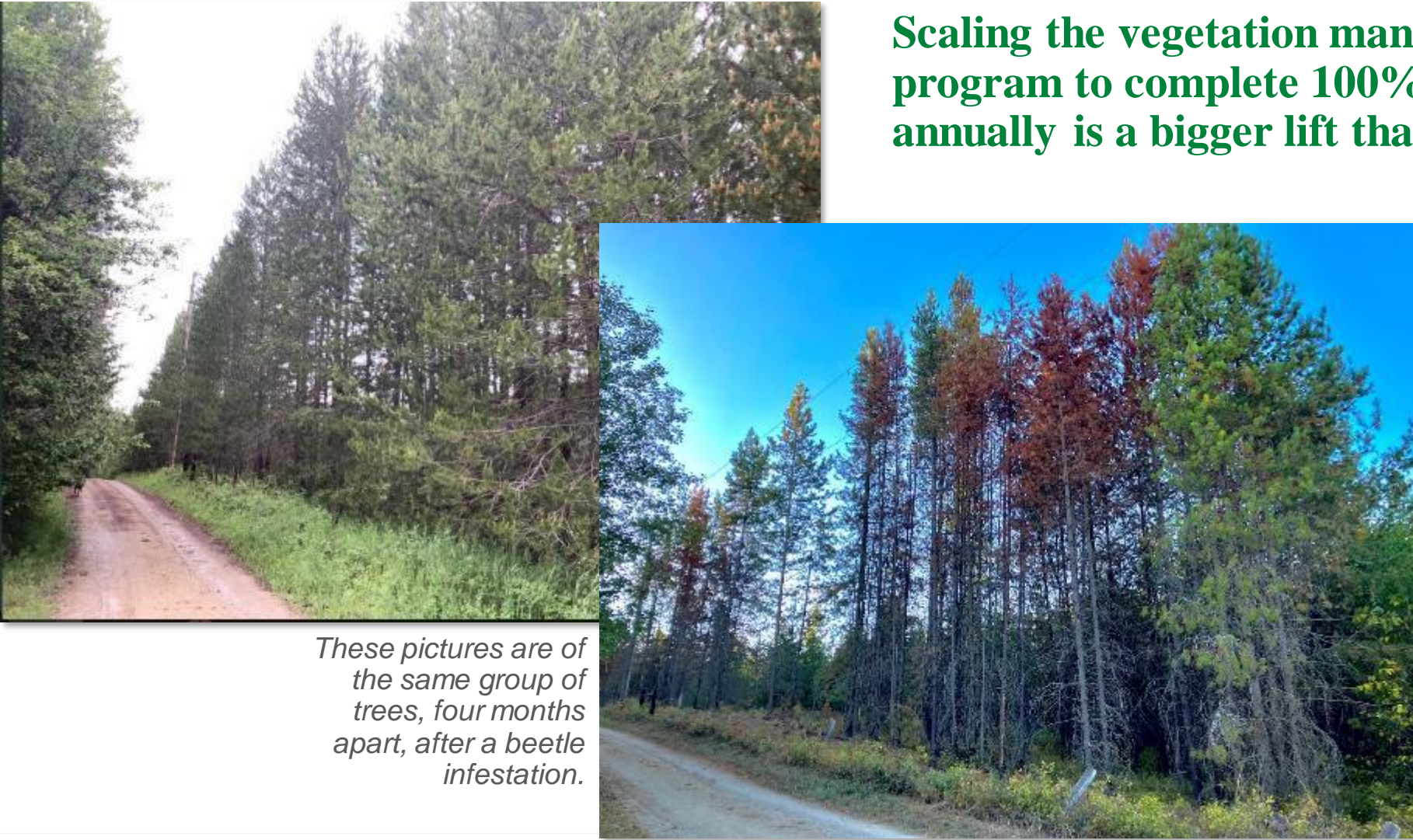
- **Safe Tree Program Expanded Systemwide**
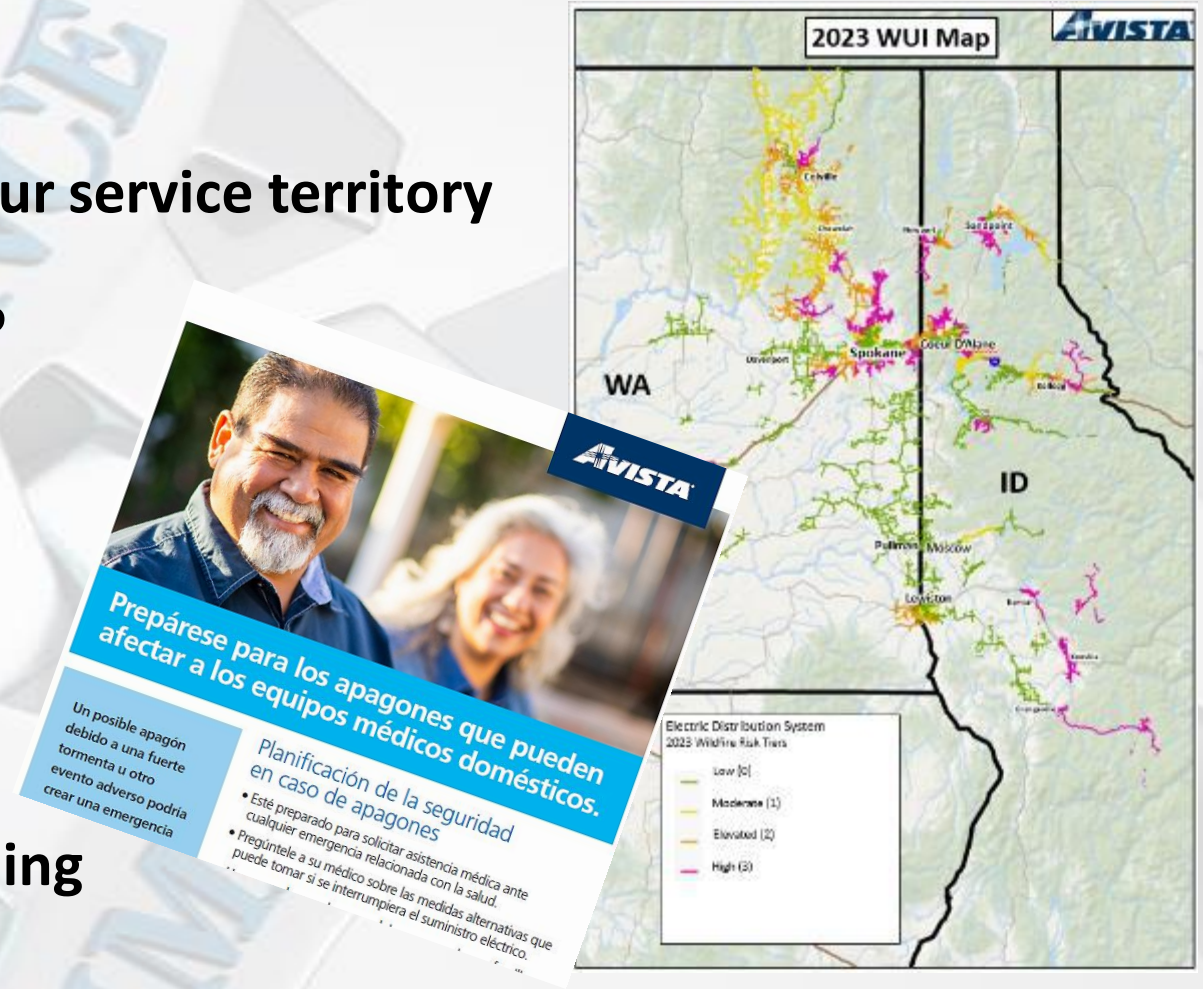
Plans for 2024

Vegetation Management Challenges

These pictures are of the same group of trees, four months apart, after a beetle infestation.

Scaling the vegetation management risk tree program to complete 100% risk inspection annually is a bigger lift than anticipated.

- **Competitive Labor Markets for Contractors**

- **Forest Health Issues**

- **Incorporating New Technologies**

- **Customer Access for Vegetation Work**

Public Safety Power Shutoffs

Utility	Enhanced Protection System?	Public Safety Power Shutoffs
Avista	Yes	Developing
APS - Arizona	Yes	Yes
Idaho Power	Yes	Yes
Northwestern	Yes	Developing
NV Energy	Yes	Yes
PG&E	Yes	Yes
PGE - Portland	Yes	Yes
PacifiCorp	Yes	Yes
Puget (PSE)	Yes	Developing

California PSPS Events

Hire a Community Safety Manager

Work With Internal/ External Partners

Develop a Detailed Implementation Plan

Avista Public Safety Power Shutoffs - Next Steps

Enhanced Grid Hardening

Base Grid Hardening → **Undergrounding Covered Conductor**

Plan	Feeder Miles
Current – Tier 2/3	2,747
3 Mile Radius	1,700
5 Mile Radius	3,200

Community Protected

3 Miles Out

Moat

5 Miles Out

Moat

Operations & Emergency Response
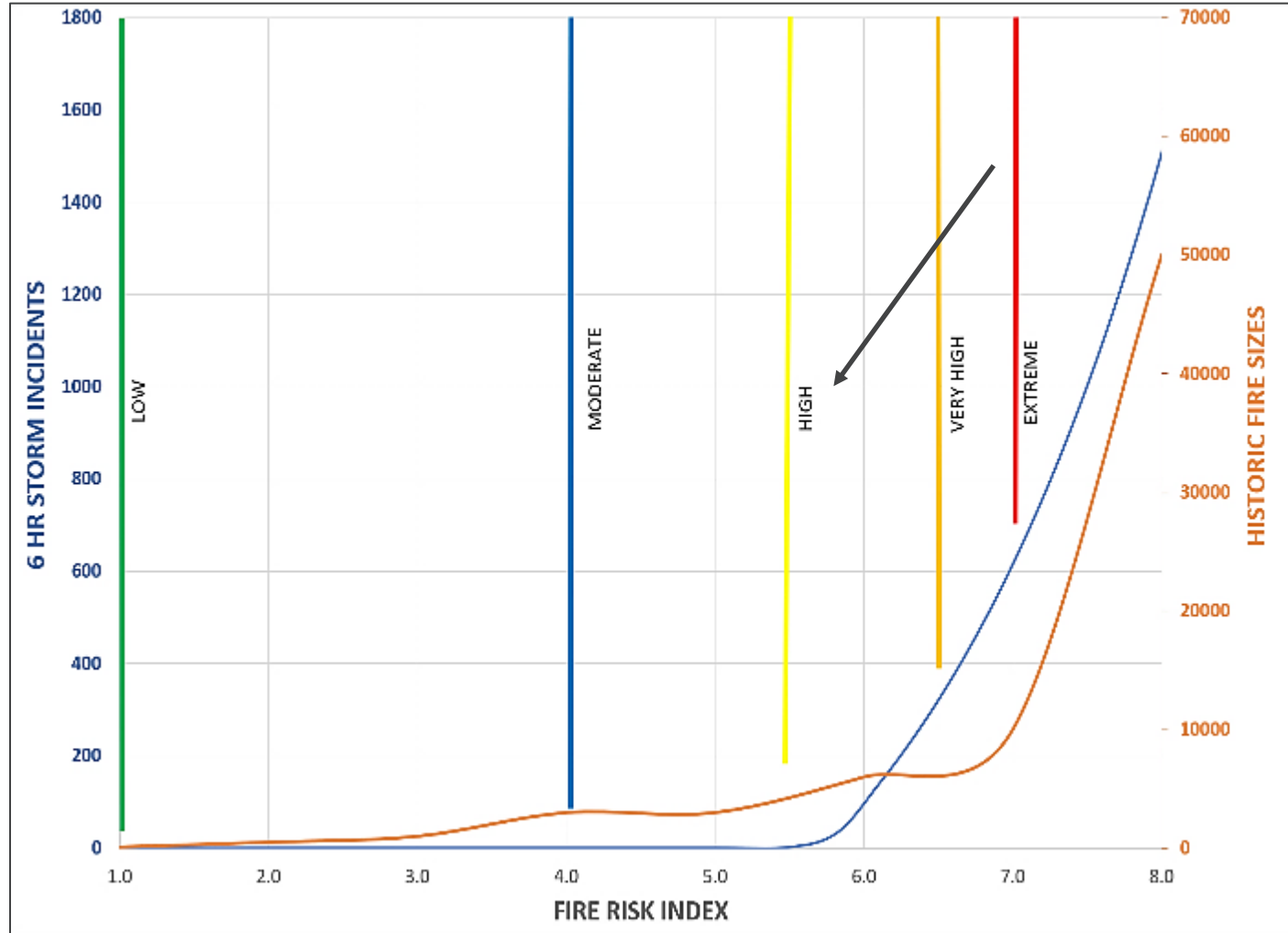
- **All fire safety mode capable feeders "opted-in" to fire safety mode by default**

- **Reduce trigger point for initiating enhanced protection**

- **Non-fire safety mode feeders to be operated at "extreme" protection levels when wildfire conditions exist**

- **Public Safety Power Shutoffs as a tool**

Questions