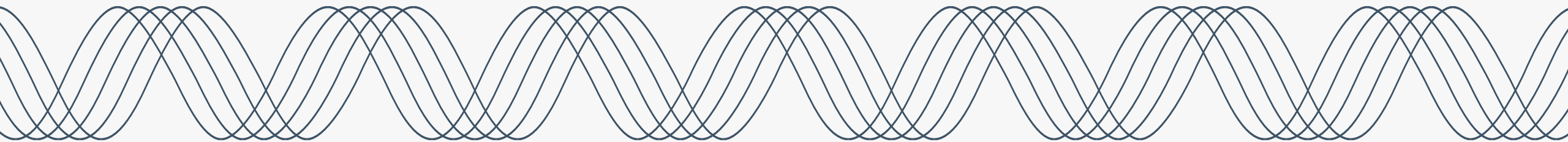# OPUC WMP Workshop
Portland General Electric

February 6, 2025

Riley Peck, Kellie Cloud, and Brooke Brownlee

PGE's Wildfire Mitigation Plan Presentation

PGE's 2025 WMP Update overview
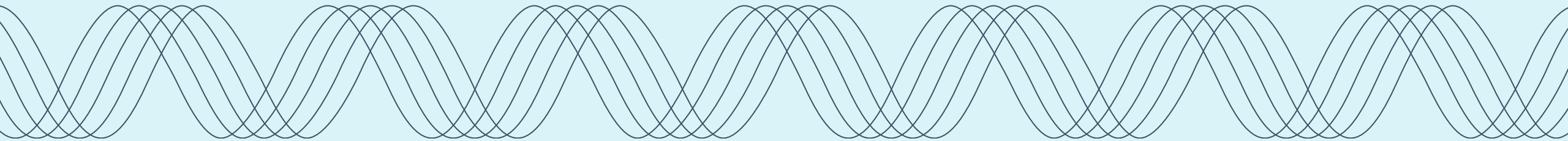
Risk Model Updates
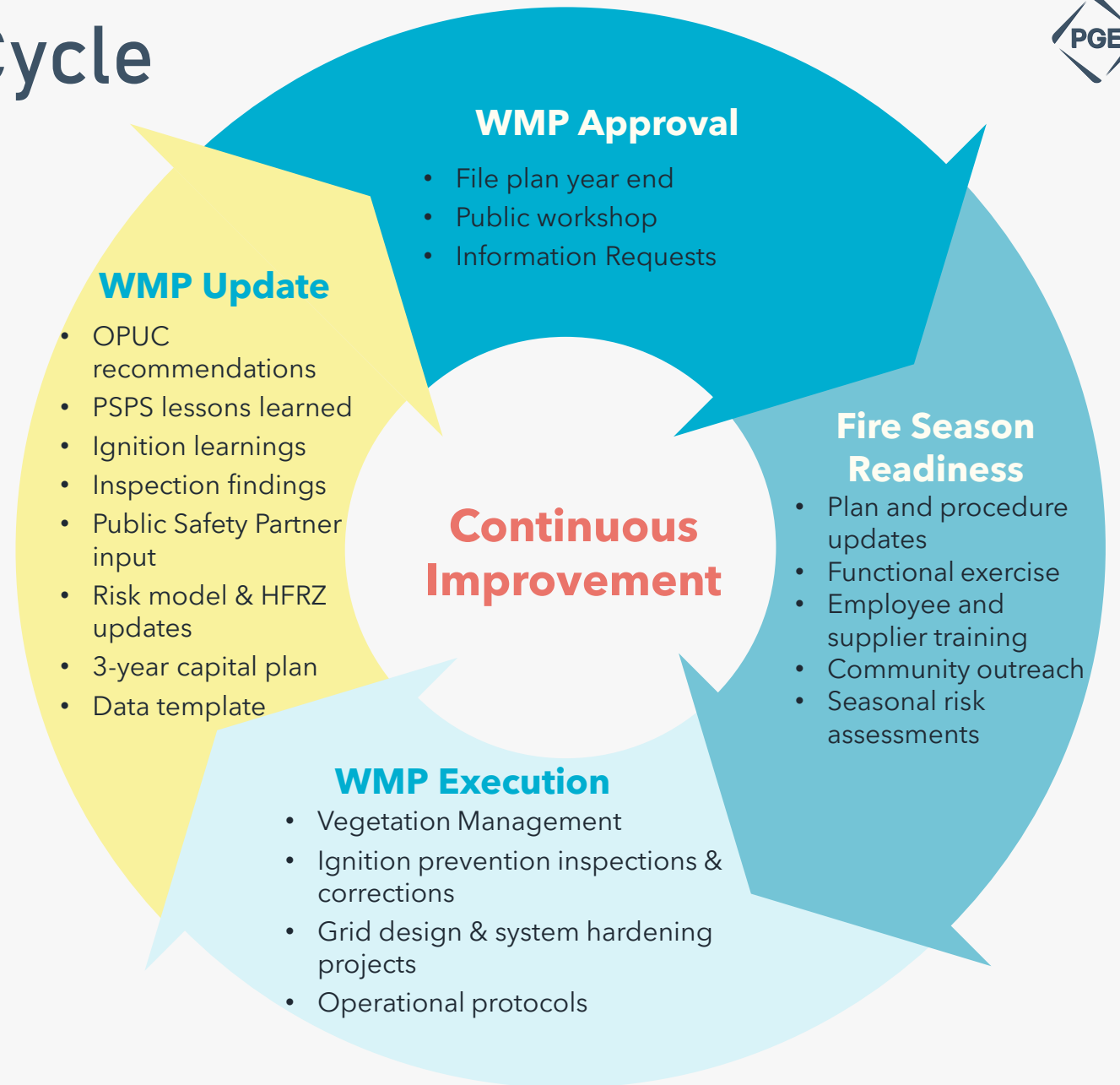
Mitigation Updates

Engagement Update

2025 WMP Update Overview
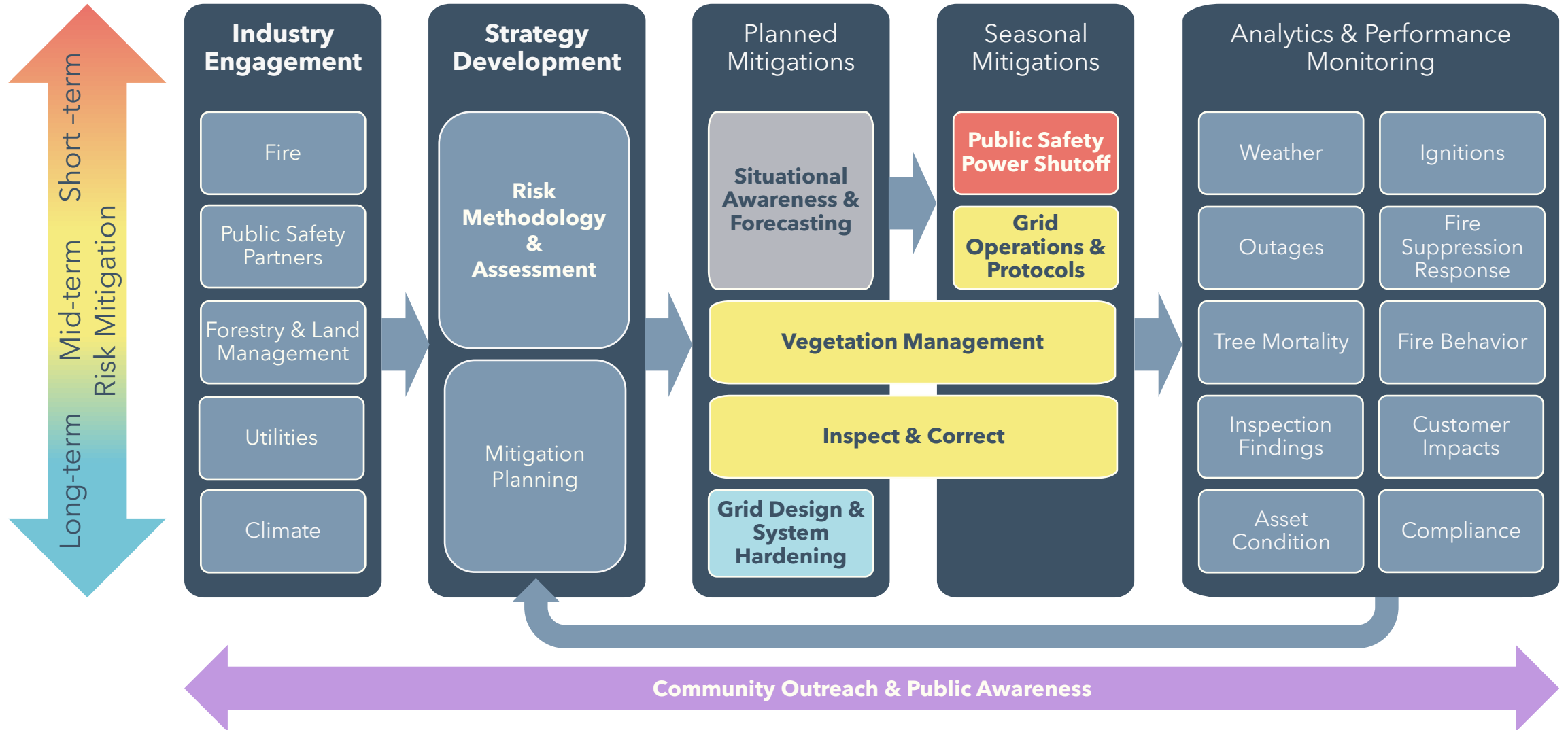
Wildfire Mitigation Plan Cycle

Key Updates in 2025:

- Incorporated 100% of PGE and Joint Utility recommendations scheduled for 2025 WMP Update, including initial data template submittal

- Risk model updates to reflect climate change impacts, observed fire behavior, and increased tree mortality rates

- Improved modeling of vegetation and weather impacts through adoption of Neural Network Learning algorithm

- Expanded Risk Spend Efficiency (RSE) methodology to vegetation management and ignition prevention inspections

- New Zone 12 in Chehalem Mountains area

- Optimized vegetation management program with annual patrols focused on active growth period in addition to the full-scope and inter-cycle patrols

WMP Approval
- File plan year end
- Public workshop
- Information Requests

WMP Update
- OPUC recommendations
- PSPS lessons learned
- Ignition learnings
- Inspection findings
- Public Safety Partner input
- Risk model & HFRZ updates
- 3-year capital plan
- Data template

Continuous Improvement

Fire Season Readiness
- Plan and procedure updates
- Functional exercise
- Employee and supplier training
- Community outreach
- Seasonal risk assessments

WMP Execution
- Vegetation Management
- Ignition prevention inspections & corrections
- Grid design & system hardening projects
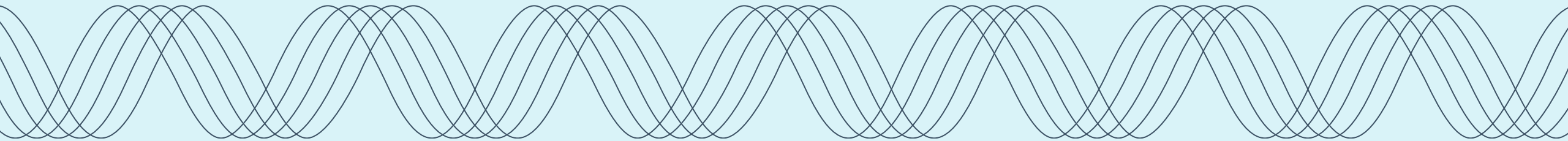- Operational protocols

PGE's Wildfire Mitigation Process

Analysis and modeling to identify both planned and seasonal mitigations, continuous engagement and performance monitoring
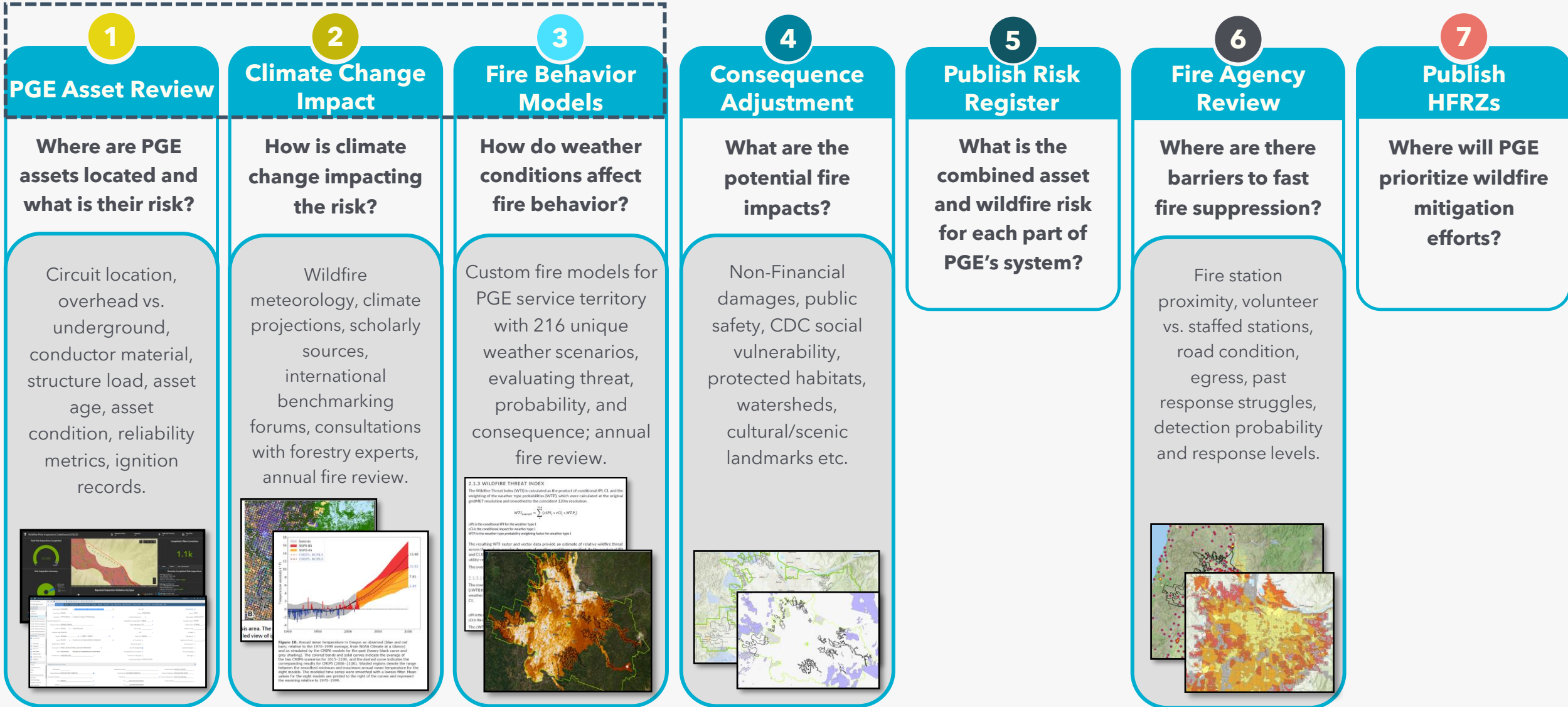
PGE

Short -term
Mid-term
Long-term

Risk Mitigation

Industry Engagement	Strategy Development	Planned Mitigations	Seasonal Mitigations	Analytics & Performance Monitoring	
Fire	Risk Methodology & Assessment	Situational Awareness & Forecasting	Public Safety Power Shutoff	Weather	Ignitions
Public Safety Partners			Grid Operations & Protocols	Outages	Fire Suppression Response
Forestry & Land Management		Vegetation Management		Tree Mortality	Fire Behavior
Utilities	Mitigation Planning	Inspect & Correct		Inspection Findings	Customer Impacts
Climate		Grid Design & System Hardening		Asset Condition	Compliance

Community Outreach & Public Awareness

Risk Model Updates

PGE's High Fire Risk Zone Annual Updates

Layers of data, models, and collaboration to identify areas subject to a heightened risk of wildfire related to utility assets

1 — PGE Asset Review

Where are PGE assets located and what is their risk?

Circuit location, overhead vs. underground, conductor material, structure load, asset age, asset condition, reliability metrics, ignition records.

2 — Climate Change Impact

How is climate change impacting the risk?

Wildfire meteorology, climate projections, scholarly sources, international benchmarking forums, consultations with forestry experts, annual fire review.

3 — Fire Behavior Models

How do weather conditions affect fire behavior?

Custom fire models for PGE service territory with 216 unique weather scenarios, evaluating threat, probability, and consequence; annual fire review.

4 — Consequence Adjustment

What are the potential fire impacts?

Non-Financial damages, public safety, CDC social vulnerability, protected habitats, watersheds, cultural/scenic landmarks etc.

5 — Publish Risk Register

What is the combined asset and wildfire risk for each part of PGE's system?

6 — Fire Agency Review

Where are there barriers to fast fire suppression?

Fire station proximity, volunteer vs. staffed stations, road condition, egress, past response struggles, detection probability and response levels.

7 — Publish HFRZs

Where will PGE prioritize wildfire mitigation efforts?

Wildfire Risk Updates

2025 risk models project approximately 55% increase in wildfire risk compared to 2024 risk models, predominately due to climate change

PGE Wildfire Risk

Ignition Likelihood

Vulnerability (Damage)

Fire Growth Potential

1   **2**   **3**

1%   X   **45%**   X   **7%**   ≈ **55%**

PGE Asset Review

Climate Change Impact
(eg: drought, tree mortality, extreme weather)
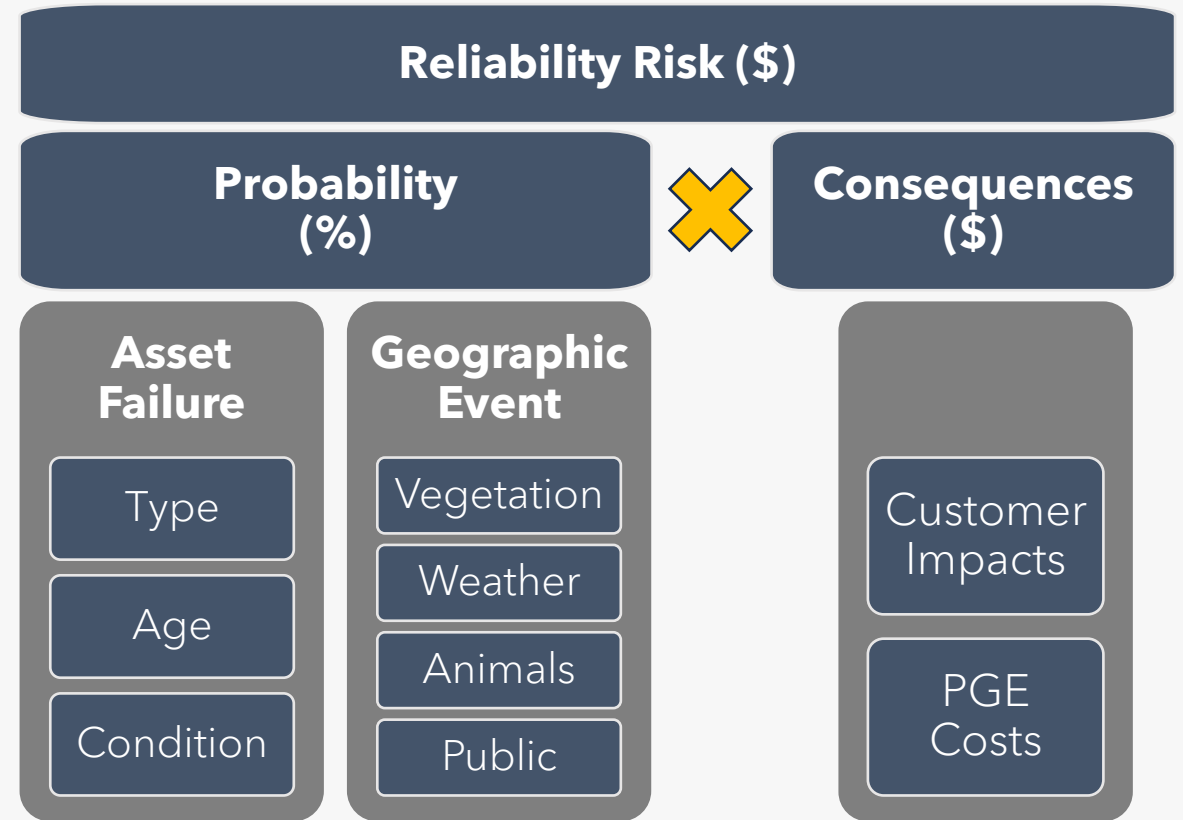
Fire Behavior Models
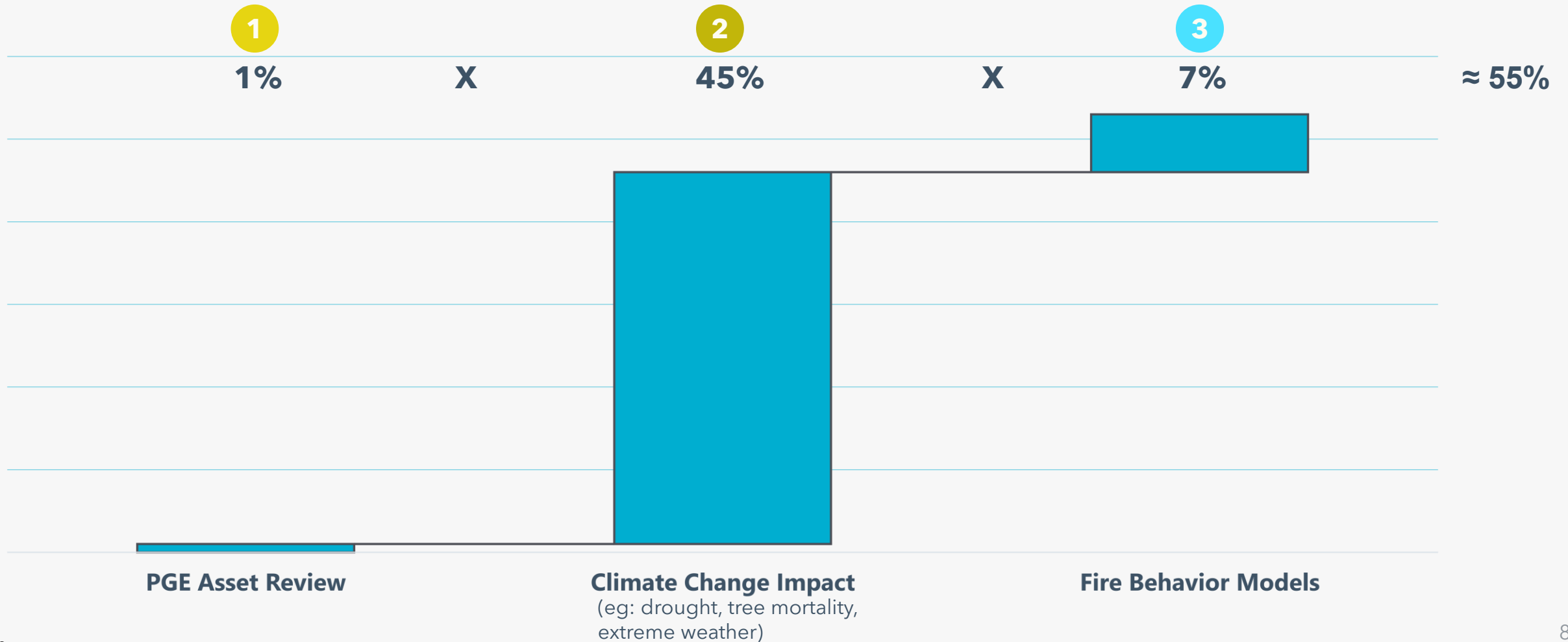
Asset Review Updates

2025 modeling confirmed the need for **increased investment in System Hardening** and the **effectiveness of PGE's Vegetation Management**.

Projected **1% increase in wildfire risk** and compared to 2024 modeling:

- Slight increase in asset failure probability due to higher asset age, partially offset by system investments
- Decrease in geographic event probability due to updated modeling methodology

Reliability Risk ($)

Probability (%) ✖ **Consequences ($)**

Asset Failure	Geographic Event	
Type	Vegetation	Customer Impacts
Age	Weather	
Condition	Animals	PGE Costs
	Public	

*When predicting PGE geographic events, the non-linear Neural Network Learning algorithm is **16% more accurate** compared to linear regression algorithms due to the ability to capture complex, non-linear relationships between factors:*

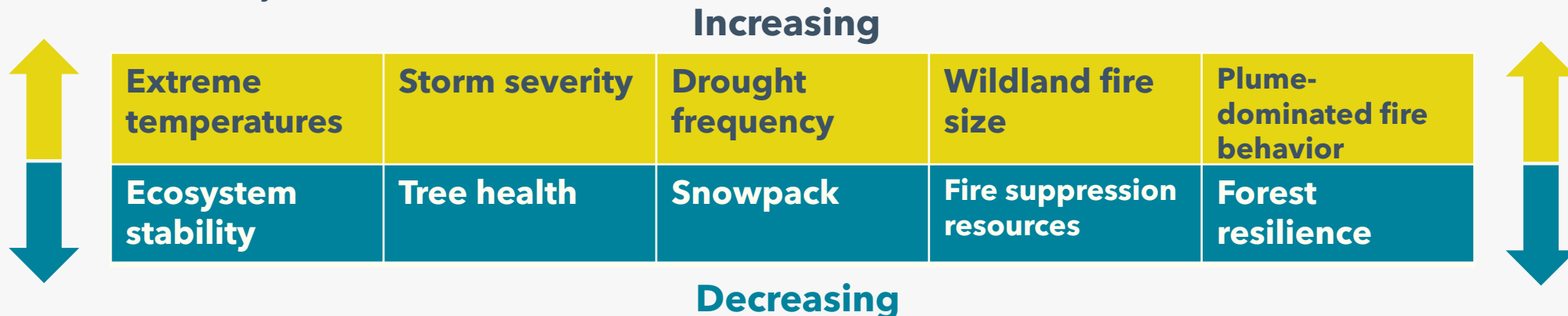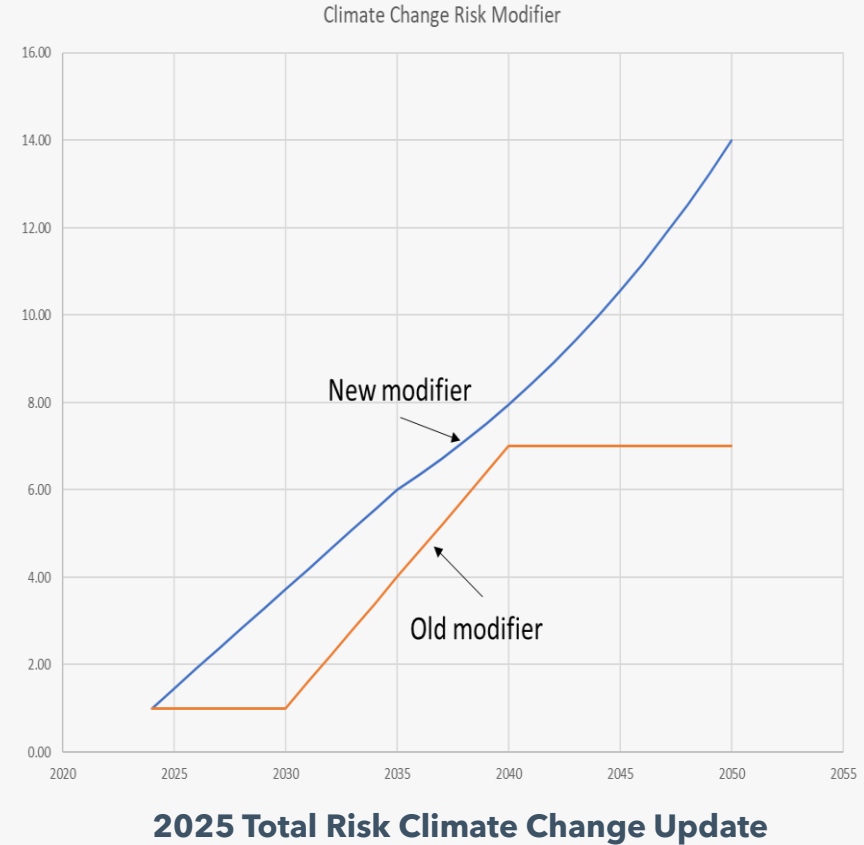Different types of vegetation   Conductor length   Weather variations

Climate Change Impacts

Projected **45% increase in wildfire risk** compared to 2024 modeling:

- **Driven by expert climate change projections**
  - Oregon Climate Change Research Institute
  - Oregon State University
  - Oregon Department of Forestry
  - NASA
  - VibrantPlanet (Pyrologix)
  - International Wildfire Risk Mitigation Consortium

- Risk impacts reflect increased **burn probabilities, tree mortality, and consequences** of a wildfire

- Without making the investments outlined in PGE's plan, projected wildfire risk on PGE's system could increase tenfold by 2050

Climate Change Risk Modifier

New modifier

Old modifier

2025 Total Risk Climate Change Update

Increasing

Extreme temperatures	Storm severity	Drought frequency	Wildland fire size	Plume-dominated fire behavior
Ecosystem stability	Tree health	Snowpack	Fire suppression resources	Forest resilience

Decreasing

Fire Behavior Model Updates

Fire	Ignition Date	Distance to Nearest PGE HFRZ	Fire Size (acres) 2024	
			Model	Actual
Lee Falls	8/8/2024	Within HFRZ 9	14	280
Sandstone	8/5/2024	12 miles from HFRZ 4	Outside	702
Elk Lane	8/4/2024	52 miles from HFRZ 1	70	5,240
SW Laurel Road	8/4/2024	8 miles from HFRZ 12	5	80

Model updated to reflect **observed fire behavior**:

- 2024 fire season had the highest land area burned on record
- Lee Falls Fire analysis resulted in Wildfire Threat Index (WTI) increasing by a factor of 7.82
- Laurel Fire involved crowning, whirls, and uncured grass burning
- Validated model adjustments with third-parties

Projected **7% increase in wildfire risk** compared to 2024 modeling:
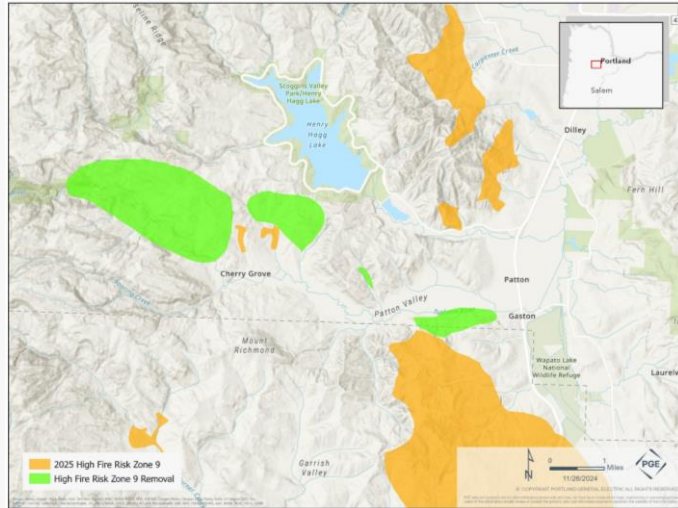
- Updated **fire weather scenarios** reflect high risk due to east winds and winds across ridgelines
- Increased frequency of **hot weather** in Portland and Salem compared to historical averages
    - 100% increase in days above 90°F
    - 200-300% increase in days above 100°F
- Successive periods of **drought** result in stressed vegetation and increased burn probability

Northern Cascades, OR (3504) Climate Division Percent Area in U.S. Drought Monitor Categories

D0 (Abnormally Dry) D2 (Severe Drought) D4 (Exceptional Drought)
D1 (Moderate Drought) D3 (Extreme Drought)

From the U.S. Drought Monitor website, https://droughtmonitor.unl.edu/DmData/TimeSeries.aspx, 11-5-2024

PGE's High Fire Risk Zones

HFRZ 9 Reduction Central West Hills
Underground conversion of 8.7 line-miles

Legend (inset map):
- 2025 High Fire Risk Zone 9
- High Fire Risk Zone 9 Removal
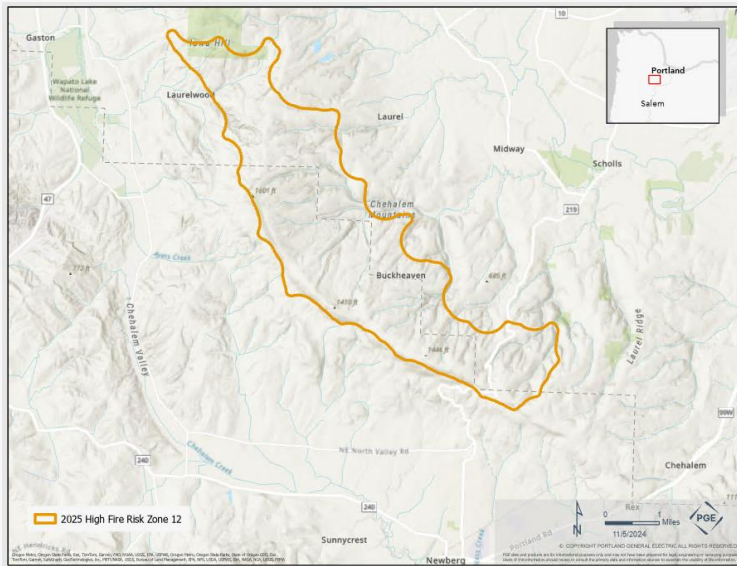
New HFRZ 12 Chehalem Mountains
Risk due to long detection and response times

Legend (inset map):
- 2025 High Fire Risk Zone 12

Legend (main map):
- 2025 High Fire Risk Zone - Net New
- 2025 High Fire Risk Zone
- High Fire Risk Zone 9 Removal
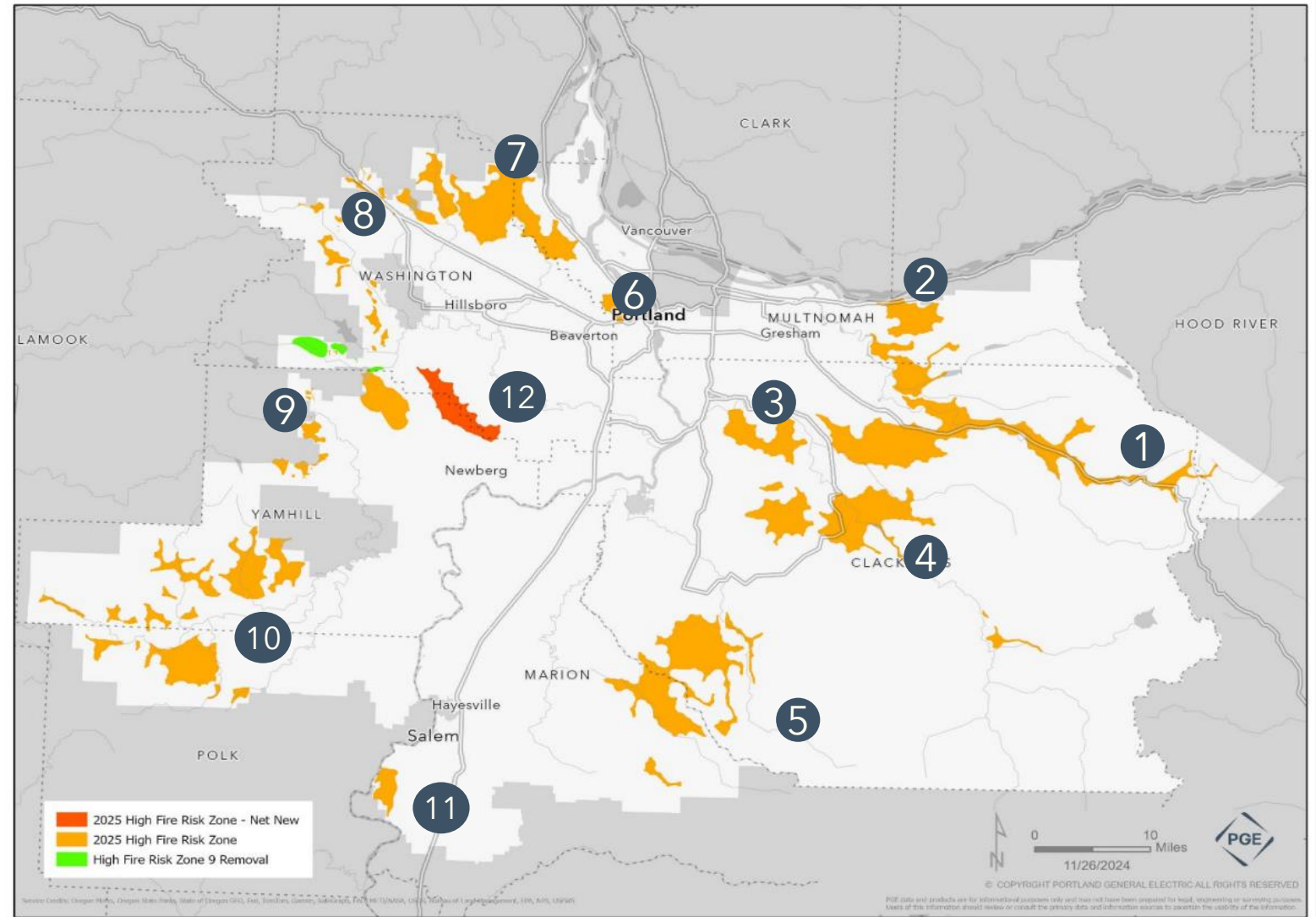
High Fire Risk Zones
2025 additions in Red (36 line-miles), reductions in Green (8.7 line-miles)

12

Risk Methodology and Assessment (RMA)

Risk modeling program, analysis, and mitigation planning

RMA Initiative	2024 Actual	2025 Plan
Thread Imagery Platform	Data collection & Platform Testing	Evaluate results
Remote Sensing	N/A	HFRZ Data Capture
ICE Calculator 2.0	N/A	Survey PGE customers
Capital Investment	**$0k**	**$1,050k**
O&M Investment	**$726k**	**$5,490k**


New Initiatives:

Thread Imagery Platform (Pilot)
- **Data** collection using drones to inspect approximately 500 structures in HFRZ 1.
- Evaluate enhanced data management, reporting, and visualization to inform mitigation planning.

Remote Sensing
- Refresh Light Detection and Ranging (LiDAR) **data** capture within HFRZs to inform risk modeling and mitigation planning.
- Continuous improvement of Risk Spend Efficiency (RSE) calculations
- Inform 2026 – 2028 Multi-year WMP mitigation prioritization

ICE Calculator 2.0
- Participation in the National Power Interruption Cost Survey to update Value of Service (VOS) assumptions with PGE customer survey results.
- Improve accuracy of **customer outage impacts** used in risk modeling and evaluation of project benefits.
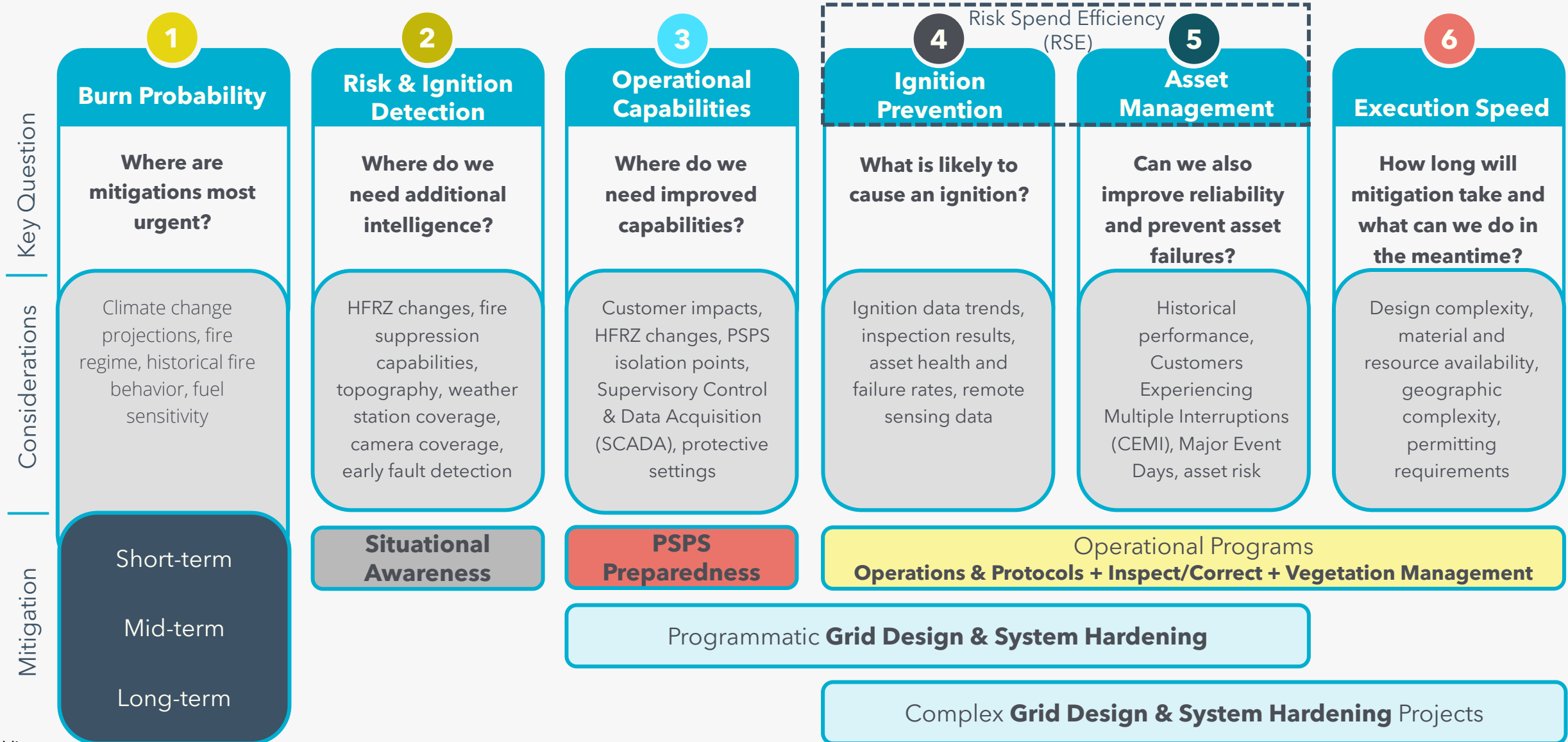- Inform 2027 WMP Update risk modeling and mitigation prioritization.
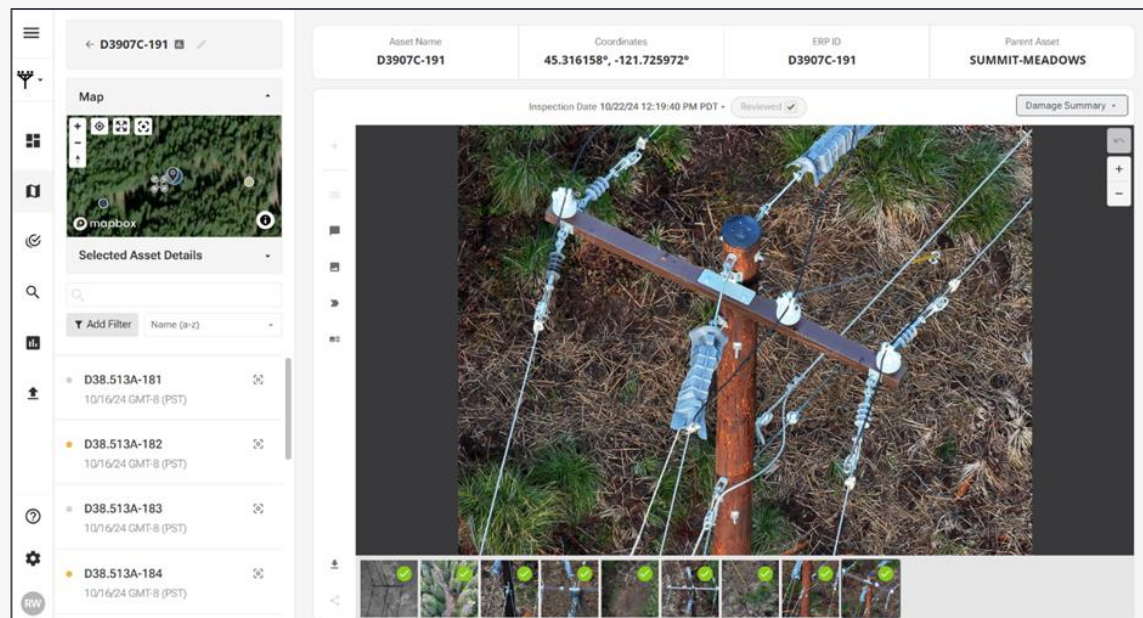
Mitigation Updates
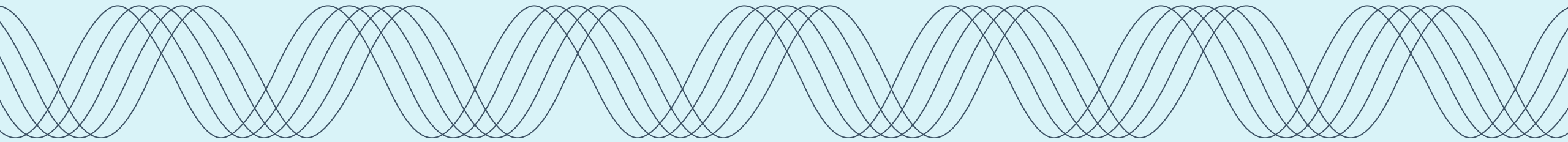
PGE's Wildfire Mitigation Strategy

Addressing immediate, short-term, and long-term risk through diverse programs and investments

PGE

Risk Spend Efficiency (RSE)

	1 Burn Probability	**2** Risk & Ignition Detection	**3** Operational Capabilities	**4** Ignition Prevention	**5** Asset Management	**6** Execution Speed
Key Question	Where are mitigations most urgent?	Where do we need additional intelligence?	Where do we need improved capabilities?	What is likely to cause an ignition?	Can we also improve reliability and prevent asset failures?	How long will mitigation take and what can we do in the meantime?
Considerations	Climate change projections, fire regime, historical fire behavior, fuel sensitivity	HFRZ changes, fire suppression capabilities, topography, weather station coverage, camera coverage, early fault detection	Customer impacts, HFRZ changes, PSPS isolation points, Supervisory Control & Data Acquisition (SCADA), protective settings	Ignition data trends, inspection results, asset health and failure rates, remote sensing data	Historical performance, Customers Experiencing Multiple Interruptions (CEMI), Major Event Days, asset risk	Design complexity, material and resource availability, geographic complexity, permitting requirements

Mitigation

Short-term	Situational Awareness	PSPS Preparedness	Operational Programs — Operations & Protocols + Inspect/Correct + Vegetation Management
Mid-term			Programmatic **Grid Design & System Hardening**
Long-term			Complex **Grid Design & System Hardening** Projects

Public

15

Complex Grid Design & System Hardening (GDSH)

Reducing ignition likelihood and consequences

GDSH Initiative	2024 Actual	2025 Plan	2025 RSE
Underground	8.7 miles	26 miles	8.7 – 184.8
Reconductor	0	12 miles	2.5 - 9.8
Covered Conductor	15 miles	15 miles	6.9 - 15.9
Capital Investment	**$21,009k**	**$55,333k**	
O&M Investment	**$60k**	**$200k**	

Initiative Updates:

- Construction of underground conversion projects previously in planning and design

- Additional underground conversion projects initiated in Mt Hood and Clackamas River areas to address increased risk associated with tree mortality

- Increased focus on long term planning and reduction of AWRR vegetation management expenses

Leland-Carus Covered Conductor

Scoggins-Cherry Grove Overhead to Underground Conversion

AWRR Forecast ($M) with Capital Buy-Down
- 2024 Forecast
- 2025 Forecast
- Cost Escalation w/o System Hardening
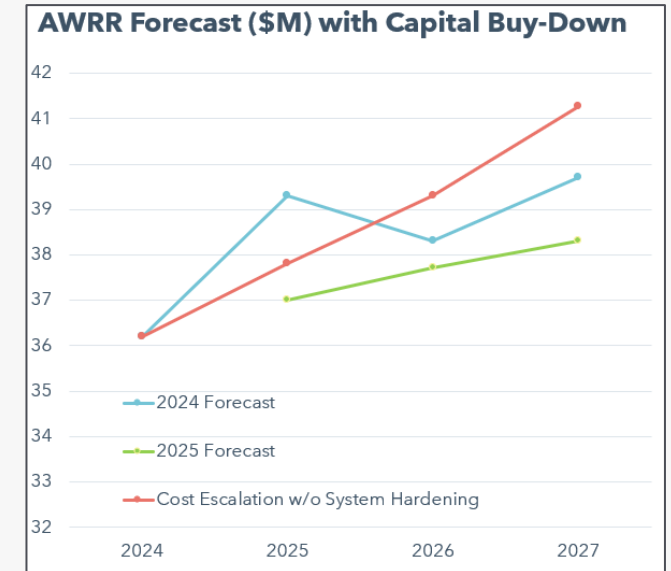
Programmatic Grid Design & System Hardening (GDSH)

Reducing ignition likelihood, wildfire consequences, and potential PSPS consequences

GDSH Initiative	2024 Actual	2025 Plan	2025 RSE
Distribution Pole Repl.	129	100	1.0
Transmission Structure Repl.	23	15	1.2
Points of Isolation	+36 devices	+25 devices	32.7
Fire Safe Fuses	1748	+2 circuits	1.1
Generation Resilience (New)	0	1 emerg. gen	
Protection & Automation (New)	3 control points	0	
Capital Investment	**$11,284k**	**$8,528k**	
O&M Investment	**$0k**	**$0k**	

Initiative Updates:

- Reduced forecast for required transmission structure requirements

- Points of Isolation for new HFRZ 12

New Initiatives:

- Generation Resilience addresses PSPS and other wildfire impacts to PGE plants

- Protection & Automation addresses gaps in operational capabilities and reduces PSPS exposure

Ductile iron poles

Points of Isolation

Fire Safe Fuses


Protection & Automation

17

Situational Awareness & Forecasting (SAF)

Enabling detection of wildfire hazards

SAF Initiative	2024 Actual	2025 Plan
AI Cameras	+4	+ 1
Weather Stations	+5	+ 8
Early Fault Detection (EFD)*	+9 circuits	+2 circuits
Capital Investment	**$3,035k**	**$3,286k**
O&M Investment	**$926k**	**$2,260k**

*2025 RSE of 1,783 based upon typical issues identified

Initiative Updates:

- Maintain 100% camera and weather station coverage of HFRZs

- Increase coverage of outlying generation and transmission

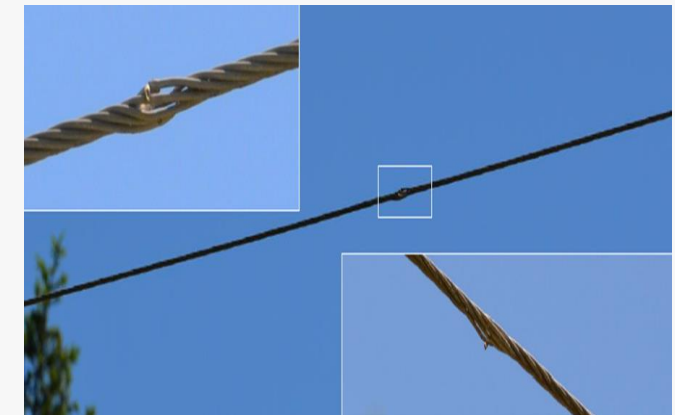- Transition EFD from pilot to ongoing program
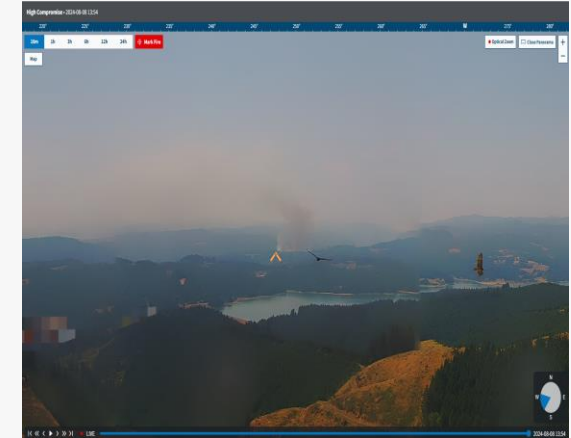
Lee Falls Fire 8.8.24

Artificial Intelligence (AI) cameras

Weather Stations

Early Fault Detection

Public

18

Grid Operations & Protocols (GOP)

Preparing employees, suppliers, and the system to reduce ignition likelihood and consequences

GOP Initiative	2024 Actual	2025 Plan
Fire Season Readiness	1,500 trained	1,500 trained
Enhanced Powerline Safety Settings (EPSS)	40 EFR events	as needed
Capital Investment	**$0k**	**$140k**
O&M Investment	**$524k**	**$680k**

Initiative Updates:

- <u>Risk-informed EPSS application</u> based upon official Red Flag Warning (RFW) *or* PGE identification of seasonal Enhanced Fire Risk (EFR).

- <u>EPSS application in areas of interest </u>outside HFRZs based upon seasonal risk assessment. In 2024, PGE addressed emerging risk in Chehalem Mt area by implementing EPSS mid-fire season. This 2024 area of interest is a 2025 HFRZ.

Fire Season Work Practices

- Fire trailers
- Fire suppression tools
- Red Flag Warning and Industrial Fire Precaution Level protocols

Employee & Supplier Training

- Fire risk factors and weather zone forecasts
- Suppression tools and equipment
- Basic suppression tactics
- Ignition reporting

Fire Season Readiness

Mode	Description
Normal	Definite time fast + time delay trip
	2-3 shot reclosing
Fire Season	Definite time fast trips
	1 shot reclosing
Enhanced Fire Risk (EFR) Red Flag Warning (RFW)	Definite time fast trip
	No reclosing

Risk-Informed EPSS Setting Modes

Inspection and Correction (IC)

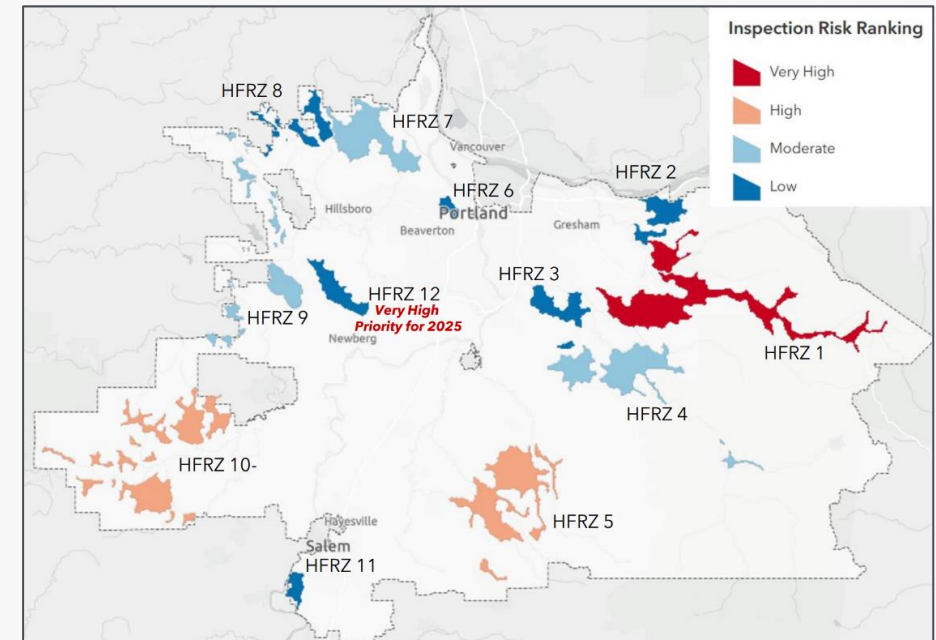**Reducing ignition likelihood and wildfire consequences**

IC Initiative	2024 Actual	2025 Plan
Ignition Prevention Inspections	27,177	28,738
Asset Corrections	78 poles cleared	75 poles cleared
Ignition Risk Corrections	1341 pole wraps 2,583 conditions	964 pole wraps as needed
Tree Attachments	333	300
Capital Investment	**$4,501k**	**$3,992k**
O&M Investment	**$3,521k**	**$4,125k**

2025 RSE of 8.6 based upon typical issues identified

Initiative Updates:

- Target inspection completion by June 30th

- Risk-based prioritization utilizing historic ignition data, inspection findings, asset data, and identified ignition risk drivers.

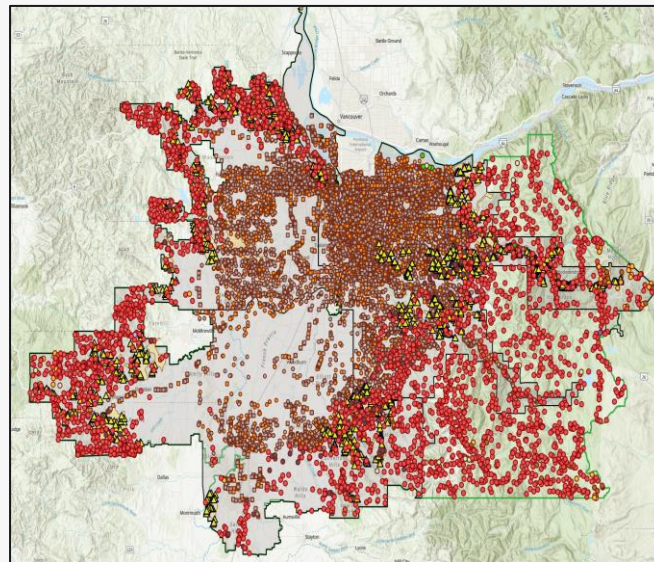**Risk-based Inspection Prioritization**

Vegetation Management (VM)

Reducing ignition likelihood and wildfire consequences

VM Initiative	2024 Actual	2025 Plan
Active Growth Period Patrol	1,065 line-miles	1,081 line-miles
Active Growth Period Mitigation	59 imminent	as needed
Hazard Patrol	1,065 line-miles	1,081 line-miles
Hazard Mitigation	16,576 probable	15,337 probable
Capital Investment	**$0k**	**$70k**
O&M Investment	**$36,613k**	**$37,000k**

2025 RSE of 14.3 based upon forecasted mitigation rates

Initiative Updates:

- Risk-based prioritization and program design using tree mortality, ignition data, outage data, and patrol findings. 2024 findings confirmed forecasted mitigation rates:
  - Inter-Cycle patrol & mitigation (ICPM): 0.5%
  - Full-Scope patrol & mitigation (FSPM): 5%

- Annual patrol and clearing during Active Growth Period (AGP) with identification and tracking of high growth potential (HGP) trees.

- Optimized schedule for ICPM and FSPM to lower cost and increase effectiveness.

- Reduction of scope by 20.65 line-miles due to underground conversion and 36 line-mile expansion of scope due to new HFRZ

Pruning in Mt. Hood National Forest Pre- and Post-Mitigation

2019-2024 Tree Mortality
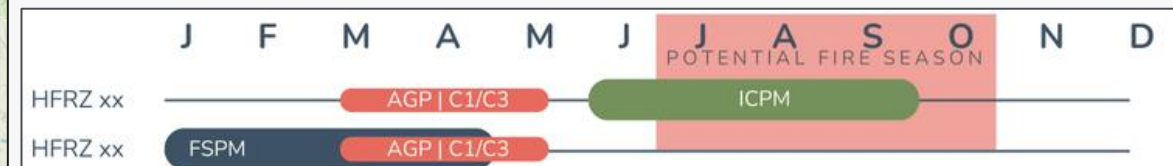
2025 Operational Cycles

PSPS/Emergency Preparedness (PSPS)

Preparing customers, employees and partners

PSPS Initiative	2024 Actual	2025 Plan
PSPS Readiness	2 exercises	2 exercises
Medical Battery Support	75 customers served	Serve all eligible customers, marketplace integration
Well Water Research (New Pilot)	Research completed	Pilot temporary back-up water offering, customer referral program
Capital Investment	**$0k**	**$460k**
O&M Investment	**$730k**	**$1,420k**

Initiative Updates:

- <u>Medical Battery Support</u> moved from pilot to program with optional delivery by Meals on Wheels and online enrollment platform to streamline and reduce cost.
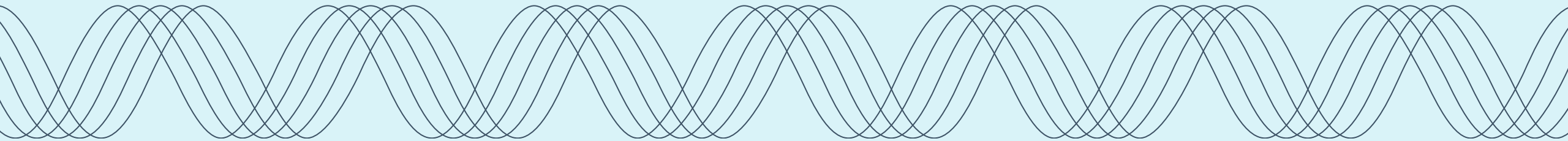
New Initiatives:

- <u>Well Water Research</u> completed in 2024 with findings available to customers in 2025.

- Considering Food Storage & Preparation research to support customers with food storage (refrigeration & freezers) and cooking during a power outage.

Proof of Concept for Temporary Back-Up Well Water

Engagement

PGE Community Engagement Strategy

- **Instill community trust** through the investment of time and resources within the communities that we serve and where we have new/proposed infrastructure.

- **Increase transparency in decision making processes** with clear expectations of where/when feedback will be incorporated and how.

- **Deploy resources within the community** to make PGE a more visible part of the community and where community members can find PGE staff through calendar of events and public communication.

- **Leverage data to improve outcomes** through the utilization of tools to evaluate PGE's community engagement efforts and identify areas of opportunity within communities for more proactive planning and engagement.

- **Increase transparency around PGE's business and plans** through the execution of programs that offer speakers and presentations on areas of interest to community.

- **Integrate feedback from environmental justice advocates** on engagement with PGE programs .

- **Use PGE staff and CBO time efficiently and effectively** in support of regulatory requirements and process improvements to achieve positive outcomes for environmental justice communities.
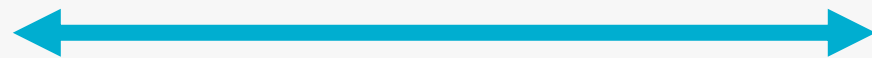
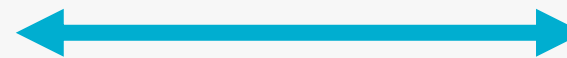Public

IAP2 Community Engagement Spectrum

	INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
PUBLIC PARTICIPATION GOAL	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision making in the hands of the public.
PROMISE TO THE PUBLIC	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.

INCREASING IMPACT ON THE DECISION →

Focus of PGE's community engagement efforts ← — → *Implemented as appropriate* ← — →

As a regulated utility, PGE's ability to collaborate with and empower the public is limited. This is particularly true with regards to Wildfire Mitigation, but PGE seeks this level of engagement when appropriate.

Public

IAP2 Community Engagement Spectrum Implementation

Empower

Customer survey revealed a priority resilience need for **well water** backup, potential customer offering available in 2025.

Collaborate

PGE improves risk modeling and analysis through engagement with **fire agencies**.

Involve

PGE Wildfire Ready events to share WMP and capture feedback for future plans.

Consult

PGE participation in **community-hosted wildfire preparedness events**.

Inform

PGE wildfire preparedness **emails, bill inserts, and advertising**.

2024 Community Outreach

- PGE hosted **six Wildfire Ready events**, two virtual and four in-person in and near HFRZ
  - All events include ASL and Spanish translators.

- PGE participated in 44 outreach and engagement events across the service area, a **100% increase** from 2023.
  - Provided information on WMP, PSPS, medical certificate, medical battery support, IQBD and more.

- **Communications toolkit** sent to over 65 organizations and 90 regional PIOs and emergency management personnel to share wildfire safety and preparedness messaging
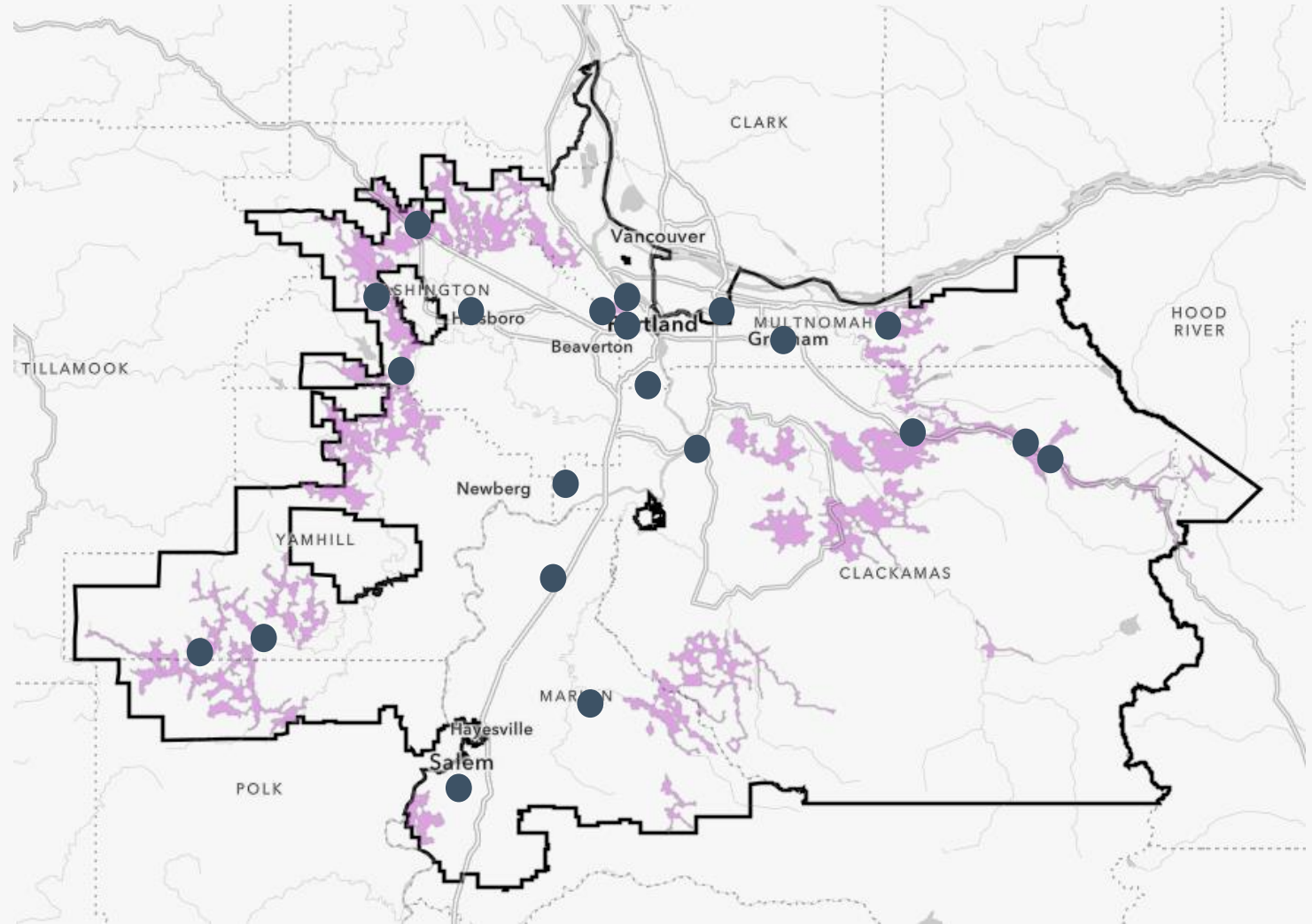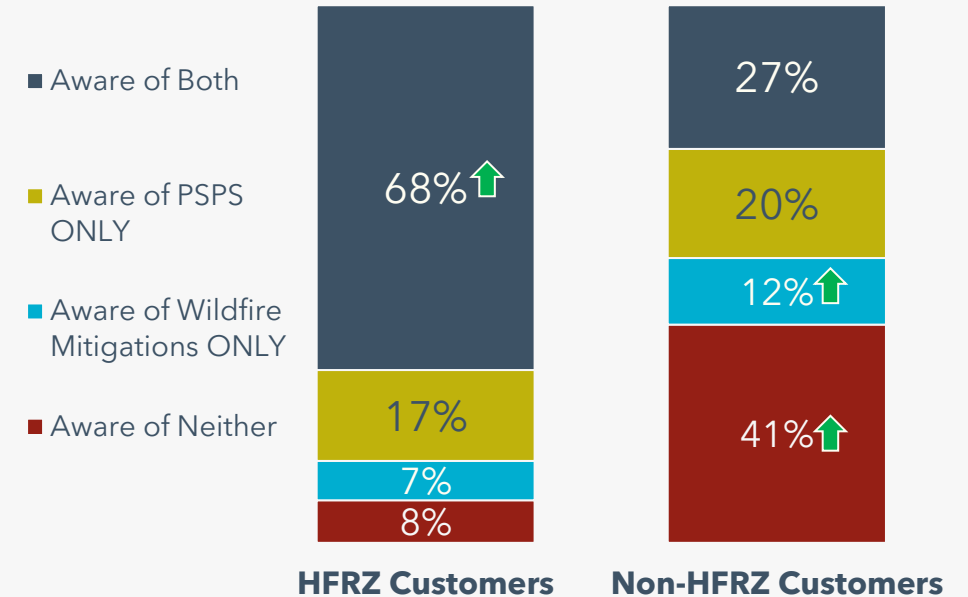

● *Indicates the location of at least one outreach and engagement event.*

Community Outreach and Public Awareness

COPA Initiative	2024 Plan	2024 Actual	2025 Targets
PGE Wildfire Ready events	6	6	6
Other community events	N/A	38	as needed
Click to PGE Wildfire webpage	13,000	36,936	52,000
Average Cost Per Click	$2.00	$1.90	$1.80
Impressions	2.3M	4.1M	5.6M
Capital Investment	**$0k**	**$0k**	**$0k**
O&M Investment	**$650k**	**$354k**	**$1,050k**

- Community events (PGE Wildfire Ready + non-PGE)
- Website
  - Wildfire Safety and Prevention
  - Public Safety Power Shutoff (PSPS)
    - Interactive PSPS Map
    - New 'PSPS Explained' video
- Media relations
  - Press release (joint IOU release)
  - Interviews (broadcast, print and radio)
- Email / Digital Newsletter (residential and business)
- Social Media
- Employee Communications

Awareness of PSPS & PGE's Wildfire Mitigations

- Aware of Both
- Aware of PSPS ONLY
- Aware of Wildfire Mitigations ONLY
- Aware of Neither

HFRZ Customers
- 68% ⬆
- 17%
- 7%
- 8%

Non-HFRZ Customers
- 27%
- 20%
- 12% ⬆
- 41% ⬆

Initiative Updates:

- Increased focus on non-HFRZ customer awareness

- Improved information about non-PSPS mitigation activities for customers, communities, and public safety partners

Let's meet the future together.

PGE

Purpose of PGE's Wildfire Mitigation Plan

Prioritize	Prioritize public and employee safety
Reduce	Reduce the risk of wildfire ignitions from PGE assets
Guide	Guide PGE's Fire Season operations
Identify	Identify and prioritize wildfire system hardening and resiliency activities
Communicate and collaborate	Communicate and collaborate effectively with Public Safety Partners, stakeholders, and customers
Implement	Implement Public Safety Power Shutoff events with efficiency, when necessary, and with broad public awareness

PGE's Wildfire Mitigation Journey

Start of WMPs

2018-2019

- Industry-wide wildfire taskforce
- Enhanced Vegetation Management
- Revamped Western coordination and mutual aid (WMAG)
- Initial fire risk assessment
- Evaluated Public Power Safety Power Shutoff (PSPS)

2020

- Created dedicated full time Wildfire group
- **Initiated first Public Safety Power Shutoff (PSPS) in Mt Hood area**

2021

- First Wildfire mitigation Plan filed with OPUC for 2022 wildfire season
- Updated risk assessment: expanded High Fire Risk Zones (HFRZ) from 1 to 7
- 26 weather stations
- 2 HD AI Cameras

2022

- First Wildfire Mitigation Plan (WMP) Approved
- Further updates to risk assessment: expanded HFRZ from 7 to 10
- **Initiated PSPS across all 10 HFRZ**
- 49 weather stations
- 24 HD AI Cameras
- Second WMP filed for 2023 wildfire season

2023

- Second Wildfire Mitigation Plan Approved
- Review of risk assessment: minor modifications made to HFRZ
- 80 remote automated weather stations
- 30 HD AI-enhanced cameras
- Third WMP filed for the 2024 wildfire season

2024

- 2024 WMP approved
- Added 1 new HFRZ
- 4 additional HD Cameras covering critical infrastructure
- 5 new weather stations
- Undergrounded approximately 9 miles in HFRZ
- Converted approximately 15 miles of bare wire into insulated cable
- Recognized by IWRMC as risk management leader across utilities

Public

31

WMP Data Tables

Process

- Queried 15 distinct internal systems of record
- Cross referenced data with PGE's geospatial tools
- Quality assurance checked to verify data consistency

Learnings

- Extensive data review highlighted opportunities for PGE improvement.
- Breadth of the requirements extends beyond the information historically collected, including non-wildfire program data.
- Over 75 clarifications included in PGE's 2025 WMP Update to assist Staff in data review. Compressed timeline may result in inconsistencies between utilities.

Feedback

- Inconsistent classification of PGE's 57kV as distribution or transmission may hinder effective use of the data.
- Wildland-Urban Interface (WUI) geospatial file provided to utilities required clean-up and did not match published state map.
- Value of data tables will be better understood after Joint Utility risk methodology workshops, allowing utilities to invest in the highest value data projects.

Technology and Process Improvements

- Identifying the most critical data for wildfire risk modeling, evaluation of mitigation effectiveness, and non-wildfire investment decisions
- Reviewing active and upcoming technology projects to identify opportunities to incorporate WMP data table requirements
- Initiating process improvements based on complexity, anticipated cost, and potential benefits for non-wildfire initiatives
- Evaluation, including cost estimates, will continue through Q1, 2025

Project Type	Data Table	Rough Order of Magnitude (ROM) Estimate
Business Process Improvement	2-6, 13	N/A (improvements in-flight)
Technology Update	3-5, 9, 12 6-8, 11	N/A (address with in-flight or planned project)
Automation	1, 3-5, 7-10, 12	$150-350k capital $60-135k ongoing O&M
Data Integration	2, 6, 13	$200k-500k capital $35k-90k ongoing O&M
New Systems of Record	11	$200k-450k capital $60k-90k ongoing O&M

2024 WMP Recommendations

UM 2208 Order 24-232 OPUC Staff Recommendations

Type	Phase 1 Implementation 2025 WMP Update			Phase 2 Progress 2026-2028 WMP			Maturation Progress Ongoing Working Group		
	Qty	Status	Recommendation	Qty	Status	Recommendation	Qty	Status	Recommendation
PGE	18	Implemented	2, 3, 4, 6, 8-18, 20, 22, 23	6	In Progress Planned	1, 4, 7, 19, 24 21	0		-
Joint	5	Implemented	A, B, E, F, G	7	In Progress Planned	C, D, J, K, L H, I	4	In Progress Planned	M, N O, P
Total	**23**			**13**			**4**		

2025 WMP Update

- Implemented 100% of Phase 1 PGE Recommendations
- Implemented 100% of Phase 1 Joint Utility recommendations
  - Process & Planning Cycle (A, B)
  - Data Template Standardization (E, F, G)
- Significant progress on 5 out of 6 Phase 2 PGE recommendations
- Progress on 1 out of 7 Phase 2 Joint Utility recommendation
  - Risk Methodology (J, risk impact maps)

2026-2028 WMP

- Coordination started on 4 out of 7 Phase 2 Joint Utility recommendations.
  - WMP Standardization (C, D)
  - Risk Methodology (K, L)
- OPUC Safety Staff and Joint Utilities Phase 2 collaboration scheduled to be complete by Q2, 2025.
  - Data Templates (H, I)
  - Risk Methodology (J, K, L)

Ongoing Maturation

- Joint Utilities address 2 out of 4 recommendations by participating in IWRMC, EEI, WEI, and other industry forums.
  - Reliability impacts (M)
  - Engagement best practices (N)
- OPUC Safety Staff and Joint Utilities will collaborate on all 4 maturation recommendations, including standardized engagement and PSPS reporting.

Details and supporting documentation related to each recommendation are shown on pages 164 - 213 of PGE's 2025 WMP Update

Public

2024 Community Engagement Events

Date	Event Name	Location
March 13	Mount Hood Corridor Wildfire Partnership (MHCWP) Monthly Meeting	Welches, OR
April 10	Mount Hood Corridor Wildfire Partnership (MHCWP) Monthly Meeting	Welches, OR
April 11	Multnomah County Community Wildfire Protection Plan Meeting	Portland, OR
April 17	Bull Run Pre-Season Meeting	Sandy, OR
April 27-28	Wildfire Preparedness Weekend	Portland, OR
May 1	City of Sheridan Wildfire Meeting	Sheridan, OR
May 11	Government Camp CPO Meeting	Government Camp, OR
May 8	Mount Hood Corridor Wildfire Partnership (MHCWP) Monthly Meeting	Welches, OR
May 19	Wildfire Ready Mt Hood Homeowners Workshop	Welches, OR
May 29	PGE Wildfire Ready	Oregon City, OR
May 31	Forest Heights Spring Safety Festival	Portland, OR
June 4	Marion County Commission Meeting	Salem, OR
June 4	PGE Wildfire Ready	Virtual
June 5	PGE Wildfire Ready	Banks, OR
June 6	Wildfire Preparedness Partner Coordination	Oregon City, OR
June 8	PGE Wildfire Ready	Salem, OR
June 11	PGE Wildfire Ready	Corbett, OR
June 12	PGE Wildfire Ready	Virtual
June 22	Tualatin Soil and Water Conservation District's Wildfire Ready	Gaston, OR
June 27	Mt Hood National Forest Partnership on Every Forest	Virtual
July 10	Mount Hood Corridor Wildfire Partnership (MHCWP) Monthly Meeting	Welches, OR
July 13	Silverton Emergency Preparedness Fair	Silverton, OR
August 1	Hoodland CPO	Welches, OR
August 7	Harborton Reliability Project Community Meeting	Portland, OR

Date	Event Name	Location
August 14	Mount Hood Corridor Wildfire Partnership (MHCWP) Monthly Meeting	Welches, OR
September 5	Lake Oswego Emergency Preparedness Fair	Lake Oswego, OR
September 7	Wilsonville Safety Fair	Wilsonville, OR
September 11	Mount Hood Corridor Wildfire Partnership (MHCWP) Monthly Meeting	Welches, OR
September 11-12	Washington County and Clean Water Services Employee Safety Fair	Hillsboro, OR
September 14	Clackamas Fire District Hilltop Health & Safety Fair	Oregon City, OR
September 20	PGE Workshop with Grand Ronde	Grand Ronde, OR
September 23	Emergency Response Training	Gresham, OR
September 24	Harborton Reliability Project Community Meeting	Portland, OR
October 5	Woodburn Fire Department Open House and Safety Fair	Woodburn, OR
October 9	Mount Hood Corridor Wildfire Partnership (MHCWP) Monthly Meeting	Welches, OR
October 10	Sheridan Community Town Hall	Sheridan, OR
October 12	Hillsboro Fire & Rescue Open House	Hillsboro, OR
October 12	Gaston Rural Fire District Open House	Gaston, OR
October 15	Clackamas Wildfire Collaborative Meeting	Clackamas, OR
October 24	Harborton Reliability Community Meeting	Portland, OR
October 30	Wildfire Ready Post-Event Debrief	Hillsboro, OR
November 2	Wildfire Ready Mt Hood Homeowners Workshop	Welches, OR
November 13	Mount Hood Corridor Wildfire Partnership (MHCWP) Monthly Meeting	Welches, OR
December 18	Prep-Ability Meeting, Upstream Access	Hillsboro, OR