

Review of September 8-10, 2022 PSPS Event November 2, 2022

Ground Rules

- Focus on solutions
- Respect all participants of the process
- Raise your hand to (*9 on phone) comment or ask a question
- Listen for opportunities to help solve gaps identified
- Please remember this process is new and if we focus on coordination and communication we can improve

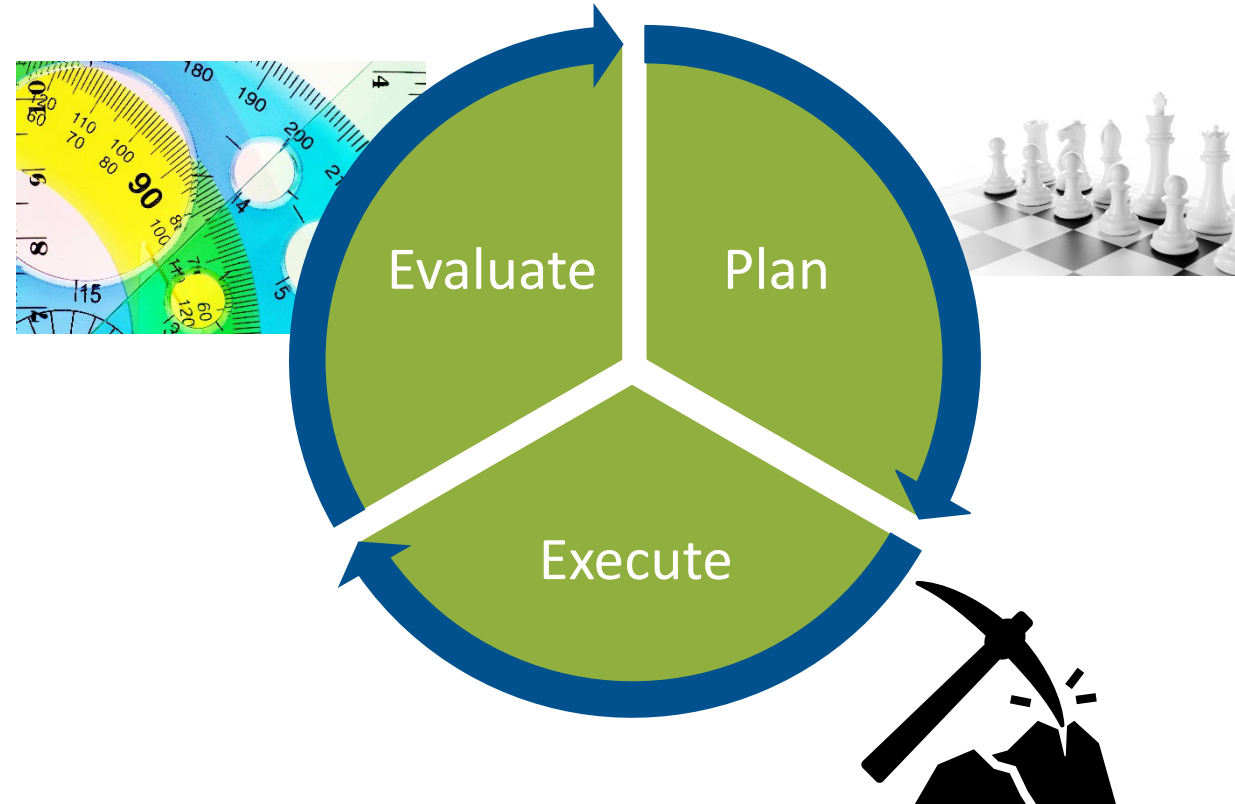


Agenda

- Intro by Commissioner Tawney
- Wildfire Mitigation Plans
- Process
- Discussion by utilities
- Stakeholder comments
 - Stakeholder survey to complement verbal feedback
 - [Sept 2022 PSPS Survey Form for Stakeholders](#)
- Wrap-up



Wildfire Mitigation Continuous Improvement



Comparison of touchpoints between OPUC and electric utilities

IOUs (PGE, Pacific Power, Idaho Power)

OPUC is the economic regulator

OPUC is responsible for reviewing effectiveness and correctness of actions that are dictated by the rules, notably OAR 860-300 PSPS requirements

OPUC acts as a conduit to emergency support function (ESF-12), energy into the state's emergency response structure

COUs (38 providers, including Cooperatives, Municipalities, and Peoples Utility Districts)

OPUC is responsible for assembling plans approved by governing boards

OPUC acts as a conduit to emergency support function (ESF-12), energy into the state's emergency response structure



Wildfire Mitigation Plans (WMPs) for Investor Owned Utilities (IOUs) and Consumer Owned Utilities (COUs)

- ▶ IOUs file WMPs with the Oregon Public Utility Commission for review and approval based on reasonable and prudent practices. Plan updates are filed annually for review and approval.
- ▶ COUs file WMPs with Oregon Public Utility Commission within 30 days of plan or updated plan review and approval from its governing body.

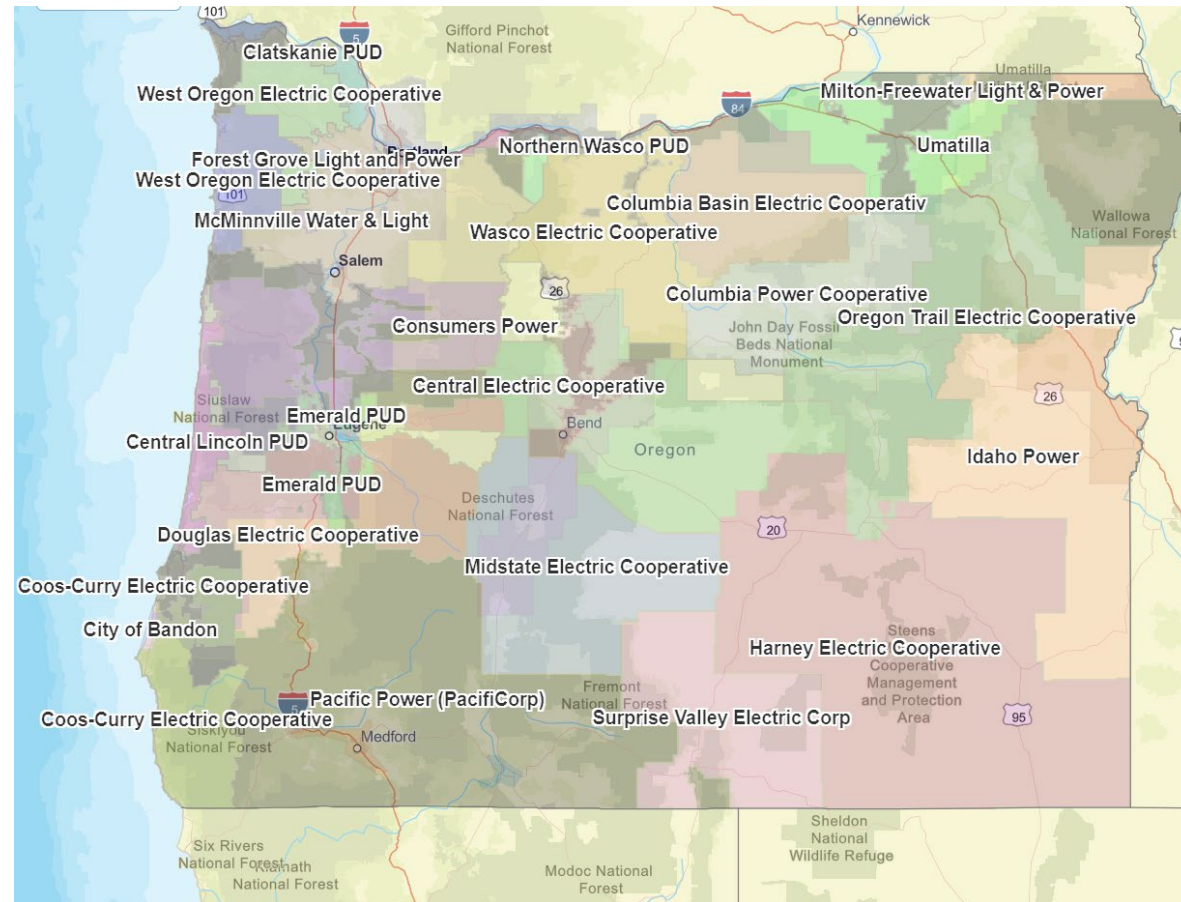
2022 Wildfire Mitigation Plans for all Oregon Electric Utilities:

<https://www.oregon.gov/puc/safety/Documents/Wildfire-Mitigation-Plans-2022.pdf>



Oregon electric service providers

<https://www.oregon.gov/energy/energy-oregon/Pages/Find-Your-Utility.aspx>



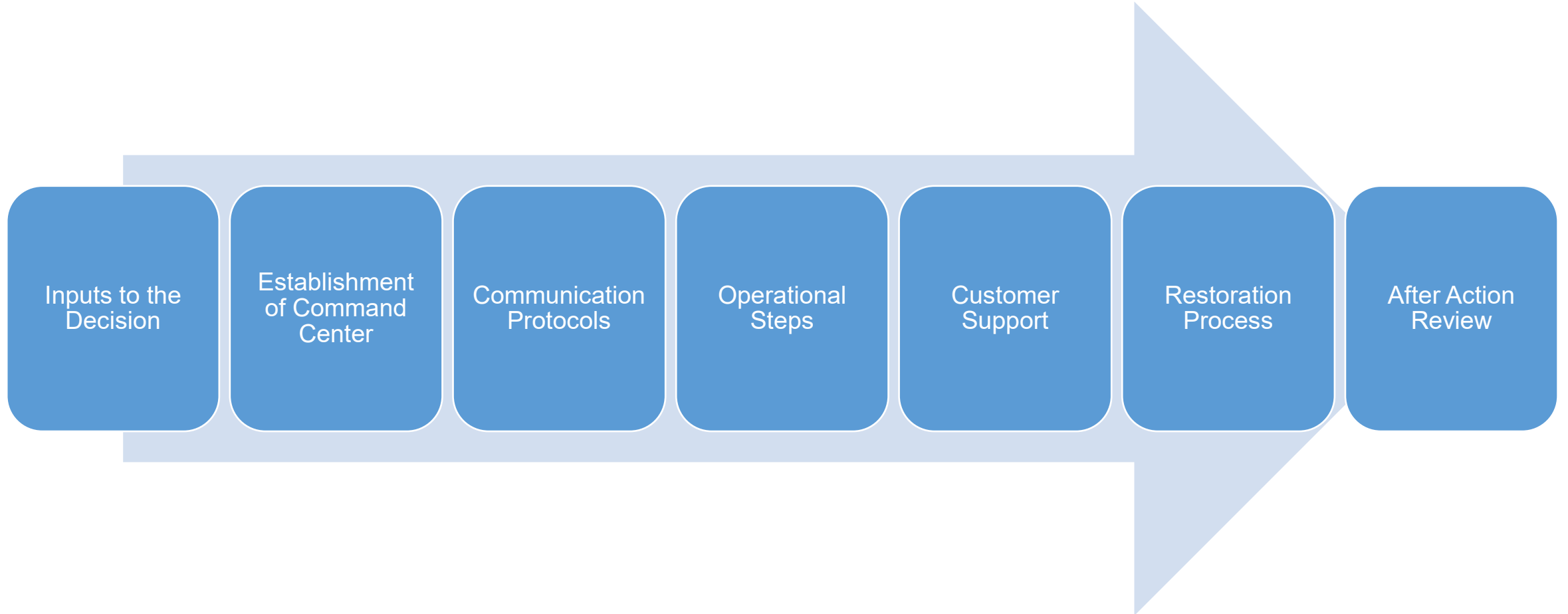
ESF-12 (Emergency Support Function): Energy

Supports all Emergency Response Partners and Energy Providers (COUs and IOUs)

- ▶ Compiles energy sector service impacts during emergency events when the Emergency Coordination Center (ECC) is activated, virtually or in person
- ▶ Provides situational awareness of energy sector impacts for the state, in coordination with the Department of Emergency Management, through statewide coordination calls and situation reports (also informs the Governor's Office and potentially the Governor's Disaster Cabinet, should it be mobilized)
- ▶ Information supplied by energy providers is key to conveying the current situation
- ▶ ECC venue facilitates expedited and efficient coordination to support emergency response and recovery efforts
- ▶ Goal is to compile and share accurate information as quickly as possible
- ▶ We recognize an energy utility's capacity to provide system impact updates during an emergency event can be challenging while working to restore service, but the ongoing goal is to identify opportunities to improve processes through building and maintaining relationships, and leveraging technology to support coordination amongst energy providers and emergency response partners



Basic Structure for PSPS Process



Public Safety Power Shutoff (PSPS) Activities – IOUs Only

Notification Requirements	What	Timing			Notes
Before	Where, when, how long, impacts,	72-48 hours	48-24 hours	4-1 hours	
During	24 hour updates, reenergization start/stop				
Public Safety Partners		√	√	√	When feasible the Utility will support Local Emergency Management efforts to send out emergency notifications
ESF-12		√	√	√	Will notify Oregon Emergency Response System (OERS) partners and Local Emergency Management in coordination with Oregon's Department of Emergency Management
Utility-identified critical facilities		√	√	√	While the rules do not require medically vulnerable customers explicitly, IOUs have provisions for noting them when customers have self-identified; GIS files are required for telecommunications providers
Customers			√	√	Notice provided via email, phone call, utility website, social media, radio, television, press releases. Utility's communications required under this rule do not replace emergency alerts initiated by local emergency response.



How do we improve and adapt to the changing future?



Review plans



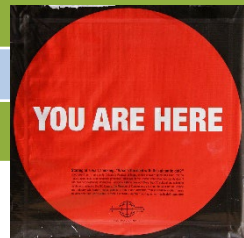
Evaluate performance against plans



Assess gaps



Assess opportunities to enhance future operations
Engage with electric provider, ODOE, us and others to move solutions forward



CPI Red Flag Response 9/9-9/11 2022

Jeffery Carlson

Safety, Compliance, & Loss Control
Specialist

&

Billy Terry

Chief Operations Officer



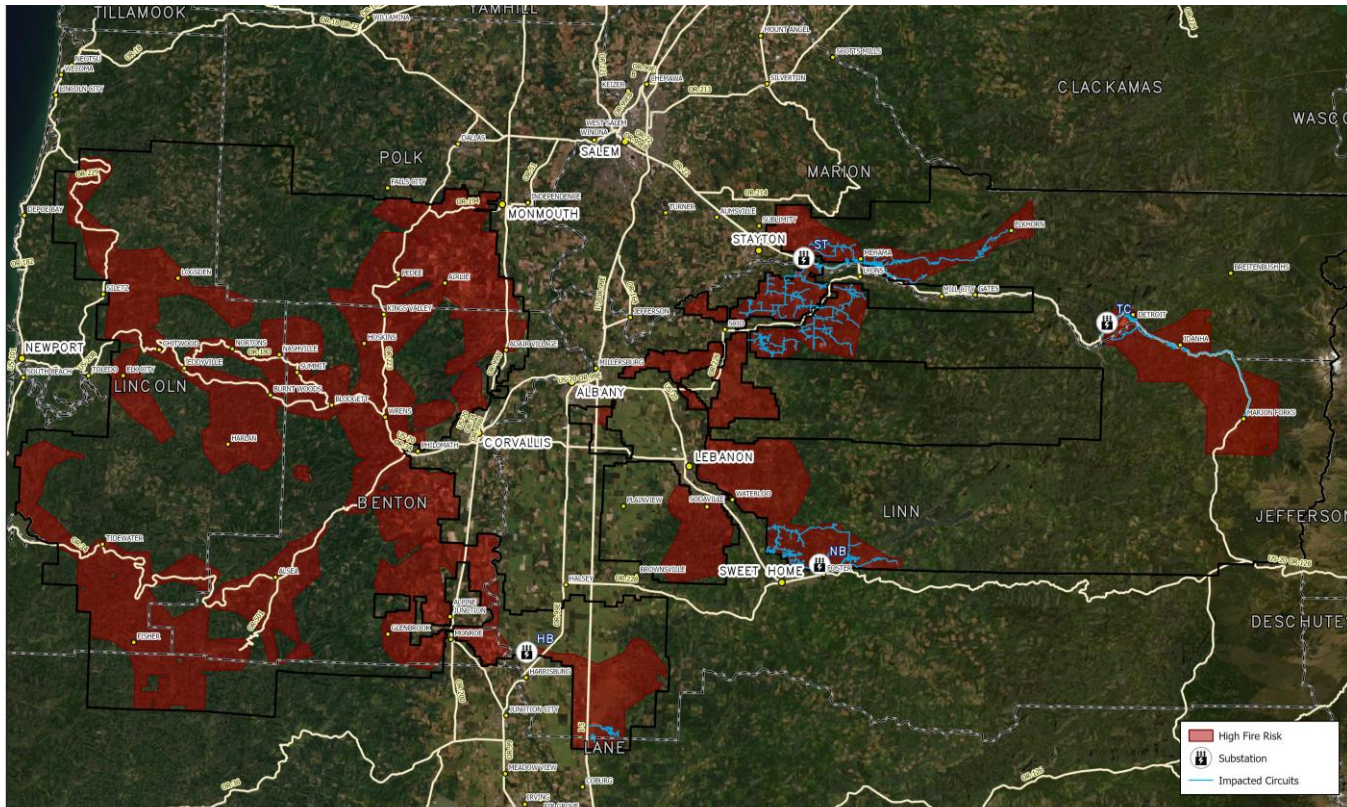
CONSUMERS POWER INC.



CPI Actions Before Red Flag

- Spring 2022: ODF Personnel from Philomath train CPI field personnel on wildfire prevention, suppression, and egress techniques.
- Summer 2022: CPI places high risk fire area circuits in “non-reclose” when ODF raises IFPL levels to “2”.
- 9/5 Daily forecast analysis shows chance of strong east winds over the weekend. Internal discussions about possible PSPS begin.
- 9/6 Forecast data solidifies. CPI begins alerting EM partners about CPI threat analysis and fire weather response.
- 9/7 CPI begins alerting our members to be prepared for outages over weekend due to fire weather. Regional coordination discussions between EM and utility personnel ramp up.

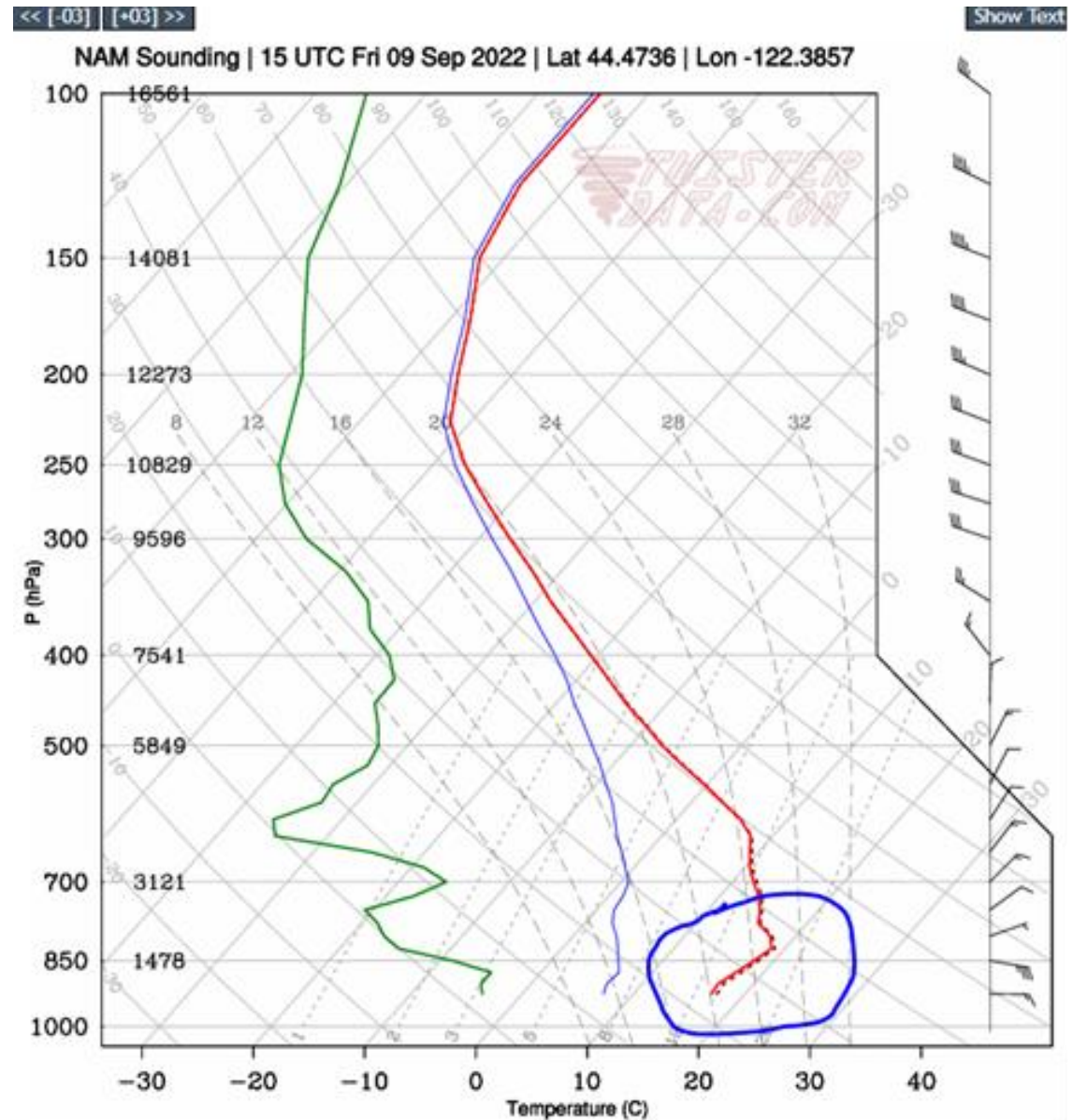
CPI Actions Before Red Flag Cont.



- 9/7 CPI identifies circuits at risk for PSPS based on forecast data.
- 9/7 CPI creates PSPS worksheet.
- 9/7 CPI discovers EM comm tools not suited for early warning.
 - CPI develops internal solution.
- 9/8 Regional talks between EM and utility personnel continue. Maps and other info shared.
- 9/8 NWS Red Flag areas expand to whole service area.

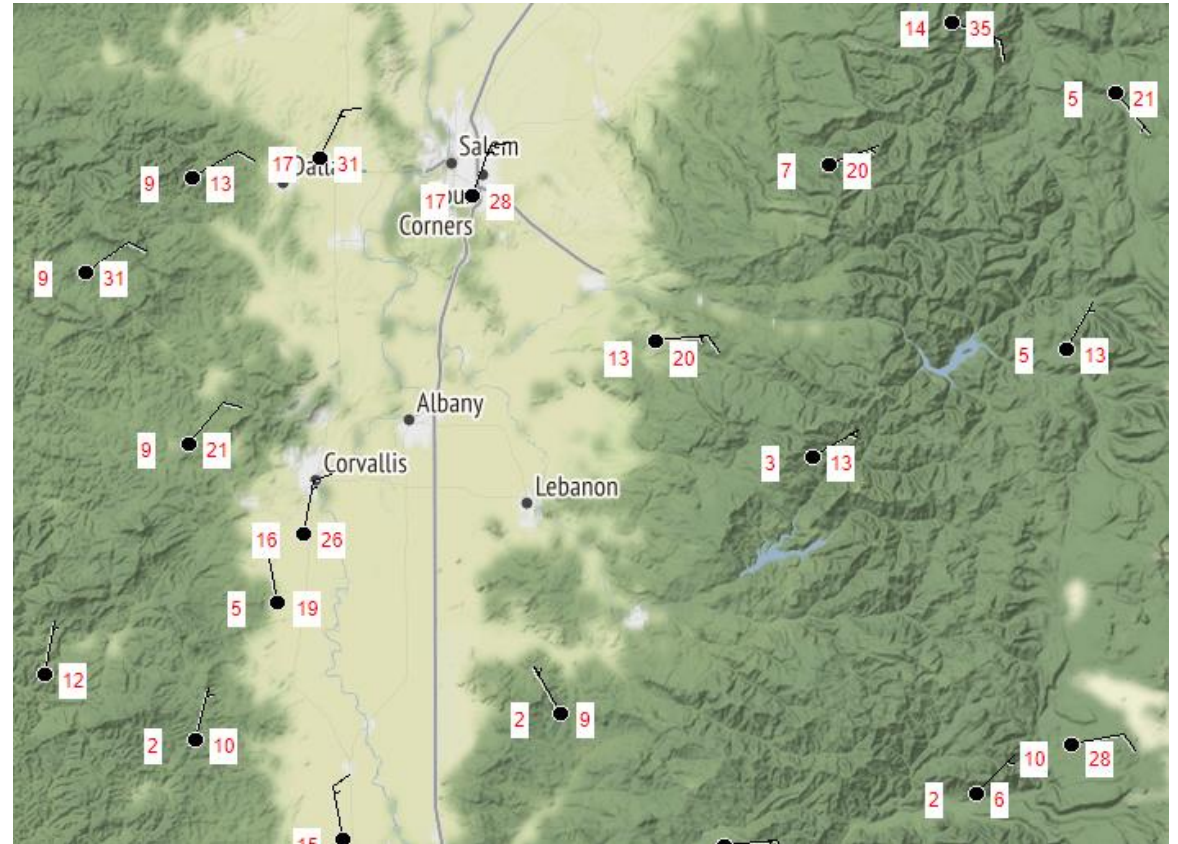
CPI Actions During Red Flag

- CPI places High Fire Risk Area Circuits in “hotline tag”.
- Crews forward positioned in high fire risk areas.
 - Inversion forecast to break approx. 11 A.M.
 - Crews forward positioned at 10 A.M. Ready to respond when protective inversion breaks.
 - Crews had fire tools, extinguishers, and backpack water spray canisters.
 - Each crew had a mini excavator in tow.
 - Fire fighting trailer positioned in Santiam Canyon.



CPI Actions During Red Flag Cont.

- Weather Conditions Monitored
 - Crews communicated conditions as experienced.
 - Regional weather station information tracked.
- Ongoing communication with EM personnel.
 - Updates to county EM managers.
 - Updates to state agencies via ESF-12.
- 9/10 wind dies down late morning.
 - CPI remains on sensitive settings until Red Flag canx, crews stand down to normal on-call status.

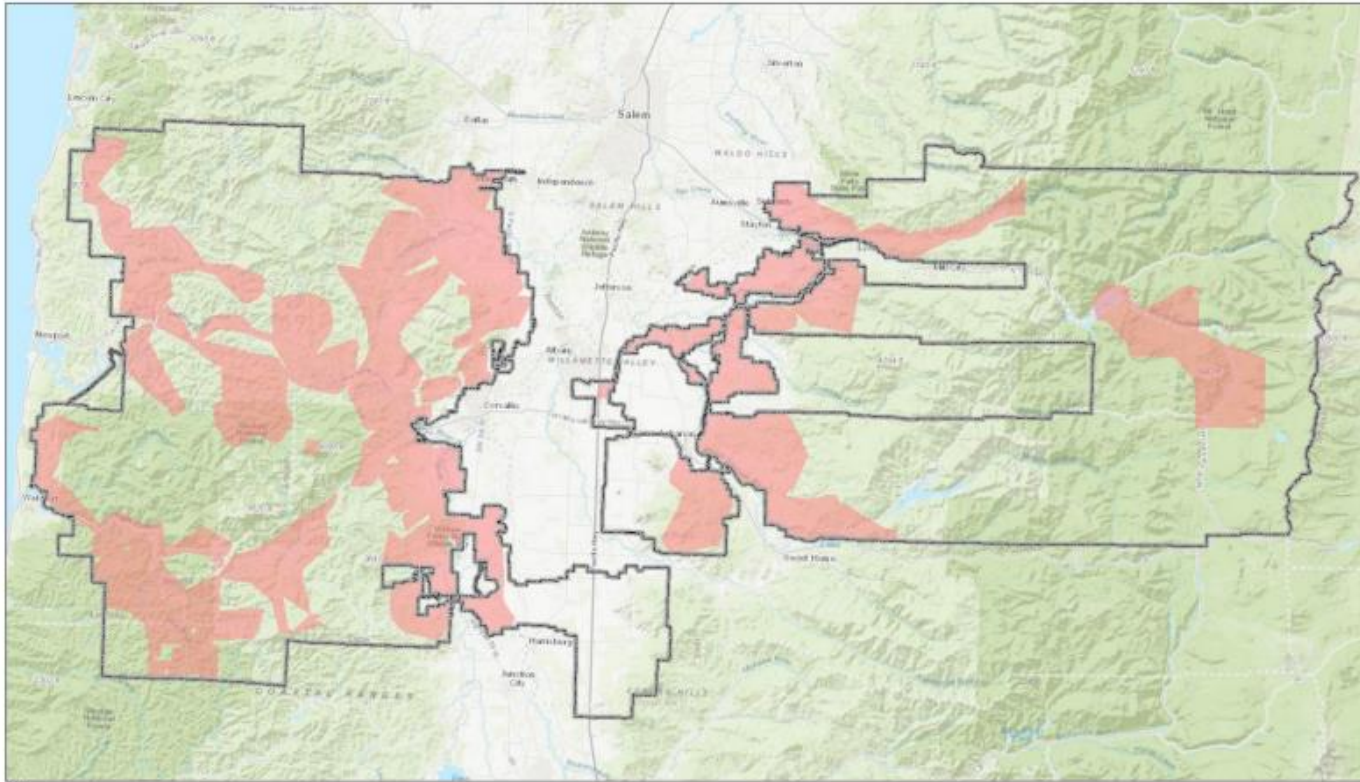




CPI Red Flag: Lessons Learned

- CPI must take the lead in early-stage member alerting.
- Member communications
 - Less is more: too much detail leads to confusion.
 - Need initiative to get members to update contact info.
 - Need interactive mapping tool to show public PSPS vs. normal outage.
- Differing regional utility responses confused the public.
 - Members expected PSPS in areas where none were planned.
 - Members believed that normal outages were PSPS.

CPI Red Flag: Positive Experiences



- High Confidence in Wildfire High Risk Analysis.
 - Nearly 100 circuits put on alternate settings.
 - Zero incidents on circuits not identified for possible PSPS.
- Fire unrelated to system discovered and extinguished.
- Weather monitoring prevented enacting any significant PSPS.
- Email & text alerts effective CPI tools for member communications.



CONSUMERS POWER INC.

The End!

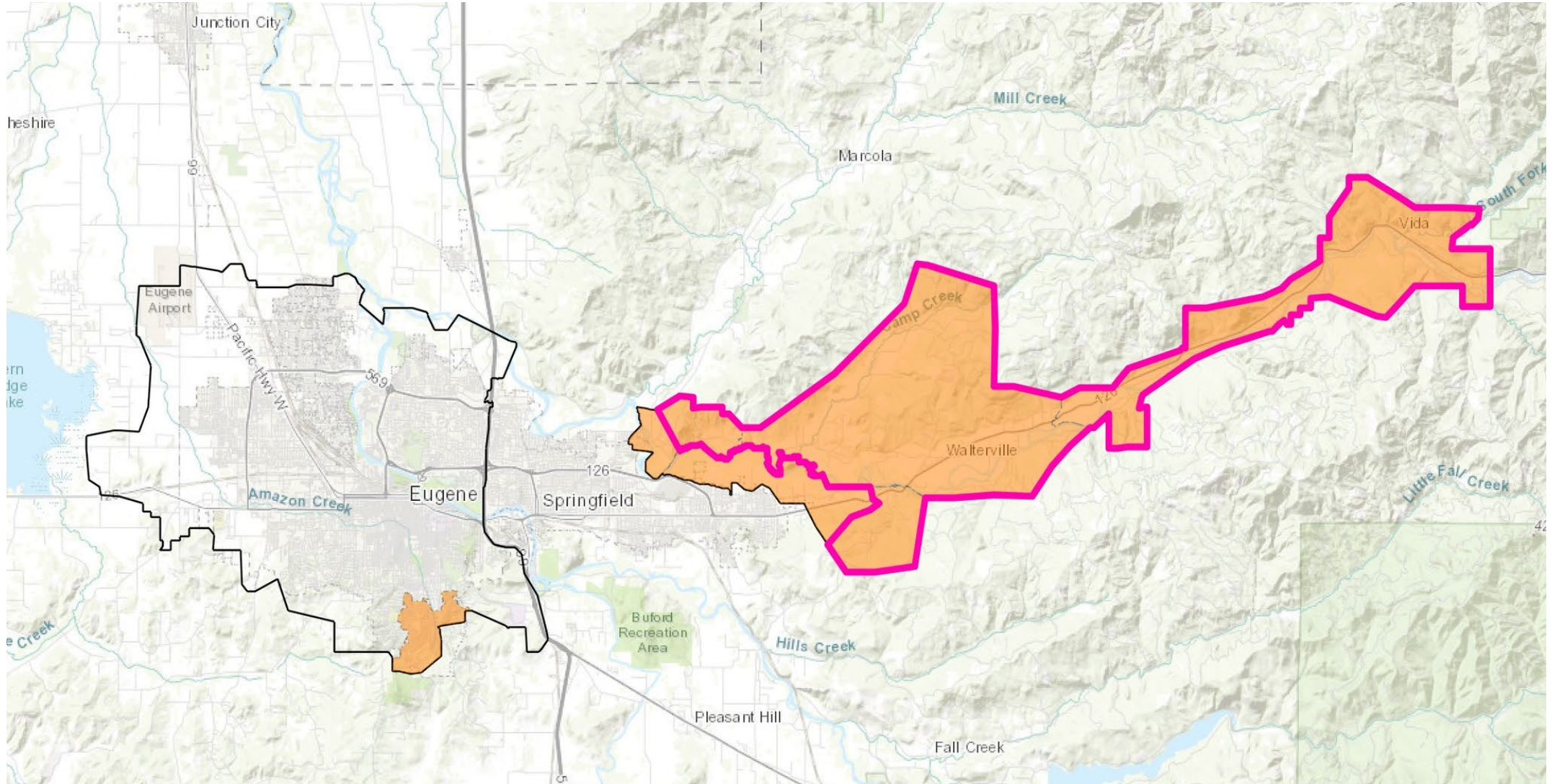


September 22 PSPS Event

EWEB



PSPS Impact Area



What Worked Well

- Early notice/event pre-planning
- Coordination with stakeholders
- Communication/multi-channel outreach
- Restoration process



Challenges and Continuous Improvement

- Unexpected outages
- RFW vs wind event
 - Reliable local wind data
- Public sentiment

- Switching orders ready
- Refining triggers for restoration
- Outreach to vulnerable customers

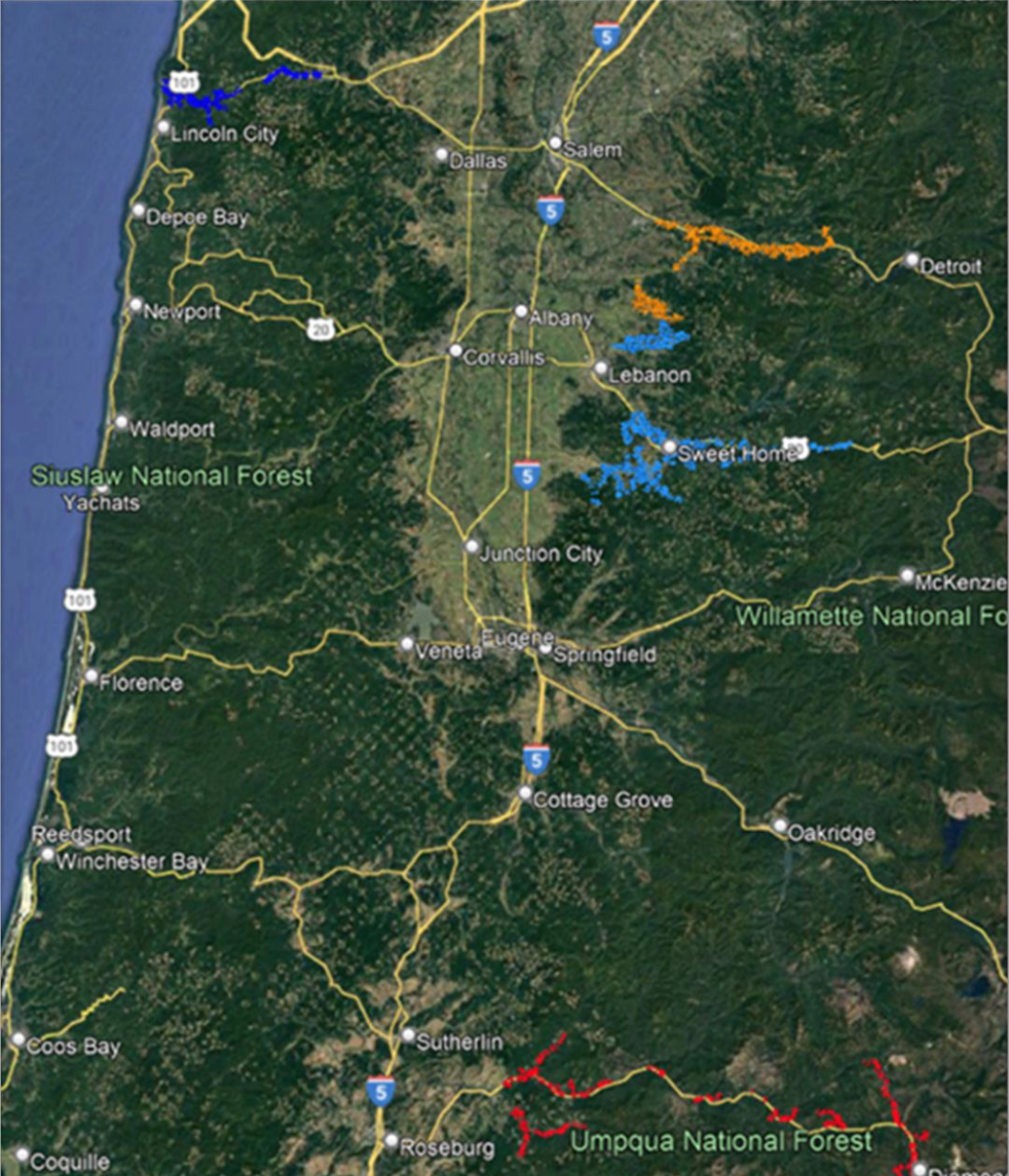
Public Safety Power Shutoff

Utility and Emergency Response Partner "Lessons Learned" Discussion



Allen Berreth, Vice President, Operations
Wednesday, November 2, 2022

Event Summary



- Customers:** 11,993
- Circuits:** 20
- Location:** West Cascades (Marion, Linn, Douglas)
Coast Range (Lincoln, Tillamook, Polk)
- Duration:** 13h 9m to 28h 20m
- Wind:** 35+ mph gusts in the west Cascades
50+ mph gusts in the west Coast Range
- Damage:** 7 conditions found upon inspection
- Resources:** 23 Line crews (95 personnel)
35 Vegetation crews (106 personnel)



Weather Forecasts PSPS Potential

****Computer models continue to trend towards a stronger wind event. Gusts exceeding 95th percentile now appear possible in North and South Santiam Canyons and potentially higher elevations east of Lincoln City and the upper North Umpqua east of Roseburg.****

		Weather-Related System Impacts (Wx) / District Fire Risk (F) / Operational Response					
		Wed. Sep. 7		Thu. Sep. 8	Fri. Sep. 9	Sat. Sep. 10	Sun. Sep. 11
		Wx	F	Wx	F	Wx	F
NOORTH WIDES							
Clatsop							
Enterprise		L					
Hermiston							
Hood River							
Pendleton							
Portland					W	W	
Sunnyside							
Walla Walla							
Yakima							
CENTRAL WIRES							
Albany							
Central Oregon		L					
Coos Bay							
Corvallis							
Cottage Grove							
Dallas							
Junction City							
Lebanon							
Lincoln City							
Roseburg							
Stayton							
SOUTH WIDES							
Alturas		L					
Crescent City							
Grants Pass			10	12,167	EFR		
Klamath Falls		L		17	5,538	EFR	
Lakeview		L		1	707	EFR	
Medford			13	14,941	EFR		
Tulelake		L		2	250	EFR	
Yreka		L		34	18,090	EFR - CC	

Weather-Related System Impacts (Wx)

Outage Potential

- Widespread Outages with Extended Restoration
- Scattered to Widespread Outages
- Isolated to Scattered Outages
- No System Impacts Expected

Spring and Summer Hazards

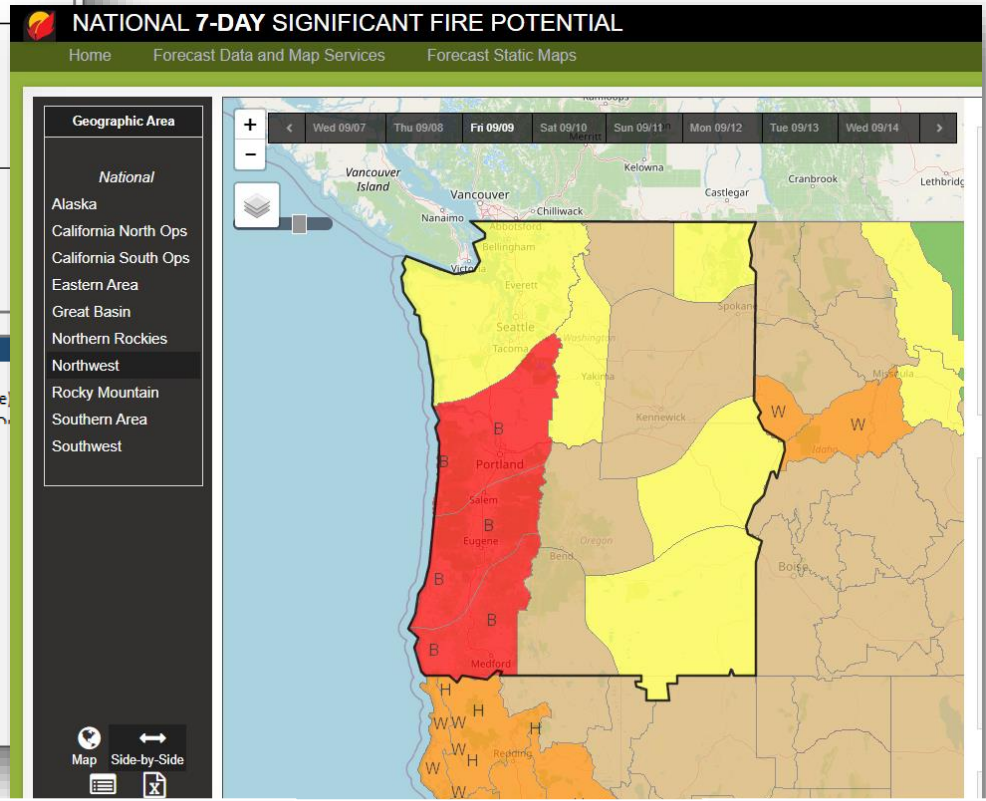
- (W) Wind
- (L) Thunderstorms / Lightning
- (R) Heavy Rain or Flooding

District Fire Risk (F)

- Extreme (Windy & Dry with Gusts ≥ 95th percentile)
- Significant (Windy & Dry OR Hot & Dry with Very Dry)
- Elevated
- Low

Extreme Fire Risk, Sct-Widespread outage potential

- GP Ground Patrol
- EFR Elevated Fire Risk Settings
- CC Conditions Cleared
- ECC ECC Activated
- T Transmission
- D Distribution



Notifications

PUBLIC SAFETY PARTNERS

- Utilities and ESF12 started coordination on Tuesday
- Local emergency management stakeholders on Wednesday
- Circuit by circuit communication throughout event

CUSTOMER COMMUNICATION

- Initial customer notification at 3pm on Wednesday, phone and email (44-hour notice)
- 11 Medical Baseline customers called directly
- 12-hour notifications provided on Thursday
- 1-hour notifications and re-energization notifications timed with each circuit

PUBLIC, NEWS MEDIA and GOVERNMENTAL

- Public, website, app, social media information updated and coordinated on an ongoing basis
- News media outreach, public and governmental outreach started on Wednesday (joint press conference with Gov. Brown and PGE)
- Critical customers had direct conduit

COMMUNITY RESOURCE CENTERS (CRC)

- Three CRCs opened prior to de-energization and remained open through event
- Douglas County – Glide High School
- Marion County – Bethel Baptist Church
- Linn County – Sankey Park

Event Summary

Weather Forecasts
PSPS Potential
Sunday

Notifications begin
Tuesday

De-Energization
Begins
Friday 11:30 AM

Re-Energization
Begins
Saturday 8:30 AM

Continuous
Improvement
Ongoing

DETERMINING FACTOR

- Wind gusts above the 95th percentile in areas with extreme wildfire risk
- Circuit by circuit de-energization

RESOURCING

- Line crew and vegetation crews were assigned to each circuit of concern

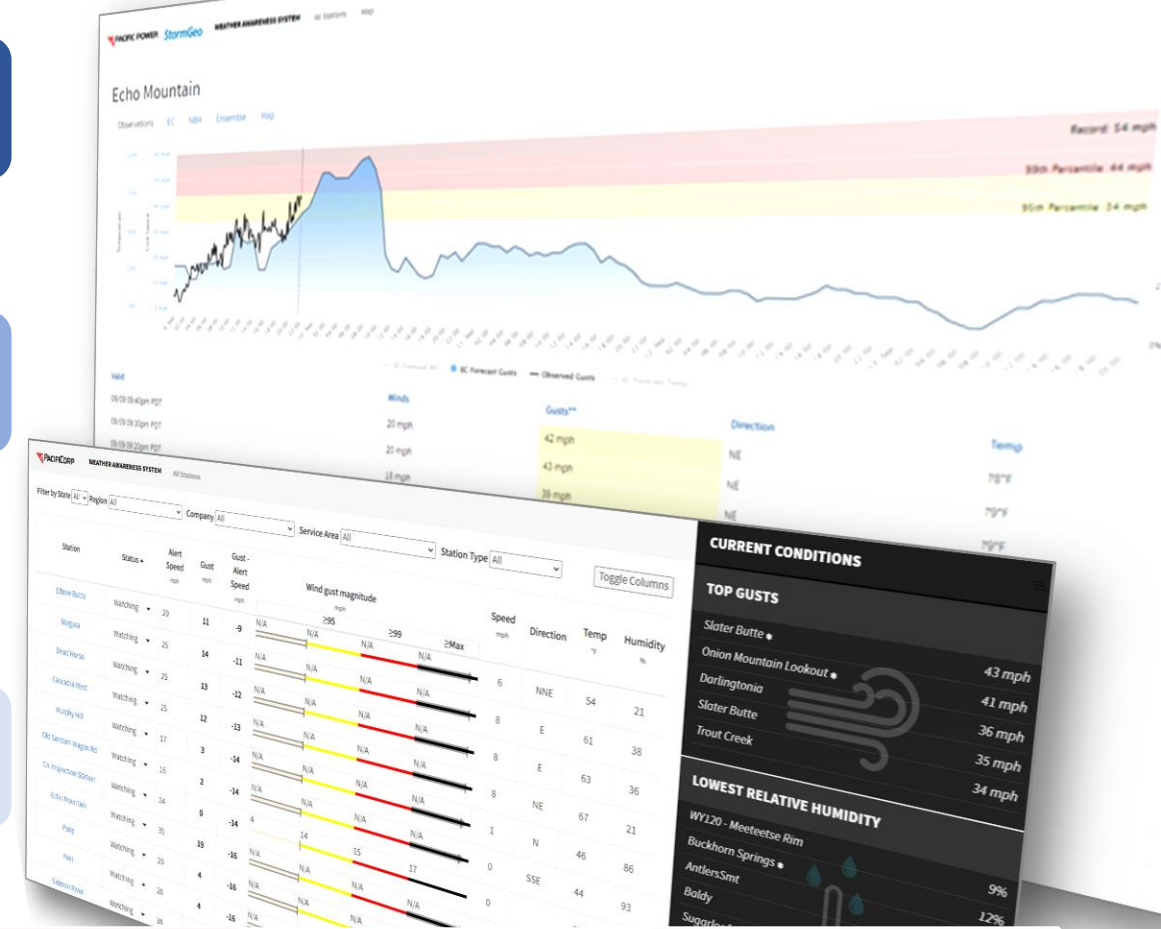
EXTERNAL COMMUNICATION / COORDINATION

- 1-hour notifications to public safety partners and customers per circuit
- Media, social media, website and app information coordinated
- Governmental agencies updated on ongoing basis
- Critical customers notified via Regional Business Managers

COMMUNITY RESOURCE CENTERS (CRC)

- Three Community Resource Centers opened prior to de-energization

De-Energization



Event Summary

Weather Forecasts
PSPS Potential
Sunday

Notifications begin
Tuesday

De-Energization
Begins
Friday 11:30 AM

Re-Energization
Begins
Saturday 8:30 AM

Continuous
Improvement
Ongoing

DETERMINING FACTOR

- Sustained trend in wind subsidence
- Circuit by circuit re-energization
- Patrols conducted to remove debris, check repairs, ensure safe

Re-Energization

RESOURCING

- Dedicated crews for each circuit expedited re-energization

EXTERNAL COMMUNICATION / COORDINATION

- Coordination with local public safety partners, utilities, governmental contacts continued with re-energization notifications
- Customer outreach continued for re-energization
- Media, social media, website and app information coordinated

COMMUNITY RESOURCE CENTERS (CRC)

- CRC's closed as circuits were re-energized

EVENT STATISTICS BY CIRCUIT													
Circuit	Area	County	Weather Station	Status	Customers	# of Customer under PSPS	Actual De-Energization Time	Estimated Time to Initiate Patrol (9/10/22 @ 00:30 Forecast)	Actual time to Initiate Patrol	Estimated Time of Restoration	Actual Restoration Time	Customers Restored	P. Dur. (hr:)
Lincoln City	Lincoln County	Salmon River		Restored/Energized	1,737	1,737	9/9/22 11:32	9/10/22 8:00	11:07	15:07	9/10/22 13:06	1,737	25:00
Lincoln City	Polk	Murphy Hill		Restored/Energized	14	14	9/9/22 12:40	9/10/22 8:00	8:20	9:20	9/10/22 15:40	14	27:00
N. Santiam	Linn	Mill City		Restored/Energized	1322	1322	9/9/22 12:32	9/10/22 12:00	13:05	16:05	9/10/22 15:07	1322	26:35
S. Santiam	Linn	Cascadia West		Restored/Energized	758	758	9/9/22 12:40	9/10/22 9:00	10:08	14:08	9/10/22 17:00	758	28:20
EU17	Roseburg	Douglas		Restored/Energized	179	179	9/9/22 13:02	9/10/22 8:00	8:20	10:20	9/10/22 10:21	179	21:19
EU23	Roseburg	Douglas		Restored/Energized	3	3	9/9/22 13:44	9/10/22 8:00	8:20	9:20	9/10/22 9:23	3	19:39
EU12	Roseburg	Douglas		Restored/Energized	96	96	9/9/22 13:06	9/10/22 8:00	8:20	9:20	9/10/22 10:48	96	21:42
EU76	Roseburg	Douglas		Restored/Energized	23	23	9/9/22 13:06	9/10/22 8:00	8:20	9:20	9/10/22 9:12	23	20:09
EU10	Roseburg	Douglas		Restored/Energized	3	3	9/9/22 13:03	9/10/22 8:00	8:20	9:20	9/10/22 8:15	3	18:51
EU13	Roseburg	Douglas		Restored/Energized	1	1	9/9/22 13:24	9/10/22 8:00	8:20	9:20	9/10/22 10:48	1	19:12
EU83	Roseburg	Douglas		Restored/Energized	25	25	9/9/22 13:07	9/10/22 8:00	8:20	9:20	9/10/22 10:16	25	20:49
S. Santiam	Linn	Brush Creek and Pacific		Restored/Energized	420	420	9/9/22 13:27	9/10/22 8:00	8:20	8:50	9/10/22 8:15	420	21:00
S. Santiam	Linn	Portable 1		Restored/Energized	295	295	9/9/22 13:03	9/10/22 8:00	8:20	8:50	9/10/22 8:15	295	21:45
N. Santiam	Linn	Lyons East		Restored/Energized	21	21	9/9/22 13:30	9/10/22 9:00	10:02	10:17	9/10/22 10:16	21	22:58
44853	N. Santiam	Linn		Restored/Energized	1,717	1,717	9/9/22 17:18	9/10/22 8:00	8:20	12:00	9/10/22 10:48	1,717	21:00
5M126	N. Santiam	Marion		Restored/Energized	989	989	9/9/22 18:00	9/10/22 9:00	9:32	12:02	9/10/22 10:30	989	19:51
40063	N. Santiam	Linn		Restored/Energized	842	842	9/9/22 18:47	9/10/22 9:00	9:32	12:32	9/10/22 13:09	842	21:25
	Albany-Lyons Hwy			Restored/Energized	706	706	9/9/22 19:05	9/10/22 9:00	9:32	12:32	9/10/22 15:25	706	19:34
	Lacomb			Was not De-energized	167	167	9/9/22 21:30	9/10/22 10:00	10:20	13:20	9/10/22 14:21	167	17:25
					260	260	9/9/22 21:30	9/10/22 10:00	10:20	13:20	9/10/22 11:20	260	13:50
					824	0		9/10/22 10:00	10:20	12:20	9/10/22 10:39	824	13:09
					12,817	11,993						11,993	21:00

Event Summary

Weather Forecasts
PSPS Potential
Sunday

Notifications begin
Tuesday

De-Energization
Begins
Friday 11:30 AM

Re-Energization
Begins
Saturday 8:30 AM

Continuous
Improvement
Ongoing

Continuous Improvement

What went well:

- ✓ Forecasting was accurate and timely
- ✓ Process and documentation
- ✓ External coordination was timely and effective
- ✓ Expedited re-energization due to dedicated resources

Future Opportunities:

- Broader public outreach and engagement
- Communication (Schedule, Content, Recipients)
- Strategize Community Resource Centers locations
- Streamline GIS and information sources

Event Summary

Weather Forecasts
PSPS Potential
Sunday

Notifications begin
Tuesday

De-Energization
Begins
Friday 11:30 AM

Re-Energization
Begins
Saturday 8:30 AM

Continuous
Improvement
Ongoing

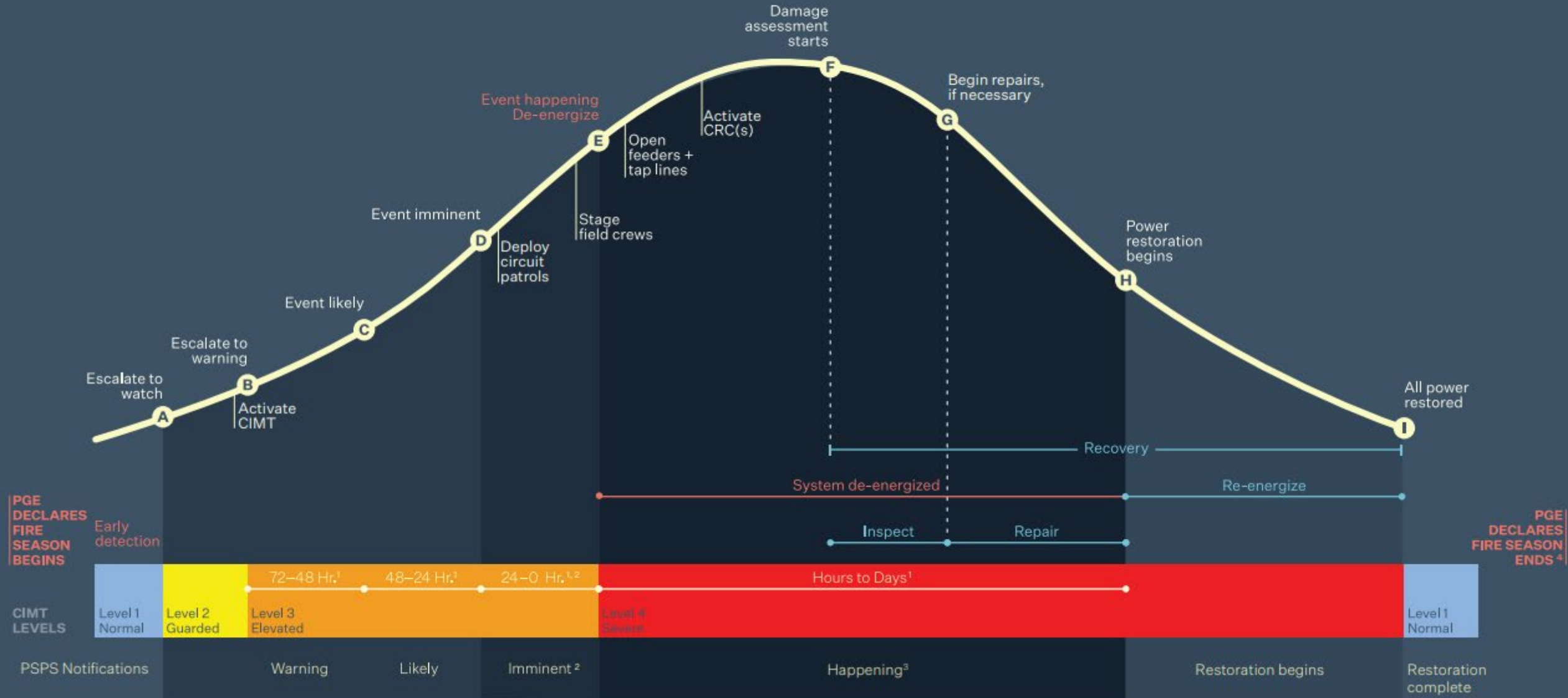
Thank you!

September 2022 PSPS Lessons Learned

Bill Messner, Director Wildfire Mitigation & Resiliency
November 2, 2022



What happens during a PSPS event



Impact

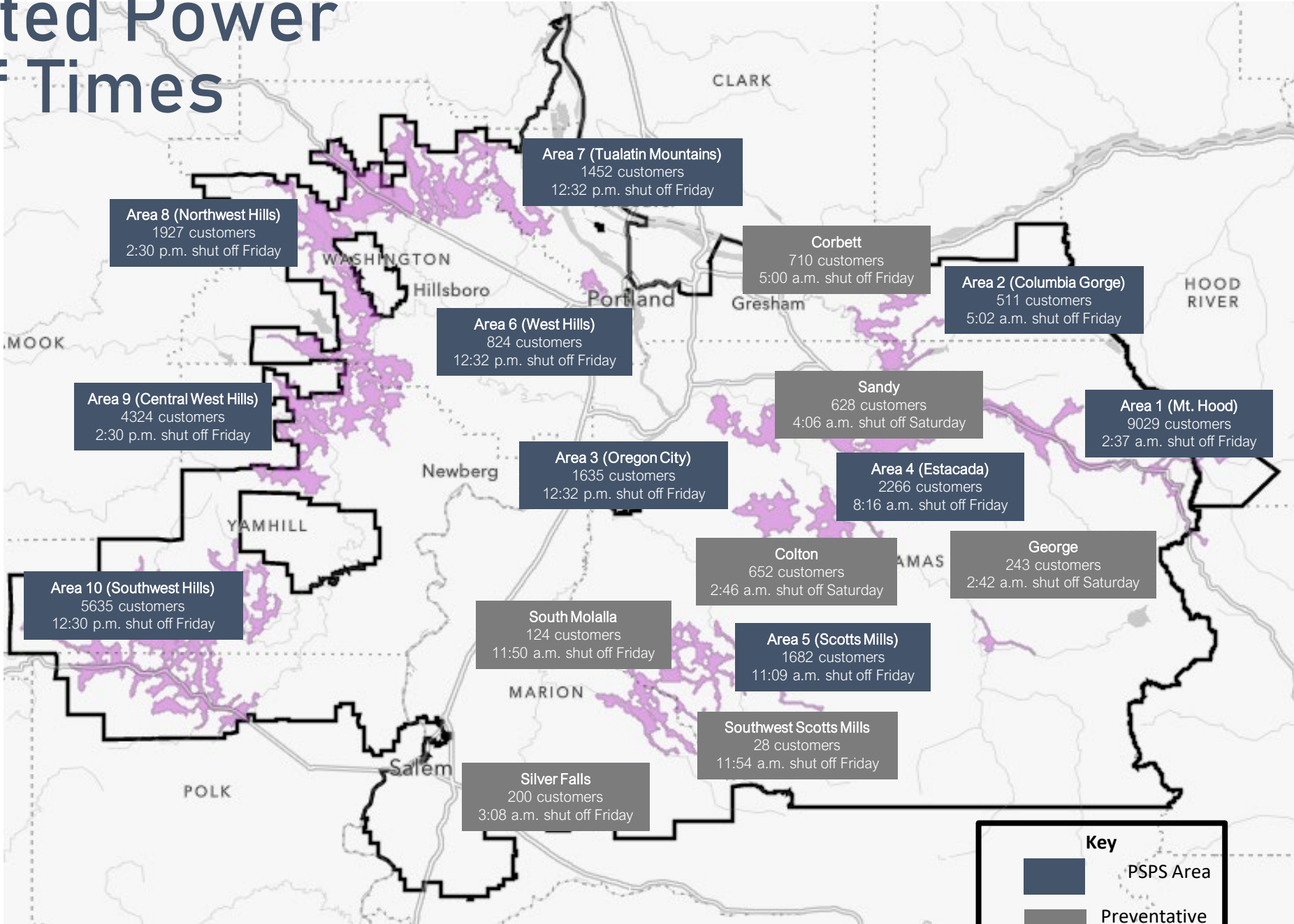
- **Total Customers Affected:** 37,000
- **Critical Customers (Level 1-3):** 1,227
- **Number of PGE CRCs stood up:** 5
 - Provided water, ice, WiFi, and device charging
 - Supported an additional 9 County CRCs
- **Restoration Efforts**
 - 500 operations personnel
 - 112 PGE, contractor, and mutual assistance crews



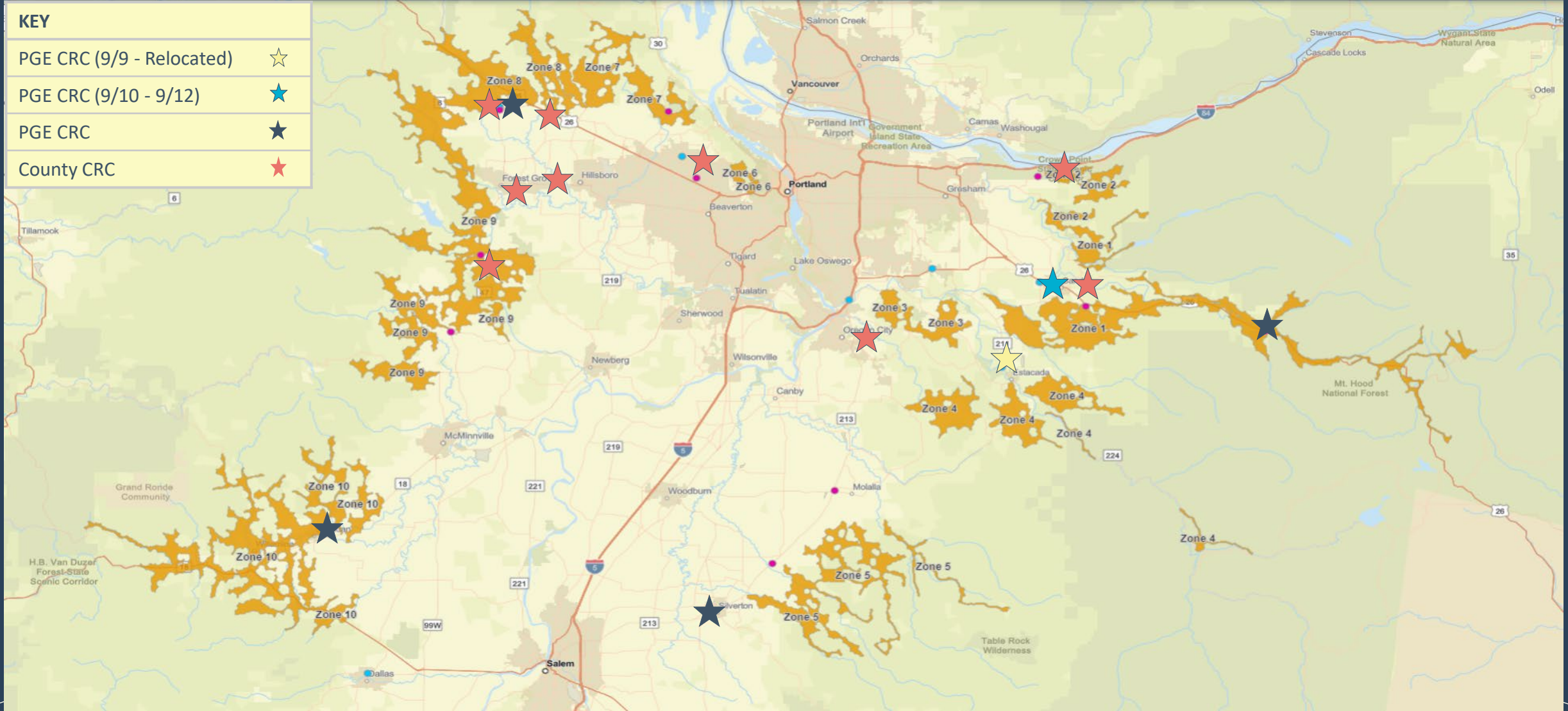
Event Forecast

- **Critical fire weather conditions highly likely Friday through Saturday**
- Magnitude less than September 2020; comparable to 2017 Eagle Creek Fire
- All PGE PSPS Zones are forecasted to meet criteria
- Max Gust Potential
 - **Cascades** 35-45mph, w/gusts 50-55mph
 - **Cascade Foothill** 35-45mph, w/gusts 45-50mph
 - **Exit Region of Gorge** 35-45mph, w/gusts 45-50mph
 - **I-5 Corridor** 23-35mph, w/gusts 40mph
 - **Coastal Range** 35-40mph, w/gusts 45mph
- Timing
 - Gusty Friday sunrise to Saturday sunset
- Strongest Wind Potential
 - Cascades & Foothills: 8PM Friday - 5am Saturday
 - Willamette Valley 11am - 6pm Friday

Estimated Power Shutoff Times



CRC Locations Map



Timeline of events

Tues, 9/6	Wed, 9/7	Thurs, 9/8	Fri, 9/9	Sat, 9/10	Sun, 9/11	Mon, 9/12
Wildfire Risk Assessment Team & CIMT Activated	OPUC Staff, Emergency Managers, Public Safety Partners, Fed/State/Local Officials & Key/Critical customers alerted	"Imminent" notifications sent to customers & Partners	Areas De-energized 2:00 am - 2:30 pm	5pm Restoration begins Power Restored 11pm for Area 6 (West Hills)	All Areas Restored 10pm	PSPS Complete

Watch

Warning /Likely


Imminent

PSPS Happening

Restoration

Re-Energization

Strengths

- Crisis Communication
 - PGE demonstrated a sincere commitment to communicate and coordinate with external partners
 - Whole Community
 - Stakeholder communications were robust and comprehensive
 - On-the-fly adjustments to community support strategies were effective
 - Working collaboratively with PGE, some counties stood up their own CRCs at public locations, while PGE donated supplies to these locations for distribution to impacted communities
 - Operations
 - Additional recloser installations prior to the event enabled PGE to reduce the September 2022 PSPS event's customer impacts
 - Additional PGE weather stations provided an accurate view of meteorological conditions closer to PGE infrastructure when compared to other weather stations in the regional network
- 

Opportunities for Improvement

- Operations
 - Define additional internal controls for PSPS Areas to align appropriate PSPS delineations and outages
 - Invest in additional tools and equipment to allow more targeted, remote control of PSPS areas
 - Update PSPS Area data to include all critical facilities with consideration for seasonality such as school and tourist season.
 - Implementing additional Preventive Outage Areas, in real-time, created communications, operational, logistical and community support challenges.

Opportunities for Improvement (cont.)

- Whole Community
 - Establish and document clear lines of responsibility between PGE and Public Safety Partners for CRCs, locations and information sharing
 - Evaluate the use of Wireless Emergency Alert for PSPS events, with our Public Safety Partners, to reduce “overspray” confusion for notification recipients
 - Assess options to improve the PSPS map functionality and simplify the customer experience
- Community Resource Centers
 - Review site locations using updated criteria and finalize contracts for all locations
 - Formalize volunteer strategy, templates, and training
 - Supplemental employees signed up and trained
 - Renew contract with Fire DAWG for 2023 wildfire season
 - Incorporate vendor recommendations into contract

Thank you

- Please email us at wildfire@pgn.com for any clarifications, additional questions, or to share feedback



Wrap up



Review requirements



Evaluate performance against plans



Assess gaps



Assess opportunities to enhance future operations

Engage with electric provider, ODOE, us and others to move solutions forward

- Thank you for your time
- We will compile feedback
- Coordinate and collaborate with your electric utilities
- Stakeholder survey to complement verbal feedback
 - [Sept 2022 PSPS Survey Form for Stakeholders](#)
- Current plans for all electric utilities can be found [here](#)
- Additional resources including early meetings held through OWEC are [here](#)

