

Don't get yourself stuck on an island - working together & being prepared!

Western

LAMPAC

LABOR AND MANAGEMENT PUBLIC AFFAIRS COMMITTEE



IBEW and Utilities Leadership

2023 SPRING CONFERENCE
HONOLULU, HAWAII, MARCH 20-22, 2023

PACIFICORP METEOROLOGY

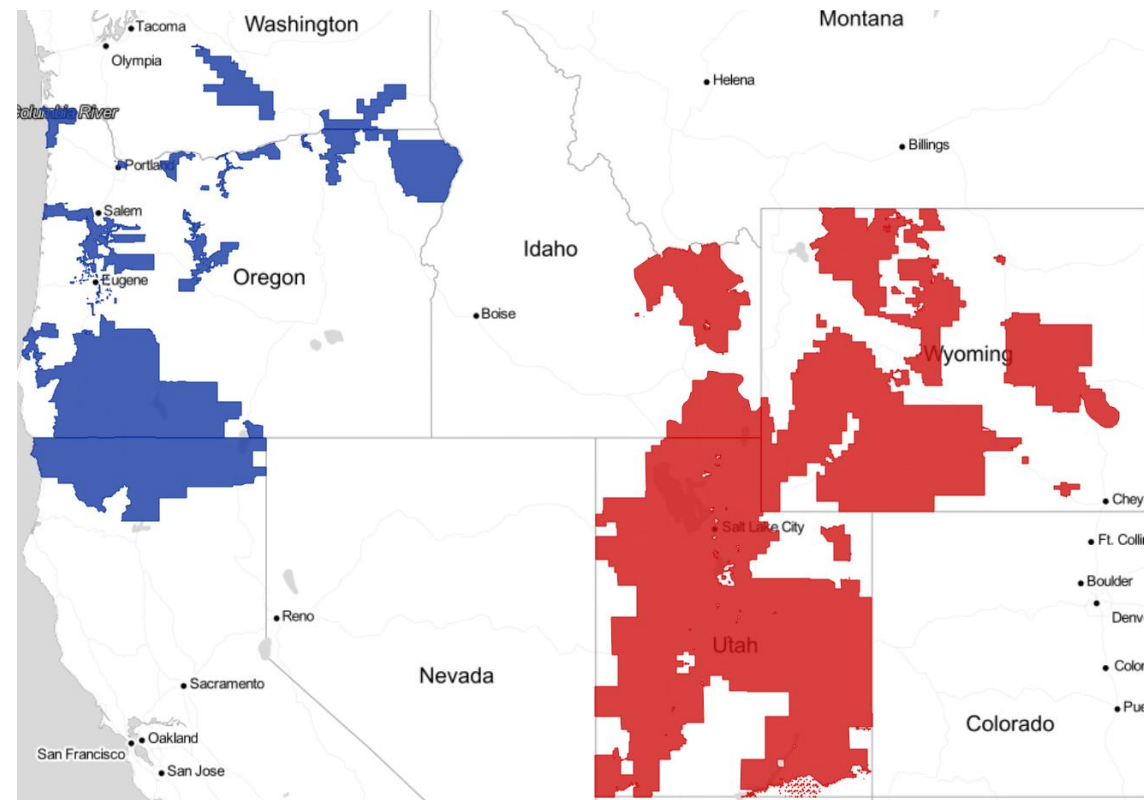
OPERATIONS OVERVIEW



CHRIS WALSH
METEOROLOGY OPERATIONS MANAGER


THE TEAM

the Meteorology Team



- ◆ Manager, operations support manager, data scientist, 4 meteorologists
- ◆ 141,500 square miles of service territory
- ◆ 12 NWS offices, 4 GACCs

DAILY FORECASTS




PACIFIC POWER

WEATHER FORECAST FOR FEB. 17 – FEB. 21

KEY TAKEAWAYS

A strong cold front will begin moving into the Pacific Power service territory from the north late Monday and exit to the south by late Wednesday. This storm will bring gusty winds and low snow levels.

- No weather-related system impacts are expected through Monday.
- **Gusty W-NW winds may lead to isolated outages Tuesday.**
- Snow levels will drop to valley floors by late Tuesday, but at this time snow amounts Tue-Wed look too light in valleys to produce system impacts, and higher elevations will receive lighter low density snow.



ROCKY MOUNTAIN POWER

WEATHER FORECAST FOR FEB. 17 – FEB. 21














KEY TAKEAWAYS

- High pressure continues through Saturday with cold and dry conditions expected for all locations except Wyoming where non-impactful winds will continue.
- A weak system moves across southern Idaho, western Wyoming and northern Utah on Sunday, bringing light snowfall to those areas. Impacts are not expected.

- ◆ 5-Day forecast issued daily Monday through Friday
- ◆ Forecast updates issued as needed
- ◆ Forecasts are impacts-based
- ◆ Focus on eight hazards: wind, snow, ice, flooding, thunderstorms, extreme temperatures, and fire weather

DAILY FORECASTS

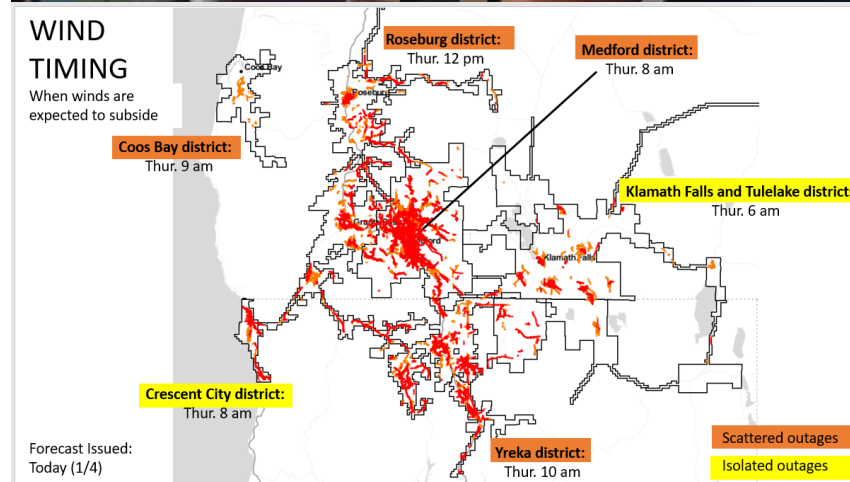
PACIFIC POWER SYSTEM IMPACTS FORECAST MATRIX										
WEATHER-RELATED OUTAGE POTENTIAL (Wx) and WILDFIRE RISK (F)										
NORTH WIRES		2/17 (Fri)					2/18 (Sat)		2/19 (Sun)	
		Wx	F	CIRC	CUST	Response	Wx	F	Wx	F
Clatsop Area	Clatsop									
Enterprise Area	Enterprise									
Hood River Area	Hood River									
Pendleton Area	Hermiston									
	Pendleton									
Portland Area	Portland									
Walla Walla Area	Walla Walla									
Yakima Area	Sunnyside									
	Yakima									

WEATHER-RELATED OUTAGE POTENTIAL (Wx)	
OUTAGE POTENTIAL	
	Widespread Outages with Extended Restoration
	Scattered to Widespread Outages
	Isolated to Scattered Outages
	No System Impacts Expected
WEATHER-RELATED HAZARDS	
 (W) Wind	 (I) Freezing Rain / Ice
 (L) Thunderstorms / Lightning	 (S) Snow
 (R) Heavy Rain or Flooding	
WILDFIRE RISK (F)	
	Extreme (Windy & Dry with Gusts ≥ 95th percentile)
	Significant (Windy & Dry OR Hot & Dry with Very Dry Fuels)
	Elevated (Dry Fuels and Dry Weather)
	Low

- ◆ Impacts Matrix issued daily
- ◆ District-level outage potential by hazard
- ◆ District-level fire risk
- ◆ 32 Pacific Power districts, 52 Rocky Mountain Power districts, 84 in all

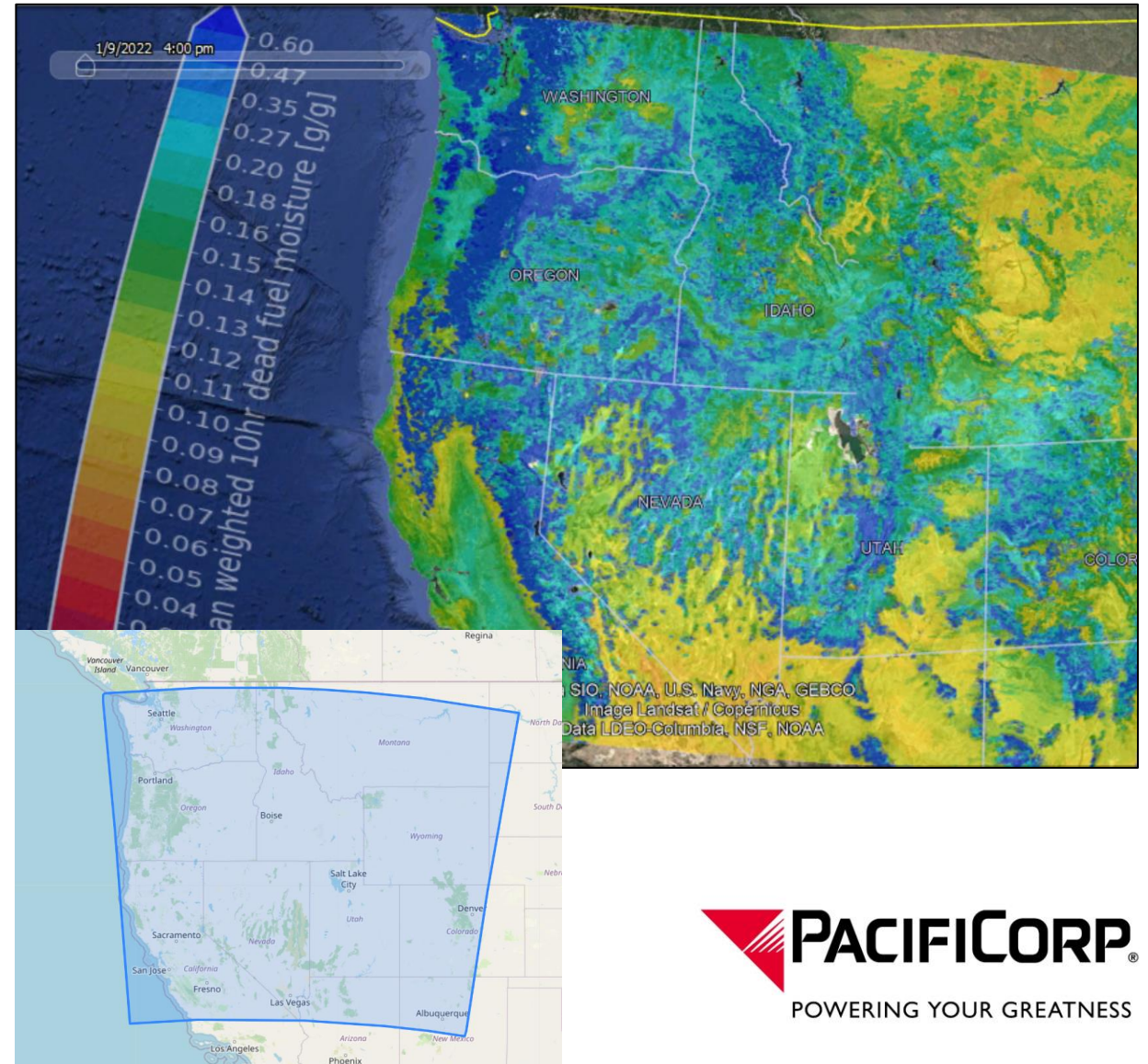
EMERGENCY OPERATIONS

- ◆ 24-7 virtual and in-person support for the Emergency Coordination Center (ECC)
- ◆ Weather briefings for significant weather events
- ◆ Realtime monitoring of conditions
- ◆ Decision support
- ◆ Event summaries for regulatory reporting



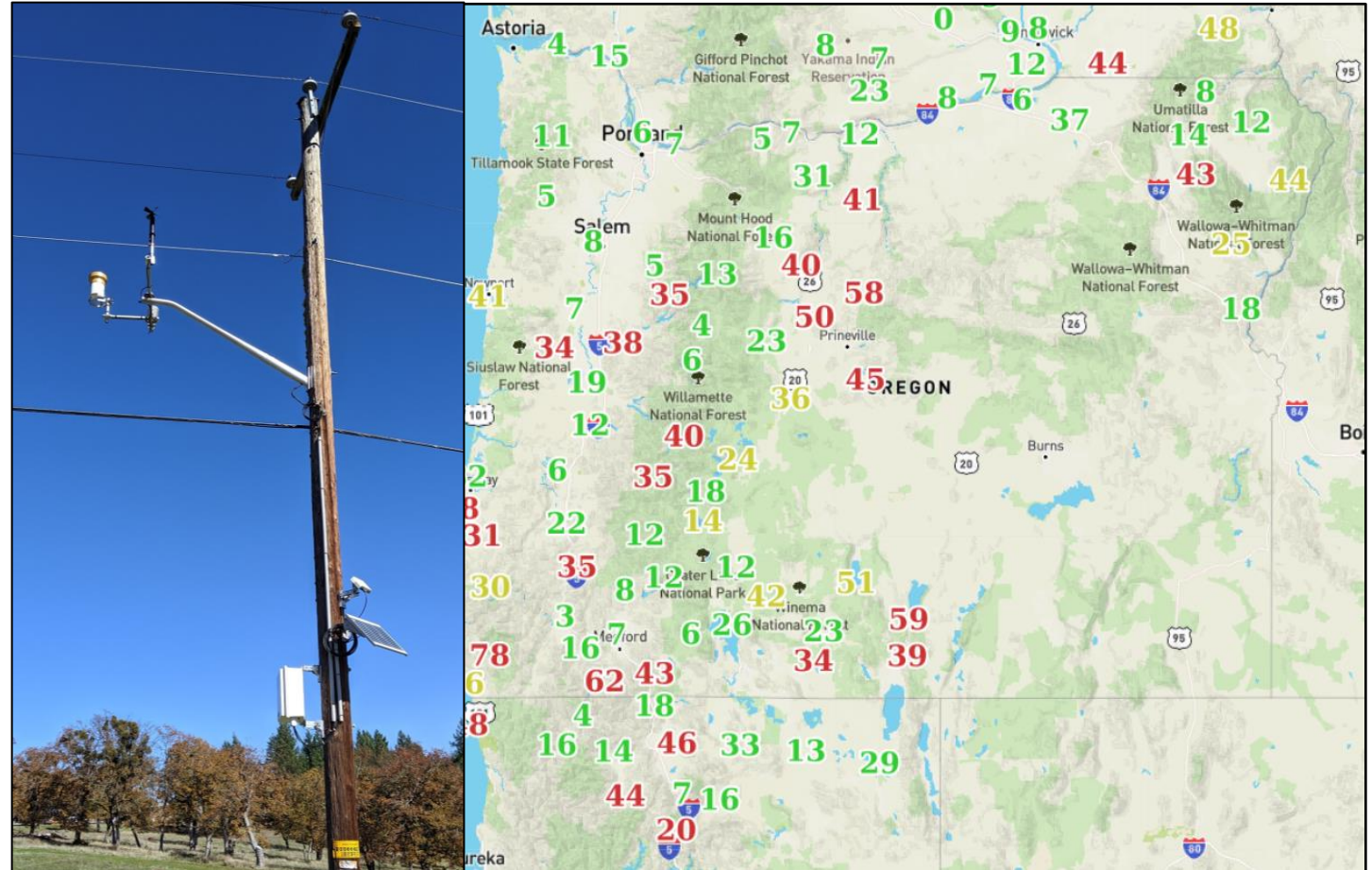
ADVANCED WEATHER PREDICTION

- ◆ Two computing clusters run an in-house 2-km 96-hour weather prediction model
- ◆ Twice daily model output
- ◆ 30-year historical weather reanalysis/climatology
- ◆ The climatology serves as the foundation for operational forecasting, outage prediction models, fire weather indices, and system hardening strategies



REALTIME SITUATIONAL AWARENESS





- ◆ 320+ weather stations deployed across the service territory, 10-minute observations, 30-second observations possible
- ◆ PacifiCorpWeather.com provides access to current conditions and forecasts
- ◆ 10 deployable weather stations



WILDFIRE RISK

- ◆ Fire risk is assessed daily for each district
- ◆ Two new data-driven fire risk indices were developed that compare current and forecast conditions to historical data, risk is assessed at the zone of protection
- ◆ Fire weather variables are assessed and contribute to the forecast

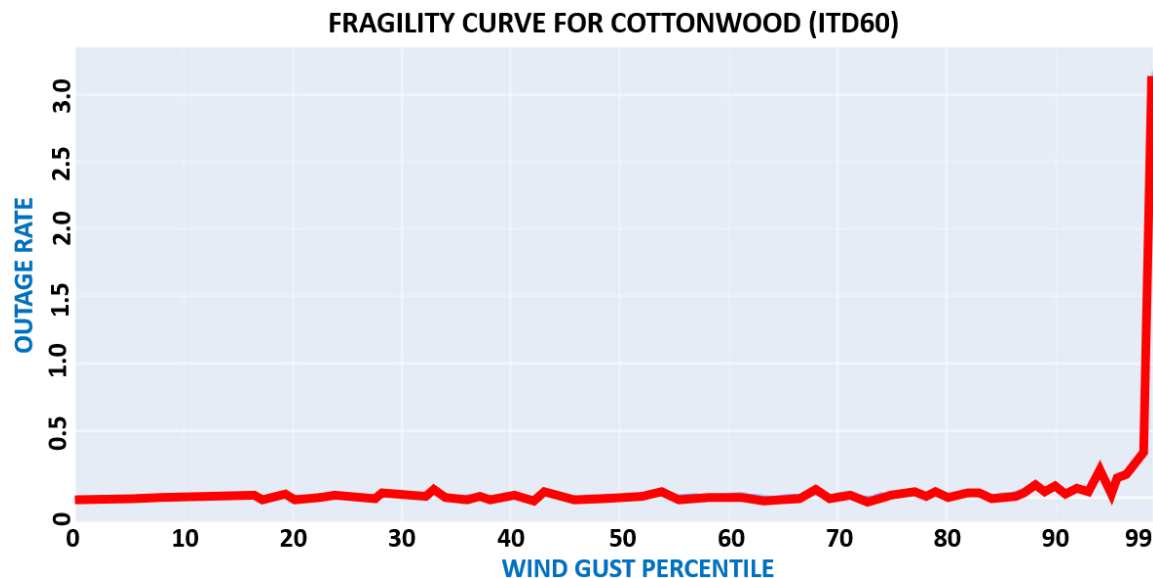
PACIFIC POWER SYSTEM IMPACTS FOR									
WEATHER-RELATED OUTAGE POTENTIAL (Wx) and WILDFIRE RISK (F)									
		TODAY					DAY 2		
SOUTH WIRES		Wx	F	CIRC	CUST	Response	Wx	F	
Grants Pass Area	Grants Pass								
Klamath Falls Area	Alturas								
	Klamath Falls								
	Lakeview								
	Tulelake								
Medford Area	Medford	W							
Yreka Area	Mt. Shasta	W							
	Yreka								

WILDFIRE RISK (F)	
	Extreme (Windy & Dry with Gusts ≥ 95th percentile)
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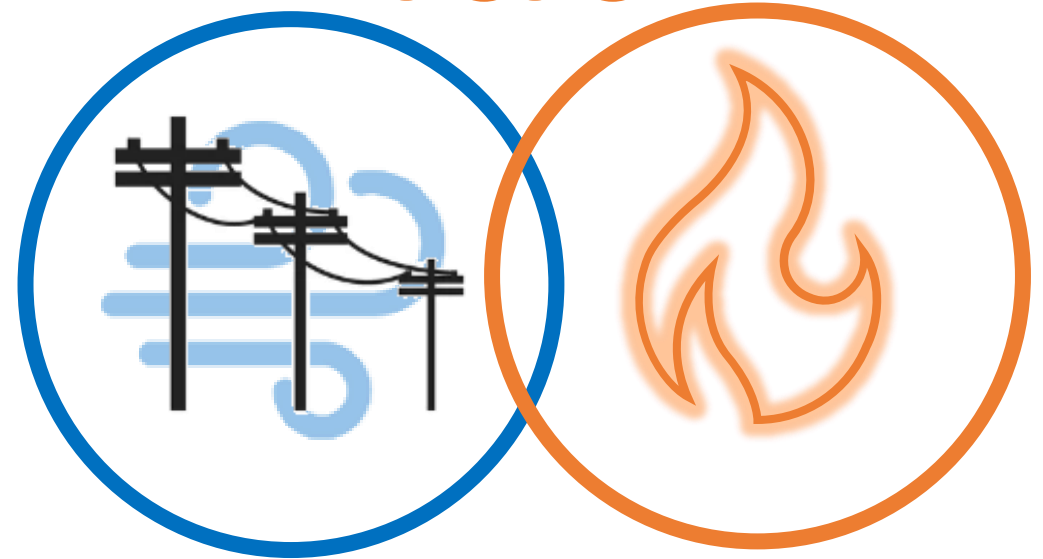


PUBLIC SAFETY POWER SHUTOFF

- ◆ Public Safety Power Shutoff become necessary when outage risk intersects with environmental / fire risk
- ◆ Data science work created wind-related outage models that aid in determining outage risk.

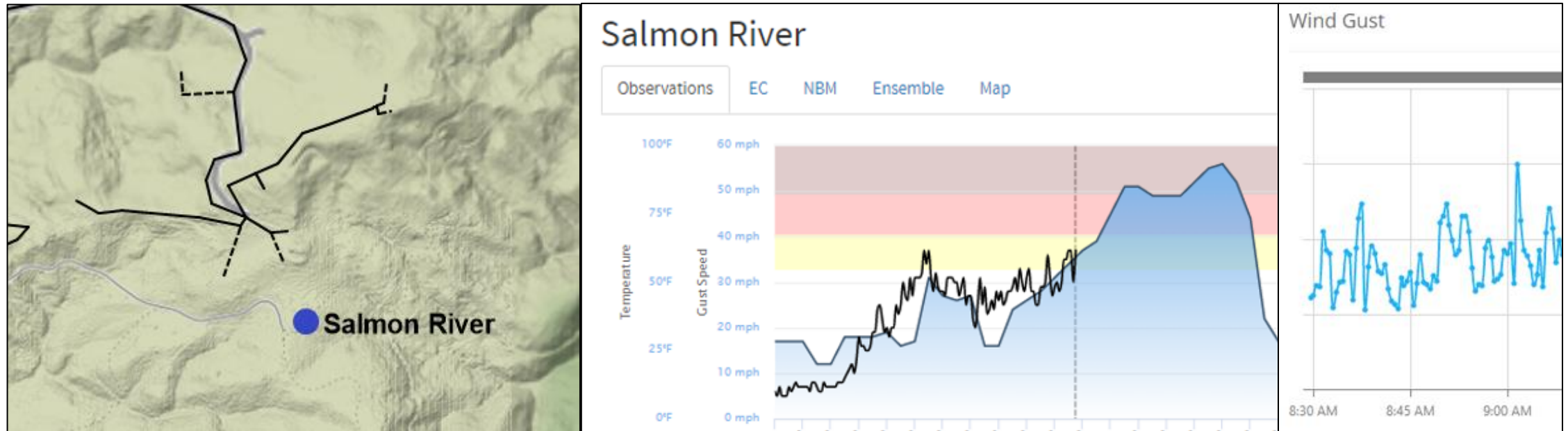


PSPS



Medford Area	Medford	W	
Yreka Area	Mt. Shasta	W	

PUBLIC SAFETY POWER SHUTOFF



- ◆ Meteorology performed weather station circuit associations across the service territory.
- ◆ Prior to a potential PSPS, meteorology creates circuit forecasts to identify critical times for operations.
- ◆ Weather stations are monitored in real time to determine if a PSPS is necessary.

Questions & Comments

For more information about our meteorology program please contact:

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THANK YOU

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