

# Fire Weather Resources 2025

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# Our discussion today

- Overview of NWS Role in Fire
- Fire Weather Forecast (FWF)
- Red Flag Warnings (RFW) & Fire Weather Watches (FWW)
- NW GACC resources



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# NWS ROLE & RESOURCES



# Mission

- Provide local weather support for planning, preparation, mitigation, and attack efforts on wildfires.
- Support partners 24/7 with spot forecasts and specialized information
- Incident Meteorologists deploy
- Recorded briefings

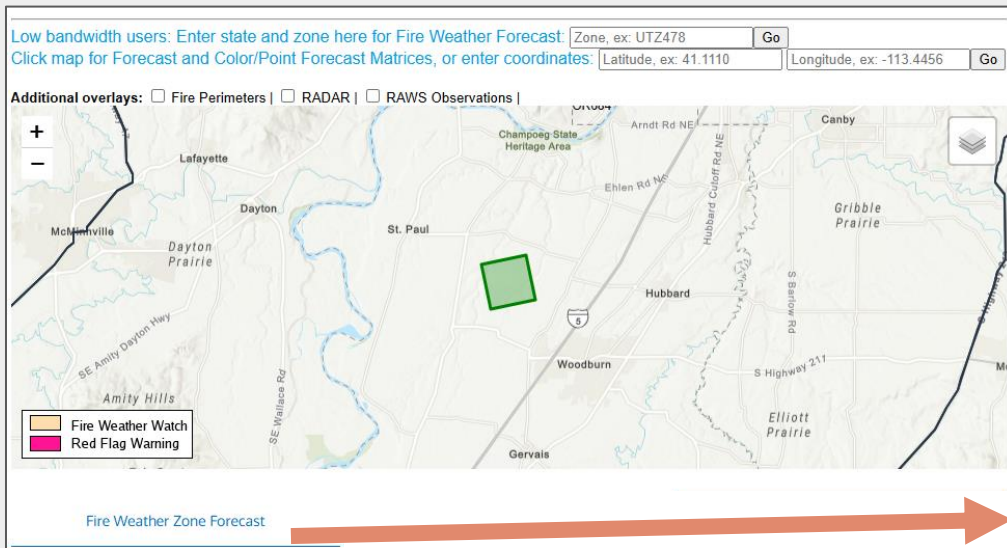


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- Fire Weather
- USAB066202 • Forecast GE • Fire Weather
- Spot Forecast • Forecasts • Hazards • Status • Fuels • Tools • Admin • Contact
- Portland, OR  
Weather Forecast Office
- Font: a A A About This Page
- Low bandwidth  
Click map for
- Portland Fire Weather  
Recording
- Forecast Matrices, or enter coordinates
- Zone: ar 112470 Go
- Latitude: ar 41 110 Longitude: ar -113.4456 Go
- Additional over
- Current Fire Weather Recording
- RAWS (Observations)
- Map showing fire weather zones and stations in the Pacific Northwest, including areas like WA551, WA555, WA559, WA560, WA563, WA565, WA567, WA569, WA570, WA571, WA572, WA573, WA574, WA575, WA576, WA577, WA578, WA579, WA580, WA581, WA582, WA583, WA584, WA585, WA586, WA587, WA588, WA589, WA590, WA591, WA592, WA593, WA594, WA595, WA596, WA597, WA598, WA599, WA600, WA601, WA602, WA603, WA604, WA605, WA606, WA607, WA608, WA609, WA610, WA611, WA612, WA613, WA614, WA615, WA616, WA617, WA618, WA619, WA620, WA621, WA622, WA623, WA624, WA625, WA626, WA627, WA628, WA629, WA630, WA631, WA632, WA633, WA634, WA635, WA636, WA637, WA638, WA639, WA640, WA641, WA642, WA643, WA644, WA645, WA646, WA647, WA648, WA649, WA650, WA651, WA652, WA653, WA654, WA655, WA656, WA657, WA658, WA659, WA660, WA661, WA662, WA663, WA664, WA665, WA666, WA667, WA668, WA669, WA670, WA671, WA672, WA673, WA674, WA675, WA676, WA677, WA678, WA679, WA680, WA681, WA682, WA683, WA684, WA685, WA686, WA687, WA688, WA689, WA690, 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Note that there are new Fire Weather Zones for offices this season.

## Fire Weather Discussion

NUS56 KPQR 121000  
FWFPQR

Fire Weather Planning Forecast for NW Oregon and SW Washington  
National Weather Service Portland OR  
300 AM PDT Thu Jun 12 2025

.DISCUSSION...Expect persistent onshore flow through early next week with near normal daytime temperatures and excellent overnight RH recoveries. Locally breezy winds in the afternoon and evening each day. Chances for widespread light rain Monday night through Wednesday morning.

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Please see Area Forecast Discussion at the URL below for the longer form forecast reasoning:  
<https://www.weather.gov/wrh/TextProduct?product=afdpqr>

\*\*\*Winds are 20-Foot 10 Minute Averages\*\*\*

\*\*\*CWR-Chance of Wetting Rain 0.25 or greater\*\*\*

\*\*\*The phrase high instability means there is weather expected that would promote pyrocumulus development\*\*\*

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## Fire Weather Forecast for ORZ684

ORZ684-131100-  
Northern and Central Willamette Valley-  
300 AM PDT Thu Jun 12 2025

.TODAY...

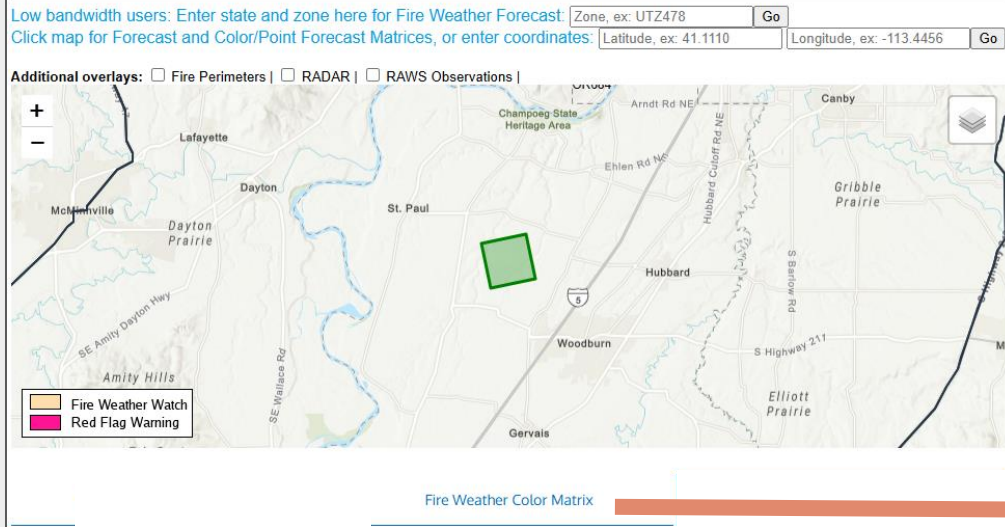
- \* Sky/Weather.....Partly sunny.
- \* Max Temperature.....72-77.
- \* Min Humidity.....39-45%.
- \* 20-Foot Winds.....Variable 0-3 mph becoming northwest 4-7 mph in the afternoon.
- \* CWR.....0%.
- \* Chance of Lightning.....0%.
- \* Mixing Height.....5500 ft agl.
- \* Transport Winds.....North around 5 mph increasing to northwest in the afternoon.

.TONIGHT...

- \* Sky/Weather.....Partly cloudy.
- \* Min Temperature.....45-50.
- \* Max Humidity.....85-90%.
- \* 20-Foot Winds.....Northwest 5-8 mph with gusts up to 20 mph until early morning becoming drainage less than 5 mph.
- \* CWR.....0%.
- \* Chance of Lightning.....0%.
- \* Mixing Height.....500 ft agl.
- \* Transport Winds.....Northwest around 15 mph becoming north around 5 mph after midnight.



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## Forecast Matrix for 45.1833 -122.9095

For Planning Purposes Only, Request a SPOT for a quality-controlled Official Forecast

	Thu Jun 12	Fri Jun 13	Sat Jun 14	Sun Jun 15	Mon Jun 16	Tue Jun 17
Min Humidity (%)	41	46	39	34	37	46
Max Wind Gust (mph)	14	12	14	12	12	15
Wind Direction *	N	NW	N	NW	W	W
Max Temperature (F)	75	70	75	80	79	77
Max Humidity (%)	90	89	90	87	85	82
Cloud Cover @1500 (%)	9	41	6	30	50	48
Probability of Precip (%)	3	1	0	5	27	36

Values that Indicate  
Neutral or Suppressed  
Fire Conditions

Values that Indicate  
Elevated Fire  
Conditions

Values that Indicate  
Critical/Extreme Fire  
Conditions

Min Humidity Criteria:	$\geq 23 \%$	16 to 22 %	$\leq 15 \%$
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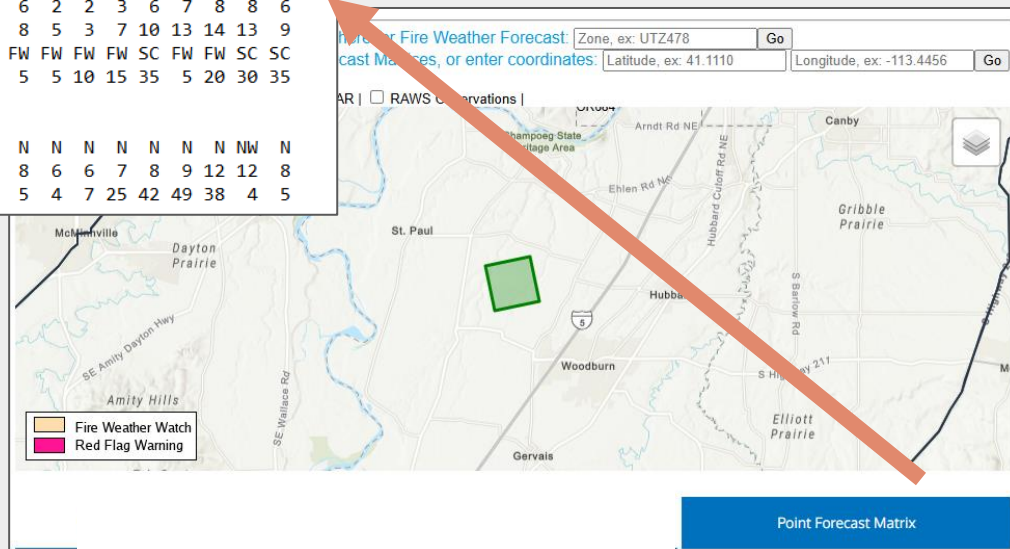
## Point Forecast Matrix for 45.1833, -122.9095

Forecast prepared by WFO PQR

45.1833N -122.9095W 108FT

1041 AM PDT Thu Jun 12 2025

DATE	THU 06/12/25										FRI 06/13/25										SAT 06/14/25									
UTC 3HRLY	10	13	16	19	22	01	04	07	10	13	16	19	22	01	04	07	10	13	16	19	22	01	04	07						
PDT 3HRLY	03	06	09	12	15	18	21	00	03	06	09	12	15	18	21	00	03	06	09	12	15	18	21	00						
MAX/MIN TEMP	46					75				45					70					43				75						
TEMP	46	55	65	73	72	61	53	47	45	53	61	66	68	61	51	46	45	54	64	72	73	65	55							
DEWPT	43	45	47	49	48	46	44	42	42	43	46	47	47	46	43	41	41	44	47	48	49	49	46							
RH	89	69	53	42	42	57	72	84	88	70	58	49	48	57	74	85	86	70	52	42	43	56	73							
WIND DIR	N	N	N	N	N	N	N	N	N	N	NW	NW	NW	NW	N	N	N	N	N	N	NW	NW								
WIND SPD	1	2	3	6	8	7	5	2	2	2	5	6	7	7	6	2	2	3	6	7	8	8	6							
WIND GUST	2	5	8	12	14	13	9	5	5	5	8	10	12	12	8	5	3	7	10	13	14	13	9							
CLOUDS	SC	BK	FW	FW	FW	SC	FW	SC	SC	BK	BK	SC	SC	FW	FW	FW	FW	FW	SC	FW	FW	SC	SC							
CLOUDS(%)	50	60	20	10	25	40	15	35	45	60	50	40	40	20	5	5	10	15	35	5	20	30	35							
POP(%)					5	5	5																							
QPF																														
TRANSWIND DIR	N	N	N	N	N	N	N	N	N	N	N	NW	N	N	N	N	N	N	N	N	N	NW	N							
TRANSWIND SPD	3	5	5	8	13	13	8	7	6	6	5	6	8	9	8	6	6	7	8	9	12	12	8							
MIXING HEIGHT	5	23	36	51	42	4	5	5	6	29	43	55	41	3	5	4	7	25	42	49	38	4	5							

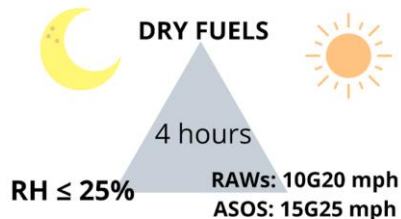


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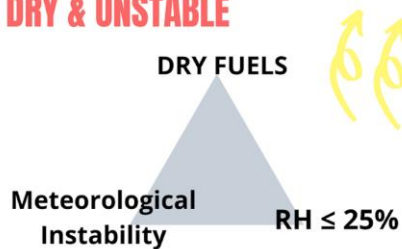


# BASELINE RED FLAG CRITERIA


## DRY & WINDY



## DRY & UNSTABLE



## LIGHTNING

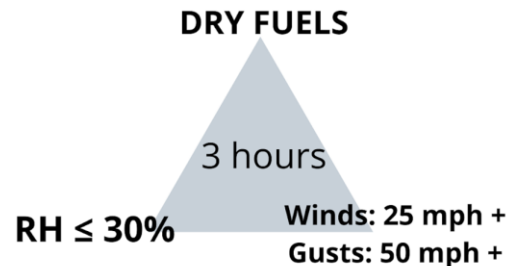


Scattered TSTMS &  
Critically Dry Fuels

No appreciable change in fuel  
conditions after event

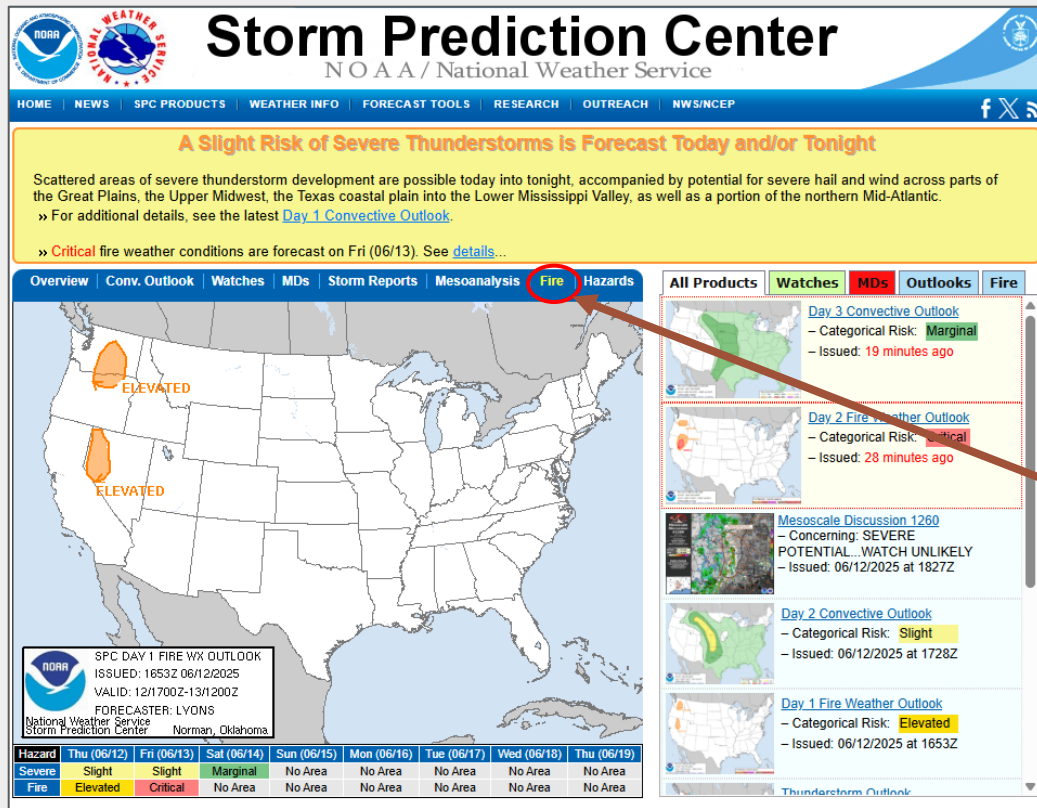
# PARTICULARLY DANGEROUS RED FLAG WARNING

## DRY & WINDY



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# Storm Prediction Center (SPC)



<https://www.spc.noaa.gov/>

Shows areas of enhanced risk for fire weather



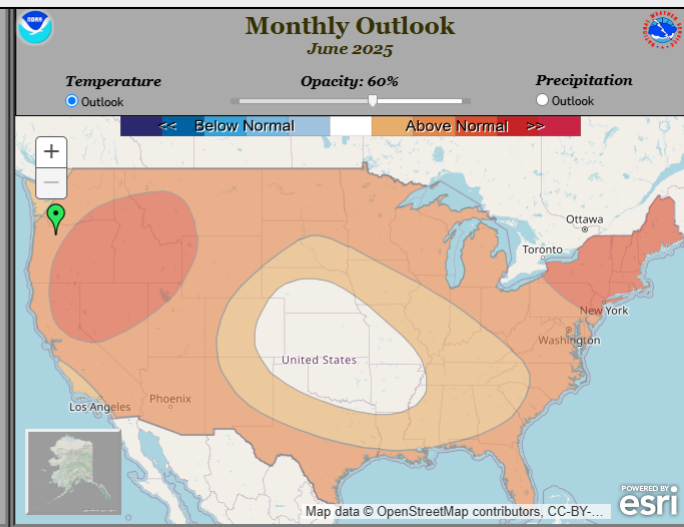
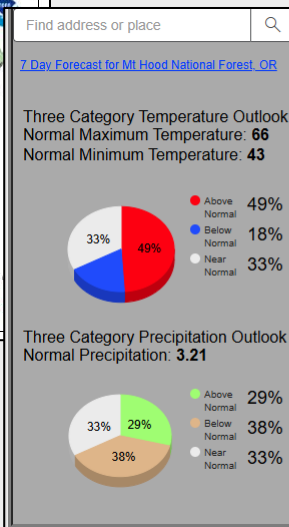
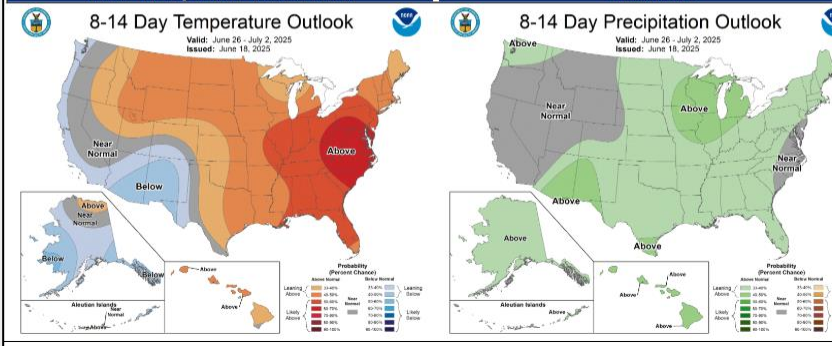
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# Climate Prediction Center (CPC)

<https://www.cpc.ncep.noaa.gov>

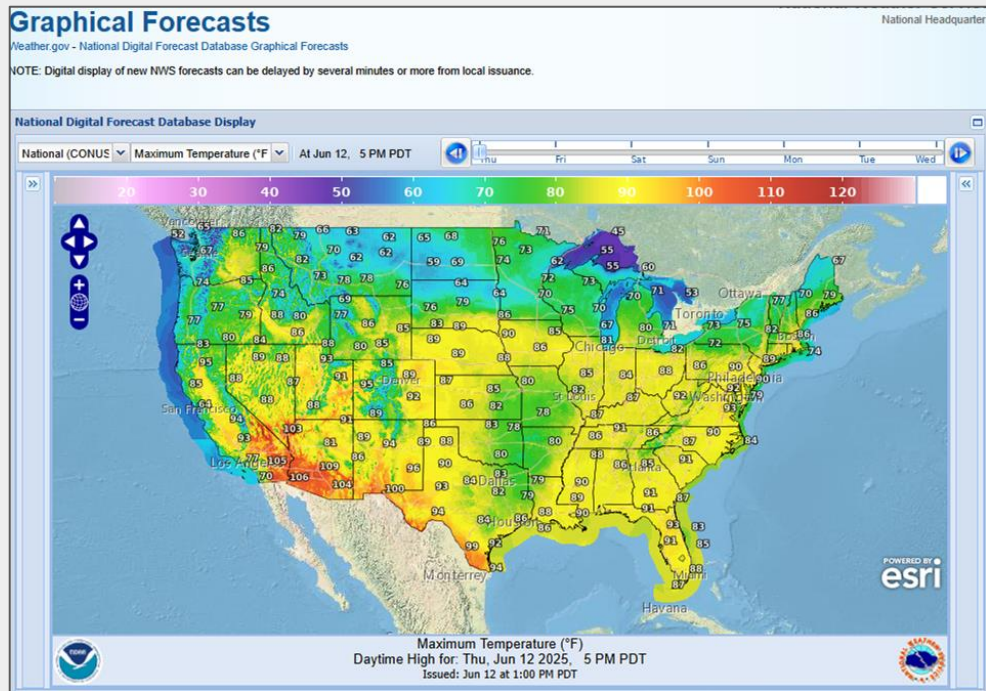
Click on product title to go to product page. Move cursor over product parameter name to display the graphic -- click to enlarge. Links to these same products are also available below.

<a href="#">6-10 Day Outlook (Interactive)</a>	<a href="#">One Month Outlook (Interactive)</a>
<a href="#">Temperature</a>	<a href="#">Temperature</a>
<a href="#">Precipitation</a>	<a href="#">Precipitation</a>
<a href="#">8-14 Day Outlook (Interactive)</a>	<a href="#">Three Month Outlook (Interactive)</a>
<a href="#">Temperature</a>	<a href="#">Temperature</a>
<a href="#">Precipitation</a>	<a href="#">Precipitation</a>
<a href="#">Week 3-4 Outlooks</a>	<a href="#">8-14 Day U.S. Hazards Outlook</a>
<a href="#">Temperature</a>	<a href="#">Probabilistic: Temp Precip Snow Wind</a>
<a href="#">Precipitation</a>	
<a href="#">U.S. Drought Information</a>	<a href="#">Global Tropics Hazards Outlook</a>
<a href="#">Monitor</a>	<a href="#">Weeks 2 and 3</a>
<a href="#">Monthly Outlook</a>	
<a href="#">Seasonal Outlook</a>	



# National Digital Forecast Database

<https://digital.weather.gov/>



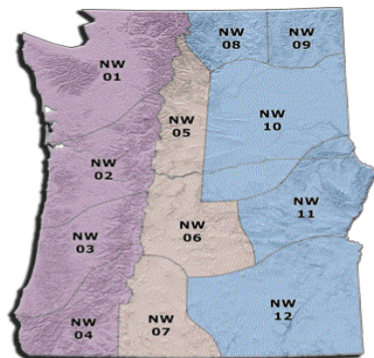
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# NW GACC

# 7-Day Fire Potential

<https://gacc.nifc.gov/nwcc/>



**Legend**

## Significant Fire Risk Levels

<b>Low</b>	The Overall Fire Environment suggests a very low risk for significant fires ( <b>less than 1% chance</b> )
<b>Moderate</b>	The Overall Fire Environment suggests a moderate risk for significant fires ( <b>1 - 4% chance</b> )
<b>Elevated</b>	The Overall Fire Environment suggests a moderately high risk for significant fires ( <b>5 - 19% chance</b> )
<b>High Risk</b>	The risk for significant fire(s) is very high ( <b>≥ 20%</b> ) Triggers: 1. ✓ (Significant Lightning) 2. BEN (Critical Burn Environment)

## Pacific Northwest 7 Day Significant Fire Potential

Thursday, 6/12/2025



Predictive Service	Areas	ytd	Today	Fri	Sat	Sun	Mon	Tue	Wed
NW01									
NW02									
NW03									
NW04									
NW05									
NW06									
NW07									
NW08									
NW09									
NW10									
NW11									
NW12									

**Fire Weather:** A transition day as upper low pressure arrives today through Saturday but stays centered offshore. Gusty winds will continue through the Gorge and the Cascades gaps but with only a minimal increase in humidity. Winds gradually weaken through the weekend. Meanwhile, isolated thunderstorms are expected later this afternoon into the early evening in northeast Washington mainly along the Canadian border. Storms will be primarily wet. After a break Sunday, the upper low nudges closer to the PacNW. This will deliver a chance of thunderstorms primarily to the SE Oregon PSAs. The low Monday and Tuesday to bring showers and potential isolated thunderstorms back into the forecast. The low moves onto the coast on Tuesday potentially resulting in strong, gusty winds for the Columbia Gorge and Cascade gaps.

Refer to local NWS forecasts and statements for specific forecast details in your area.

**Fire Potential:** Expect IA to diminish to seasonal level over the next several days. Holdovers will continue to be an issue due to the abundant lightning over the past couple days. Spread potential in Oregon is being moderated by recent moisture, and live fuels at mid to upper elevations. Eastern Washington still has high spread potential where cured fuels align with slope and/or wind. Expect temperatures to remain at or slightly below seasonal normals. The next significant increase in fire potential is possible on Tuesday as strong winds push through the Columbia Gorge and Cascade gaps.



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**Many other resources on the GACC website**



# CONTACT US:

**Meteorologist-in-charge** - Tanja Fransen - [tanja.fransen@noaa.gov](mailto:tanja.fransen@noaa.gov)

**Warning Coordination Meteorologist** - Treena Jensen - [treena.jensen@noaa.gov](mailto:treena.jensen@noaa.gov)

**Fire Wx Focal Point** - Rebecca Muessle - [rebecca.muessle@noaa.gov](mailto:rebecca.muessle@noaa.gov)

For all of the fire weather team please email  
**[pqr.fire.team@noaa.gov](mailto:pqr.fire.team@noaa.gov)**



# QUESTIONS?



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