Oregon Water Conditions Report

August 26th, 2024

HIGHLIGHTS

Thus far in 2024, there is one Oregon county with a state drought declaration under ORS 536.

According to the US Drought Monitor, over 66% of Oregon is experiencing moderate (D1) to severe drought (D2) conditions. In the past two weeks, severe drought has emerged in southwestern and southeastern Oregon.

Over the last two weeks, most of Oregon received above normal precipitation especially in southwestern Oregon where precipitation was 1.5 to 3.75 inches above normal. Across western and parts of central and eastern Oregon, precipitation was less than 0.75 inches above normal. Precipitation in isolated parts of central and eastern Oregon was below normal with less than 0.25 inch of accumulated precipitation.

Temperatures over the last two weeks were below normal for most of the state, most notably in southcentral Oregon where temperatures were 4°F to 8°F below normal. Along the coast and in parts of northeastern Oregon, temperatures were up to 2°F above normal.

Recent soil moisture indicators show a slight increase in soil moisture in southwestern Oregon and small parts of western and eastern Oregon. Along the coast and in scattered parts of central and eastern Oregon there has been a minimal decrease in soil moisture.

The 8-14 day climate outlook indicates above normal temperatures are likely for the entire state and probabilities are leaning towards above normal precipitation statewide.

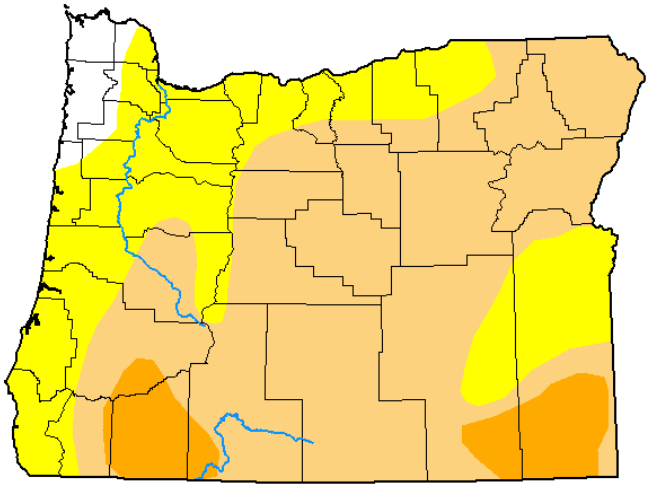
Recent streamflow conditions over the past seven days have varied across the state. Along and west of the Cascades, streamflow conditions were generally near to above normal with some exception. In central and eastern Oregon, streamflow was generally below normal. Streamflow over the past 28 days shows a similar trend in variability across the state but with less above normal streamflows. In northeastern and across parts of southern Oregon, well below normal streamflow conditions were recorded.

Reservoir storage in many basins is currently near to above average. However, projects in the Deschutes, Powder, and Rogue basins are measuring below average. See USBR (including Klamath) and USACE teacup diagrams for more information.

Significant wildfire potential over the next seven days ranges from low to elevated throughout the Pacific Northwest. Parts of central and eastern Oregon are projected to have an elevated risk by the end of the week.

DROUGHT CONDITIONS

U.S. Drought Monitor
Oregon



August 20, 2024
(Released Thursday, Aug. 22, 2024)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	3.12	96.88	66.12	8.40	0.00	0.00
Last Week *08-13-2024*	4.37	95.63	64.76	4.21	0.00	0.00
3 Months Ago *05-21-2024*	90.09	9.91	0.00	0.00	0.00	0.00
Start of Calendar Year *01-02-2024*	47.04	52.96	18.85	3.12	0.00	0.00
Start of Water Year *09-26-2023*	24.13	75.87	54.18	27.06	6.40	0.00
One Year Ago *08-22-2023*	24.02	75.98	50.89	17.70	0.00	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

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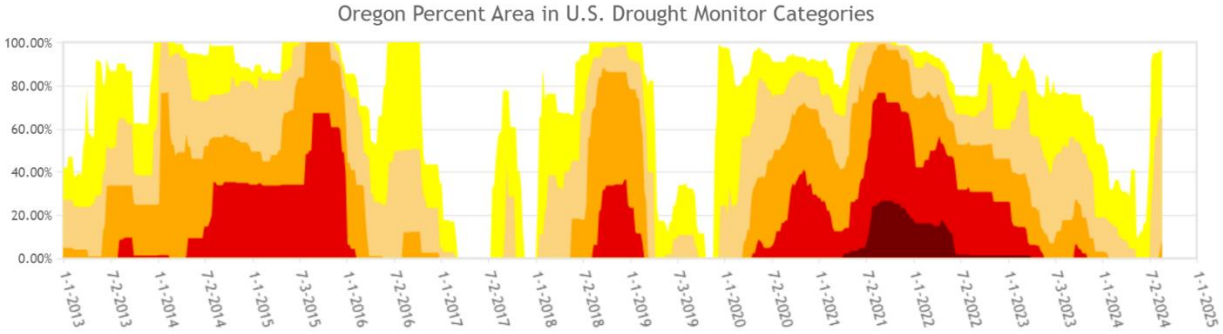
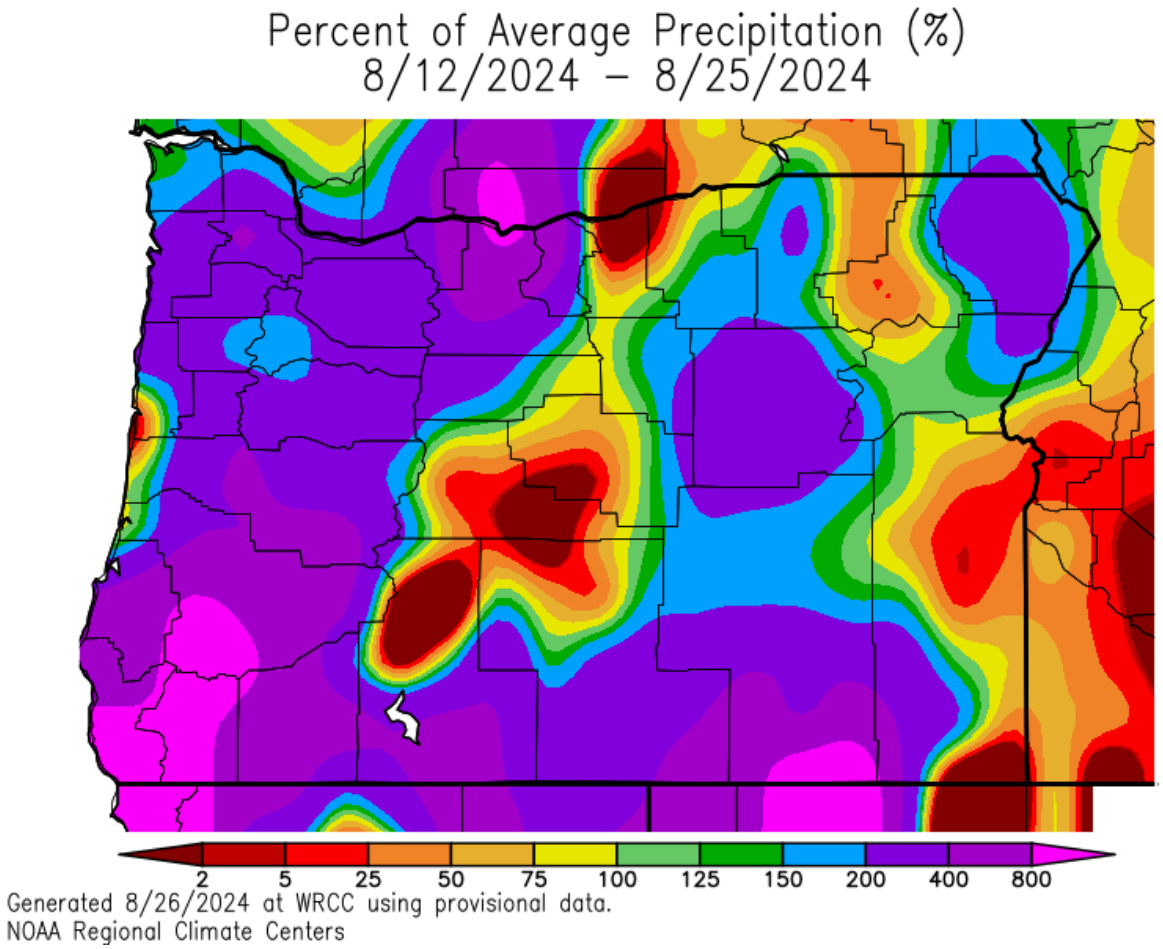
droughtmonitor.unl.edu

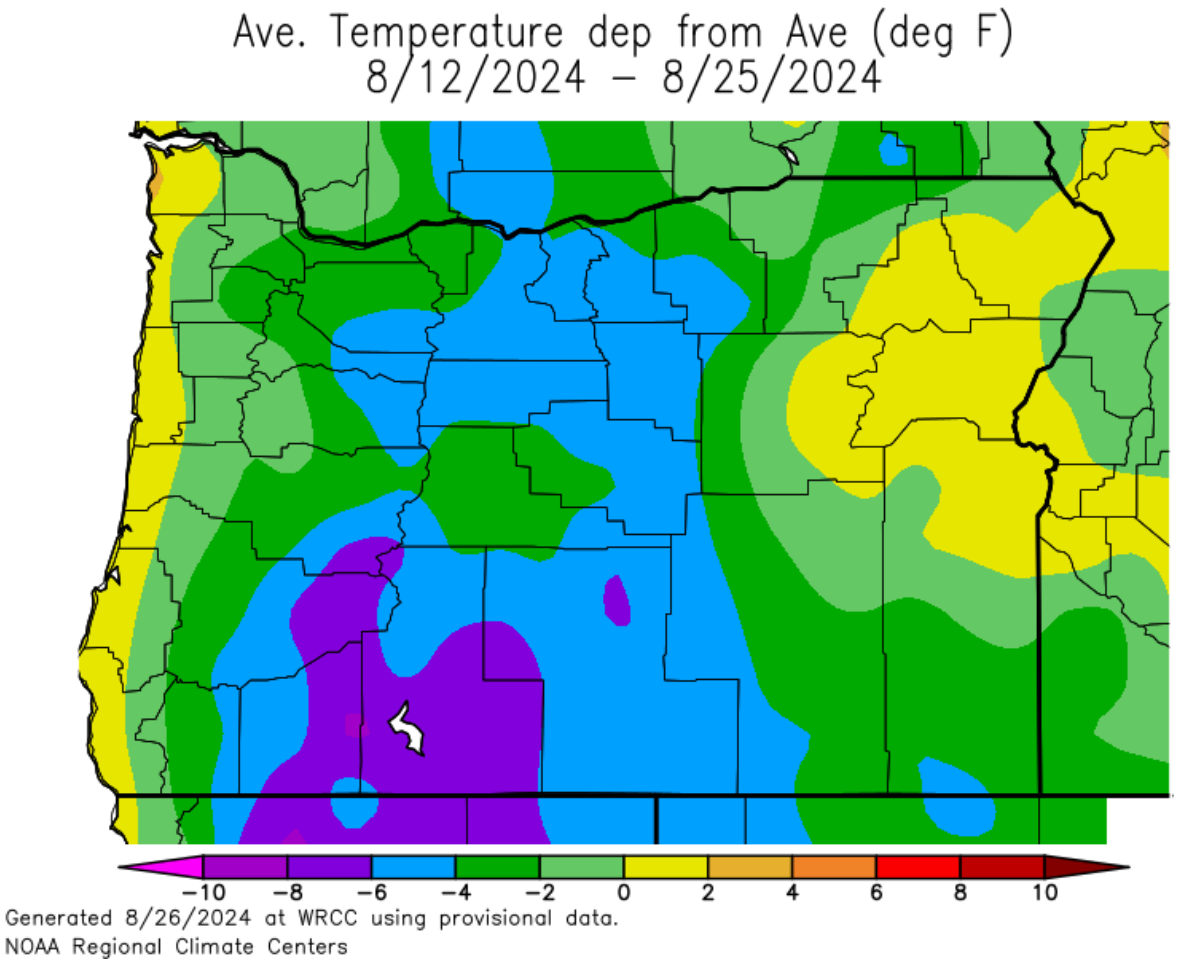


From the U.S. Drought Monitor website, https://droughtmonitor.unl.edu/DmData/TimeSeries.aspx, 8-26-2024

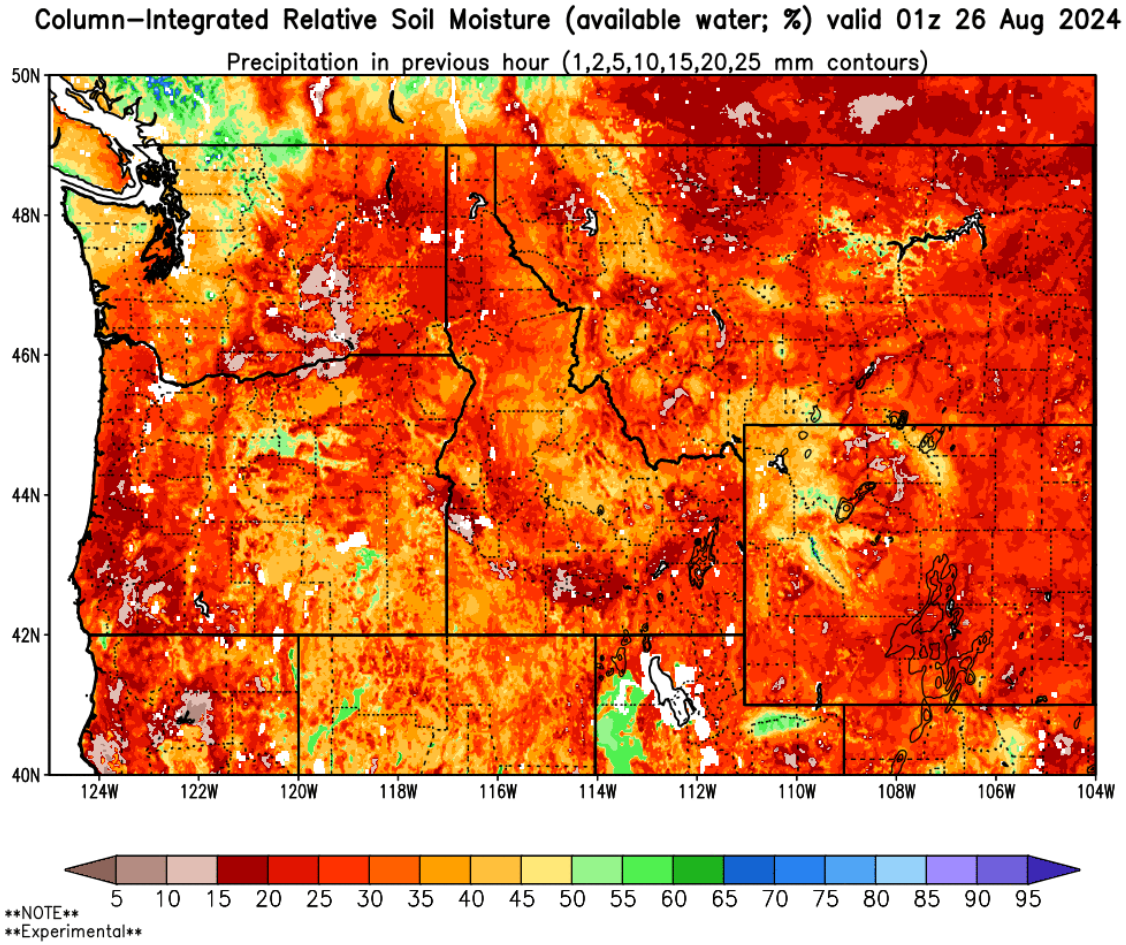
PRECIPITATION



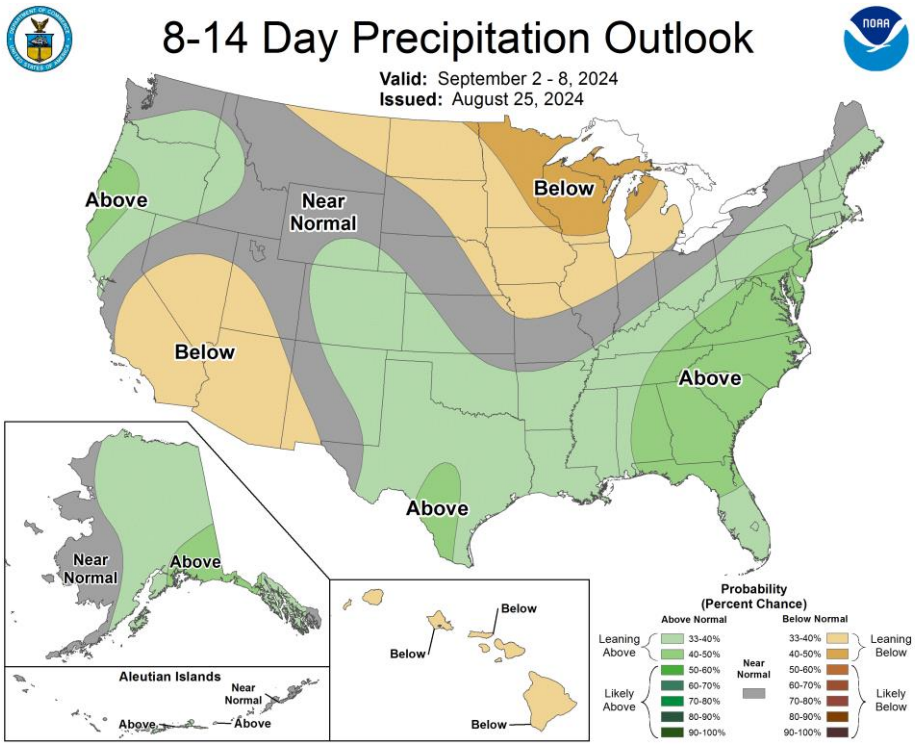
TEMPERATURE

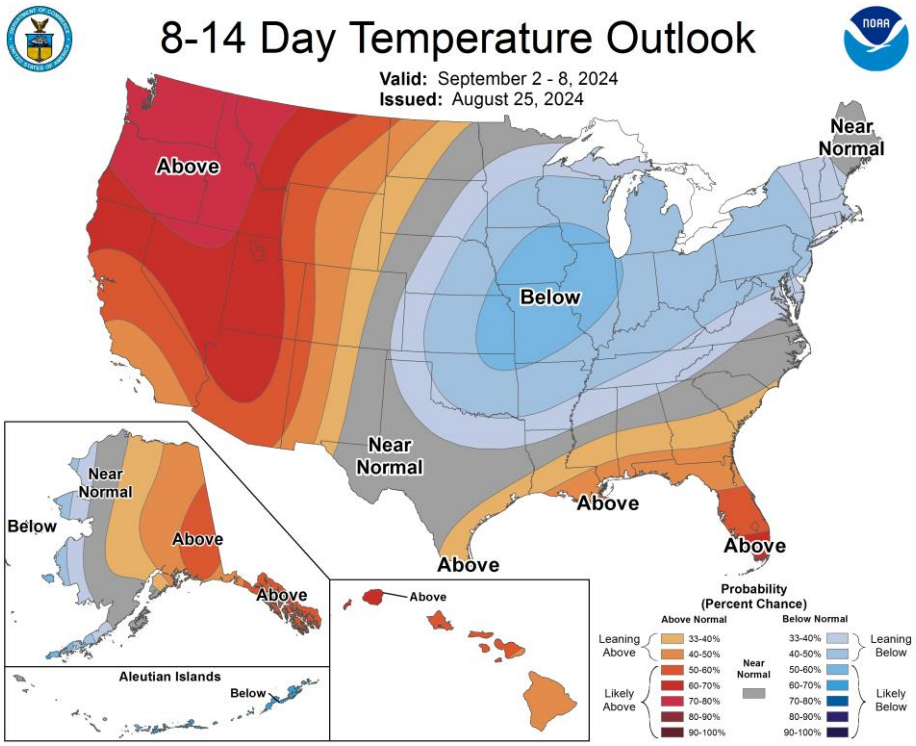


SOIL MOISTURE

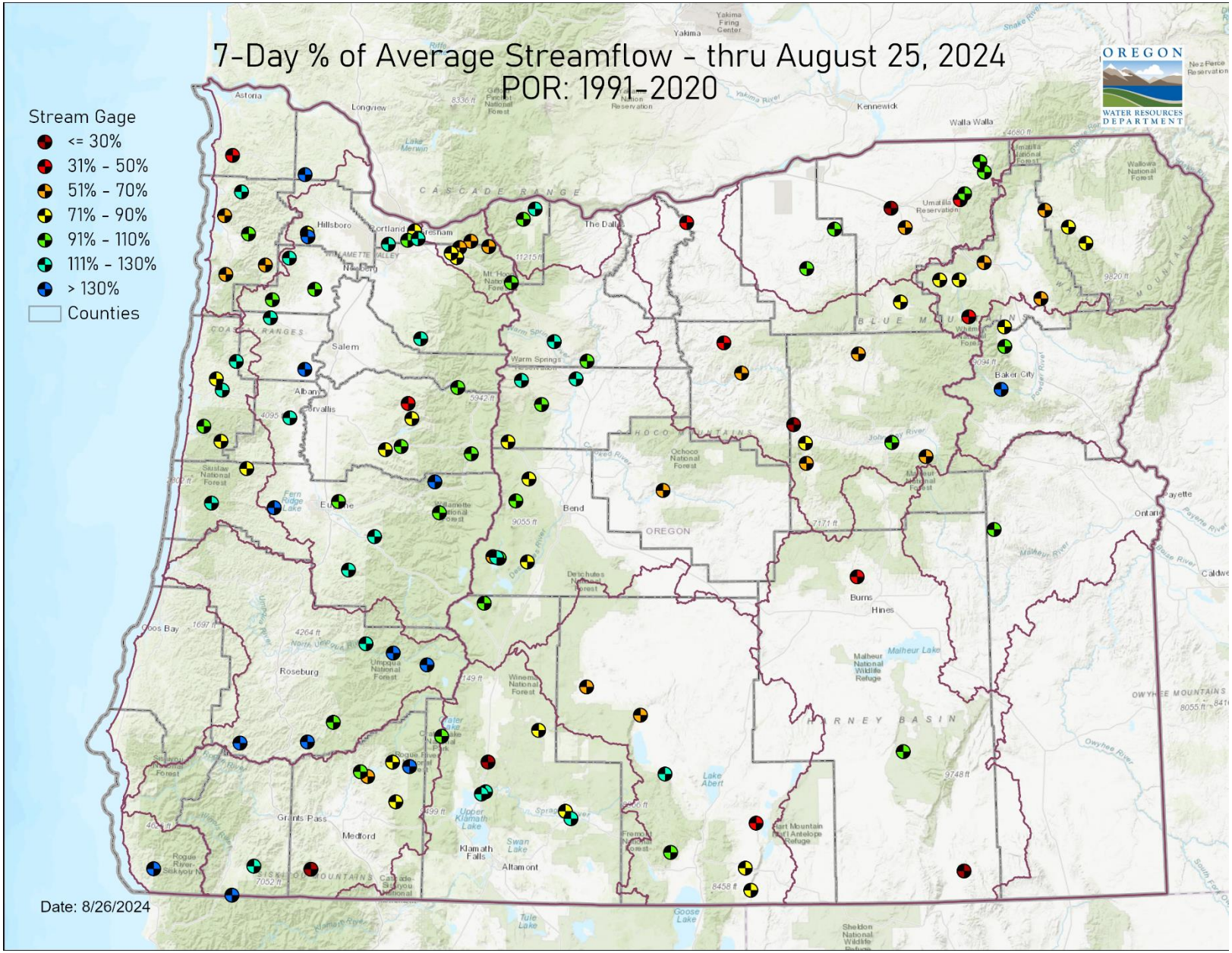


CLIMATE OUTLOOK

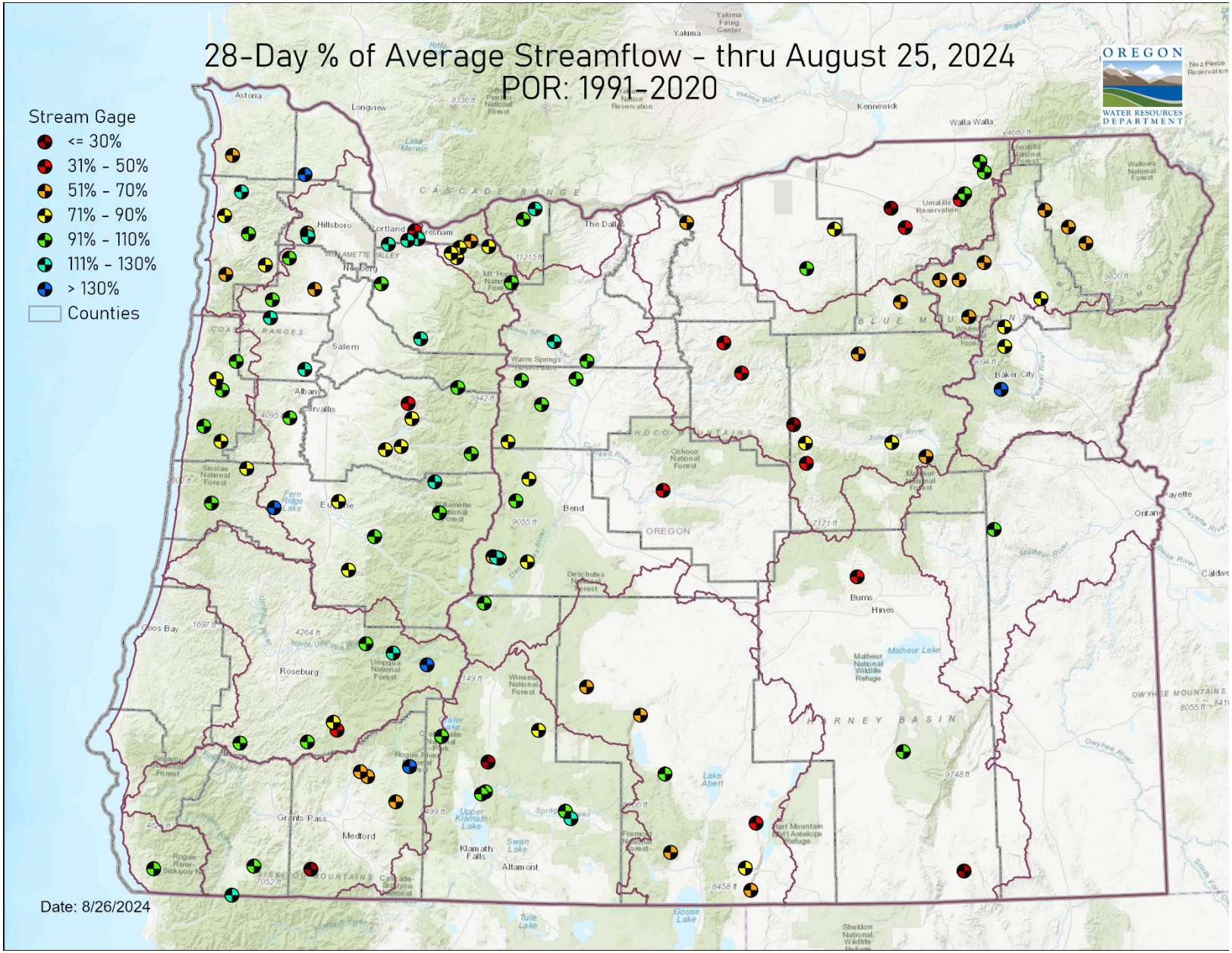




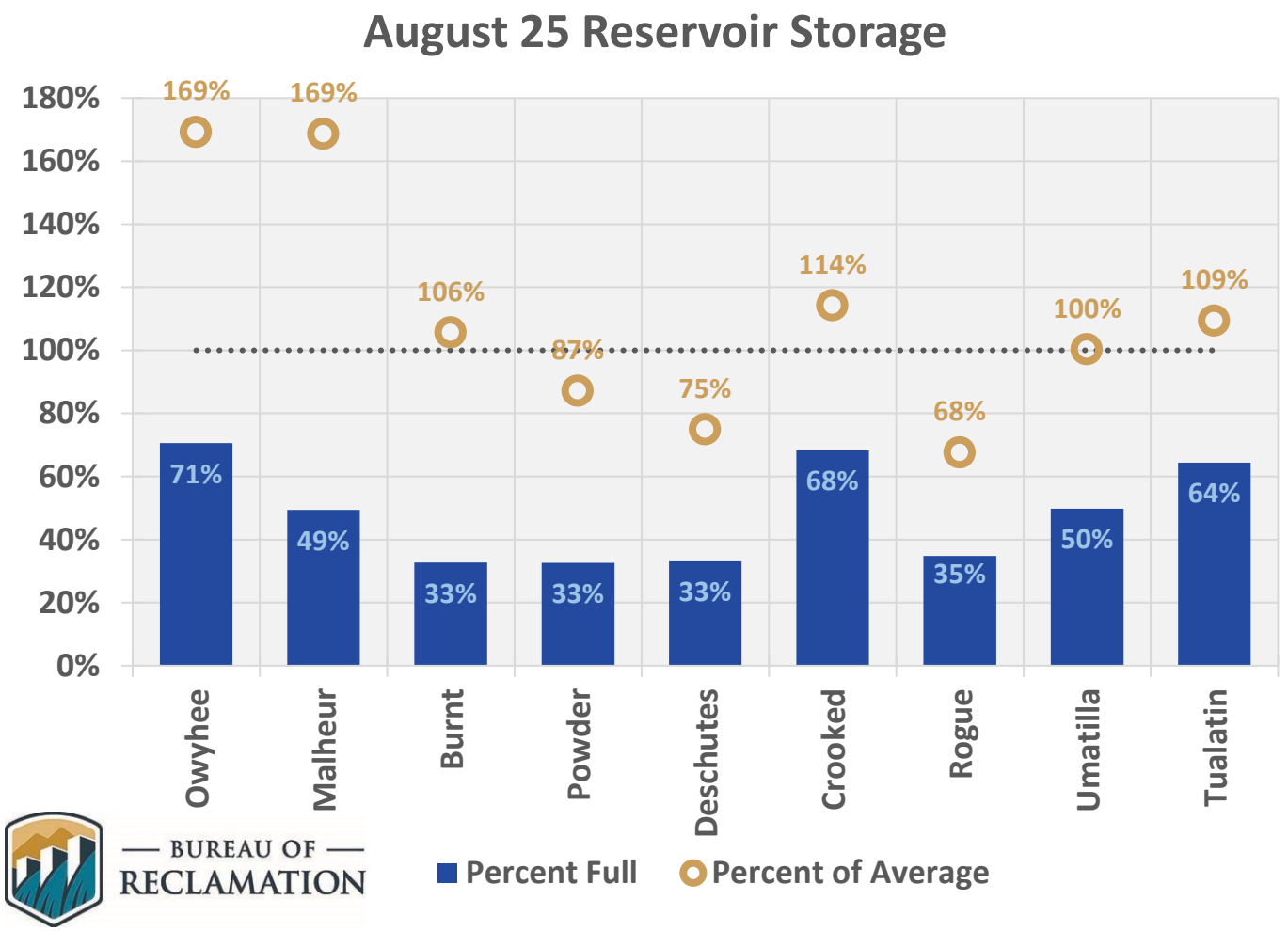
STREAMFLOW


7-Day % of Average Streamflow - thru August 25, 2024
POR: 1991-2020
OREGON
WATER RESOURCES DEPARTMENT
Stream Gage
<= 30%
31% - 50%
51% - 70%
71% - 90%
91% - 110%
111% - 130%
> 130%
Counties
Date: 8/26/2024

STREAMFLOW

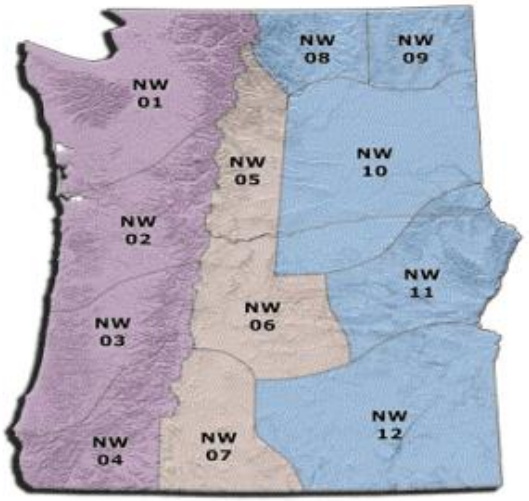

28-Day % of Average Streamflow - thru August 25, 2024
POR: 1991-2020
OREGON
WATER RESOURCES DEPARTMENT
Stream Gage
<= 30%
31% - 50%
51% - 70%
71% - 90%
91% - 110%
111% - 130%
> 130%
Counties
Date: 8/26/2024

STORAGE


August 25 Reservoir Storage
180%
160%
140%
120%
100%
80%
60%
40%
20%
0%
169%
169%
106%
87%
75%
114%
68%
100%
109%
71%
49%
33%
33%
33%
68%
35%
50%
64%
Owyhee
Malheur
Burnt
Powder
Deschutes
Crooked
Rogue
Umatilla
Tualatin
BUREAU OF RECLAMATION
Percent Full
Percent of Average

Pacific Northwest
7 Day Significant Fire Potential

Monday, 8/26/2024



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

Legend

Significant Fire Risk Levels

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

The assessment of Significant Fire risk considers three main factors including: weather elements, number of ignitions, and background fire danger.

Significant Fire risk is derived objectively via statistical methods that combine all three factors. **High Risk** levels (≥ 20% probability of a significant fire) are usually due to numerous fire starts from lightning. Human fires don't often result in a large fire probability above 20%.

Fire Weather: Low pressure enters the Geographic Area this afternoon with rain and showers mainly focused over western Washington through tomorrow. Isolated thunderstorms are possible along the Canadian border Tuesday. A dry cold front also crosses Tuesday with strong winds through the Cascade gaps along plus slightly below average humidity. Gusty winds expected elsewhere. High pressure builds over the region Wednesday to bring warmer and drier weather. A thermal trough brings easterly flow and decreased humidity recovery to the Cascade mid and upper slopes through the weekend. Cut-off low pressure near the California coast next weekend increases thunderstorm potential Saturday and beyond.

Refer to local NWS forecasts for details.

Fire Potential: Holdovers will continue appearing, especially as conditions warm and dry this week. Lighter fuels quickly become available, especially Tuesday as winds increase. East flow later this week will increase west side fuel drying rates. Fire danger indices across most PSAs climb above the annual 85th percentile heading into the holiday weekend then climb above 95th percentile by Sunday. Potential ignitions increase this weekend from potential lightning plus human holiday recreation contributions.

Fire Danger Trends:
https://gacc.nifc.gov/nwcc/content/products/fwx/WEB_NFDRS_graphics.php

Preparedness Level:

Northwest: 4

National: 4

-Jon Bonk

RESOURCES/REFERENCES

Please visit Oregon Water Resources Department's drought information page to learn about current drought conditions, assistance programs, and potential drought tools.

If you are interested in submitting local drought-related conditions and impacts, please visit the drought impacts toolkit to learn more. Click here to visit the map of condition monitoring observer reports.

Released every Thursday, the US Drought Monitor provides a weekly assessment of drought conditions. The USDM provides a network infographic which depicts the network of observers who gather and report information about conditions and drought impacts.

The WestWide Drought Tracker uses data from PRISM to provide easy access to fine-scale drought monitoring and climate products, such as the figures depicting climate conditions within this report.

The National Weather Service's Climate Prediction Center offers weekly, monthly, and seasonal climate outlooks illustrating the probabilities of temperatures and precipitation.

The Regional Climate Centers (RCC) working with NOAA partners, deliver climate services at national, regional, and state levels. Climate anomaly maps of Oregon are updated daily at around noon PST.

NASA's Gravity Recovery and Climate Experiment (GRACE) provide satellite-based observations of soil moisture conditions that are useful as drought indicators, helpful in describing current wet or dry soil conditions.

USGS Water Watch provides maps of real-time and average streamflow conditions at USGS sites throughout the state.

Reservoir storage "teacup" diagrams are offered by both the US Bureau of Reclamation and US Army Corps of Engineers. The diagrams represent the level of fill in the reservoirs as both percent full and as a ratio of volume of water currently in the reservoir to the volume of water in the reservoir when it is full.

Oregon wildfire information can be found through InciWeb and the Oregon Department of Forestry's Wildfire News, along with the National Interagency Fire Center which offers outlooks on the significant wildland fire potential.

Oregon Office of Emergency Management maintains a hydrology/meteorology dashboard which shows state and local drought declarations, as well as hosts many of the data sources to generate this report. Use the selection arrows at the bottom of your browser to navigate through the various sources.

US Department of Agriculture provides the Weekly Weather and Crop Bulletin as a vital source of information on US and global weather, climate, and agricultural developments, along with seasonally appropriate agrometeorological charts and tables. USDA's Drought Programs and Assistance offers links to programs and resources to help those struggling with persistent drought.