

# Oregon Water Conditions Report



July 26<sup>th</sup>, 2021

## HIGHLIGHTS

Thus far in 2021, [22 Oregon counties](#) have received state drought declarations, including a recent [Executive Order](#) for Coos, Lane, and Lincoln Counties.

Recent updates to the [US Drought Monitor](#) show expansion of D3 (extreme drought) and D4 (exceptional drought) conditions. Over 56% of Oregon is now classified as D3-D4.

Precipitation over recent weeks was [well below average](#) throughout most of Oregon, with much of the state receiving [little to no measurable precipitation](#). Portions of Harney County received above average precipitation.

Temperatures throughout the state were variable [over the past two weeks](#). Temperatures along the coast and in portions of the Willamette Valley measured between 0 - 4 °F below average. Elsewhere, temperatures ranged from 0 - 6 °F above average.

The near-term [climate outlook for the next 8 - 14 days](#) shows probabilities favoring above average temperatures, while precipitation probabilities vary. In central Oregon, the outlook favors below average precipitation while the probability of above average precipitation in southeastern Oregon is favored.

Recent dry conditions and warm temperatures have continued to sustain [historically dry soil moisture conditions](#).

Recent streamflows have tended to measure below to well below average statewide over [7-day](#) and [28-day](#) periods.

Reservoir storage contents in many systems throughout the state are below to well below average. Please see teacup diagrams for [USBR](#), [including the Klamath Basin](#), and [USACE](#) systems.

[Wildfire potential](#) remains elevated throughout much of Oregon and the Pacific Northwest over the next 7 days. For more information on current wildfires please visit [Oregon Wildfire Recovery & Response](#).

## DROUGHT CONDITIONS

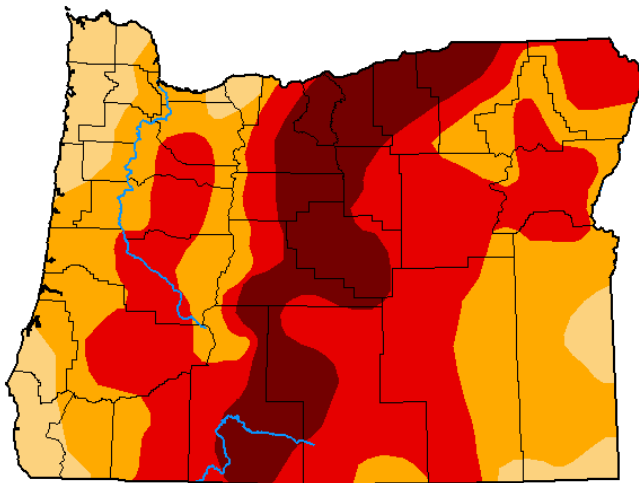
The US Drought Monitor indicates 100% of the state is experiencing some form of drought conditions. Major changes include expansion of D4 (exceptional drought) conditions in north-central Oregon and D3 (extreme drought) into portions of Marion and Clackamas Counties.

### U.S. Drought Monitor Oregon

**July 20, 2021**

(Released Thursday, Jul. 22, 2021)

Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	0.00	100.00	100.00	90.01	56.30	17.12
<b>Last Week</b> 07-13-2021	0.00	100.00	100.00	89.01	54.51	11.62
<b>3 Months Ago</b> 04-20-2021	5.47	94.53	75.95	47.11	14.12	2.22
<b>Start of Calendar Year</b> 12-29-2020	8.57	91.43	83.53	68.71	27.74	0.00
<b>Start of Water Year</b> 09-29-2020	6.50	93.50	84.77	65.53	33.59	0.00
<b>One Year Ago</b> 07-21-2020	9.21	90.79	75.87	50.31	12.49	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>

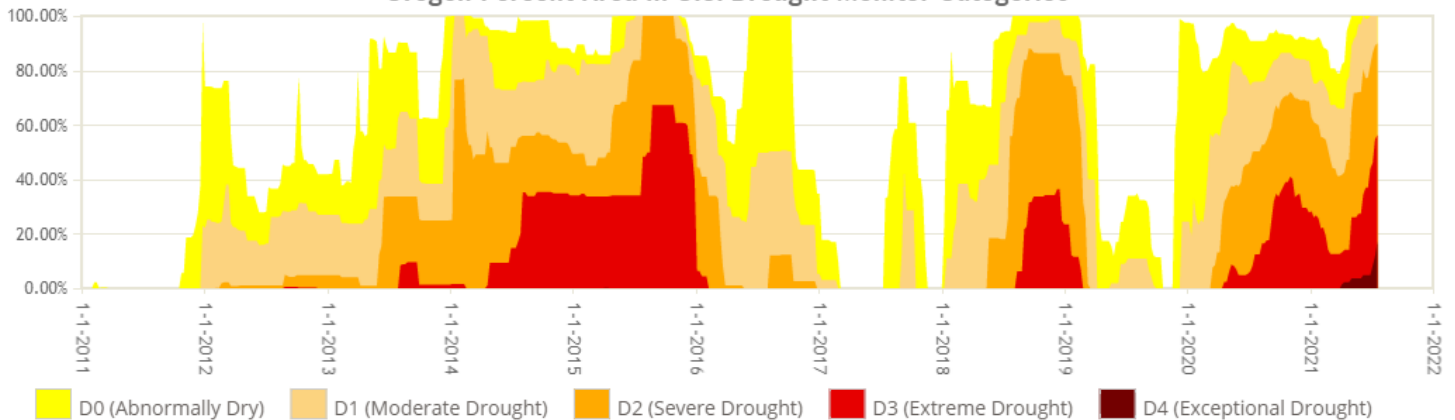
Author:

Brad Rippey  
U.S. Department of Agriculture

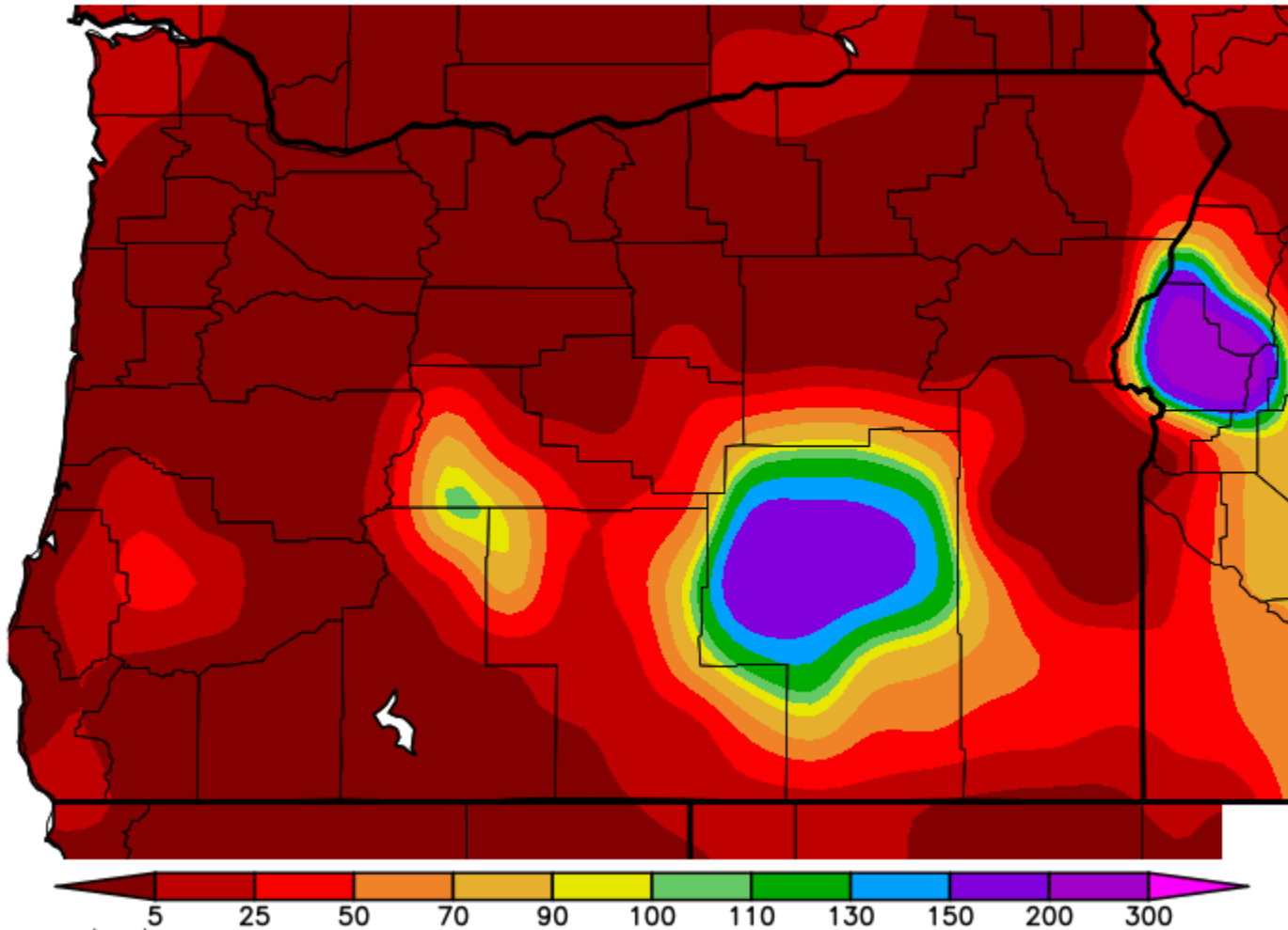


[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

### Oregon Percent Area in U.S. Drought Monitor Categories

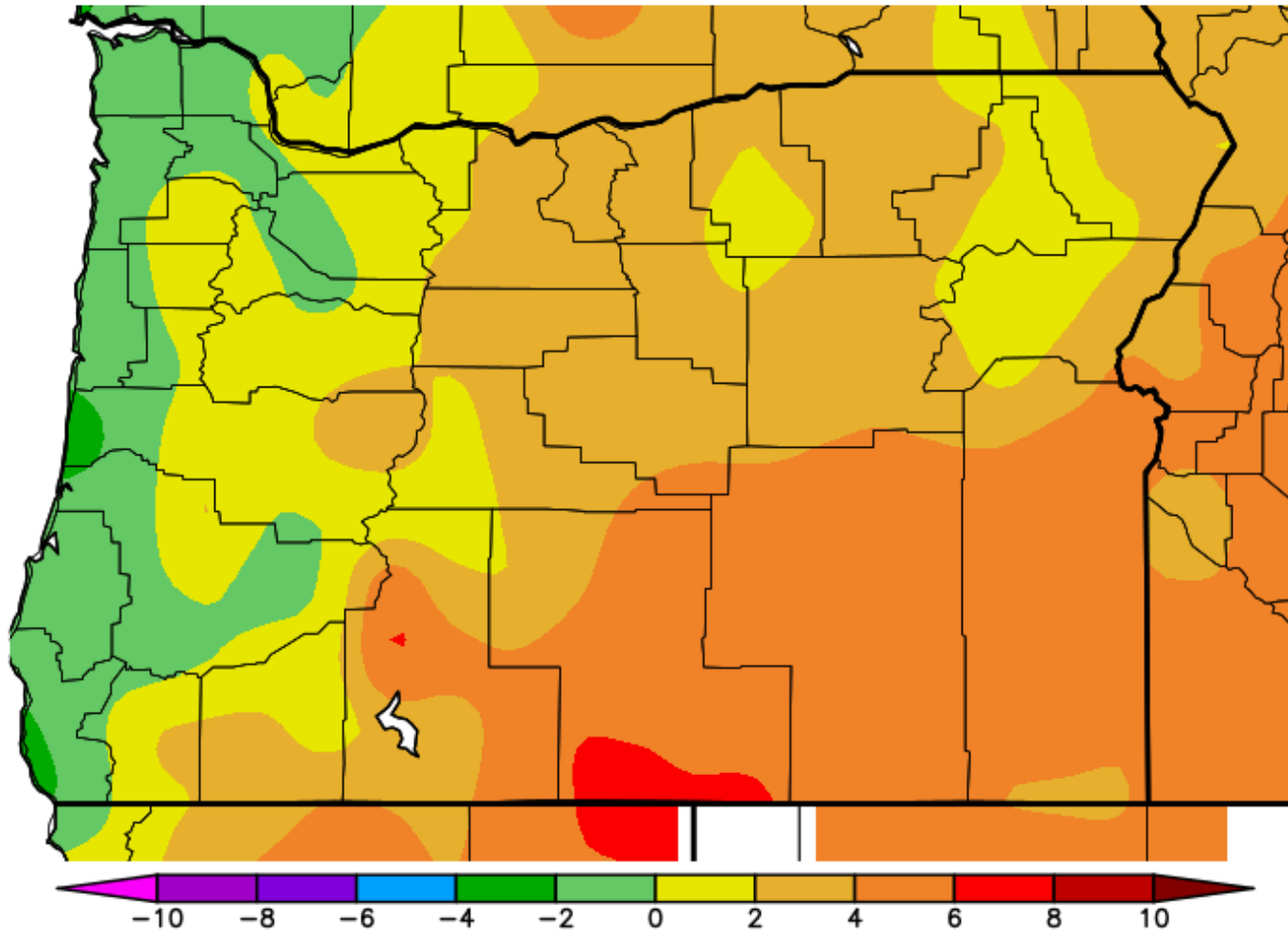


Percent of Average Precipitation (%)  
7/11/2021 – 7/24/2021



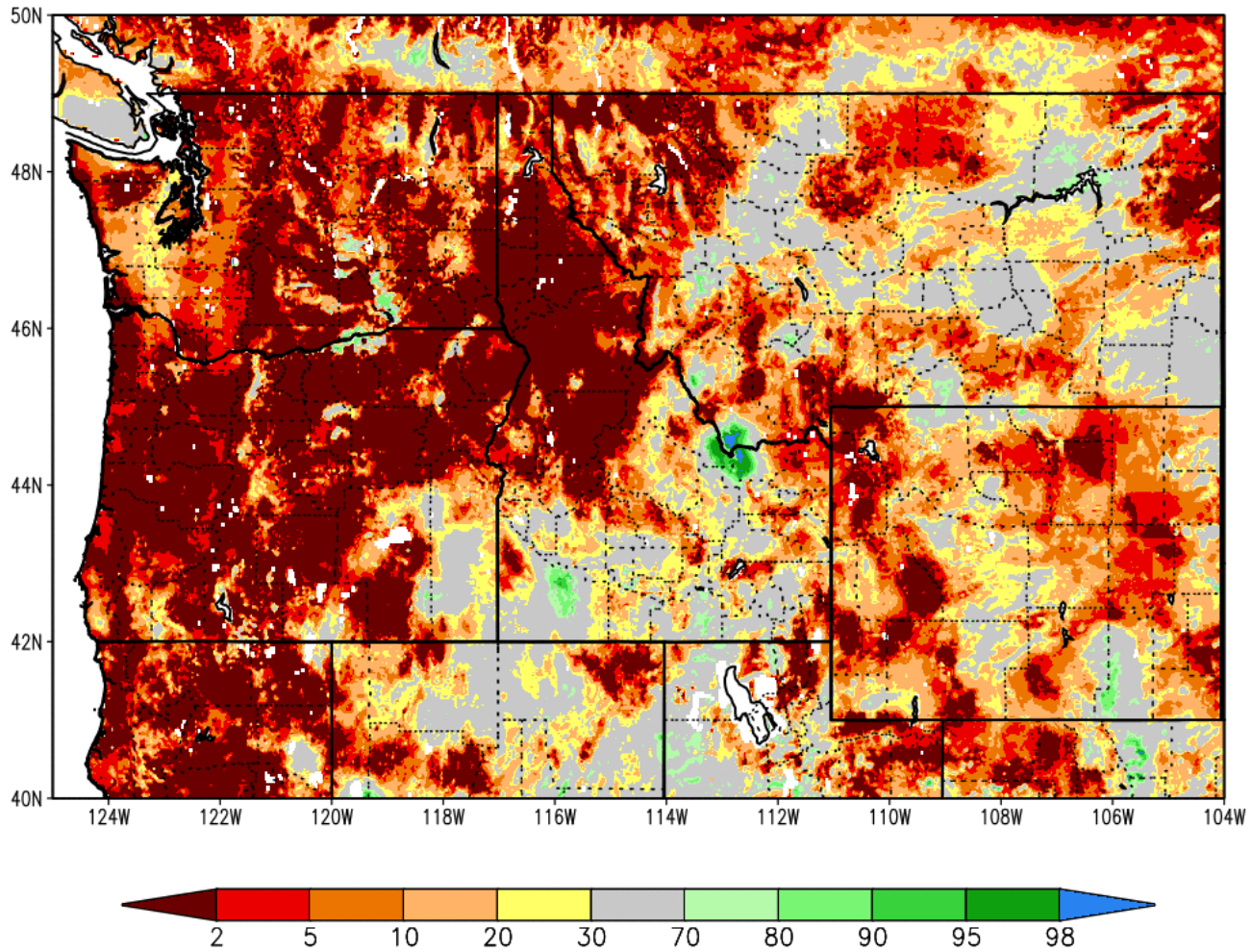
Generated 7/25/2021 at WRCC using provisional data.  
NOAA Regional Climate Centers

Ave. Temperature dep from Ave (deg F)  
7/10/2021 - 7/23/2021



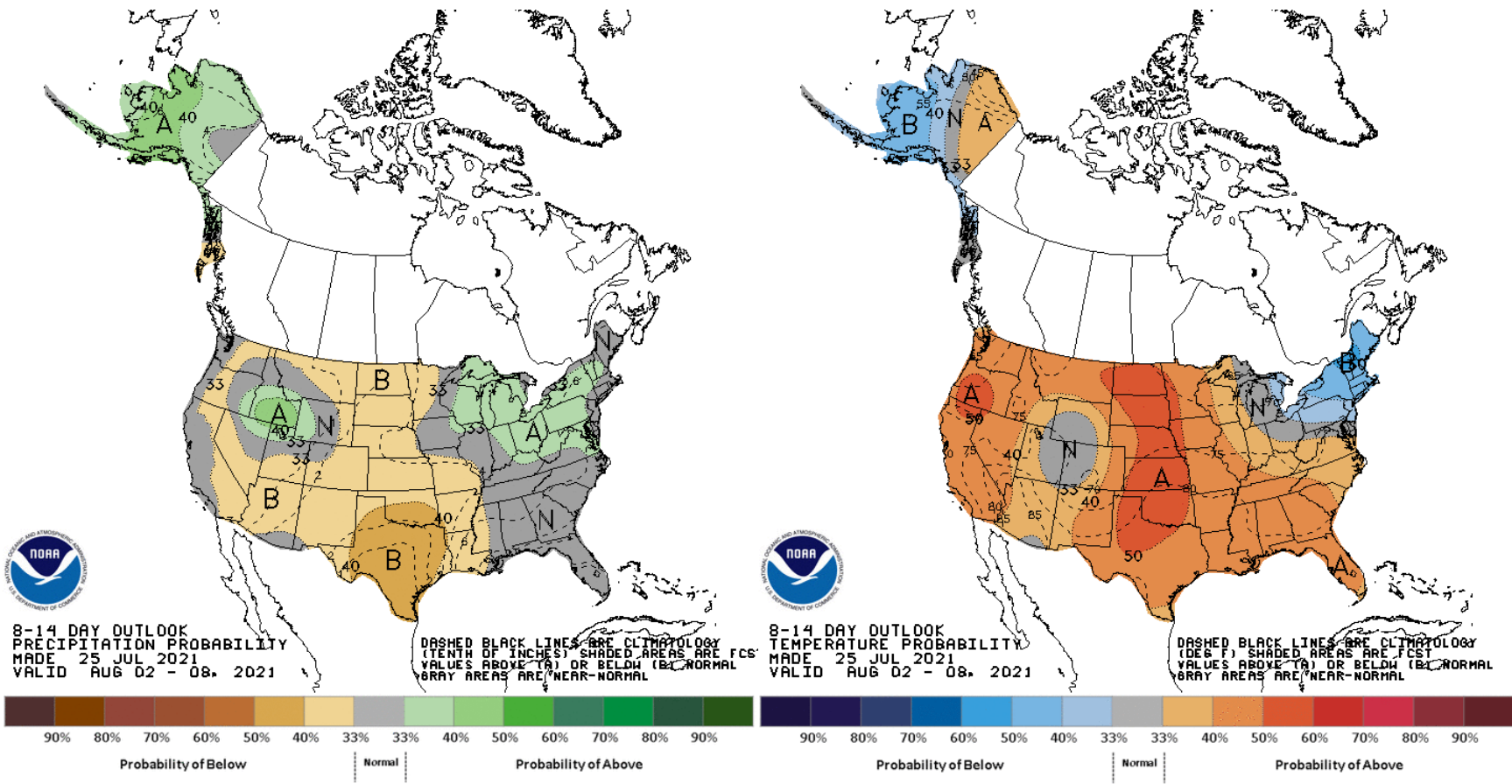
Generated 7/24/2021 at WRCC using provisional data.  
NOAA Regional Climate Centers

SPoRT-LIS 0-10 cm Soil Moisture percentile valid 26 Jul 2021



CLIMATE OUTLOOK

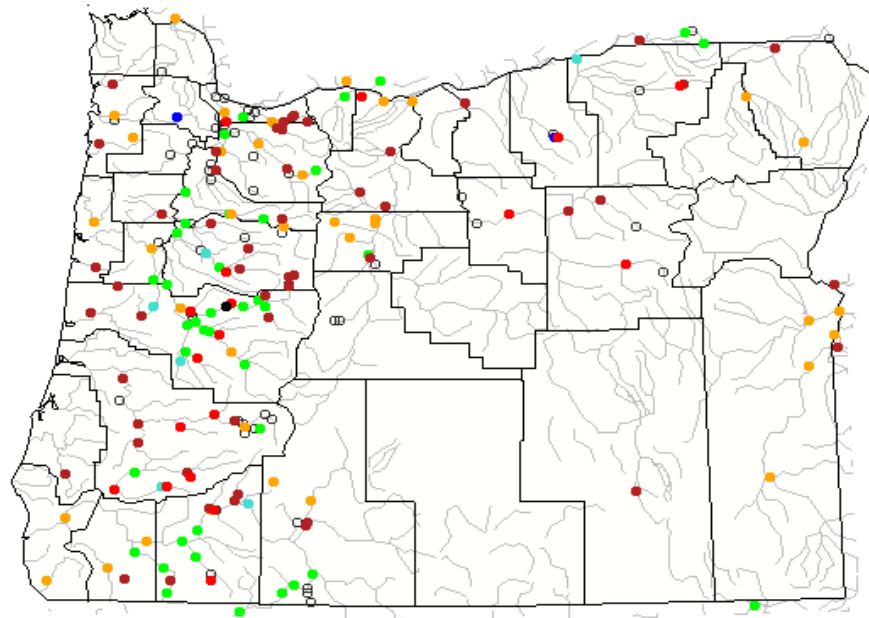
8-14 DAY



### Map of 28-day average streamflow compared to historical streamflow for the day of the year (Oregon)

Oregon ▼ or Water-Resources Regions ▼

Sunday, July 25, 2021

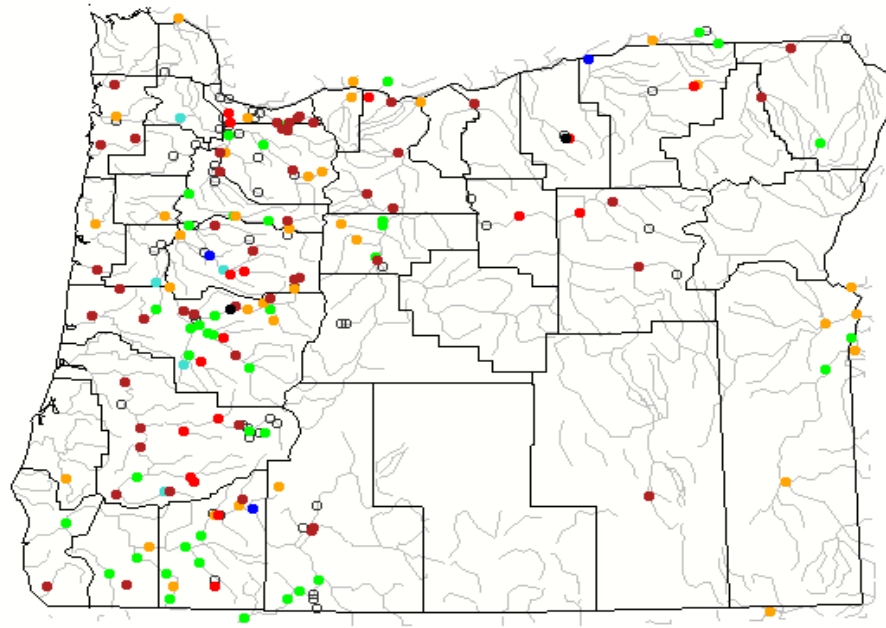


Explanation - Percentile classes							
Low	<10 Much below normal	10-24 Below normal	25-75 Normal	76-90 Above normal	>90 Much above normal	High	Not-ranked

## Map of 7-day average streamflow compared to historical streamflow for the day of the year (Oregon)

Oregon or Water-Resources Regions All Days

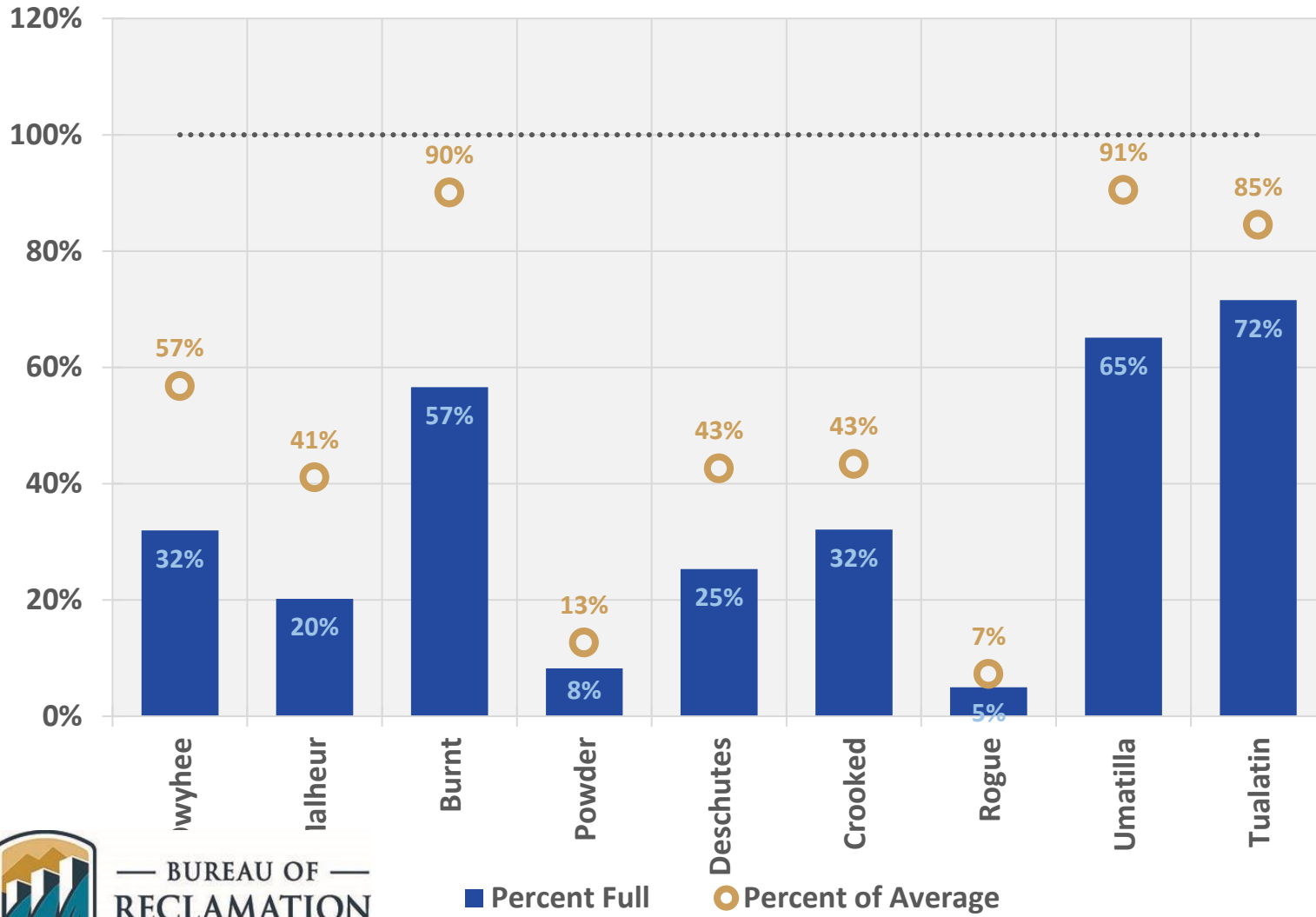
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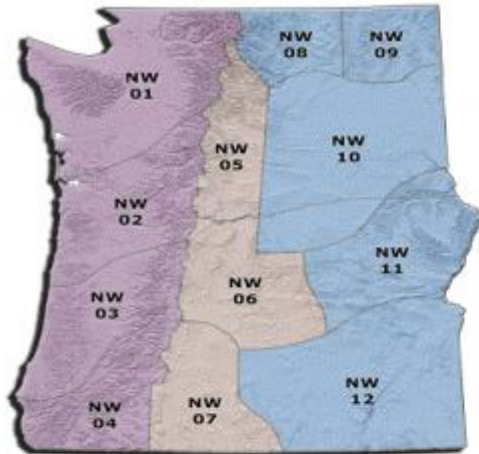
## July 17 Reservoir Storage



## Pacific Northwest 7 Day Significant Fire Potential



Monday, 7/26/2021



### Legend

#### Fire Environment (FEN) 4 levels

Minimal	- The Overall Fire Environment suggests a very low risk for Large fires (less than 1% chance)
Normal	- The Overall Fire Environment suggests a normal risk for large fires (1 - 4% chance)
Elevated	- The Overall Fire Environment suggests a moderately high risk for large fires (5 - 19% chance)
High Risk	The risk for large fire(s) is very high (≥ 20%) Triggers: 1. ⚡ (Significant Lightning) 2. BEN (Critical Burn Environment)

The assessment of the overall fire environment considers multiple factors including weather, lightning amount and fuel dryness. Large Fire probabilities are derived objectively via statistical methods. **High Risk** levels (≥ 20% probability of a large fire) are almost always due to significant lightning as burning conditions alone rarely result in a large fire probability much above about 10%.

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

**Fire Weather:** Aside from some isolated showers this morning in central Oregon, the Pacific Northwest starts the day dry. Cloud cover will increase for the next few days with injection of monsoonal moisture from the south. Potential for showers and isolated wet thunderstorms will return to central Oregon this afternoon/evening, lingering into the night. The thunderstorm chances expand to cover much of eastern Oregon Tuesday afternoon with periodic showers remaining in the area through the week. General winds will be a little breezy through Cascade gaps each afternoon and in the vicinity of storms over the next few days. Overnight relative humidity recovery should improve for the next few days for eastern Oregon but remain poor to moderate in eastern Washington. Temperatures will dip a little tomorrow with the increased cloud cover, but will rebound later in the work week.

See your local NWS fire weather forecasts and advisories for the latest fire weather details for your area.

**Fire Potential:** With a few ignitions from dry lightning this morning drawing initial attack resources and more thunderstorms expected this afternoon, south central Oregon (PSA NW07) has high risk for development of new significant fires today. With increasingly wet storms and cooler temperatures expected tomorrow, the potential in that PSA rejoins the rest of the east side and southwestern Oregon at the elevated level. New significant fire potential will remain low in western Washington and northwest Oregon through the week. Lightning over the next few days is likely to ignite some new fires, but it looks like there will be sufficient rainfall to avoid high risk of new large fires.

#### Preparedness Level:

Northwest: 5  
National: 5

- Eric Wise

## 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.