# Oregon Water Conditions Report



# October $21^{st}$ , 2024

#### HIGHLIGHTS

Thus far, <u>two Oregon counties</u> have received <u>Executive Orders</u> issuing state drought declarations under ORS 536. Additionally, Wallowa County has requested a drought declaration.

According to the <u>US Drought Monitor</u>, over 64% of Oregon is experiencing moderate (D1) to severe (D2) drought conditions. Over the last two weeks abnormally dry (D0) conditions have spread into northwest and north-central Oregon.

Over the <u>past two weeks</u>, precipitation has been below average for most of the state with well below average precipitation across much of western and north-central Oregon. Southeastern and parts of south-central Oregon received above average precipitation over the past two weeks.

Temperatures over the <u>past two weeks</u> have been above average statewide. In eastern and parts of western and central Oregon, temperatures were  $4^{\circ}F$  to  $6^{\circ}F$  above average.

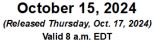
<u>Recent soil moisture indicators</u> show a slight increase in soil moisture in northwestern, southeastern, and parts of south-central Oregon. Elsewhere in the state there has been a slight decrease in soil moisture.

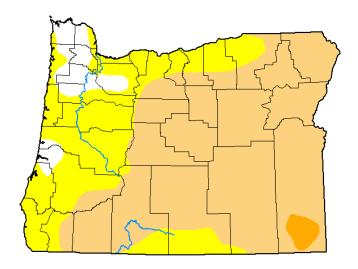
The <u>near-term climate outlook</u> (8-14 days) indicates probabilities leaning towards above normal precipitation and below normal temperatures statewide.

Recent <u>streamflow</u> across the state varied between western and eastern Oregon. Streamflow in western Oregon was generally well below average with closer to normal flows in the Cascade Range. In central and eastern Oregon, streamflow ranged from well below to above average. Generally, below average flows in northeastern and south-central Oregon have persisted since the summer months.

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

## U.S. Drought Monitor Oregon





	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	5.74	94.26	64.41	1.36	0.00	0.00
Last Week 10-08-2024	10.58	89.42	60.87	1.36	0.00	0.00
3 Month s Ago 07-16-2024	5.47	94.53	35.28	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 10-01-2024	10.56	89.44	61.05	1.36	0.00	0.00
One Year Ago	30.05	69.95	49.00	18.82	2.50	0.00

#### Intensity:

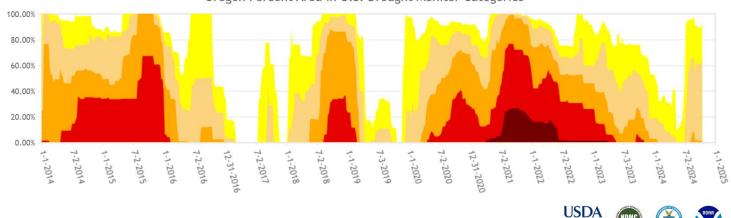


D2 Severe Drought D3 Extreme Drought

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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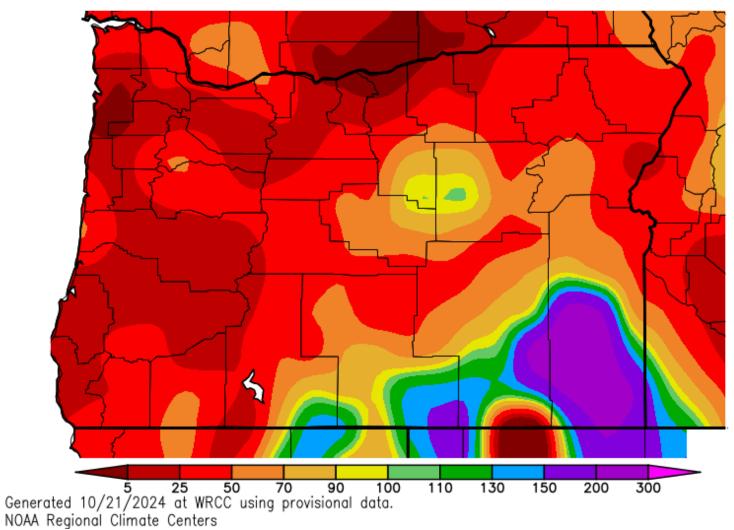


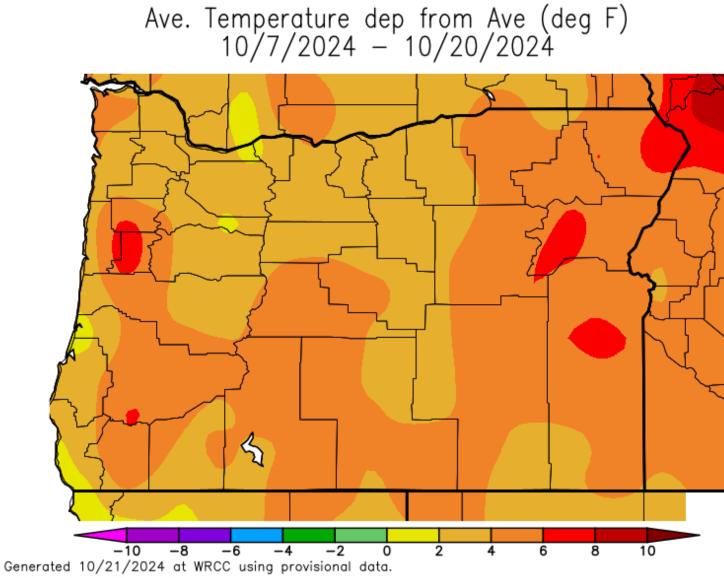


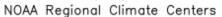
## Oregon Percent Area in U.S. Drought Monitor Categories

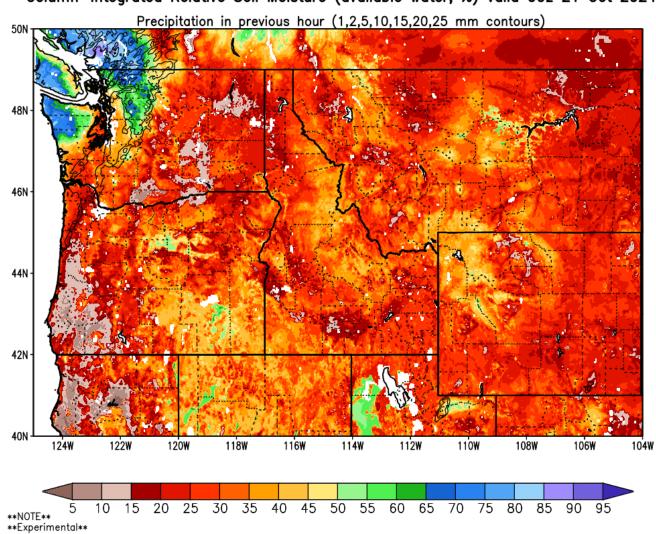
### CLIMATE CONDITIONS PRECIPITATION

Percent of Average Precipitation (%) 10/7/2024 - 10/20/2024

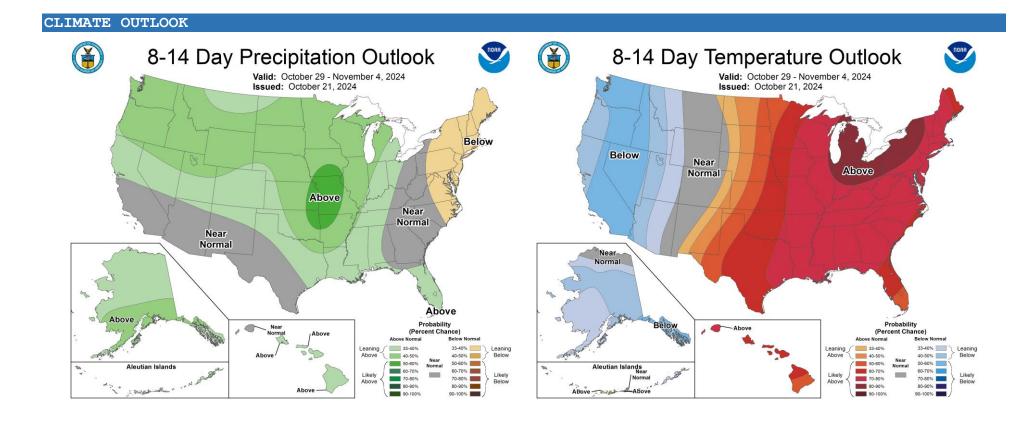




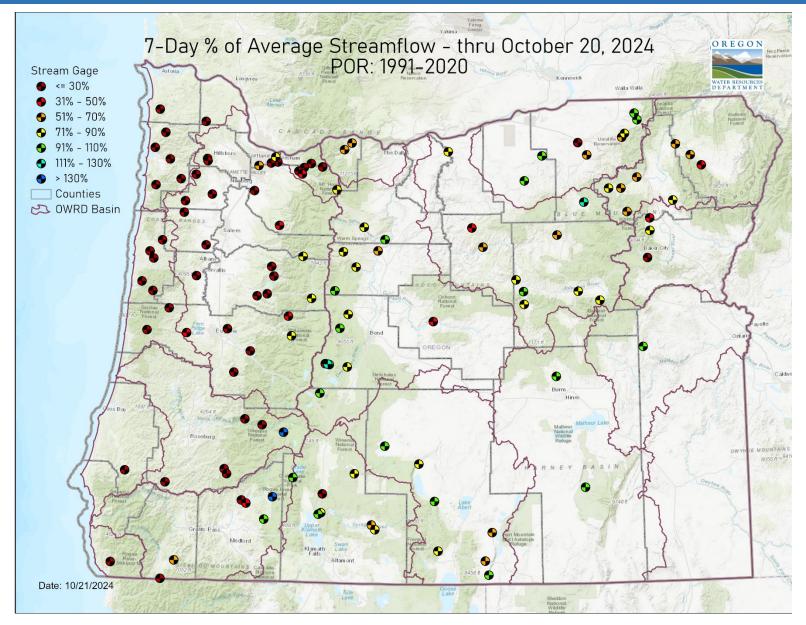




Column-Integrated Relative Soil Moisture (available water; %) valid 00z 21 Oct 2024



#### STREAMFLOW



#### **190%** 200% 186% 0 0 180% **160%** 140% 117% 108% 120% 0 96% 0 100% <del>8</del>5%····O 78% 0 67% 80% 0 65% 0 0 60% 58% 55% 40% 39% 36% 20% 28% 27% 22% 21% 16% 0% Burnt Powder Rogue Tualatin Owyhee Crooked Umatilla Malheur Deschutes — BUREAU OF — RECLAMATION Percent Full **O** Percent of Average

# **October 20 Reservoir Storage**

#### **RESOURCES/REFERENCES**

Please visit <u>Oregon Water Resources Department's drought information page</u> 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 <u>drought impacts toolkit</u> to learn more. <u>Click here</u> to visit the map of condition monitoring observer reports.

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

The <u>WestWide Drought Tracker</u> uses data from <u>PRISM</u> to provide easy access to finescale drought monitoring and climate products, such as the figures depicting climate conditions within this report.

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

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

NASA's <u>Gravity Recovery and Climate Experiment</u> (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 <u>Water Watch</u> provides maps of real-time and average streamflow conditions at USGS sites throughout the state.

Reservoir storage "teacup" diagrams are offered by both the <u>US Bureau of</u> <u>Reclamation</u> and <u>US Army Corps of Engineers</u>. 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 <u>InciWeb</u> and the Oregon Department of Forestry's <u>Wildfire News</u>, along with the <u>National Interagency Fire</u> <u>Center</u> which offers outlooks on the significant wildland fire potential.

Oregon Office of Emergency Management maintains a <u>hydrology/meteorology dashboard</u> 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 <u>Weekly Weather and Crop Bulletin</u> 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 <u>Drought Programs and Assistance</u> offers links to programs and resources to help those struggling with persistent drought.