Oregon Water Conditions Report



November 20th, 2023

HIGHLIGHTS

Thus far, <u>thirteen Oregon counties</u> have received <u>Executive Orders</u> issuing state drought declarations under ORS 536.

According to the <u>US Drought Monitor</u>, nearly 41% of Oregon is experiencing moderate (D1) to severe (D2) drought conditions. Conditions across Oregon have shown improvement with the elimination of extreme drought and an areal reduction of severe and moderate drought conditions across the state.

Over the <u>past two weeks</u>, precipitation across much of the state was below average with parts of western and eastern Oregon receiving above average precipitation. Most of eastern Oregon received less than 1 inch of precipitation whereas western Oregon received a wide range of precipitation (0.5 - 8 inches). Northern and southern parts of the coast received up to 8 inches whereas the Willamette Valley received 0.5 - 3.5 inches.

Temperatures over the <u>past two weeks</u> have been near to above average for most of the state, especially in eastern Oregon. Average temperatures ranged from 2°F to 8°F above the long-term average with some exception in the central Oregon Cascades.

<u>Shallow groundwater and soil moisture profiles</u> show some degradation over recent weeks across the state due to a lack of precipitation which has resulted in dry conditions.

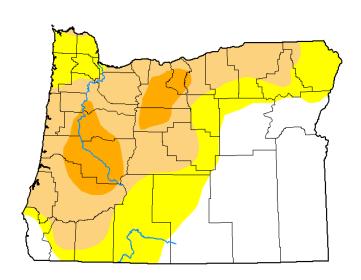
The <u>near-term climate outlook</u> (8-14 days) favors below average precipitation for most of the state and above average temperatures statewide.

Recent <u>streamflow</u> across the state varies between western and eastern Oregon. Streams in western Oregon are generally below to well below the long-term average, whereas streams in eastern Oregon are generally at or above the long-term average. Streamflow over the water year to date is below average for most of western and central Oregon basins and above average for basins in eastern Oregon and parts of the coast.

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

U.S. Drought Monitor Oregon

November 14, 2023 (Released Thursday, Nov. 16, 2023) Valid 7 a.m. EST



Drought Conditions (Percent Area)						
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	33.85	66.15	40.98	9.32	0.00	0.00
Last Week 11-07-2023	31.98	68.02	43.18	14.24	0.00	0.00
3 Month s Ago 08-15-2023	23.26	76.74	52.12	17.68	0.00	0.00
Start of Calend ar Year 01-03-2023	13.46	86.54	59.75	46.03	26.18	1.40
Start of Water Year 09-26-2023	24.13	75.87	54.18	27.06	6.40	0.00
One Year Ago 11-15-2022	5.37	94.63	59.79	46.04	26.18	1.40

Intensity:



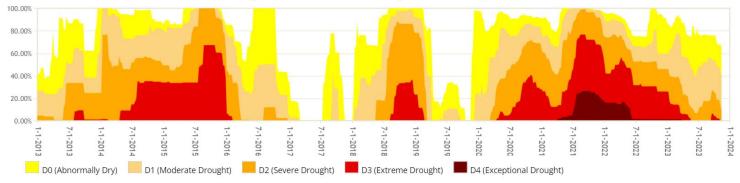
D2 Severe Drought D3 Extreme Drought

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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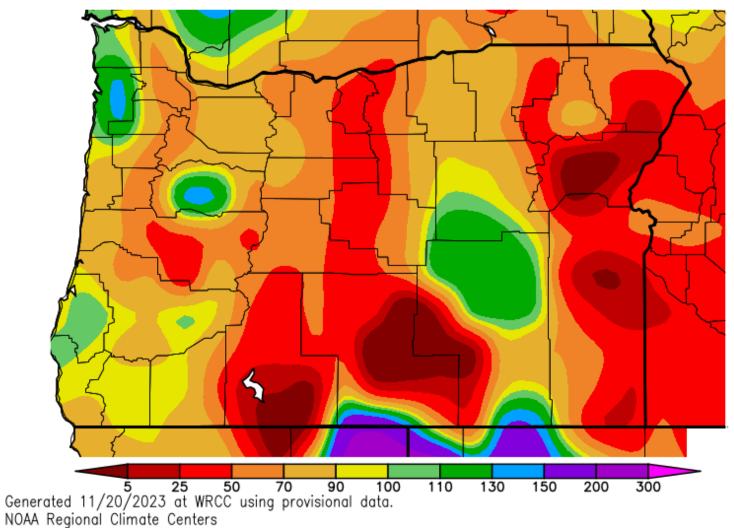
droughtmonitor.unl.edu

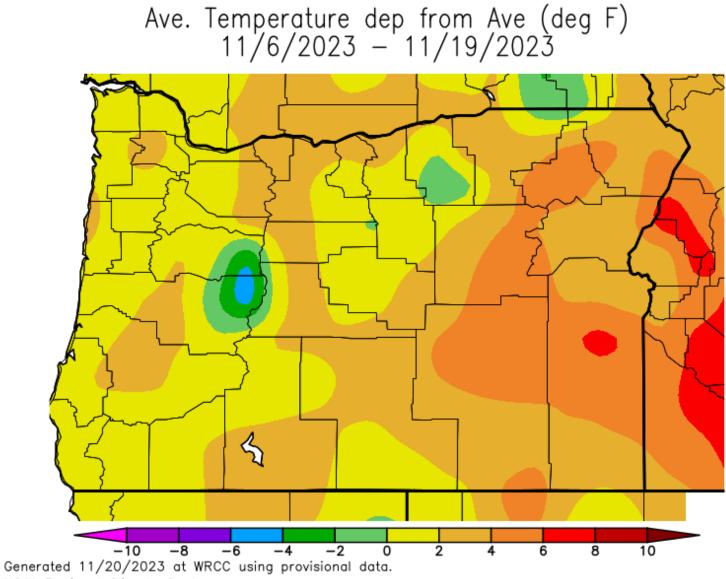


Oregon Percent Area in U.S. Drought Monitor Categories

CLIMATE CONDITIONS PRECIPITATION

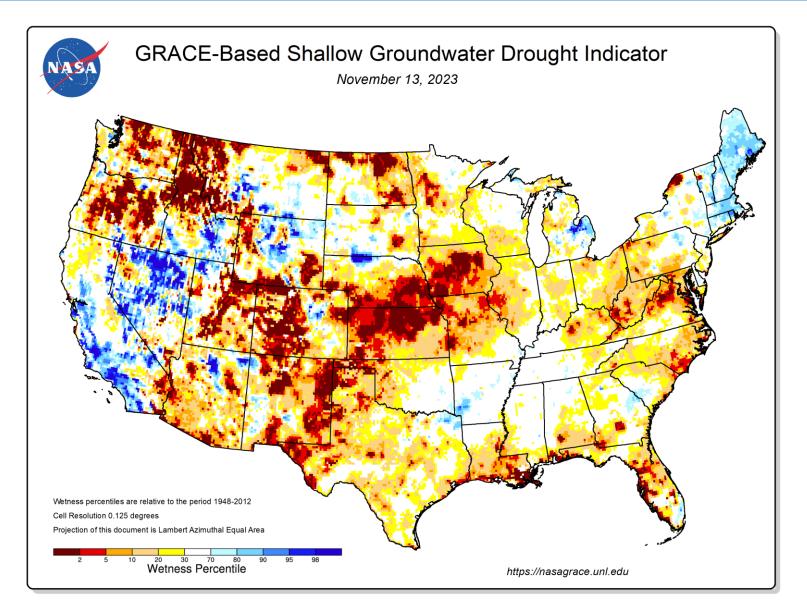
Percent of Average Precipitation (%) 11/6/2023 - 11/19/2023

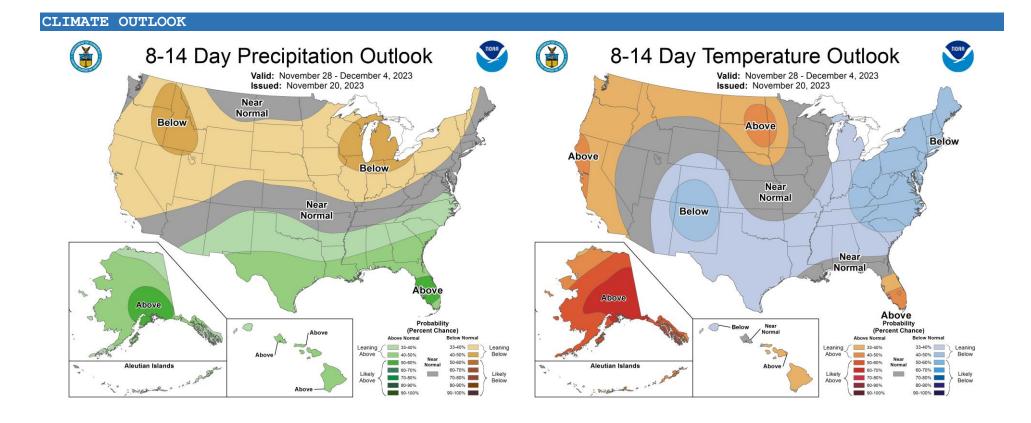




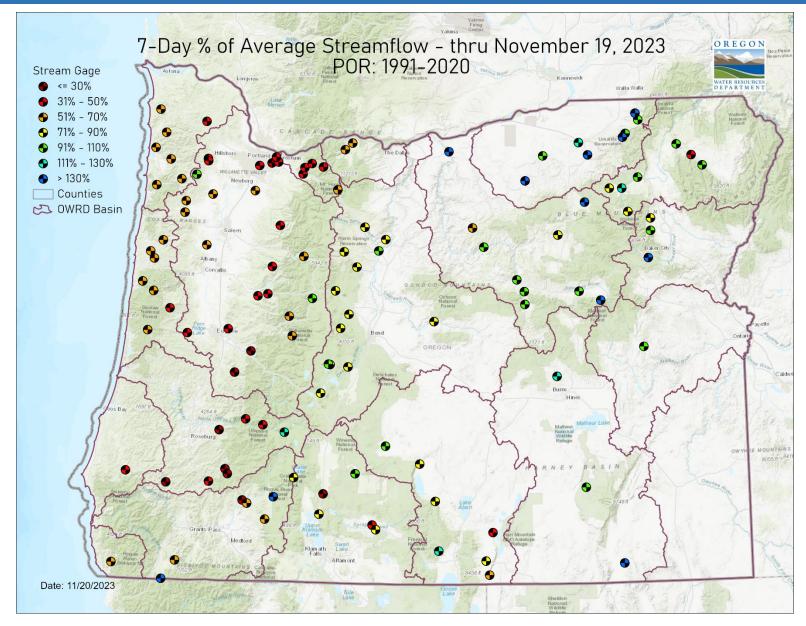
NOAA Regional Climate Centers

SOIL MOISTURE

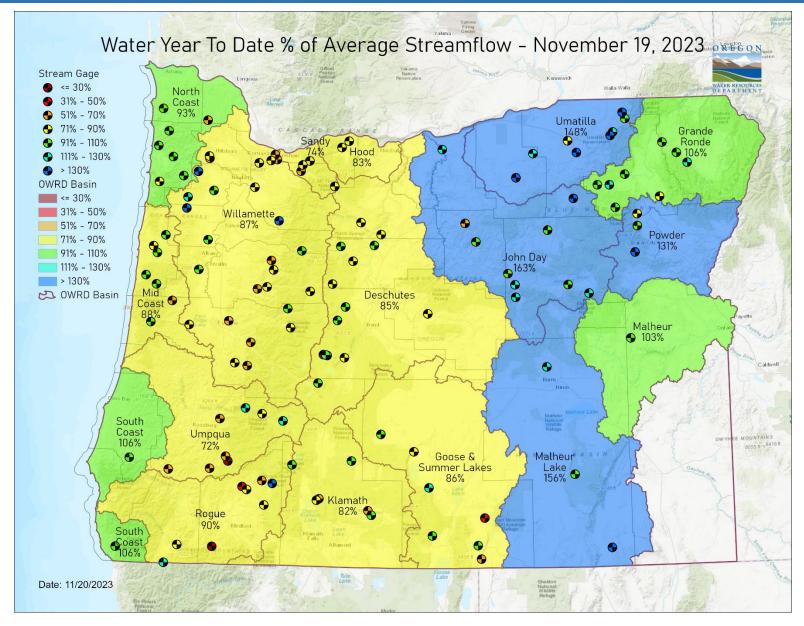




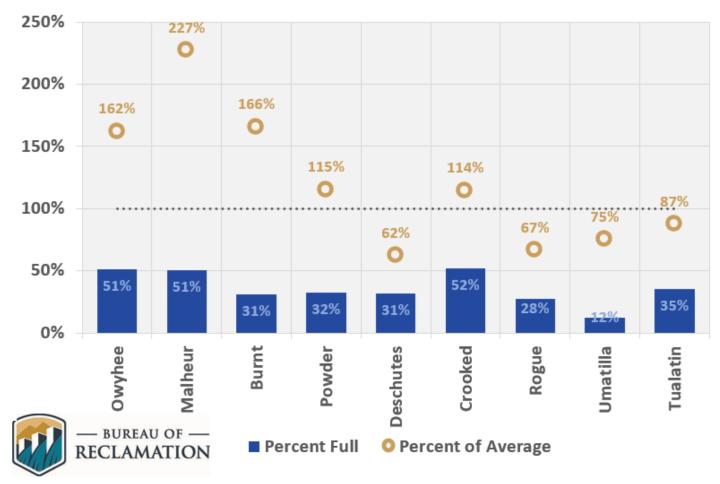
STREAMFLOW - 7 DAY AVERAGE



STREAMFLOW - WATER YEAR TO DATE



November 19 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.