Oregon Water Conditions Report



November 6^{th} , 2023

HIGHLIGHTS

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

According to the <u>US Drought Monitor</u>, over 48% of Oregon is experiencing moderate (D1) to extreme (D3) drought conditions. Drought conditions across the state have not changed significantly over the last 2 weeks. The southern Willamette Valley continues to experience extreme drought.

<u>Precipitation in October</u> was average to below average for most of the state with some exception in parts of the Coast Range as well as southeast and northeast Oregon, where precipitation was above to well above average.

<u>Recent precipitation over the last two weeks</u> has been above average for most of the state with the exception of parts of the Powder Basin and southern Oregon.

October temperatures were slightly average to above average statewide.

Recent temperatures over the last 2 weeks have been below to well below for most of the state, ranging from 1°F to 5°F below average. Whereas isolated parts of western and eastern Oregon have been 1°F to 2°F above average.

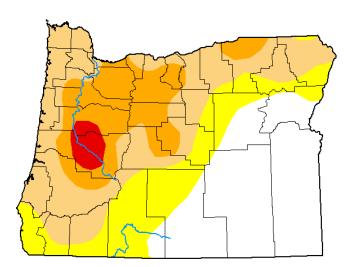
<u>Surface and root zone soil moisture profiles</u> show some degradation in response to a lack of long-term precipitation and above average temperatures across much of the state.

The <u>three-month seasonal climate</u> outlook for November through January indicates probabilities favoring above average temperatures statewide and average precipitation for most of the state excluding parts of northeast Oregon.

October streamflows varied across much of the state and generally followed trends in precipitation. Streamflows west of the Cascade Range generally measured near to well below average. East of the Cascade Range, streamflows measured near to well above average. Recent streamflow over the past seven days varied statewide showing improvement across much of the state.

Reservoir storage carryover in many basins continue to measure near to above average. However, projects in the Deschutes, Rogue, and Umatilla basins are measuring below average. See $\underline{\text{USBR}}$ (including $\underline{\text{Klamath}}$) and $\underline{\text{USACE}}$ teacup diagrams for more information.

U.S. Drought Monitor
Oregon



October 31, 2023 (Released Thursday, Nov. 2, 2023) Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	32.21	67.79	48.43	18.82	2.23	0.00
Last Week 10-24-2023	32.44	67.56	48.42	18.82	2.23	0.00
3 Month s Ago 08-01-2023	23.38	76.62	52.19	17.68	0.00	0.00
Start of Calendar 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 11-01-2022	0.44	99.56	80.77	52.92	30.73	1.40

<u>Intensity:</u>	
None	D2 Severe Drought
D0 Abnormally Dry	D3 Extreme Drought
D1 Moderate 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

<u>Author:</u>

Brian Fuchs

National Drought Mitigation Center



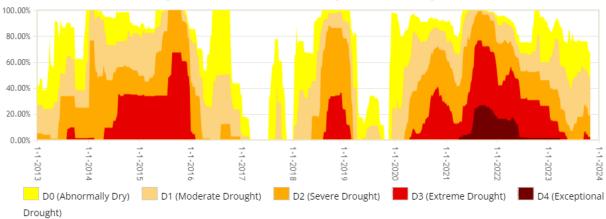






droughtmonitor.unl.edu

Oregon Percent Area in U.S. Drought Monitor Categories



124°W

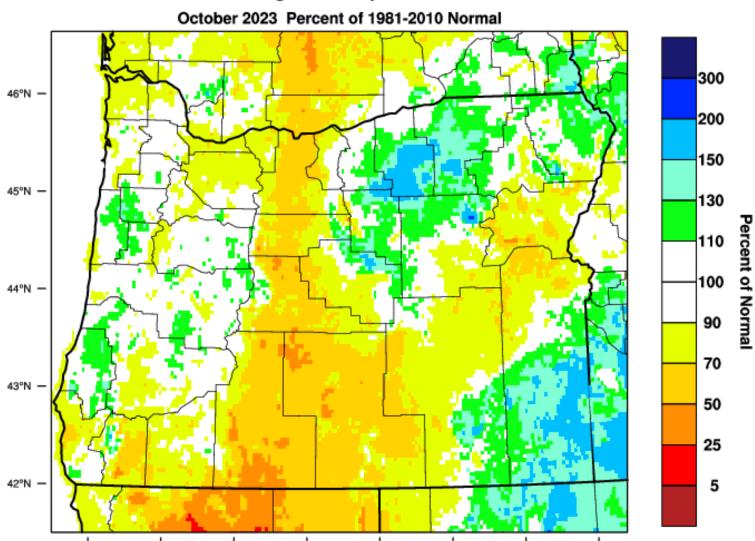
123°W

122°W

121°W

WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 5 NOV 2023

Oregon - Precipitation



120°W

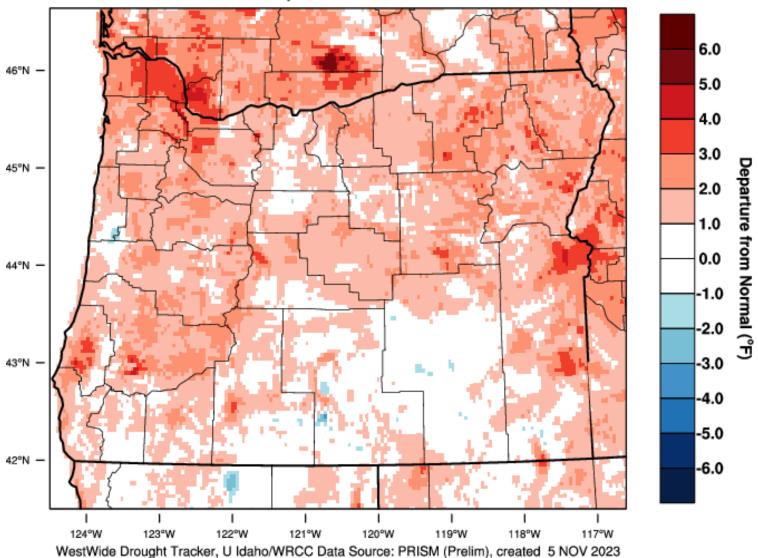
119°W

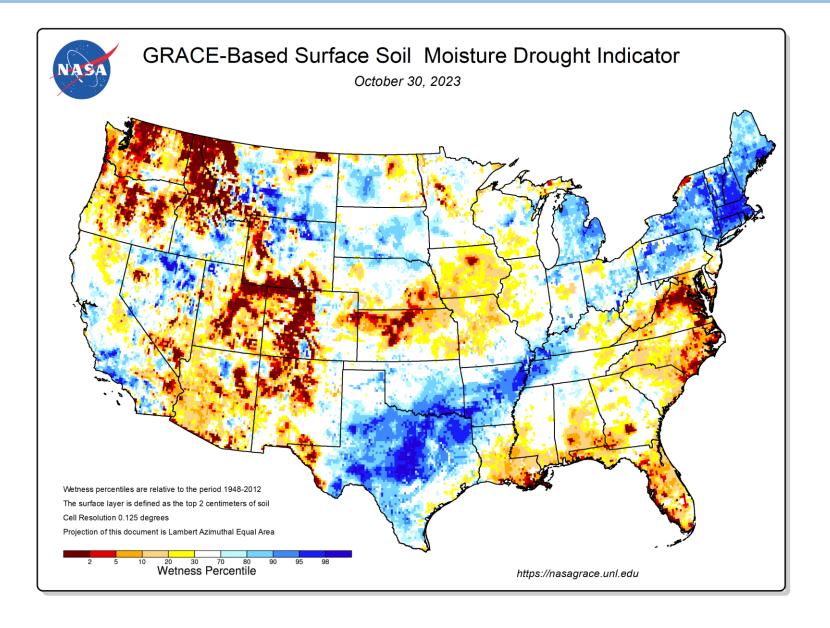
118°W

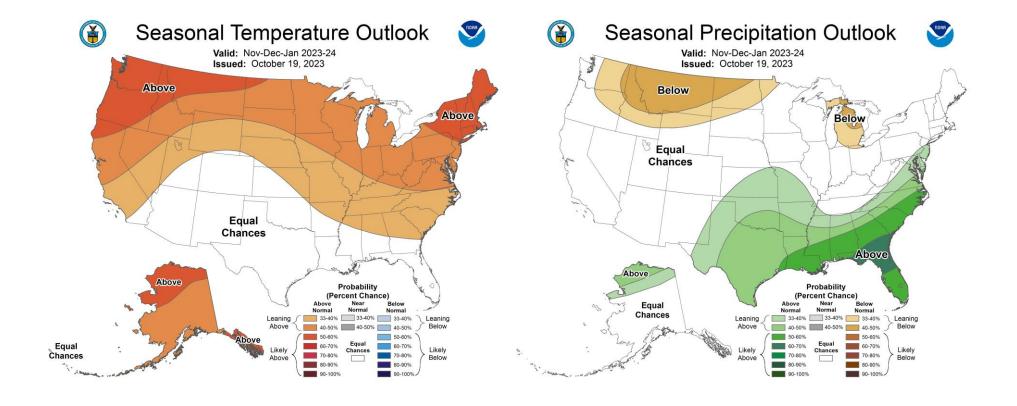
117°W

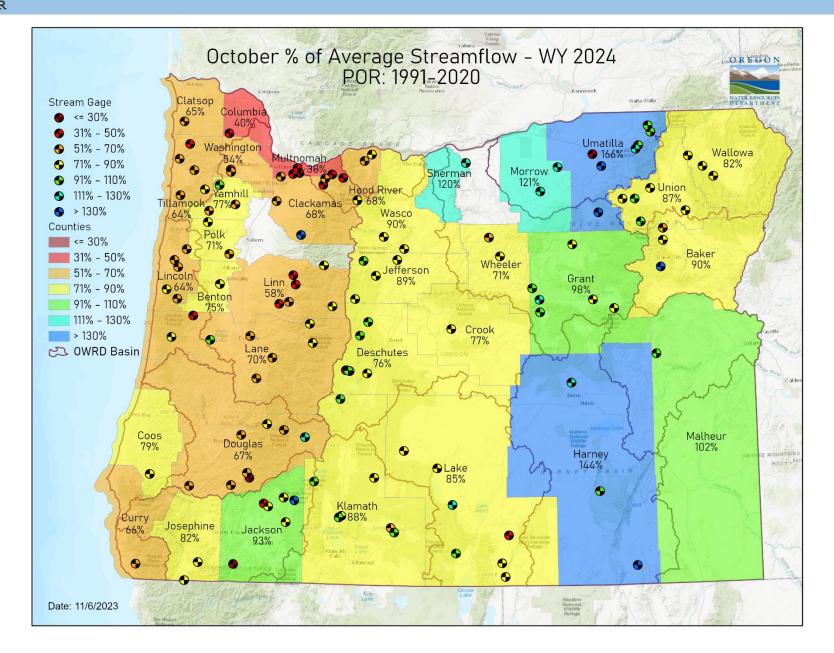
Oregon - Mean Temperature

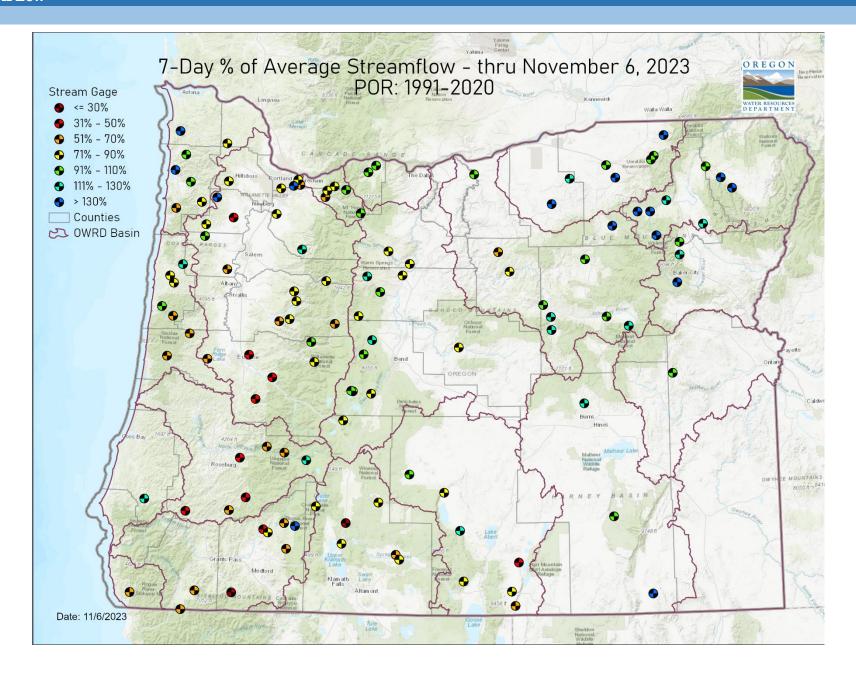
October 2023 Departure from 1981-2010 Normal











November 5 Reservoir Storage



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 <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 $\underline{\text{US Drought Monitor}}$ provides a weekly assessment of drought conditions. The USDM provides a $\underline{\text{network infographic}}$ 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 fine-scale 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 $\underline{seasonal}$ 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 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 <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.