Oregon Water Conditions Report



May 30th, 2023

HIGHLIGHTS

Currently, there are <u>eight Oregon counties</u> with <u>Executive Orders</u> issuing state drought declarations under ORS 536. One additional request for a state drought declaration has been submitted by Jackson County.

The <u>US Drought Monitor</u> has continued to reflect improvements in drought conditions across much of Oregon over recent weeks. Just over 46% of the state is experiencing drought conditions ranging from moderate (D1) to severe (D2). Water supplies in central Oregon benefitted from significant snowpack and recent precipitation, causing a one-category improvement in conditions (D3 -> D2).

<u>Snowpack at NRCS SNOTEL sites</u> is variable across the state. Snowmelt continues to occur statewide, with several basins in central and eastern Oregon having melted out.

<u>Precipitation over the past two weeks</u> has been well below average across most of Oregon. Isolated pockets of above average precipitation benefitted conditions in northcentral Oregon and Malheur County.

Temperatures over the past two weeks have been much warmer than usual, mostly ranging between 4 °F and 8 °F above average.

<u>Soil moisture contents</u> are variable among profiles and across the state. Indicators across the surface, root zone, and shallow groundwater profiles show varying degrees of stress by region. Profiles in western Oregon have recently indicated a drying trend along parts of the Cascade foothills.

The <u>near-term climate outlook</u> for the next 8 - 14 days indicates probabilities favoring warm, wet conditions. Warmer than average temperatures are highly favored, while the forecast slightly favors above average precipitation.

Streamflows throughout the water year to date are variable across the state. The Goose and Summer Lakes, Malheur Lake, Malheur, and Powder Basins have measured above average streamflow due to beneficial precipitation and significant snowpack. The rest of the state is measuring near to below average.

Recent streamflows over the past 7-day period vary between east and west of the Cascades. Flows in western Oregon are much lower than average, while those in central and eastern Oregon are generally above average.

Reservoir storage contents in <u>USBR</u> (including <u>Klamath</u>) and <u>USACE</u> projects are variable across the state.

U.S. Drought Monitor Oregon





	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	25.34	74.66	46.05	11.50	0.00	0.00
Last Week 05-16-2023	25.13	74.87	49.72	13.41	2.52	0.00
3 Month s Ago 02-21-2023	7.93	92.07	77.18	38.84	14.48	1.40
Start of Calendar Year 01-03-2023	13.46	86.54	59.75	46.03	26.18	1.40
Start of Water Year 09-27-2022	0.42	99.58	68.05	52.42	30.73	1.40
One Year Ago 05-24-2022	17.41	82.59	74.31	63.57	47.22	11.81

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 SNOW WATER EQUIVALENT







TEMPERATURE



NOAA Regional Climate Centers

SOIL MOISTURE



CLIMATE OUTLOOK



STREAMFLOW





9

May 29 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.