Oregon Water Conditions Report



February 7th, 2022

HIGHLIGHTS

Over 88% of Oregon is classified as experiencing moderate (D1) to exceptional (D4) drought conditions according to the <u>US Drought Monitor</u>. Dry conditions over the past two weeks did not warrant any improvements to depiction of drought throughout the state.

<u>Snow water equivalent (SWE)</u> is currently measuring 105% of the long-term median statewide. Current statewide SWE remains the same as last week (1/31) and represents a 9% loss over the past two weeks. SWE has stagnated in most basins (see basin snowpack graphs below), many of which are now measuring below median values with exception of Willamette, Hood-Sandy-Lower Deschutes, and Umatilla-Walla Walla-Willow.

January precipitation measured below to well below average for western and southern Oregon. Precipitation in eastern Oregon was more variable, ranging from well below to above average. Precipitation has been limited to less than 1.5 inches west of the Cascades, with little to no measurable precipitation recorded in most of eastern Oregon over the past two weeks.

<u>Temperatures in January</u> were near to well above average throughout much of the state, with exception in portions of eastern and north central Oregon.

Soil moisture remains below to well below average for many indicators, including groundwater, root zone, and surface soil moisture profiles according to NASA GRACE in both eastern and western Oregon.

The <u>three-month climate outlook for March through May</u> indicates probabilities favoring equal chances of above to below average precipitation and temperature throughout much of the state. One exception is the northwest quadrant where probabilities favor above average precipitation and below average temperatures. The <u>8-14 day outlook</u> favors above average temperatures and below average precipitation throughout Oregon.

Streamflows throughout January were variable throughout the state. Flows in much of western Oregon were near to above average, however most of the state east of the Cascades saw streamflows well below average. <u>Recent 7-</u> <u>day average streamflows</u> are well below average statewide, with some areas experiencing record low flows (see below for more information).

Most <u>USBR</u> (including <u>Klamath</u>) and <u>USACE</u> reservoir systems are measuring below to well below average storage contents, with exception of the Tualatin basin (98%). Contents are notably low in many basins.

DROUGHT CONDITIONS

The US Drought Monitor indicates just over 88% of Oregon is experiencing drought conditions. There has been no change in the severity and coverage of drought conditions over recent weeks.

U.S. Drought Monitor Oregon



February 1, 2022
(Released Thursday, Feb. 3, 2022)
Valid 7 a.m. EST

	Drought Conditions (Percent Area)						
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	
Current	4.87	95.13	88.12	74.05	42.05	16.22	
Last Week 01-25-2022	4.68	95.32	88.23	74.05	42.05	16.22	
3 Month s Ago 11-02-2021	1.34	98.66	98.27	96.55	72.11	25.34	
Start of Calendar Year 01-04-2022	4. 16	95.84	89.75	75.37	50.84	17.27	
Start of Water Year 09-28-2021	0.00	100.00	100.00	96.47	72.10	26.59	
One Year Ago 02-02-2021	9.05	90.95	76.68	55.56	21.97	0.00	

Intensity:

D0 Abnormally Dry

D2 Severe Drought D3 Extreme Drought

t 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

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droughtmonitor.unl.edu



SNOWPACK





Umatilla-Walla Walla-Willow



Rogue-Umpqua



Upper Deschutes-Crooked Historic Snowpack Range -Current Snowpack ---Median Snowpack

Basin Snowpack Index

1-Oct 1-Nov 1-Dec 1-Jan 1-Feb 1-Mar 1-Apr 1-May 1-Jun





SNOWPACK















Malheur



CLIMATE CONDITIONS SNOW WATER EQUIVALENT



PRECIPITATION



TEMPERATURE



WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 5 FEB 2022

SOIL MOISTURE





STREAMFLOW



7-DAY



February 6 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.