Oregon Water Conditions Report



November 28th, 2022

HIGHLIGHTS

According to the <u>US Drought Monitor</u>, nearly 60% of Oregon is experiencing moderate (D1) to exceptional (D4) drought conditions. There has been little to no change in conditions over recent weeks.

Snow water equivalent (SWE) at <u>NRCS SNOTEL</u> sites is measuring near to above average statewide, ranging from 104% (Malheur) to 208% (Owyhee) of the long-term median. While snowpack is currently measuring above the historical median, contents typically do not peak until April 1.

Oregon received <u>well below average precipitation</u> throughout the state over the past two weeks, <u>with much of the state receiving less than 0.5 inches</u>. Some areas in western Oregon received four to eight inches less than average. <u>Overall precipitation at NRCS SNOTEL sites</u> is measuring 83% of the long-term median at statewide since the start of the new water year on October 1.

<u>Temperatures throughout the state were cooler than average</u> over the past two weeks. Temperatures in western Oregon generally ranged between 0 - 6 °F below average, while those east of the Cascades ranged between 3 and more than 15 °F below average.

With the recent lack of precipitation, <u>moisture in soil profiles</u> has trended downward over recent weeks and continues to measure well below the long-term average statewide.

<u>Near-term climate outlooks for the next 8- to 14-day period</u> reflect probabilities favoring continuation of below average temperatures statewide. There is a slight chance of above average precipitation throughout much of Oregon east of the Cascades and near average precipitation predicted in the west.

<u>Streamflows over the past week</u> have generally measured below to well below average statewide (see below for more), with some exceptions in the northeast region. Streamflow over the water year to date continues to lag well behind in all basins except for the Umatilla and Powder.

Reservoir contents in many <u>USBR</u> (including <u>Klamath</u>) storage projects are measuring well below average, with many experiencing similar conditions to last year at this time. See below for more information.

DROUGHT CONDITIONS



U.S. Drought Monitor

November 22, 2022 (Released Wednesday, Nov. 23, 2022)

Valid 7 a.m. EST Drought Conditions (Percent Area) None D0-D4 D1-D4 D2-D4 D3-D4 D4 5.37 94.63 59.79 46.04 26.18 1.40 Current Last Week 94.63 59.79 46.04 1.40 5.37 26.18 11-15-2022 3 Month s Ago 08-23-2022 25.02 65.52 52.22 30.73 1.40 74.98

> 95.84 89.75 75.37 50.84 17.27

4.16

0.42 99.58 68.05 52.42 30.73 1.40

1.34 98.66 98.27 91.97 67.91 23.25

D0 Abnormally Dry

D1 Moderate Drought

11-23-2021 Intensity: None

Start of

Calendar Year Start of Water Year

One Year Ago

D2 Severe Drought D3 Extreme 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

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droughtmonitor.unl.edu



Oregon Percent Area in U.S. Drought Monitor Categories

CLIMATE CONDITIONS SNOW WATER EQUIVALENT





NOAA Regional Climate Centers

TEMPERATURE



NOAA Regional Climate Centers

SOIL MOISTURE



CLIMATE OUTLOOK



STREAMFLOW

WATER YEAR TO DATE



7-DAY



STORAGE

November 27 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.