Oregon Water Conditions Report



June 14th, 2021

HIGHLIGHTS

Thus far in 2021, 15 counties have received <u>state drought declarations</u>. The most recent executive orders were issued for Crook, Deschutes, Harney, Jefferson, Malheur, Sherman, and Wallowa Counties.

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</u> <u>here</u> to visit the map of condition monitoring observer reports from water year 2021.

The most recent update to the US Drought Monitor indicates that all of Oregon is experiencing drought conditions ranging in intensity from D1 (moderate drought) to D4 (exceptional drought). Over 80% of Oregon is classified as D2 - D4. See below for more information.

Precipitation at <u>NRCS SNOTEL sites</u> is measuring 82% of the long-term average statewide over the water year to date. Much of western Oregon welcomed above average precipitation over the past 7 days.

Although <u>temperatures over the past two weeks</u> have been above average statewide, the state benefitted from cooler temperatures more recently.

Streamflows throughout the state continue to measure well below the longterm average (see below). However, some streams in western Oregon are currently experiencing improved flows due to recent precipitations.

The <u>8-14 day climate outlook</u> indicates probabilities favoring belowaverage precipitation and above-average temperatures statewide. The <u>3-</u> month outlook favors similar conditions.

Reservoir storage conditions are well below average throughout the state, with exception of systems in the Tualatin, Umatilla, and Burnt River basins (see below). Low reservoir levels will likely impact some recreational activities throughout the rest of the water year.

<u>Fire potential over the next 7-days</u> ranges from minimal to normal throughout the Pacific Northwest. More information regarding significant wildfire potential over the long-term can be found <u>here</u>.

DROUGHT CONDITIONS

The US Drought Monitor indicates 100% of Oregon is experiencing some form of drought conditions. The most recent version of the drought monitor includes many changes statewide which suggest increased intensity due to much below average precipitation and enhanced evaporative demand. The increased evaporative demand also exacerbated poor soil moisture conditions. Additionally, many streams were experiencing historically low streamflows.

U.S. Drought Monitor Oregon





Drought Conditions (Percent Area) None D0-D4 D1-D4 D2-D4 D3-D4 D4 0.00 100.00 100.00 80.37 34.37 4.78 Current Last Week 0.00 100.00 97.08 72.03 27.36 3.57 06-01-2021 3 Month s Ago 67.28 43.99 0.00 19.33 80.67 12.53 03-09-2021 Start of 68.71 8.57 91.43 83.53 27.74 0.00 Calendar Year Start of Water Year 6.50 93.50 84.77 65.53 33.59 0.00 09-29-2020 One Year Ago 06-09-2020 4.88 95.12 81.33 38.77 4.79 0.00





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



CLIMATE CONDITIONS PRECIPITATION





NOAA Regional Climate Centers

SOIL MOISTURE



CLIMATE	OUTLOOK
8-14 DAY	



STREAMFLOW



STREAMFLOW

7-DAY





June 7 Reservoir Storage

RESOURCES/REFERENCES

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>NRCS Snow Survey</u> Program provides mountain snowpack data and streamflow forecasts for Oregon and the western United States.

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.