Oregon Water Conditions Report



April 17th, 2023

HIGHLIGHTS

Currently, <u>four Oregon counties</u> have received <u>Executive Orders</u> issuing state drought declarations under ORS 536. Requests from Wasco and Harney Counties have been forwarded to the Governor's Office. In addition, many counties in eastern and southern Oregon have received <u>Secretarial Disaster</u> <u>Designations</u> from the <u>US Department of Agriculture</u> due to drought conditions.

Over 57% of Oregon is classified as experiencing moderate (D1) to extreme (D3) drought conditions, according to the <u>US Drought Monitor</u>. Changes over recent weeks include one-class improvements from exceptional to extreme drought in Crook County and severe to moderate in southern Oregon.

<u>Snow water equivalent at NRCS SNOTEL sites</u> is measuring well above longterm values statewide. SWE peaked well above typical values in all basins and has recently begun showing signs of meltout throughout the state.

<u>Precipitation over the past two weeks</u> varied across the state, with most of western Oregon measuring <u>between 0 and 2.5 inches above average</u>, and eastern Oregon generally measuring within half an inch of typical amounts.

Temperatures over the past two weeks measured below to well below average throughout the state, generally ranging between 2 °F and 6 °F cooler than usual.

<u>Soil moisture contents</u> are variable throughout the state. Soils in parts of western Oregon and along the Cascades are measuring above average in terms of wetness, with pockets of eastern Oregon showing similar trends. However, some areas of central and the northeastern corner of the state are still showing very dry soil moisture contents.

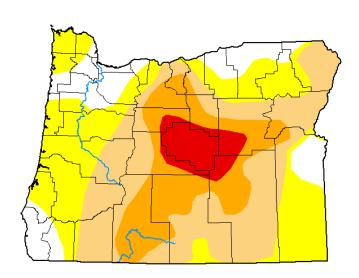
The <u>near-term climate outlook</u> indicates likelihood favoring near average precipitation throughout the state. Temperature projections vary somewhat, with slightly favorable chances of cooler than average temperatures everywhere except southeastern Oregon (near average).

<u>Streamflows over the past week</u> have measured above to well above average in much of the state due to recent precipitation events and the onset of snowmelt. Although water year streamflow continues to lag behind, flows have trended upwards in all basins since last week.

Reservoir storage contents have increased considerably in many <u>USBR</u> (including <u>Klamath</u>) and <u>USACE</u> projects over recent weeks due to increased inflows and delayed start to the irrigation season as a result of wet weather and cooler temperatures.

U.S. Drought Monitor Oregon

April 11, 2023 (Released Thursday, Apr. 13, 2023) Valid 8 a.m. EDT



	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	13.40	86.60	56.44	23.63	6.20	0.00
Last Week 04-04-2023	12.87	87.13	57.20	23.63	6.20	0.00
3 Month s Ago 01-10-2023	13.69	86.31	59.60	45.94	25.89	1.40
Start of Calend ar 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 04-12-2022	7.23	92.77	88.12	75.88	56.72	15.01

Intensity:

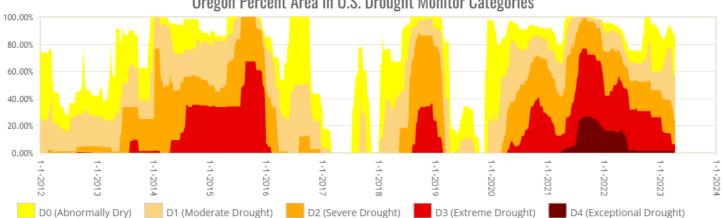


D2 Severe Drought D3 Extreme Drought

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

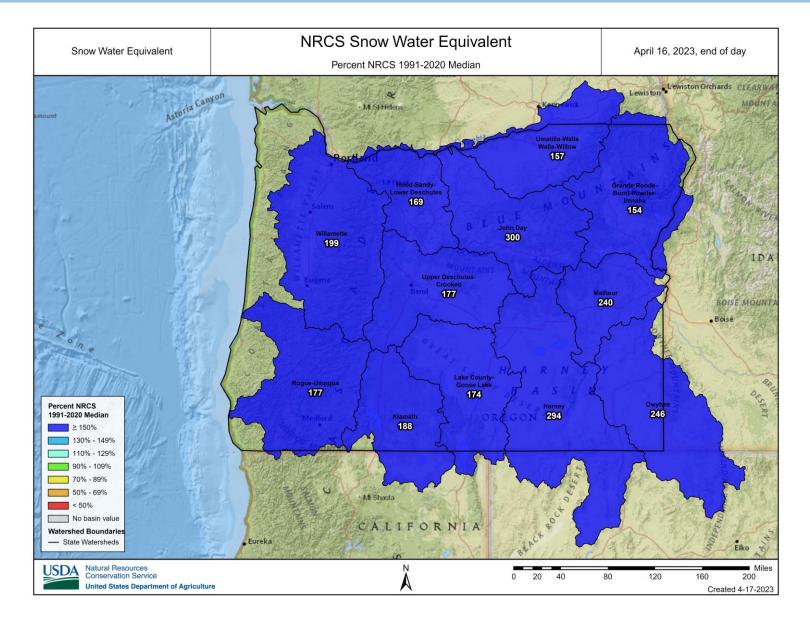
Author: David Simeral Western Regional Climate Center

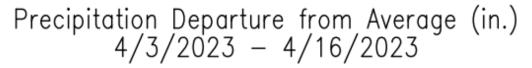


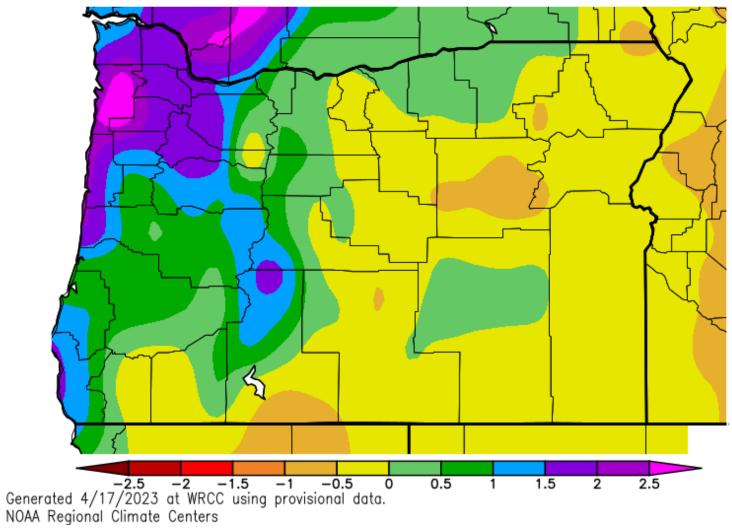


Oregon Percent Area in U.S. Drought Monitor Categories

CLIMATE CONDITIONS SNOW WATER EQUIVALENT

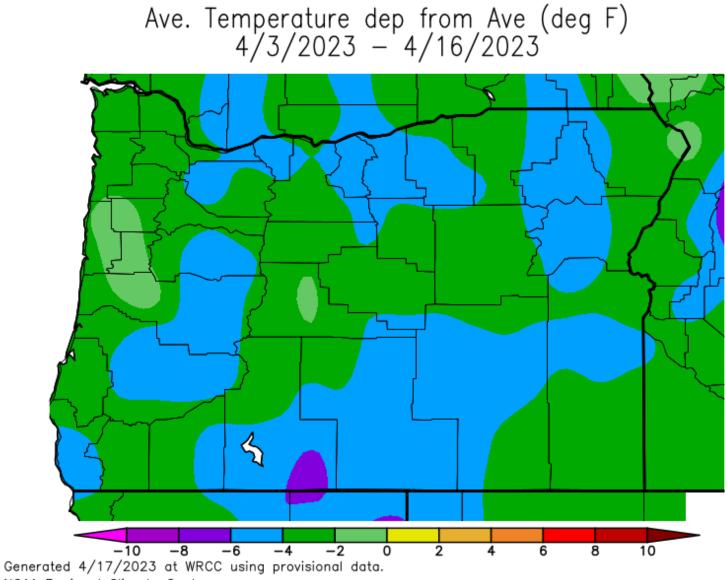




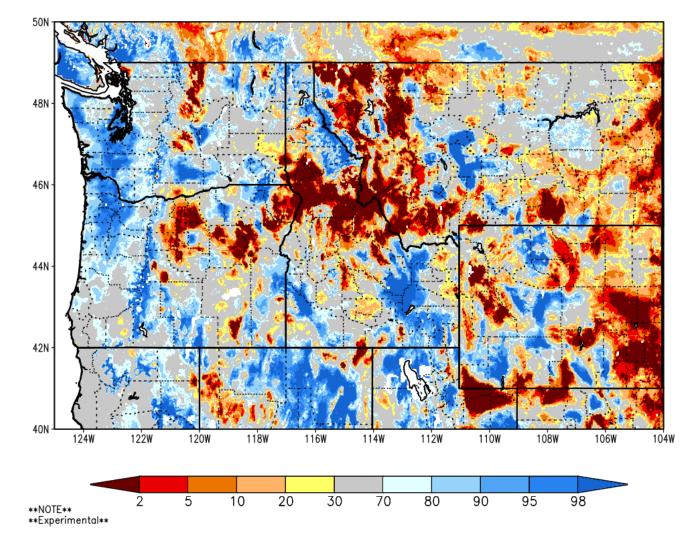


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TEMPERATURE

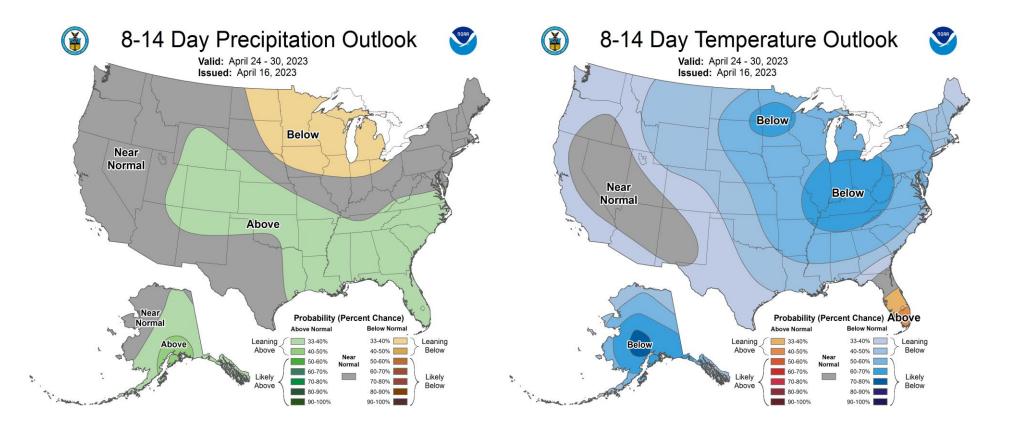


NOAA Regional Climate Centers

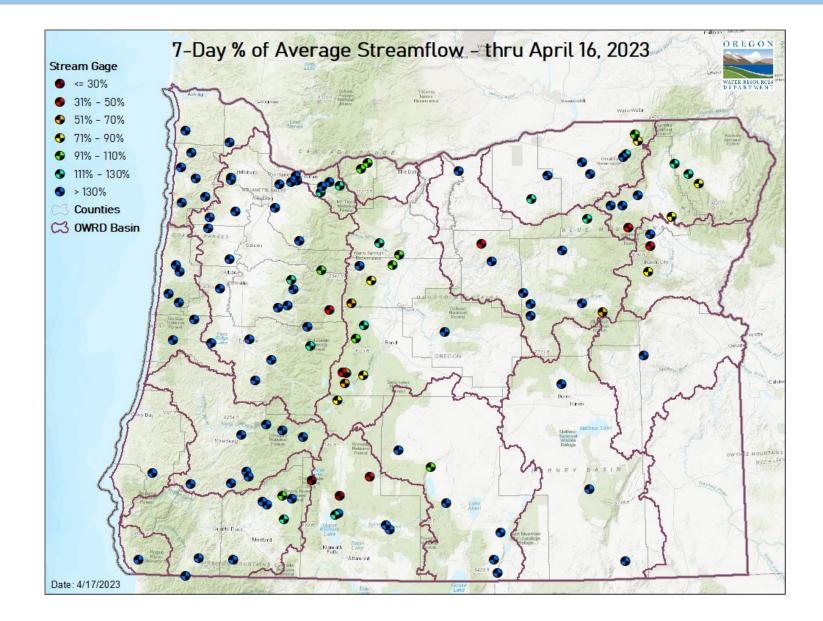


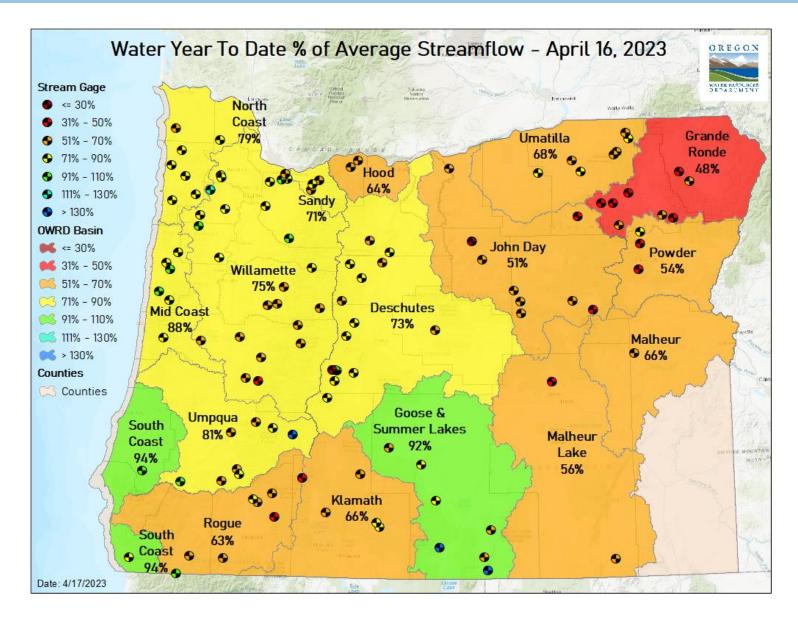
SPoRT-LIS 0-100 cm Soil Moisture percentile valid 17 Apr 2023

CLIMATE OUTLOOK

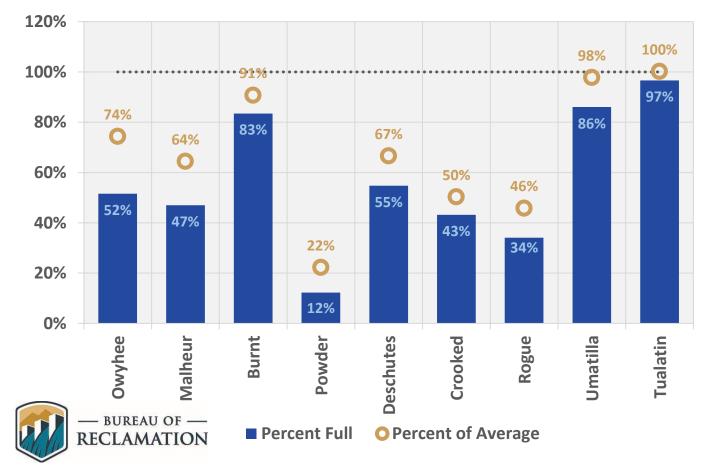


STREAMFLOW





April 16 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.