# Oregon Water Conditions Report



# July 31<sup>st</sup>, 2023

### HIGHLIGHTS

Thus far in 2023, <u>nine Oregon counties</u> have received <u>Executive Orders</u> issuing state drought declarations under ORS 536. Gilliam County has also submitted a request for a state declaration.

The <u>US Drought Monitor</u> indicates nearly 49% of Oregon is experiencing moderate (D1) to severe (D2) drought conditions. Just over 24% of the state is classified as drought-free. There have been no significant changes in drought depiction throughout the state over recent weeks.

Much of Oregon received <u>little to no measurable precipitation</u> over the past two weeks, although precipitation during this period has been historically negligible.

Recent temperatures generally trended 0  $^{\circ}F - 2 ^{\circ}F$  <u>above average</u> over the past two weeks throughout Oregon, with some slight variation in various parts of the state.

<u>Soil moisture indicators</u> reflect significantly dry conditions across much of the state. The <u>Evaporative Demand Drought Index</u> also indicates high atmospheric evaporative demand over the past three months outside of southeastern Oregon.

The <u>8-14-day climate outlook</u> indicates probabilities favoring above average precipitation and above average temperatures throughout Oregon.

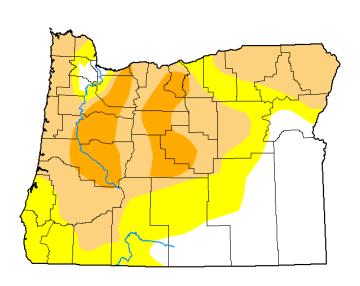
Dry conditions are reflected in average streamflows over the past 7- and 28-day periods across most of Oregon, with exception in parts of south central and southeastern Oregon.

Reservoir storage contents are measuring below average in projects in the Deschutes, Rogue, and Tualatin Basins, as well as some projects in the Willamette Basin. See <u>USBR</u> (including <u>Klamath</u>) and <u>USACE</u> teacup diagrams for more information.

<u>Significant wildfire potential</u> is above normal outside of parts of central, southwest, and southcentral Oregon, where conditions are expected to be near normal.

# U.S. Drought Monitor Oregon

July 25, 2023 (Released Thursday, Jul. 27, 2023) Valid 8 a.m. EDT



	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	24.30	75.70	48.76	12.60	0.00	0.00
Last Week 07-18-2023	24.39	75.61	48.76	12.60	0.00	0.00
3 Month s Ago 04-25-2023	23.62	76.38	56.30	22.29	5.78	0.00
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 07-26-2022	24.60	75.40	66.42	52.76	31.72	1.77

#### 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

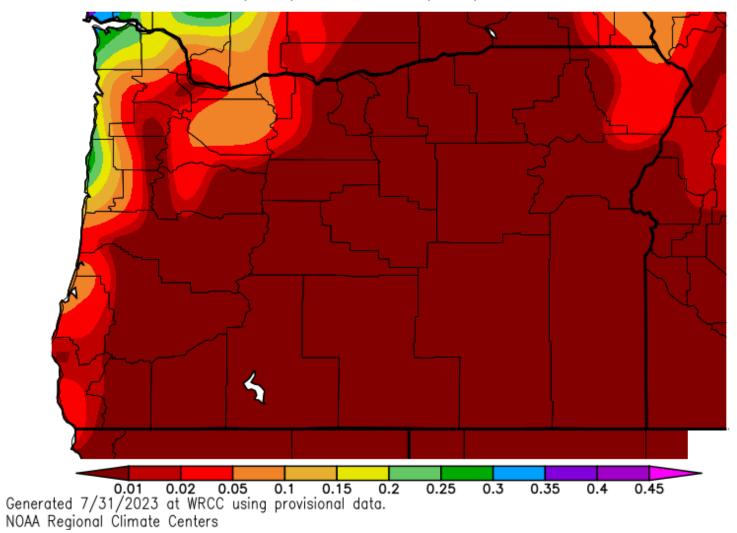
Author: Brian Fuchs National Drought Mitigation Center

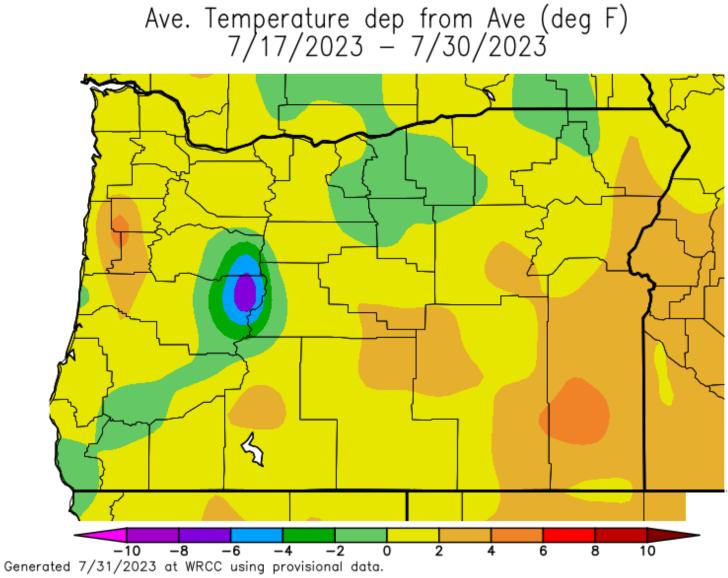


#### 100.00% 80.00% 60.00% 40.00% 20.00% 0.00% 4-1-2020 - 7-1-2023 7-1 <u>\_</u> 4 7-1-2021 1-1-2022 4-1-2022 7 4-1-2023 1-1-2024 10-1-2021 10-1-2022 10-1-2020 10-1-2023 -2021 -2020 -2020 -2021 -2022 -2023 📃 D0 (Abnormally Dry) 📃 D1 (Moderate Drought) 📃 D2 (Severe Drought) 📕 D3 (Extreme Drought) 📕 D4 (Exceptional Drought)

#### Oregon Percent Area in U.S. Drought Monitor Categories

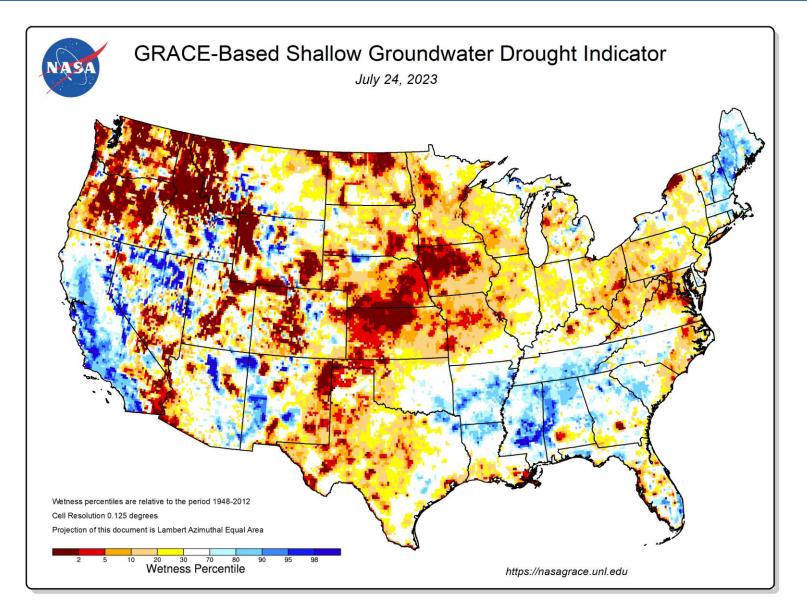
Total Precipitation (in.) 7/17/2023 — 7/30/2023



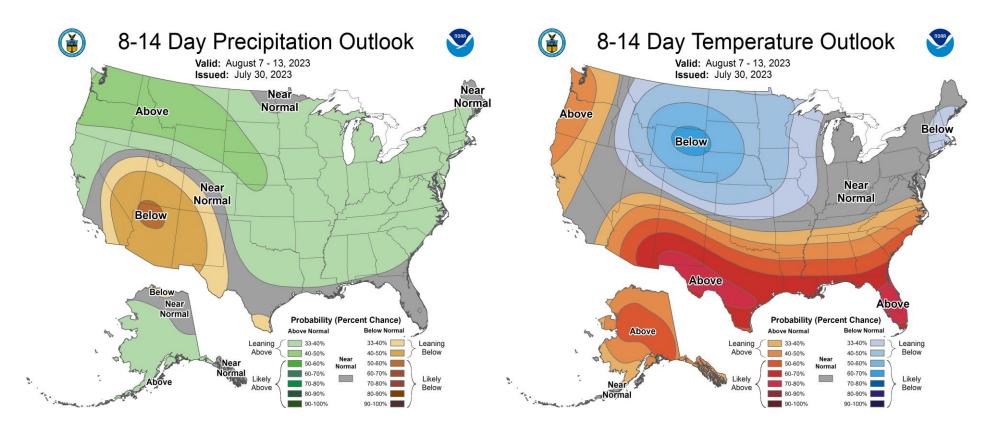


NOAA Regional Climate Centers

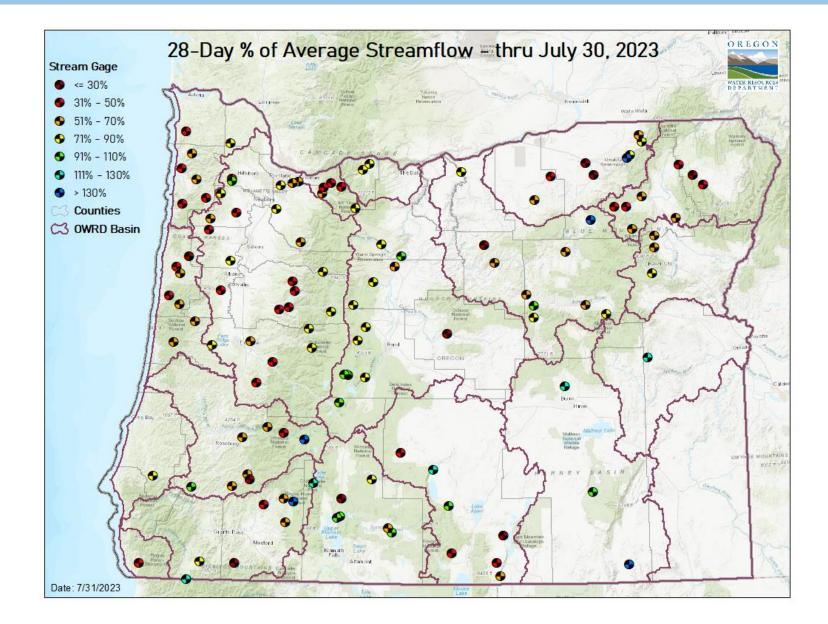
## SOIL MOISTURE



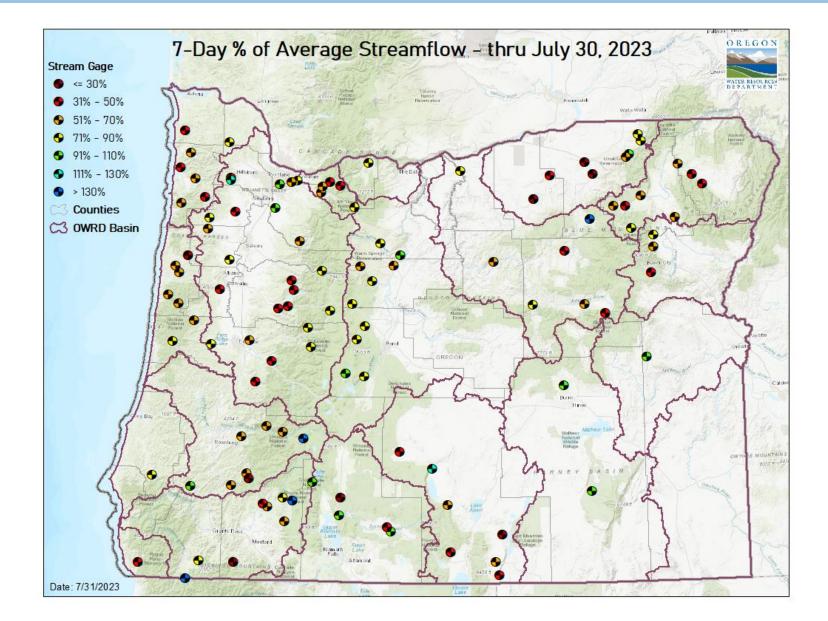
## CLIMATE OUTLOOK



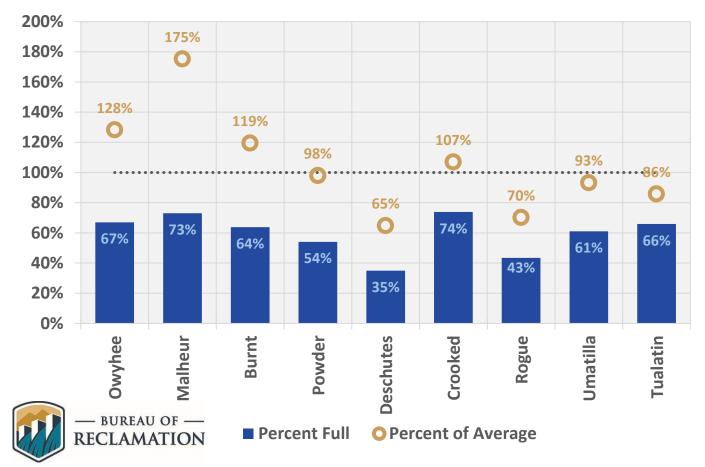
# STREAMFLOW



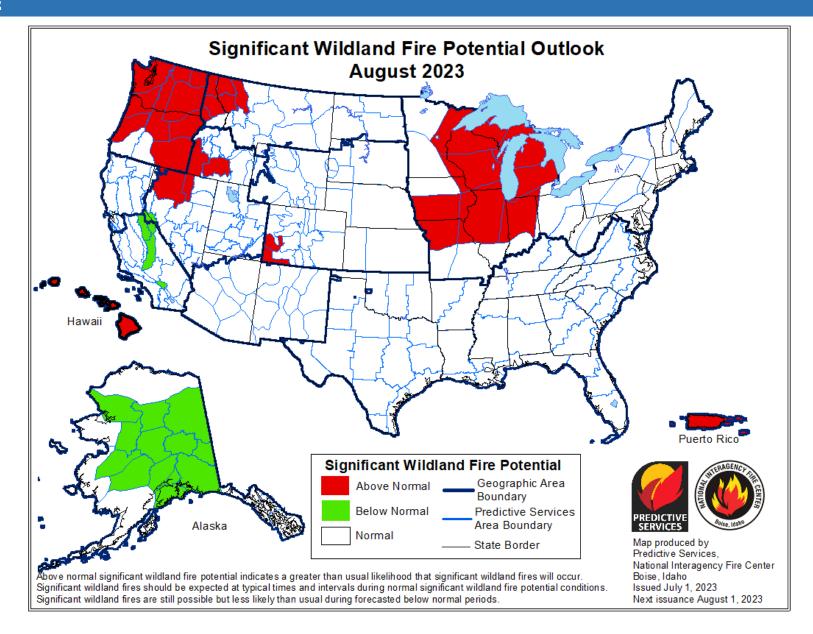
7-DAY



# July 30 Reservoir Storage



## WILDFIRE



## **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.