

# Oregon Water Conditions Report



August 28<sup>th</sup>, 2023

## HIGHLIGHTS

Nine [Oregon counties](#) have received [Executive Orders](#) issuing state drought declarations under ORS 536. Requests for state drought declarations from Gilliam, Lincoln, and Douglas Counties have been forwarded to the Governor's Office.

According to the [US Drought Monitor](#), over 50% of Oregon is experiencing moderate (D1) to severe (D2) drought conditions. There has been little change in drought conditions over recent weeks. The [Evaporative Demand Drought Index](#) reflects extremely dry conditions for much of western and northern Oregon over the past two weeks, while conditions in southern and eastern Oregon range from normal to wet.

[Precipitation over the past two weeks](#) varies along a transect from southwest to northeastern Oregon. Much of the area south of this transect received above average precipitation, with some areas receiving [0.5 to greater than 2.0 inches above average](#). Precipitation was below average for much of western Oregon.

[Temperatures over the past two weeks](#) were warmer than usual across the state, generally ranging between 2 - 8 °F above the long-term average.

NASA's [GRACE-based surface soil moisture indicator](#) reflects recent precipitation, with much of southern and eastern Oregon measuring wet conditions. Conditions in central and western Oregon continue to measure much drier than usual.

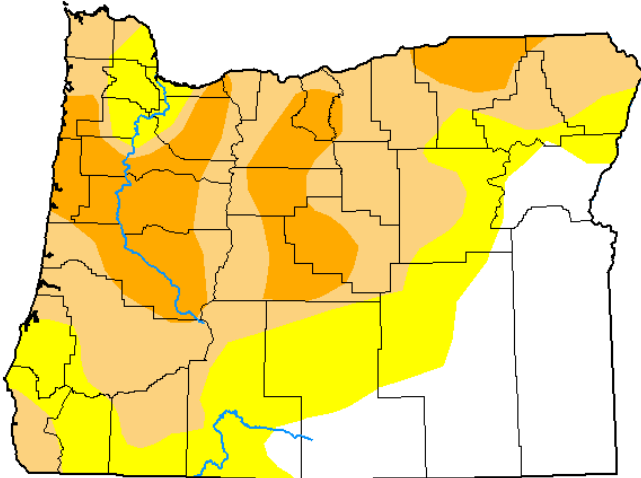
The [near-term 8-14-day climate outlook](#) indicates probabilities favoring cooler, wetter weather across Oregon.

[Streamflows](#) over the past 7- and 28-day periods are variable across the state. Areas in south and eastern Oregon reflect recent precipitation events when comparing flows between the two periods. Streamflows in western Oregon continue to reflect dry conditions, with many streams along the coast and in the Willamette Valley measuring well below average.

Reservoir storage contents are measuring near to above average in many projects across the state. Conditions in the Deschutes, Rogue, and Tualatin basins are below average. See [USBR](#) (including [Klamath](#)) and [USACE](#) teacup diagrams for more information.

**U.S. Drought Monitor  
Oregon**

**August 22, 2023**  
(Released Thursday, Aug. 24, 2023)  
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	24.02	75.98	50.89	17.70	0.00	0.00
<b>Last Week</b> 08-15-2023	23.26	76.74	52.12	17.68	0.00	0.00
<b>3 Months Ago</b> 05-23-2023	25.34	74.66	46.05	11.50	0.00	0.00
<b>Start of Calendar Year</b> 01-03-2023	13.46	86.54	59.75	46.03	26.18	1.40
<b>Start of Water Year</b> 09-27-2022	0.42	99.58	68.05	52.42	30.73	1.40
<b>One Year Ago</b> 08-23-2022	25.02	74.98	65.52	52.22	30.73	1.40

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- 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>

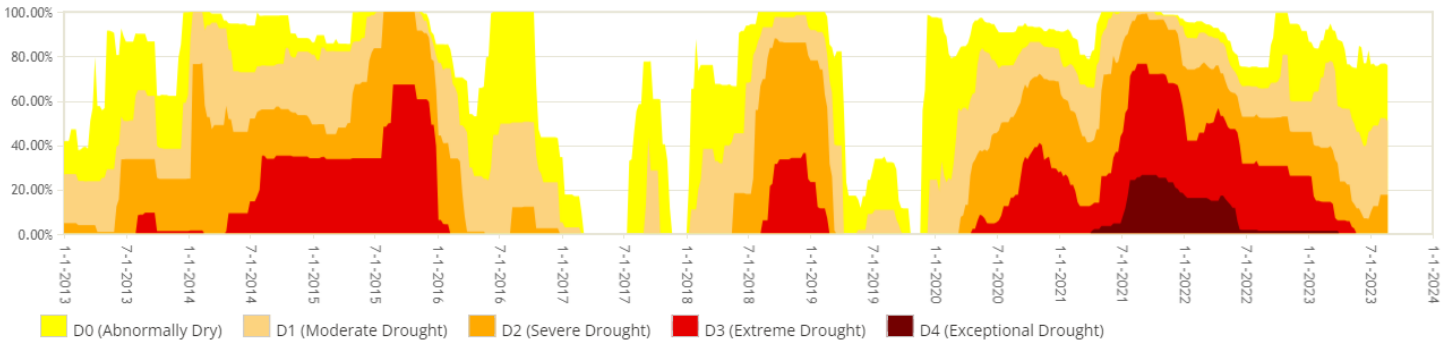
Author:

David Simeral  
Western Regional Climate Center

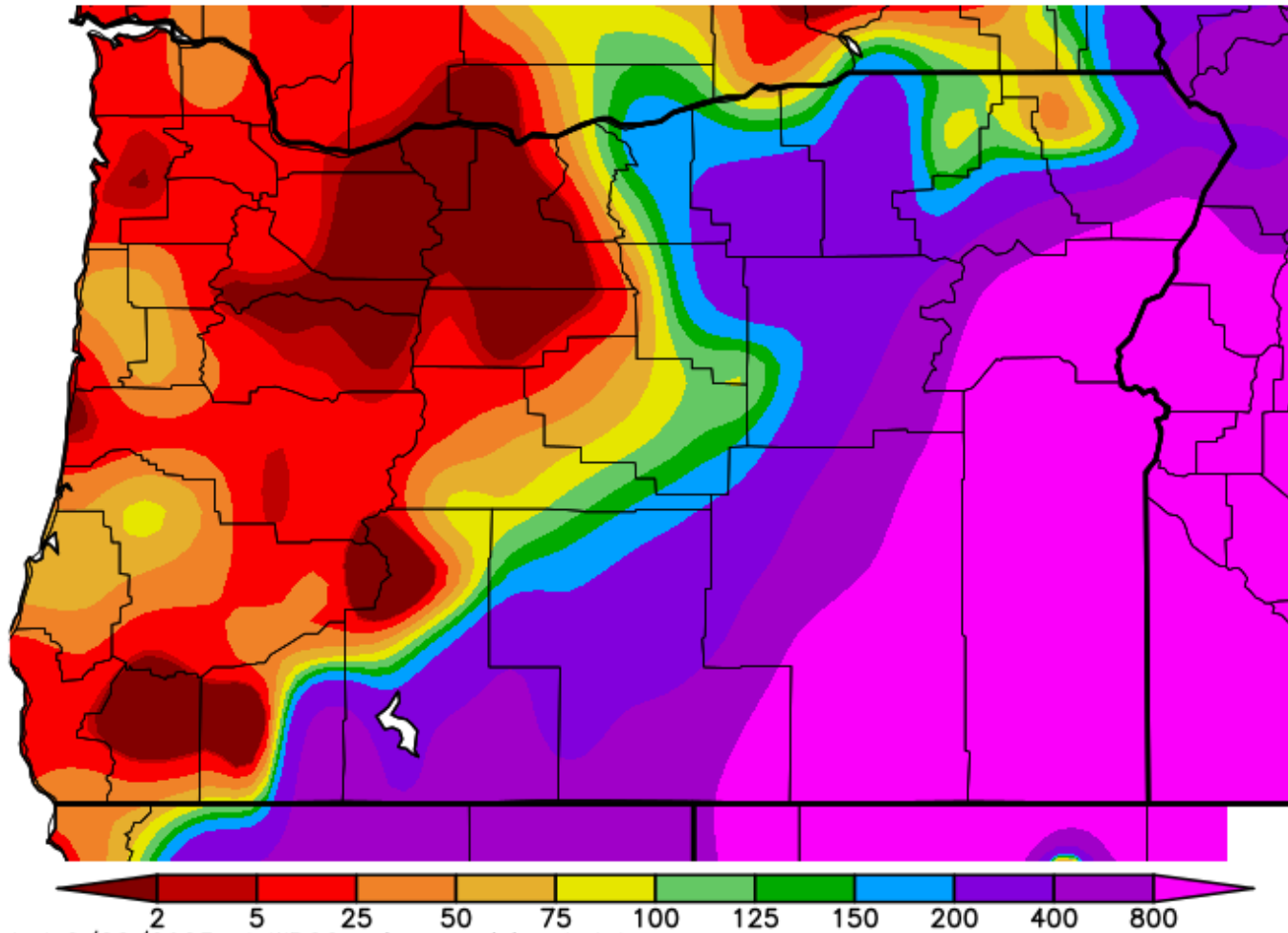


[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

Oregon Percent Area in U.S. Drought Monitor Categories

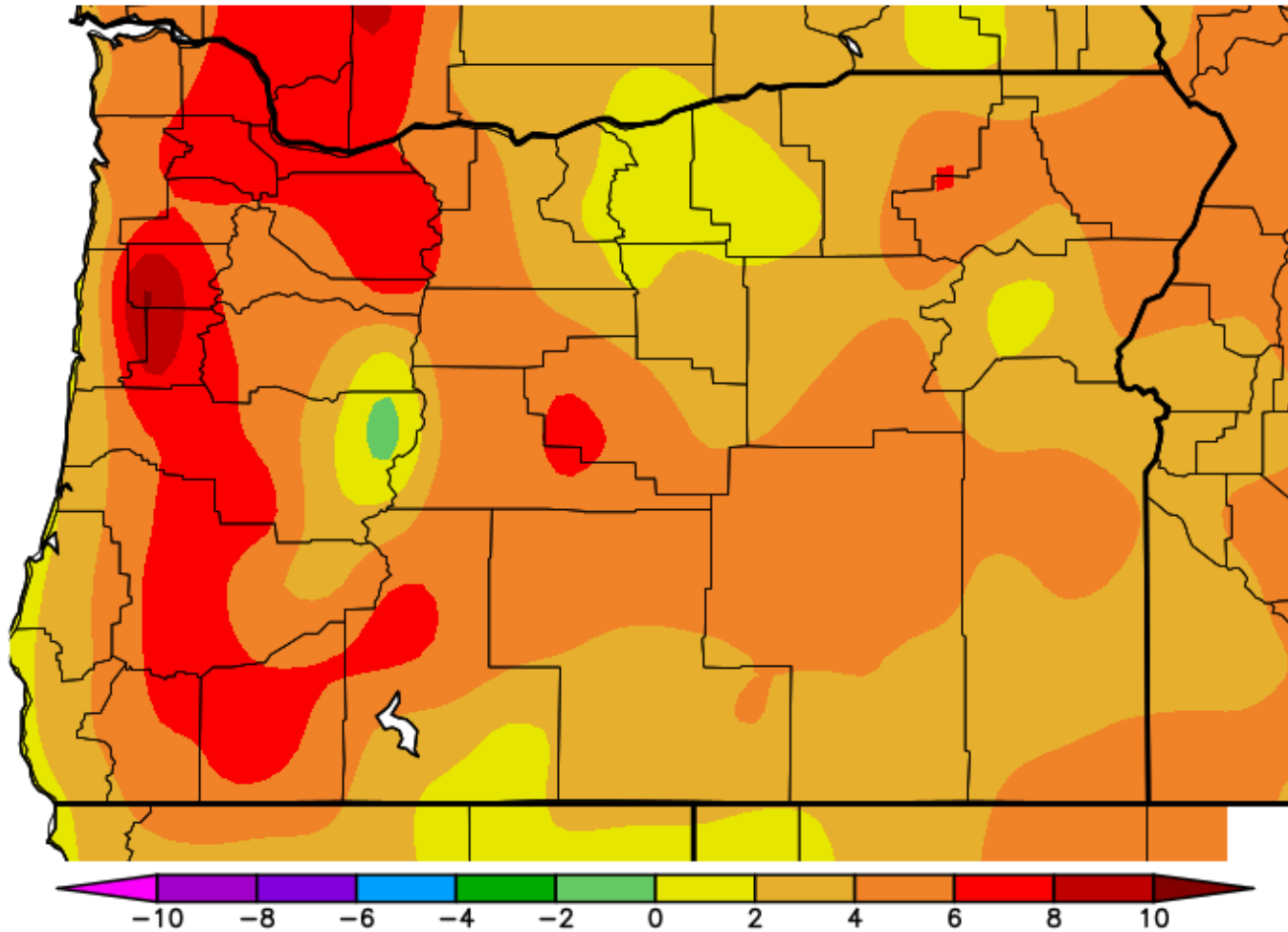


Percent of Average Precipitation (%)  
8/14/2023 – 8/27/2023



Generated 8/28/2023 at WRCC using provisional data.  
NOAA Regional Climate Centers

Ave. Temperature dep from Ave (deg F)  
8/14/2023 - 8/27/2023

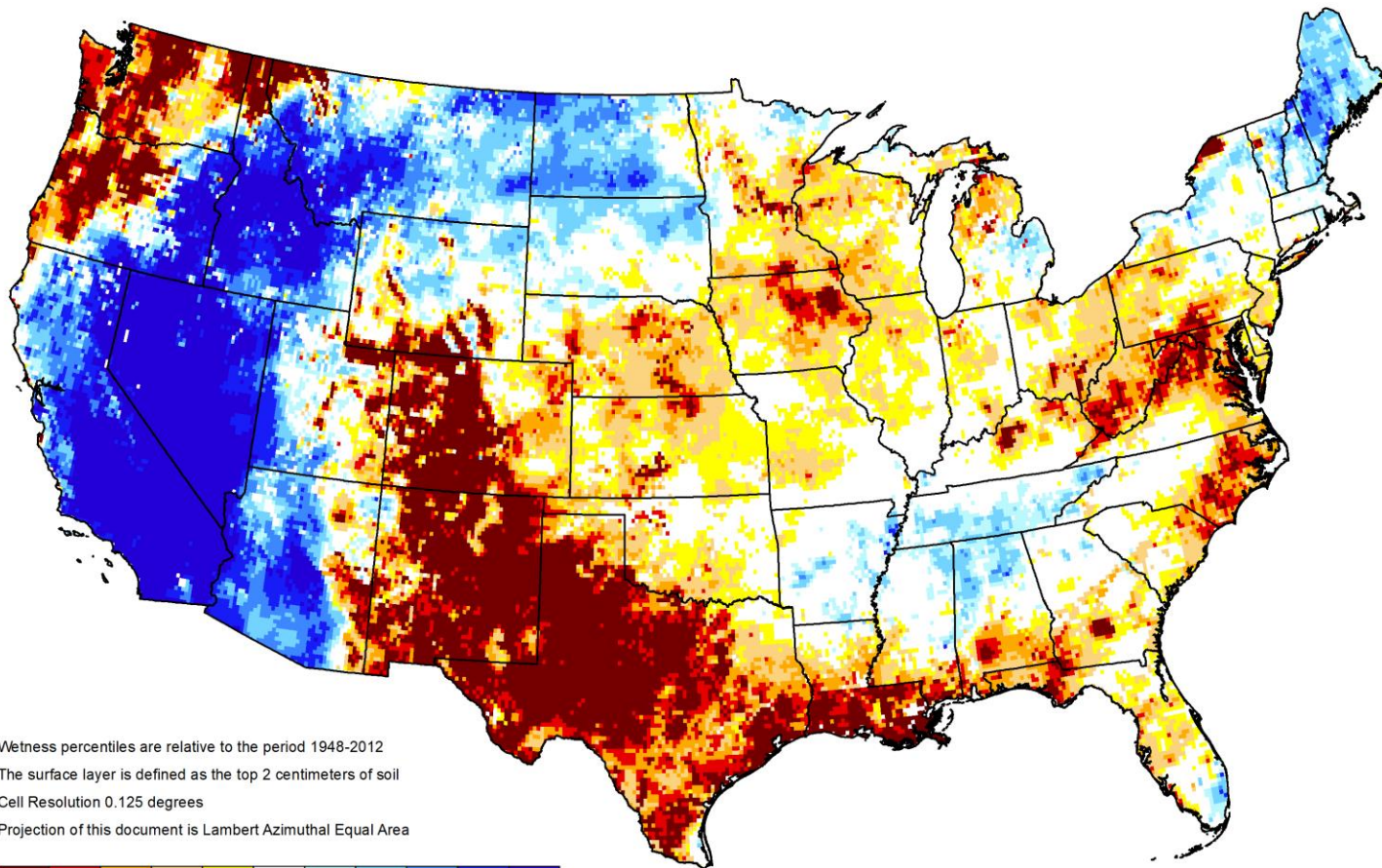


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NOAA Regional Climate Centers

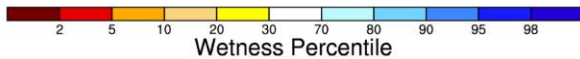


# GRACE-Based Surface Soil Moisture Drought Indicator

August 21, 2023



Wetness percentiles are relative to the period 1948-2012  
The surface layer is defined as the top 2 centimeters of soil  
Cell Resolution 0.125 degrees  
Projection of this document is Lambert Azimuthal Equal Area



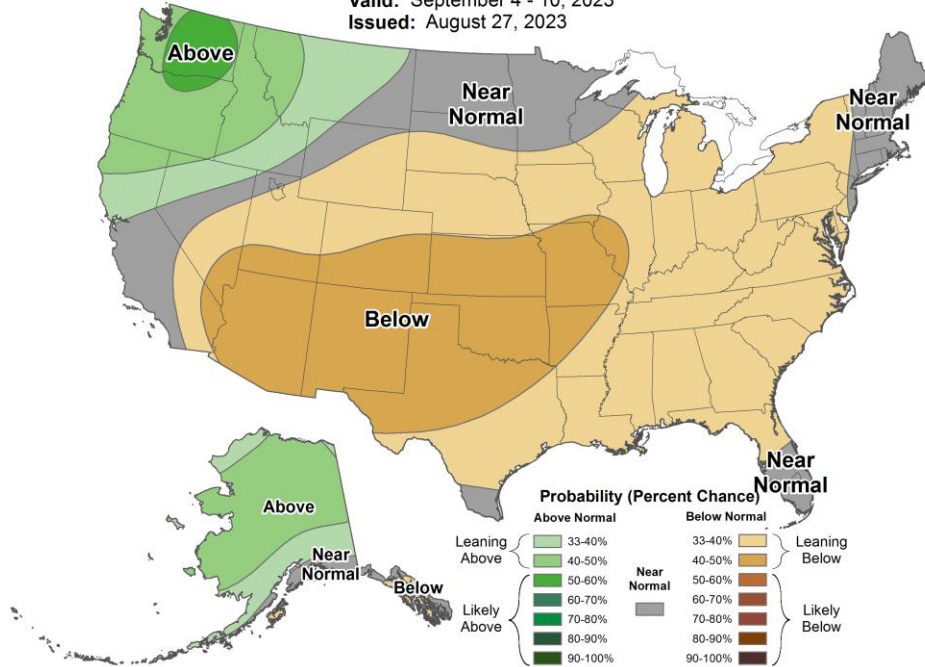
<https://nasagrace.unl.edu>



## 8-14 Day Precipitation Outlook



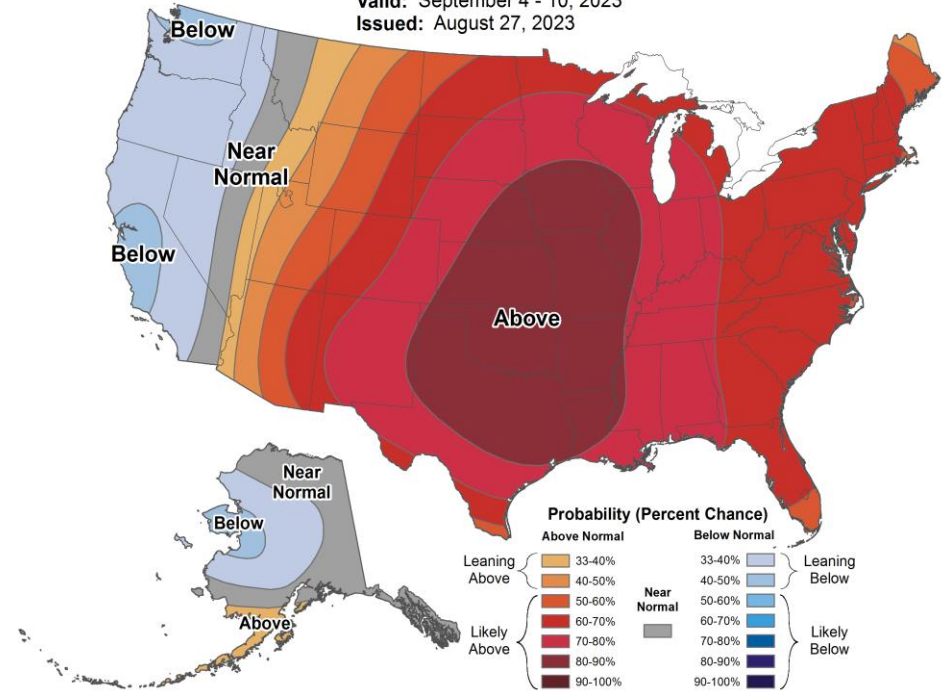
Valid: September 4 - 10, 2023  
 Issued: August 27, 2023



## 8-14 Day Temperature Outlook

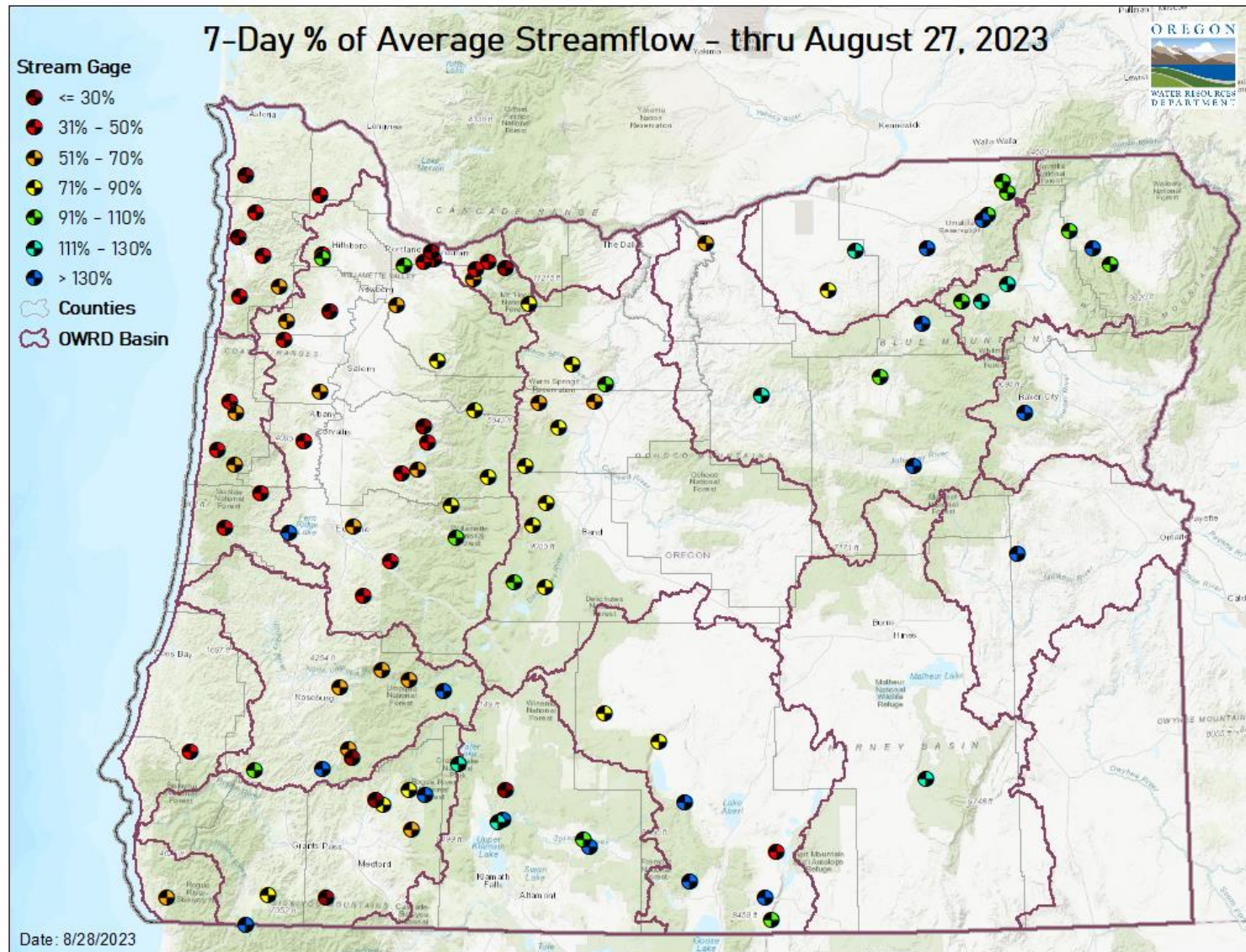


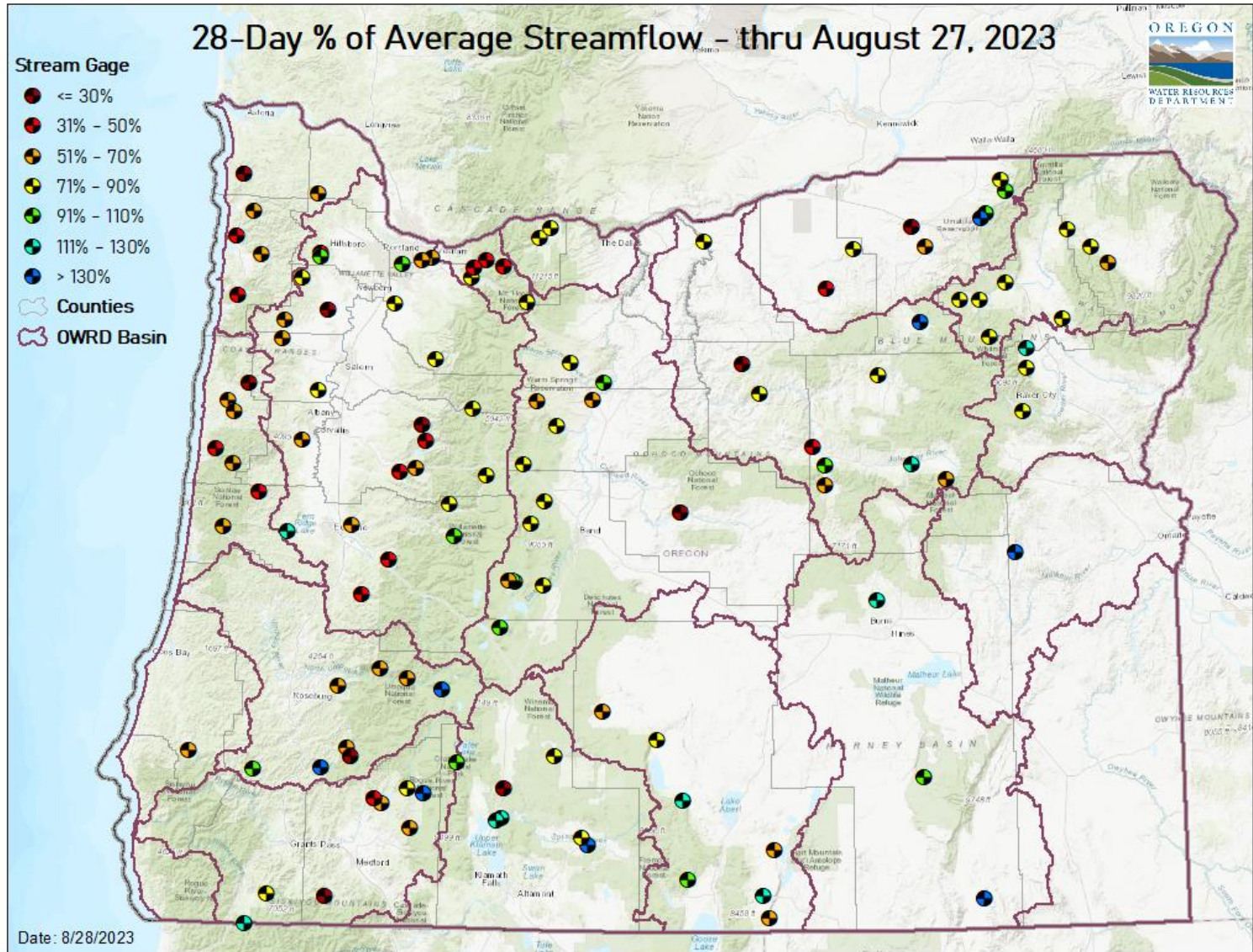
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# STREAMFLOW

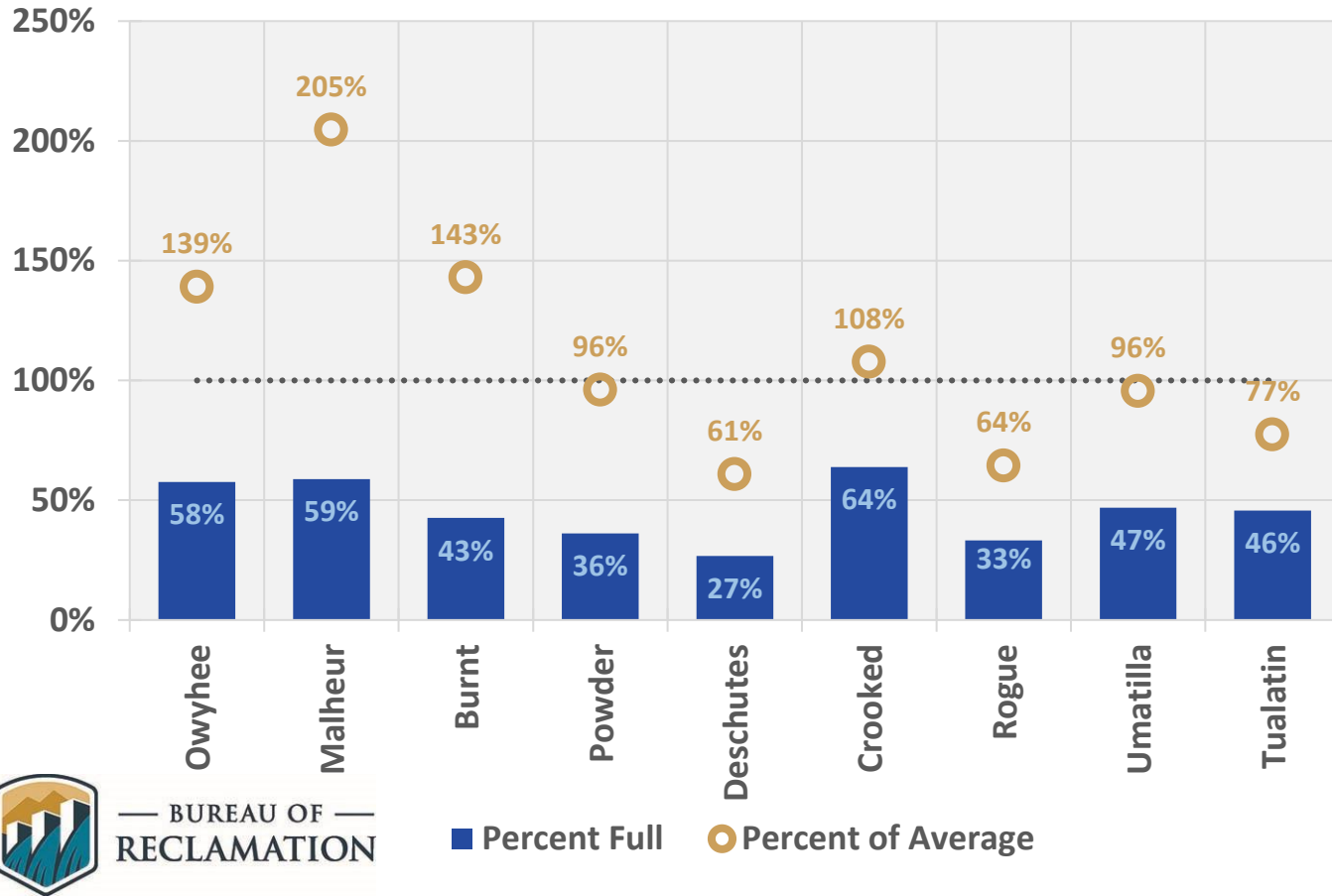
## 7-DAY







### August 27 Reservoir Storage



## RESOURCES/REFERENCES

Please visit [Oregon Water Resources Department's drought information page](#) 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 [drought impacts toolkit](#) to learn more. [Click here](#) to visit the map of condition monitoring observer reports.

Released every Thursday, the [US Drought Monitor](#) provides a weekly assessment of drought conditions. The USDM provides a [network infographic](#) which depicts the network of observers who gather and report information about conditions and drought impacts.

The [WestWide Drought Tracker](#) uses data from [PRISM](#) to provide easy access to fine-scale drought monitoring and climate products, such as the figures depicting climate conditions within this report.

The National Weather Service's [Climate Prediction Center](#) offers [weekly](#), [monthly](#), and [seasonal](#) climate outlooks illustrating the probabilities of temperatures and precipitation.

The [Regional Climate Centers](#) (RCC) working with NOAA partners, deliver climate services at national, regional, and state levels. Climate [anomaly maps of Oregon](#) are updated daily at around noon PST.

NASA's [Gravity Recovery and Climate Experiment](#) (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 [Water Watch](#) provides maps of real-time and average streamflow conditions at USGS sites throughout the state.

Reservoir storage "teacup" diagrams are offered by both the [US Bureau of Reclamation](#) and [US Army Corps of Engineers](#). 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 [InciWeb](#) and the Oregon Department of Forestry's [Wildfire News](#), along with the [National Interagency Fire Center](#) which offers outlooks on the significant wildland fire potential.

Oregon Office of Emergency Management maintains a [hydrology/meteorology dashboard](#) 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 [Weekly Weather and Crop Bulletin](#) 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 [Drought Programs and Assistance](#) offers links to programs and resources to help those struggling with persistent drought.