

# Oregon Water Conditions Report



October 23<sup>rd</sup>, 2023

## HIGHLIGHTS

Thus far, [twelve Oregon counties](#) have received [Executive Orders](#) issuing state drought declarations under ORS 536. Additionally, Morrow County has requested a drought declaration.

According to the [US Drought Monitor](#), 49% of Oregon is experiencing moderate (D1) to extreme (D3) drought conditions. Conditions across Oregon have shown some improvement, specifically in the Willamette Valley which has seen a reduction in coverage of extreme drought conditions.

Precipitation across the state has varied over the [past two weeks](#). Parts of the Oregon coast and Cascade Range have received well above average precipitation whereas most of eastern and parts of southern Oregon are well below average.

Temperatures over the [past two weeks](#) have been above average for most of the state with parts of eastern Oregon being well above average. Average temperatures ranged from 2°F to 10°F above the long-term average with some exception in the southern coast and central Oregon Cascades.

[Shallow groundwater and soil moisture profiles](#) show improvements over recent weeks across the state due to recent precipitation which has resulted in [wetter conditions](#).

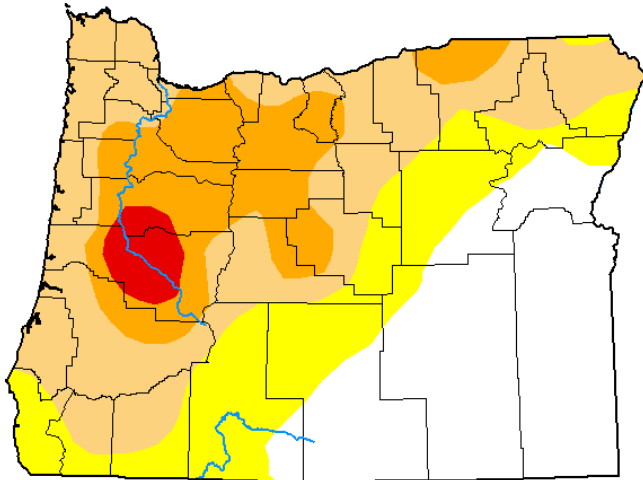
The [near-term climate outlook](#) (8-14 days) favors above average precipitation statewide. Above average temperatures are favored for western Oregon and parts of central Oregon and near average temperatures are likely for the rest of the state.

Recent [streamflow](#) across the state varies between western and eastern Oregon. Streams in western Oregon are generally below to well below the long-term average, whereas streams in eastern Oregon are generally at or above the long-term average.

With irrigation season ending, reservoir storage carryover in many basins is near to above average. However, projects in the Deschutes and Rogue basins are measuring well below average, resulting in below average carryover. See [USBR](#) (including [Klamath](#)) and [USACE](#) teacup diagrams for more information.

**U.S. Drought Monitor  
Oregon**

**October 17, 2023**  
(Released Thursday, Oct. 19, 2023)  
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	30.05	69.95	49.00	18.82	2.50	0.00
<b>Last Week</b> 10-10-2023	24.10	75.90	53.26	24.81	4.32	0.00
<b>3 Months Ago</b> 07-18-2023	24.39	75.61	48.76	12.60	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> 09-26-2023	24.13	75.87	54.18	27.06	6.40	0.00
<b>One Year Ago</b> 10-18-2022	0.44	99.56	80.77	52.92	30.73	1.40

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

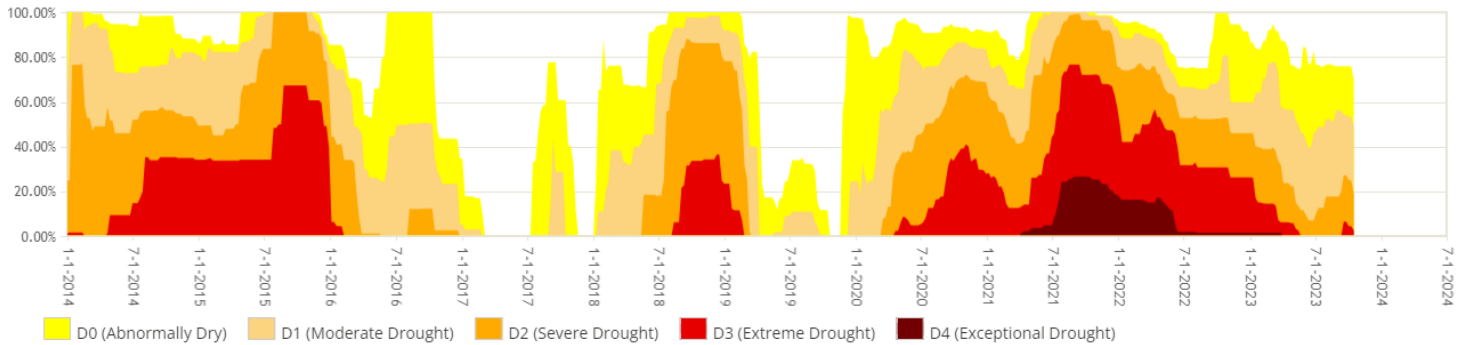
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

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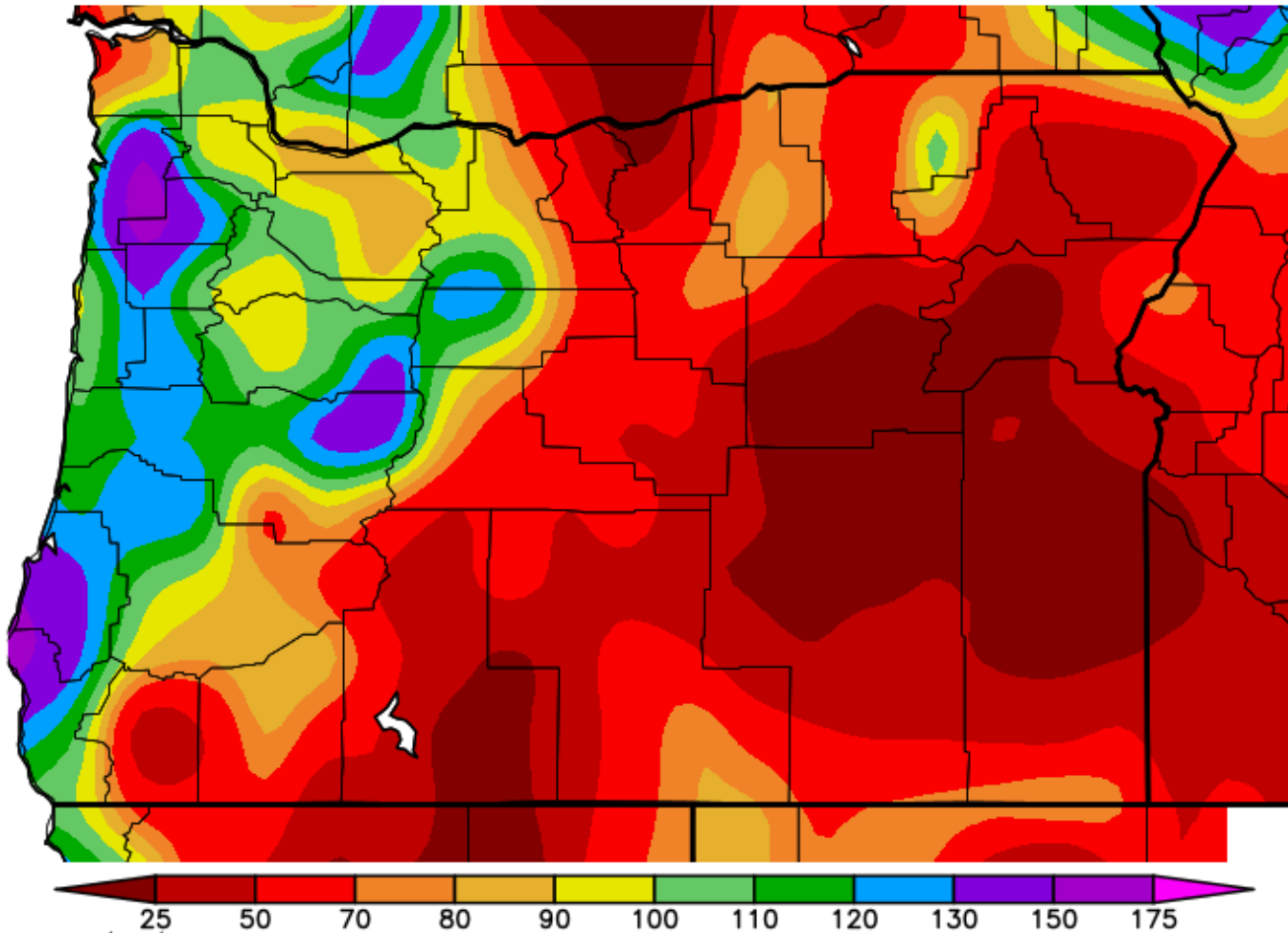


[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

Oregon Percent Area in U.S. Drought Monitor Categories

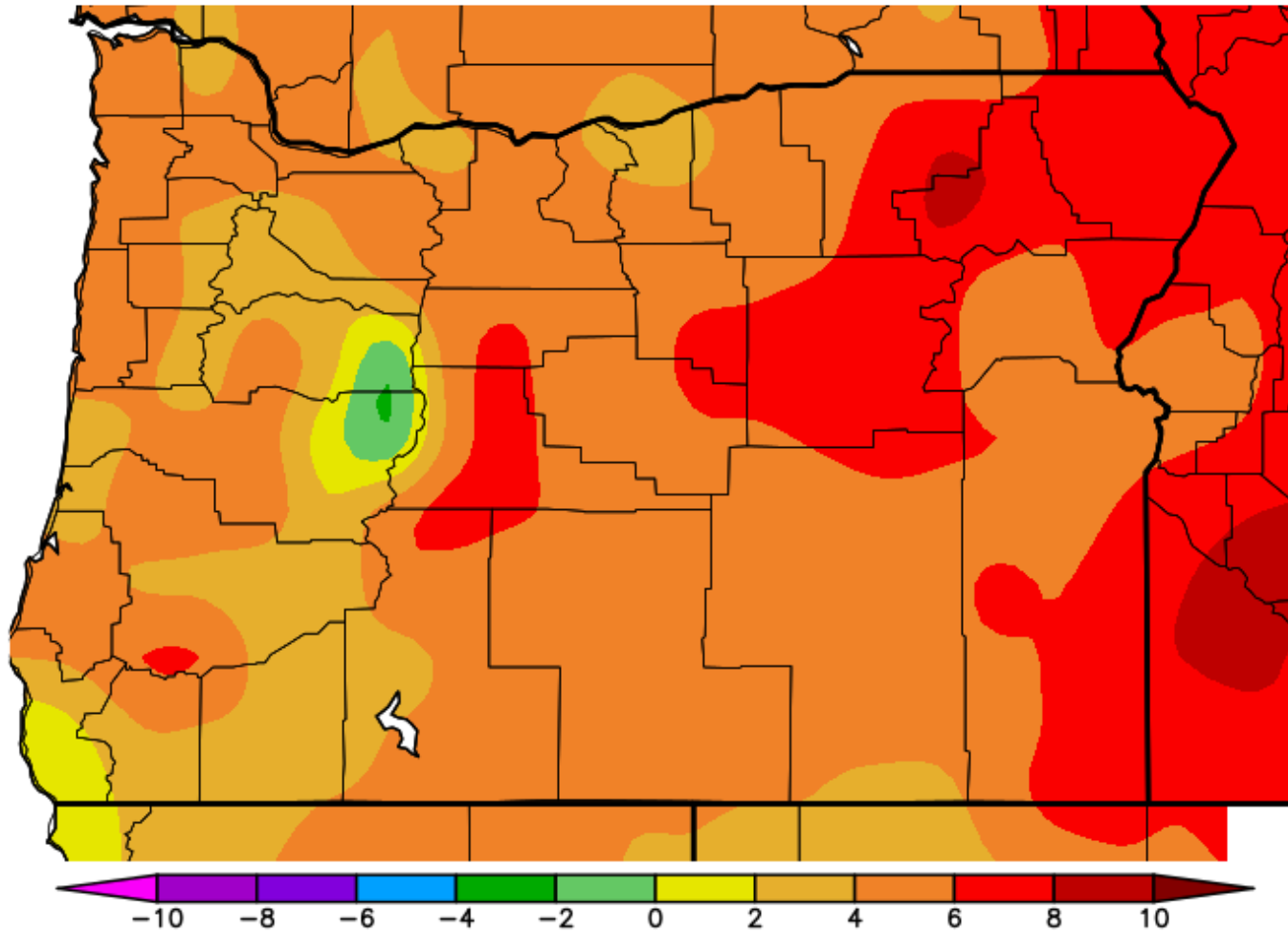


Percent of Average Precipitation (%)  
10/9/2023 - 10/22/2023



Generated 10/23/2023 at WRCC using provisional data.  
NOAA Regional Climate Centers

Ave. Temperature dep from Ave (deg F)  
10/9/2023 - 10/22/2023

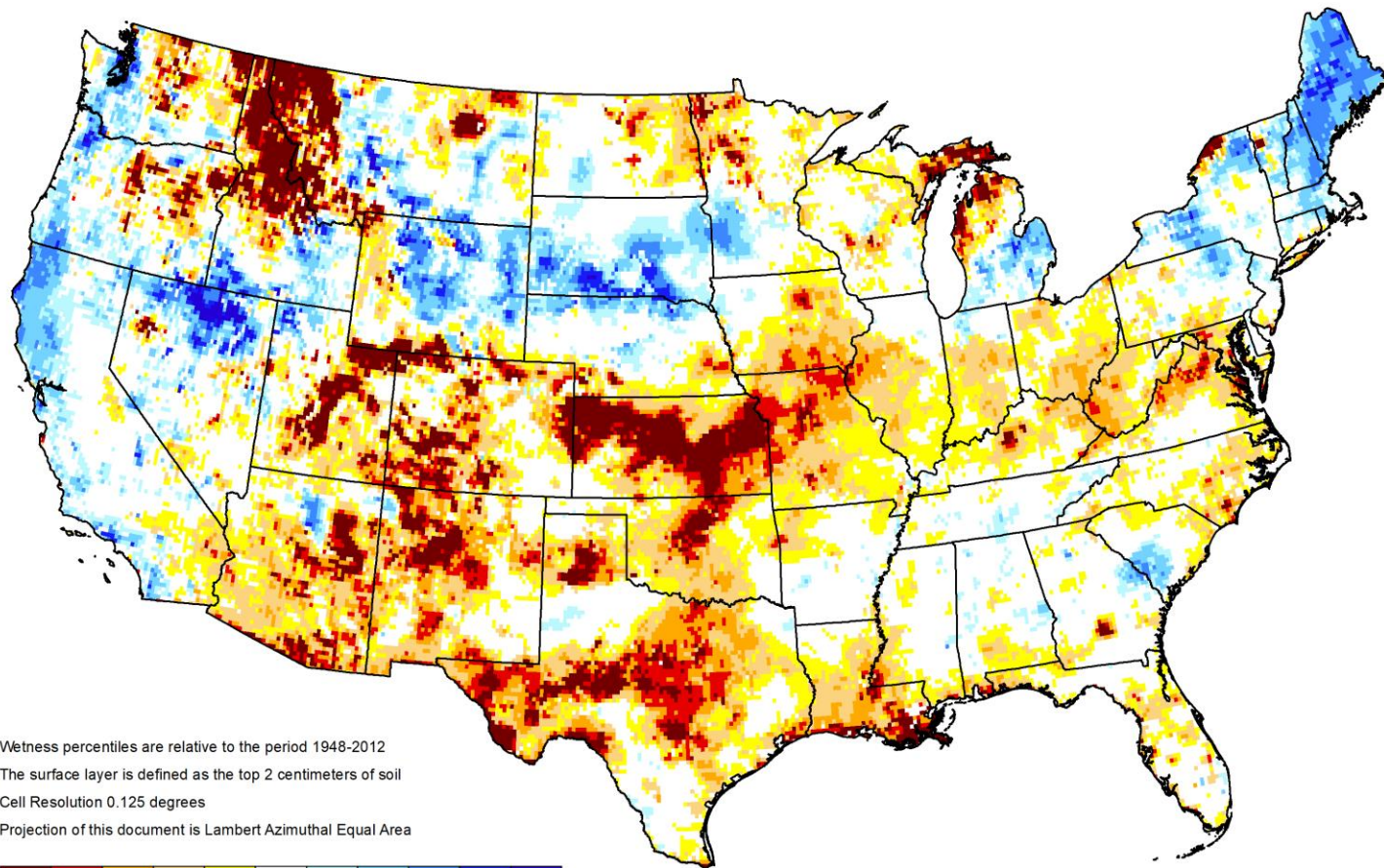


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NOAA Regional Climate Centers

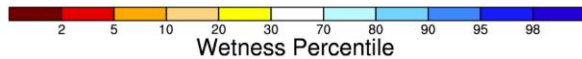


# GRACE-Based Surface Soil Moisture Drought Indicator

October 16, 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



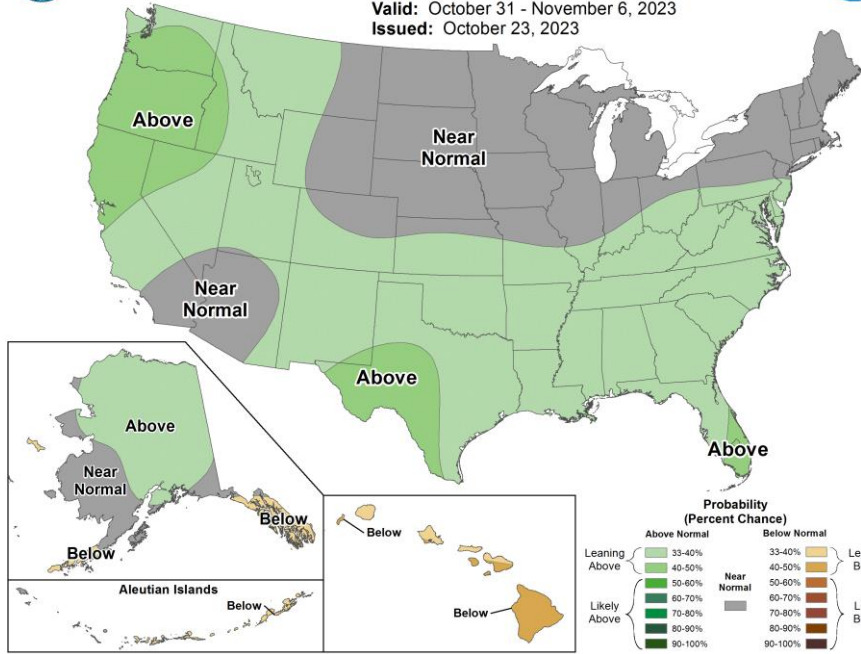
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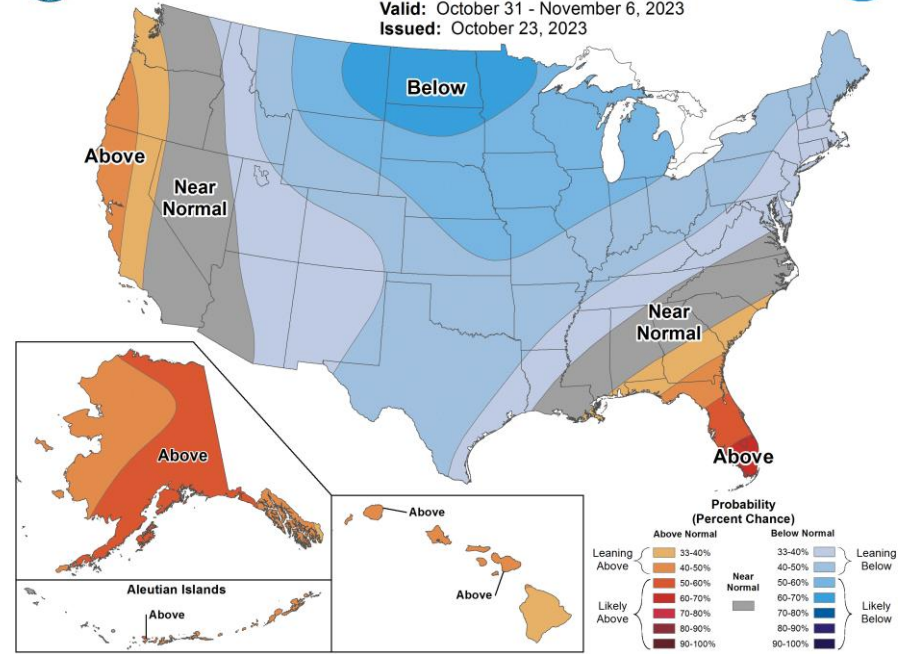
# 8-14 Day Precipitation Outlook

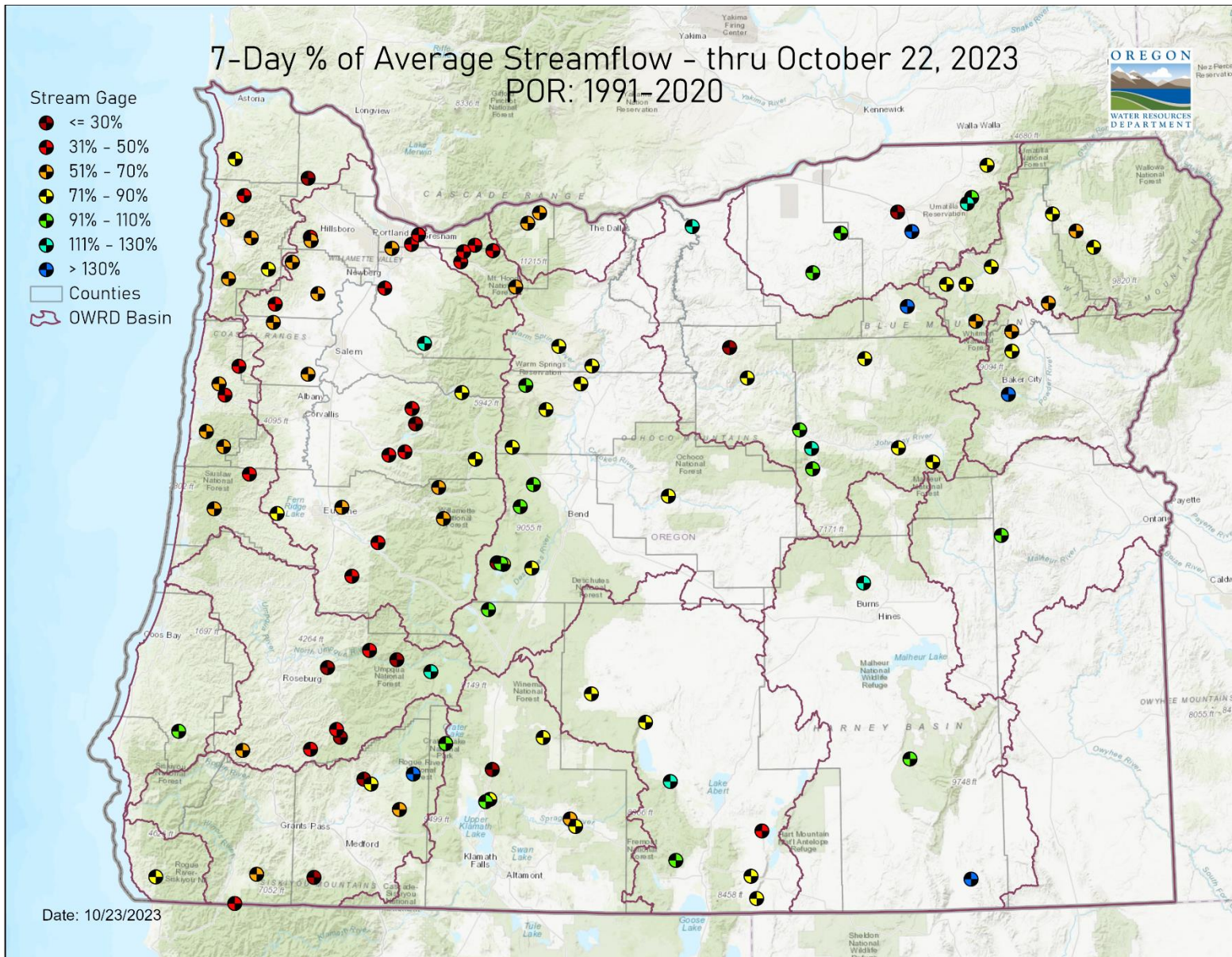
Valid: October 31 - November 6, 2023  
 Issued: October 23, 2023



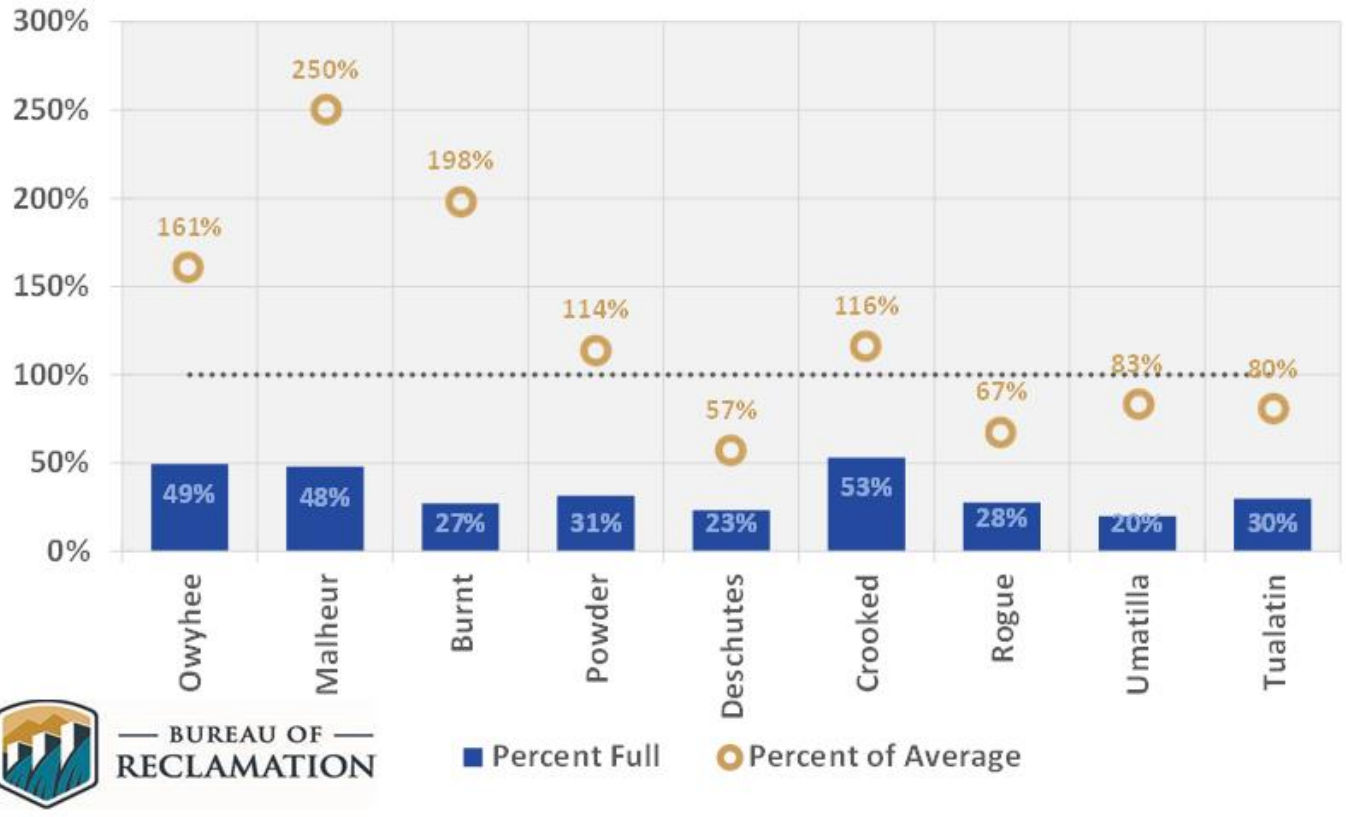
# 8-14 Day Temperature Outlook

Valid: October 31 - November 6, 2023  
 Issued: October 23, 2023





### October 22 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.