

Oregon Water Conditions Report



September 11th, 2023

HIGHLIGHTS

Three counties have recently received [Executive Orders](#) issuing state drought declarations under ORS 536: Douglas, Gilliam, and Lincoln. Thus far in 2023, [12 counties](#) have received state drought declarations.

The [US Drought Monitor](#) indicates over 56% of Oregon is experiencing moderate (D1) to severe (D2) drought conditions, with nearly an additional 20% of the state being abnormally dry (D0). There has been little to no change in drought depiction over recent weeks.

[Precipitation throughout August](#) varied along a transect stretching from southwest to northeast Oregon. Areas to the south and east received well above average precipitation, with some locations measuring up to 300% of average. In contrast, precipitation in areas to the north and west measured well below average.

[August temperatures](#) were above to well above the long-term average across the state. Anomalies were much stronger in western Oregon, where temperatures generally ranged from 4 °F to greater than 6 °F above average, and [some areas along the Coast Range measured their warmest August on record](#). Temperatures east of the Cascades ranged up to 3 °F above average.

[Surface and root zone soil moisture profiles](#) show some response to recent precipitation events east of the Cascades, with some areas measuring wetter than usual. Shallow groundwater moisture continues to measure much drier than usual across much of Oregon.

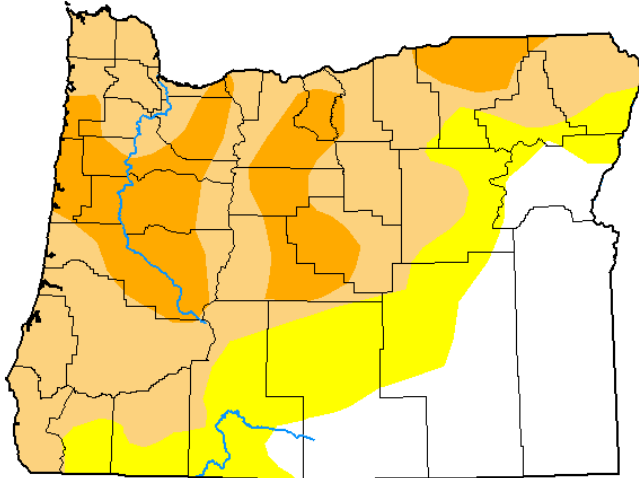
The [three-month seasonal climate outlook](#) for September through November indicates probabilities favoring above average temperatures and below average precipitation statewide. However, over the next [8-14 days](#) precipitation is favored to be above average across the state.

August streamflows were variable throughout the state, but generally followed precipitation trends. Flows in much of western and northern Oregon measured below to well below average, while those in southern and eastern Oregon were near to above average after benefitting from above average precipitation.

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

U.S. Drought Monitor Oregon

September 5, 2023
(Released Thursday, Sep. 7, 2023)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	24.13	75.87	56.11	17.70	0.00	0.00
Last Week 08-29-2023	24.02	75.98	56.32	17.70	0.00	0.00
3 Months Ago 06-06-2023	15.92	84.08	42.57	9.37	0.00	0.00
Start of Calendar 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 09-06-2022	25.04	74.96	65.71	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>

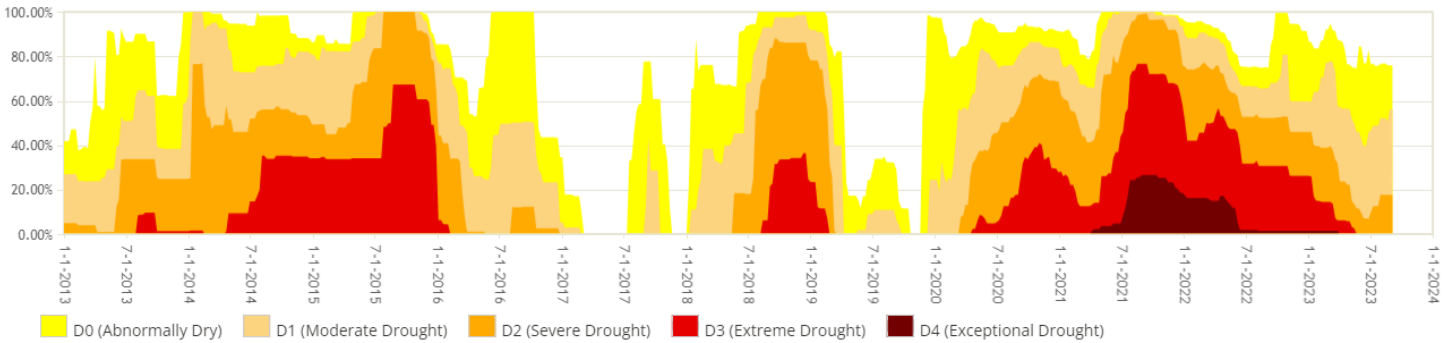
Author:

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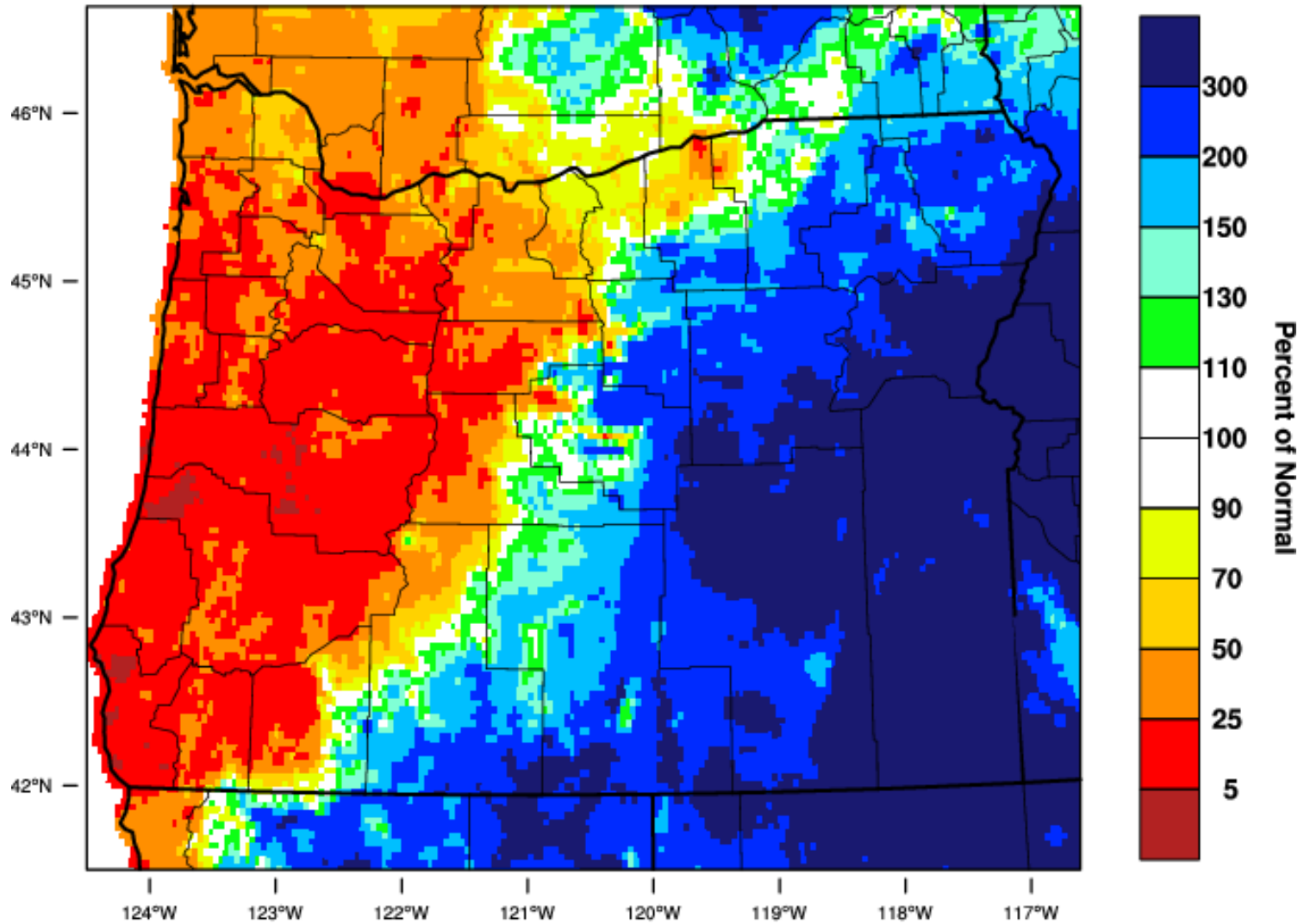


droughtmonitor.unl.edu

Oregon Percent Area in U.S. Drought Monitor Categories



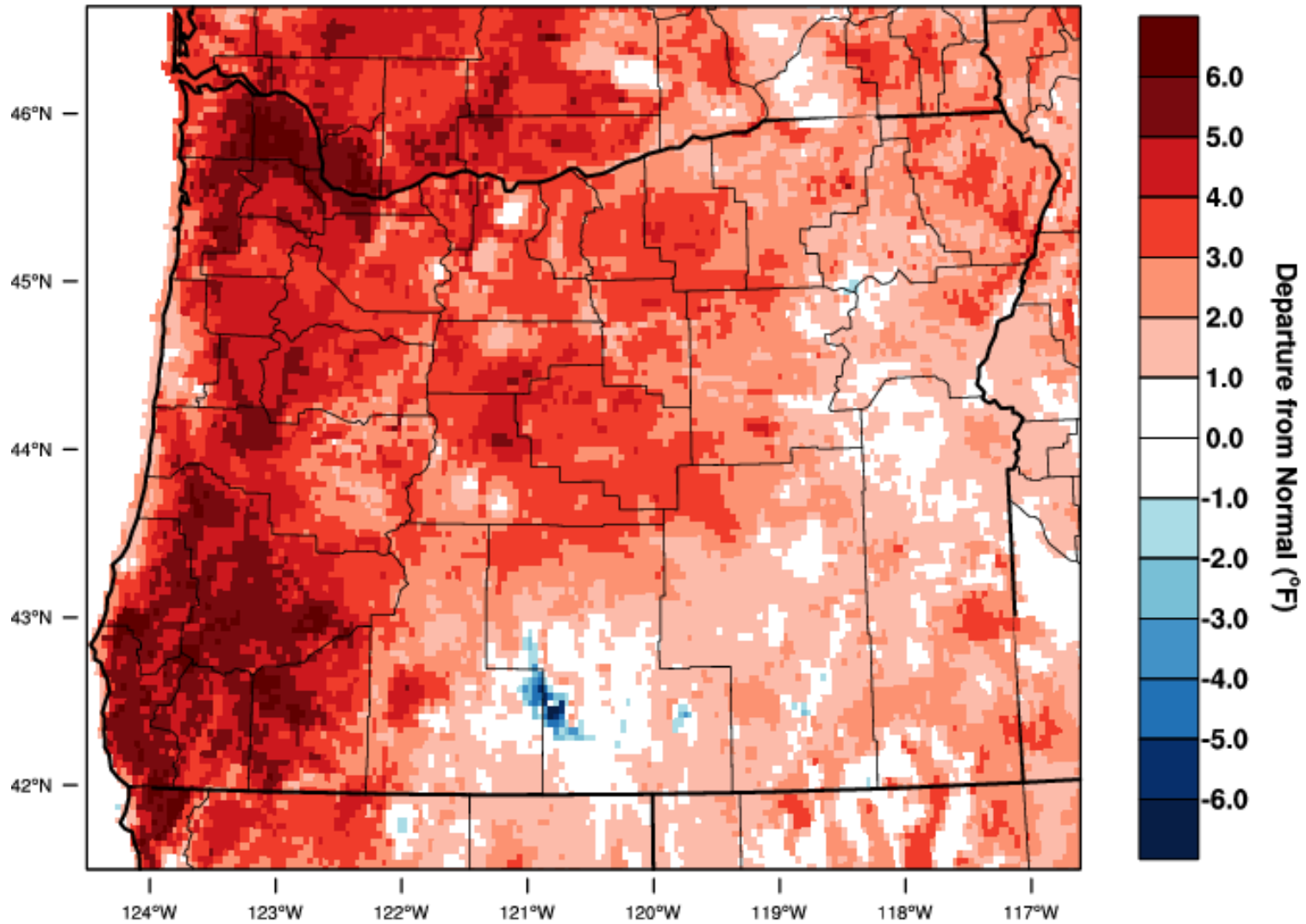
Oregon - Precipitation August 2023 Percent of 1981-2010 Normal



WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 11 SEP 2023

Oregon - Mean Temperature

August 2023 Departure from 1981-2010 Normal

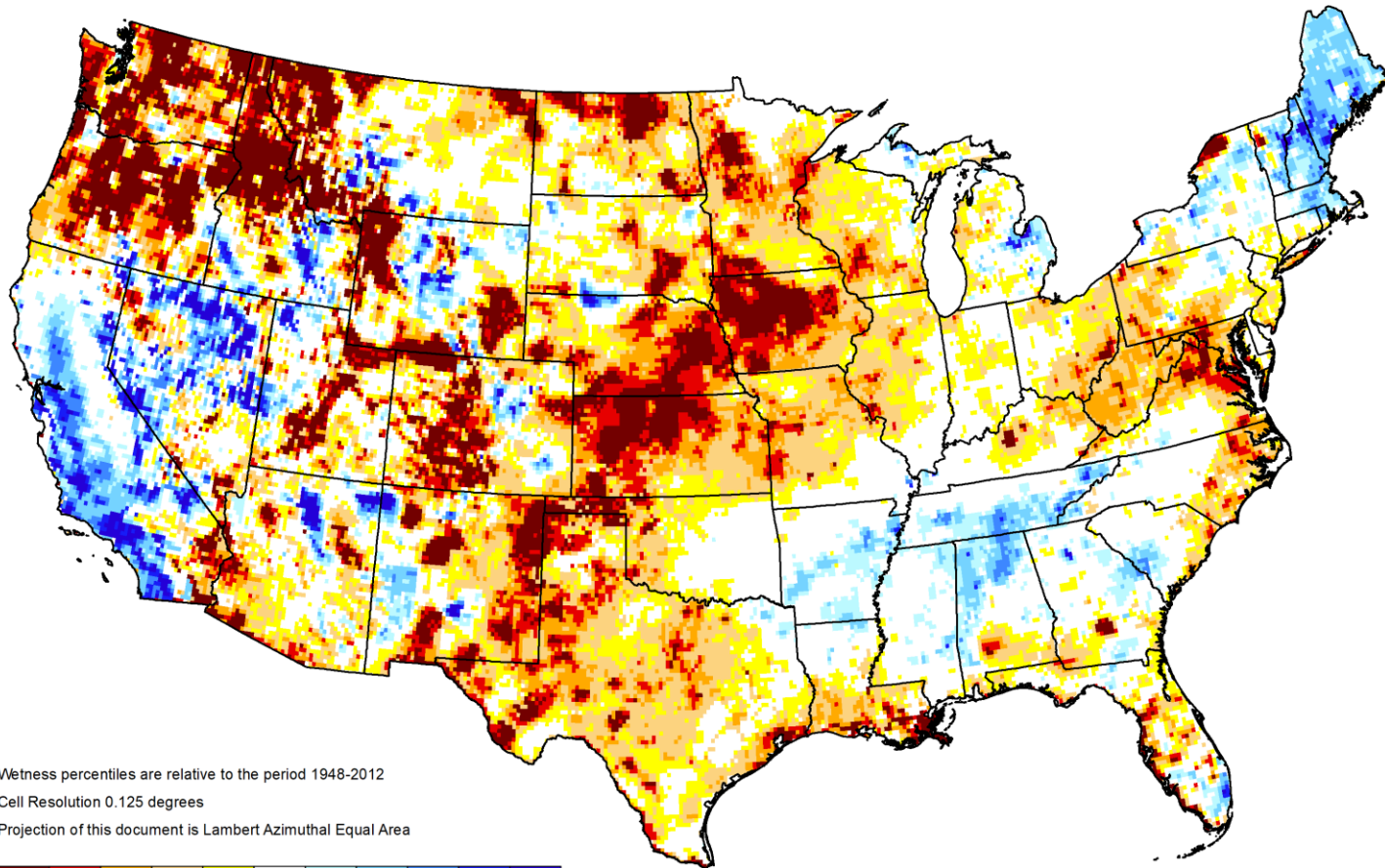


WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 11 SEP 2023

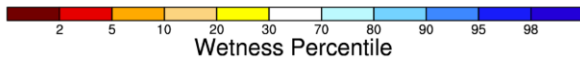


GRACE-Based Shallow Groundwater Drought Indicator

September 04, 2023



Wetness percentiles are relative to the period 1948-2012
Cell Resolution 0.125 degrees
Projection of this document is Lambert Azimuthal Equal Area



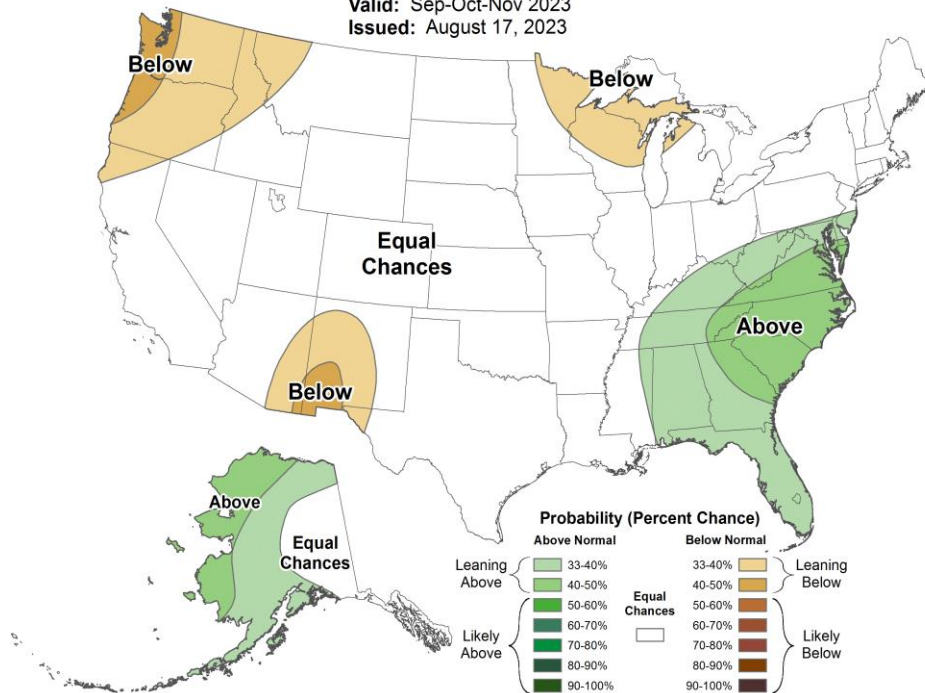
<https://nasagrace.unl.edu>



Seasonal Precipitation Outlook



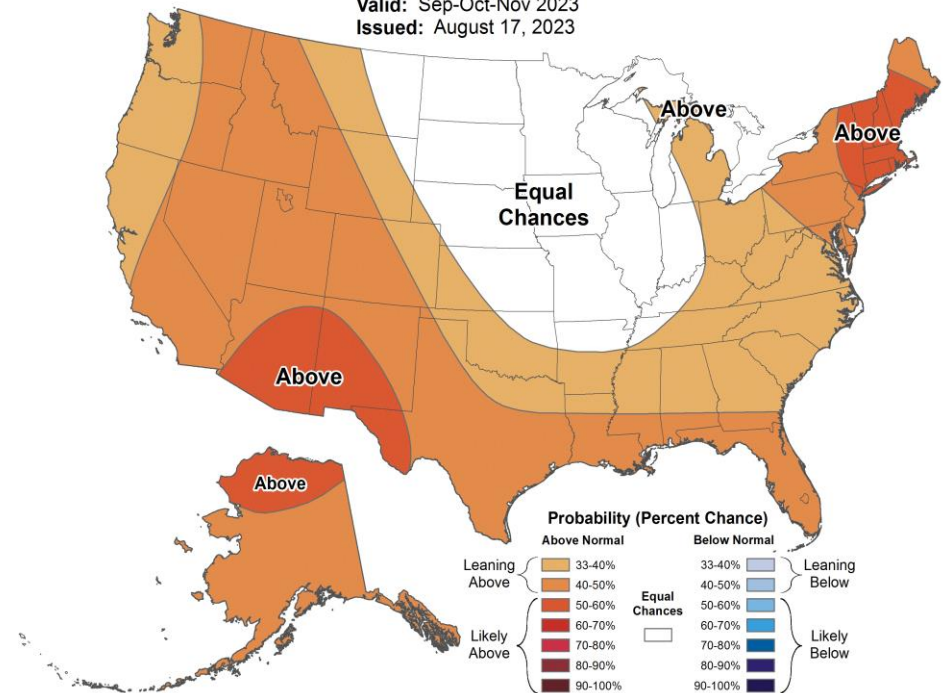
Valid: Sep-Oct-Nov 2023
 Issued: August 17, 2023



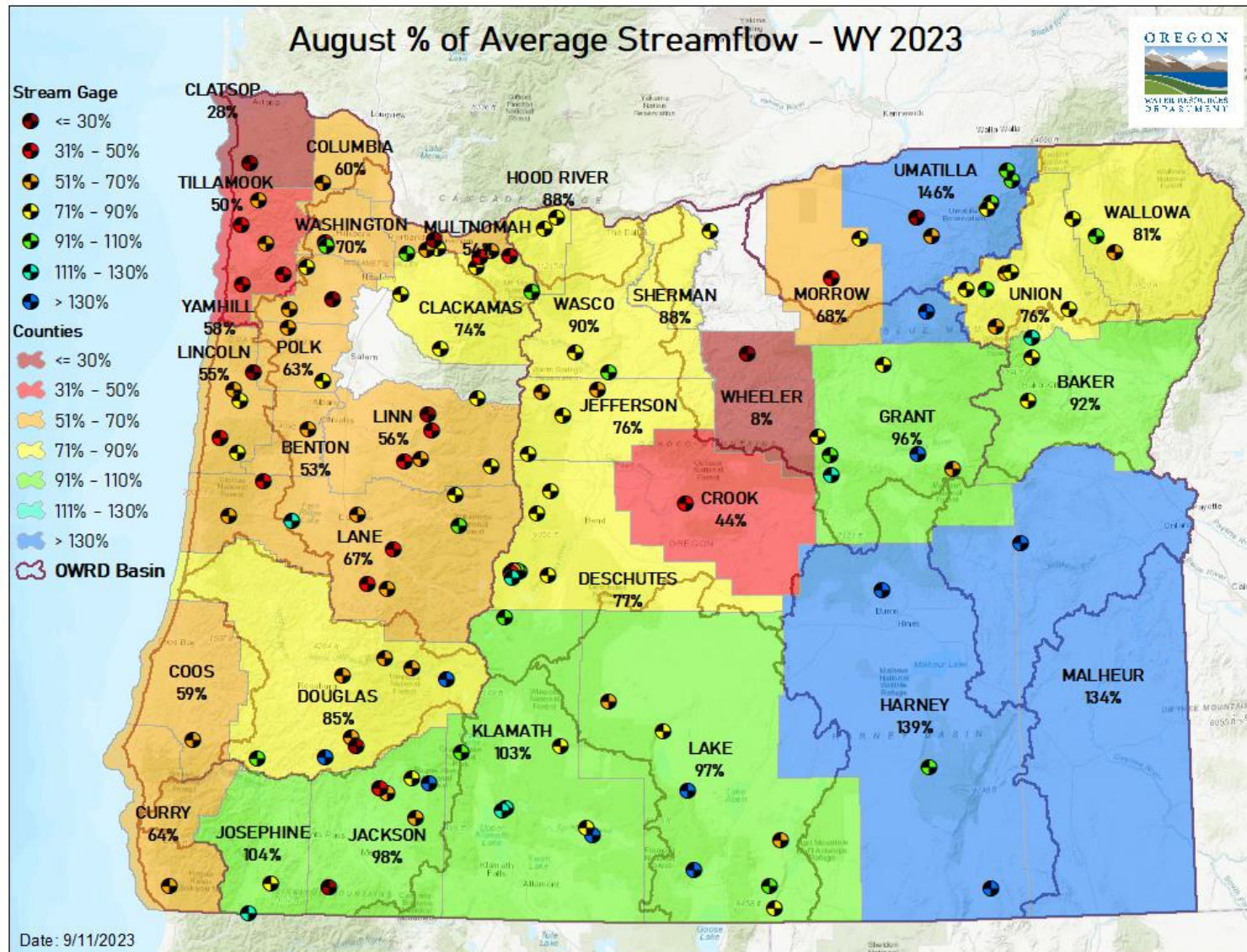
Seasonal Temperature Outlook

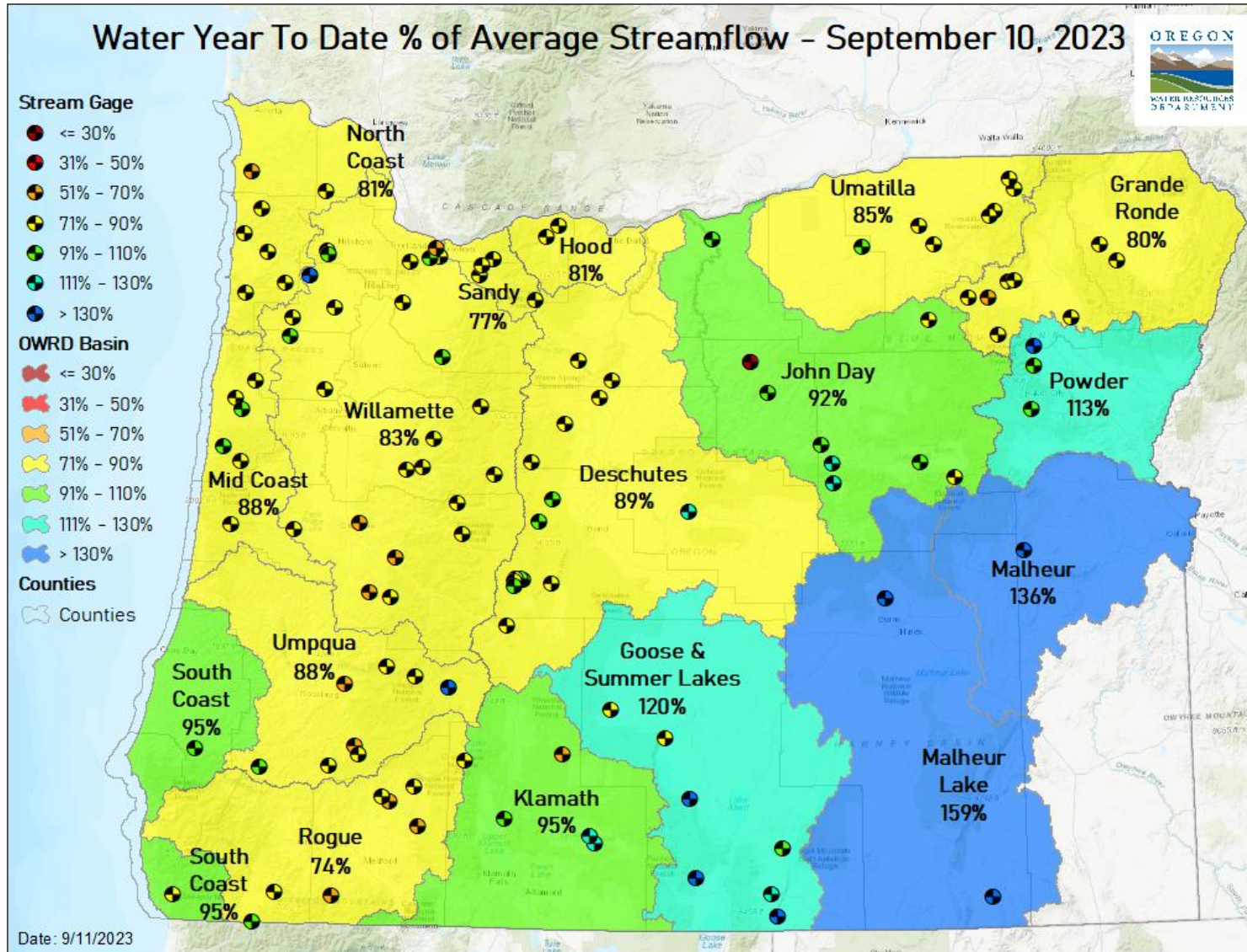


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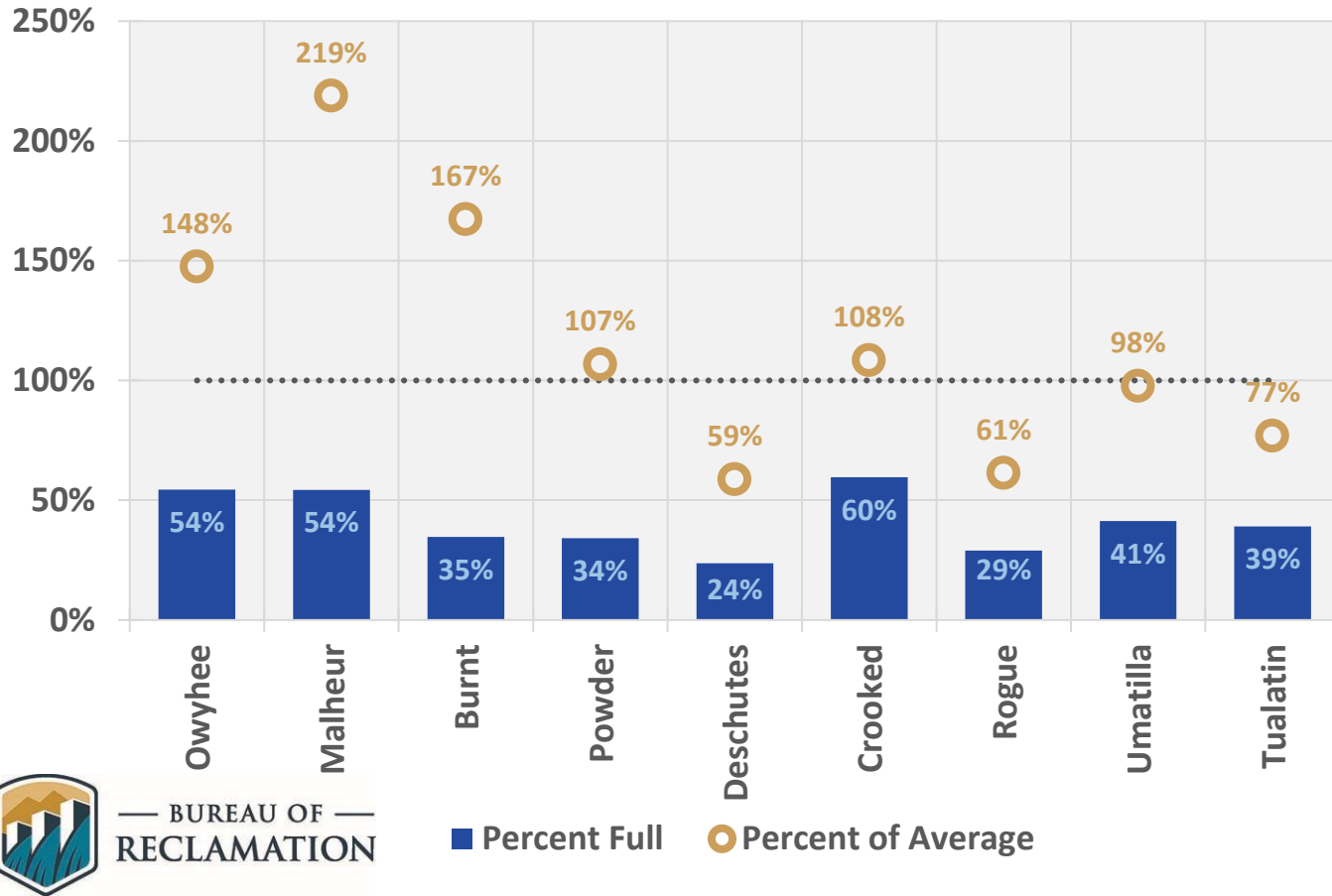


STREAMFLOW
AUGUST





September 10 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.