

Oregon Water Conditions Report



October 3rd, 2022

HIGHLIGHTS

Happy New Water Year! October 1st marked the beginning of water year 2023. [Click here for more information](#) on the significance of the water year in hydrology.

There have been no additional state or federal drought designations over recent weeks. Thus far in 2022, [17 Oregon counties](#) have received state drought declarations under ORS 536, while 29 counties have received [USDA crop disaster designations](#) due to drought.

Warm temperatures and little precipitation, in combination with already low streamflows and dry soils, led to expansion of abnormally dry conditions in western Oregon, according to the [US Drought Monitor](#).

[September precipitation](#) was below to well below average throughout much of Oregon. Portions of southern Oregon in Klamath and Lake Counties measured above average precipitation. [Water year precipitation](#) was variable throughout the state, trending from just above average to below average from north to south.

[September temperatures](#) were well above average throughout Oregon. Temperatures ranged from 1 °F along the coast to greater than 7 °F above average in eastern Oregon. Overall, temperatures throughout water year 2022 generally ranged from near average to 3 °F above average.

[Soil moisture profiles](#) continue to measure below to well below average across the state, although surface soils in western Oregon are less dry relative to east of the Cascades.

The [three-month climate outlook](#) for October through December varies throughout Oregon. Precipitation forecasts favor above average conditions for much of the northern portion of Oregon, while near average conditions are projected elsewhere. Near average temperatures are favored for a majority of Oregon, while above average temperatures are favored in southeastern Oregon.

Streamflows throughout September were mostly below to well below average throughout much of Oregon, ranging from 13% to 161% of average. Water year streamflow measured 92% of average statewide. See below for more.

Reservoir storage contents are measuring below to well below average in most [USBR](#) (including [Klamath](#)) projects outside of the Burnt, Tualatin, and Umatilla Basins. Most USBR projects ended the water year to below average carryover. [USACE projects](#) in the Willamette Basin are releasing flows to reach minimum pool elevation.

DROUGHT CONDITIONS

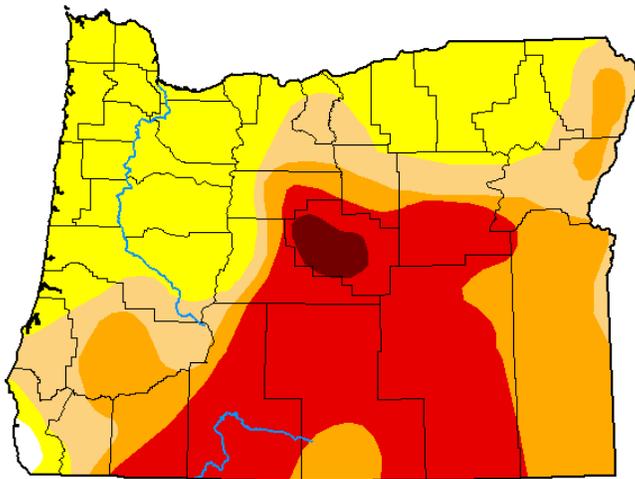
Over 68% of Oregon is classified as experiencing moderate (D1) to exceptional (D4) drought, according to the US Drought Monitor. Coastal Oregon and the Willamette Valley have been classified as abnormally dry due to recent conditions.

U.S. Drought Monitor Oregon

September 27, 2022

(Released Thursday, Sep. 29, 2022)

Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.42	99.58	68.05	52.42	30.73	1.40
Last Week 09-20-2022	11.67	88.33	68.05	52.22	30.73	1.40
3 Months Ago 06-28-2022	24.60	75.40	66.49	52.71	31.72	1.77
Start of Calendar Year 01-04-2022	4.16	95.84	89.75	75.37	50.84	17.27
Start of Water Year 09-28-2021	0.00	100.00	100.00	96.47	72.10	26.59
One Year Ago 09-28-2021	0.00	100.00	100.00	96.47	72.10	26.59

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>

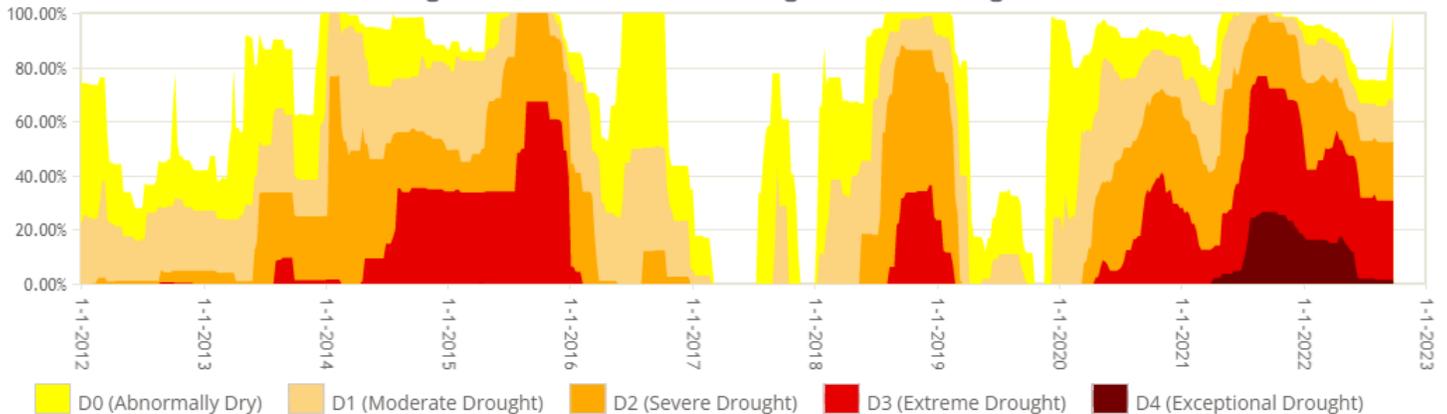
Author:

Richard Heim
NCEI/NOAA



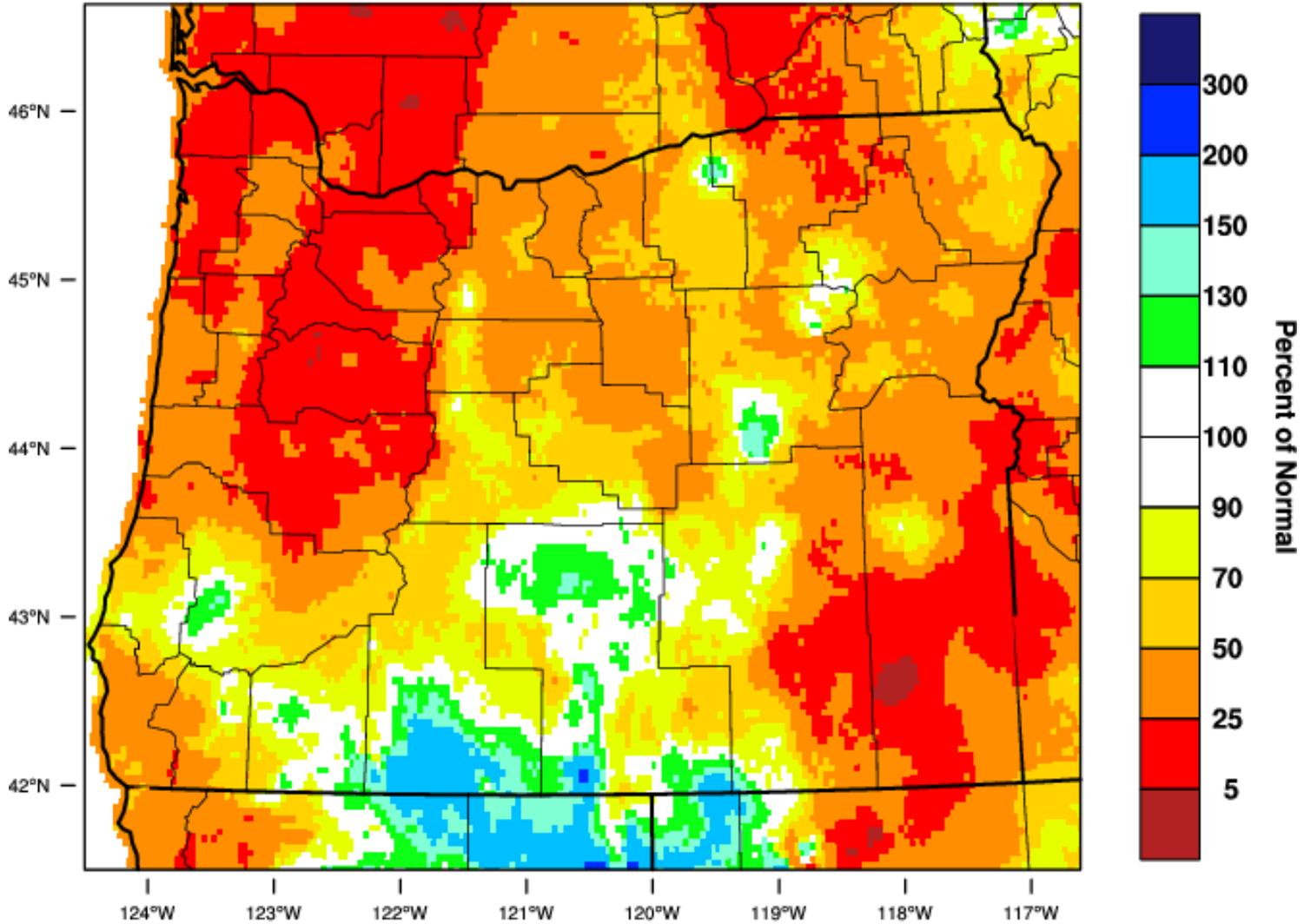
droughtmonitor.unl.edu

Oregon Percent Area in U.S. Drought Monitor Categories



Oregon - Precipitation

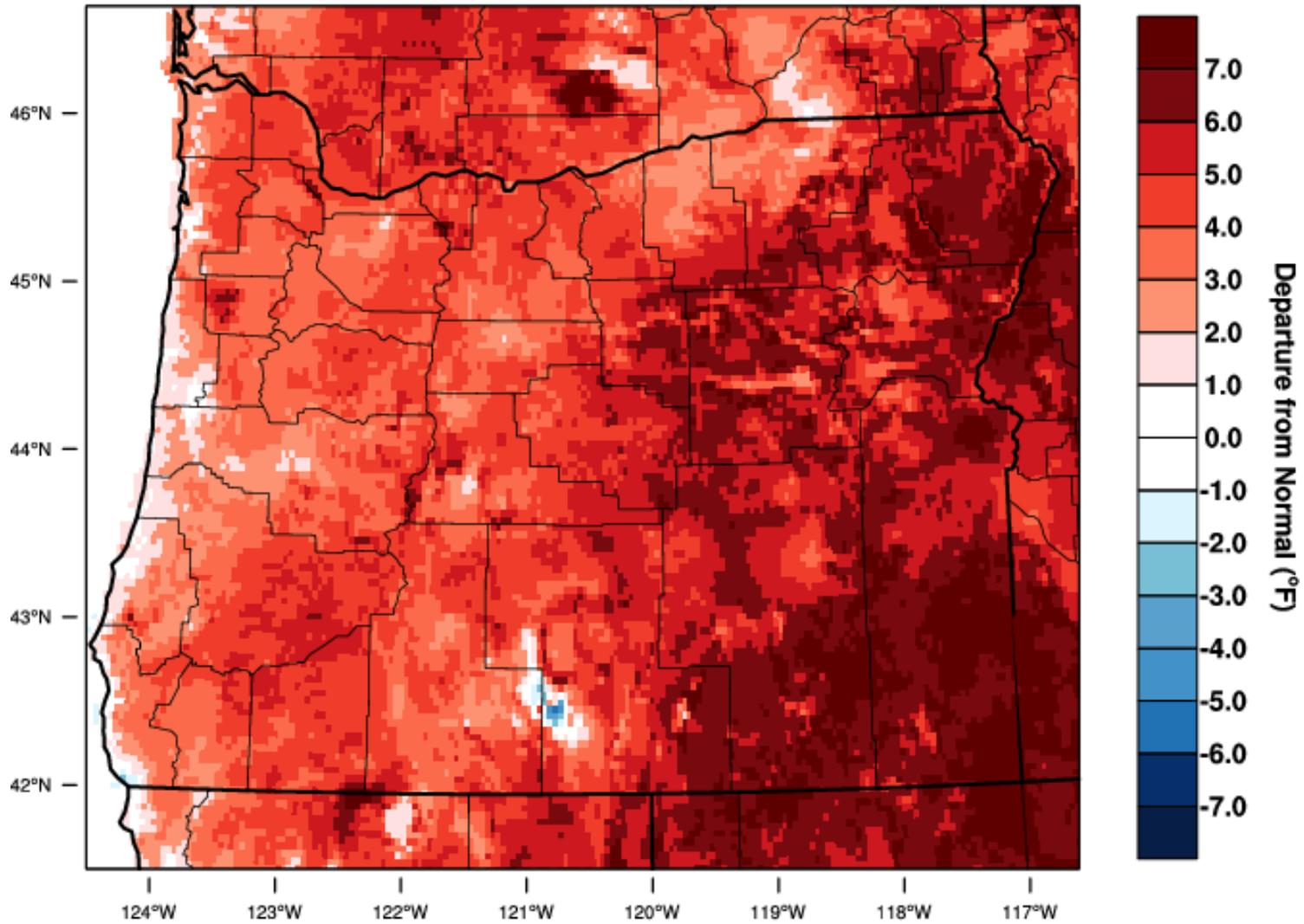
September 2022 Percent of 1981-2010 Normal



WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 2 OCT 2022

Oregon - Mean Temperature

September 2022 Departure from 1981-2010 Normal

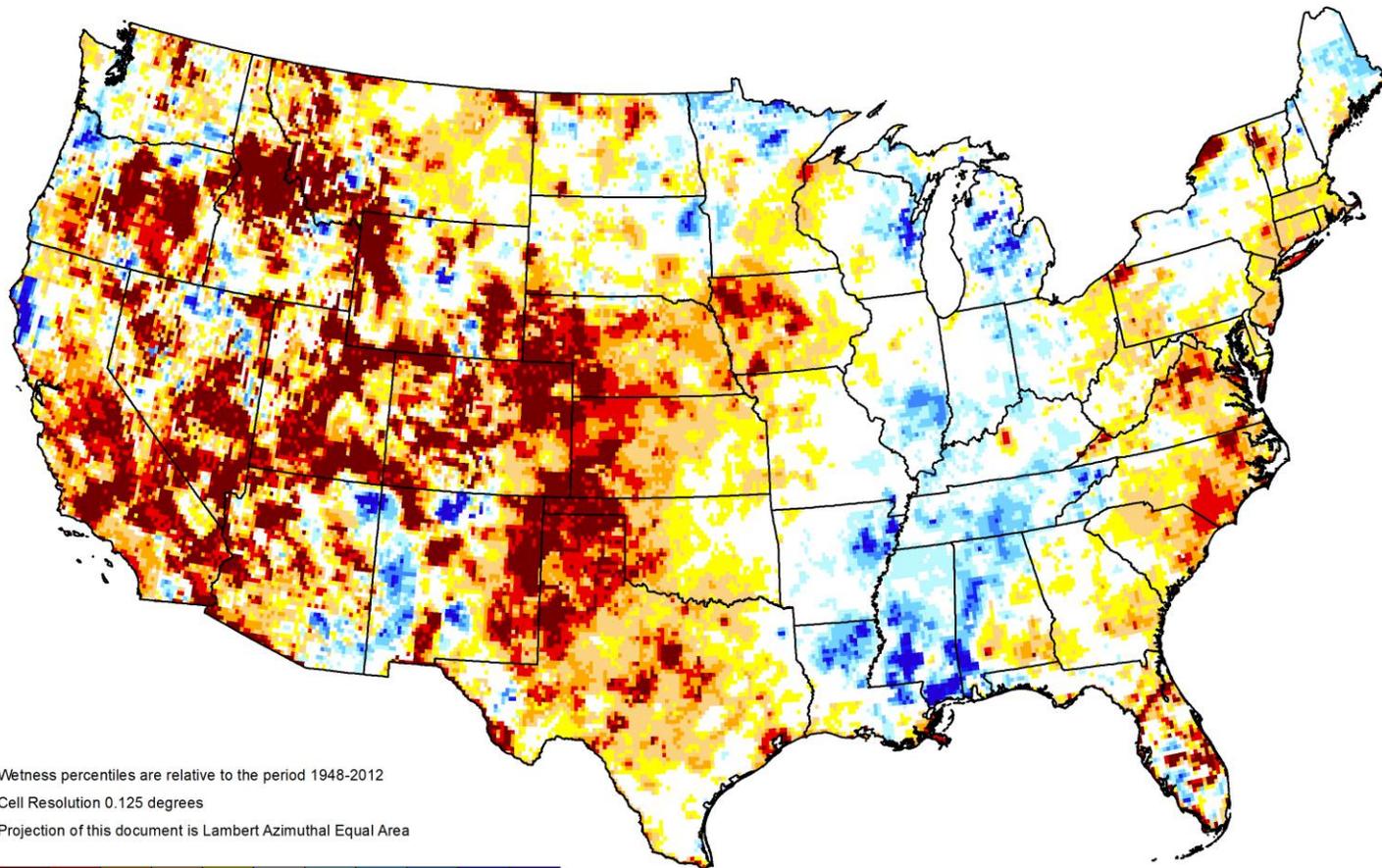


WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 2 OCT 2022

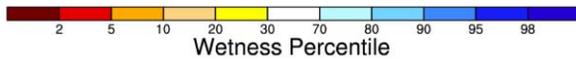


GRACE-Based Shallow Groundwater Drought Indicator

September 26, 2022



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



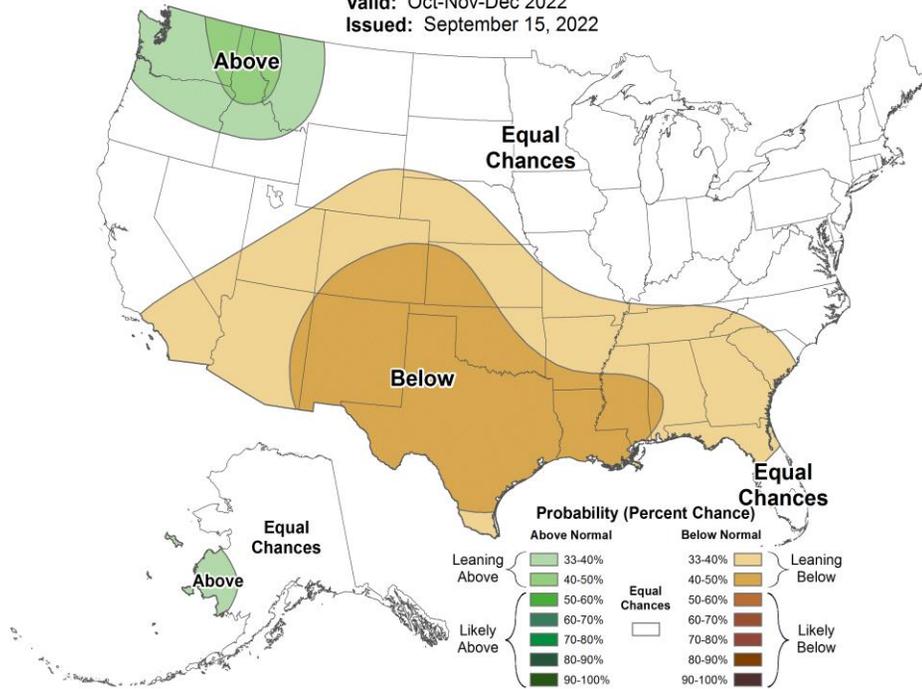
<https://nasagrace.unl.edu>



Seasonal Precipitation Outlook



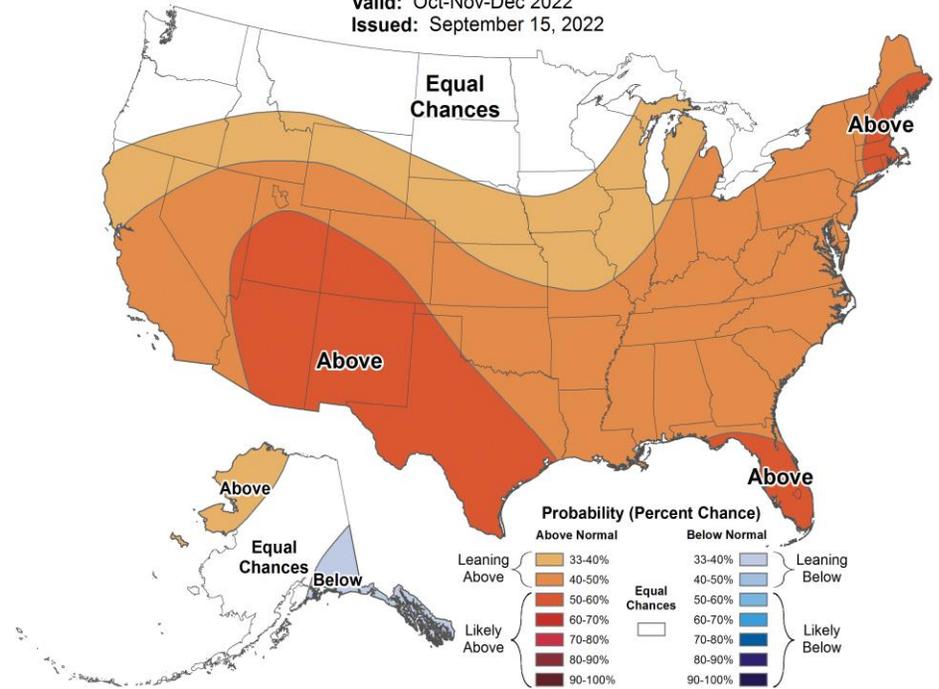
Valid: Oct-Nov-Dec 2022
 Issued: September 15, 2022



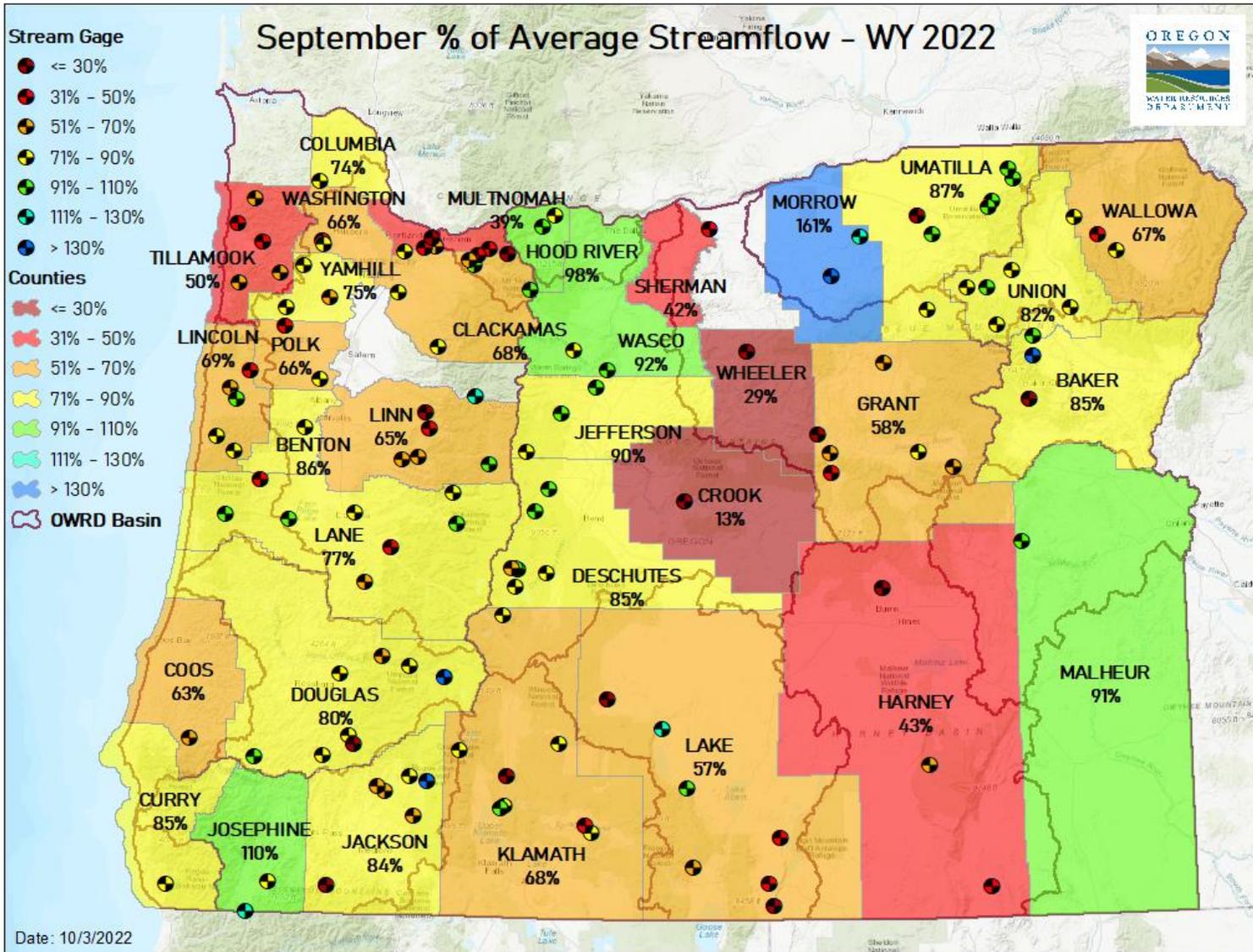
Seasonal Temperature Outlook

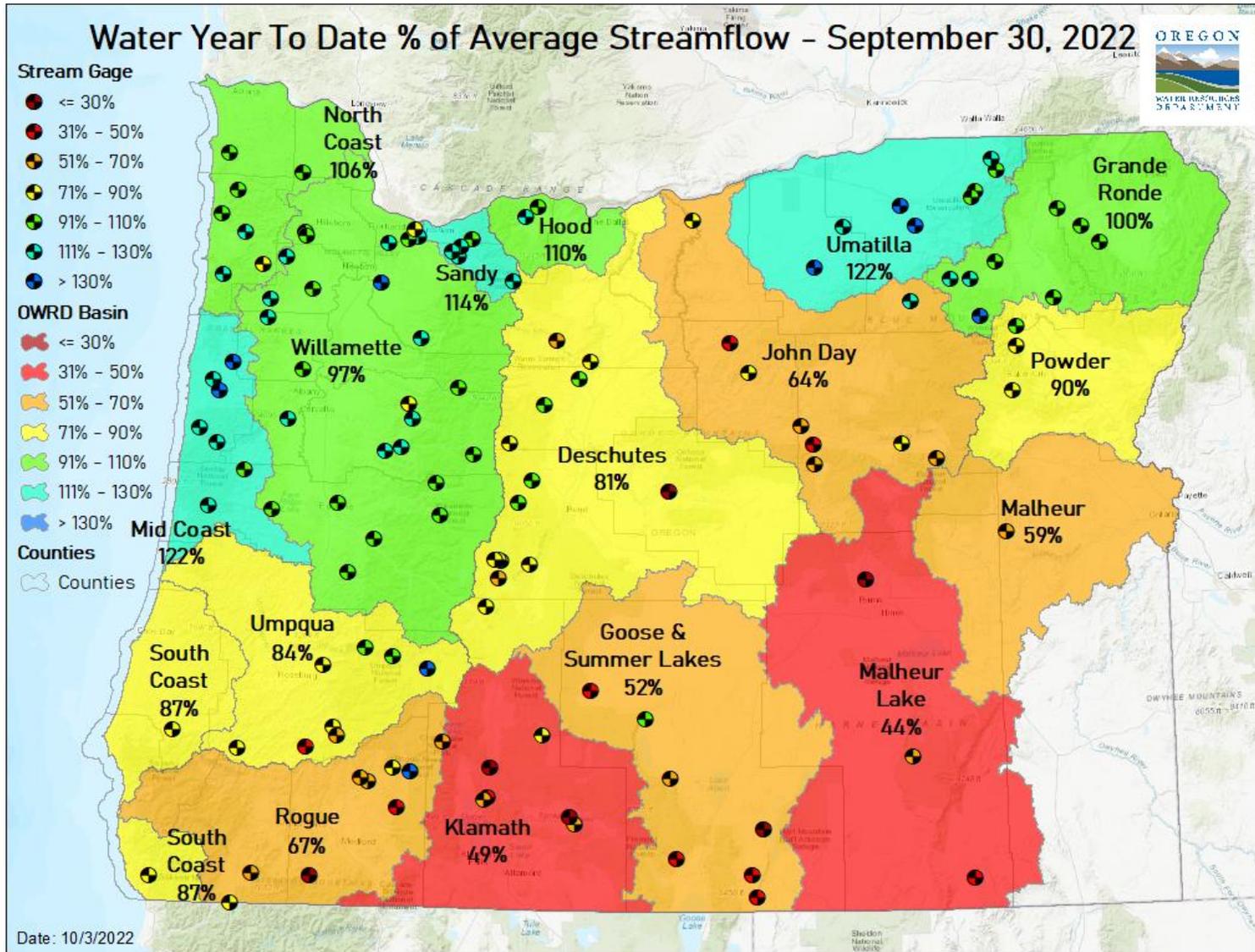


Valid: Oct-Nov-Dec 2022
 Issued: September 15, 2022

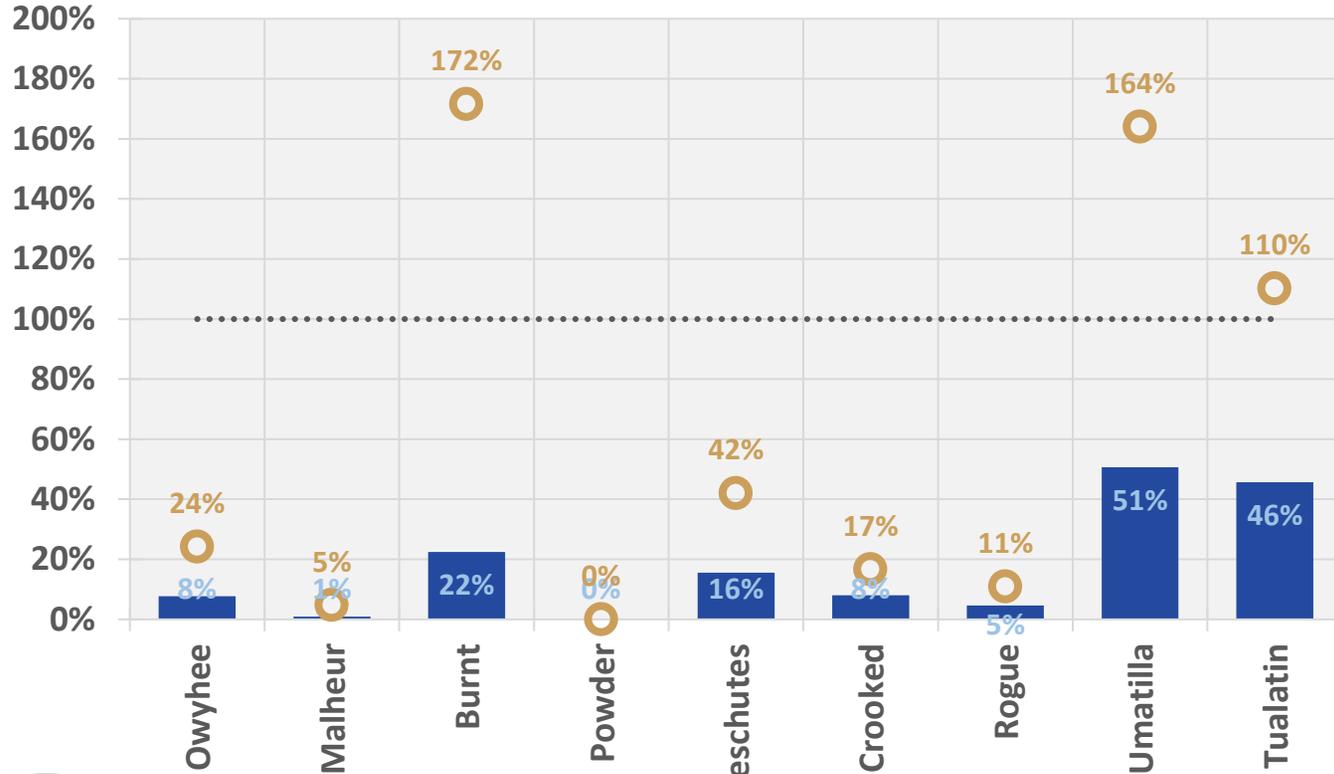


STREAMFLOW
SEPTEMBER





October 2 Reservoir Storage



BUREAU OF RECLAMATION

■ Percent Full

● Percent of Average

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.