

Oregon Water Conditions Report



August 22nd, 2022

HIGHLIGHTS

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.

Minor changes, including several one-class improvements, have been made to the [US Drought Monitor](#) over the past two weeks. See below for more information.

[Precipitation over the past two-week period](#) was variable throughout the state. While most of Oregon received [little to no measurable precipitation](#), parts of central and eastern Oregon received about 0.5 - 1 inch.

[Temperatures over recent weeks were warmer than usual](#) statewide, ranging between 0 and 8 °F above average. Warm temperatures leading to high [evaporative demand](#) and coupled with abnormally dry soil conditions are suggestive of flash drought conditions over parts of Oregon.

[Shallow groundwater](#) and other soil moisture profiles continue to measure below to well below average throughout much of the state.

The [near-term climate outlook](#) for the next 8 - 14-day period indicates probabilities favoring below average precipitation and above average temperatures across much of Oregon. Precipitation along the coast has equal chances of above or below average.

[Streamflows over the past seven days](#) were variable throughout Oregon. While many streams in western and northeastern Oregon measured average to above average, some streams have begun to decrease below average. Flows in most of central and southern Oregon continue to measure below to well below average. See below for more information.

Reservoir storage contents in many [USBR](#) (including [Klamath](#)) systems continue to measure well below average. Irrigation releases have ceased or are projected to shut down in some basins, including Malheur and Rogue. Many reservoirs will end the irrigation season with little to no carryover to begin the next water year. Storage in many [USACE reservoirs](#) is average to above average.

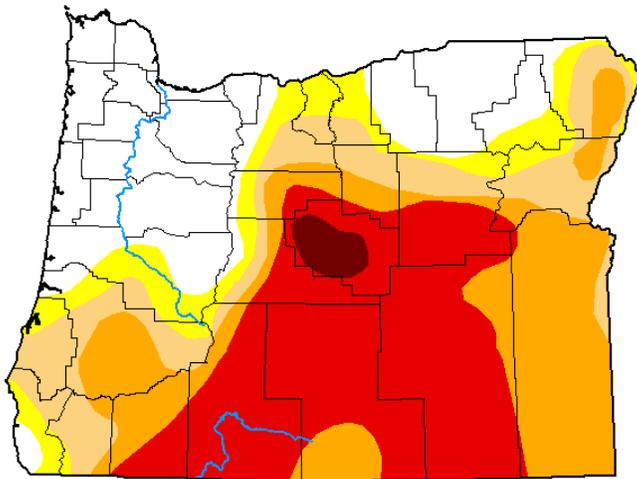
[Significant wildfire potential over the next seven days](#) is variable throughout the Pacific Northwest, ranging from minimal to high risk. Risk is generally more elevated in central and eastern Oregon.

DROUGHT CONDITIONS

The US Drought Monitor indicates over 65% of Oregon is experiencing moderate (D1) to exceptional (D4) drought conditions. Slight changes over recent weeks include one-class improvements in parts of Jefferson, Wasco, and Wheeler Counties.

U.S. Drought Monitor Oregon

August 16, 2022
(Released Thursday, Aug. 18, 2022)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	25.01	74.99	65.52	52.22	30.73	1.40
Last Week 08-09-2022	25.01	74.99	65.60	52.55	30.73	1.40
3 Months Ago 05-17-2022	13.09	86.91	76.03	64.09	47.22	13.34
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 08-17-2021	0.00	100.00	100.00	98.71	76.65	25.58

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>

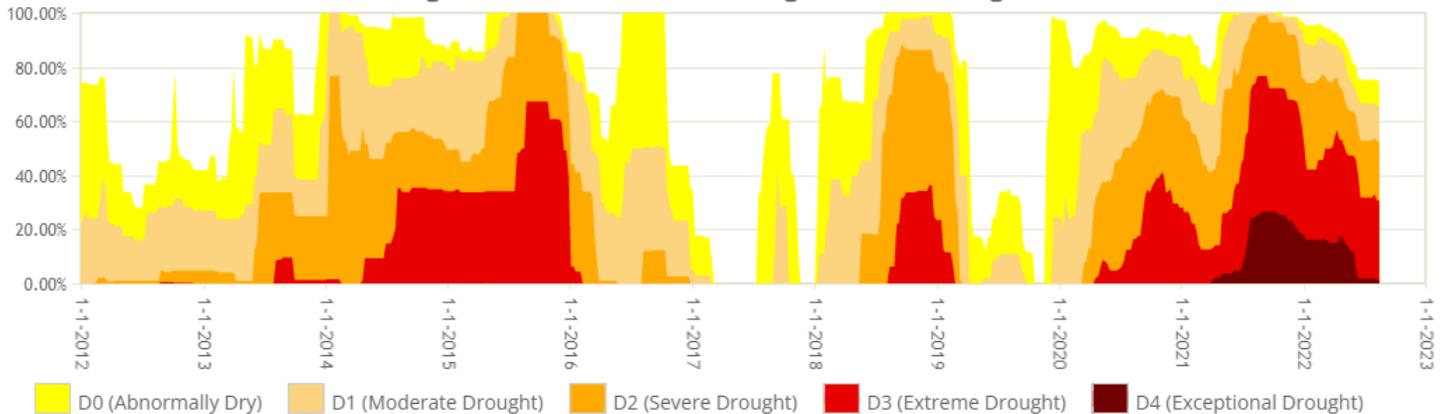
Author:

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CPC/NOAA/NWS/NCEP

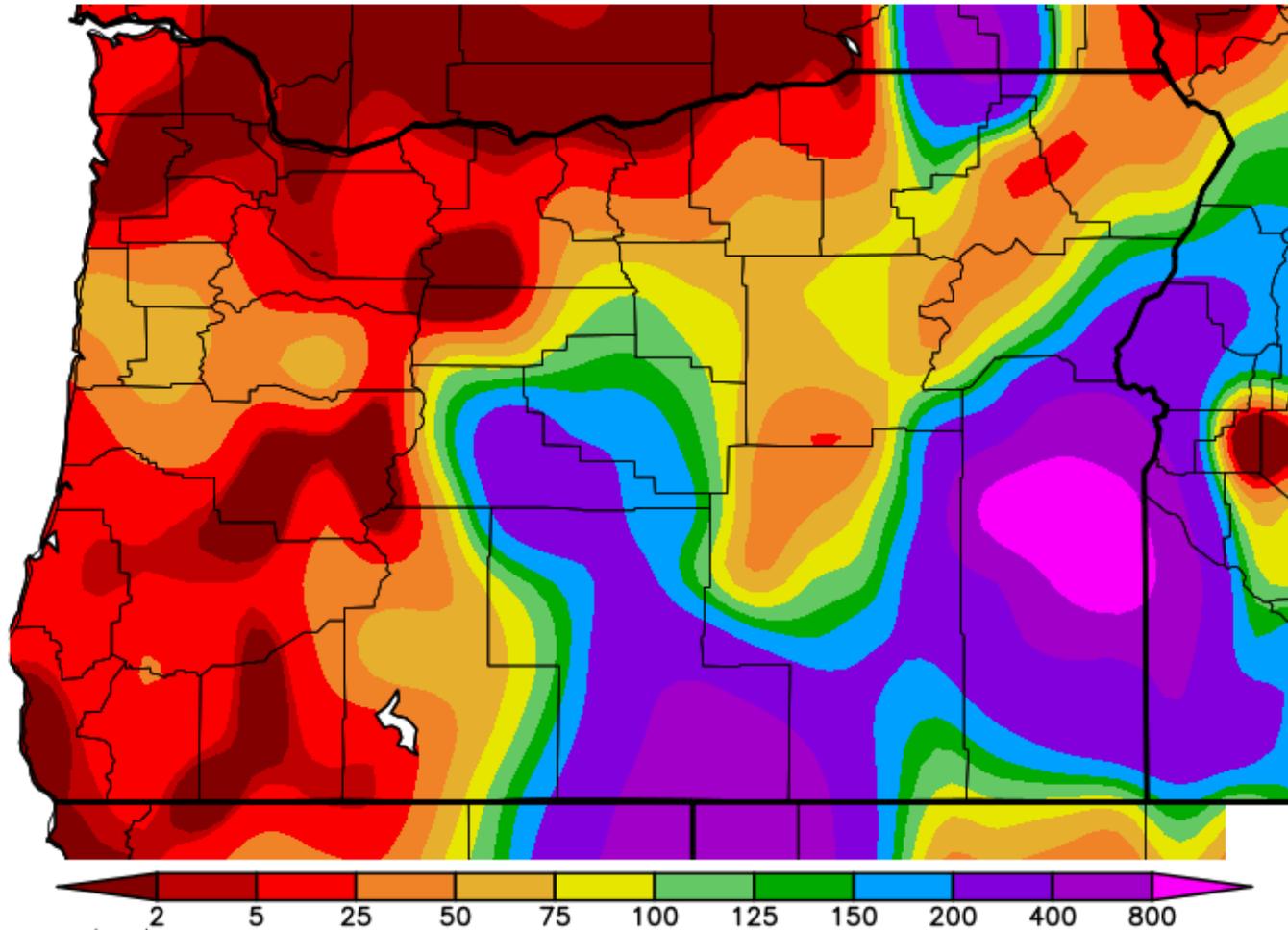


droughtmonitor.unl.edu

Oregon Percent Area in U.S. Drought Monitor Categories

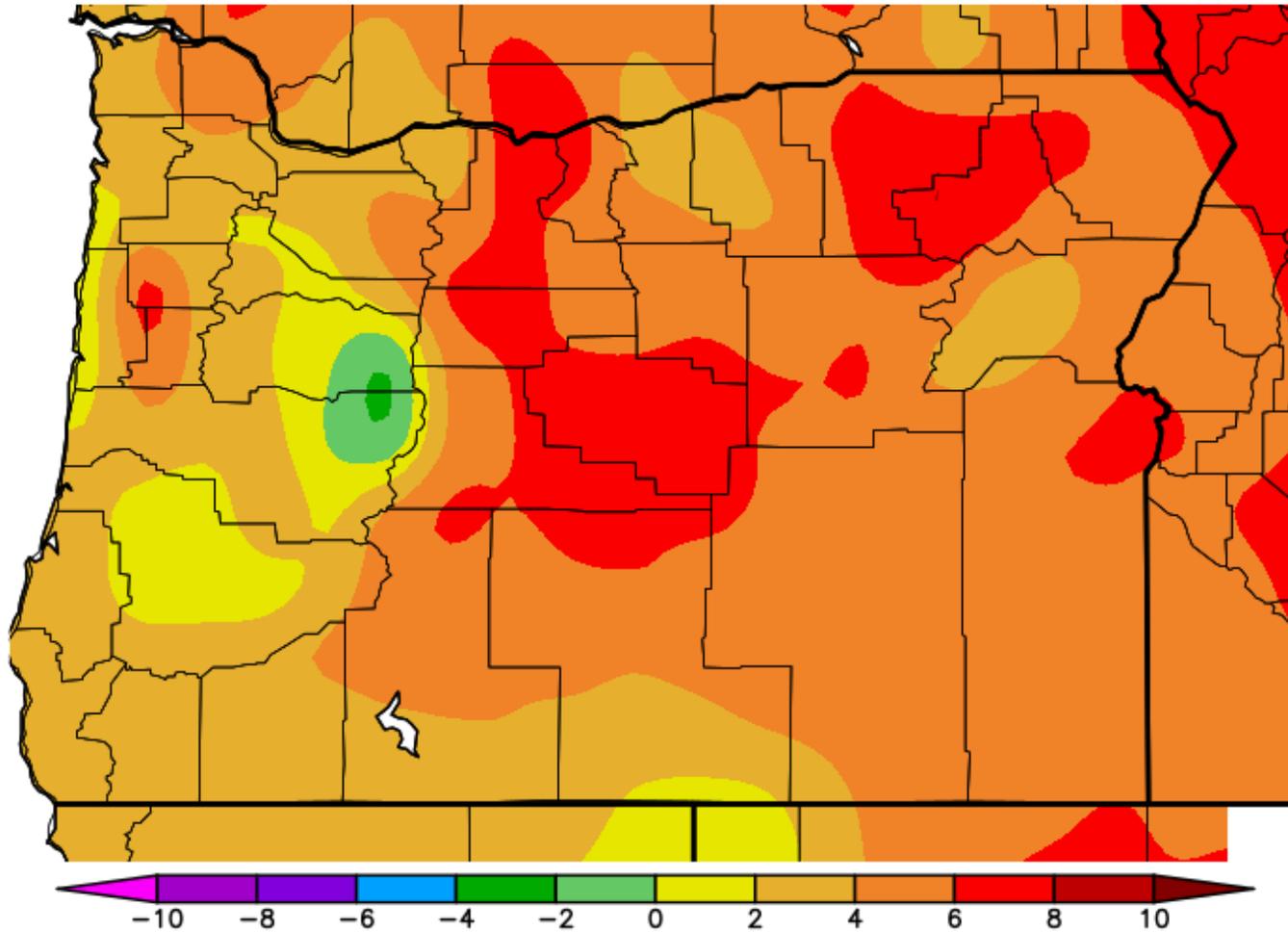


Percent of Average Precipitation (%)
8/8/2022 – 8/21/2022



Generated 8/22/2022 at WRCC using provisional data.
NOAA Regional Climate Centers

Ave. Temperature dep from Ave (deg F)
8/8/2022 - 8/21/2022

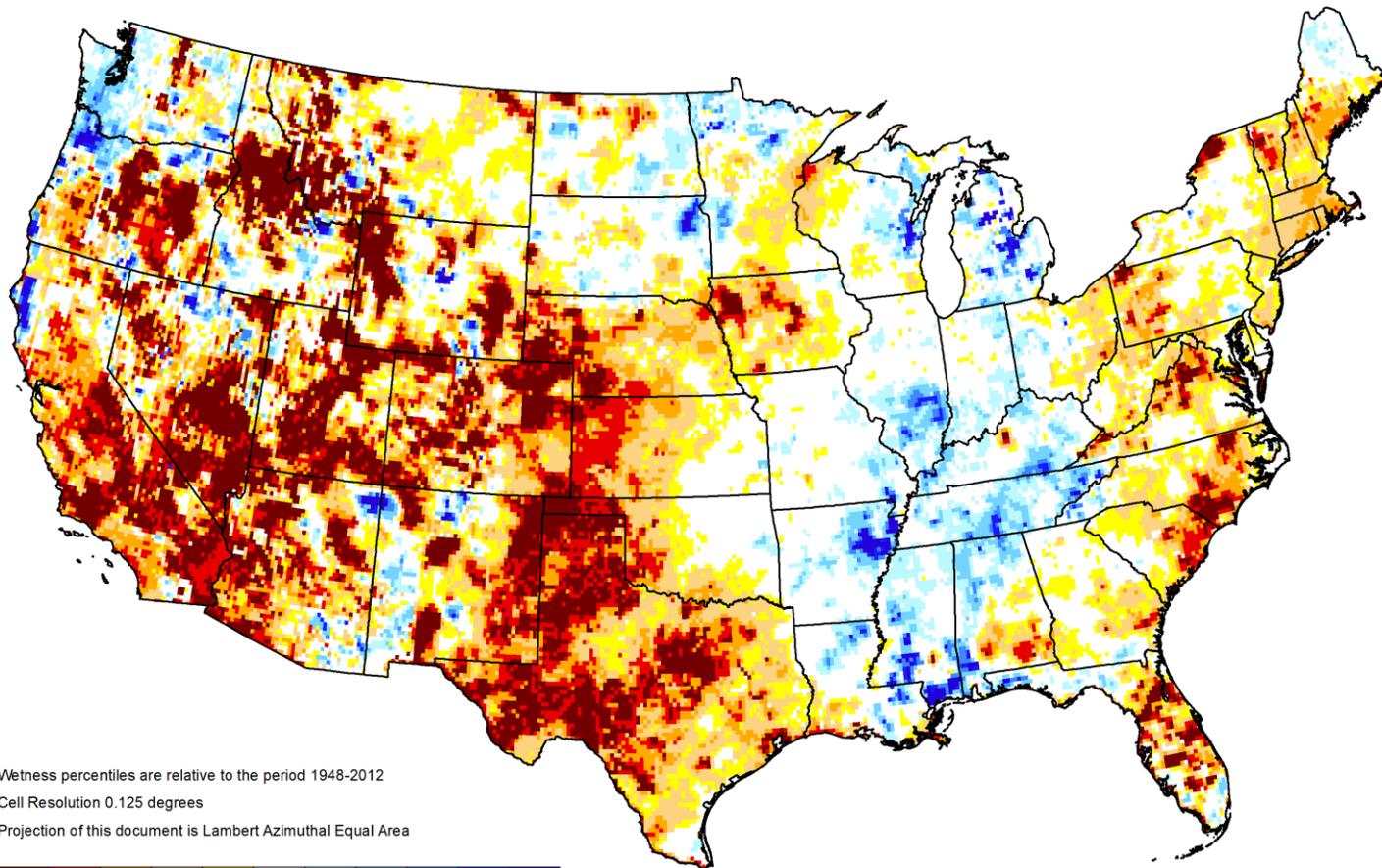


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NOAA Regional Climate Centers

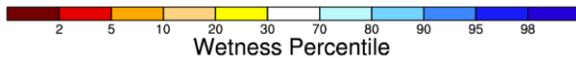


GRACE-Based Shallow Groundwater Drought Indicator

August 15, 2022



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

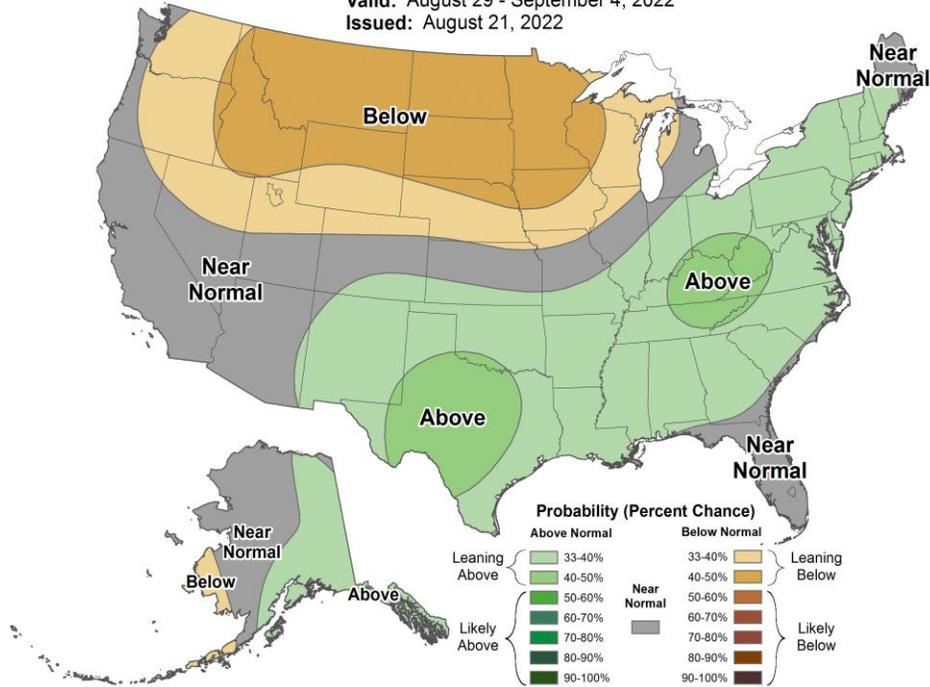


<https://nasagrace.unl.edu>



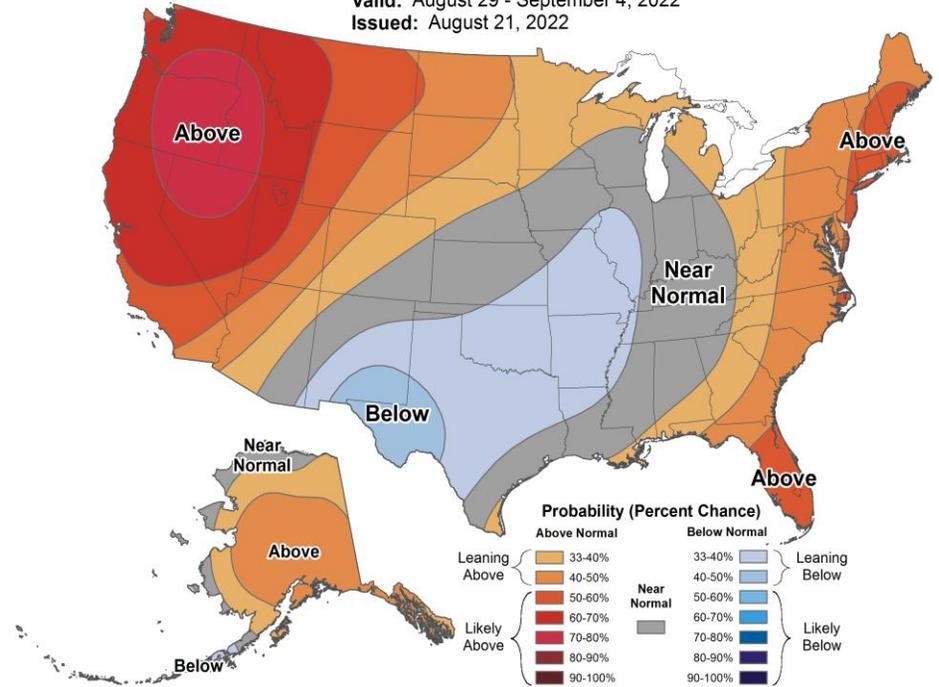
8-14 Day Precipitation Outlook

Valid: August 29 - September 4, 2022
 Issued: August 21, 2022



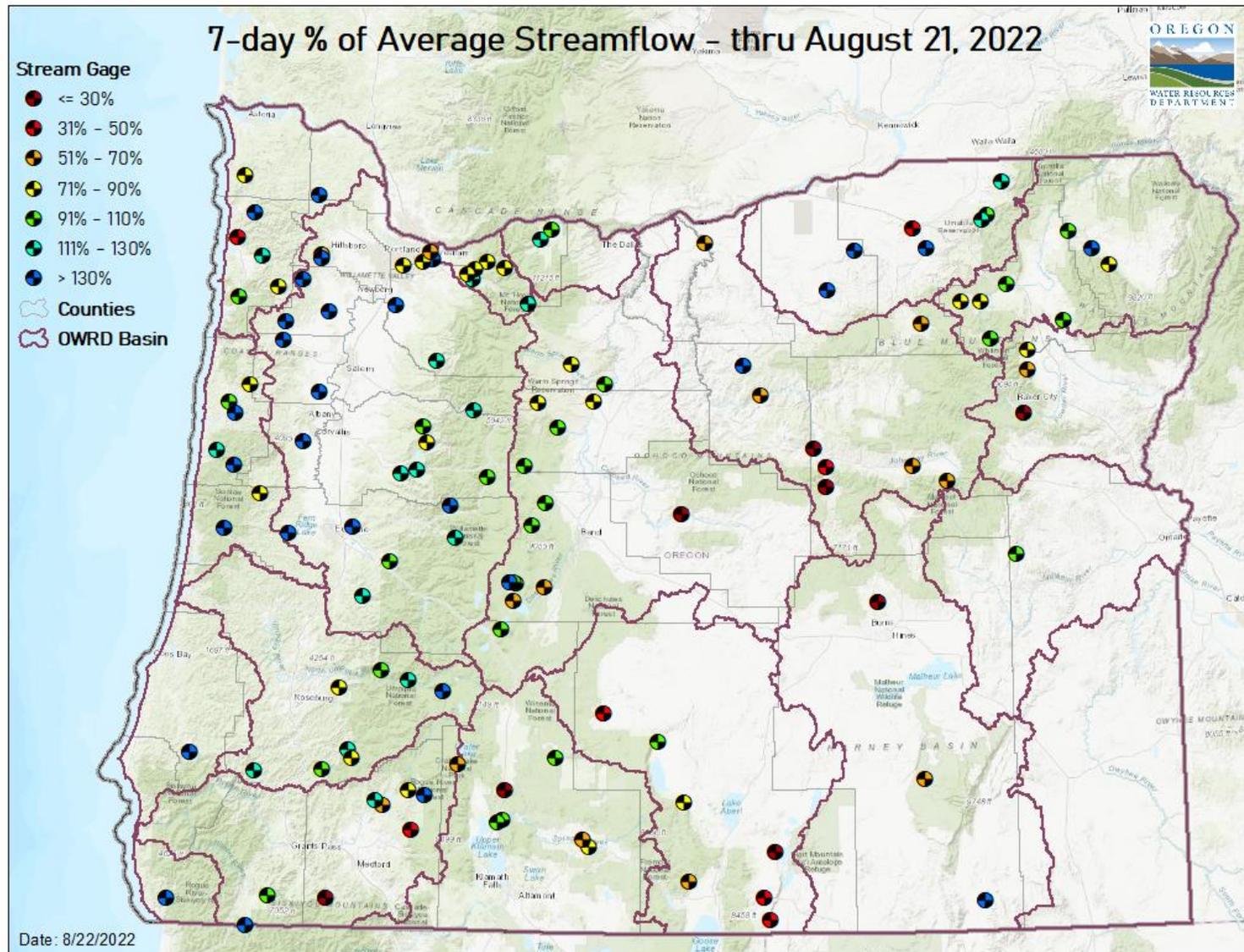
8-14 Day Temperature Outlook

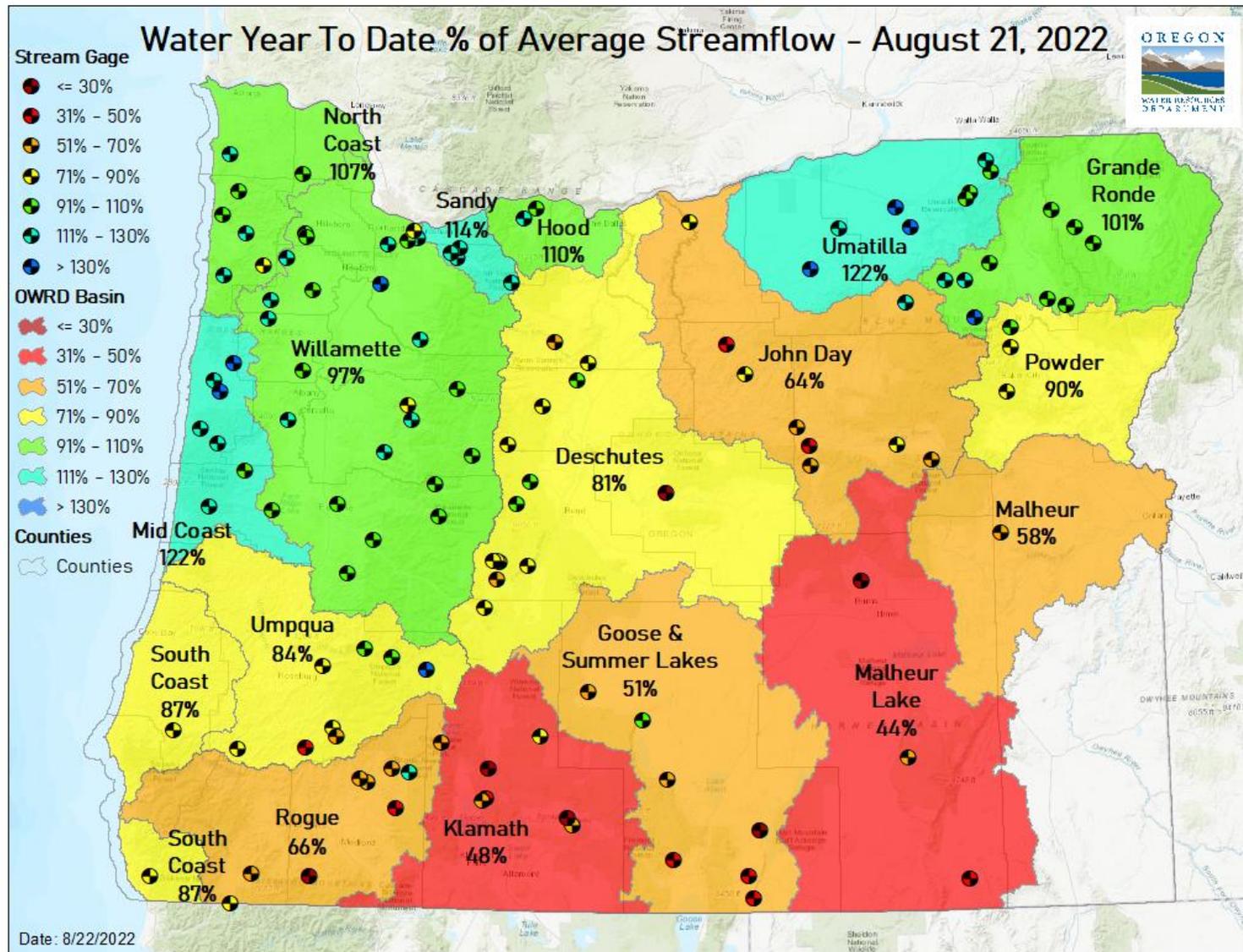
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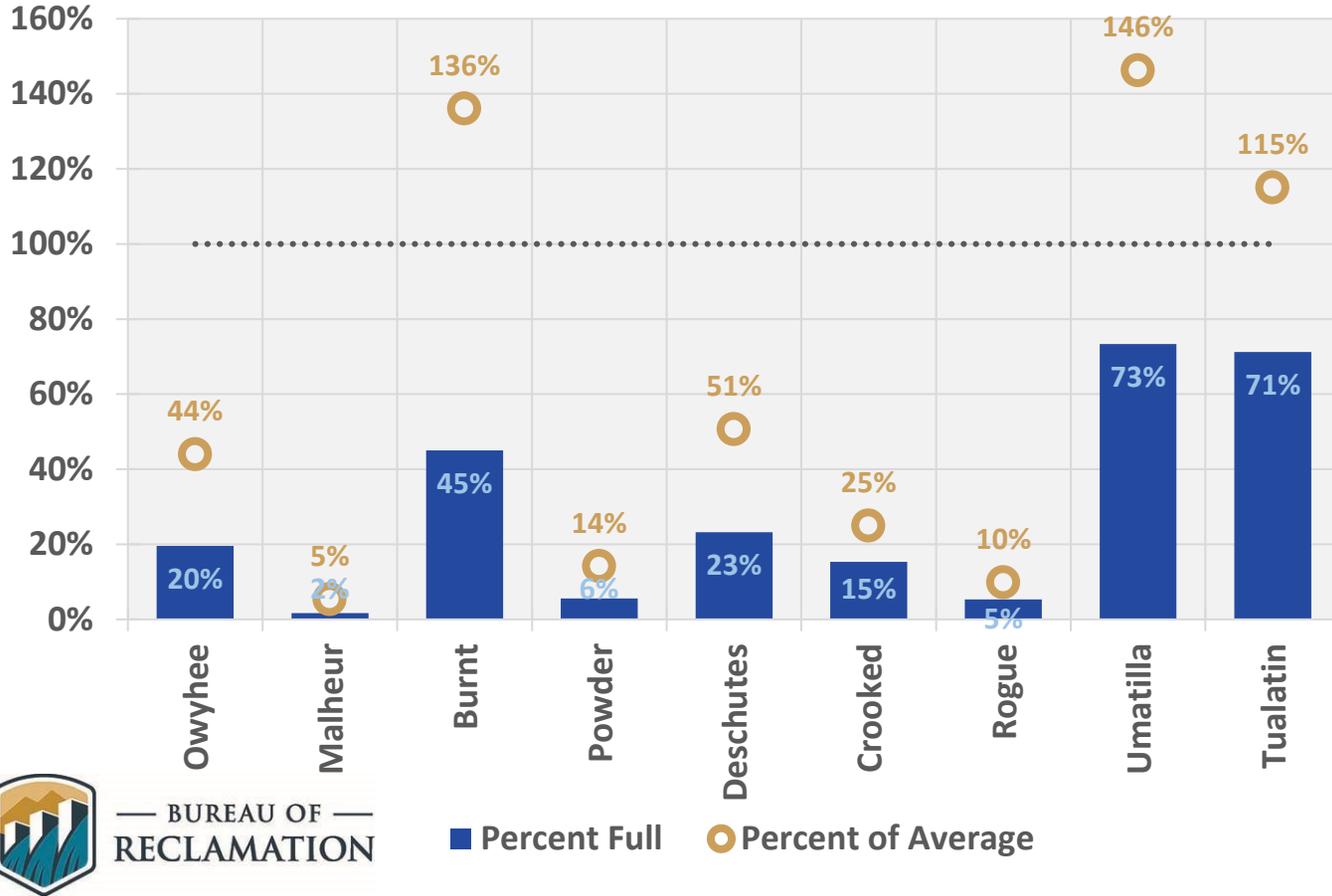
STREAMFLOW

7-DAY





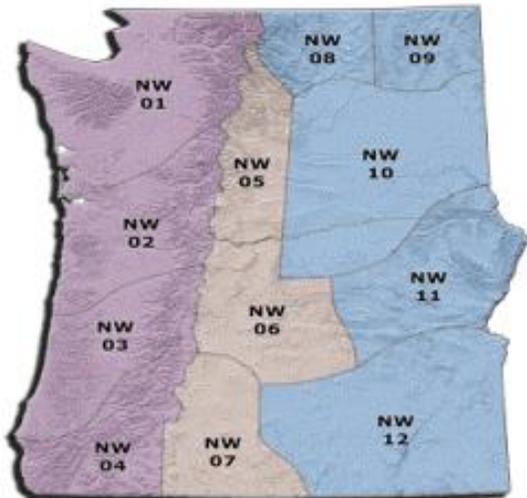
August 21 Reservoir Storage



Pacific Northwest 7 Day Significant Fire Potential



Sunday, 8/21/2022



Legend

Fire Environment (FEN) 4 levels

- Minimal** - The Overall Fire Environment suggests a very low risk for Large fires (**less than 1% chance**)
- Normal** - The Overall Fire Environment suggests a normal risk for large fires (**1 - 4% chance**)
- Elevated** - The Overall Fire Environment suggests a moderately high risk for large fires (**5 - 19% chance**)
- High Risk** - The risk for large fire(s) is very high (**≥ 20%**)
Triggers: 1. ⚡ (Significant Lightning)
2. BEN (Critical Burn Environment)

The assessment of the overall fire environment considers multiple factors including weather, lightning amount and fuel dryness. Large Fire probabilities are derived objectively via statistical methods. **High Risk** levels (≥ 20% probability of a large fire) are almost always due to significant lightning as burning conditions alone rarely result in a large fire probability much above about 10%.

Predictive Service Areas	ytd	Today	Mon	Tue	Wed	Thu	Fri	Sat
NW01		Minimal	Minimal	Minimal	Minimal	Minimal	Minimal	Minimal
NW02		Minimal	Normal	Normal	Normal	Normal	Normal	Normal
NW03		Minimal	Minimal	Minimal	Minimal	Minimal	Minimal	Minimal
NW04		Minimal	Normal	Normal	Normal	Normal	Normal	Normal
NW05		Normal	Normal	Normal	Normal	Normal	Elevated	Elevated
NW06		Normal	Normal	Normal	Normal	Normal	Normal	Normal
NW07		Normal	Normal	Normal	Normal	Normal	Normal	Normal
NW08		Normal	Elevated	High Risk	Elevated	Elevated	Elevated	Elevated
NW09		Normal	Normal	Normal	Normal	Normal	Normal	Normal
NW10		Elevated	Elevated	Elevated	Elevated	Elevated	Elevated	Elevated
NW11		Elevated	Elevated	Elevated	Elevated	Elevated	Elevated	Elevated
NW12		Normal	Normal	Normal	Normal	Normal	Normal	Normal

Fire Weather: Thunderstorms will be possible near the Canadian border in eastern Washington this afternoon/evening and also over northeastern Oregon, with potential lasting overnight into Monday morning as an upper-level weather trough moves over the region. The trough will linger over northern Washington tomorrow and Tuesday, continuing chances isolated lightning mainly over sections of northern Washington and northeastern Oregon. The storms should be slow-moving, improving chances for wetting rain under the storms. Widespread strong general wind increases are not likely anticipated for the region although gusts from passing thunderstorms will raise local concerns. High pressure aloft will start a warming trend in the latter half of the workweek. The intensity and duration of the heat wave is uncertain as models depict a variety of potential outcomes.

See your NWS forecasts for Red Flag Warnings or other advisories in your area.

Fire Potential: Lightning potential remains elevated over northeastern Oregon late this afternoon, tonight and into Monday. The best near-term risk of new significant fires appears to be over PSA NW11 due to the combination of high fire danger and sufficient new starts through Monday. Following that, fire potential remains elevated over much of eastern Oregon and eastern Washington with lingering thunderstorm chances. The risk of strong offshore winds affecting incidents in southwest Oregon appears low for the time being.

Preparedness Level:

Northwest: 3
National: 3

- Eric Wise

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.