

Oregon Water Conditions Report



July 25th, 2022

HIGHLIGHTS

With no new drought declarations over recent weeks, there remains [17 counties](#) with state drought declarations under ORS 503 and 29 counties with [USDA crop disaster designations](#).

Currently, over 66% of the state is experiencing moderate (D1) to exceptional (D4) drought conditions according to the [US Drought Monitor](#).

Precipitation over the past two weeks has been [well below the long-term average](#), with much of the state receiving [little to no measurable precipitation](#).

[Recent temperatures were variable throughout the state](#), although temperatures were generally 0 to 4 °F above the long-term average.

Soil moisture varies in terms of wetness both throughout the state and across profiles according to [NASA Grace](#) and [NASA SPoRT](#). Profiles in parts of northwestern and northeastern Oregon and along the coast are near to above average, while much of the rest of the state is below average.

[Precipitation and temperature outlooks](#) over the next 8 - 14-day period are variable throughout the state. Precipitation is projected to be above average for the eastern third of the state and near average elsewhere. Temperatures are projected to be above average for southeastern Oregon and below average in northern parts of the state, with near average temperatures elsewhere.

Although streamflows have decreased somewhat over recent weeks, many streams are measuring [average to above average flows over the past 7-day period](#). Flows in central and southern Oregon are generally much lower than their long-term averages. See below for more information.

Many USBR (including Klamath) reservoirs contain below to well below average contents throughout the state, with exception in the Tualatin, Umatilla, and Burnt River basins (see below). USACE reservoirs in both the Willamette, Rogue, and Willow basins contain average to above average storage contents.

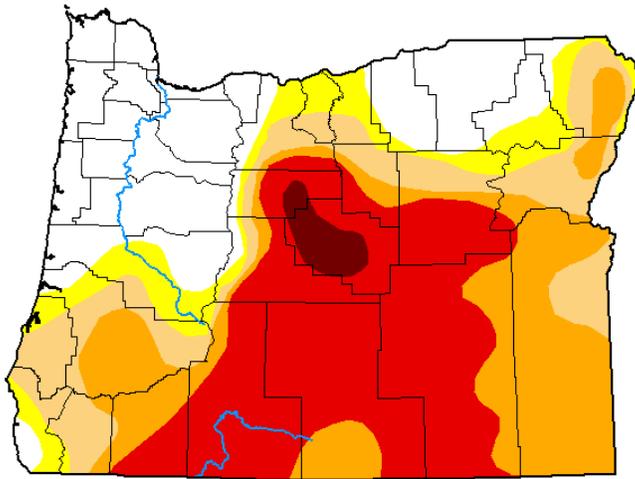
[Significant wildfire potential](#) over the next seven days ranges from below average to high risk throughout the Pacific Northwest. Nearly all of Oregon is projected to have some elevated risk over the next week, with some of the southern part of the state at high risk.

DROUGHT CONDITIONS

There has been little change to drought conditions over the past two weeks.

U.S. Drought Monitor Oregon

July 19, 2022
(Released Thursday, Jul. 21, 2022)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	24.60	75.40	66.42	52.76	31.72	1.77
Last Week 07-12-2022	25.00	75.00	66.67	52.71	31.72	1.77
3 Months Ago 04-19-2022	9.08	90.92	86.14	72.31	53.12	17.30
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 07-20-2021	0.00	100.00	100.00	90.01	56.30	17.12

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>

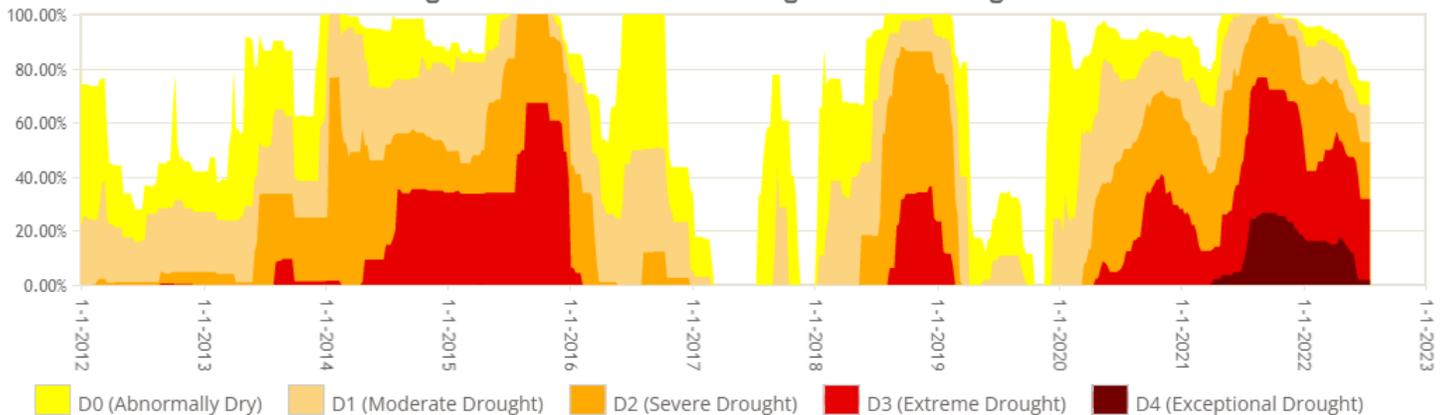
Author:

Brian Fuchs
National Drought Mitigation Center

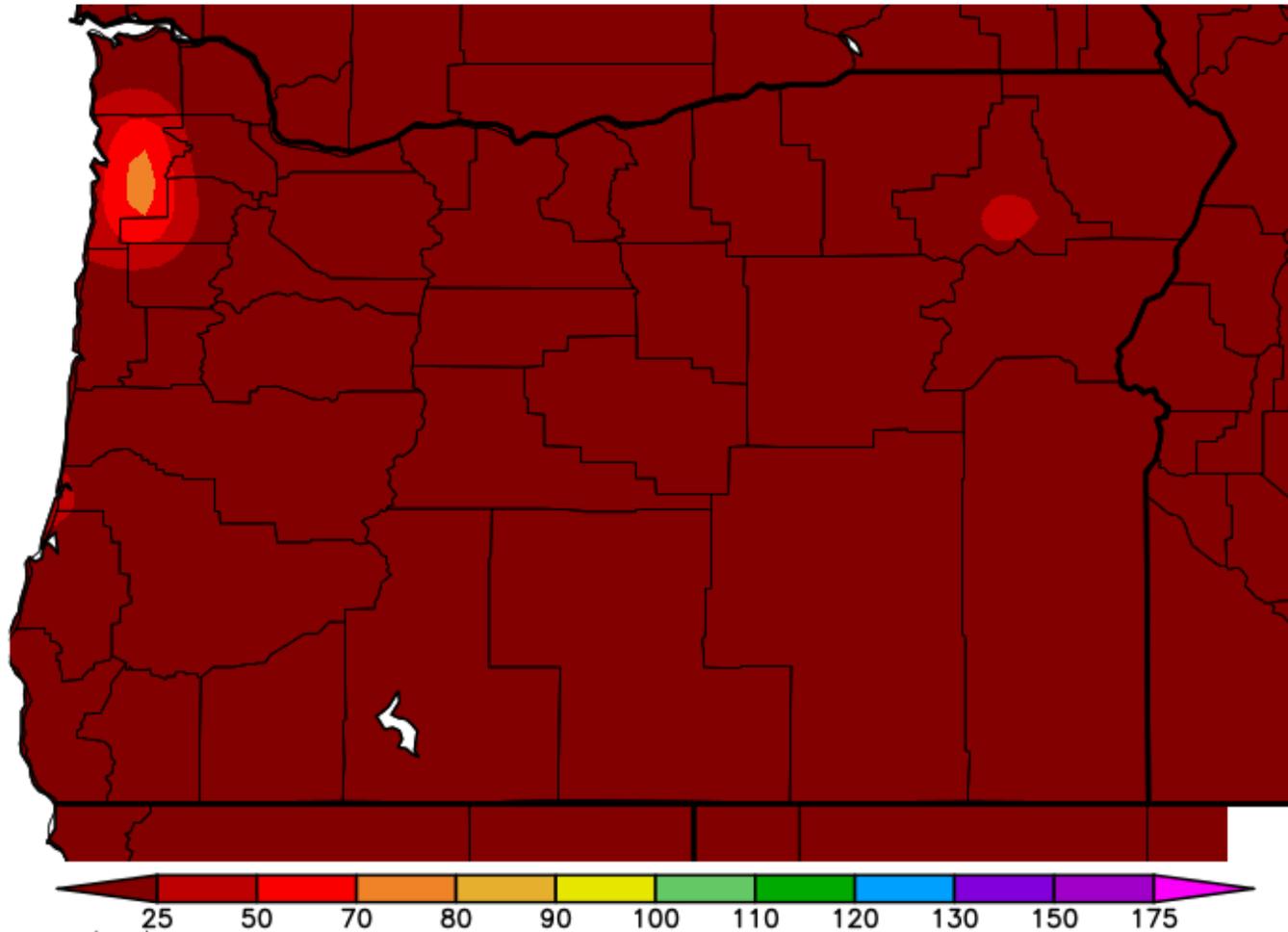


droughtmonitor.unl.edu

Oregon Percent Area in U.S. Drought Monitor Categories

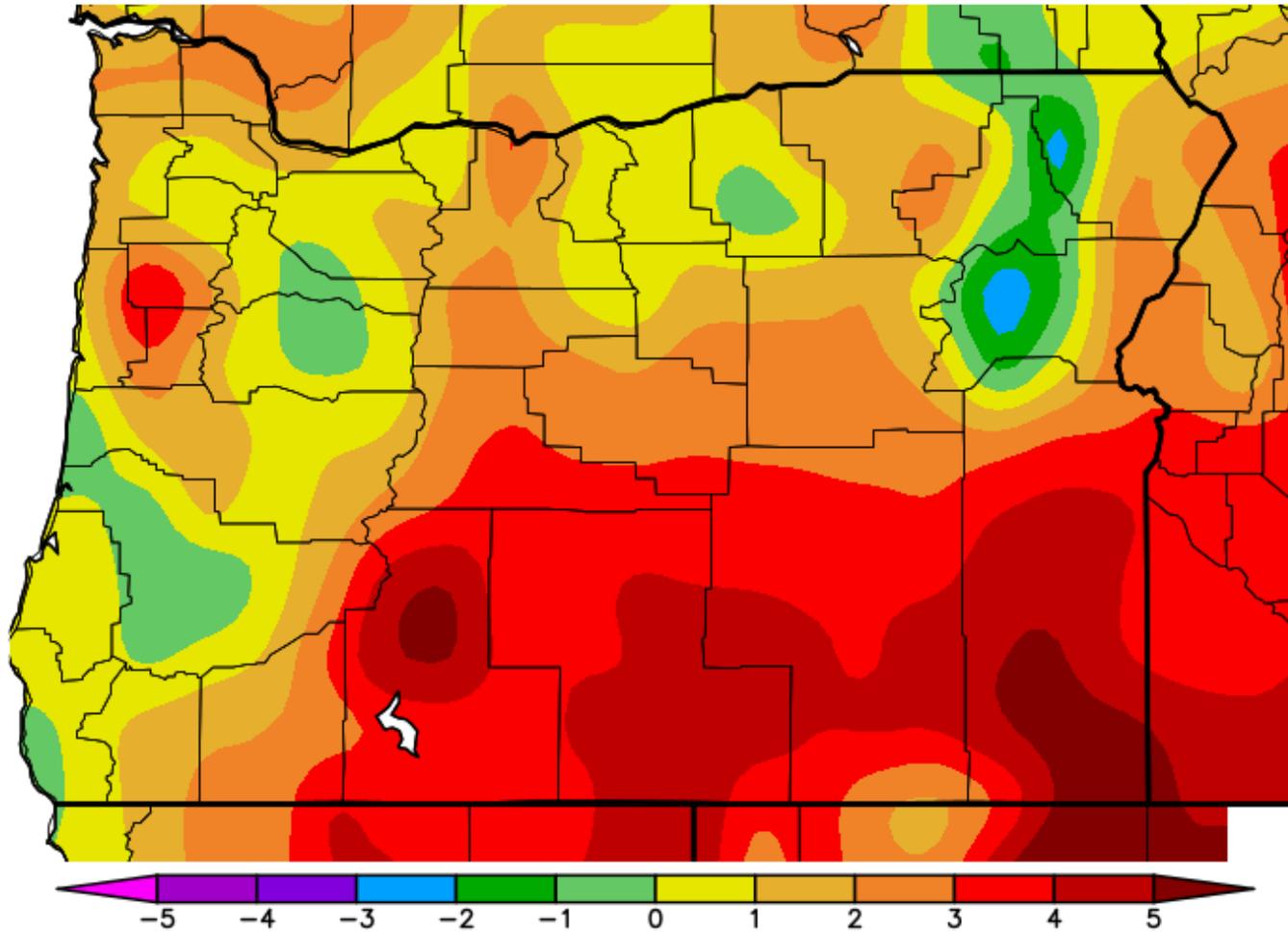


Percent of Average Precipitation (%) 7/11/2022 – 7/24/2022



Generated 7/25/2022 at WRCC using provisional data.
NOAA Regional Climate Centers

Ave. Temperature dep from Ave (deg F)
7/11/2022 - 7/24/2022

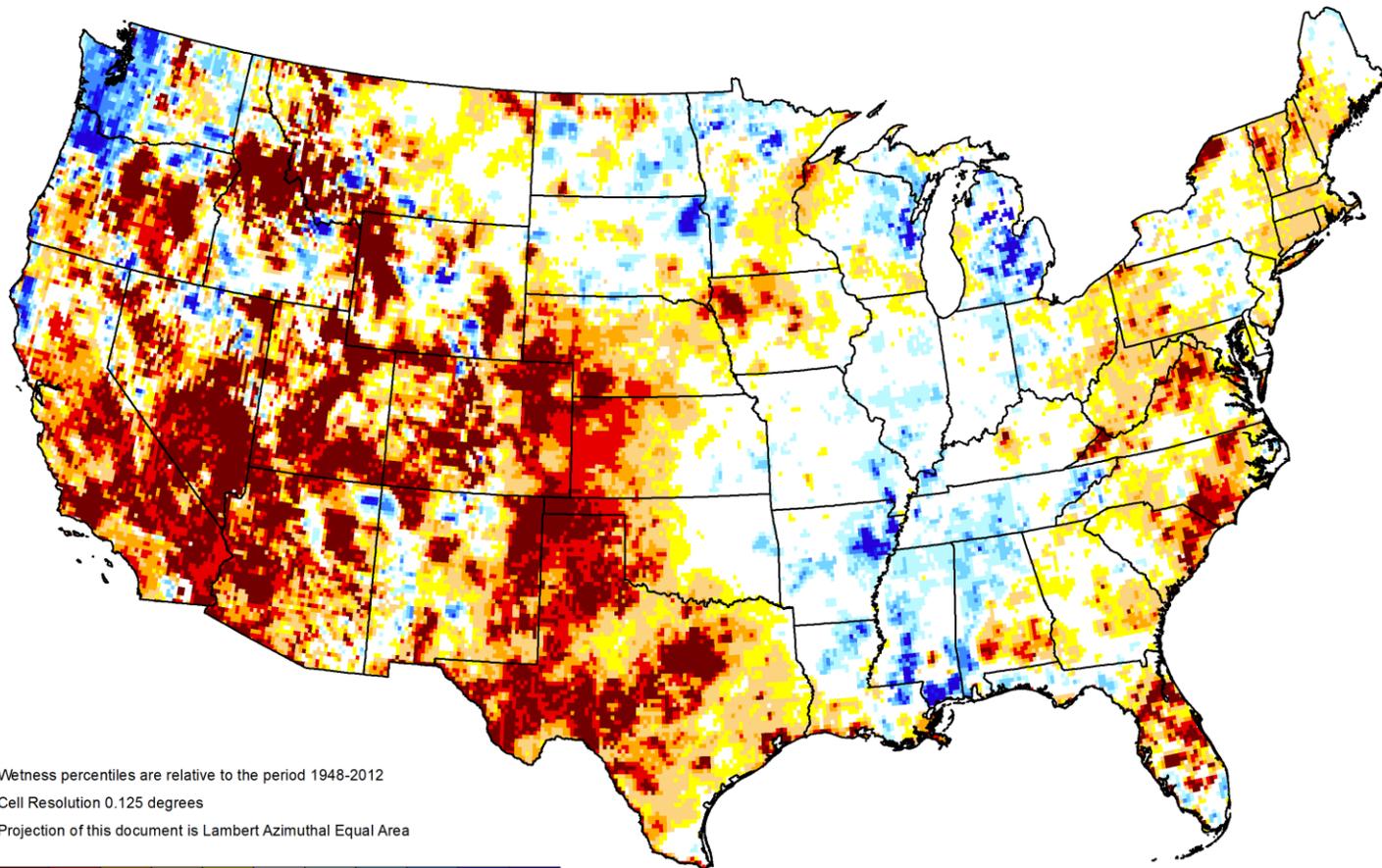


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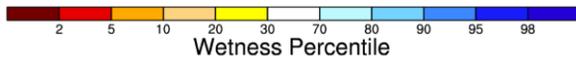


GRACE-Based Shallow Groundwater Drought Indicator

July 18, 2022



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



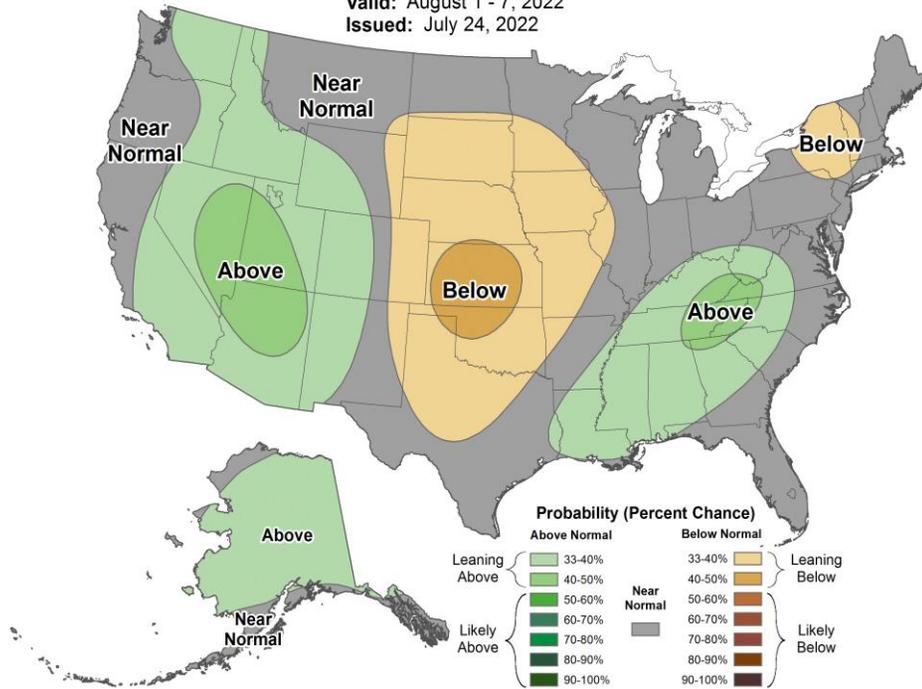
<https://nasagrace.unl.edu>



8-14 Day Precipitation Outlook



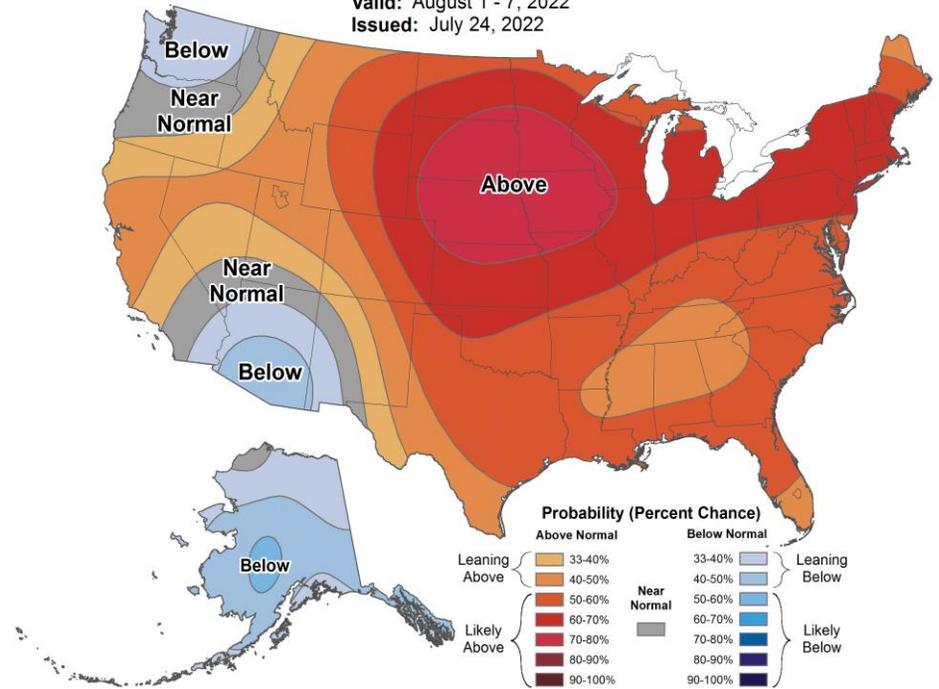
Valid: August 1 - 7, 2022
 Issued: July 24, 2022



8-14 Day Temperature Outlook

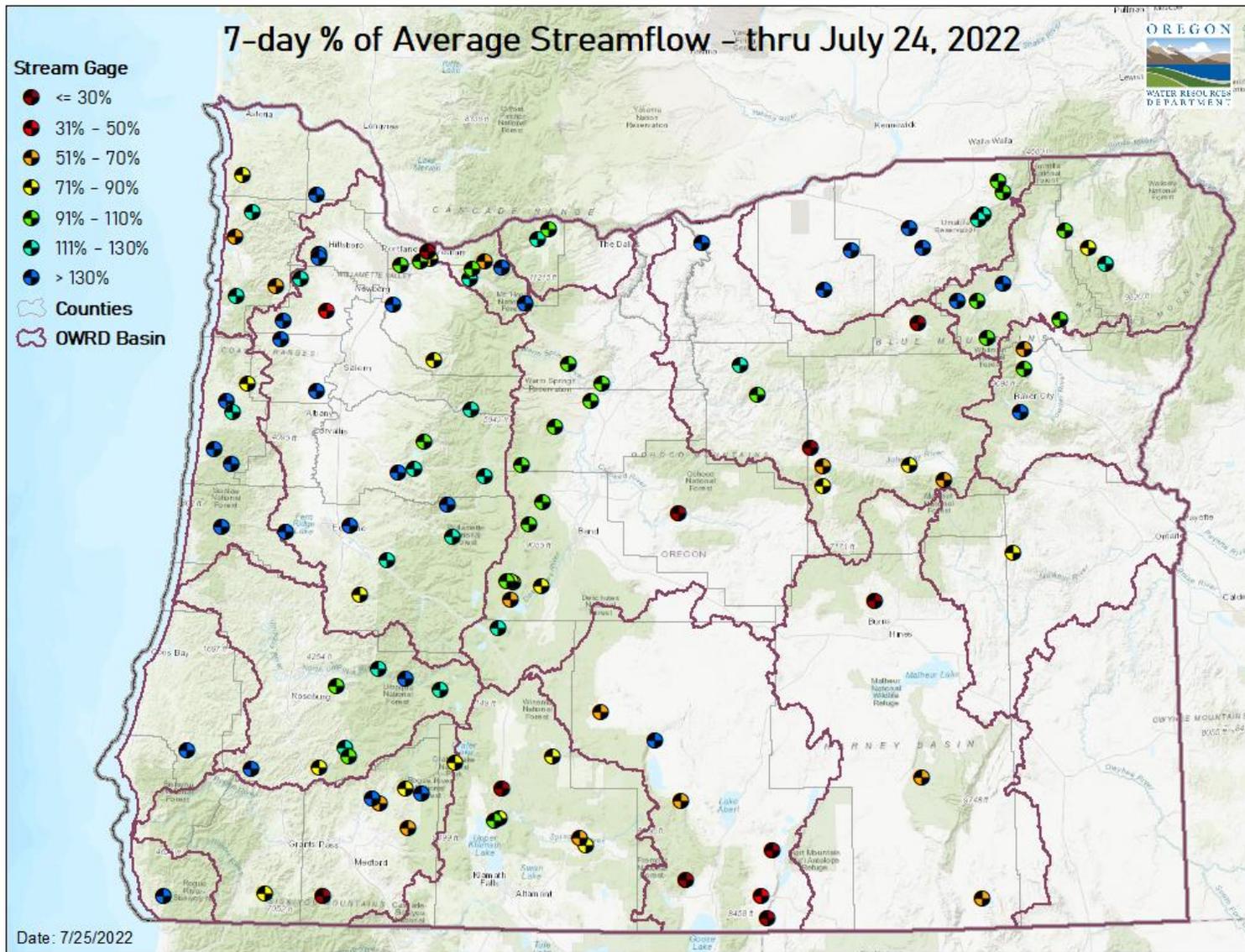


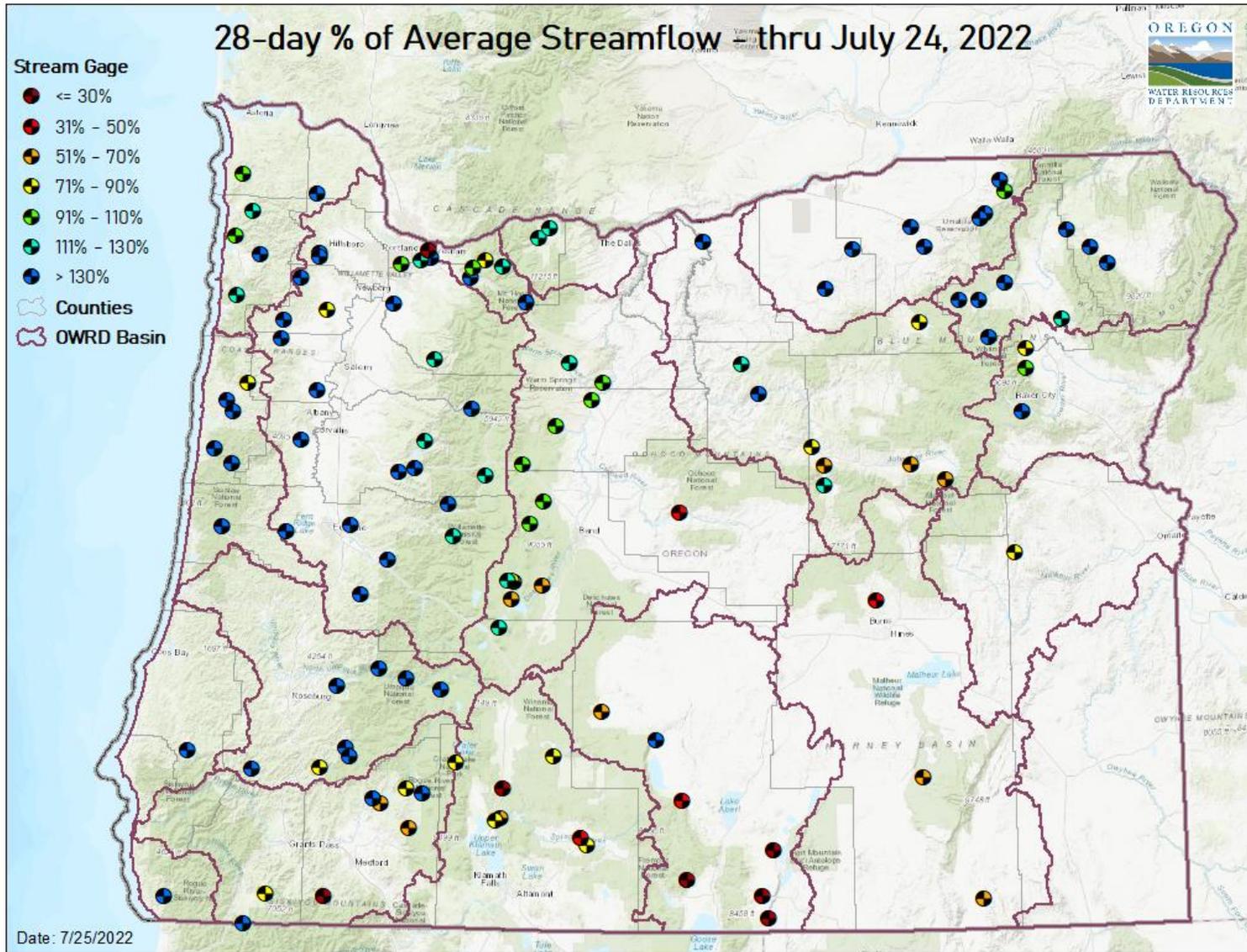
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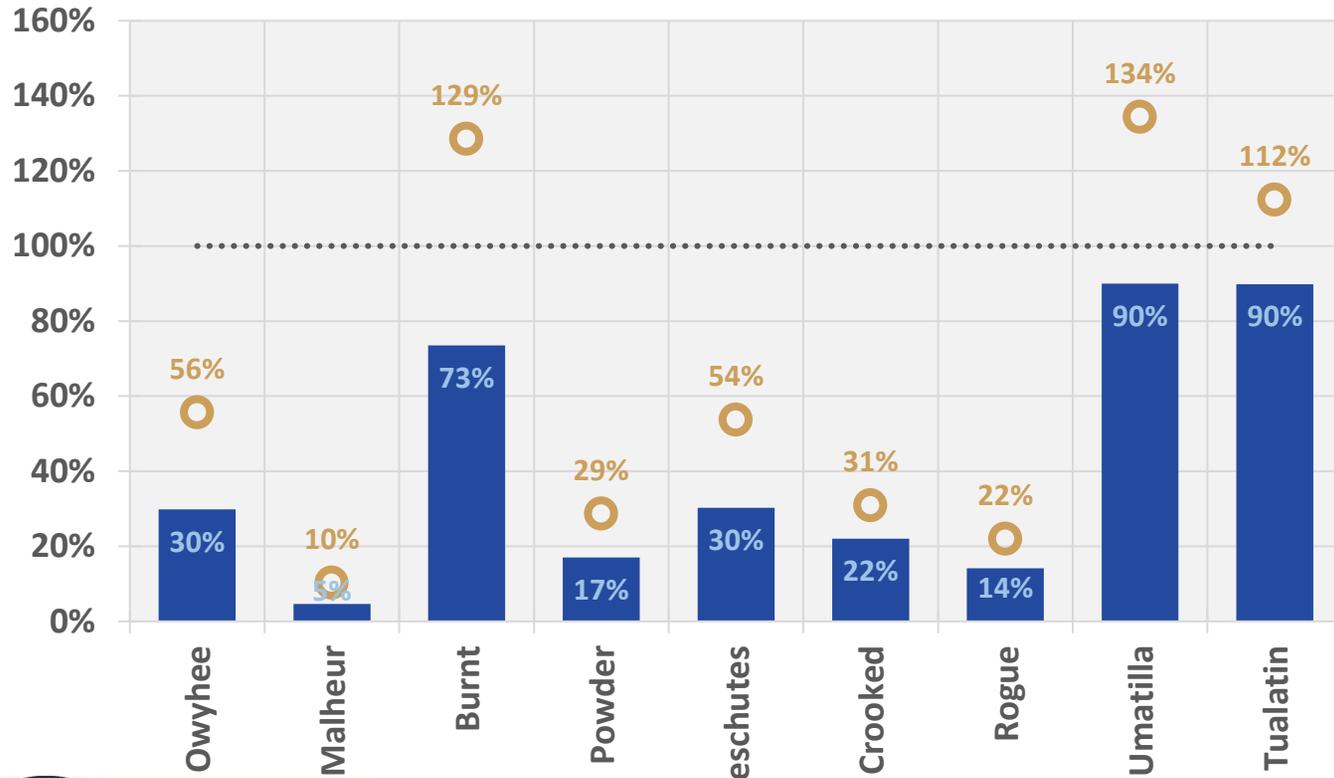
STREAMFLOW

7-DAY





July 24 Reservoir Storage



BUREAU OF RECLAMATION

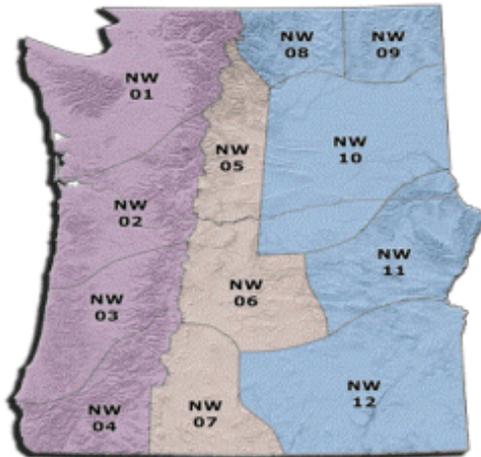
■ Percent Full

● Percent of Average

Pacific Northwest 7 Day Significant Fire Potential



Monday, 7/25/2022



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	Tue	Wed	Thu	Fri	Sat	Sun
NW01								
NW02								
NW03								
NW04								
NW05								
NW06								
NW07			⚡	⚡	⚡			
NW08								
NW09								
NW10								
NW11								
NW12						⚡	⚡	⚡

Fire Weather: Expect hot and dry conditions across the region through the work week. Overnight relative humidity recoveries will be fair to poor, particularly along ridgetops. Fortunately, general winds will be light, although locally breezy winds will channel through the Okanogan Valley today and tomorrow. Southwestern Oregon could see thunderstorm chances as early as Tuesday afternoon, with potential along and east of the Cascades following Wednesday into the weekend. Any lightning that materializes is likely to be dry. The ridge that is bringing the heat wave should start to break down this weekend, but models show a lot of uncertainty in both timing and details.

Watch your NWS forecasts for details in your area, especially regarding evolving thunderstorm possibilities.

Fire Potential: Hotter and drier weather will drive fire danger indices upward through the work week, leading to elevated potential for significant fire development. Winds are not anticipated to be a threat for the next few days, but mid-week dry lightning potential could lead to high risk for new significant fires. Anticipated poor overnight relative humidity recoveries on mid-slopes and ridgetops will extend burning periods.

Preparedness Level:

Northwest: 1 (PL 2 anticipated in 3- and 10-day forecasts)
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.