

Oregon Water Conditions Report



June 27th, 2022

HIGHLIGHTS

Thus far in 2022, [17 counties](#) have received [Executive Orders](#) issuing drought declarations under ORS 536. Additionally, Executive Order 22-10 makes any county with an Executive Order issuing a drought declaration under ORS 536 eligible to pursue assistance under ORS 401. See [EO 22-10](#) for more details.

According to the [US Drought Monitor](#), over 66% of Oregon is experiencing moderate (D1) to exceptional (D4) drought. Elevated streamflows and reduced evaporative demand due to cooler temperatures have led to continued reductions in drought coverage and improvements in drought severity over recent weeks. See below for more details.

[Precipitation over the past two weeks](#) has been variable throughout the state. Areas along the Cascade Range, along with parts of northern Oregon and Lake County received above average precipitation, while the rest of the state was well below average.

Recent temperatures have ranged between [0 °F and 6 °F below](#) the long-term average throughout much of Oregon.

Although [shallow groundwater](#) continues to measure drier than average across much of the state, conditions have improved in parts of northwestern and northeastern Oregon.

The [8-14-day climate outlook](#) indicates probabilities favoring below average temperatures statewide, while precipitation is expected to vary. Above average precipitation is forecasted for northeastern Oregon, while below average is expected for southeastern Oregon.

Although many basins have benefitted from above average streamflows throughout spring, water year streamflow still measures below to well below average outside of northern Oregon. More recently, precipitation has helped sustain well above average streamflows throughout much of the state over the past 7-day period, with some exceptions in southern and eastern Oregon.

Reservoir storage contents continue to measure well below average in many [USBR](#) (including [Klamath](#)) systems, although recent precipitation helped suppress irrigation demands. Many [USACE reservoirs](#) are full.

[Significant wildfire potential](#) ranges from minimal to normal over the next seven days throughout the Pacific Northwest.

DROUGHT CONDITIONS

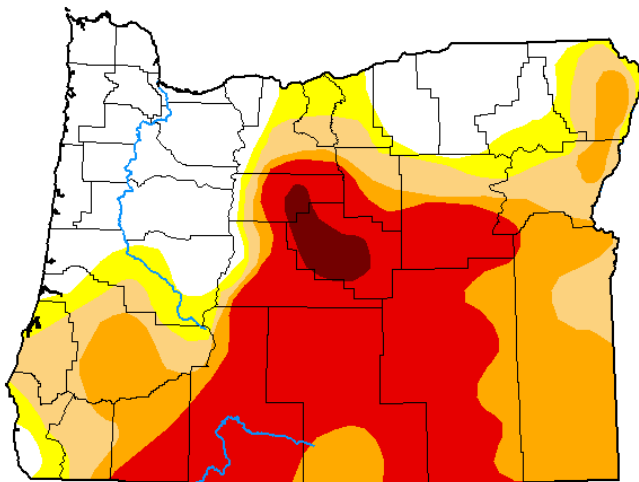
Oregon has seen reductions in drought severity over recent weeks due to above average streamflows and improved soil moisture following the wet spring. Cooler temperatures have also inhibited evaporative demand throughout much of the state. Over the past two weeks, coverage of D3-D4 drought conditions has been reduced by 14%, with improvements seen in both western and eastern Oregon.

U.S. Drought Monitor Oregon

June 21, 2022

(Released Thursday, Jun. 23, 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	66.49	52.71	31.72	1.77
Last Week 06-14-2022	24.25	75.75	67.93	56.72	40.06	1.93
3 Months Ago 03-22-2022	6.11	93.89	89.04	74.25	49.92	15.01
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 06-22-2021	0.00	100.00	98.99	77.38	36.90	4.78

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>

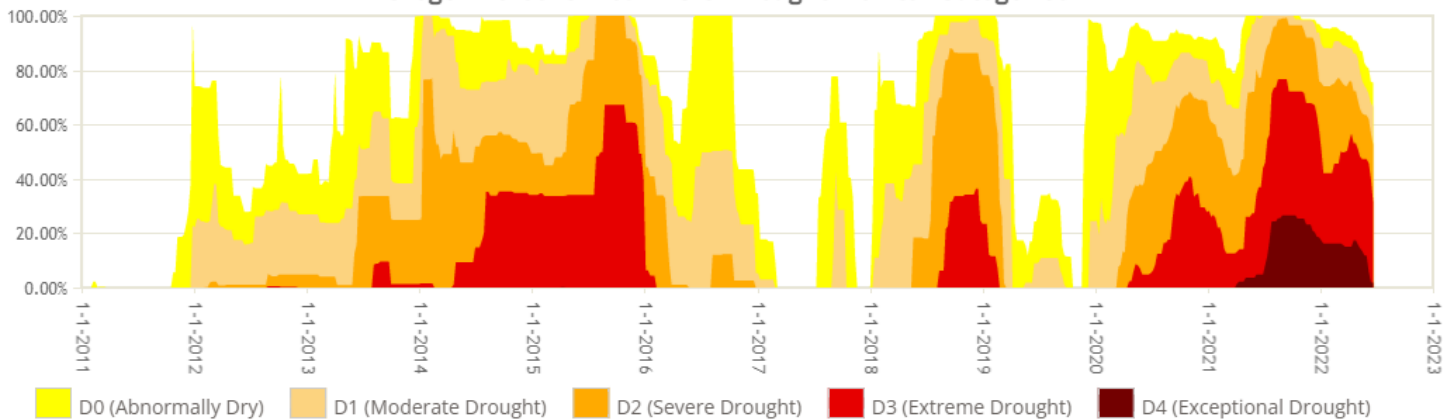
Author:

Adam Hartman
NOAA/NWS/NCEP/CPC

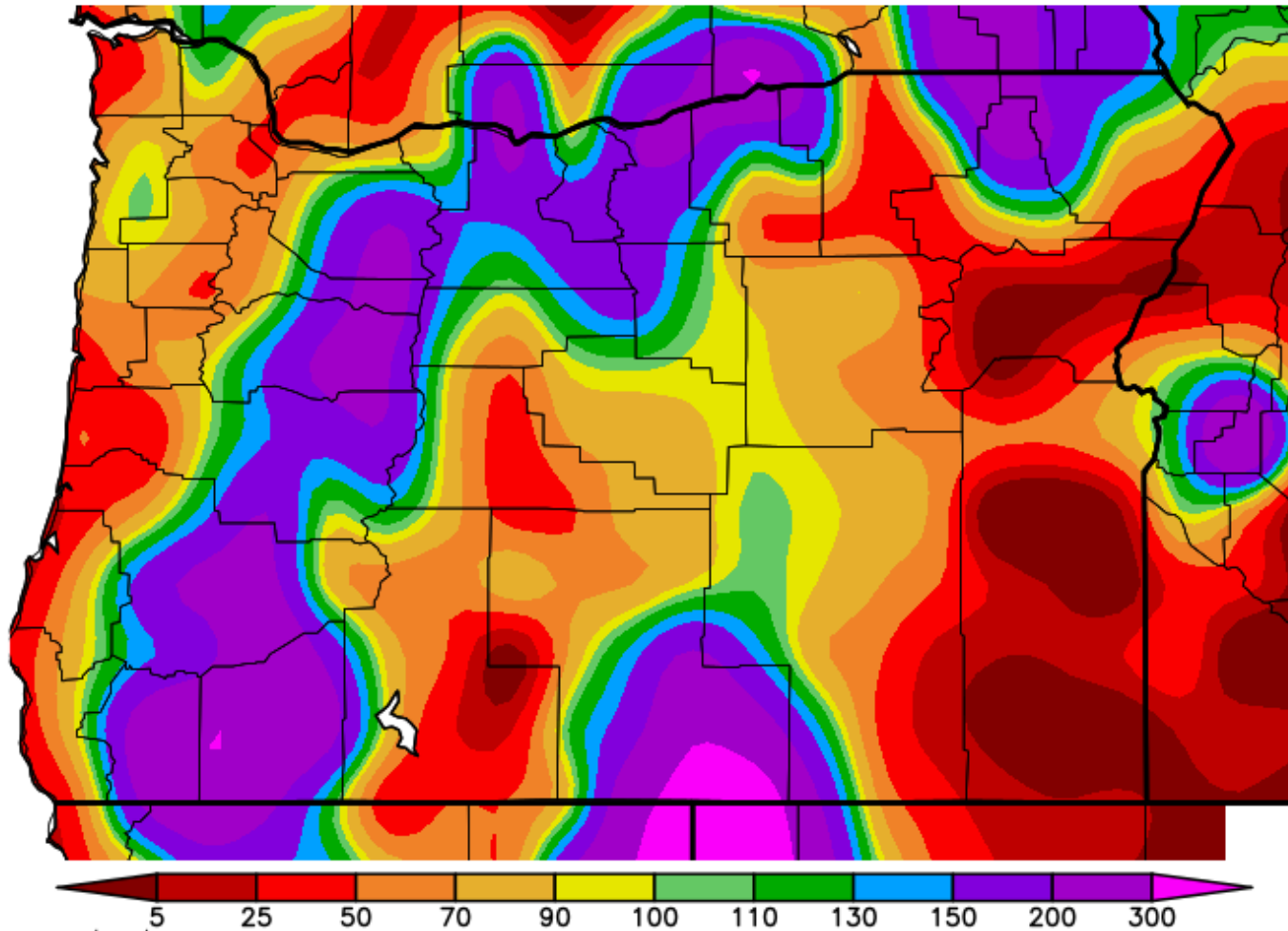


droughtmonitor.unl.edu

Oregon Percent Area in U.S. Drought Monitor Categories

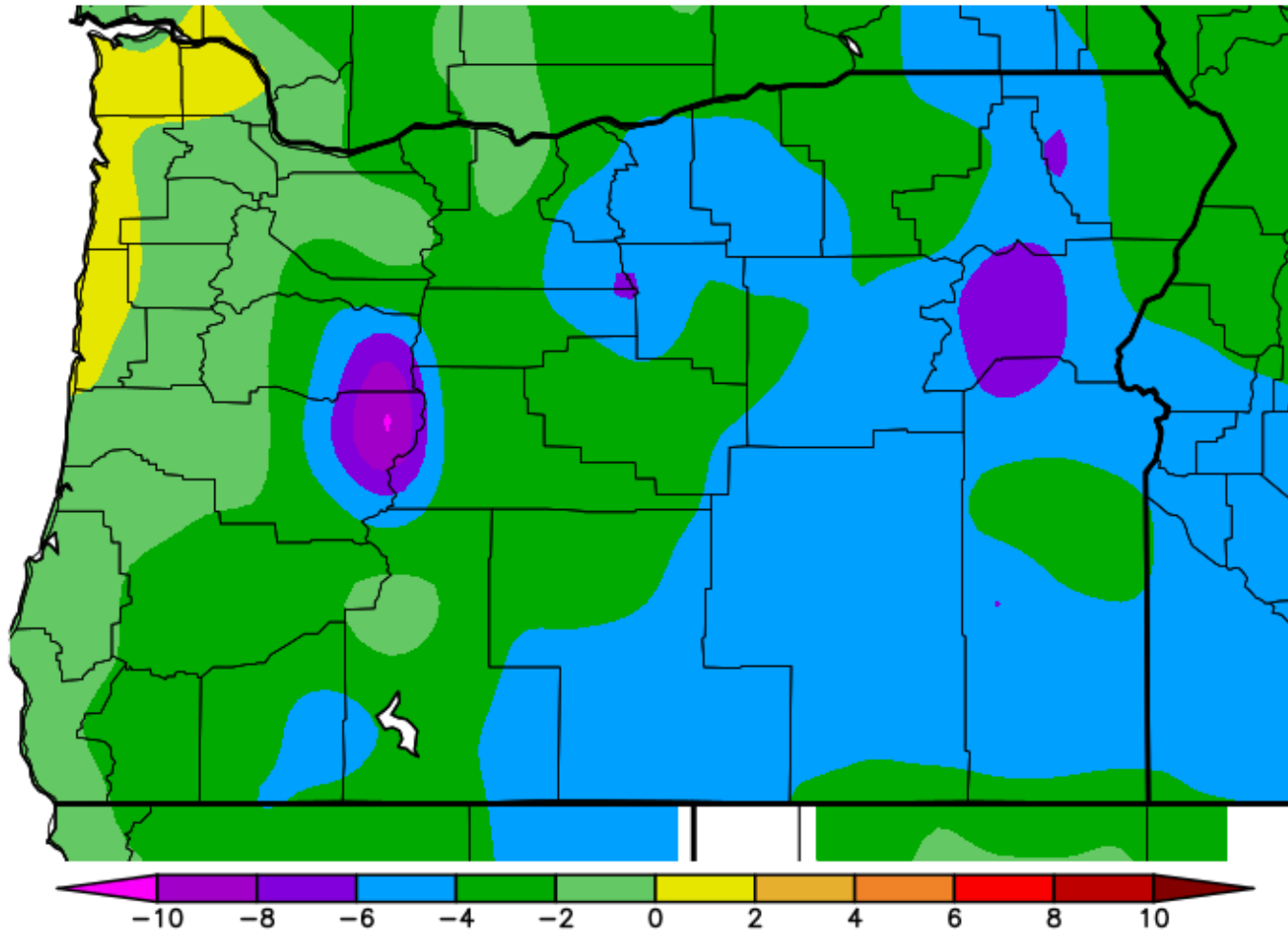


Percent of Average Precipitation (%)
6/13/2022 – 6/26/2022



Generated 6/27/2022 at WRCC using provisional data.
NOAA Regional Climate Centers

Ave. Temperature dep from Ave (deg F)
6/13/2022 – 6/26/2022

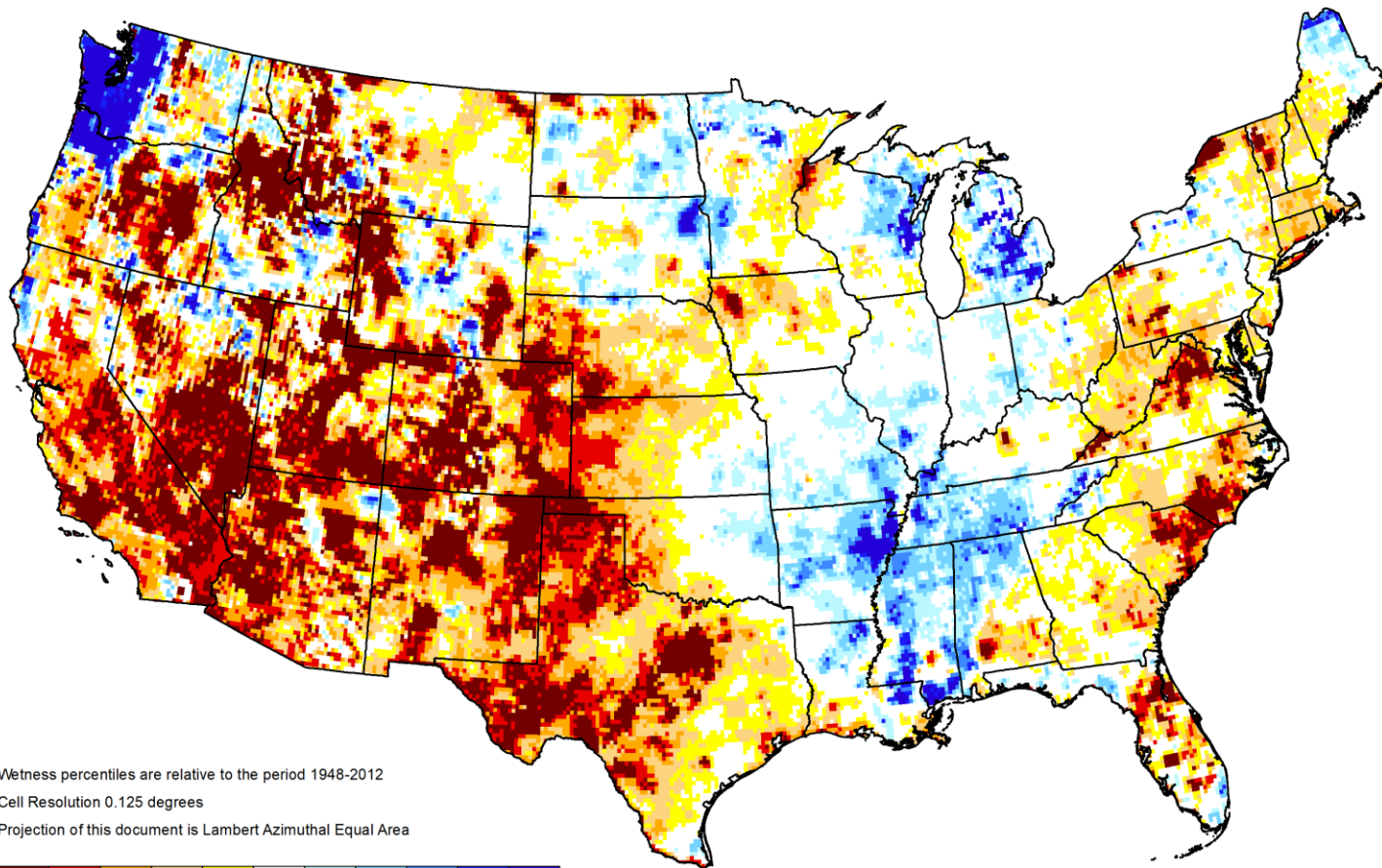


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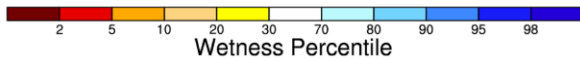


GRACE-Based Shallow Groundwater Drought Indicator

June 20, 2022



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

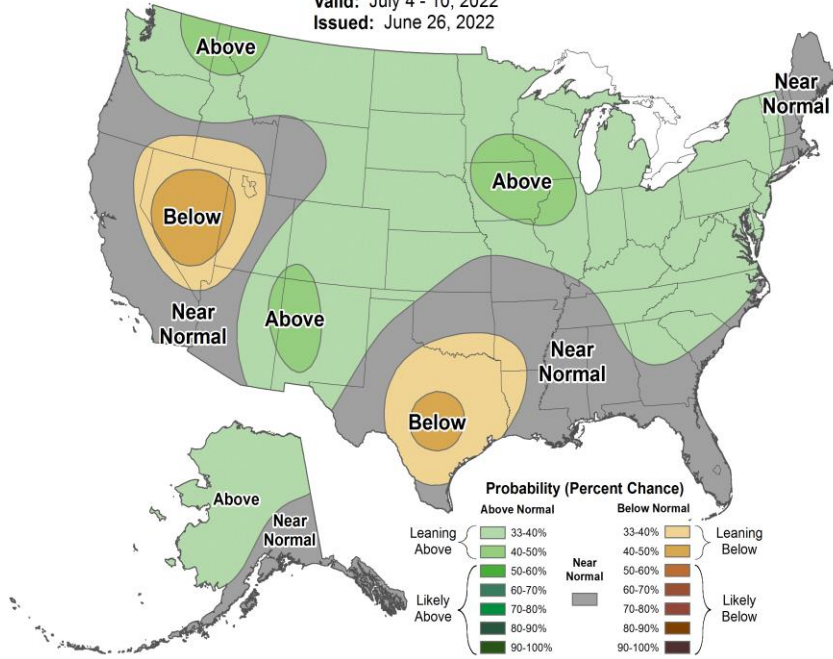


<https://nasagrace.unl.edu>



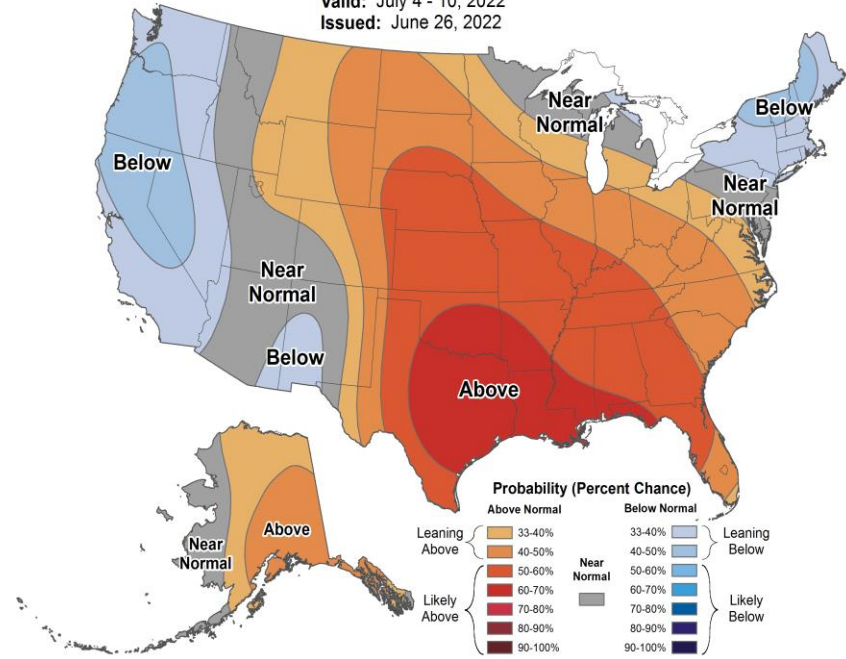
8-14 Day Precipitation Outlook

Valid: July 4 - 10, 2022
 Issued: June 26, 2022



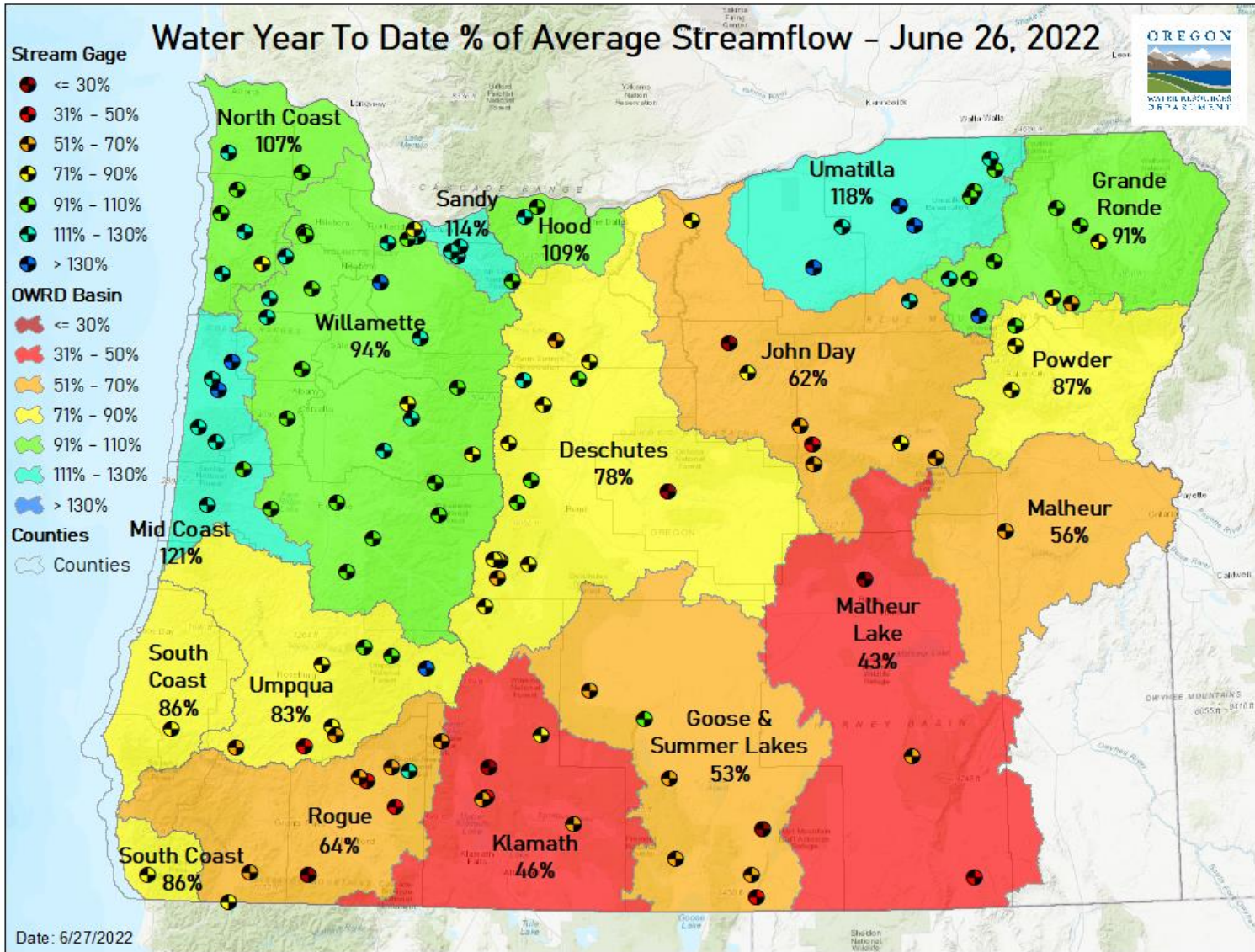
8-14 Day Temperature Outlook

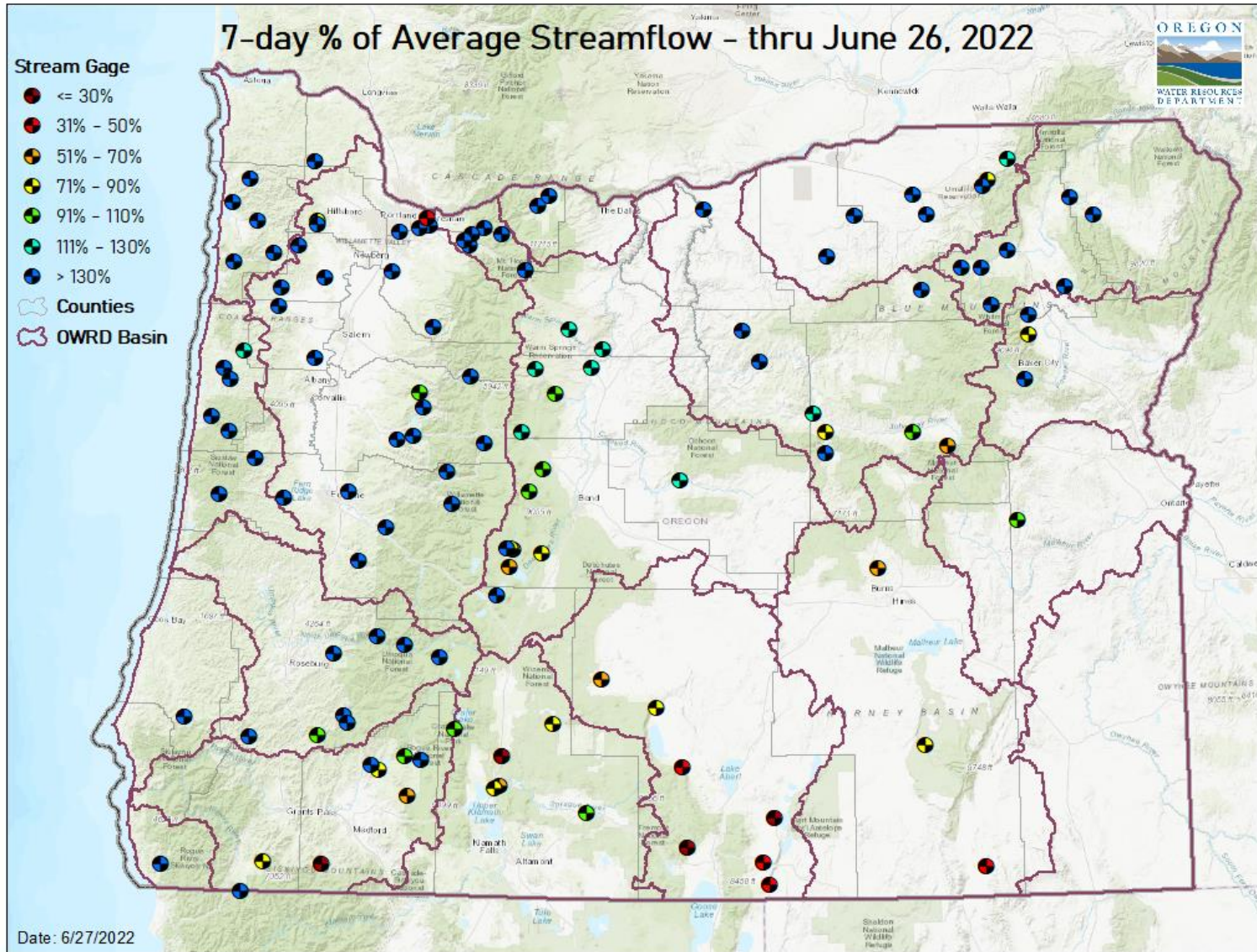
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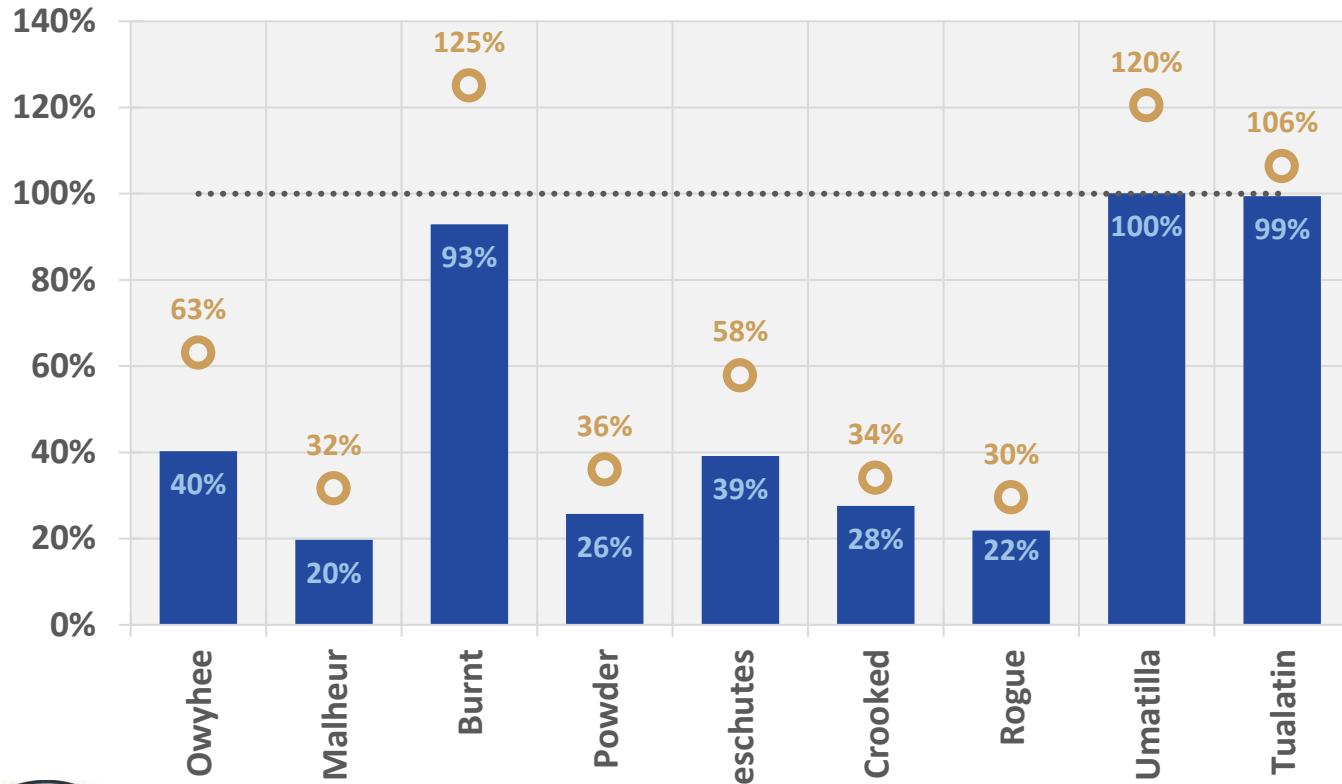
STREAMFLOW

WATER YEAR TO DATE





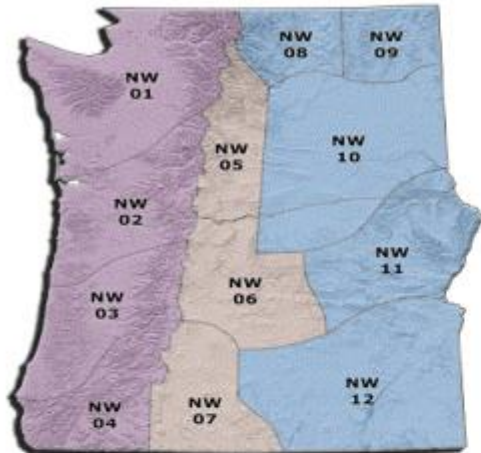
June 26 Reservoir Storage



BUREAU OF RECLAMATION

■ Percent Full

● Percent of Average



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%.

Pacific Northwest 7 Day Significant Fire Potential



Sunday, 6/26/2022

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

Fire Weather: Expect temperatures well above normal through Monday before the next cooling trend arrives. A thermal trough along the coast will draw offshore, downslope winds leading peak heat today on the west side. Temperatures will continue to climb across the east side tomorrow. Isolated thunderstorms are possible over central and eastern Oregon today and into the Oregon and Washington Cascades as well as eastern Oregon on Monday. An upper-level trough moves in Tuesday with gusty westerly winds and much cooler temperatures, as well as some showers over the Olympics and northern Cascades. Chances for showers and thunderstorms persist across northern Washington's mountains into mid-week. Another weather system approaches for the holiday weekend, possibly bringing some precipitation chances, but details are sketchy at this time.

Monitor your NWS forecasts for local details as this pattern evolves, particularly for the potential risk of thunderstorms and general wind shifts.

Fire Potential: The potential for significant fires remains low today but fire danger indices are rising as a result of the hot, dry weather. An uptick in initial attack activity is likely on Sunday and Monday as lightning causes a few starts in both Oregon and Washington. Fire danger is not yet high enough for strong risk of large fires. The cooling trend later in the week will level or drop fire danger indices.

Preparedness Level:

Northwest: 1
National: 2

- 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.