

# Oregon Water Conditions Report



September 19<sup>th</sup>, 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.

Below average precipitation and streamflow over recent weeks have led to expansion of abnormally dry conditions in parts of western and eastern Oregon, according to the [US Drought Monitor](#). See below for more information.

[Precipitation over the past two weeks](#) has been variable throughout the state. While much of western and eastern Oregon measured well below average, a large portion of central Oregon received well above average precipitation, [with some areas receiving more than one inch](#). Water year precipitation is measuring 100% of the long-term median across the state at [NRCS SNOTEL](#) sites.

[Temperatures over the past two weeks](#) were warmer than usual across much of Oregon, generally ranging between 0 and 6 °F above the long-term average.

[Soil moisture profiles](#) continue to measure below to well below average throughout a majority of Oregon. Dry conditions have expanded recently due to elevated evaporative demand.

The [near-term climate outlook](#) for the next 8-14-day period indicates probabilities favoring above average temperatures statewide. Precipitation is projected to vary, with above average expected in much of western Oregon, and equal chances of above or below average elsewhere.

Average streamflows over the past 7- and 28-day periods are variable throughout the state, ranging from well below to well above average. In general, streamflow has been declining over recent weeks from coastal to far eastern Oregon. See below for more information.

Reservoir storage contents in many [USBR](#) (including [Klamath](#)) projects are well below average. With irrigation season nearing an end, storage water supplies have been exhausted in some basins. Carryover contents are anticipated to be well below average heading into next water year. [USACE storage projects](#) are managing flows to prepare for next water year.

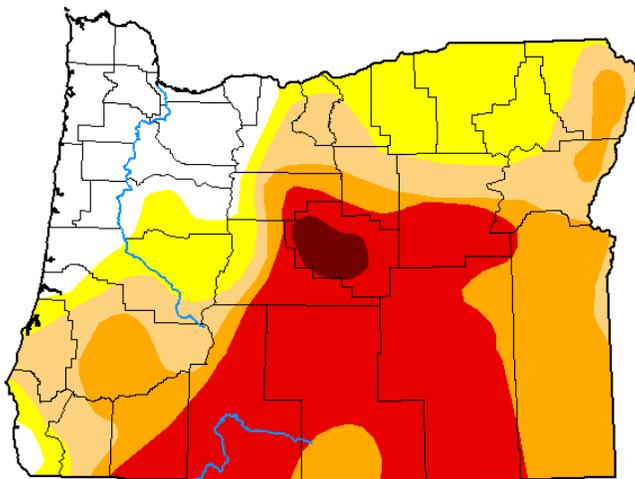
[Significant wildfire potential](#) for the next seven days ranges from minimal to normal throughout the Pacific Northwest.

## DROUGHT CONDITIONS

Over 65% of Oregon is classified as experiencing moderate (D1) to exceptional (D4) drought, according to the US Drought Monitor. Changes over recent weeks include expansion of abnormally dry (D0) conditions in both northeastern Oregon and the western foothills of the Cascades. Conditions in north central Oregon have deteriorated to moderate drought in Wasco, Sherman, and Gilliam Counties.

### U.S. Drought Monitor Oregon

**September 13, 2022**  
(Released Thursday, Sep. 15, 2022)  
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	14.92	85.08	68.34	52.22	30.73	1.40
<b>Last Week</b> 09-06-2022	25.04	74.96	65.71	52.22	30.73	1.40
<b>3 Months Ago</b> 06-14-2022	24.25	75.75	67.93	56.72	40.06	1.93
<b>Start of Calendar Year</b> 01-04-2022	4.16	95.84	89.75	75.37	50.84	17.27
<b>Start of Water Year</b> 09-28-2021	0.00	100.00	100.00	96.47	72.10	26.59
<b>One Year Ago</b> 09-14-2021	0.00	100.00	100.00	99.34	76.69	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>

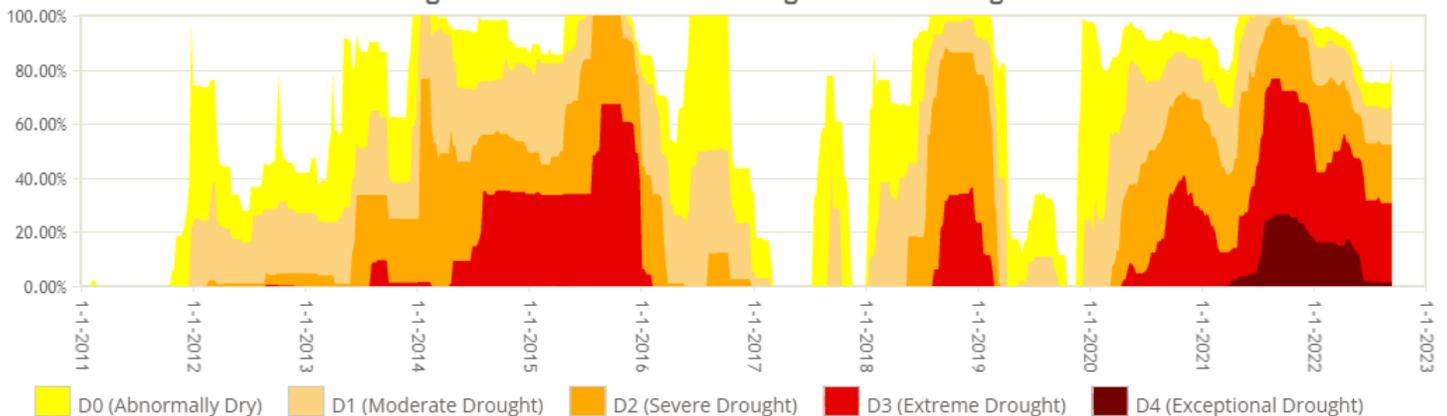
Author:

David Simeral  
Western Regional Climate Center

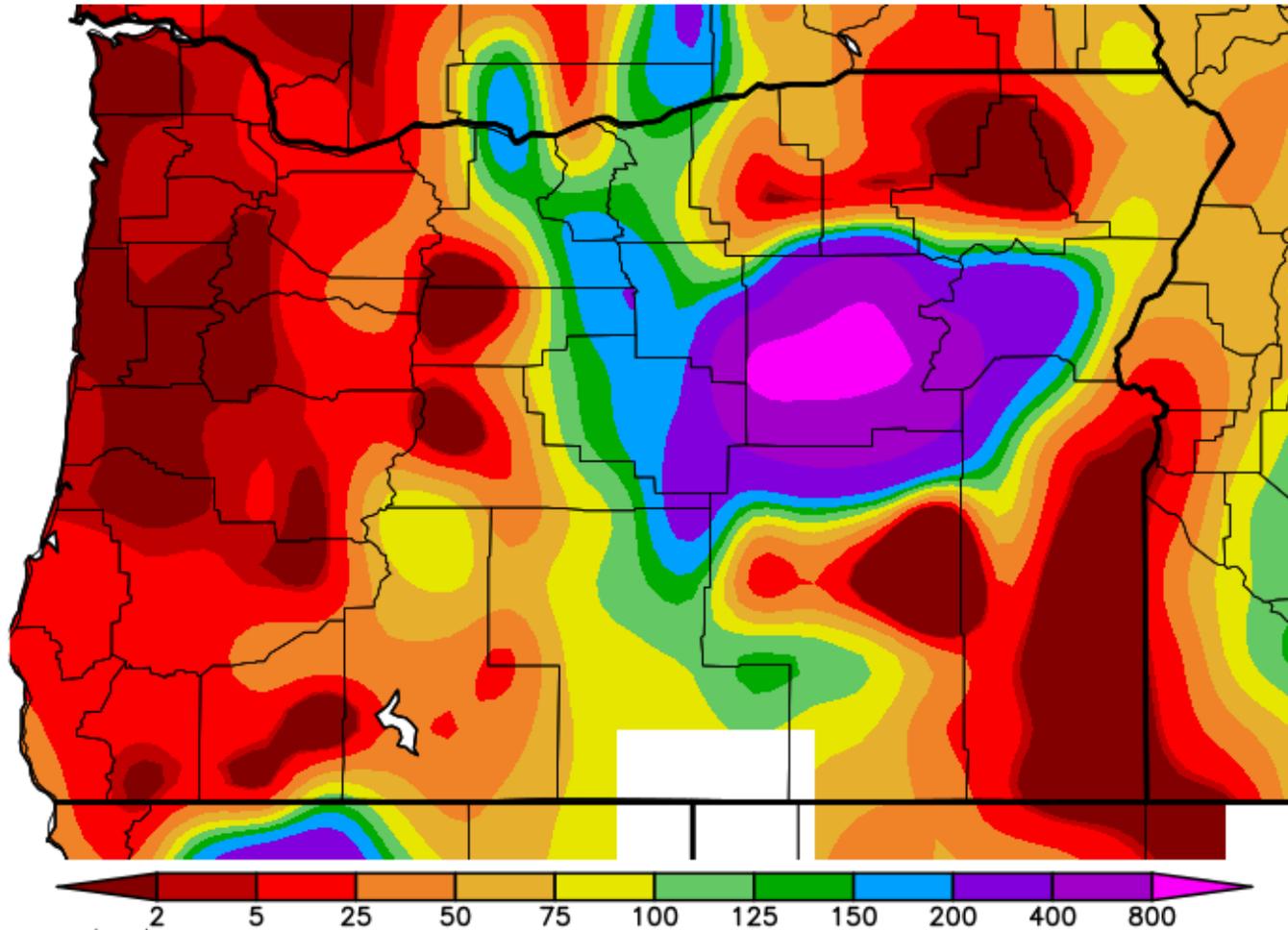


[droughtmonitor.unl.edu](http://droughtmonitor.unl.edu)

### Oregon Percent Area in U.S. Drought Monitor Categories

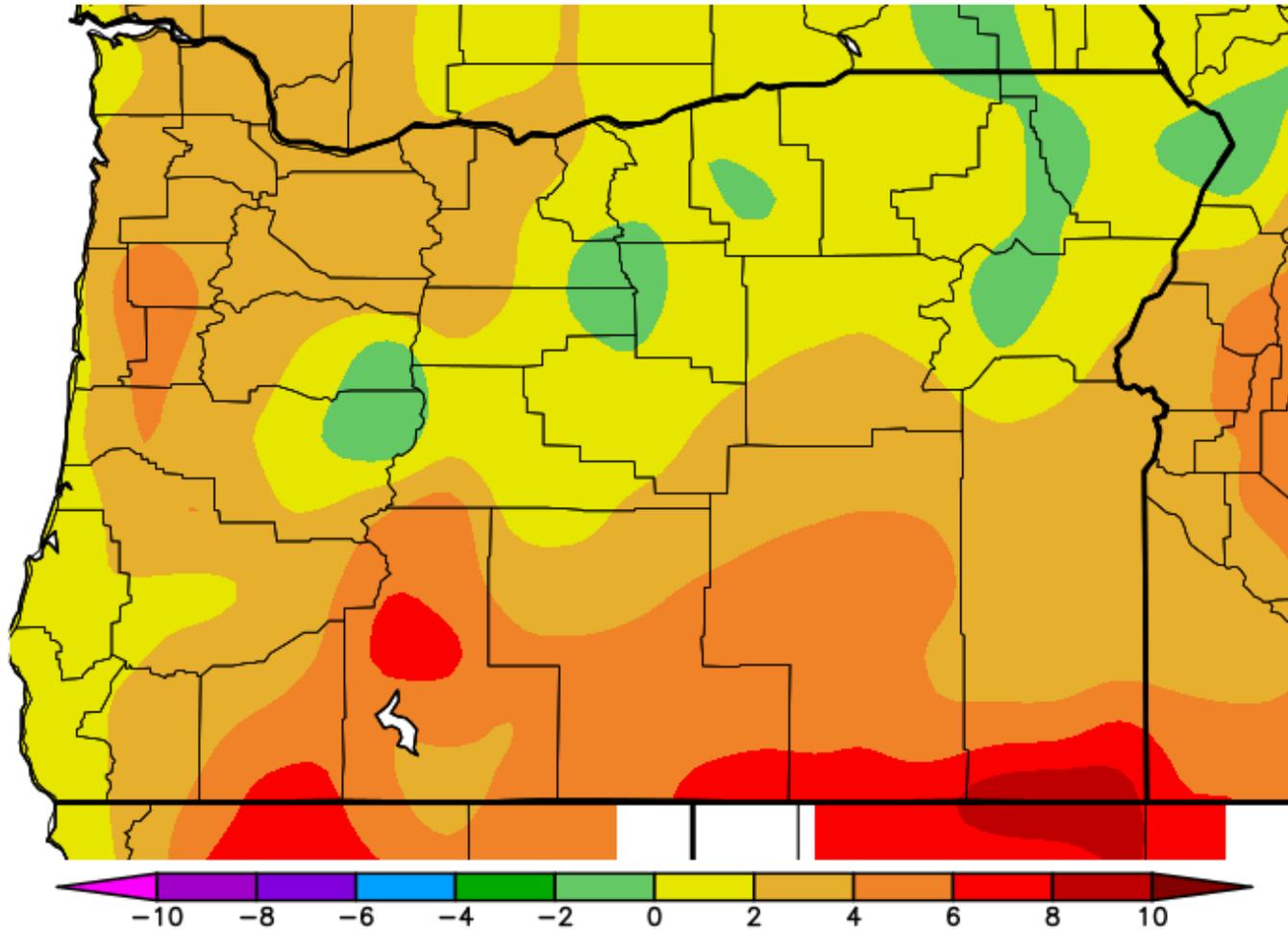


Percent of Average Precipitation (%)  
9/5/2022 - 9/18/2022



Generated 9/19/2022 at WRCC using provisional data.  
NOAA Regional Climate Centers

Ave. Temperature dep from Ave (deg F)  
9/5/2022 - 9/18/2022

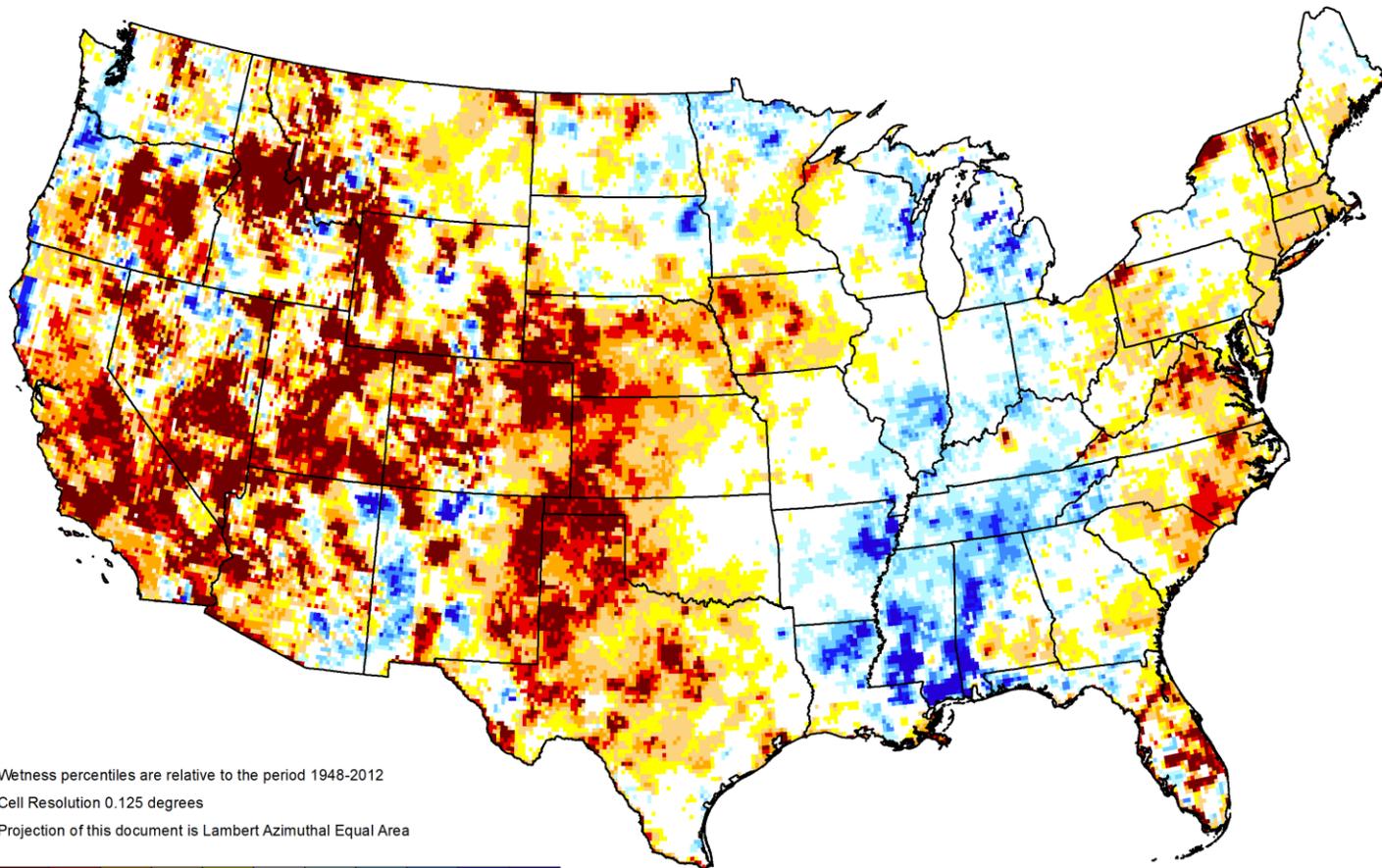


Generated 9/19/2022 at WRCC using provisional data.  
NOAA Regional Climate Centers

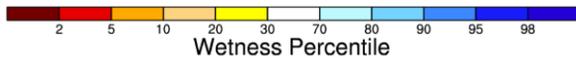


# GRACE-Based Shallow Groundwater Drought Indicator

September 12, 2022



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



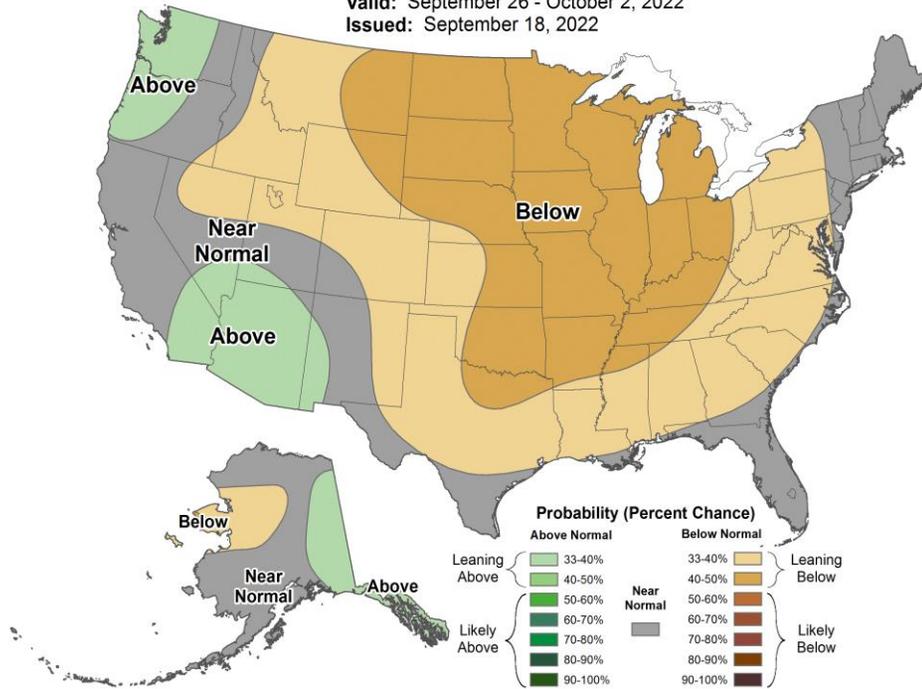
<https://nasagrace.unl.edu>



## 8-14 Day Precipitation Outlook



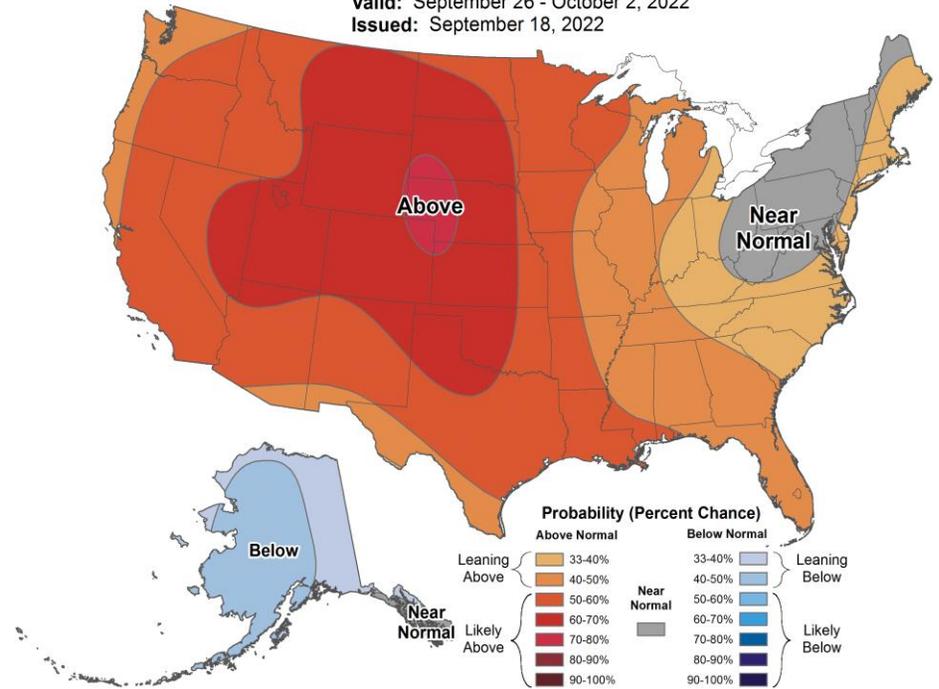
Valid: September 26 - October 2, 2022  
 Issued: September 18, 2022



## 8-14 Day Temperature Outlook

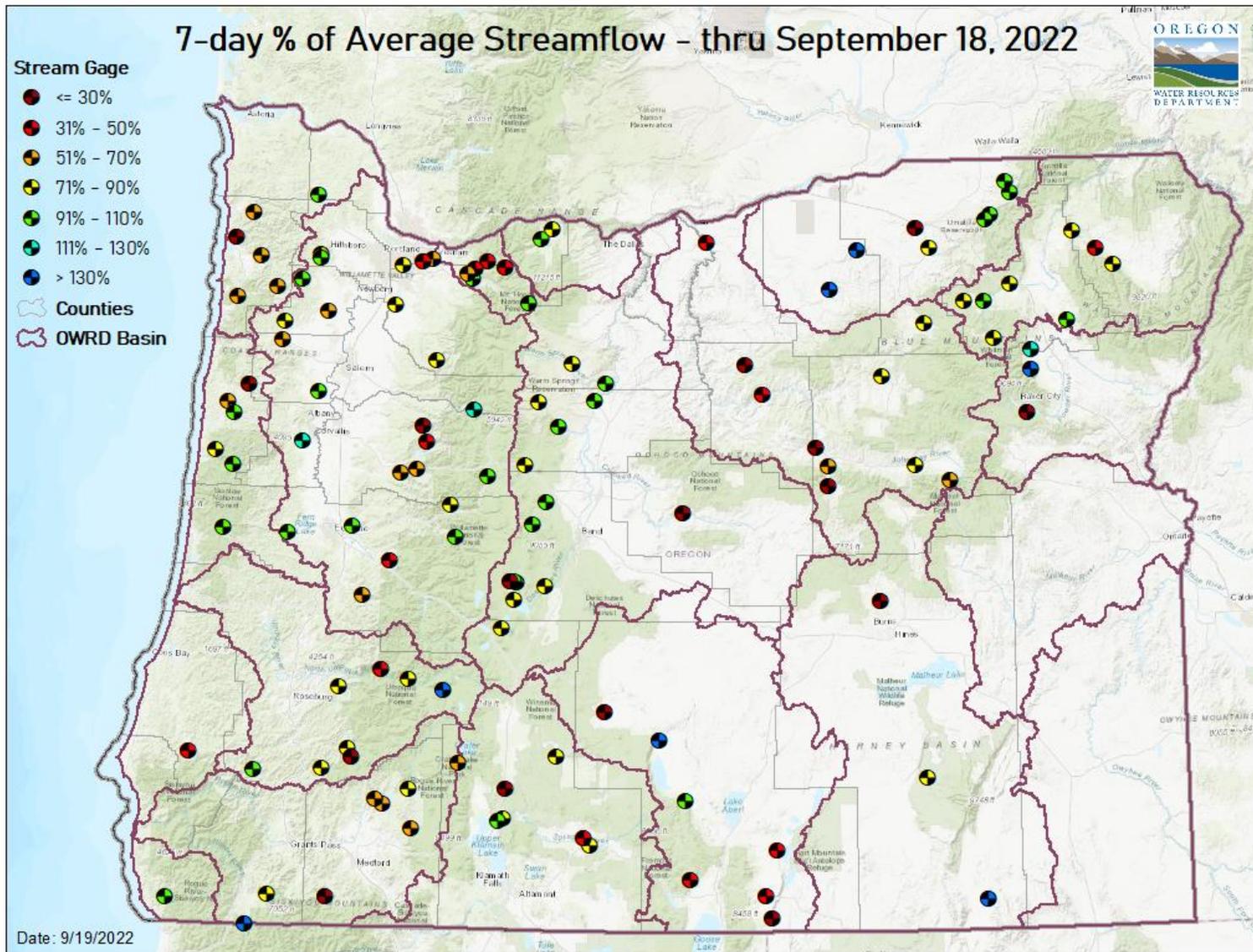


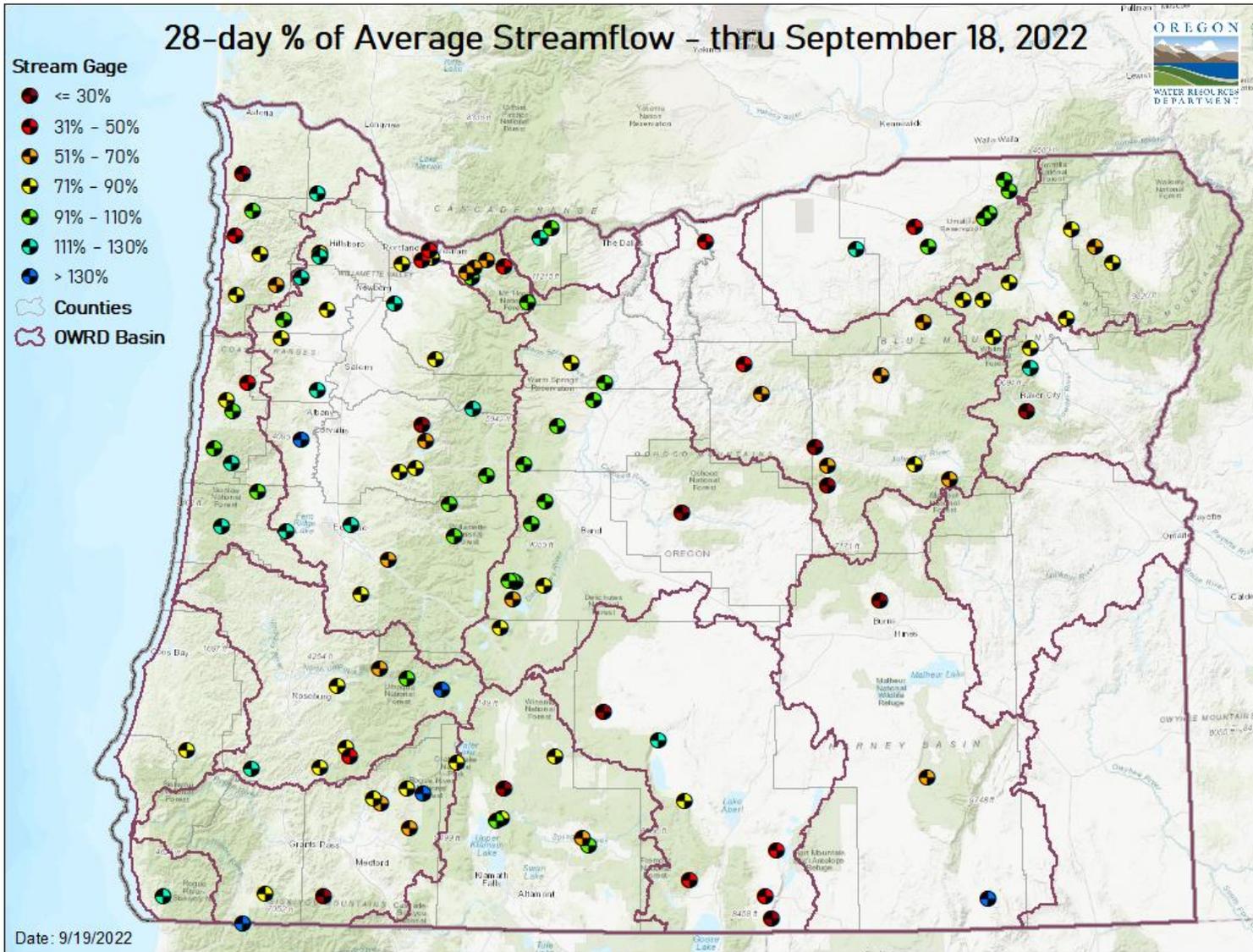
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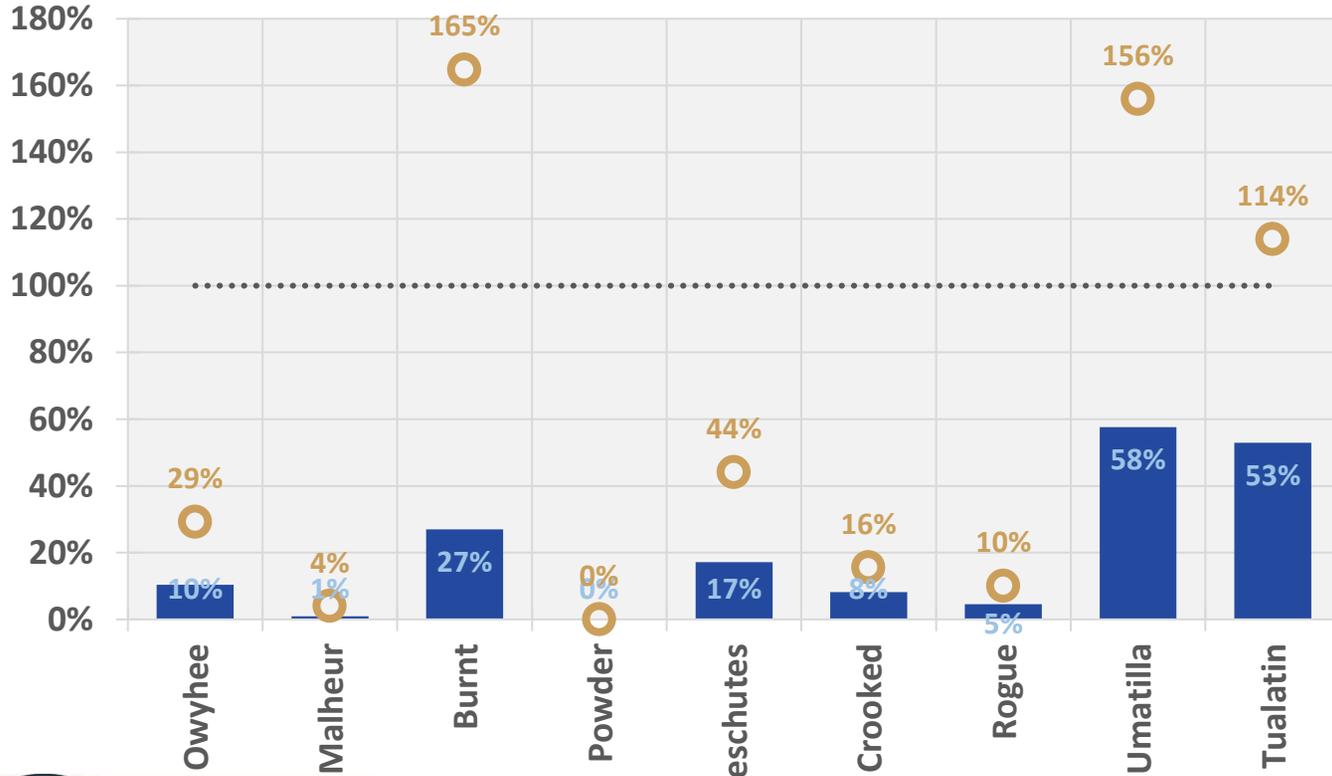
STREAMFLOW

7-DAY





## September 18 Reservoir Storage



BUREAU OF RECLAMATION

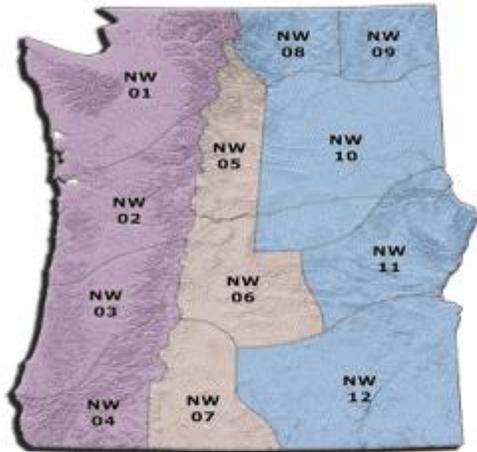
■ Percent Full

● Percent of Average

## Pacific Northwest 7 Day Significant Fire Potential



Sunday, 9/18/2022



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

**Fire Weather:** Showers and wet thundershowers are likely over sections of Oregon and southern Washington today through Wednesday as a strong low-pressure system coils up off California. Temperatures below normal for Oregon but warming to normal or slightly above normal as Washington dries out. Some gusty north winds are possible in central Washington on Tuesday. Warmer and drier conditions could return towards the end of the week.

Check your NWS forecasts for the latest details in your area.

**Fire Potential:** Fire danger continues to decline across Oregon due to the cloudier, wetter weather. Fire danger indices are rising over Washington where drier conditions are coming. Without strong winds or concentrated lightning, the risk of significant fires appears low through the weekend and next week.

#### 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.