Oregon Water Conditions Report

September 6th, 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.

There have been no new changes to the US Drought Monitor over recent weeks due to little change in terms of streamflow and soil moisture.

August precipitation was variable throughout Oregon, although much of the state received well below average precipitation. Precipitation in parts of southeastern Oregon ranged from average to well above average, with some areas receiving about an inch.

August temperatures were well above the long-term average statewide, particularly so in central and eastern Oregon. Temperatures ranged from 3 °F to greater than 6 °F above average. Much of central and eastern Oregon recorded the warmest August on record.

Soil moisture profiles continue to measure below to well below average throughout much of the state. Parts of northwest and southwest Oregon are measuring above average soil moisture.

The three-month climate outlook for September through November indicates probabilities favoring near average precipitation and above average temperatures statewide. The 8-14-day outlook favors above average precipitation and below average temperatures throughout the state.

Streamflows throughout August were variable across Oregon. While many counties measured average to above average streamflow, many streams in eastern Oregon measured below to well below average. See below for more information.

Reservoir storage outside of the Willamette and Umatilla basins (USACE) is measuring well below average in USBR systems (including Klamath). Storage releases for demands have ceased in some systems and are projected to end soon in others. Many reservoirs are projected to begin next water year with little to no carryover.

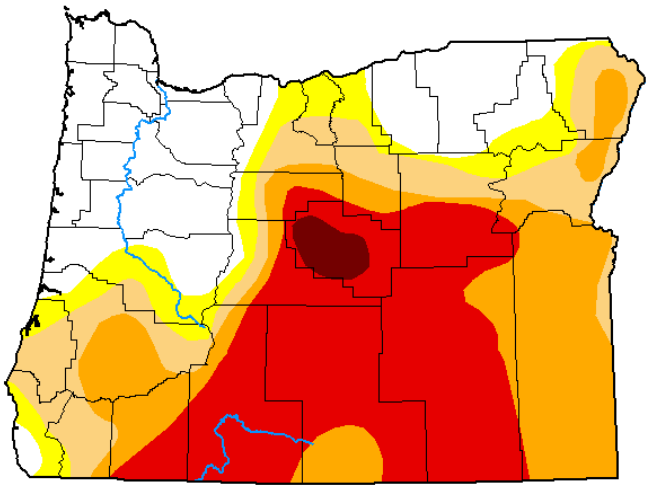
Significant wildfire potential in September ranges from normal to above normal throughout Oregon and the Pacific Northwest. Potential is above average in much of central Oregon, as well as the southwester portion of the state.

DROUGHT CONDITIONS

Over 65% of Oregon is classified as experiencing moderate (D1) to exceptional (D4) drought, according to the US Drought Monitor, which reflects no change in coverage or severity over recent weeks.

U.S. Drought Monitor

Oregon



August 30, 2022

(Released Thursday, Sep. 1, 2022)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	24.93	75.07	65.71	52.22	30.73	1.40
Last Week *08-23-2022*	25.02	74.98	65.52	52.22	30.73	1.40
3 Months Ago *05-31-2022*	18.70	81.30	73.06	63.39	47.22	11.81
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 *08-31-2021*	0.00	100.00	100.00	99.07	76.69	26.59

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

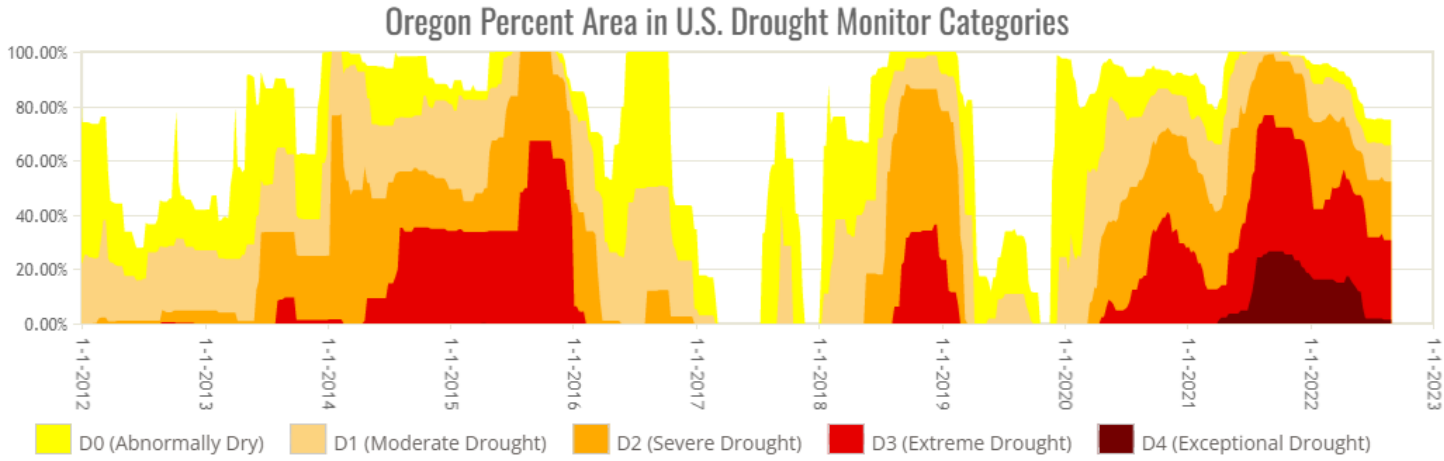
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

Author:

Deborah Bathke

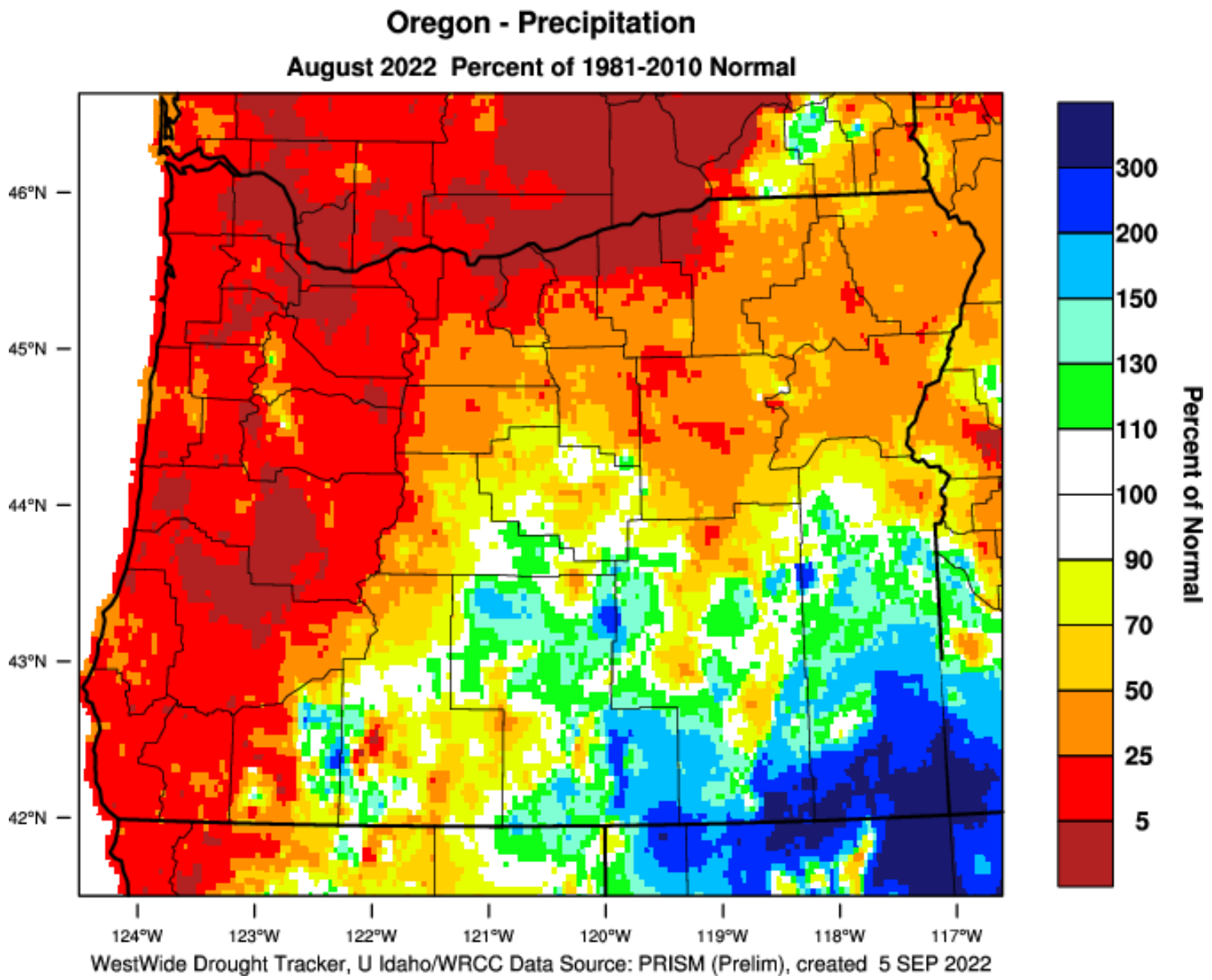
National Drought Mitigation Center

droughtmonitor.unl.edu

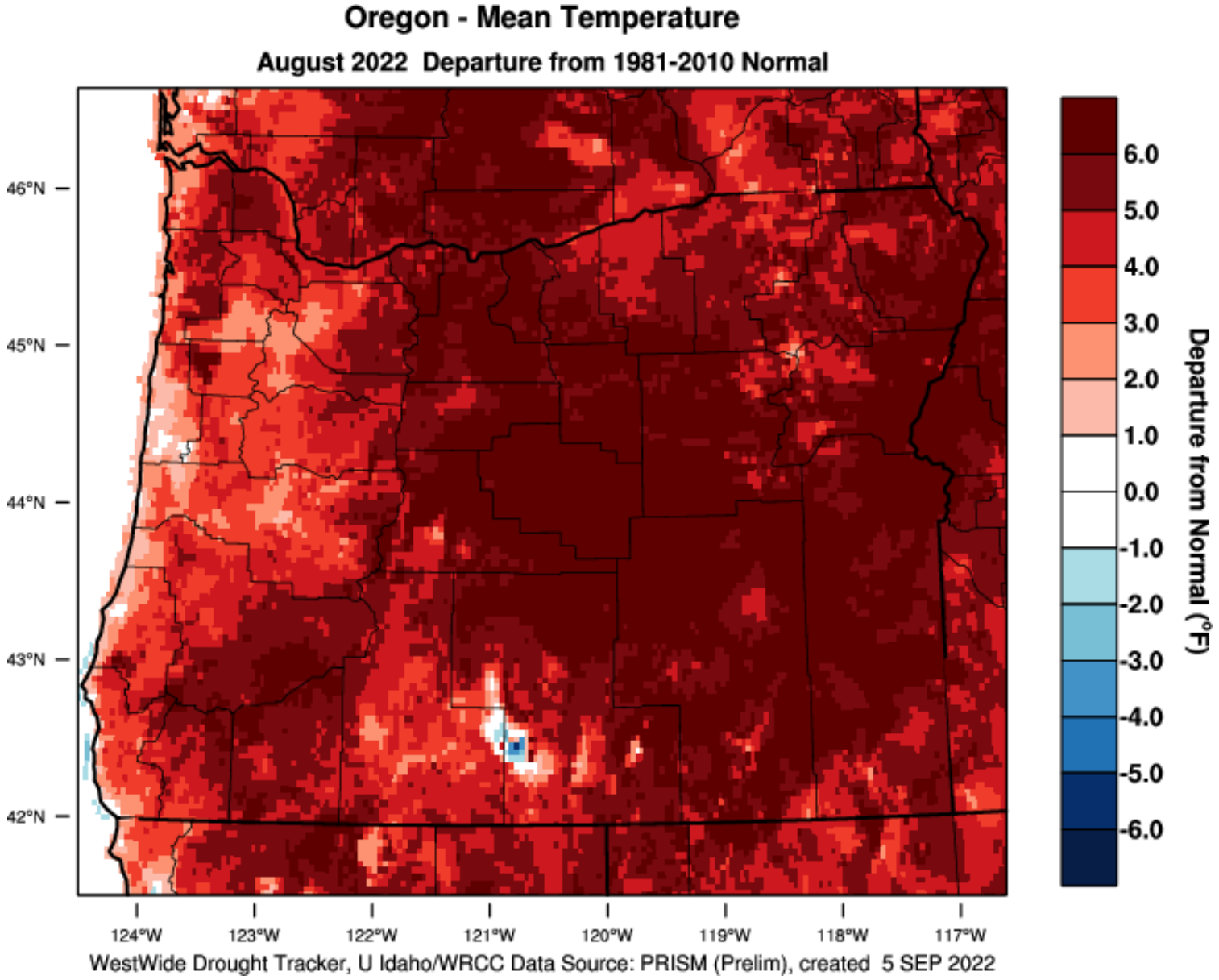


CLIMATE CONDITIONS

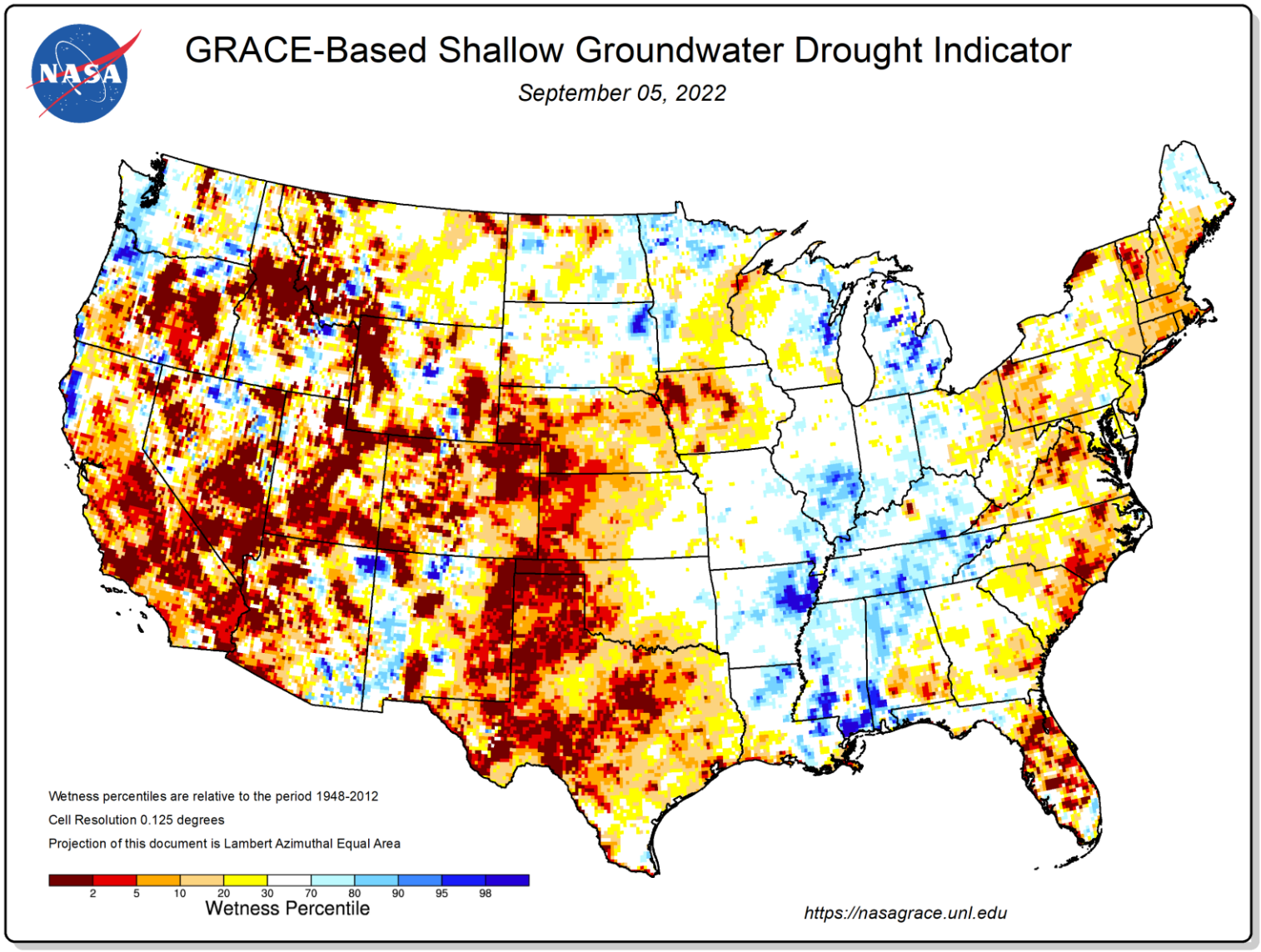
PRECIPITATION



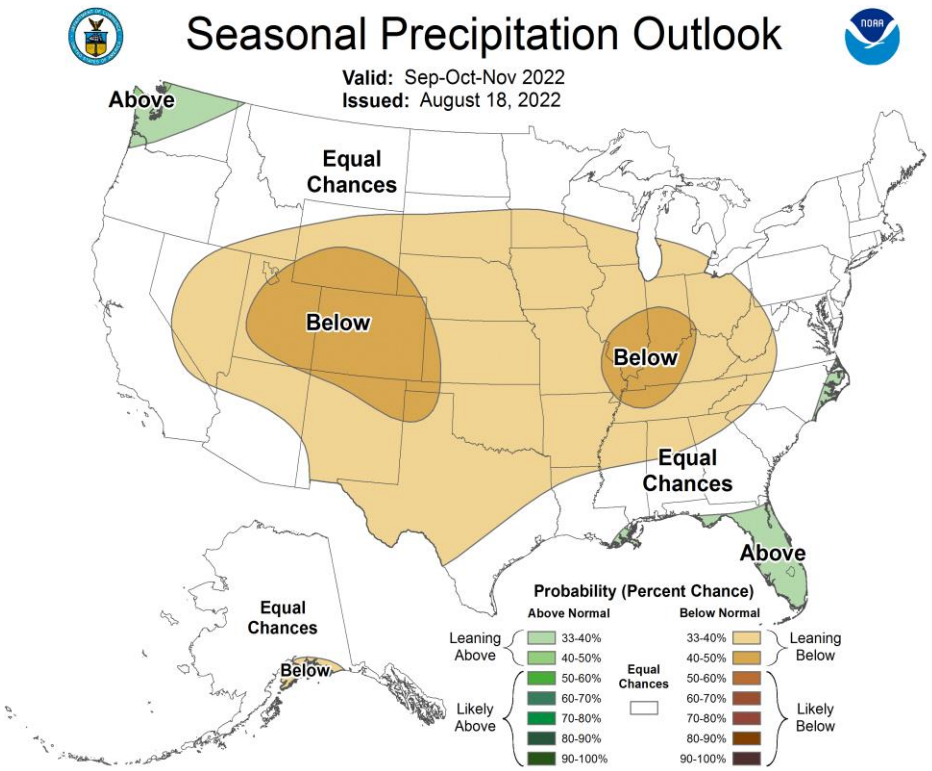
TEMPERATURE

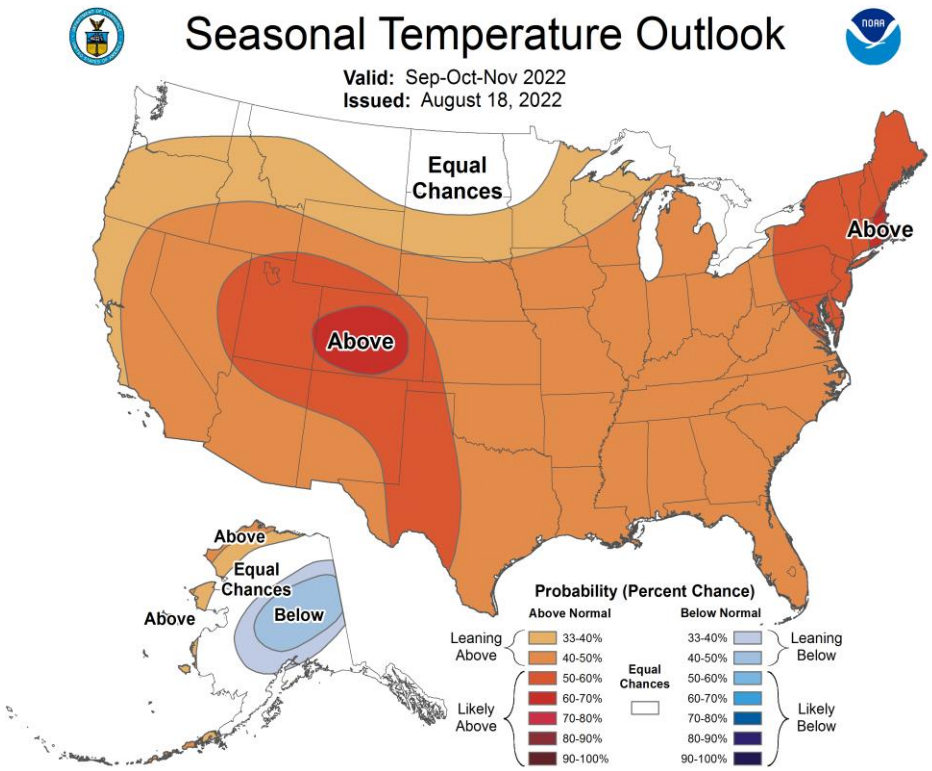


SOIL MOISTURE

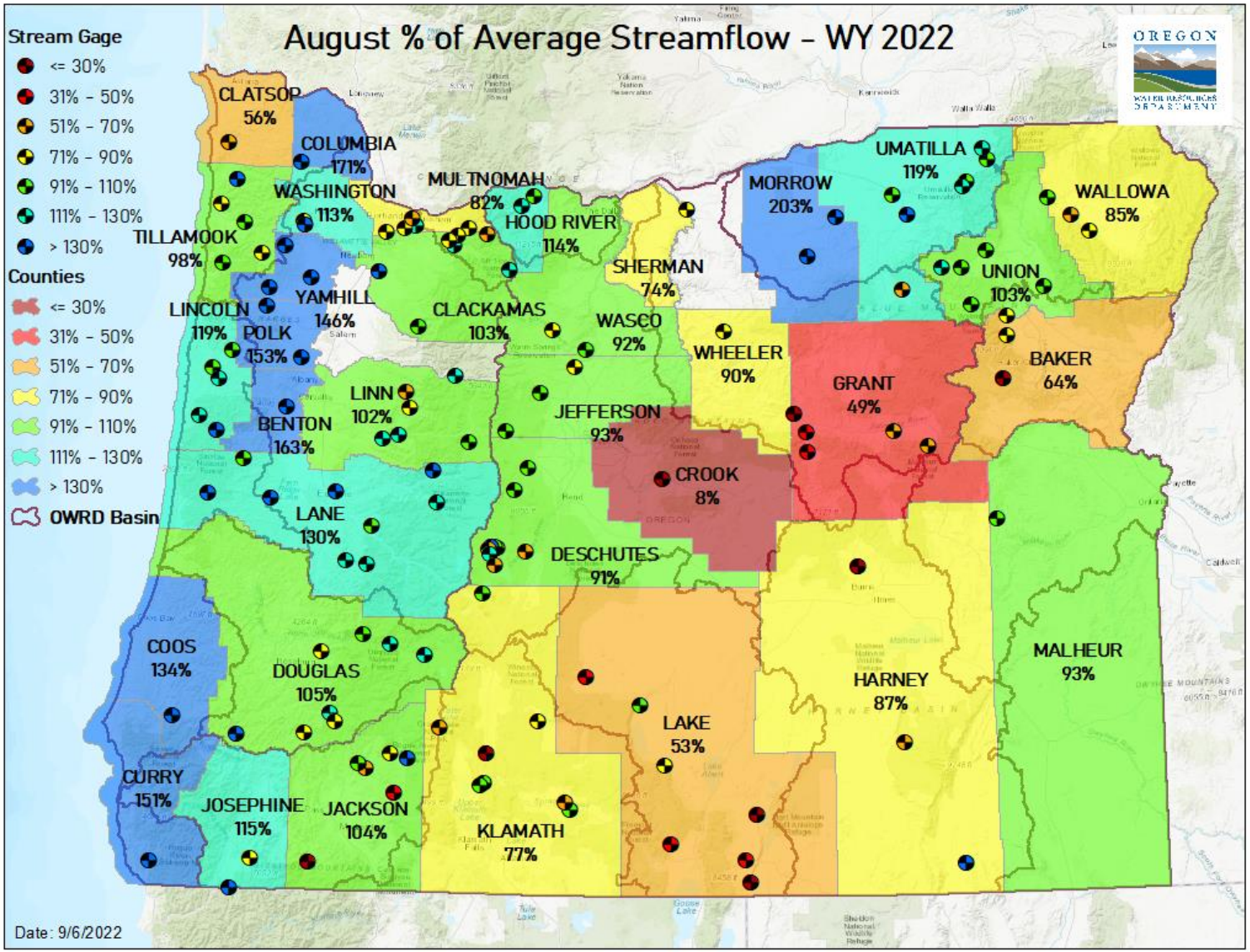


CLIMATE OUTLOOK

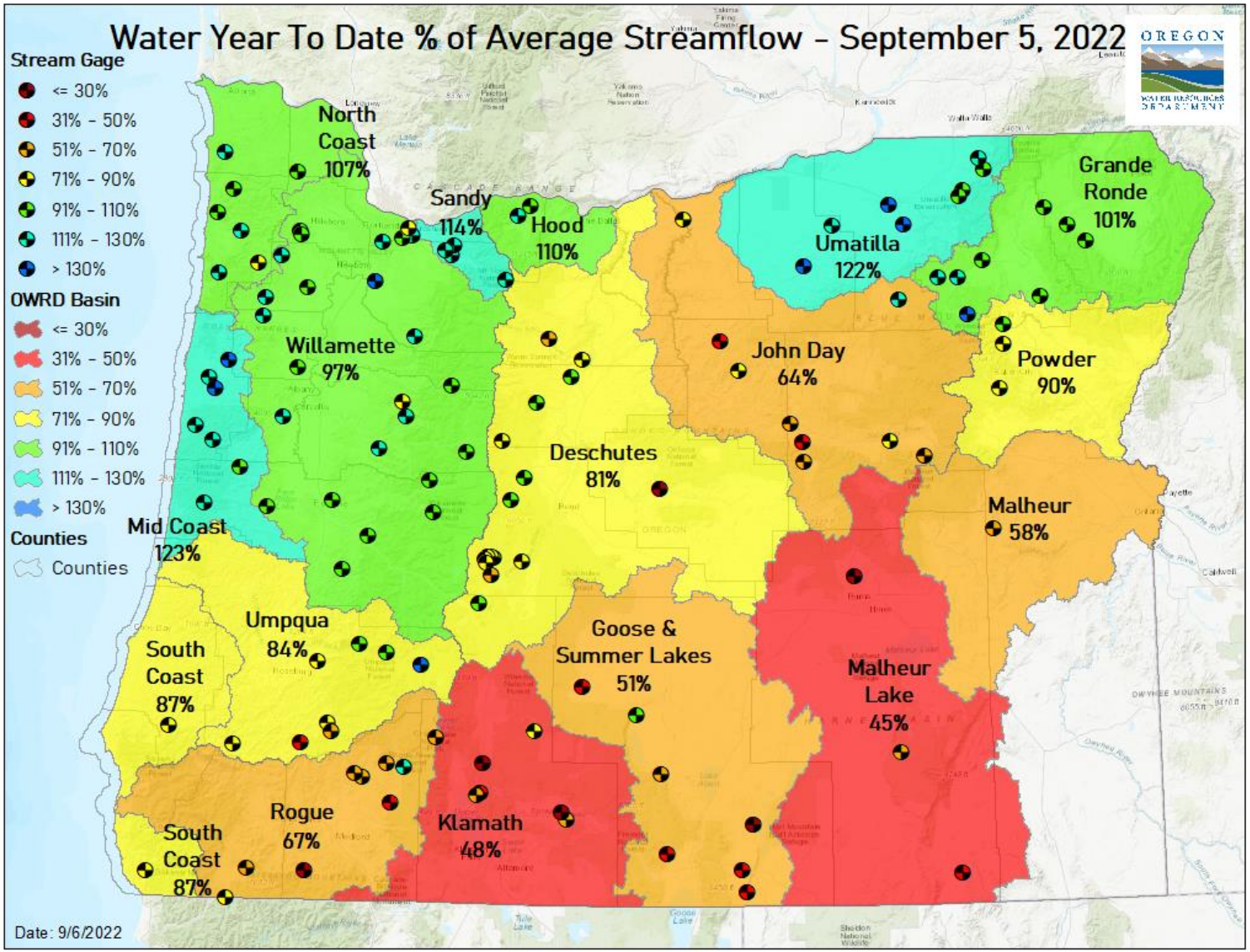




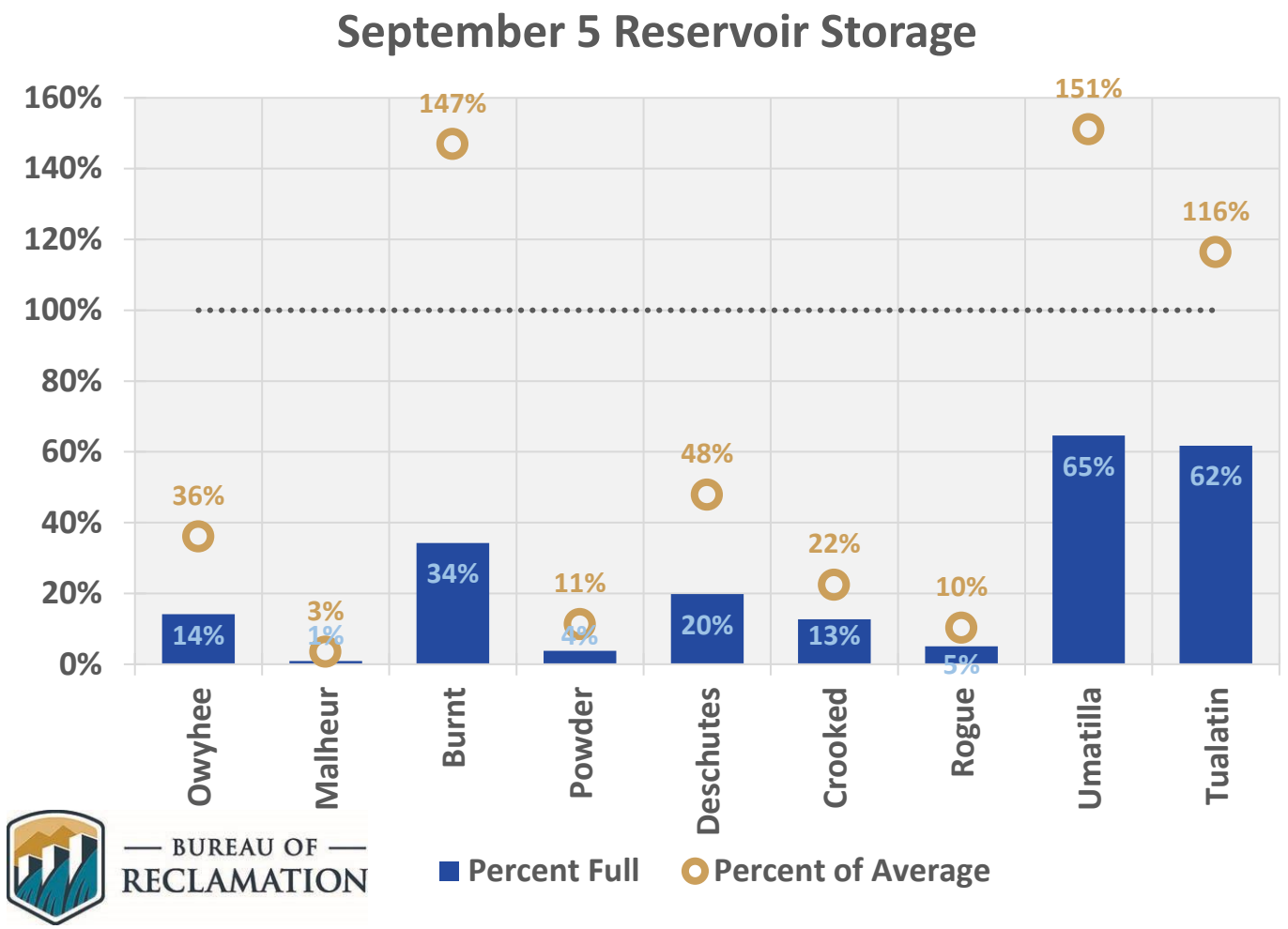
STREAMFLOW
AUGUST



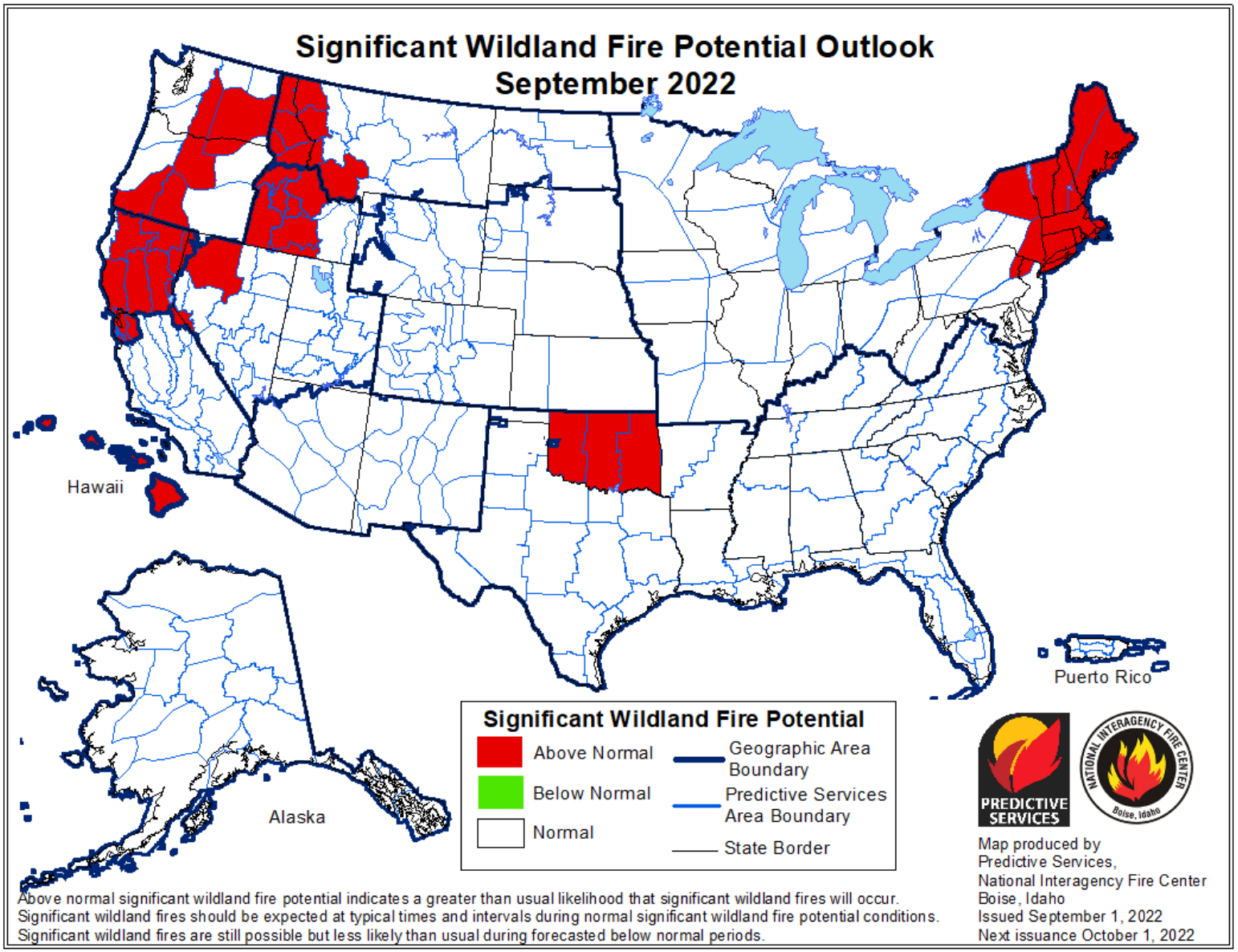
WATER YEAR TO DATE



STORAGE


September 5 Reservoir Storage
160%
140%
120%
100%
80%
60%
40%
20%
0%
36%
14%
3%
1%
147%
34%
11%
4%
48%
20%
22%
13%
10%
5%
151%
65%
116%
62%
Owyhee
Malheur
Burnt
Powder
Deschutes
Crooked
Rogue
Umatilla
Tualatin
BUREAU OF RECLAMATION
Percent Full
Percent of Average

WILDFIRE


Significant Wildland Fire Potential Outlook
September 2022
Hawaii
Alaska
Puerto Rico
Significant Wildland Fire Potential
Above Normal
Below Normal
Normal
Geographic Area Boundary
Predictive Services Area Boundary
State Border
PREDICTIVE SERVICES
NATIONAL INTERAGENCY FIRE CENTER
Boise, Idaho
Above normal significant wildland fire potential indicates a greater than usual likelihood that significant wildland fires will occur.
Significant wildland fires should be expected at typical times and intervals during normal significant wildland fire potential conditions.
Significant wildland fires are still possible but less likely than usual during forecasted below normal periods.
Map produced by
Predictive Services,
National Interagency Fire Center
Boise, Idaho
Issued September 1, 2022
Next issuance October 1, 2022

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.