Oregon Water Conditions Report

May 15th, 2023

HIGHLIGHTS

Six Oregon counties have received Executive Orders issuing state drought declarations under ORS 536. Requests for state drought declarations from Sherman and Lake Counties have been forwarded to the Governor's Office.

The most recent update to the US Drought Monitor reflects a near 5% reduction in drought-covered area. Changes were largely focused on central and southeastern Oregon, with reductions in extreme drought centered over Crook County and severe drought over parts of Grant, Klamath, Lake, and Harney Counties.

While snowmelt continues to occur across the state, snow water equivalent at NRCS SNOTEL sites is still measuring well above the long-term median in most basins. The John Day and Malheur Basins are approaching complete meltout.

Precipitation over the past two weeks was variable across the state. Much of central Oregon benefitted from well above average precipitation, ranging between 0 and 2 inches above average. Much of western Oregon received below average precipitation.

Temperatures over the past two weeks varied between northern and southern Oregon. The southern third of the state was a bit cooler than usual, while the rest of the state was slightly warmer than average.

Soil moisture profiles continue to show improvements following snowmelt. The surface soil moisture indicator is showing near to wetter than normal conditions across much of the state, with some pockets of dry conditions scattered about. Shallow groundwater moisture profiles continue to lag behind.

The near-term climate outlook indicates probabilities favoring warm, dry weather over the next 8 to 14 days.

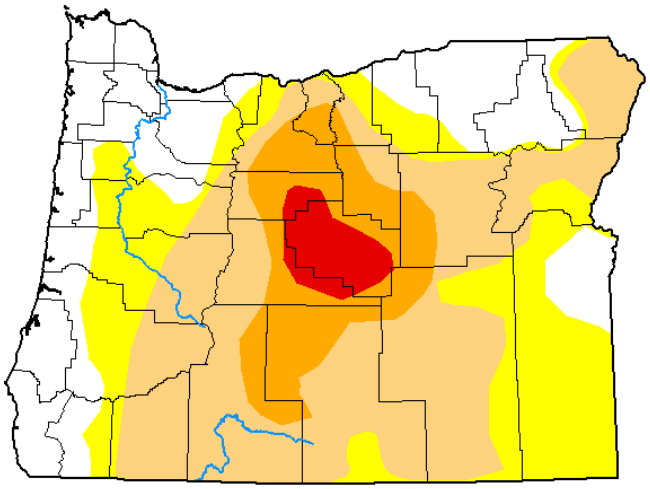
Water year to date streamflow continues to lag behind outside of southeastern Oregon, where flows are measuring above average (min = Rogue @ 71%; max = Malheur Lake @ 142%). More recently, flows over the past seven days have varied somewhat across the state, though most reflect near to well above average conditions.

Reservoir storage is measuring near to above average in many USBR (see Klamath) and USACE systems across the state, reflecting dramatic fill throughout April and May. Irrigation seasons have been slow to start due to snowmelt and cold temperatures.

DROUGHT CONDITIONS

U.S. Drought Monitor

Oregon



May 9, 2023

(Released Thursday, May. 11, 2023)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	24.77	75.23	51.86	14.85	3.24	0.00
Last Week *05-02-2023*	23.62	76.38	56.30	22.29	5.78	0.00
3 Months Ago *02-07-2023*	12.87	87.13	70.46	38.84	14.61	1.40
Start of Calendar Year *01-03-2023*	13.46	86.54	59.75	46.03	26.18	1.40
Start of Water Year *09-27-2022*	0.42	99.58	68.05	52.42	30.73	1.40
One Year Ago *05-10-2022*	12.83	87.17	79.35	65.63	48.13	14.43

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

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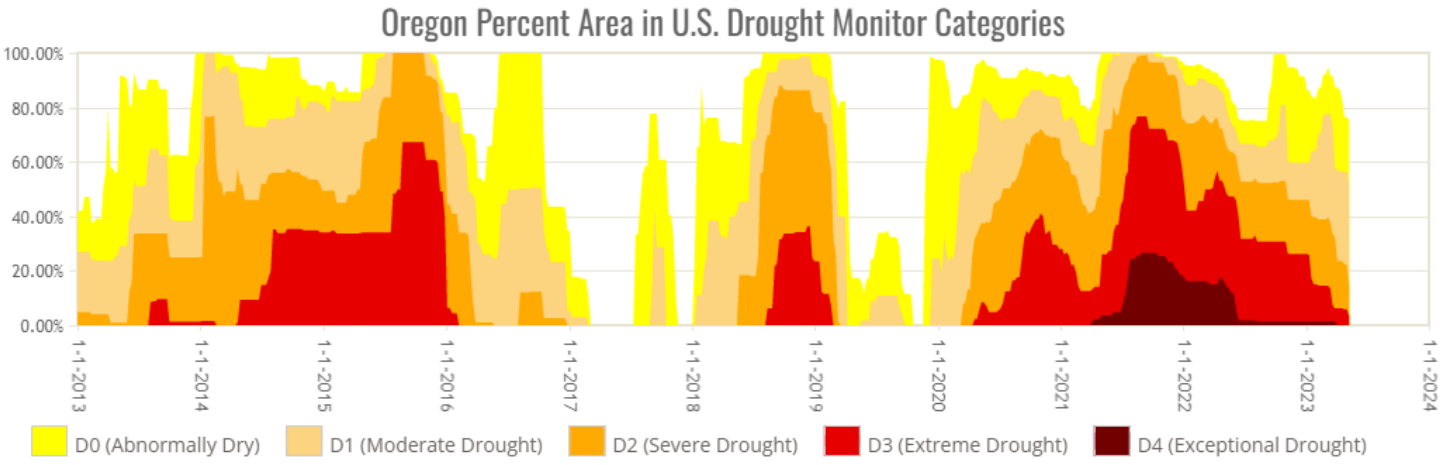
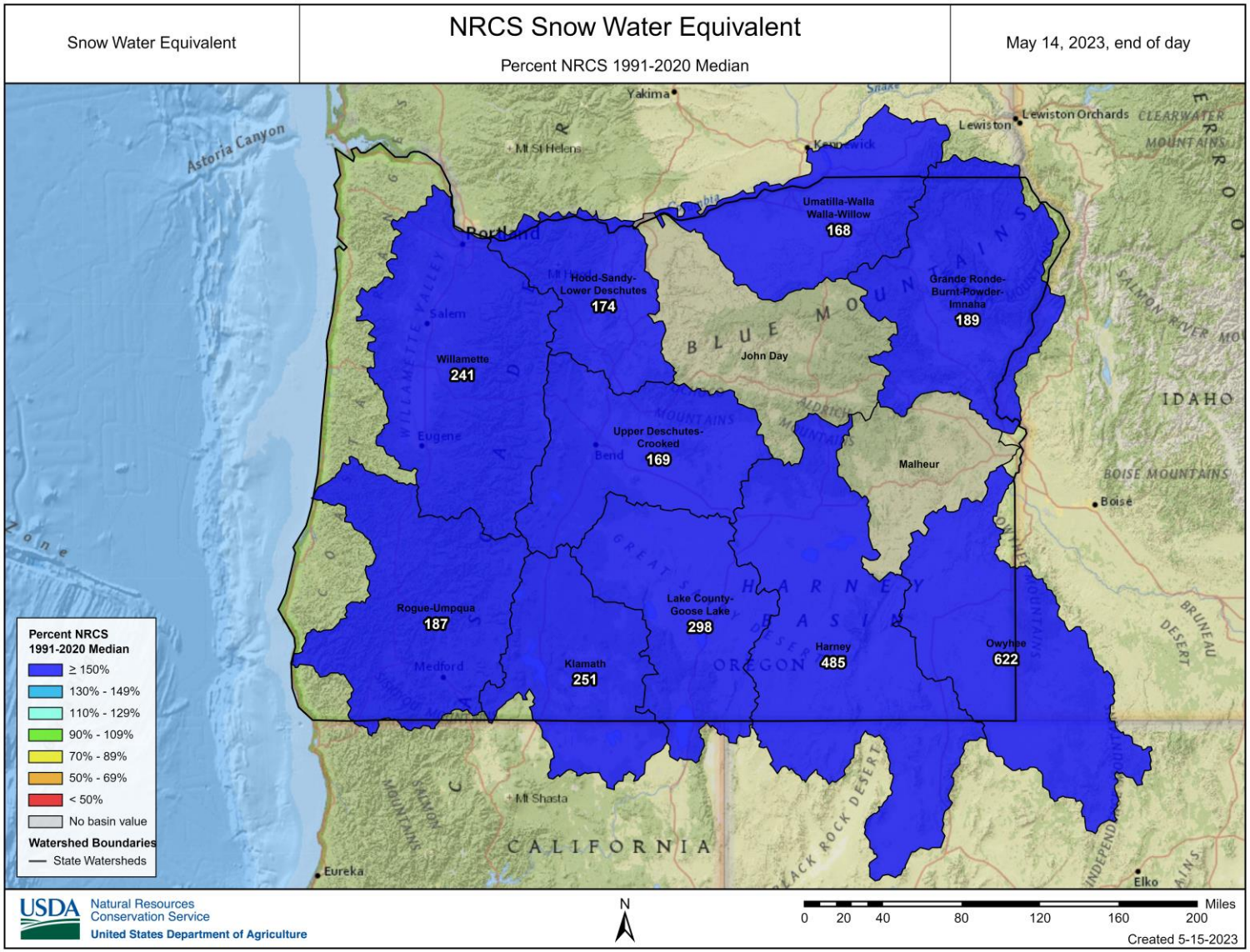
CPC/NOAA

droughtmonitor.unl.edu

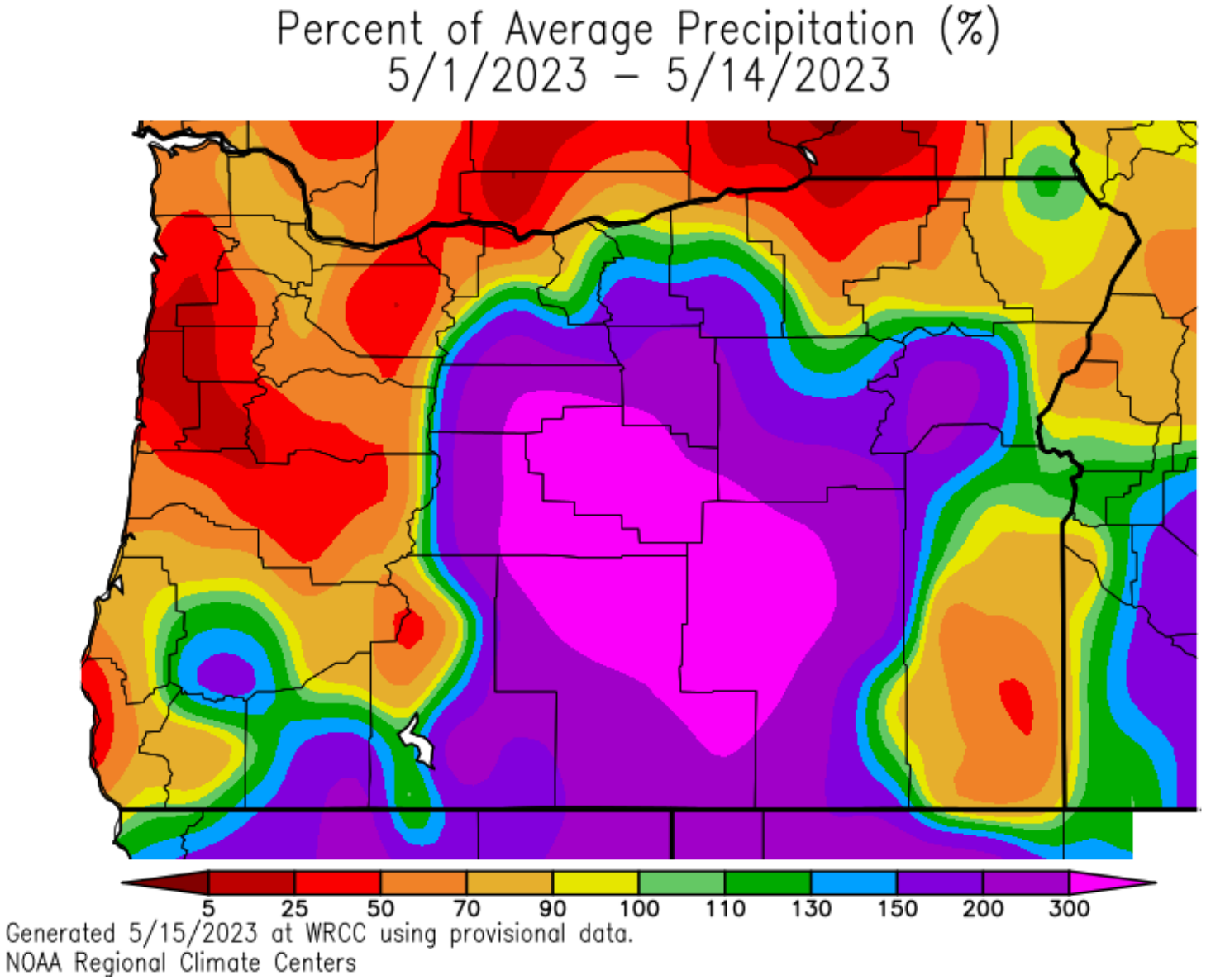


CLIMATE CONDITIONS

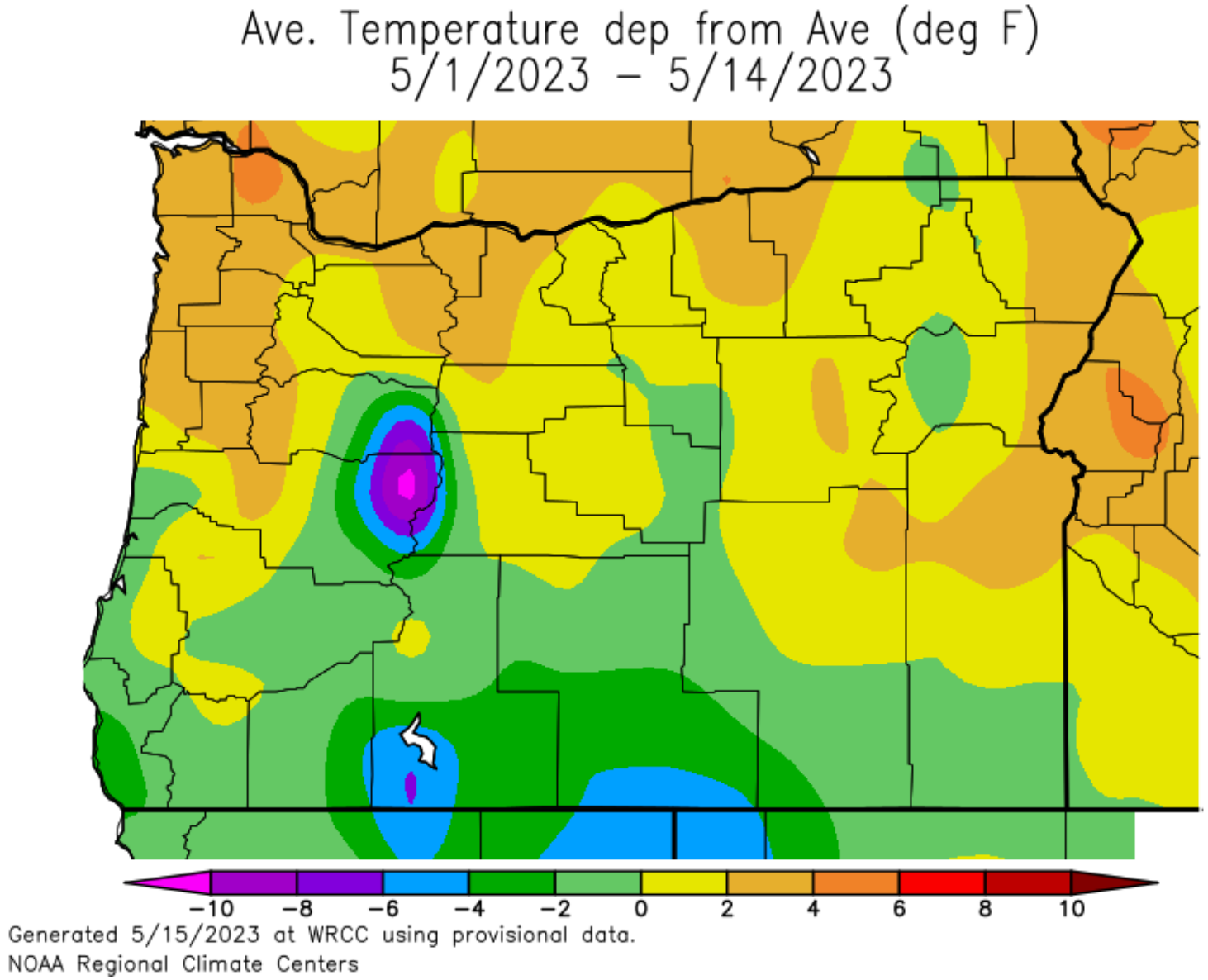
SNOW WATER EQUIVALENT



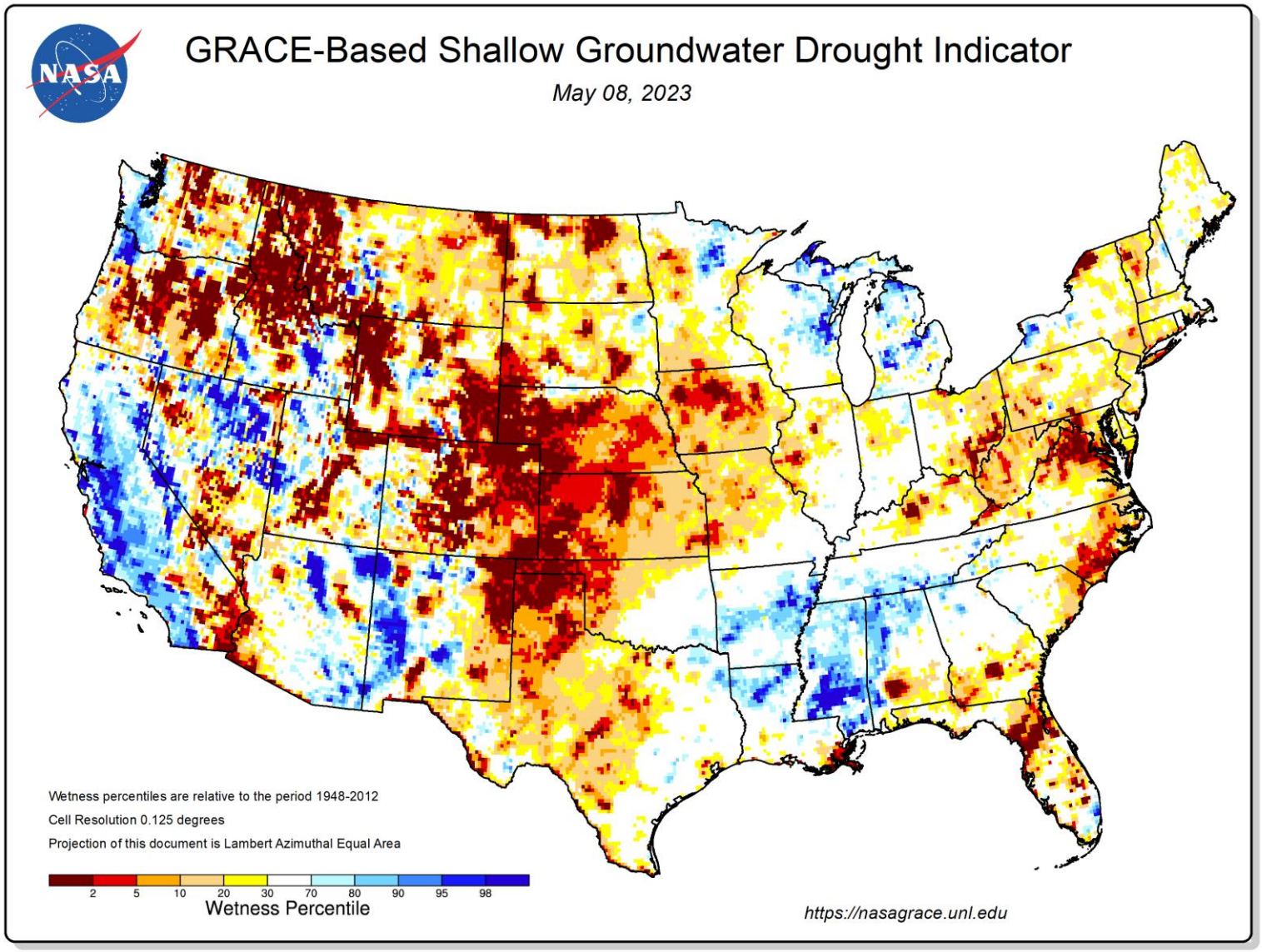
PRECIPITATION



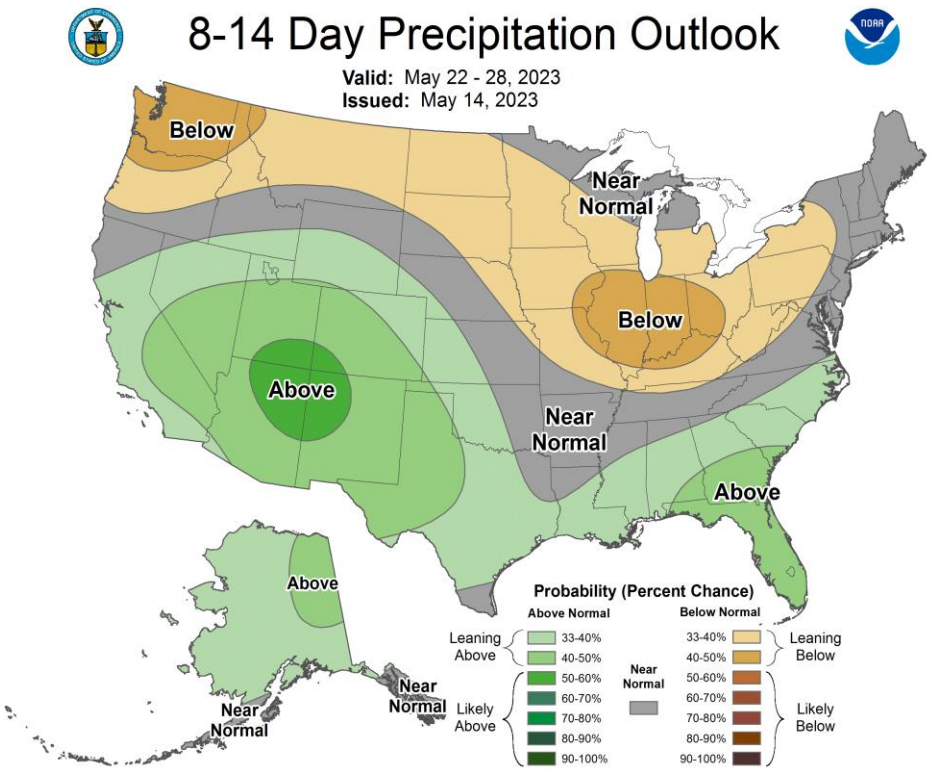
TEMPERATURE

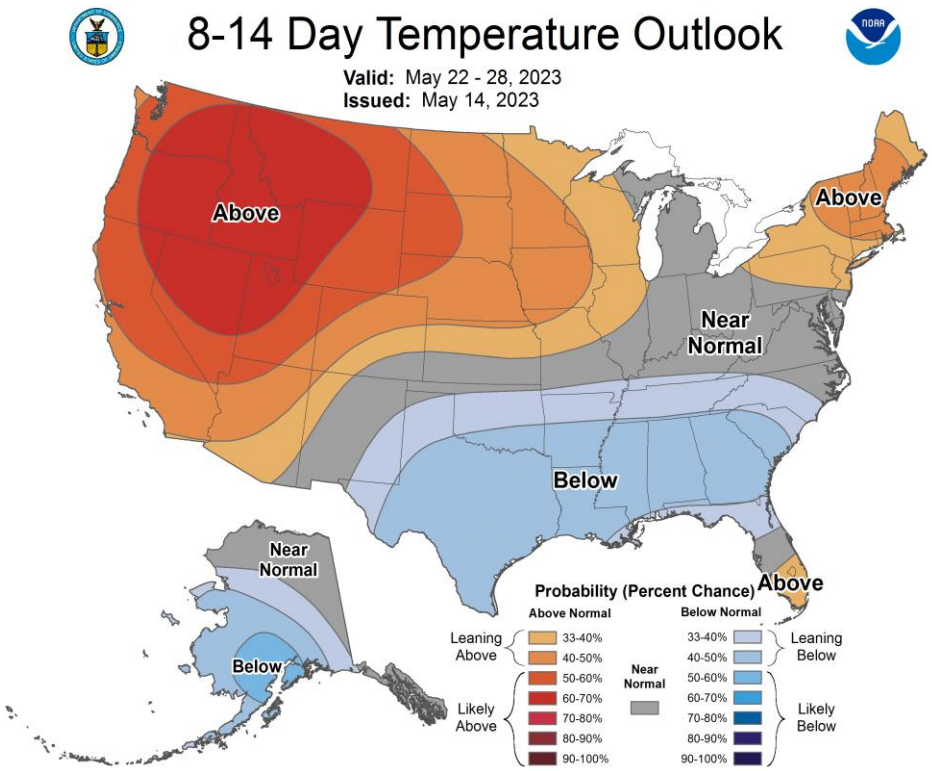


SOIL MOISTURE



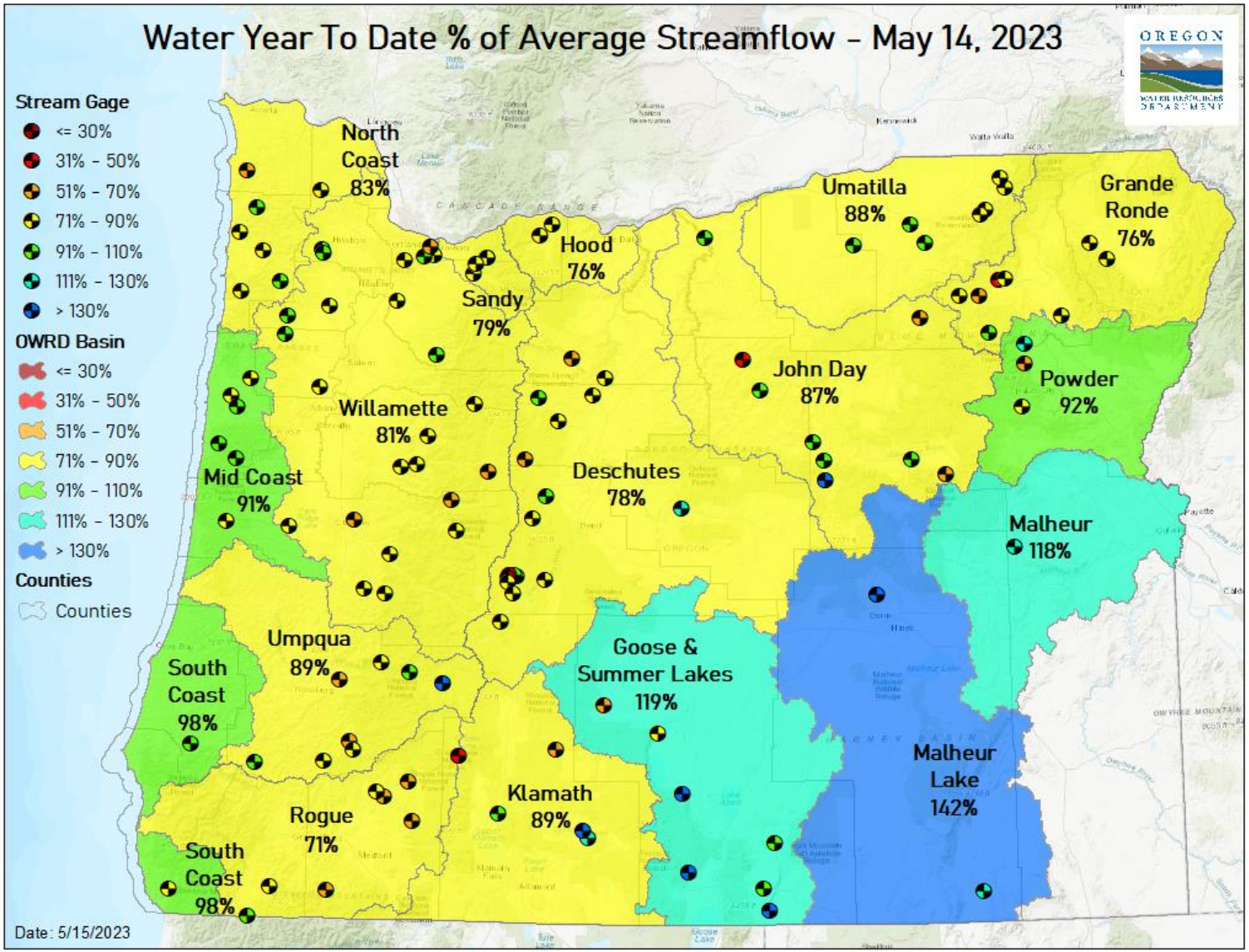
CLIMATE OUTLOOK



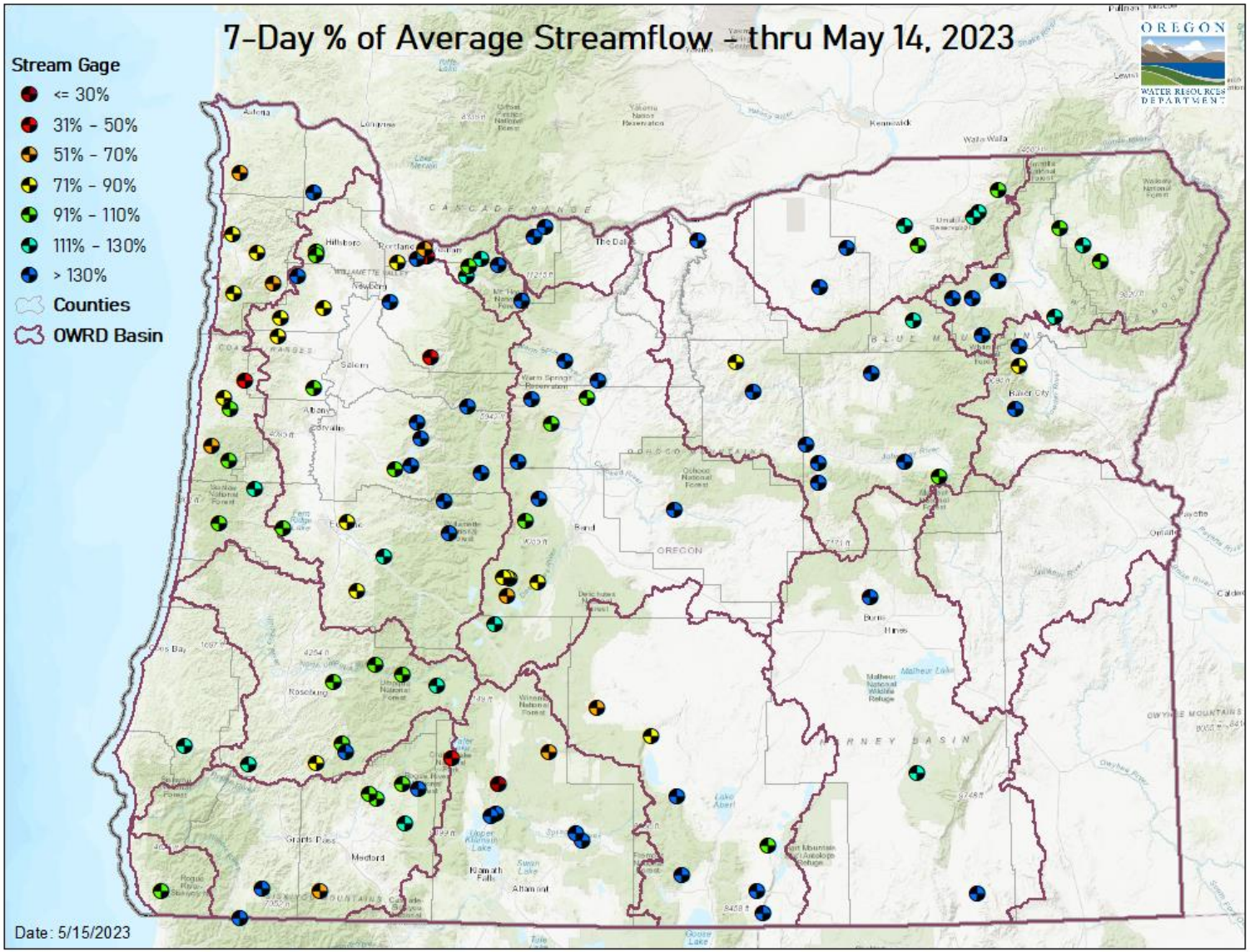


STREAMFLOW

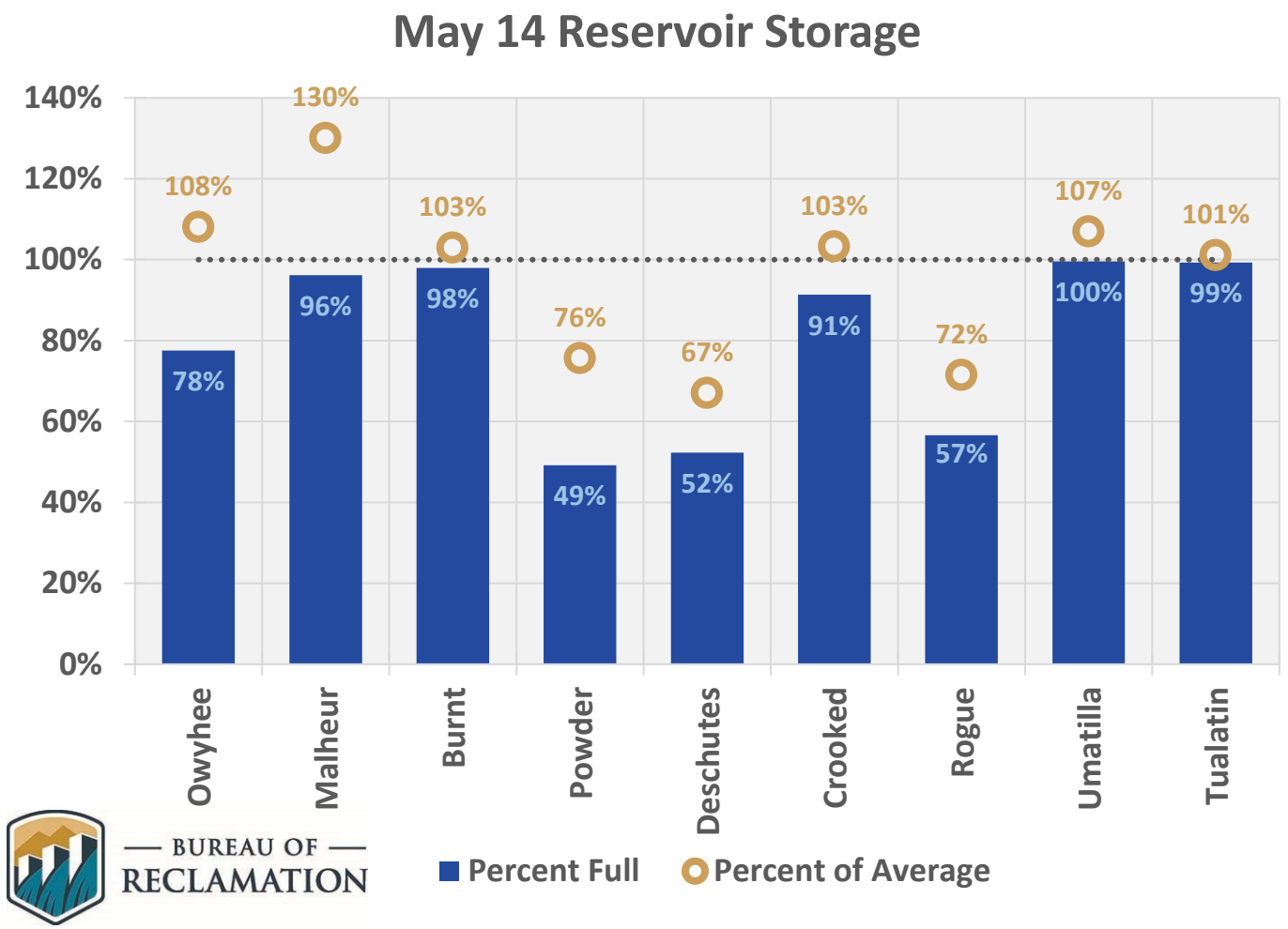
WATER YEAR TO DATE



7-DAY


7-Day % of Average Streamflow – thru May 14, 2023
OREGON
WATER RESOURCES DEPARTMENT
Stream Gage
<= 30%
31% - 50%
51% - 70%
71% - 90%
91% - 110%
111% - 130%
> 130%
Counties
OWRD Basin
Date: 5/15/2023

STORAGE


May 14 Reservoir Storage
140%
120%
100%
80%
60%
40%
20%
0%
108%
130%
103%
76%
67%
103%
107%
101%
78%
96%
98%
49%
52%
91%
72%
57%
100%
99%
Owyhee
Malheur
Burnt
Powder
Deschutes
Crooked
Rogue
Umatilla
Tualatin
BUREAU OF RECLAMATION
Percent Full
Percent of Average

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.