Oregon Water Conditions Report

March 6th, 2023

OREGON WATER RESOURCES DEPARTMENT

HIGHLIGHTS

Thus far in 2023, two Oregon counties have received Executive Orders issuing state drought declarations under ORS 536. In addition, Grant and Deschutes Counties have also requested state drought declarations.

The US Drought Monitor indicates over 77% of Oregon is experiencing moderate (D1) to exceptional (D4) drought conditions. Changes over recent weeks include expansion of moderate drought around the mid coast region, as well as the addition of abnormally dry conditions in the northwest.

Snow water equivalent at NRCS SNOTEL sites is measuring near to above average in all basins throughout the state (min = Malheur @ 97%; max = Harney @ 131%). Most basins have benefitted from recent events and continue to trend slightly upwards.

February precipitation measured below to well below average throughout the state. Much of the area east of the Cascades received less than 50% of the typical rainfall. This continues a trend of well below average water year precipitation statewide.

Most of Oregon was cooler than average in February, although temperatures along the Cascades were closer to average.

Shallow groundwater and other soil moisture profiles continue to trend well below average and are near historical dryness in large areas due to significant precipitation deficits recently and over the long term.

The three-month seasonal climate outlook for March through May indicates probabilities favoring near average precipitation and temperatures throughout most of the state. The northern third of Oregon has slightly elevated chances of below average temperatures.

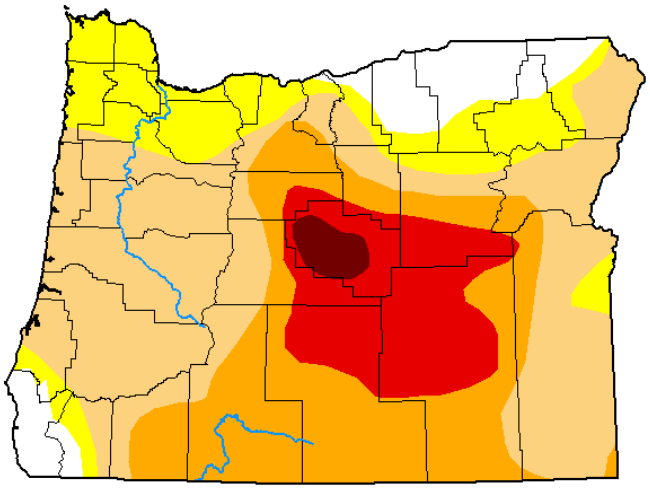
Streamflows throughout February were well below average statewide, continuing the trend of well below average flows over the water year to date. Recent 7-day streamflows are also below to well below average, with some exception in western Oregon along the coast. See below for more information.

Reservoir storage continues to measure below to well below average in most USBR (including Klamath) projects. See information for US Army Corps of Engineers projects here.

DROUGHT CONDITIONS

U.S. Drought Monitor

Oregon



February 28, 2023

(Released Thursday, Mar. 2, 2023)

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	7.93	92.07	77.18	38.84	14.48	1.40
Last Week *02-21-2023*	7.93	92.07	77.18	38.84	14.48	1.40
3 Months Ago *11-29-2022*	5.38	94.62	59.76	46.04	26.18	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 *03-01-2022*	4.97	95.03	90.65	77.27	45.61	16.22

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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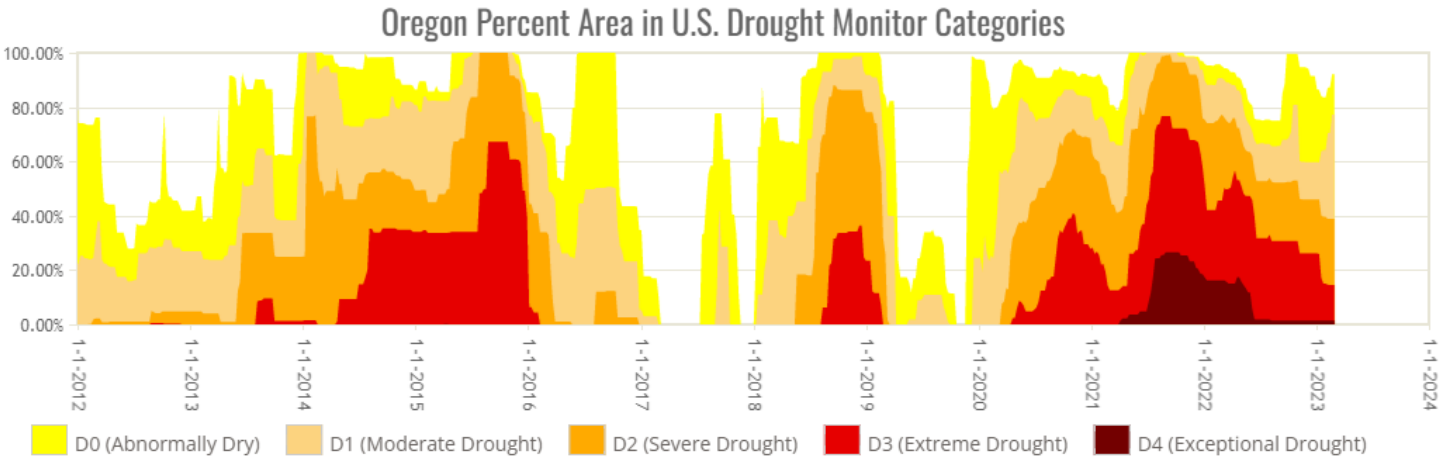
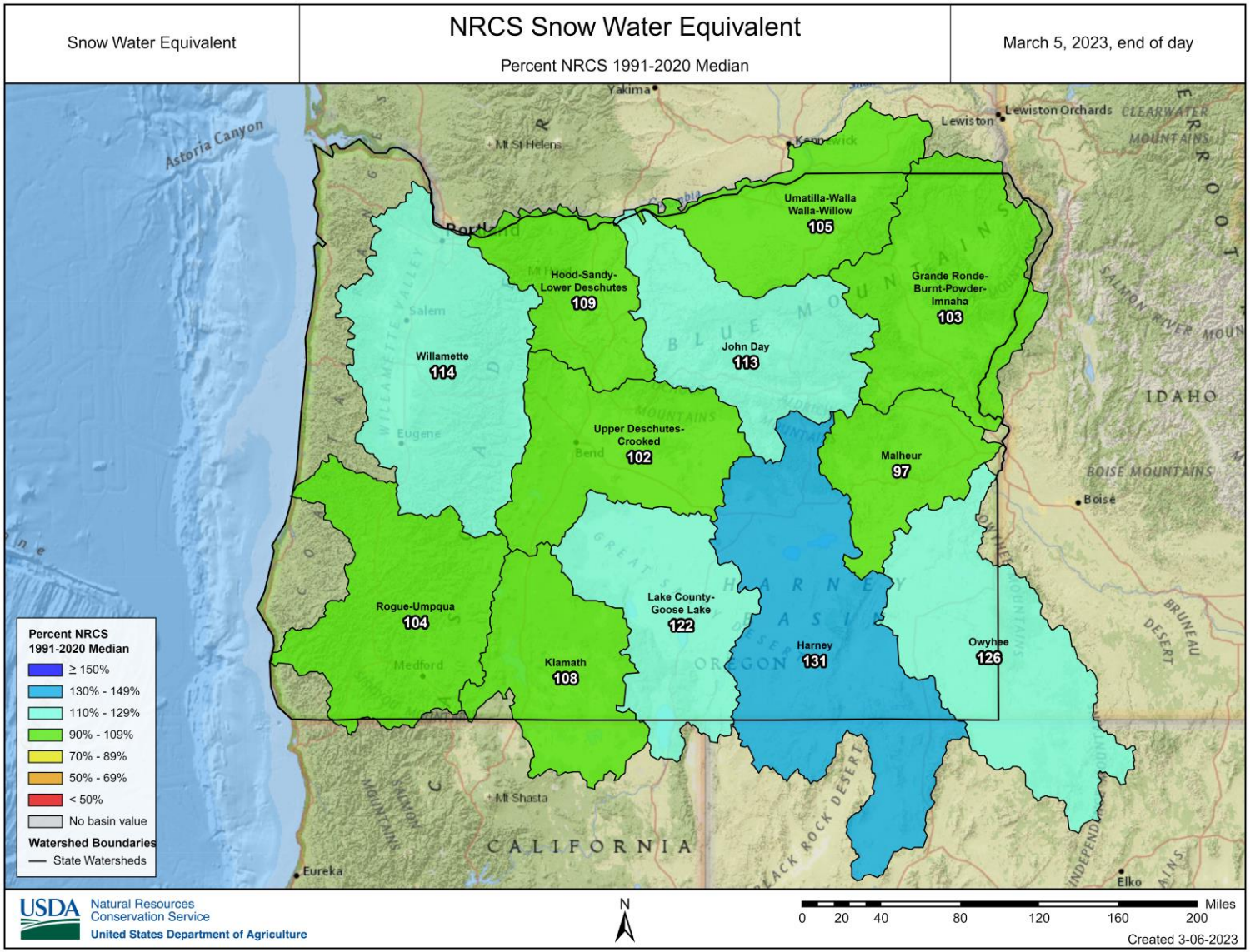
droughtmonitor.unl.edu

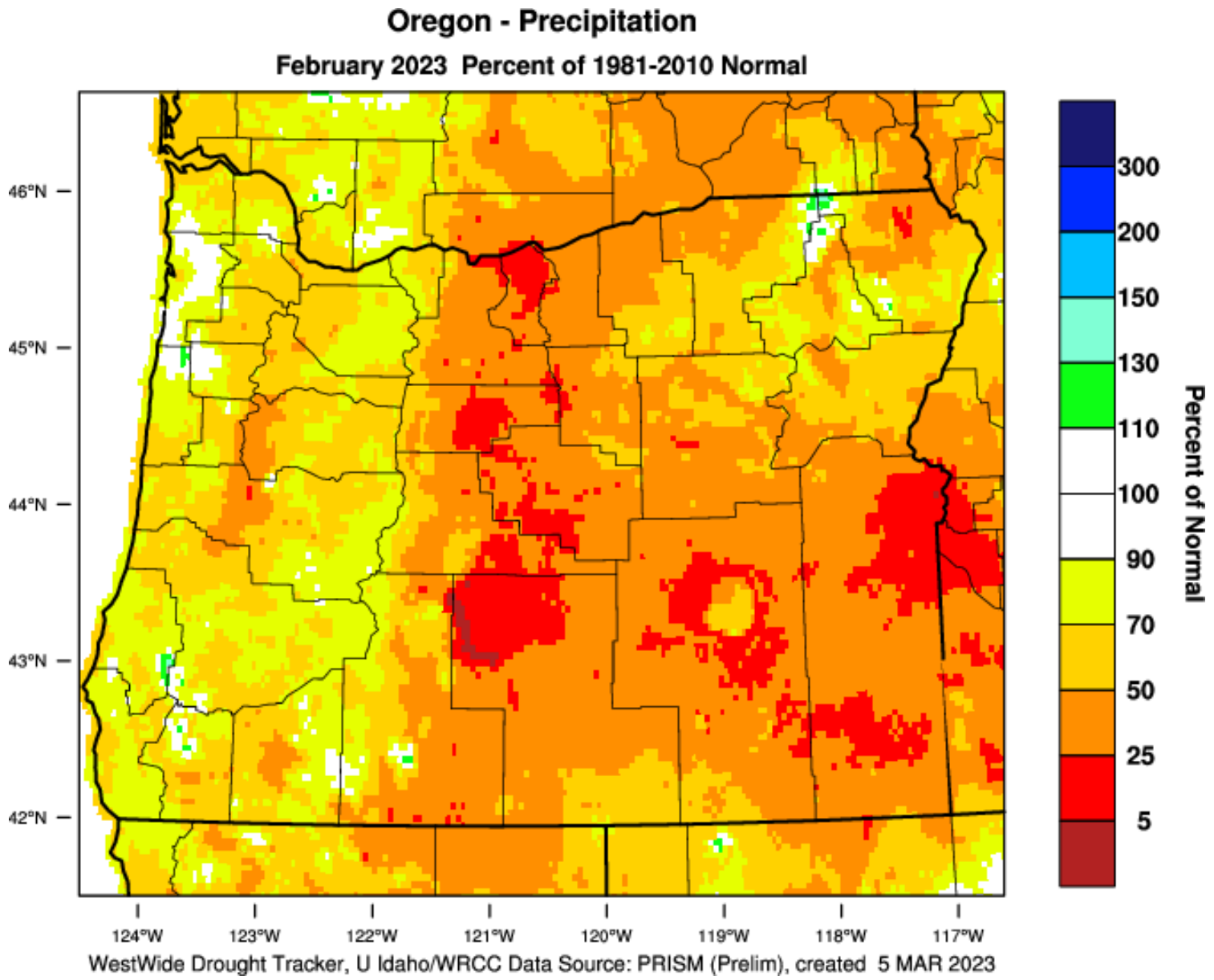


CLIMATE CONDITIONS

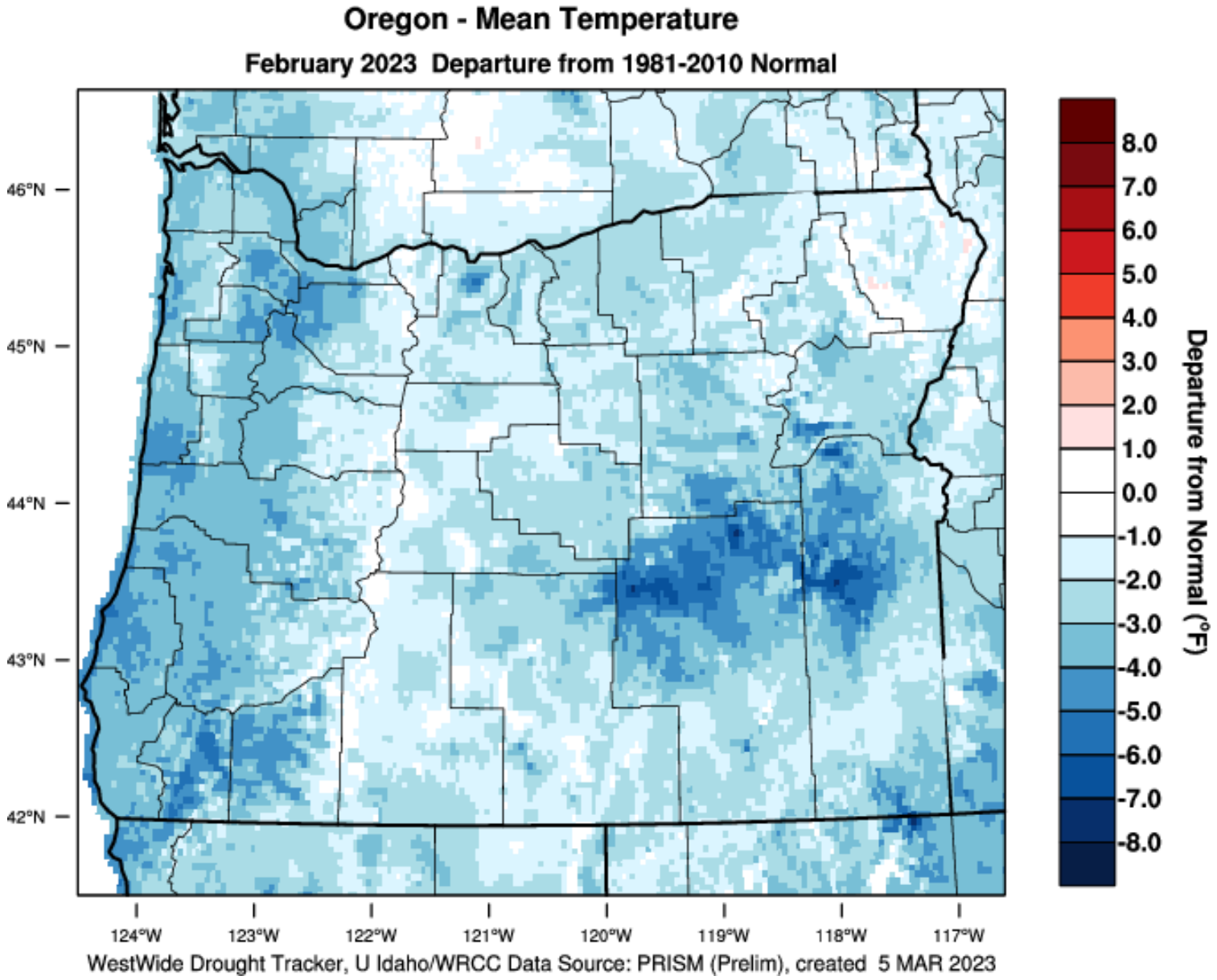
SNOW WATER EQUIVALENT



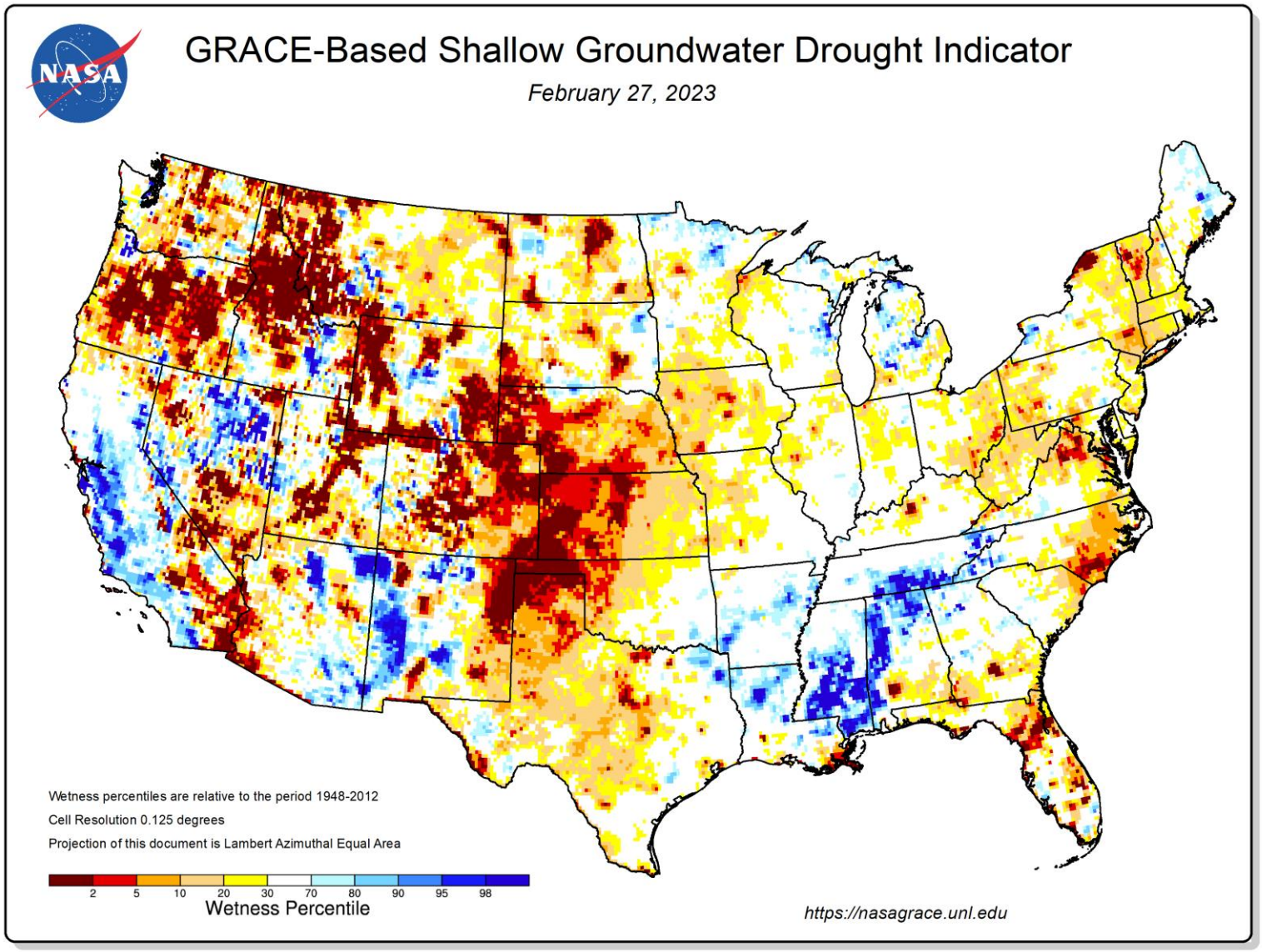
PRECIPITATION



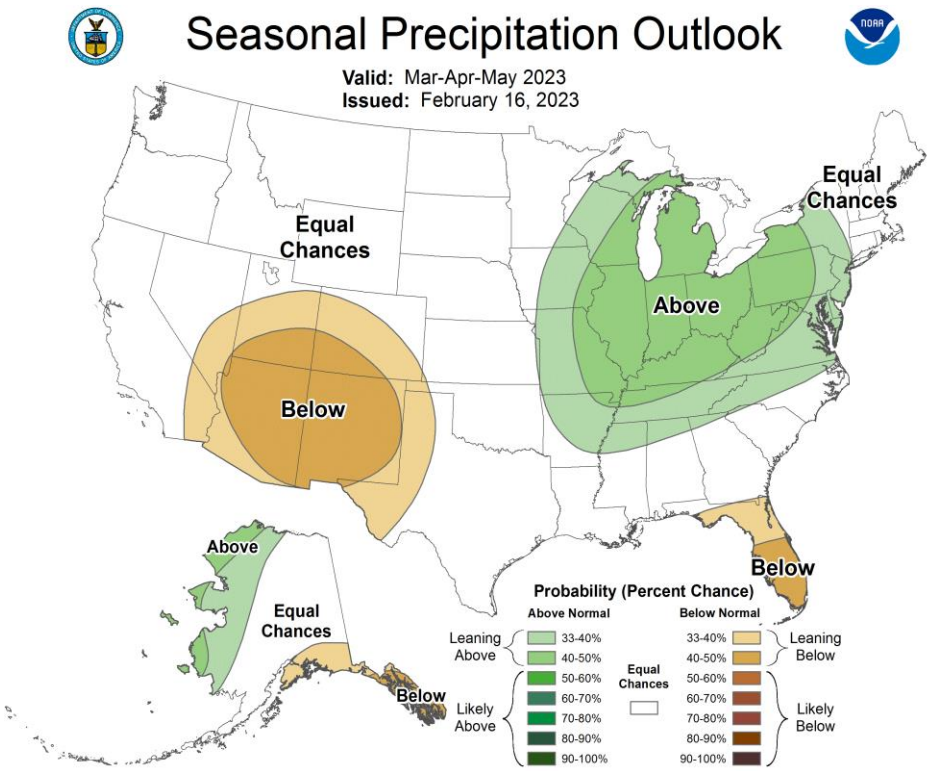
TEMPERATURE

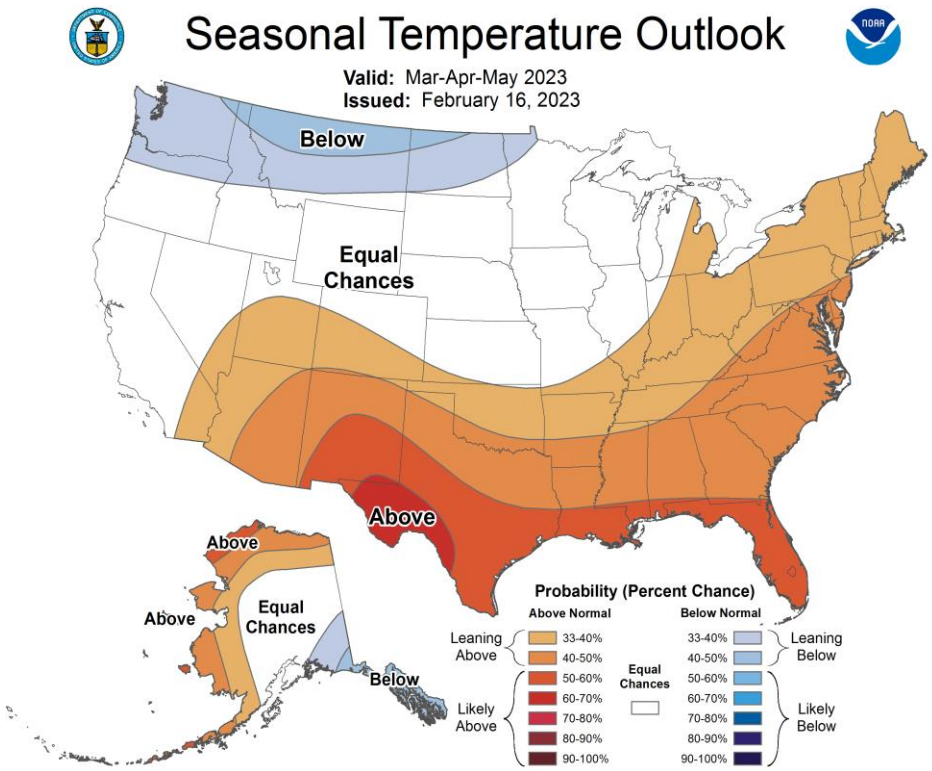


SOIL MOISTURE



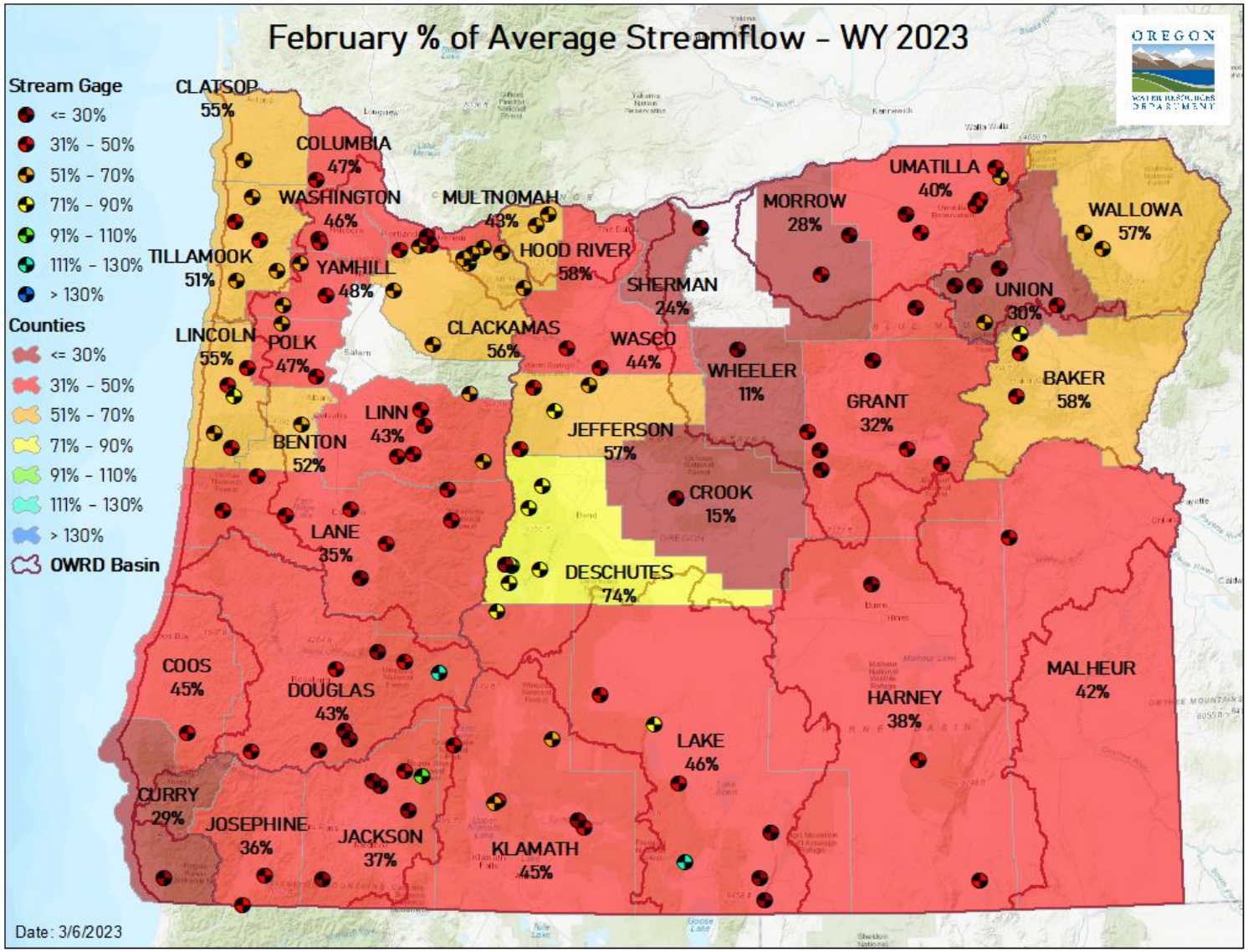
CLIMATE OUTLOOK



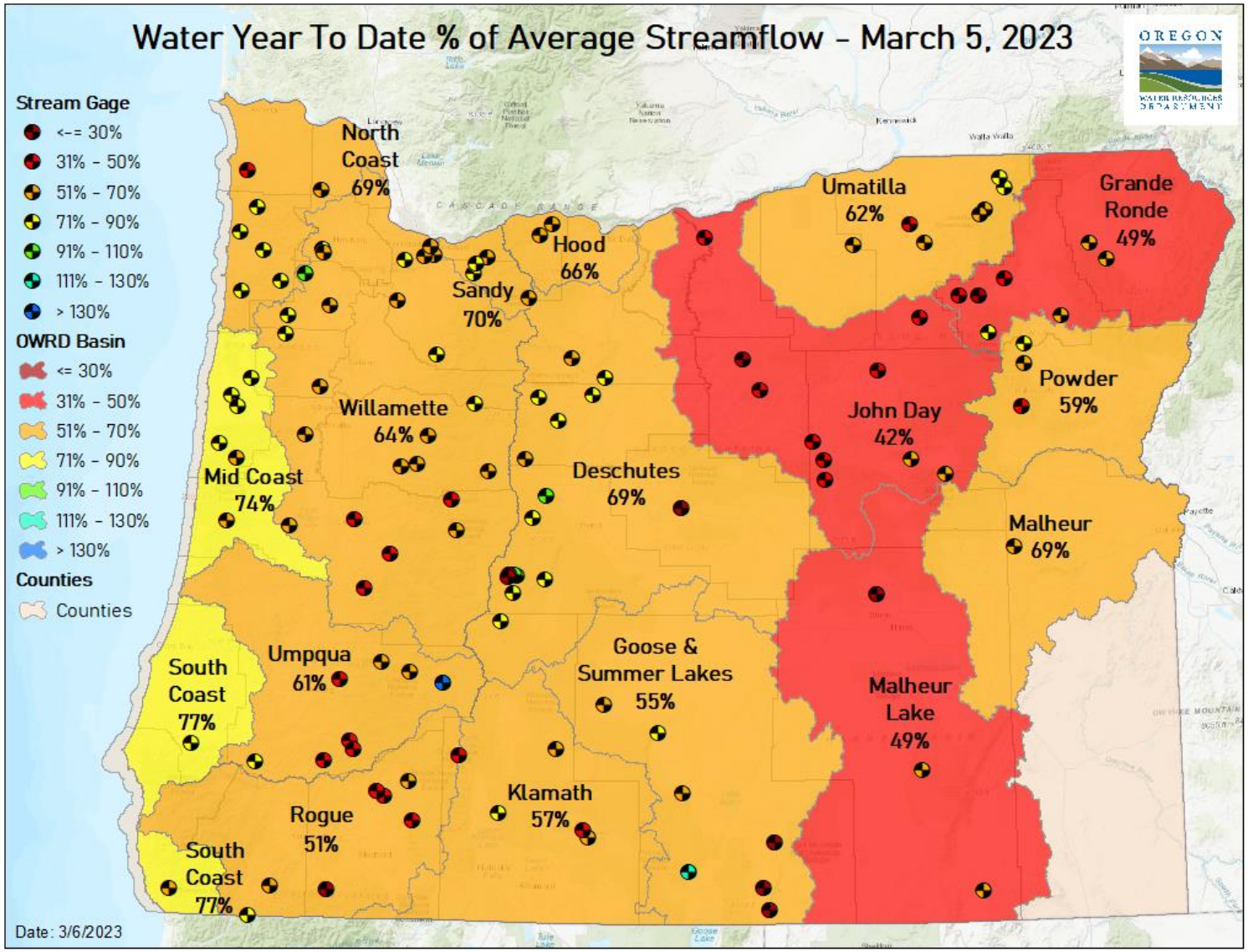


STREAMFLOW

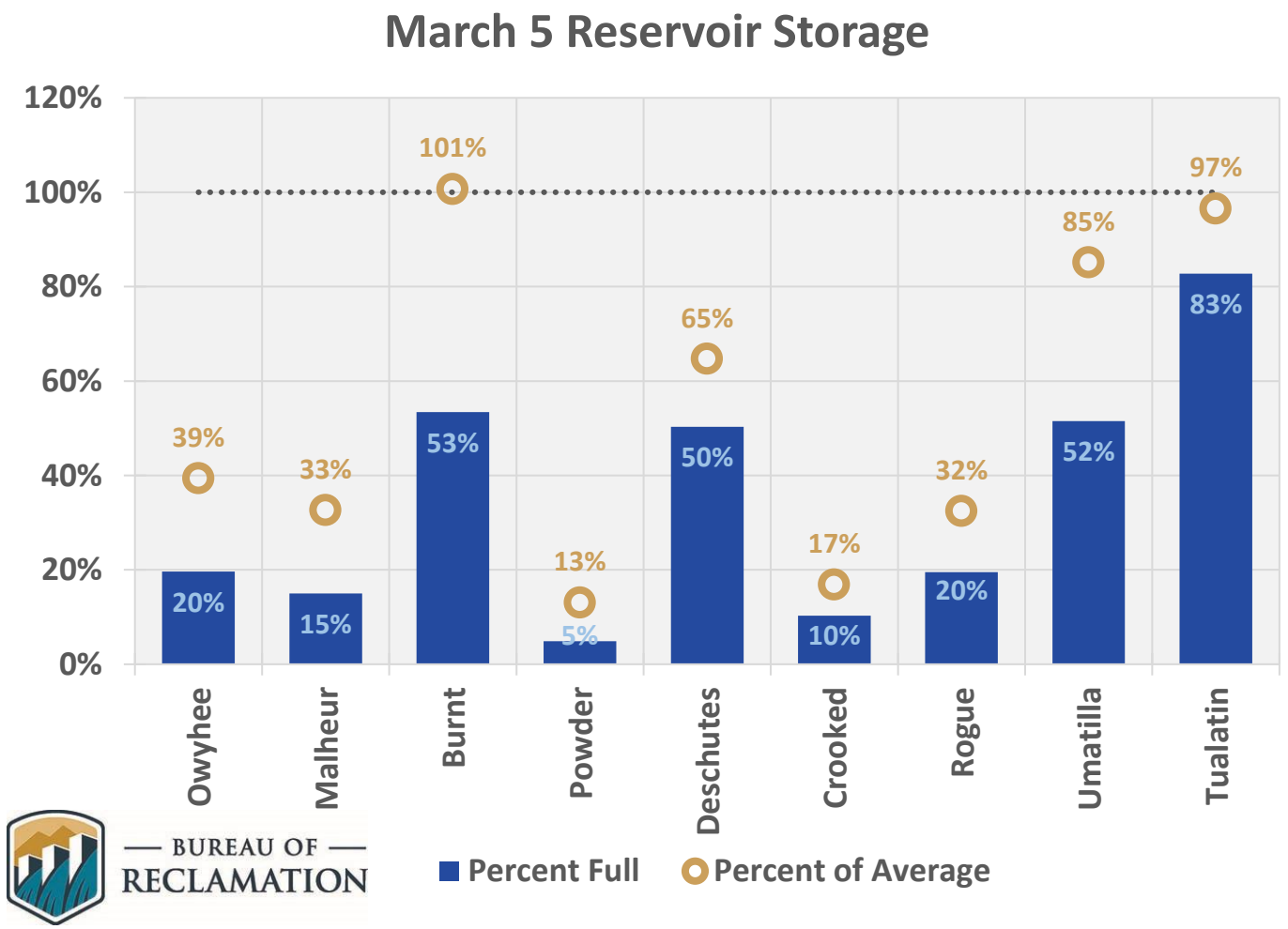
FEBRUARY



WATER YEAR TO DATE



STORAGE


March 5 Reservoir Storage
120%
100%
80%
60%
40%
20%
0%
39%
33%
101%
13%
65%
17%
32%
85%
97%
20%
15%
53%
5%
50%
10%
20%
52%
83%
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.