

Oregon Water Conditions Report



March 7th, 2022

HIGHLIGHTS

Over 90% of Oregon is classified as experiencing moderate (D1) to exceptional (D4) drought conditions according to the [US Drought Monitor](#). With the exception of some slight changes, drought depiction has remained largely unchanged over recent weeks. See below for more information.

The Pacific Northwest Drought Early Warning System hosted a [drought press briefing](#) last week to discuss the severe drought conditions across the PNW and long-term drought outlook.

[Snow water equivalent \(SWE\)](#) is now measuring 82% of the long-term median statewide at NRCS SNOTEL sites. This represents a 10% decrease from last week (02/28), largely due to lack of accumulation over this time. All basins are measuring below the median value, with exception of Hood-Sandy-Lower Deschutes. Last week's atmospheric river event impacted snowpack in the Willamette Basin and slightly in the Blue Mountains. See individual basin snowpack graphs below.

[February precipitation](#) was notably below average statewide with much of the state receiving less than 50% of average. Some areas throughout the state experienced [the driest February on record](#). Statewide precipitation is now measuring [88% of average at NRCS SNOTEL sites](#).

[February temperatures](#) were variable throughout Oregon. Much of coastal Oregon and portions of the Willamette Valley, as well as much of eastern Oregon, experienced cooler temperatures. However, above average temperatures prevailed along the Cascades and into central and southern Oregon.

[Soil moisture profiles](#) continue to measure well below average wetness for this time of year. Although, the surface soil moisture benefitted slightly in some areas due to precipitation over the past week.

Streamflows throughout February were well below average across Oregon, measuring less than 50% of average statewide. A number of [historically low streamflows](#) were recorded throughout the state, ranging from coastal to eastern Oregon. Recently, streamflows in western and northeastern Oregon have responded well to last week's atmospheric river event.

Reservoir storage contents continue to measure well below average in both [USBR](#) (including [Klamath](#)) and [USACE](#) systems throughout Oregon. Impacts to irrigation allotments are likely.

DROUGHT CONDITIONS

The US Drought Monitor indicates over 90% of Oregon is experiencing drought conditions. Drought conditions have intensified to severe drought (D2) in portions of Curry and Josephine Counties due to poor streamflows and lack of precipitation. A small portion of coastal Oregon in Tillamook and Lincoln Counties was removed from drought classification.

U.S. Drought Monitor Oregon

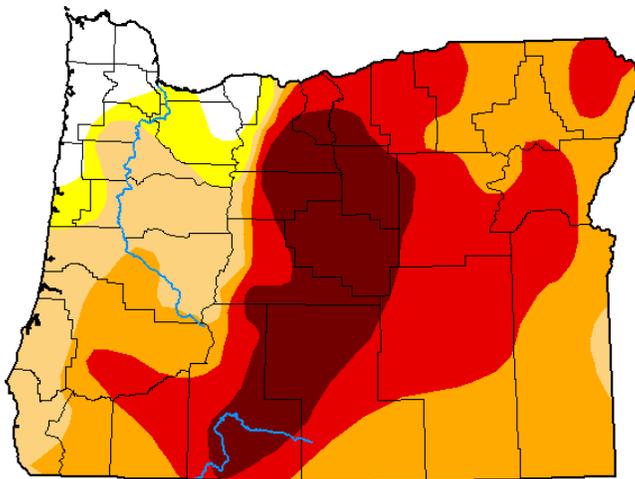
March 1, 2022

(Released Thursday, Mar. 3, 2022)

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	4.97	95.03	90.65	77.27	45.61	16.22
Last Week <i>02-22-2022</i>	4.18	95.82	90.65	76.38	45.61	16.22
3 Months Ago <i>11-30-2021</i>	1.34	98.66	98.27	91.97	67.91	23.25
Start of Calendar Year <i>01-04-2022</i>	4.16	95.84	89.75	75.37	50.84	17.27
Start of Water Year <i>09-28-2021</i>	0.00	100.00	100.00	96.47	72.10	26.59
One Year Ago <i>03-02-2021</i>	19.33	80.67	67.28	47.14	12.53	0.00



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>

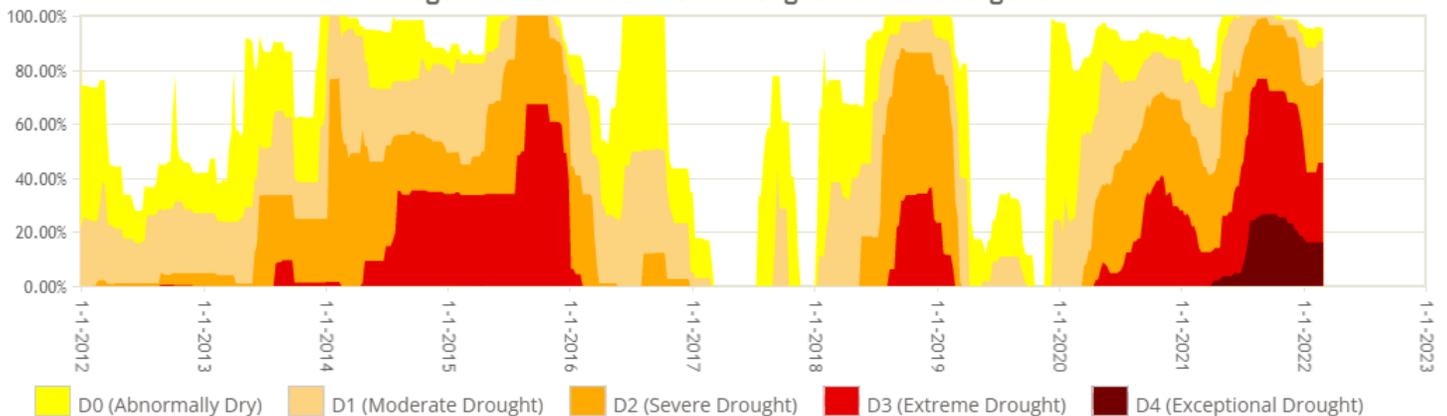
Author:

Brad Rippey
U.S. Department of Agriculture

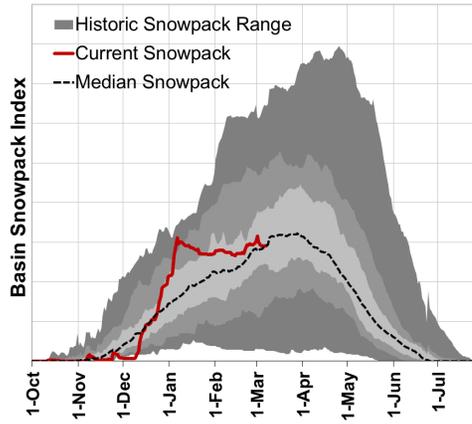


droughtmonitor.unl.edu

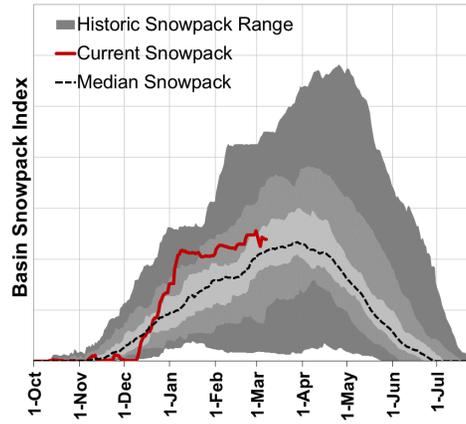
Oregon Percent Area in U.S. Drought Monitor Categories



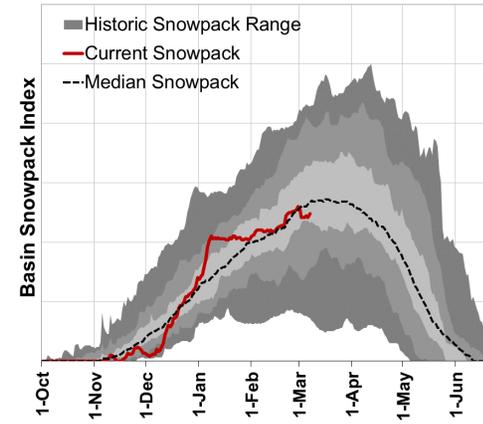
Willamette



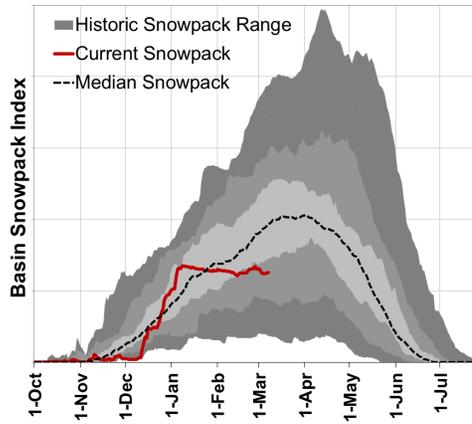
Hood-Sandy-Lower Deschutes



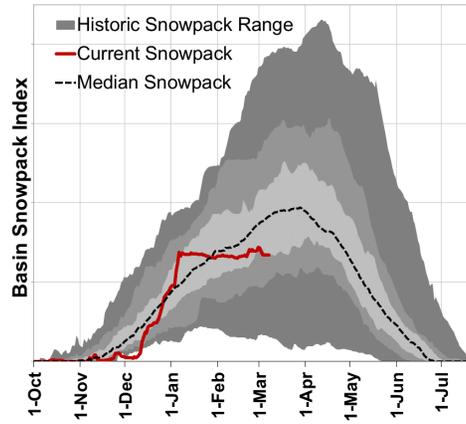
Umatilla-Walla Walla-Willow



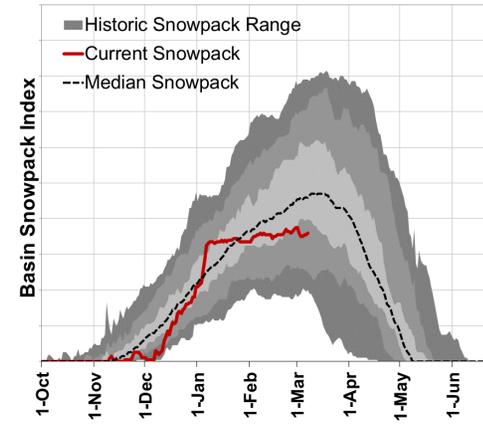
Rogue-Umpqua



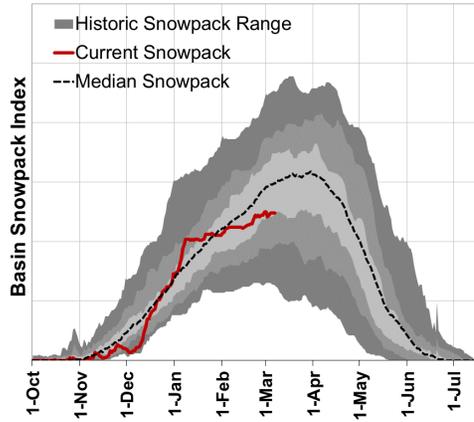
Upper Deschutes-Crooked



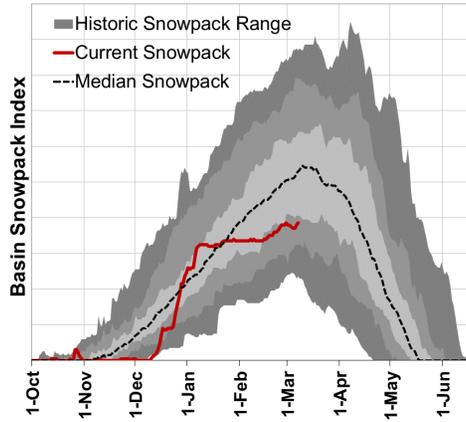
John Day



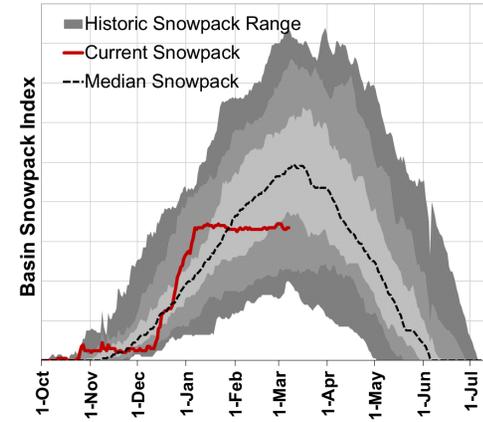
Grande Ronde-Burnt-Powder-Imnaha



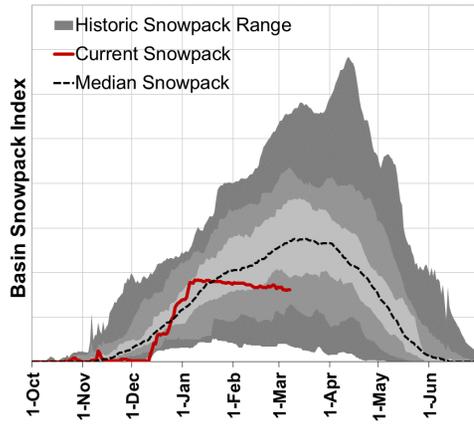
Owyhee



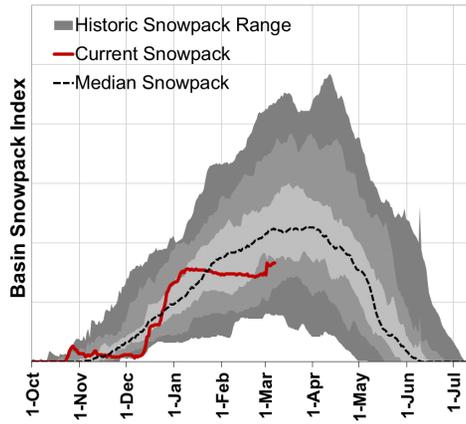
Harney



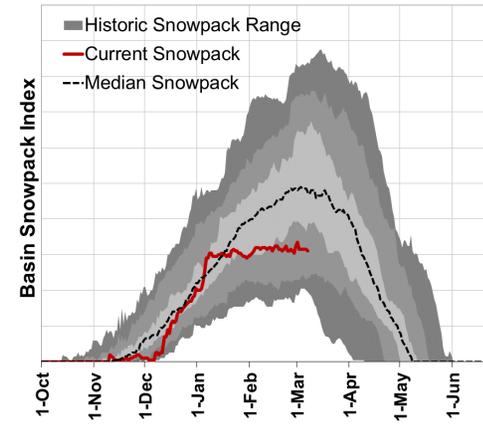
Klamath



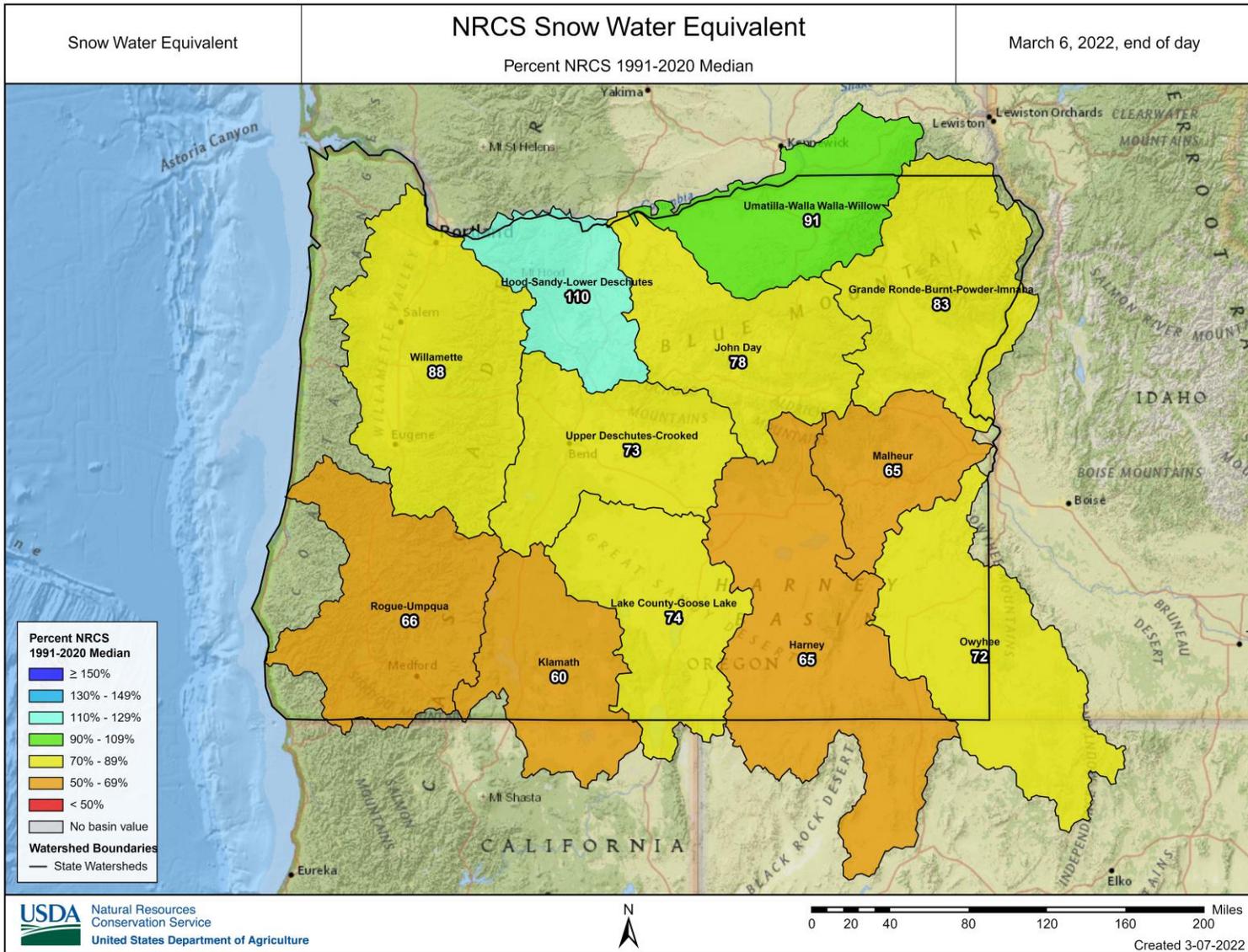
Lake County-Goose Lake



Malheur

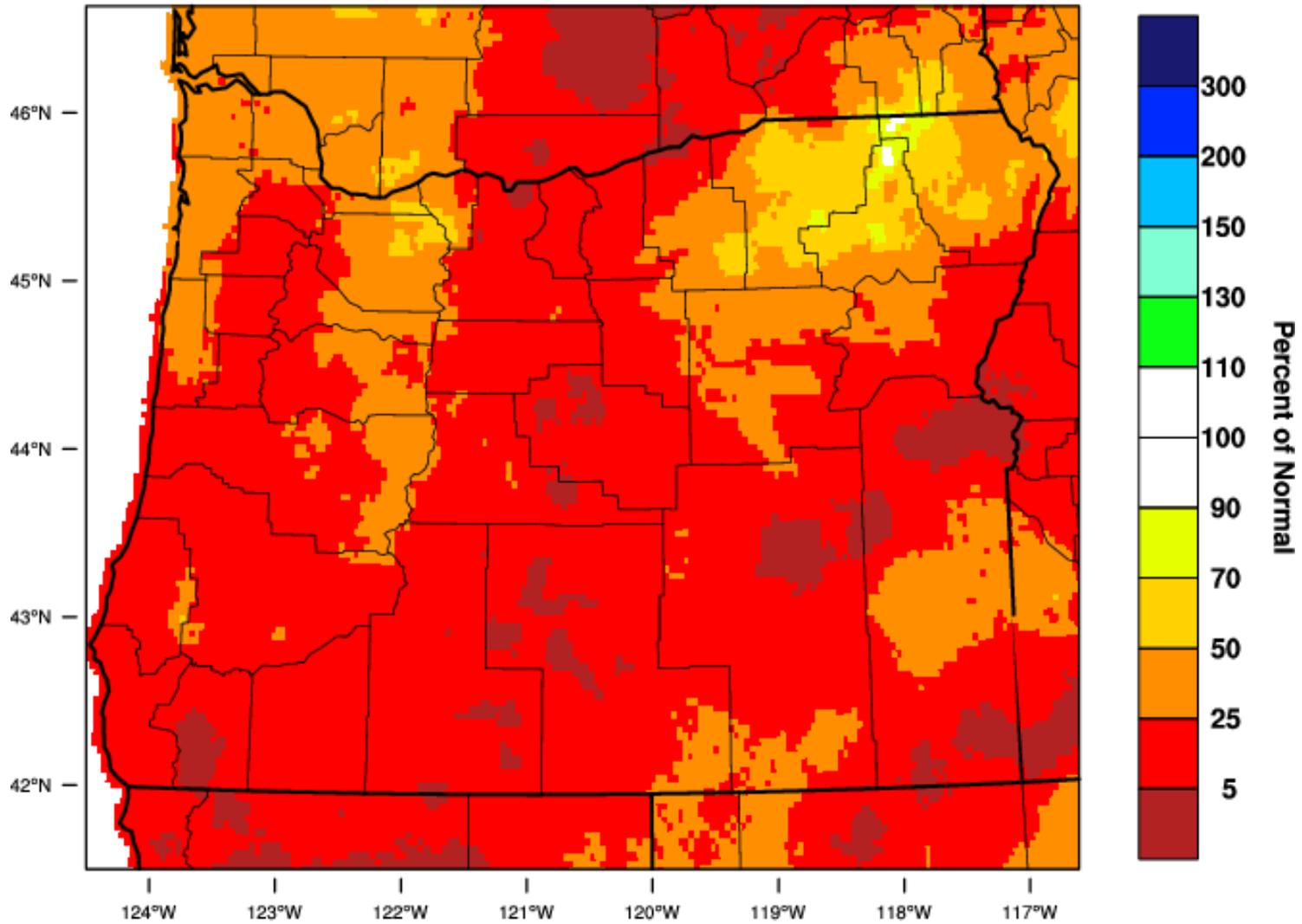


CLIMATE CONDITIONS
SNOW WATER EQUIVALENT



Oregon - Precipitation

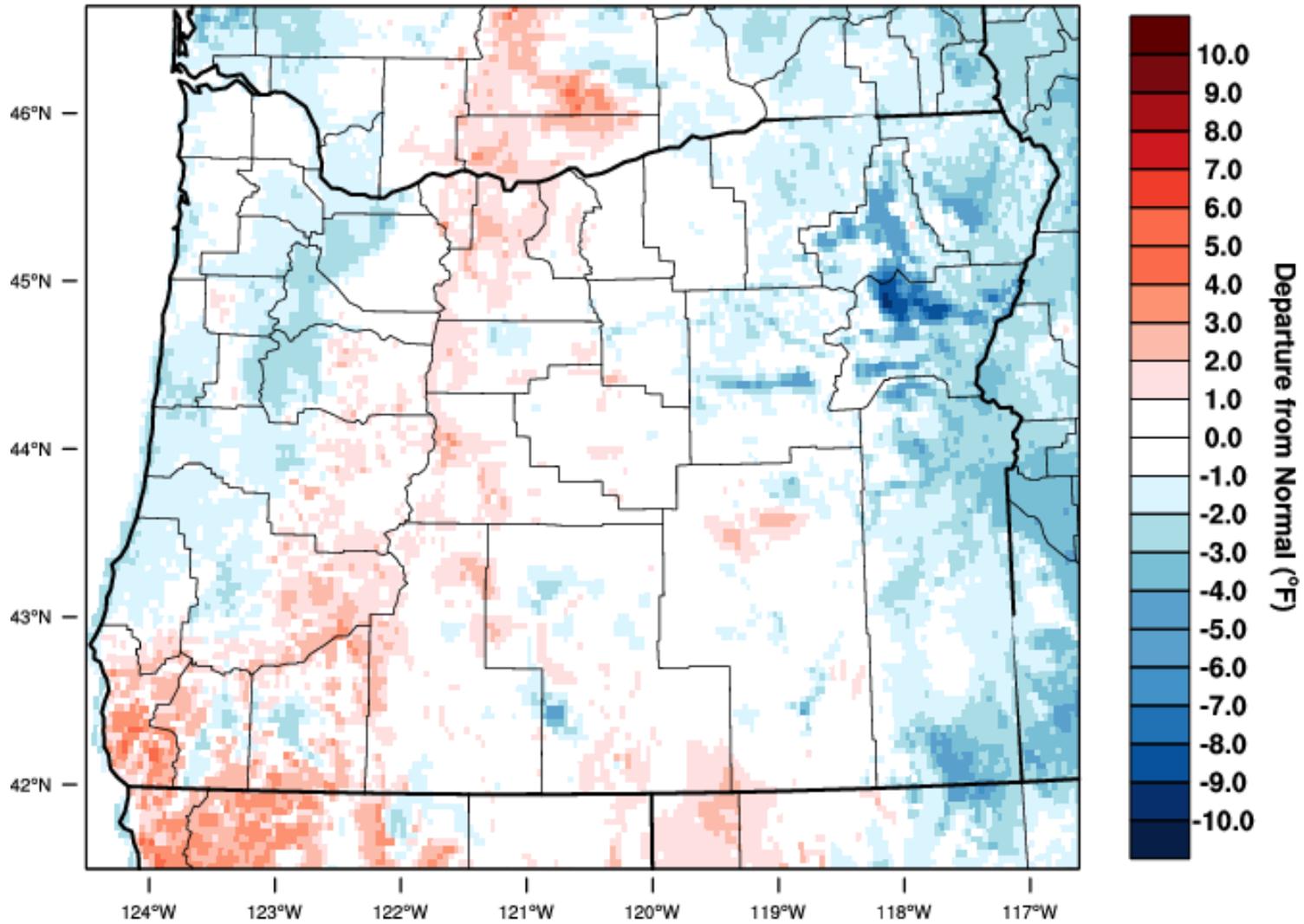
February 2022 Percent of 1981-2010 Normal



WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 2 MAR 2022

Oregon - Mean Temperature

February 2022 Departure from 1981-2010 Normal

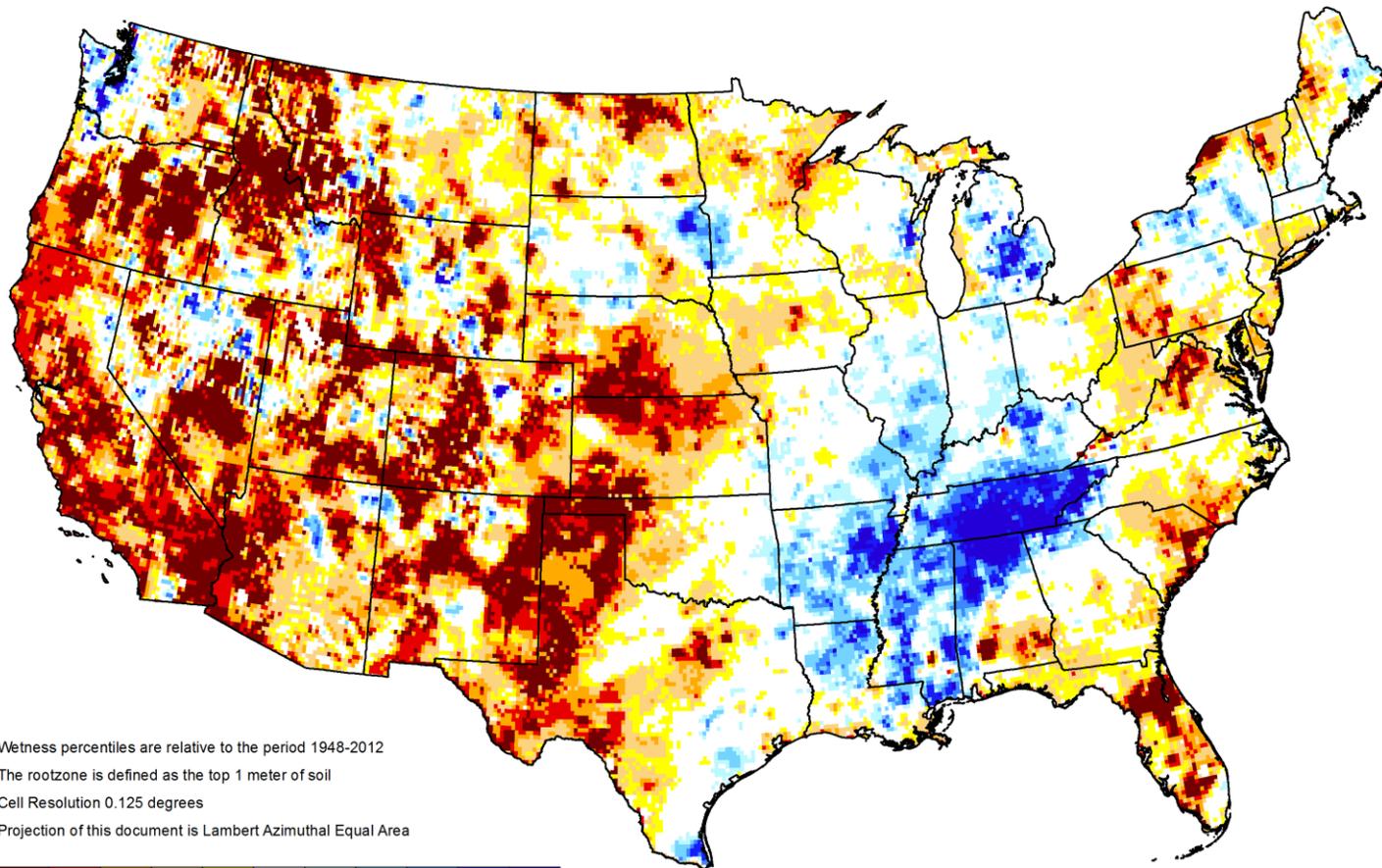


WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 2 MAR 2022

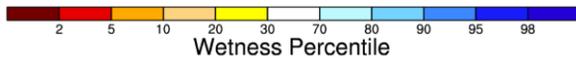


GRACE-Based Root Zone Soil Moisture Drought Indicator

February 28, 2022



Wetness percentiles are relative to the period 1948-2012
The rootzone is defined as the top 1 meter of soil
Cell Resolution 0.125 degrees
Projection of this document is Lambert Azimuthal Equal Area



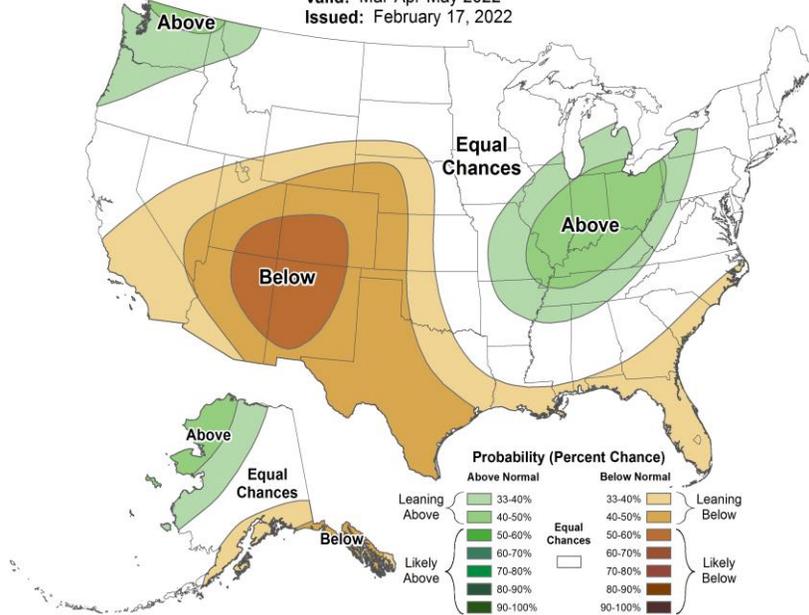
<https://nasagrace.unl.edu>



Seasonal Precipitation Outlook



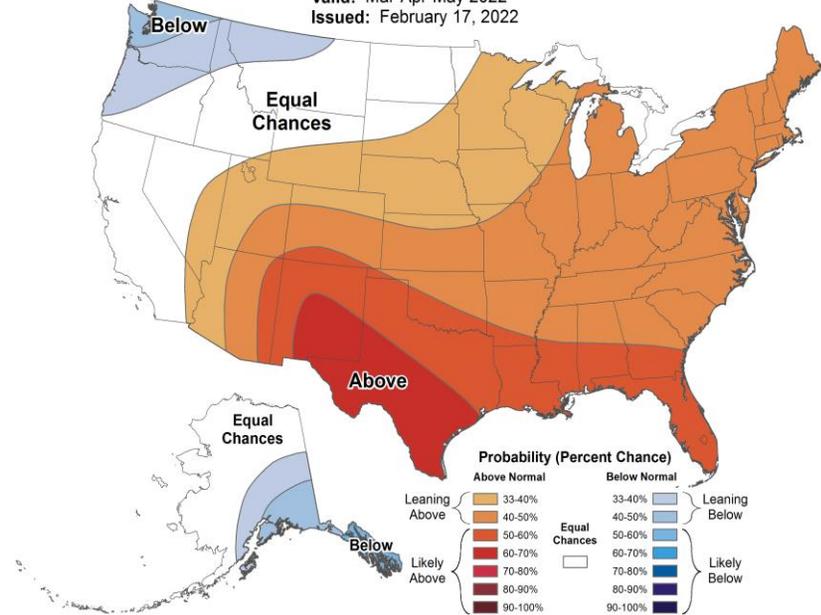
Valid: Mar-Apr-May 2022
 Issued: February 17, 2022



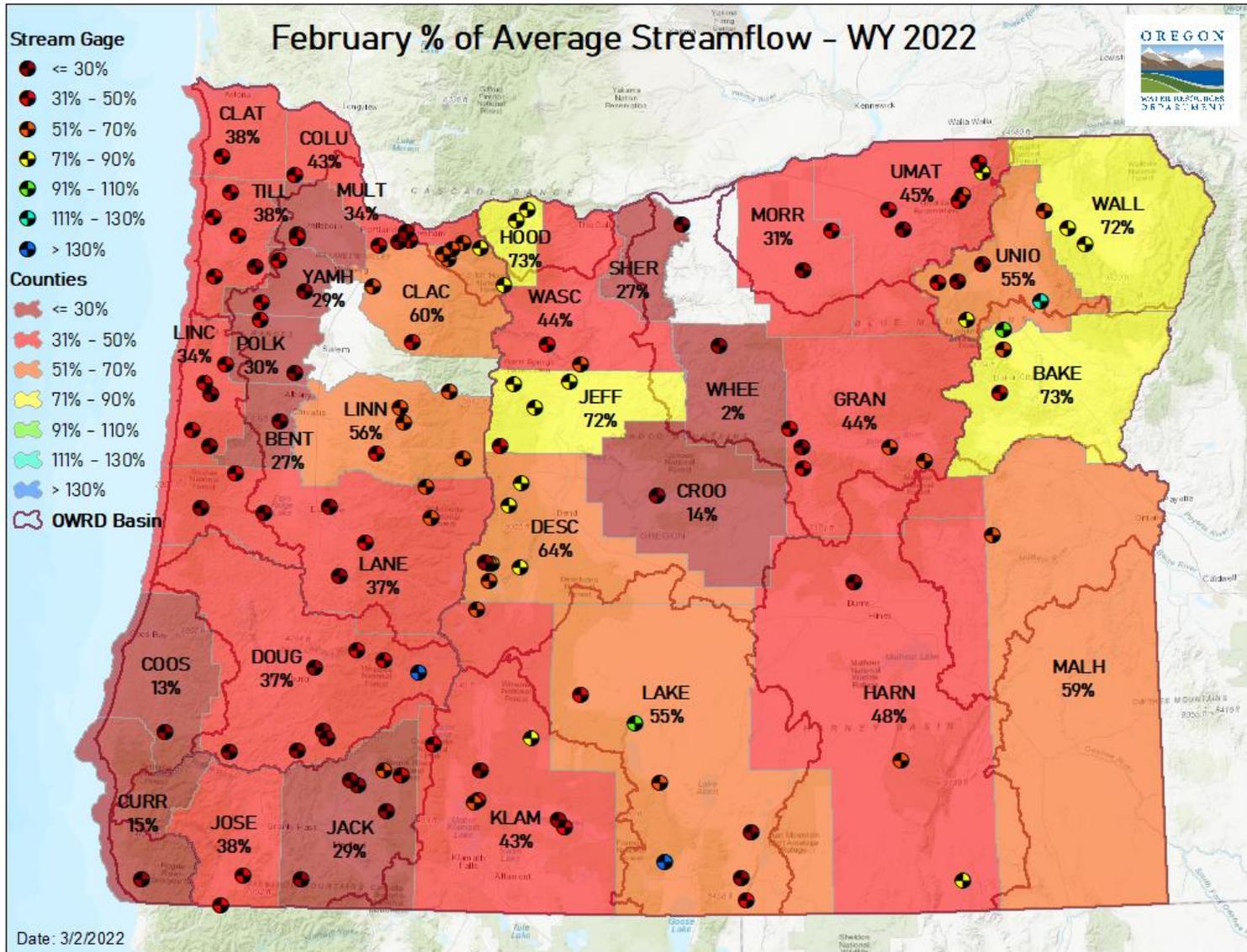
Seasonal Temperature Outlook

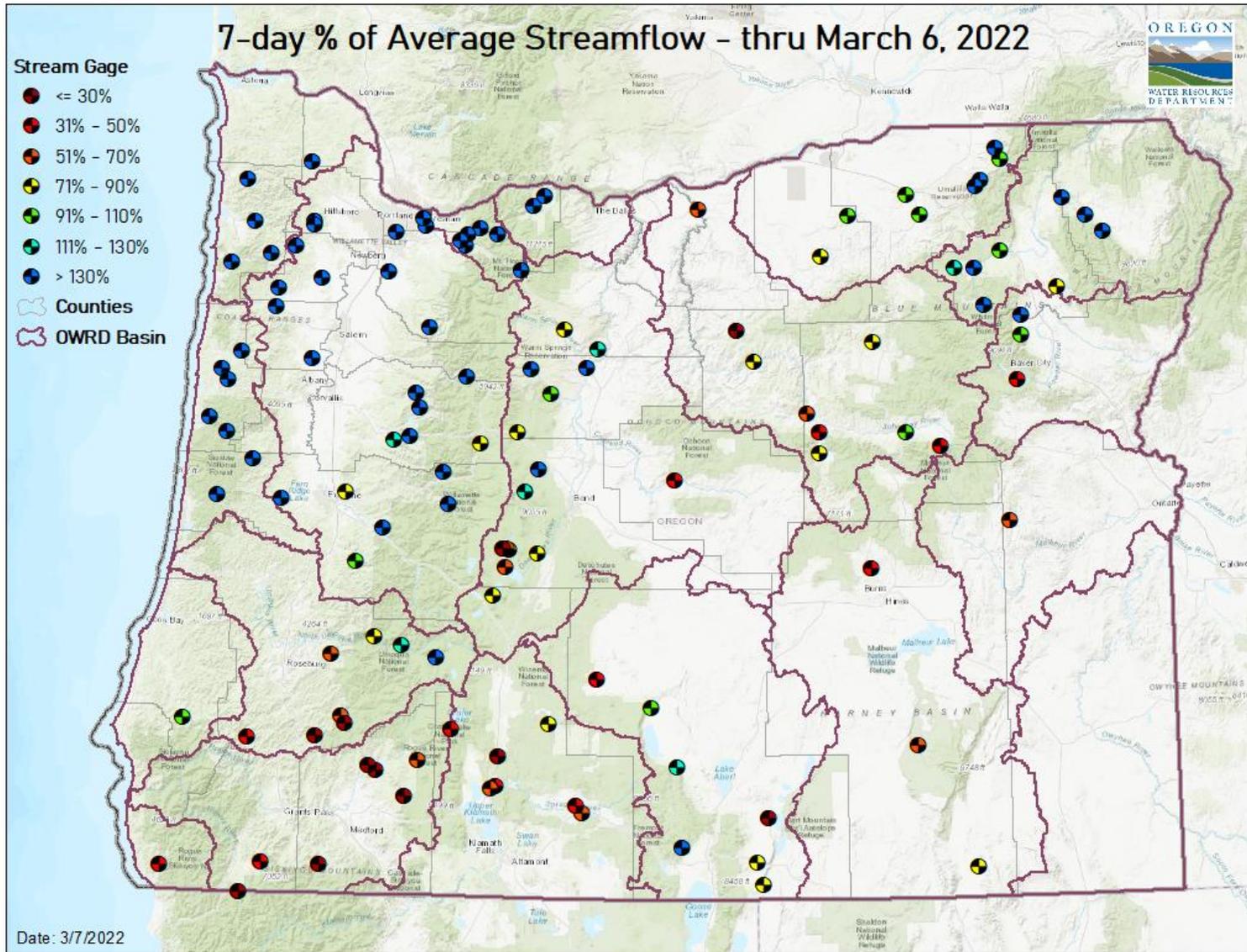


Valid: Mar-Apr-May 2022
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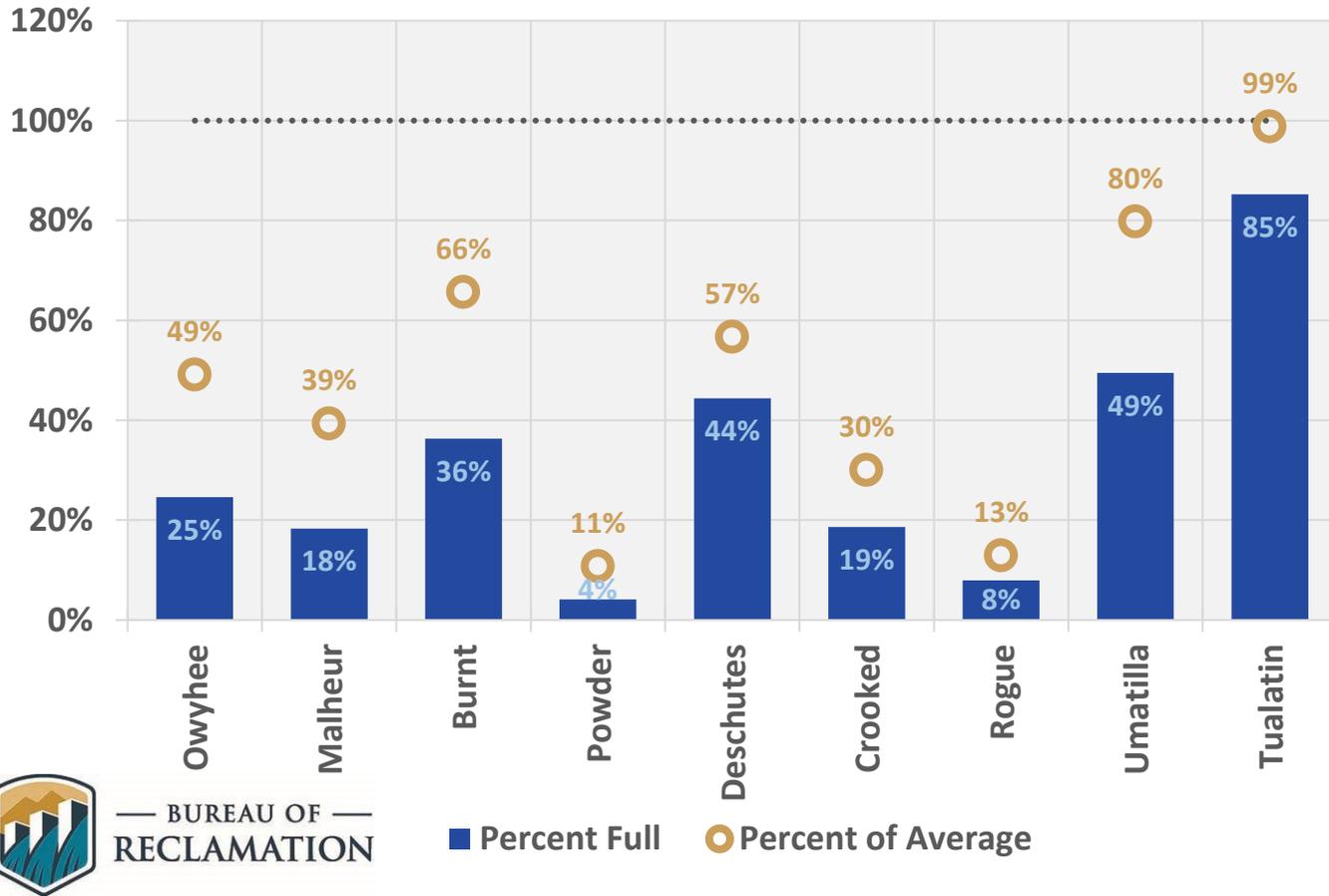


STREAMFLOW
FEBRUARY





March 6 Reservoir Storage



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.