

Oregon Water Conditions Report



February 6th, 2023

HIGHLIGHTS

Due to ongoing drought conditions, [Jefferson and Crook Counties](#) have submitted requests for state drought declarations under ORS 536.

According to the [US Drought Monitor](#), over 64% of Oregon is experiencing moderate (D1) to exceptional (D4) drought conditions. Change over recent weeks includes improvement from extreme (D3) to severe (D2) drought in portions of Lake and Harney Counties.

[Snow water equivalent at NRCS SNOTEL sites](#) ranges from 90% in the Willamette Basin to 137% in the Harney Basin and is measuring 102% statewide. Snowpack accumulation has stagnated along the Cascades, while many eastern basins benefitted from recent snowfall.

[January precipitation](#) measured well below average throughout most of the state, with some exception in portions of the southwest and southeast regions. Portions of Wallowa and Wheeler Counties measured the [lowest January precipitation on record](#).

[January temperatures](#) were variable between northern and southern Oregon, with slightly warmer than usual temperatures occurring in the north. Temperatures in the southern portion of the state were generally close to the long-term average, although some areas were cooler than usual.

[Surface soil moisture](#) is measuring near historical dryness throughout a majority of Oregon, according to NASA GRACE, in large part due to well below average precipitation.

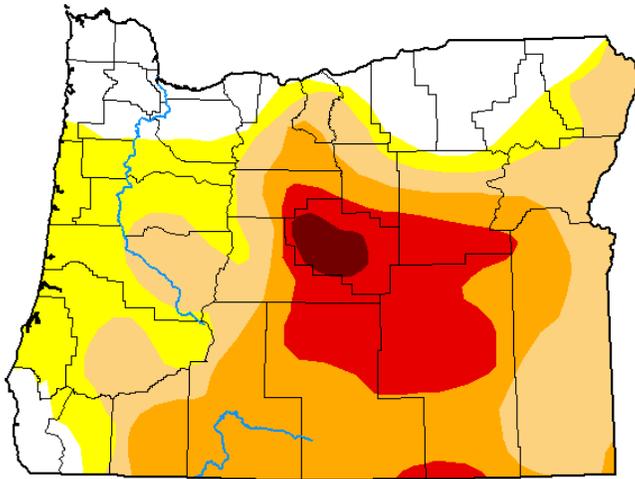
The [three-month seasonal outlook](#) for February through April indicates probabilities with equal chances of above or below average precipitation throughout much of the state, although northeastern Oregon is slightly favored to receive above average precipitation. Cooler than usual temperatures are slightly favored throughout the state.

Streamflows throughout January measured well below average statewide, with exception of southern coastal Oregon. This trend follows similarly to water year streamflow, which ranges from a low of 49% of average in the Grande Ronde Basin to a high of 98% in the Umatilla Basin.

[Reservoir storage](#) is currently measuring well below average in most USBR (including [Klamath](#)) projects, with exceptions in the Burnt, Umatilla, and Willamette Basins.

**U.S. Drought Monitor
Oregon**

January 31, 2023
(Released Thursday, Feb. 2, 2023)
Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	16.43	83.57	64.15	39.58	14.98	1.40
Last Week <i>01-24-2023</i>	16.43	83.57	64.15	39.58	14.98	1.40
3 Months Ago <i>11-01-2022</i>	0.44	99.56	80.77	52.92	30.73	1.40
Start of Calendar Year <i>01-03-2023</i>	13.46	86.54	59.75	46.03	26.18	1.40
Start of Water Year <i>09-27-2022</i>	0.42	99.58	68.05	52.42	30.73	1.40
One Year Ago <i>02-01-2022</i>	4.87	95.13	88.12	74.05	42.05	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>

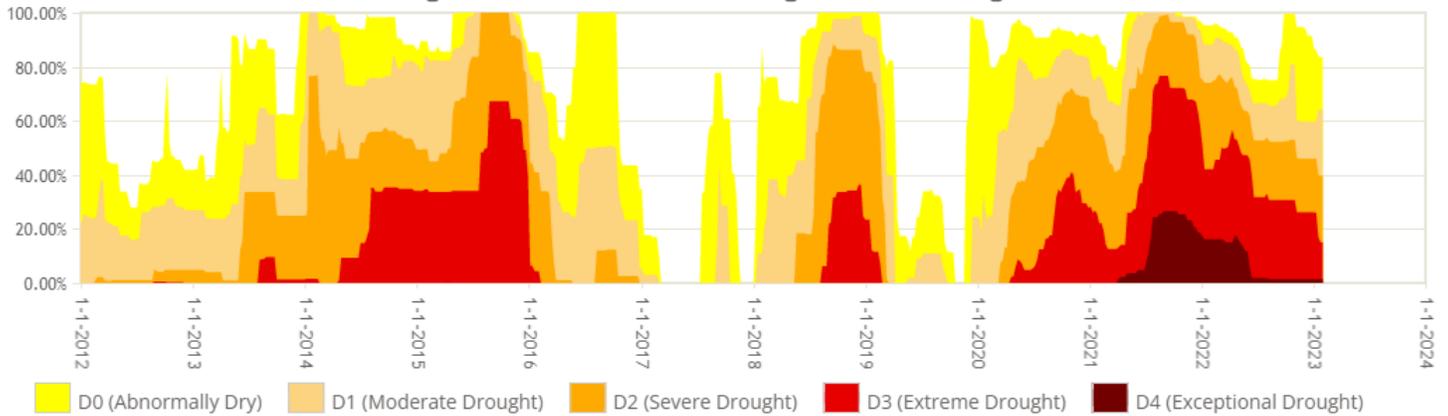
Author:

Rocky Bilotta
NCEI/NOAA

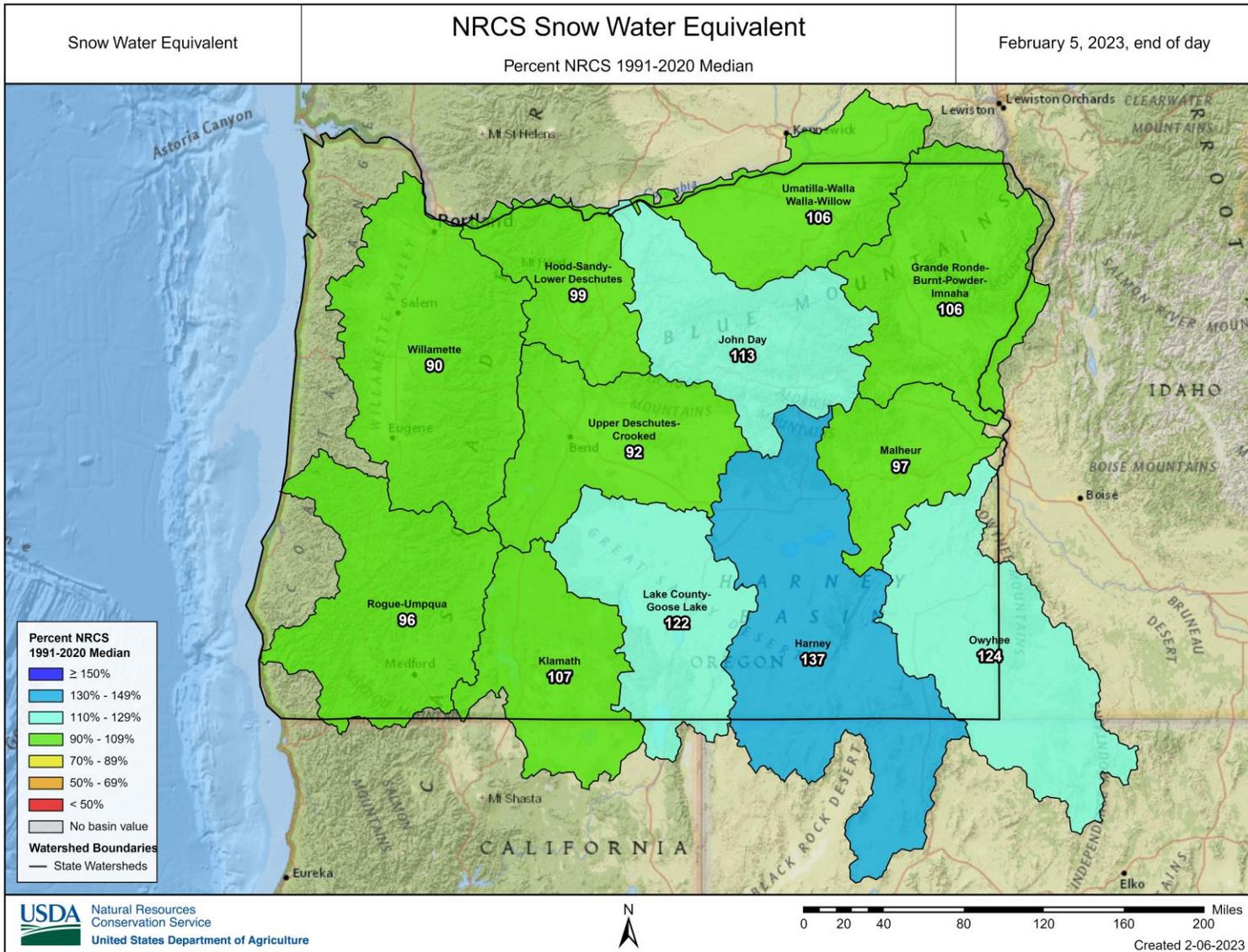


droughtmonitor.unl.edu

Oregon Percent Area in U.S. Drought Monitor Categories

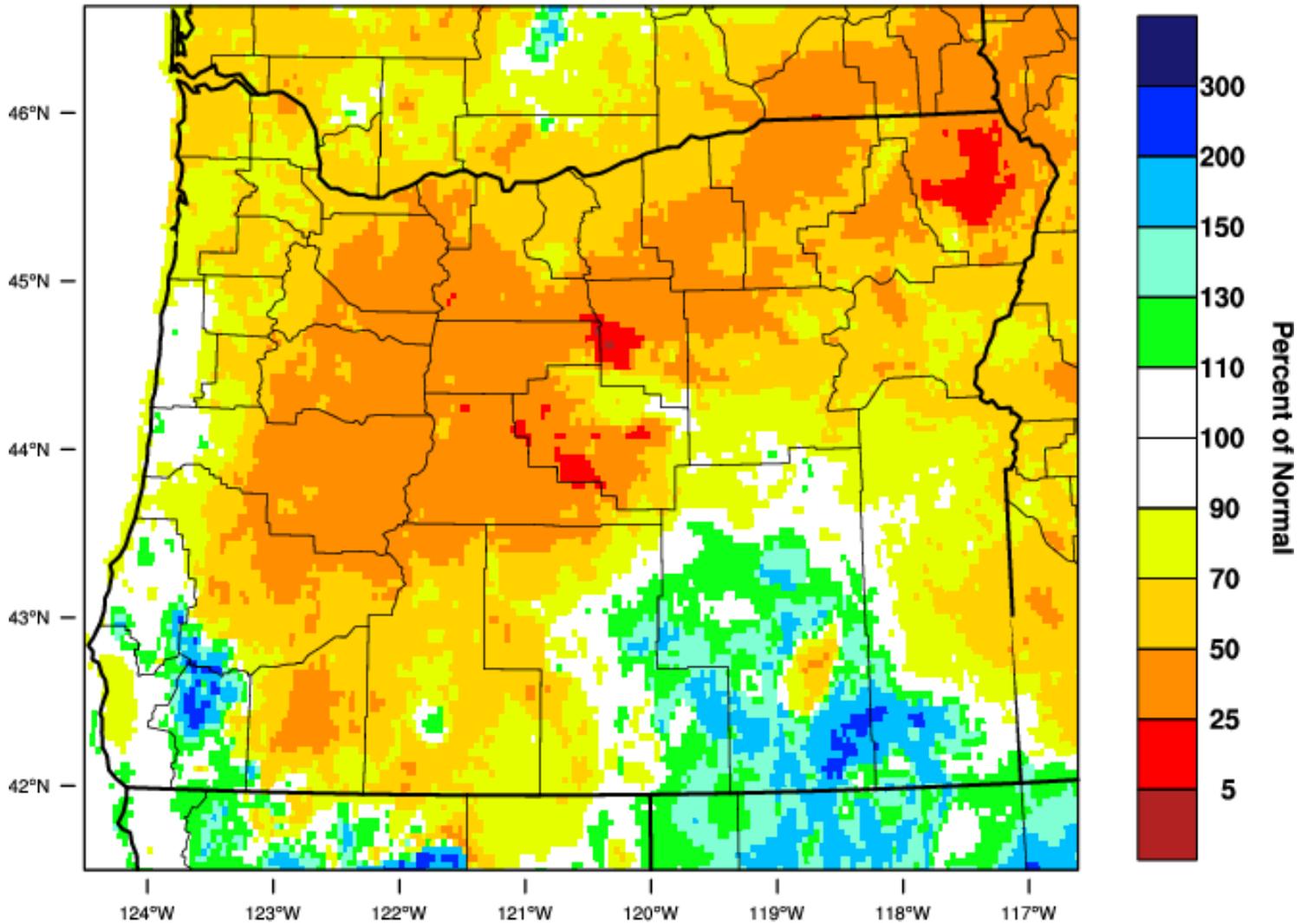


CLIMATE CONDITIONS
SNOW WATER EQUIVALENT



Oregon - Precipitation

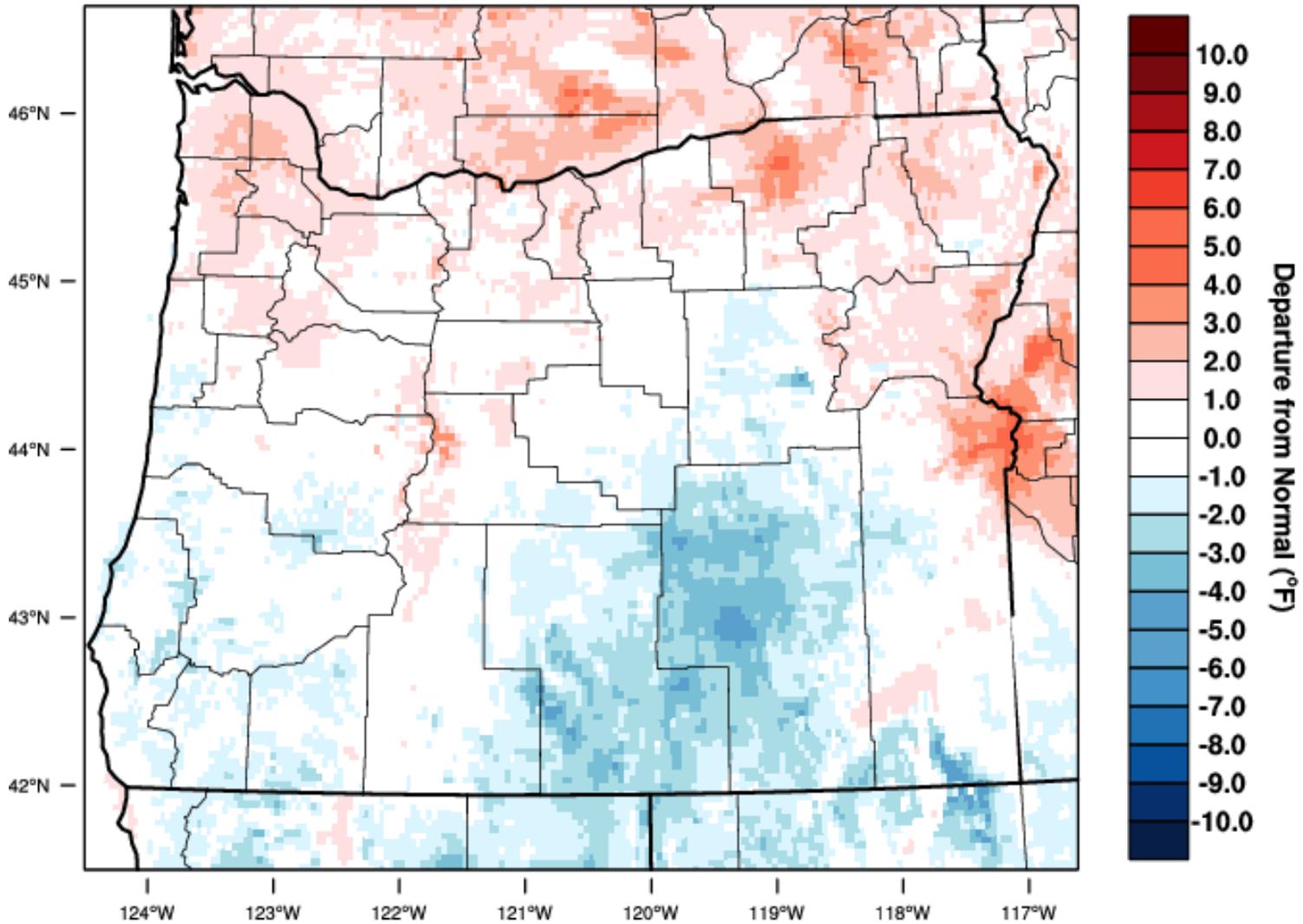
January 2023 Percent of 1981-2010 Normal



WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 5 FEB 2023

Oregon - Mean Temperature

January 2023 Departure from 1981-2010 Normal

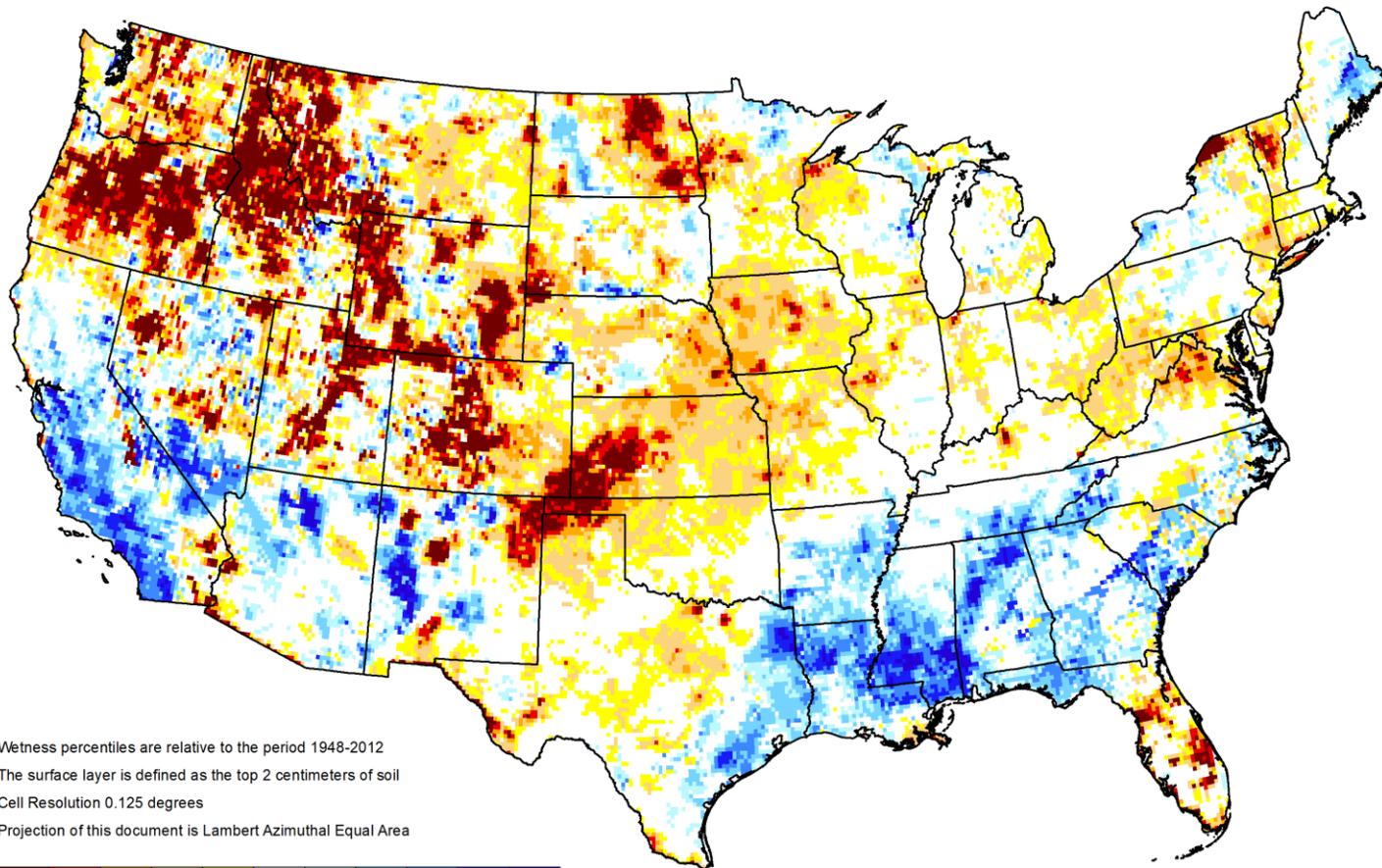


WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 5 FEB 2023

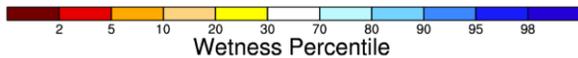


GRACE-Based Surface Soil Moisture Drought Indicator

January 30, 2023



Wetness percentiles are relative to the period 1948-2012
The surface layer is defined as the top 2 centimeters of soil
Cell Resolution 0.125 degrees
Projection of this document is Lambert Azimuthal Equal Area



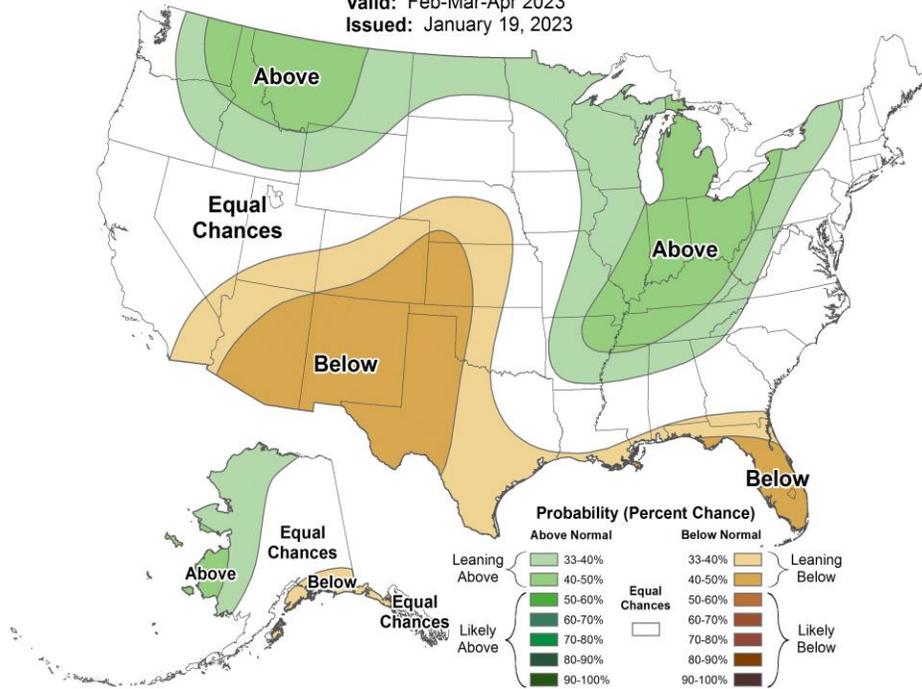
<https://nasagrace.unl.edu>



Seasonal Precipitation Outlook



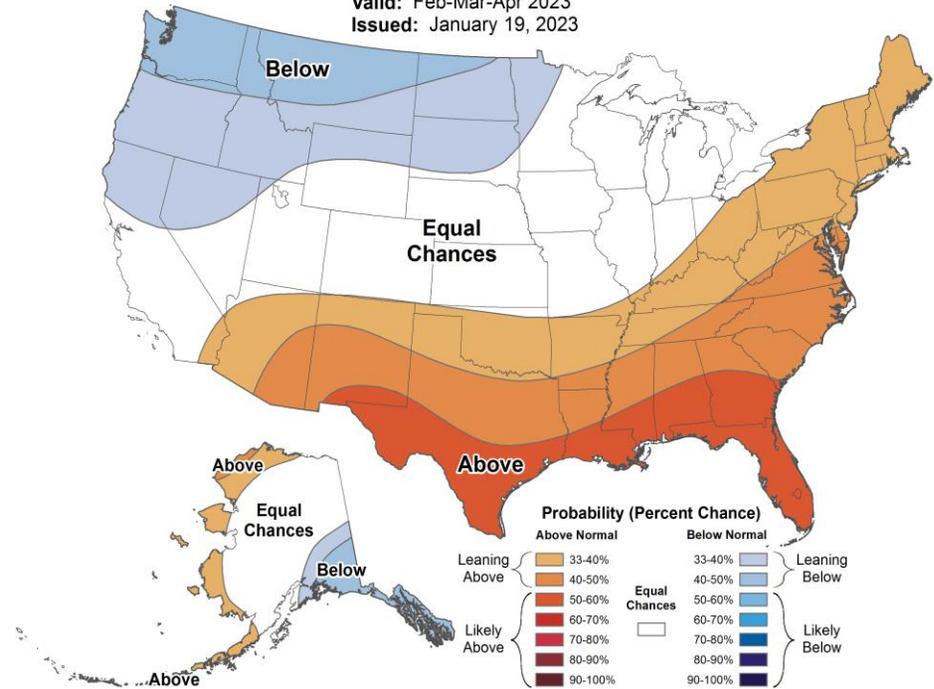
Valid: Feb-Mar-Apr 2023
 Issued: January 19, 2023



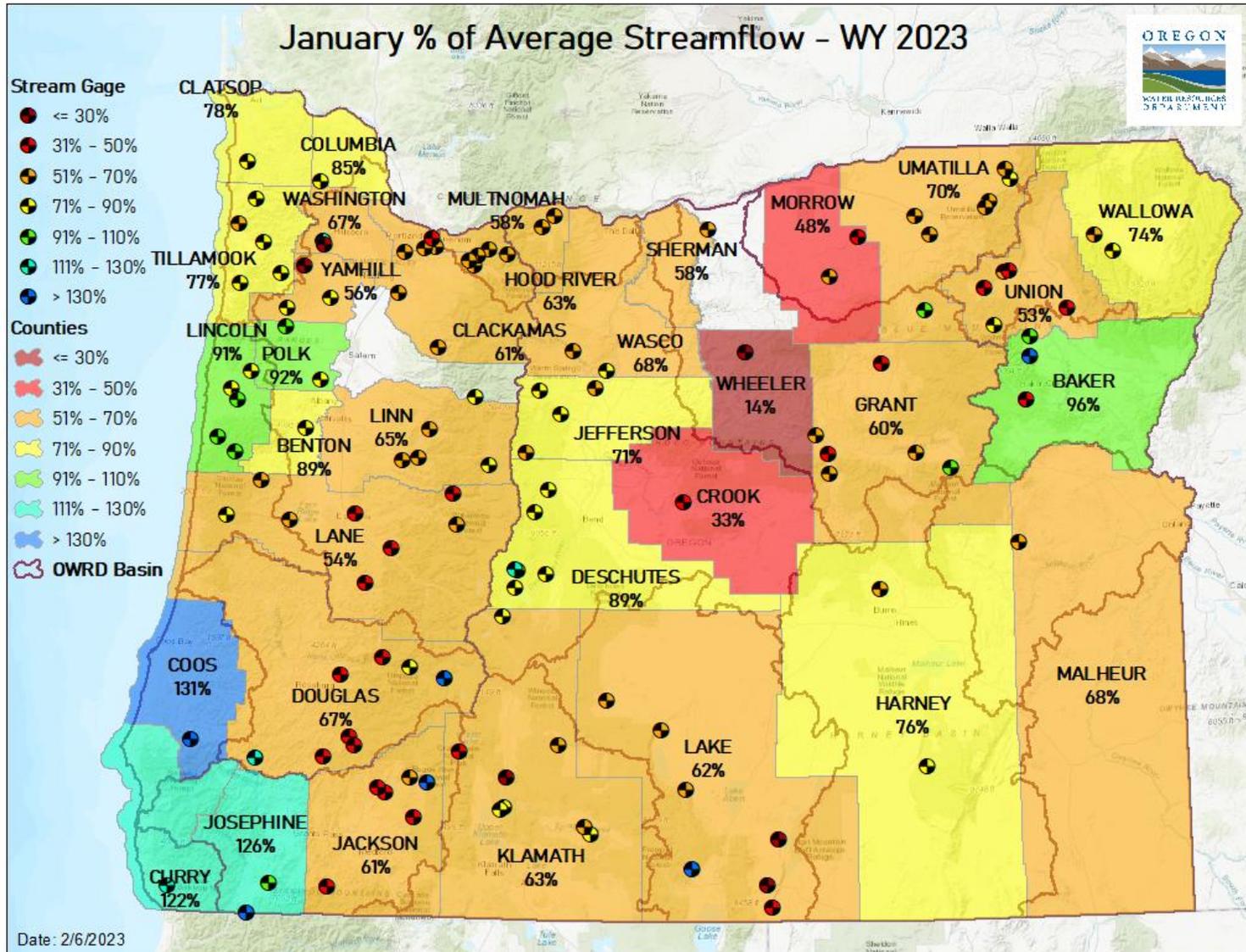
Seasonal Temperature Outlook

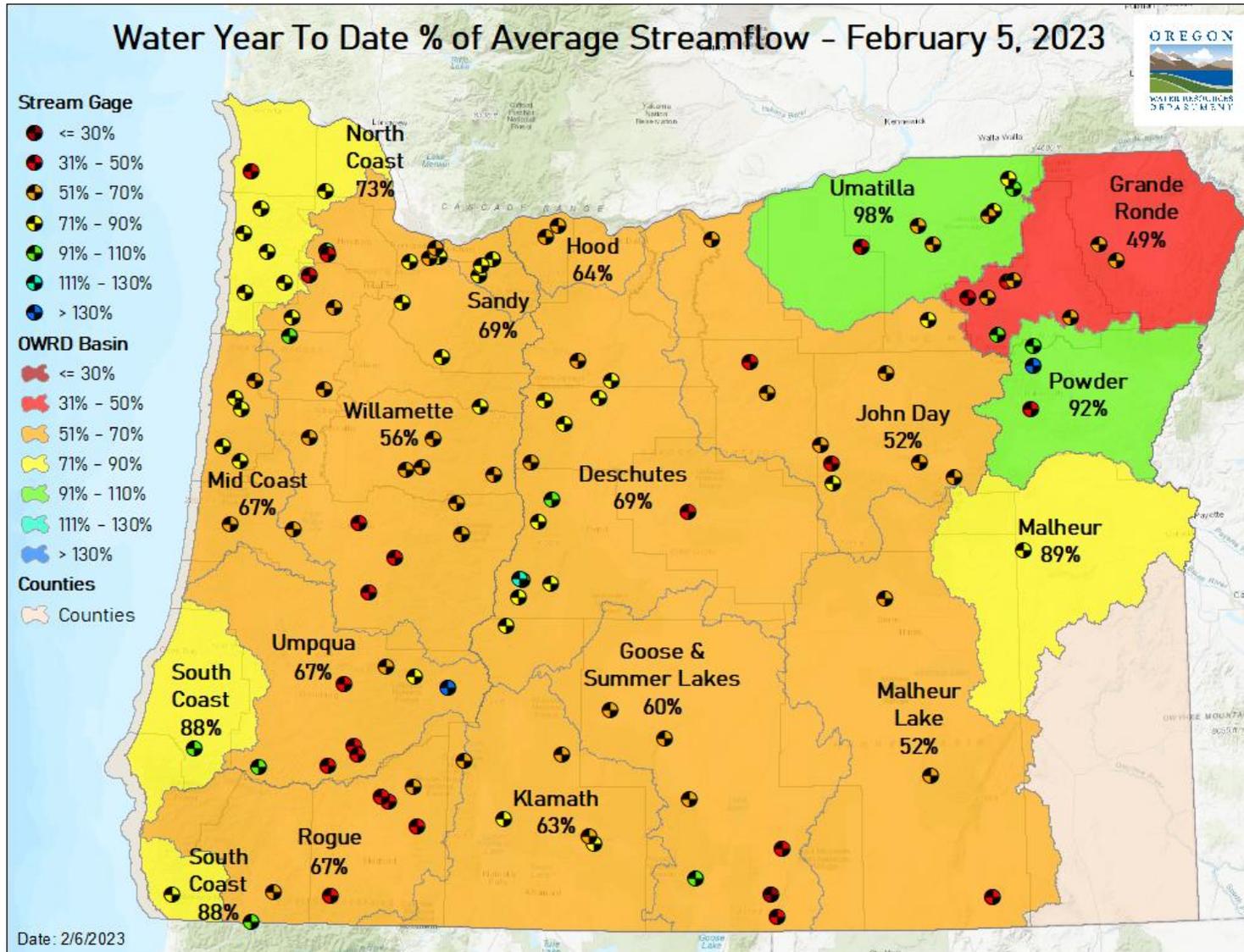


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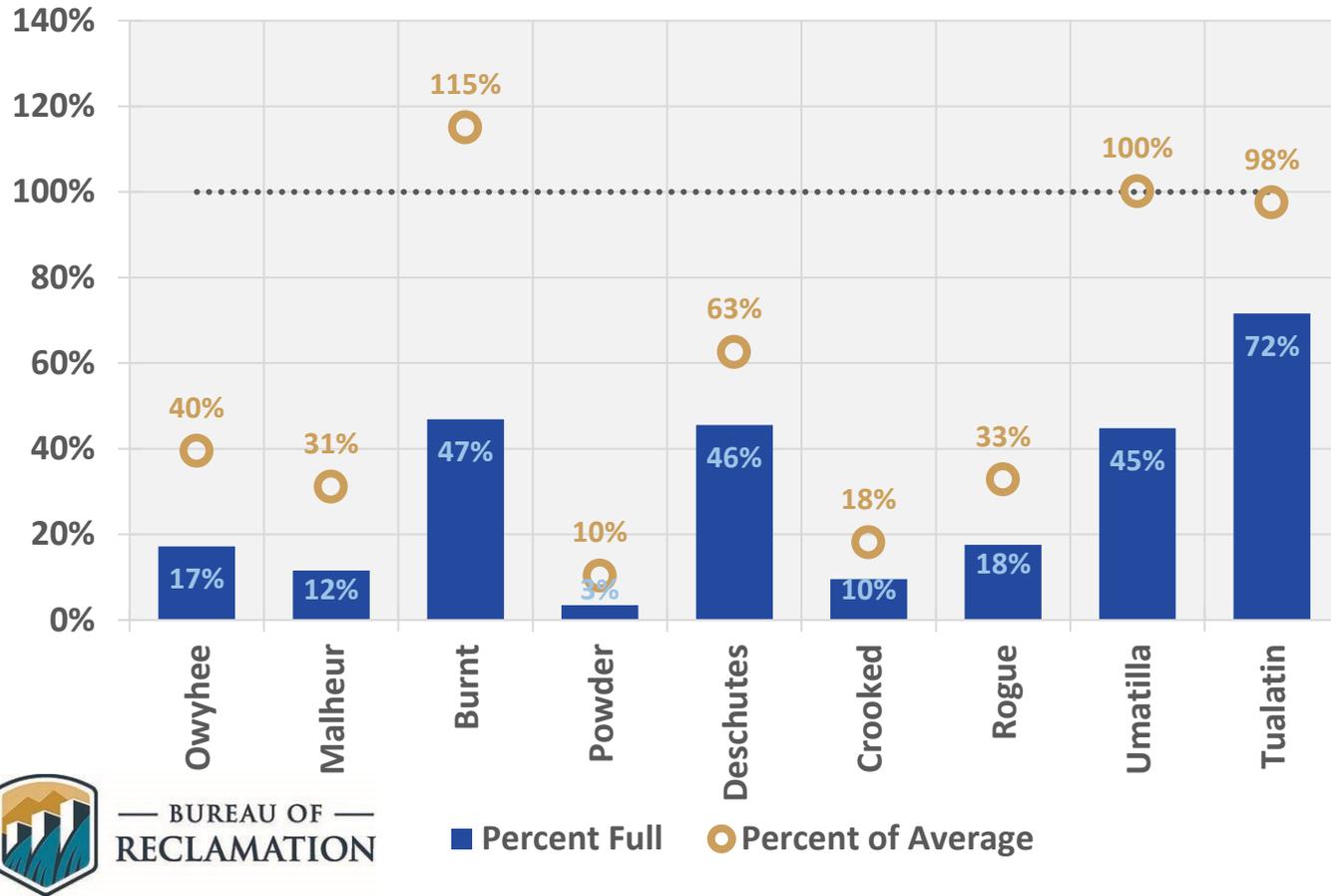


STREAMFLOW
JANUARY





February 5 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.