

Oregon Water Conditions Report



January 24th, 2022

HIGHLIGHTS

Over 88% of Oregon is classified as experiencing moderate (D1) to exceptional (D4) drought conditions according to the [US Drought Monitor](#). Drought conditions in portions of eastern Oregon improved slightly, leading to a reduction in coverage of extreme drought (D3) over recent weeks. See below for more information.

[Statewide snow water equivalent](#) (SWE) is measuring 114% of the long-term median at NRCS SNOTEL sites. SWE is down 12% from last week (01/17) due to warm temperatures, clear skies, and lack of snowfall. SWE in most basins is measuring near to above median values, with exception of Malheur (85%). Individual basin plots highlight reduction in snowpack in the Willamette, Rogue-Umpqua, and Hood-Sandy-Lower Deschutes Basins (see below).

[Precipitation over the past two weeks](#) was well below the long-term average throughout the state. Central and southwestern Oregon experienced [little to no measurable precipitation](#). [SNOTEL precipitation](#) over the water year to date is measuring 102% of the long-term median, representing a 3% decrease from last week.

[Temperatures over the past two weeks](#) were near to above average throughout much of Oregon, with some exception along the Cascades and in northeastern Oregon. Temperatures in western Oregon were generally [well above freezing](#), contributing to reduced snowpack.

[Shallow groundwater profiles](#) continue to measure much drier than usual in central and eastern Oregon. Although portions of western Oregon still lag behind in terms of typical wetness, [profiles have improved greatly since the beginning of water year 2022](#).

The [8 - 14-day climate outlook](#) indicates probabilities favoring below average temperatures and above average precipitation throughout much of the state. Temperatures in southeastern Oregon are projected to be near normal.

Streamflows throughout the water year to date are variable throughout the state (see below). Flows in the Willamette, Sandy, Hood, Malheur, and coastal basins are measuring near to above average, while most others are measuring below to well below the long-term average. Recent 7-day streamflows are measuring below to well below average throughout the state with few exceptions along the Cascades and northeastern Oregon.

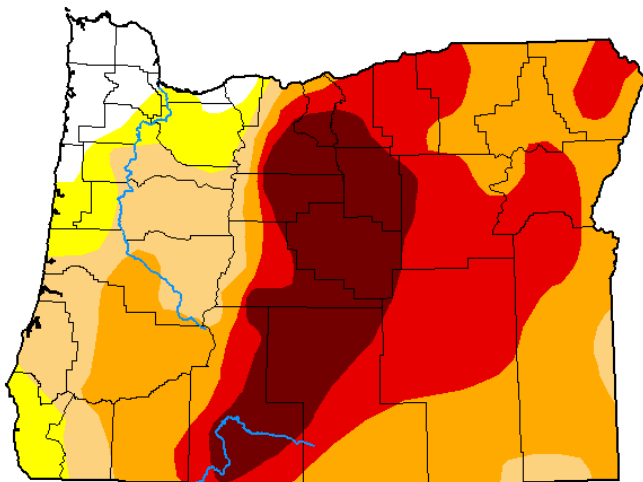
Reservoir storage contents in [USBR \(including Klamath\)](#) and [USACE](#) systems continue to measure below average throughout much of the state, with some exceptions in the Tualatin (101%) and Umatilla Basins (87%).

DROUGHT CONDITIONS

The US Drought Monitor indicates over 88% of Oregon is experiencing drought conditions. Portions of northeastern Oregon saw a one-category improvement from extreme drought (D3) to severe drought (D2), while portions of Harney and Lake Counties saw similar improvements. Conditions in the southern half of Clackamas County deteriorated from abnormally dry (D0) to moderate drought (D1).

U.S. Drought Monitor Oregon

January 18, 2022
(Released Thursday, Jan. 20, 2022)
Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	4.68	95.32	88.23	74.05	42.05	16.22
Last Week <i>01-11-2022</i>	4.66	95.34	88.23	74.05	42.05	16.22
3 Months Ago <i>10-19-2021</i>	0.00	100.00	98.64	96.55	72.10	25.34
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>01-19-2021</i>	8.48	91.52	75.08	60.36	26.81	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>

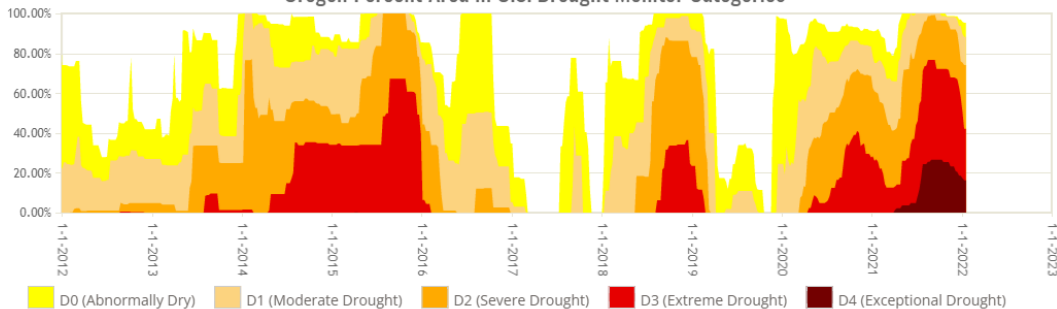
Author:

Brian Fuchs
National Drought Mitigation Center

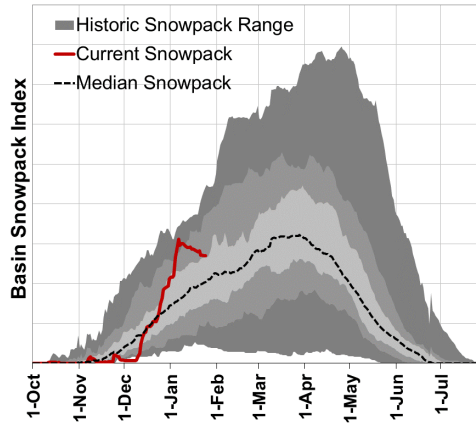


droughtmonitor.unl.edu

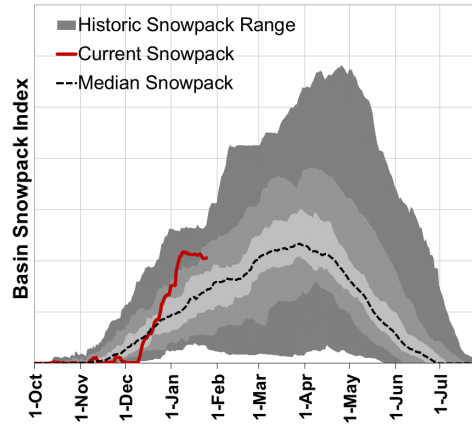
Oregon Percent Area in U.S. Drought Monitor Categories



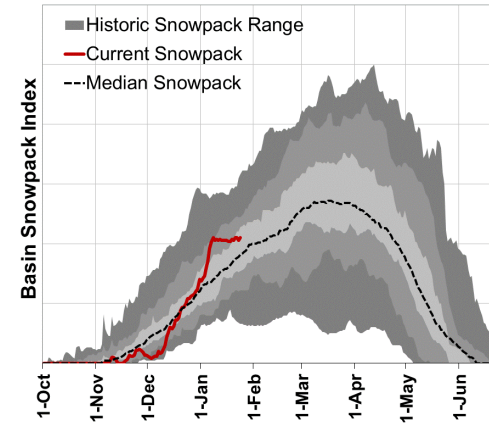
Willamette



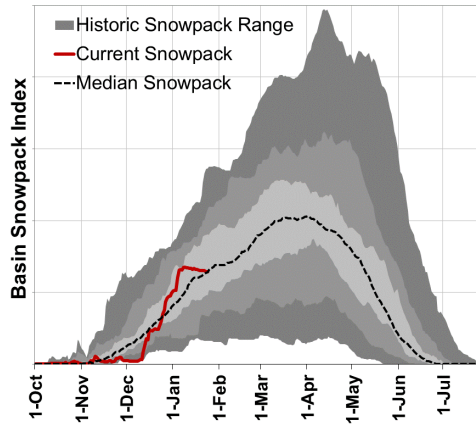
Hood-Sandy-Lower Deschutes



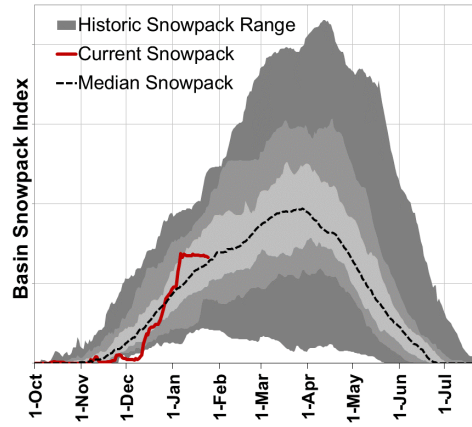
Umatilla-Walla Walla-Willow



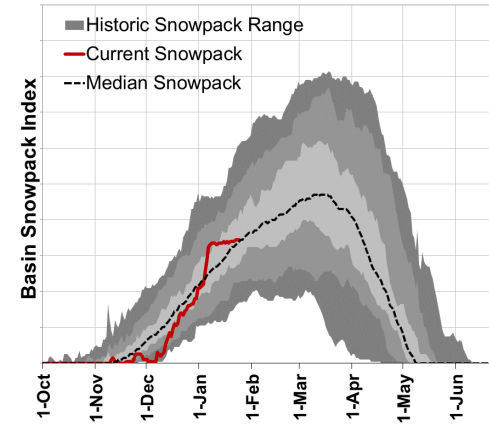
Rogue-Umpqua

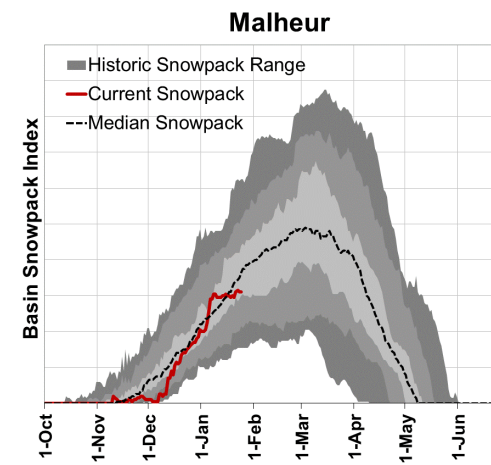
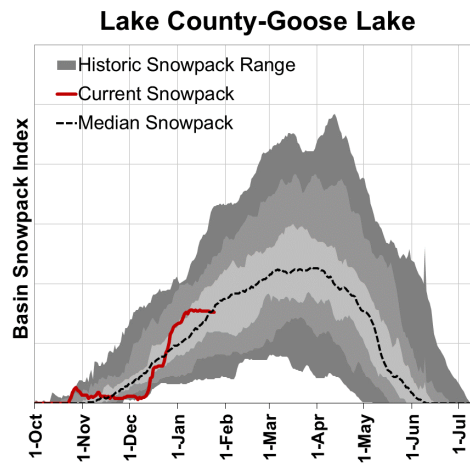
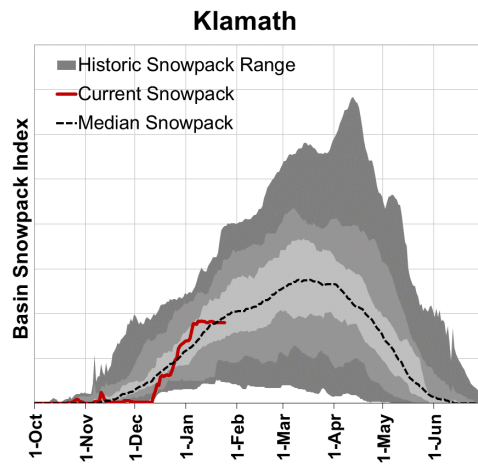
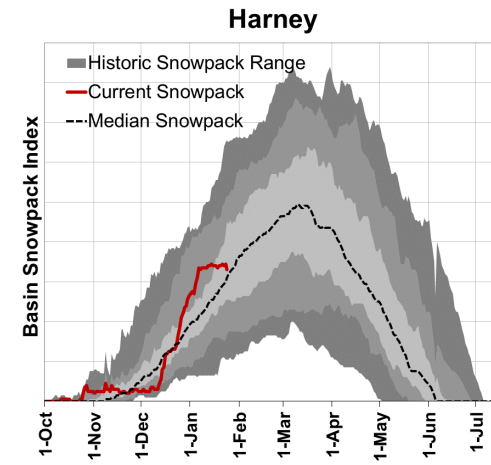
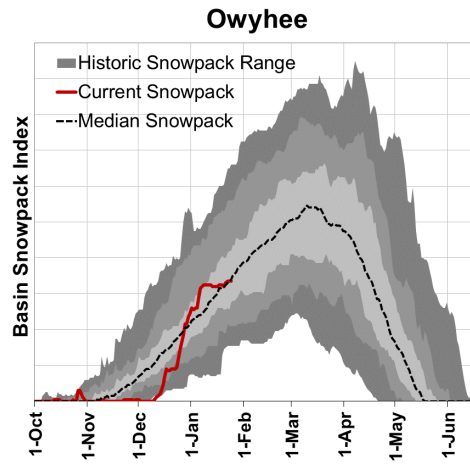
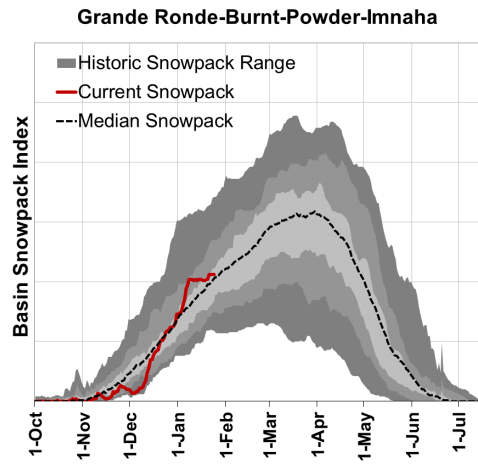


Upper Deschutes-Crooked

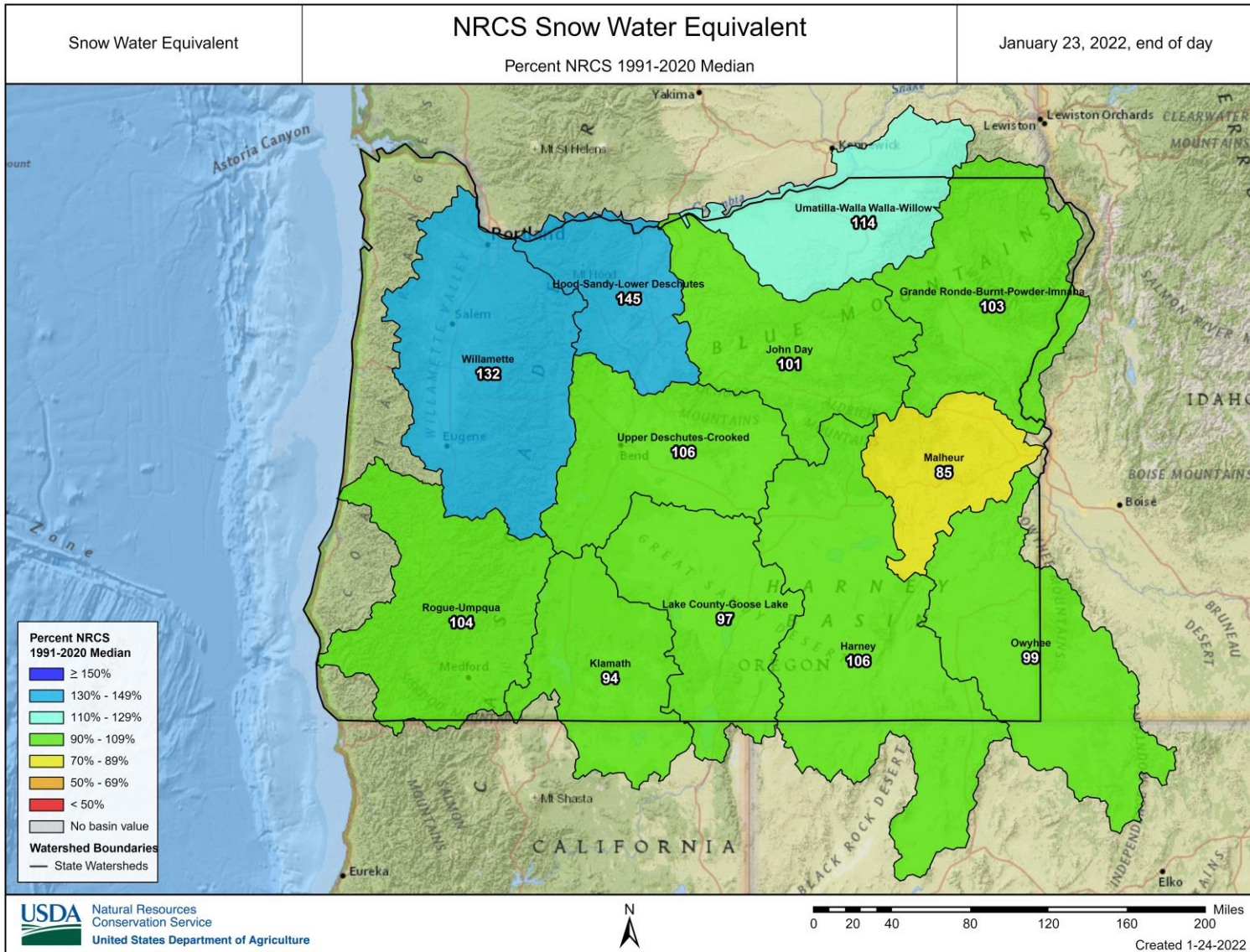


John Day

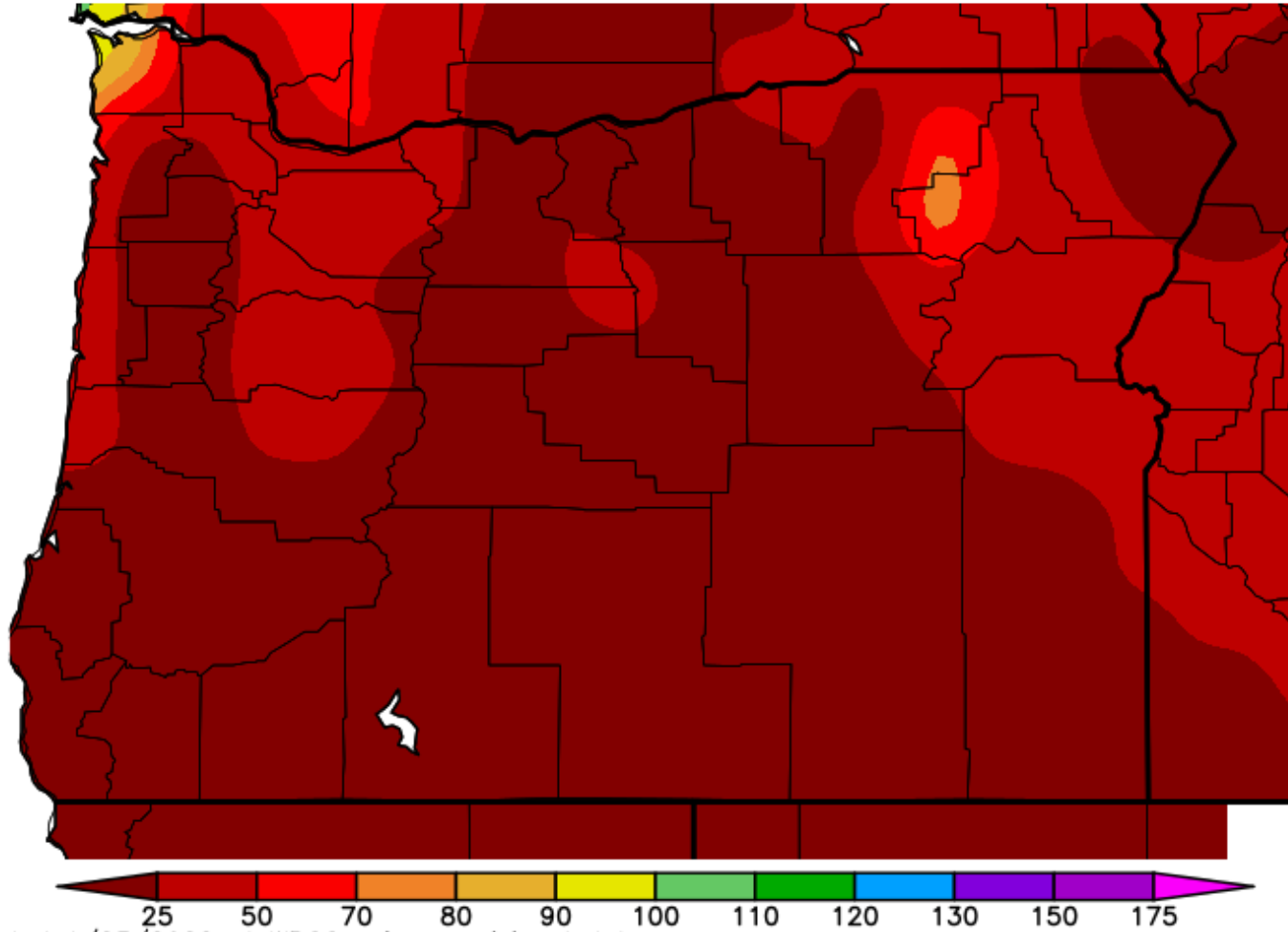




CLIMATE CONDITIONS
SNOW WATER EQUIVALENT

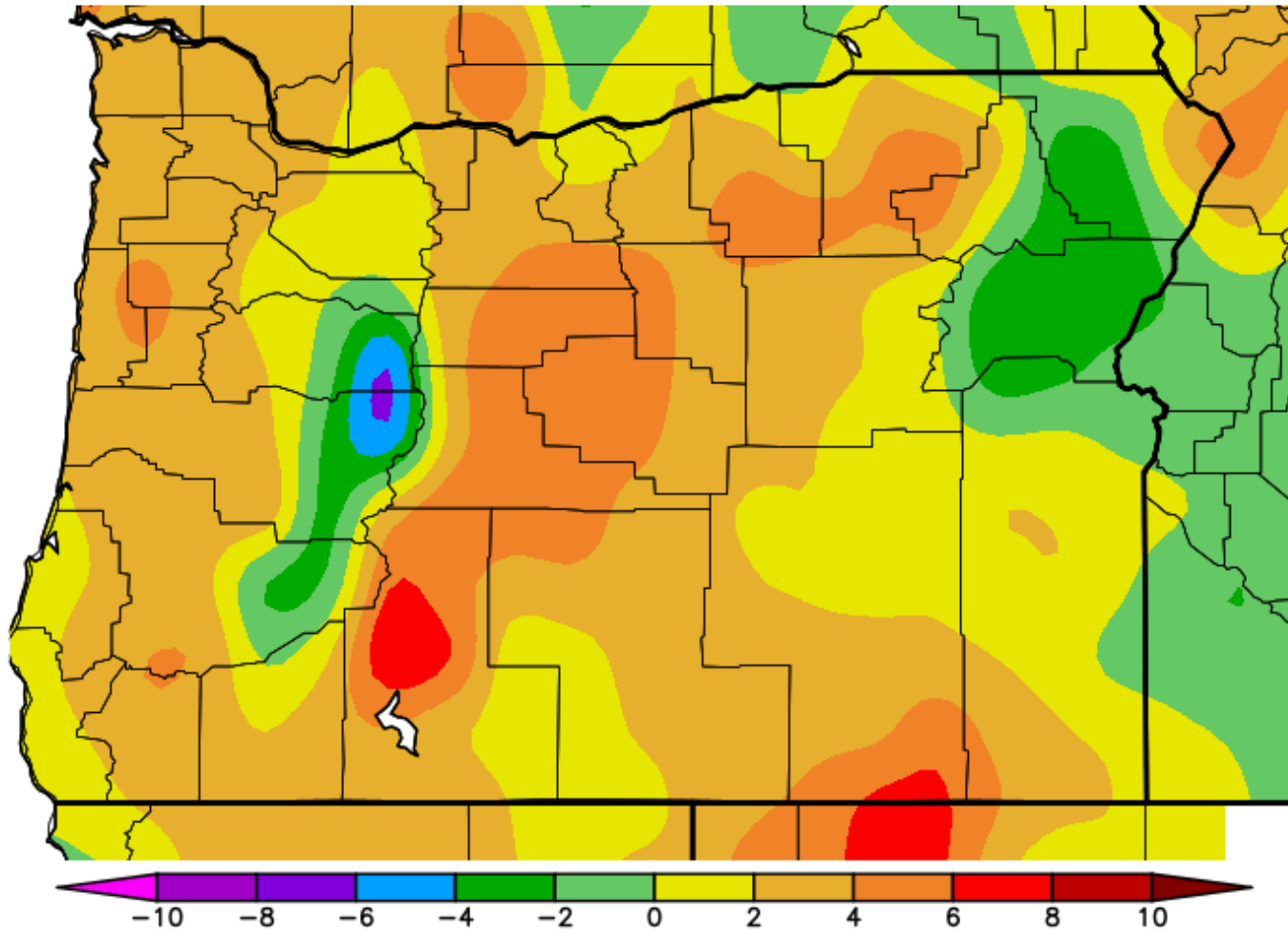


Percent of Average Precipitation (%) 1/9/2022 – 1/22/2022

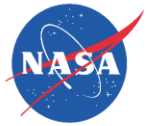


Generated 1/23/2022 at WRCC using provisional data.
NOAA Regional Climate Centers

Ave. Temperature dep from Ave (deg F)
1/9/2022 - 1/22/2022

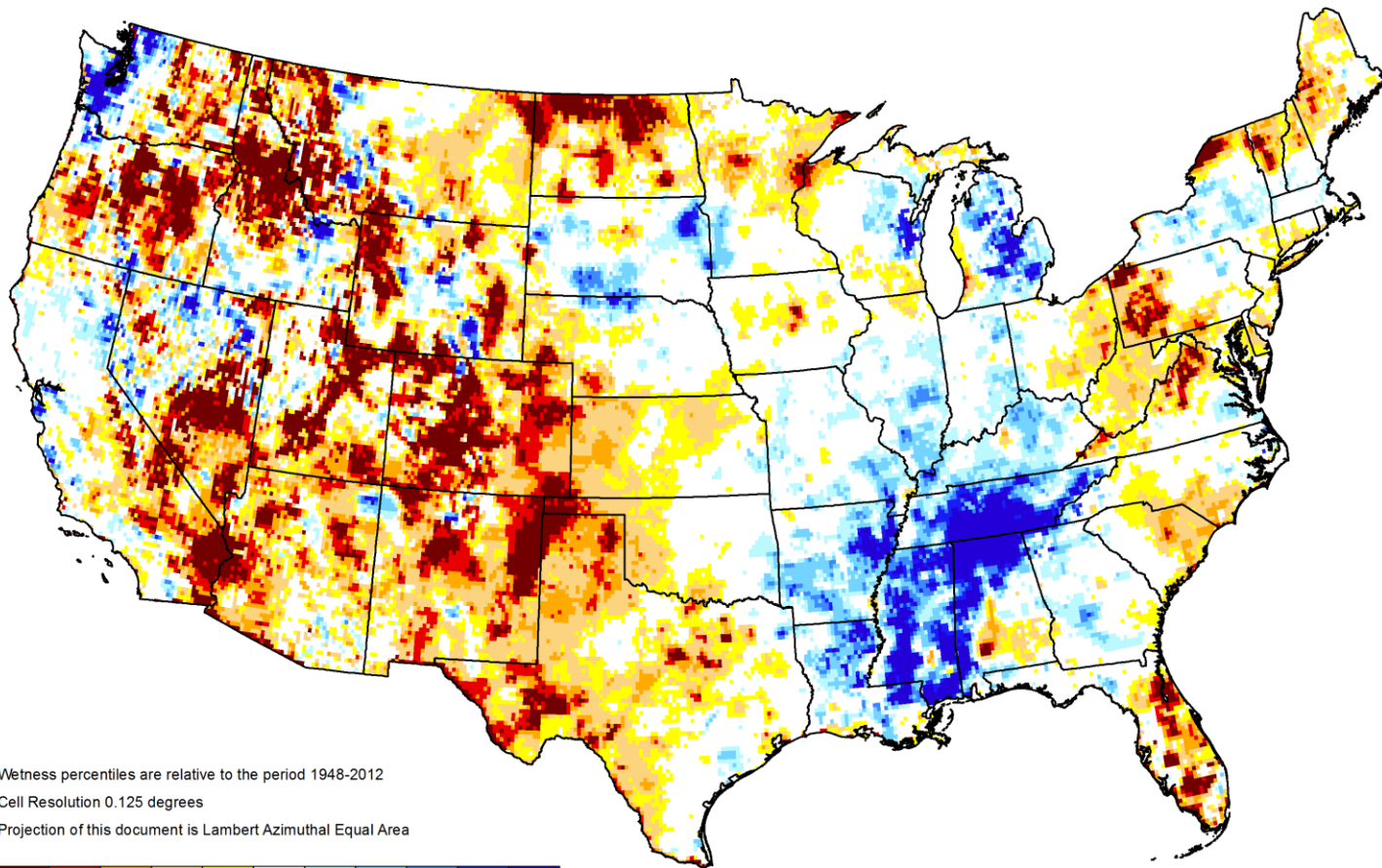


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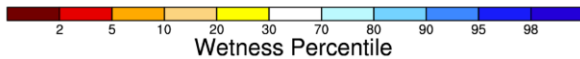


GRACE-Based Shallow Groundwater Drought Indicator

January 17, 2022



Wetness percentiles are relative to the period 1948-2012
Cell Resolution 0.125 degrees
Projection of this document is Lambert Azimuthal Equal Area

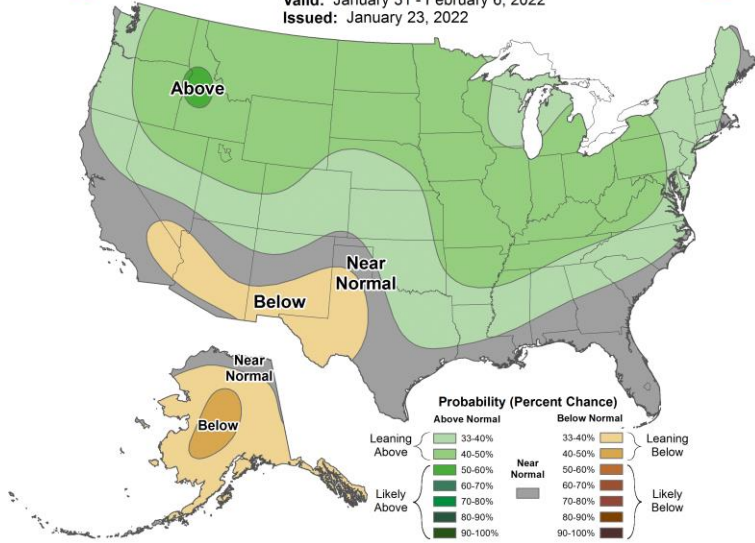


<https://nasagrace.unl.edu>



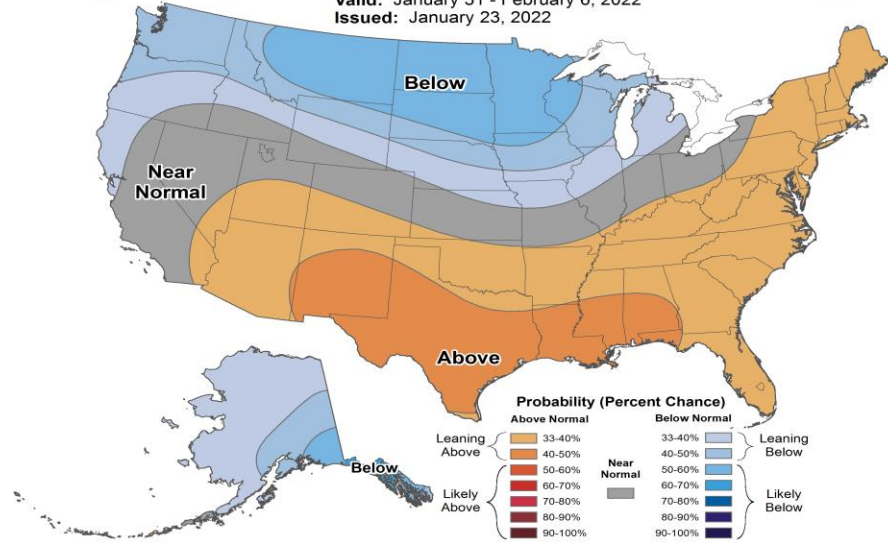
8-14 Day Precipitation Outlook

Valid: January 31 - February 6, 2022
 Issued: January 23, 2022



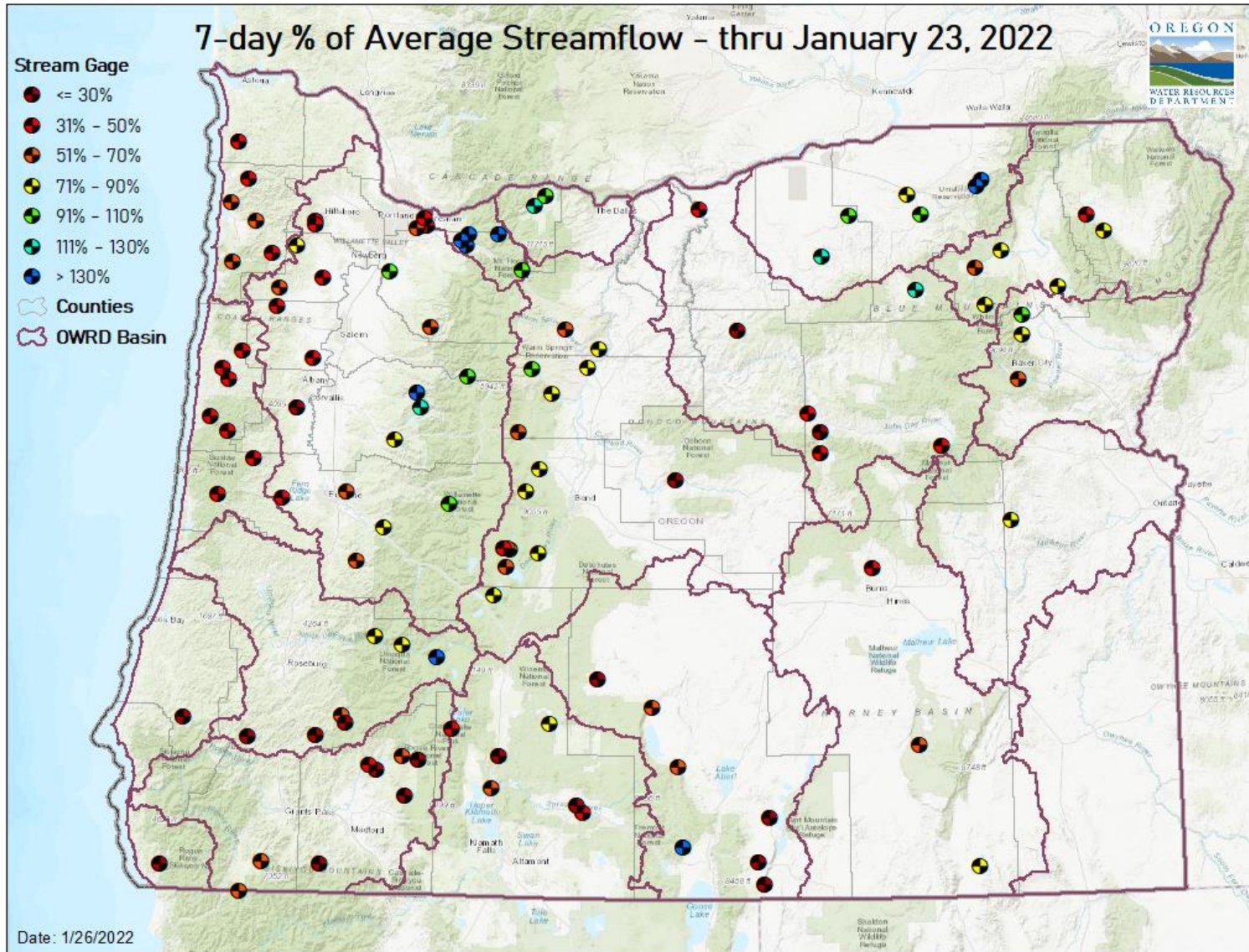
8-14 Day Temperature Outlook

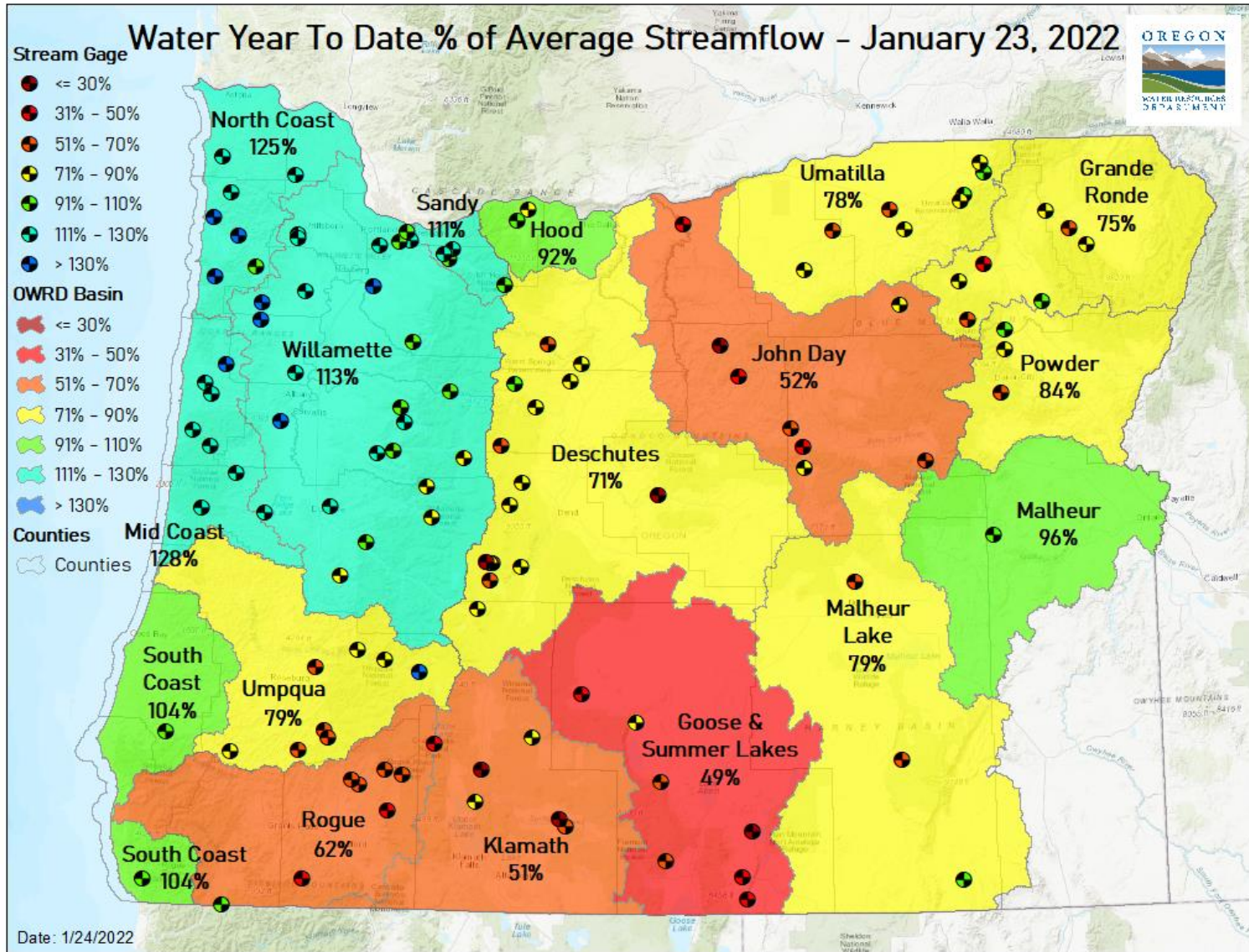
Valid: January 31 - February 6, 2022
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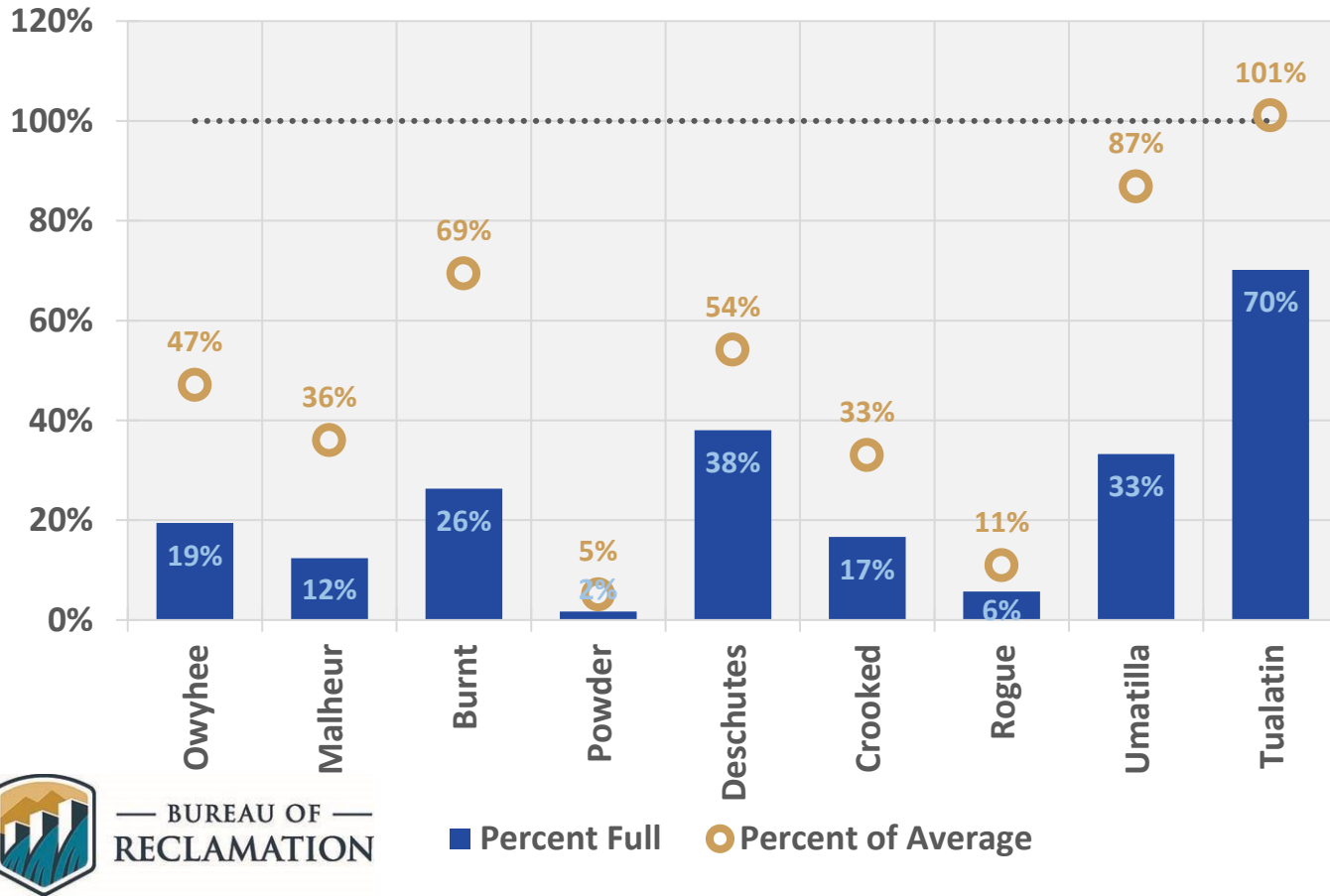
STREAMFLOW

7-DAY





January 23 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.