

Oregon Water Conditions Report



December 13th, 2021

HIGHLIGHTS

Over 98% of Oregon is classified as experiencing moderate (D1) to exceptional (D4) drought conditions according to the [US Drought Monitor](#). Drought severity was reduced from D4 to D3 in parts of northwestern Oregon (see below).

[Statewide snow water equivalent](#) is measuring 74% of the long-term median. SWE is variable throughout the state. With the exception of Willamette (98%) and Rogue (91%) Basins, all basins are measuring below 90% of median snowpack. Basins in southern Oregon are faring worse than central and northern basins east of the Cascades (see below).

[Precipitation throughout November](#) measured below to well below average throughout much of the state. With exception of northcentral and northwestern Oregon, precipitation measured below 90% of the long-term average, while some parts of southern Oregon measured below 50% of average. [Statewide SNOTEL precipitation](#) is measuring 94% of the long-term median at NRCS sites.

[November temperatures](#) were warmer than the long-term average statewide. Temperatures ranged between 2 °F - 7°F above the average throughout the state, with somewhat warmer temperatures in eastern Oregon.

[Shallow groundwater profiles](#) are still measuring well below the typical wetness in large portions of western, central, and eastern Oregon.

The three-month climate outlook for January through March indicates probabilities favoring below average temperatures statewide. Precipitation probabilities differ statewide, with above average precipitation likely in the northern third of Oregon and near average precipitation expected elsewhere.

Streamflows throughout November were variable throughout Oregon. Counties in northwestern Oregon measured streamflow well above average due to significant precipitation events. Streamflows in Jackson and Curry Counties were also well above average. Flows were generally well below average elsewhere, with few exceptions in Baker, Harney, and Jefferson Counties. [Average streamflows over the past seven days](#) remain well below average throughout much of the state (see below for more).

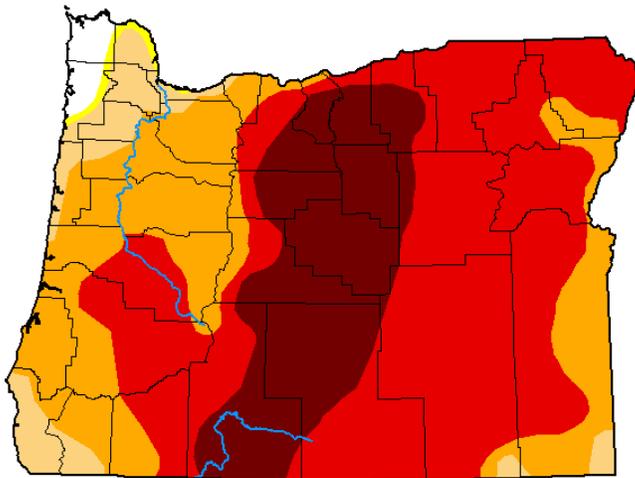
Reservoir storage contents continue to measure well below average in many [USBR](#) (including [Klamath](#)) and [USACE](#) systems throughout the state.

DROUGHT CONDITIONS

The US Drought Monitor indicates over 98% of Oregon is experiencing drought conditions. Drought severity was reduced from exceptional (D4) to extreme (D3) in portions of Morrow and Umatilla Counties.

U.S. Drought Monitor Oregon

December 7, 2021
(Released Thursday, Dec. 9, 2021)
Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	1.39	98.61	98.06	91.97	67.56	20.86
Last Week 11-30-2021	1.34	98.66	98.27	91.97	67.91	23.25
3 Months Ago 09-07-2021	0.00	100.00	100.00	99.08	76.69	26.59
Start of Calendar Year 12-29-2020	8.57	91.43	83.53	68.71	27.74	0.00
Start of Water Year 09-28-2021	0.00	100.00	100.00	96.47	72.10	26.59
One Year Ago 12-08-2020	7.77	92.23	84.10	69.08	29.59	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>

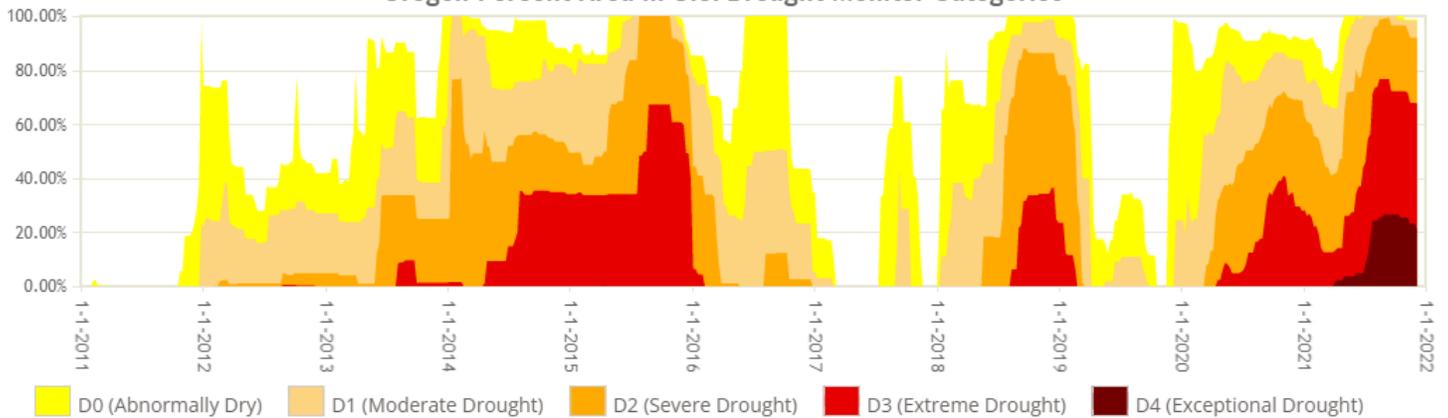
Author:

David Simeral
Western Regional Climate Center

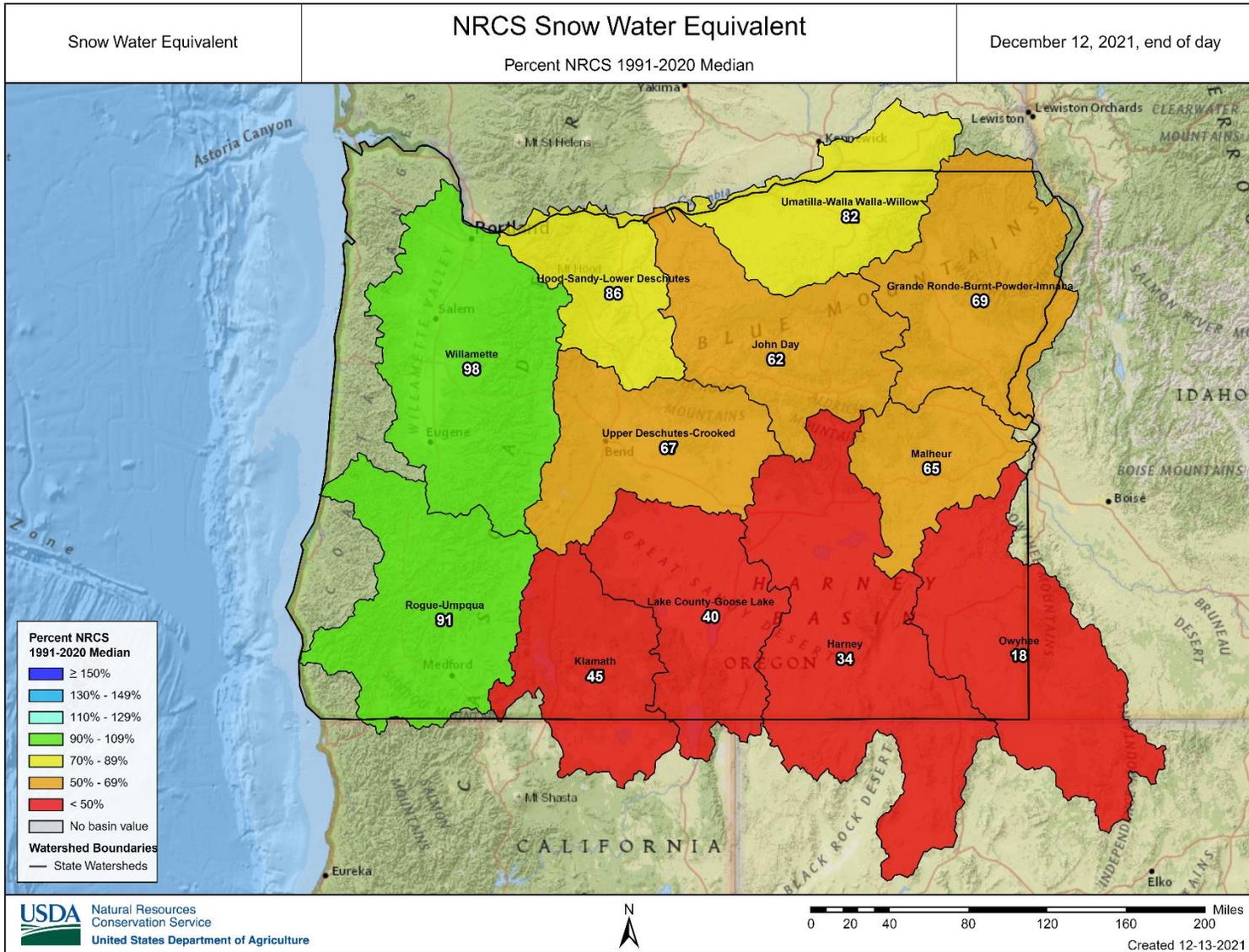


droughtmonitor.unl.edu

Oregon Percent Area in U.S. Drought Monitor Categories

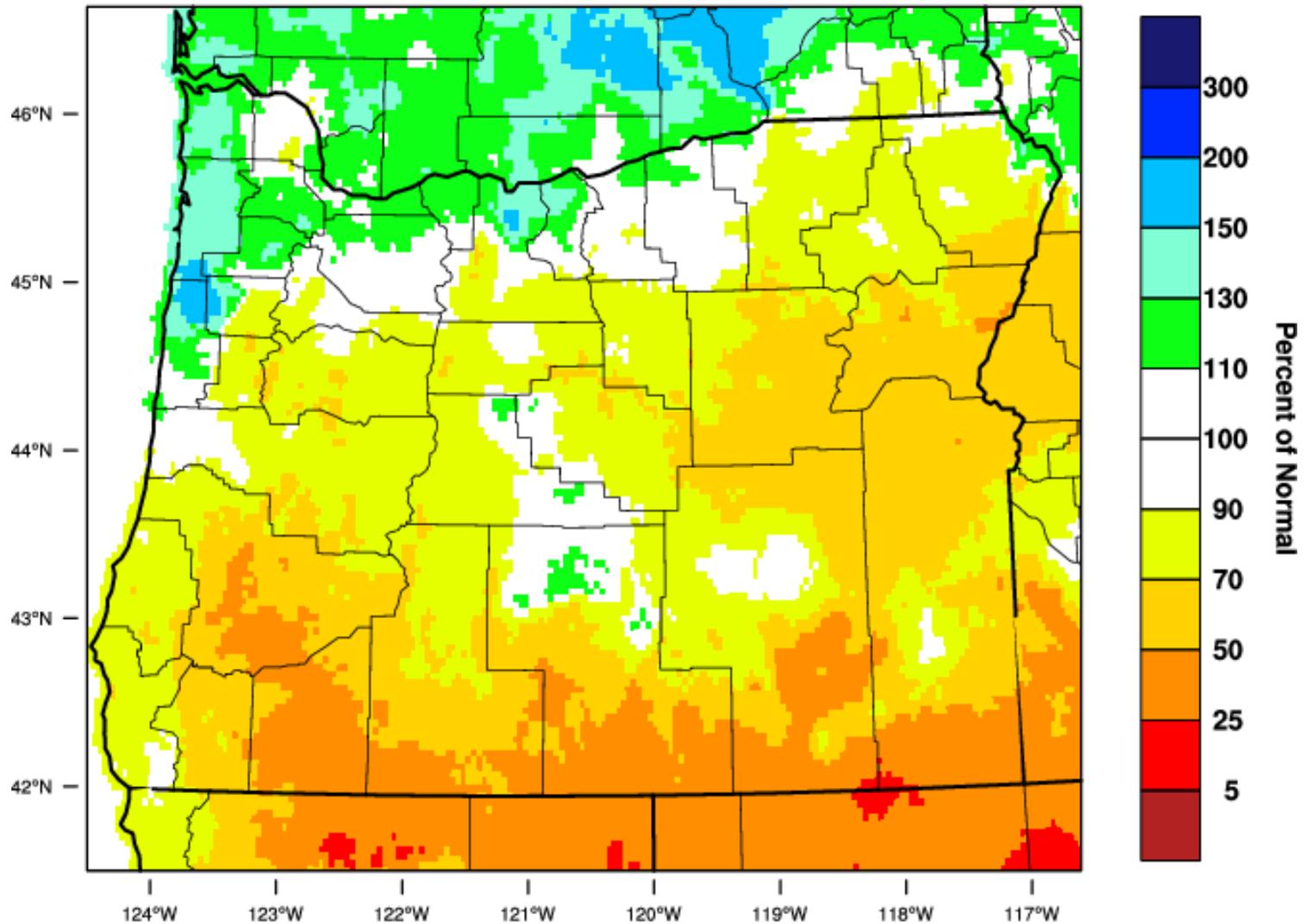


CLIMATE CONDITIONS
SNOW WATER EQUIVALENT



Oregon - Precipitation

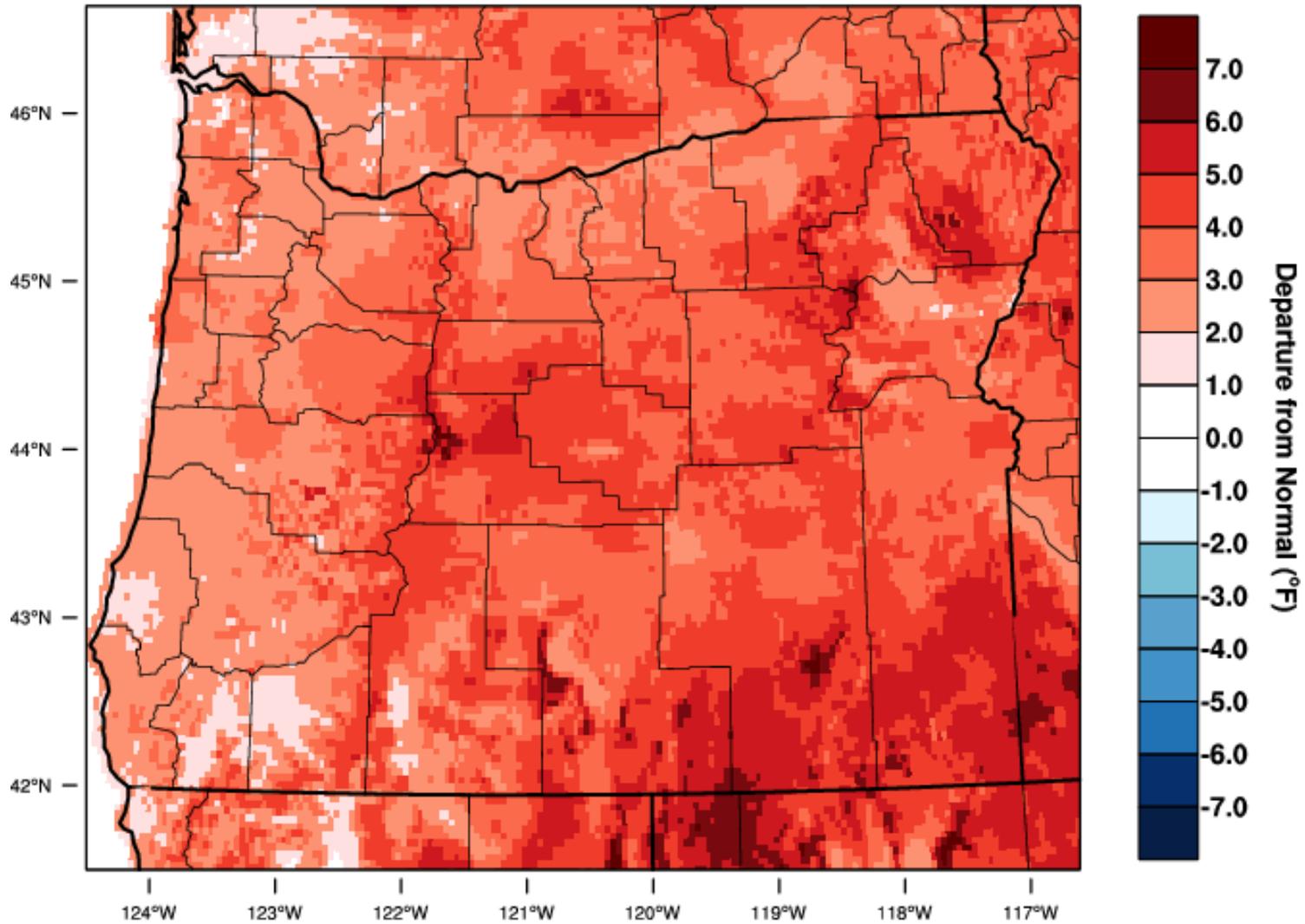
November 2021 Percent of 1981-2010 Normal



WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 11 DEC 2021

Oregon - Mean Temperature

November 2021 Departure from 1981-2010 Normal

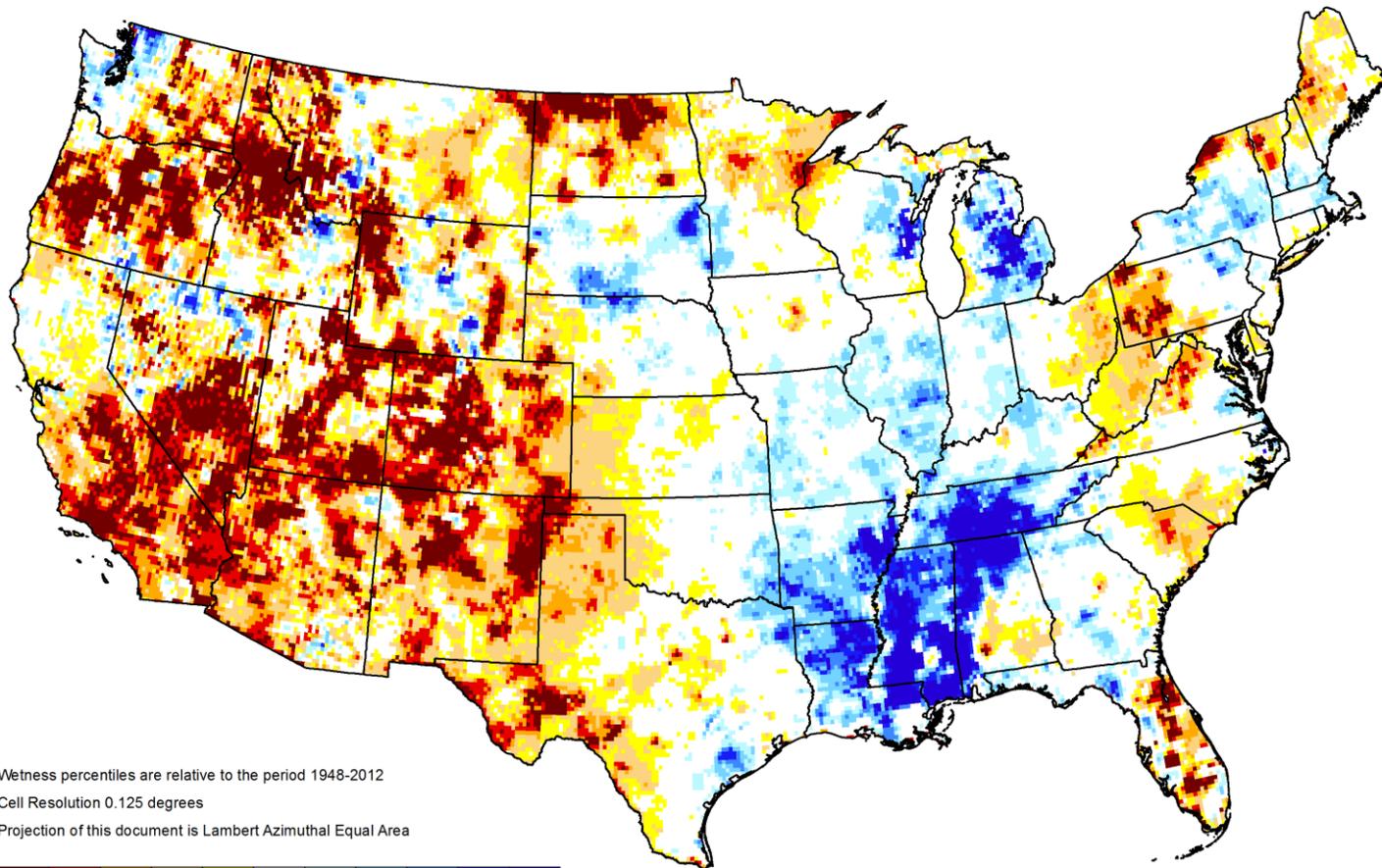


WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 11 DEC 2021

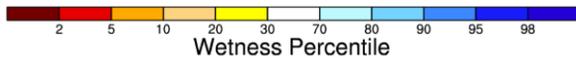


GRACE-Based Shallow Groundwater Drought Indicator

December 06, 2021



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



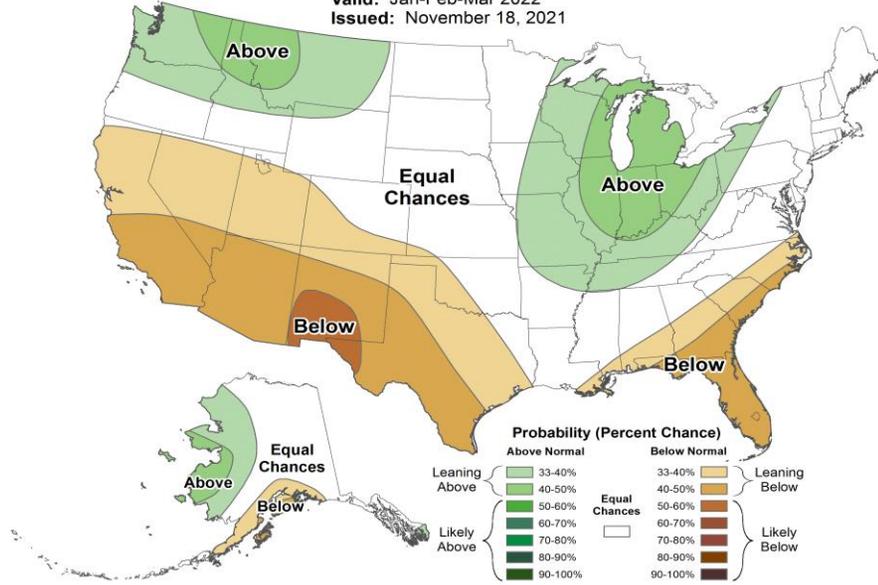
<https://nasagrace.unl.edu>



Seasonal Precipitation Outlook



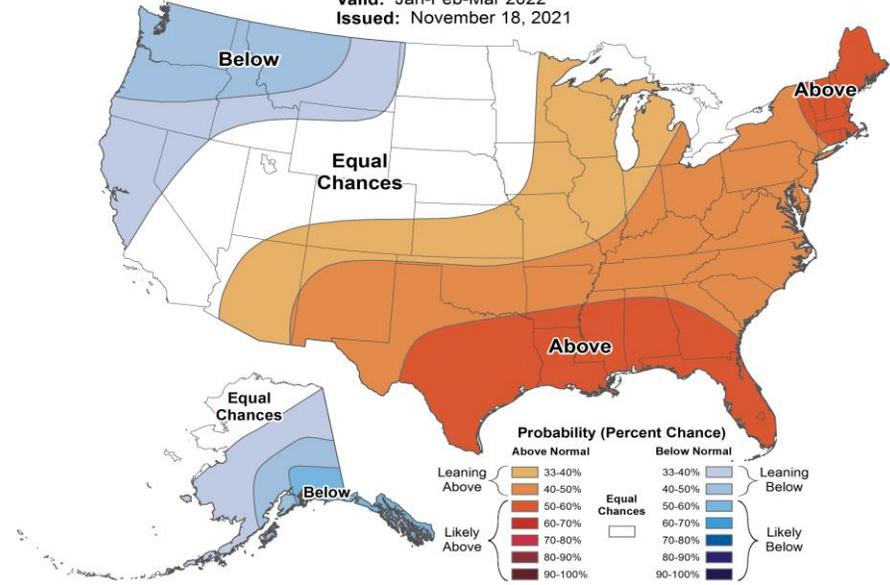
Valid: Jan-Feb-Mar 2022
 Issued: November 18, 2021



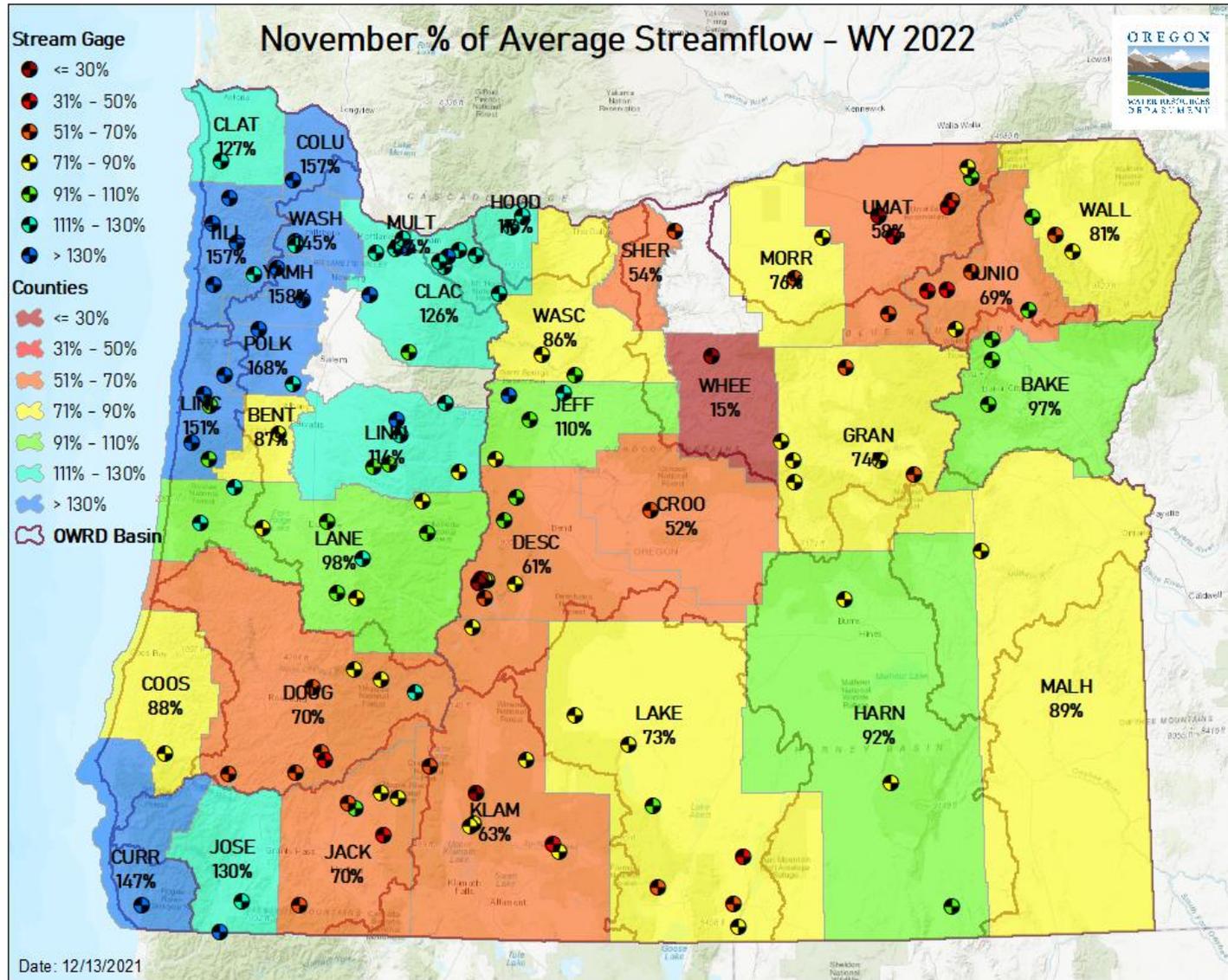
Seasonal Temperature Outlook

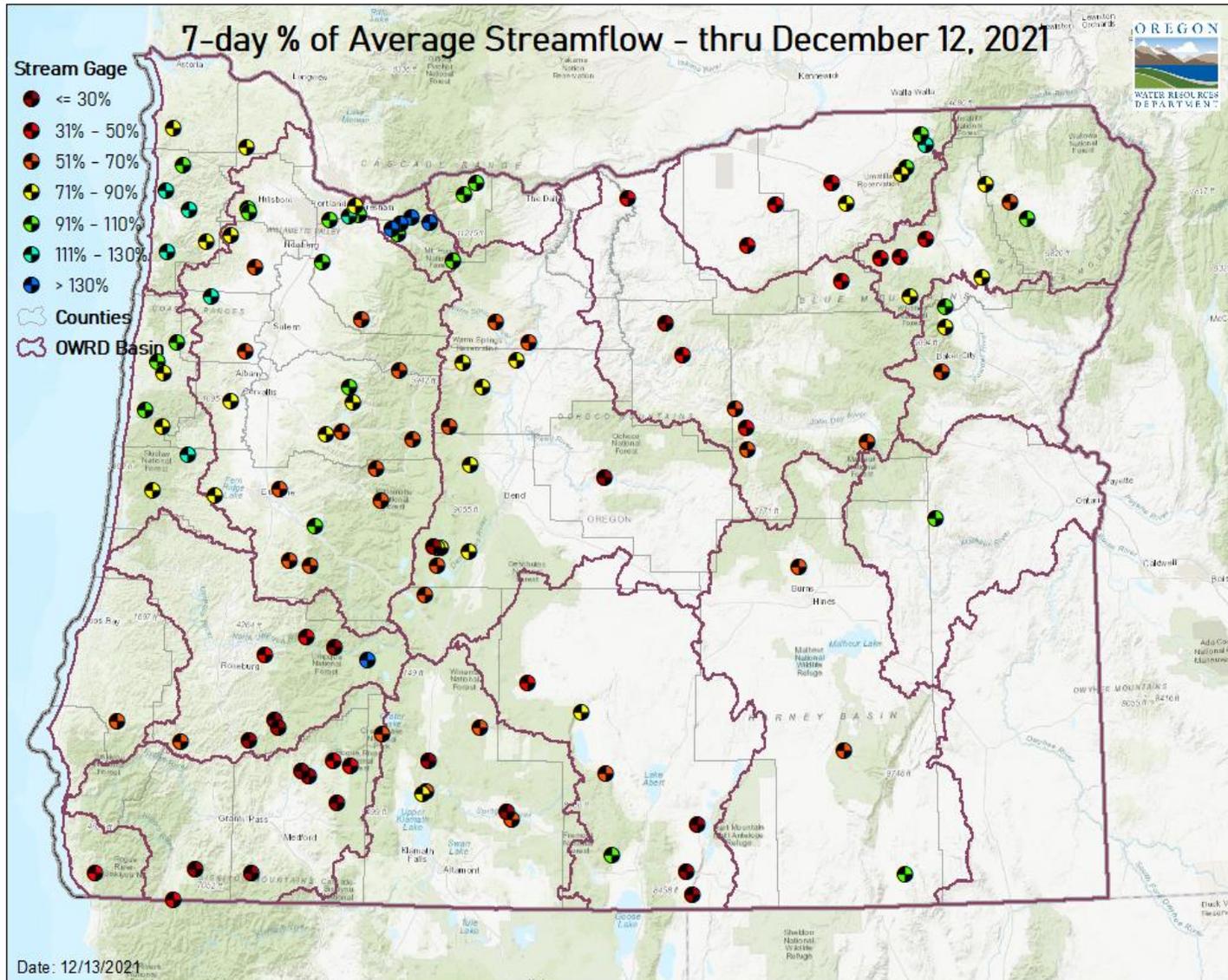


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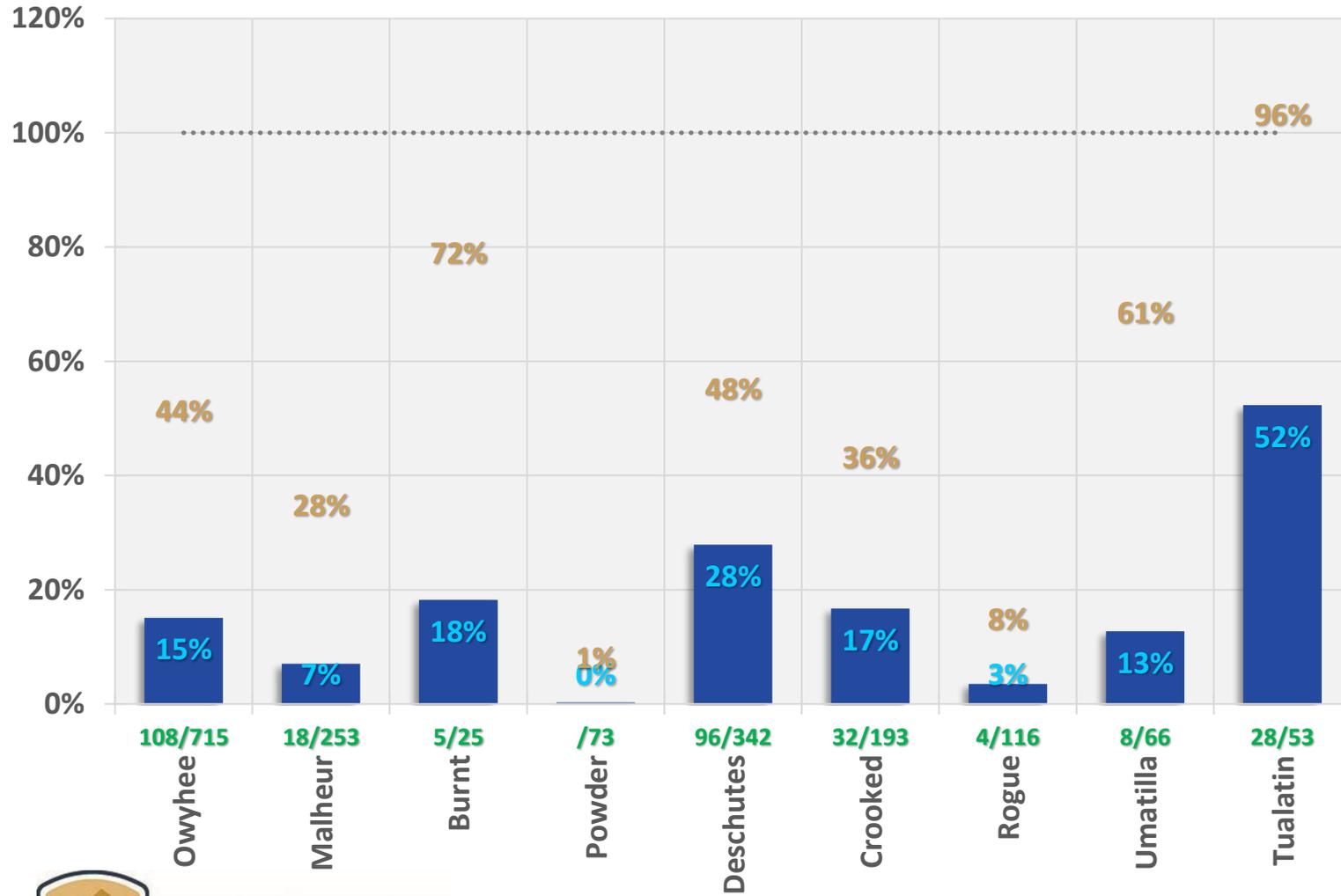


STREAMFLOW
NOVEMBER





Oregon Reservoir Storage (Dec 12 2021)



BUREAU OF RECLAMATION

■ Percent Full (Active Storage)
 ● Percent of Average (Dec-12 '90-'20)

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.