# Oregon Water Conditions Report

## January 16th, 2024

## HIGHLIGHTS

According to the US Drought Monitor, over 19% of Oregon is experiencing moderate (D1) to severe (D2) drought conditions. Over the past two weeks there have been minimal changes in drought coverage. Conditions in NE Oregon have degraded to D1. There have also been minimal improvements in D1 and D2 conditions in the Willamette Valley and north-central Oregon, respectively.

Snow water equivalent (SWE) in many basins across the state is currently measuring below to well above the historical median (min = 76%, max = 133%).

Precipitation over the past 14 days has been above to well above average for most of the state with the exception of NE Oregon, where precipitation was about 1.5 inches below average. In the central and southern Cascades, southern coast, and central coast range precipitation amounts ranged from 1.5 to 6 inches above average.

Over the past 14 days, temperatures have generally varied between northern and southern Oregon. Average temperatures in northern Oregon generally ranged from 2°F to 10°F below average. In southern parts of the state, average temperatures ranged from 4°F below average to 4°F above average.

Root zone soil and surface soil moisture profiles show some improvement over recent weeks due to above average precipitation for much of Oregon.

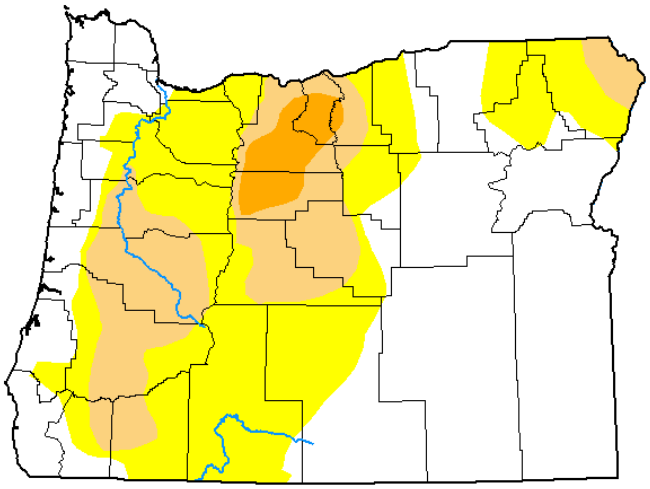
The near-term climate outlook indicates probabilities leaning towards above average precipitation statewide. The near-term outlook for temperature indicates probabilities leaning towards above average temperatures statewide especially in parts of SW Oregon.

Recent streamflow conditions varied between western and eastern Oregon. West of the Cascades, most streams were well above average in response to recent storm events. East of the Cascades, streamflow varied from well below (Klamath and Goose and Summer Lakes basins) to well above average (Blue Mountains). Streamflow conditions over the water year to date have shown some improvement in response to recent precipitation, most notably in western Oregon basins (Rogue, Umpqua, and South Coast).

Reservoir storage in many basins is currently above average. However, projects in the Deschutes, Rogue, and Umatilla basins are measuring below average. See USBR (including Klamath) and USACE teacup diagrams for more information.

## DROUGHT CONDITIONS

### U.S. Drought Monitor
# Oregon



**January 9, 2024**
*(Released Thursday, Jan. 11, 2024)*
**Valid 7 a.m. EST**

*Drought Conditions (Percent Area)*

| | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
|---|---|---|---|---|---|---|
| **Current** | 49.01 | 50.99 | 19.46 | 2.91 | 0.00 | 0.00 |
| **Last Week** *01-02-2024* | 47.04 | 52.96 | 18.85 | 3.12 | 0.00 | 0.00 |
| **3 Months Ago** *10-10-2023* | 24.10 | 75.90 | 53.26 | 24.81 | 4.32 | 0.00 |
| **Start of Calendar Year** *01-02-2024* | 47.04 | 52.96 | 18.85 | 3.12 | 0.00 | 0.00 |
| **Start of Water Year** *09-26-2023* | 24.13 | 75.87 | 54.18 | 27.06 | 6.40 | 0.00 |
| **One Year Ago** *01-10-2023* | 13.69 | 86.31 | 59.60 | 45.94 | 25.89 | 1.40 |

*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:*
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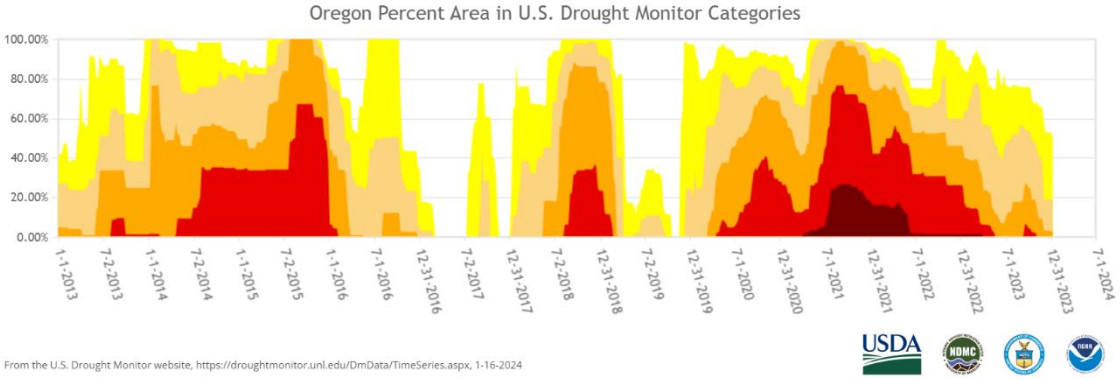
NOAA/NWS/NCEP/CPC

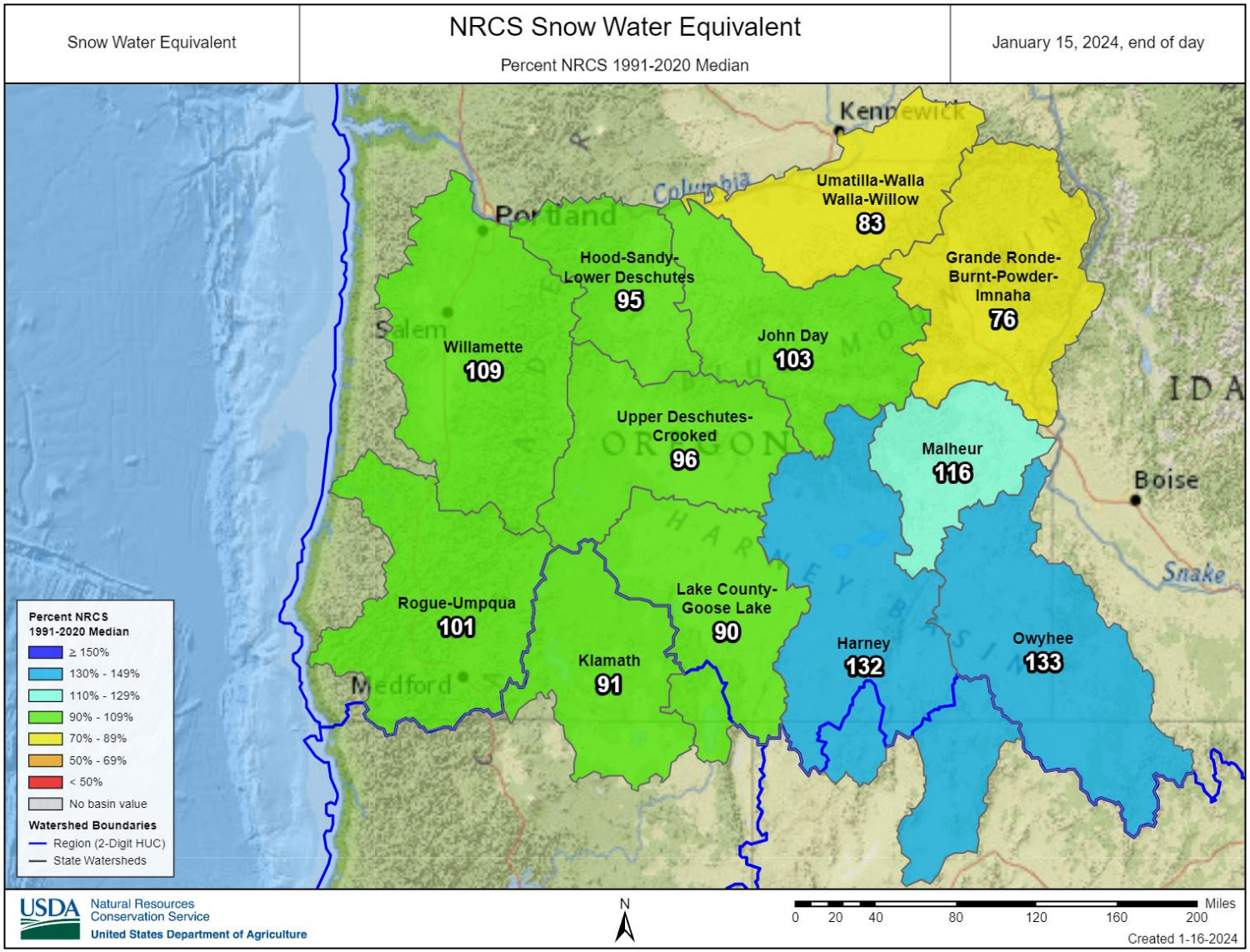
**droughtmonitor.unl.edu**



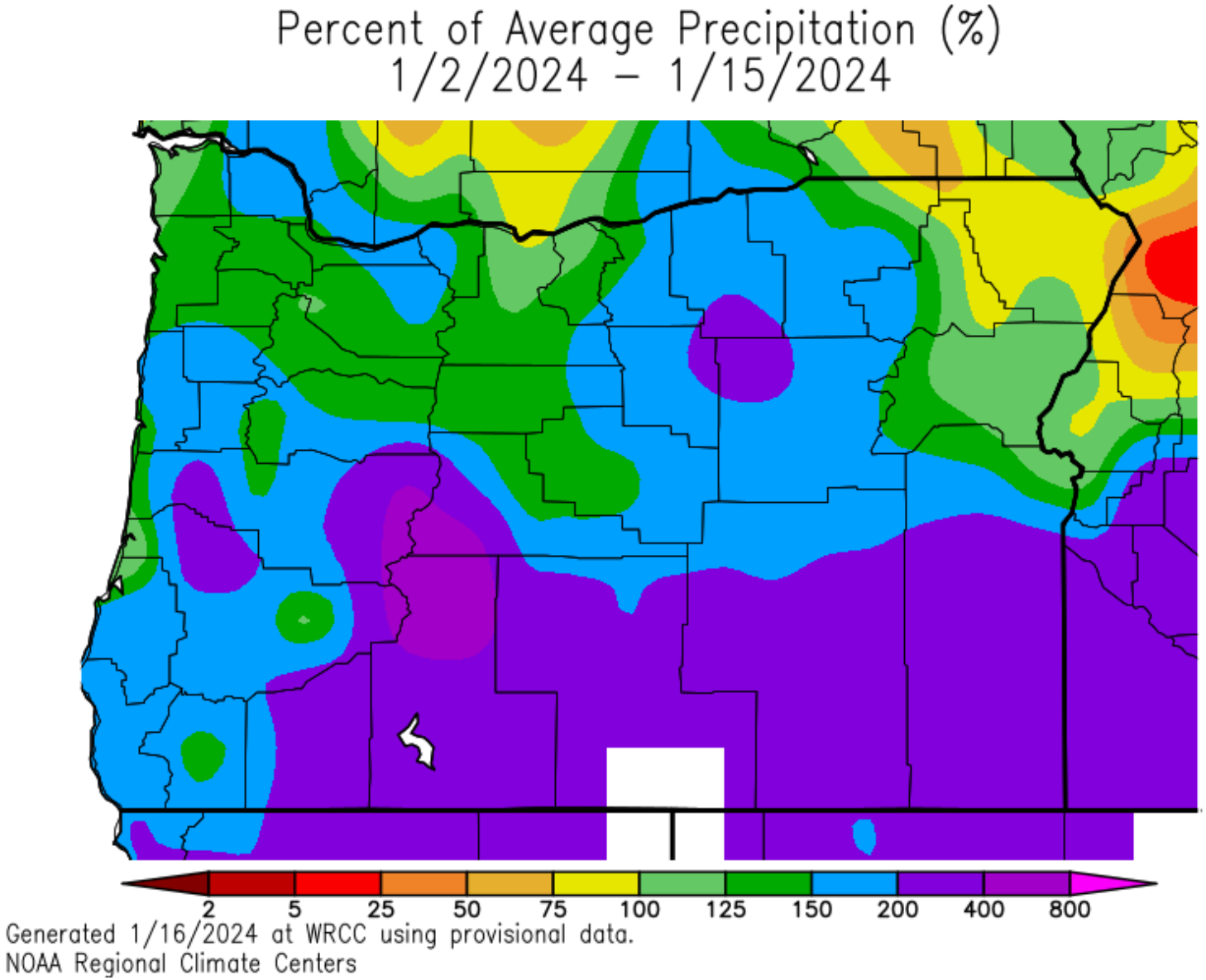

From the U.S. Drought Monitor website, https://droughtmonitor.unl.edu/DmData/TimeSeries.aspx, 1-16-2024

## CLIMATE CONDITIONS

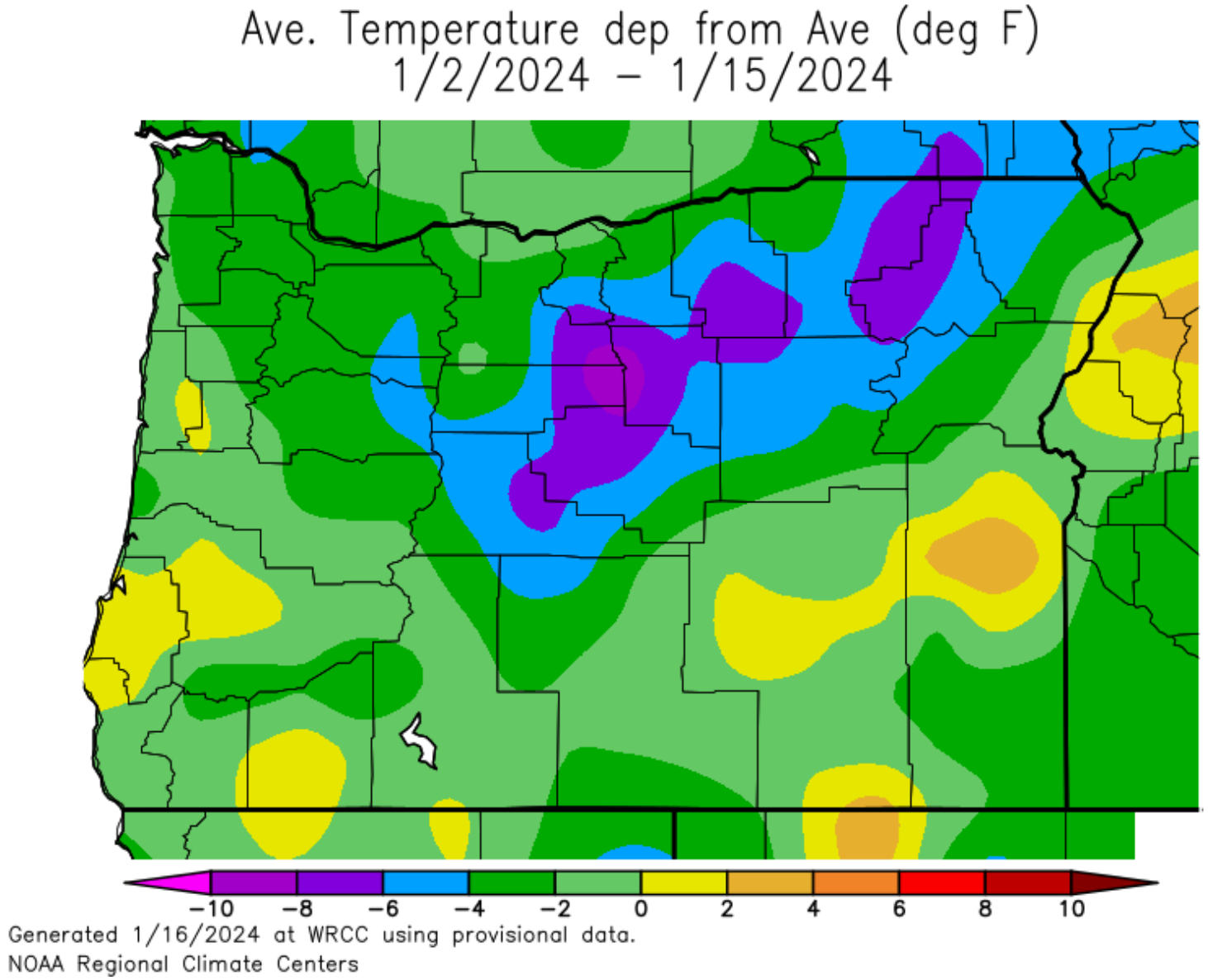
### SNOW WATER EQUIVALENT



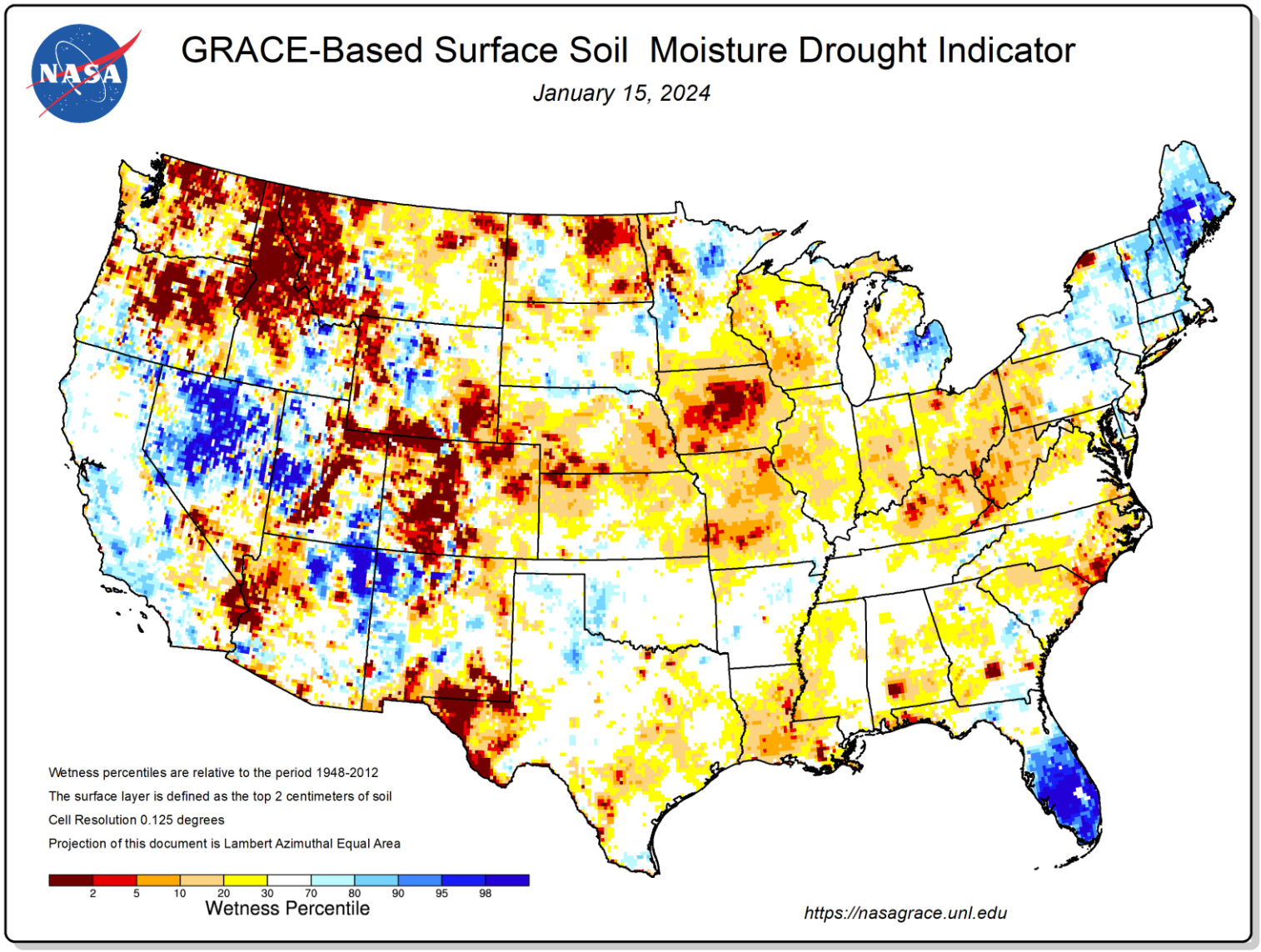
## PRECIPITATION



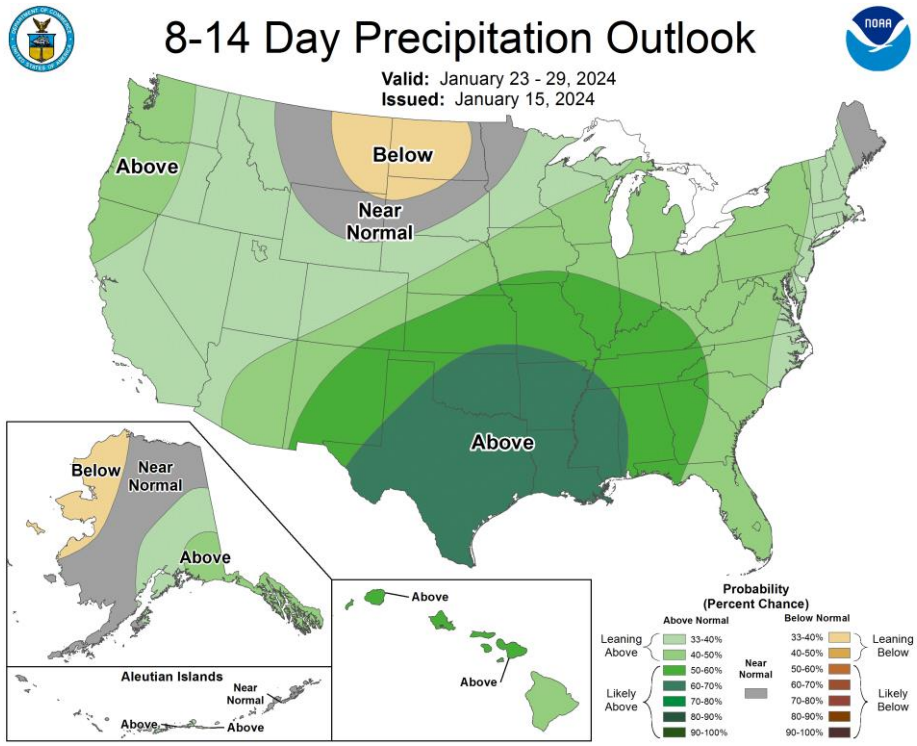
## TEMPERATURE

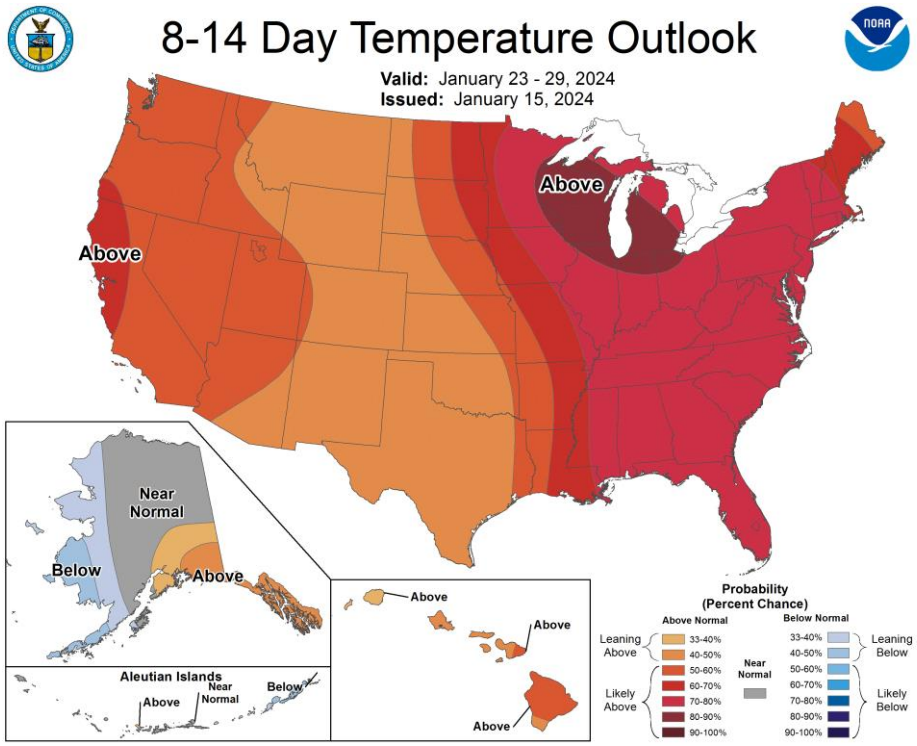


## SOIL MOISTURE

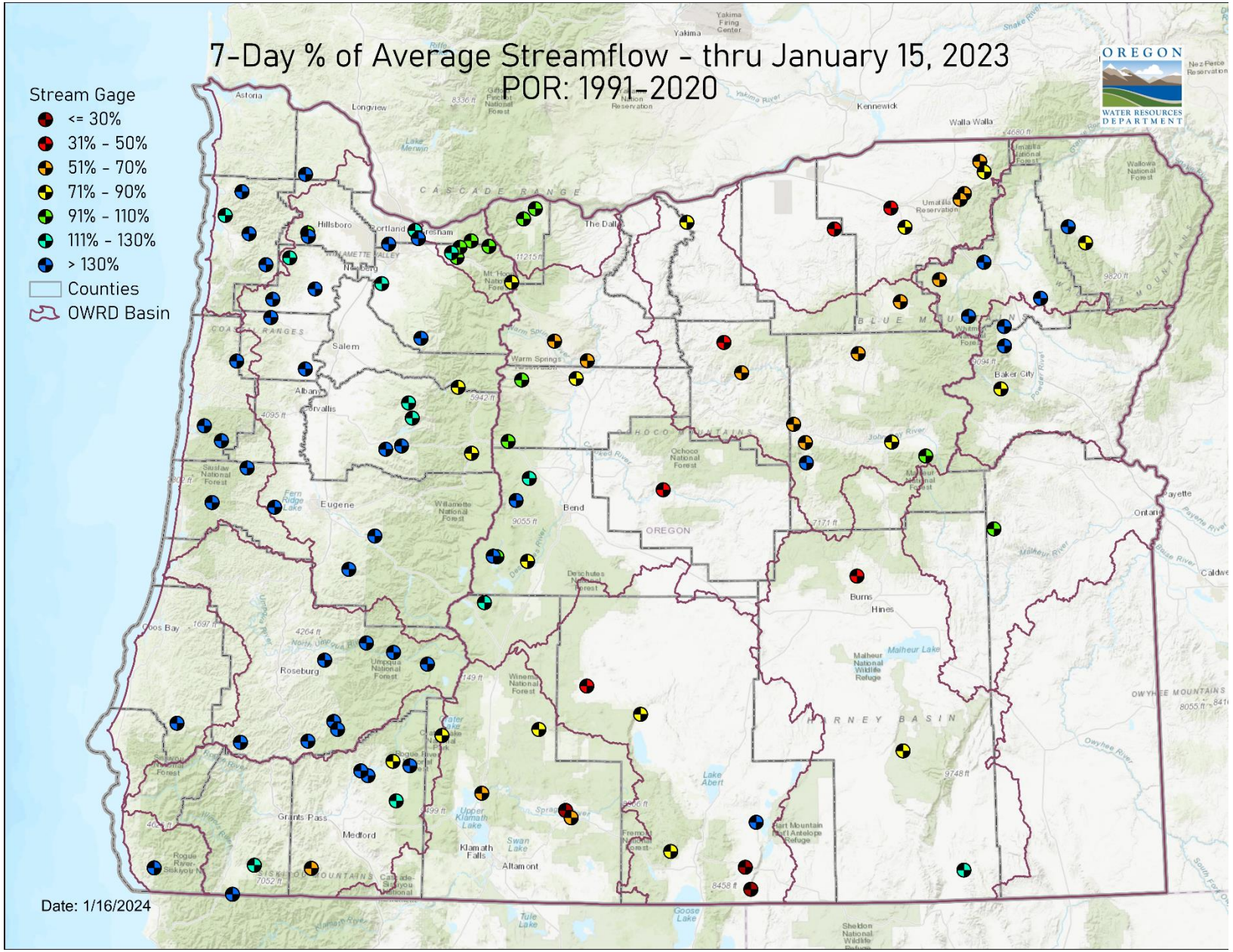


## CLIMATE OUTLOOK

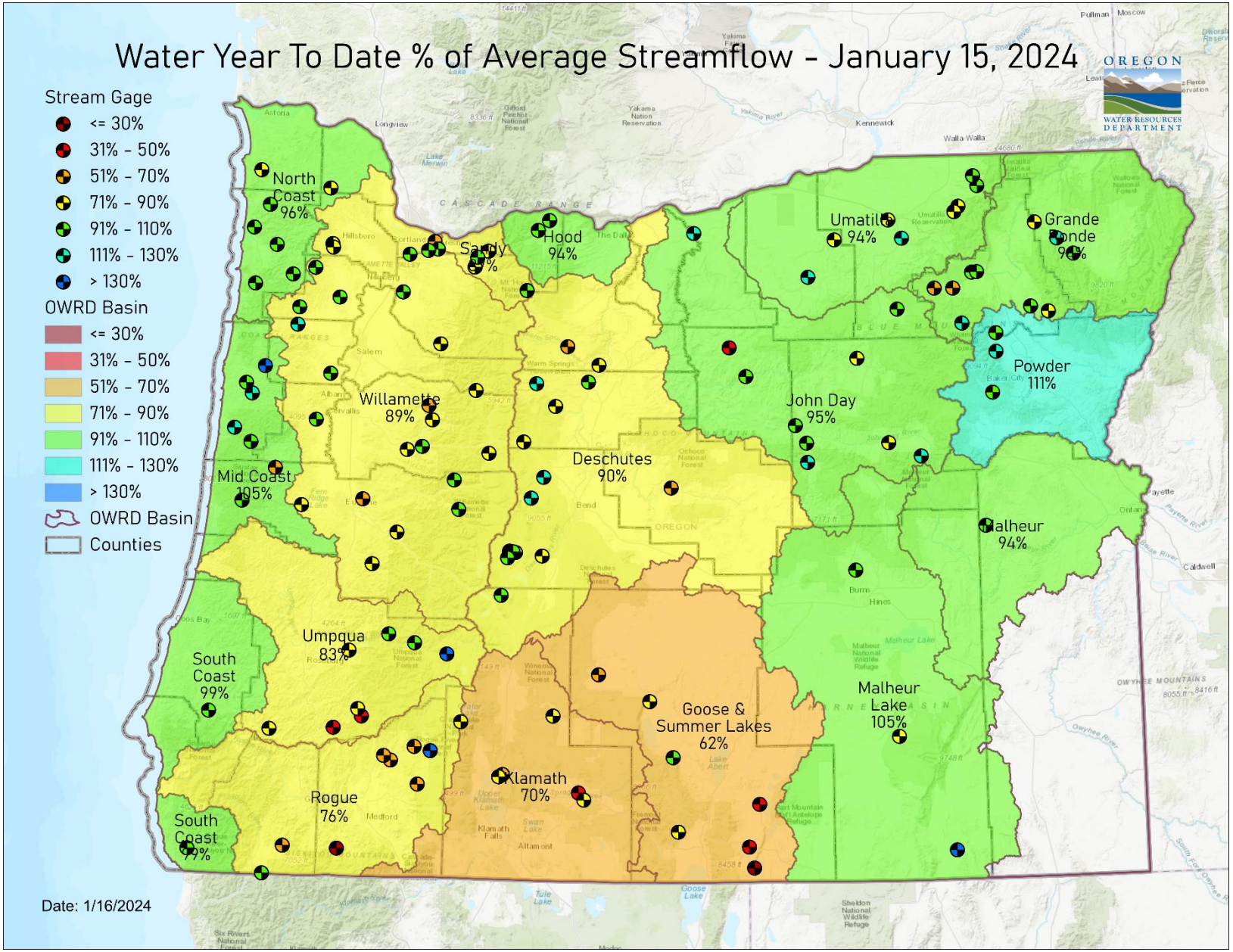


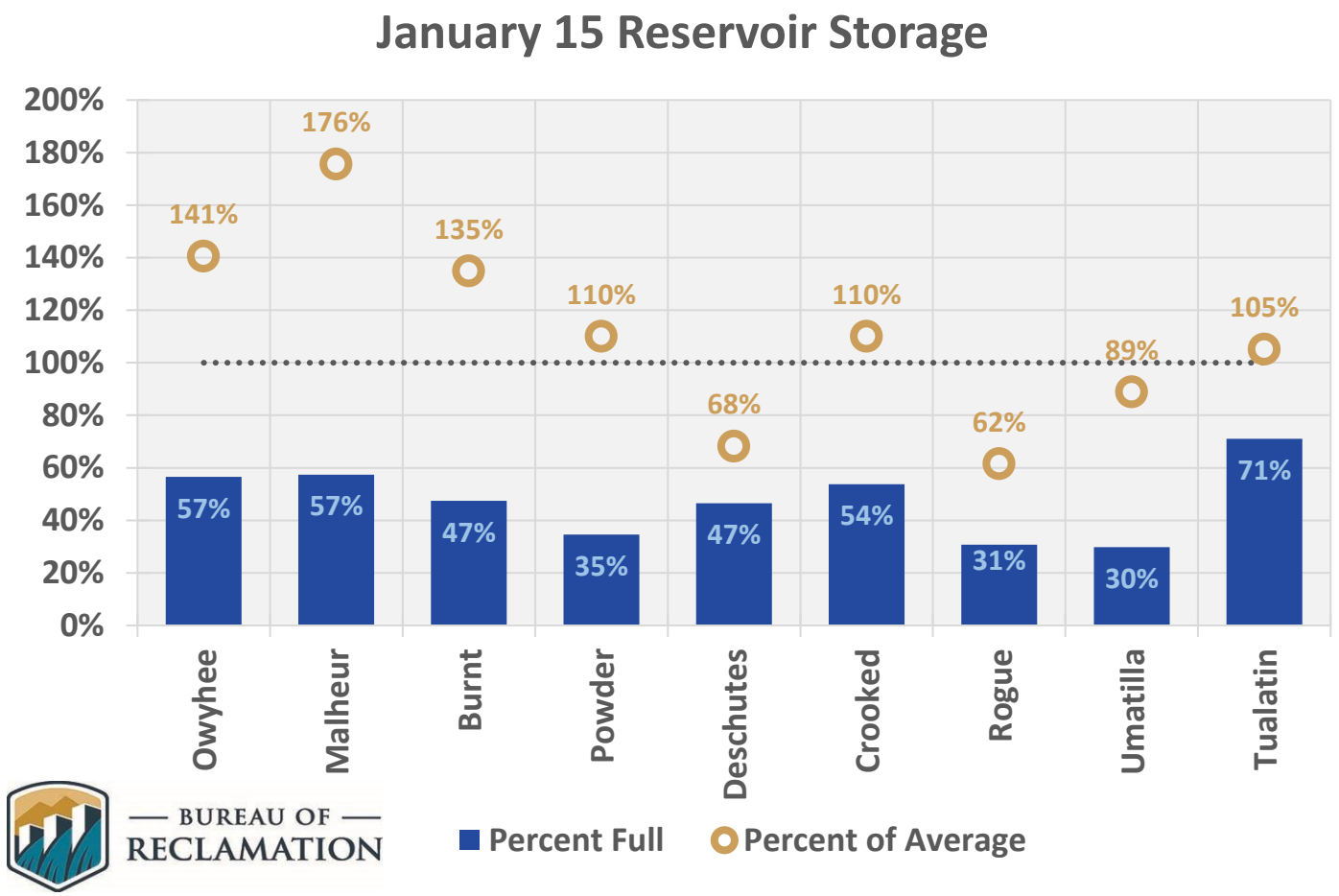



## STREAMFLOW


7-Day % of Average Streamflow - thru January 15, 2023
POR: 1991-2020
OREGON
WATER RESOURCES DEPARTMENT
Stream Gage
<= 30%
31% - 50%
51% - 70%
71% - 90%
91% - 110%
111% - 130%
> 130%
Counties
OWRD Basin
Date: 1/16/2024

## STREAMFLOW


Water Year To Date % of Average Streamflow - January 15, 2024
OREGON
WATER RESOURCES DEPARTMENT
Stream Gage
<= 30%
31% - 50%
51% - 70%
71% - 90%
91% - 110%
111% - 130%
> 130%
OWRD Basin
<= 30%
31% - 50%
51% - 70%
71% - 90%
91% - 110%
111% - 130%
> 130%
OWRD Basin
Counties
North Coast 96%
Sandy 87%
Hood 94%
Umatilla 94%
Grande Ronde 96%
Powder 111%
John Day 95%
Willamette 89%
Deschutes 90%
Mid Coast 105%
Malheur 94%
Umpqua 83%
South Coast 99%
Goose & Summer Lakes 62%
Malheur Lake 105%
Klamath 70%
Rogue 76%
South Coast 77%
Date: 1/16/2024


January 15 Reservoir Storage
200%
180%
160%
140%
120%
100%
80%
60%
40%
20%
0%
141%
176%
135%
110%
68%
110%
62%
89%
105%
57%
57%
47%
35%
47%
54%
31%
30%
71%
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.