Oregon Water Conditions Report

December 4th, 2023

HIGHLIGHTS

According to the US Drought Monitor, over 37% of Oregon is experiencing moderate (D1) to severe (D2) drought conditions. Over the last two weeks, there has been an areal reduction in moderate drought and abnormally dry conditions across Gilliam, Morrow, Umatilla, and Grant counties.

Snow water equivalent (SWE) in basins across the state is currently measuring below to well above the historical median (min = 89%; max = 196%). It is important to note SWE is highly variable early in the water year.

November precipitation was below average throughout most of the state. Precipitation over the water year to date reflects similar patterns in dryness with some exceptions throughout the state, most notably in northeast and southeast Oregon.

Temperatures in November were warmer than usual statewide. Throughout much of the state, temperatures ranged from 1 °F to 5 °F above the long-term average.

Shallow groundwater profiles continue to measure below average throughout most of the state but have shown improvement since the beginning of the water year.

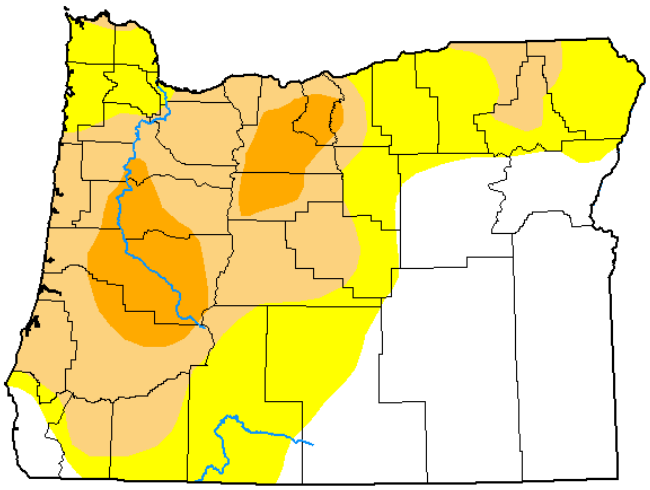
The three-month seasonal outlook for December through February indicates probabilities showing equal chances of above/below average precipitation for much of the state and above average for southern Oregon. The seasonal outlook for temperature indicates probabilities favoring above average temperatures statewide.

Streamflows in November were well below to below average west of the Cascades with some exception in the southern Cascades and northern Coast Range. East of the Cascades, streamflows were below to well above average. Over the water year to date, flows generally show a similar pattern of dryness to flows in November especially in western Oregon.

Reservoir storage carryover in many basins continue to measure near to above average. However, projects in the Deschutes, Rogue, Umatilla, and Tualatin basins are measuring below average. See USBR (including Klamath) and USACE teacup diagrams for more information.

DROUGHT CONDITIONS

U.S. Drought Monitor
Oregon



November 28, 2023
(Released Thursday, Nov. 30, 2023)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	34.37	65.63	37.28	9.32	0.00	0.00
Last Week *11-21-2023*	34.37	65.63	40.71	9.32	0.00	0.00
3 Months Ago *08-29-2023*	24.02	75.98	56.32	17.70	0.00	0.00
Start of Calendar Year *01-03-2023*	13.46	86.54	59.75	46.03	26.18	1.40
Start of Water Year *09-26-2023*	24.13	75.87	54.18	27.06	6.40	0.00
One Year Ago *11-29-2022*	5.38	94.62	59.76	46.04	26.18	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

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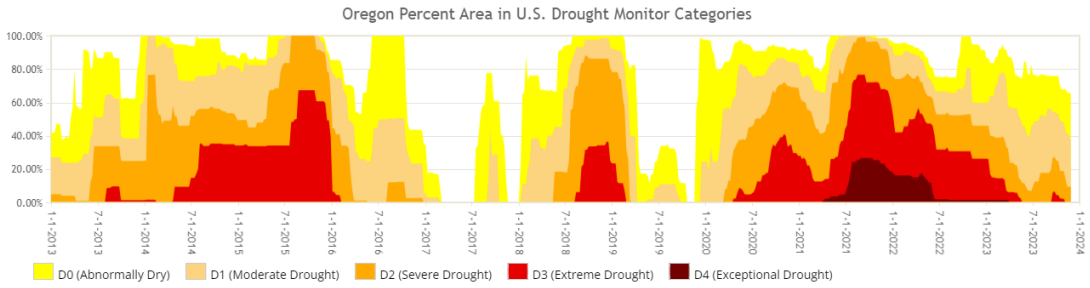
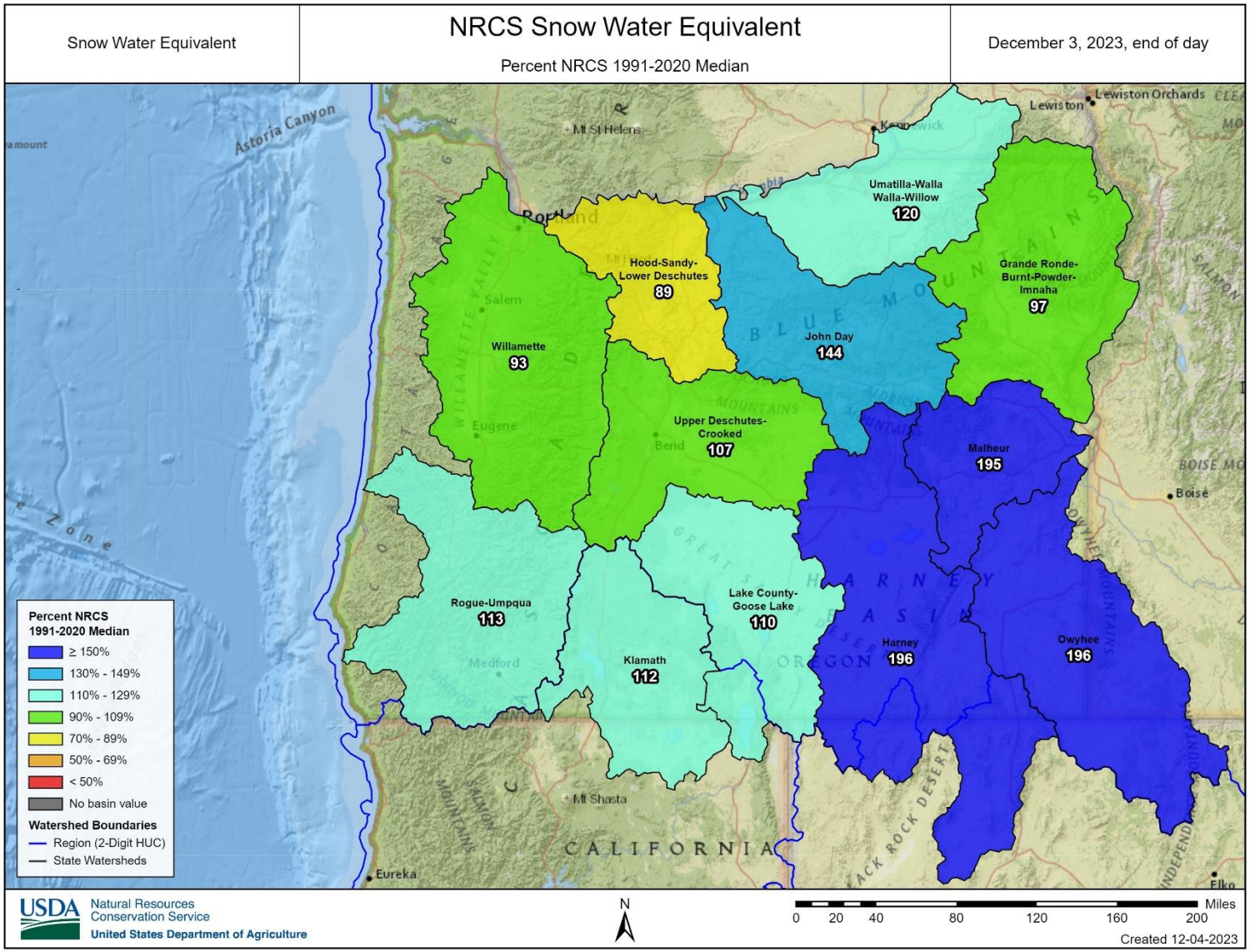
droughtmonitor.unl.edu

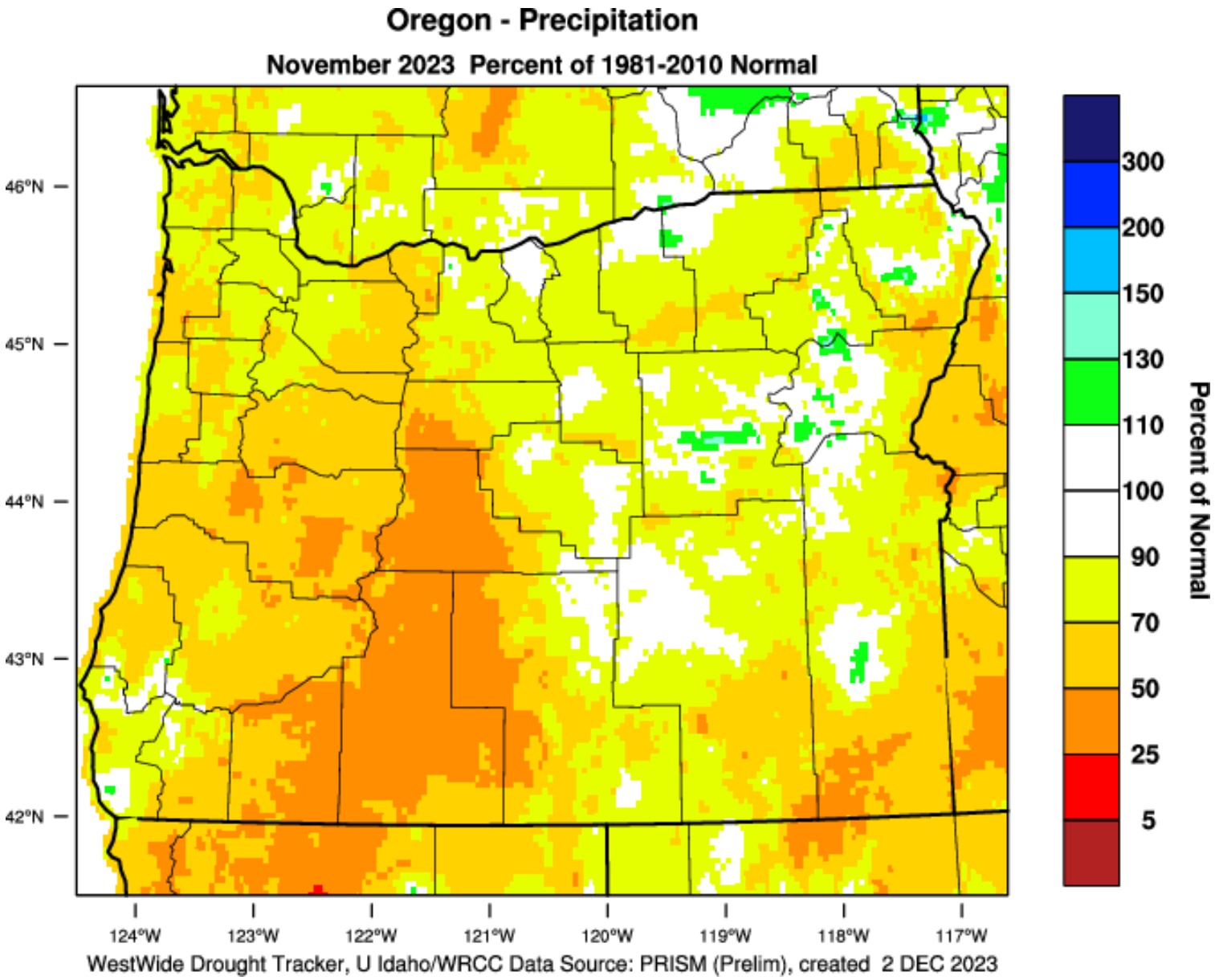


CLIMATE CONDITIONS

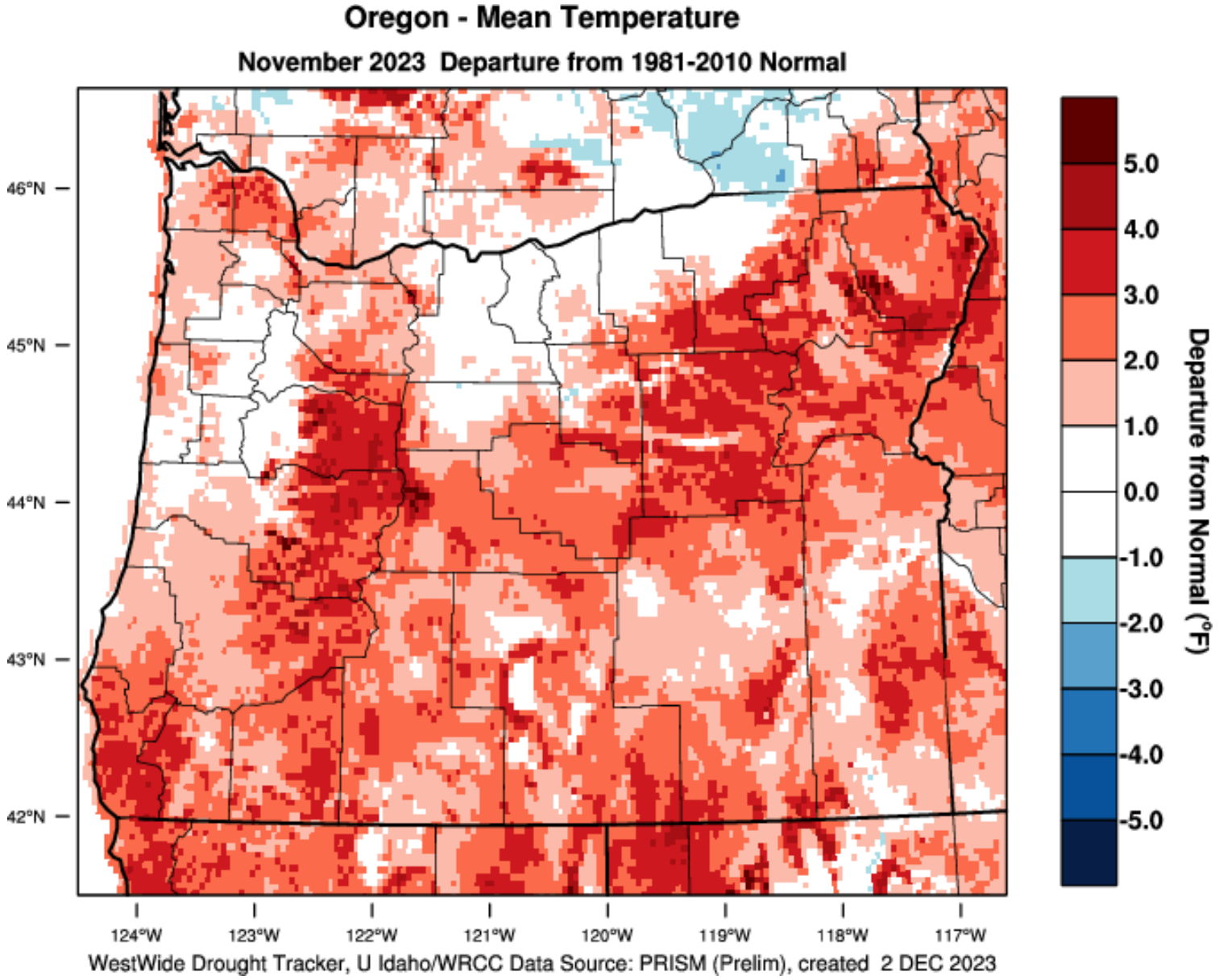
SNOW WATER EQUIVALENT



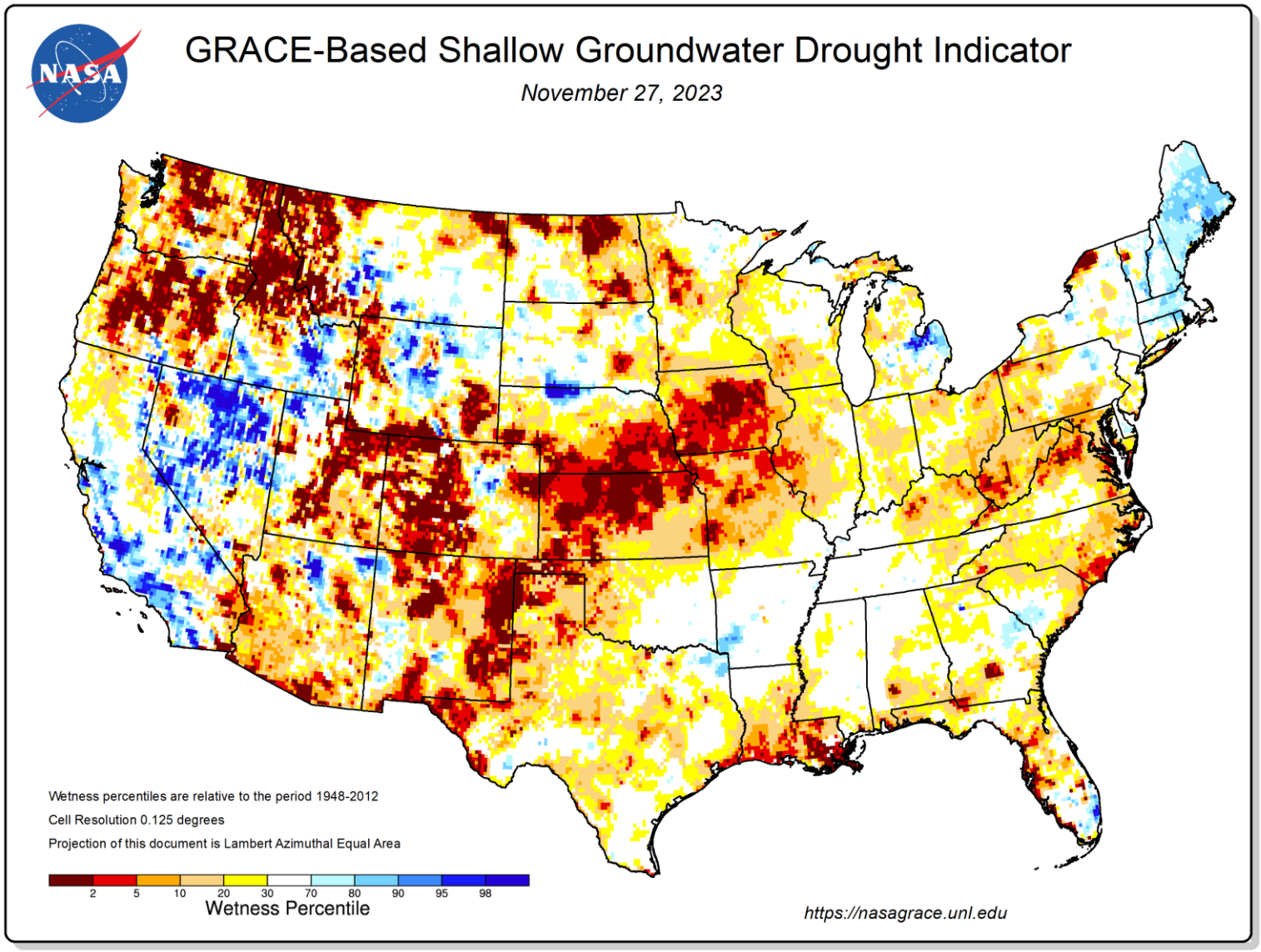
PRECIPITATION



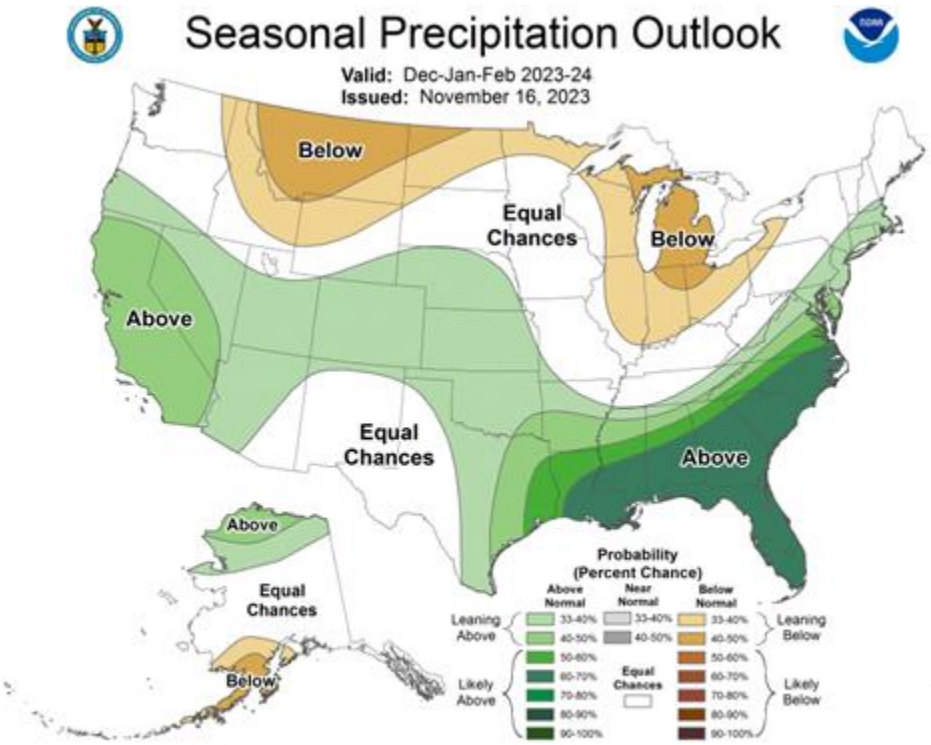
TEMPERATURE

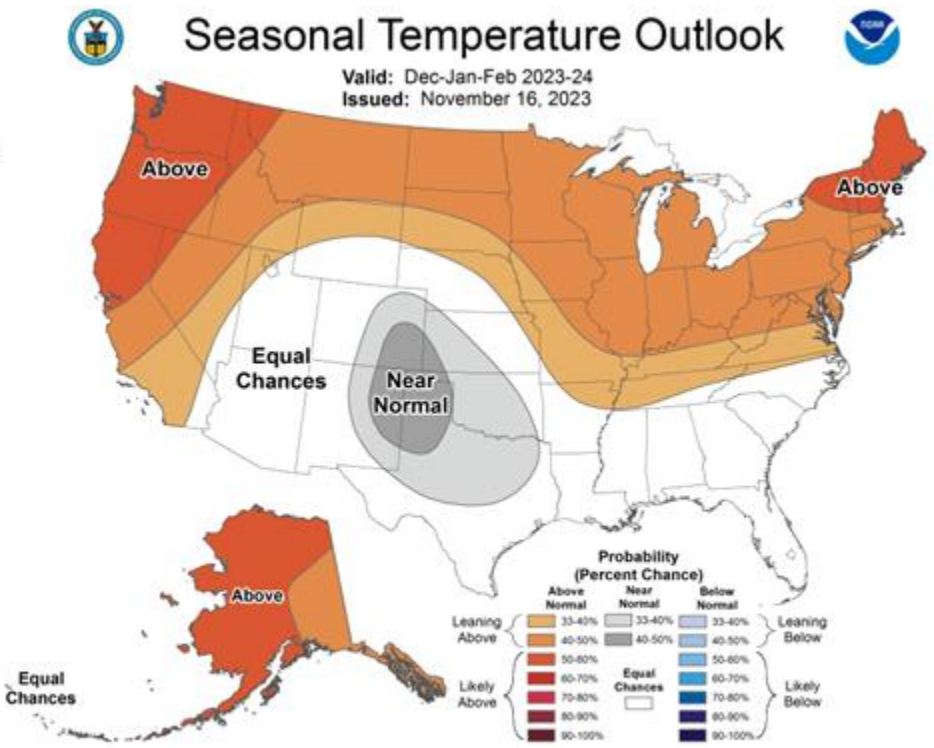


SOIL MOISTURE

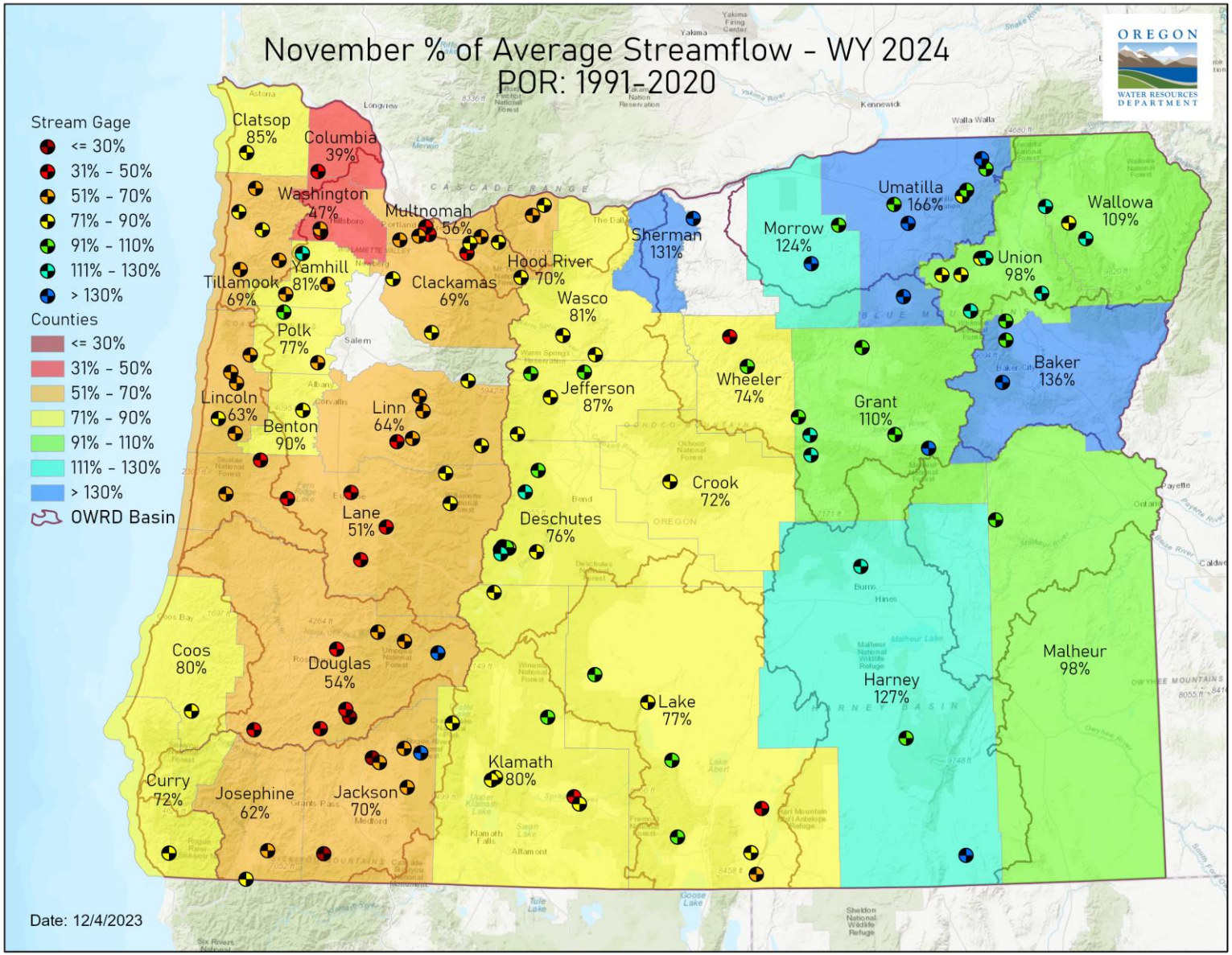


CLIMATE OUTLOOK

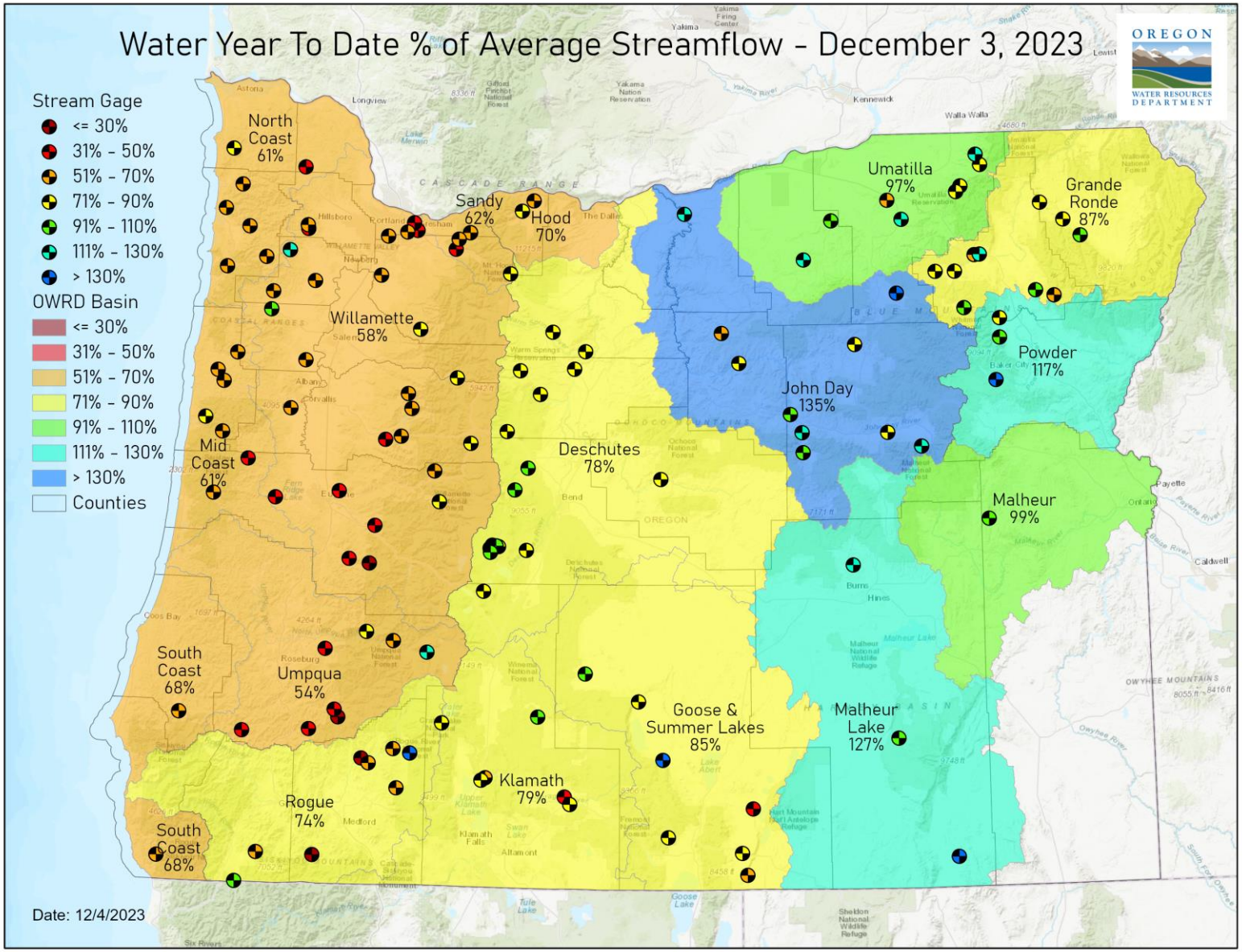


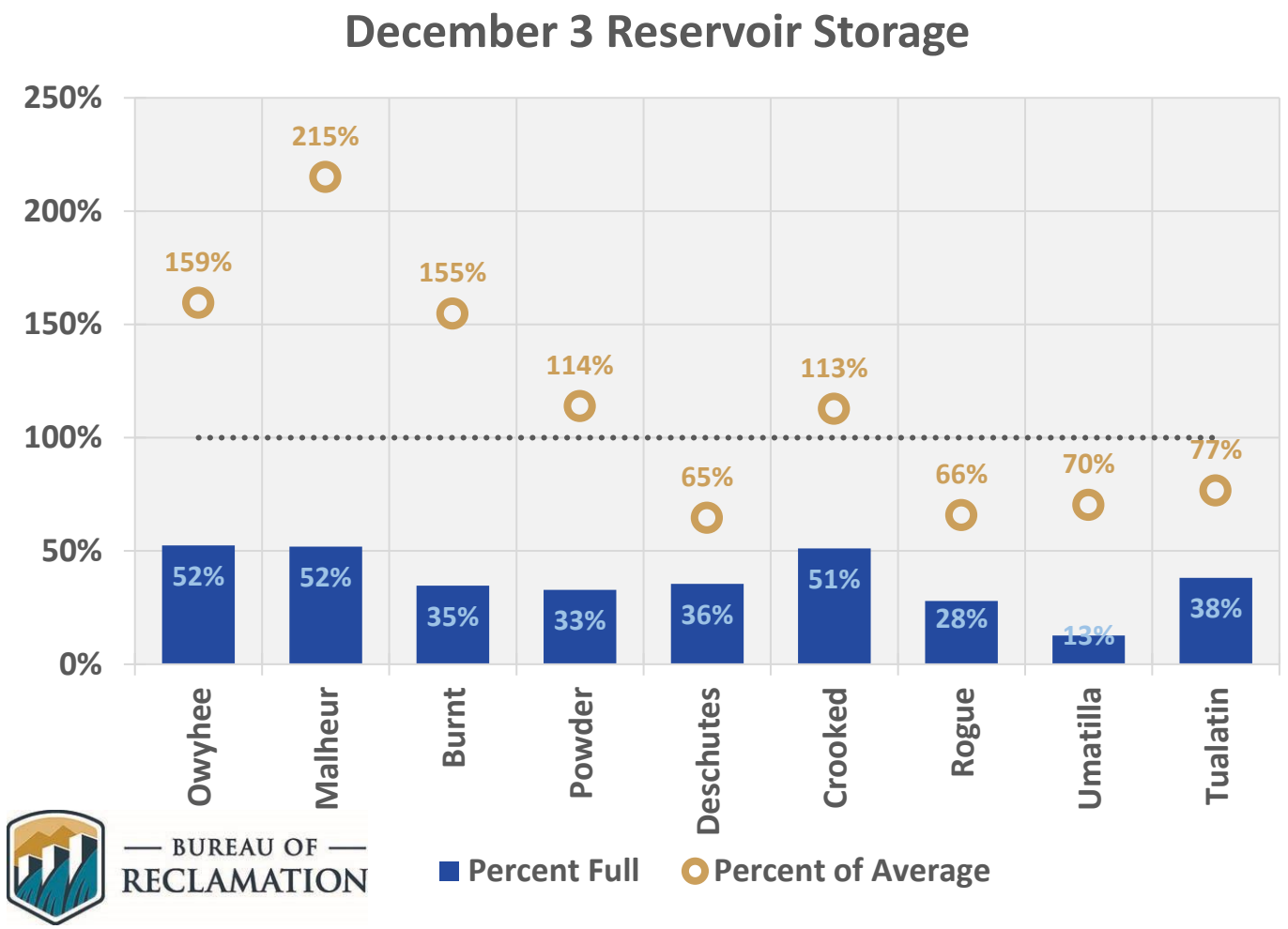


STREAMFLOW


November % of Average Streamflow - WY 2024
POR: 1991-2020
OREGON
WATER RESOURCES DEPARTMENT
Stream Gage
<= 30%
31% - 50%
51% - 70%
71% - 90%
91% - 110%
111% - 130%
> 130%
Counties
<= 30%
31% - 50%
51% - 70%
71% - 90%
91% - 110%
111% - 130%
> 130%
OWRD Basin
Clatsop 85%
Columbia 39%
Washington 47%
Multnomah 56%
Yamhill 81%
Tillamook 69%
Clackamas 69%
Hood River 70%
Sherman 131%
Wasco 81%
Morrow 124%
Umatilla 166%
Union 98%
Wallowa 109%
Baker 136%
Polk 77%
Jefferson 87%
Wheeler 74%
Grant 110%
Lincoln 63%
Linn 64%
Benton 90%
Crook 72%
Lane 51%
Deschutes 76%
Coos 80%
Douglas 54%
Harney 127%
Malheur 98%
Lake 77%
Klamath 80%
Curry 72%
Josephine 62%
Jackson 70%
Date: 12/4/2023

STREAMFLOW


Water Year To Date % of Average Streamflow - December 3, 2023
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%
Counties
North Coast 61%
Sandy 62%
Hood 70%
Willamette 58%
Mid Coast 61%
Umatilla 97%
Grande Ronde 87%
Powder 117%
John Day 135%
Deschutes 78%
Malheur 99%
South Coast 68%
Umpqua 54%
Goose & Summer Lakes 85%
Malheur Lake 127%
Klamath 79%
Rogue 74%
South Coast 68%
Date: 12/4/2023


December 3 Reservoir Storage
250%
200%
150%
100%
50%
0%
159%
215%
155%
114%
113%
65%
66%
70%
77%
52%
52%
35%
33%
36%
51%
28%
13%
38%
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.