

Oregon Water Conditions Report



May 1st, 2023

HIGHLIGHTS

[Six Oregon counties](#) have received [Executive Orders](#) issuing state drought declarations under ORS 536, with one additional county (Lake) requesting a state declaration. The US Department of Agriculture has issued [Secretarial Disaster Designations](#) for [many counties due to drought conditions](#).

Over 56% of Oregon is experiencing moderate (D1) to extreme (D3) drought conditions, according to the [US Drought Monitor](#). Change over recent weeks includes improvements from abnormally dry to no drought along the coast and in northeastern Oregon due to precipitation and improved streamflows. Drought severity was also reduced in parts of Grant, Baker, and Malheur Counties due to the onset of meltout to abundant snowpack and improvements to soil moisture. Nearly one quarter of Oregon is drought-free.

Due to cooler than usual temperatures throughout winter and early spring, [statewide snowpack](#) avoided early onset of meltout and is measuring above values typically observed at this time of year at NRCS SNOTEL sites. However, meltout began in all basins over recent weeks.

[Precipitation throughout April was variable across the state](#). Much of western Oregon received average to well above average precipitation, while most of eastern and southwestern Oregon [measured up to an inch and a half below average](#).

[April temperatures](#) were cooler than average throughout the state, ranging between 0 °F and 5 °F below average.

Due to recent precipitation and the onset of snowmelt, [soil moisture profiles](#) have shown some improvement over recent weeks. Eastern Oregon has shown notable improvements in the top meter of soil, although [shallow groundwater profiles](#) continue to lag behind in places.

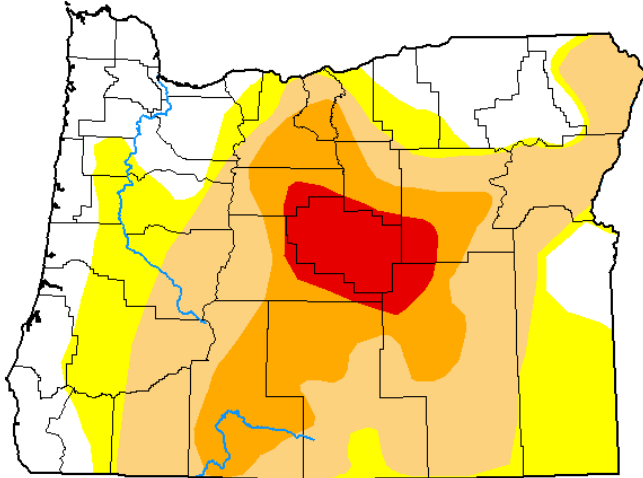
The three-month [seasonal climate outlook](#) for May through July indicates probabilities favoring above average temperatures statewide, and below average precipitation for the northern half of the state.

April streamflows measured well above average throughout most of Oregon (min = Wheeler @ 36%; max = Coos @ 214%). Flows in central and northeastern Oregon were lower than average due to late onset of snowmelt and low precipitation.

Reservoir storage contents in [USBR](#) (including [Klamath](#)) and [USACE](#) projects benefitted greatly from recent snowmelt and precipitation events. Many projects are measuring near average contents, reflecting notable improvements from near historic lows.

**U.S. Drought Monitor
Oregon**

April 25, 2023
(Released Thursday, Apr. 27, 2023)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	23.62	76.38	56.30	22.29	5.78	0.00
Last Week 04-18-2023	16.91	83.09	56.44	23.63	6.20	0.00
3 Months Ago 01-24-2023	16.43	83.57	64.15	39.58	14.98	1.40
Start of Calendar Year 01-03-2023	13.46	86.54	59.75	46.03	26.18	1.40
Start of Water Year 09-27-2022	0.42	99.58	68.05	52.42	30.73	1.40
One Year Ago 04-26-2022	9.08	90.92	86.14	72.31	53.12	17.30

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>

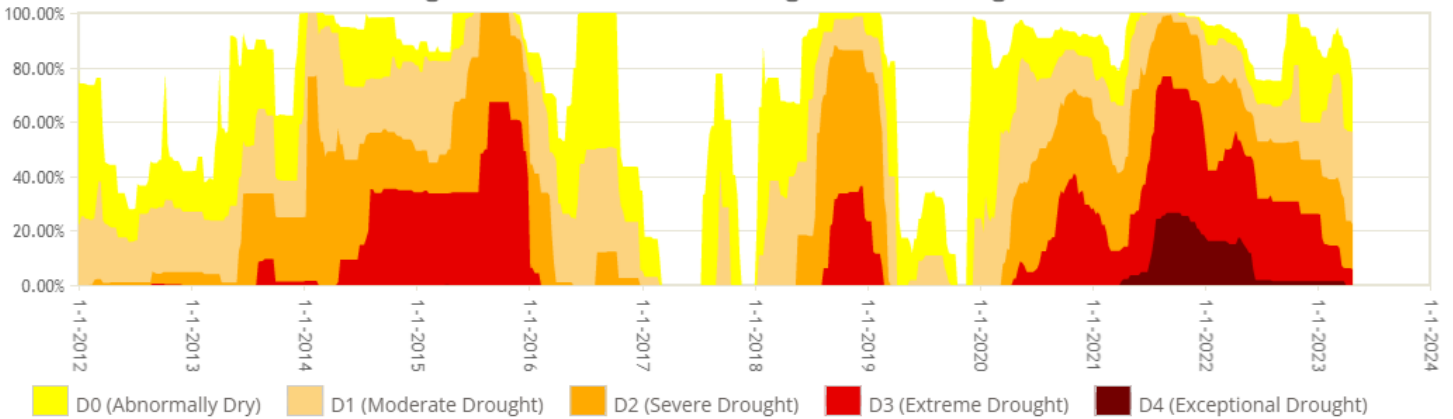
Author:

Richard Tinker
CPC/NOAA/NWS/NCEP

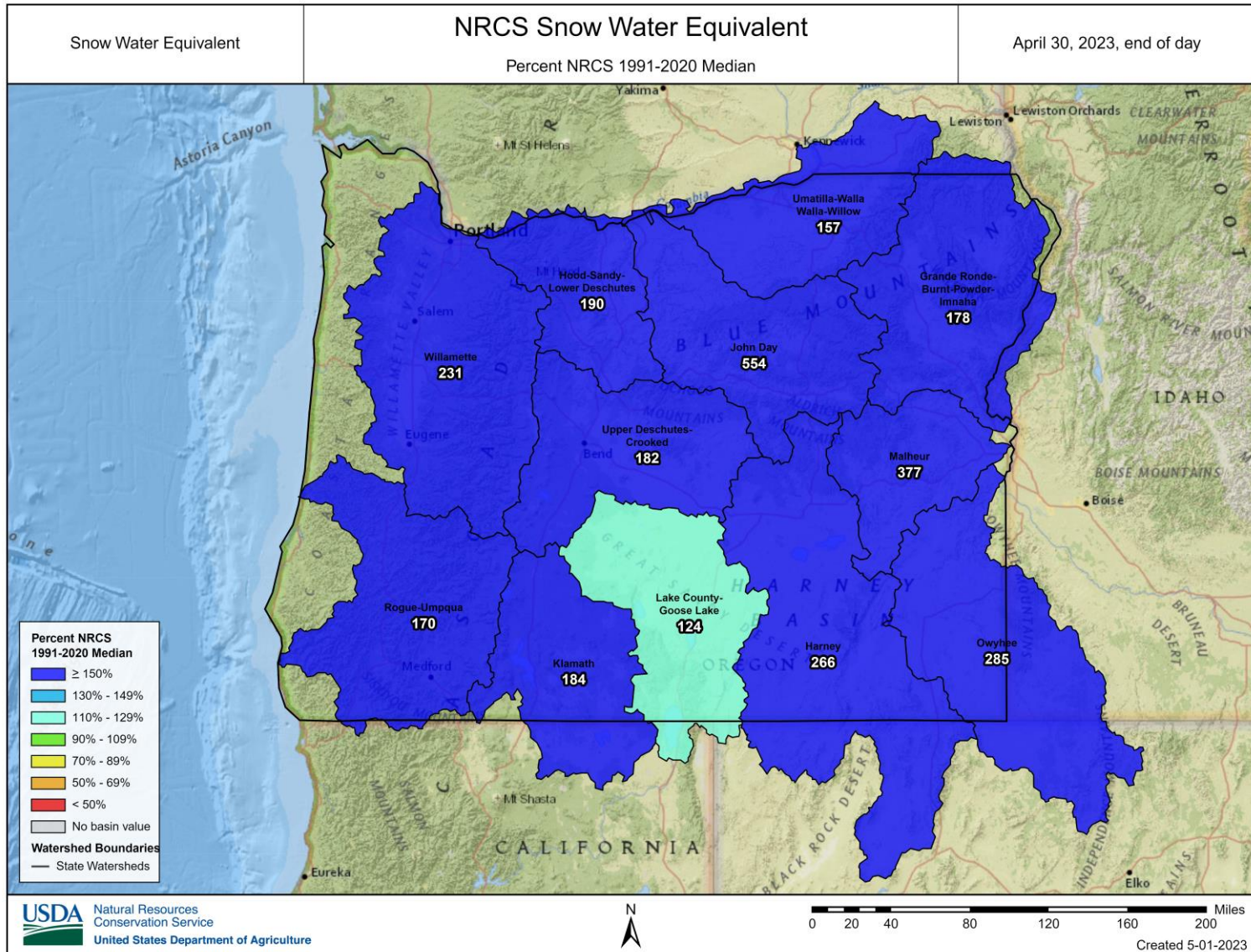


droughtmonitor.unl.edu

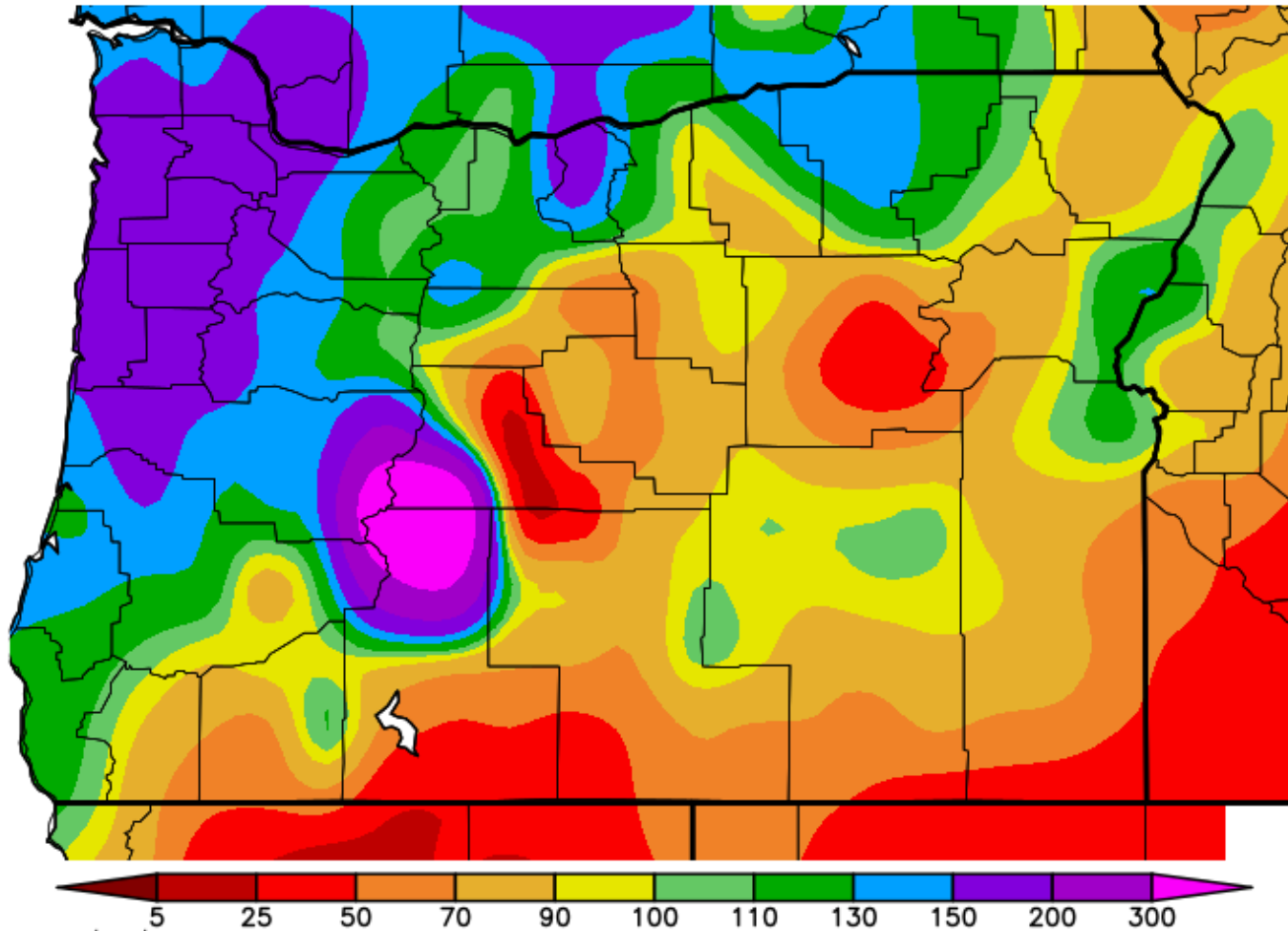
Oregon Percent Area in U.S. Drought Monitor Categories



CLIMATE CONDITIONS
SNOW WATER EQUIVALENT

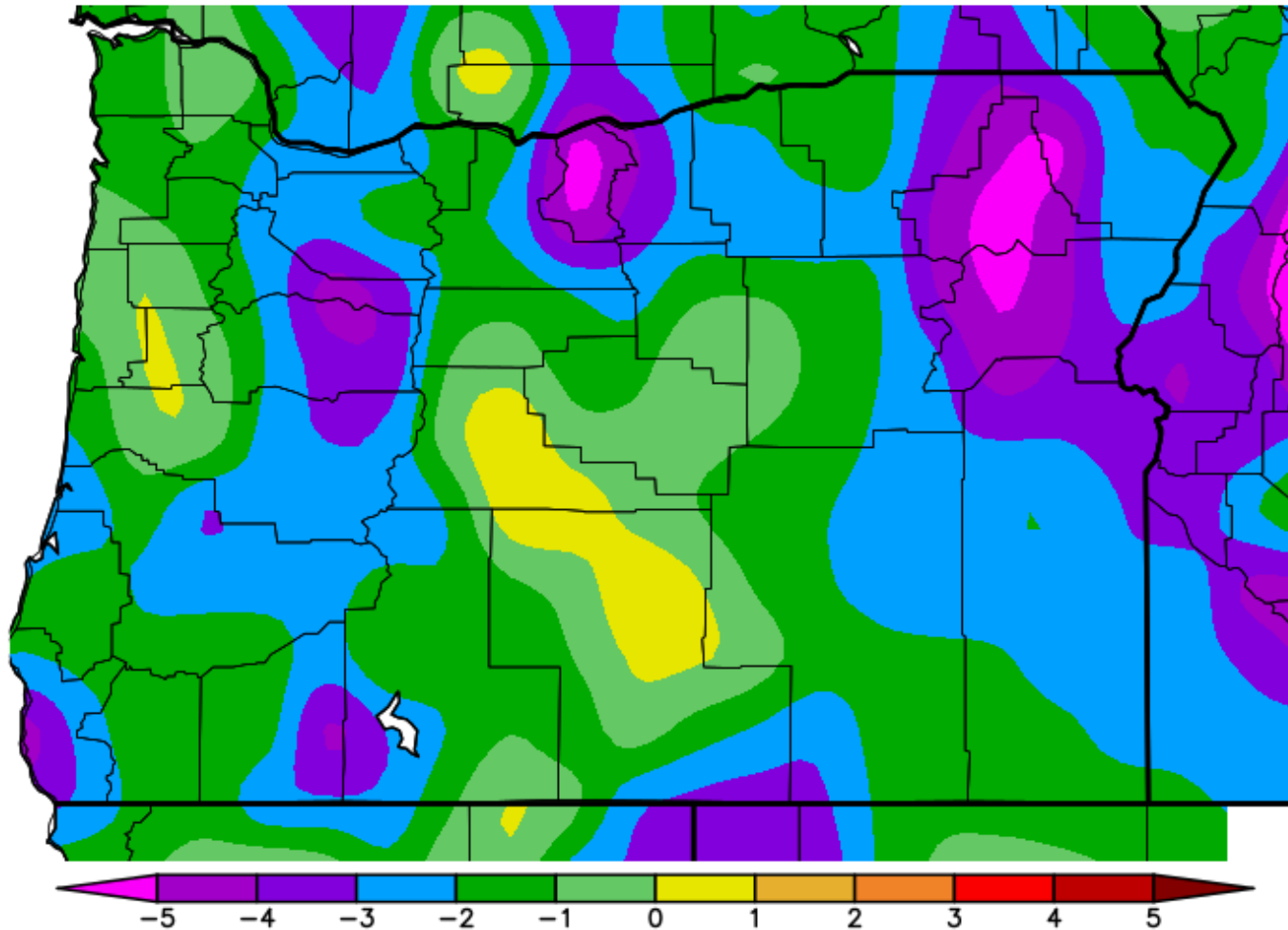


Percent of Average Precipitation (%) 4/1/2023 - 4/30/2023



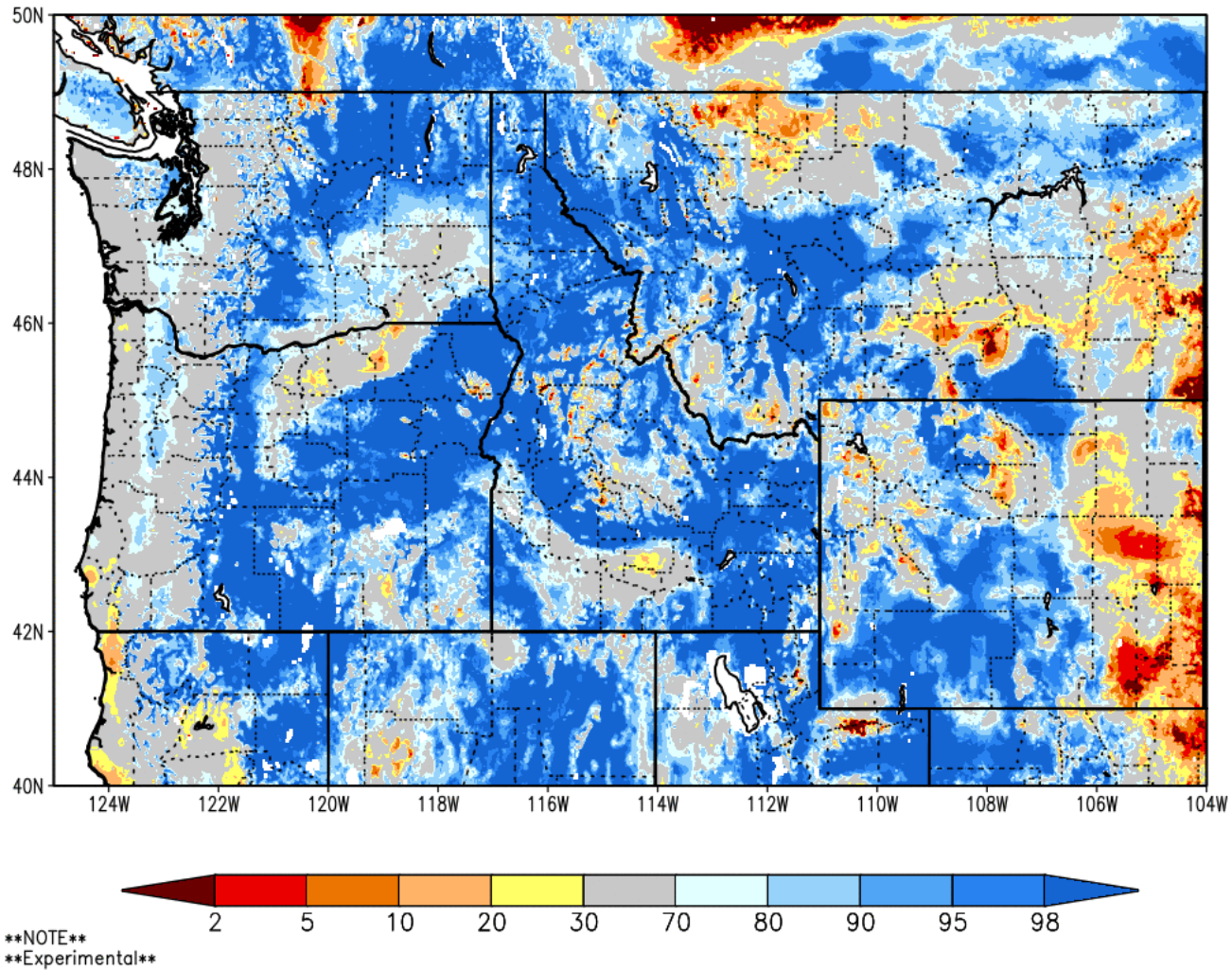
Generated 5/ 1/2023 at WRCC using provisional data.
NOAA Regional Climate Centers

Ave. Temperature dep from Ave (deg F)
4/1/2023 - 4/30/2023



Generated 5/ 1/2023 at WRCC using provisional data.
NOAA Regional Climate Centers

SPoRT-LIS 0-100 cm Soil Moisture percentile valid 01 May 2023

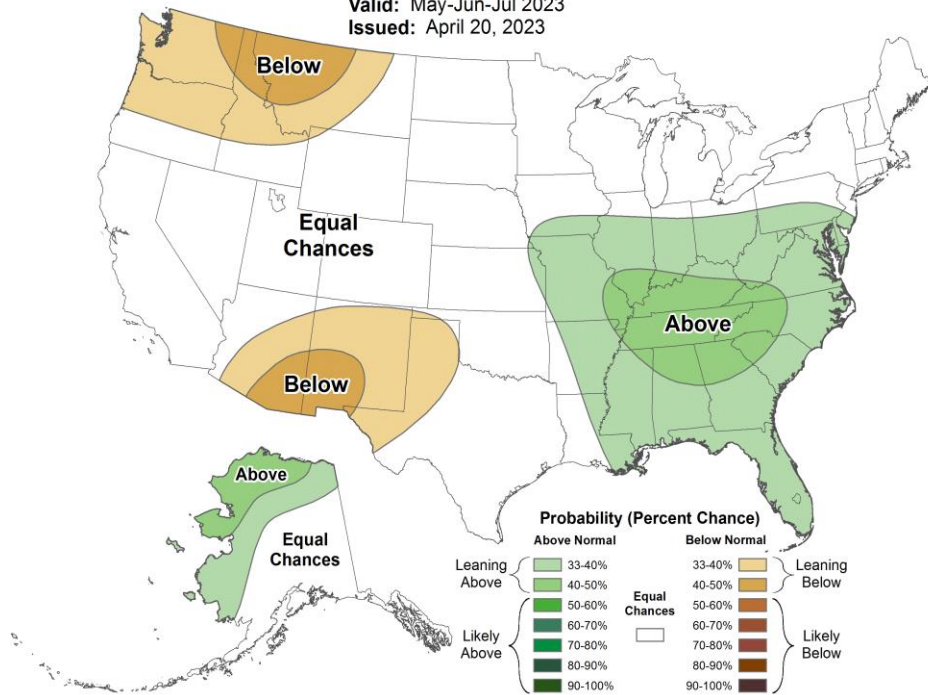




Seasonal Precipitation Outlook



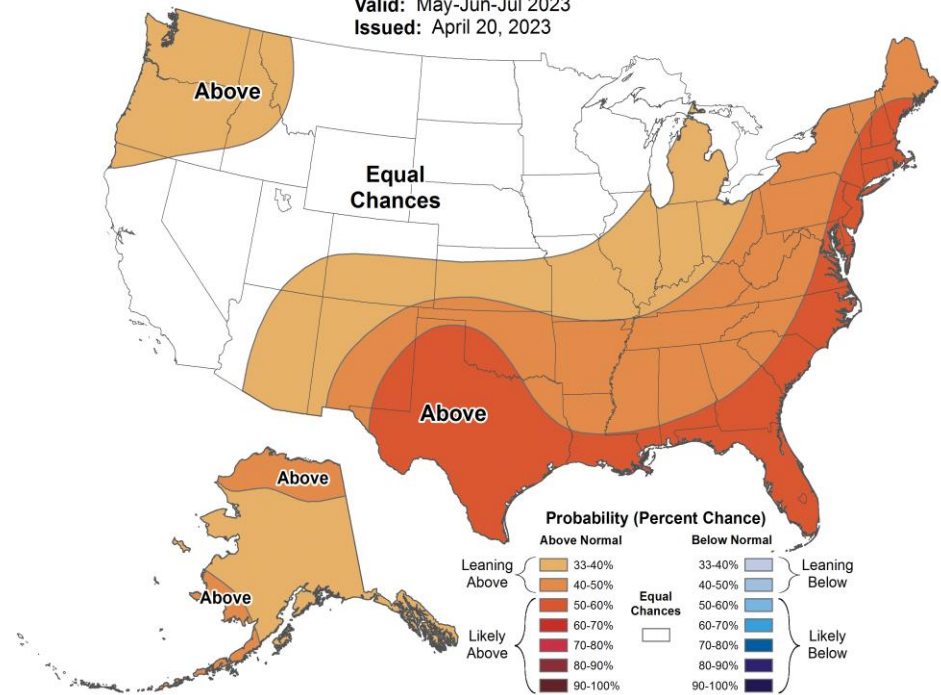
Valid: May-Jun-Jul 2023
 Issued: April 20, 2023

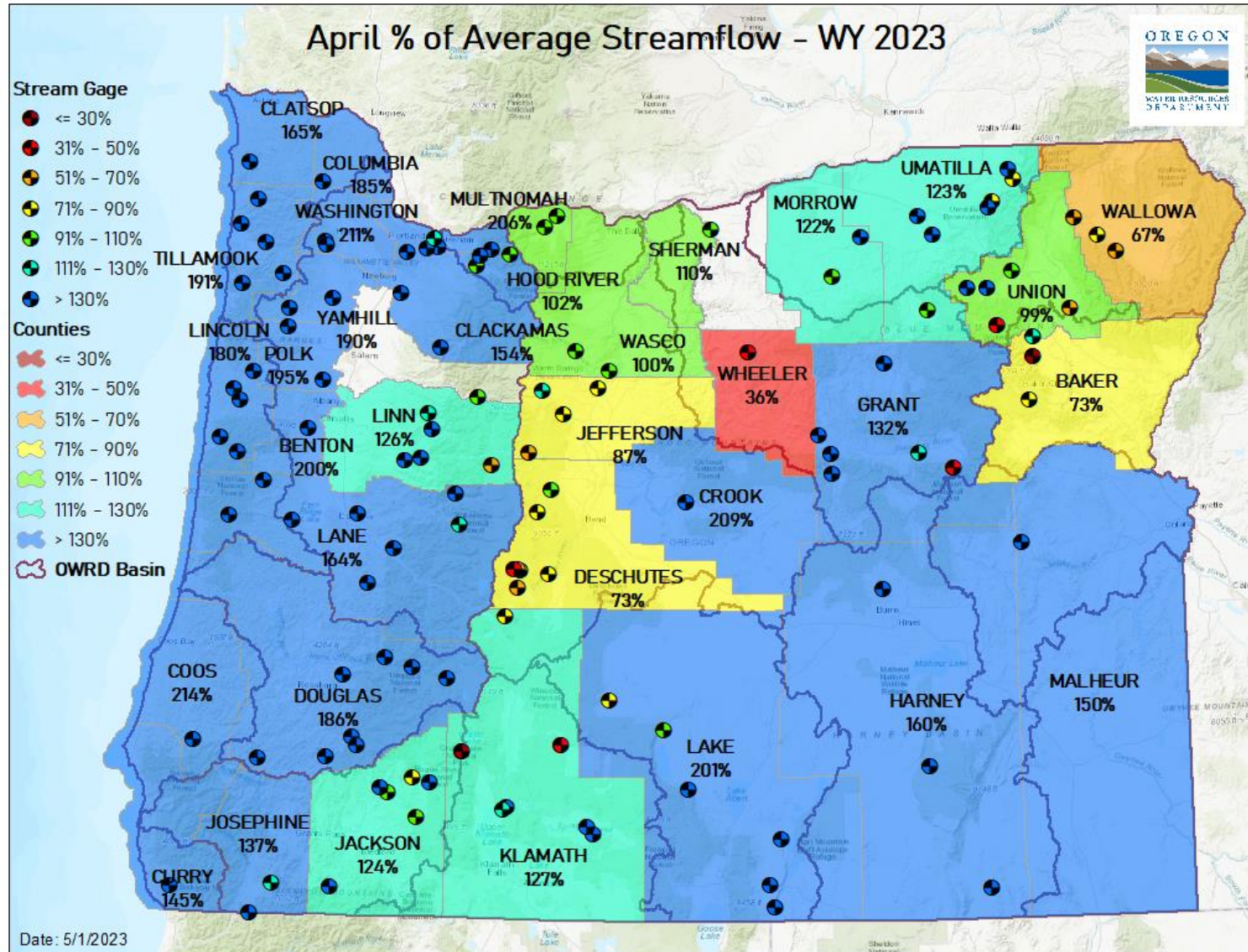


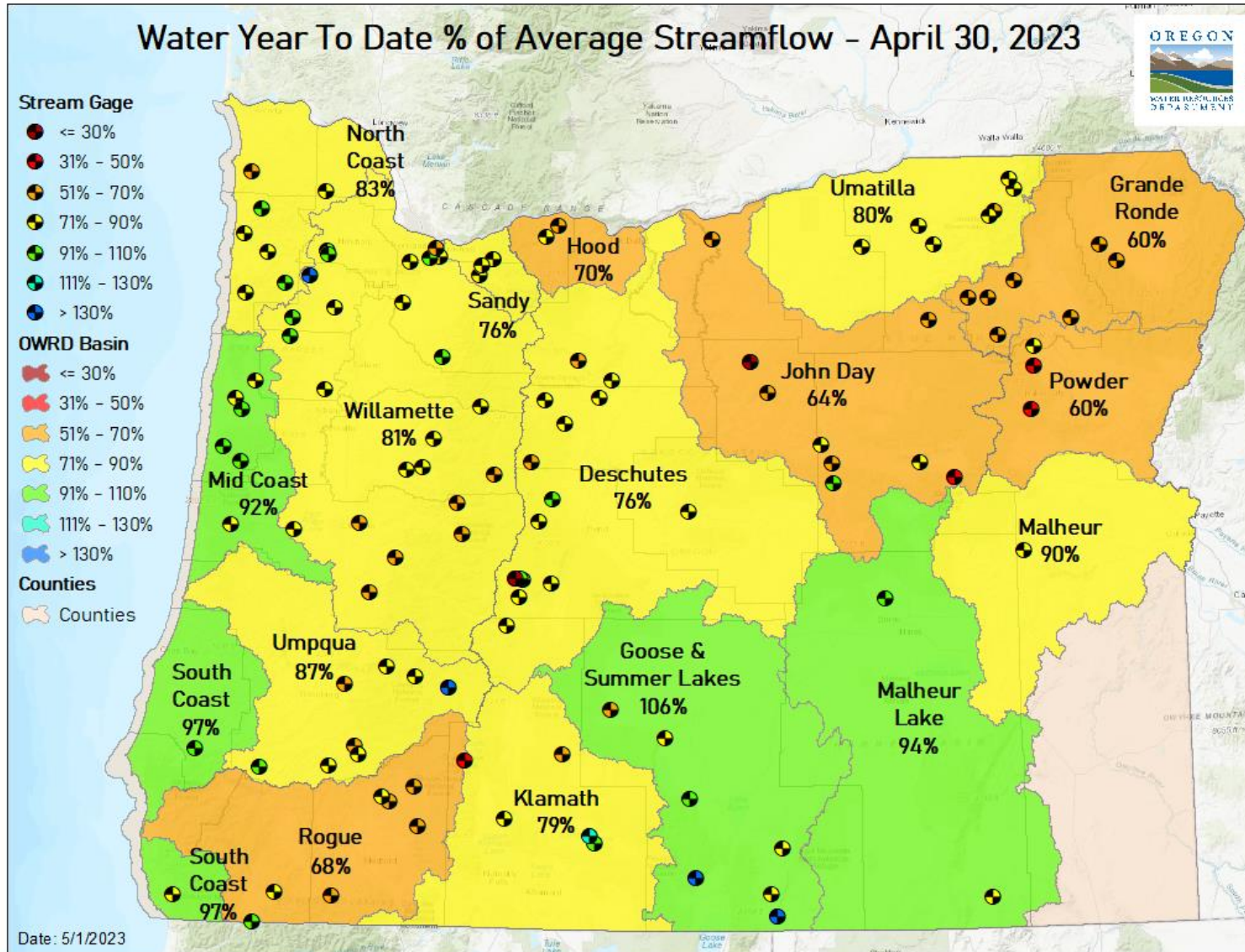
Seasonal Temperature Outlook



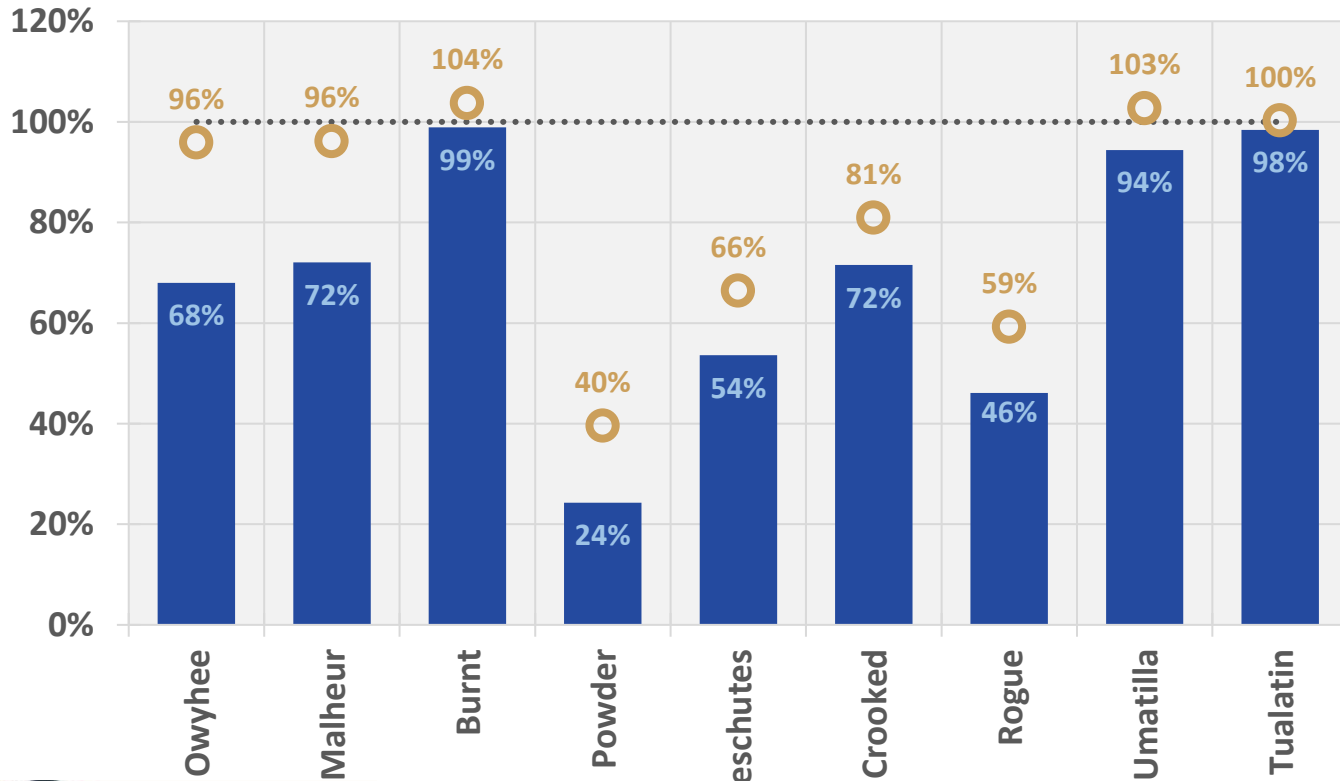
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April 30 Reservoir Storage



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.