Oregon Water Conditions Report

April 18th, 2022

OREGON WATER RESOURCES DEPARTMENT

HIGHLIGHTS

Thus far in 2022, seven counties have received Executive Orders issuing state drought declarations, while four additional counties have requested drought declarations.

According to the US Drought Monitor, over 88% of Oregon is classified as experiencing moderate (D2) to exceptional (D4) drought conditions. While there has been little change in overall coverage of drought, there has been an increase in coverage of extreme drought (D3) conditions. See more information below.

Statewide snow water equivalent (SWE) is measuring 95% of the long-term median at NRCS SNOTEL sites. While all basins received an influx of late-season snowfall over recent weeks, many basins peaked well below the median peak value.

Precipitation over the past two weeks has been variable throughout the state. Nearly all of western Oregon and the Columbia River corridor received above to well above average precipitation. Eastern Oregon received a mixture of above and below average precipitation.

Recent temperatures were cooler than average throughout all of Oregon. Temperatures ranged between 4 and 10 °F below average for much of the state, with some areas between -2 and 0 °F below average mostly along the coast and Coast Range.

Soil moisture profiles continue to vary in degree of wetness, with a majority of the state experiencing well below average moisture content. While precipitation over recent weeks has benefitted root zone and surface soil wetness, much of Oregon is still experiencing near historical dryness.

The near-term climate outlook suggests probabilities favoring below average temperatures statewide over the next 8-14 days, with increased variability for precipitation. Above average precipitation is expected for much of northern Oregon, while the rest of the state has equal chances of above or below average.

Recent streamflows have measured below to well below average throughout much of Oregon with trends worsening from west to east.

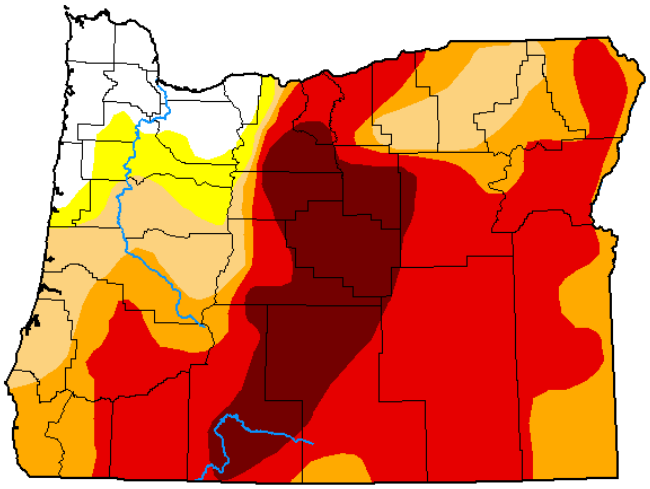
Reservoir storage contents in USBR (including Klamath) and USACE systems continue to measure well below average throughout much of Oregon. Irrigation activities have begun in some basins, but conditions will likely impact water supply allocation.

DROUGHT CONDITIONS

The US Drought Monitor indicates over 88% of Oregon is experiencing drought conditions. Extreme drought conditions have expanded in Douglas, Harney, Lake, and Malheur Counties due to a mixture of low streamflows and dry soil moisture profiles.

U.S. Drought Monitor

Oregon



April 12, 2022

(Released Thursday, Apr. 14, 2022)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	7.23	92.77	88.12	75.88	56.72	15.01
Last Week *04-05-2022*	7.16	92.84	88.10	75.88	54.05	15.01
3 Months Ago *01-11-2022*	4.66	95.34	88.23	74.05	42.05	16.22
Start of Calendar Year *01-04-2022*	4.16	95.84	89.75	75.37	50.84	17.27
Start of Water Year *09-28-2021*	0.00	100.00	100.00	96.47	72.10	26.59
One Year Ago *04-13-2021*	16.95	83.05	65.95	42.60	14.12	2.22

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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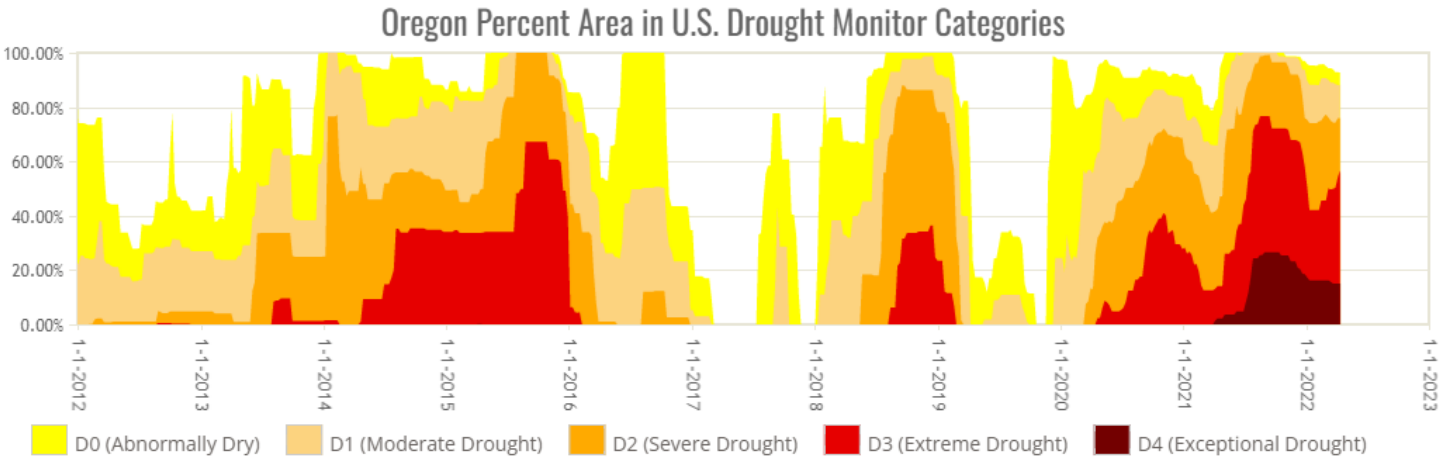
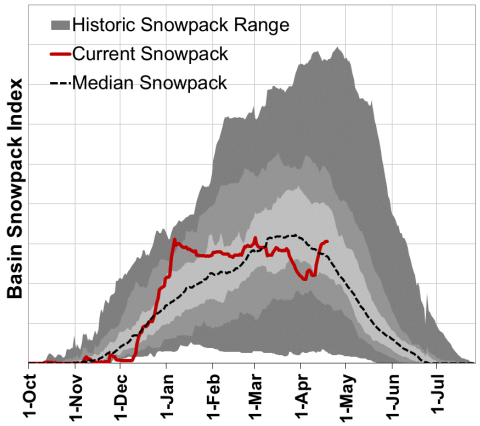
CPC/NOAA/NWS/NCEP

droughtmonitor.unl.edu

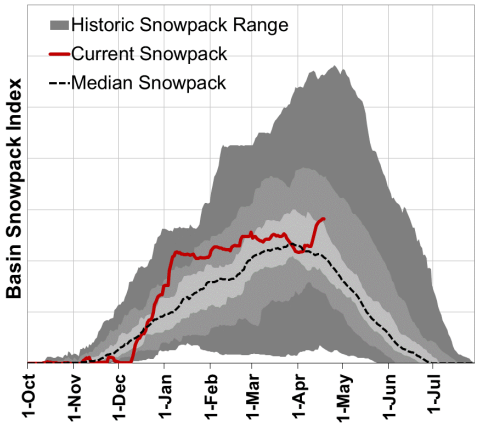


SNOWPACK

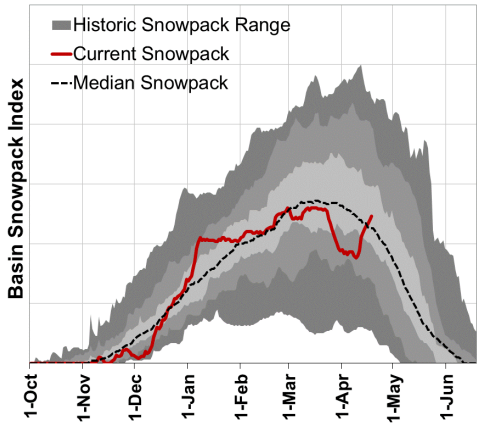
Willamette



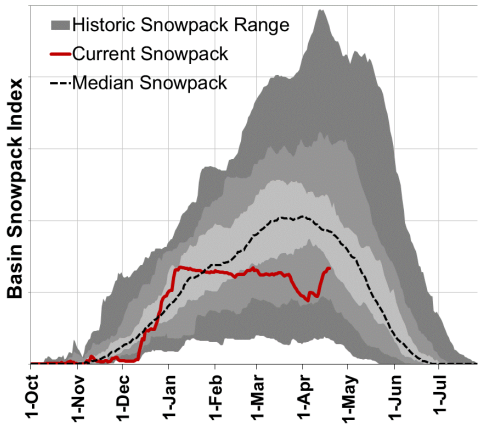
Hood-Sandy-Lower Deschutes



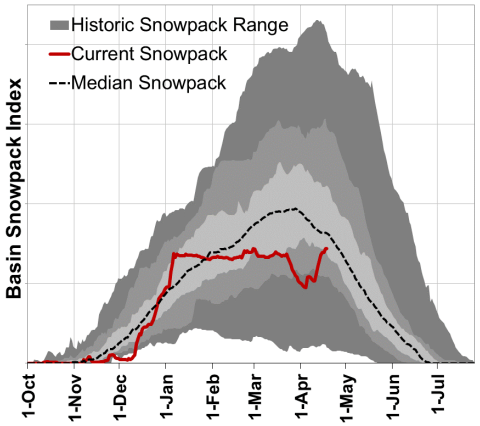
Umatilla-Walla Walla-Willow



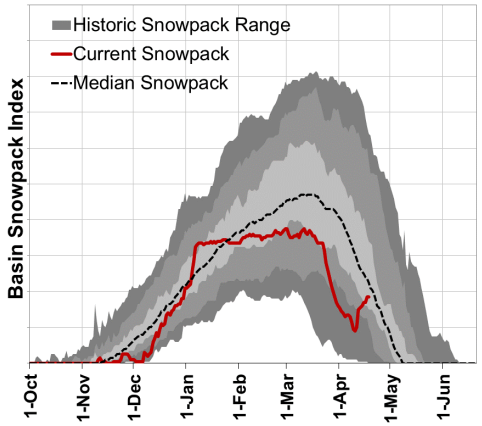
Rogue-Umpqua



Upper Deschutes-Crooked

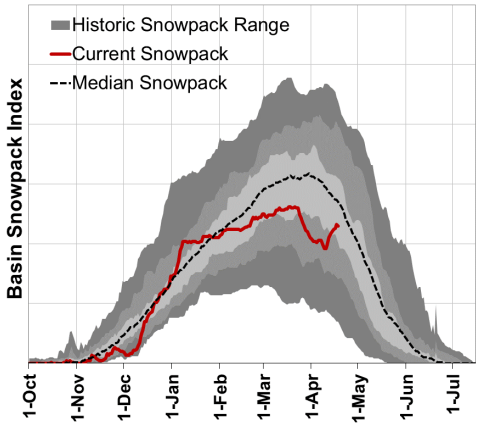


John Day

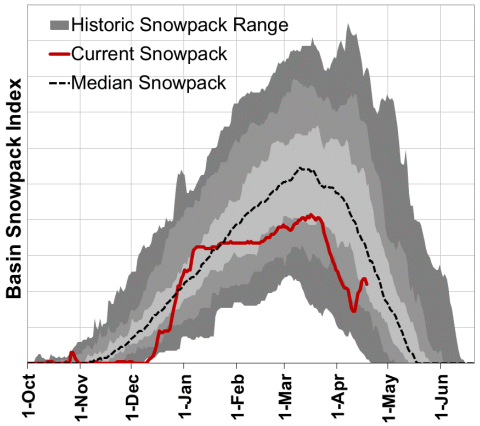


SNOWPACK

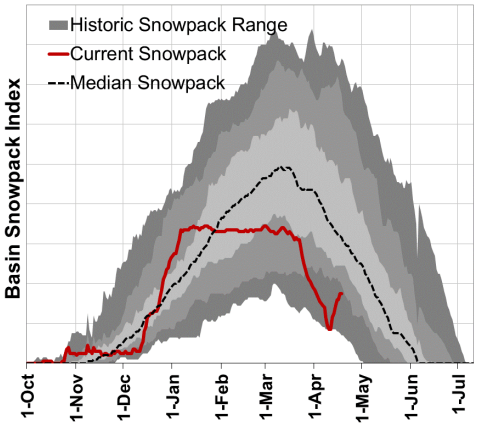
Grande Ronde-Burnt-Powder-Imnaha



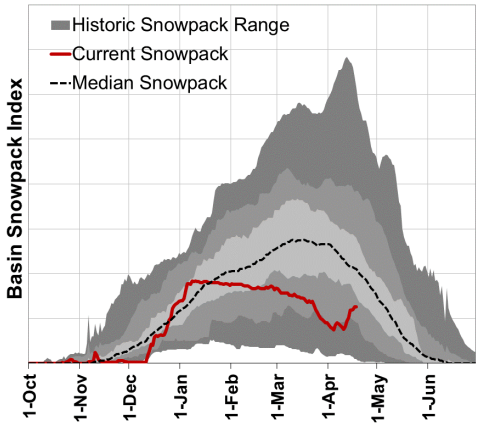
Owyhee



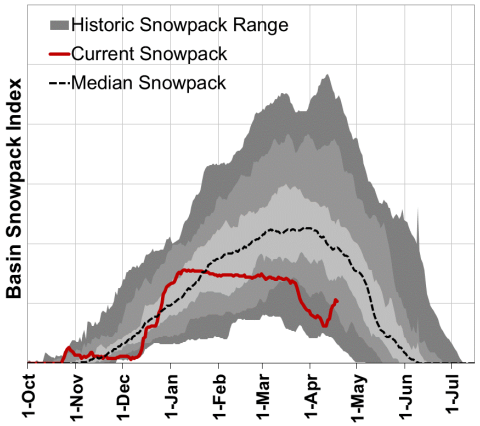
Harney



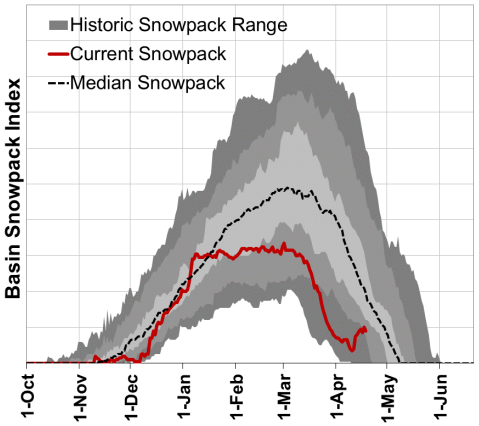
Klamath



Lake County-Goose Lake

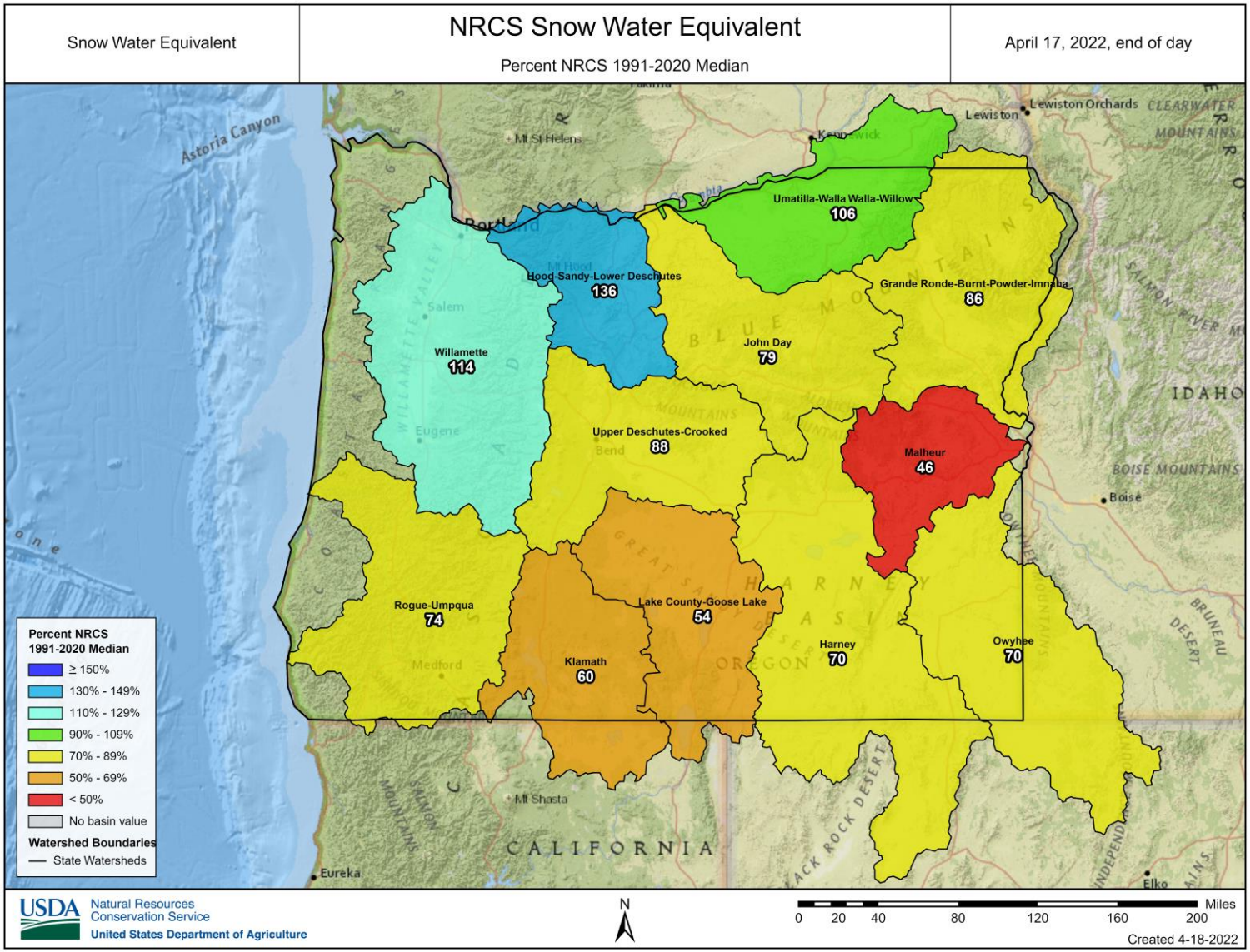


Malheur

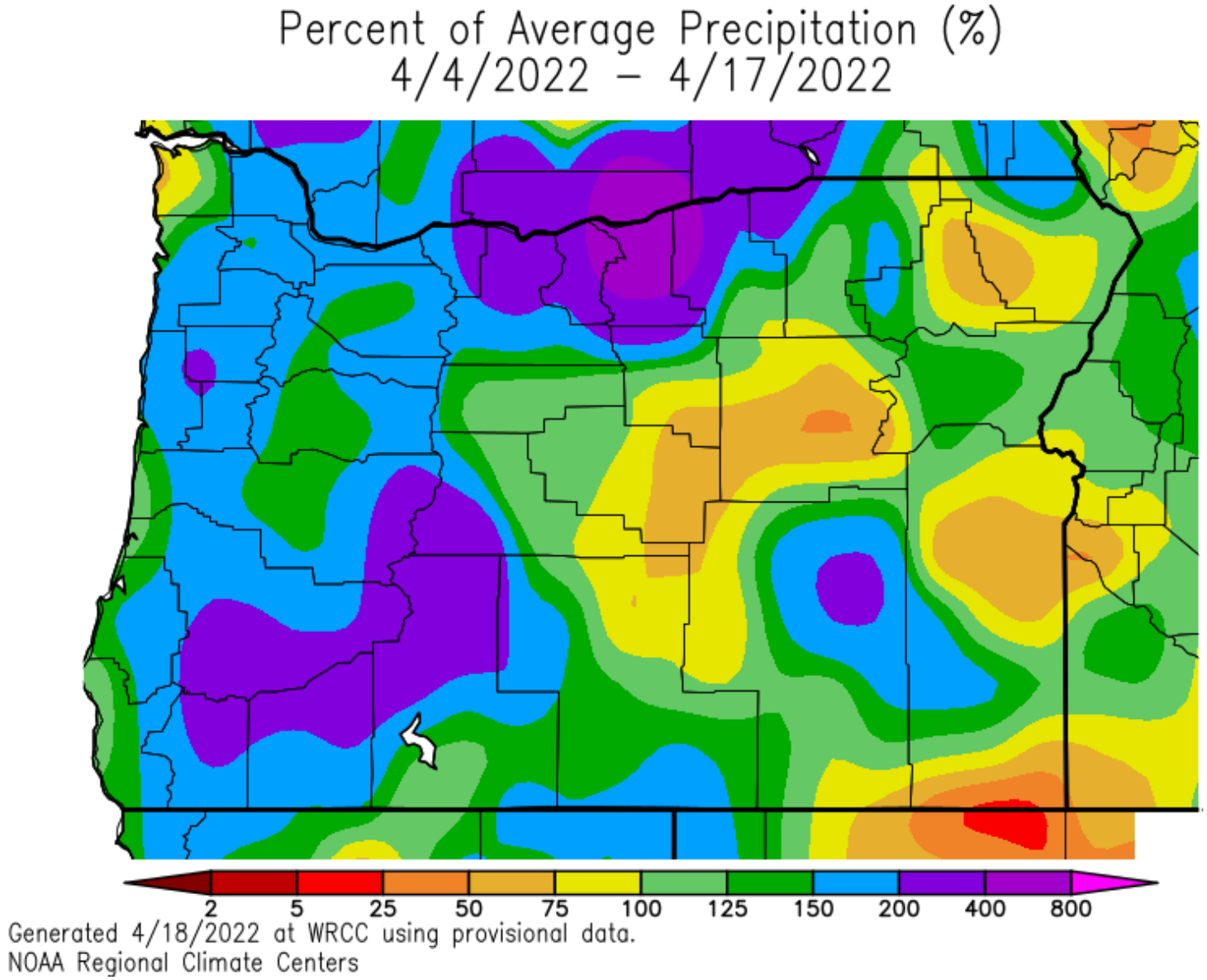


CLIMATE CONDITIONS

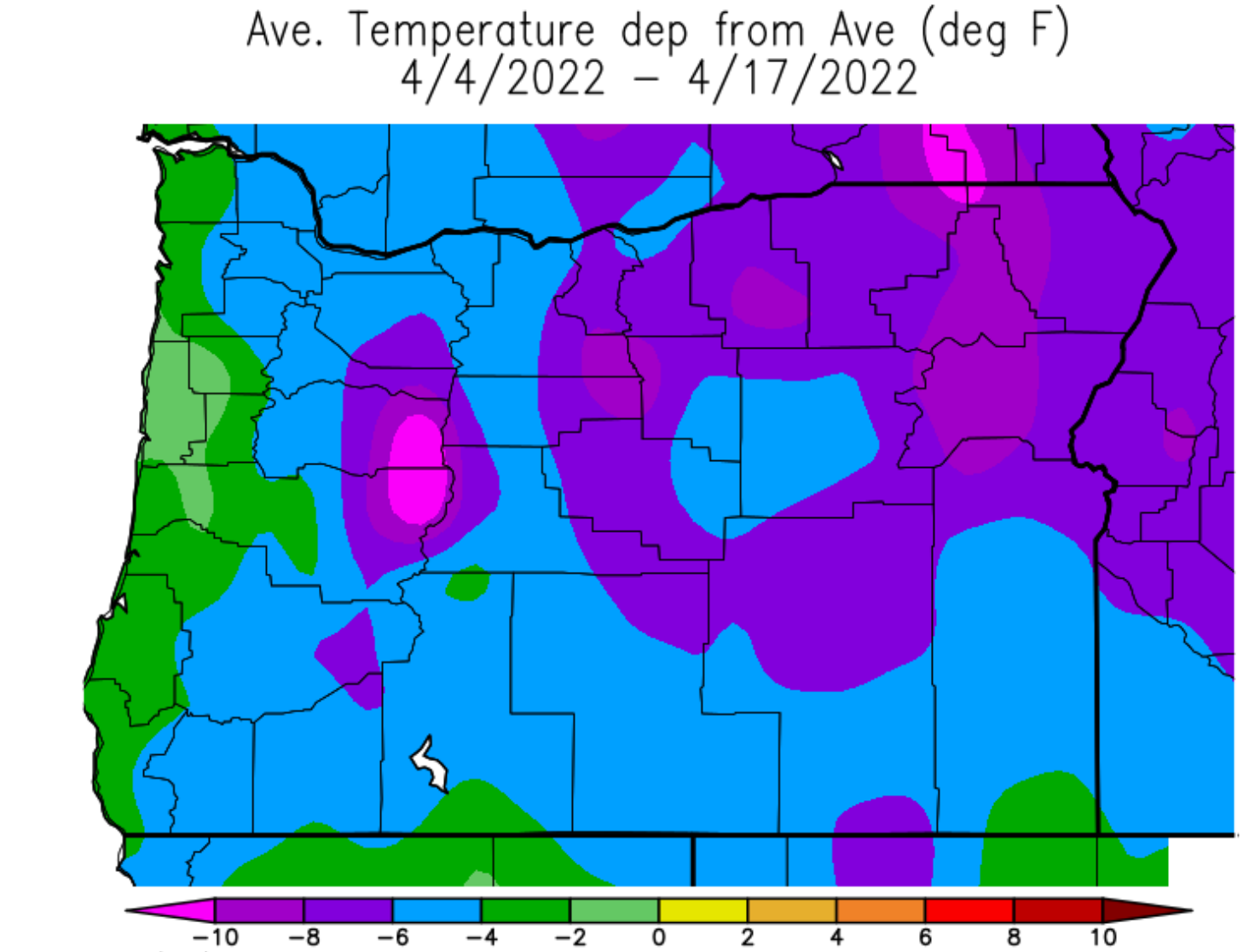
SNOW WATER EQUIVALENT



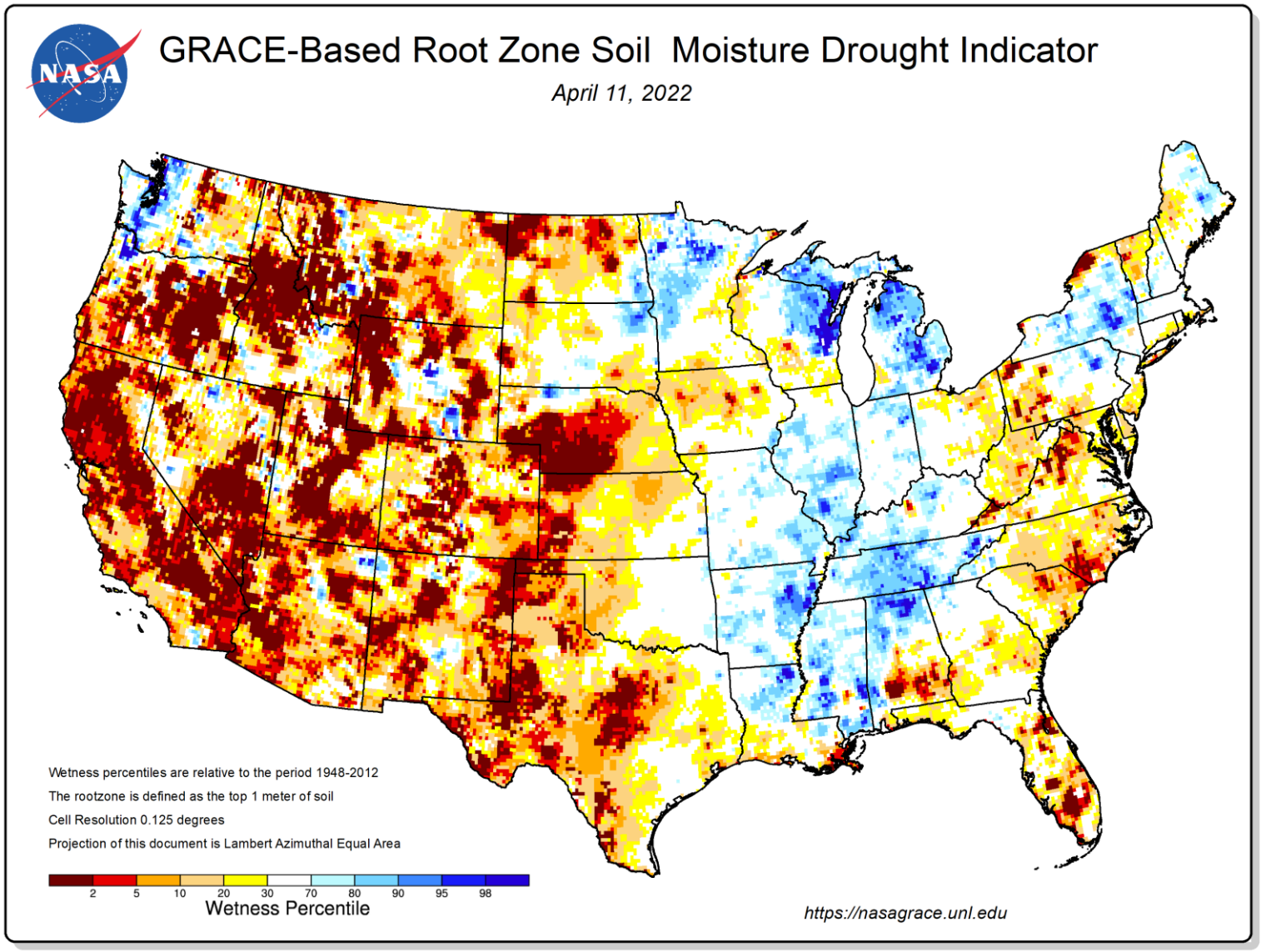
PRECIPITATION



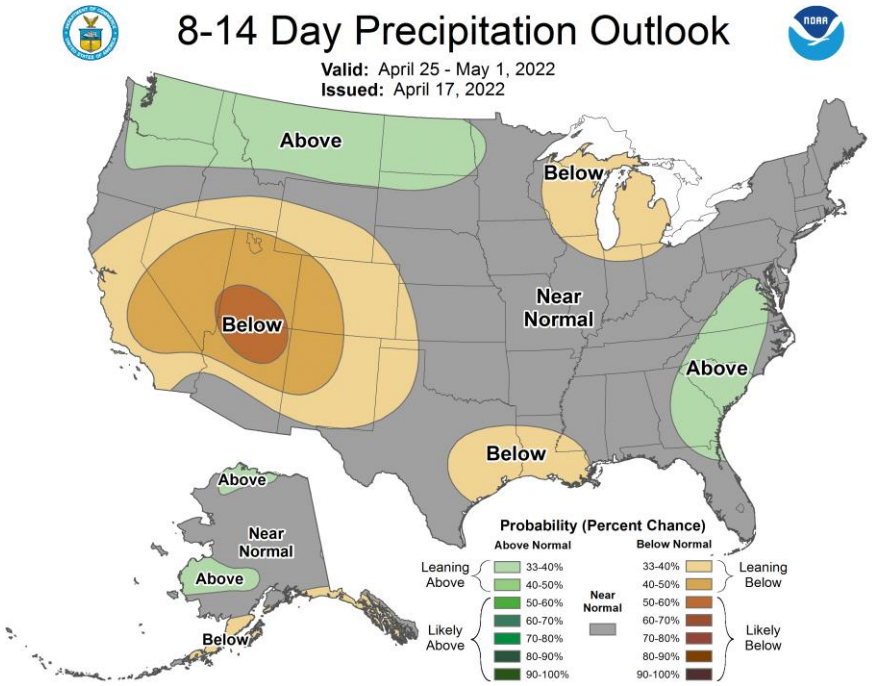
TEMPERATURE

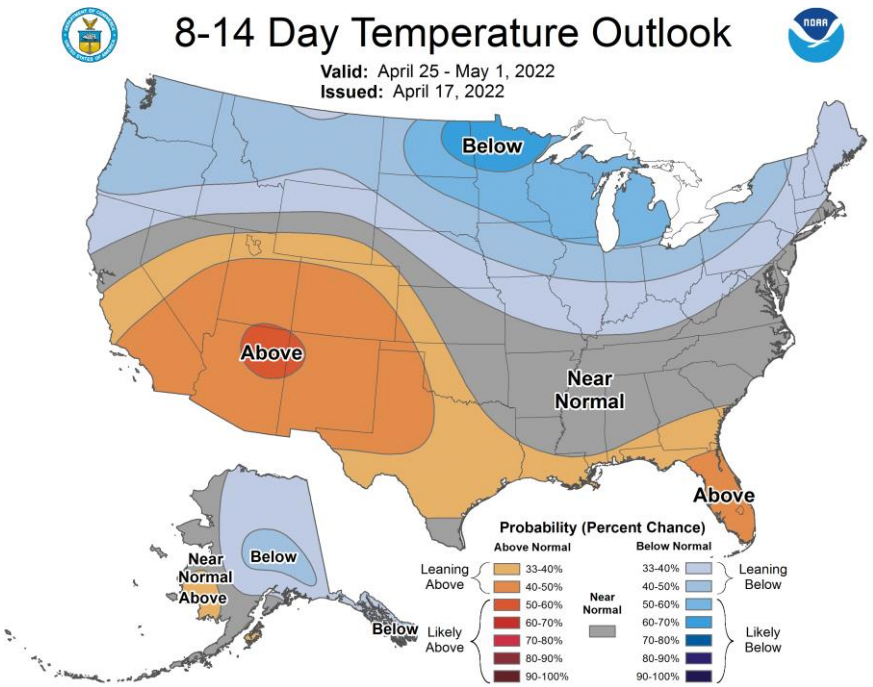


SOIL MOISTURE



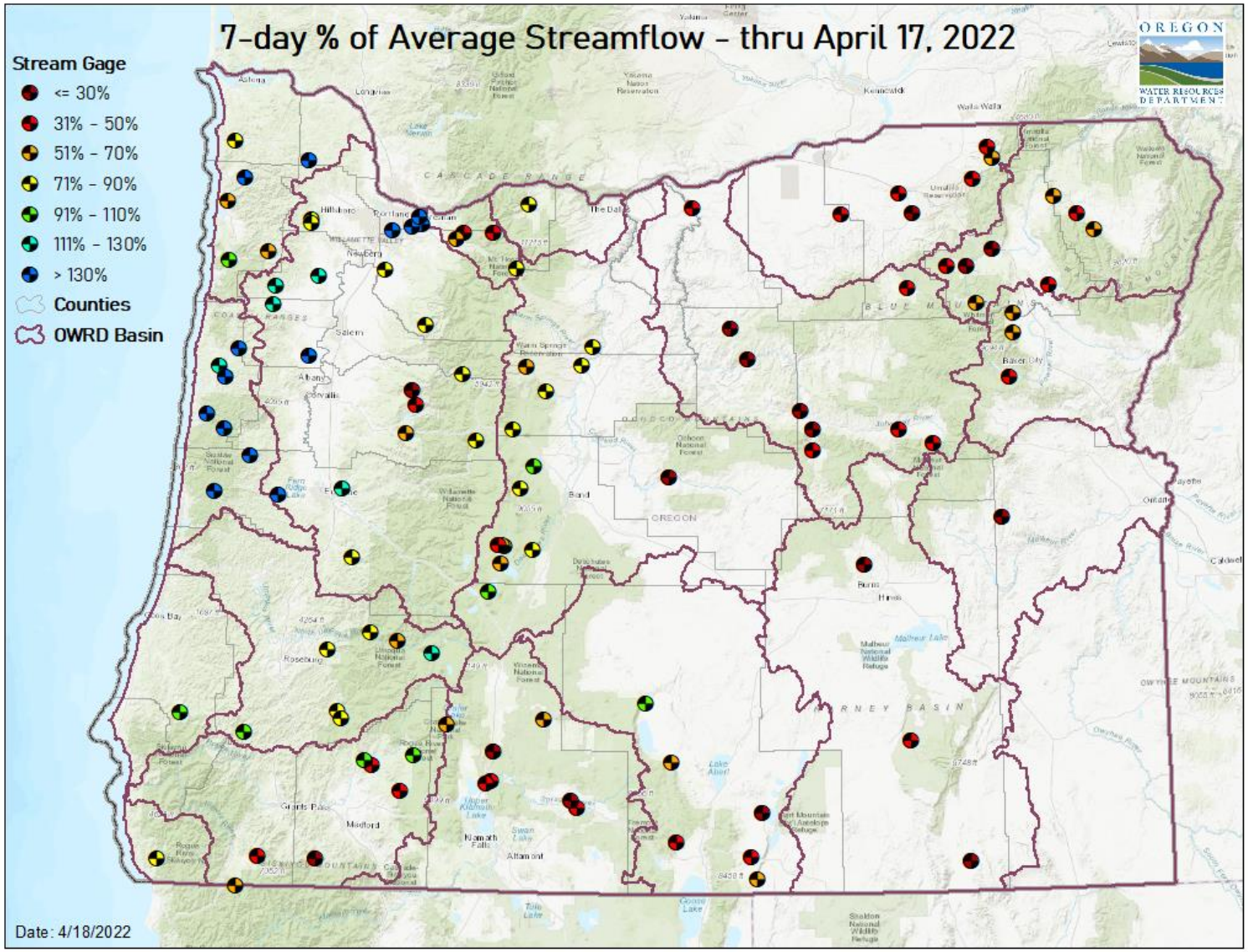
CLIMATE OUTLOOK



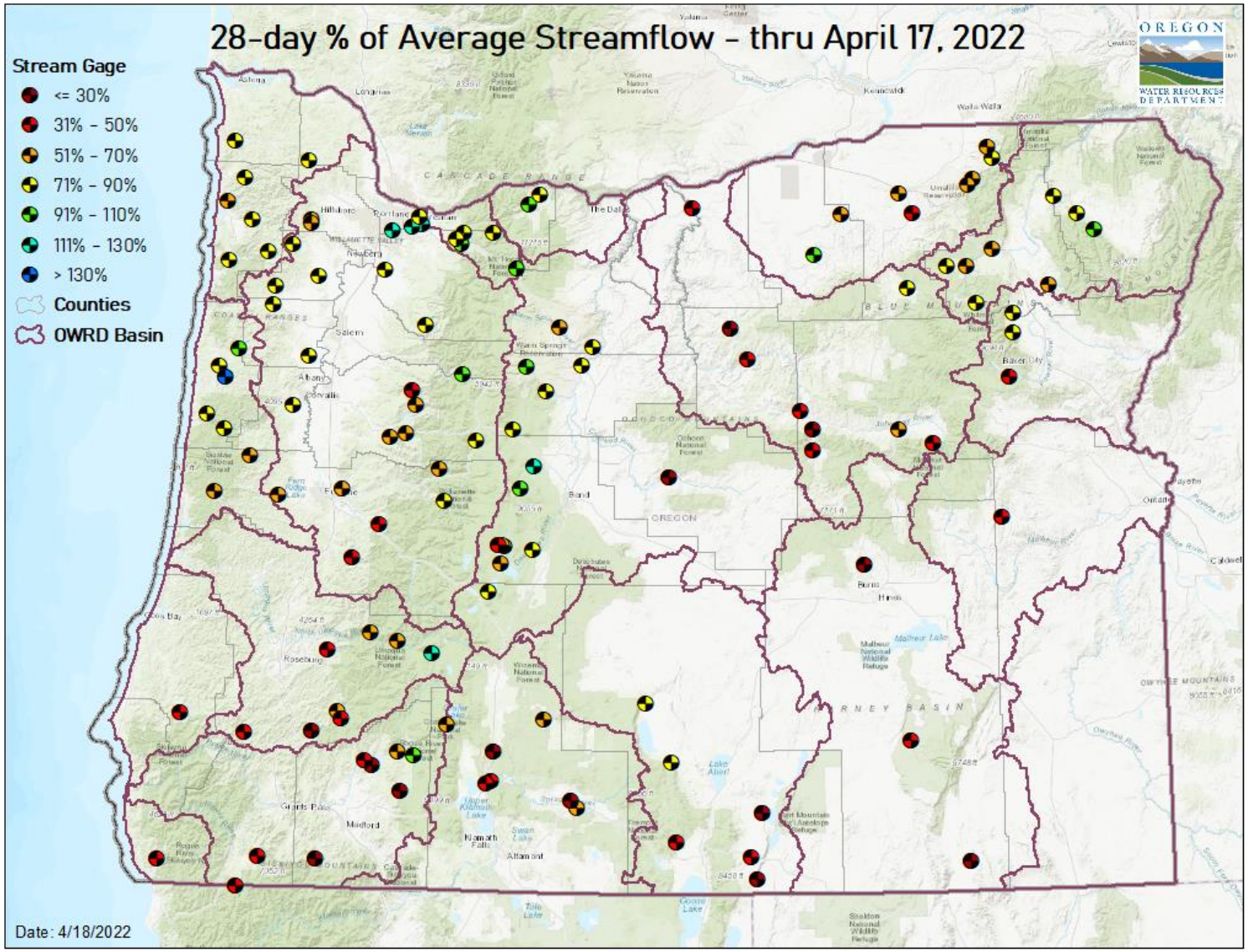


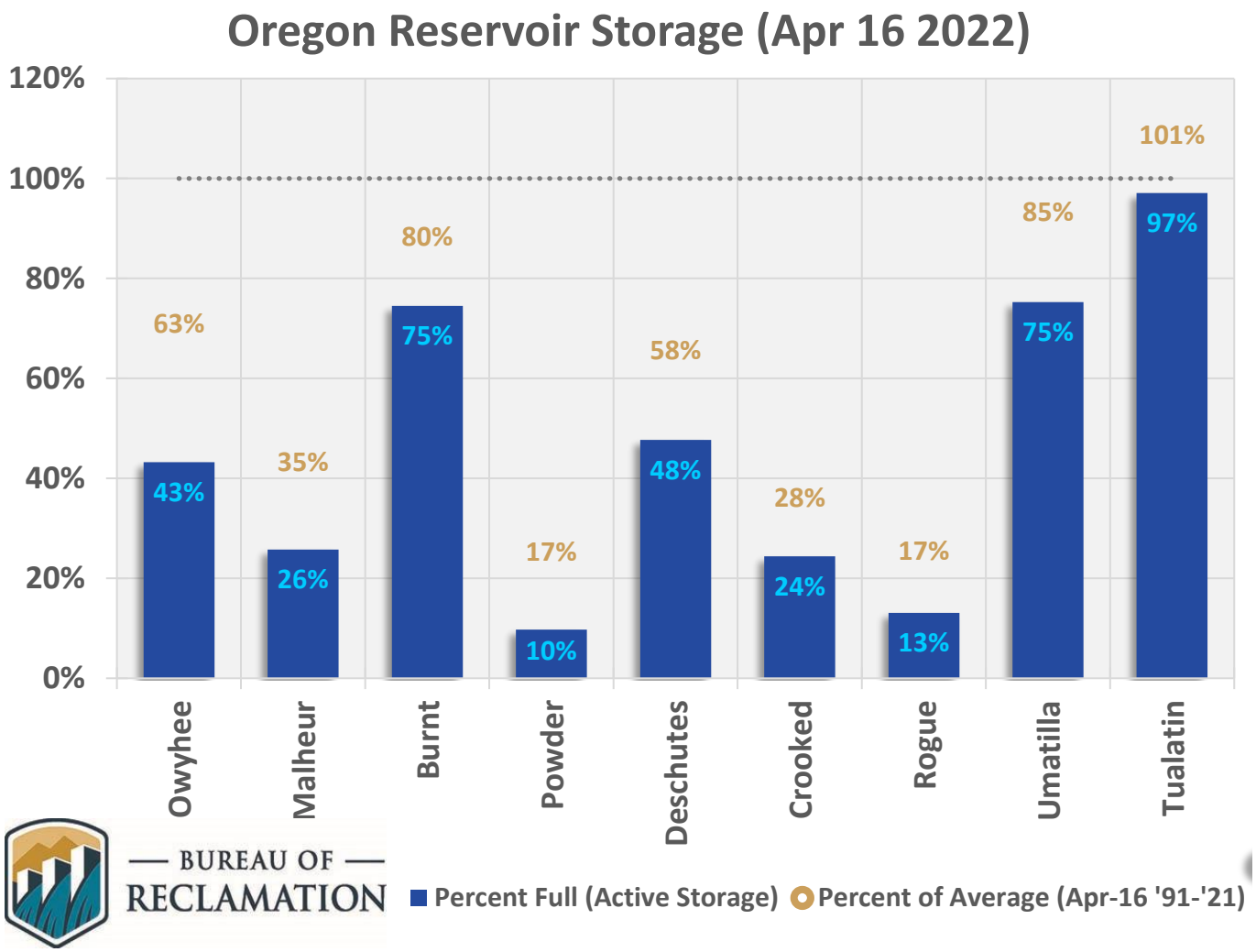
STREAMFLOW

7-DAY



28-DAY


28-day % of Average Streamflow - thru April 17, 2022
Stream Gage
<= 30%
31% - 50%
51% - 70%
71% - 90%
91% - 110%
111% - 130%
> 130%
Counties
OWRD Basin
Date: 4/18/2022
OREGON
WATER RESOURCES DEPARTMENT


Oregon Reservoir Storage (Apr 16 2022)
120%
100%
80%
60%
40%
20%
0%
63%
43%
35%
26%
80%
75%
17%
10%
58%
48%
28%
24%
17%
13%
85%
75%
101%
97%
Owyhee
Malheur
Burnt
Powder
Deschutes
Crooked
Rogue
Umatilla
Tualatin
BUREAU OF RECLAMATION
Percent Full (Active Storage)
Percent of Average (Apr-16 '91-'21)

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.