Oregon Water Conditions Report

May 31st, 2022

HIGHLIGHTS

Thus far in 2022, 15 counties have received Executive Orders issuing drought declarations, with an additional state drought declaration request submitted by Union County.

According to the US Drought Monitor, over 74% of Oregon is experiencing moderate (D1) to exceptional (D4) drought, a 5% reduction in drought-afflicted area over the past two weeks. See below for more information.

Basin snowpack continues to meltout where present. While many basins are near or completely melted out, the Willamette, Hood-Sandy-Lower Deschutes, Upper Deschutes-Crooked, and Grande Ronde-Burnt-Powder-Imnaha are trending towards a later than average meltout. See below for more.

Precipitation over the past two weeks was variable across the state. Overall, precipitation was below average with much of the state receiving less than one inch. However, some localized areas along the Cascades and northeastern Oregon received above average precipitation.

Recent temperatures have been cooler than average statewide, mostly ranging between 0 °C and 4 °C with some more localized pockets of temperatures 4 °C and 10 °C below average.

Soil moisture profiles continue to lag behind in terms of wetness throughout much of the state. With exception of northwest Oregon, surface, root zone, and shallow groundwater profiles are below to well below average.

The three-month climate outlook for June through August favors above average temperatures and below average precipitation statewide. The 8-14 day outlook is more variable, although temperatures are projected to be above average throughout most of the state.

Streamflows over the water year to date are below average throughout much of Oregon, with some exception in the North and Mid Coast, Sandy, and Hood Basins. More recently, 7-day average streamflows have measured average to above average throughout most of western and northern Oregon. See below for more information.

Reservoir storage contents are well below average in many USBR (including Klamath) and USACE systems.

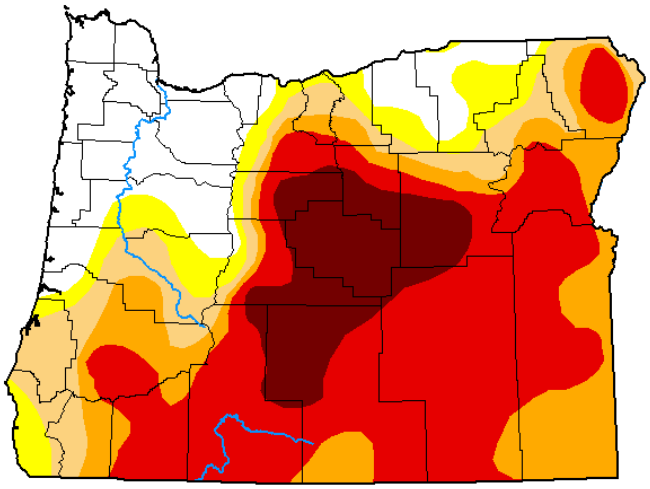
Significant wildfire potential is above average throughout central Oregon for the month of June. The area of above average potential is projected to expand in July and August.

DROUGHT CONDITIONS

The US Drought Monitor indicates over 74% of Oregon is experiencing drought conditions. Portions of Klamath and Lake Counties received a one-category reduction from exceptional (D4) to extreme drought (D3) due to improvements in long-term drought metrics (e.g., Standardized Precipitation Evapotranspiration Index). Parts of northeastern Oregon have been removed from drought classification due to beneficial precipitation.

U.S. Drought Monitor

Oregon



May 24, 2022

(Released Thursday, May. 26, 2022)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	17.41	82.59	74.31	63.57	47.22	11.81
Last Week *05-17-2022*	13.09	86.91	76.03	64.09	47.22	13.34
3 Months Ago *02-22-2022*	4.18	95.82	90.65	76.38	45.61	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 *05-25-2021*	0.00	100.00	97.08	72.03	27.36	3.57

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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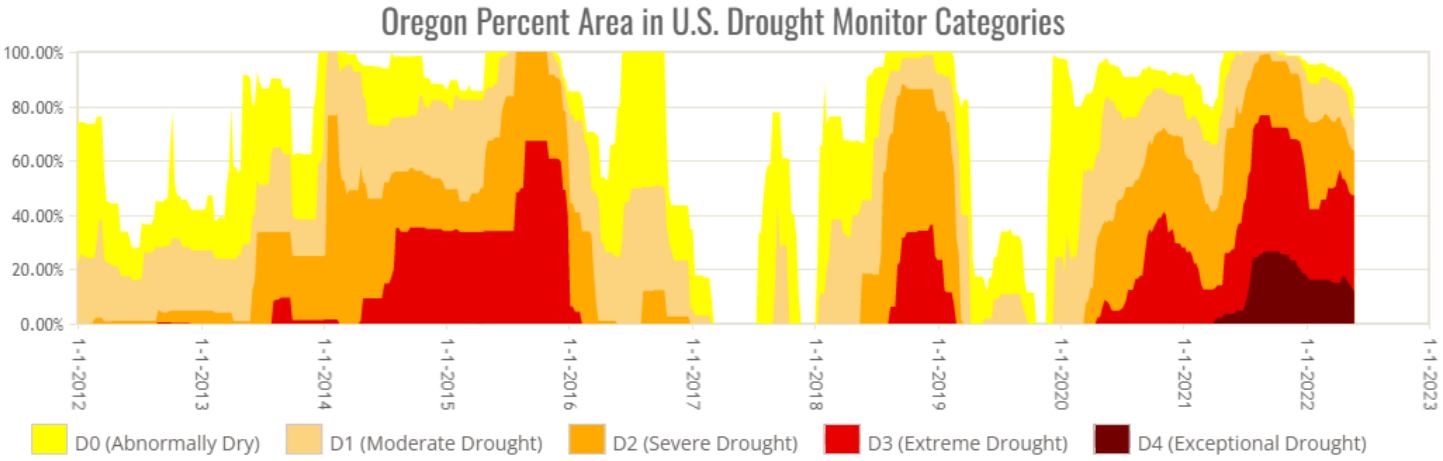
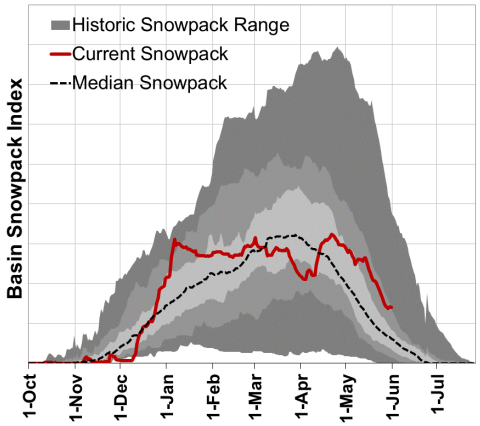
NCEI/NOAA

droughtmonitor.unl.edu

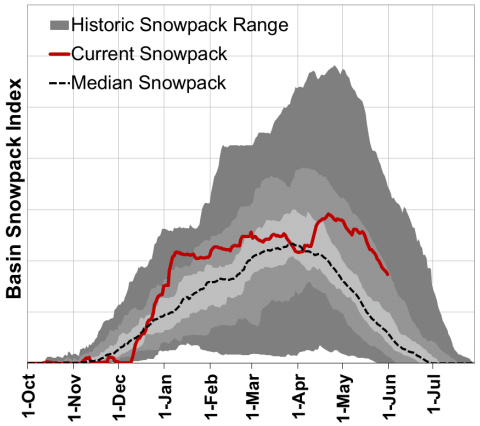


SNOWPACK

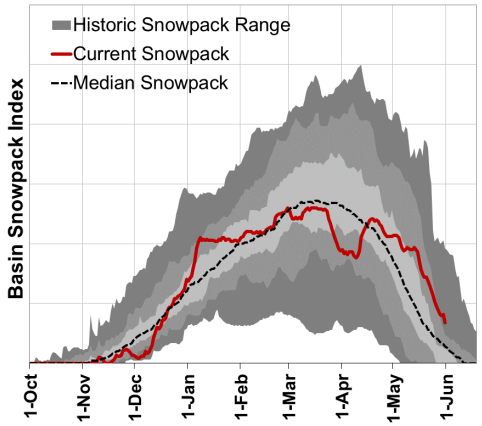
Willamette



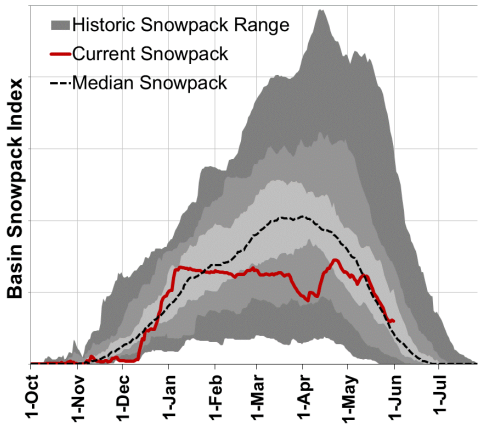
Hood-Sandy-Lower Deschutes



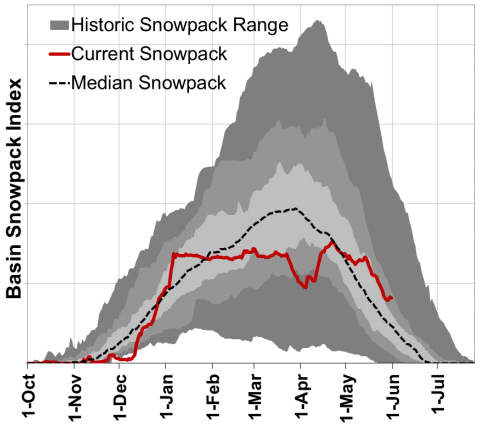
Umatilla-Walla Walla-Willow



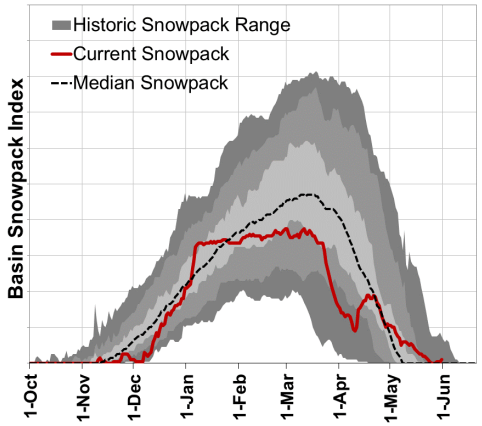
Rogue-Umpqua



Upper Deschutes-Crooked

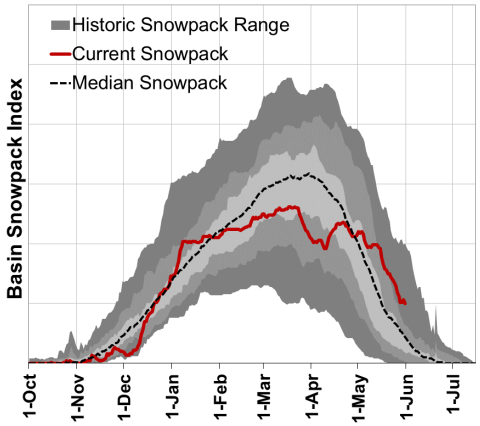


John Day

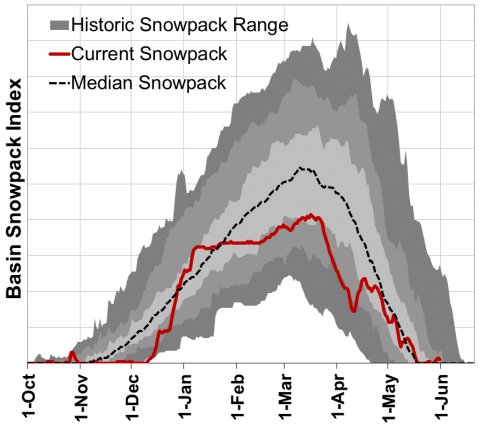


SNOWPACK

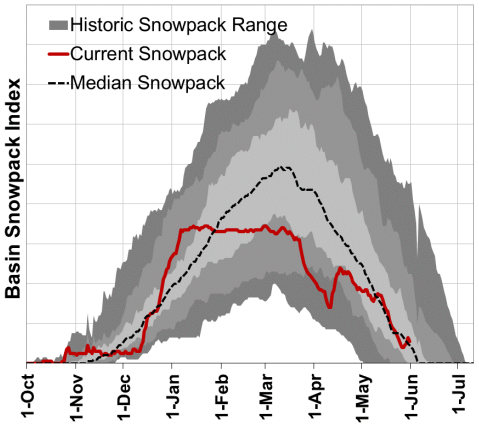
Grande Ronde-Burnt-Powder-Imnaha



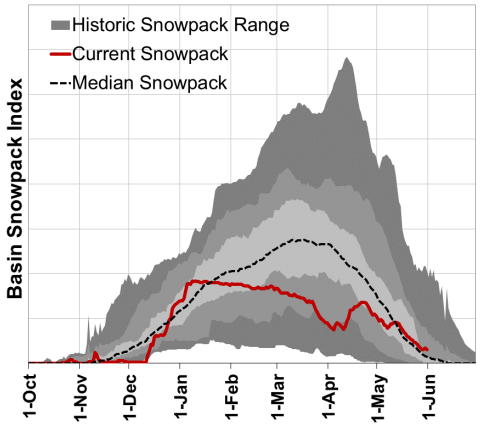
Owyhee



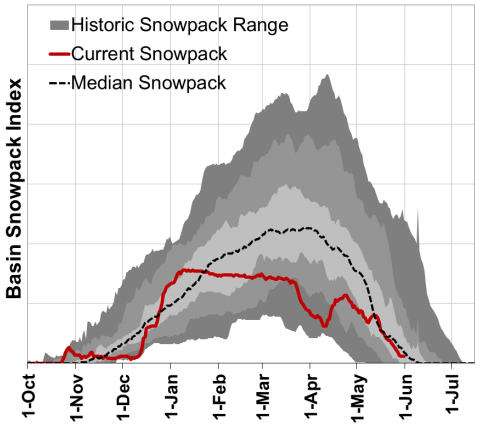
Harney



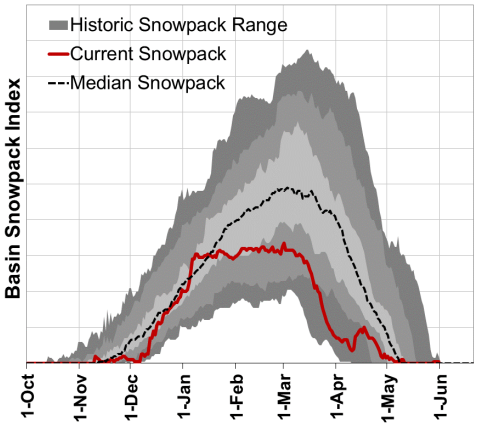
Klamath



Lake County-Goose Lake

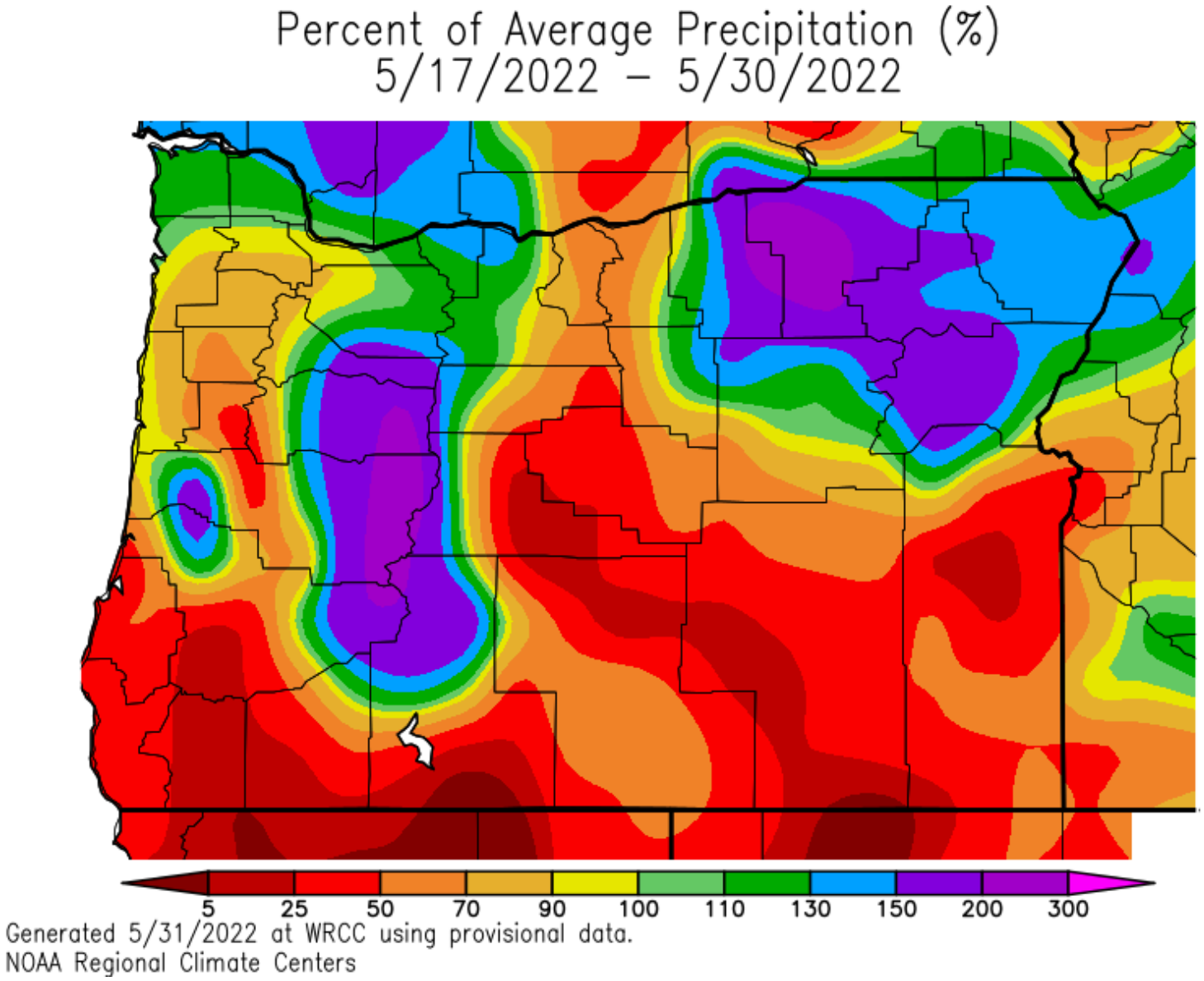


Malheur

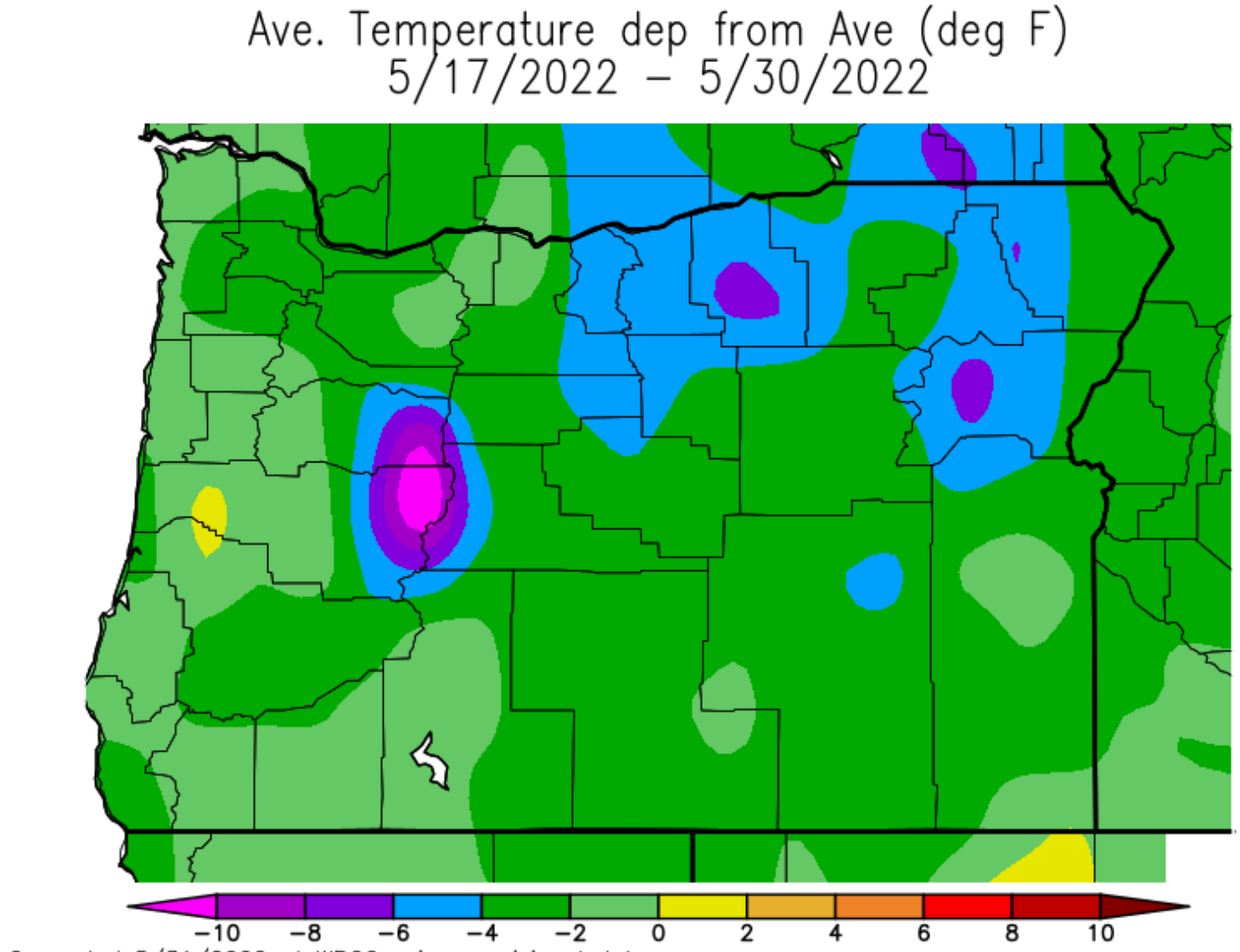


CLIMATE CONDITIONS

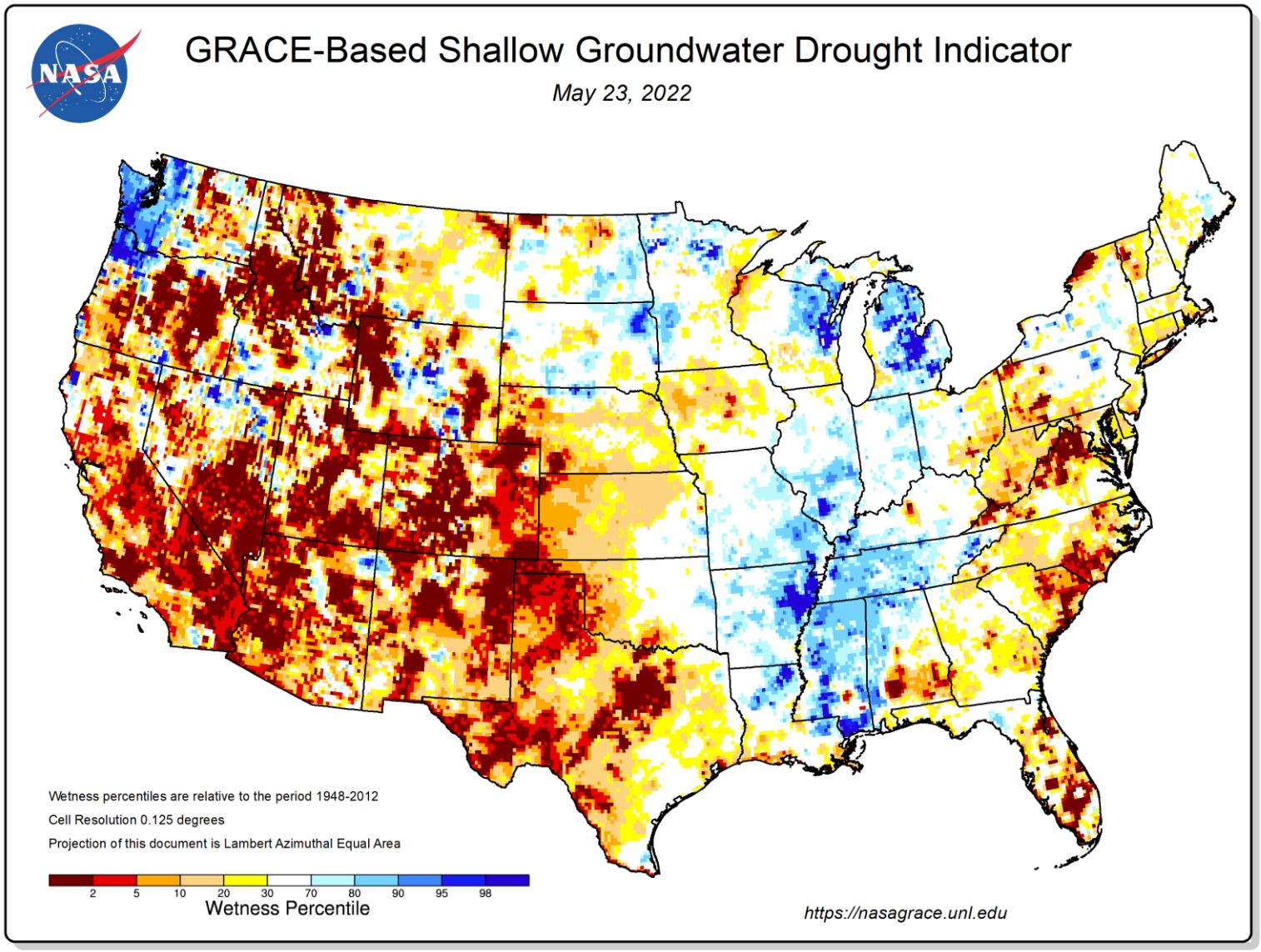
PRECIPITATION



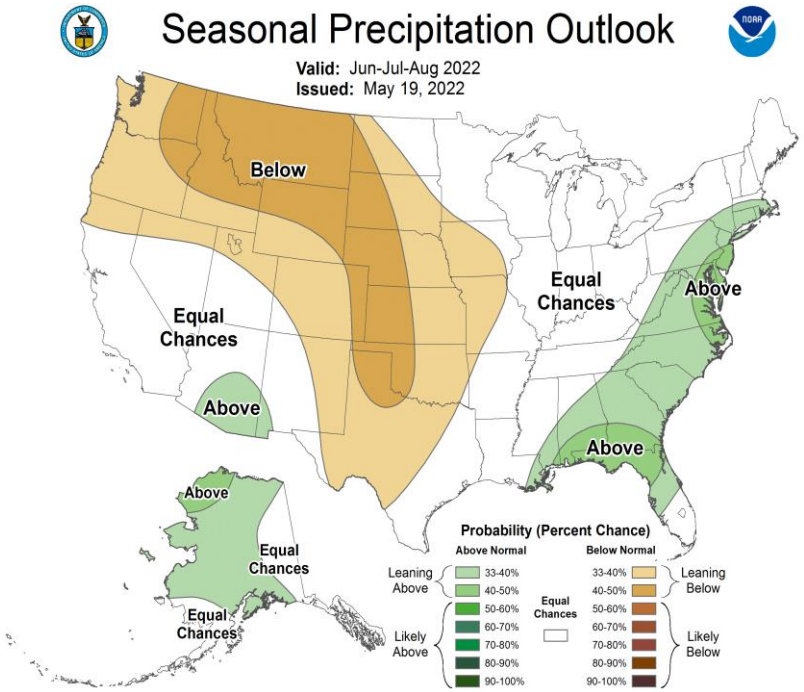
TEMPERATURE

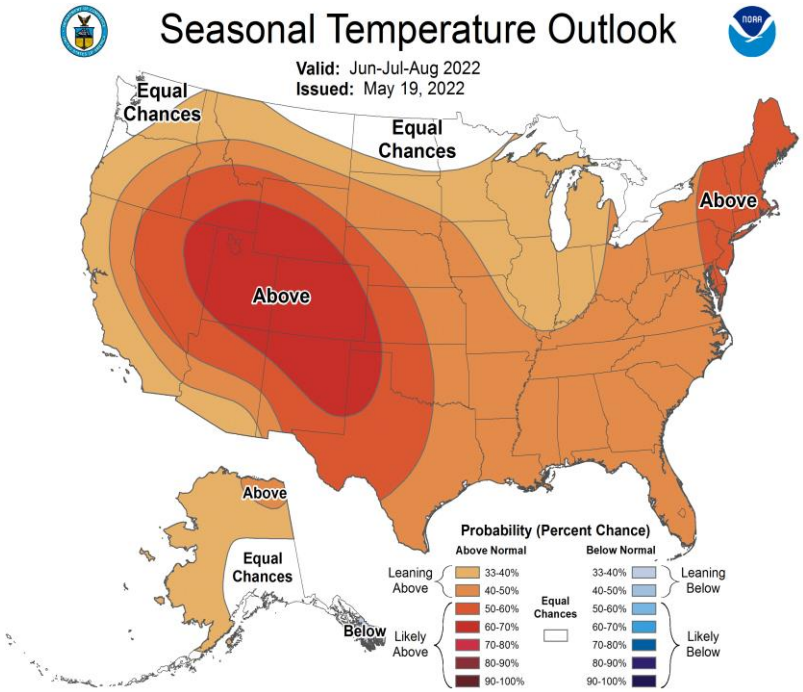


SOIL MOISTURE



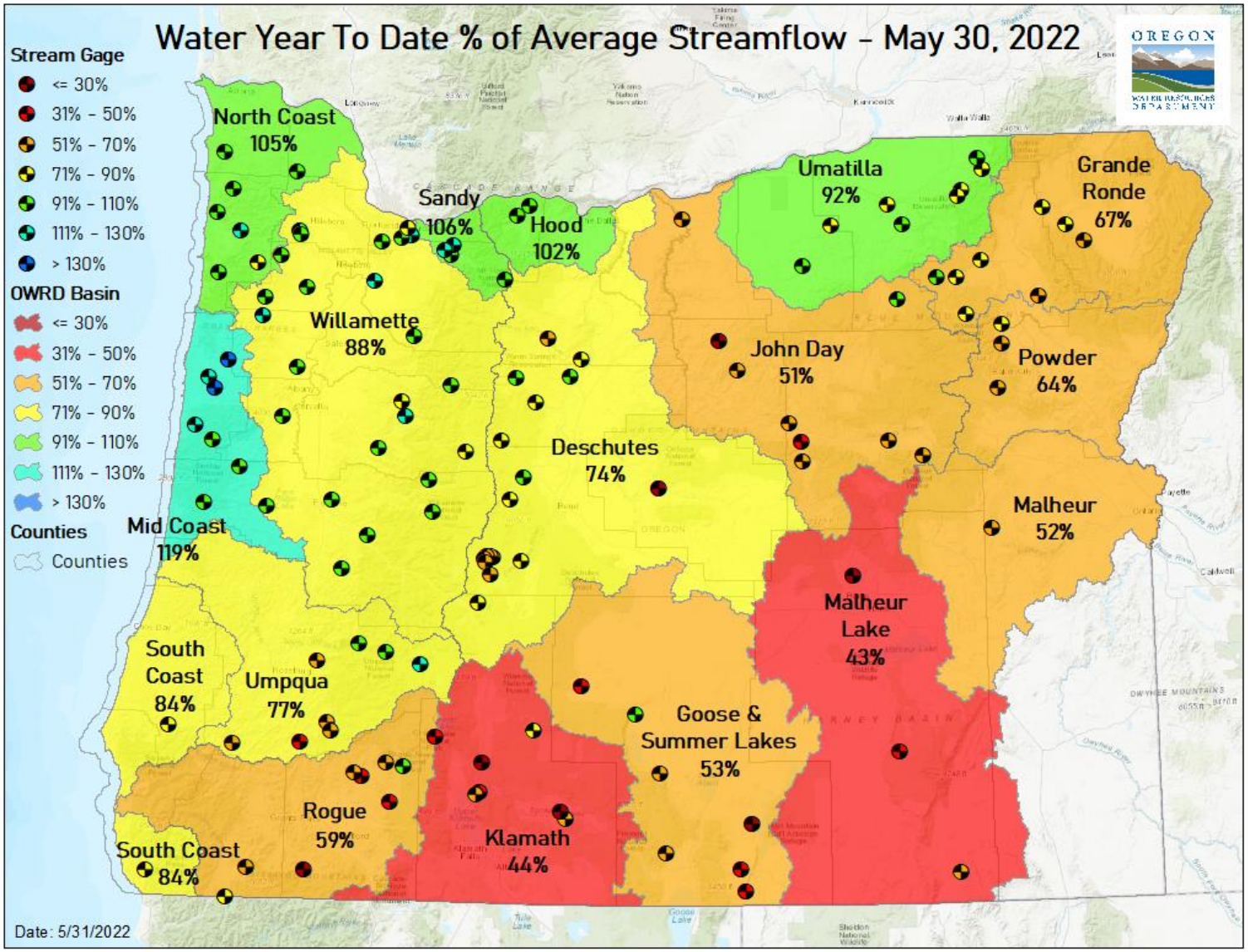
CLIMATE OUTLOOK



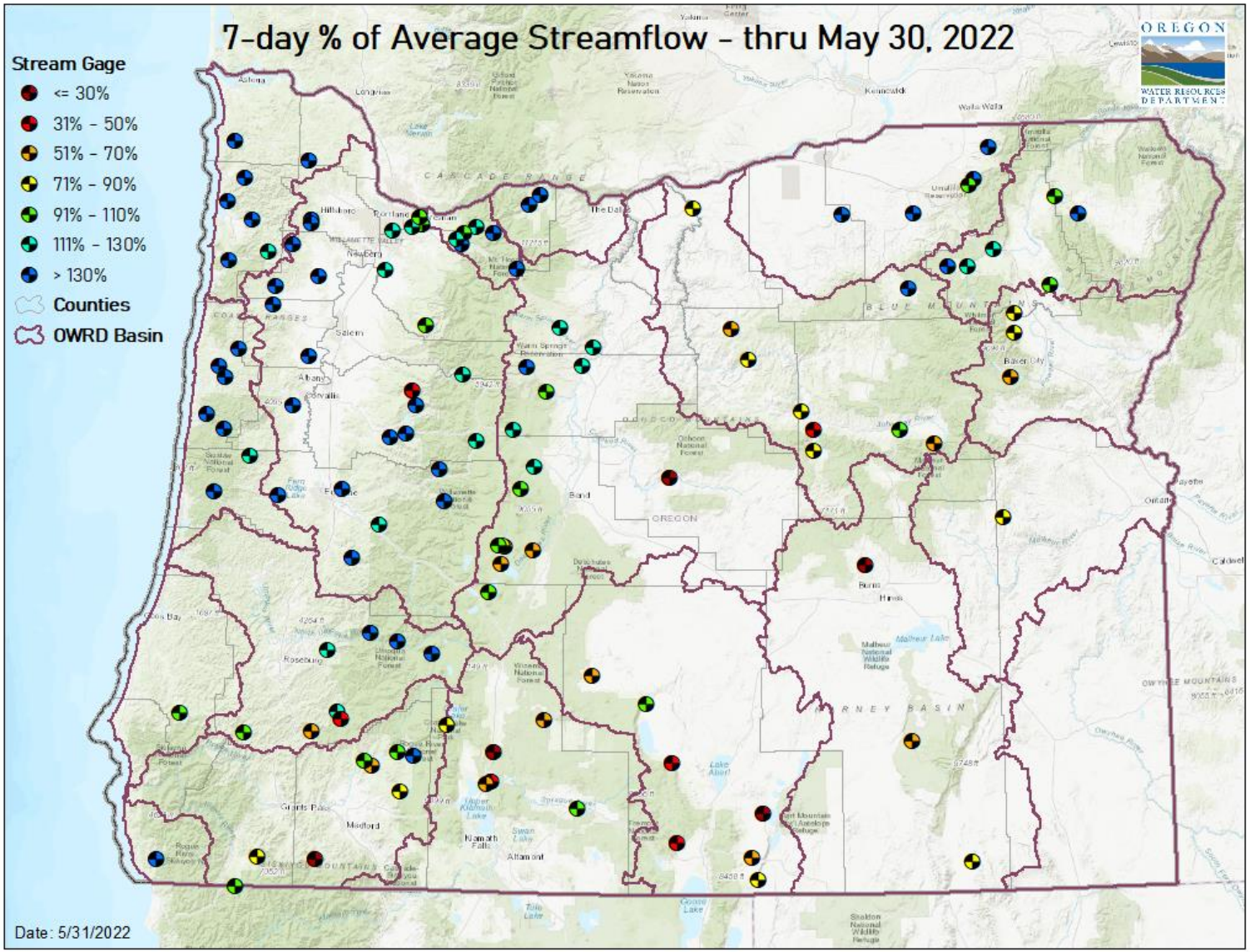


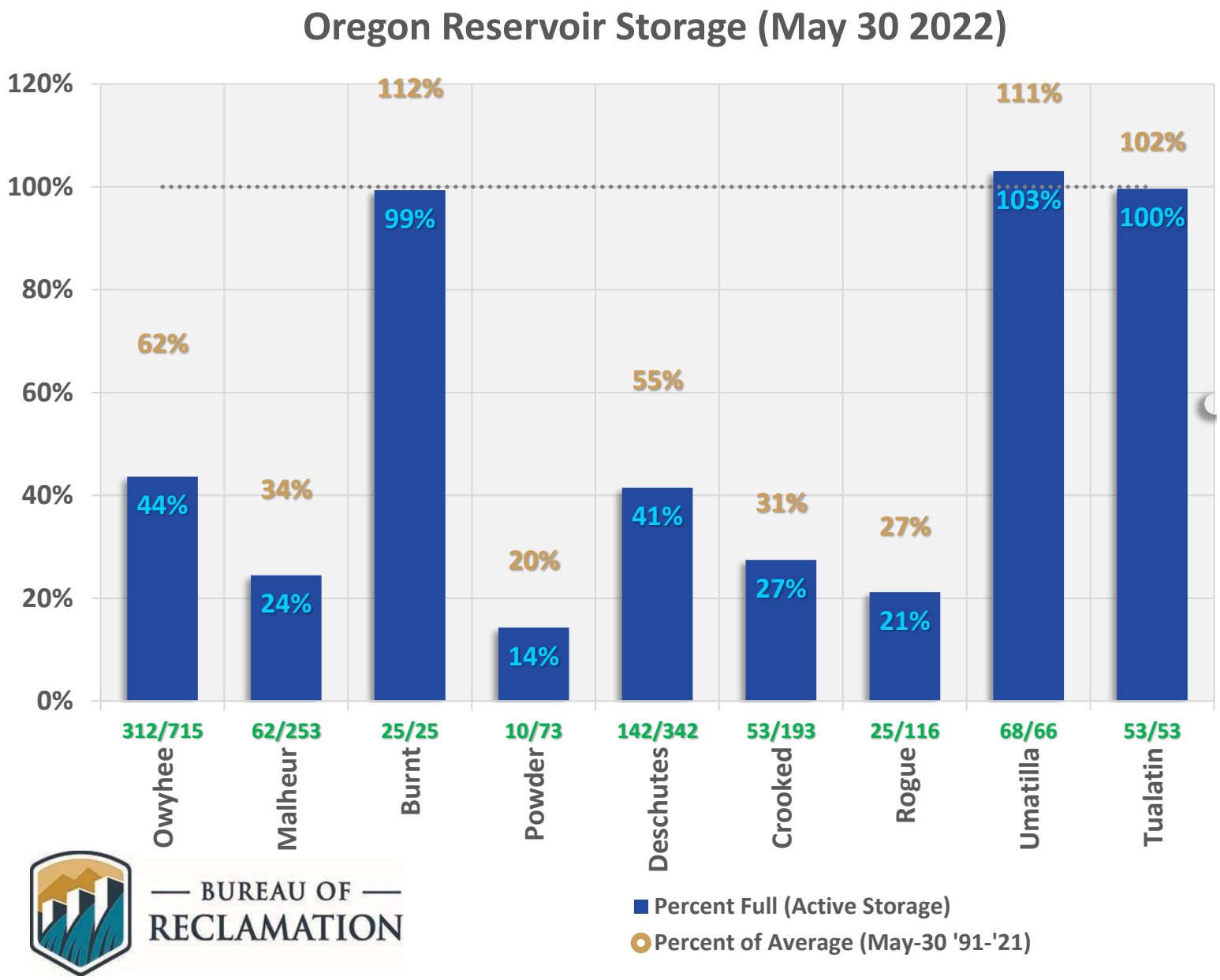
STREAMFLOW

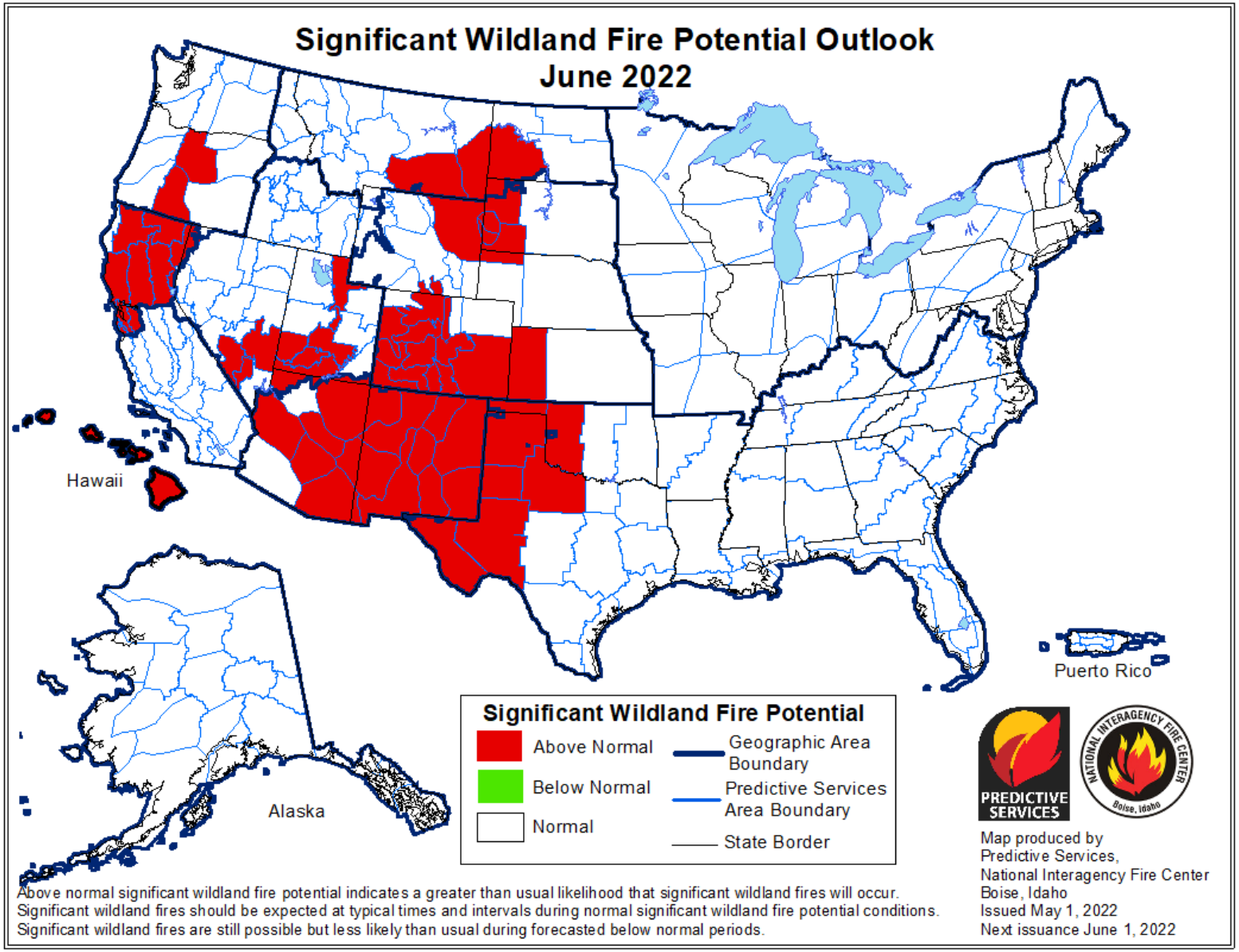
WATER YEAR TO DATE



7-DAY


7-day % of Average Streamflow - thru May 30, 2022
Stream Gage
<= 30%
31% - 50%
51% - 70%
71% - 90%
91% - 110%
111% - 130%
> 130%
Counties
OWRD Basin
Date: 5/31/2022
OREGON
WATER RESOURCES DEPARTMENT


Oregon Reservoir Storage (May 30 2022)
120%
100%
80%
60%
40%
20%
0%
62%
44%
312/715
Owyhee
34%
24%
62/253
Malheur
112%
99%
25/25
Burnt
20%
14%
10/73
Powder
55%
41%
142/342
Deschutes
31%
27%
53/193
Crooked
27%
21%
25/116
Rogue
111%
103%
68/66
Umatilla
102%
100%
53/53
Tualatin
BUREAU OF
RECLAMATION
Percent Full (Active Storage)
Percent of Average (May-30 '91-'21)


Significant Wildland Fire Potential Outlook
June 2022
Hawaii
Alaska
Puerto Rico
Significant Wildland Fire Potential
Above Normal
Below Normal
Normal
Geographic Area Boundary
Predictive Services Area Boundary
State Border
PREDICTIVE SERVICES
NATIONAL INTERAGENCY FIRE CENTER
Boise, Idaho
Map produced by
Predictive Services,
National Interagency Fire Center
Boise, Idaho
Issued May 1, 2022
Next issuance June 1, 2022
Above normal significant wildland fire potential indicates a greater than usual likelihood that significant wildland fires will occur.
Significant wildland fires should be expected at typical times and intervals during normal significant wildland fire potential conditions.
Significant wildland fires are still possible but less likely than usual during forecasted below normal periods.

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.