

Oregon Water Conditions Report June 15, 2020



The majority of Oregon snowpack has melted out and the remaining areas with snow will be rapidly melting out over the next couple of weeks.

Current Oregon statewide water year precipitation at NRCS SNOTEL sites remains below average at 82 percent. Basin precipitation values range from a low of 69 percent of average in the Klamath basin to 103 percent of average in the Umatilla, Walla Walla, and Willow basins.

The NRCS [Basin Outlook Report](#) for June is now available. The June report mentions that after a warm and dry April, the month of May brought significant precipitation to Oregon; most parts of the state received above average monthly precipitation. In addition, SNOTEL sites in many locations melted out one to three weeks early. Note that this is the last report of the 2020 season.

Precipitation over the [past two weeks](#) has been above average in western and far eastern Oregon. With most of central Oregon seeing less about 0.5 inches less than average precipitation. For the [month of May](#), precipitation was normal to well above normal across most of the state. Most noteworthy were areas in north central, northeast, and southwestern Oregon where precipitation was up to 300 percent of normal. The exception were areas in Lake and Malheur counties where precipitation was between 90 and 70 percent of normal.

Temperatures over the [past two weeks](#) have been warmer than normal across a broad area of south central and especially southeastern Oregon. Temperatures across much of western and especially northwestern Oregon were cooler than normal. For the [month of May](#), temperatures were warmer than normal across most of the state with temperatures close to normal in the north central and south central regions of Oregon.

Over the next [8 to 14 days](#), the NOAA Climate Prediction Center is forecasting higher than normal temperatures across the state. The precipitation outlook is varied from below-normal across the northern half of the state, transitioning to equal chances and then to above-normal in parts of south central and southeast Oregon. The most recent [three month outlook](#) indicates an increased probability of above-normal temperatures along with below-normal precipitation across the Pacific Northwest. The next long-term outlook is scheduled to be issued on June 18, 2020.

There is a ~60 percent chance of [ENSO-neutral](#) during Northern Hemisphere summer 2020, with roughly equal chances (~40-50%) of La Niña or ENSO-neutral during the autumn and winter 2020-21. During May 2020, sea surface temperature (SST) anomalies were near-to-below average across the east-central and eastern equatorial Pacific. All of the Niño indices decreased during the month, and the latest weekly Niño-3.4 index value was -0.4°C. For a more complete report, refer to the May 14, 2020 [diagnostic discussion](#) issued by the Climate Prediction Center. The next diagnostic discussion is scheduled for July 9, 2020. Another source of information is the latest [ENSO blog](#) on the climate.gov website.

Statewide streamflow conditions for May showed improvement but remained lower than normal at 82 percent. Values for May ranged from a high of close to 150 percent of normal in the Umatilla Basin to a low of only 44 and 45 percent in the Owyhee and Klamath. Recent rainfall continues to provide benefit to streamflow in some parts of western Oregon. Flows in the Sandy are currently at over 200 percent of normal with flows in the Willamette at close to 130 percent. In central and eastern Oregon, flows are currently ranging from around 100 percent of normal in the Hood and Grande Ronde basins to only about 40 percent of normal in the Klamath Basin.

[USACE Reservoirs:](#)

[Rogue:](#) The Rogue system is 81 percent full and 19 percent below rule curve. Lost Creek is 87 percent full, 13 percent below rule curve and releasing close to the fisheries recommended flow of 2500 cfs. Applegate is only 54 percent full, 46 percent below rule curve and releasing a minimum flow of 150 cfs. Applegate is not expected to fill this year, and will probably be on or close to minimum flow for most of the summer.

[Willamette:](#) The Willamette system is 88 percent full and 12 percent below rule curve with system-wide inflow of 9,000 cfs and outflow of 8,000 cfs. The flow in the Willamette River at Salem was 13,000 cfs yesterday and 14,000 cfs the previous seven days. The projects within 5 percent of full are Detroit, Green Peter, Foster, Dorena and Fall Creek. The other projects are still behind the refill schedule but are still filling with the next two days of rain. The Willamette at Salem is forecast to reach nearly 18,000 cfs by Wednesday. While well below bankfull, this flow is high for mid-June.

[Willow Creek:](#) Willow Creek is full and passing inflow. Current releases are 15.2 cfs.

[USBR Reservoirs:](#)

[Tualatin River Basin:](#) Scoggins reservoir is at 95 percent of capacity and maintaining storage levels with inflows around 31 cfs and outflows around 37 cfs.

[Umatilla River Basin:](#) McKay reservoir is at 100 percent of capacity and maintaining storage levels with inflows around 39 cfs and outflows around 39 cfs.

[Deschutes River Basin:](#) Prineville reservoir is at 64 percent of capacity and drafting with inflows around 17 cfs and outflows around 236 cfs. Ochoco reservoir is at 47 percent of capacity and maintaining storage levels with inflows around 17 cfs and outflows around 10 cfs. Crescent Lake is at 55 percent, Wickiup reservoir is at 45 percent and Crane Prairie reservoir is at 84 percent of capacity.

[Malheur River Basin:](#) Warm Springs reservoir is at 73 percent of capacity and drafting with inflows around 79 cfs and outflows of around 279 cfs. Beulah reservoir is at 75 percent of capacity and drafting with inflows around 122 cfs and outflows around 240 cfs. Bully Creek reservoir is at 84 percent of capacity and drafting with inflows below 5 cfs and outflows around 9 cfs.

[Owyhee River Basin:](#) Owyhee reservoir is at 78 percent of capacity and generally drafting with inflows around 673 cfs and outflows around 184 cfs.

[Burnt and Powder River Basins:](#) Unity reservoir is at 95 percent of capacity and drafting with inflows around 51 cfs and outflows around 100 cfs. Phillips reservoir is at 57 percent

of capacity and maintaining storage levels with inflows around 203 cfs and outflows around 152 cfs.

The most recent update to the [US Drought Monitor](#) shows some slight improvement with over 95 percent of the state in D0 (abnormally dry) conditions, 82 percent listed as in D1 (moderate drought), 37 percent is listed as in D2 (severe drought) and just under 5 percent in D3 (extreme drought).

Governor Brown declared a [drought emergency](#) in Klamath County in early March, followed by Curry County in April, Jackson County in early May and most recently in Coos County. It is very likely that more counties will follow in the near future.

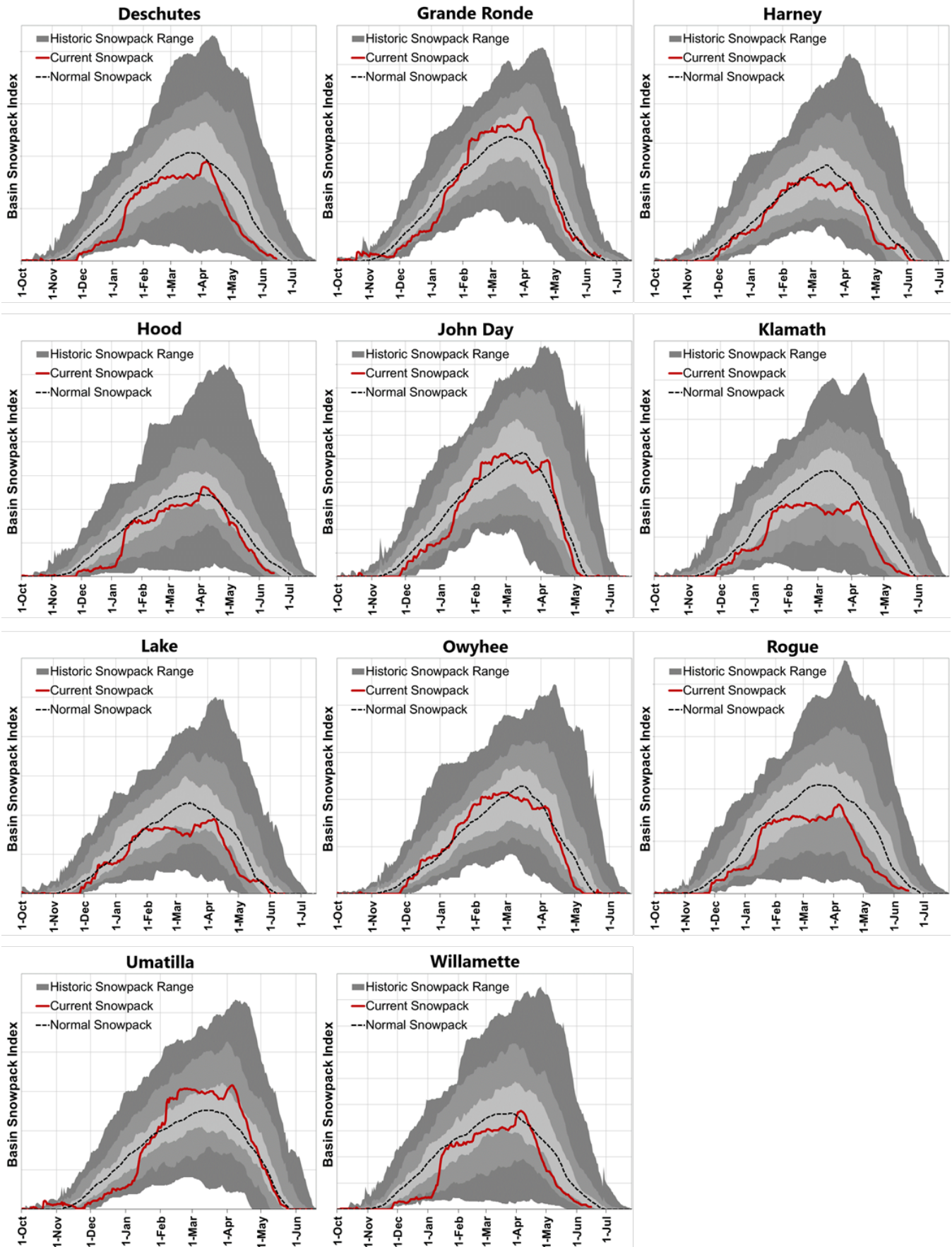
Above-normal significant large fire potential will begin developing across southwestern Oregon in June and then expand to include all but the northwestern quarter of the region in July. The above-normal significant large fire potential will persist into September before the seasonal transition begins. Other locations in the Pacific Northwest can expect normal significant large fire potential during the outlook period. See the latest report from the [National Interagency Fire Center](#) for the June through September outlooks.

The Douglas Forest Protective Association, the Umpqua National Forest, and the Bureau of Land Management, Roseburg District, have announced that the 2020 fire season will officially begin Monday, June 15. Refer the Oregon Department of Forestry's [Wildfire News](#) page for more details.

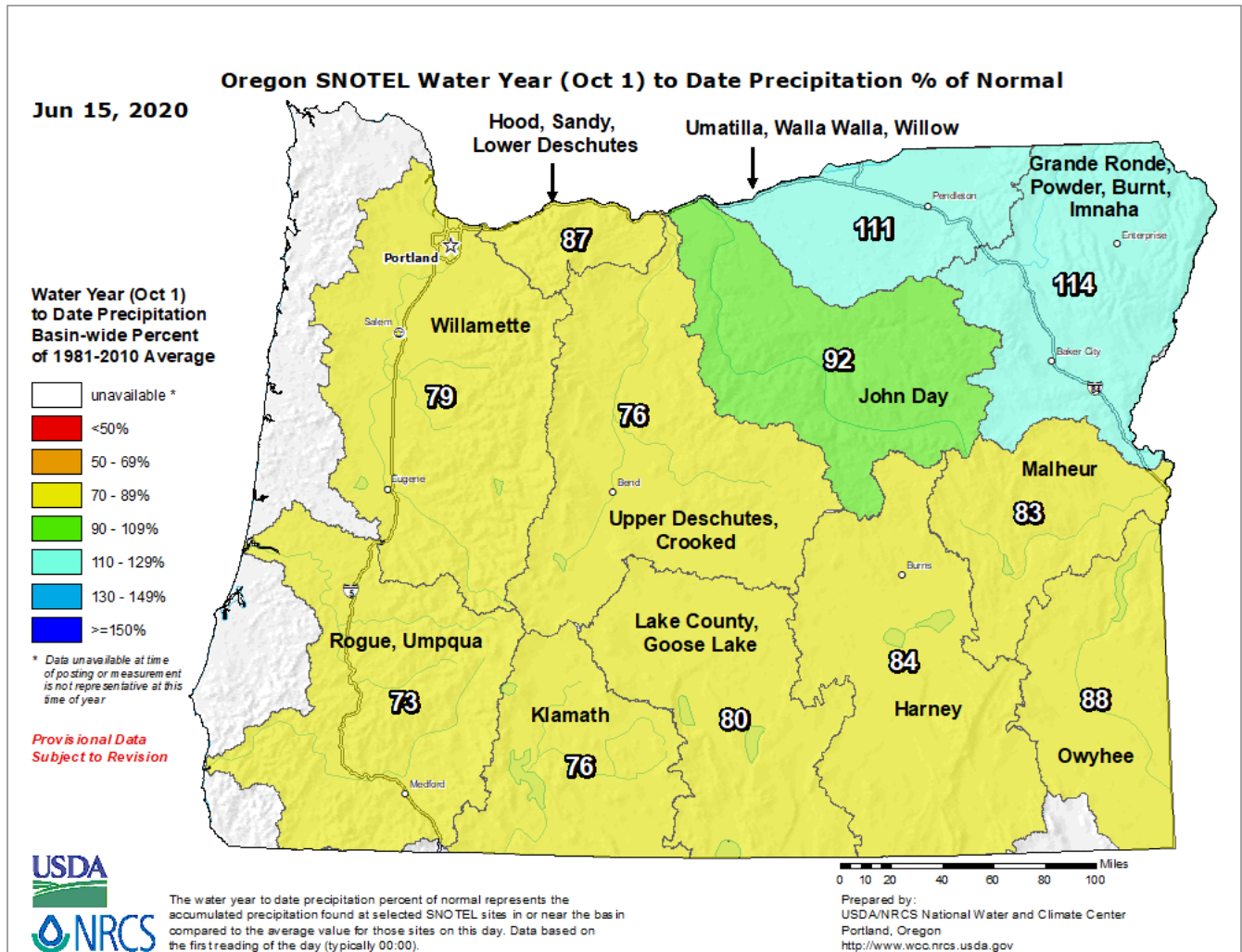
The Oregon Office of Emergency Management has assembled a [hydrology/meteorology dashboard](#) featuring many of the data sources used to generate this report. Use the selection arrows at the bottom of your browser to navigate to the various data sources.

Data & Products:	Page:
Snowpack Graphs – June 15, 2020	4
Precipitation (Mountain) - Percent of Normal	5
Precipitation – (1 Month) Percent of Normal	6
Temperature – (1 Month) Departure from Normal	7
Three Month Temperature and Precipitation Outlook	8
Satellite-Based Soil Moisture Percentile.....	9
U.S. Drought Monitor for Oregon	10
Streamflow Conditions by County – May, 2020.....	11
Streamflow Conditions – 7-day average (USGS)	11

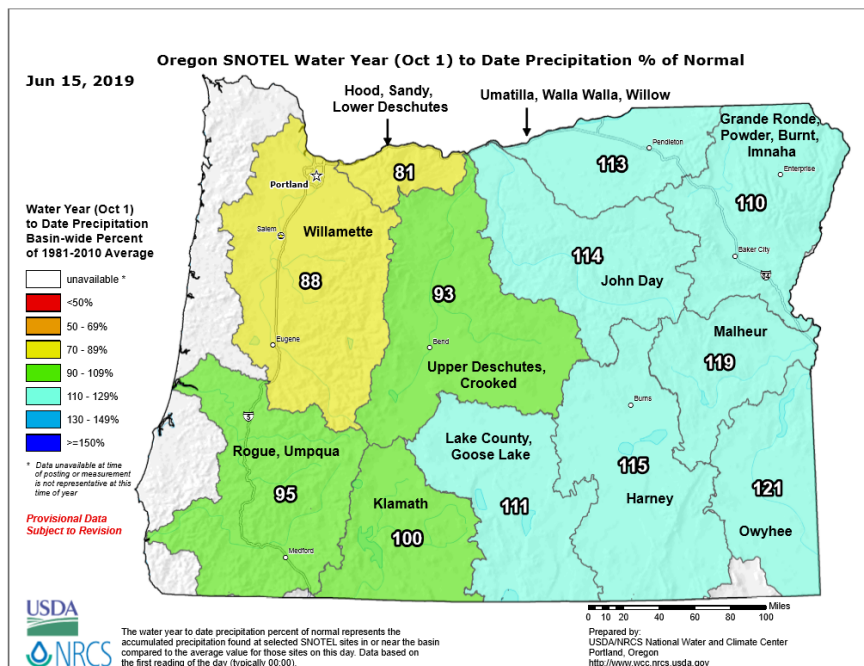
Snowpack Graphs – June 15, 2020



Precipitation (Mountain) - Percent of Normal



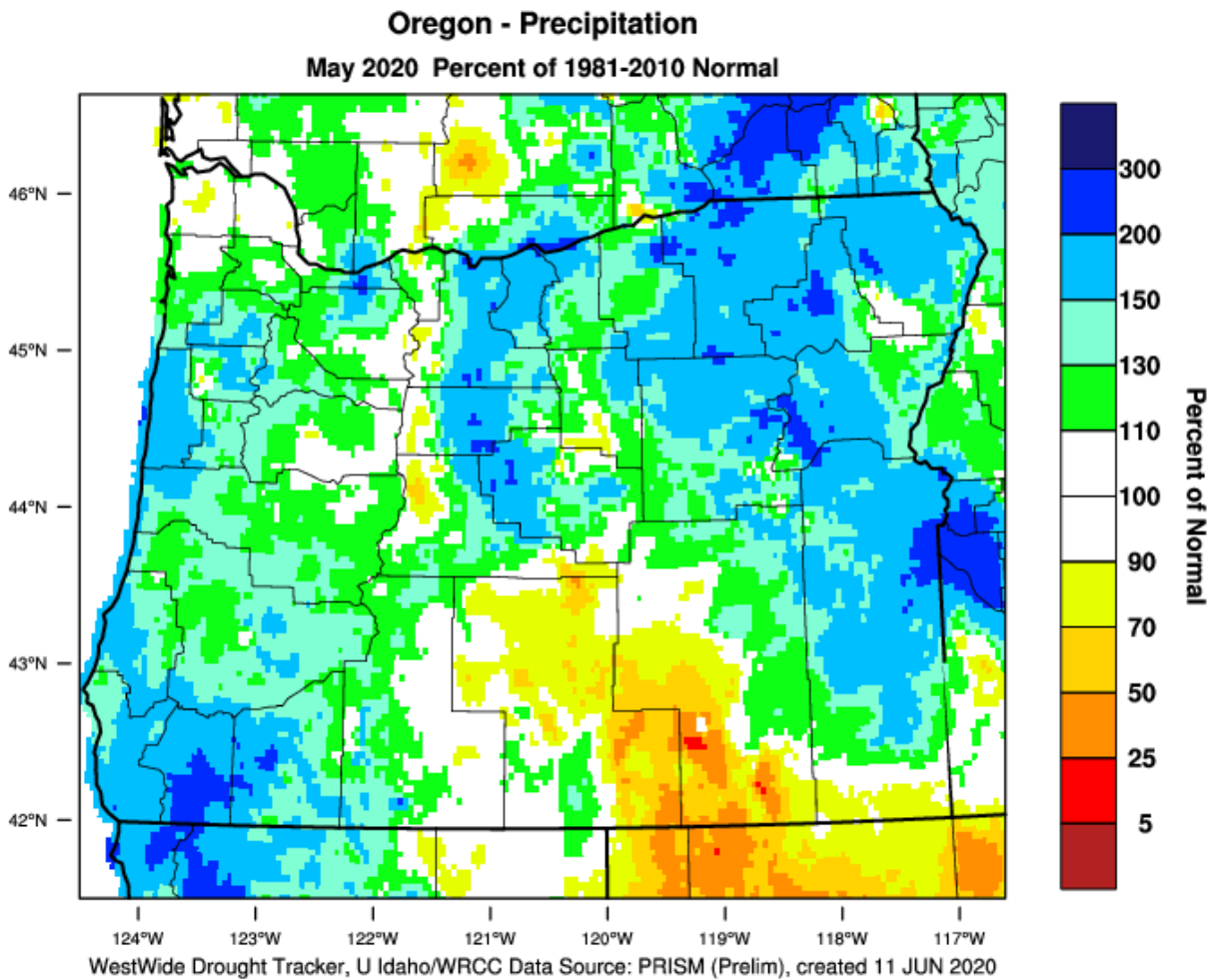
Compared to this time last
year:



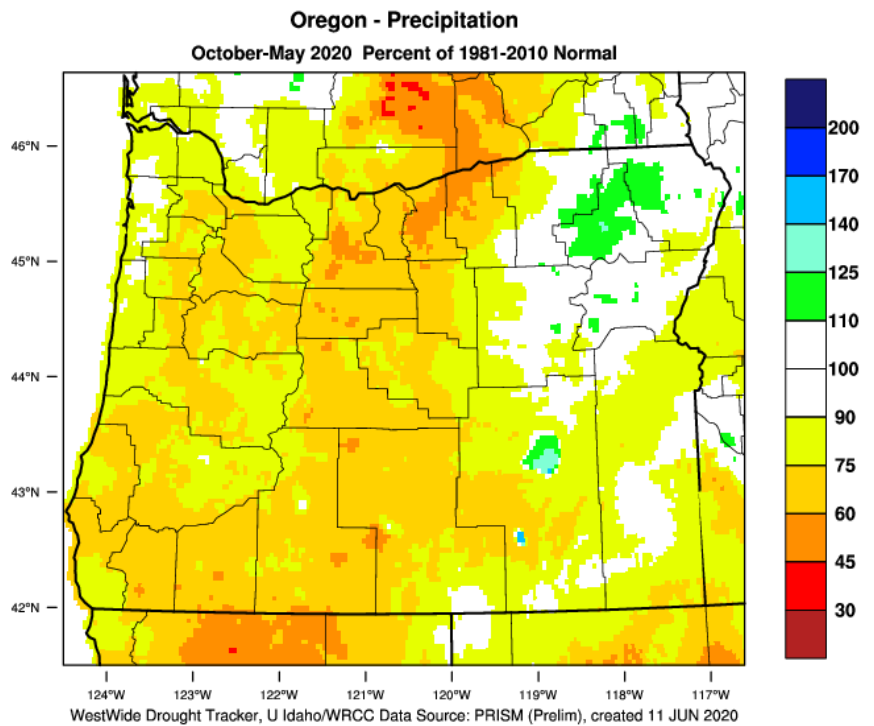
Precipitation – (1 Month) Percent of Normal

Website: <https://wrcc.dri.edu/wwdt/index.php?folder=pon1>

PRISM > Precipitation Anomaly 1 Month > Oregon



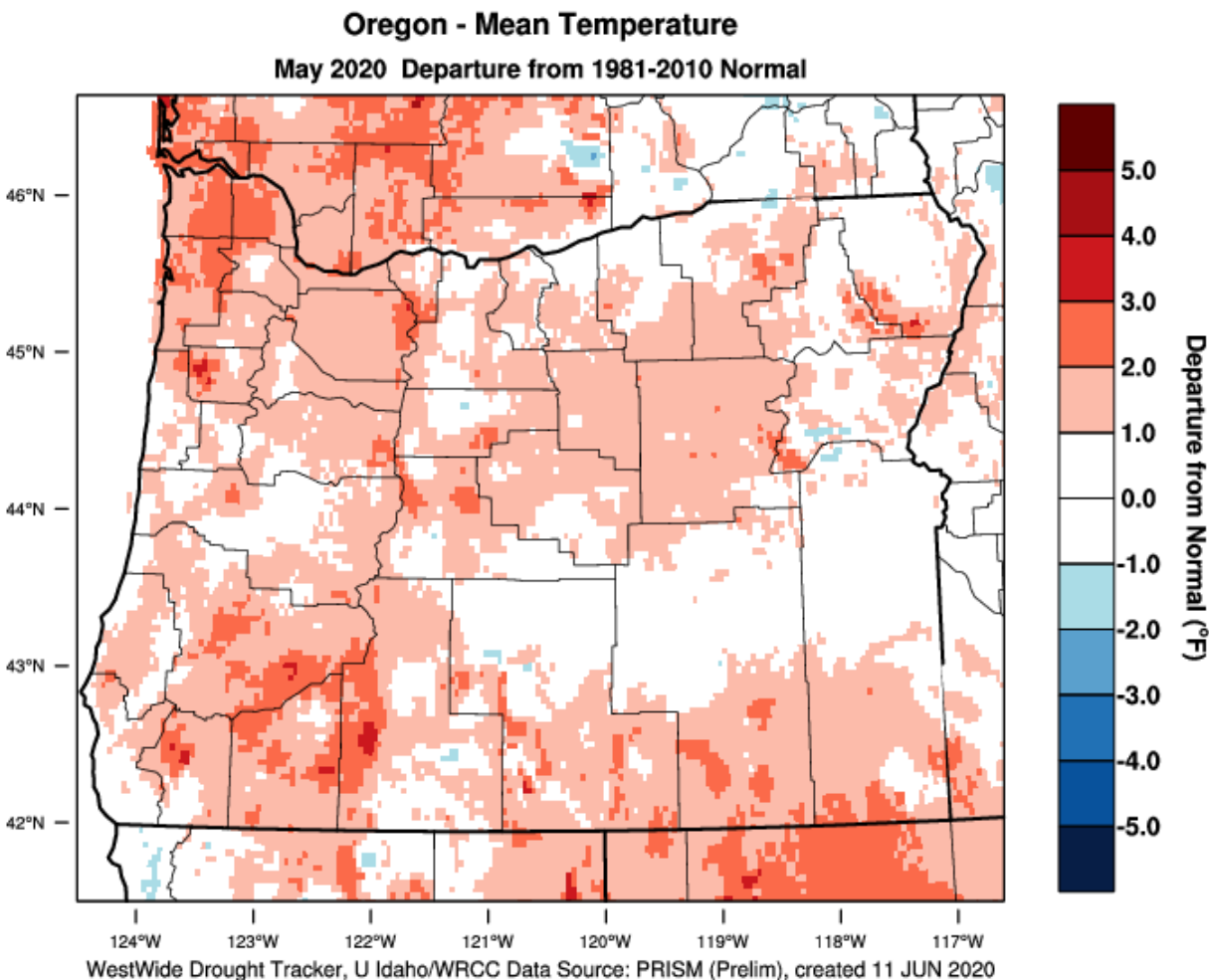
Precipitation since the beginning of the water year:



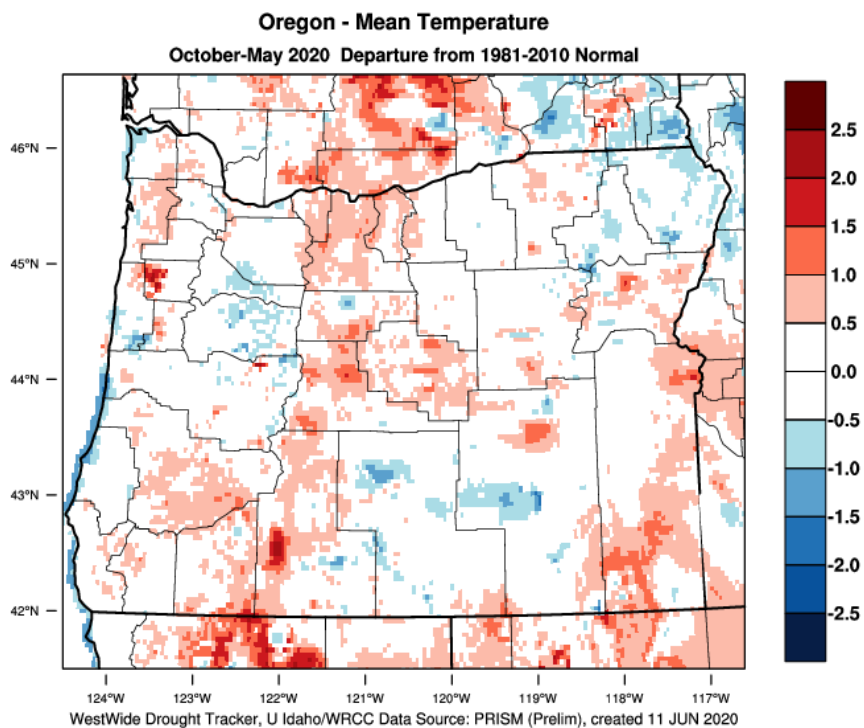
Temperature – (1 Month) Departure from Normal

Website: <https://wrcc.dri.edu/cgi-bin/anomimage.pl?ore30dTvdep.png>

PRISM > Temperature Anomaly 1 Month > Oregon



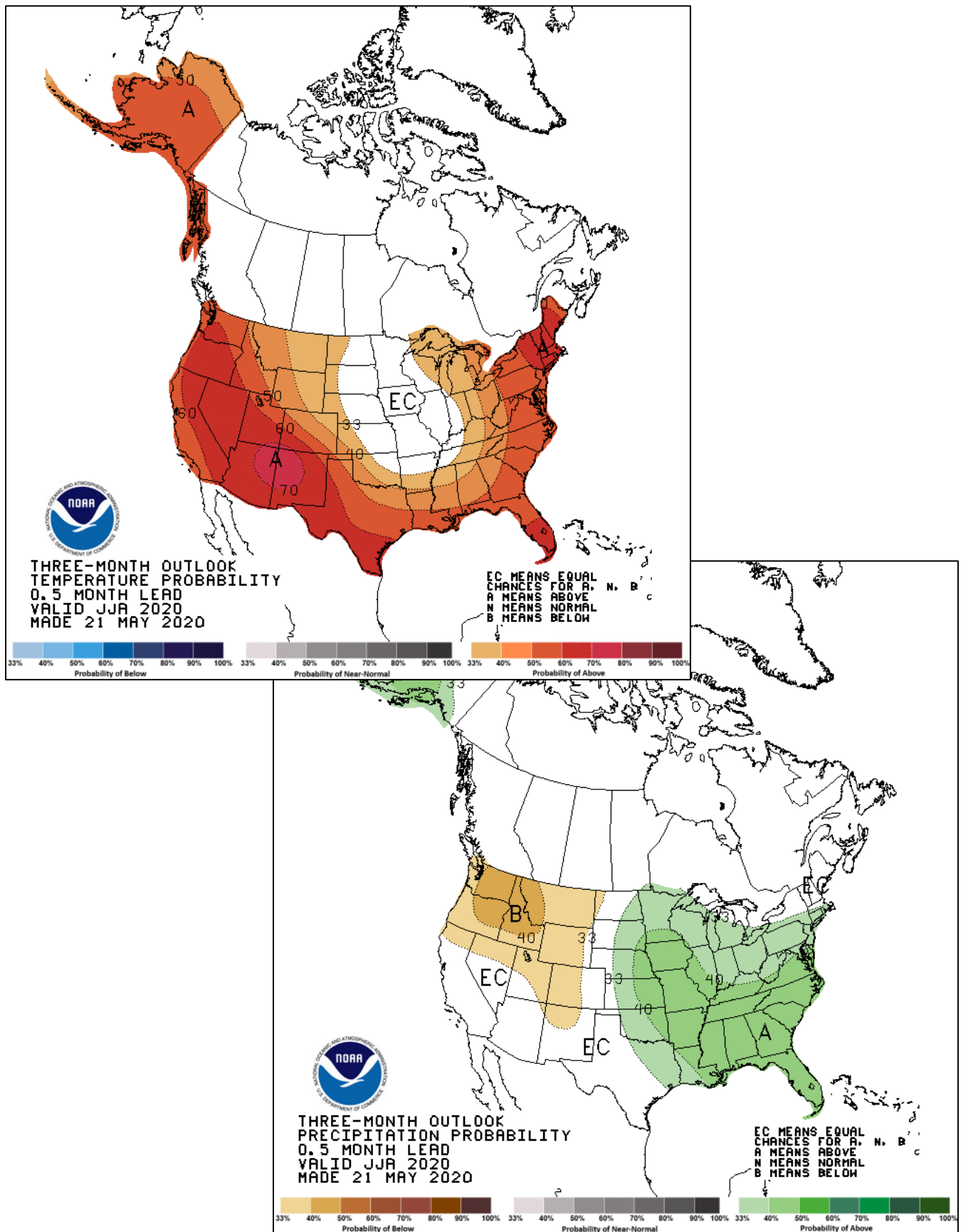
Temperature since the beginning of the water year:



Three Month Temperature and Precipitation Outlook

June through August

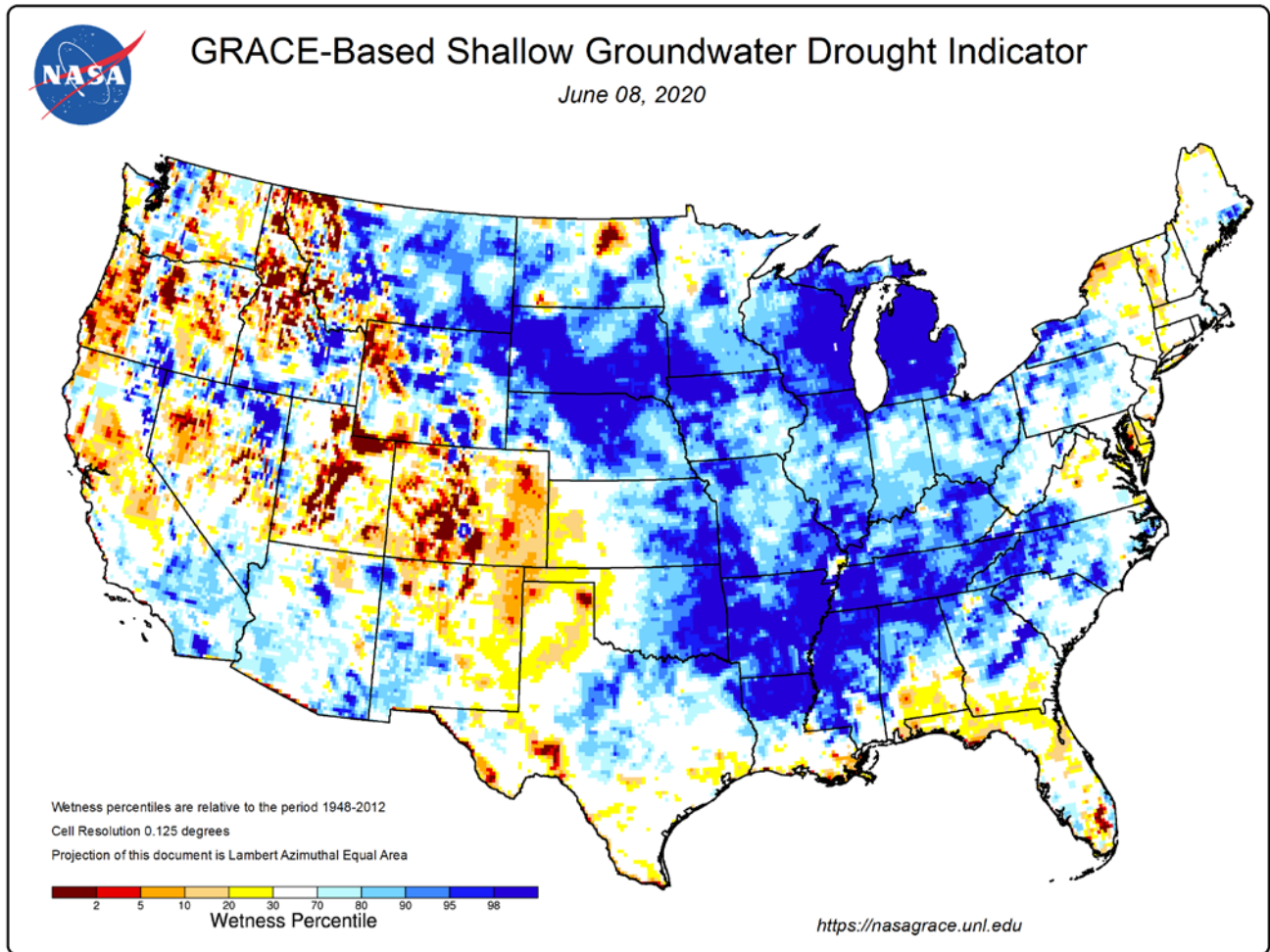
Website: http://www.cpc.ncep.noaa.gov/products/predictions/long_range/seasonal.php?lead=1



Satellite-Based Soil Moisture Percentile

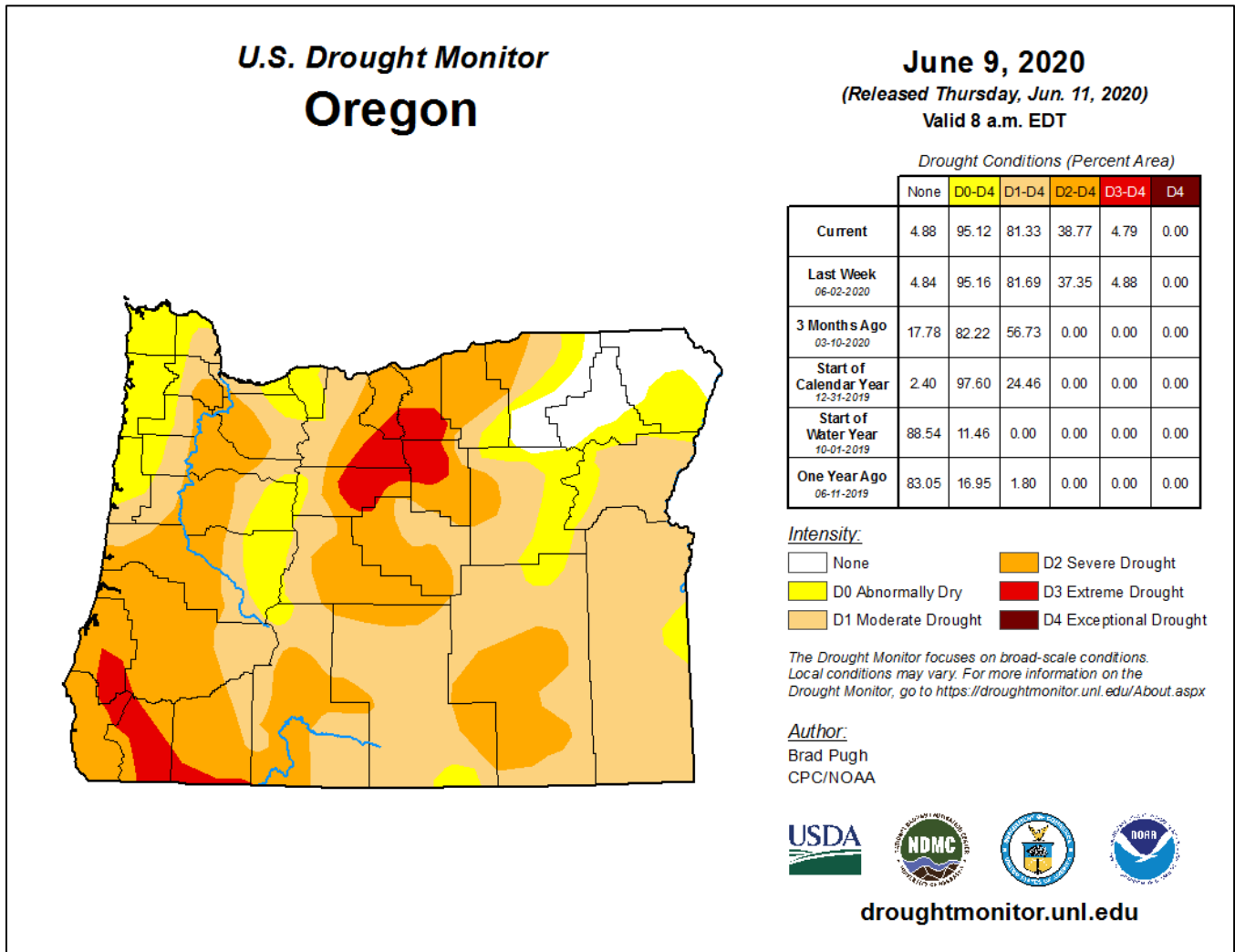
The maps are based on data from NASA's Gravity Recovery and Climate Experiment (GRACE; 2002-2017) and GRACE Follow On (GRACE-FO; 2018-present) satellites, which detect small changes in the Earth's gravity field caused by the redistribution of water on and beneath the land surface.

Website: <https://nasagrace.unl.edu/Default.aspx>

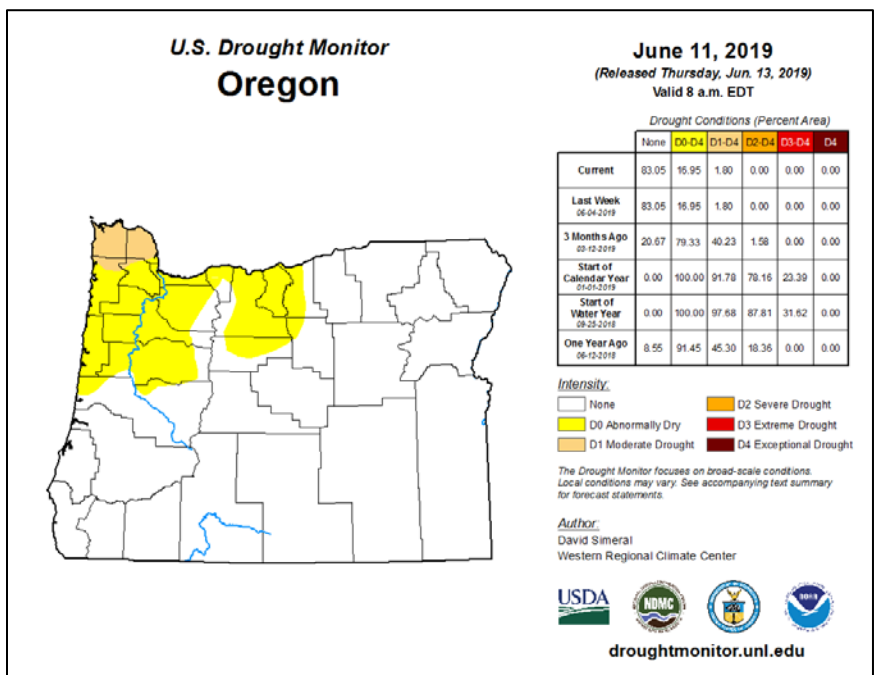


U.S. Drought Monitor for Oregon

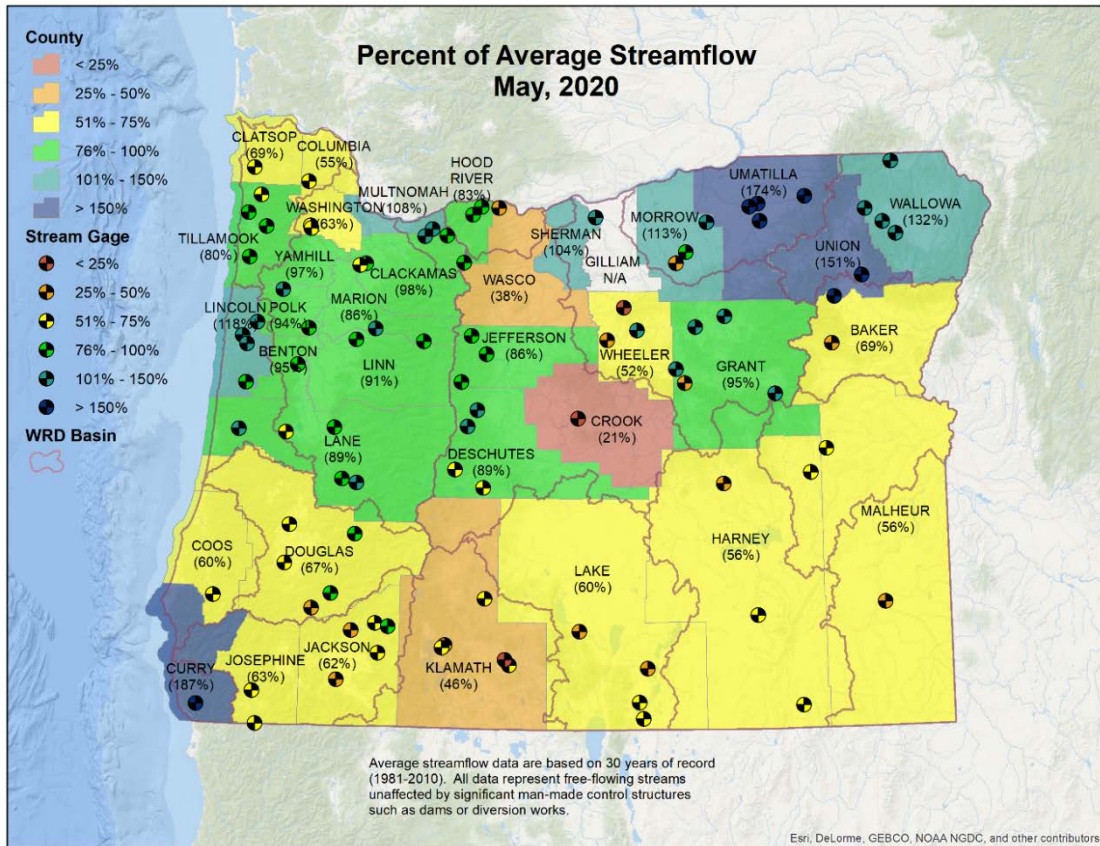
Website: <https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?OR>



Compared to this time last year:



Streamflow Conditions by County – May, 2020



Streamflow Conditions – 7-day average (USGS)

Website: <https://waterwatch.usgs.gov/index.php?m=pa07d&r=or&w=map>

