Oregon Water Conditions Report July 13, 2020



Current Oregon statewide water year precipitation at NRCS SNOTEL sites remains below average at 83 percent. Basin precipitation values range from a low of 69 percent of average in the Klamath and Lake County, Goose Lake basins to 105 percent of average in the Grande Ronde, Powder, Burnt, and Imnaha basins.

Precipitation over the <u>past two weeks</u> has been below average across most of **Oregon.** The most noteworthy exceptions were in the northeast and southeast corners of the state where precipitation was well above normal for this time of year. For the <u>month of June</u>, precipitation was widely varied, from well below normal in southwest and central Oregon to well above normal in southeastern Oregon. Most noteworthy were areas in Malheur County where precipitation was close to 300 percent of normal.

Temperatures over the past two weeks have been cooler than normal across most of the state with the exception of parts of Baker County and areas along the mid coast where temperatures were a few degrees above normal. For the month of June, temperatures were close to normal with the exception of widely scattered areas of above-normal temperatures in northwest, southwest, central, and north central Oregon.

Over the next 8 to 14 days, the NOAA Climate Prediction Center is forecasting above-normal temperatures along with below-normal precipitation across the state. The most recent three-month outlook indicates an increased probability of above-normal temperatures. Below-normal precipitation is forecast for all but the southwest third of the state, where there is equal probability of above or below normal precipitation. The next long-term outlook is scheduled to be issued on July 16, 2020.

ENSO-neutral is favored to continue through the summer, with a 50-55 percent chance of La Niña development during Northern Hemisphere fall 2020 and continuing through winter 2020-21 (~50 percent chance). During June 2020, sea surface temperatures (SST) were near average in the east-central equatorial Pacific and below average in the eastern Pacific. For a more complete update, refer to the July 9, 2020 diagnostic discussion issued by the Climate Prediction Center. The next diagnostic discussion is scheduled for August 9, 2020. Another source of information is the latest ENSO blog on the climate.gov website.

Statewide streamflow conditions for June were lower than normal at 77 percent. Values for June ranged from a high of close to 115 percent of normal in the Sandy and Grande Ronde basins to a low of only 33 and 43 percent in the Goose and Summer Lakes and Klamath basins respectively. Recent data indicates a similar but even lower trend with flows in western Oregon close to average, and lower than normal east of the Cascades with the exception of parts of the Umatilla and Grande Ronde basins where flows remain about normal for this time of year.

USACE Reservoirs:

Rogue: The Rogue system is 69 percent full and 31 percent below rule curve. Lost Creek is 74 percent full, 26 percent below rule curve and releasing close to 1,730 cfs. Applegate is only 48 percent full, 51 percent below rule curve and releasing a minimum flow of 150 cfs. Applegate is unlikely to fill this year, and will probably be on or close to minimum flow for most of the summer.

<u>Willamette</u>: The Willamette system is 89 percent full and 11 percent below rule curve. Recent rains and milder weather have helped to fill several project reservoirs. The projects within 5 percent of full are Detroit, Green Peter, Dorena, Blue River, and Fall Creek. The flow in the Willamette River at Salem is 7,690 cfs and 5,050 cfs at Albany.

<u>Willow Creek</u>: Willow Creek is 90 percent full, 10 percent below rule curve. Inflow is currently 10 cfs with outflow close to 15 cfs.

USBR Reservoirs:

<u>Tualatin River Basin:</u> Scoggins reservoir is at 89 percent of capacity and drafting with inflows around 13 cfs and outflows around 135 cfs.

<u>Umatilla River Basin:</u> McKay reservoir is at 85 percent of capacity and drafting with inflows around 12 cfs and outflows around 150 cfs.

<u>Deschutes River Basin:</u> Prineville reservoir is at 55 percent of capacity and drafting with inflows around 5 cfs and outflows around 235 cfs. Ochoco reservoir is at 37 percent of capacity and drafting with inflows around 2 cfs and outflows around 10 cfs. Crescent Lake is at 53 percent, Wickiup reservoir is at 31 percent and Crane Prairie reservoir is at 82 percent of capacity.

<u>Malheur River Basin:</u> Warm Springs reservoir is at 63 percent of capacity and drafting with inflows around 13 cfs and outflows of around 450 cfs. Beulah reservoir is at 59 percent of capacity and drafting with inflows around 55 cfs and outflows around 247 cfs. Bully Creek reservoir is at 72 percent of capacity and drafting with inflows close to 0 cfs and outflows around 11 cfs.

Owyhee River Basin: Owyhee reservoir is at 70 percent of capacity and drafting on average, with current inflows around 225 cfs and outflows around 190 cfs.

Burnt and Powder River Basins: Unity reservoir is at 80 percent of capacity and drafting with inflows around 10 cfs and outflows around 108 cfs. Phillips reservoir is at 53 percent of capacity and maintaining storage levels with inflows around 30 cfs and outflows around 240 cfs.

The most recent update to the <u>US Drought Monitor</u> has been holding somewhat steady with 91 percent of the state in D0 (abnormally dry) conditions, 74 percent listed as in D1 (moderate drought), 46 percent is listed as in D2 (severe drought) and just over 6 percent in D3 (extreme drought).

Governor Brown declared a <u>drought emergency</u> in Klamath County in early March, followed by Curry County in April, Jackson County in early May and later by Coos County. Most recently, Governor Brown has declared drought emergencies in Crook, Deschutes, Douglas,

Gilliam, Jefferson, Josephine, and Wasco counties. Drought declaration requests have been received from Morrow and Wheeler counties and are currently in process.

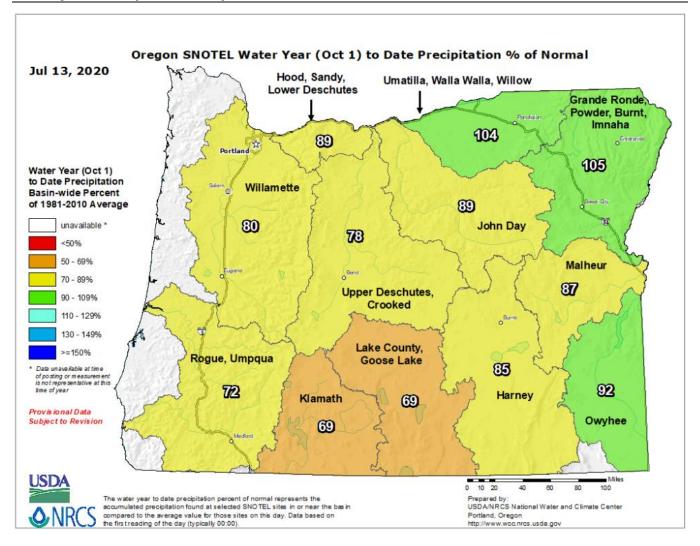
July is the entry point into the core of the Western Fire Season. Above normal significant large fire potential is forecast as dry conditions continue to expand across portions of the Great Basin, Northern California, the Pacific Northwest and Northern Rockies in August and September. See the latest report from the <u>National Interagency Fire Center</u> for the July through September outlooks.

Oregon Department of Forestry (ODF) announced on July 6, 2020, that fire season was officially in effect on all ODF protected lands. The North Cascade and West Oregon protection districts are the last two to declare fire season. ODF's Southwest Oregon District was the first to declare fire season May 1. Refer the Oregon Department of Forestry's Wildfire News page for the latest news and updates.

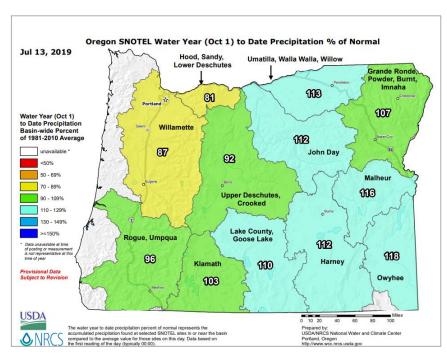
The Oregon Office of Emergency Management has assembled a <u>hydrology/meteorology</u> <u>dashboard</u> featuring many of the data sources used to generate this report. Use the selection arrows at the bottom of your browser to navigate to the various data sources.

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

Precipitation (Mountain) - Percent of Normal

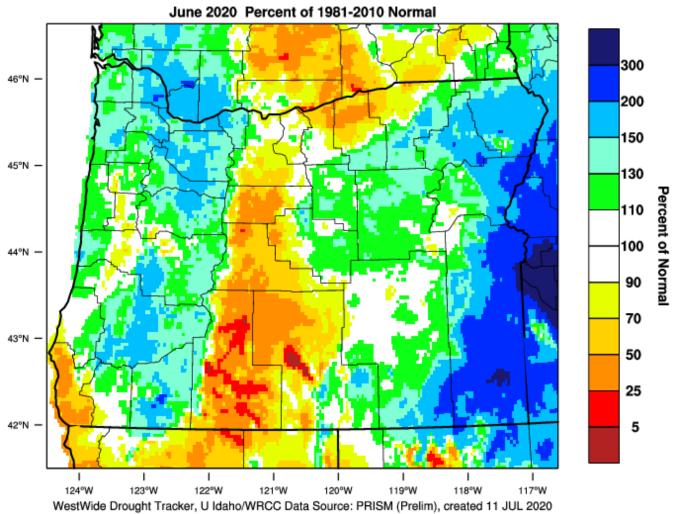


Compared to this time <u>last</u> <u>year</u>:

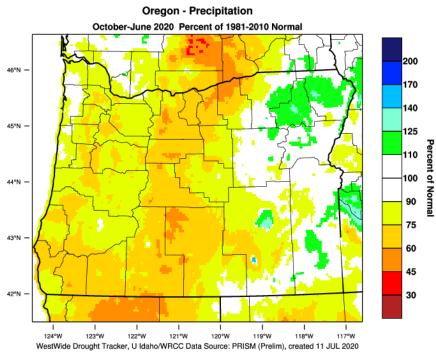


Website: https://wrcc.dri.edu/wwdt/index.php?folder=pon1

Oregon - Precipitation

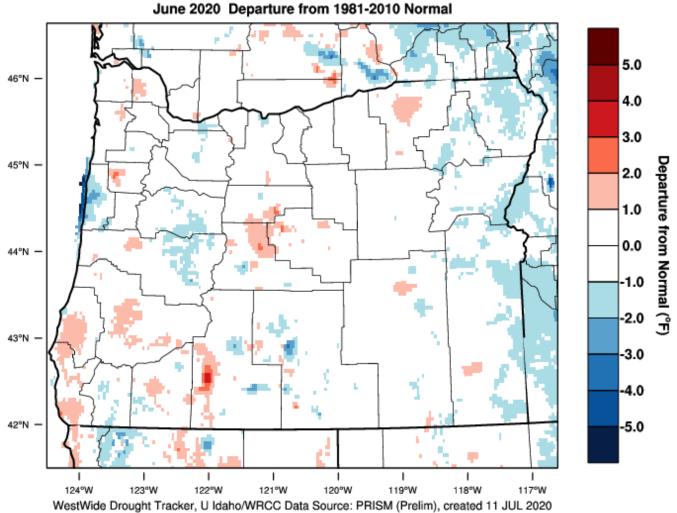


Precipitation since the beginning of the water year:

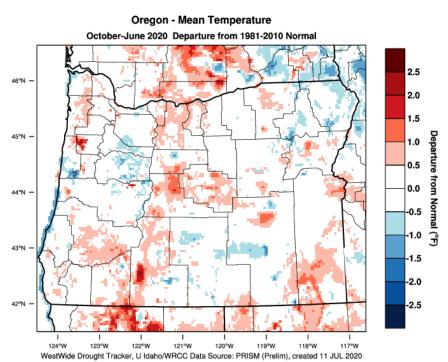


Website: https://wrcc.dri.edu/cgi-bin/anomimage.pl?ore30dTvdep.png

Oregon - Mean Temperature

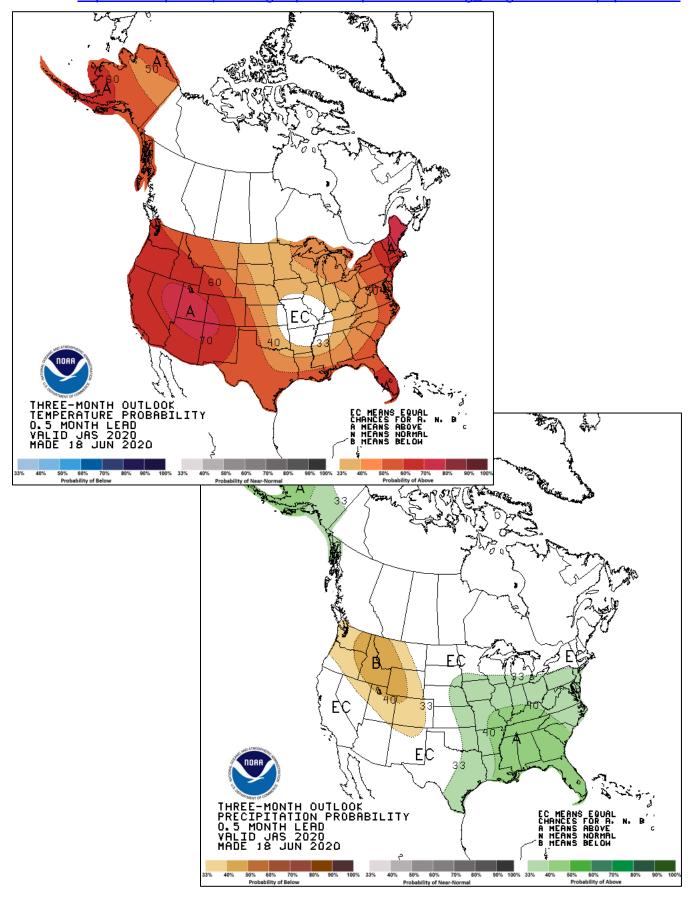


Temperature since the beginning of the water year:



July through September

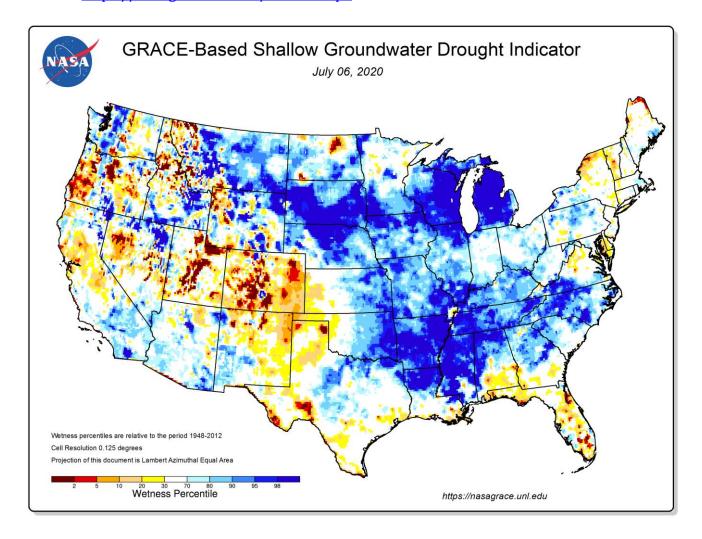
Website: http://www.cpc.ncep.noaa.gov/products/predictions/long_range/seasonal.php?lead=1



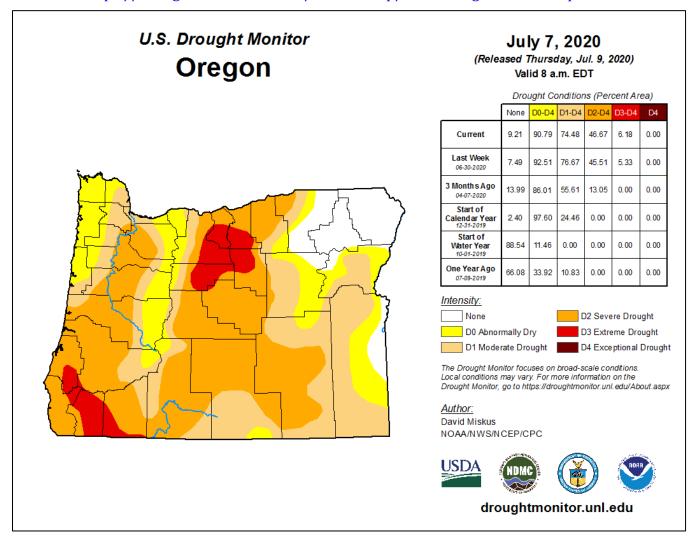
Satellite-Based Soil Moisture Percentile

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.

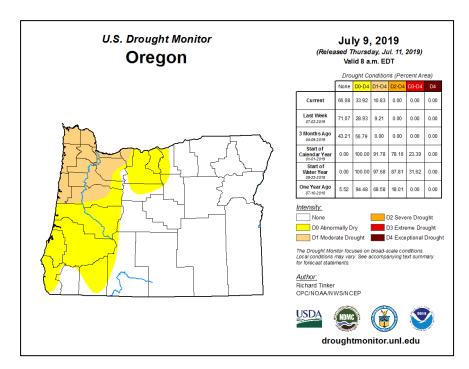
Website: https://nasagrace.unl.edu/Default.aspx



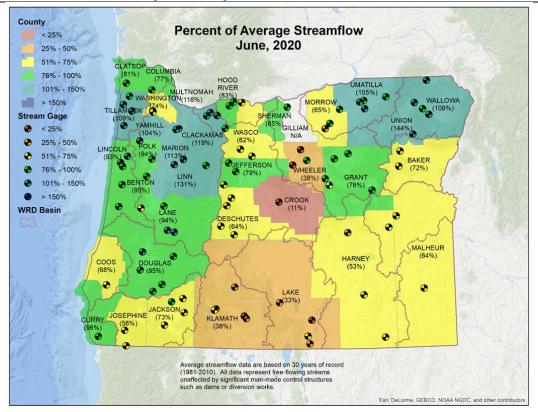
Website: https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?OR



Compared to this time last year:



Streamflow Conditions by County - June, 2020



Streamflow Conditions - 7-day average (USGS)

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

Sunday, July 12, 2020

