Drought Information Statement
National Weather Service Portland OR
400 pm PST Thursday August 13 2020

UPDATE ON DROUGHT CONDITIONS AND IMPACTS FOR OREGON AS OF AUGUST 13TH, 2020

Drought conditions persist across most of Oregon, as depicted by the U.S. Drought Monitor. The only changes in drought conditions since the last update in mid-July are some expansion of D2 and D3 conditions in southwest and central Oregon. Over half of the state is in severe or extreme drought, primarily affecting north-central, south-central, and southwest Oregon. Another quarter of the state is in moderate drought. The only part of Oregon not currently affected by drought or abnormally-dry conditions is northeast Oregon. For the latest drought monitor depiction, visit droughtmonitor.unl.edu.

What caused the drought? Above-average temperatures and below-average precipitation for most of the past ten months resulted in below-average mountain snowpack, low soil-moisture, and low streamflow, especially for central and southwest Oregon. Wet conditions in June notwithstanding, above-normal temperatures and below-average precipitation in spring and summer have exacerbated drought stress for central and southwest Oregon.
What are the impacts of drought and abnormally-dry conditions around the state as of early July? Impacts include 1) below-average streamflow, with which leads to supply shortages, increases in water temperature, and declines in water quality and in-stream habitat conditions, 2) low reservoir storage, especially in central and southwest Oregon, which will likely affect irrigation allotments and reduces recreational opportunities, 3) depleted or stressed groundwater aquifers due to more reliance on well water in areas with surface water deficits, and 4) stressed vegetation, both for rangeland and forest conditions, which reduces grazing availability and increases fire and insect-damage susceptibility. These impacts are most severe in the Klamath, Deschutes, Rogue, Coquille, and Umpqua watersheds.

What is the outlook for the remainder of summer? Temperatures are likely to be above-average for the second half of August, with little or no precipitation expected. Above-average temperatures are likely through early autumn. The precipitation outlook for the same period calls for equal chances of normal, above-normal, or below-normal. For more details on monthly and seasonal outlooks, visit www.cpc.ncep.noaa.gov.

Visit drought.gov for more details on drought conditions and categories in Oregon and the Pacific Northwest.

As of mid August, the following counties have drought emergency declarations in effect from Oregon Governor Brown: Coos, Crook, Curry, Deschutes, Douglas, Gilliam, Jackson, Jefferson, Josephine, Klamath, Lake, Morrow, Wasco and Wheeler. Visit www.oregon.gov/owrd/pages/wr.drought.gov for details on county declarations.

The next update of this Drought Information Statement will be issued by September 10, 2020.

**Observed Precipitation and Temperatures**

Water-year precipitation thus far (October 2019 - June 2020) is lowest in southwest and central Oregon and highest in northeast Oregon. Values are 40 to 65 percent of normal for southwest Oregon, 50 to 75 percent of normal for north-central and south-central Oregon, 60 to 100 percent of normal for southeast Oregon, 70 to 100 percent of normal for northwest Oregon, and 90 to 120 percent of normal for northeast Oregon.

Temperatures December 2019 through May 2020 were above-average. Temperatures in June 2020 were near average. Temperatures in July 2020 were near average, expect above-average in southwest Oregon.

*Water year precipitation through August 12, 2020 - Percent of Normal*
Precipitation and Temperature Outlook

The Climate Prediction Center produces monthly and seasonal outlooks, in which there is a weighing of the odds of near-normal, above-normal, or below-normal temperatures and precipitation.

For August and September, precipitation is typically negligible in terms of water supply. Summer thunderstorms can provide isolated short-term drought relief, but in general, widespread precipitation is unlikely until late September.

Temperatures for the mid and late August are expected to be above-average, with strong high pressure over much of the western U.S. Looking into the late summer and early fall, the three-month temperature outlook for July through September calls for an enhanced likelihood of above-average temperatures across Oregon. For precipitation, there are equal chances of above, below, or near average conditions.

Visit [www.cpc.ncep.noaa.gov](http://www.cpc.ncep.noaa.gov) for details about monthly and seasonal outlooks.
Reservoir Conditions

Reservoir conditions are highly variable around the state, but the big message is that dry and warm conditions this winter and spring resulted in low storage for reservoirs in central and southwest Oregon. Reservoirs that are notably low include Applegate, Howard Prairie, and Emigrant in southwest Oregon at 39, 13, and 27 percent of capacity, respectively; Prineville, Ochoco, and Wickiup Reservoirs in central Oregon, at 45, 26, and 14 percent of capacity, respectively; and Warm Springs and Beulah Reservoirs in eastern Oregon, at 43 and 36 percent of capacity, respectively.

All irrigation reservoirs are releasing more than inflow, and reservoir storage levels will continue to drop through the summer. Some reservoirs may go to minimum pool and restrict releases later this summer. Many reservoirs will have little or no carry-over storage leading into the fall.


Streamflow Conditions

Streamflow in July was near-average for northwestern and eastern Oregon but below-average for central and southwest Oregon. Looking at the water year, streamflow has been well below-average. Water-year runoff ranges from 35 to 60 percent of average in southwest Oregon and 30 to 50 percent of average in central Oregon, the areas most affected by drought. Visit waterwatch.usgs.gov, www.nwrfc.noaa.gov/ws/index.html and www.cnrfc.noaa.gov/water_resources_update.php for recent streamflow and water year runoff data.