

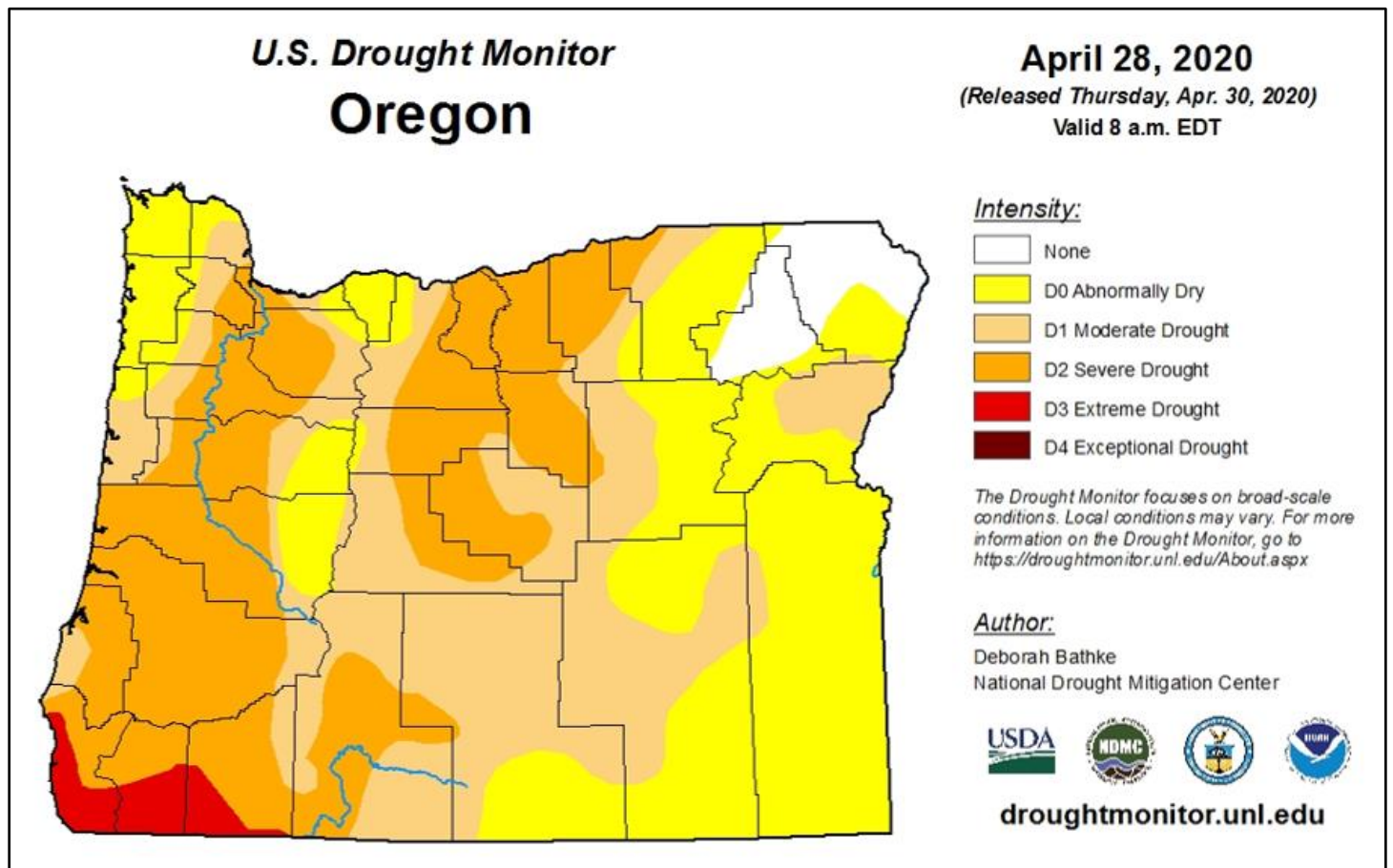
OREGON WATER SUPPLY AND SPRING FLOOD OUTLOOK AS OF MAY 1ST, 2020

The water supply forecast for the spring and summer of 2020 is below-average for most of Oregon, except for near- or above-average for northeast Oregon basins. Water supply forecasts are particularly low for basins in central, south-central, and southwest Oregon. Water supply forecasts decreased by 5 to 20 percent, relative to normal, for most locations due to dry conditions in April. Note that there remains some potential for spring flooding in northeast Oregon, particularly the Grande Ronde basin. Any flooding would likely be caused by a combination of snowmelt and rainfall. Spring flooding is very unlikely for all other areas east of the Cascades, and spring snowmelt flooding has historically not occurred west of the Cascades.

The May outlook from the Climate Prediction Center highlights the enhanced likelihood of above-average temperatures, with equal chances of near, above, or below average precipitation for most of the state. However, the first half of the month looks generally warm and dry for the state. For more information on monthly and seasonal outlooks, visit cpc.ncep.noaa.gov.

Refer to the sections below and links provided for details regarding snowpack, precipitation, seasonal climate outlooks, reservoirs, streamflow, and water supply forecasts.

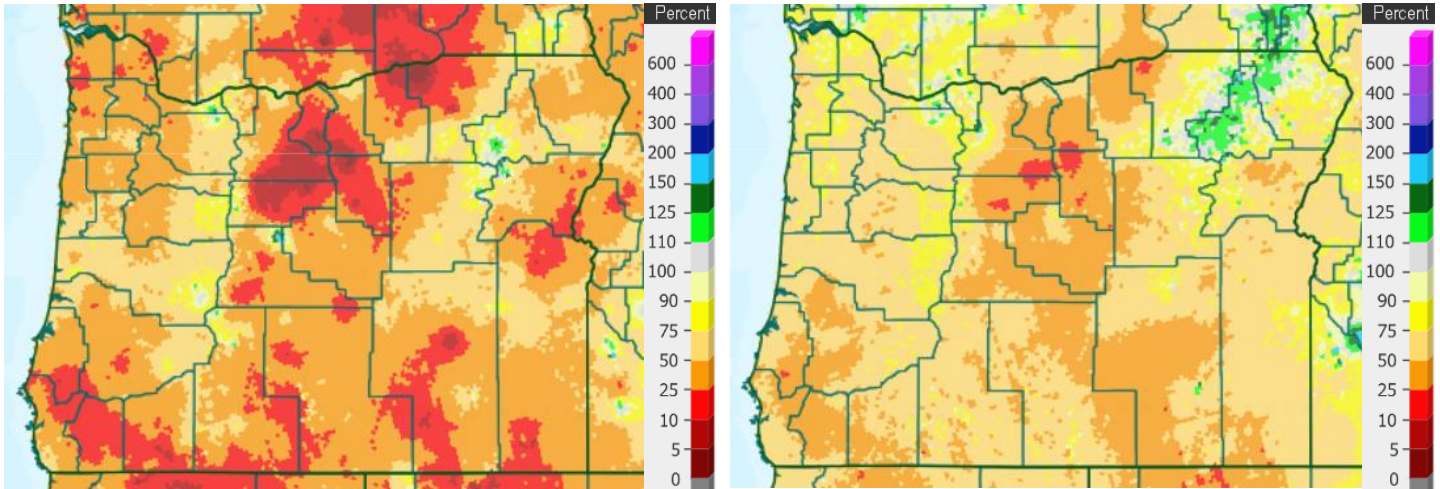
The next update to this outlook will be issued by June 4, 2020.



Precipitation and Temperatures across Oregon

Precipitation for the 2020 water year thus far (Oct 1, 2019 through Apr 30, 2020) ranges from 40 to 80 percent of average for all of Oregon, except for 98 percent for the Grande Ronde basin. April precipitation was very low statewide, with many observing stations reporting the month as one of the driest Aprils on record.

April temperatures were slightly above average, ranging from normal to +2.0 degrees relative to average.



AHPS Precipitation % of Normal for April 2020

AHPS Precipitation % of Normal for Water Year 2020 thus far (October 1, 2019 – April 30, 2020)

Additional Information:

NOAA National Weather Service - Northwest River Forecast Center
www.nwrfc.noaa.gov/water_supply/wy_summary/wy_summary.php

NOAA NWS - California-Nevada River Forecast Center (Klamath basin)
www.cnrfc.noaa.gov/water_resources_update.php

AHPS Precipitation: https://water.weather.gov/precip/index.php?location_type=state&location_name=OR

Western Regional Climate Center West-Wide Drought Tracker: <https://wrcc.dri.edu/wwdt/index.php?region=or>

Snowpack across Oregon

As of May 1, mountain snowpack is melting rapidly across the state, with many SNOTEL monitoring stations reporting no snow. Peak snowpack this year occurred the first week of April for most snow monitoring stations. The highest snowpack, in terms of percent of average, was in northeast Oregon, where it was 100 to 120 percent of average. For the north and central Cascades and mountains in east-central and southeast Oregon, snowpack was 90 to 100 percent of average. For the south Cascades and Siskiyou, snowpack was about 80 percent of average. With dry and sunny conditions for most of April, the snowpack has melted quickly, which could mean more rapid declines to summer baseflow for many streams that are typically fed by late spring snowmelt.

Additional snowpack information:

NOAA National Weather Service - Northwest River Forecast Center
www.nwrfc.noaa.gov/snow/

USDA Natural Resources Conservation Service
www.nrcs.usda.gov/wps/portal/nrcs/main/or/snow/

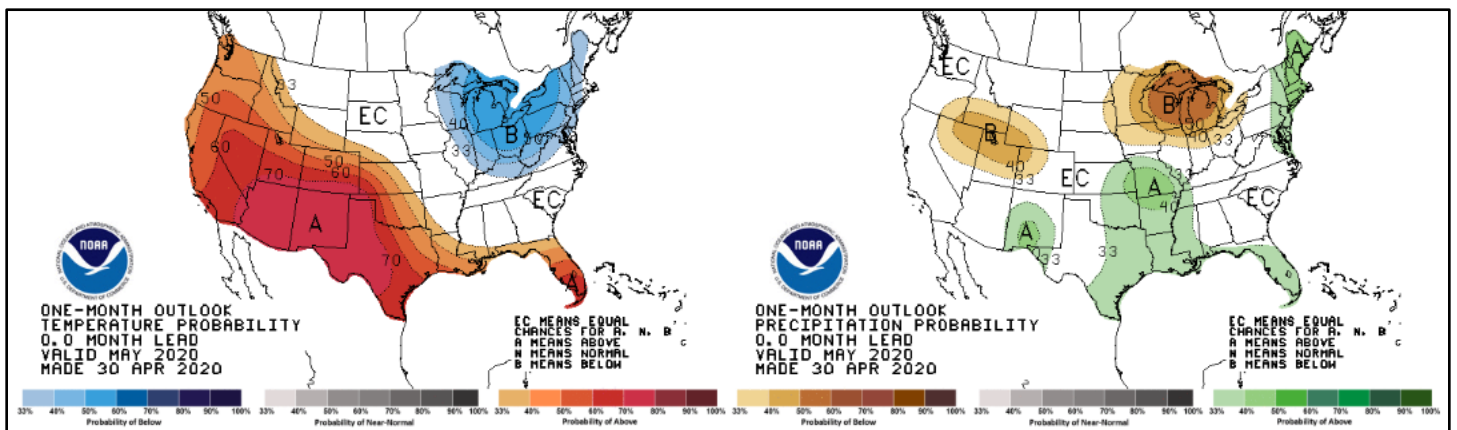
Precipitation and Temperature Outlook

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 for temperatures and precipitation.

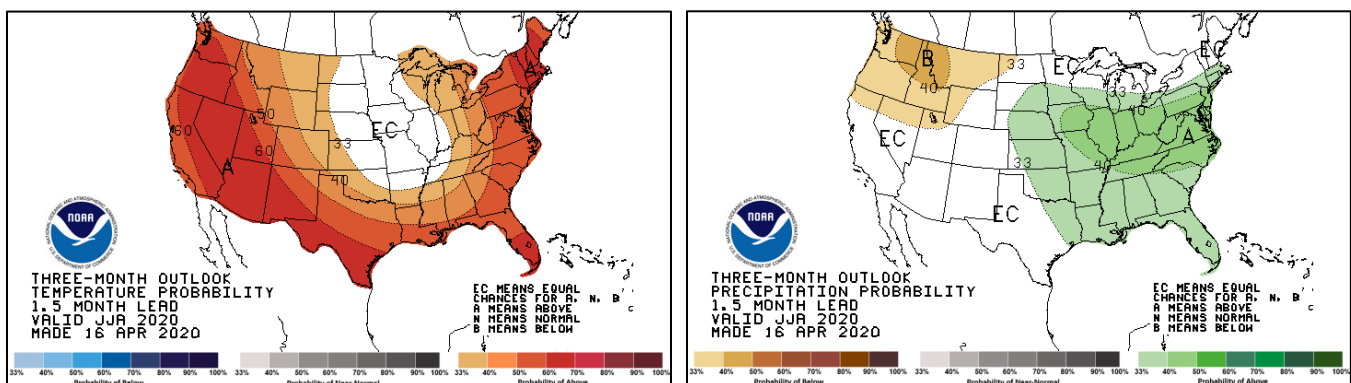
The May outlook from the Climate Prediction Center highlights the likelihood of above-average temperatures across the state. The April precipitation outlook also shows near, above, or below-average conditions for most of the state, except for enhanced below-average chances for southeast Oregon. That said, the first half of May is likely to be mostly dry across Oregon.

The June through August outlook indicates an enhanced likelihood of above-average temperatures and below-average precipitation statewide, which would only increase drought concerns for much of Oregon.

Visit www.cpc.ncep.noaa.gov for more about seasonal outlooks.



May temperature and precipitation outlooks from the Climate Prediction Center



June through August temperature outlook

June through August precipitation outlook

Reservoirs

Storage for most irrigation reservoirs in central and eastern Oregon as of May 1 ranges from 80 to 100 percent of capacity, with the exceptions of Ochoco at 50 percent, Philips at 42 percent, Wickiup at 63 percent, and Cold Springs at 49 percent of capacity. Storage for southwest Oregon reservoirs, where reservoir inflow has been well below average, ranges from 30 to 70 percent of capacity.

Corps of Engineers flood control reservoirs in western Oregon are refilling slower than the spring refill plan due to dry spring conditions and are at 74 percent of capacity as of May 1. It appears likely that most Corps reservoirs in the Willamette basin will not fill to summer full pool levels.

Owyhee Reservoir, the largest irrigation project in the state, has storage of 597,000 acre-feet, 83 percent of capacity, as of early May. This is a 1 percent decrease from a month ago.

Reservoir data is provided by the Natural Resources Conservation Service, the Bureau of Reclamation, and the US Army Corps of Engineers.

Additional reservoir information:

www.wcc.nrcs.usda.gov/basin.html

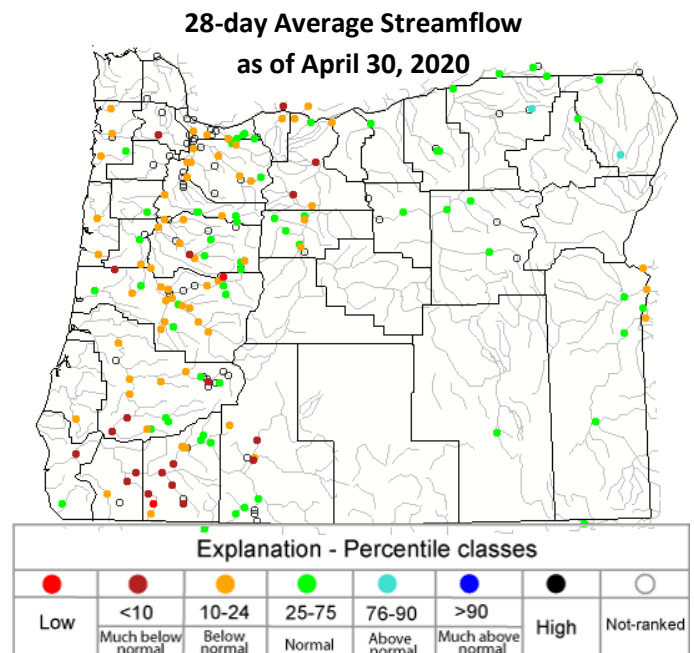
www.usbr.gov/pn/hydromet/select.html

www.nwd-wc.usace.army.mil/nwp/teacup/willamette/

Observed Streamflow

Observed runoff so far this water year is much below-average for most of the state and particularly low for central and southwest Oregon rivers, where water-year runoff ranges from 30 to 60 percent of average. At the other extreme, water year runoff is above average for far-northeast Oregon rivers, ranging from 100 to 130 percent of average, with much of that runoff occurring during February flooding. For the rest of the state, runoff ranges from 50 to 90 percent for the water year.

April streamflow was near-average for rivers fed by snowmelt across the state. However, for much of western Oregon, and particularly southwest Oregon, April streamflow was low, with some streams in the driest areas near record-lows for this time of year.



Visit waterwatch.usgs.gov for details on observed streamflow. Water year and monthly runoff data is available at www.nwrfc.noaa.gov for several locations in Oregon.

Water Supply Seasonal Forecasts

Water supply forecasts for April-September runoff volume vary widely across the state but are mostly below-average. The main exceptions are northeast Oregon basins, ranging from 90 to 120 percent of average. Northwest Oregon basins are a little below-average, ranging from 60 to 90 percent. Basins in southern and central Oregon are well below-average, ranging from 30 to 70 percent. The dry conditions in April resulted in significant declines and increased certainty of below-average forecast volumes for many watersheds.

The forecast for the Columbia River at The Dalles, which is a good index of conditions across the Columbia Basin, is 96 percent of average for April-September, no change from a month ago.

Details on basin-scale water supply forecasts:

NOAA/NWS Northwest River Forecast Center: www.nwrfc.noaa.gov/ws/

NOAA/NWS California-Nevada River Forecast Center:

USDA Natural Resources Conservation Service

www.wcc.nrcs.usda.gov/wsf/

