

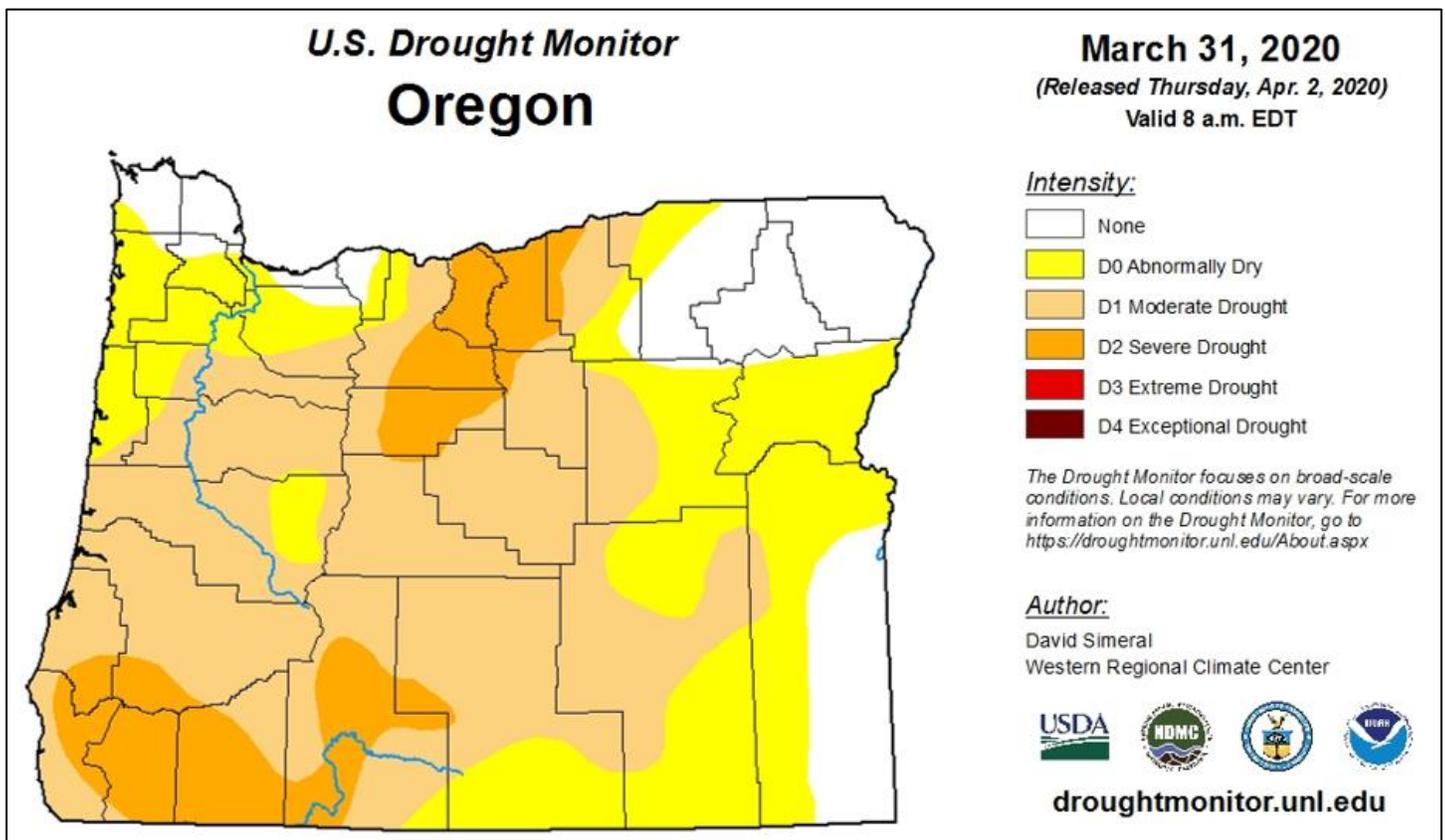
OREGON WATER SUPPLY AND SPRING FLOOD OUTLOOK AS OF APRIL 3RD, 2020

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 and south-central Oregon. Water supply forecasts overall didn't change much from a month ago, which may seem surprising given the below-average precipitation in March. However, March temperatures were also below-average, which meant that the mountain snowpack persisted through the month and was boosted somewhat by late-March storms. Note that there remains some potential for spring flooding in northeast Oregon, particularly the Grande Ronde basin. However, any flooding would likely be caused by a combination of snowmelt and rainfall. The potential for spring flooding is lower than usual for all other areas east of the Cascades, and spring snowmelt flooding has historically not occurred west of the Cascades.

The April outlook from the Climate Prediction Center highlights the enhanced likelihood of below-average temperatures and above-average precipitation for most of Oregon. 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.

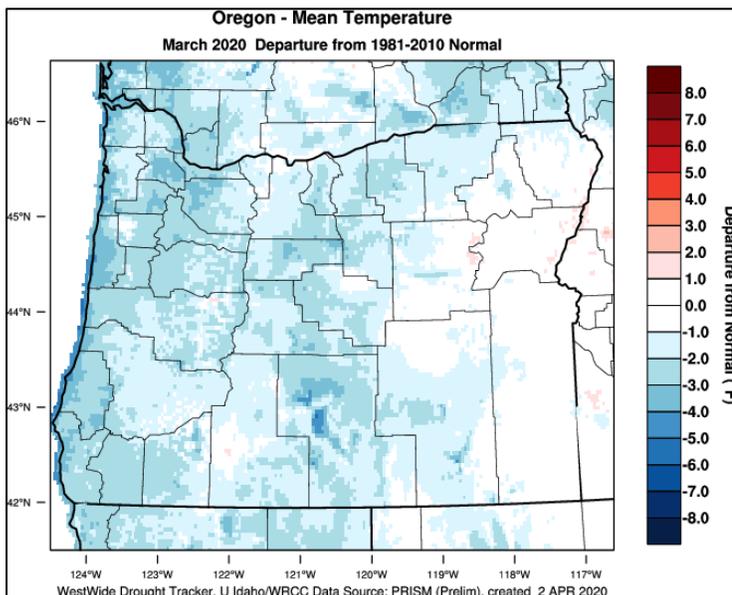
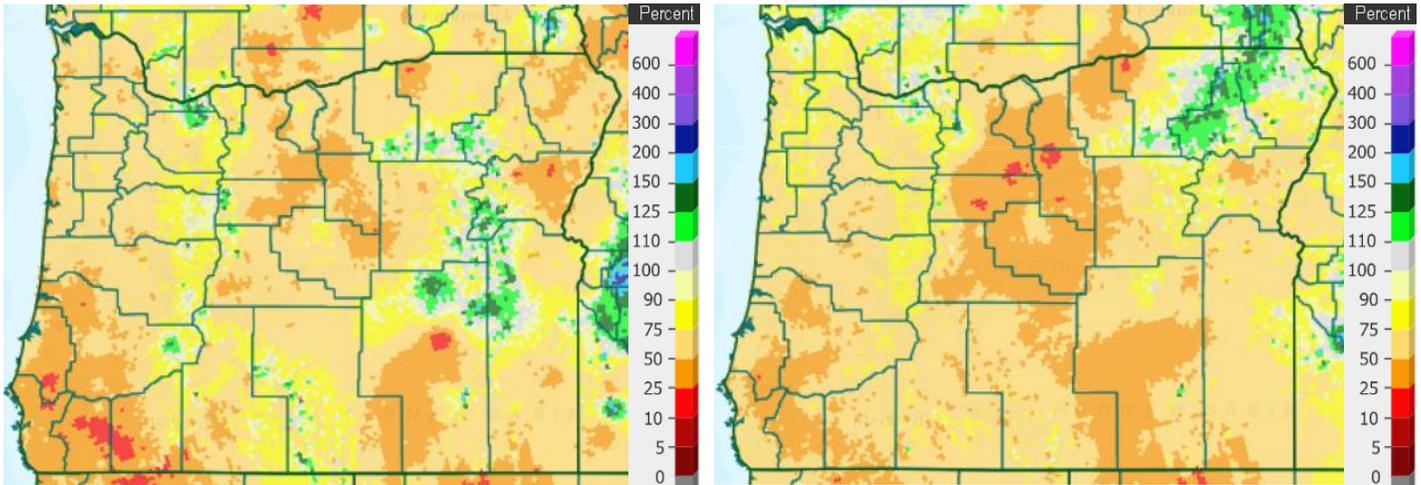
The next update to this outlook will be issued by May 4, 2020.



Precipitation and Temperatures across Oregon

Precipitation for the 2020 water year thus far (Oct 1, 2019 through April 2, 2020) ranges from 40 to 75 percent of average for all of Oregon, except for 100 percent for the Grande Ronde basin. March precipitation was below-average statewide, although some late March storms provided a minor boost to mountain snowpack.

Temperatures so far this winter through January were above-average, generally 1 to 3 degrees. However, February and March temperatures were 1 to 3 degrees below average.



Graphics:

(Upper Left) AHPs Precipitation % of Normal for March 2020

(Upper Right) AHPs Precipitation % of Normal for Water Year 2020 thus far (October 1, 2019 – April 2, 2020)

(Lower Left) Mean Temperature departure from normal, Western Regional Climate Center

Additional Information:

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

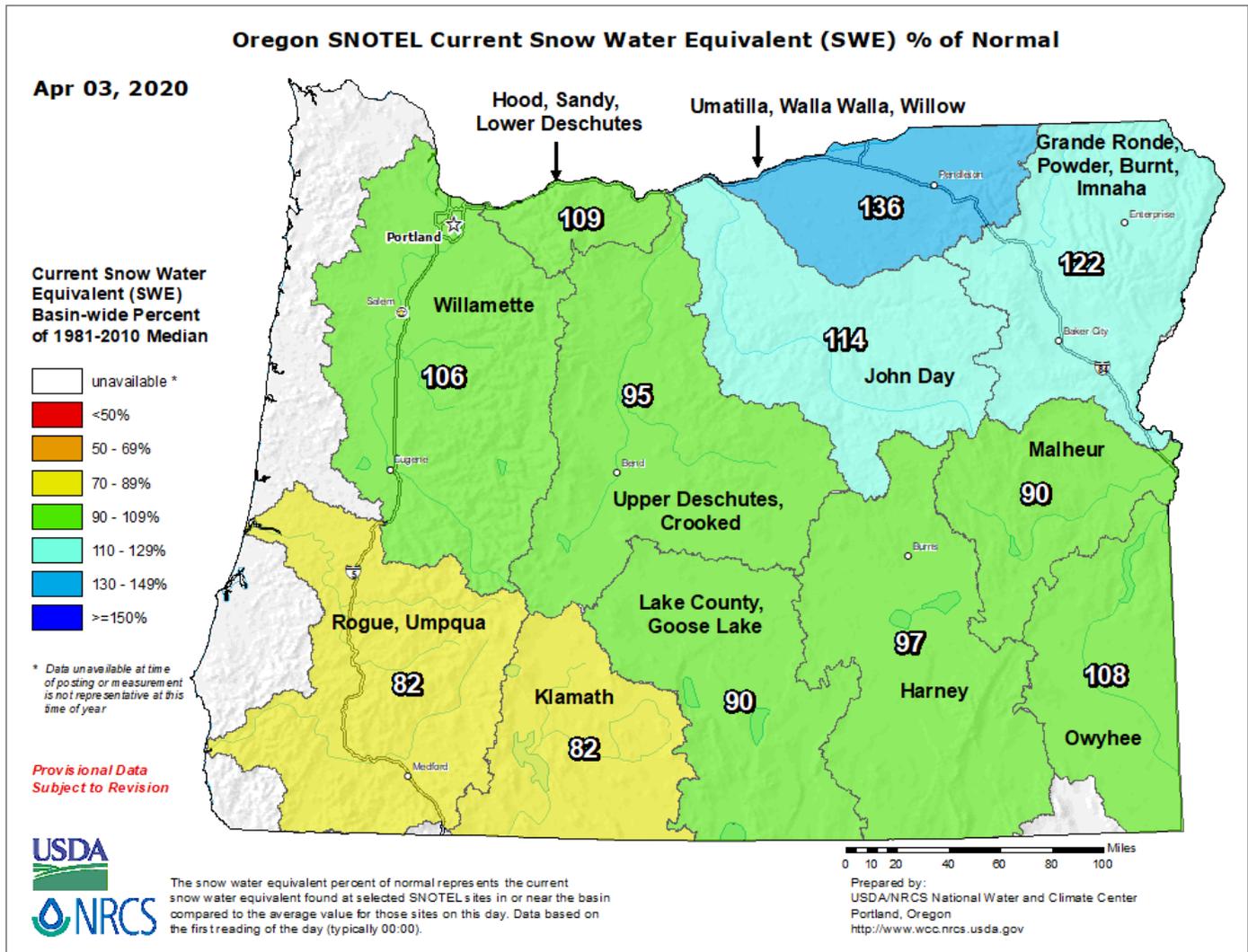
NOAA NWS - California-Nevada River Forecast Center (Klamath basin)
www.cnrhc.noaa.gov/water_resources_update.php

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 early April, mountain snowpack is above-average for northeast Oregon, near-average for northwest, central, and southeast Oregon, and below-average for southwest and south-central Oregon. Snowpack has increased 10 to 15 percent statewide from a month ago, in terms of percent of average, due to storms in late March and early April. The highest basin value is 136 percent in the Umatilla – Walla Walla – Willow basin, and the lowest is 82 percent in the Rogue – Umpqua and Klamath basins.



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/

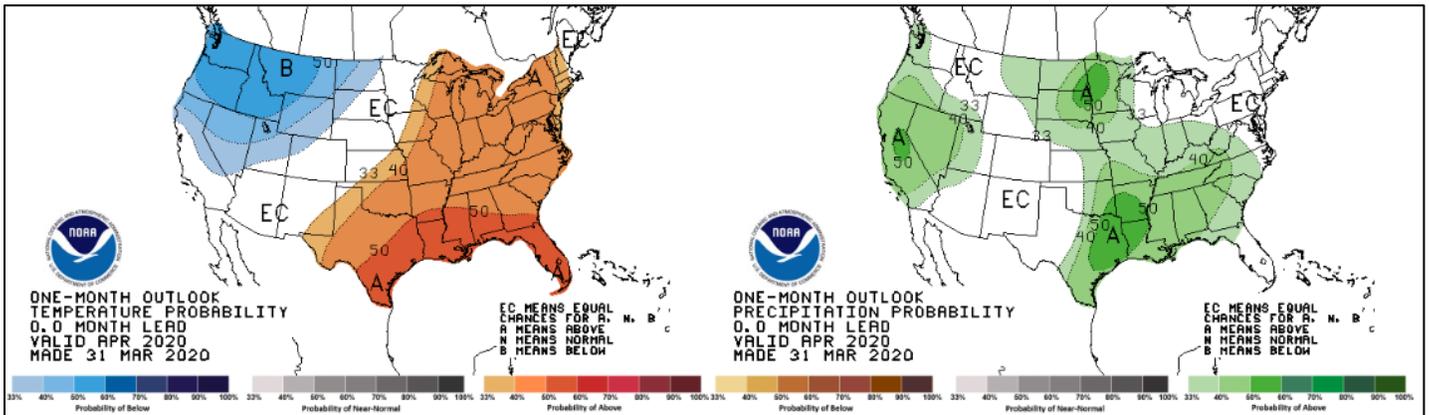
Precipitation and Temperature Outlook

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.

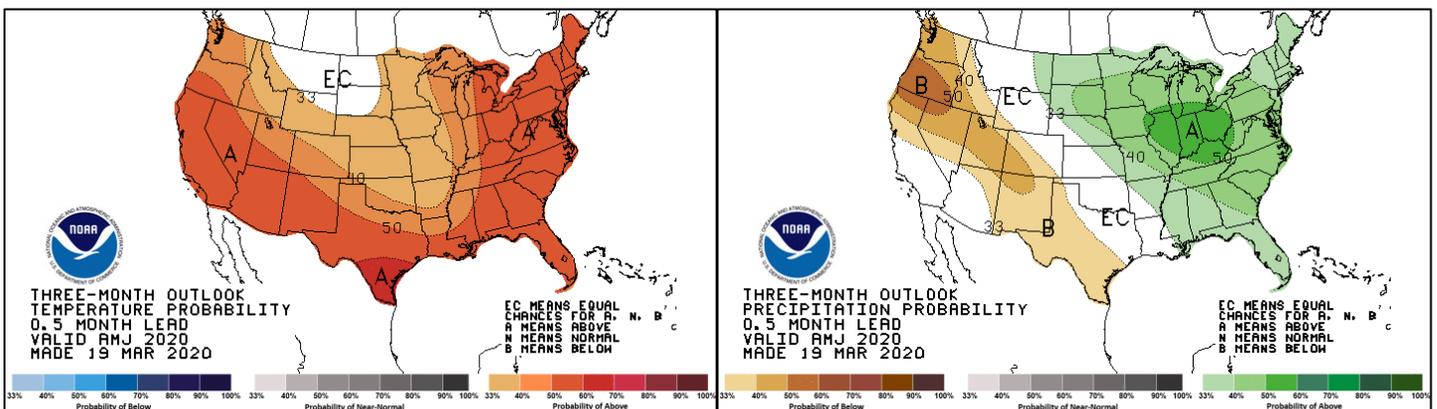
The April outlook from the Climate Prediction Center highlights the likelihood of below-average temperatures across the state. The April precipitation outlook also shows enhanced likelihood for above-average conditions for most of the state, with the exception of equal chances for northeast Oregon.

The May through July outlook is a different story, with enhanced likelihood of above-average temperatures and below-average precipitation statewide.

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



April temperature and precipitation outlooks from the Climate Prediction Center



May through July temperature outlook

May through July precipitation outlook

Reservoirs

Storage for most irrigation reservoirs in central and eastern Oregon as of early April ranges from 70 to 100 percent of capacity, with the exceptions of Ochoco at 50 percent and Philips at 35 percent. Storage for southwest Oregon reservoirs ranges from 25 to 65 percent.

Corps of Engineers flood control reservoirs in western Oregon are refilling slower than the spring refill plan due to relatively dry conditions in February and March and are at 46 percent of capacity as of early April.

Owyhee Reservoir, the largest irrigation project in the state, has storage of 601,000 acre-feet, 84 percent of capacity, as of early April. This is an 8 percent increase 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

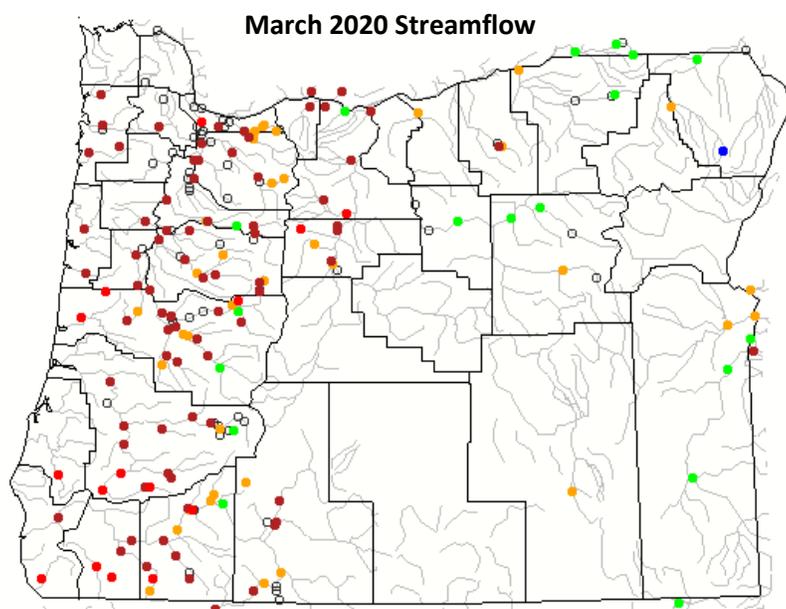
www.nwd-wc.usace.army.mil/nwp/teacup/willamette/

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. Water year runoff is near average for some rivers along the far-north coast and above average for far-northeast Oregon rivers, ranging from 110 to 140 percent of average, with much of that runoff occurring during February flooding.

March streamflow was notably below-average for western and central Oregon rivers and generally near-average for eastern Oregon rivers.

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.



Explanation - Percentile classes							
●	●	●	●	●	●	●	○
Low	<10	10-24	25-75	76-90	>90	High	Not-ranked
	Much below normal	Below normal	Normal	Above normal	Much above normal		

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 130 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.

Precipitation and temperatures in April could have a significant impact on these forecasts, so keep an eye on forecast trends through the spring.

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, a decrease of 3 percent 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/

