## OREGON WATER SUPPLY SUMMARY AS OF JUNE 21<sup>ST</sup>, 2022

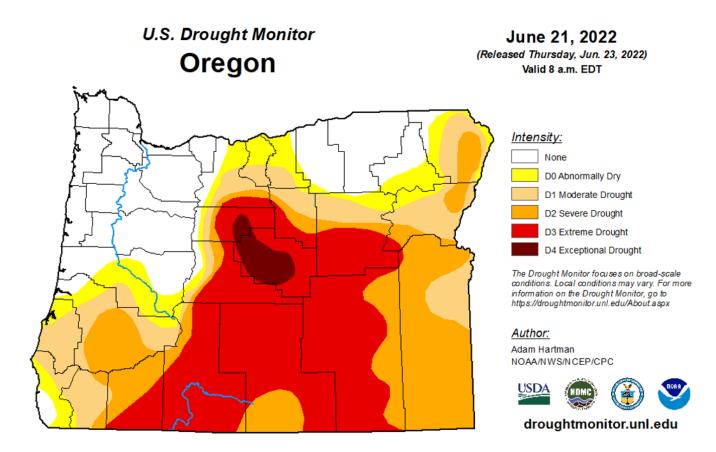
The water supply forecast for SUMMER 2022 is below average for southwest, central, and southeast Oregon. Forecasts for northwest, west-central, and northeast Oregon are near or above average. Most of the areas projected to be below average are already stressed due to drought conditions for much of the past 2 years.

Precipitation so far this water year (October 1, 2021 to present) is below average for most of Oregon, except near to above average for northwest Oregon and the mountains of northeast Oregon. Seasonal precipitation is particularly low relative to average for central and southeast Oregon. Spring precipitation has reduced drought severity across much of Oregon, with much above average precipitation in western and northeast Oregon for April through mid June. However, for areas of central and southeast Oregon already dealing with persistent multi-year drought, precipitation for that same spring period was below average.

Seasonal deficits remain for long-term precipitation, snowpack, soil moisture, and reservoir storage, especially for the southern half of Oregon. The following counties already have received drought declarations from the Governor's office: Baker, Crook, Deschutes, Gilliam, Grant, Harney, Jackson, Jefferson, Klamath, Lake, Malheur, Morrow, Union, Wallowa, and Wasco.

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

This is the last water supply summary of the season.



## PRECIPITATION AND TEMPERATURES ACROSS OREGON

Precipitation for the 2022 water year thus far (Oct 1, 2021 through June 20, 2022) ranges from 70 to 115 percent of average in Oregon. Spring precipitation boosted water year totals by 10 to 20 percent of average for much of the state. The lowest totals relative to average have been in central and southeast Oregon, areas that have also been below average for much of the past two years. The highest spring totals, 150 to 250 percent of average, have been in the far-northern Cascades, the northern Blue Mountains, and the Wallowa Mountains in far-northeast Oregon.

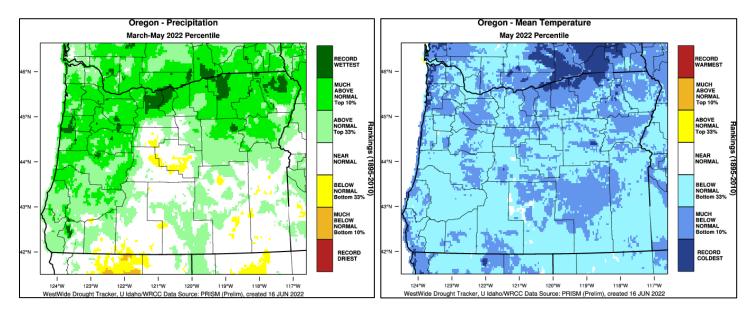
April temperatures were 3 to 6 degrees below average statewide, and May temperatures were 2 to 5 degrees below average. The cool spring temperatures helped to delay mountain snowmelt and reduce evapotranspiration and irrigation demand.

Details on precipitation and temperatures:

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

WestWide Drought Tracker wrcc.dri.edu/wwdt/index.php



## SNOWPACK ACROSS OREGON

As of mid June, mountain snowpack is almost completely melted except for sheltered areas above 5000 feet. The overall seasonal snowpack was below average for all but the far-northern Cascades, the Wallowas, and northern portions of the Blues, due to a lack of snow accumulation from mid January through March.

Additional snowpack information:

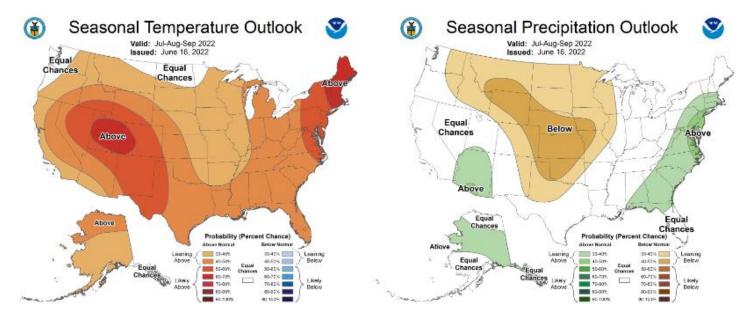
NOAA National Weather Service - Northwest River Forecast Center www.nwrfc.noaa.gov/snow/

# 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 temperatures and precipitation.

After a wet first half of June, the latter half of June is likely to be on the dry and warm side, relative to average. For the heart of summer, July through September, the CPC outlook indicates the likelihood of above average temperatures for all but western Oregon, with equal chances of near, below, and above average precipitation.

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



## RESERVOIRS

Storage for most irrigation reservoirs across the state is much below average, with multiple reservoirs in central and southwest Oregon at record low levels coming into this water year. The combination of low carry-over storage from last water year and below-average precipitation and snowpack this winter means that reservoir storage is unlikely to be sufficient to meet all demands this summer, especially for the southern half of the state. Some reservoirs have partially refilled with recent precipitation and snowmelt, and recent cool temperatures and near or above average precipitation have reduced irrigation demand in May and early June. However, reservoir levels remain low, especially in central, southwest, and southeast Oregon. Corps of Engineers reservoirs in the Willamette basin have filled due to ample precipitation and snowmelt in March, April, and May in northwest Oregon.

Owyhee Reservoir, the largest irrigation project in the state, has storage of about 299,000 acre-feet, 42 percent of capacity, as of mid June. This is 59 percent of average for this time of year.

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.nwd-wc.usace.army.mil/nwp/teacup/willamette/ www.usbr.gov/pn/hydromet/select.html www.wcc.nrcs.usda.gov/basin.html

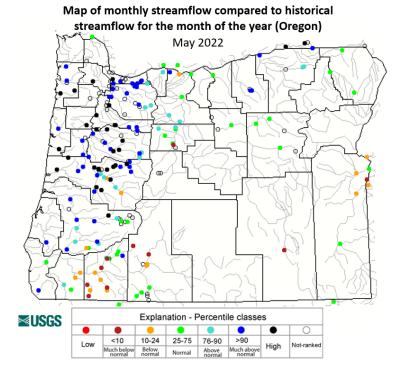
#### **OBSERVED STREAMFLOW**

Observed runoff so far this water year has been near average in northwest Oregon and below average for basins elsewhere in Oregon, notably much-below-average in southwest, central, and eastern Oregon.

Runoff in May and early June was above average in most of western Oregon, and near to above average in north-central and northeast Oregon. Runoff was below average for far-southwest, central and southeast Oregon.

Visit waterwatch.usgs.gov for details on observed streamflow. Runoff data is available at www.nwrfc.noaa.gov/natural/index.html at water year and monthly time scales for several Oregon locations.

#### WATER SUPPLY SEASONAL FORECASTS



Water supply forecasts for April-September runoff volume vary widely, with some areas above average and some much below. Forecasts are above average for northwest, west-central, and far-northeast Oregon. Forecast for far-southwest, central, and southeast Oregon are below average.

The forecast for the Columbia River at The Dalles, which is a good index of conditions across the Columbia Basin, is 110 percent of average for April-September.

Note that these forecasts include observed data thus far for April, May and the first half of June.

Details on basin-scale water supply forecasts:

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

NOAA National Weather Service - California Nevada RFC cnrfc.noaa.gov/water\_resources\_update.php

USDA Natural Resources Conservation Service www.wcc.nrcs.usda.gov/wsf/

