Oregon Water Conditions Report April 6, 2020



Current Oregon statewide snow water equivalent is 109 percent of normal, increased from 85 percent two weeks ago. Basin values range from a low of 87 percent of normal in the Rogue, Umpqua basin, to 143 percent of normal in the Umatilla, Walla Walla, and Willow basin. Statewide snowpack has increased over the past week due to cooler temperatures and a series of storms providing mid and high elevation accumulation of snow.

Current Oregon statewide precipitation at NRCS SNOTEL sites is 80 percent of average, remaining below average for the water year. Basin precipitation values range from a low of 69 percent of average in the Klamath, Rogue, and Umpqua basins, to 102 percent of average in the Umatilla, Walla Walla and Willow basin. Southwestern Oregon continues to be the driest region in the state with well below normal snowpack and water year precipitation being observed.

The NRCS <u>Basin Outlook Report</u> for April should be available later this week. This report is published monthly from January through June.

Precipitation over the <u>past two weeks</u> has been normal across much of the state. The exceptions were the Cascades where precipitation was above normal and southwestern Oregon where precipitation was below normal. For the <u>month of March</u>, precipitation was below normal across most of the state.

Temperatures over the <u>past two weeks</u> have been much cooler than normal across most of the state. For the <u>month of March</u>, temperatures also cooler than normal across the state.

Over the next <u>8 to 14 days</u>, the NOAA Climate Prediction Center is forecasting belownormal temperature across all but the southwest third of the state where the probability is normal. The precipitation outlook is for below normal probability for western and north central Oregon transitioning to above-normal in the southeast corner. The most recent <u>three</u> <u>month outlook</u> indicates an increased probability of above-normal temperatures along with below-normal precipitation across the state. The next long-term outlook will be issued on April 16, 2020.

ENSO-neutral continues to be favored through Northern Hemisphere spring 2020 (~65 percent chance), continuing through summer 2020 (~55 percent chance). During February 2020, above-average sea surface temperatures were evident across the western, central, and far eastern Pacific Ocean. For a more complete report, refer to the March 12, 2020 <u>diagnostic discussion</u> issued by the Climate Prediction Center. The next diagnostic discussion is scheduled for April 9, 2020. Another source of information is the latest <u>ENSO</u> blog on the climate.

Statewide streamflow conditions for March were much lower than normal at 45 percent. Values ranged from a high of 78 percent of normal in parts of the Deschutes basin to a low of only 15 percent in the South Coast. Recent weather patterns have helped to improve flows especially in western Oregon and coastal watersheds. However, not all areas of the state have benefitted and consequently, flows remain lower than normal.

USACE Reservoirs:

<u>Willamette</u>: The Willamette system is 49percent full and 27 percent below rule curve. Flows in the Willamette River at <u>Albany</u> are 11,170 cfs with flows at <u>Salem</u> at 19,340 cfs.

<u>Rogue:</u> The Rogue system is currently 68 percent full and 21 percent below rule curve. Lost Creek is 77 percent full and 15 percent below rule. Outflows are holding at about 930 cfs with inflows around 1850 cfs. Applegate is at 29 percent, 48 percent below rule, with inflows of about 210 cfs and releases currently at 125 cfs.

<u>Willow Creek</u>: The Willow Creek Project is currently 92 percent full and 2 percent below rule curve. Current inflow is around 51 cfs with outflows at about 12 cfs.

USBR Reservoirs:

<u>Umatilla River Basin</u>: McKay reservoir is at 92 percent of capacity and filling with inflows around 278 cfs and outflows around 50 cfs.

<u>Deschutes River Basin</u>: Prineville reservoir is at 71 percent of capacity and filling with inflows around 327cfs and outflows around 200 cfs. Ochoco reservoir is at 54 percent of capacity and maintaining storage levels with inflows around 32 cfs and outflows around 4 cfs. Crescent Lake is at 50 percent, Wickiup is at 71 percent and Crane Prairie is at 83 percent of capacity.

<u>Malheur River Basin</u>: Warm Springs reservoir is at 74 percent of capacity and filling with inflows around 280 cfs. Beulah reservoir is at 72 percent of capacity and filling with inflows around 166 cfs. Bully Creek reservoir is at 100 percent of capacity and filling with inflows around 130 cfs and outflows around 24 cfs.

<u>Owyhee River Basin</u>: Owyhee reservoir is at 84 percent of capacity and maintaining storage levels with inflows around 827 cfs and outflows around 168 cfs.

<u>Burnt and Powder River Basins</u>: Phillips reservoir is at 36 percent of capacity and filling with inflows around 122 cfs and outflows around 18 cfs. Unity reservoir is at 82 percent of capacity and filling with inflows around 175 cfs and outflows around 137 cfs.

<u>Tualatin River Basin</u>: Scoggins reservoir is at 91 percent of capacity and filling with inflows around 137 cfs and outflows around 10 cfs.

The most recent update to the <u>US Drought Monitor</u> indicates that over 84 percent of the state is in D0 (abnormally dry) conditions, with almost 57 percent of the state listed as in D1 (moderate drought) and now 13 percent is listed as in D2 (severe drought).

The Oregon Office of Emergency Management has assembled a new

hydrology/meteorology dashboard 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:

Snowpack Graphs – April 6, 2020	.4
Snow Water Equivalent (SWE) - Percent of Normal	.5
Precipitation (Mountain) - Percent of Normal	.6
Precipitation – (1 Month) Percent of Normal	.7
Temperature – (1 Month) Departure from Normal	.8
Three Month Temperature and Precipitation Outlook	.9
Total Moisture - Percentile1	0
U.S. Drought Monitor for Oregon1	1
Streamflow Conditions by County - March, 20201	2
Streamflow Conditions – John Day Basin (Grant County)1	2

Snowpack Graphs – April 6, 2020





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





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



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

PRISM > Precipitation Anomaly 1 Month > Oregon



Oregon - Precipitation arch 2020 Percent of 1981-2010 Nor Website: https://wrcc.dri.edu/wwdt/index.php?region=or

PRISM > Temperature Anomaly 1 Month > Oregon



Oregon - Mean Temperature

April through June

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



Total Moisture - Percentile

Total Moisture (STOT) is a moisture index calculated by adding Soil Moisture and Snow Water Equivalent. STOT represents the total water content of a region.

Website: http://www.hydro.ucla.edu/SurfaceWaterGroup/forecast/monitor pnw/index.shtml







Compared to this time last year:





Streamflow Conditions – John Day Basin (Grant County)

