Oregon Water Conditions Report May 7, 2018



Snow water equivalent has declined in the past two weeks. Statewide snowpack is now well below normal at 66 percent. The Hood, Sandy, and Lower Deschutes continue to measure the highest at 95 percent of normal. As of today, the Owyhee Basin has melted out completely with the John Day effectively the same at only 4 percent. The map on page 4 illustrates the considerable differences between the northern and southern regions of the state. These differences are reflective of the weather patterns that have been prevalent across the west throughout this past winter and spring.

Despite the above-average precipitation in April, the statewide water year to date precipitation at NRCS SNOTEL sites is at 93 percent. The highest amounts of precipitation so far this water year have been in the Umatilla, Walla Walla, Willow at 105 percent with the Hood, Sandy, and Lower Deschutes not far behind at 103 percent of normal. The lowest values are in the Harney Basin receiving 78 percent, Rogue and Umpqua Basins at 79 percent, and the Klamath Basin at 80 percent.

For more region-specific details, the most recent <u>NRCS Snow Survey Basin Outlook</u> <u>Report</u> is now available and will continue to be published monthly until June, 2018.

The Snow Survey also publishes weekly condition reports on three areas affected by wildfire in eastern Oregon. After exposure to high heat, soils in these burned areas can't absorb as much water. As a result, these watersheds can experience a higher risk for flash flooding. The reports can be accessed at:

https://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/or/snow/?cid=nrcseprd854607 With little snow remaining, it is likely that this will be the last report of the season.

Temperatures over the <u>past two weeks</u> have been warmer than normal. Over the next <u>8 to 14 days</u>, the NOAA Climate Prediction Center is forecasting an increased probability of above-average temperatures along with below-normal precipitation for the state.

The Climate Prediction Center's most recent <u>three month outlook</u> also favors increased chances of above-normal temperatures along with below-normal precipitation across the entire state. The next long-term outlook will be issued on May 17, 2018.

La Niña conditions are expected to transition to ENSO-Neutral conditions most likely during April-May (> 50 percent chance). For more insight, refer to the April 12, 2018 <u>diagnostic discussion</u> issued by the Climate Prediction Center. For the latest discussion on the spring outlook, refer to the latest <u>ENSO blog</u> on the climate.gov website. The

situation continues to be monitored and updated by the Climate Prediction Center. The next ENSO Diagnostics Discussion is scheduled for May10, 2018.

Statewide streamflows for April were at 94 percent of normal. This is up from the 74 percent seen for the month of March. Regionally for April, streamflow conditions were at 71 percent east of the Cascades and 134 percent to the west. April weather events benefitted primarily the northern and northwestern watersheds. Unfortunately, watersheds in the south and southwest regions of the state did not receive benefit from these weather systems. As a result, streamflows in the Owyhee basin are currently only 20 percent of normal. Flows in the Malheur and Malheur Lake basins are between 35 and 42 percent. Streamflow forecasts for the approaching spring and summer seasons continue to predict that streamflows will be much lower than normal, especially in the southeastern regions of the state.

Most of the state's water supply reservoirs are at near-normal levels for this time

of year. In some instances, reservoir operators are releasing water for early season water supply. The <u>Willamette</u> System is currently almost 90 percent full and 8 percent below rule curve. Lookout Point, Hills Creek and Dorena range from 73 to 87 percent of capacity. All other project reservoirs are at or near capacity at this time.

Low flow conditions are still prevalent in the <u>Rogue</u> basin. <u>Lost Creek</u> is full with releases now higher than inflows. <u>Applegate</u> continues to release minimum outflow to sustain refill efforts. Currently the Applegate is 96 percent of capacity and only 4 percent below rule curve.

All of the USBR Oregon projects are well below any flood control requirements and continue to pass minimum flows, storing as much water as possible ahead of the start of irrigation season. A bright spot is <u>McKay Reservoir</u>, which is now at 100 percent of capacity. <u>Scoggins</u> is close to its fill curve and is very close to capacity.

<u>Central Oregon</u> reservoirs are between 66 and 92 percent of capacity. <u>Eastern Oregon</u> reservoirs (not considering Thief Valley) are now at 64 to 100 percent of capacity. Reservoirs in <u>North Central Oregon</u> are at 89 and 100 percent. For the most recent near real-time, site-specific reservoir conditions (teacup diagrams) visit the <u>USBR</u> or <u>USACE</u> websites.

The <u>US Drought Monitor</u> has changed only slightly over the past two weeks. The May 1, 2018 report indicates that 67 percent of Oregon is now listed as "Abnormally Dry" (D0). In addition, 39 percent of the state is now listed as in "Moderate Drought" (D1).

Wildfire conditions and forecasts for are now being discussed. Visit the Oregon Department of Forestry's <u>wildfire blog</u> for the latest updates. More information will be made available as the season progresses.

Data & Products:

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Compared to this time last year -





Compared to this time last year -



Website: https://wrcc.dri.edu/wwdt/index.php?folder=mdn1

PRISM > Temperature Anomaly 1 Month > Oregon



Oregon - Mean Temperature April 2018 Departure from 1981-2010 Norma Website: http://www.wrcc.dri.edu/wwdt/index.php?folder=pon1

PRISM > Precipitation Anomaly 1 Month > Oregon



Oregon - Precipitation April 2018 Percent of 1981-2010 Normal

May through July Outlook - Follow link for the latest information.

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



Soil Moisture - Percentile

Website:

http://www.hydro.washington.edu/forecast/monitor/curr/conus.mexico/west.vic.sm_qnt.gif



Website: http://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?OR

U.S. Drought Monitor Oregon



May 1, 2018
(Released Thursday, May. 3, 2018)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)								
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4		
Current	32.94	67.06	39.92	0.00	0.00	0.00		
Last Week 04-24-2018	32.94	67.06	39.92	0.00	0.00	0.00		
3 Month s Ago 01-30-2018	12.18	87.82	11.00	0.00	0.00	0.00		
Start of Calendar Year 01-02-2018	100.00	0.00	0.00	0.00	0.00	0.00		
Start of Water Year 09-26-2017	39.23	60.77	28.57	0.00	0.00	0.00		
One Year Ago 05-02-2017	100.00	0.00	0.00	0.00	0.00	0.00		

Intensity:

D0 Abnormally Dry D1 Moderate Drought D4 Exceptional Drought D2 Severe Drought

D3 Extreme Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:





http://droughtmonitor.unl.edu/

Compared to this time last year:

U.S. Drought Monitor Oregon

May 2, 2017 (Released Thursday, May. 4, 2017) Valid 8 a.m. EDT





The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summ for forecast statements.

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http://droughtmonitor.unl.edu/





Streamflow Conditions – Hood



Streamflow Conditions – Malheur Lake



Statewide Reservoir Conditions - April

