Oregon Water Conditions Report July 16, 2018



Oregon statewide water year precipitation at NRCS SNOTEL sites is 87 percent of normal. The highest amounts of water year precipitation are currently in the Umatilla, Walla Walla, and Willow basins with 103 percent. The lowest values are in the Rogue/Umpqua basins at 77 percent with the Harney basin not much better at 79 percent of normal for the water year.

Temperatures over the <u>past two weeks</u> have been warmer than normal especially in western and far eastern Oregon. The exception was the north to south central regions of the state where temperatures were normal to below normal. Temperatures over the <u>past week</u> have been warmer than normal across almost all of the state. Temperatures for the <u>month of June</u> were for the most part about normal across the state for this time of year.

Precipitation over the <u>past two weeks</u> has been below normal for most of the state. Recent warm temperatures and below normal precipitation have increased water demand across the state, contributing to water distribution activities one to three weeks earlier in the season than normal. Only in the northeast corner of the state are state officials seeing somewhat normal water distribution activities for this time of year. Precipitation for the <u>month of June</u> was below normal for most areas of the state.

Over the next <u>8 to 14 days</u>, the NOAA Climate Prediction Center is forecasting an increased probability of above-normal temperatures across the state along with below-normal precipitation. The most recent <u>three month outlook</u> is similar, favoring increased chances of above-normal temperatures along with below-normal precipitation across most of the entire state. The next long-term outlook will be issued on July 19, 2018.

ENSO-Neutral conditions are expected to continue through the summer. There are increasing chances for El Niño conditions during the fall and winter. For more insight, refer to the July 12, 2018 <u>diagnostic discussion</u> issued by the Climate Prediction Center. For the latest discussion on the summer outlook, refer to the latest <u>ENSO blog</u> on the climate.gov website. The Climate Prediction Center will continue to monitor conditions and provide regular updates. The next ENSO Diagnostics Discussion is scheduled for August 9, 2018.

Statewide streamflows for June were only 40 percent of normal. This is down considerably from the 60 percent seen for the month of May. Regionally for June, streamflow conditions were about the same (40 percent) east and west of the Cascades. Recent dry conditions across the state have contributed to declining streamflows that currently range from 30 percent in the Malheur Lake Basin to just over 65 percent in the South Coast. <u>Streamflow forecasts</u> for the summer season predict that streamflows will be much lower than normal, especially in the south central and southeastern regions of the state.

USACE Reservoirs: Rogue: Dry conditions and warm weather are forecast to continue, contributing to receding inflows. Lost Creek Reservoir outflow continues to be maintained at 1,600 cfs to augment mainstem flows for juvenile fish rearing needs. Currently the project is 73 percent full and 27 percent below rule curve with inflows holding steady at around 1,100 cfs. Applegate Reservoir outflows continue to be approximately 300 cfs and are expected to decrease back down to 275 cfs once temperatures are back in the 90's. Currently the project is 73 percent full, and 27 percent below rule curve.

<u>Willow Creek</u>: Willow Creek inflow is 1.5 cfs and outflow is 16.8 cfs. The project is currently 9' (33 percent) below rule curve. There is currently 13 cfs of irrigation demand.

<u>Willamette:</u> The Willamette system continues to draft while augmenting mainstem flow. System-wide inflow is 1,700 cfs and outflow is 4,700 cfs. Water temperature management below Detroit and Fall Creek continue to be provided. Minimum flow in the North Santiam below Detroit changed from incubation levels (1,300 cfs) to rearing (1,000 cfs) on July 16. Willamette River flow at Albany is 5,200 cfs and at Salem flow is 7,100 cfs. Fern Ridge and Foster are the fullest projects (at 95 percent) and Cougar is the least full (25 percent). Cougar filled this spring but the storage was used to provide mainstem flow augmentation since the Middle Fork projects didn't fill.

USBR Reservoirs: In north central Oregon, <u>McKay Reservoir</u> is at 64 percent of capacity and has been releasing water since late May. In the Willamette, <u>Scoggins</u> <u>Reservoir</u> remains close to its fill curve and is now at 81 percent of capacity. <u>Central</u> <u>Oregon</u> reservoirs are between 36 and 88 percent of capacity. Of note, due to increased water use demand, Wickiup Reservoir is now at only 36 percent. <u>Eastern Oregon</u> reservoirs (not considering Thief Valley) are now at 32 to 61 percent of capacity. <u>Rogue</u> <u>Basin</u> reservoirs are between 23 and 51 percent of capacity. <u>Upper Klamath Lake</u> is currently at 58 percent of useable capacity.

The Reservoir Storage Summary map of storage conditions that is usually featured on the last page of past reports has been omitted due to incomplete data from some areas of the state. This will be revisited in future editions. In the meantime please refer to the hyperlinks provided in the preceding paragraphs.

<u>The US Drought Monitor</u> indicates continued drier than normal conditions across the state. The July 10, 2018 report indicates that 94 percent of Oregon is now listed as "Abnormally Dry" (D0). Over 68 percent of the state is listed as in "Moderate Drought" (D1). In addition, 18 percent of the state is listed as in "Severe Drought" (D2). Due to continued warm and dry weather, expansion of these areas is likely in the coming week.

Wildfire conditions and **forecasts** for the upcoming season are now being posted.

The Oregon Department of Forestry has commented that as recent sunny and dry conditions continue this week, fire risk will increase across the state. Visit the Oregon Department of Forestry's <u>wildfire blog</u> for the latest updates. More information can also be accessed through the Northwest Interagency Coordination Center <u>website</u>.

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Precipitation (Mountain) - Percent of Normal



Compared to this time last year -



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Temperature – (1 Month) Departure from Normal

Website: <u>https://wrcc.dri.edu/wwdt/index.php?region=or</u>

PRISM > Temperature Anomaly 1 Month > Oregon



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

PRISM > Precipitation Anomaly 1 Month > Oregon



Oregon - Precipitation

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

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



Website: <u>http://www.hydro.ucla.edu/SurfaceWaterGroup/forecast/monitor_pnw/index.shtml</u>



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

U.S. Drought Monitor Oregon

July 10, 2018 (Released Thursday, Jul. 12, 2018) Valid 8 a.m. EDT



Drought Conditions (Percent Area)							
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	
Current	5.52	94.48	68.58	18.01	0.00	0.00	
Last Week 07-03-2018	6.08	93.92	68.13	18.01	0.00	0.00	
3 Month s Ago 04-10-2018	32.44	67.56	31.83	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 07-11-2017	100.00	0.00	0.00	0.00	0.00	0.00	

Intensity:





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

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http://droughtmonitor.unl.edu/

Compared to this time last year:





Streamflow Conditions – North Coast





Streamflow Conditions – Deschutes

