Oregon Water Conditions Report July 2, 2018



In most areas measured by the NCRS, snowpack has melted out between 1 to 3 weeks earlier than normal. As noted in the June NRCS Snow Survey Basin Outlook Report, the snowmelt rates observed during May were significantly higher than normal because of the warm temperatures.

Oregon statewide water year precipitation at NRCS SNOTEL sites is 88 percent of normal. The highest amounts of water year precipitation are currently in the Umatilla, Walla Walla, and Willow basins with 104 percent, while the lowest values are in the Rogue/Umpqua basins at 78 percent of normal for the water year.

Temperatures over the <u>past two weeks</u> have been warmer than normal across the western half of Oregon. The exception was in the southcentral and southeast third of the state where temperatures were normal to below normal. 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 western **Oregon.** Some areas in the central and eastern regions of the state have seen higher than normal precipitation. Below normal temperatures and above normal precipitation in a few of these areas has helped to (temporarily) ease water demands. However, across much of Oregon water demands are high, 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 8 to 14 days, the NOAA Climate Prediction Center is forecasting an increased probability of above-average temperatures across the state along with below normal precipitation across the northern two thirds of the state. The most recent three month outlook favors 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.

<u>ENSO</u>-Neutral conditions are expected through September-November. For more insight, refer to the June 14, 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 July 12, 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 northwest have contributed to declining streamflows

that currently range from 20 percent in the Powder and Malheur to over 65 percent in the Hood. <u>Streamflow forecasts</u> for the summer season continue to 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 increasingly warm weather is forecast to continue along with receding inflows. Lost Creek outflow currently sits at around 1,600 cfs. Currently the project is 78 percent full, and inflows have come in significantly lower than initially forecast. Applegate outflows continue to be approximately 275 cfs and are expected to stay at these levels. Currently the project is 82 percent of capacity. Last week flows transitioned sooner at Lost Creek dropping to 1,600 cfs in attempts to conserve water and hold 1,600 cfs through the first 10 days of July rather than decreasing to 1,500 cfs on July 1.

<u>Willow Creek:</u> Willow Creek Reservoir inflow is 4 cfs and outflow is 17 cfs. The project is currently 5.5' (24 percent) below rule curve. There is currently 12 cfs of irrigation demand.

<u>Willamette</u>: The Willamette system is at 64 percent of capacity. Total system inflow is 2,380 cfs and outflow is 5,050 cfs. The most recent mean daily average flow at Salem is 8,000 cfs and the previous 7-day average flow is 8,200 cfs. Flows are currently meeting the July Salem minimum-flow target of 6,000 cfs. Temperature control operations continue with a mixture of spill and power generation at Detroit.

<u>USBR Reservoirs</u>: In north central Oregon, <u>McKay Reservoir</u> is at 72 percent of capacity and has been releasing water since late May. In the Willamette, <u>Scoggins Reservoir</u> remains very close to its fill curve and is now at 90 percent of capacity. <u>Central Oregon</u> reservoirs are between 47 and 90 percent of capacity. Of note, due to increased water use demand, Wickiup Reservoir is now at only 47 percent. <u>Eastern Oregon</u> reservoirs (not considering Thief Valley) are now at 40 to 70 percent of capacity. <u>Rogue Basin</u> reservoirs are between 30 and 60 percent of capacity. <u>Upper Klamath Lake</u> is currently at 66 percent of useable capacity.

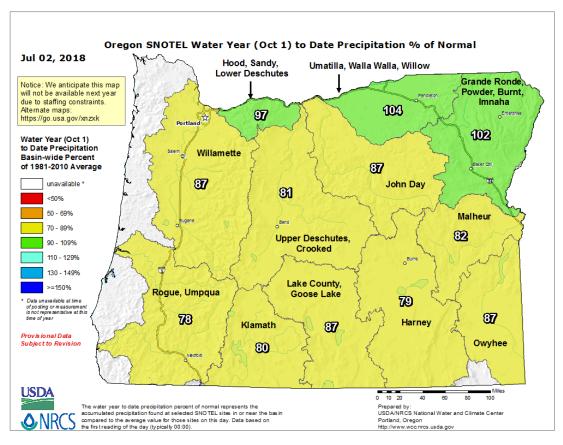
The map of storage conditions that is usually featured on the last page of this report has been purposely omitted due to incomplete data from some areas of the state. This will be revisited in future editions of this report.

The US Drought Monitor indicates continued drier than normal conditions across the state. The June 28, 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).

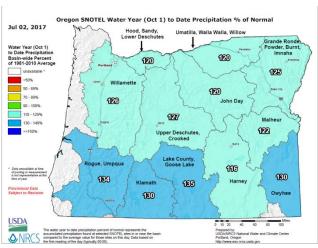
Wildfire conditions and <u>forecasts</u> for the upcoming season are now being posted. The Oregon Department of Forestry has commented that as recent sunny and dry conditions continue this week, fire risk will increase across the state. Visit the Oregon Department of Forestry's <u>wildfire blog</u> for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

Precipitation (Mountain) - Percent of Normal	
Temperature – (1 Month) Departure from Normal	4
Precipitation – (1 Month) Percent of Normal	5
Three Month Temperature and Precipitation Outlook	6
Soil Moisture - Percentile	7
U.S. Drought Monitor for Oregon	8
Statewide Streamflow Conditions - June	9
Streamflow Conditions - Mid Coast	9
Streamflow Conditions – Goose & Summer Lakes	10
Streamflow Conditions – Umatilla	10

Precipitation (Mountain) - Percent of Normal



Compared to this time last year -

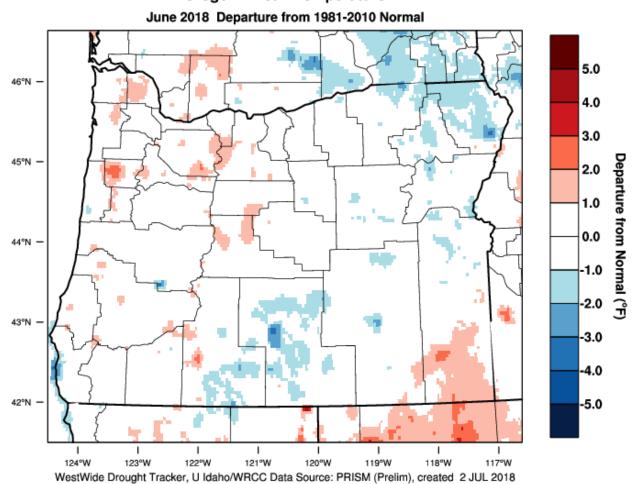


Temperature – (1 Month) Departure from Normal

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

PRISM > Temperature Anomaly 1 Month > Oregon

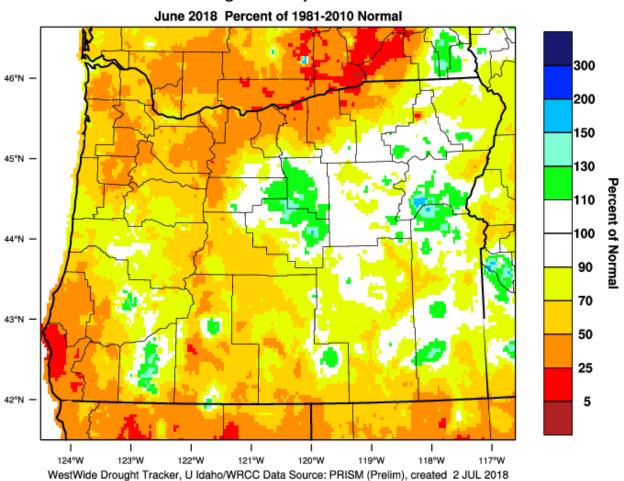




Website: http://www.wrcc.dri.edu/wwdt/index.php?folder=pon1

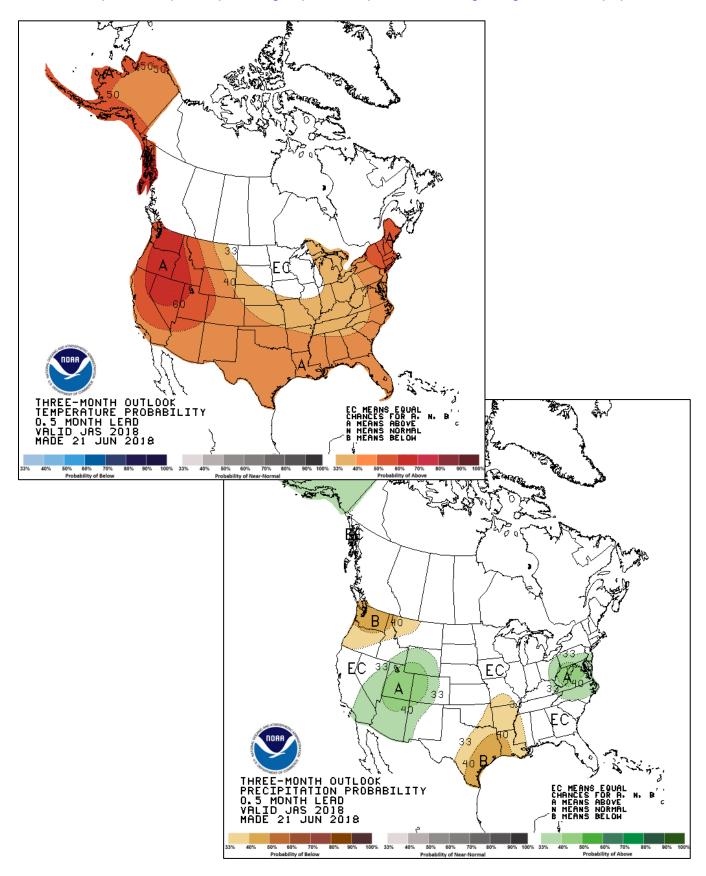
PRISM > Precipitation Anomaly 1 Month > Oregon

Oregon - Precipitation



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

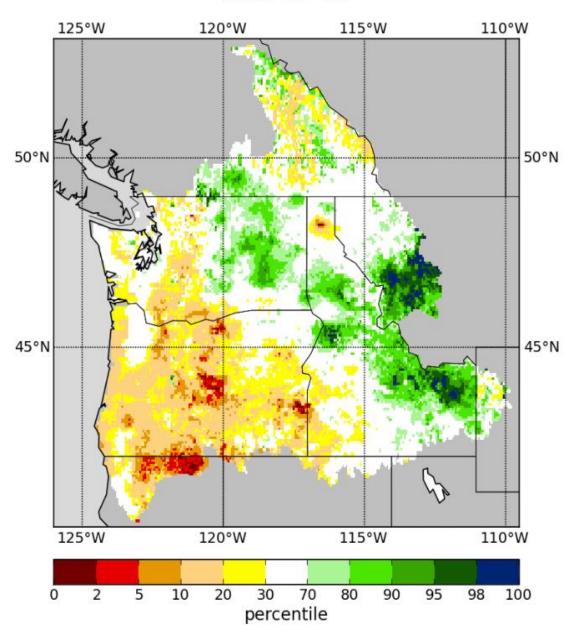
Website: http://www.cpc.ncep.noaa.gov/products/predictions/long_range/seasonal.php?lead=1



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

Soil Moisture Percentile

2018--07--01



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

U.S. Drought Monitor Oregon

June 26, 2018 (Released Thursday, Jun. 28, 2018) Valid 8 a.m. EDT

Drought Conditions (Percent Area)

		None	D0-D4	D1-D4	D2-D4	D3-D4	D4
	Current	6.12	93.88	68.13	18.01	0.00	0.00
_	ast Week 06-19-2018	8.54	91.46	45.30	18.36	0.00	0.00
	Month's Ago 03-27-2018	32.44	67.56	32.89	0.00	0.00	0.00
	Start of lendar Year 01-02-2018	100.00	0.00	0.00	0.00	0.00	0.00
	Start of Vater Year 09-26-2017	39.23	60.77	28.57	0.00	0.00	0.00
	e Year Ago 06-27-2017	100.00	0.00	0.00	0.00	0.00	0.00

Intensity: D0 Abnormally Dry D1 Moderate Drought D2 Severe Drought D2 Severe Drought

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

Author: Richard Heim NCEI/NOAA









http://droughtmonitor.unl.edu/

Compared to this time last year:

U.S. Drought Monitor
Oregon



June 20, 2017 (Released Thursday, Jun. 22, 2017) Valid 8 a.m. EDT

Intensity.

D0 Abnormally Dry

D1 Moderate Drought

D2 Severe Drought

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

Author: David Miskus NOAA/NWS/NCEP/CPC

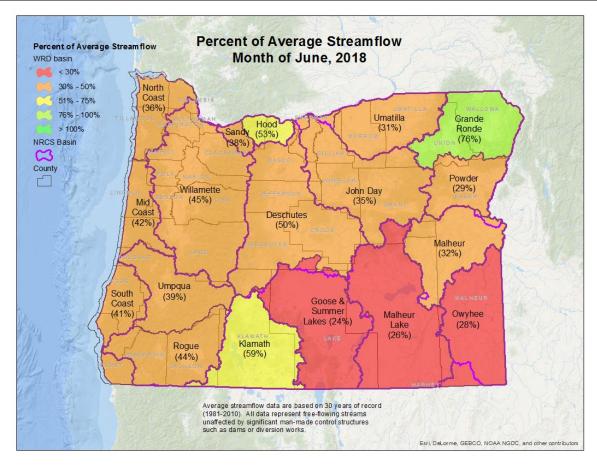




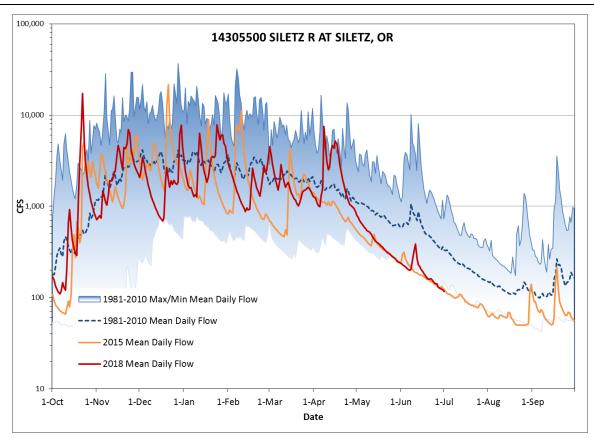




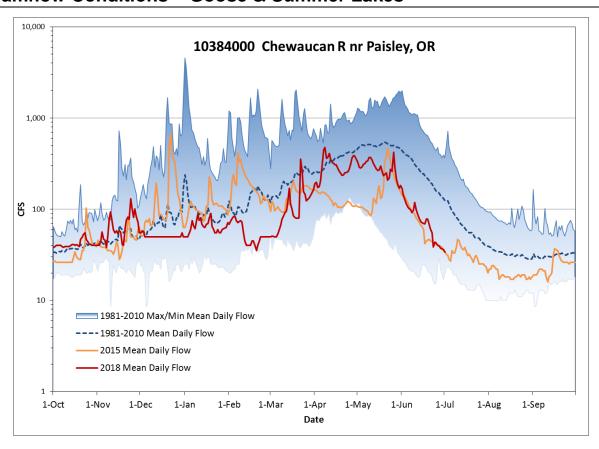
http://droughtmonitor.unl.edu/



Streamflow Conditions - Mid Coast



Streamflow Conditions - Goose & Summer Lakes



Streamflow Conditions - Umatilla

