Oregon Water Conditions Report November 19, 2018



Unseasonably dry conditions have continued to prevail across the state. Precipitation over the <u>past two weeks</u> has been below-normal across the entire state. From the crest of the Cascades westward to the coast precipitation has been between two to eight inches below normal. Across central and eastern Oregon precipitation has been slightly below normal. Precipitation for the <u>month of October</u> was below-normal for most of the state but abovenormal for the northeast portion.

Temperatures over the <u>past two weeks</u> have been cooler than normal. Regionally temperatures were six to ten degrees below normal for most of south eastern Oregon and two to four degrees below normal in central and north eastern Oregon. In western Oregon temperatures were about normal for this time of year. For the <u>month of October</u>, temperatures were well above normal west of the Cascades and normal to below normal to the east.

With the new water year not quite two months old it is still a little too early to start comparing current snowpack conditions with past years. However, compared to last year we do seem to be off to a slow start. The next month (or two) will provide a longer time period to better determine the condition and progress of our snowpack. In the meantime we will be including the snow water equivalent maps in this and subsequent editions of this report.

Over the next 8 to 14 days, the NOAA Climate Prediction Center is forecasting abovenormal temperatures across Oregon. The precipitation probability outlook is for abovenormal precipitation for the entire state. The most recent <u>three month outlook</u> indicates increased chances of above-normal temperatures statewide. The precipitation outlook for the same period calls for equal chances of above or below-normal precipitation for all of the state. The next long-term outlook will be issued on December 20, 2018.

El Niño is expected to form and continue through the Northern Hemisphere winter **2018-19.** For more insight, refer to the November 8, 2018 <u>diagnostic discussion</u> issued by the Climate Prediction Center. For the latest discussion on the fall-winter outlook, refer to the latest <u>ENSO blog</u> on the climate.gov website. The Climate Prediction Center will continue to provide updates on a regular basis. The next ENSO Diagnostics Discussion is scheduled for December 13, 2018.

Statewide streamflows for October were 57 percent of normal. This is up from 54 percent seen for the month of September. Regionally for October, streamflow conditions were about 67 percent east of the Cascades and 42 percent to the west. More recent data indicate that flows are ranging from less than 5 percent in the South Coast to almost 90 percent in the Malheur.

USACE Reservoirs: Rogue: Currently the system is 30 percent full and 6 percent below rule curve. Lost Creek is maintaining an outflow of 1,150 cfs to provide lower velocities for fall Chinook salmon currently spawning in the system. Applegate outflows have are being maintained at 100 cfs with inflows currently at 20 cfs.

<u>Willow Creek:</u> Currently the project is 13 percent full and 44 percent below rule curve. Inflows have been about 12 cfs while the project has been maintaining an outflow of 1.6 cfs. The project goal is to continue to capture inflows to get back to rule curve.

<u>Willamette</u>: The Willamette system continues to draft while augmenting mainstem flows. The project is currently at 0 percent full and 13 percent below rule curve. System inflow is about 4,500 cfs with outflow at about 6,200 cfs. The flow in the Willamette River at Albany is about 3,700 cfs and at Salem flows are about 6,200 cfs.

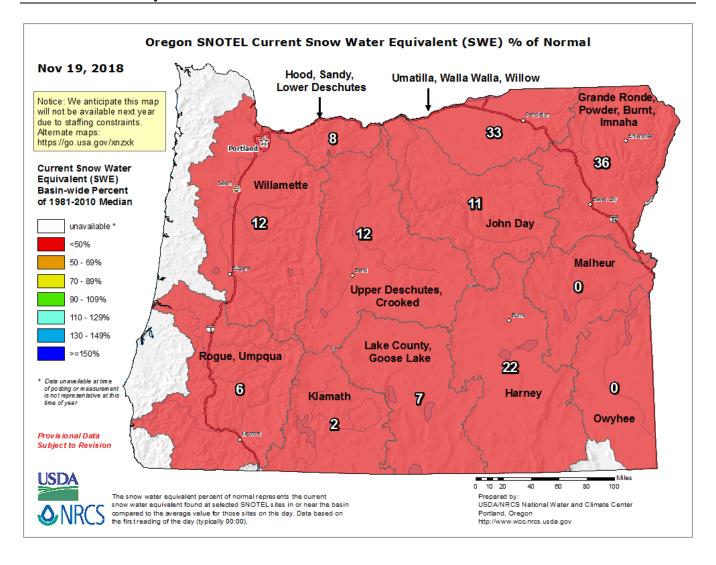
USBR Reservoirs: In north central Oregon, <u>McKay Reservoir</u> is at 11 percent of capacity, just about normal for this time of year. In the Willamette, <u>Scoggins Reservoir</u> remains very close to its fill curve and is currently 26 percent full. <u>Central Oregon</u> reservoirs are between 12 (Ochoco) and 64 (Crescent Lake) percent of capacity. <u>Eastern Oregon</u> reservoirs (not considering Thief Valley) are all at or below 32 percent now with Warm Springs and Bully Creek at 3 percent and Owyhee at 32 percent of capacity. <u>Rogue Basin</u> reservoirs are between 4 and 34 percent of capacity. <u>Upper Klamath Lake</u> is currently at 29 percent of capacity.

The most recent update to the <u>US Drought Monitor</u> indicates a slight degradation since the last report two weeks ago. Indicators now point toward D3 (Extreme Drought) in over 34 percent of the state. The report also shows 86 percent of the state is in D2 (Severe Drought), 98 percent is listed as in D1 (Moderate Drought) and 100 percent of the state is listed as D0 (Abnormally Dry). As of November 14, thirty-one Oregon counties are under drought <u>designation</u> by the US Department of Agriculture. Eleven counties are now under statedeclared drought status. Refer to the Oregon Water Resources Department <u>web page</u> for the latest information.

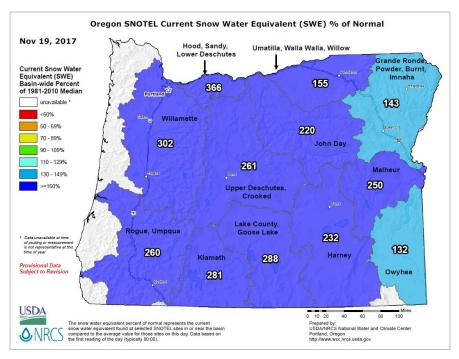
While the 2018 fire season may be officially over in Oregon, Department of Forestry recently sent two strike teams to assist with the California wildfires. The next wildland fire outlook update is scheduled for December 1, 2018. More information can also be accessed through the Northwest Interagency Coordination Center website. Another recommended resource is the Oregon Office of Emergency Management's RAPTOR incident mapping program which includes current situational information, such as wildfire perimeters, thermal satellite, fire evacuation boundaries, and air quality info.

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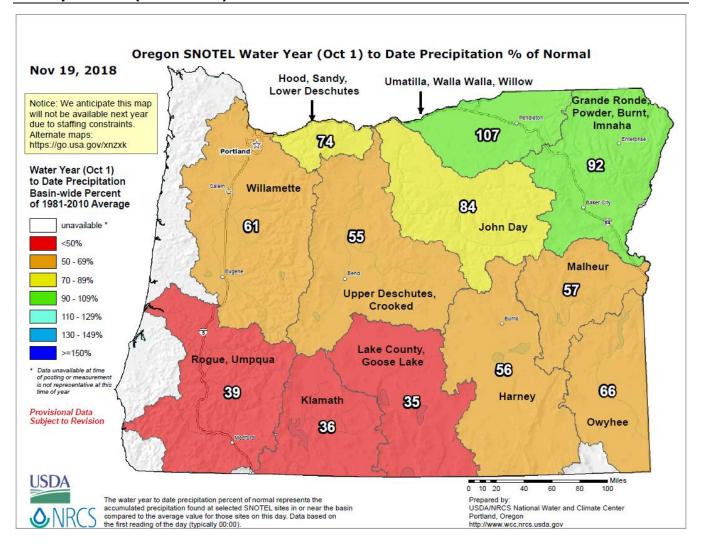
Snow Water Equivalent - Percent of Normal



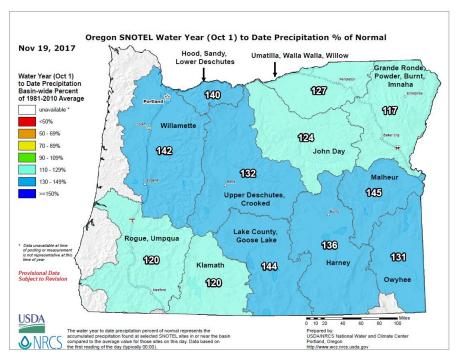
Compared to this time last year -



Precipitation (Mountain) - Percent of Normal



Compared to this time last year -

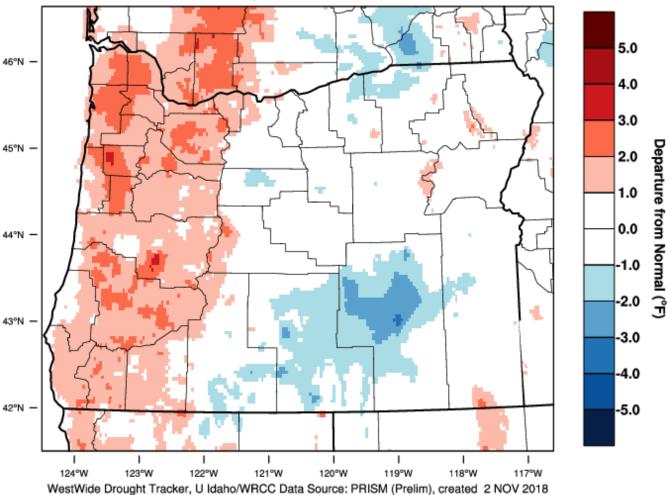


Website: https://wrcc.dri.edu/wwdt/index.php?region=or

PRISM > Temperature Anomaly 1 Month > Oregon

Oregon - Mean Temperature

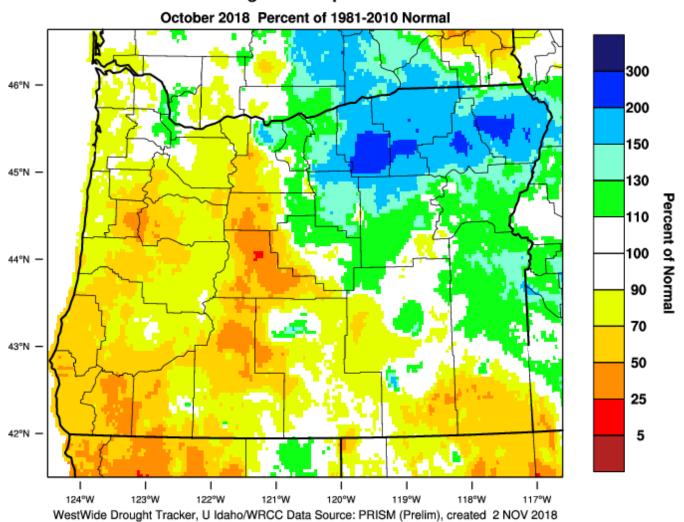




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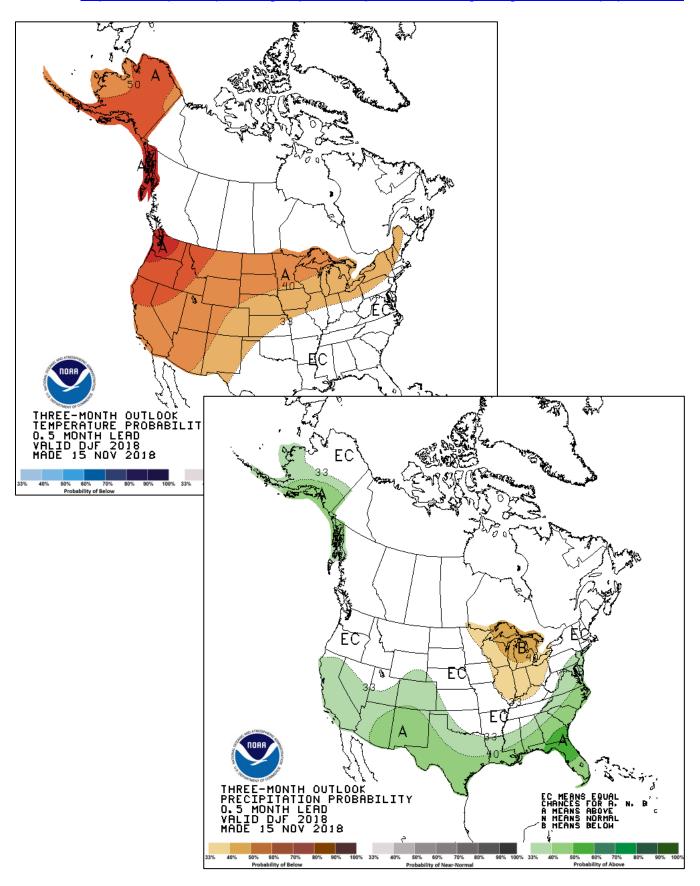
Oregon - Precipitation



Three Month Temperature and Precipitation Outlook

December through February

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

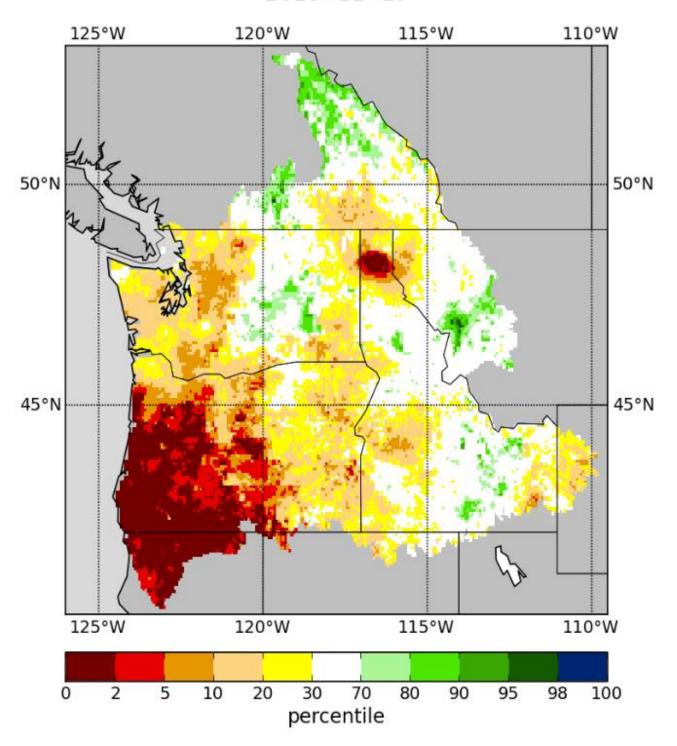


Current percentiles for soil moisture, snow water equivalent, and total moisture storage.

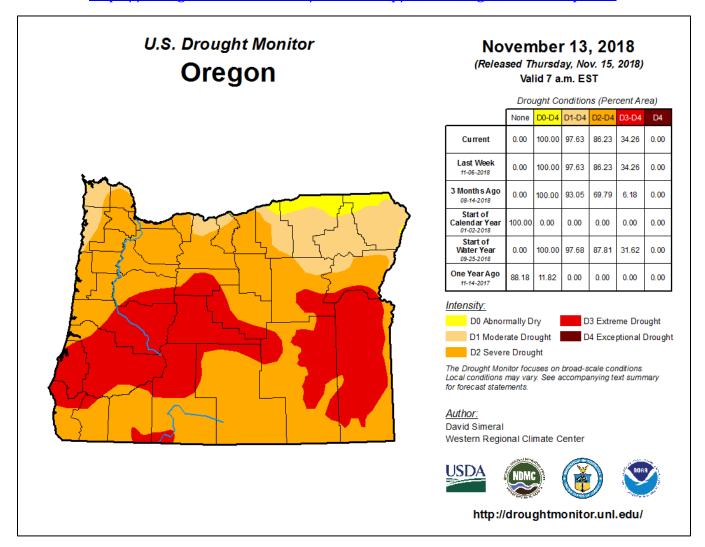
Website: http://www.hydro.ucla.edu/SurfaceWaterGroup/forecast/monitor pnw/index.shtml

Total Moisture Percentile

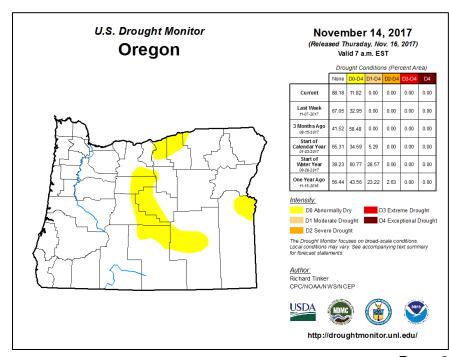
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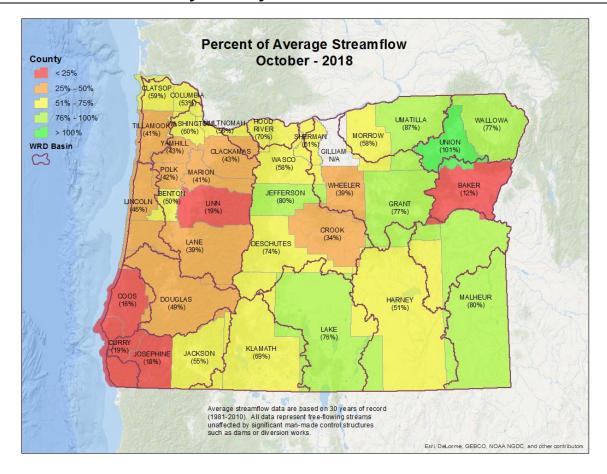
Website: https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?OR



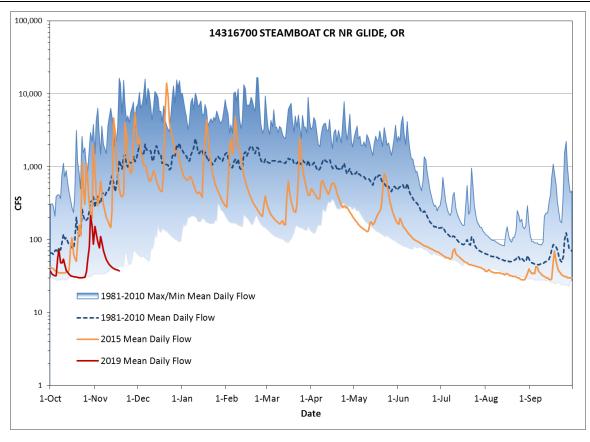
Compared to this time last year:



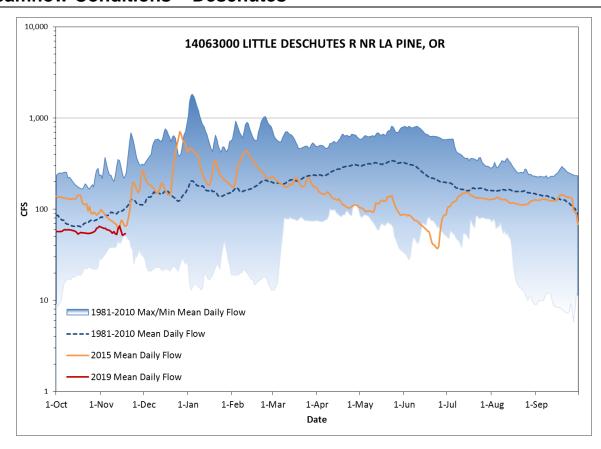
Streamflow Conditions by County - October



Streamflow Conditions - Umpqua



Streamflow Conditions - Deschutes



Statewide Reservoir Conditions - October

