Oregon Water Conditions Report November 5, 2018



Temperatures over the <u>past two weeks</u> have been warmer than normal. Regionally temperatures were up to 6 degrees warmer than normal for most of central and eastern Oregon. In western Oregon temperatures were 2 to 4 degrees warmer than 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.

Precipitation over the <u>past two weeks</u> has been a mix of above and below normal across the state. From the crest of the Cascades westward to the coast precipitation has been below normal. Across central and eastern Oregon precipitation has been slightly below normal while northeast Oregon has been above. Precipitation for the <u>month of October</u> was below normal for most of the state but above normal for the northeast portion.

With the new water year only a month old it is still a little 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 all but the northeast corner of the state where an equal probability of above or below-normal temperatures exist. The precipitation outlook is for below-normal precipitation for the entire state. The most recent three month outlook indicates increased chances of above-normal temperatures statewide. The precipitation outlook for the same period calls for an increased probability of below-normal precipitation for most of the state. The next long-term outlook will be issued on November 15, 2018.

ENSO-Neutral conditions are expected to transition this fall. There are increasing chances (70-75 percent) of the onset of El Niño conditions during the 2018-19 winter. For more insight, refer to the October 11, 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 November 8, 2018.

Statewide streamflows for October were 58 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 43 percent to the west. More recent data indicate that flows are ranging from 10 percent in the South Coast to well over 100 percent in the Grande Ronde. Recent rains have helped to improve streamflow

conditions primarily in the northern third of the state. Unfortunately the most recent two week outlook would suggest that flows will be receding.

<u>USACE Reservoirs:</u> Rogue: Lost Creek outflow continues to be maintained at about 1,200 cfs. Currently the project is 38 percent full and 4 percent below rule curve. Inflows are up slightly and at around 990 cfs. Applegate inflows are at about 30 cfs with outflows at approximately 124 cfs. Currently the project is 6 percent full and 16 percent below rule curve.

<u>Willow Creek</u>: Willow Creek inflow is around 2.6 cfs and outflow is about 1.5 cfs. The project is currently 13 percent full and 60 percent below rule curve.

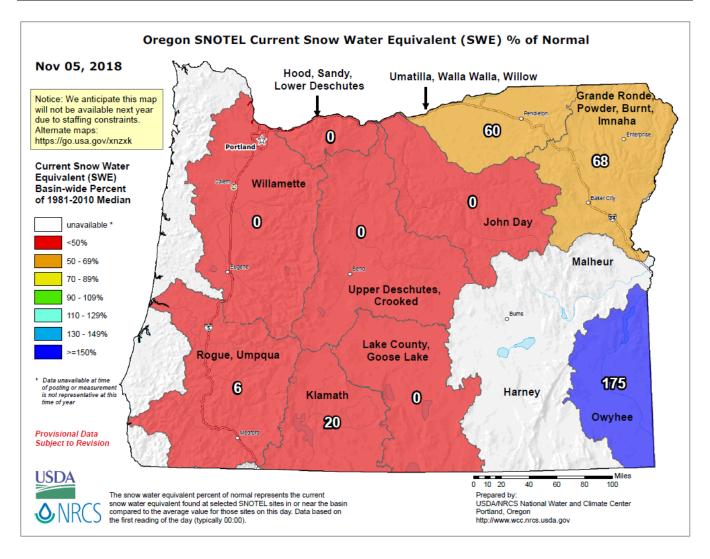
<u>Willamette</u>: The Willamette system continues to draft while augmenting mainstem flows. The project is currently 4 percent full and 25 percent below rule curve. The flow in the Willamette River at Albany is about 5,700 cfs and at Salem flows are about 9,500 cfs.

<u>USBR Reservoirs</u>: In north central Oregon, <u>McKay Reservoir</u> is at 16 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 28 percent full. <u>Central Oregon</u> reservoirs are between 12 (Ochoco) and 68 (Crescent Lake) percent of capacity. <u>Eastern Oregon</u> reservoirs (not considering Thief Valley) are all below 35 percent now with Warm Springs at 2 percent and Owyhee at 31 percent of capacity. <u>Rogue Basin</u> reservoirs are between 4 and 34 percent of capacity. <u>Upper Klamath Lake</u> is currently at 27 percent of capacity.

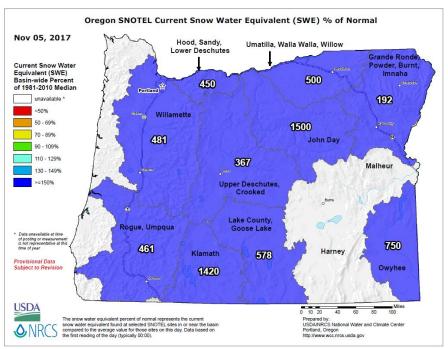
The most recent update to the <u>US Drought Monitor</u> indicates no change in the last two weeks. Indicators continue to point toward D3 (Extreme Drought) in over 33 percent of the state. The report also shows 86 percent of the state is in D2 (Severe Drought), 98 percent is listed as in D1 (Moderate Drought) and 100 percent of the state is listed as D0 (Abnormally Dry). As of October 31, thirty-one Oregon counties are now under drought <u>designation</u> by the US Department of Agriculture. Eleven counties are now under state-declared drought status. Refer to the Oregon Water Resources Department <u>web page</u> for the latest information.

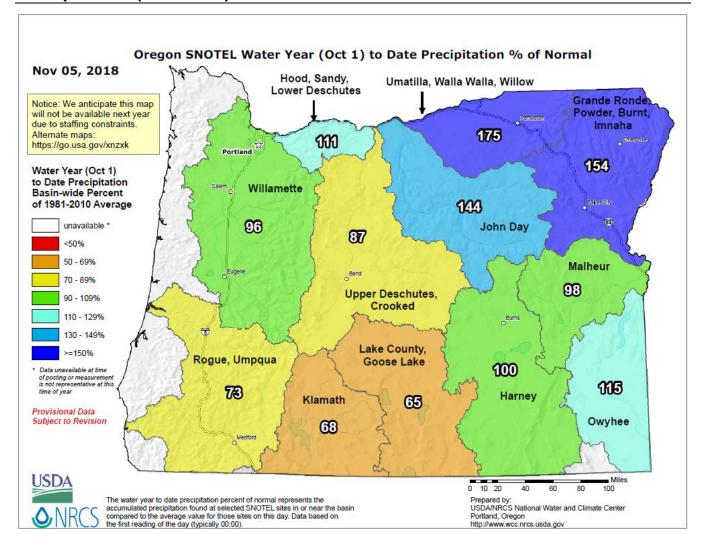
Last week the Oregon Department of Forestry's wildfire blog posted that the "2018 Fire season officially over" adding that "fire prevention continues". According to the November 1 wildland fire outlook much of the West exited fire season by early October as the frequency of wet systems moving across the country increased. The next 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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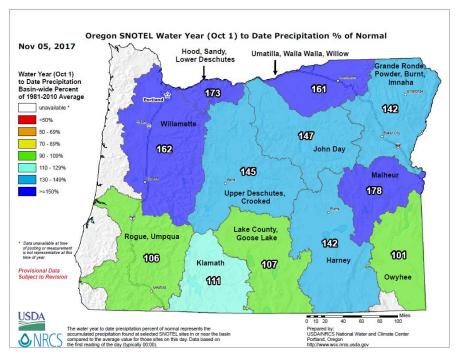


Compared to this time last year -





Compared to this time last year -



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

123°W

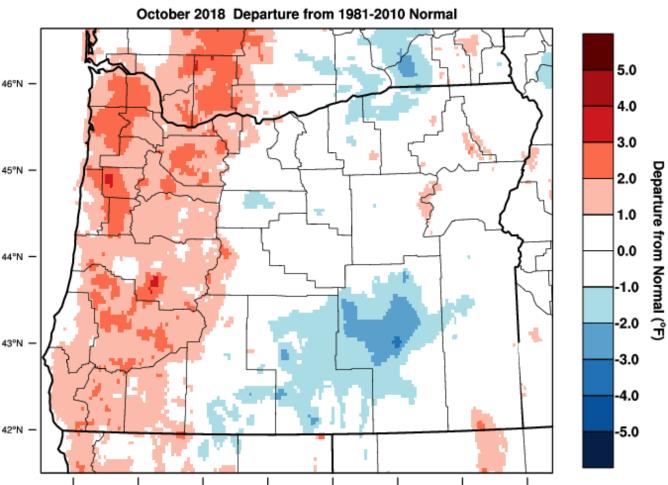
122°W

121°W

WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 2 NOV 2018

PRISM > Temperature Anomaly 1 Month > Oregon

Oregon - Mean Temperature



120°W

119°W

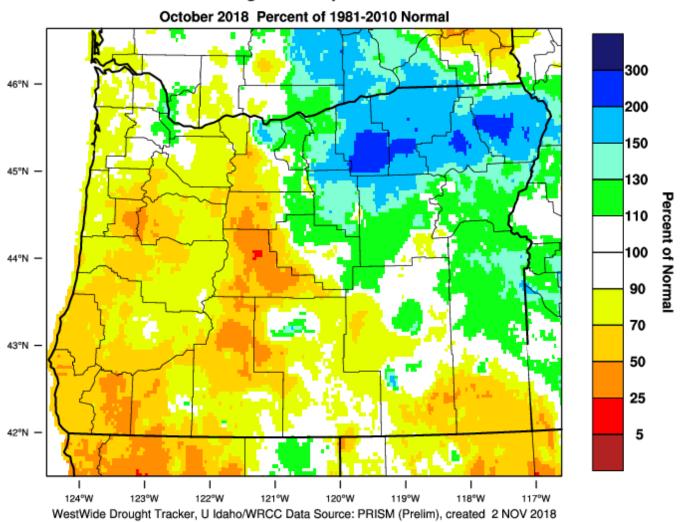
118°W

117°W

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

PRISM > Precipitation Anomaly 1 Month > Oregon

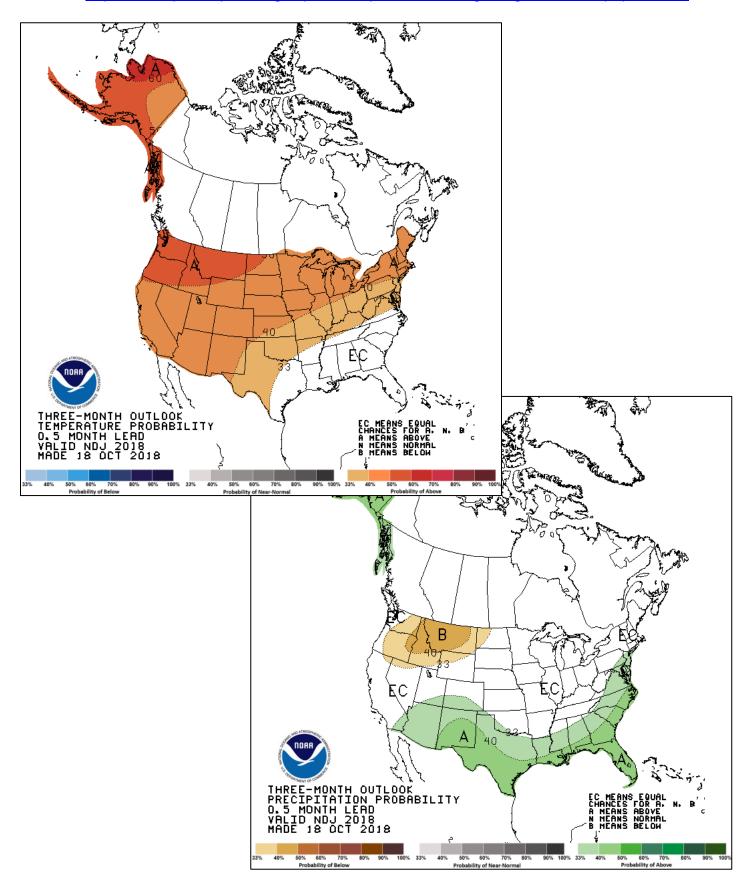
Oregon - Precipitation



Three Month Temperature and Precipitation Outlook

November through January

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

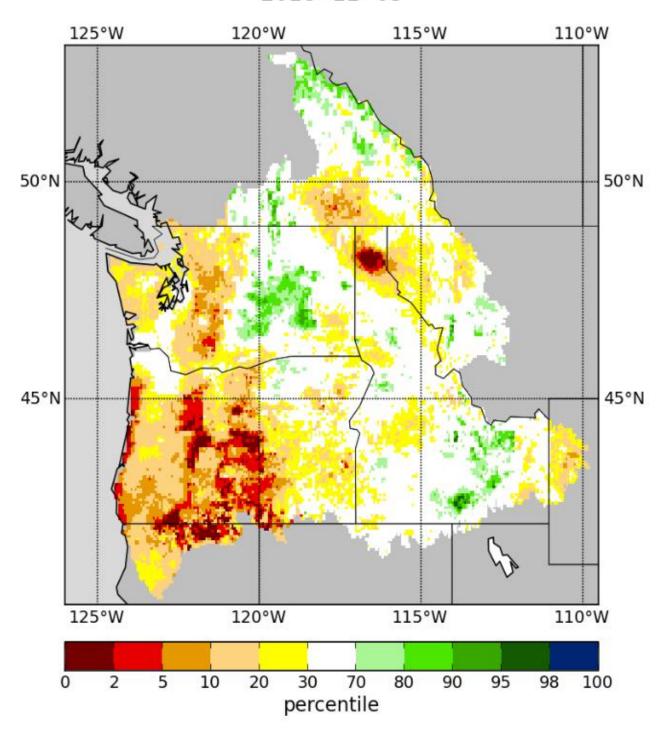


Current percentiles for soil moisture, snow water equivalent, and total moisture storage.

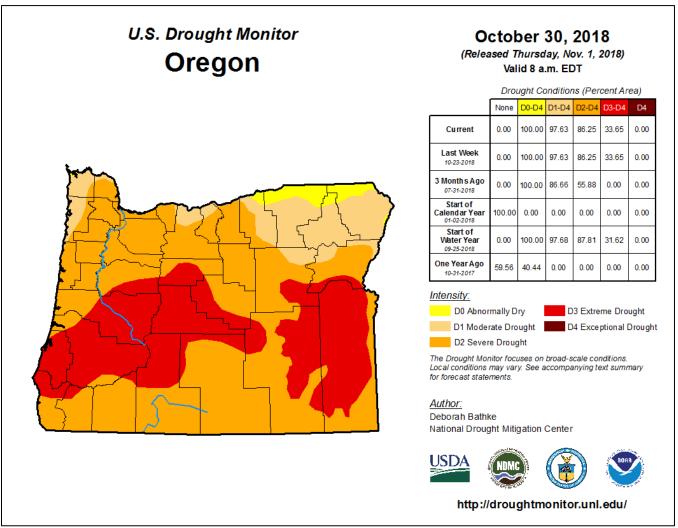
Website: http://www.hydro.ucla.edu/SurfaceWaterGroup/forecast/monitor pnw/index.shtml

Total Moisture Percentile

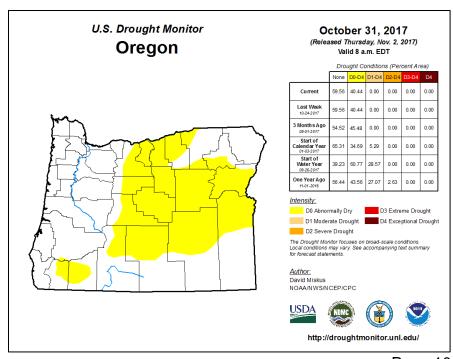
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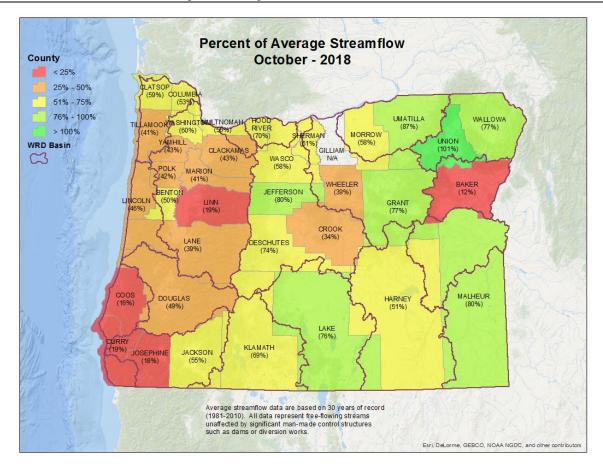
Website: https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?OR



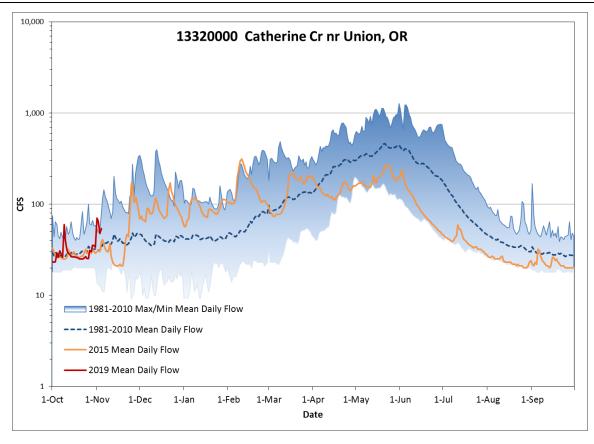
Compared to this time last year:



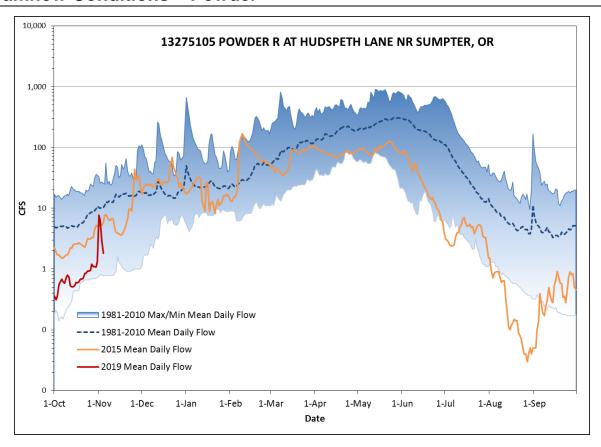
Streamflow Conditions by County - October



Streamflow Conditions - Grande Ronde



Streamflow Conditions - Powder



Statewide Reservoir Conditions - October

