Oregon Water Conditions Report December 3, 2018



Recent rains brought much needed moisture across the state. Even so, precipitation over the <u>past two weeks</u> has still been normal to below-normal across the state. Parts of northwest and northeast Oregon have been one to three inches below normal for this time of year. Across central and southern Oregon precipitation has been slightly above normal. Precipitation for the <u>month of November</u> was well below-normal for most of the state.

Temperatures over the <u>past two weeks</u> have been warmer than normal. Regionally temperatures were two to five degrees above normal for northeast and most of western Oregon. Across the north central and southeastern Oregon temperatures were about normal to two degrees below normal. For the <u>month of November</u>, temperatures were well above normal west of the Cascades and normal to below normal to the east.

With the new water year a little over two months old it is still a little too early to start comparing current snowpack conditions with past years. However it continues to appear as though we are 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.

Over the next 8 to 14 days, the NOAA Climate Prediction Center is forecasting abovenormal temperatures across most of the state. The precipitation probability outlook is for above-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 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 November were 50 percent of normal. This is down from 56 percent seen for the month of October. Regionally for November, streamflow conditions were about 65 percent east of the Cascades and only 30 percent to the west. More recent data indicate that flows are ranging from about 35 percent in the Umpqua to over 85 percent in the Malheur.

<u>USACE Reservoirs:</u> Rogue: Currently the system is 31 percent full and 6 percent below rule curve. Lost Creek is maintaining an outflow of 1,150 cfs to provide for fall Chinook salmon currently spawning in the system. Lost Creek inflows are currently at 1,020 cfs. Applegate outflows have are being maintained at 100 cfs with inflows currently at 80 cfs.

<u>Willow Creek:</u> Currently the project is 14 percent full and 32 percent below rule curve. Inflows have been about 5 cfs while the project has been maintaining an outflow of 1.5 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 effectively empty and right on the rule curve. The flow in the Willamette River at Albany is about 8,000 cfs and at Salem flows are about 14,600 cfs.

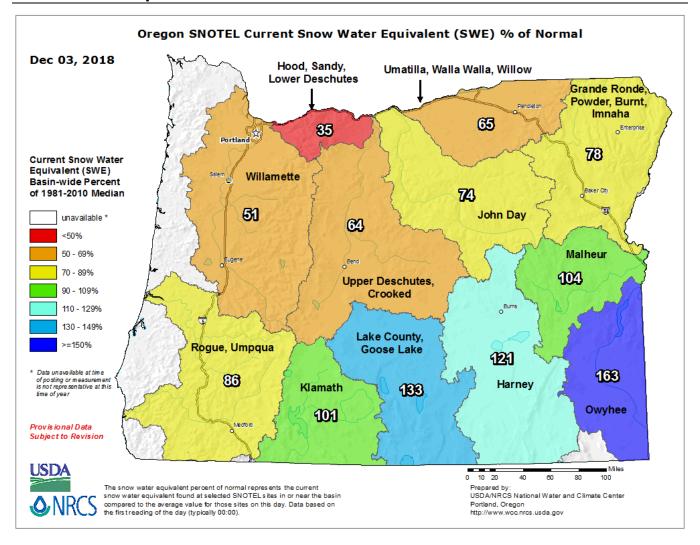
<u>USBR Reservoirs:</u> In north central Oregon, <u>McKay Reservoir</u> is at 11 percent of capacity, just about normal for this time of year. In the Willamette, <u>Scoggins Reservoir</u> remains very close to its fill curve and is currently 27 percent full. <u>Central Oregon</u> reservoirs are between 12 (Ochoco) and 68 (Crescent Lake) percent of capacity. <u>Eastern Oregon</u> reservoirs (not considering Thief Valley) are all at or below 33 percent now with Warm Springs at 4 percent and Owyhee at 33 percent of capacity. <u>Rogue Basin</u> reservoirs are between 5 and 33 percent of capacity. <u>Upper Klamath Lake</u> is currently at 34 percent of capacity.

The most recent update to the <u>US Drought Monitor</u> indicates no change in status since the last report two weeks ago. Indicators continue to 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 18, thirty-one Oregon counties are 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.

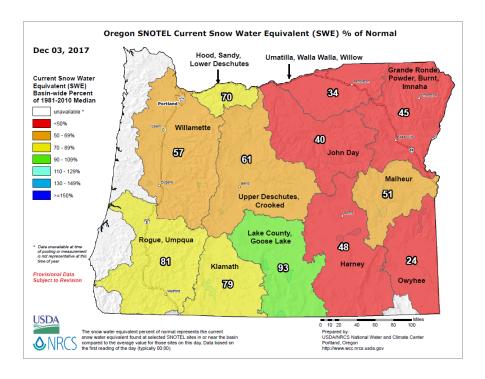
<u>Oregon Department of Forestry</u> strike teams sent to fight California wildfires returned home recently. The next wildland fire <u>outlook</u> update is scheduled for January 1, 2019. More information can also be accessed through the Northwest Interagency Coordination Center <u>website</u>. Another recommended resource is the Oregon Office of Emergency Management's <u>RAPTOR</u> incident mapping program which includes current situational information, such as wildfire perimeters, thermal satellite, fire evacuation boundaries, and air quality info.

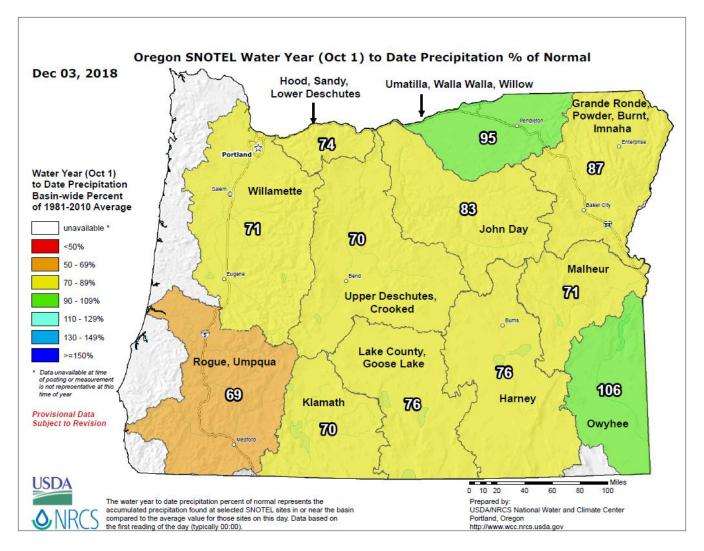
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Snow Water Equivalent - Percent of Normal

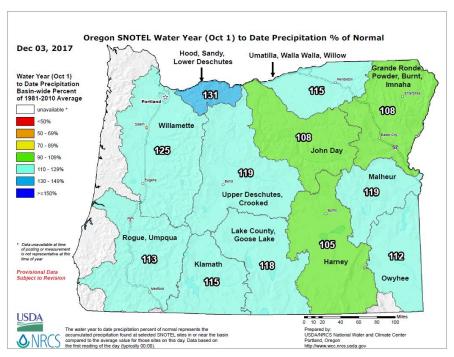


Compared to this time last year -





Compared to this time last year -

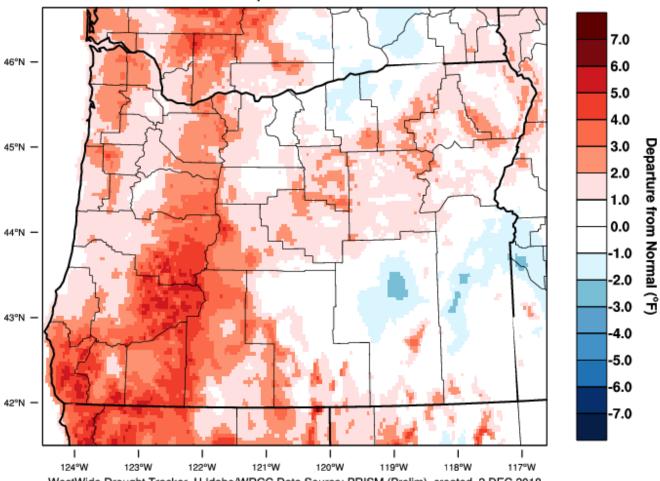


Website: https://wrcc.dri.edu/wwdt/index.php?region=or

PRISM > Temperature Anomaly 1 Month > Oregon

Oregon - Mean Temperature

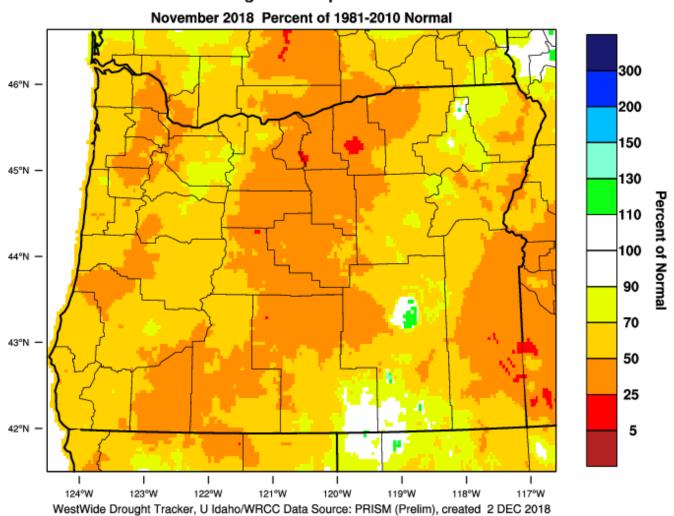




Website: http://www.wrcc.dri.edu/wwdt/index.php?folder=pon1

PRISM > Precipitation Anomaly 1 Month > Oregon

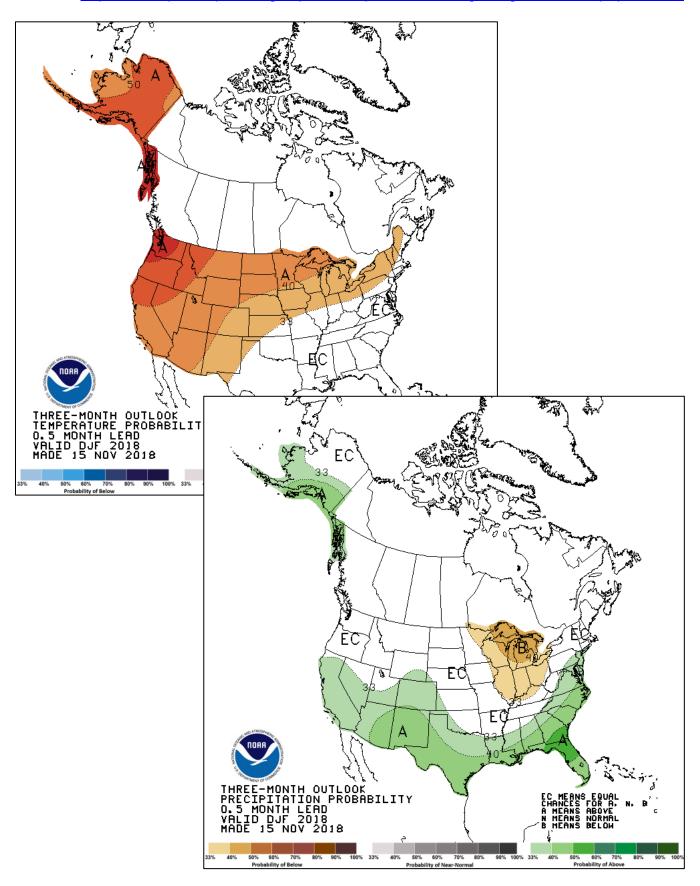
Oregon - Precipitation



Three Month Temperature and Precipitation Outlook

December through February

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

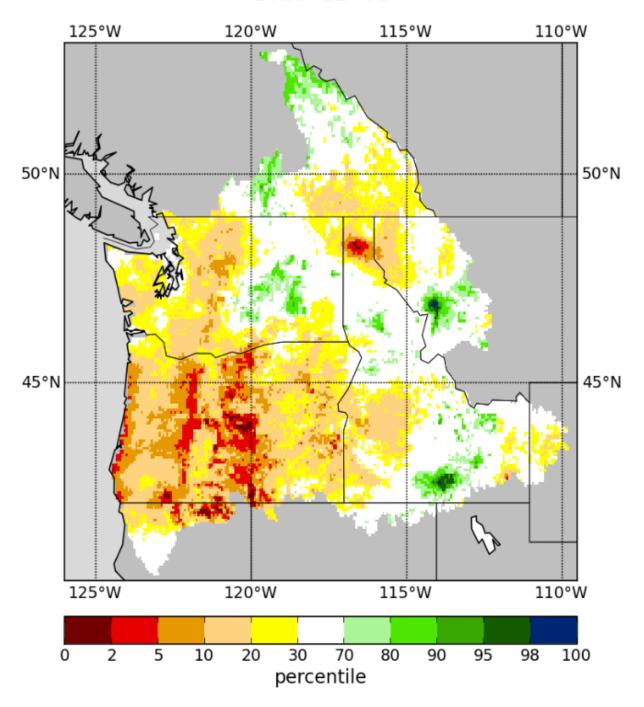


Current percentiles for soil moisture, snow water equivalent, and total moisture storage.

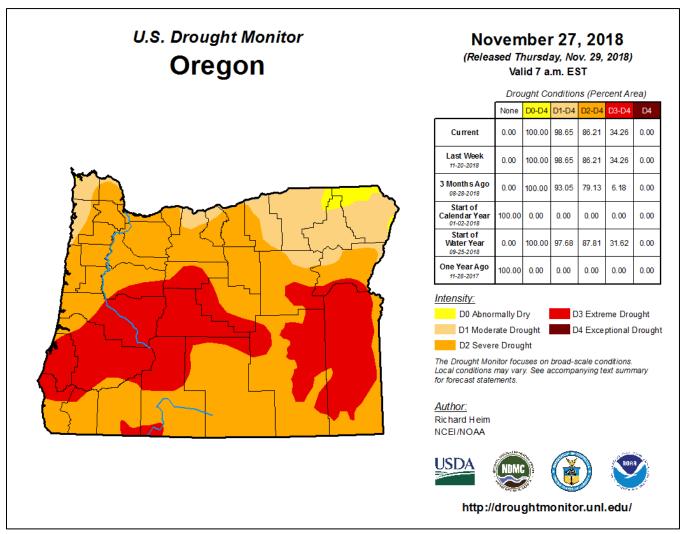
Website: http://www.hydro.ucla.edu/SurfaceWaterGroup/forecast/monitor pnw/index.shtml

Total Moisture Percentile

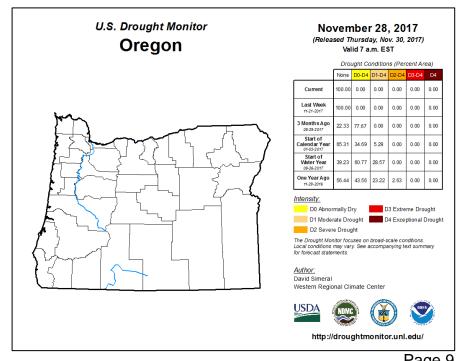
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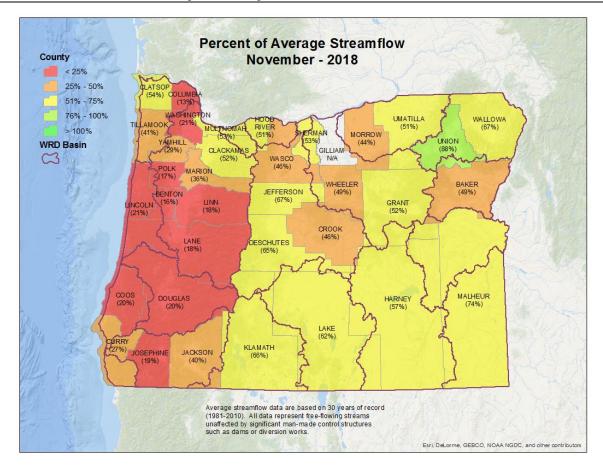
Website: https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?OR



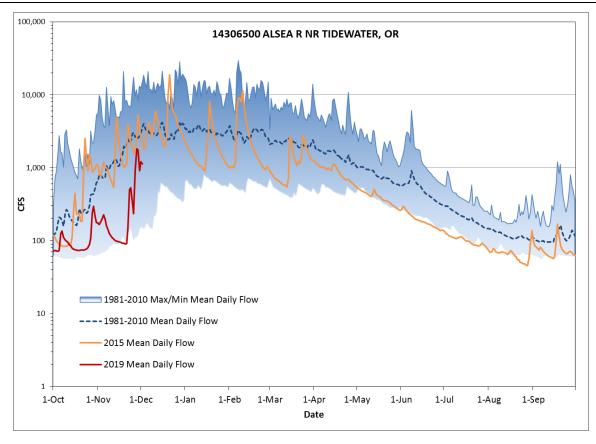
Compared to this time last year:



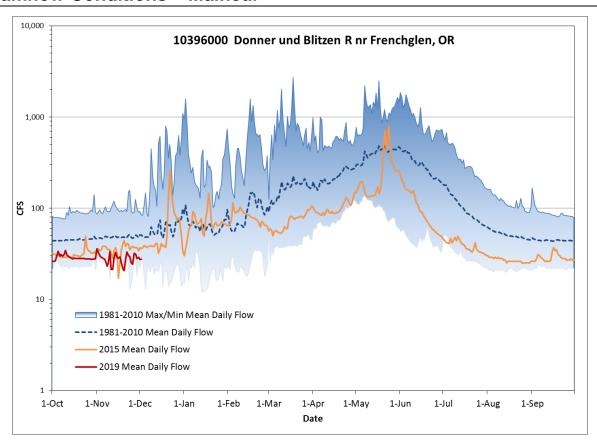
Streamflow Conditions by County - November



Streamflow Conditions - Mid Coast



Streamflow Conditions - Malheur



Streamflow Conditions - Grande Ronde

