Oregon Water Conditions Report September 18, 2017



Statewide mountain precipitation for the water year remains well above normal. As of September 17, precipitation for the water year (based upon SNOTEL data) is at 122 percent. According the National Weather Service's Weather Prediction Center, Oregon is forecast to receive from a trace of precipitation (SE Oregon) to nearly 6" of precipitation (central Cascades) over the next 7 days. This is a result of a series of disturbances originating from the Gulf of Alaska. This precipitation will provide first measurable amounts of rain in quite some time for many locations, with some accumulating snow above 5000 feet in the mountainous regions.

The National Weather Service has issued a <u>Flash Flood Watch</u> for fire burn areas in portions of Northwest Oregon, including the Cascades in Lane County, Central Columbia River Gorge, Northern Oregon Cascades, and Western Columbia River Gorge. This Flash Flood Watch includes the Eagle Creek burn area, the Whitewater burn area, and the Separation burn area. The watch is in effect through Wednesday (9/20/2017) morning.

Despite the welcome precipitation this week, drier than normal conditions continue to spread across Oregon. Due to continuing higher than normal temperatures and below normal precipitation, the <u>US Drought Monitor</u> now indicates that almost 78 percent of Oregon is now categorized as "abnormally dry" along with 43 percent of the state that has now been categorized as in "moderate drought".

Most of Oregon was much warmer than normal for the month of August. The above average temperatures for the <u>past three months</u> have reversed the cooler than normal trend that we started the year with. June-August 2017 is the 2nd warmest such period in Oregon in the 123 year record (2015 is #1). August of 2017 was the warmest month on record.

Over the next <u>8 to 14 days</u>, the NOAA Climate Prediction Center is forecasting above normal temperature probabilities across Oregon. The accompanying precipitation outlook is for below normal precipitation across the western half of the state and normal probability for the remainder.

The NOAA Climate Prediction Center's most recent <u>three month outlook</u> continues to indicate a high likelihood of above normal temperatures for Oregon. There is an equal chance of above or below normal precipitation between now and November. The next outlook will be issued on September 21, 2017.

The Climate Prediction Center has recently issued a La Niña Watch for the upcoming 2017-18 fall-winter season. There is an increasing chance (~55-60%) of La Niña during the Northern Hemisphere fall and winter 2017-18. For in-depth discussions, refer to the <u>diagnostic discussion</u> or the very informative <u>blog</u> by CPC contractor Emily Becker. The situation continues to be monitored and any changes will be made to the status by the Climate Prediction Center.

Statewide streamflows for the month of August were 85 percent of normal. This is down slightly from 86 percent last month. Regionally streamflow conditions were balanced at 85 percent for both east and west of the Cascades.

As of September 15, streamflows have continued to decline and are now at 74 percent of normal. Of note, flows in the Umatilla, South Coast, Willamette, John Day, and Sandy Basins are all less than 55 percent of normal. Flows in the Umatilla continue to rank the lowest in the state at 40 percent but the South Coast and Willamette are not far behind (or ahead) at less than 50 percent of normal. Short term weather outlooks indicate that this downward trend will slow temporarily but may continue.

Most of the state's water supply reservoirs are at normal levels for this time of year.

<u>Willamette</u> and <u>Rogue</u> project reservoirs remain on track this summer. <u>Hills Creek Reservoir</u> in the Willamette Basin was held to lower than normal levels for maintenance projects. Minimum streamflow targets are projected to be met for the rest of the season. <u>Central Oregon</u> reservoirs are between 33 and 80 percent of capacity. <u>Eastern Oregon</u> reservoirs are between 20 and 60 percent of capacity. All are continuing to release stored water for the supply season. While this is good news for entities that have access to storage releases, individuals that rely on live streamflows are experiencing late season shortages in some areas of the state. For the most recent near real-time, site-specific reservoir conditions (teacup diagrams) visit the <u>USBR</u> or <u>USACE</u> websites.

Rain has helped to dampen wildfires but concern remains in some areas. Fire potential is listed as "High" in large areas of central and southwest Oregon. The Oregon Department of Forestry <u>Significant Fire Potential</u> map provides the latest detail. Information and updates on current and developing wildfire conditions can be accessed at the <u>ODF Wildfire Blog.</u> For statewide incident-specific information refer to the <u>InciWeb</u> incident reporting system.

Data & Products:

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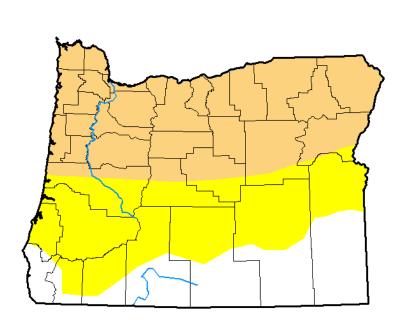
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Website: http://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?OR

U.S. Drought Monitor Oregon

September 12, 2017

(Released Thursday, Sep. 14, 2017) Valid 8 a.m. EDT



Drought Conditions (Percent Area)							
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	
Current	22.33	77.67	43.41	0.00	0.00	0.00	
Last Week 09-05-2017	22.33	77.67	13.50	0.00	0.00	0.00	
3 Month s Ago 06-13-2017	100.00	0.00	0.00	0.00	0.00	0.00	
Start of Calend ar Year 01-03-2017	65.31	34.69	5.29	0.00	0.00	0.00	
Start of Water Year 09-27-2016	0.00	100.00	50.59	12.30	0.00	0.00	
One Year Ago 09-13-2016	0.00	100.00	50.59	12.30	0.00	0.00	

Intensity:

D0 Abnormally Dry D2 Severe Drought



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

Author: Richard Tinker CPC/NOAA/NWS/NCEP



http://droughtmonitor.unl.edu/

Compared to this time last year:



U.S. Drought Monitor



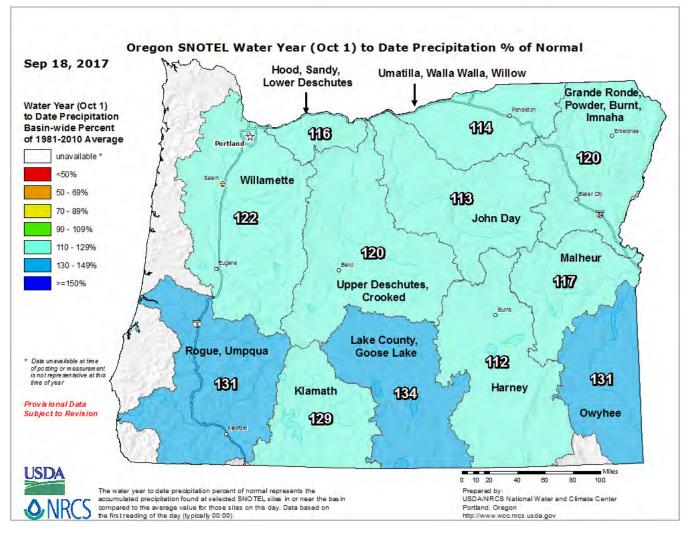


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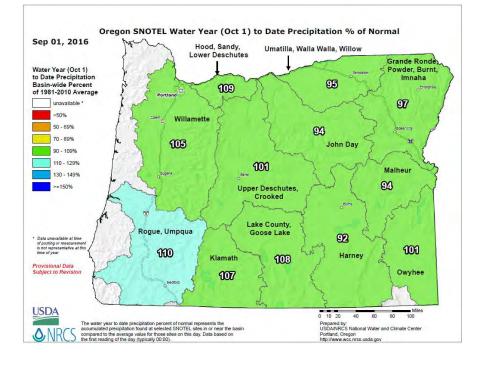
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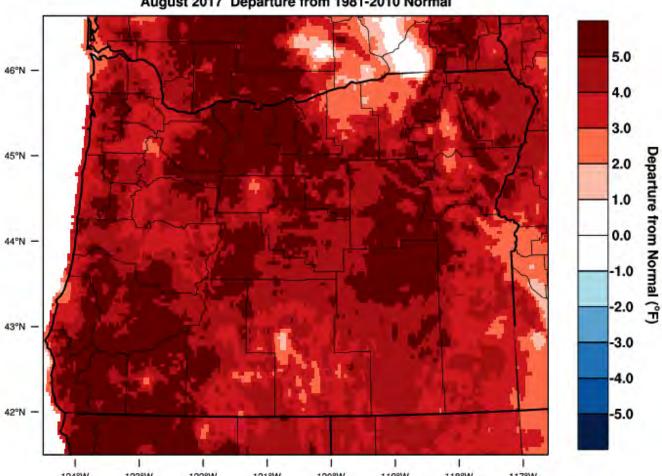
Compared to this time last year -



Temperature – (1 Month) Departure from Normal

Website: http://www.wrcc.dri.edu/wwdt/index.php?folder=mdn1

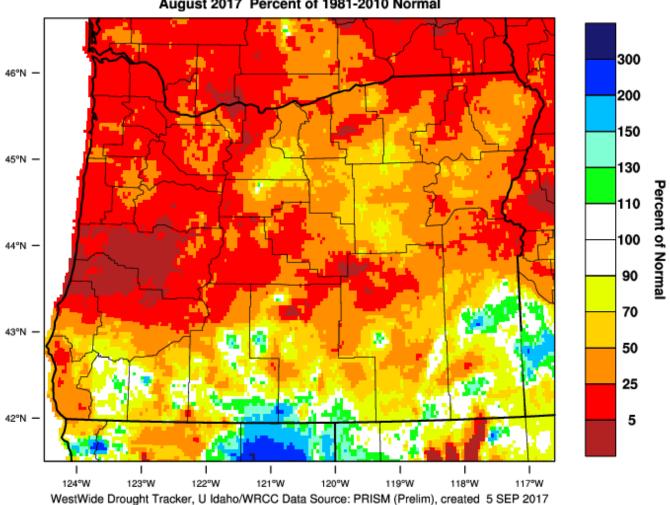
PRISM > Temperature Anomaly 1 Month > Oregon



Oregon - Mean Temperature August 2017 Departure from 1981-2010 Normal

124°W 123°W 122°W 121°W 120°W 119°W 118°W 117°W WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 5 SEP 2017 Website: http://www.wrcc.dri.edu/wwdt/index.php?folder=pon1

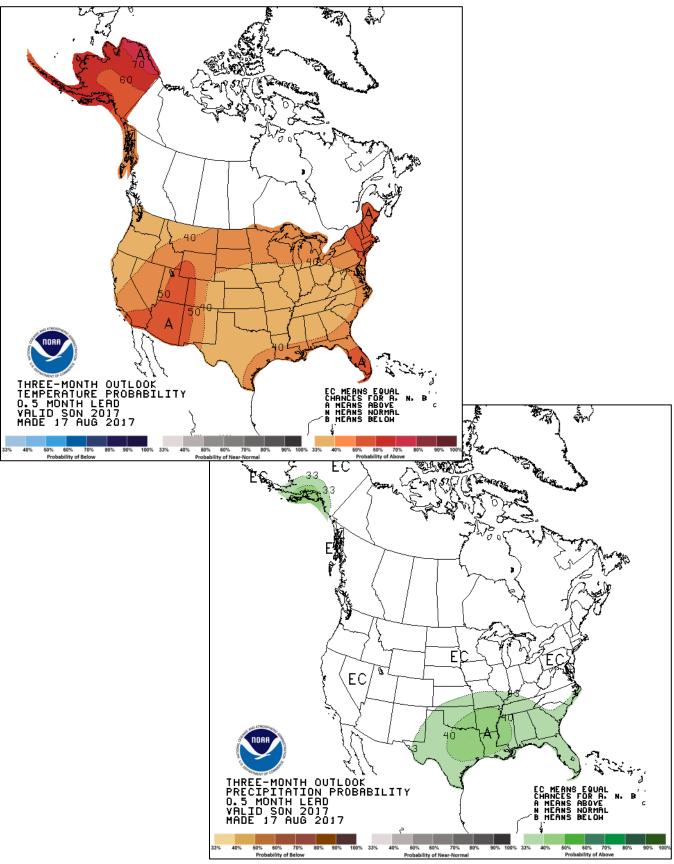
PRISM > Precipitation Anomaly 1 Month > Oregon



Oregon - Precipitation August 2017 Percent of 1981-2010 Normal

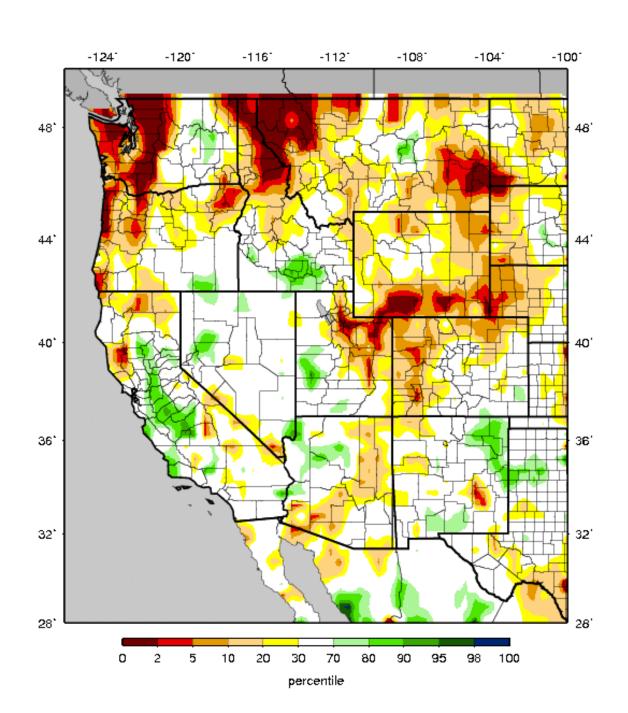
September-October-November – Follow link for the latest information.

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

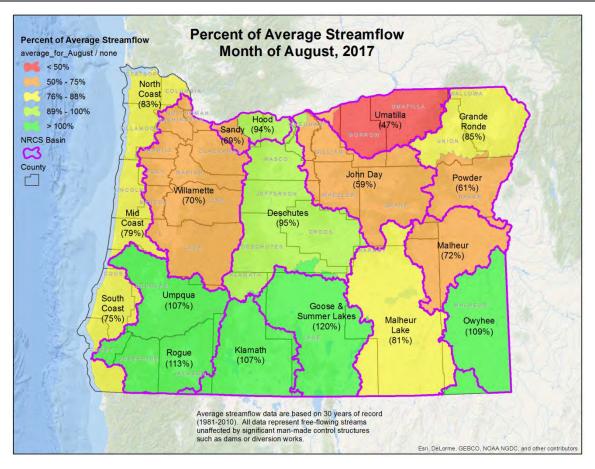


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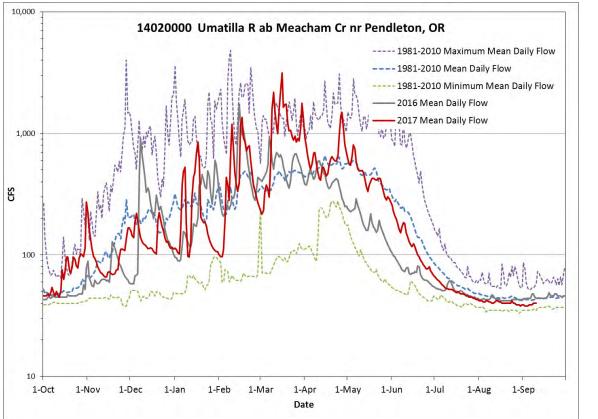
http://www.hydro.washington.edu/forecast/monitor/curr/conus.mexico/west.vic.sm_qnt.gif

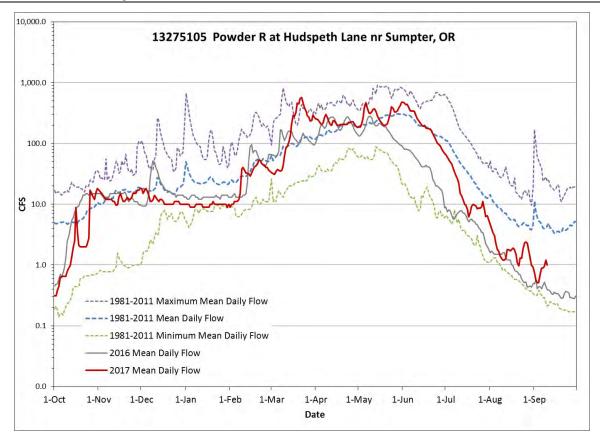


VIC Soil Moisture Percentiles (wrt/ 1916-2004) Western United States - 20170917



Streamflow Example – Umatilla





Streamflow Example – John Day

