Oregon Water Conditions Report August 21, 2017



The drought status for Oregon has been updated to reflect an even broader area of drier than normal conditions. Due to continuing higher than normal temperatures and below normal precipitation, the <u>US Drought Monitor</u> now indicates that over 58 percent of Oregon is categorized as "abnormally dry". This areal coverage continues to increase and is likely to intensify between now and the end of the water year (September 30).

With the exception of the northwest corner of the state, most of Oregon was much warmer than normal for the month of July. The above average temperatures for the past three months have reversed the cooler than normal trend that we started the year with. May-July 2017 is the 5th warmest such period in Oregon in the 123 year record (May-July 2015 is #1)

Temperatures for the past two weeks have been cooler but 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 state.

The NOAA Climate Prediction Center's most recent three month outlook 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.

Statewide mountain precipitation for the water year remains well above normal. As of August 18, precipitation for the water year (based upon SNOTEL data) is at 124 percent. However, even with the recent rain showers, precipitation for the past few months has been well below normal. This lack of precipitation, combined with sustained above average temperatures, continues to contribute to an increase in water demand as well as a reduction in streamflow in some areas of the state.

El Niño Southern Oscillation conditions are projected to remain neutral through fall of 2017. Sea surface temperatures in the equatorial Pacific are slightly warmer than normal, but atmospheric conditions are not reflective of El Niño. Unfortunately these "neutral" conditions do not provide much certainty about the upcoming fall and winter outlooks for the Pacific Northwest. By comparison, the winters of 2013-14 with below normal precip/normal temperatures and 2014-15, with near normal precip/warm temperatures were ENSO neutral years. 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 July were 86 percent of normal for this time of year. Regionally during the month of July, streamflow conditions east of the Cascades were at 83 percent and 90 percent of normal on the west side. Statewide, this is the first month that stream flows have been below normal since last January.

Some relief from recent hot and dry conditions has temporarily slowed the decline in stream flows over the past week. As of late last week, streamflows are holding statewide at 86 percent of normal. Of note, flows in the Powder, John Day, and Malheur Basins are less than 70 percent of normal. Flows in the Umatilla are the lowest in the state at 40 percent. Short term weather outlooks indicate that this downward trend is likely to continue.

Most of the state's water supply reservoirs are at normal to above normal levels for this time of year. Willamette and Rogue project reservoirs remain on track this summer. Hills Creek Reservoir in the Willamette Basin is being held to lower than normal levels for maintenance projects. Minimum streamflow targets are projected to be met for the rest of the season. Central Oregon reservoirs are between 40 and 85 percent of capacity. Eastern Oregon reservoirs are between 50 and 80 percent of capacity. All are now releasing stored water for the summer supply season. While this is good news for entities that have access to storage releases, individuals that rely on live streamflows may see late season shortages in some areas of the state. For the most recent near real-time, site-specific reservoir conditions (teacup diagrams) visit the USBR or USACE websites.

All Oregon Department of Forestry fire protection districts are now in fire season. Fire potential is listed as "extreme" in large areas of the state. The ODF Significant Fire Potential map of Oregon provides the latest detail. For the most recent information and updates on developing wildfire conditions, refer to the ODF Wildfire Blog.

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

U.S. Drought Monitor Oregon

August 15, 2017

(Released Thursday, Aug. 17, 2017) Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	41.52	58.48	0.00	0.00	0.00	0.00
Last Week 08-08-2017	44.70	55.30	0.00	0.00	0.00	0.00
3 Month's Ago 05-16-2017	100.00	0.00	0.00	0.00	0.00	0.00
Start of Calendar 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 08-16-2016	0.00	100.00	50.20	12.03	0.00	0.00

Intensity:

D0 Abnormally Dry D3 Extreme Drought
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.

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http://droughtmonitor.unl.edu/

Compared to this time last year:

U.S. Drought Monitor

Oregon

August 16, 2016 (Released Thursday, Aug. 18, 2016) Valid 8 a.m. EDT

	Name	D0-D4	D1-D4	02-04	00-04	DM
Current	0.00	100.00	50.70	12.03	0.00	n.00
Last Week	0.00	100.00	50.20	12.03	0.00	0.00
3 Month's Ago Strayte	33 66	88.34	24.74	1.00	0.00	0.00
Start of Calendar Year	14,52	85.48	80.45	65.33	39.55	0.00
Start of Water Year agaders	0.00	100 60	100.00	100.00	67.29	0.00
One Year Ago	0.00	100.00	100 00	100.00	40.09	0.00

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Author: David Miskus NOAA/NWSINCEPICPC

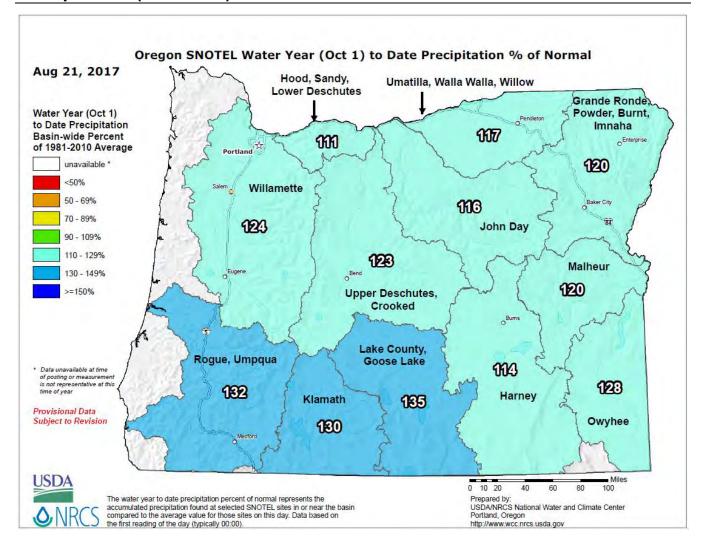
USDA



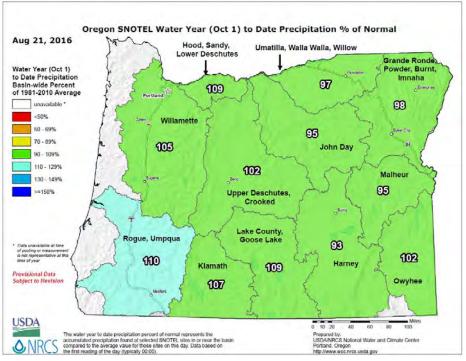




http://droughtmonitor.unl.edu/

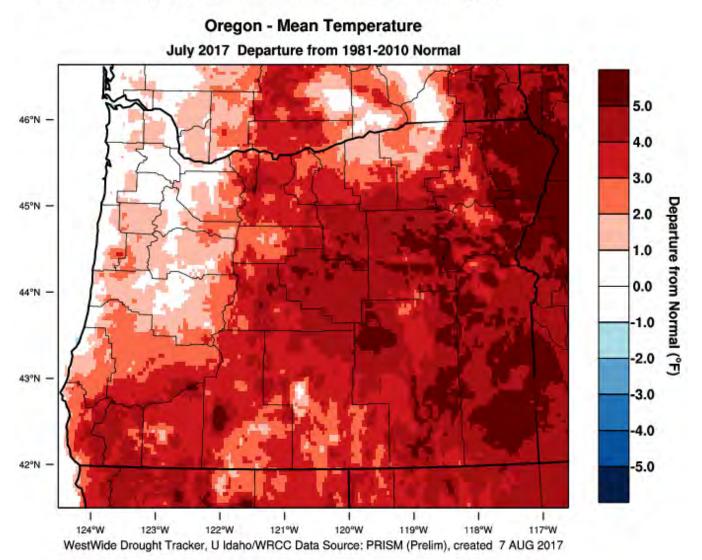


Compared to this time last year -



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

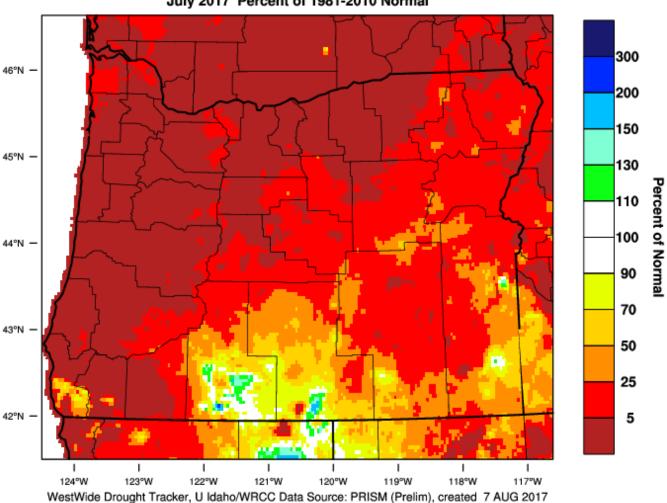
PRISM > Temperature Anomaly 1 Month > Oregon



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

PRISM > Precipitation Anomaly 1 Month > Oregon

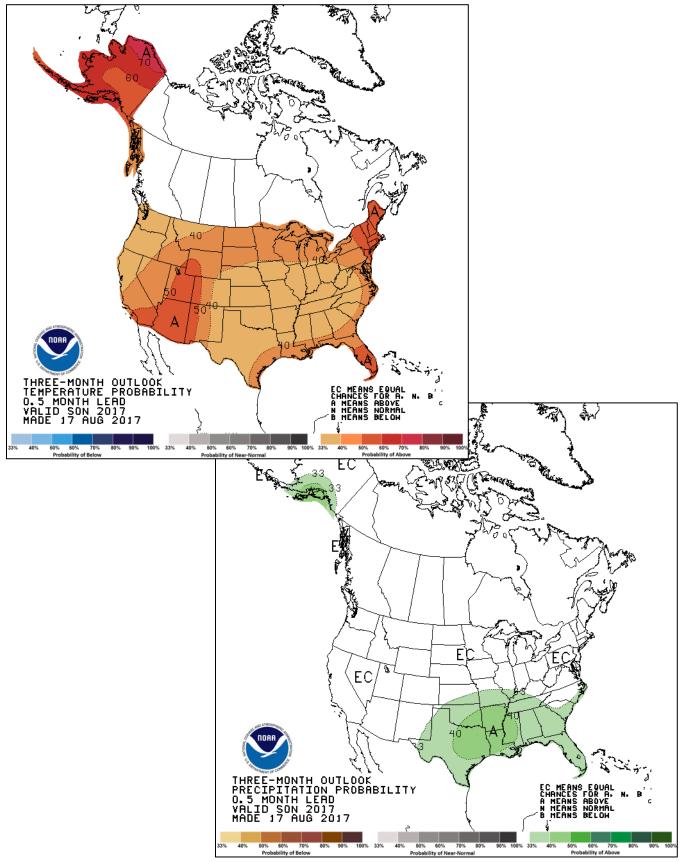
Oregon - Precipitation July 2017 Percent of 1981-2010 Normal



Three Month Temperature and Precipitation Outlook

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

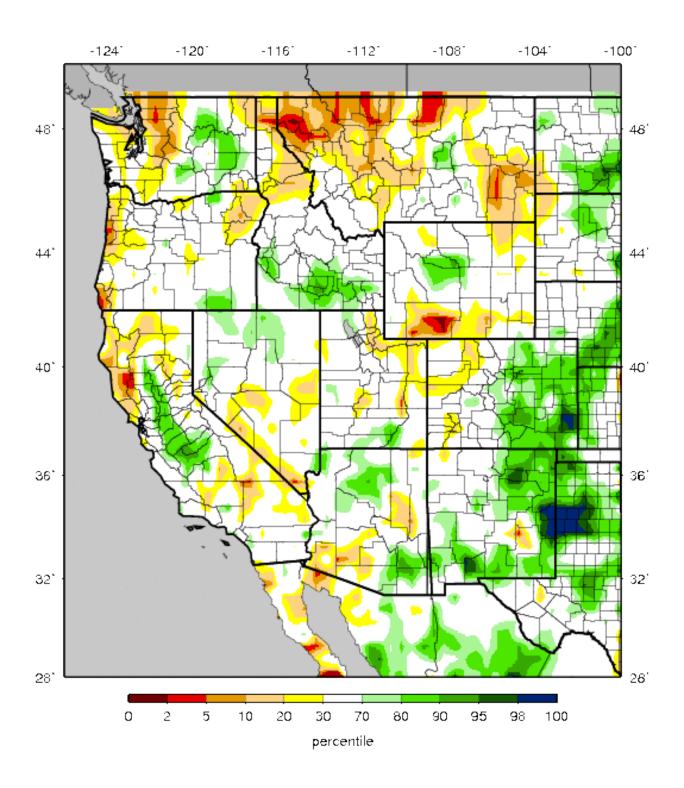
Website: http://www.cpc.ncep.noaa.gov/products/predictions/long_range/seasonal.php?lead=1

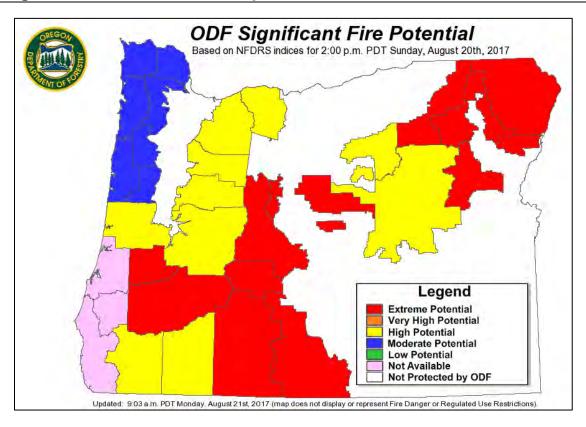


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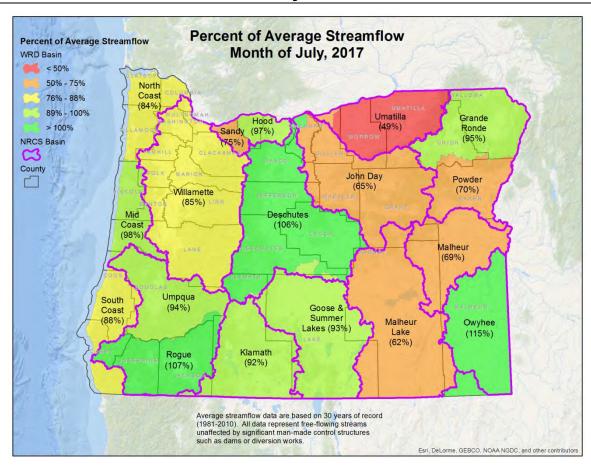
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VIC Soil Moisture Percentiles (wrt/ 1916-2004)
Western United States - 20170819

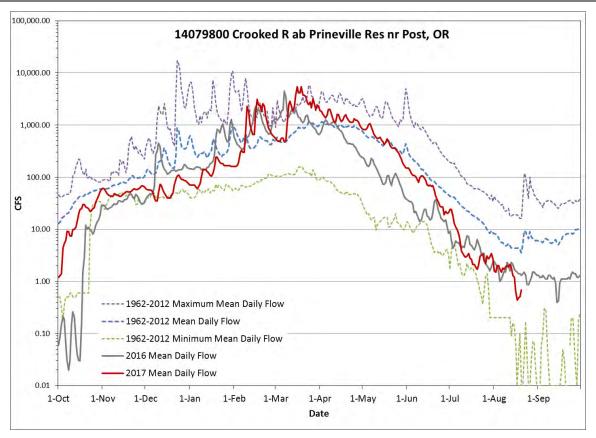




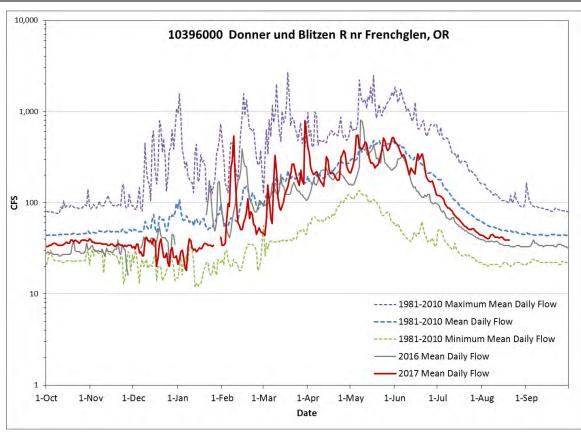
Regional Streamflow Conditions - July



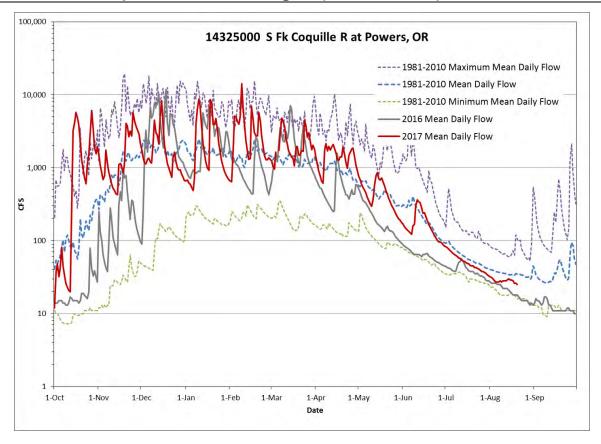
Streamflow Example – Central Oregon (Deschutes)



Streamflow Example – Eastern Oregon (Malheur Lake)



Streamflow Example - Western Oregon (South Coast)



Regional Reservoir Storage Conditions - July

