# Oregon Water Conditions Report August 9, 2017



**The drought status for Oregon has been updated to reflect an even broader area of drier than normal conditions.** Due to continuing hot and dry conditions the <u>US Drought Monitor</u> now indicates that over 45 percent of Oregon is categorized as "abnormally dry". This areal coverage has increased recently and may intensify between now and the end of the water year (September 30).

**Statewide mountain precipitation for the water year remains well above normal.** As of August 8, precipitation for the water year (based upon SNOTEL data) is at 124 percent. However, in the past 50 (+) days precipitation has been well below normal. This lack of precipitation, combined with sustained above average temperatures, is very likely to have contributed to an increase in water demand as well as a reduction in streamflow in some areas of the state.

With the exception of the northwest corner of the state, most of Oregon was much warmer than normal for the month of July. Over the next <u>8 to 14 days</u>, the NOAA Climate Prediction Center is forecasting a range of temperature probabilities from above normal in southwestern Oregon, to normal in the central part of the state, and below normal temperatures in the northeast corner. The precipitation outlook is for normal precipitation probability across the state.

**The NOAA Climate Prediction Center's most recent** <u>three month outlook</u> continues to indicate a high likelihood of above normal temperatures. An increased chance of below normal precipitation is likely in the northwest corner of the state. For the rest of Oregon there is an equal chance of above or below normal precipitation between now and October. The next outlook will be issued on August 17, 2017.

**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, 2013-2014 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 87 percent of normal for this time of

**year.** Regionally during the month of July, streamflow conditions east of the Cascades were at 84 percent and 92 percent of normal on the west side. Statewide, this is the first month that stream flows have been below normal since last January.

Continued hot and dry conditions have impacted water supplies and consequently, as of late last week, streamflows are trending downward at 84 percent of normal. Of note, flows in the Malheur Lake, Umatilla, John Day, and Malheur Basins are less than 60 percent of normal. 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.** <u>Willamette</u> and <u>Rogue</u> project reservoirs remain on track this summer. <u>Hills Creek Reservoir</u> 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. <u>Central Oregon</u> reservoirs are between 50 and 90 percent of capacity. <u>Eastern Oregon</u> reservoirs are between 50 and 90 percent of capacity. <u>Eastern Oregon</u> reservoirs are between 50 and 90 percent of 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 <u>USBR</u> or <u>USACE</u> 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 <u>map</u> of Oregon provides the latest detail. For the most recent information and updates on developing wildfire conditions, refer to the <u>ODF Wildfire Blog</u>.

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

# U.S. Drought Monitor Oregon

#### August 1, 2017 (Released Thursday, Aug. 3, 2017) Valid 8 a.m. EDT





Drought Conditions (Percent Area)								
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4		
Current	54.52	45.48	0.00	0.00	0.00	0.00		
Last Week 07-25-2017	66.40	33.60	0.00	0.00	0.00	0.00		
3 Month s Ago 05-02-2017	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 08-02-2016	0.00	100.00	49.75	0.00	0.00	0.00		

#### Intensity:





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 2, 2016 (Released Thursday, Aug. 4, 2016) Valid 8 a.m. EDT







# Compared to this time last year -



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

# 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 July 2017 Percent of 1981-2010 Normal

## August-September-October – Follow link for the latest information.

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



## Website:

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 - 20170806

## **ODF Significant Fire Potential Map**



# **Regional Streamflow Conditions - July**



## Streamflow Example – North Central Oregon (Umatilla)



# Streamflow Example – Eastern Oregon (Powder)



## Streamflow Example – Western Oregon (Willamette)



# **Regional Reservoir Storage Conditions - July**

