

# Oregon Water Conditions Report November 28, 2016



**In the past several days, high rainfall rates in coastal regions as well as some areas west of the Cascades have caused local high water conditions. Flows are now receding to near normal levels for this time of year.** In areas east of the Cascades, weather conditions have been a little drier. As a result, stream flows in this part of the state are running between average and less than average for this time of year. Of note is that while the accumulation of precipitation since the beginning of the water year (October 1) has been well above normal, snowpack is still lagging. This has been due to above normal temperatures in the past two months. However, while statewide conditions are still well below normal, a recent trend of cooler temperatures has improved snowpack in some areas.

**Precipitation across much of the state has been below average during the past two weeks.** Some areas in central and south central Oregon received less than 50 percent of normal amounts of precipitation. Exceptions were parts of the north and south coast regions that received between 120 and 90 percent. In the past 30 days precipitation has ranged widely across the state from 50 to 150 percent. Refer to the graphics on page 3 for greater detail of both the two week and 30 day precipitation.

**For much of Oregon the latest three month outlook from NOAA's Climate Prediction Center indicates that there is an equal chance of above or below average temperatures expected to continue through February.** Current climate observations now indicate a trend toward the increasing likelihood of a mild La Nina potential. For the Pacific Northwest, La Nina would bring wetter, cooler conditions.

In the last two weeks, temperatures across most of Oregon were above average. Areas across central and eastern parts of the state were 2 to 8 degrees warmer than normal.

**Statewide average streamflows are a little over 100 percent of normal.** This is somewhat higher than the 80 percent seen two weeks ago. Regionally, streamflow conditions east of the cascades are at 75 percent of normal. Westside streams are around 150 percent of normal for this time of year.

**Reservoir storage levels are still expectedly low but early winter rainfall has helped to increase inflows.** Reservoirs in the eastern part of Oregon continue to be well below normal even for this time of year. See page 10 for a statewide map of storage conditions. For site specific reservoir conditions (teacup diagrams) visit the [USBR](#) or [USACE](#) websites.

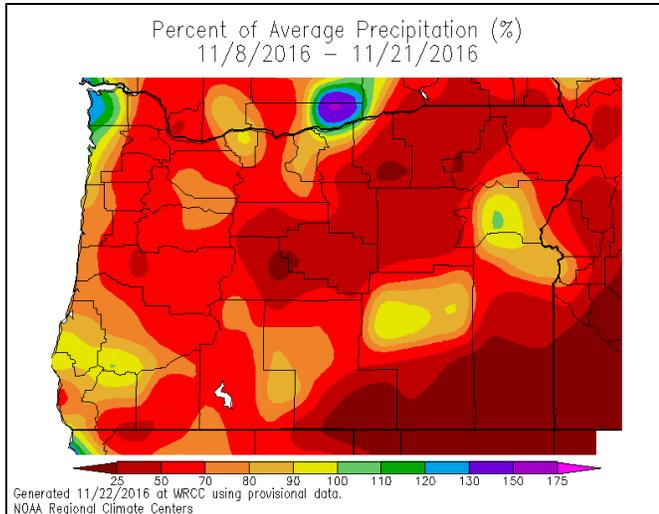
**There has been no change in drought conditions in the past two weeks.** As of November 22, the US Drought Monitor continues to indicate that 56 percent of the state is no longer listed in any drought category. However, 44 percent of the state is still listed in the D0 (abnormally dry) category as well as 23 percent listed as D1 (moderate drought) category. Of note are areas in Baker and Malheur Counties that continue to be listed in the D2 (severe drought) category. Soil moisture models continue to indicate drier than normal conditions within these areas. The effect of recent rainfall on soil moisture is evident in the map on page 7.

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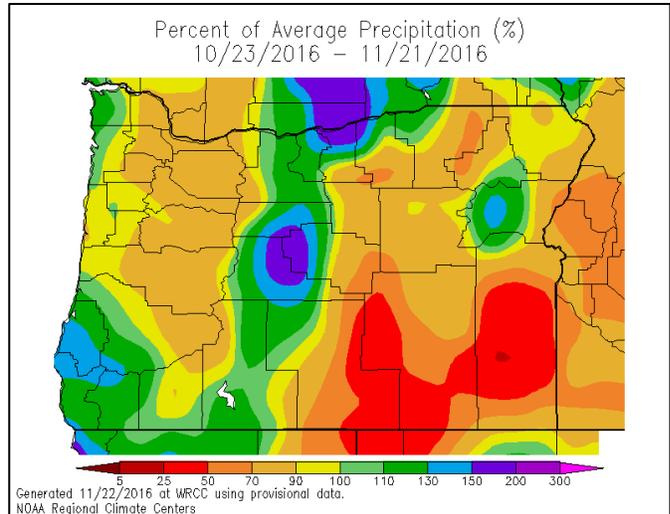
## Precipitation – Percent of Average

Website: [http://www.wrcc.dri.edu/anom/ore\\_anom.html](http://www.wrcc.dri.edu/anom/ore_anom.html)

Last 14 days



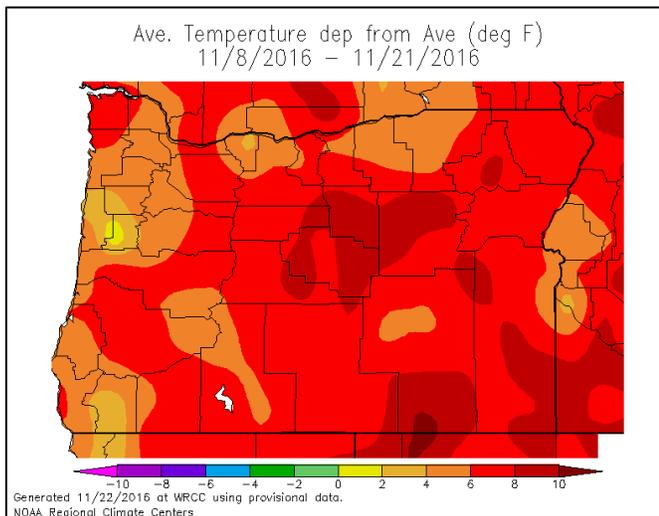
Last 30 days



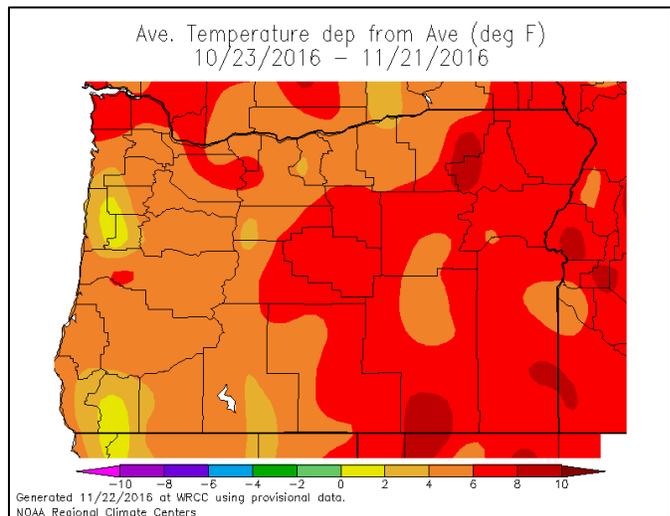
## Temperature - Departure from Average

Website: [http://www.wrcc.dri.edu/anom/ore\\_anom.html](http://www.wrcc.dri.edu/anom/ore_anom.html)

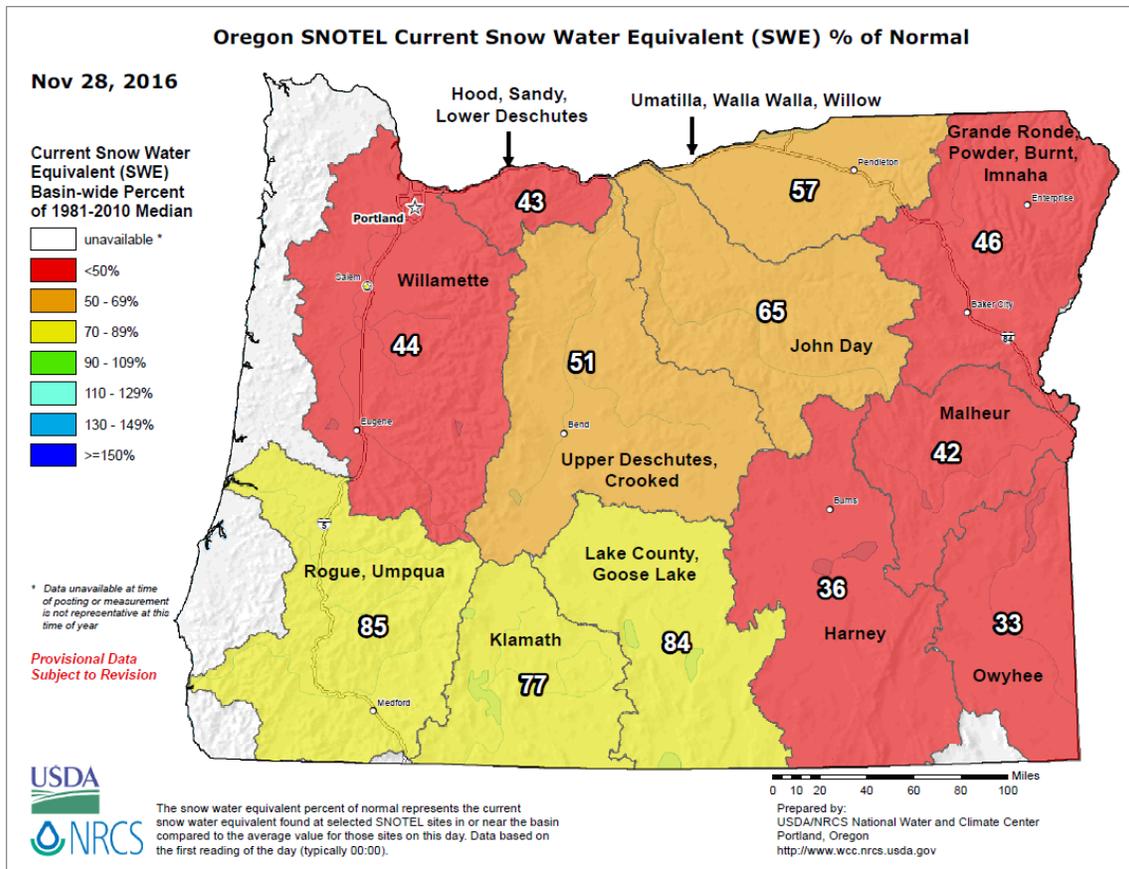
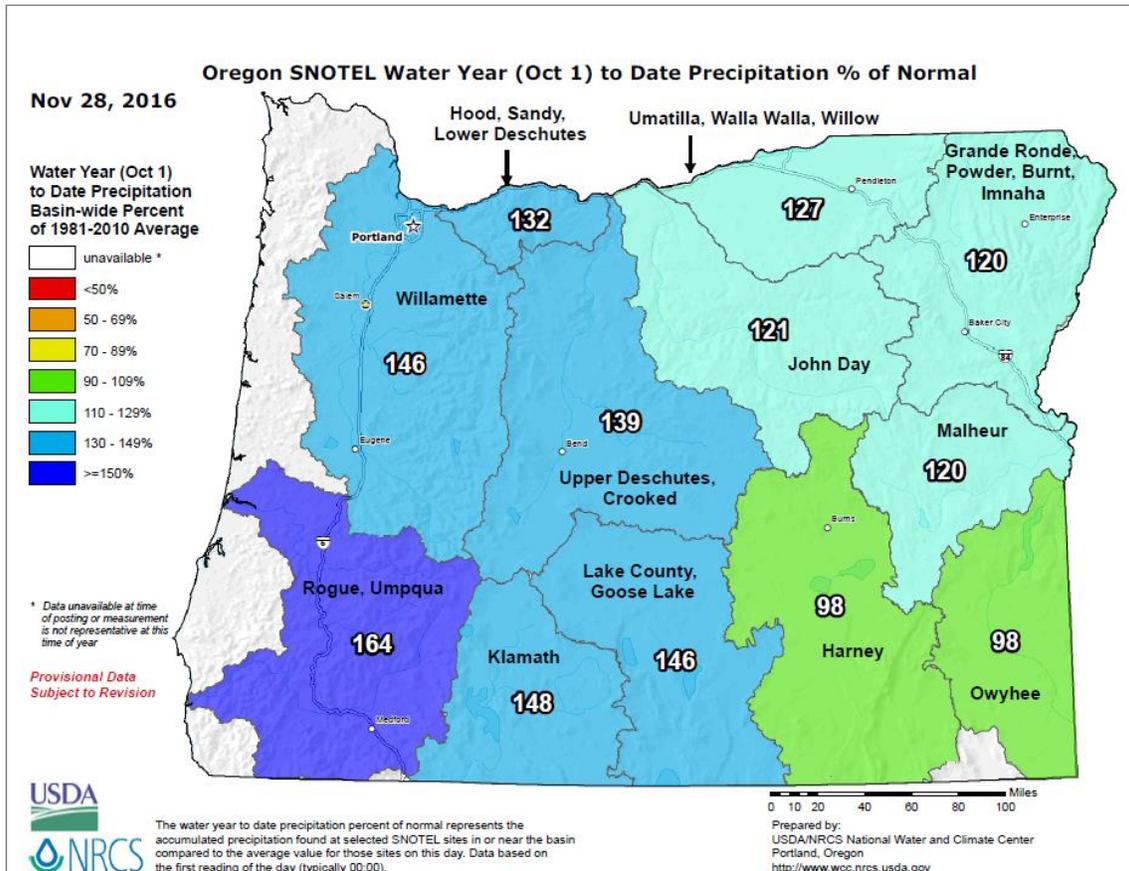
Last 14 days



Last 30 days



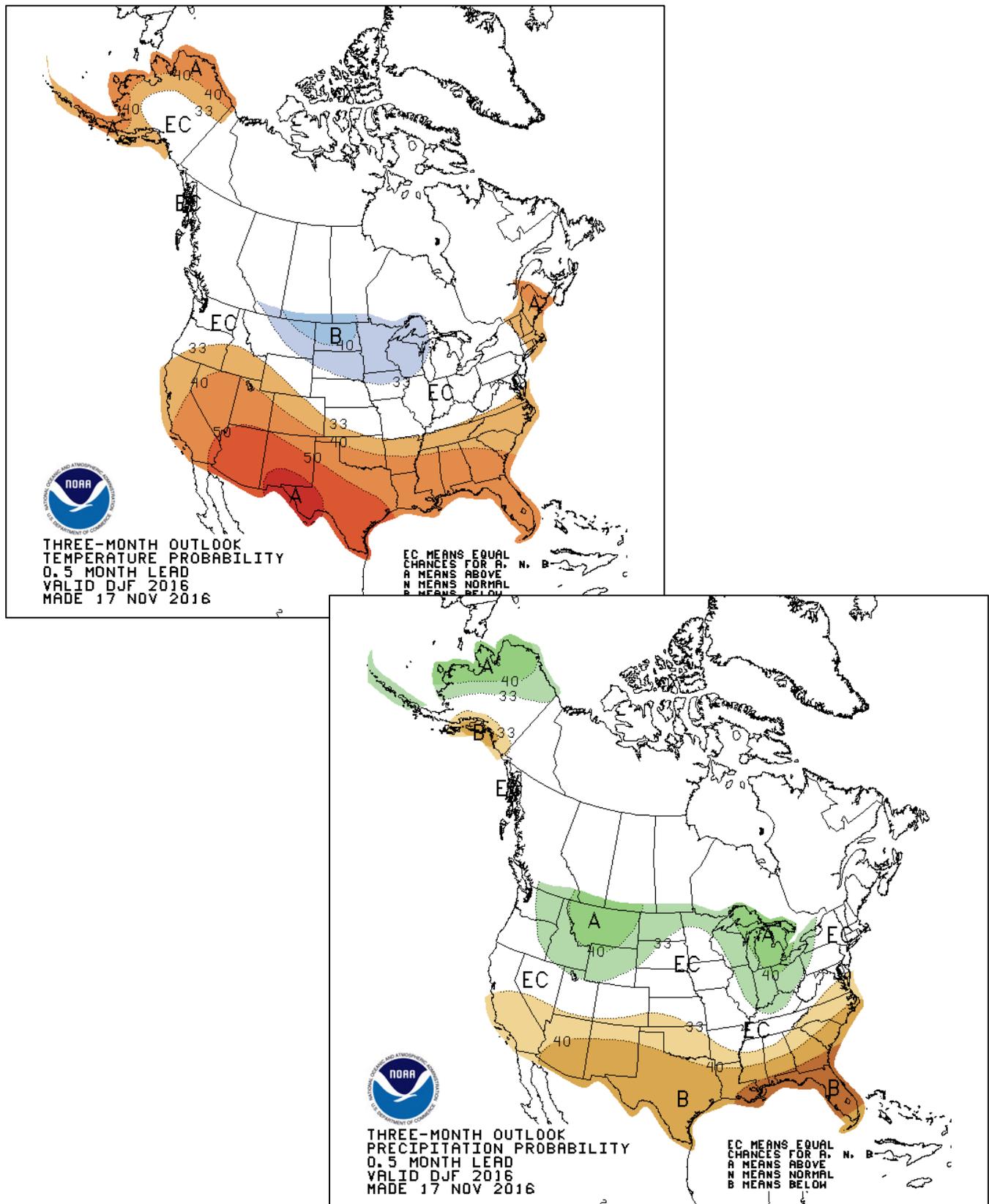
# Precipitation and Snowpack Comparison- Percent of Average



# Three Month Temperature and Precipitation Outlook

December-January-February

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

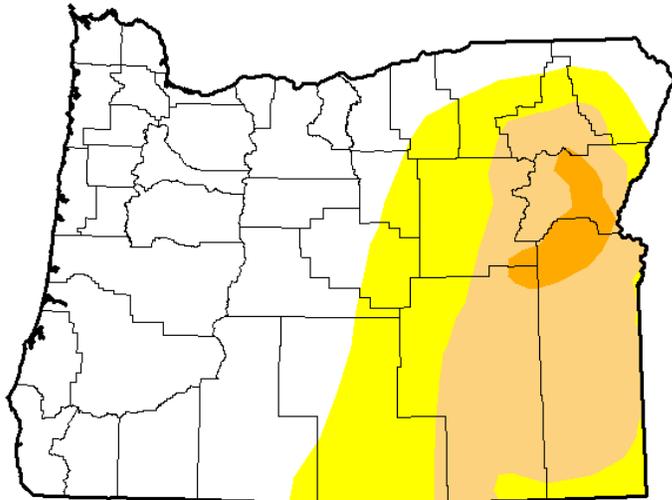


# U.S. Drought Monitor for Oregon

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

## U.S. Drought Monitor Oregon

**November 22, 2016**  
(Released Wednesday, Nov. 23, 2016)  
Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	56.44	43.56	23.22	2.63	0.00	0.00
<b>Last Week</b> 11/15/2016	56.44	43.56	23.22	2.63	0.00	0.00
<b>3 Months Ago</b> 8/23/2016	0.00	100.00	50.21	12.03	0.00	0.00
<b>Start of Calendar Year</b> 12/29/2015	14.52	85.48	80.45	65.33	39.55	0.00
<b>Start of Water Year</b> 9/27/2016	0.00	100.00	50.59	12.30	0.00	0.00
<b>One Year Ago</b> 11/24/2015	0.71	99.29	96.01	90.37	60.69	0.00

*Intensity:*

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

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

**Author:**  
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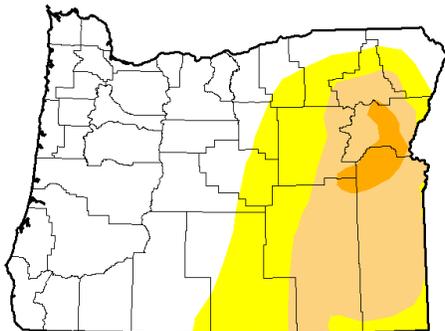


<http://droughtmonitor.unl.edu/>

**Note: No Change from November 8, 2016 report**

## U.S. Drought Monitor Oregon

**November 8, 2016**  
(Released Thursday, Nov. 10, 2016)  
Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	56.44	43.56	23.22	2.63	0.00	0.00
<b>Last Week</b> 11/2/2016	56.44	43.56	27.07	2.63	0.00	0.00
<b>3 Months Ago</b> 8/9/2016	0.00	100.00	50.20	12.03	0.00	0.00
<b>Start of Calendar Year</b> 12/29/2015	14.52	85.48	80.45	65.33	39.55	0.00
<b>Start of Water Year</b> 9/27/2016	0.00	100.00	50.59	12.30	0.00	0.00
<b>One Year Ago</b> 11/9/2015	0.00	100.00	100.00	91.53	60.69	0.00

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**Author:**  
Deborah Bathke  
National Drought Mitigation Center

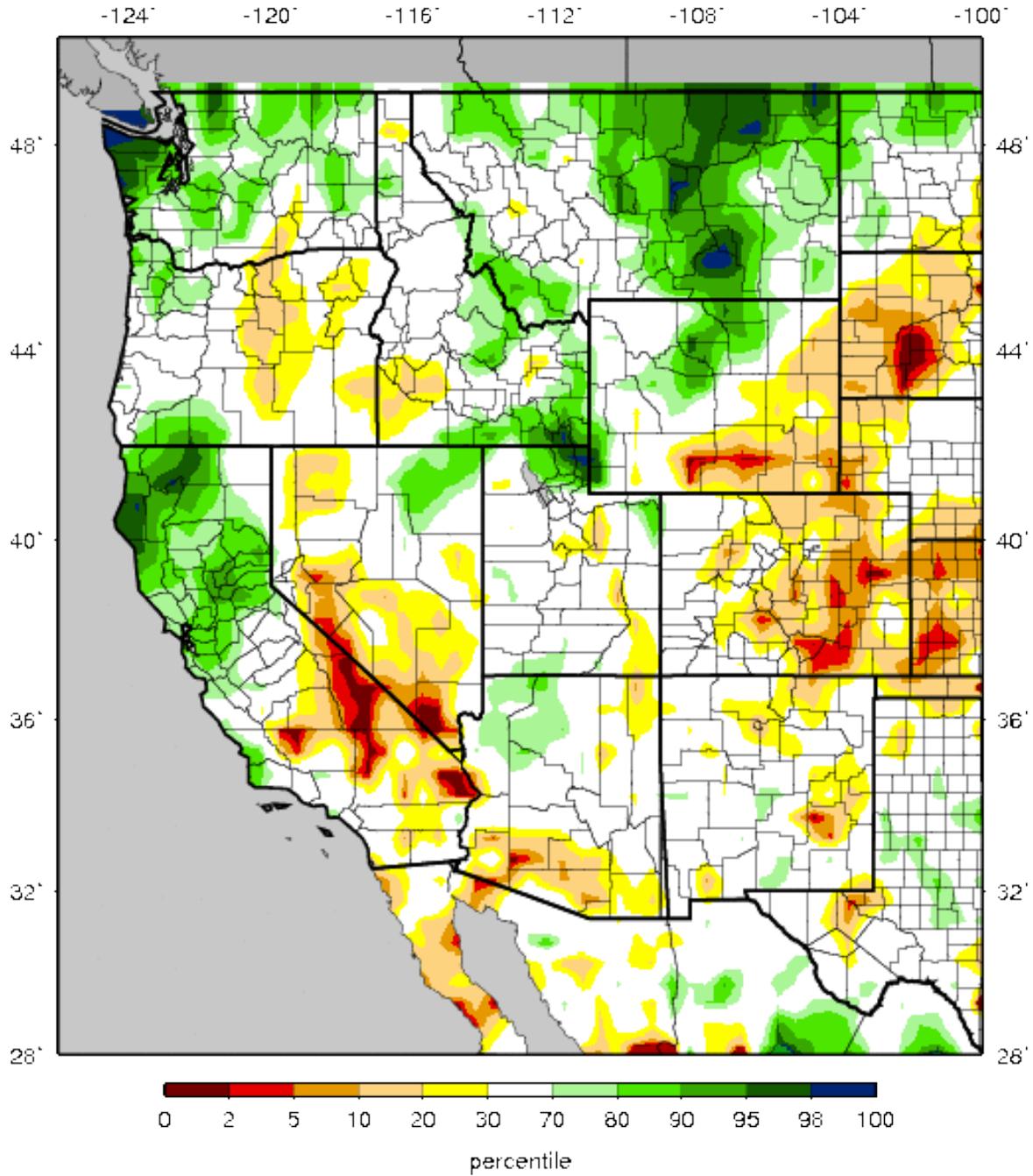


<http://droughtmonitor.unl.edu/>

# Soil Moisture

Website: [http://www.hydro.washington.edu/forecast/monitor/curr/conus.mexico/west.vic.sm\\_qnt.gif](http://www.hydro.washington.edu/forecast/monitor/curr/conus.mexico/west.vic.sm_qnt.gif)

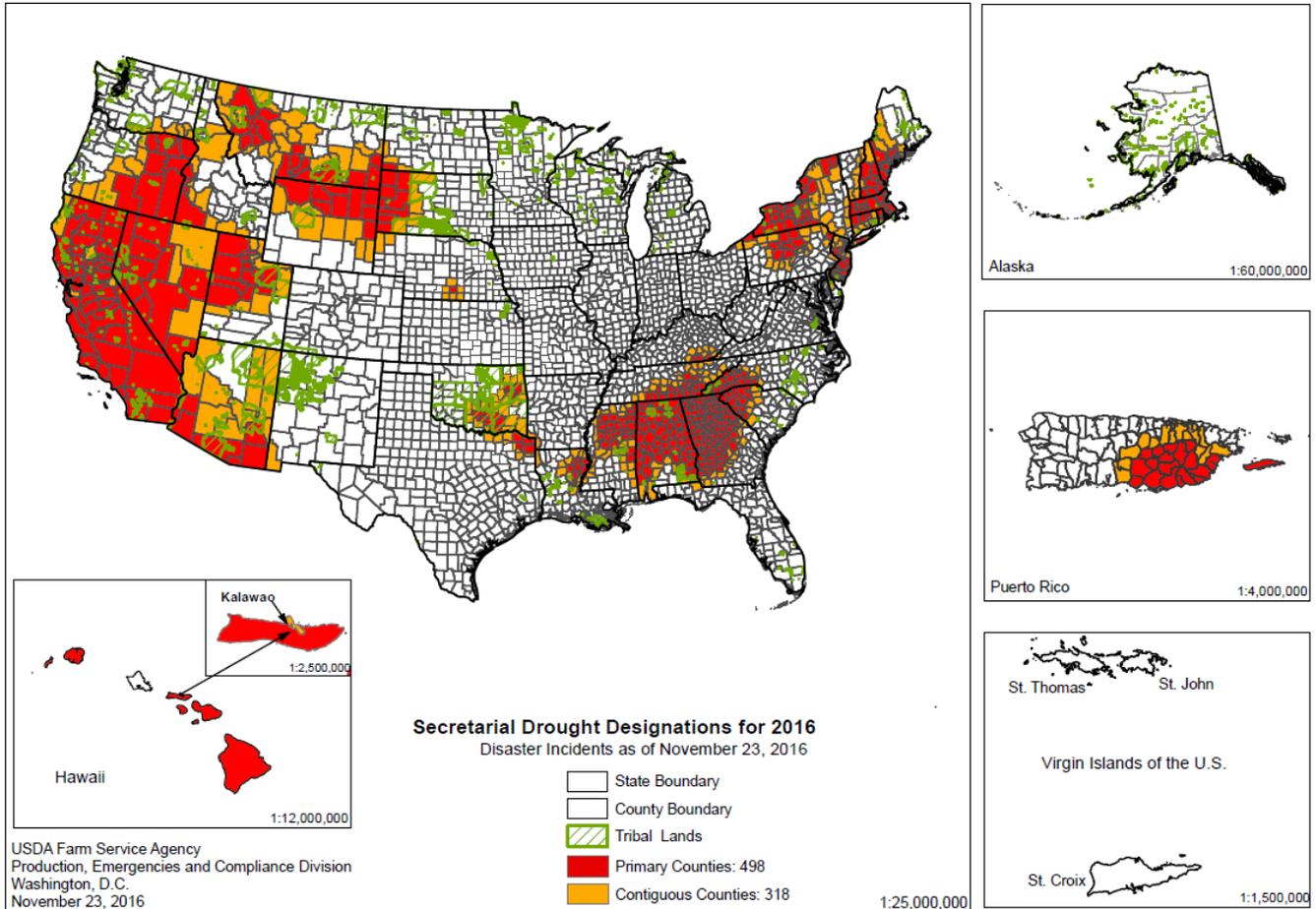
VIC Soil Moisture Percentiles (wrt' 1916-2004)  
Western United States - 20161126



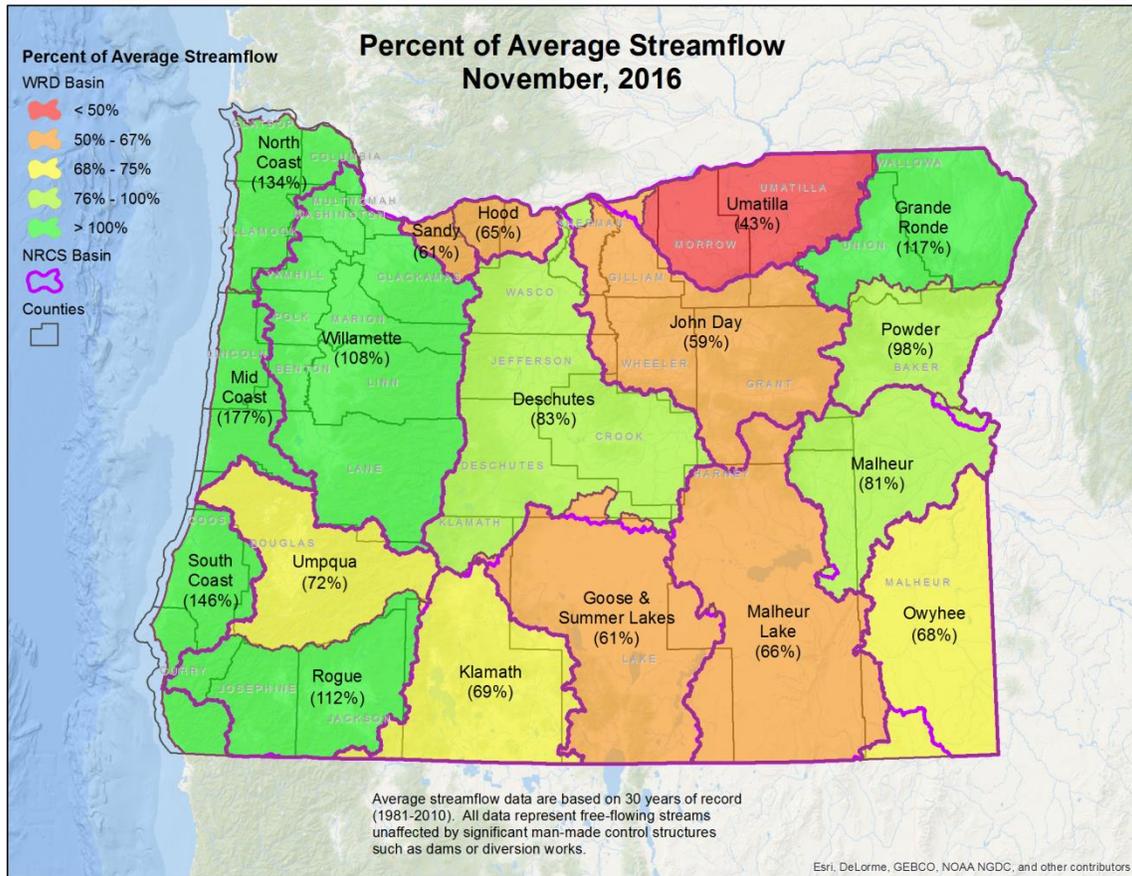
# USDA Federal Drought Designations

Website: <http://www.usda.gov/documents/usda-drought-fast-track-designations.pdf>

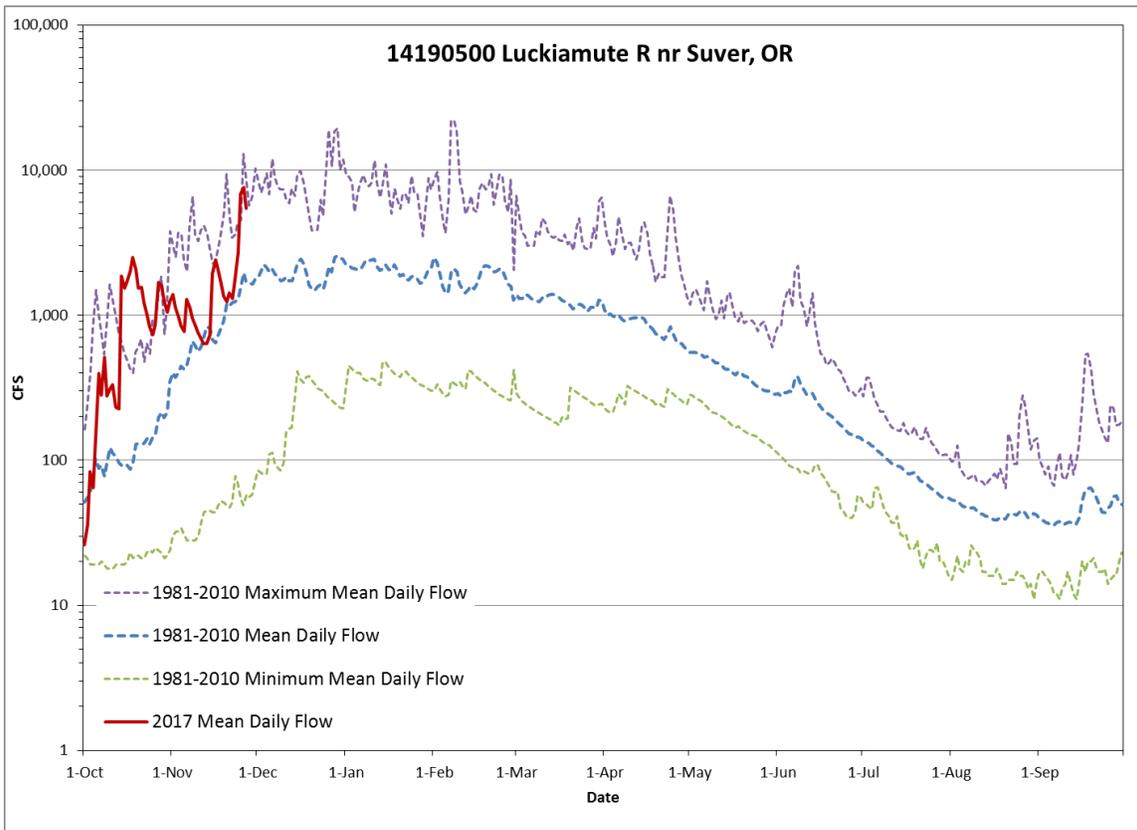
## 2016 Secretarial Drought Designations - All Drought



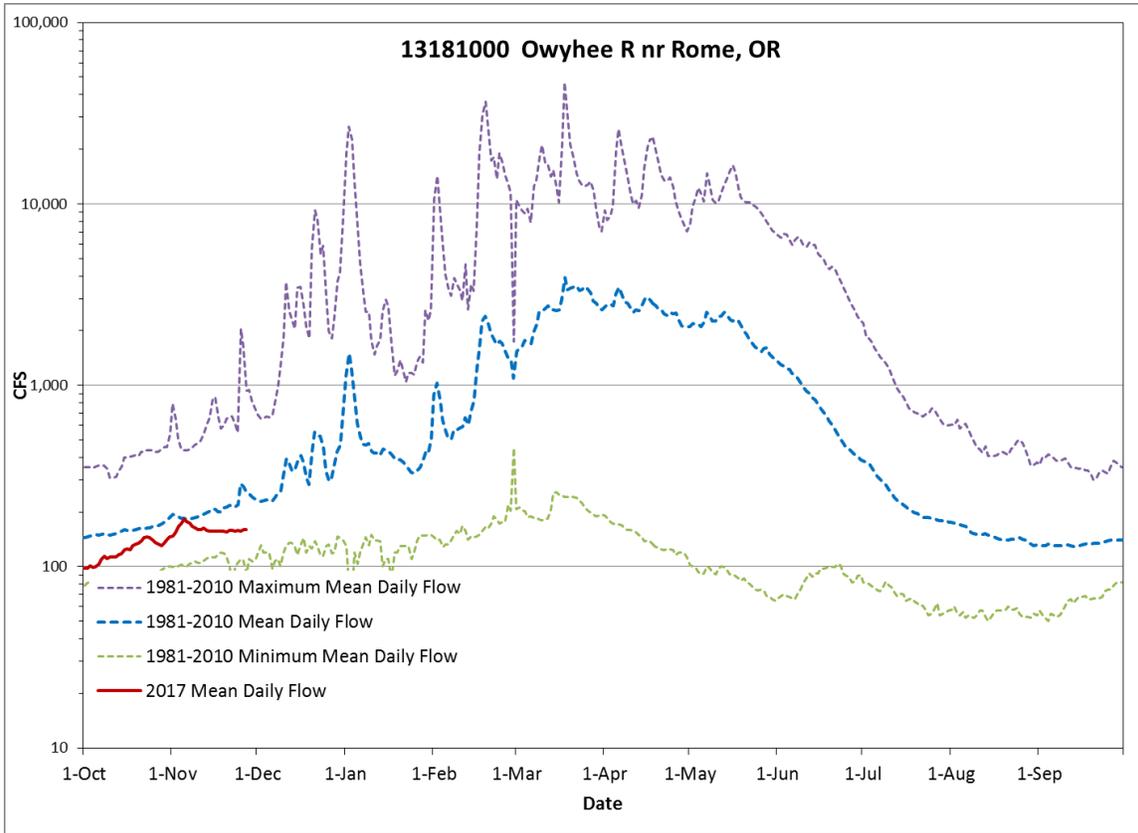
# November Regional Streamflow Conditions



## Streamflow Example - Western Oregon



# Streamflow Example – Eastern Oregon



# Regional Reservoir Storage Conditions

