

# Oregon Water Conditions Report January 23, 2017



**Above average mountain snowpack trend continues.** Mountain snowpack continues to be well above normal across the state, with the exception in the northeast corner of the state where snowpack is at 102 percent in Baker, Union, and Wallowa counties. The statewide average is 132 percent. It is worth noting that last year at this time, the statewide average was 127 percent and was beginning to drop due to warmer and drier conditions. As has been mentioned, the amount of time snowpack remains near or above normal will be critical, and will determine the amount of water available for runoff in the spring.

The NRCS Snow Survey's first monthly water supply report of the season has been released and is available online:

[http://www.wcc.nrcs.usda.gov/ftpref/states/or/watersupply/2017/WSOR\\_2017\\_Jan.pdf](http://www.wcc.nrcs.usda.gov/ftpref/states/or/watersupply/2017/WSOR_2017_Jan.pdf)

The Snow Survey also publishes weekly condition reports on three areas affected by wildfire in eastern Oregon. Because the burned soils can't absorb as much water, these areas experience a higher risk for flash flooding. The reports can be accessed here:

<https://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/or/snow/?cid=nrcseprd854607>

**The most recent three month outlook from NOAA's Climate Prediction Center indicates an equal chance of above or below normal temperatures between now and April.** Precipitation probability is predicted to be above normal in the northeastern corner of the state and equal chances for the rest of the state during the same period.

**Statewide average streamflows for December were almost 90 percent of normal.**

Regionally, streamflow conditions east of the Cascades were almost 80 percent of normal. West of the Cascades streams were over 100 percent of normal for this time of year. Recent conditions (as of January 21) reflect an increase in flows west of the Cascades to over 150 percent. For streams east of the Cascades flows have increased to 115 percent of normal. It should be noted that many of the streams in eastern Oregon are experiencing the effect of ice and are difficult to represent in real time.

Based on the current snowpack conditions, the (NRCS) spring and summer streamflow forecasts are projecting near average to above average streamflows for the water supply season. However, there are several months left in the snow accumulation season, which means there is a lot of uncertainty in these first forecasts of the year.

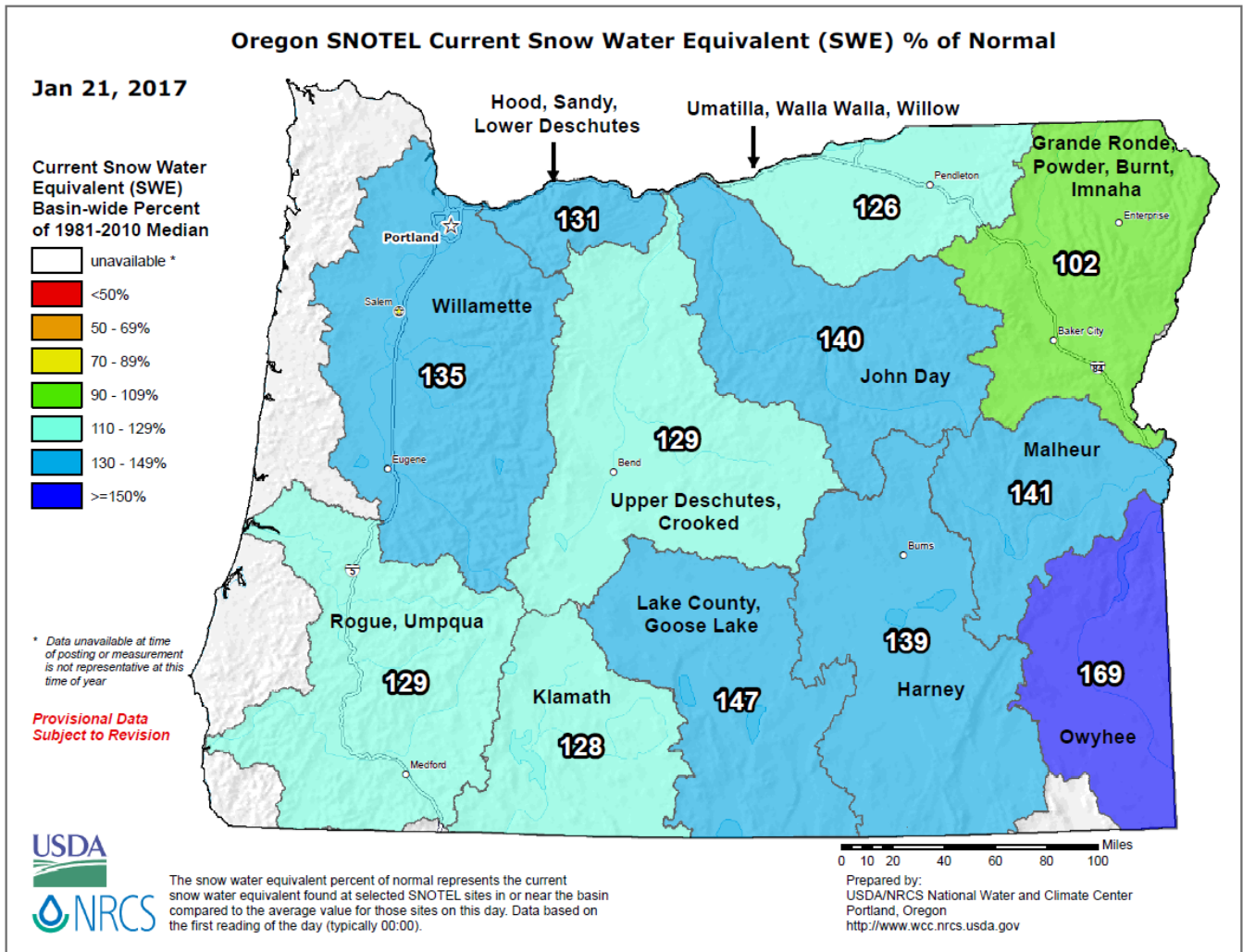
**Early winter rainfall and good snowpack continues to raise hopes of increased reservoir inflows.** A majority of reservoirs in the Willamette and Rogue basins, primarily used for flood

control, are currently being maintained at typically low levels for this purpose. While there has been a recent increase in storage levels, reservoirs used for water supply in the central, southwest and eastern regions of Oregon continue to be below normal for this time of year. Refer to the graphic on page 11 for a statewide map of storage conditions for the end of December. For the most recent, site specific reservoir conditions (teacup diagrams) visit the [USBR](#) or [USACE](#) websites.

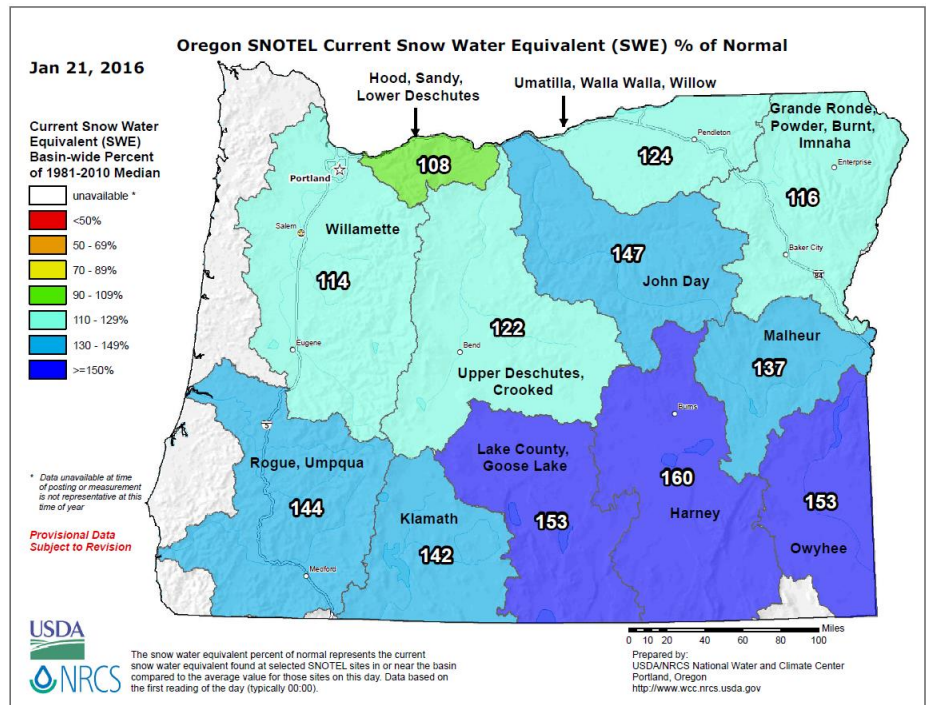
**There has been more change in drought conditions in the past two weeks.** The US Drought Monitor has been updated to indicate that 82 percent of the state is no longer listed in any drought category. 18 percent of the state is listed in the D0 (abnormally dry) category. and 3 percent is listed as D1 (moderate drought) category.

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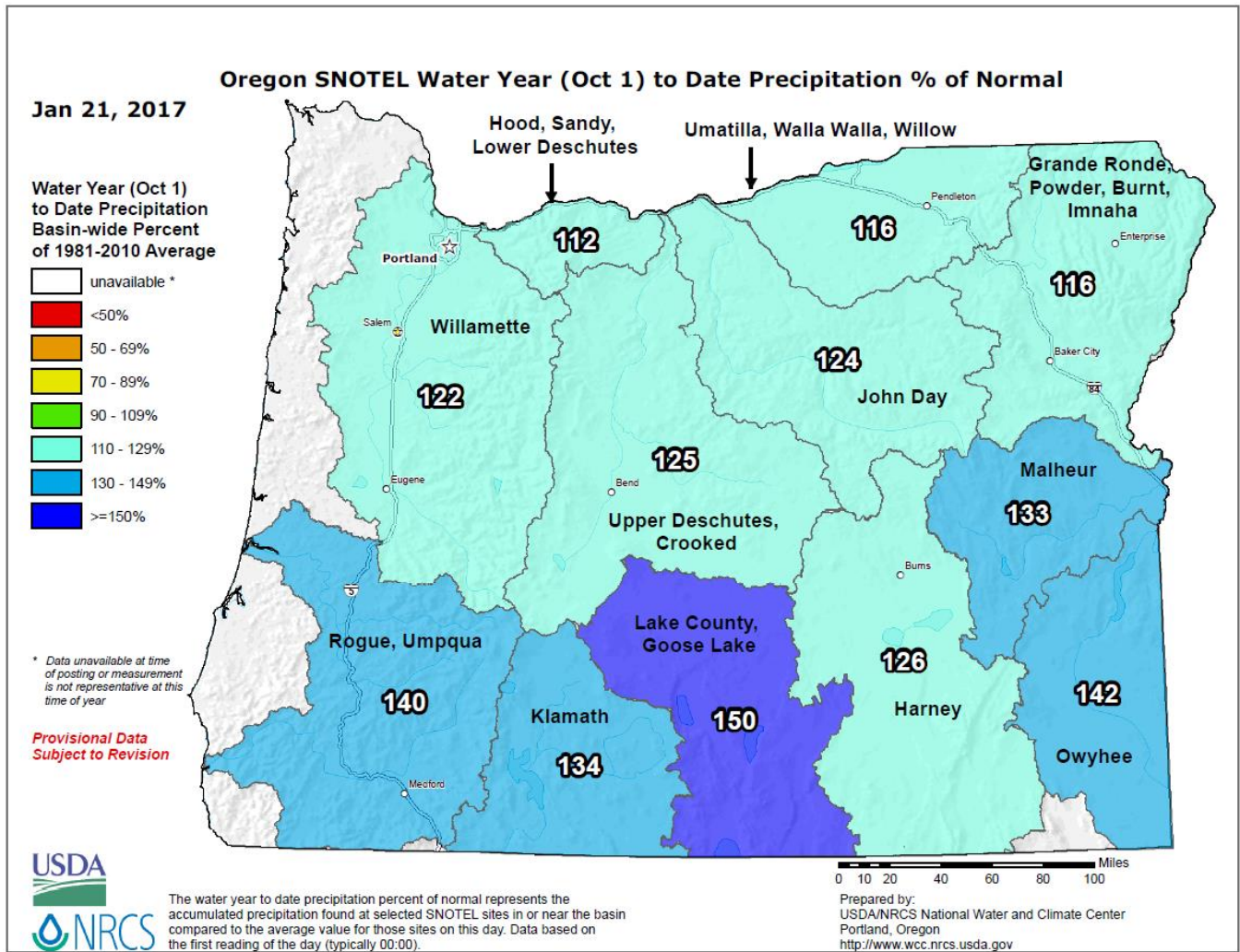
# Snowpack - Percent of Normal



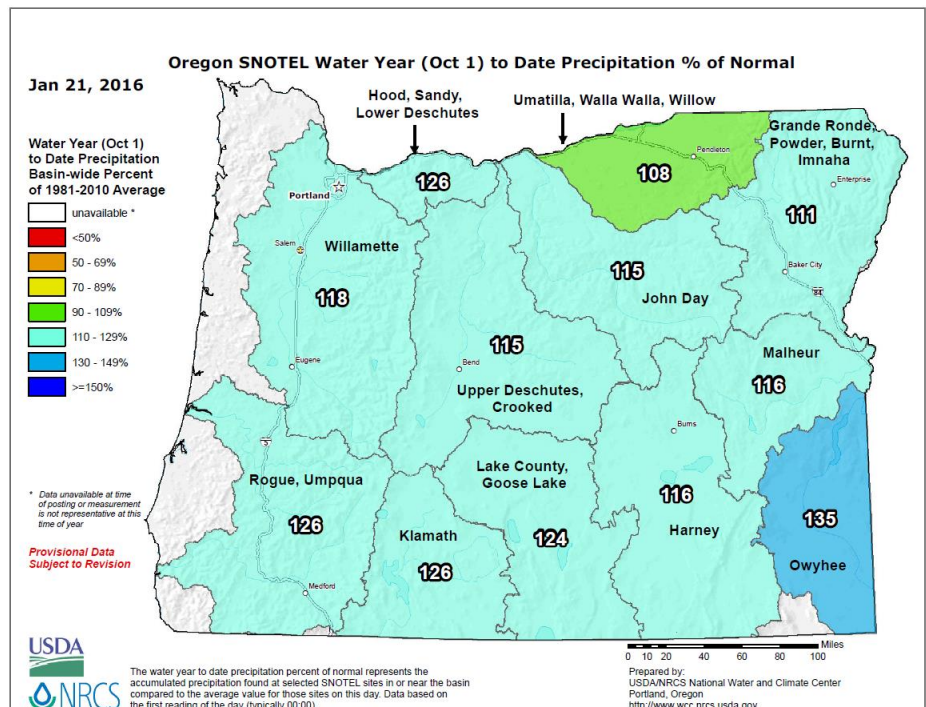
## Compared to this time last year -



# Precipitation (mountain) - Percent of Normal



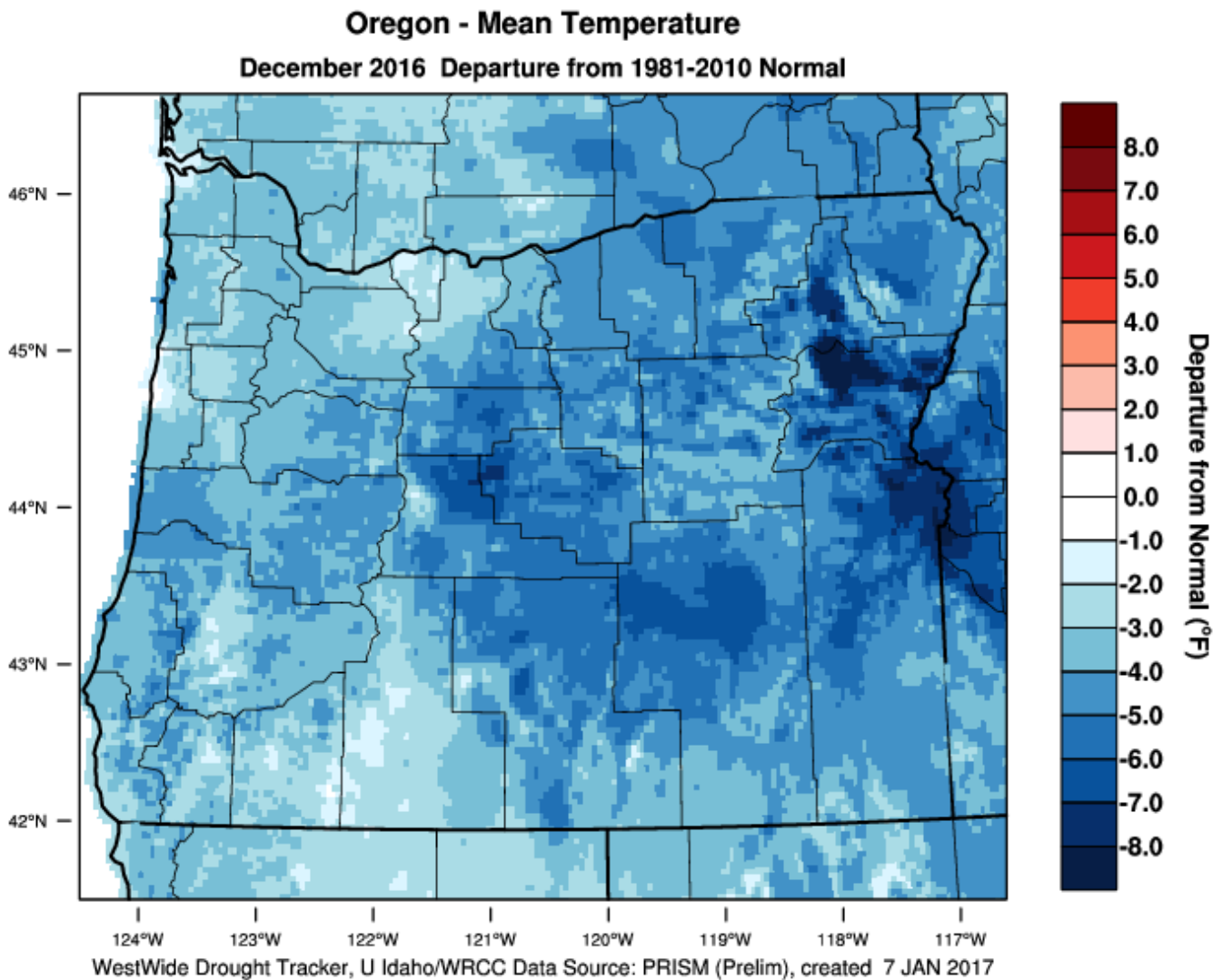
## Compared to this time last year -



## Temperature – (December) Departure from Normal

Website: <http://www.wrcc.dri.edu/wwdt/index.php?region=or>

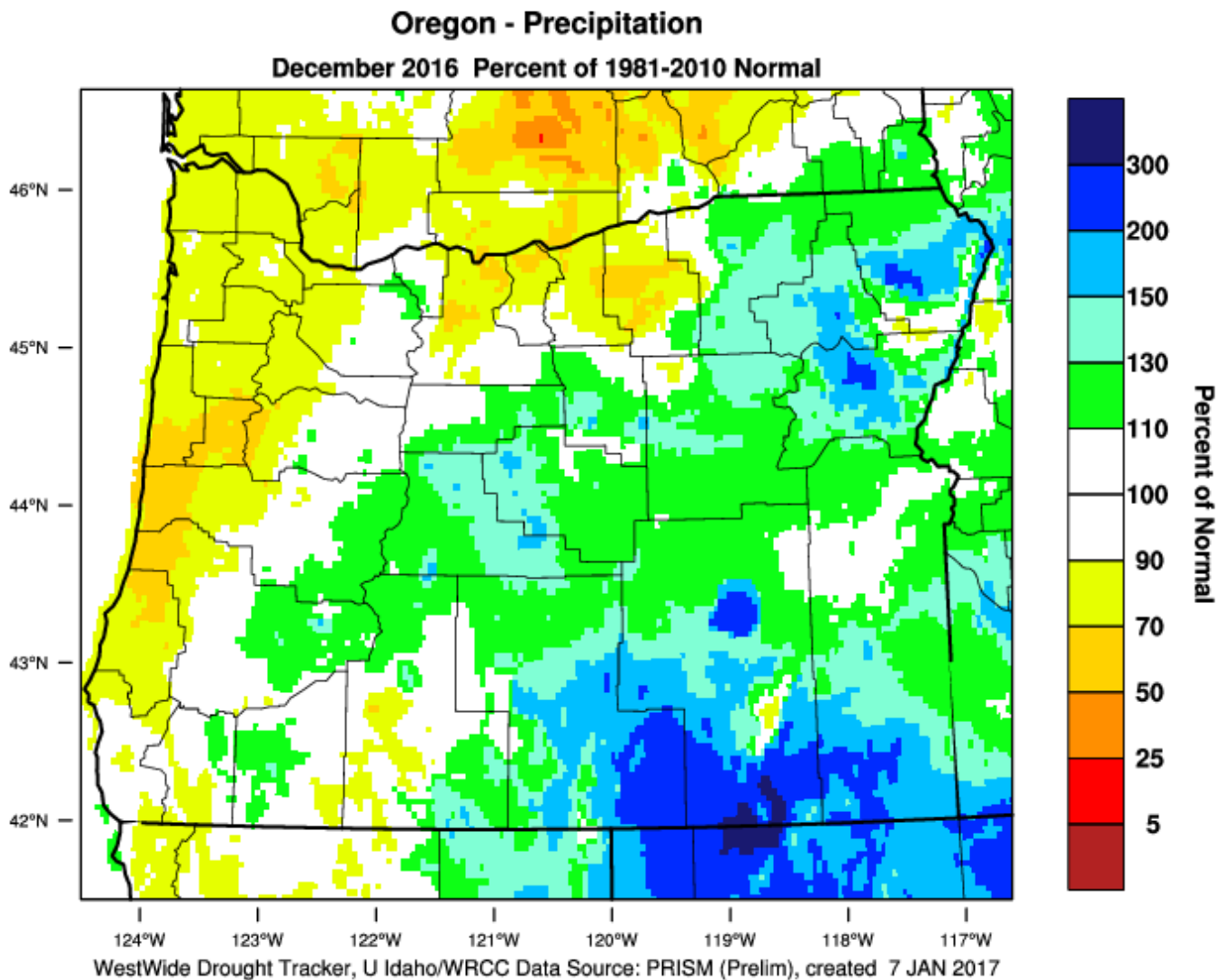
### PRISM > Temperature Anomaly 1 Month > Oregon



## Precipitation – (December) Percent of Normal

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

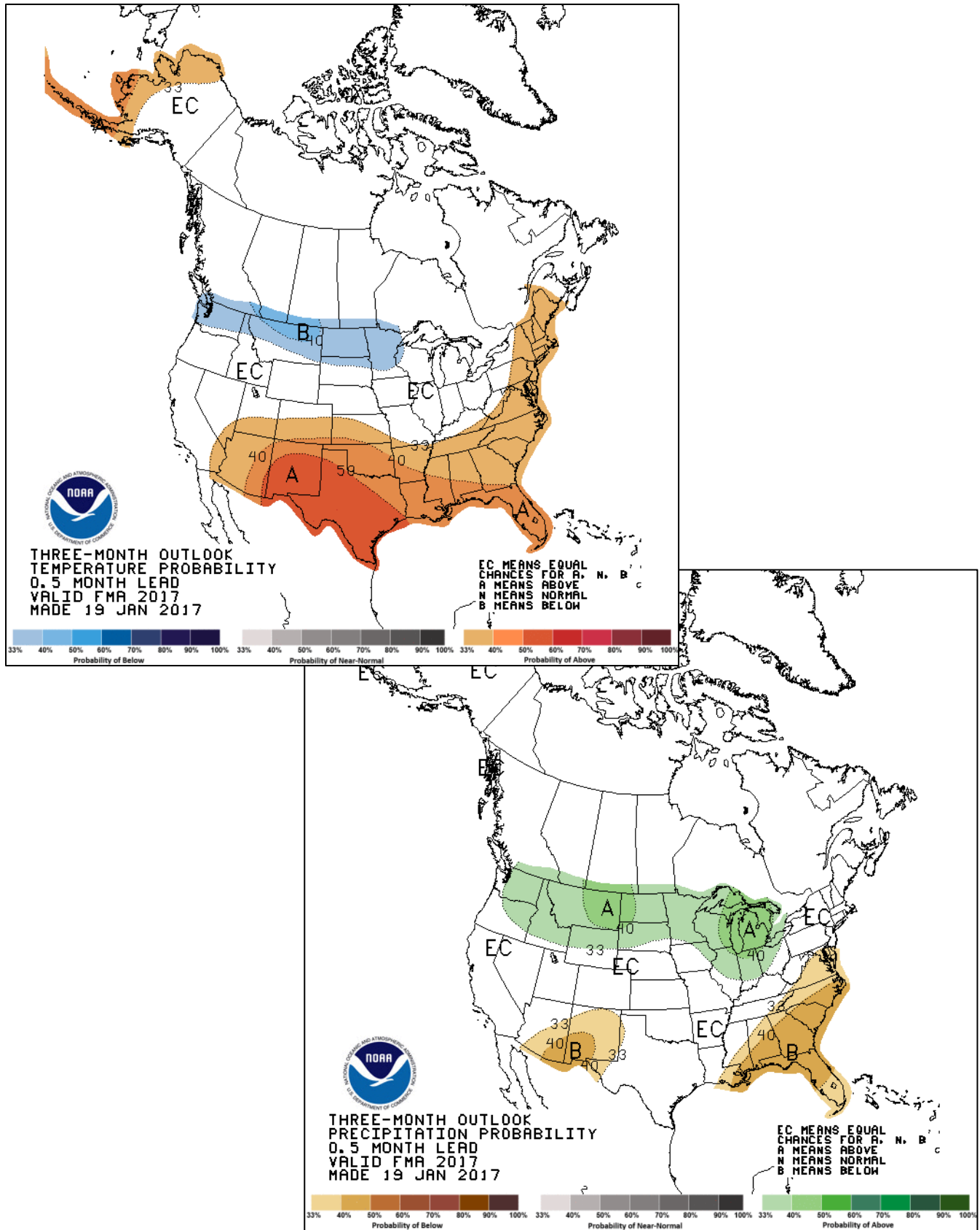
### PRISM > Precipitation Anomaly 1 Month > Oregon



# Three Month Temperature and Precipitation Outlook

## February-March-April

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)

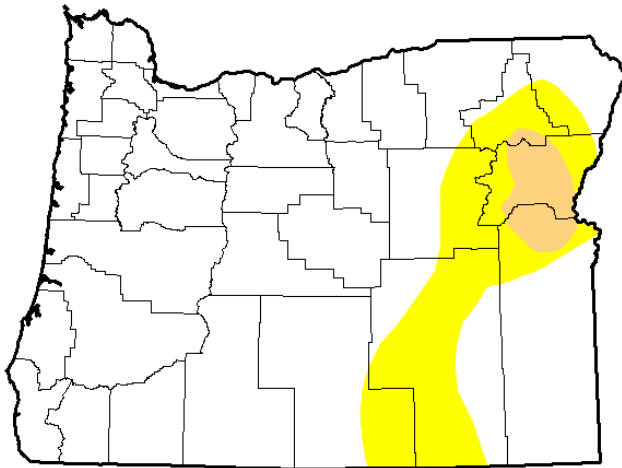


# U.S. Drought Monitor for Oregon

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

## U.S. Drought Monitor Oregon

**January 17, 2017**  
(Released Thursday, Jan. 19, 2017)  
Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	82.27	17.73	2.98	0.00	0.00	0.00
<b>Last Week</b> 1/10/2017	82.27	17.73	2.98	0.00	0.00	0.00
<b>3 Months Ago</b> 10/18/2016	32.78	67.22	35.40	2.63	0.00	0.00
<b>Start of Calendar Year</b> 1/3/2017	65.31	34.69	5.29	0.00	0.00	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> 1/19/2016	14.60	85.40	73.81	40.94	4.47	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.

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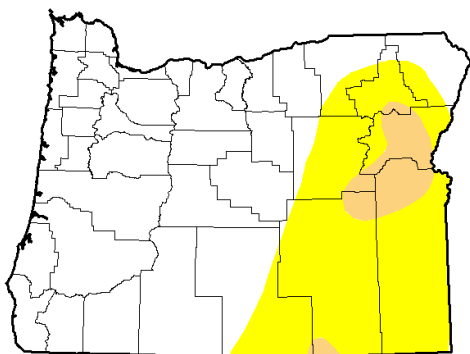


<http://droughtmonitor.unl.edu/>

**Note: Change from January 3, 2017 report**

## U.S. Drought Monitor Oregon

**January 3, 2017**  
(Released Thursday, Jan. 5, 2017)  
Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	65.31	34.69	5.29	0.00	0.00	0.00
<b>Last Week</b> 12/27/2016	65.31	34.69	5.29	0.00	0.00	0.00
<b>3 Months Ago</b> 10/4/2016	0.00	100.00	50.28	12.30	0.00	0.00
<b>Start of Calendar Year</b> 1/3/2017	65.31	34.69	5.29	0.00	0.00	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> 1/5/2016	14.52	85.48	76.99	44.33	6.35	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.

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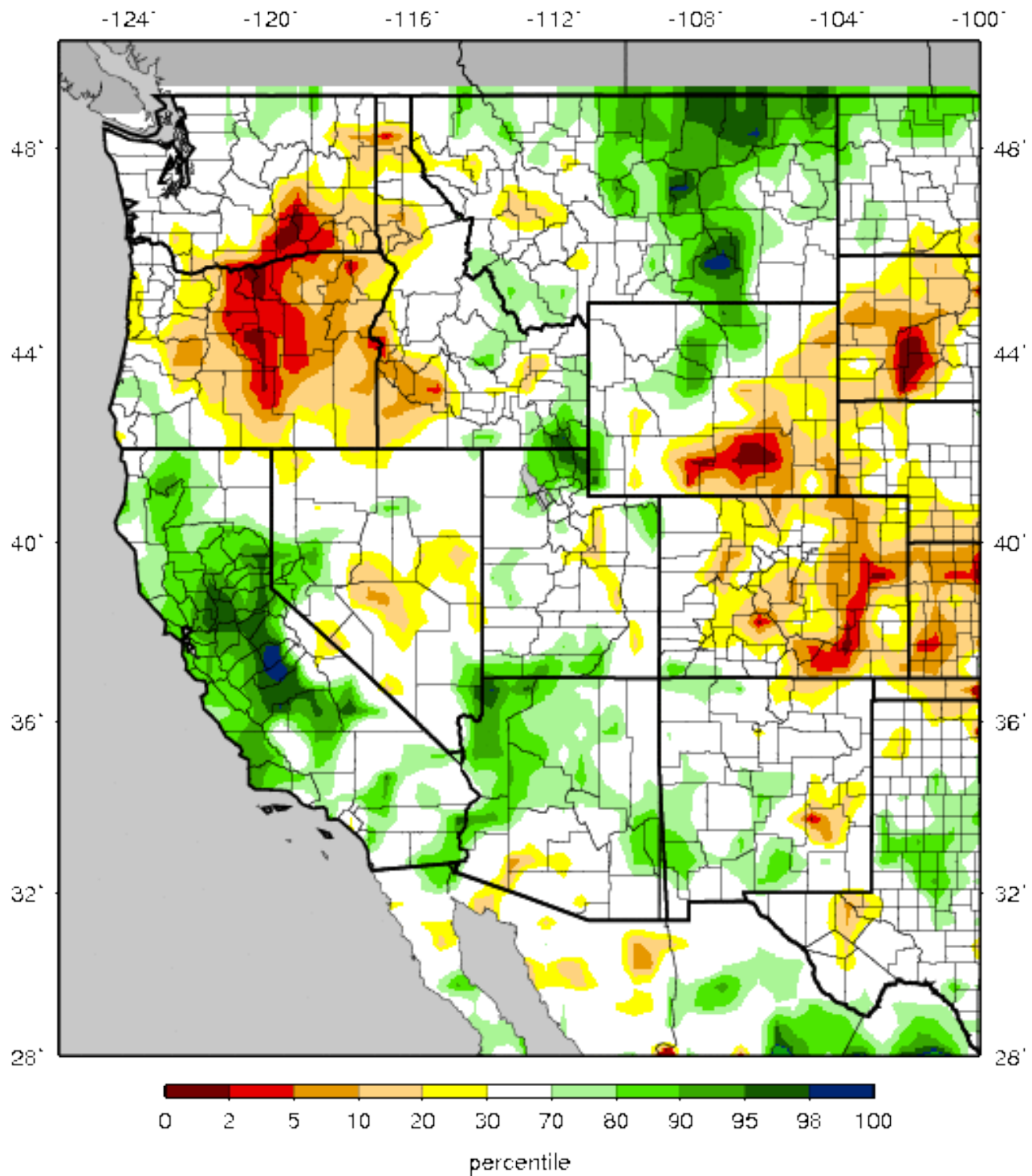
<http://droughtmonitor.unl.edu/>



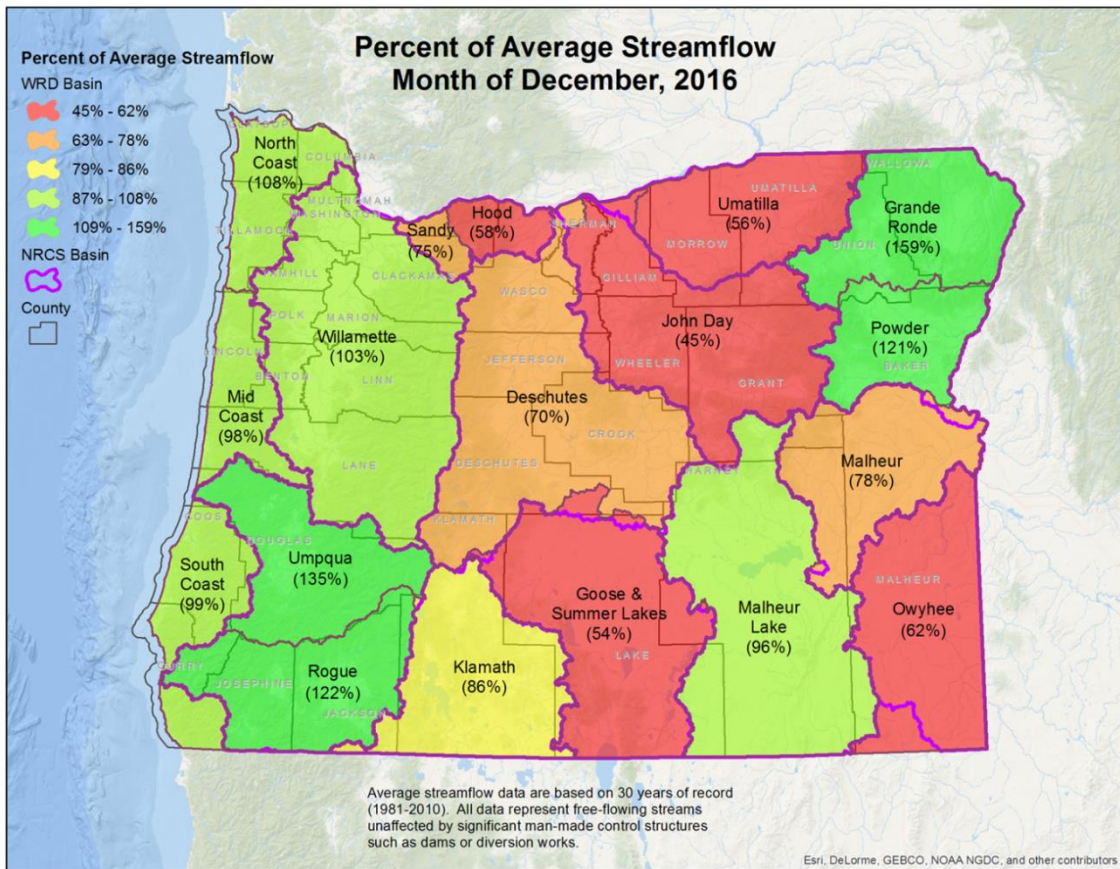
## Soil Moisture - Percentile

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)

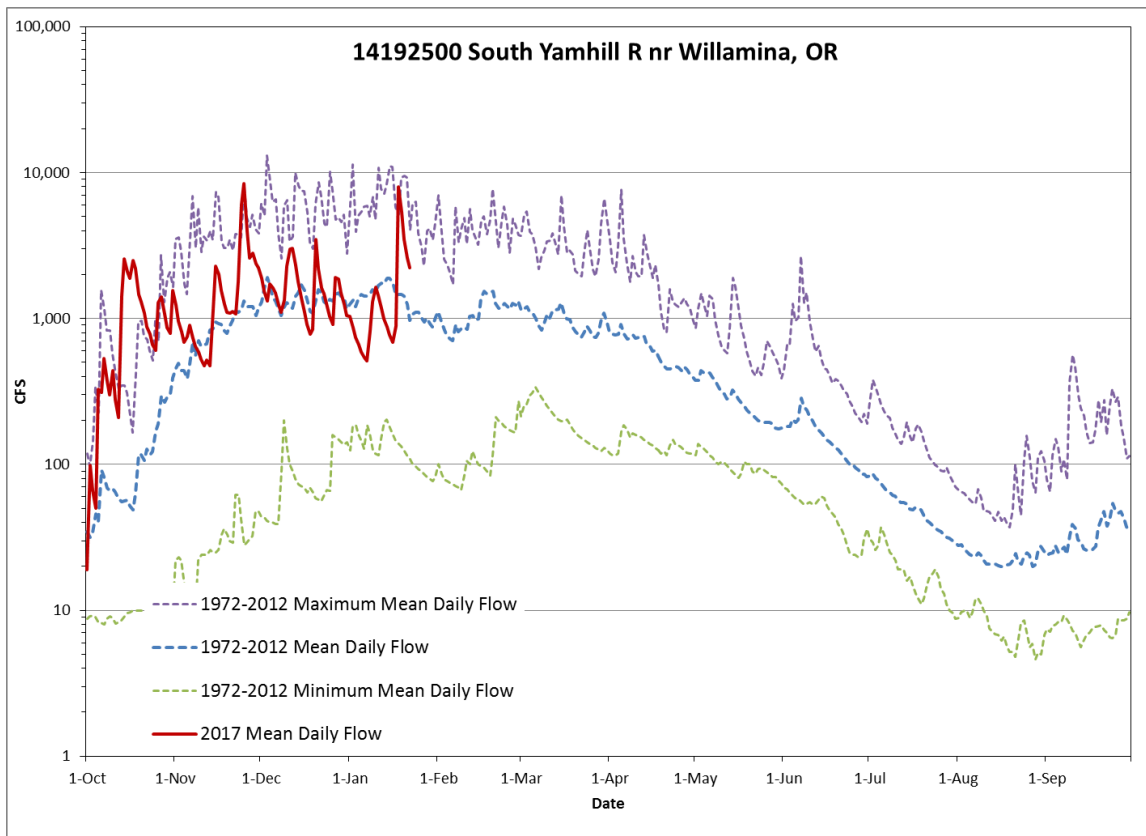
VIC Soil Moisture Percentiles (wrt' 1916-2004)  
Western United States - 20170122



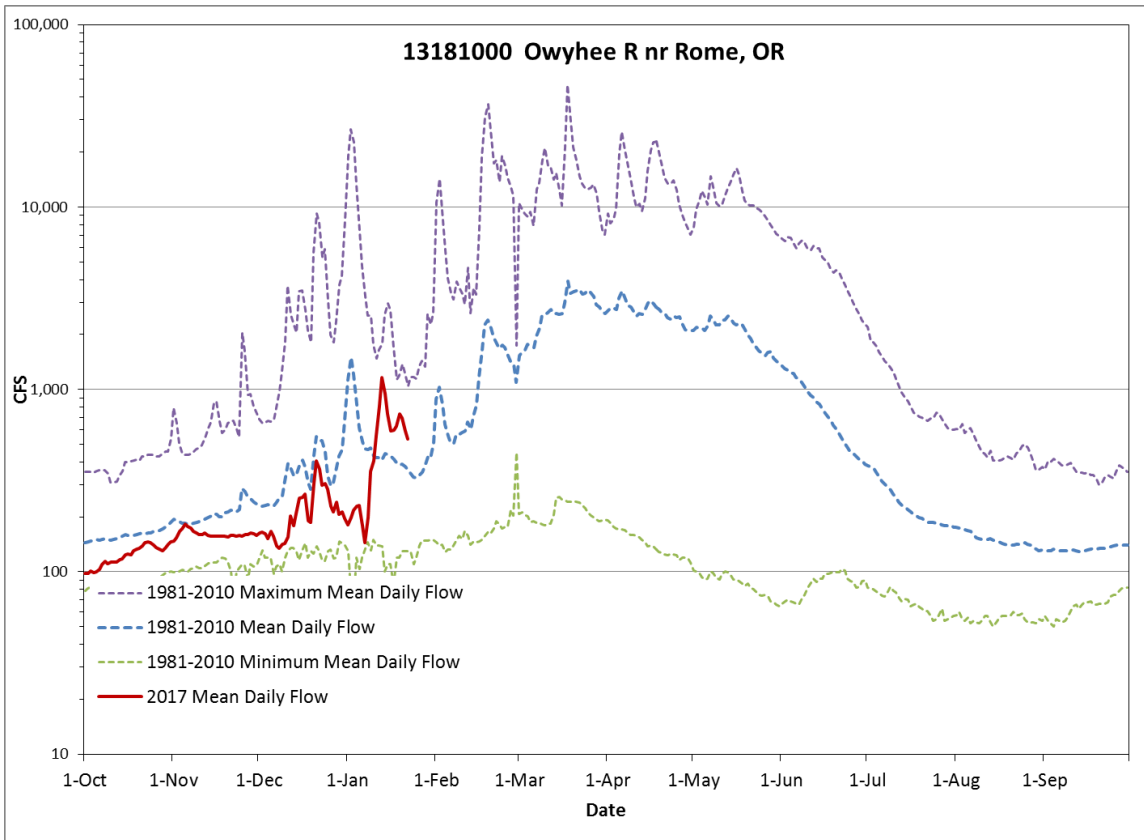
# December Regional Streamflow Conditions



## Streamflow Example - Western Oregon (Willamette)



# Streamflow Example – Eastern Oregon (Owyhee)



# Regional Reservoir Storage Conditions

