

Oregon Water Conditions Report October 31, 2016



Due to the effect of above normal amounts of rain in the past month, water supply conditions in Oregon have improved. While the greatest effect has been seen west of the Cascades, conditions east of the Cascades have improved as well but not quite as notably. As expected, these rain events have dramatically increased streamflows in some areas, especially coastal watersheds. In some instances, to record flow levels for this time of year.

Precipitation across much of the state has been well above average during the past two weeks. During this period, some areas received over 300% of normal amounts of precipitation. Exceptions were parts of Malheur and Harney Counties where precipitation amounts varied widely from as low as 5 percent to as high as 150 percent. Rainfall records for the month of October have been broken in several areas in western Oregon. Near record amounts have fallen in parts of central Oregon as well. Refer to the graphic on page 3 for greater detail of both the two week and 30 day precipitation across the state.

Climate models continue to indicate the likelihood of ENSO-Neutral conditions for the 2016/2017 fall and winter. However, there is still the discussion of a very mild La Nina potential. For the Northwest, ENSO-Neutral conditions mean that there's an equal likelihood of above average or below average precipitation in coming months.

Above average temperatures are expected to continue through January. Temperatures in last two weeks were 2 to 4 degrees warmer than normal in the northwest and southeast corners of the state. Areas in central and north central Oregon were 2 to 4 degrees cooler than normal and 6 to 10 degrees cooler than normal in parts of Klamath and Jackson Counties. NOAA's Climate Prediction Center continues to predict increased odds of warmer than normal conditions through fall and winter.

Statewide average streamflows are at 280 percent of normal. This is in stark contrast to 53 percent seen last year for the month of October. Regionally, streamflow conditions east of the cascades are a little over 100 percent of normal. Westside streams are at well over 500 percent of normal for October.

Reservoir storage levels are expectedly still low but inflows are increasing due to the recent rains. See page 9 for a statewide map of storage conditions. For site specific reservoir conditions (teacup diagrams) visit the [USBR](#) or [USACE](#) websites.

There has been a significant improvement in drought conditions across much of Western and Central Oregon. As of October 25, the US Drought Monitor has indicated that 53 percent of the state is no longer listed in any drought category. However, 47 percent of the state is still listed in the D0 (abnormally dry) category as well as 29 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 6.

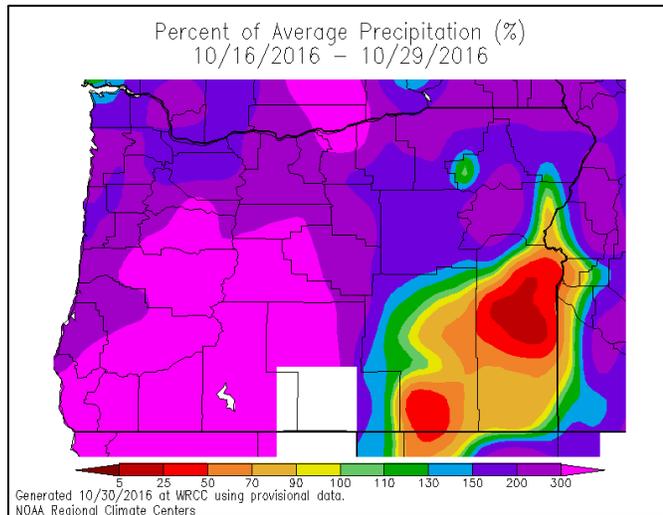
The Oregon Department of Forestry recently announced the end of the 2016 fire season. ODF and its fire protective association partners suppressed 807 fires in 2016 that burned 5,554 acres and cost about \$17.4 million. In comparison, the volatile fire seasons from 2013-2015 accounted for an annual average of 81,467 acres and about \$88 million in fire suppression costs. Visit the [ODF wildfire blog](#) for a summary of the 2016 fire season.

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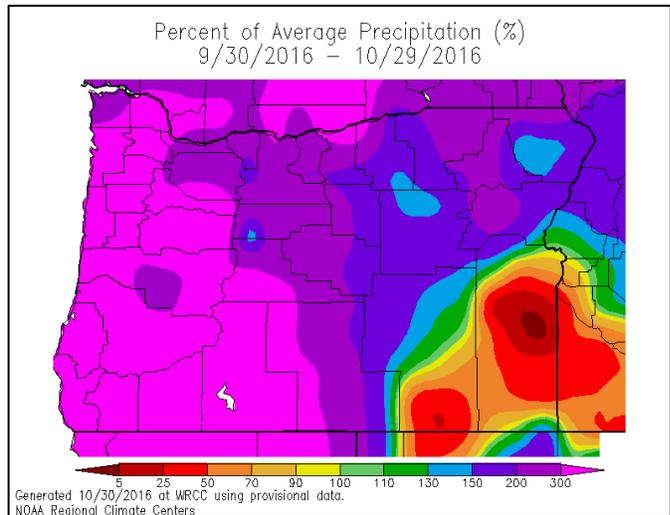
Precipitation – Percent of Average

Website: http://www.wrcc.dri.edu/anom/ore_anom.html

Last 14 days



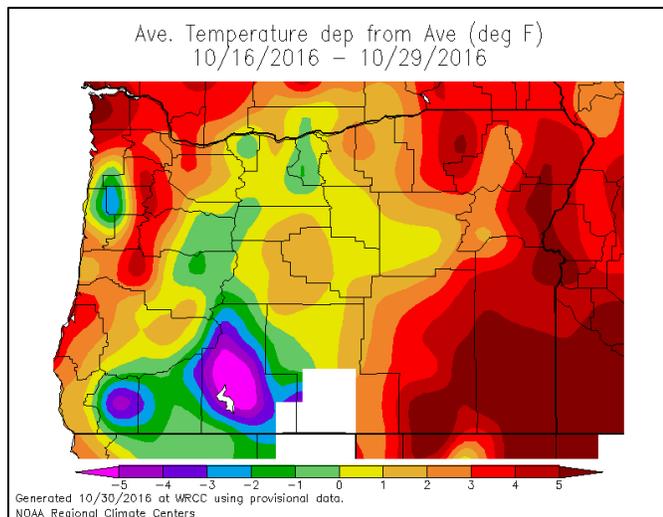
Last 30 days



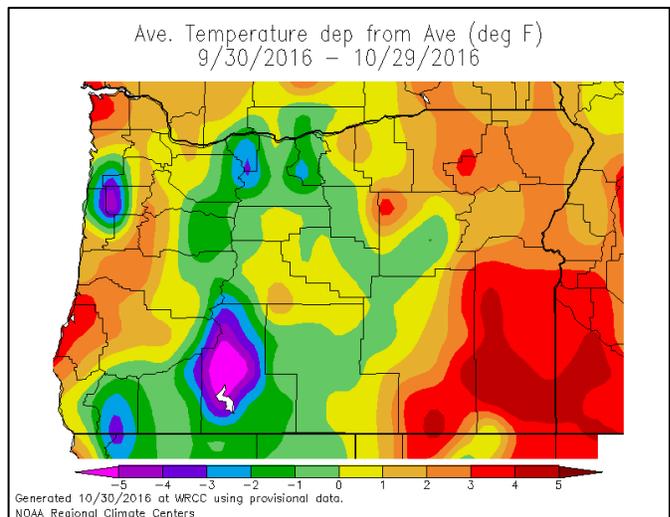
Temperature - Departure from Average

Website: http://www.wrcc.dri.edu/anom/ore_anom.html

Last 14 days



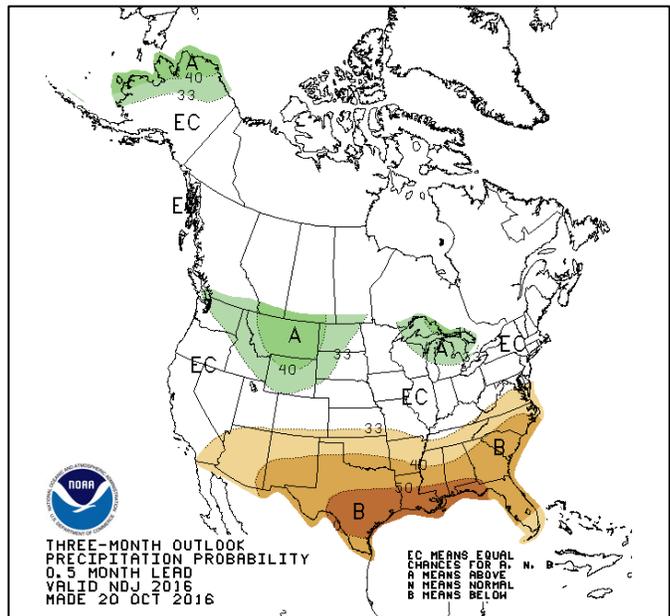
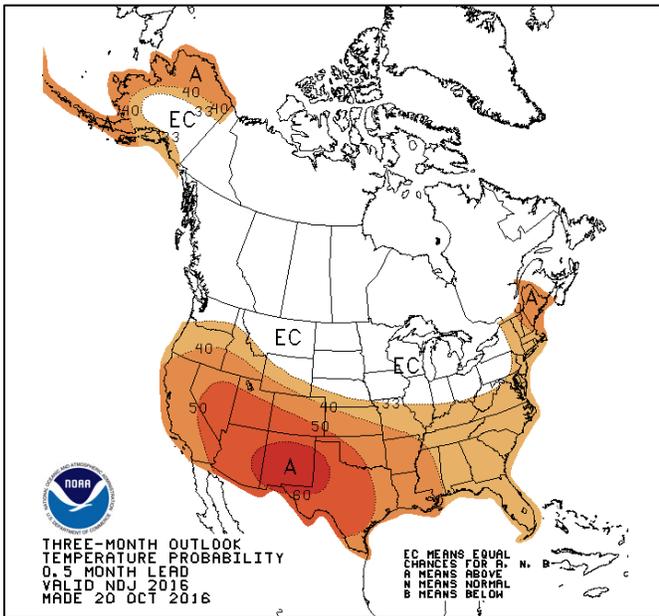
Last 30 days



Three Month Temperature and Precipitation Outlook

November-December-January

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

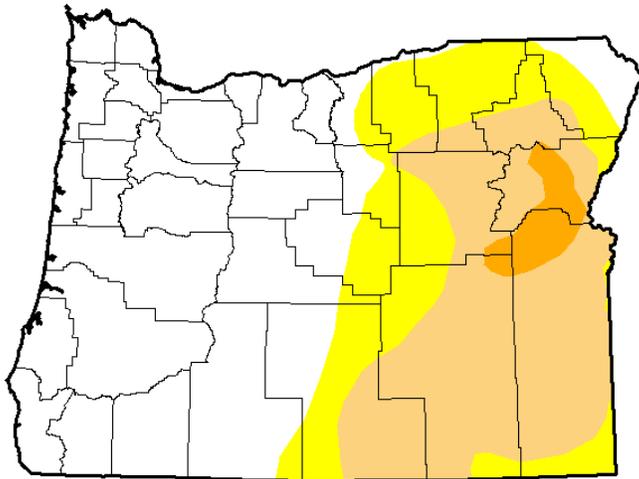


U.S. Drought Monitor for Oregon

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

U.S. Drought Monitor Oregon

October 25, 2016
(Released Thursday, Oct. 27, 2016)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	52.91	47.09	28.96	2.63	0.00	0.00
Last Week 10/18/2016	32.78	67.22	35.40	2.63	0.00	0.00
3 Months Ago 7/26/2016	0.00	100.00	49.75	0.00	0.00	0.00
Start of Calendar Year 12/29/2015	14.52	85.48	80.45	65.33	39.55	0.00
Start of Water Year 9/27/2016	0.00	100.00	50.59	12.30	0.00	0.00
One Year Ago 10/27/2015	0.00	100.00	100.00	100.00	67.29	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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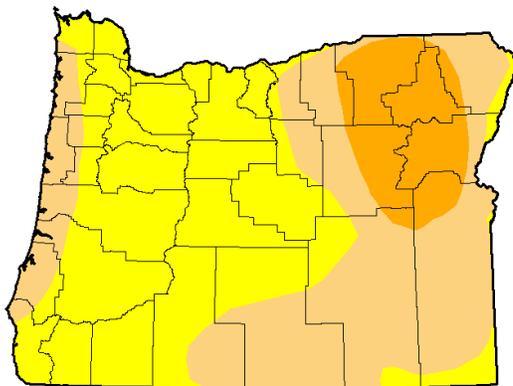


<http://droughtmonitor.unl.edu/>

Note: Significant change from October 11, 2016 report

U.S. Drought Monitor Oregon

October 11, 2016
(Released Thursday, Oct. 13, 2016)
Valid 8 a.m. EDT



Intensity:

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

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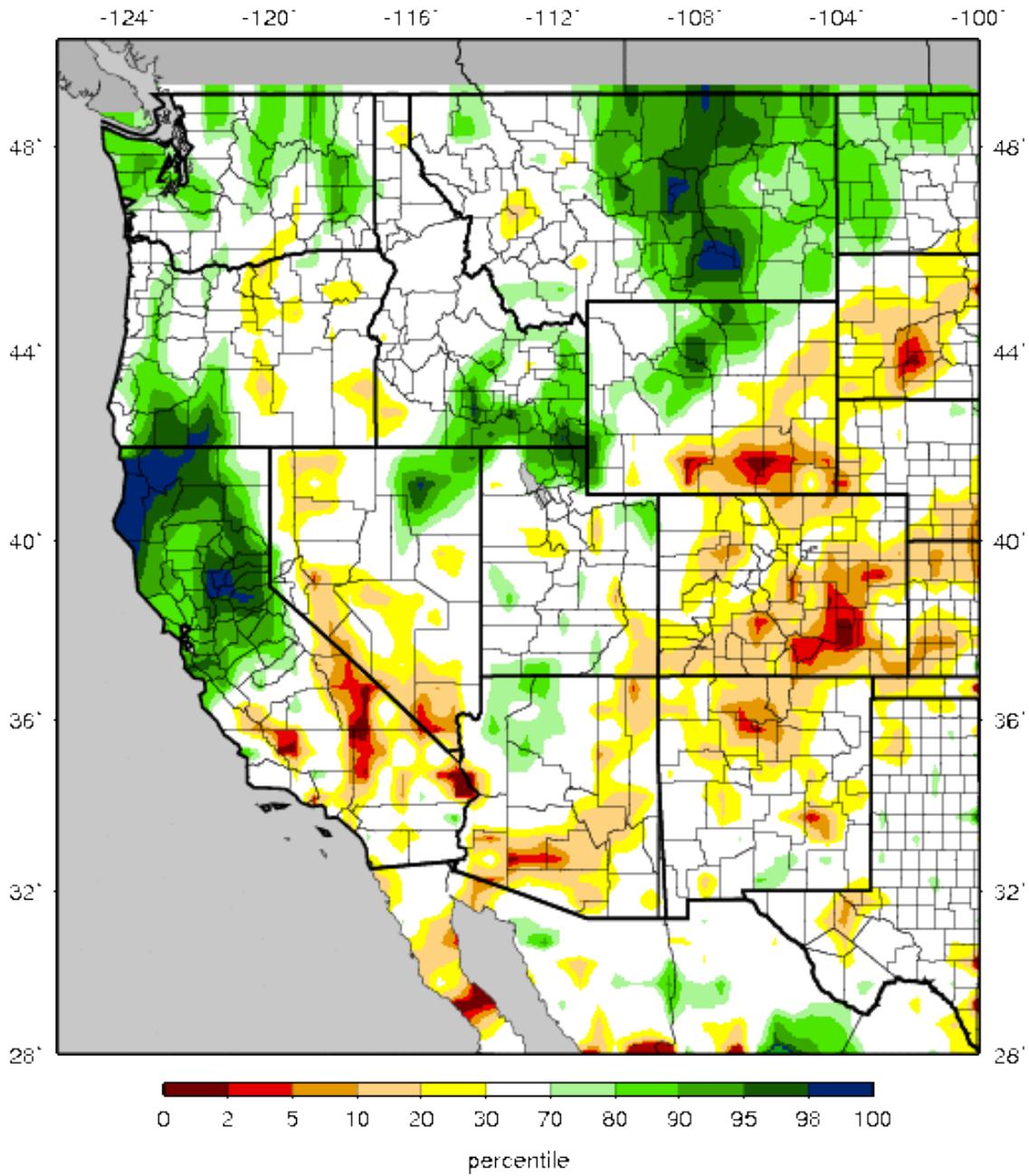


<http://droughtmonitor.unl.edu/>

Soil Moisture

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

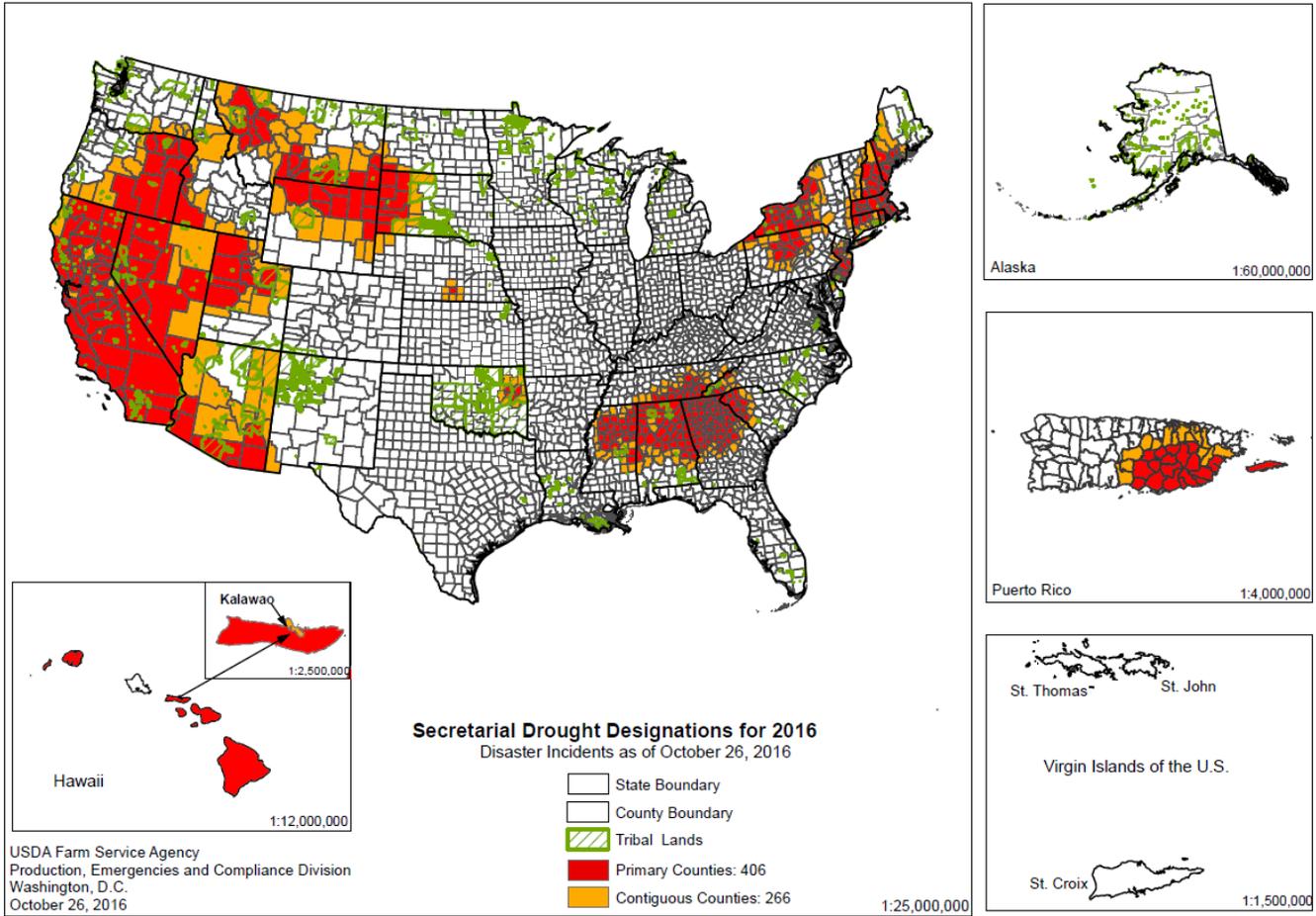
VIC Soil Moisture Percentiles (wrt' 1916-2004)
Western United States - 20161029



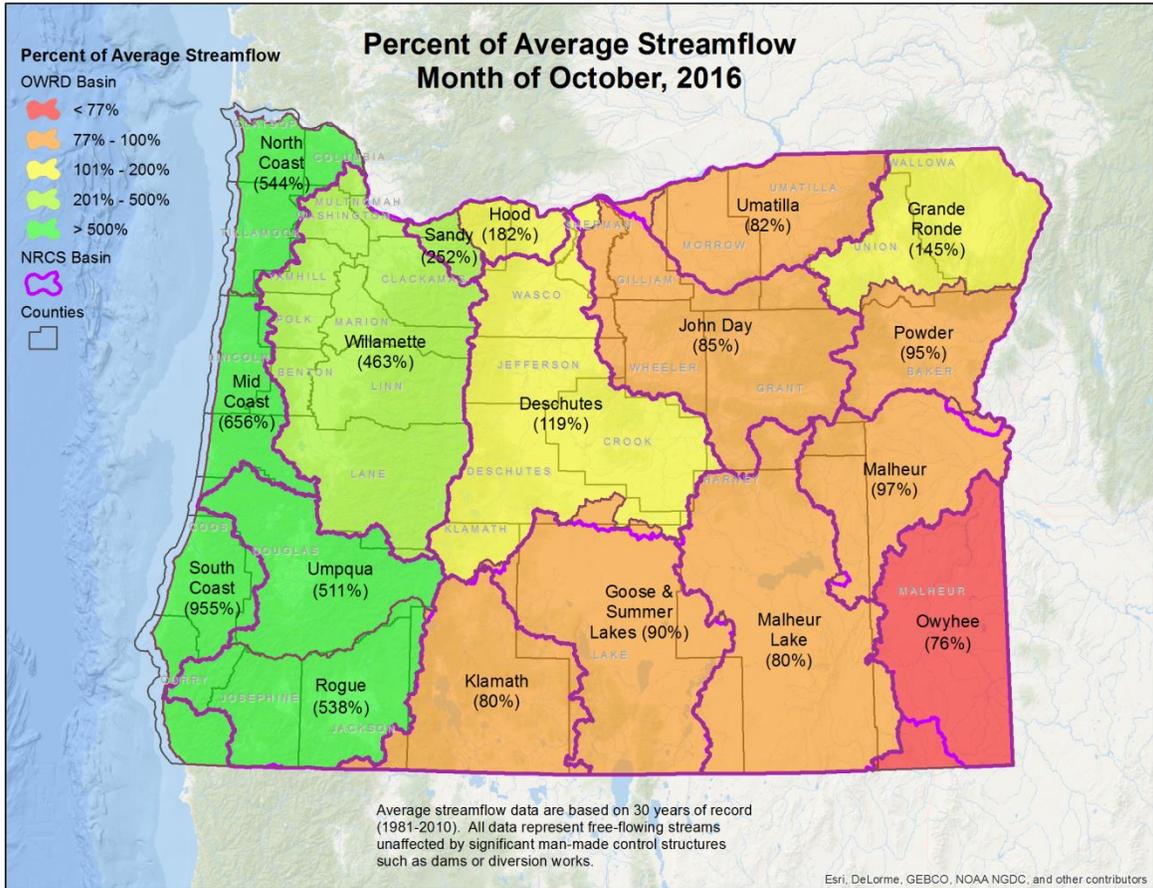
USDA Federal Drought Designations

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

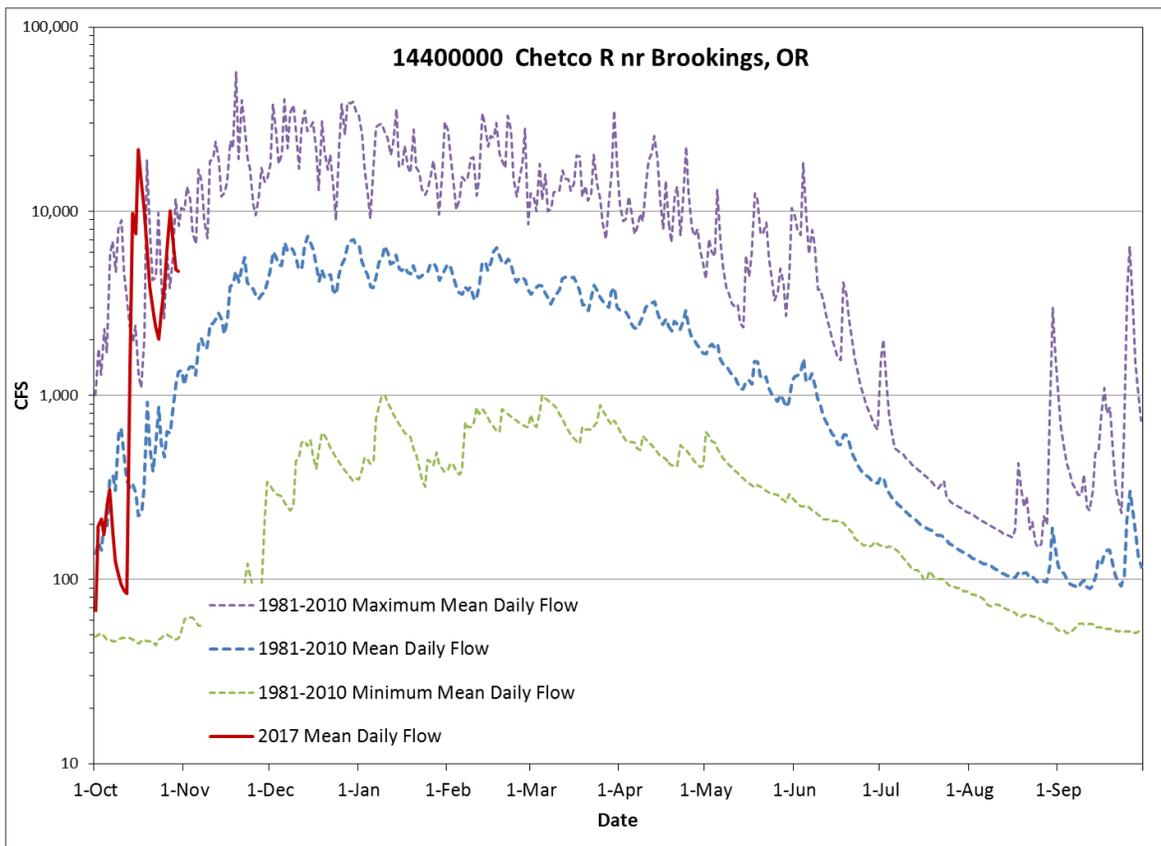
2016 Secretarial Drought Designations - All Drought



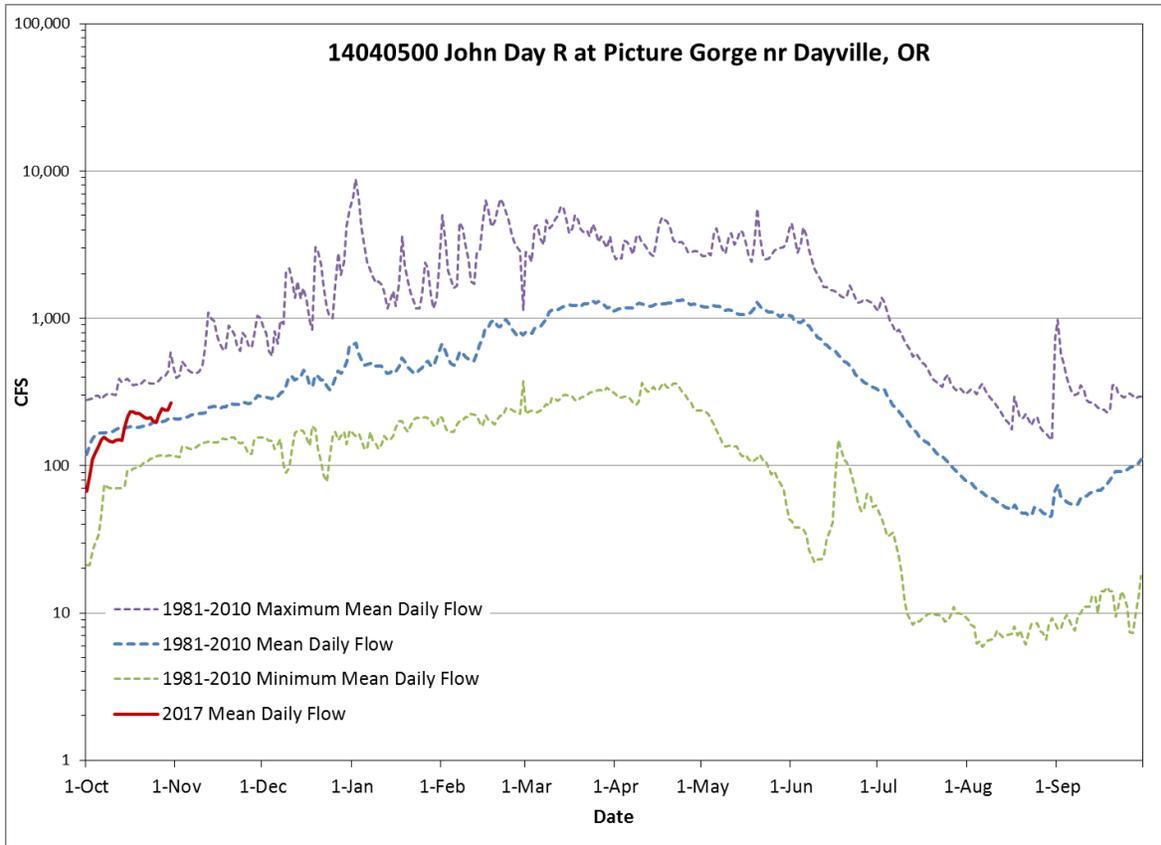
October Regional Streamflow Conditions



Streamflow Example - Western Oregon



Streamflow Example – Eastern Oregon



Regional Reservoir Storage Conditions

