

Oregon Water Conditions Report April 17, 2017



Mountain snowpack continues to maintain significant levels for mid-April. By late March, statewide snowpack had declined to 118 percent of normal after starting out the month at 131 percent. Now, after higher elevation SNOTEL sites continued to receive snow from a series of storm systems, statewide snowpack is back up to 139 percent.

The last year that Oregon had snowpack values this high was 2011, when the statewide snow pack was 180 percent of normal for this time of year. At present, the Willamette Basin and Lake County/Goose Lake region have the highest basin snowpack at 152 percent of normal each, while the lowest is found in the Owyhee Basin at 109 percent.

For more region-specific information, refer to [page 4](#) or the April 1, 2017 NRCS [Water Supply Outlook Report](#).

The NRCS Snow Survey also publishes weekly condition reports on three areas that were affected by wildfire during 2015 in eastern Oregon. Due to the inability of scorched soils to readily absorb water, these areas can 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>

Over the next [8 to 14 days](#), the NOAA Climate Prediction Center is forecasting a higher than normal probability of [below average temperatures](#) across most of Oregon. Over this same period there is a higher than normal probability of [above average precipitation](#) in most parts of Oregon as well.

Statewide precipitation continues to be well above normal. Precipitation records for the water year (October 1, 2016 to date) continue to be ranked in the top 5 in several statewide locations. Statewide mountain precipitation has continued to be well above average in most locations. As of April 17, 2017, statewide mountain precipitation (based upon SNOTEL data) is 131 percent of average, compared to 133 percent of average on April 1st of this year.

The most recent three month outlook from NOAA's Climate Prediction Center indicates an equal chance of above or below normal temperatures and precipitation between now and June. The [latest outlook](#) will be issued later this week.

Recent climate observations indicate that ENSO Neutral conditions have returned. These conditions will likely persist through spring and summer. The Climate Prediction Center forecasts increasing odds of the onset of [El Niño](#) in fall 2017. This can bring generally warm, dry conditions to the Pacific Northwest.

Statewide streamflows for the month of March were 230 percent of normal. So far for April, stream flows are at a little over 140 percent of normal. Regionally, streamflow conditions east the Cascades are the highest at around 150 percent. West of the Cascades, flows are about 130 percent of normal for this time of year. Stream flows are now receding but levels should maintain or trend slightly upward with the recent rain events predicted for this week.

Due to the amount of remaining snowpack, the NRCS April 1st streamflow volume forecast for the state indicates average to above average streamflows for the majority of Oregon this summer.

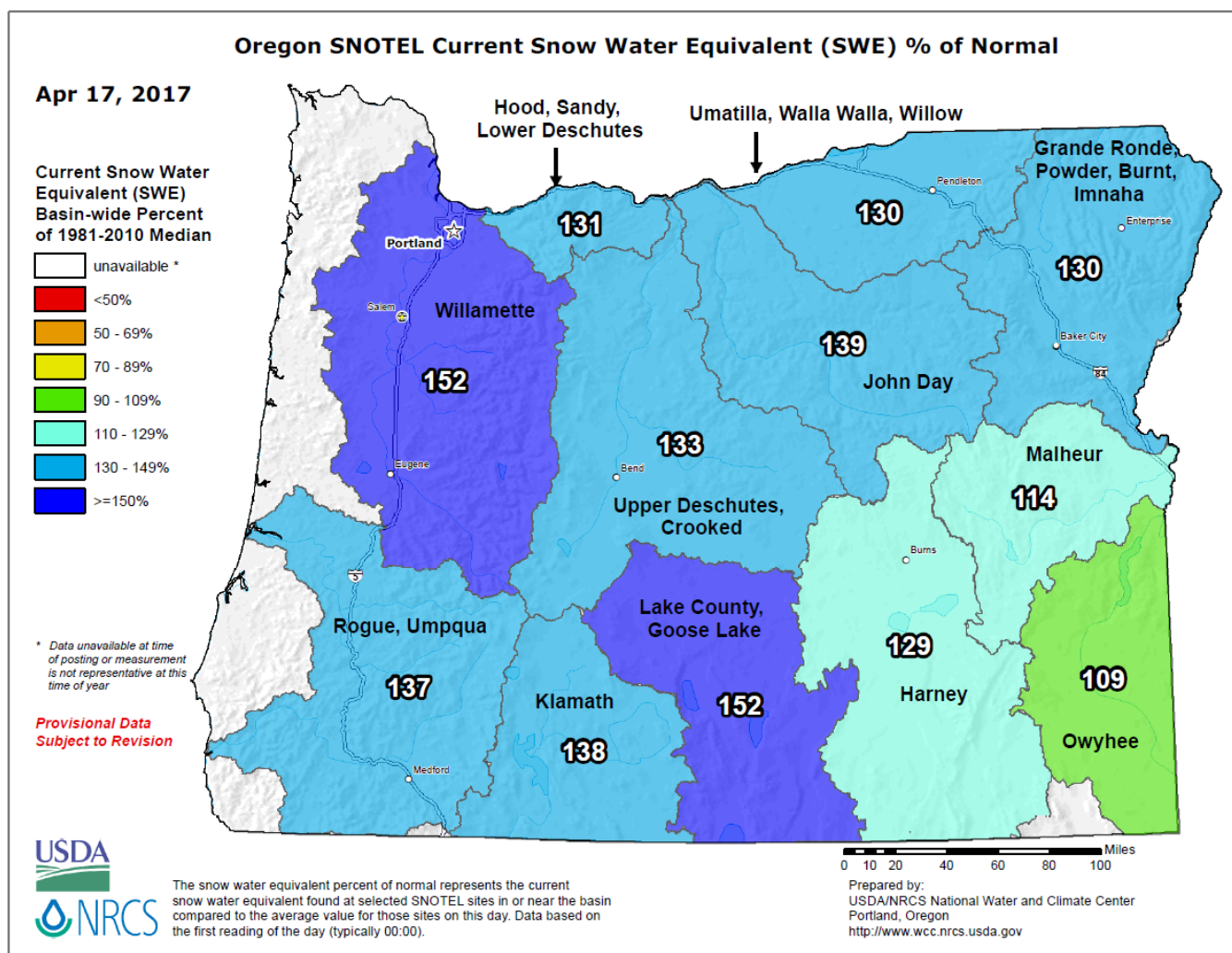
Most of the state’s water supply reservoirs are approaching maximum capacity. [Willamette](#) and [Rogue](#) project reservoirs appear to be on track for a good summer season. The above average precipitation has continued to fill central and eastern Oregon Reservoirs. With the exception of Phillips Reservoir in Baker County, most reservoirs in the central and eastern regions of Oregon are at or very near full capacity. [Owyhee Reservoir](#) levels have increased to 97 percent of capacity and projected to fill. For the most recent near real-time, site-specific reservoir conditions (teacup diagrams) visit the [USBR](#) or [USACE](#) websites.

No change in drought status in the past two weeks. The most recent US Drought Monitor report indicates that the entire state (100 percent) is no longer listed in any drought category. The last time this condition was observed was in October, 2011. Refer to the map on page 9 for details.

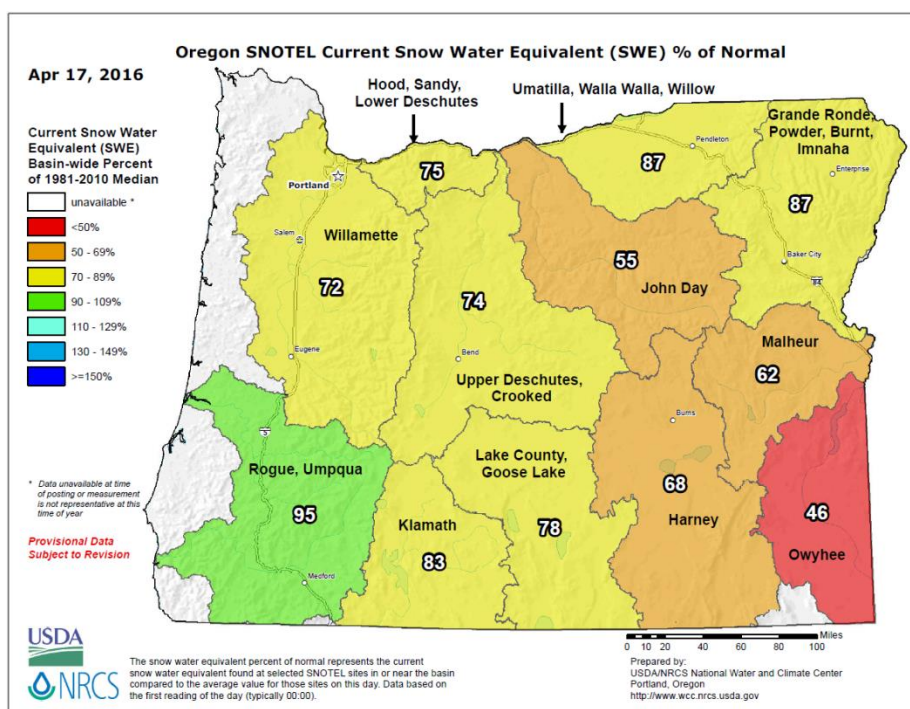
The Oregon Department of Forestry continues to forecast below average 2017 fire season. “Current fuels in the state are either wet or white. While there has been recent snowmelt with the warm rain, it doesn’t appear the existing snowpack will leave the high country early this spring. Spring temperatures are likely to be near average or below average and moisture is likely to be above average. Drought has left the state and combined with the other listed climate conditions, fire season is likely to be below average again.”

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Snowpack - Percent of Normal

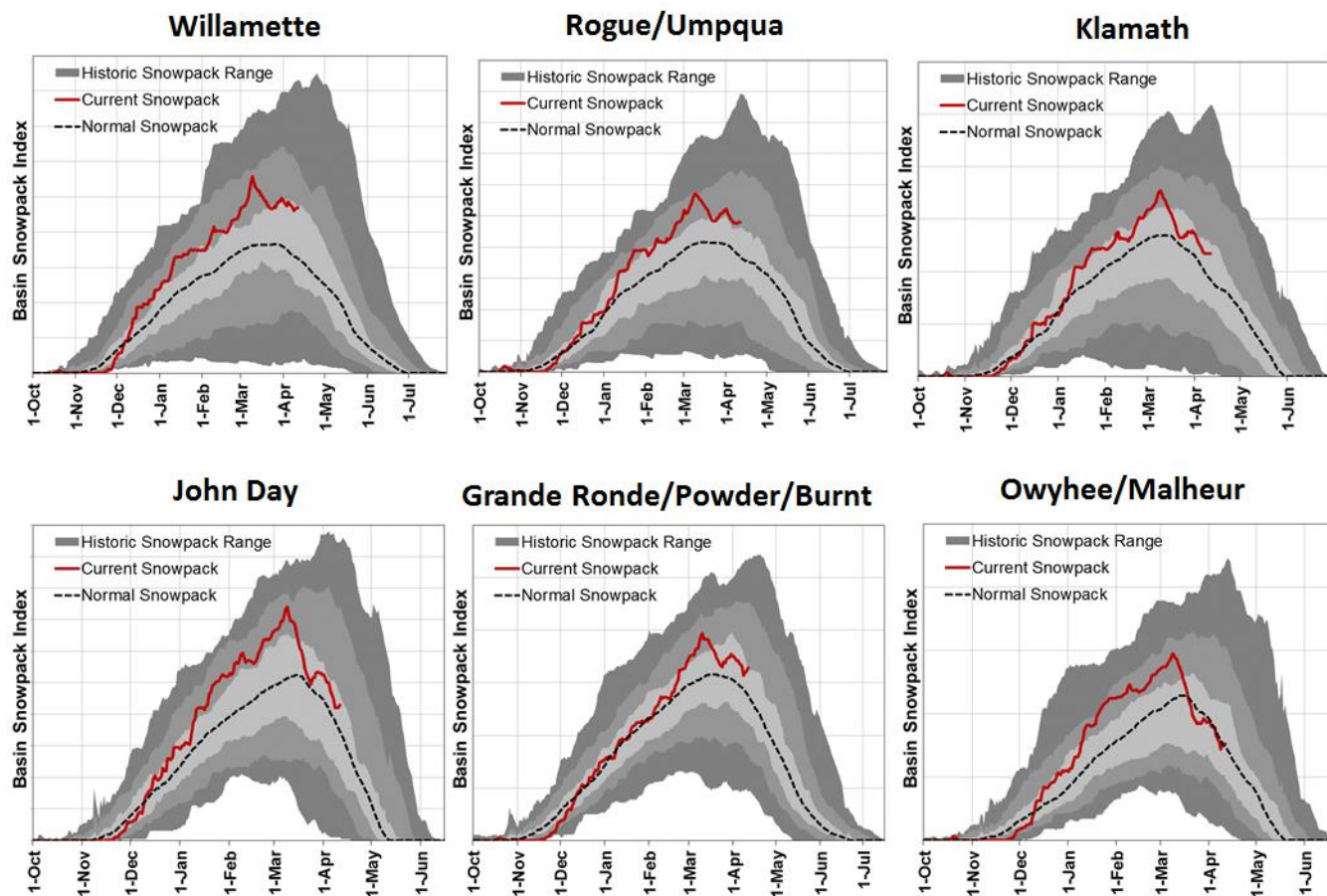


Compared to this time last year -

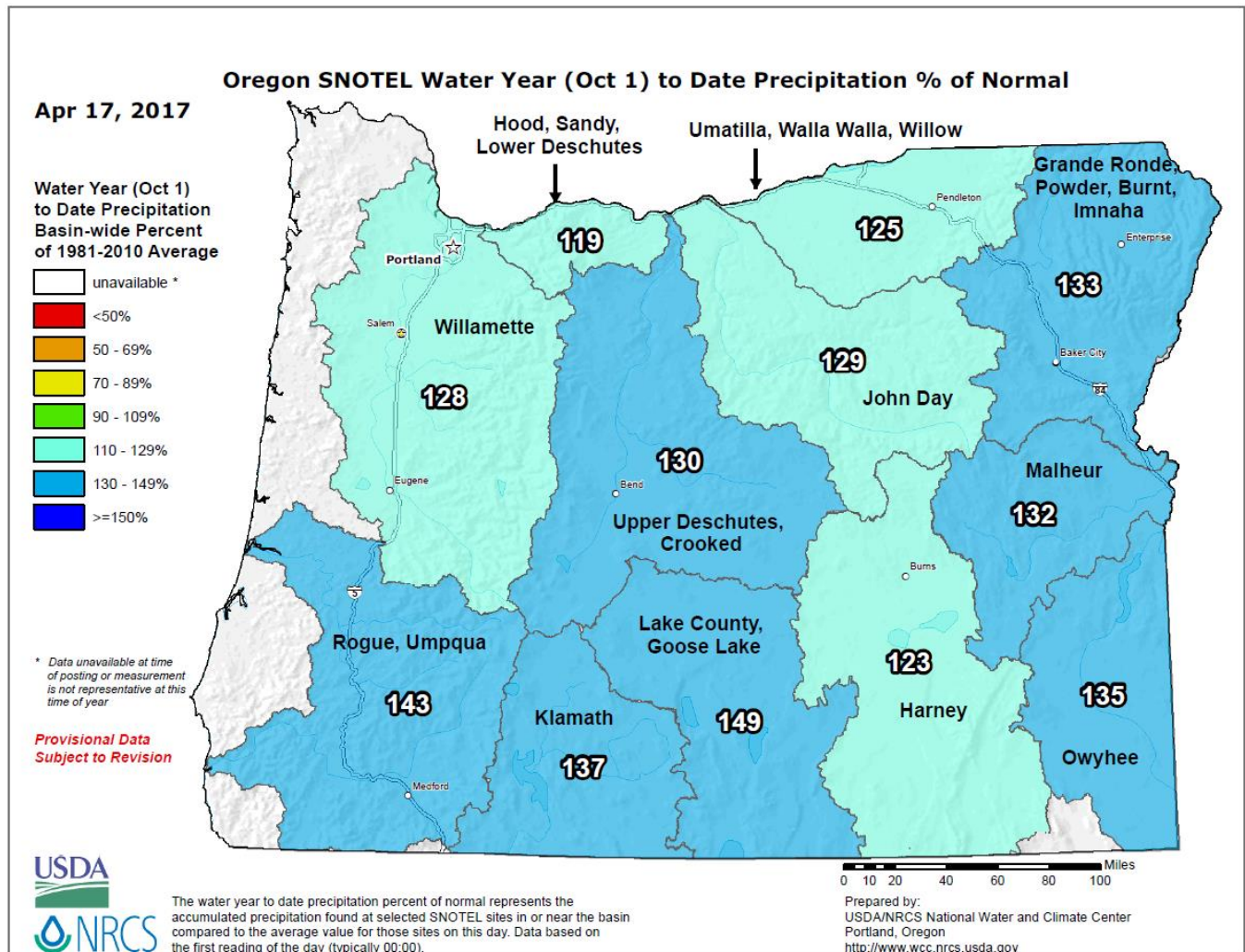


Snowpack - Percent of Normal (continued)

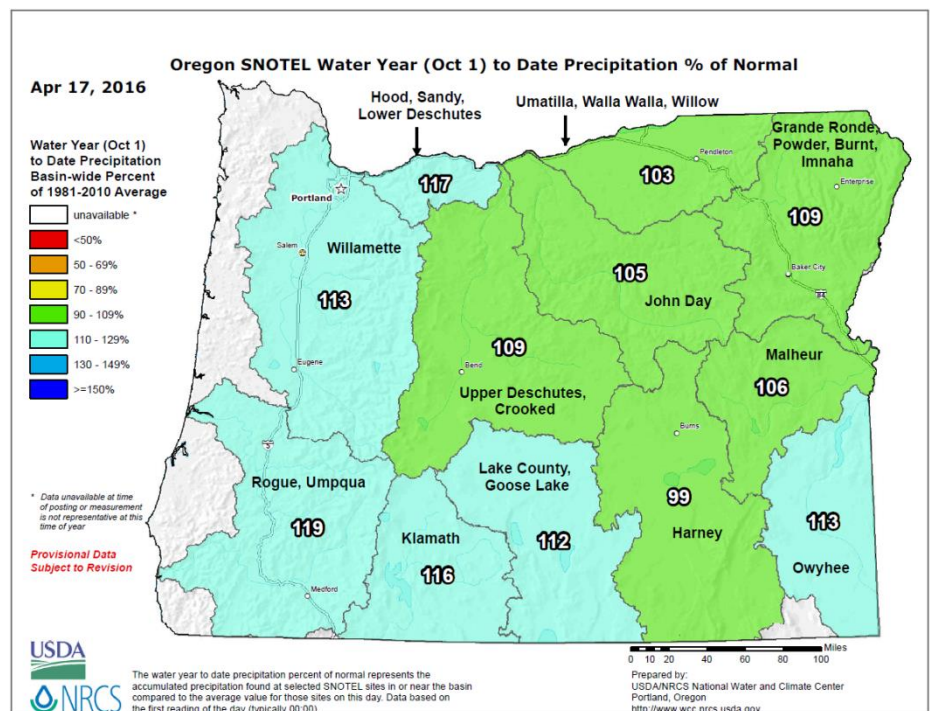
Water Year 2017 – April 11th



Precipitation (mountain) - Percent of Normal



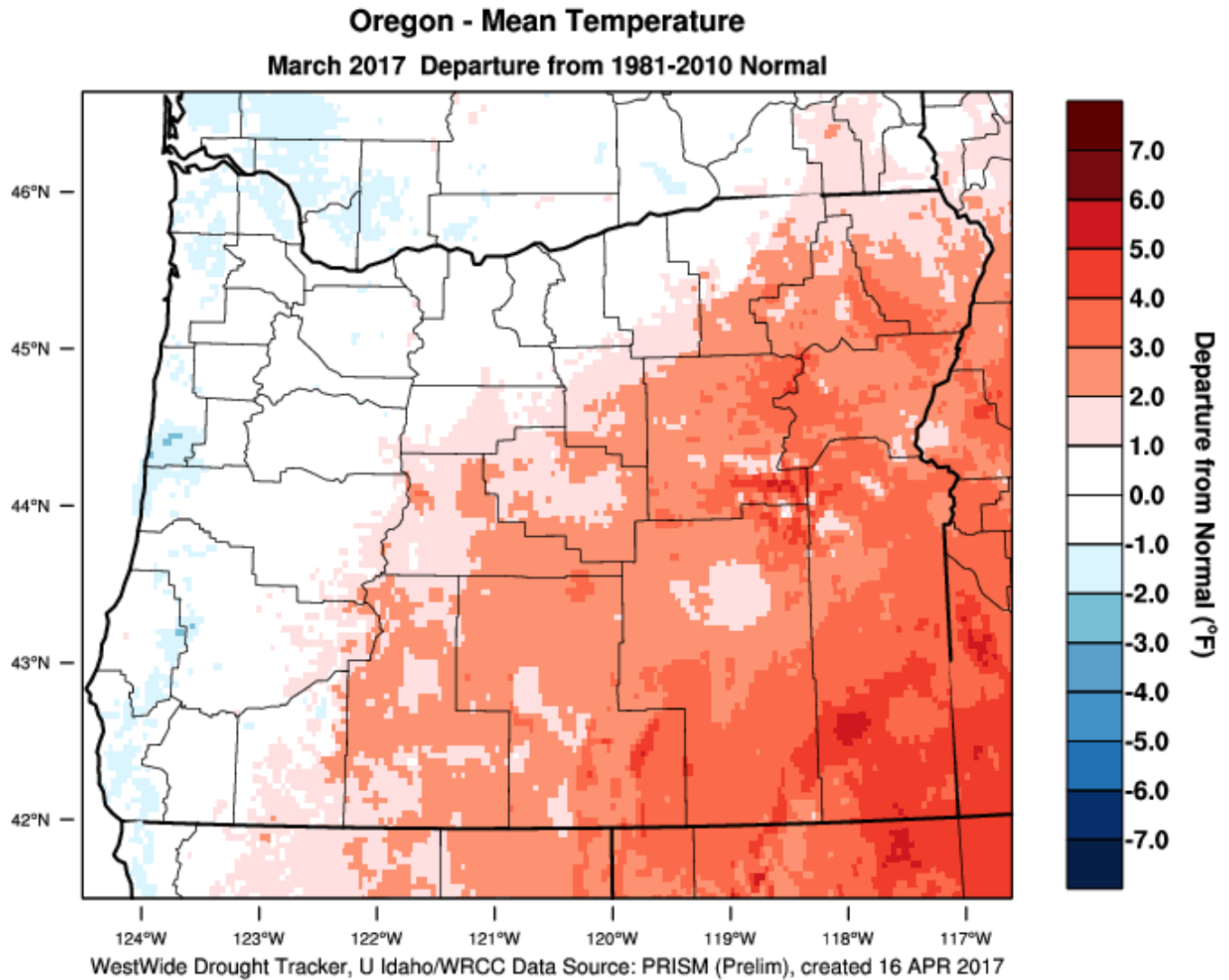
Compared to this time
 last year -



Temperature – (1 Month) Departure from Normal

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

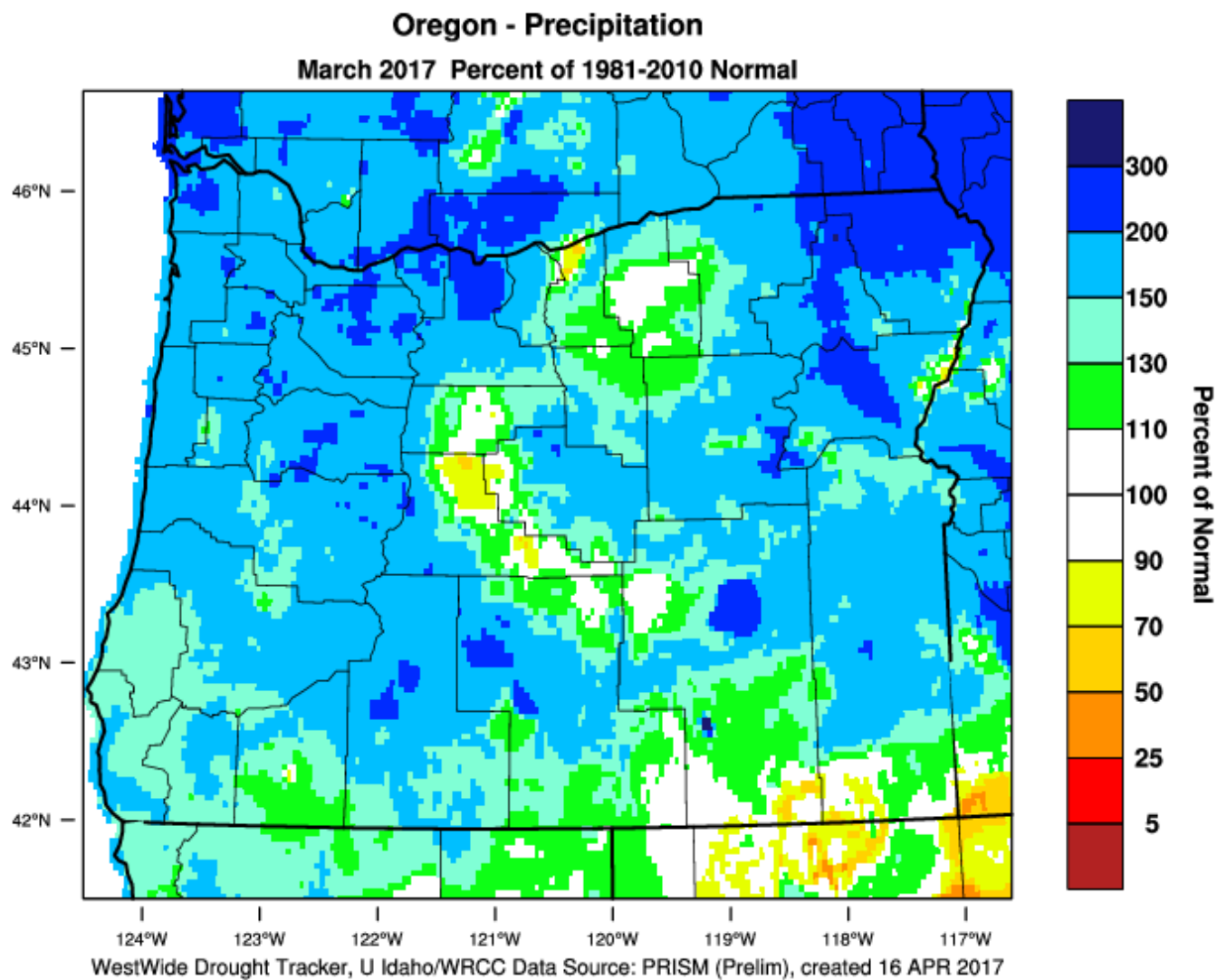
PRISM > Temperature Anomaly 1 Month > Oregon



Precipitation – (1 Month) Percent of Normal

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

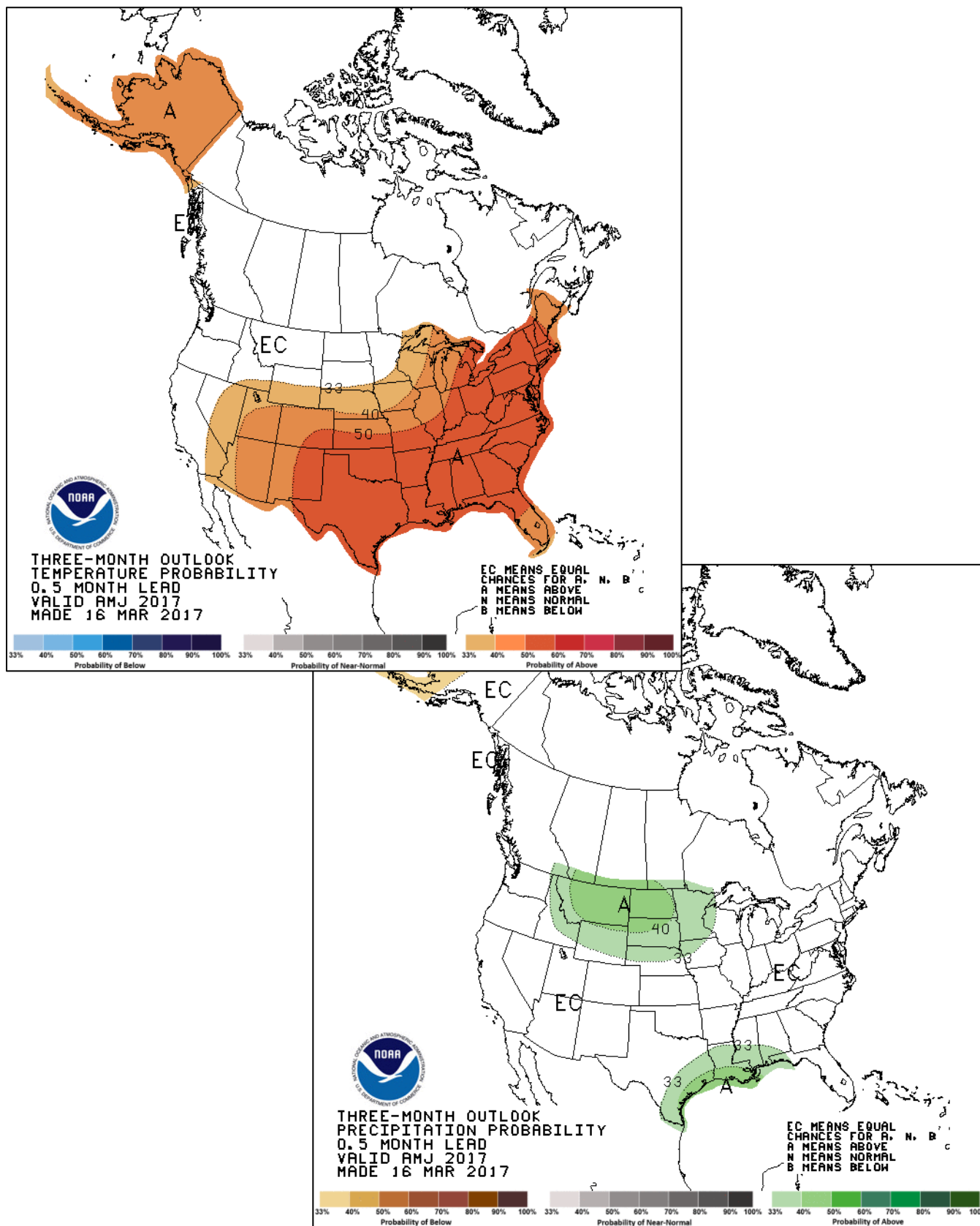
PRISM > Precipitation Anomaly 1 Month > Oregon



Three Month Temperature and Precipitation Outlook

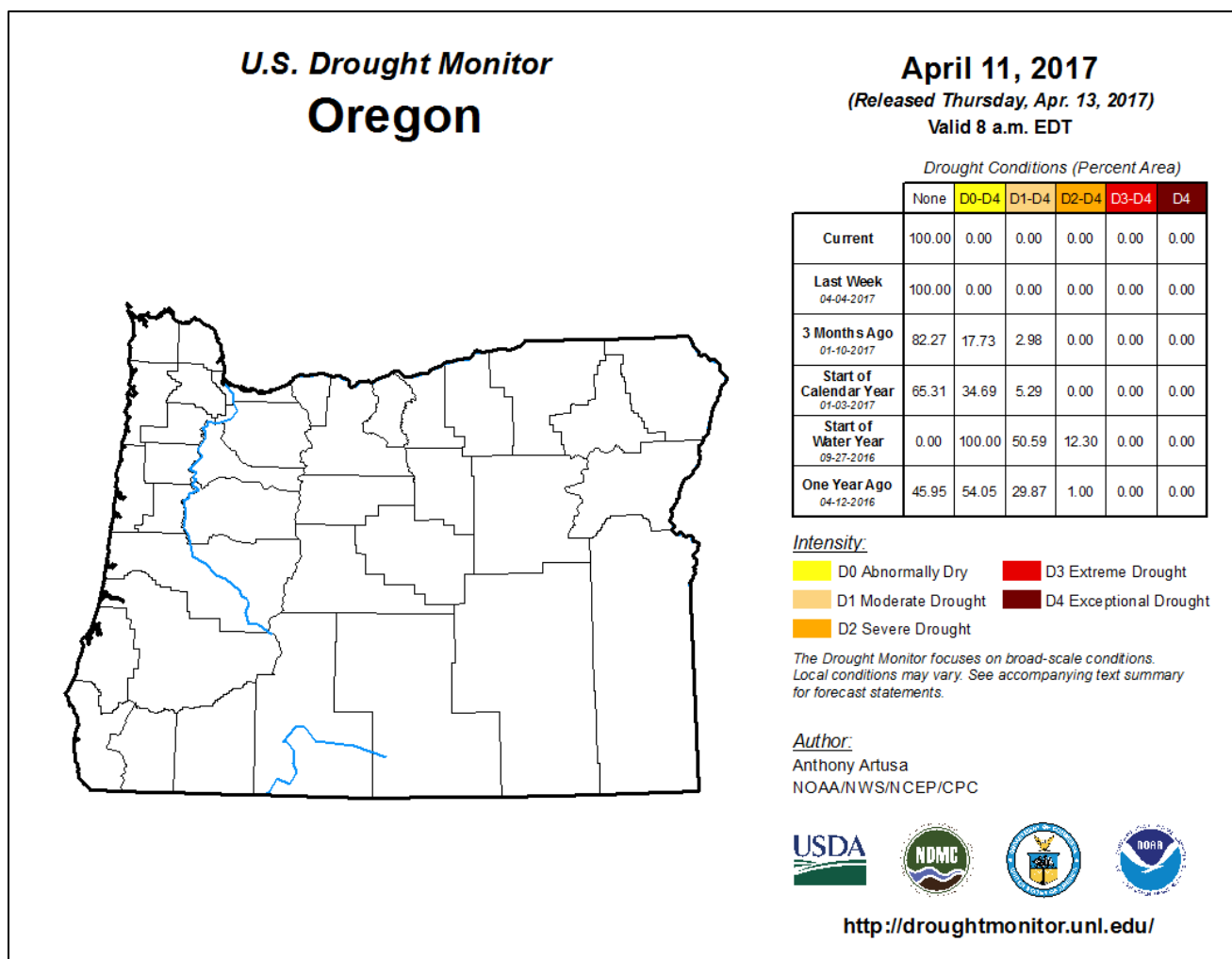
April-May-June – Outlook will be updated later this week. Follow link for the latest information.

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

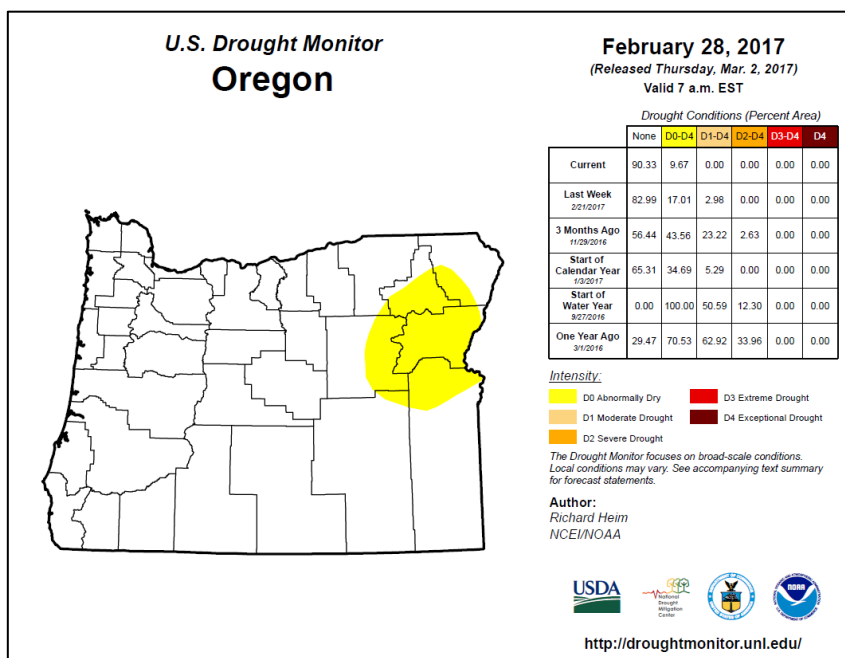


U.S. Drought Monitor for Oregon

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



Note: Change from February 28, 2017 report



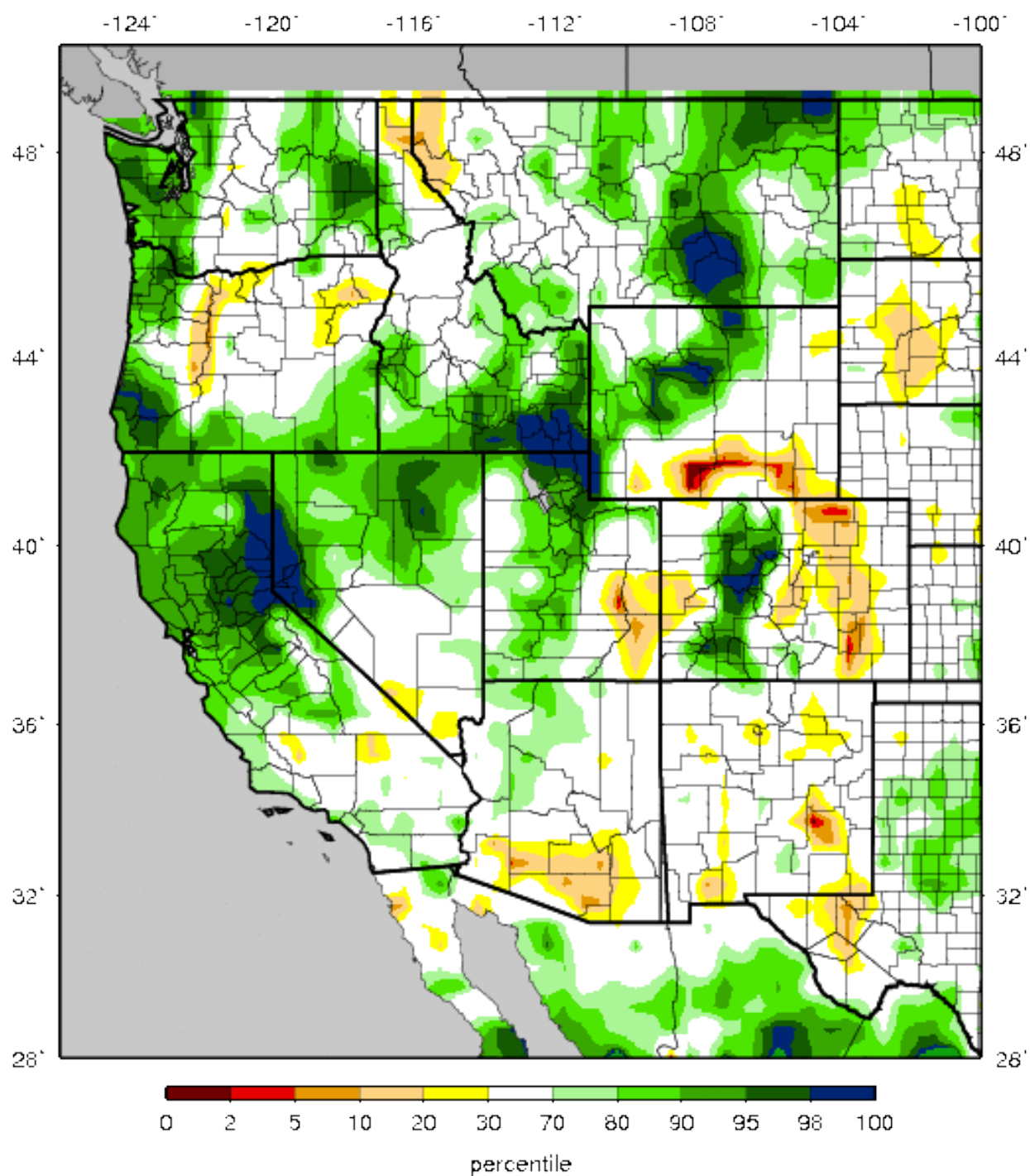
Soil Moisture - Percentile

Website:

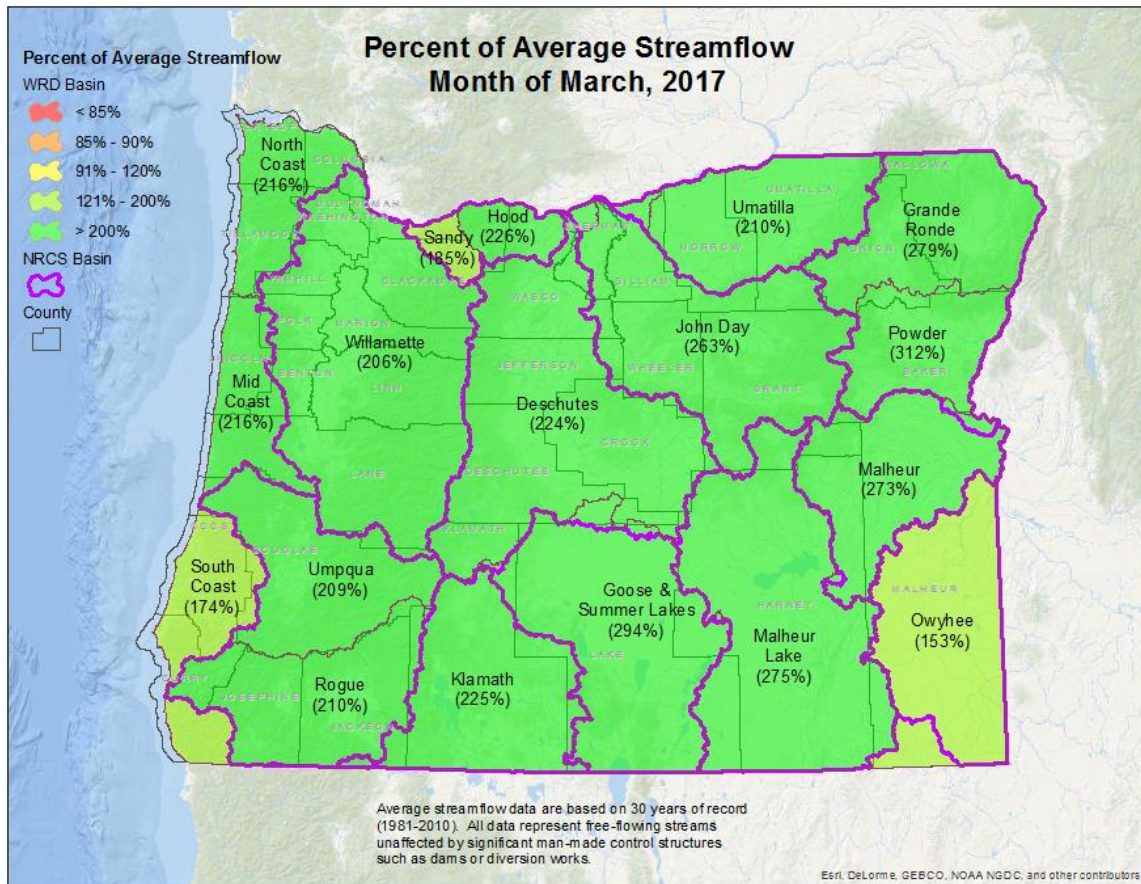
http://www.hydro.washington.edu/forecast/monitor/curr/conus.mexico/west.vic.sm_qnt.qif

VIC Soil Moisture Percentiles (wrt/ 1916-2004)

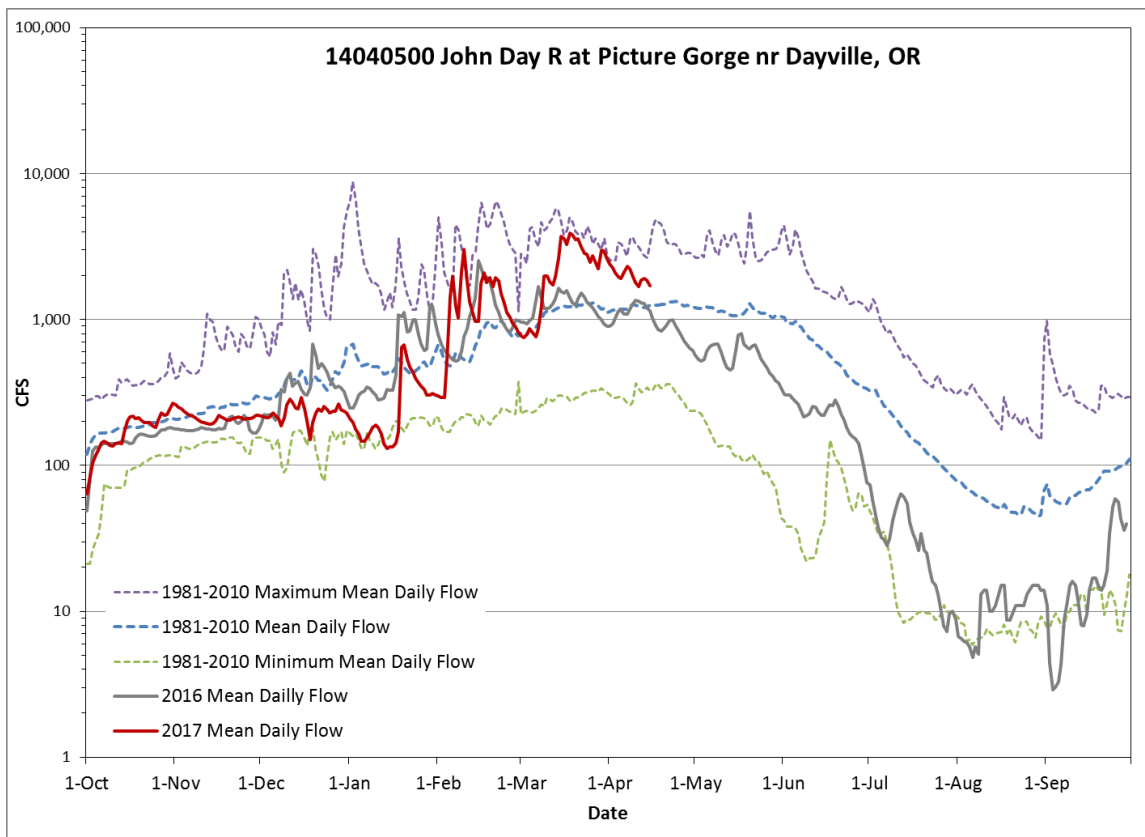
Western United States - 20170416



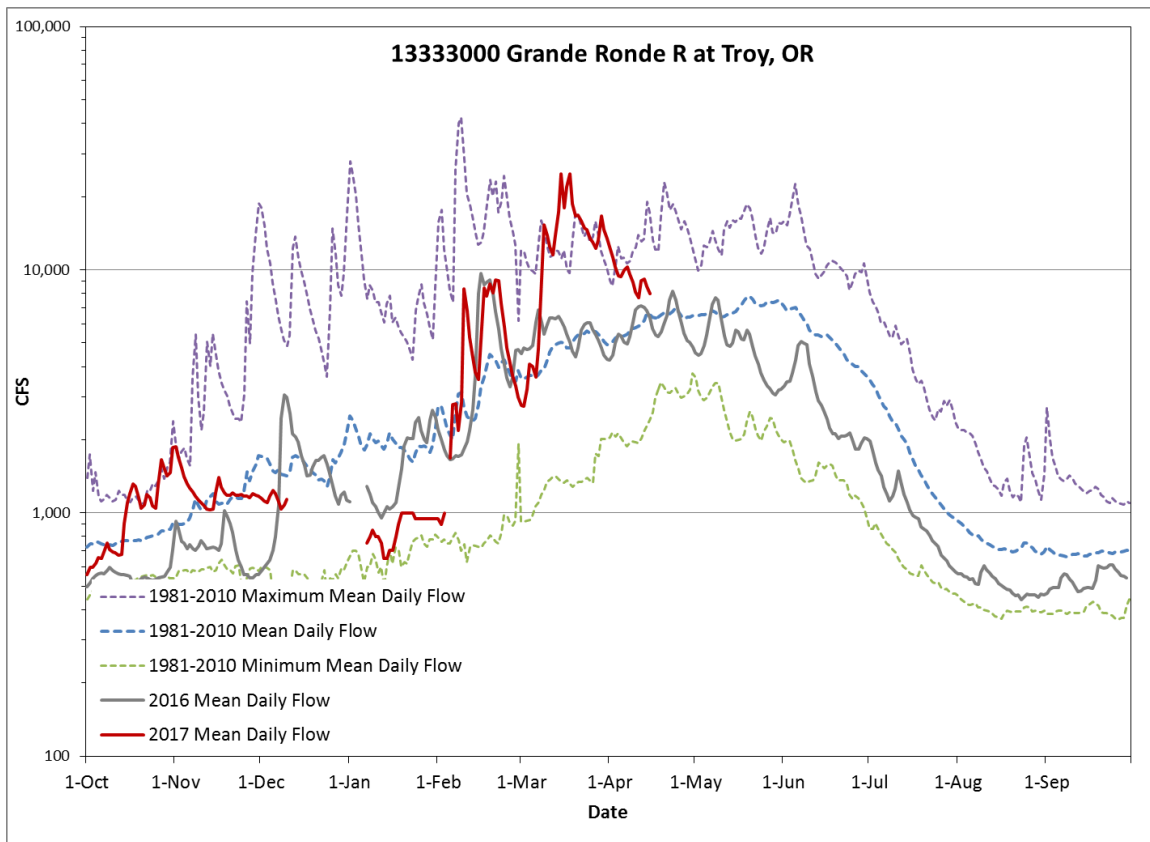
March Regional Streamflow Conditions



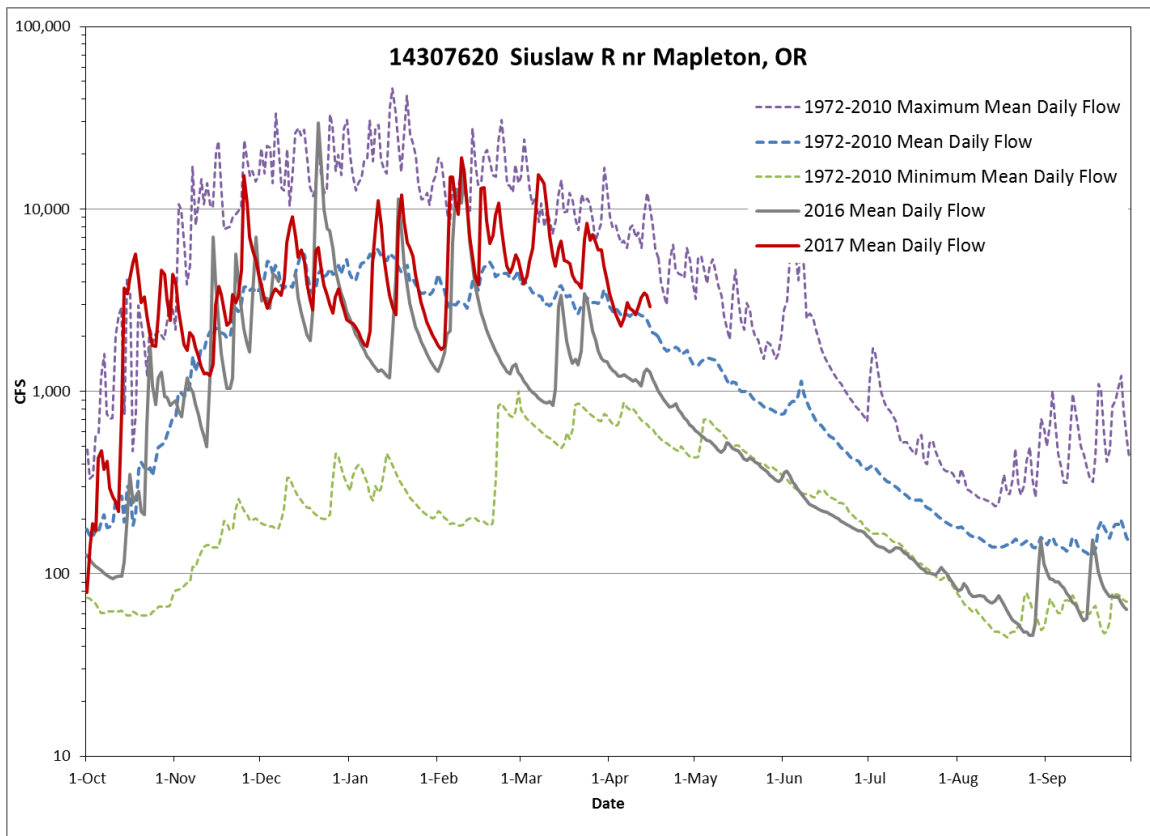
Streamflow Example – North Central Oregon (John Day)



Streamflow Example – Eastern Oregon (Grande Ronde)



Streamflow Example – Western Oregon (Mid Coast)



March Regional Reservoir Storage Conditions

