Oregon
Water Conditions Report
March 13, 2018

OREGON
WATER RESOURCES
DEPARTMENT

Snow water equivalent values measured at NRCS SNOTEL sites have increased over the past two weeks. While still below normal, the statewide average is now at 63 percent. This continues to be been buoyed by recent snow events primarily in the northern part of the state, in particular the northern Cascades, and northeastern basins. The Hood, Sandy, and lower Deschutes basins are currently measuring the highest at 84 percent of normal with basins across the southern parts of the state still lagging behind. The Owyhee and Klamath basins are currently measuring the lowest at 38 and 45 percent of normal.

Statewide water year precipitation at NRCS SNOTEL sites is almost 90 percent of normal. The Umatilla, Walla Walla, and Willow basins currently are measuring the highest at 107 percent of average water year precipitation, while the Lake County, Goose Lake, and Harney basins are measuring 73 percent of average.

For more region specific details, the most recent NRCS Snow Survey Basin Outlook Report is now available and will continue to be published monthly until June, 2018. The Snow Survey also publishes weekly condition reports on three areas affected by wildfire in eastern Oregon. After exposure to high heat, soils in these burned areas can't absorb as much water. As a result, these watersheds can experience a higher risk for flash flooding. The reports can be accessed at: https://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/or/snow/?cid=nrcseprd854607

Temperatures over the past two weeks have been cooler than normal. Of note, areas in central and south central Oregon have seen temperatures 4 to 8 degrees cooler than normal. Over the next 8 to 14 days, the NOAA Climate Prediction Center is forecasting an increased probability of below-normal temperatures along with an increased probability of above-normal precipitation.

The Climate Prediction Center's most recent three month outlook favors increased chances of below-normal temperatures in the north and northwestern half of Oregon with equal chances of above or below-normal temperatures for the rest of the state. The precipitation outlook for the same period indicates equal chances of above or below-normal precipitation for most of the state. The next outlook will be issued on April 12, 2018.

La Niña conditions are expected to transition to ENSO-Neutral conditions most likely early this spring (~55 percent chance). The diagnostic discussion issued on March 8, 2018 provides more insight. For the latest discussion on the spring outlook, refer to the latest ENSO blog on the climate.gov website. The situation continues to be monitored;

any changes will be made to the status by the Climate Prediction Center. The next ENSO Diagnostics Discussion is scheduled for April 12, 2018.

Statewide streamflows for February were just over 60 percent of normal. This is down considerably from 90 percent seen for the month of January. Regionally for February, streamflow conditions were at 70 percent east of the Cascades and 50 percent to the west. Weather events in late February contributed to a rise in flows late in the month, especially the northern areas of the state. Streamflow forecasts for the approaching spring and summer season continue to predict that streamflows will be much lower than normal.

Most of the state's water supply reservoirs are at near-normal levels for this time of year. The Willamette System is currently 35 percent full and 19 percent below rule curve. Most projects are on minimum flow except Dorena and Foster, which are releasing a higher flow rate to stay on rule curve. USACE reservoir simulation models indicate that there is still a reasonable probability that Detroit, Cottage Grove, Dorena and Fern Ridge will fill by the summer recreation season.

With low flow conditions prevalent in the Rogue basin, Lost Creek releases have been reduced to sustain refill efforts, relying on local inflow below the project to maintain flows downstream. Currently the project is 12 percent below rule curve. Applegate continues to release minimum outflow to sustain refill efforts. Currently the project is 21 percent behind rule curve.

All of the USBR Oregon projects are well below any flood control requirements and continue to pass minimum flows, storing as much water as possible ahead of the start of irrigation season. A bright spot is McKay Reservoir which looks to have a good chance of filling. Scoggins is close to its fill curve and should also fill this spring. A wet spring will be needed to fill the other projects.

Central Oregon reservoirs are between 51 and 98 percent of capacity. Eastern Oregon reservoirs (not considering Thief Valley) are now at 51 to 73 percent of capacity. Reservoirs in North Central Oregon are at 77 and 82 percent. For the most recent near real-time, site-specific reservoir conditions (teacup diagrams) visit the USBR or USACE websites.

The US Drought Monitor remains unchanged in the past two weeks. The March 6, 2018 report indicates that 76 percent of Oregon is now listed as "Abnormally Dry" (D0). In addition, 38 percent of the state is now listed as in "Moderate Drought" (D1).

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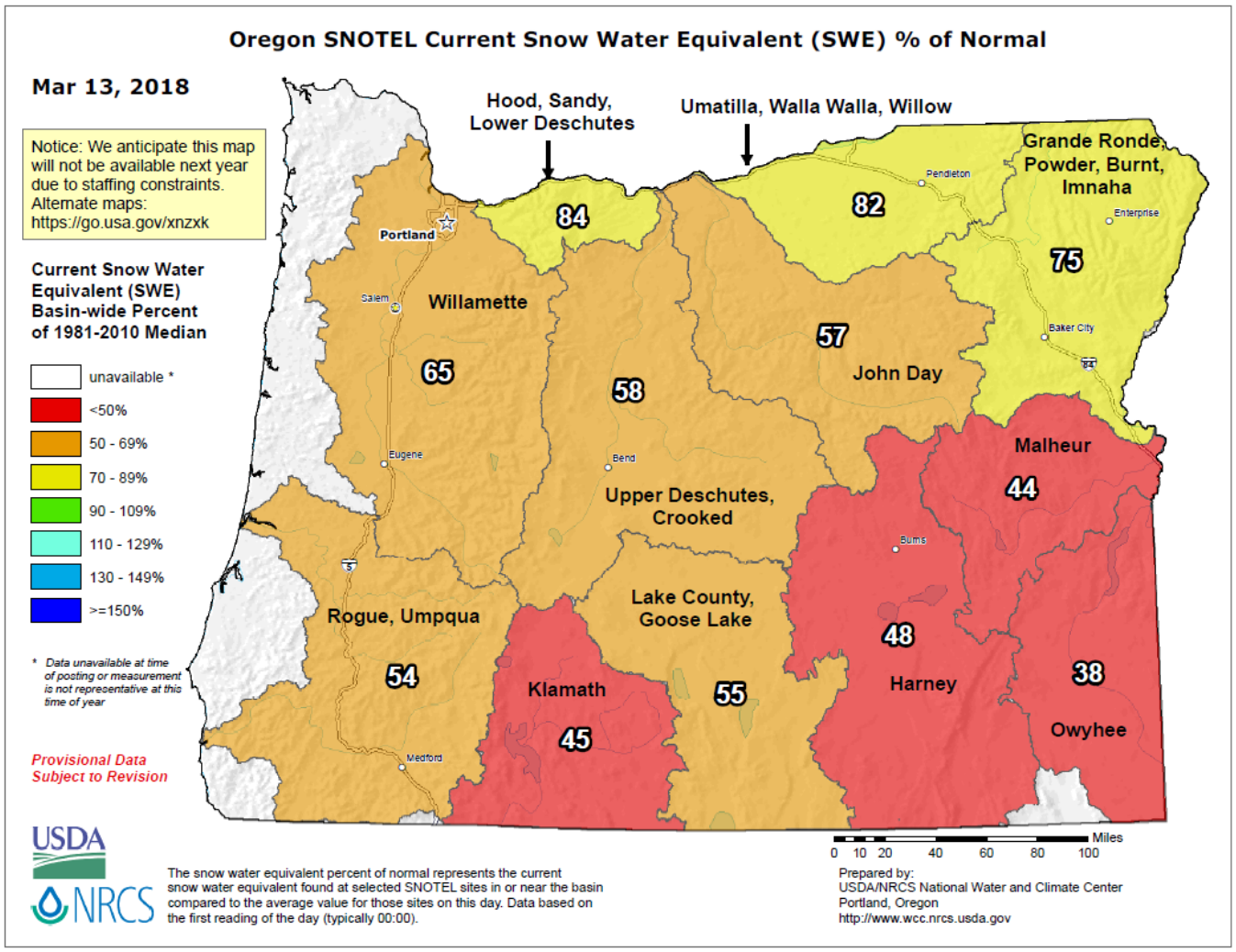
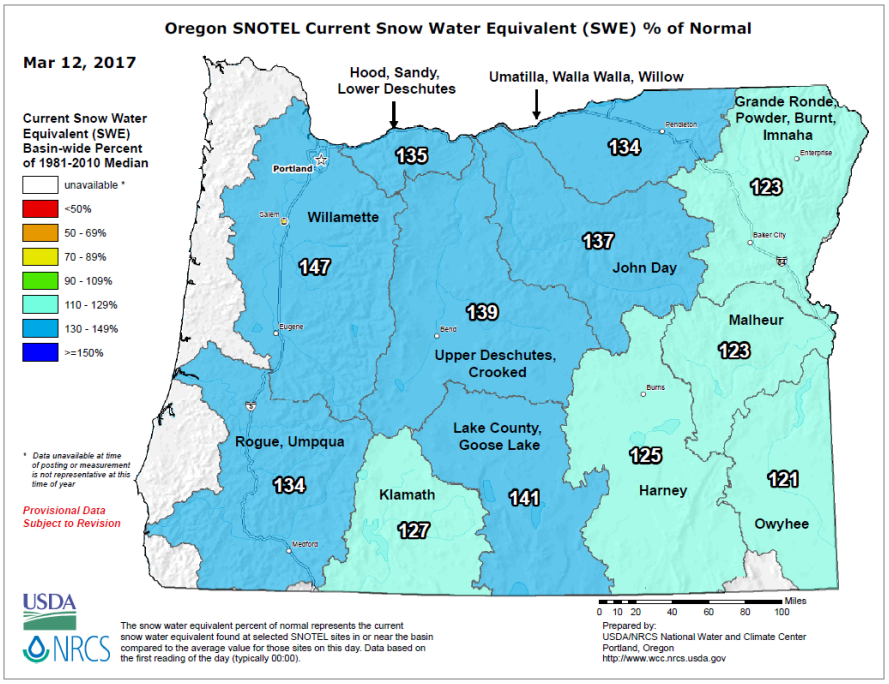
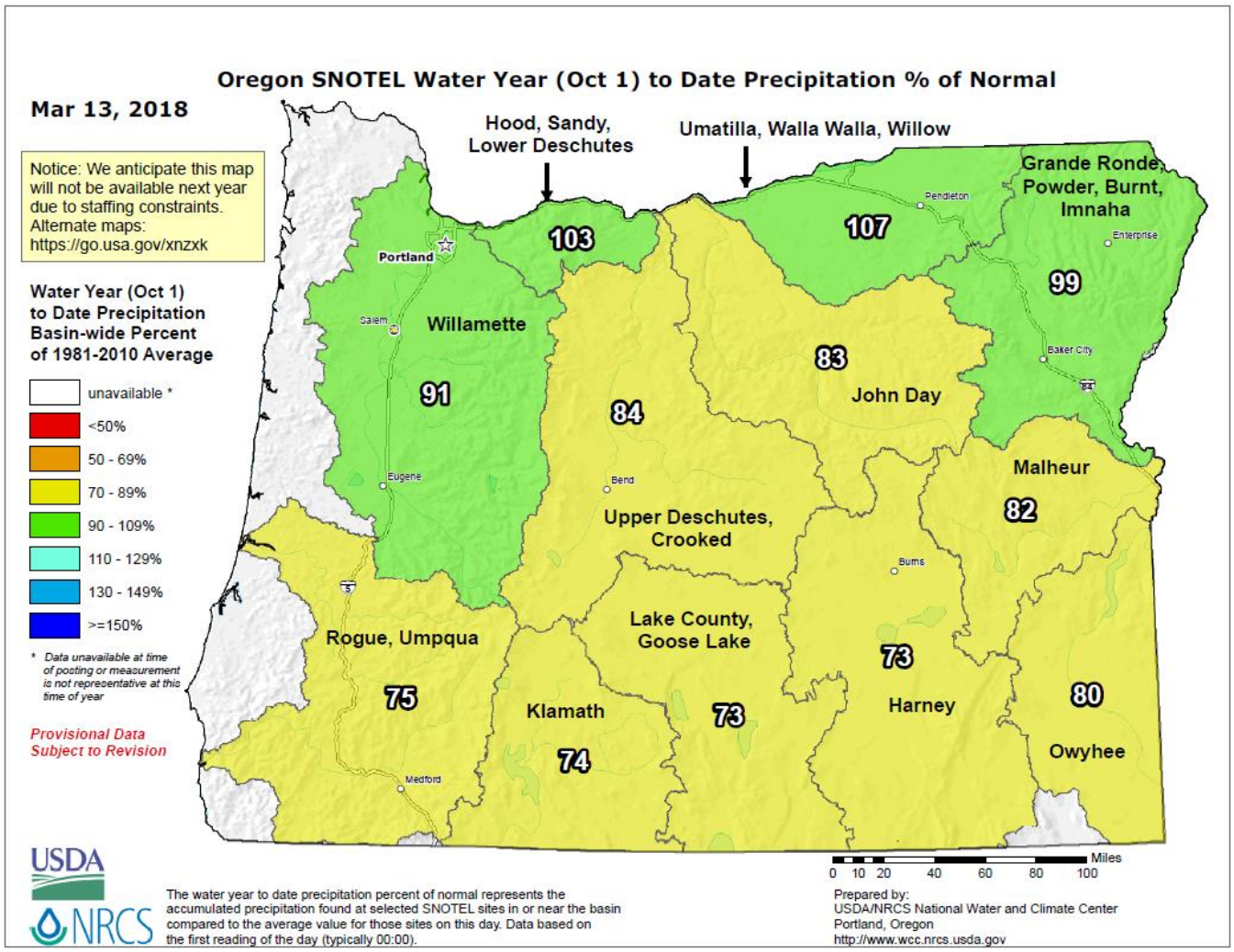
Snow Water Equivalent – Percent of Normal



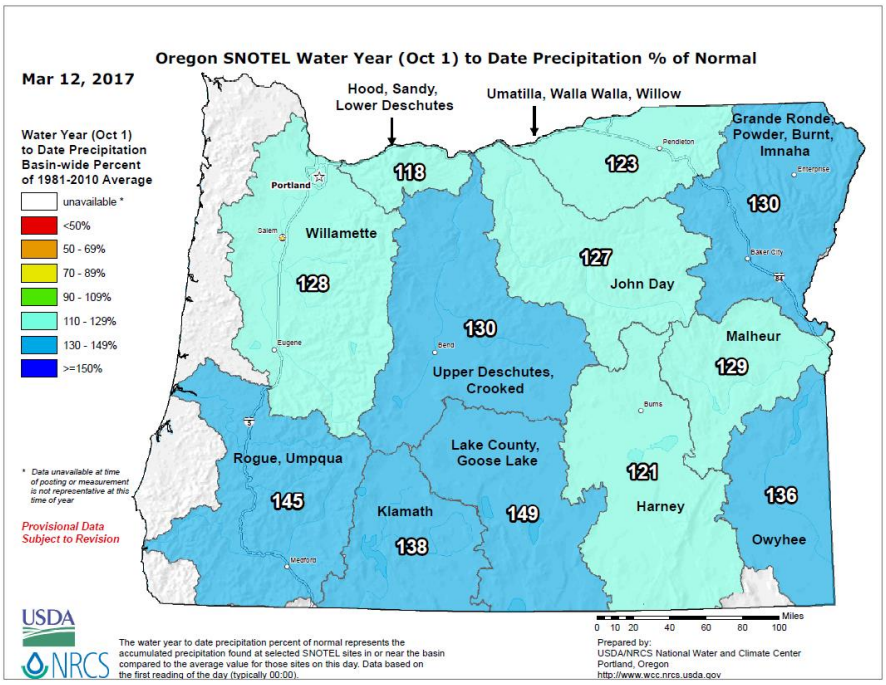
Compared to this time last year -



Precipitation (Mountain) - Percent of Normal



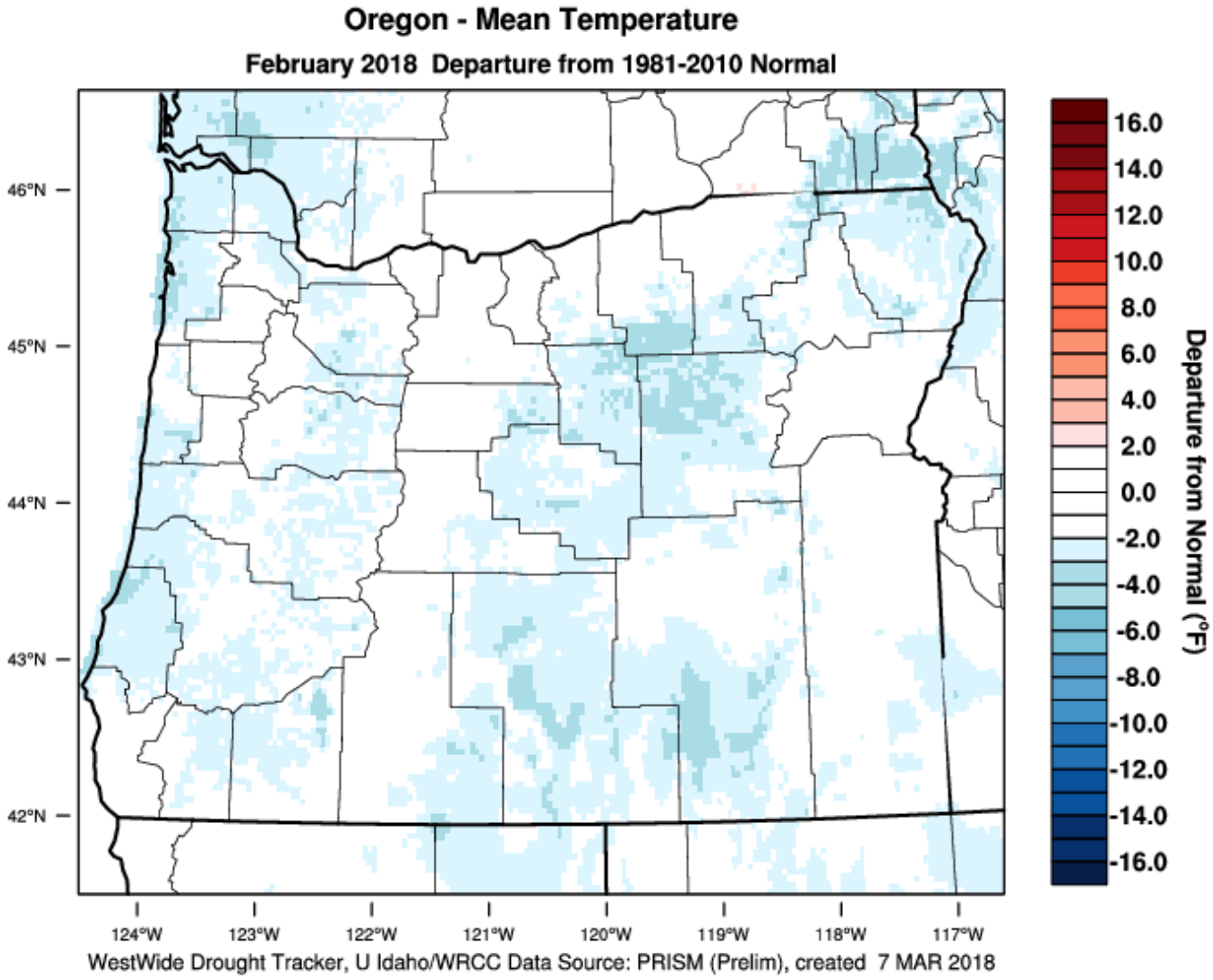
Compared to this time last year -



Temperature – (1 Month) Departure from Normal

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

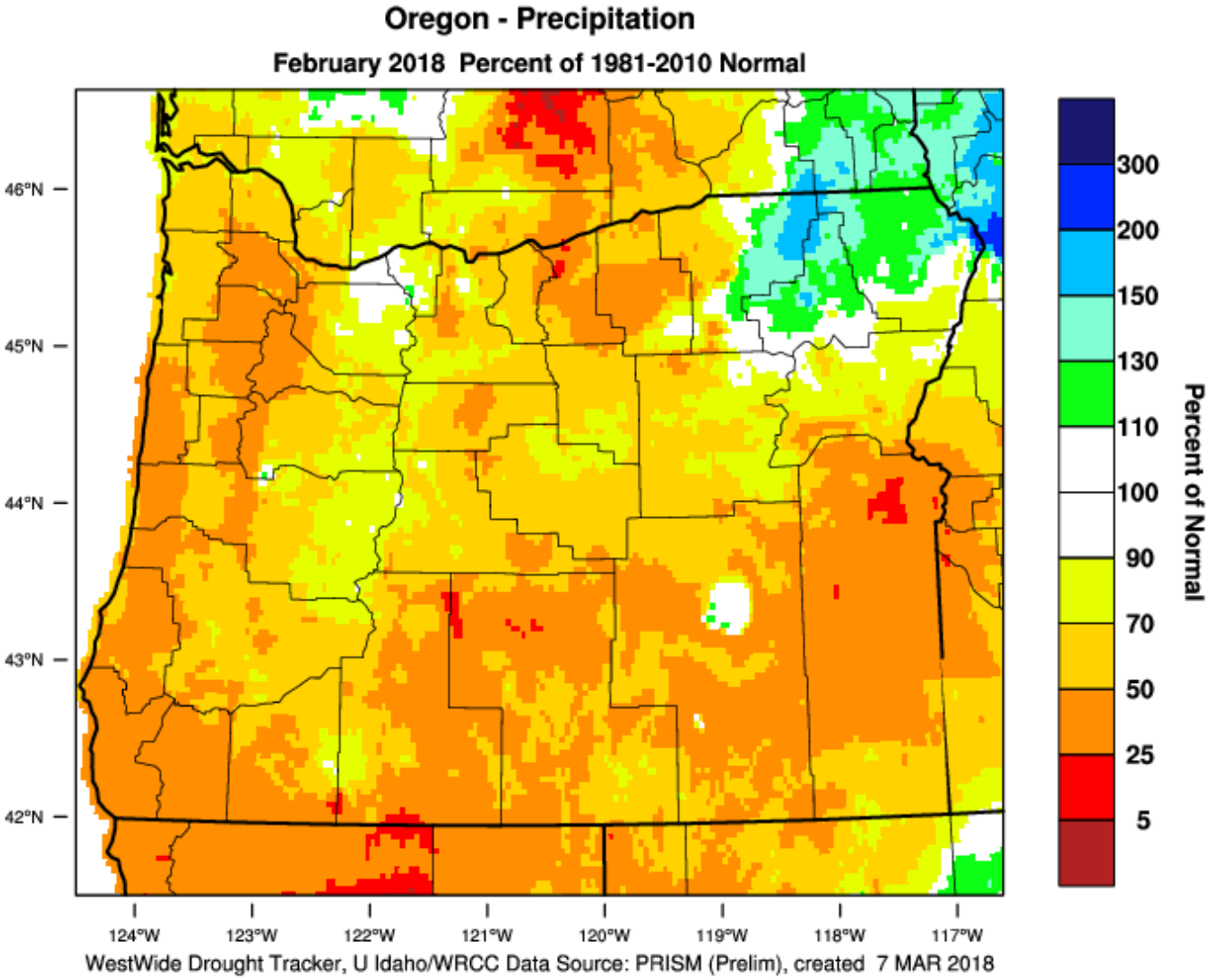
PRISM > Temperature Anomaly 1 Month > Oregon



Precipitation – (1 Month) Percent of Normal

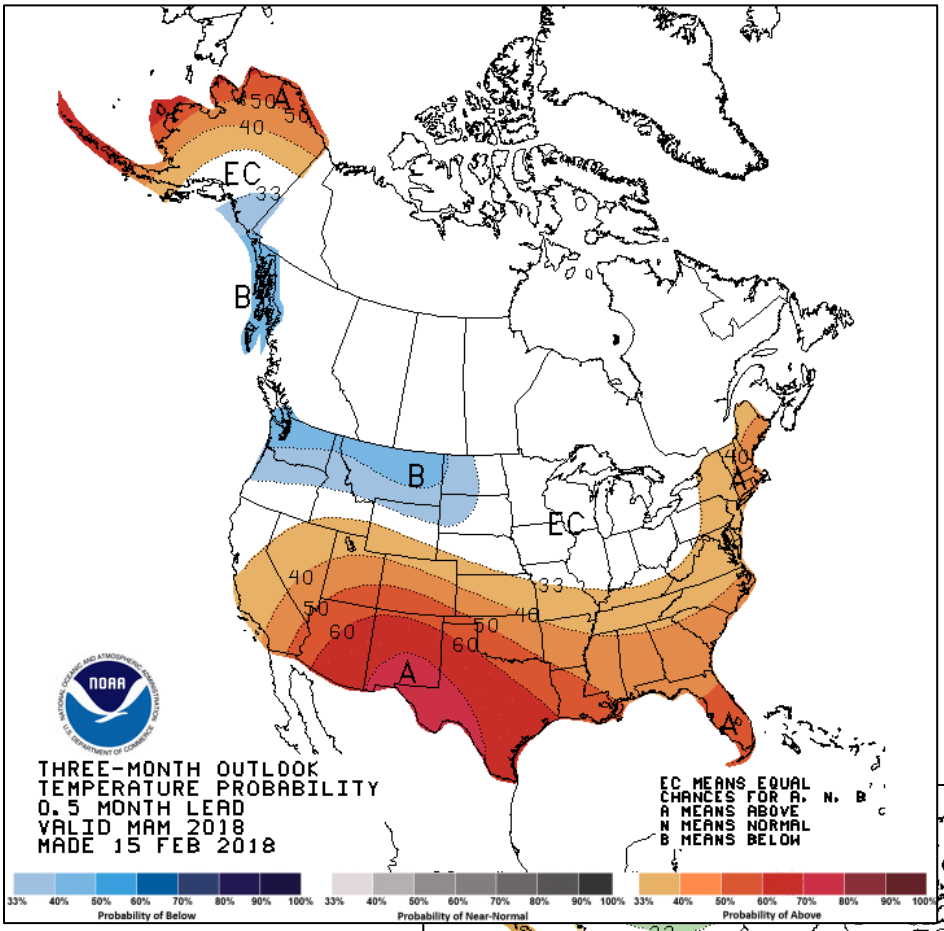
Website: http://www.wrcc.dri.edu/wwdt/index.php?folder=pon1

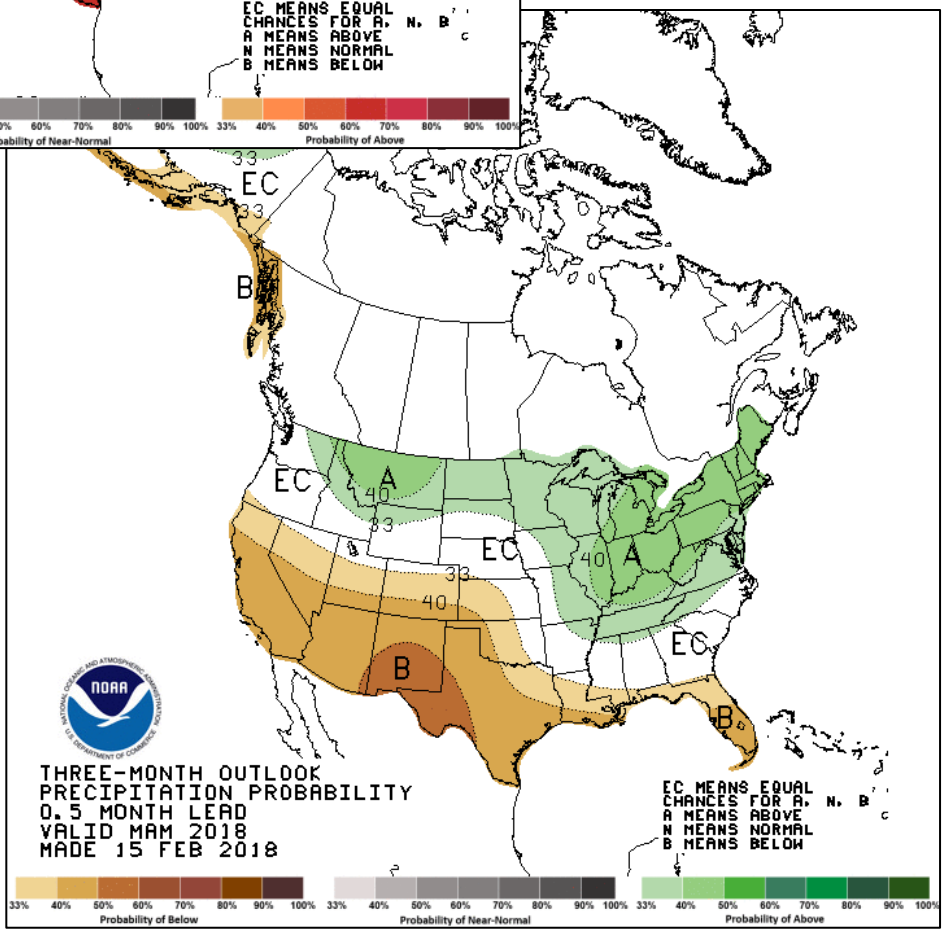
PRISM > Precipitation Anomaly 1 Month > Oregon



Three Month Temperature and Precipitation Outlook

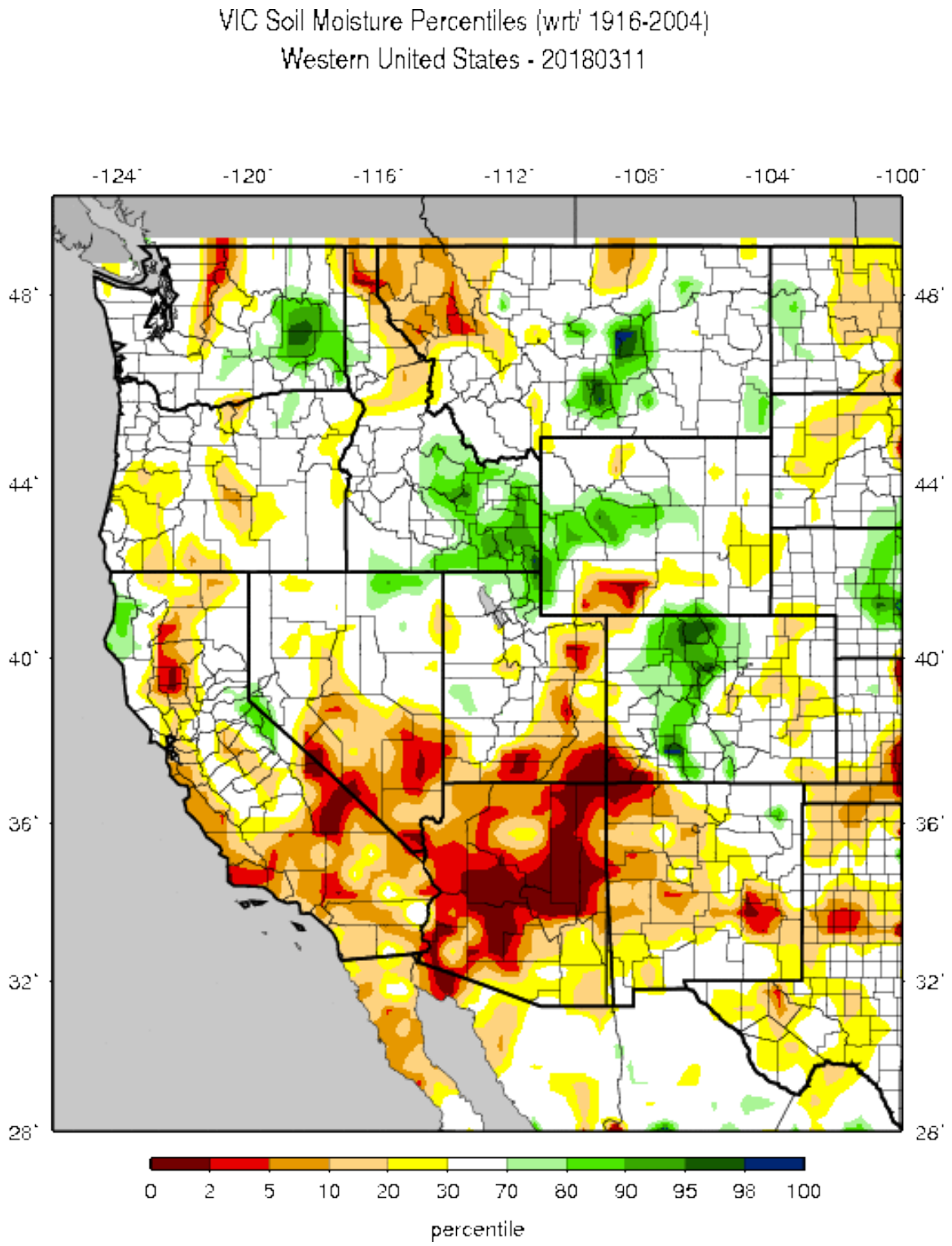
March through May Outlook - Follow link for the latest information.
Website: http://www.cpc.ncep.noaa.gov/products/predictions/long_range/seasonal.php?lead=1





Soil Moisture - Percentile

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

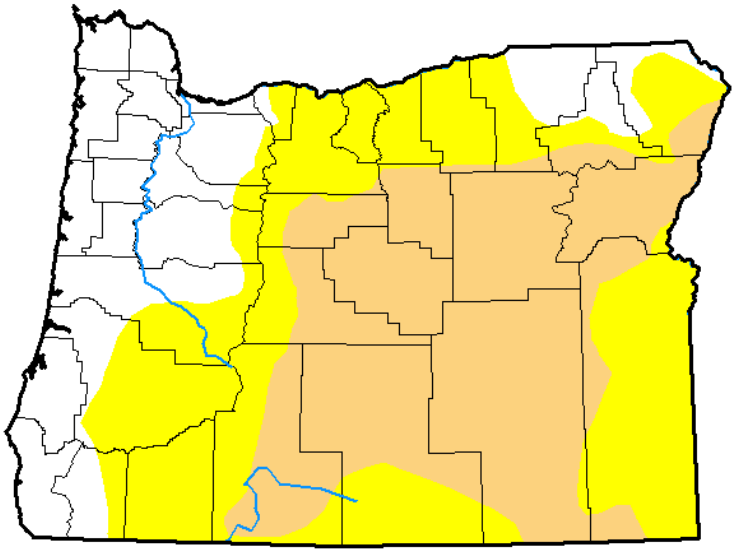


U.S. Drought Monitor for Oregon

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

U.S. Drought Monitor

Oregon



March 6, 2018

(Released Thursday, Mar. 8, 2018)

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	23.86	76.14	38.32	0.00	0.00	0.00
Last Week 02-27-2018	23.86	76.14	38.32	0.00	0.00	0.00
3 Months Ago 12-05-2017	100.00	0.00	0.00	0.00	0.00	0.00
Start of Calendar Year 01-02-2018	100.00	0.00	0.00	0.00	0.00	0.00
Start of Water Year 09-26-2017	39.23	60.77	28.57	0.00	0.00	0.00
One Year Ago 03-07-2017	100.00	0.00	0.00	0.00	0.00	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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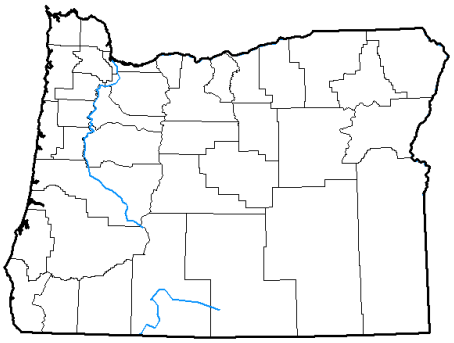
http://droughtmonitor.unl.edu/

Compared to this time last year:

U.S. Drought Monitor

Oregon



March 14, 2017

(Released Thursday, Mar. 16, 2017)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	100.00	0.00	0.00	0.00	0.00	0.00
Last Week 03-07-2017	100.00	0.00	0.00	0.00	0.00	0.00
3 Months Ago 12-13-2016	56.47	43.53	23.22	2.63	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 03-15-2016	29.47	70.53	48.88	18.60	0.00	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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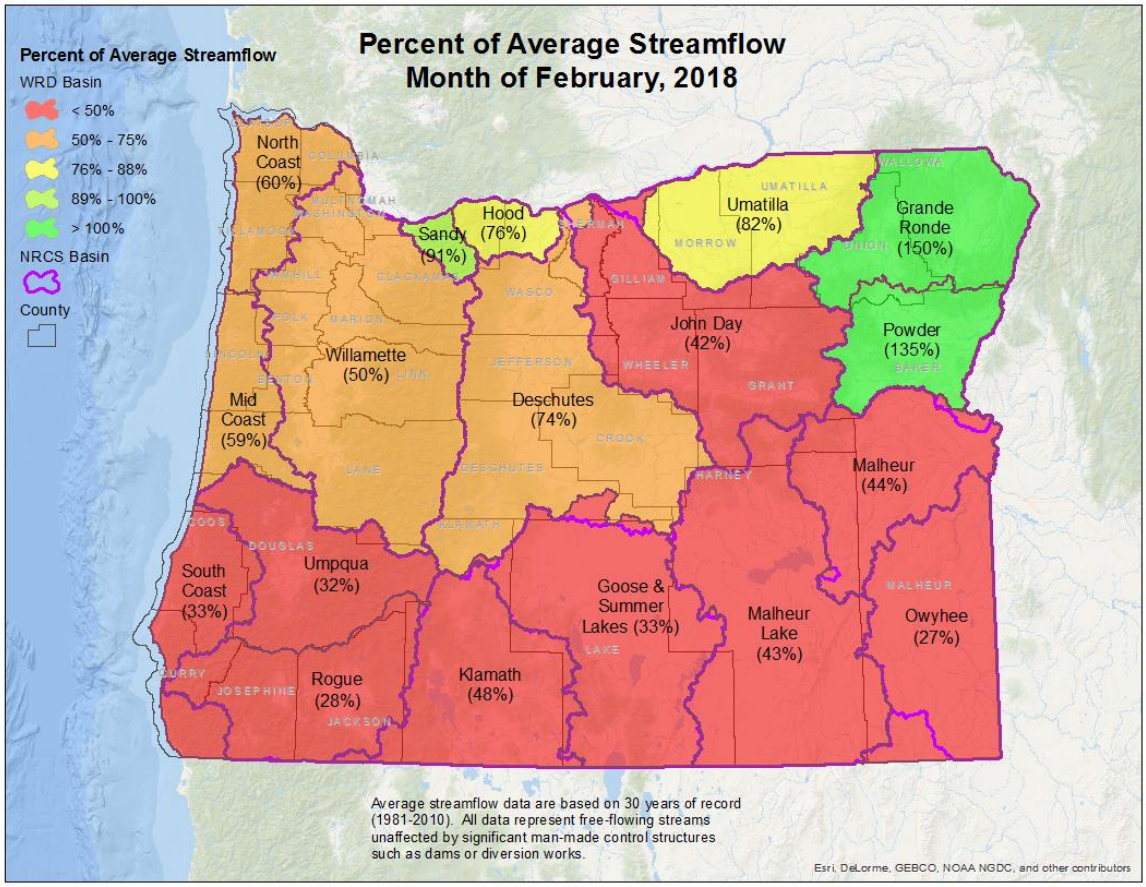
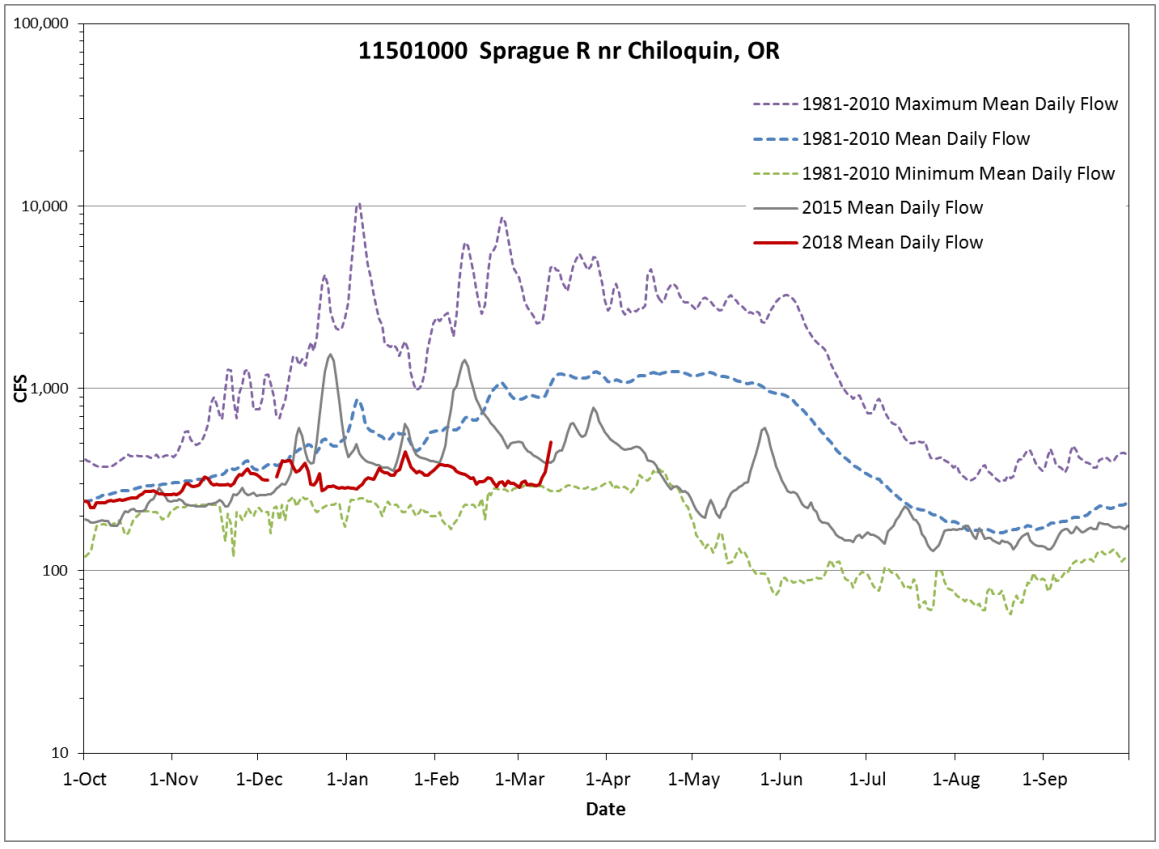
http://droughtmonitor.unl.edu/

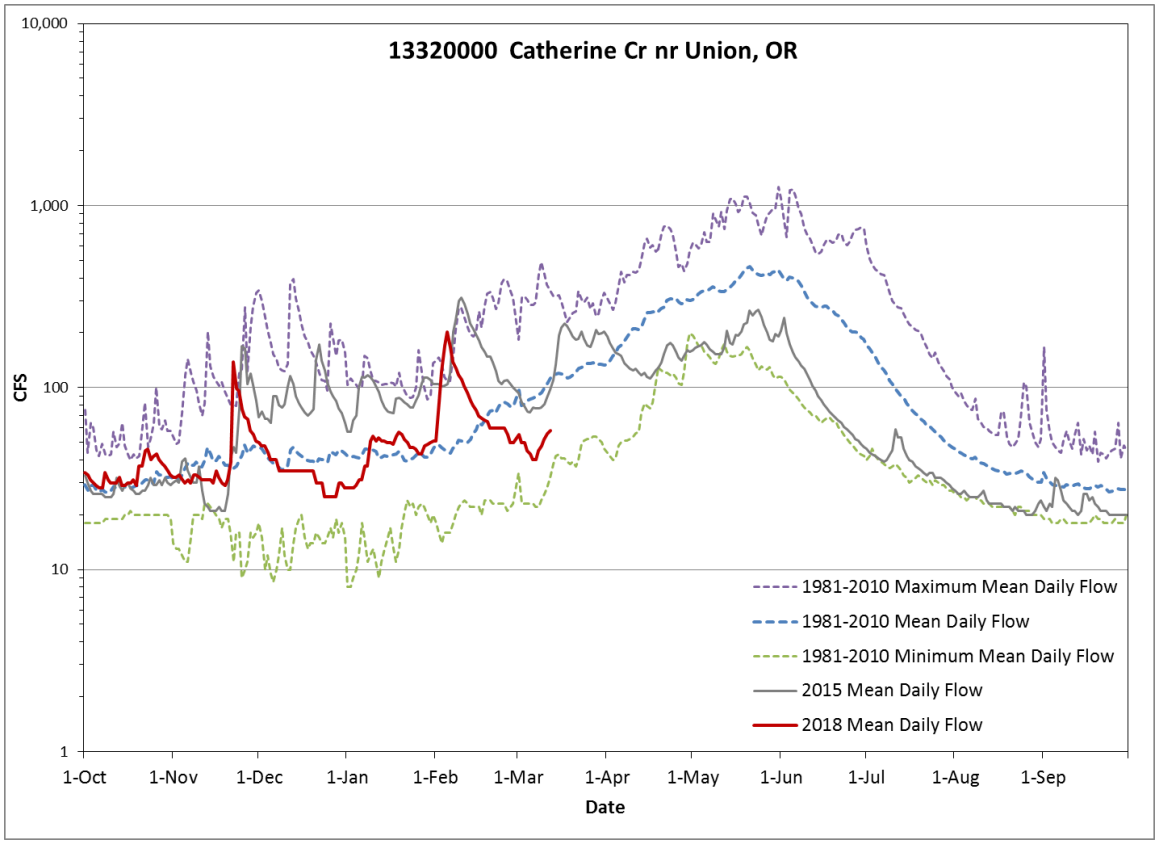
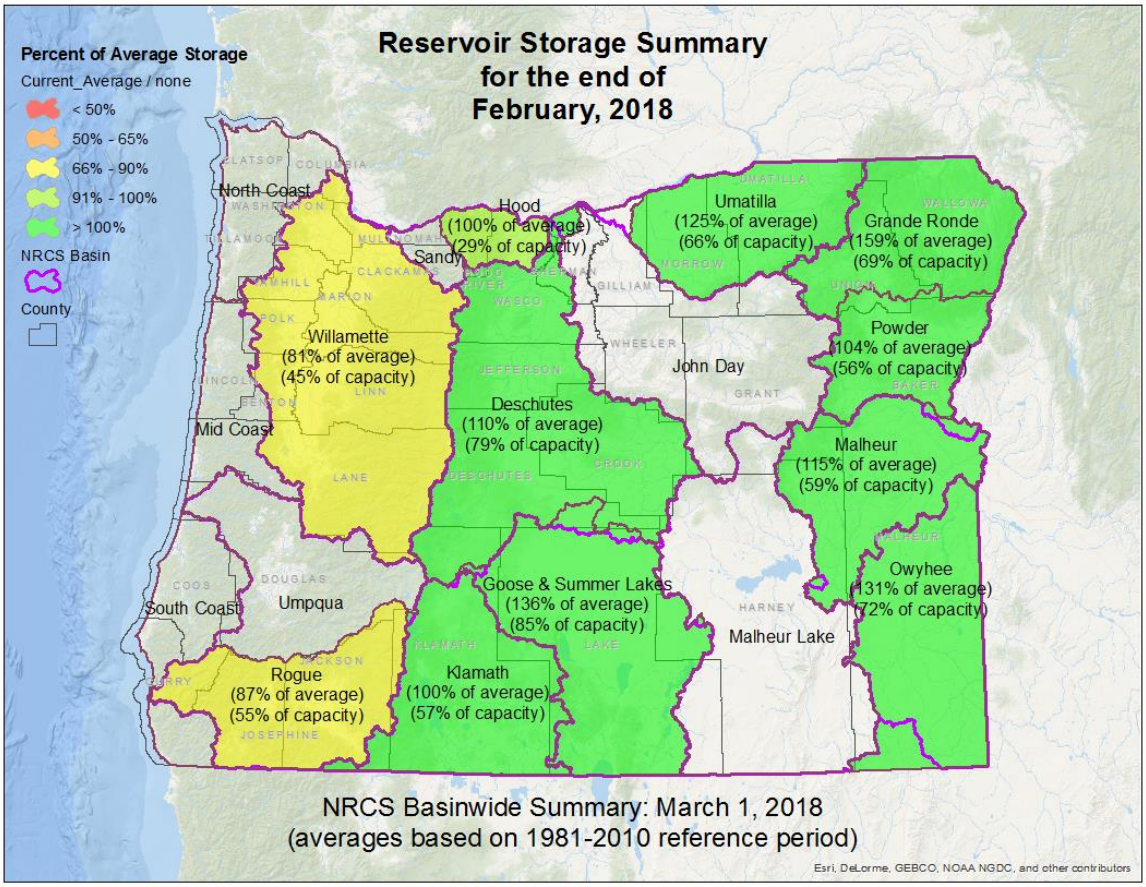
Statewide Streamflow Conditions - February



Streamflow Conditions – Klamath



Streamflow Conditions – Grande Ronde



Statewide Reservoir Conditions - February