

Oregon

Water Conditions Report

April 23, 2018



Snow water equivalent values measured at NRCS SNOTEL sites across Oregon remain below normal at 80 percent. The Hood, Sandy, and Lower Deschutes and Umatilla, Walla Walla, and Willow basins have received the highest amounts of snowpack over the past several weeks and are measuring 110 percent of normal. The Owyhee, Malheur, and John Day basins are measuring the least amount of snowpack and stand at 32, 43, and 50 percent of normal, respectively. The map on [page 4](#) illustrates the considerable differences between the northern and southern regions of the state. These differences are reflective of the weather patterns that have been prevalent [across the west](#) throughout this past winter and spring.

Oregon statewide water year precipitation at NRCS SNOTEL sites is 94 percent of normal, and has remained fairly steady over the past couple of months. The highest amounts of water year precipitation have been in the Hood, Sandy, and Lower Deschutes and Umatilla, Walla Walla, and Willow basins with 110 percent and 107 percent of normal, respectively. The lowest values are in the Harney and Klamath basins at 79 percent and 81 percent of normal for the water year.

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 with the exception of areas along the north coast, southeast, and eastern Oregon where temperatures have been 2 to 4 degrees warmer than normal. Over the next [8 to 14 days](#), the NOAA Climate Prediction Center is forecasting equal chances of above or below-normal temperatures along with an increased probability of above-normal precipitation for the southern two thirds of the state.

The Climate Prediction Center's most recent [three month outlook](#) favors increased chances of above-normal temperatures along with below-normal precipitation across the entire state. The next long-term outlook will be issued on May 17, 2018.

La Niña conditions are expected to transition to ENSO-Neutral conditions most likely during April-May (> 50 percent chance). For more insight, refer to the April 12, 2018 [diagnostic discussion](#) issued by the Climate Prediction Center. 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 and updated by the Climate Prediction Center. The next ENSO Diagnostics Discussion is scheduled for May10, 2018.

Statewide streamflows for March were at 74 percent of normal. This is up from the 63 percent seen for the month of February. Regionally for March, streamflow conditions were at 63 percent east of the Cascades and 92 percent to the west. Weather events in early April have sustained flows for most of the month, especially the northern and coastal areas of the state. [Streamflow forecasts](#) for the approaching spring and summer seasons continue to predict that streamflows will be much lower than normal, especially in the southeastern regions of the state.

Most of the state's water supply reservoirs are at near-normal levels for this time of year. In some instances, reservoir operators are releasing water for early season water supply. The [Willamette](#) System is currently 82 percent full and 5 percent below rule curve. USACE reservoir simulation models indicate that there is still a reasonable probability that Cottage Grove, and Dorena will fill by the summer recreation season. Detroit, Green Peter and Fern Ridge are all now at or near 100 percent of capacity.

Low flow conditions are still prevalent in the [Rogue](#) basin. [Lost Creek](#) is nearly full with releases now only slightly lower than inflows. [Applegate](#) continues to release minimum outflow to sustain refill efforts. Currently the Applegate is 82 percent of capacity and 10 percent below 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 is now at 100 percent of capacity. [Scoggins](#) is close to its fill curve and is very close to capacity.

[Central Oregon](#) reservoirs are between 68 and 97 percent of capacity. [Eastern Oregon](#) reservoirs (not considering Thief Valley) are now at 63 to 100 percent of capacity. Reservoirs in [North Central Oregon](#) are at 89 and 100 percent. For the most recent near real-time, site-specific reservoir conditions (teacup diagrams) visit the [USBR](#) or [USACE](#) websites.

The [US Drought Monitor](#) has changed only slightly over the past two weeks. The April 17, 2018 report indicates that 67 percent of Oregon is now listed as “Abnormally Dry” (D0). In addition, 32 percent of the state is now listed as in “Moderate Drought” (D1).

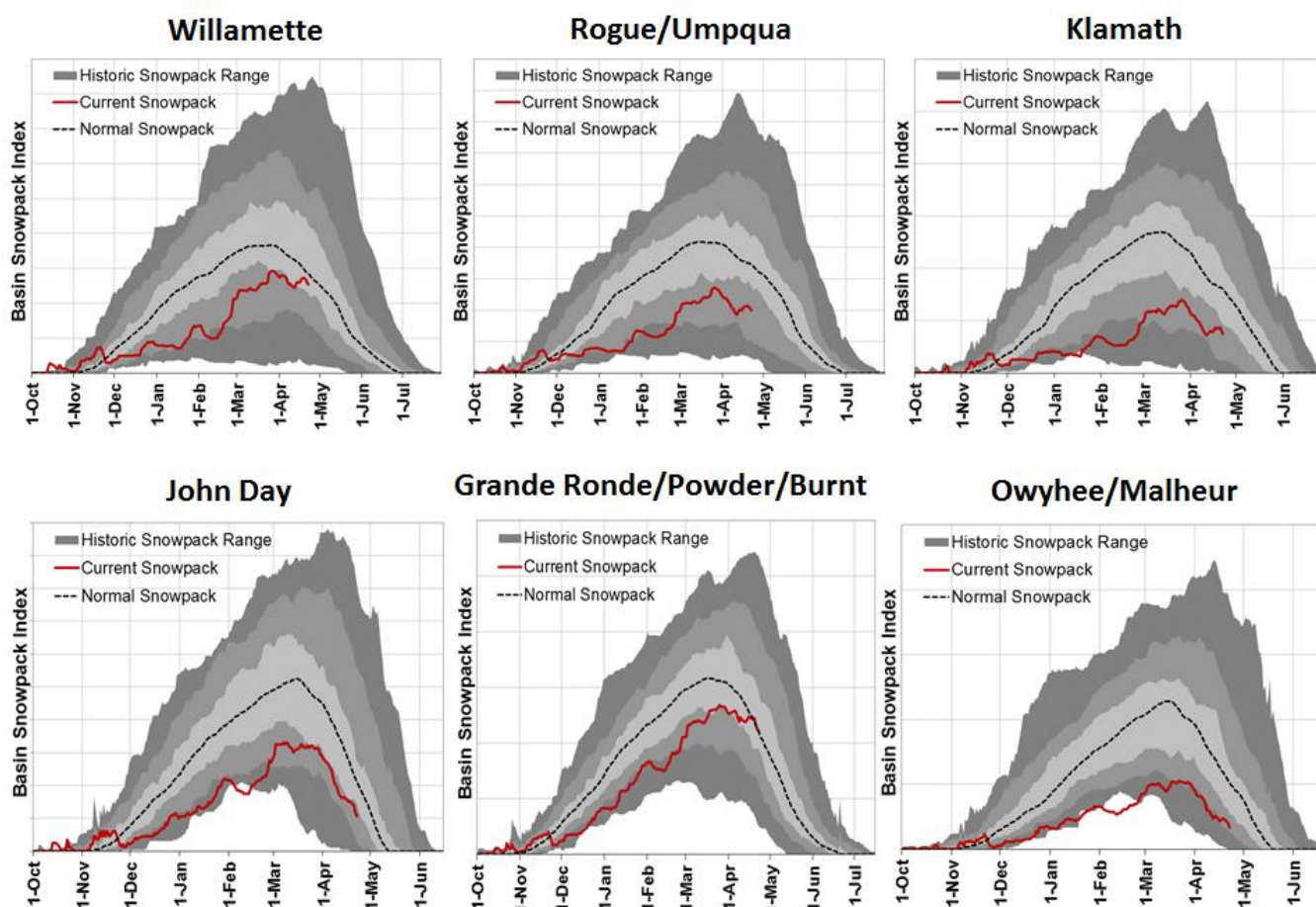
Data & Products:

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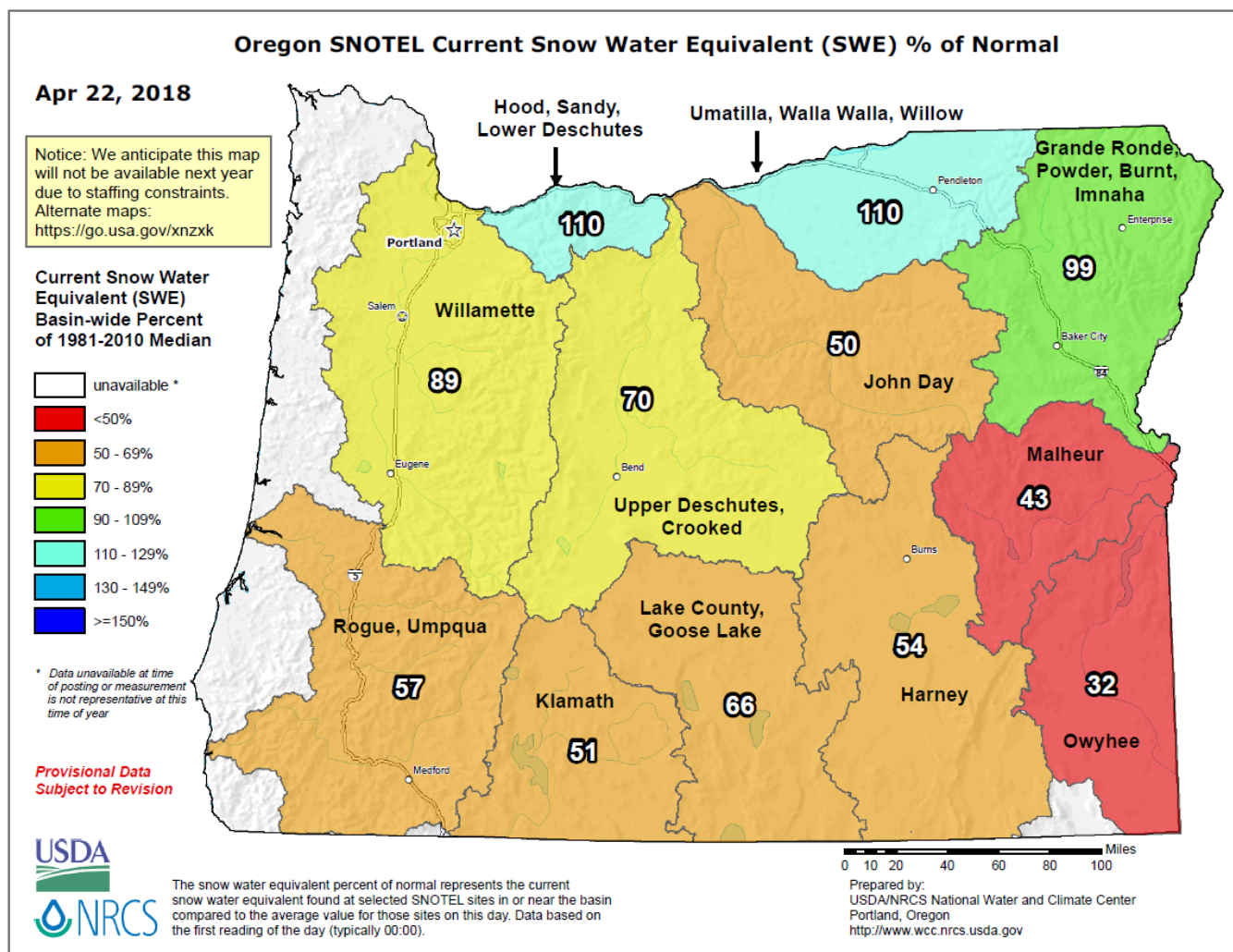
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Snowpack examples around Oregon

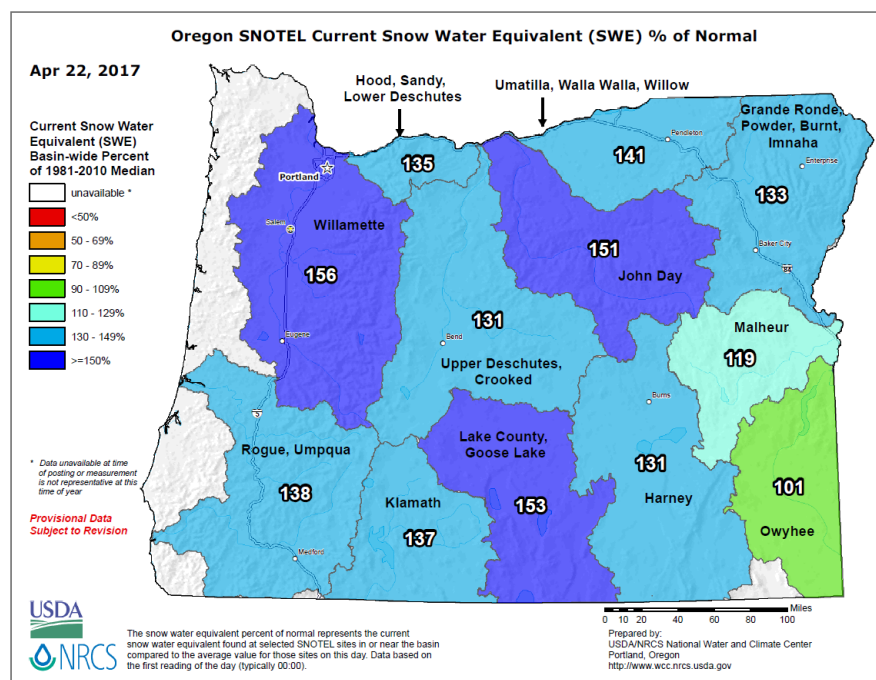
Water Year 2018



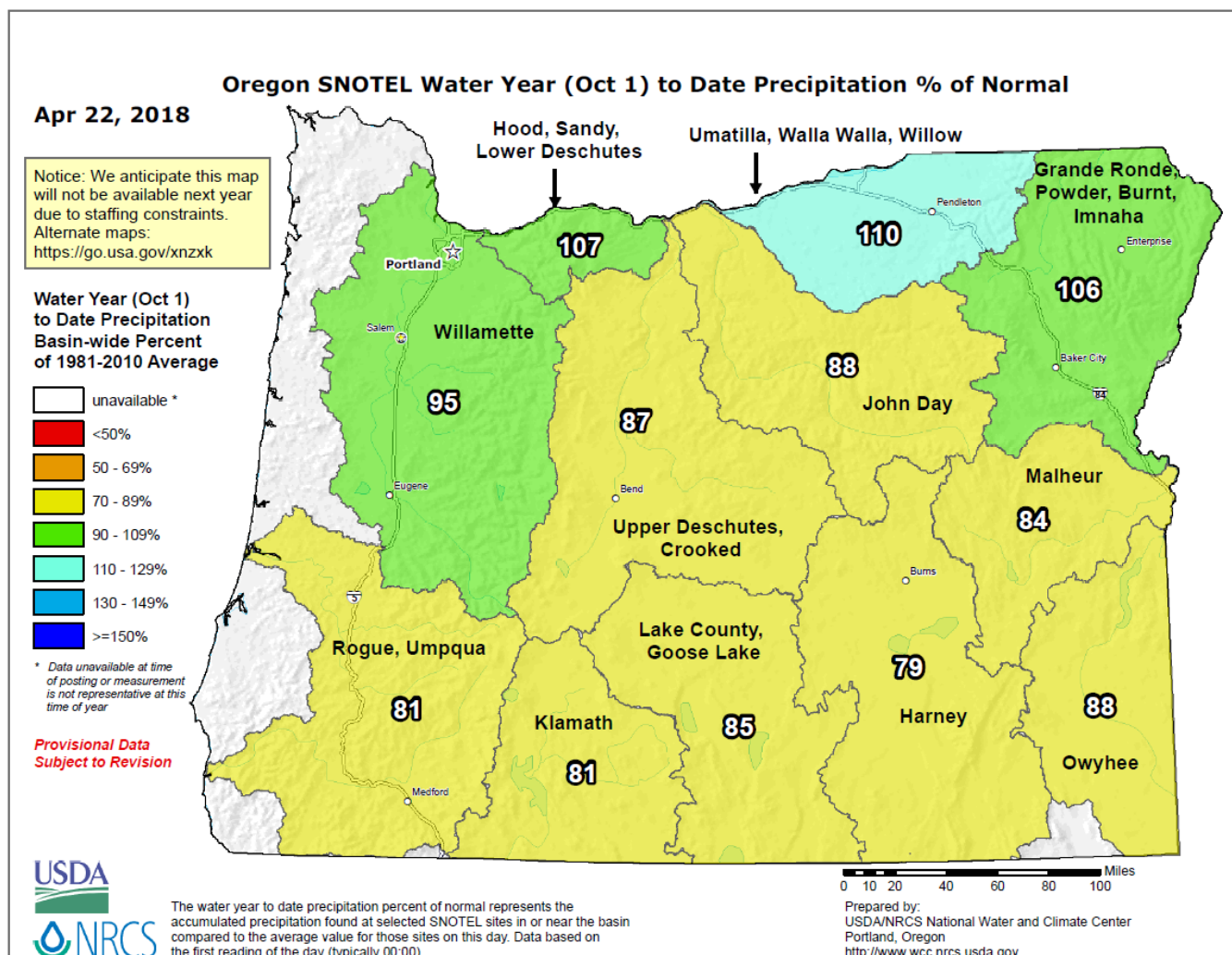
Snow Water Equivalent – Percent of Normal



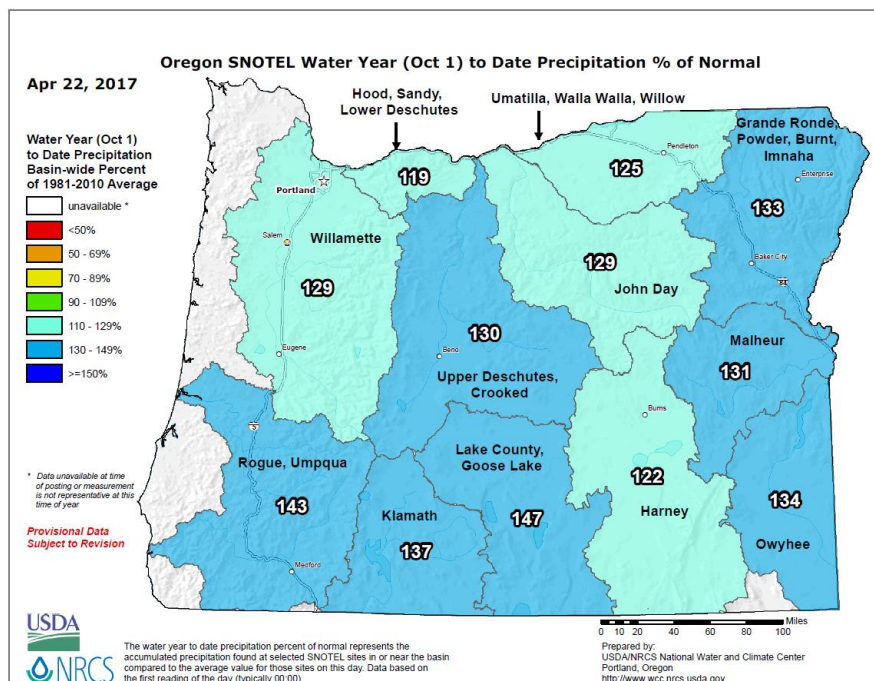
Compared to this time last year -



Precipitation (Mountain) - Percent of Normal



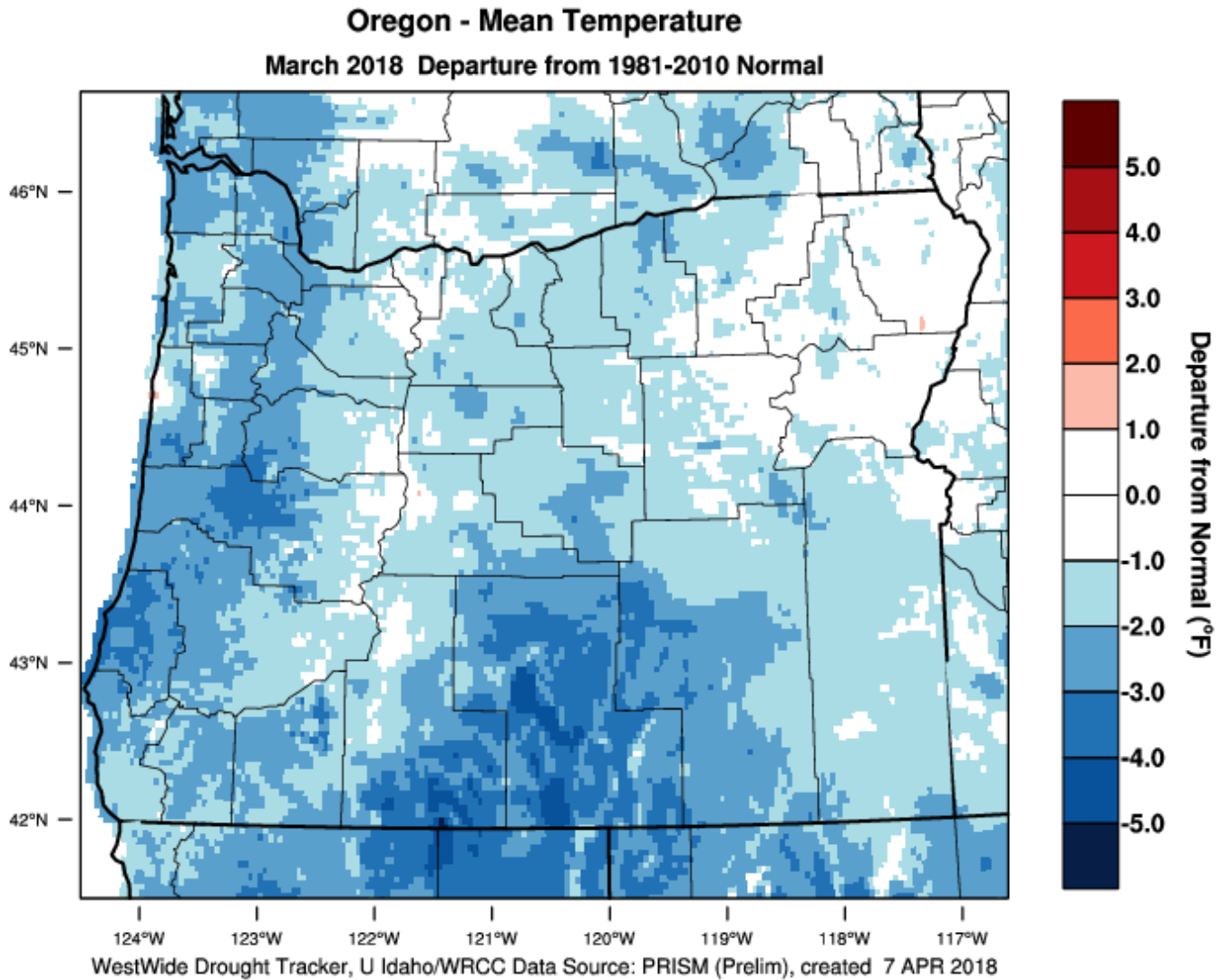
Compared to this time
 last year -



Temperature – (1 Month) Departure from Normal

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

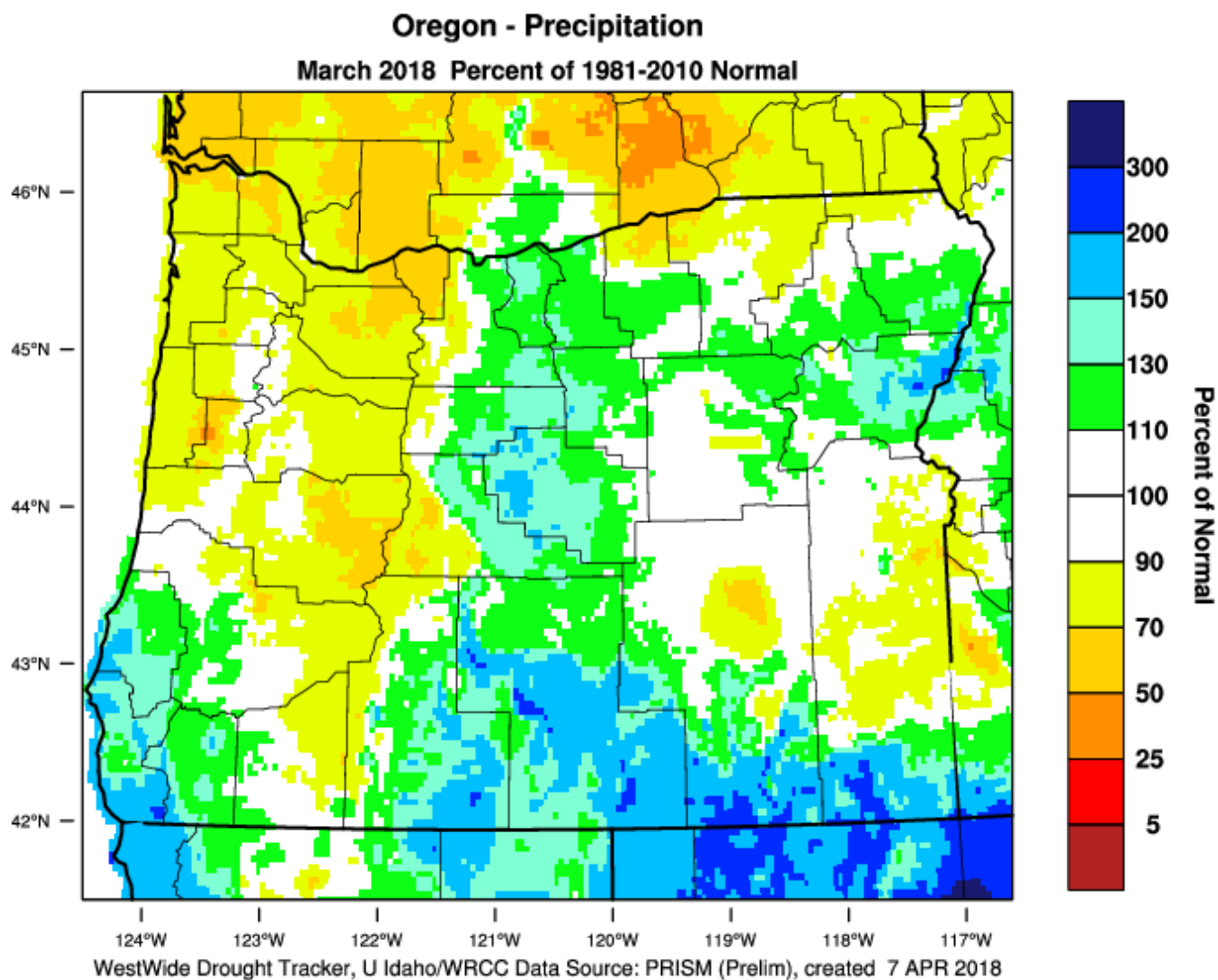
PRISM > Temperature Anomaly 1 Month > Oregon



Precipitation – (1 Month) Percent of Normal

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

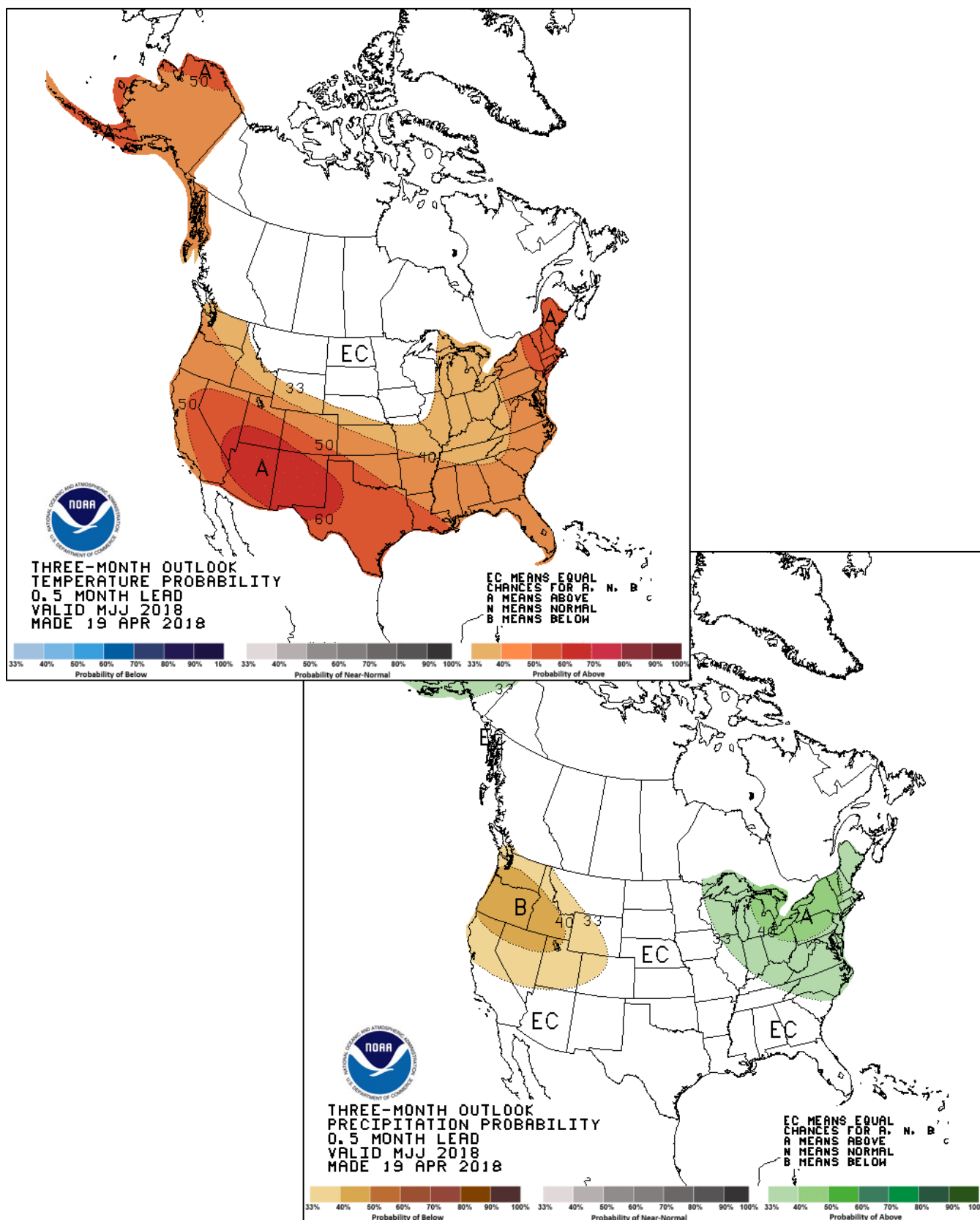
PRISM > Precipitation Anomaly 1 Month > Oregon



Three Month Temperature and Precipitation Outlook

May through July Outlook - Follow link for the latest information.

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



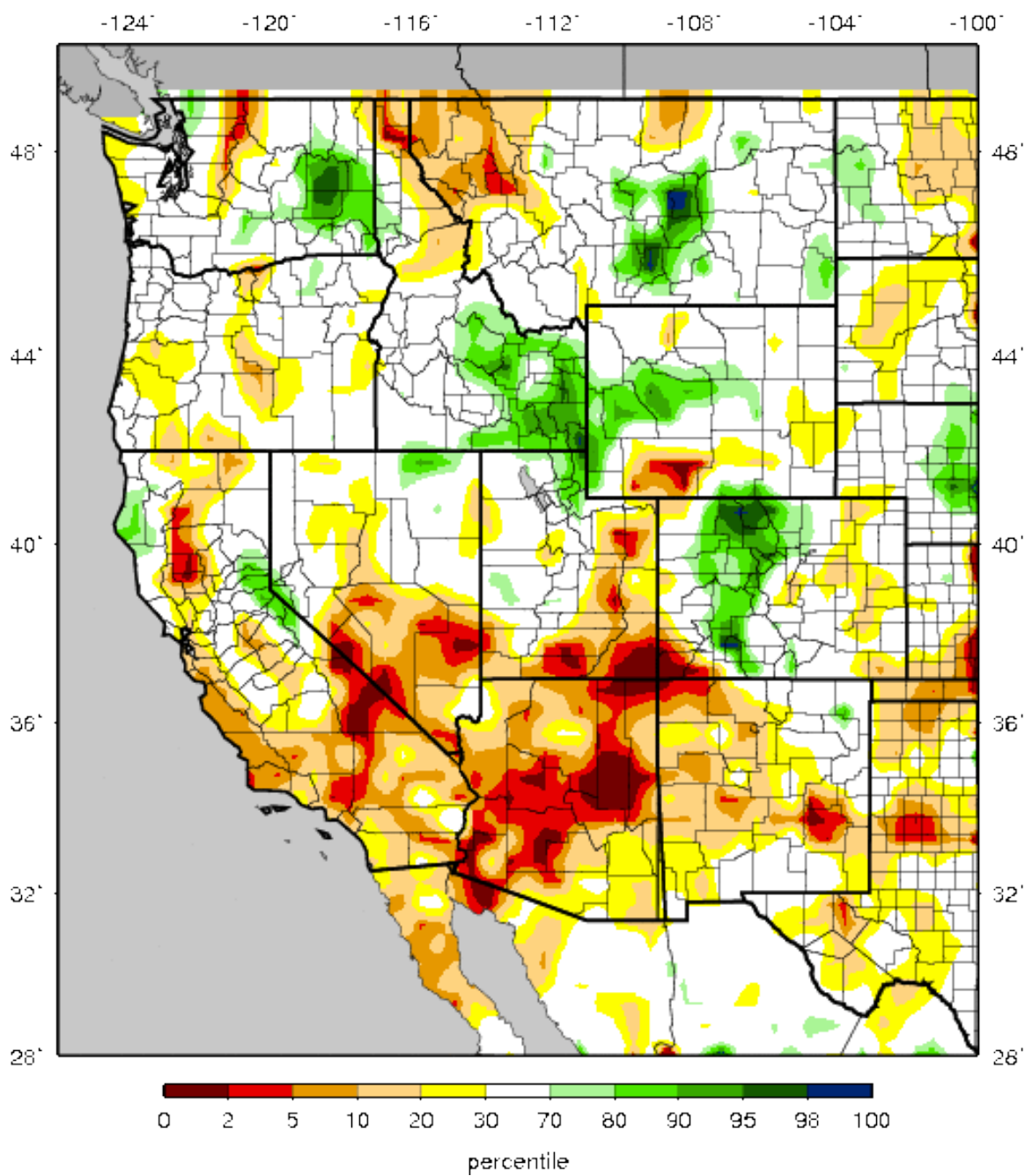
Soil Moisture - Percentile

Website:

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

VIC Soil Moisture Percentiles (wrt/ 1916-2004)

Western United States - 20180421



U.S. Drought Monitor for Oregon

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

U.S. Drought Monitor Oregon

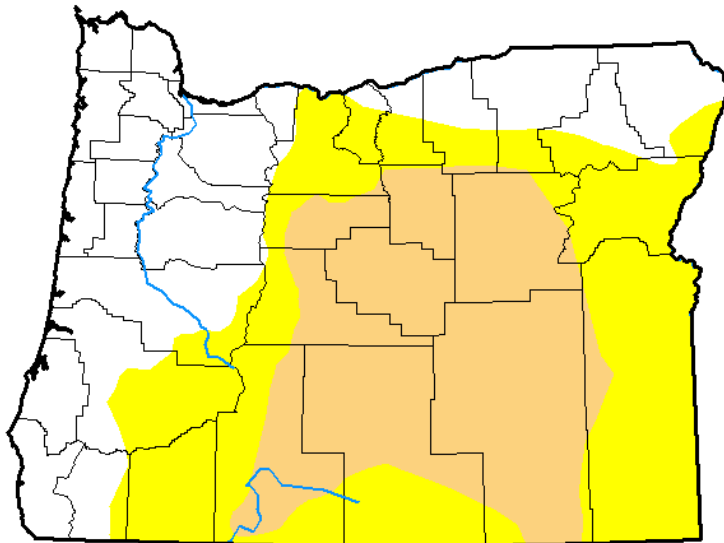
April 17, 2018

(Released Thursday, Apr. 19, 2018)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	32.94	67.06	31.83	0.00	0.00	0.00
Last Week 04-10-2018	32.44	67.56	31.83	0.00	0.00	0.00
3 Months Ago 01-16-2018	34.61	65.39	11.00	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 04-19-2017	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

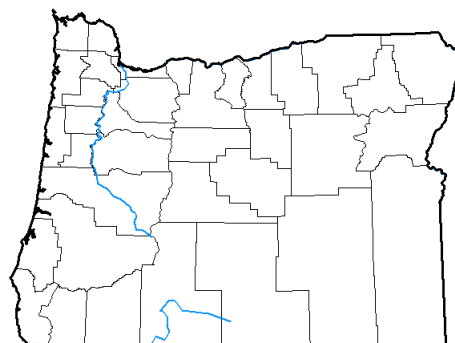
April 18, 2017

(Released Thursday, Apr. 20, 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 04-11-2017	100.00	0.00	0.00	0.00	0.00	0.00
3 Months Ago 01-17-2017	82.27	17.73	2.98	0.00	0.00	0.00
Start of Calendar Year 01-02-2017	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 04-19-2016	47.03	52.97	26.12	1.00	0.00	0.00



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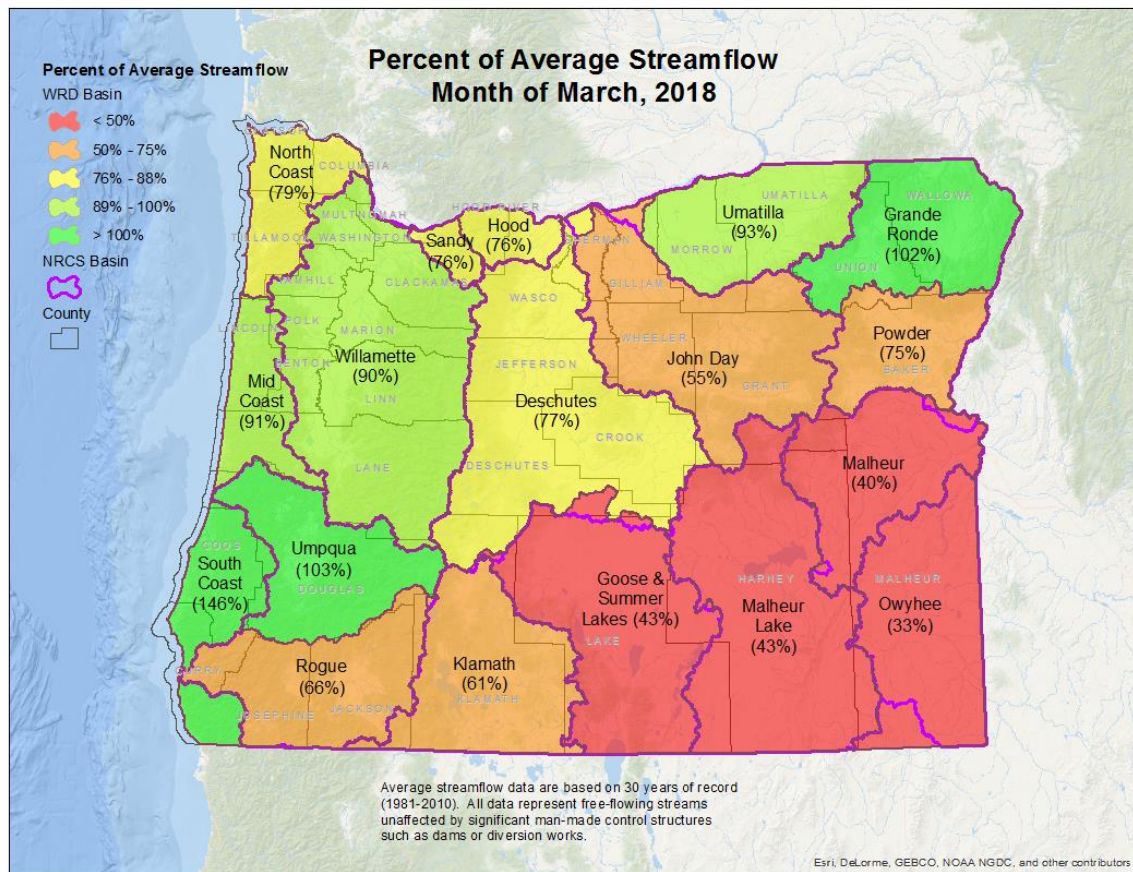
Author:

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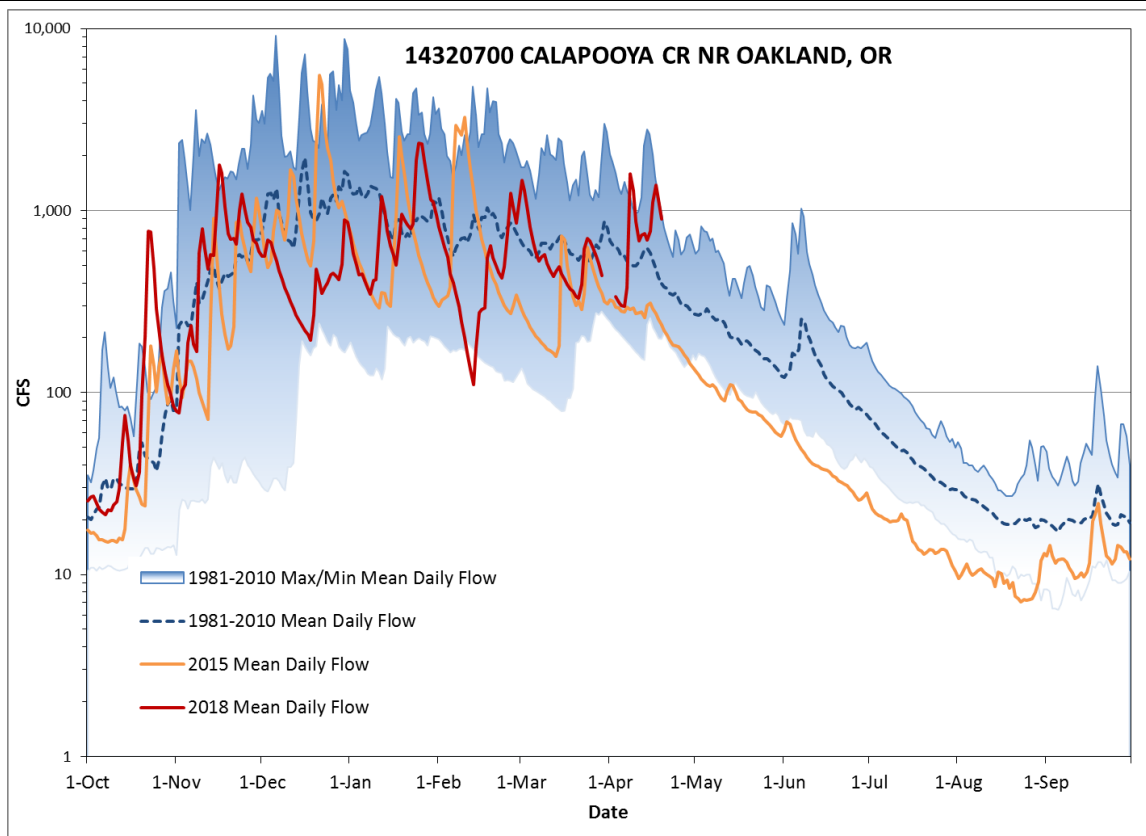


<http://droughtmonitor.unl.edu/>

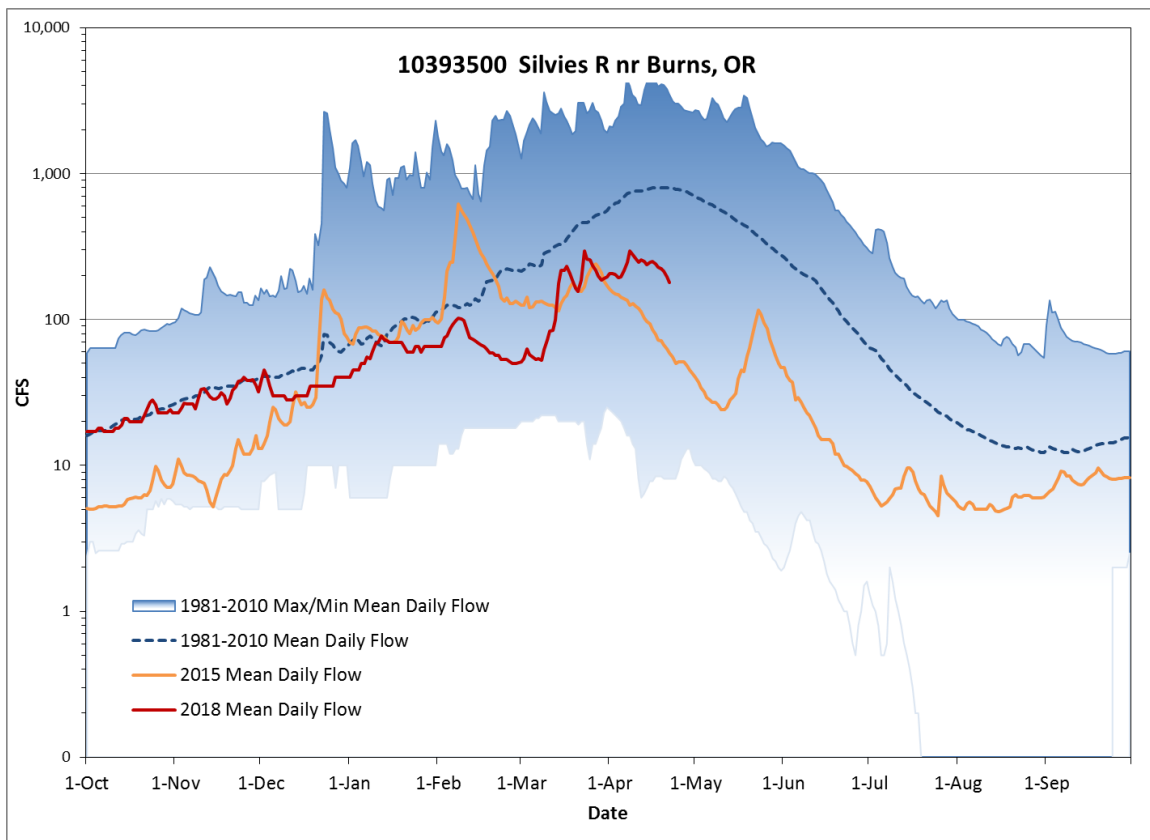
Statewide Streamflow Conditions - March



Streamflow Conditions – Umpqua



Streamflow Conditions – Malheur Lake



Statewide Reservoir Conditions - March

