

# Oregon

## Water Conditions Report

### March 9, 2020



**Current Oregon statewide snow water equivalent** is 86 percent of normal, decreased from 94 percent two weeks ago. Basin values vary from as low of 63 percent of normal in the Klamath basin, to 118 percent of normal in the Umatilla, Walla Walla, and Willow basin.

**Current Oregon statewide precipitation** at NRCS SNOTEL sites is 79 percent of average, remaining below average for the water year. Basin precipitation values range from a low of 66 percent of average in the Klamath and Lake County, Goose Lake basins, to 106 percent of average in the Umatilla, Walla Walla, and Willow basin.

Southwestern Oregon continues to be the driest region in the state with well below normal snowpack and water year precipitation being observed.

The NRCS [Basin Outlook Report for March](#) is now available. This report is published monthly from January through June. The March report states that the first week of February brought a storm to the northeast corner of the state that included heavy snow and heavy rain on snow, resulting in catastrophic flooding of the Umatilla and Walla Walla River systems. At the same time, the southwestern basins in the state received well below normal snow and precipitation, which led to significantly lower snow water equivalent and water year precipitation values on March 1 compared to a month ago.

**Precipitation over the [past two weeks](#)** has been below-normal across the state. Especially noteworthy in southwest Oregon where precipitation was up to six inches below normal. For the [month of February](#), precipitation was below-normal across much of the state with the exception of areas of north central Oregon where precipitation was over 200 percent above-normal.

**Temperatures over the [past two weeks](#)** have been primarily normal to below-normal in western Oregon and above-normal to the east of the Cascades. For the [month of February](#), temperatures were similar to the past two weeks, cooler to the west of the Cascades and warmer to the east.

**Over the next [8 to 14 days](#), the NOAA Climate Prediction Center** is forecasting below normal temperature probability across all but the southeast third of the state where equal chances are forecast. The precipitation outlook is for from above normal probability across far eastern third of the state with normal probability forecast for the remainder. The most recent [three month outlook](#) indicates an increased probability of above normal temperatures across the state. The precipitation outlook for the same period is for below normal probability across most of western and south central Oregon with equal chances of above or below normal probability for the rest of the state. The next long-term outlook will be issued on March 19, 2020.

**[ENSO-neutral](#) continues to be favored through Northern Hemisphere spring 2020** (~60 percent chance), continuing through summer 2020 (~50 percent chance). During January 2020, near- to above-average sea surface temperatures were evident across most

of the equatorial Pacific Ocean. For a more complete report, refer to the February 13, 2020 [diagnostic discussion](#) issued by the Climate Prediction Center. The next diagnostic discussion is scheduled for March 12, 2020. Another source of information is the latest [ENSO blog](#) on the climate.gov website.

**February statewide streamflow ended up at 77 percent of normal for this time of year.** This is lower than the 100 percent seen in January. Regionally for February, streamflow conditions were about 79 percent of normal east of the Cascades and 75 percent to the west. Flows varied widely across the state from only 30 percent in the South Coast and not surprisingly, up to 180 percent in the Umatilla. Lately, streamflow continues to trend downward across a broad swath of southern Oregon, including parts of the Umpqua, South Coast, Rogue, Klamath Goose & Summer Lake and Harney basins.

**[USACE Reservoirs:](#) [Willamette:](#)** The Willamette system is 32 percent full and 21 percent below rule curve. Flows in the Willamette River at [Albany](#) are 7,080 cfs with flows at [Salem](#) at 11,900 cfs.

**[Rogue:](#)** The Rogue system is currently 59 percent full and 16 percent below rule curve. Lost Creek is 67 percent full and 14 percent below rule. Outflows should continue holding at about 1,100 cfs and hopefully capture the majority of the forecasted inflows. Applegate is at 24 percent, 24 percent below rule, with releases currently at 125 cfs. Current fisheries goals are minimizing the dewatering of spring chinook redds in 2019-2020, and minimizing early emergence by spring chinook in the spring of 2020.

**[Willow Creek:](#)** The Willow Creek Project is currently 71 percent full and 2 percent below rule curve. The current project objectives are to pass 5 cfs of the current inflow, as the project continues to slowly fill back to rule curve.

**[USBR Reservoirs:](#)** Reclamation reservoirs in Oregon continue to have higher than average storage levels thanks to higher than average carryover at the start of the Water Year. Most reservoirs have shown very little increase in storage over the past several weeks. Water Managers continue to actively monitor potential precipitation events since some reservoirs (Prineville, Bully Creek, Warm Springs, and Scoggins) are potentially a decent rainstorm away from exceeding maximum winter storage requirements as set by flood control regulations.

**[Umatilla River Basin:](#)** McKay reservoir is at 81 percent of capacity. Outflows are close to 12 cfs with inflows of about 218 cfs.

**[Deschutes River Basin:](#)** Ochoco and Prineville reservoirs are at 51 percent and 65 percent full respectively. Prineville reservoir is currently releasing about 90 cfs with inflows of about 330 cfs. Crescent Lake is at 51 percent, Wickiup is at 66 percent and Crane Prairie is at 82 percent of capacity.

**[Malheur River Basin:](#)** Warm Springs, Beulah, and Bully Creek reservoirs are at 66, 57, and 78 percent full respectively. All three are above normal for this time of year, hopefully ensuring the chance of available carryover for next year.

[Owyhee River Basin](#): Owyhee reservoir is well above normal at 76 percent of capacity. Inflows are currently about 1,265 cfs.

[Burnt and Powder River Basins](#): Phillips and Unity reservoirs are at 28 percent and 66 percent full respectively. Phillips is releasing about 14 cfs with inflows around 56 cfs while Unity is releasing about 20 cfs.

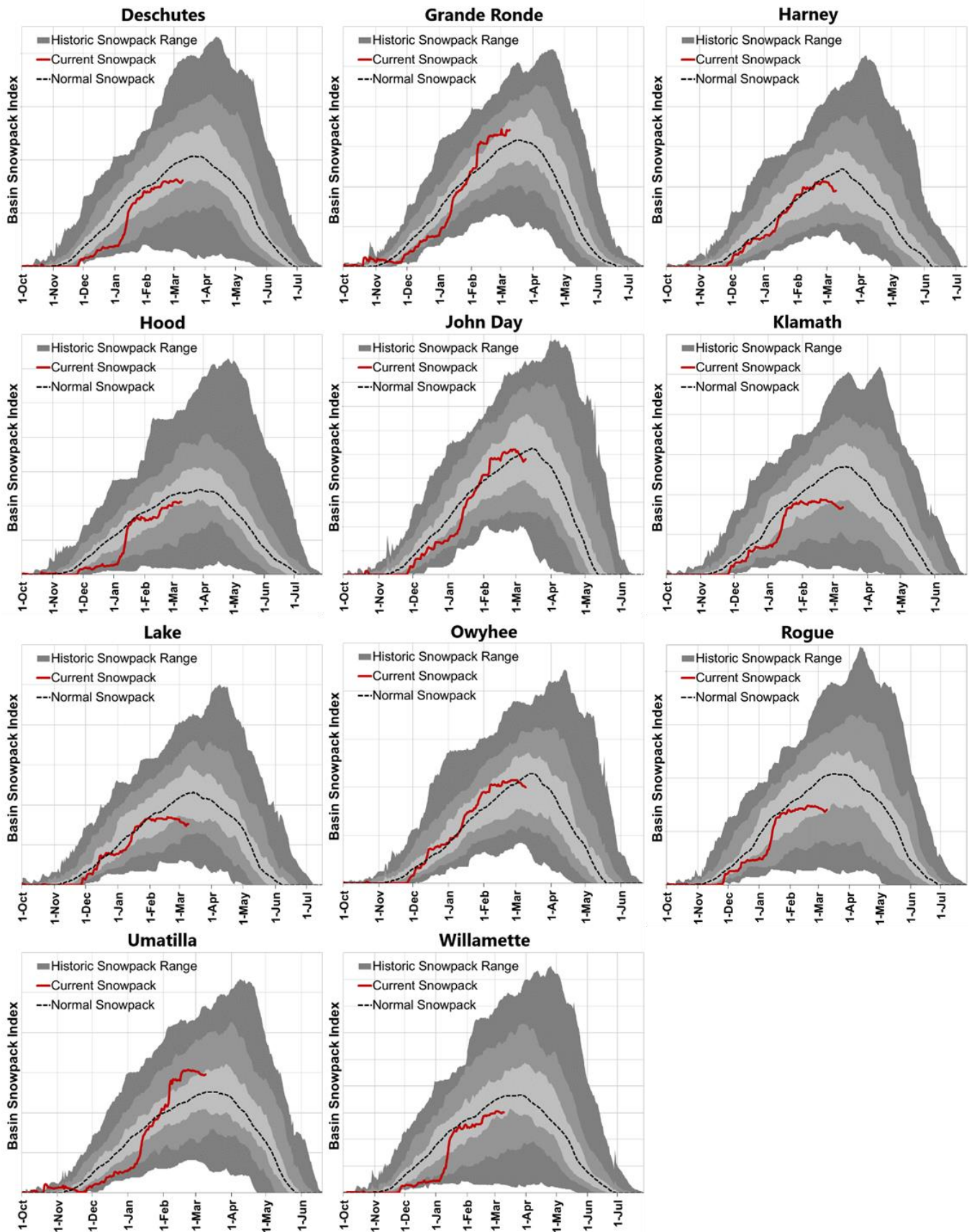
[Tualatin River Basin](#): Scoggins reservoir is at 84 percent of capacity and releasing 20 cfs.

**The most recent update to the [US Drought Monitor](#)** indicates that almost 80 percent of the state is in D0 (abnormally dry) conditions, with just over 24 percent of the state listed as in D1 (moderate drought). This is a slight improvement over the past two weeks.

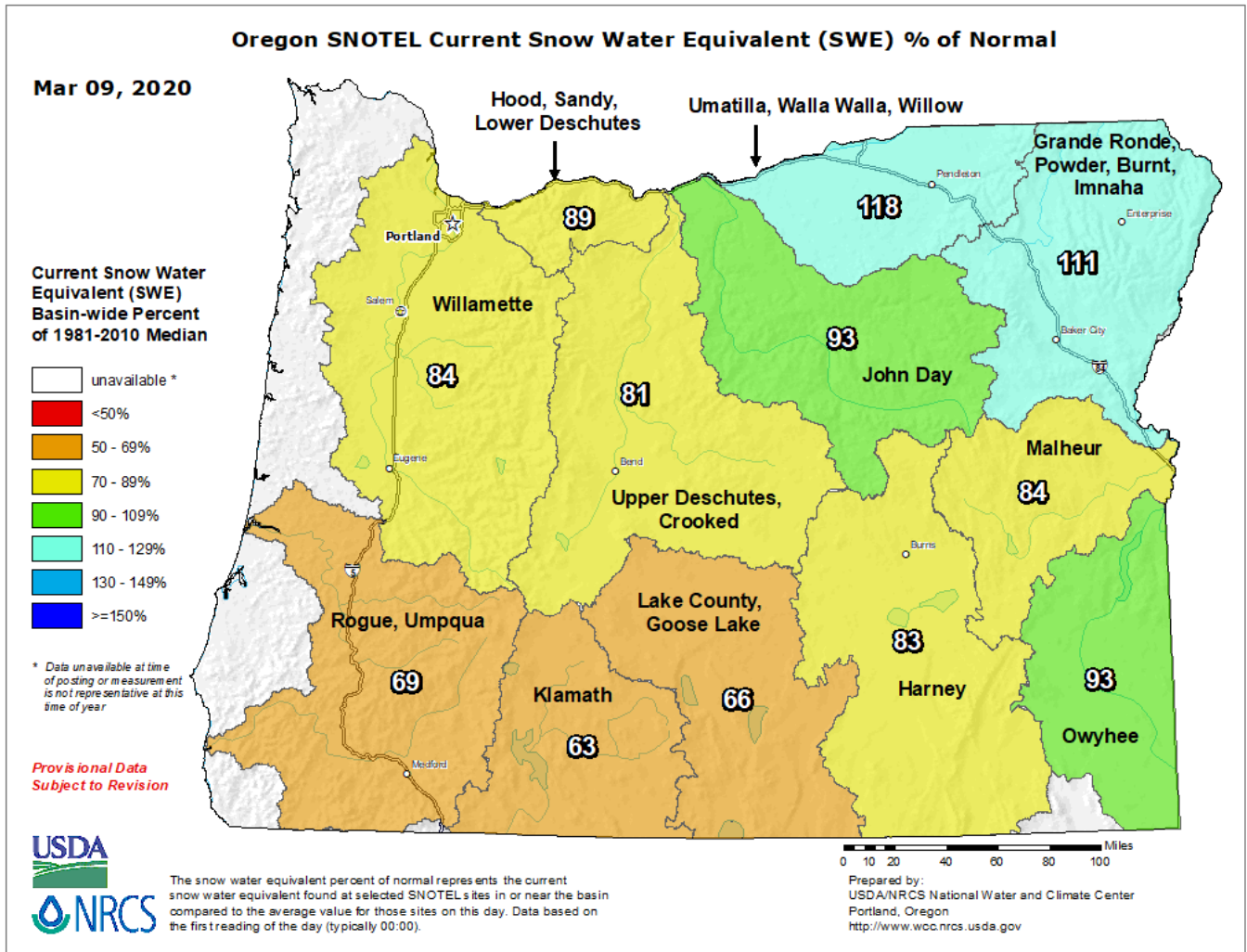
**The Oregon Office of Emergency Management has assembled a new [hydrology/meteorology dashboard](#)** featuring many of the data sources used to generate this report. Use the selection arrows at the bottom of your browser to navigate to the various data sources.

<b>Data &amp; Products:</b>	<b>Page:</b>
Snowpack Graphs – March 9, 2020 .....	4
Snow Water Equivalent (SWE) - Percent of Normal .....	5
Precipitation (Mountain) - Percent of Normal .....	6
Precipitation – (1 Month) Percent of Normal .....	7
Temperature – (1 Month) Departure from Normal.....	8
Three Month Temperature and Precipitation Outlook .....	9
Total Moisture - Percentile .....	10
U.S. Drought Monitor for Oregon .....	11
Streamflow Conditions by County – February, 2020 .....	12
Streamflow Conditions – Goose & Summer Lake Basin (Lake County) .....	12

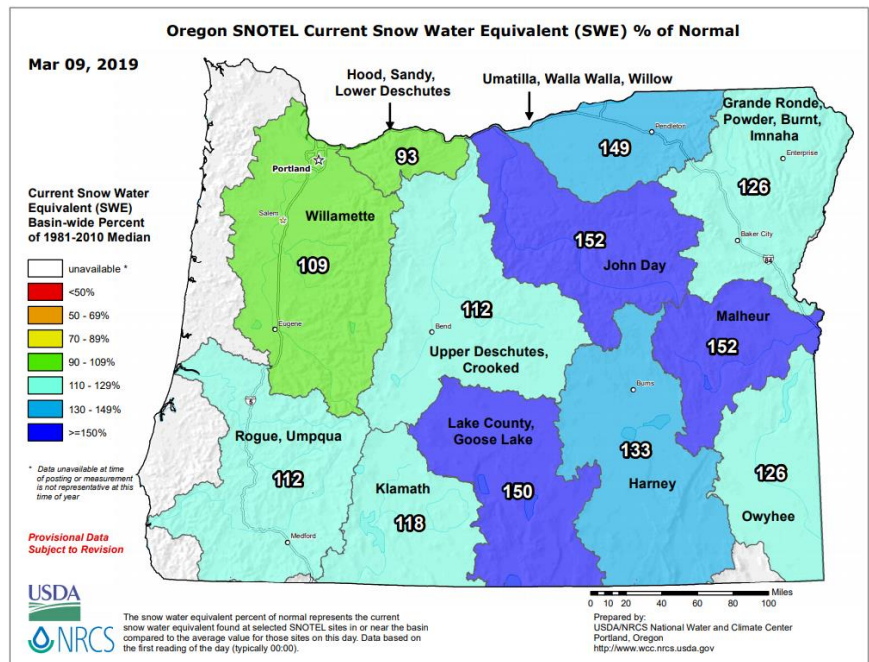
# Snowpack Graphs – March 9, 2020



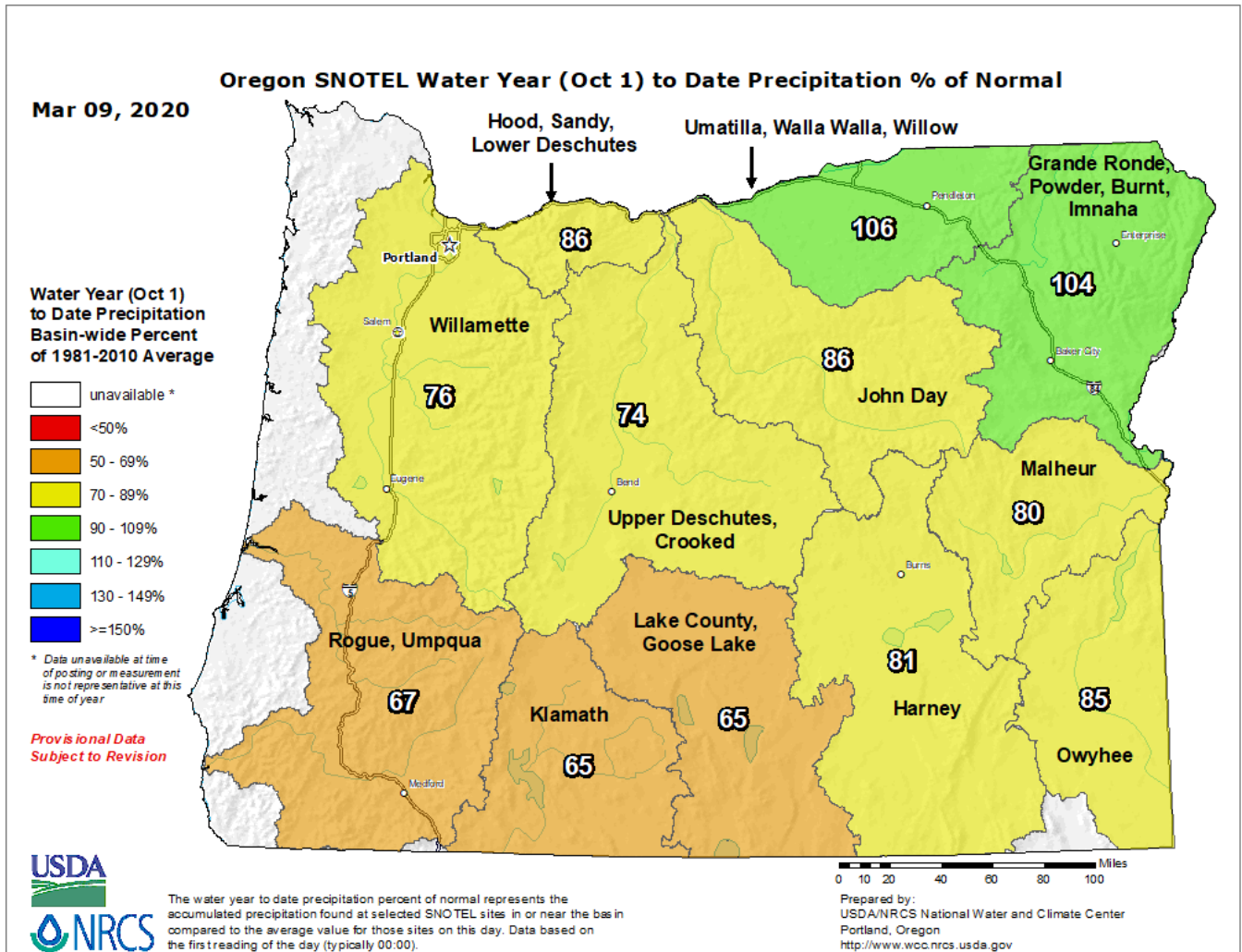
# Snow Water Equivalent (SWE) - Percent of Normal



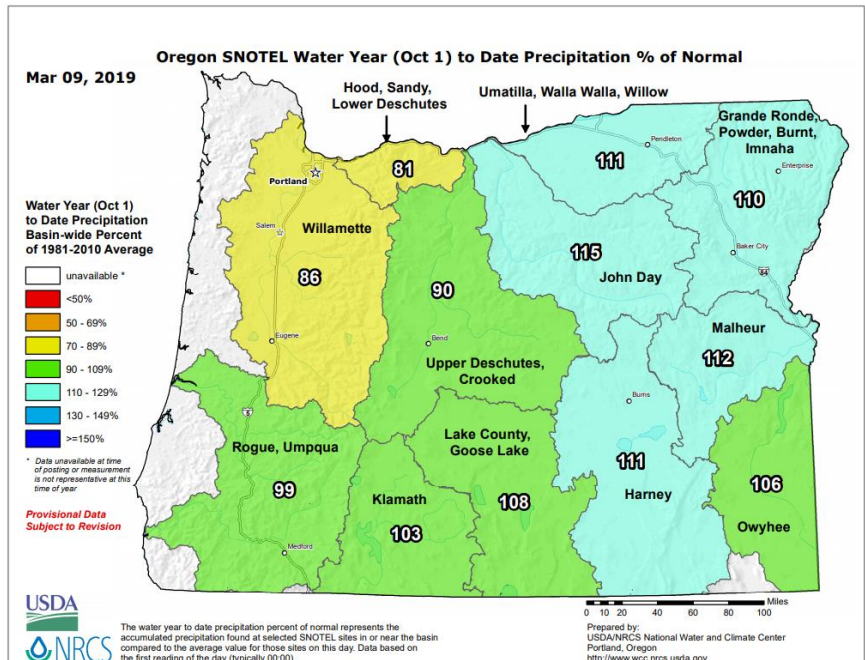
Compared to this time last year:



# Precipitation (Mountain) - Percent of Normal



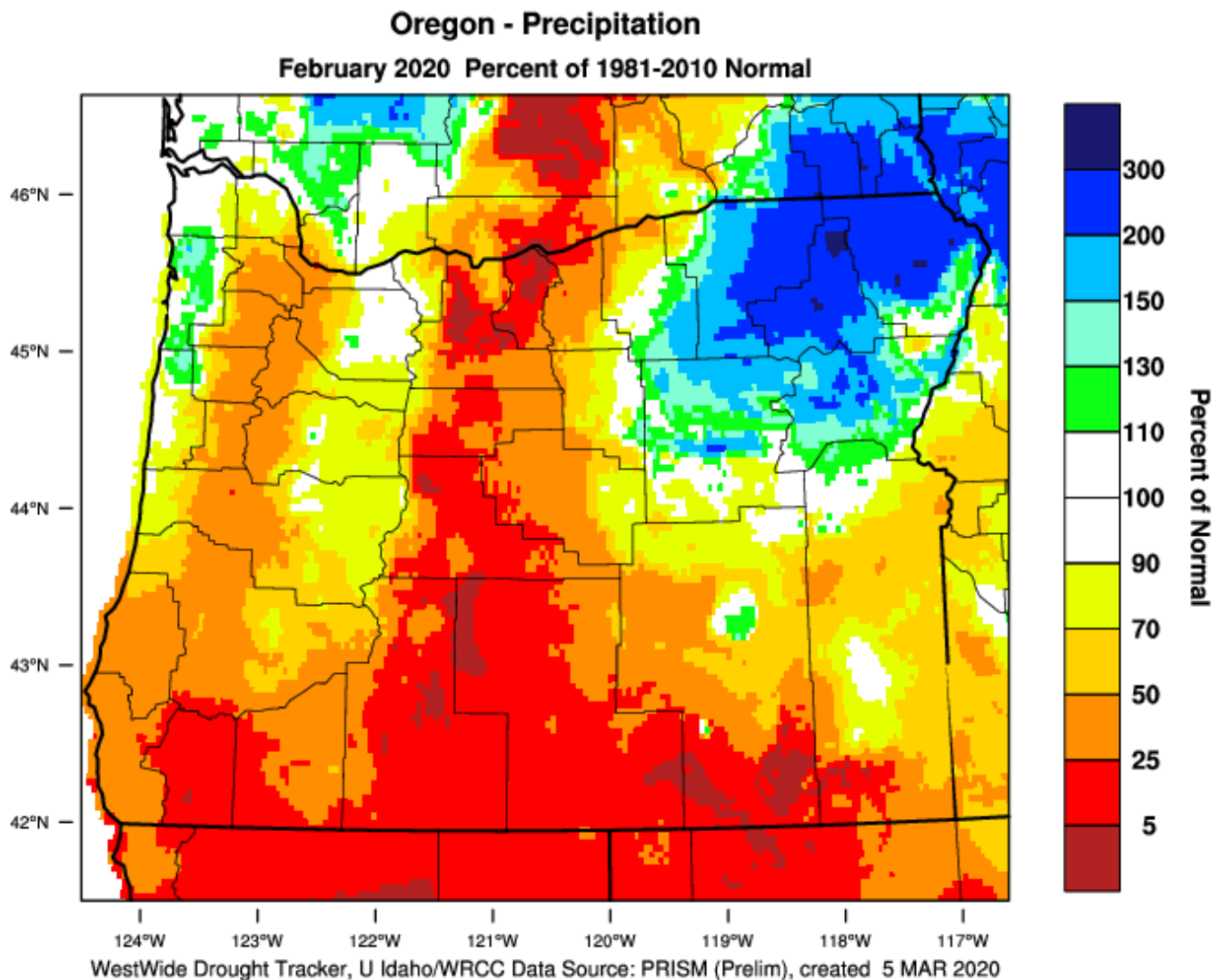
Compared to this time last  
year:



# Precipitation – (1 Month) Percent of Normal

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

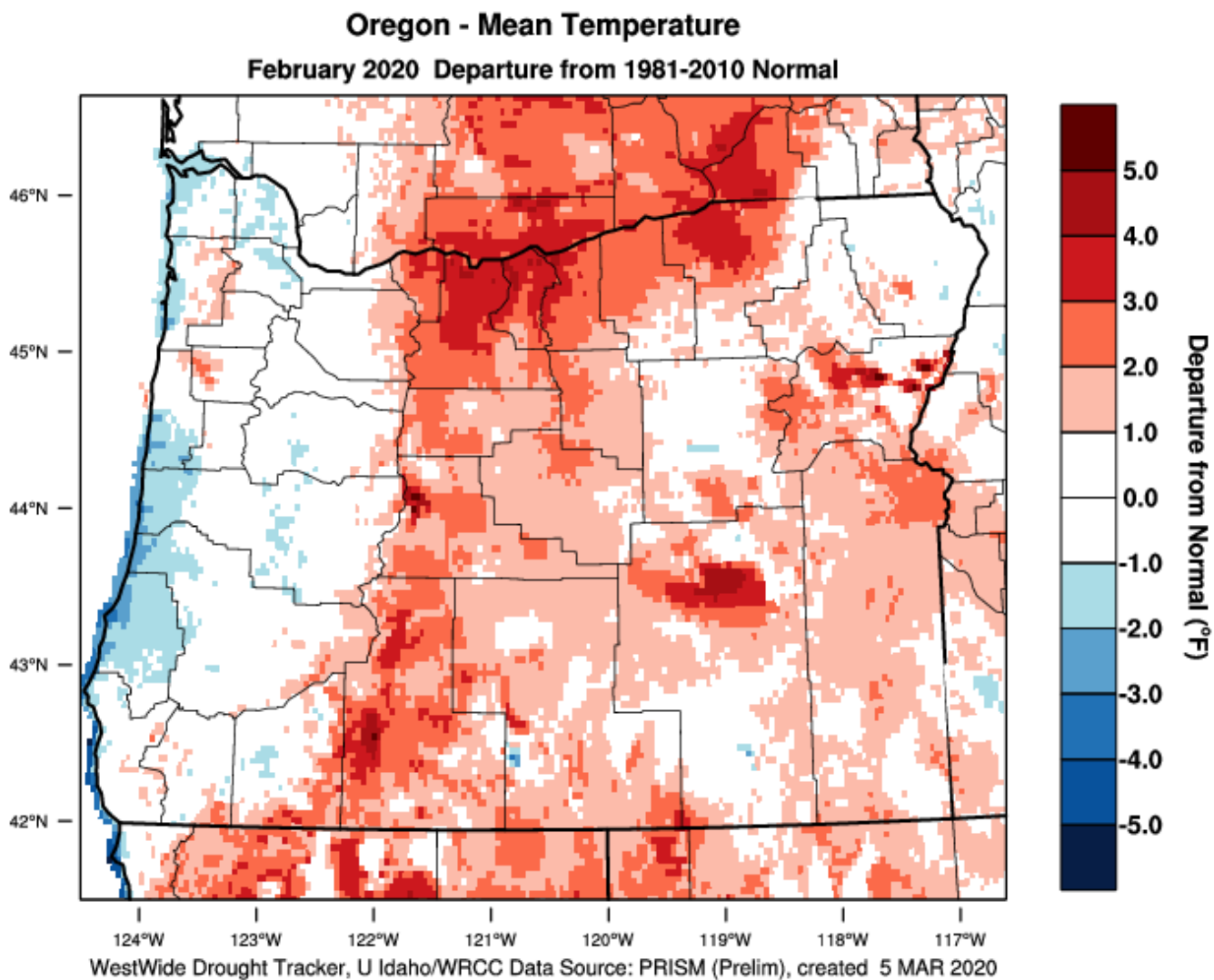
## PRISM > Precipitation Anomaly 1 Month > Oregon



## Temperature – (1 Month) Departure from Normal

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

### PRISM > Temperature Anomaly 1 Month > Oregon

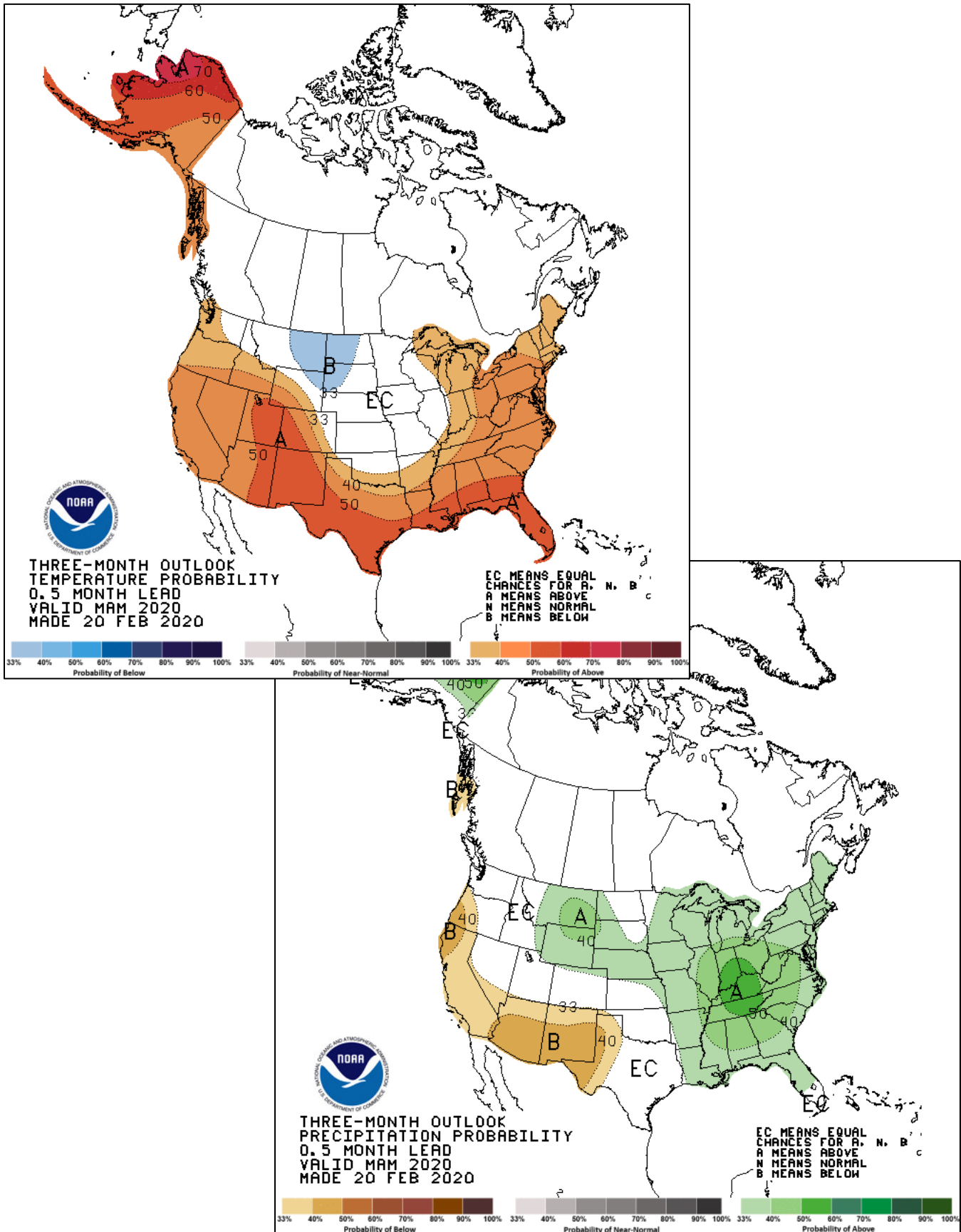




# Three Month Temperature and Precipitation Outlook

## March through May

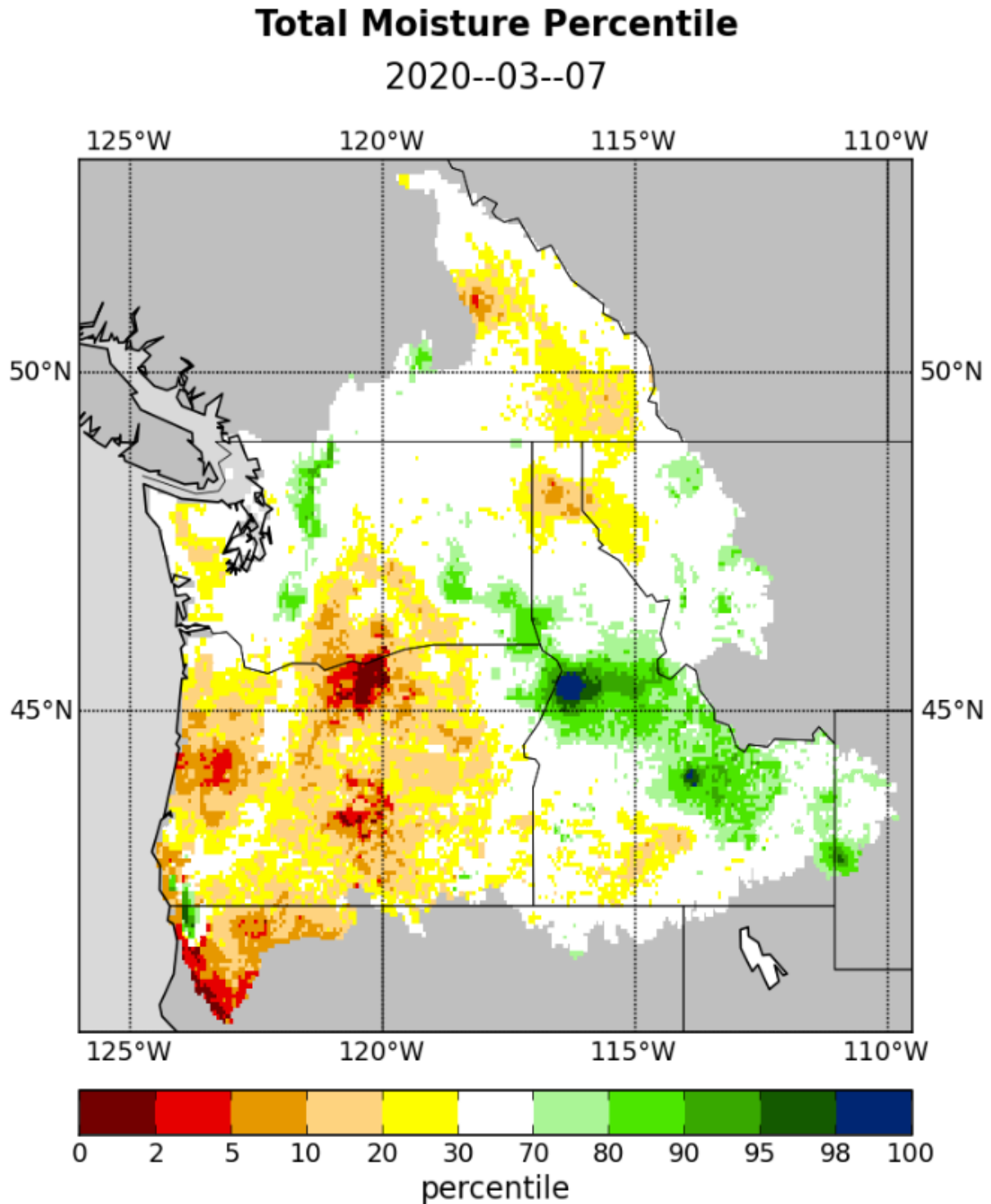
Website: [http://www.cpc.ncep.noaa.gov/products/predictions/long\\_range/seasonal.php?lead=1](http://www.cpc.ncep.noaa.gov/products/predictions/long_range/seasonal.php?lead=1)



## Total Moisture - Percentile

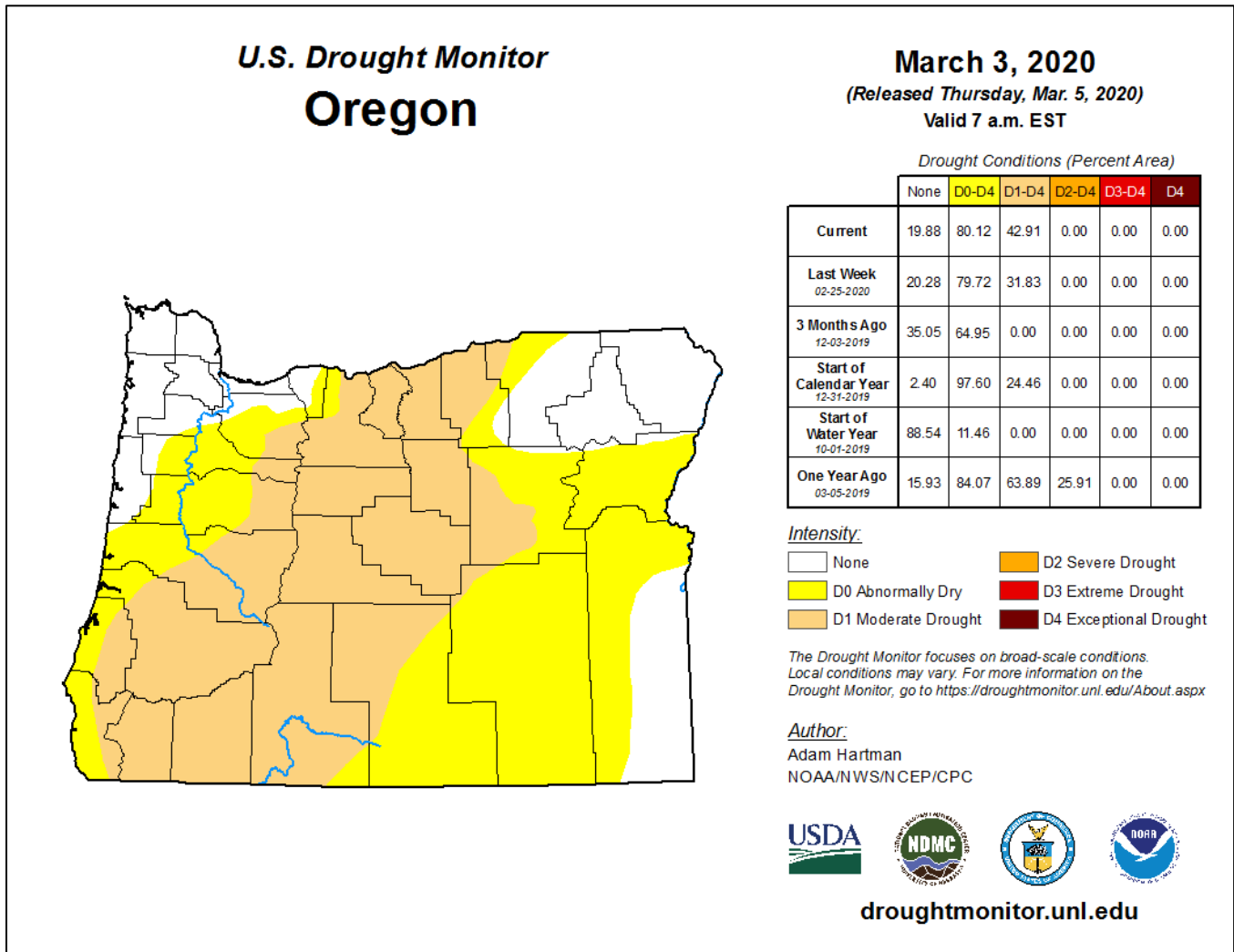
Total Moisture (STOT) is a moisture index calculated by adding Soil Moisture and Snow Water Equivalent. STOT represents the total water content of a region.

Website: [http://www.hydro.ucla.edu/SurfaceWaterGroup/forecast/monitor\\_pnw/index.shtml](http://www.hydro.ucla.edu/SurfaceWaterGroup/forecast/monitor_pnw/index.shtml)

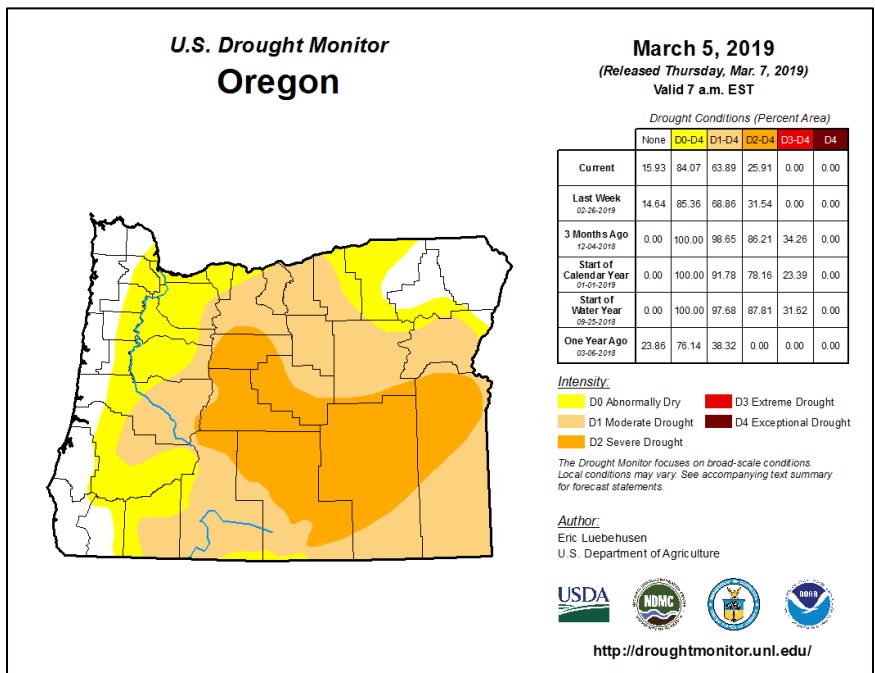


# U.S. Drought Monitor for Oregon

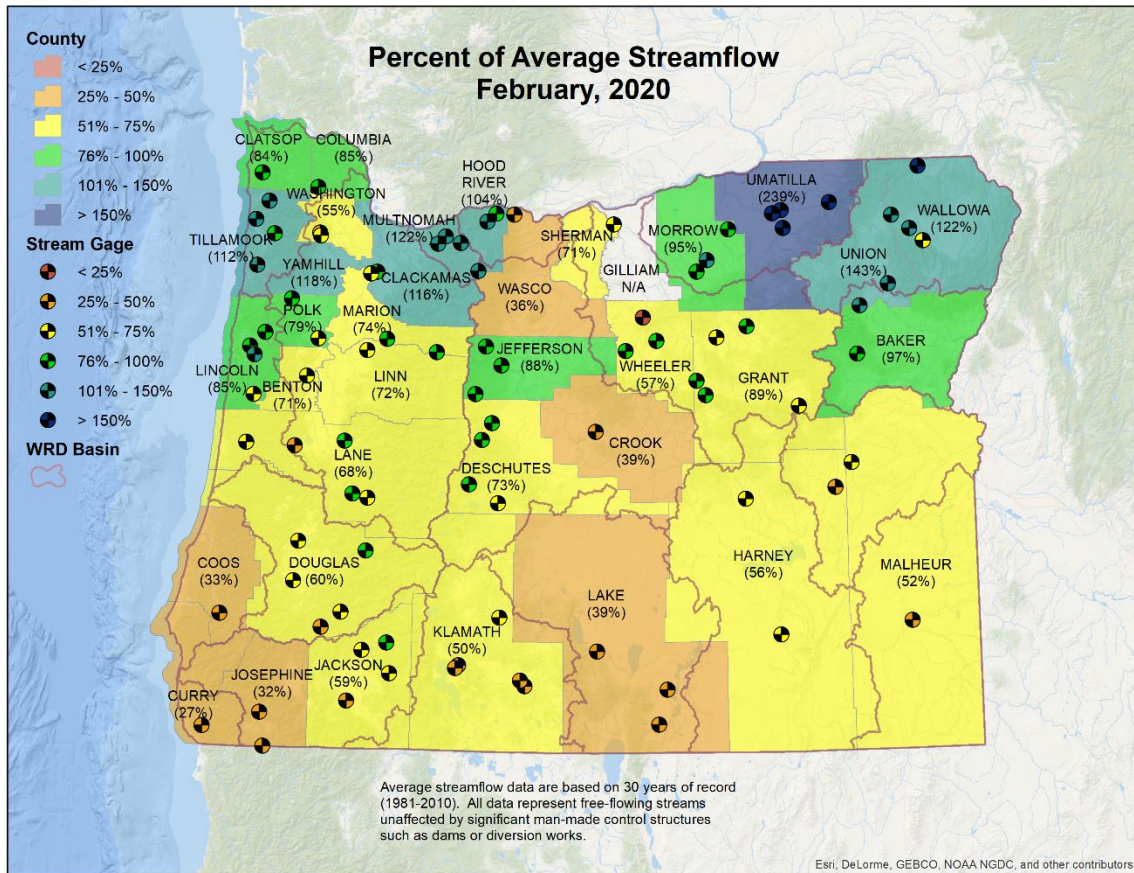
Website: <https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?OR>



Compared to this time last year:



# Streamflow Conditions by County – February, 2020



# Streamflow Conditions – Goose & Summer Lake Basin (Lake County)

