Oregon
Water Conditions Report
February 25, 2019

OREGON
WATER RESOURCES
DEPARTMENT

Recent late winter storms brought a welcome increase in snowpack across the state. The statewide snow water equivalent value is now 109 percent of normal, a significant increase from the 80 percent seen on February 11, 2019. The Malheur basin currently has the highest amounts of snowpack and is measuring 148 percent of normal. The Hood, Sandy, and Lower Deschutes basins are measuring the least amount at 88 percent of normal, well above the 57 percent seen on February 11.

Oregon statewide water year precipitation at NRCS SNOTEL sites is 91 percent of normal, up from 82 percent on February 11. The highest amounts of water year precipitation have been in the Malheur with 112 percent of normal, while the lowest value is in the Hood, Sandy, and Lower Deschutes basins at 83 percent of normal for the water year.

The February NRCS Basin Outlook Report is now available. This report is published monthly from January through June. The most recent edition points out that a wide array of snow conditions exists throughout the state. The March edition should be available in a couple of weeks.

Temperatures over the past two weeks have been cooler than normal especially across the north central and south central regions of the state. Temperatures were a little warmer than normal in Baker and northern Malheur Counties. For the month of January, temperatures were above normal for almost the entire state. So far for the month of February temperatures have been 5 to 10 degrees cooler than normal.

Over the next 8 to 14 days, the NOAA Climate Prediction Center is forecasting below-normal temperatures across the state. Precipitation probability is for equal chances of above or below normal for the northwest third of the state with above-normal probability for the rest of the state. The most recent three month outlook indicates increased chances of above-normal temperatures. The precipitation outlook for the same period is for equal chances of above or below normal precipitation for the entire state. The next long-term outlook will be issued on March 21, 2019.

Weak El Niño conditions are present and are expected to continue through the spring of 2019. El Nino conditions formed during January 2019, based on the presence of above-average sea surface temperatures across most of the equatorial Pacific Ocean. For a more complete report, refer to the February 14, 2019 diagnostic discussion issued by the Climate Prediction Center. Another excellent source of information is the latest ENSO blog on the climate.gov website. The Climate Prediction Center provides updates on a regular basis. The next diagnostics discussion is scheduled for March 14, 2019.

Statewide streamflows for January were 62 percent of normal. This is up slightly from the 60 percent seen for the month of December. Regionally for January, streamflow conditions were about 55 percent east of the Cascades and 74 percent to the west. More

recent data indicate that flows remain lower than normal, ranging from less than 30 percent in the Sandy, Hood, Malheur, and Owyhee Basins to over 80 percent in the Mid Coast.

USACE Reservoirs: Rogue: Currently the system is 60 percent full and 7 percent below rule curve. Lost Creek is at 67 percent and also 7 percent below rule curve, maintaining an outflow of about 1,200 cfs with inflows currently at about 3,300 cfs. Applegate is at 29 percent and 6 percent below rule curve. Applegate outflows are right at 200 cfs with inflows now at 840 cfs.

Willow Creek: Currently the project is 75 percent full and 11 percent above rule curve. Inflows are about 30 cfs while the project has been maintaining an outflow of about 8 cfs. The project goal is to continue to capture inflows to stay on rule curve.

Willamette: The project is currently at 25 percent of capacity and 14 percent below rule curve. The flows in the Willamette River at Albany are about 37,300 cfs and flows at Salem are about 48,600 cfs.

USBR Reservoirs: Storage contents in Reclamation's Pacific Northwest Region reservoirs in Oregon remain below-normal for this time of year and range from 20 percent of average in the Powder Basin system to almost 95 percent of average in the Umatilla. Coupled with below average precipitation and runoff forecasts for this upcoming spring, there is the potential for minimal risk in terms of flood control operations and a relatively increased risk in terms of refill. The current operation at all reservoirs is to release winter minimum flows to allow the reservoirs to fill over the winter and it is anticipated this operation will continue for the next few months.

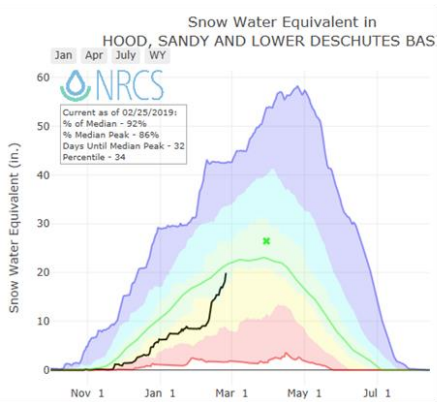
In north central Oregon, McKay Reservoir is at 55 percent of capacity, which is about 95 percent of normal for this time of year. In the Willamette, Scoggins Reservoir is currently 80 percent full. Central Oregon reservoirs are between 17 (Ochoco) and 75 (Crane Prairie) percent of capacity. Eastern Oregon reservoirs (not considering Thief Valley) range from 9 percent in Phillips to Owyhee at 42 percent of capacity. Rogue Basin reservoirs are between 15 and 56 percent of capacity. Upper Klamath Lake is currently at 70 percent of capacity.

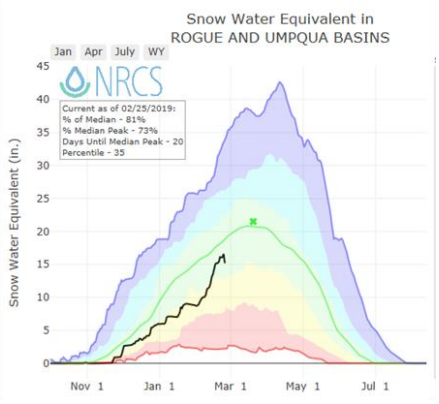
The most recent update to the US Drought Monitor is showing a continued improvement in conditions in Oregon over the past few weeks. Indicators now point toward D3 (Extreme Drought) in a little over 7 percent of the state. The report also shows that 57 percent of the state is in D2 (Severe Drought), 81 percent is listed as in D1 (Moderate Drought) and 98 percent of the state is listed as D0 (Abnormally Dry).

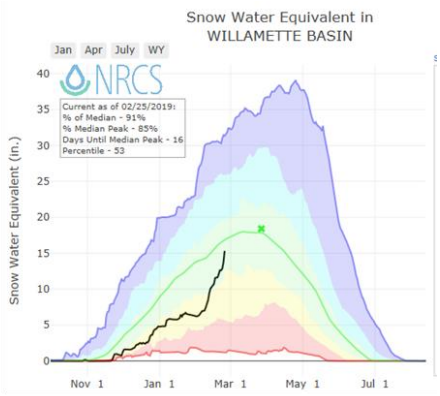
Wildfire conditions across the state are now at low levels. The nation remained largely out of fire season in January. The next wildland fire outlook update is scheduled for March 1, 2019. More information can also be accessed through the Northwest Interagency Coordination Center website. Another recommended resource is the Oregon Office of Emergency Management's RAPTOR incident mapping program which includes current situational information, such as wildfire perimeters, thermal satellite, fire evacuation boundaries, and air quality info.

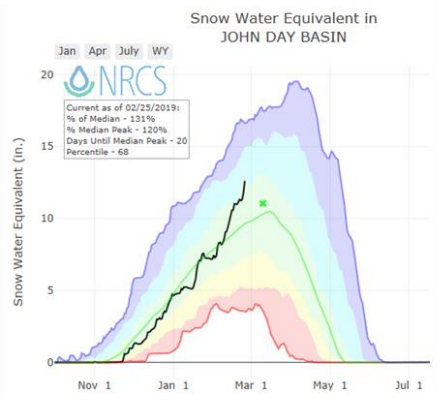
Data & Products: Page:

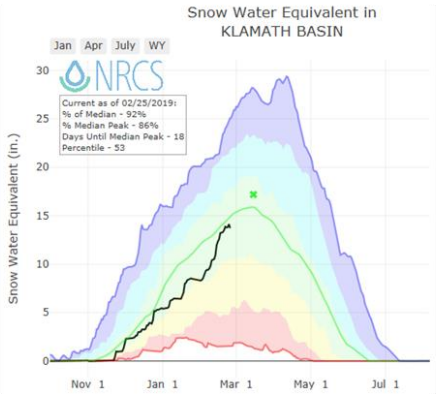
Snowpack Graphs – February, 2019

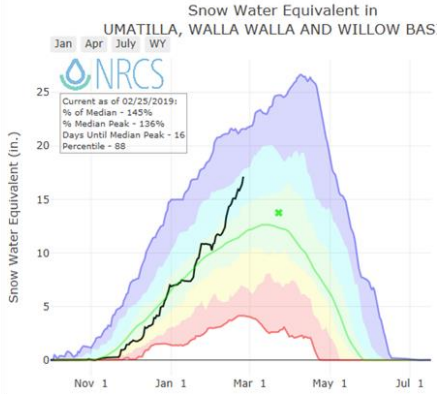




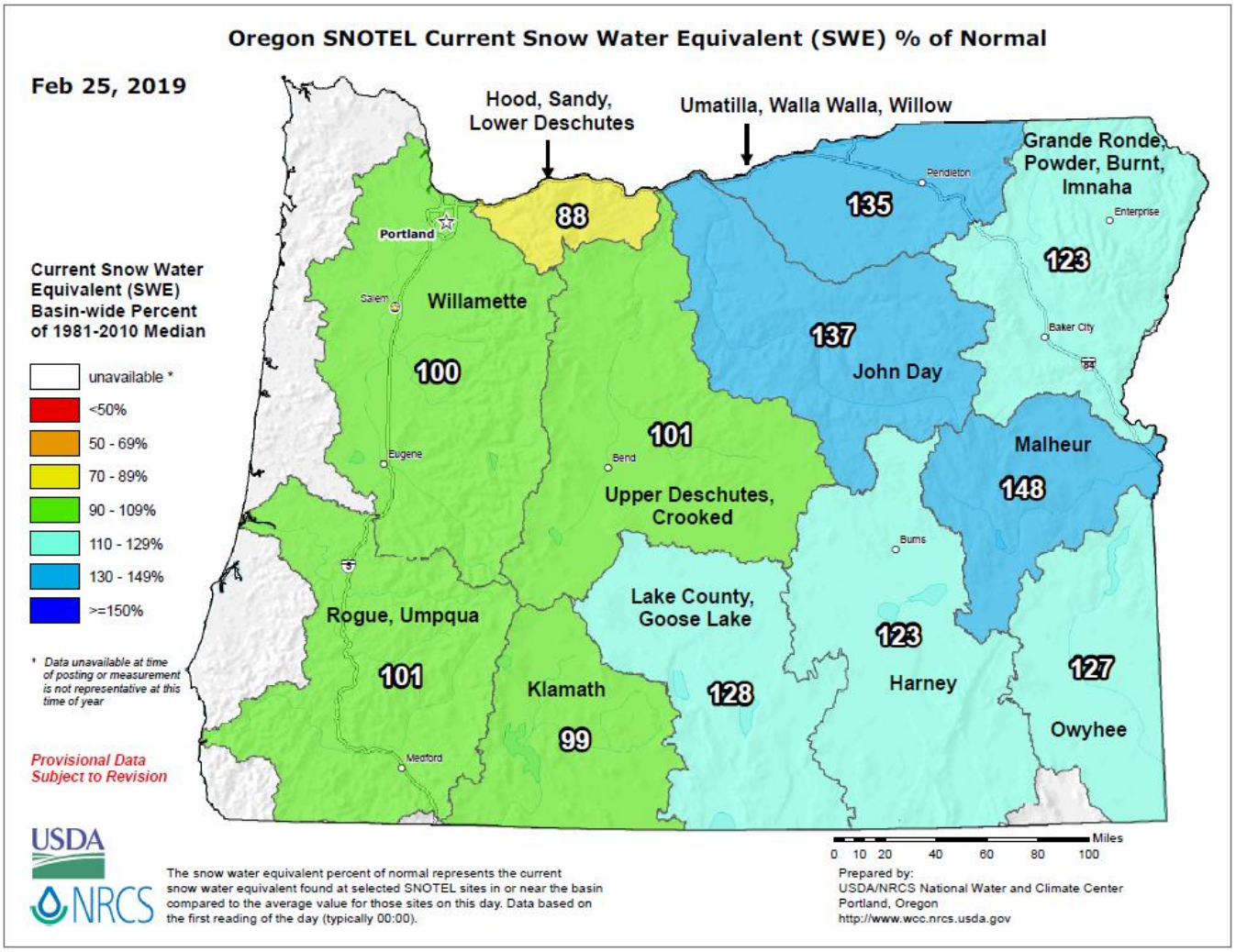




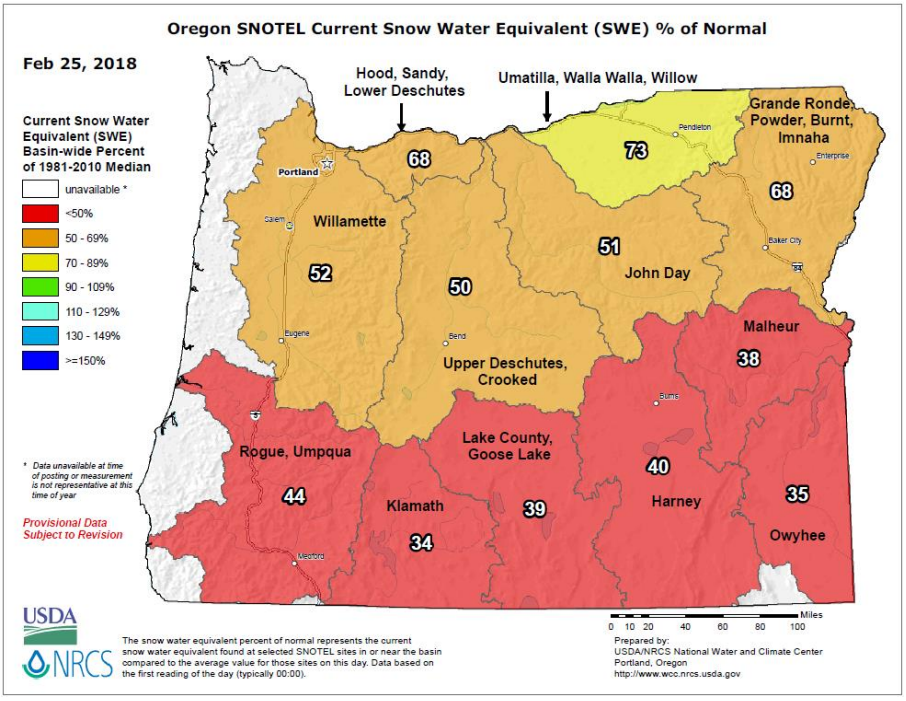




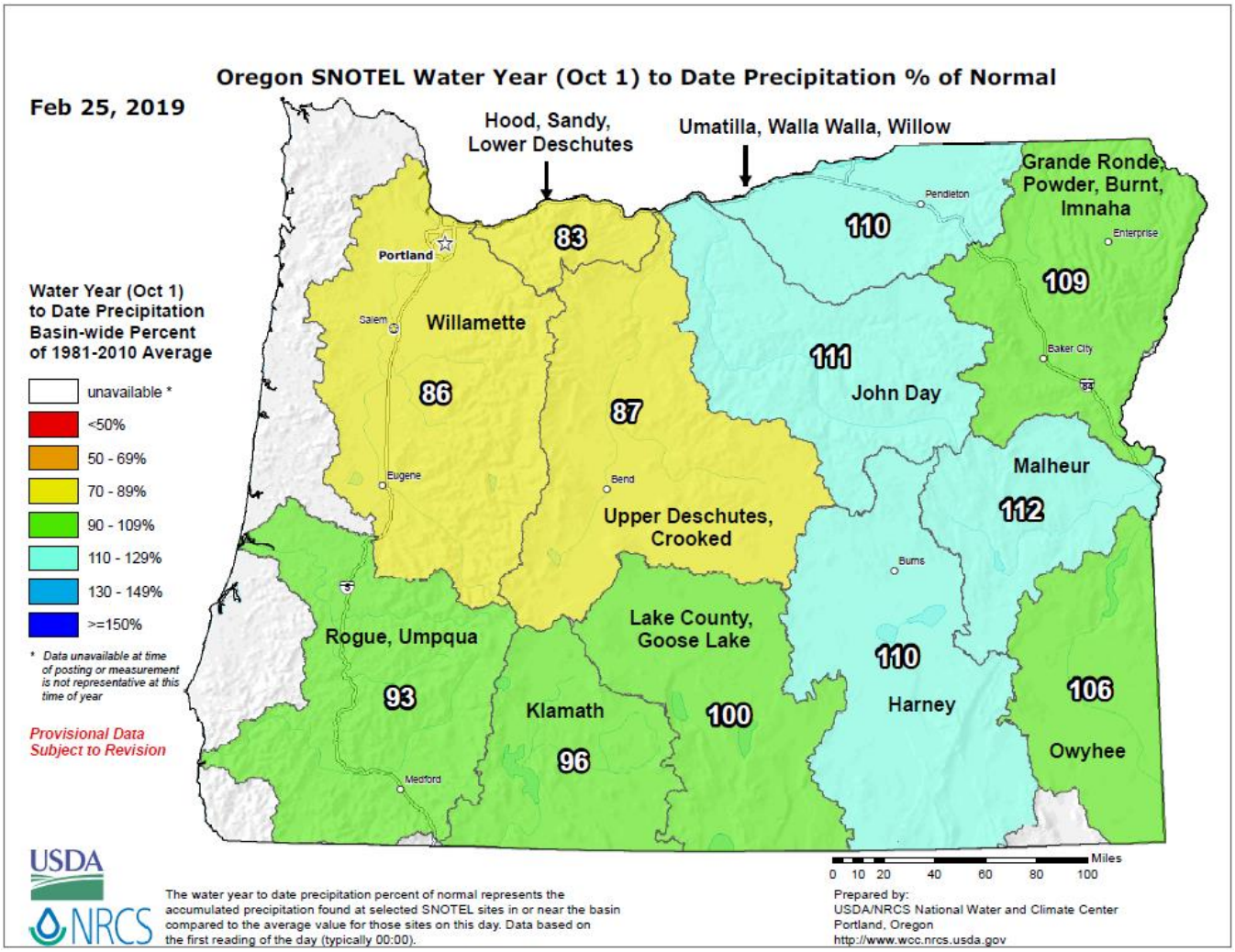
Snow Water Equivalent - Percent of Normal



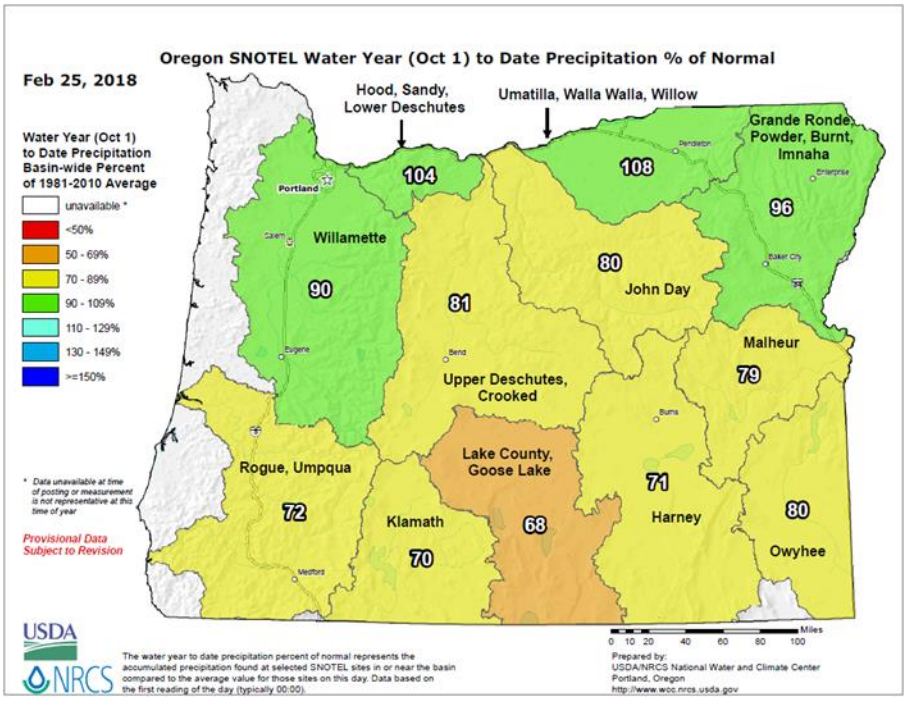
Compared to this time last year -



Precipitation (Mountain) - Percent of Normal



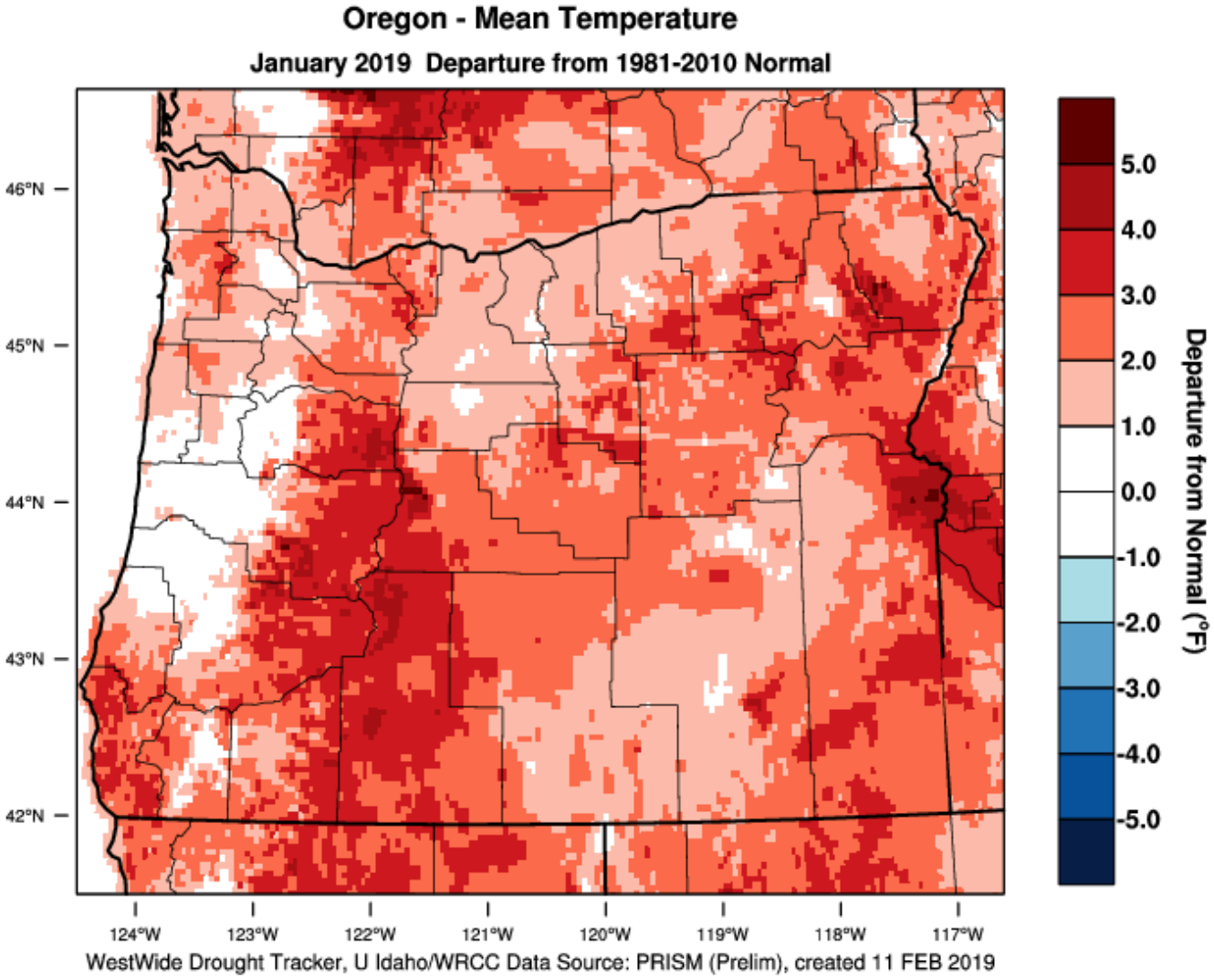
Compared to this time last year –



Temperature – (1 Month) Departure from Normal

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

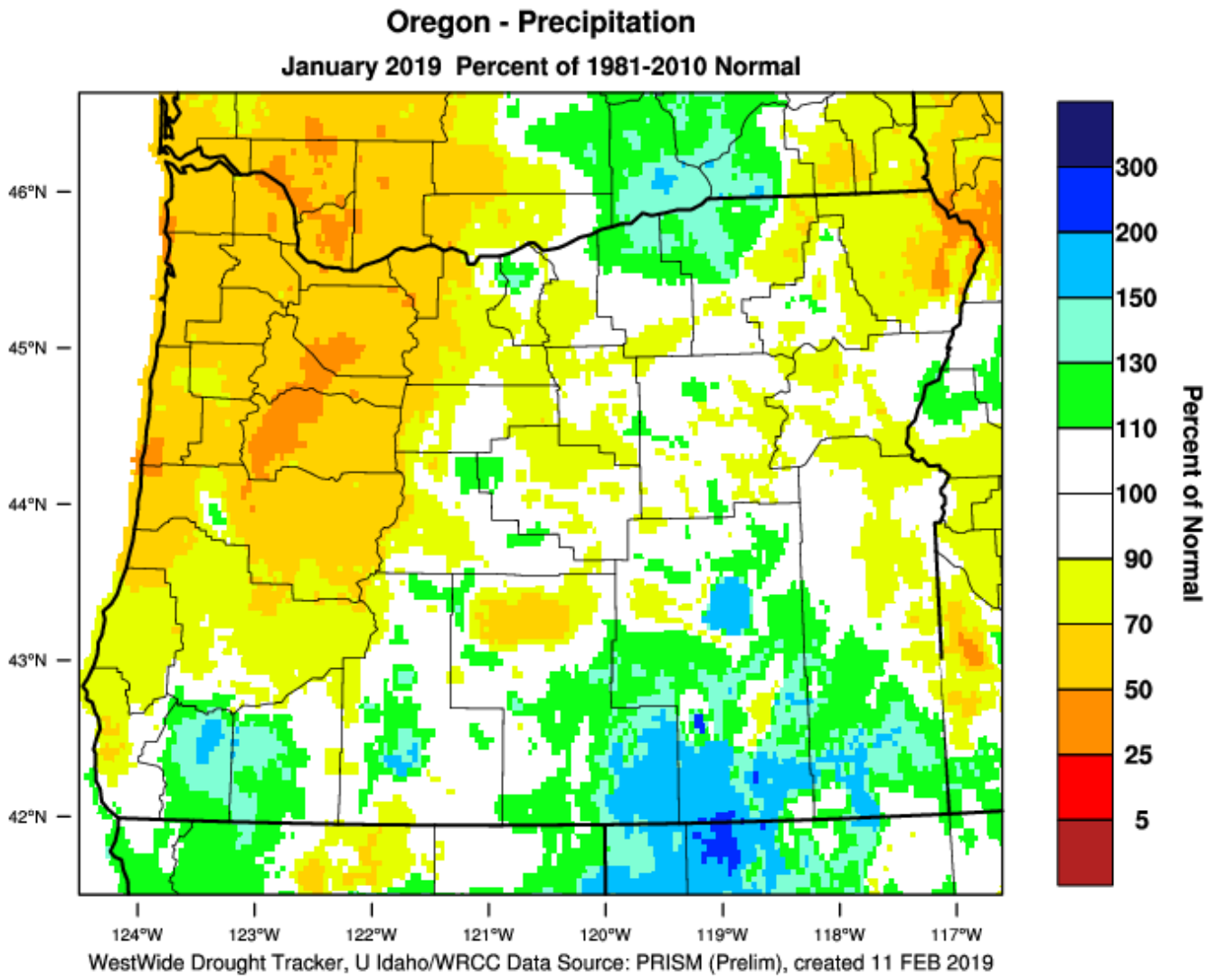
PRISM > Temperature Anomaly 1 Month > Oregon



Precipitation – (1 Month) Percent of Normal

Websitehttps://wrcc.dri.edu/wwdt/index.php?region=or

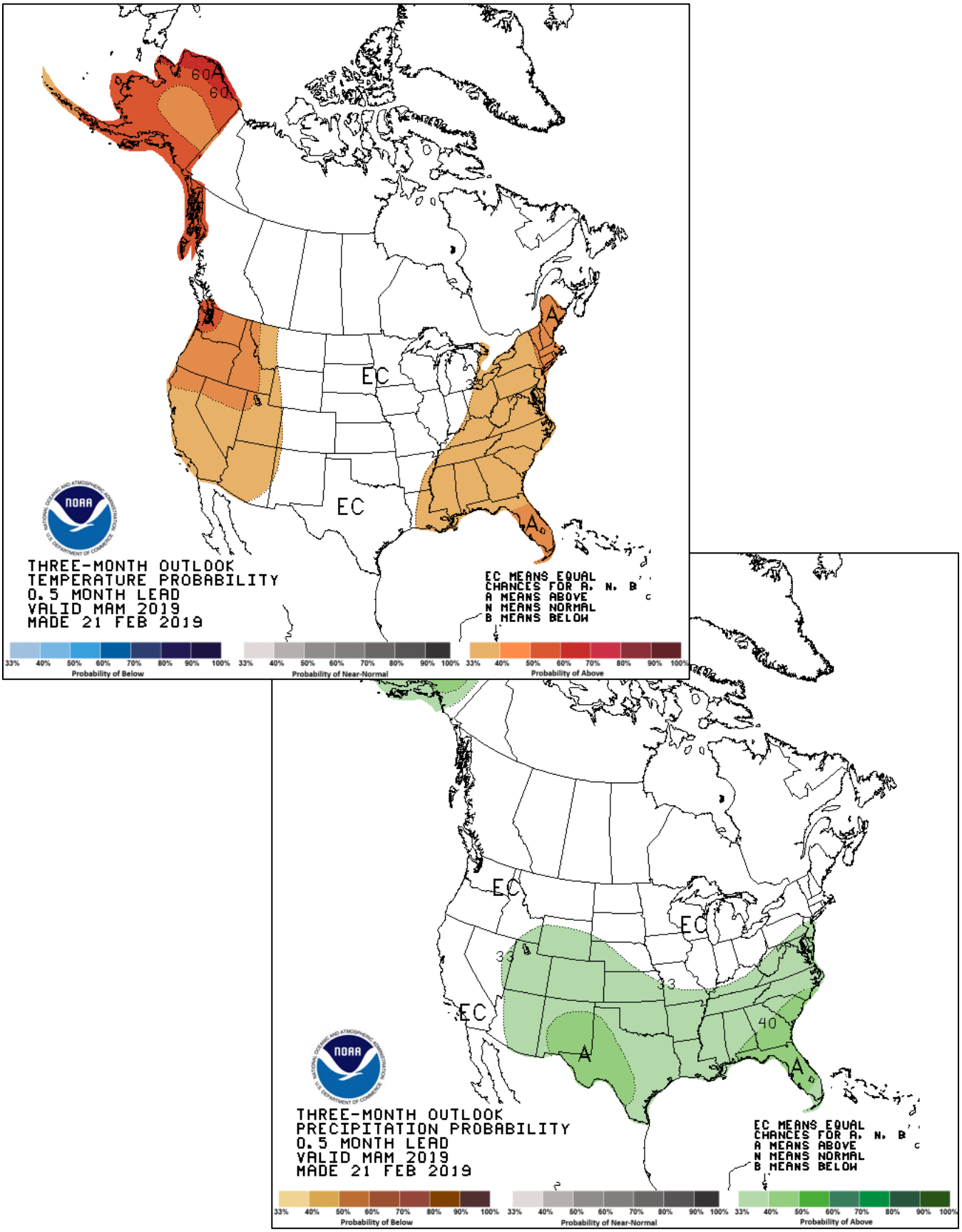
PRISM > Precipitation Anomaly 1 Month > Oregon



Three Month Temperature and Precipitation Outlook

March through May

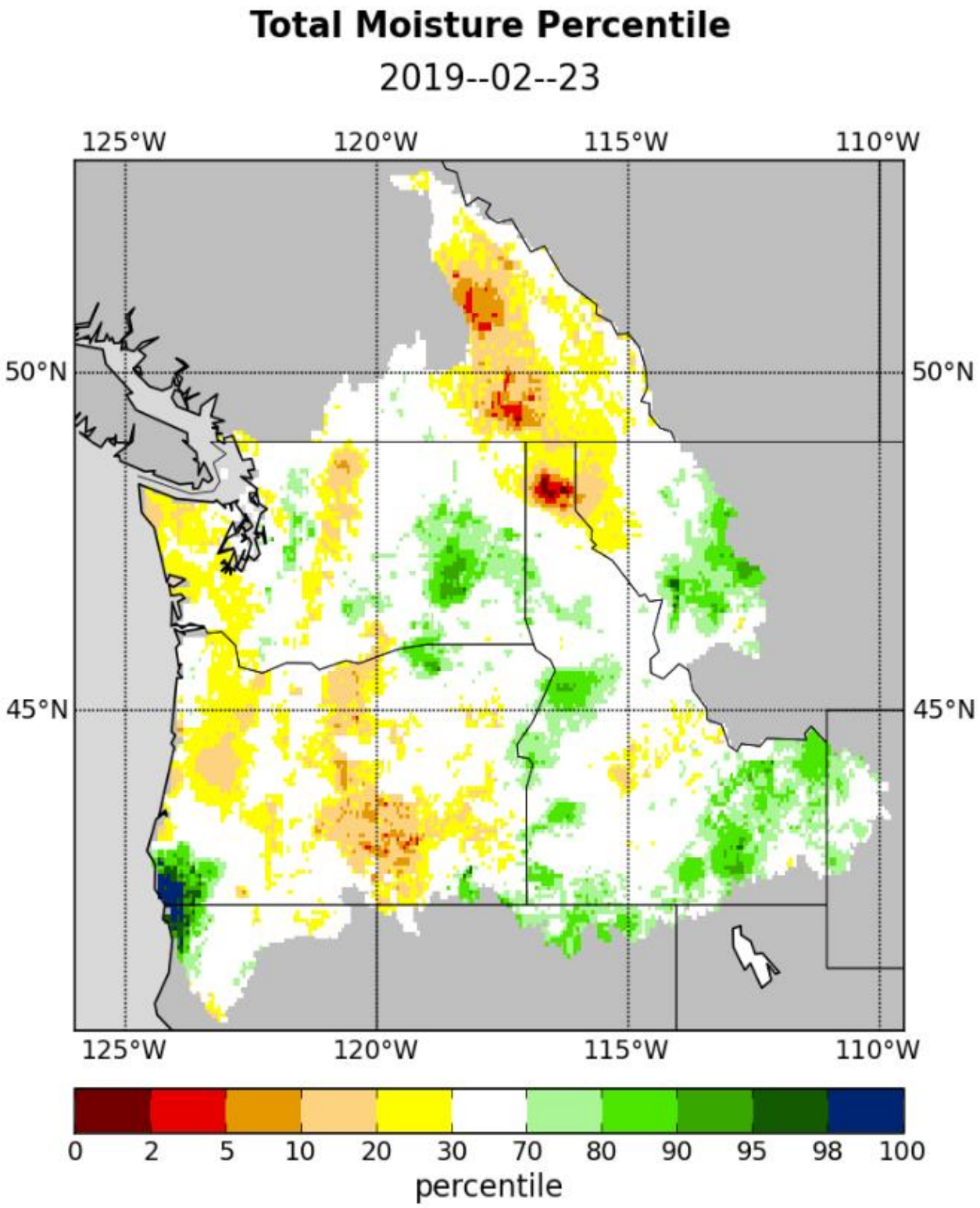
Website: http://www.cpc.ncep.noaa.gov/products/predictions/long_range/seasonal.php?lead=1



Total Moisture - Percentile

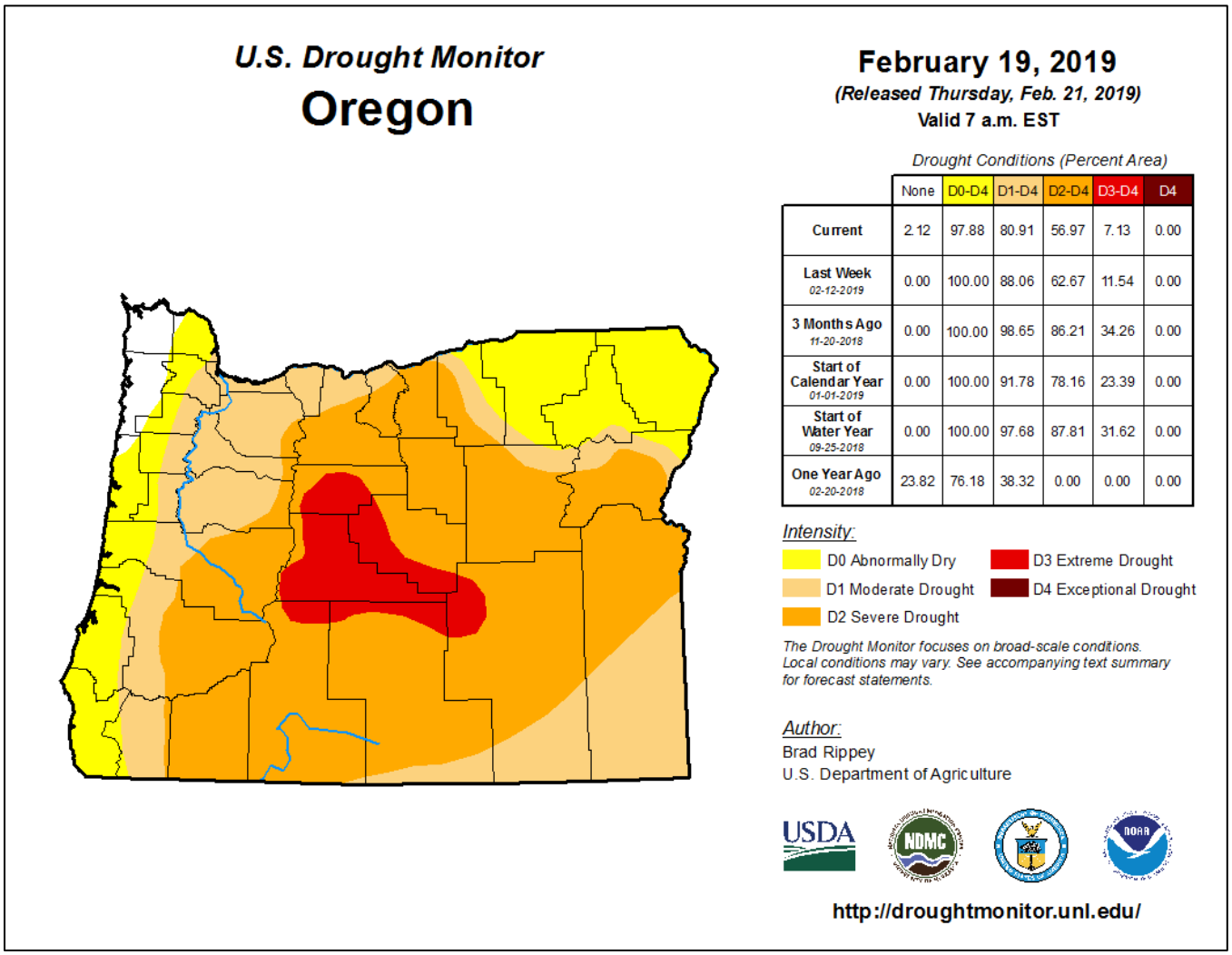
Total Moisture (STOT) is a moisture index calculated by adding Soil Moisture and Snow Water Equivalent. STOT represents the total water content of a region.

Website: http://www.hydro.ucla.edu/SurfaceWaterGroup/forecast/monitor_pnw/index.shtml

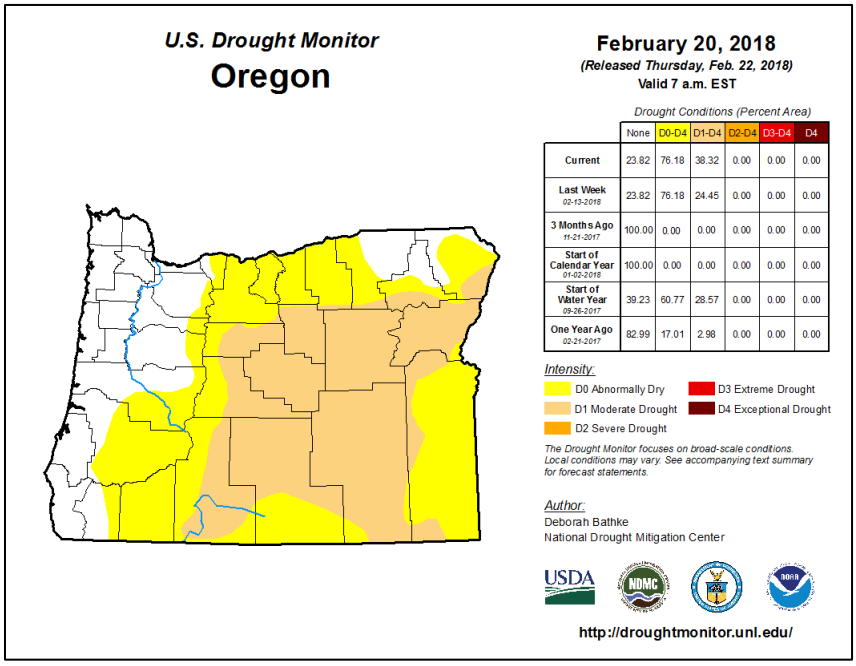


U.S. Drought Monitor for Oregon

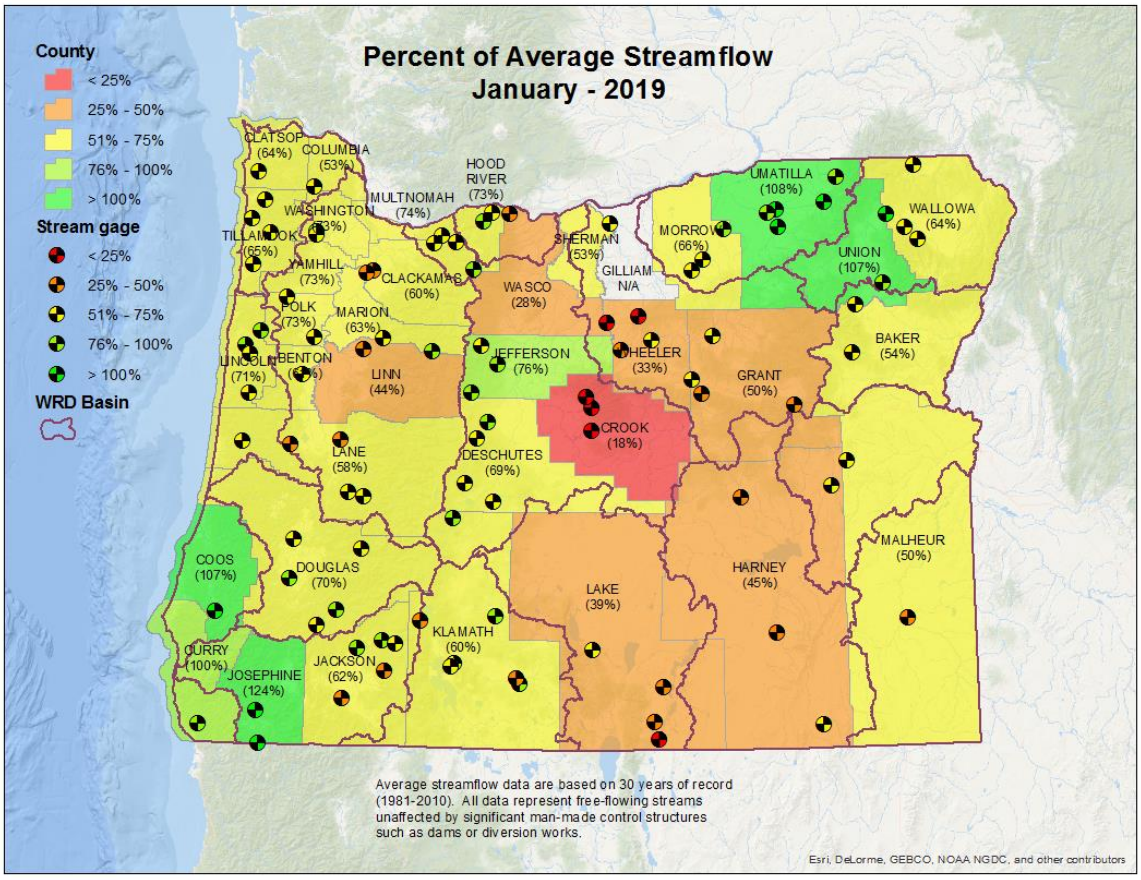
Website: https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?OR



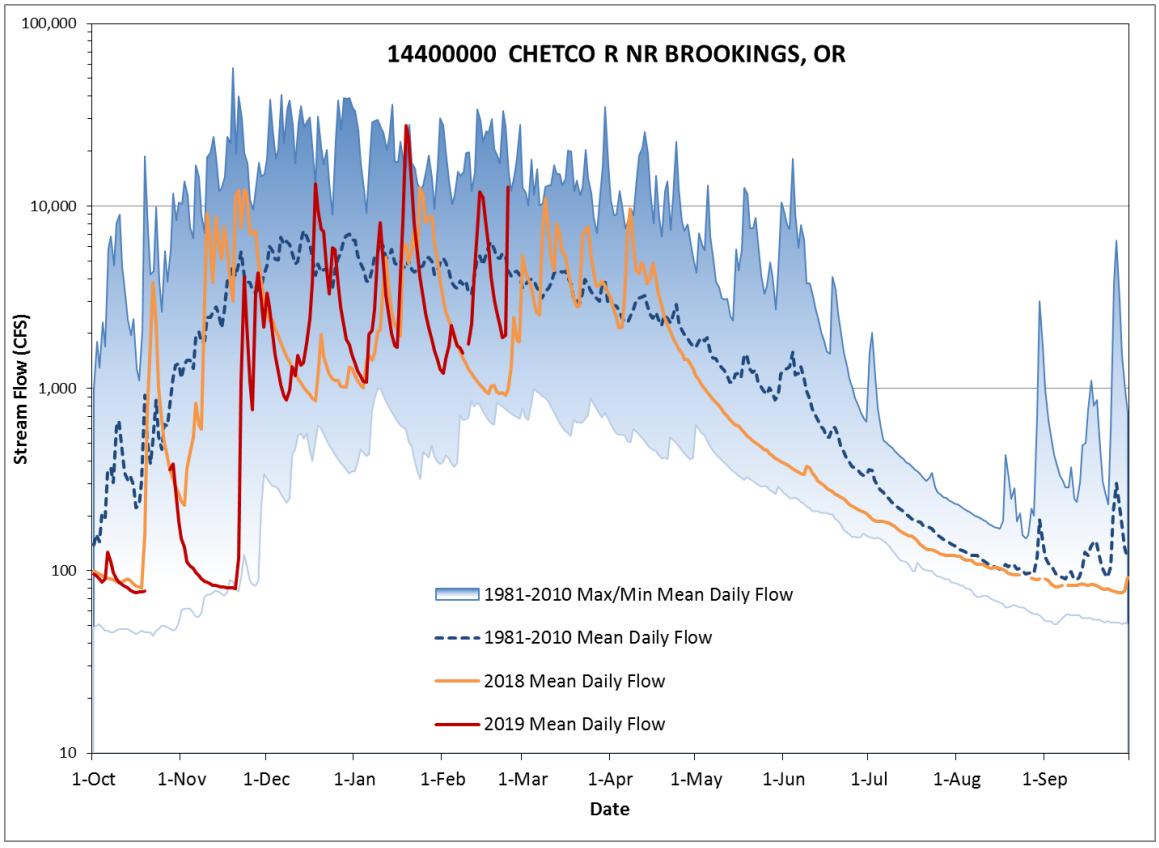
Compared to this time last year:



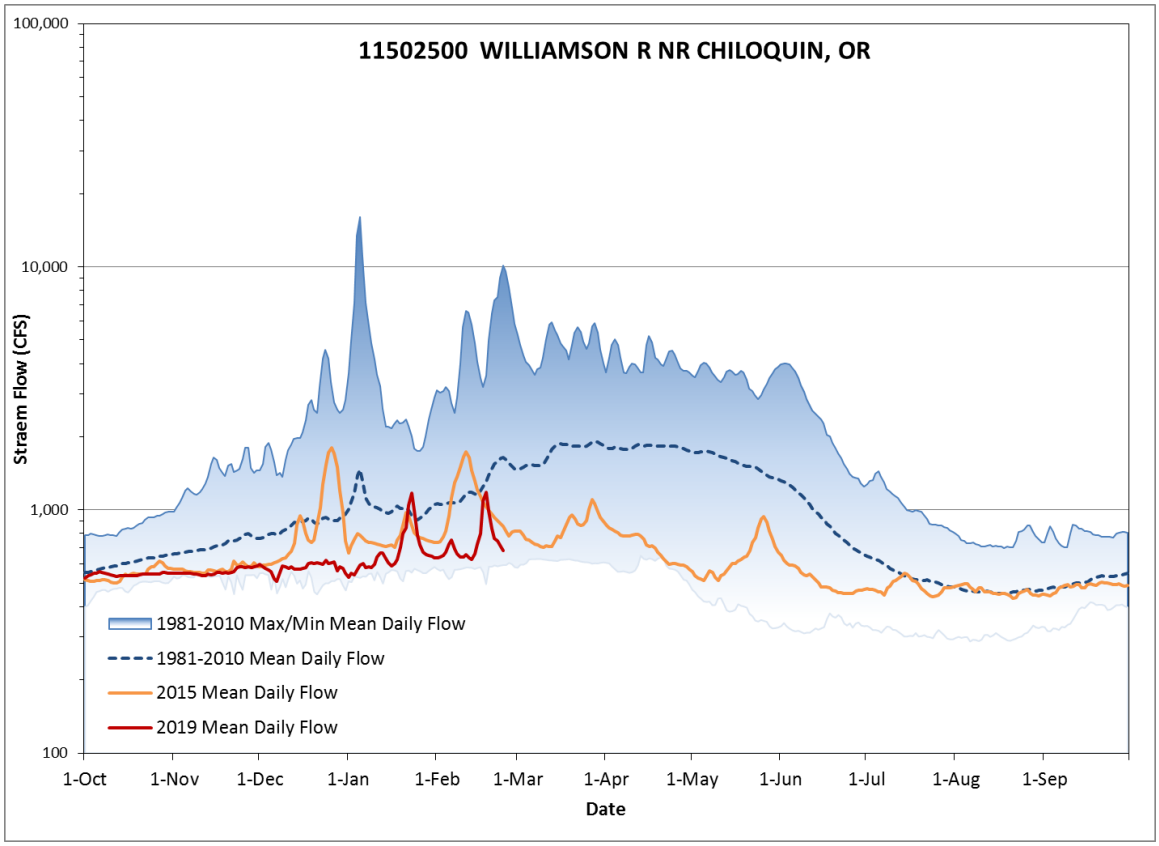
Streamflow Conditions by County - January



Streamflow Conditions – South Coast Basin (Curry County)



Streamflow Conditions – Klamath Basin (Klamath County)



Streamflow Conditions – Powder Basin (Baker County)