

Oregon Water Conditions Report June 3, 2019



Mountain snowpack has melted out at the majority of NRCS SNOTEL sites with only a handful of high elevation sites retaining measurable amounts of snow water equivalent. Most basins melted on a normal schedule, however there were some that melting out up to 2 weeks earlier than normal.

Oregon statewide water year precipitation at NRCS SNOTEL sites is currently 95 percent of normal. The highest percent of normal values for water year precipitation have been in the Owyhee at 124 percent of normal, while the lowest value is in the Hood, Sandy, and Lower Deschutes basin at 80 percent of normal for the water year.

The NRCS [Basin Outlook Report](#) for May is available. The final [\(June\)](#) report for the water year will be available soon. The report is published monthly from January through June.

The NRCS Snow Survey also continues to publish 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 normal for this time of year across much of the state. The exceptions were areas along the coast, northwestern and northeastern Oregon where temperatures were above normal. For the [month of May](#), temperatures were below-normal in the southeast corner of the state transitions to well above normal for large areas of northwest Oregon.

Precipitation over the [past two weeks](#) has been normal for this time of year. The exception was in central Oregon where precipitation was over two inches above-normal. For the [month of May](#), precipitation was normal to well above normal for regions east of the cascades and well below normal to the west where precipitation was well below normal.

Over the next [8 to 14 days](#), the NOAA Climate Prediction Center is forecasting above-normal temperatures along with below-normal precipitation probability across the state. The most recent [three month outlook](#) indicates increased chances of above-normal temperatures. The precipitation outlook for the same period is for drier than normal probabilities in the northwest corner of the state with equal chances of above or below normal precipitation for the southwest and central regions of state. For eastern Oregon the outlook is for above-normal precipitation. The next long-term outlook will be issued on June 20, 2019.

[El Niño](#) conditions are likely to continue through the summer and fall of 2019. During April, above-average sea surface temperatures persisted across most of the equatorial Pacific Ocean, reflecting the ongoing El Niño. For a more complete report, refer

to the May 9, 2019 [diagnostic discussion](#) issued by the Climate Prediction Center. The next diagnostics discussion is scheduled for June 13, 2019. Another source of information is the latest [ENSO blog](#) on the climate.gov website.

Statewide streamflows for May were over 90 percent of normal. This is significantly less than the 200 percent seen in April. Regionally for May, streamflow conditions were about 118 percent of normal east of the Cascades but only 54 percent to the west. Flows in the North Coast and Sandy were the lowest at about 48 percent of normal while the highest flows were in the Malheur at almost 160 percent of normal for the month. More recent data indicate a similar pattern where flows have dropped rapidly to very low levels in the North Coast, Mid Coast and Willamette Basins. While to the east, streams continue to flow at normal to well above normal rates.

USACE Reservoirs: Rogue: Currently the system is at 98 percent full and 2 percent below rule curve. The Lost Creek project is 97 percent full and 3 percent below rule curve with outflow at 2,800 cfs and inflow at about 2,200cfs. Applegate is at 99 percent, 1 percent below rule curve. Applegate outflows are 400 cfs with inflows at 380 cfs.

Willow Creek: The project is full and just above rule curve. Project outflows are currently about 44 cfs; inflows are close to 42 cfs.

Willamette: The project is currently at 84 percent of capacity and 16 percent below rule curve. The flows in the Willamette River at Albany are about 9,900 cfs and flows at Salem are about 13,500 cfs. With the exception of Green Peter, the larger storage projects that provide summer flow augmentation are now close to rule curve while still providing minimum outflow.

USBR Reservoirs: Umatilla River Basin: McKay reservoir is at 100 percent of capacity. Inflows are currently about 100 cfs with outflows just over 80 cfs.

Deschutes River Basin: Ochoco and Prineville reservoirs are at 87 percent and 100 percent full respectively. Ochoco reservoir is still releasing minimum flows close to 10 cfs while Prineville reservoir is currently releasing 350 cfs with inflows about 275 cfs. Crescent Lake is at 76 percent, Wickiup is at 59 percent and Crane Prairie is at 86 percent of capacity.

Malheur River Basin: Warm Springs, Beulah, and Bully Creek reservoirs range from 100 to 98 percent full.

Owyhee River Basin: Owyhee reservoir is currently 99 percent full. Owyhee reservoir is currently releasing over 4,000 cfs with inflows of almost 5,500 cfs.

Burnt and Powder River Basins: Phillips and Unity reservoirs are at 67 percent and 100 percent full. Phillips is releasing 100 cfs with inflows of almost 300 cfs while Unity is releasing 114 cfs. Unity is currently undergoing space and refill management measures due to elevated inflows and shrinking storage space.

Tualatin River Basin: Scoggins reservoir is nearly full and releasing almost 80 cfs.

The most recent update to the [US Drought Monitor](#) is showing degradation in conditions in the North Coast along with improvements in areas in southeast Oregon. The report now indicates that 12 percent of the state is listed as in D0 (Abnormally Dry) with just under 2 percent listed as D1 (Moderate Drought). D2 (Severe Drought) and D3 (Extreme Drought) are no longer present anywhere in the state.

Wildfire potential for June is predicted to be above normal across the northwest corner of the state. According to the [National Significant Wildland Fire Potential Outlook](#), Normal significant large fire potential is expected across the region during the outlook period except west of the Cascade crest in Washington and Oregon through August where Above Normal significant large fire potential is expected.

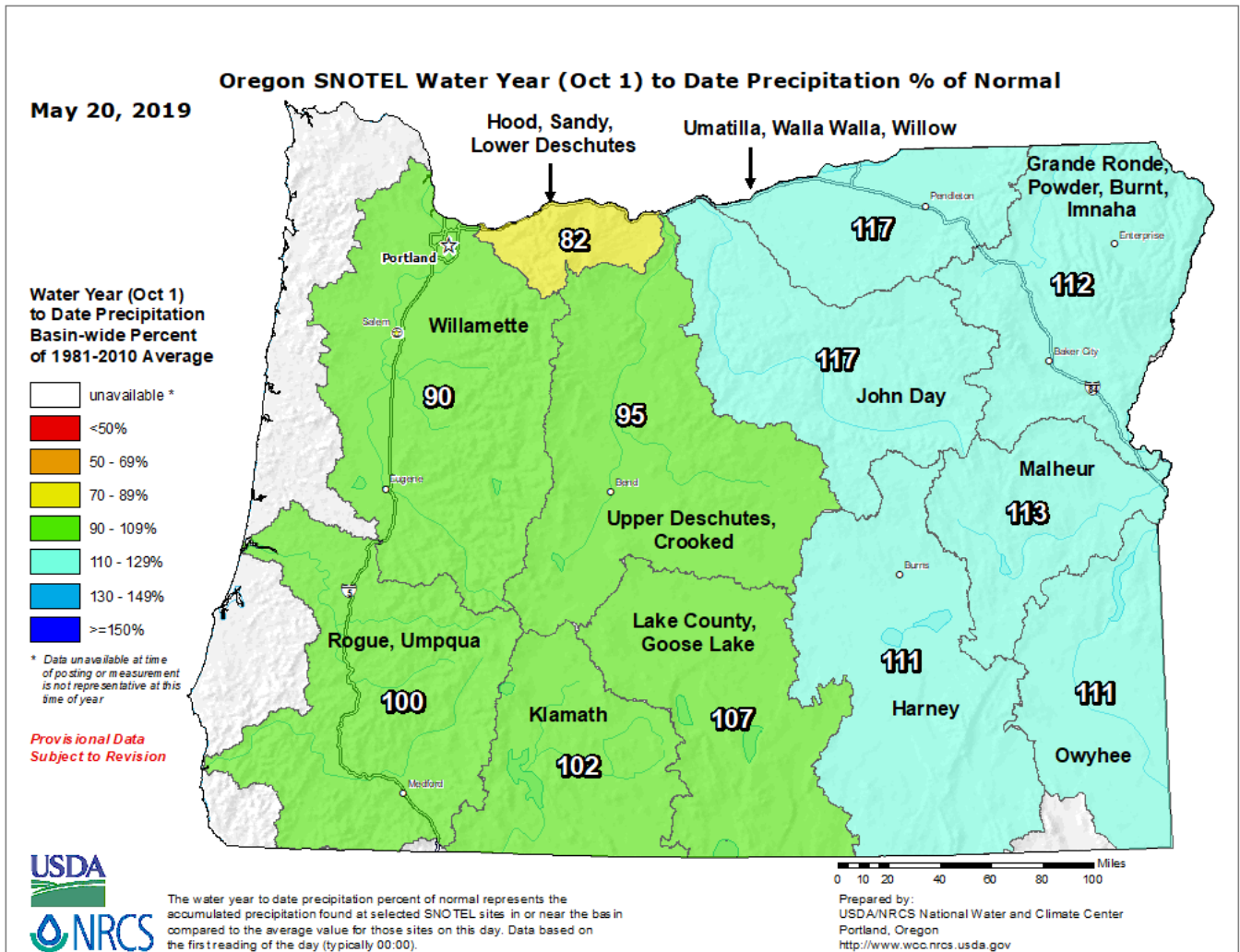
Long-range outlooks suggest fire danger will rise to be above-average during the summer, particularly west of the Cascades where outlooks suggest a warmer than average summer. Fire season will likely begin sooner than average in June for areas west of the Cascades.

Large fire risk is expected to become higher than average and spread to Oregon and central Washington as the summer progresses. The next update is scheduled for July 1, 2019.

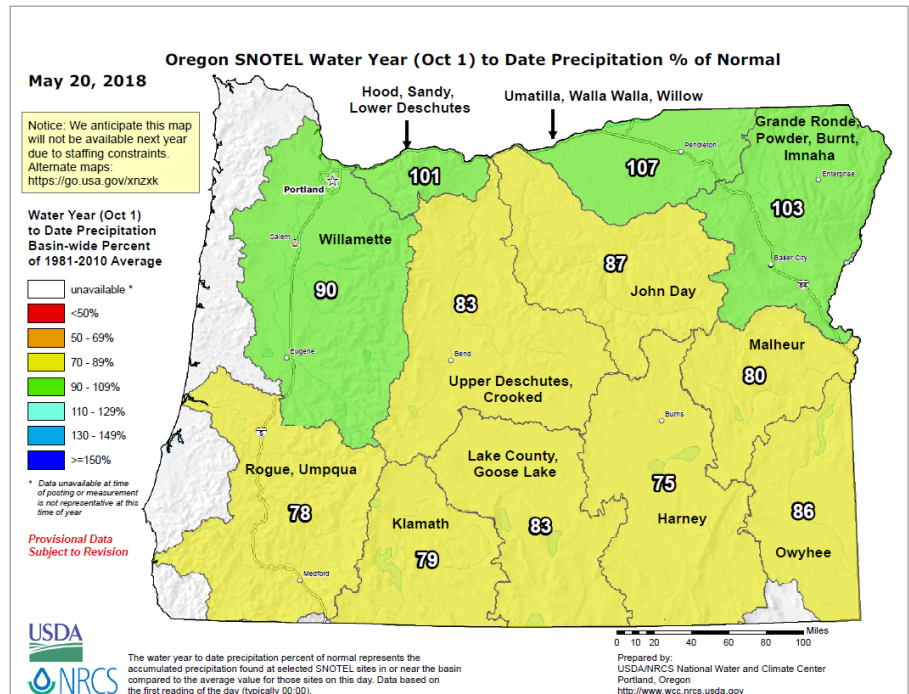
More information can also be accessed through the Northwest Interagency Coordination Center [website](#). Another recommended resource is the Oregon Office of Emergency Management’s [RAPTOR](#) incident mapping program which includes current situational information, such as wildfire perimeters, thermal satellite, fire evacuation boundaries, and air quality info.

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Precipitation (Mountain) - Percent of Normal



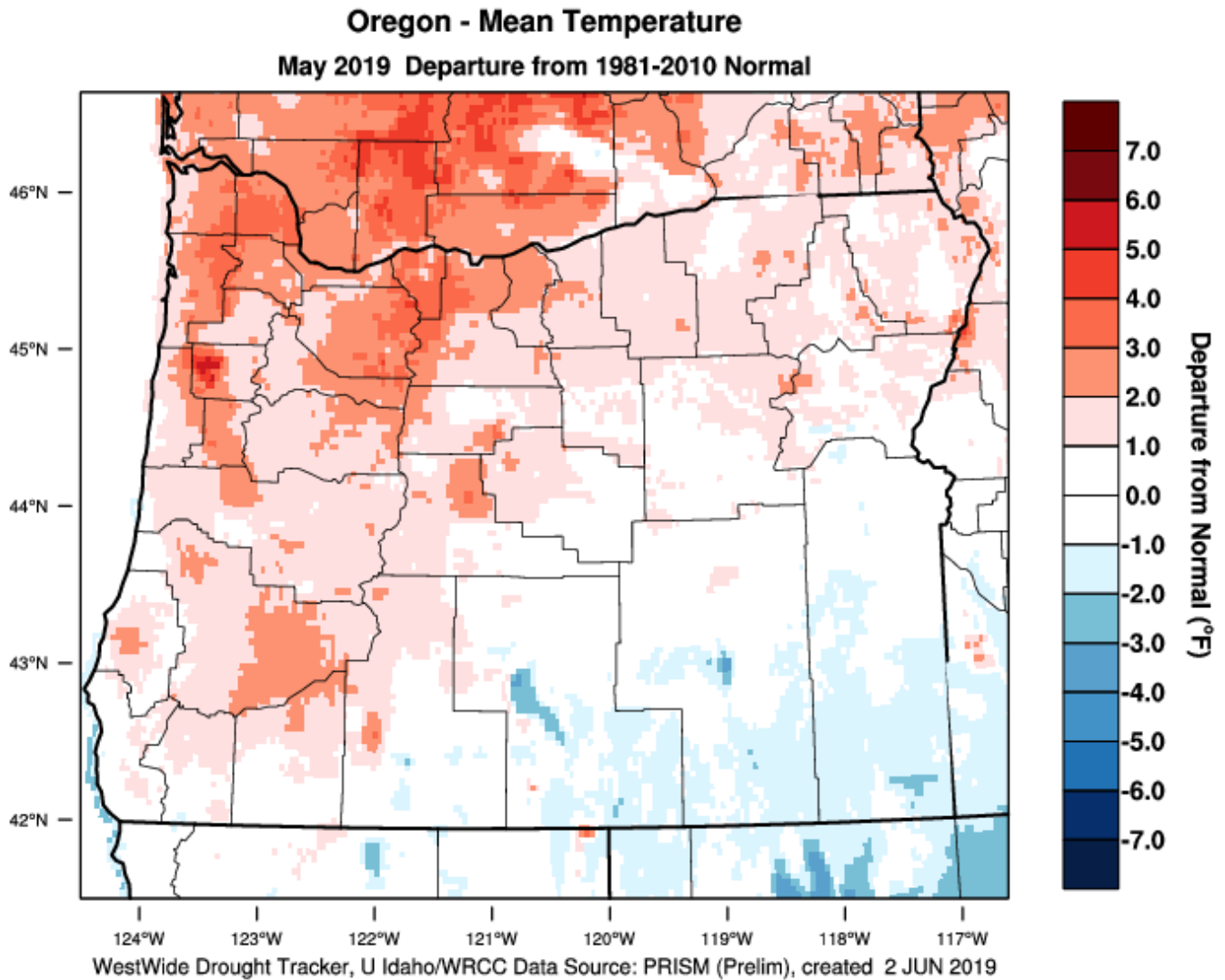
Compared to this time last year -



Temperature – (1 Month) Departure from Normal

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

PRISM > Temperature Anomaly 1 Month > Oregon



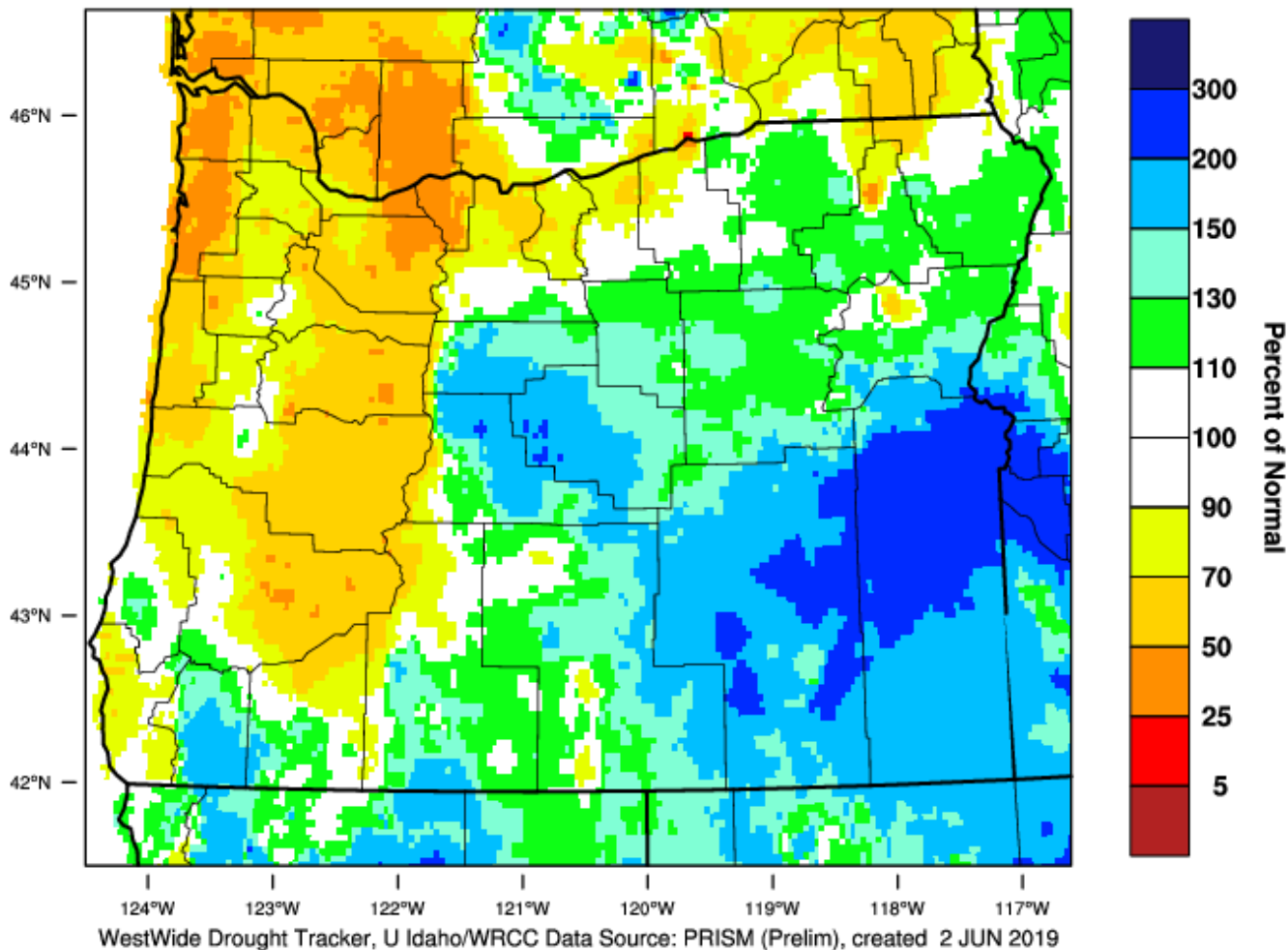
Precipitation – (1 Month) Percent of Normal

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

PRISM > Precipitation Anomaly 1 Month > Oregon

Oregon - Precipitation

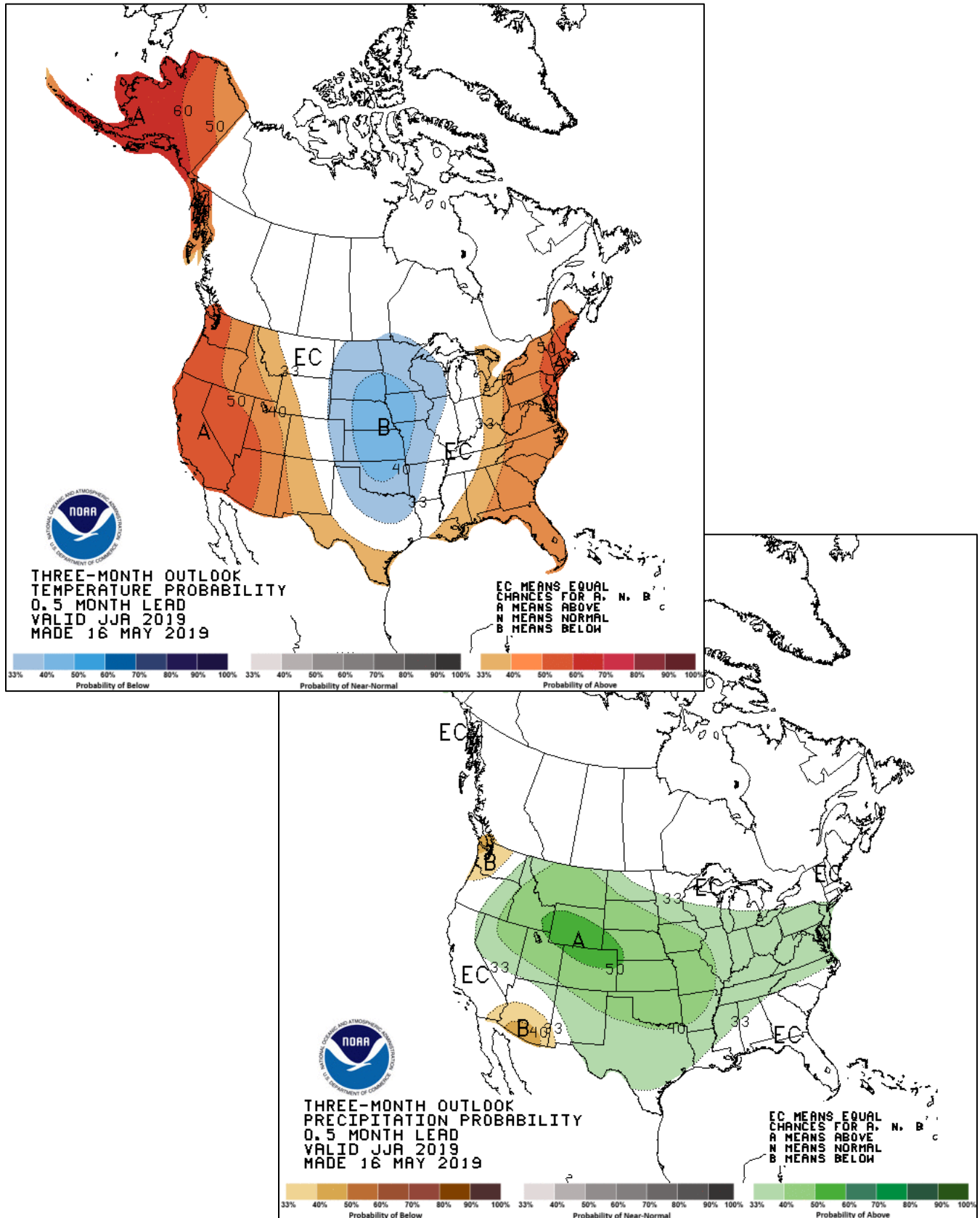
May 2019 Percent of 1981-2010 Normal



Three Month Temperature and Precipitation Outlook

June through August

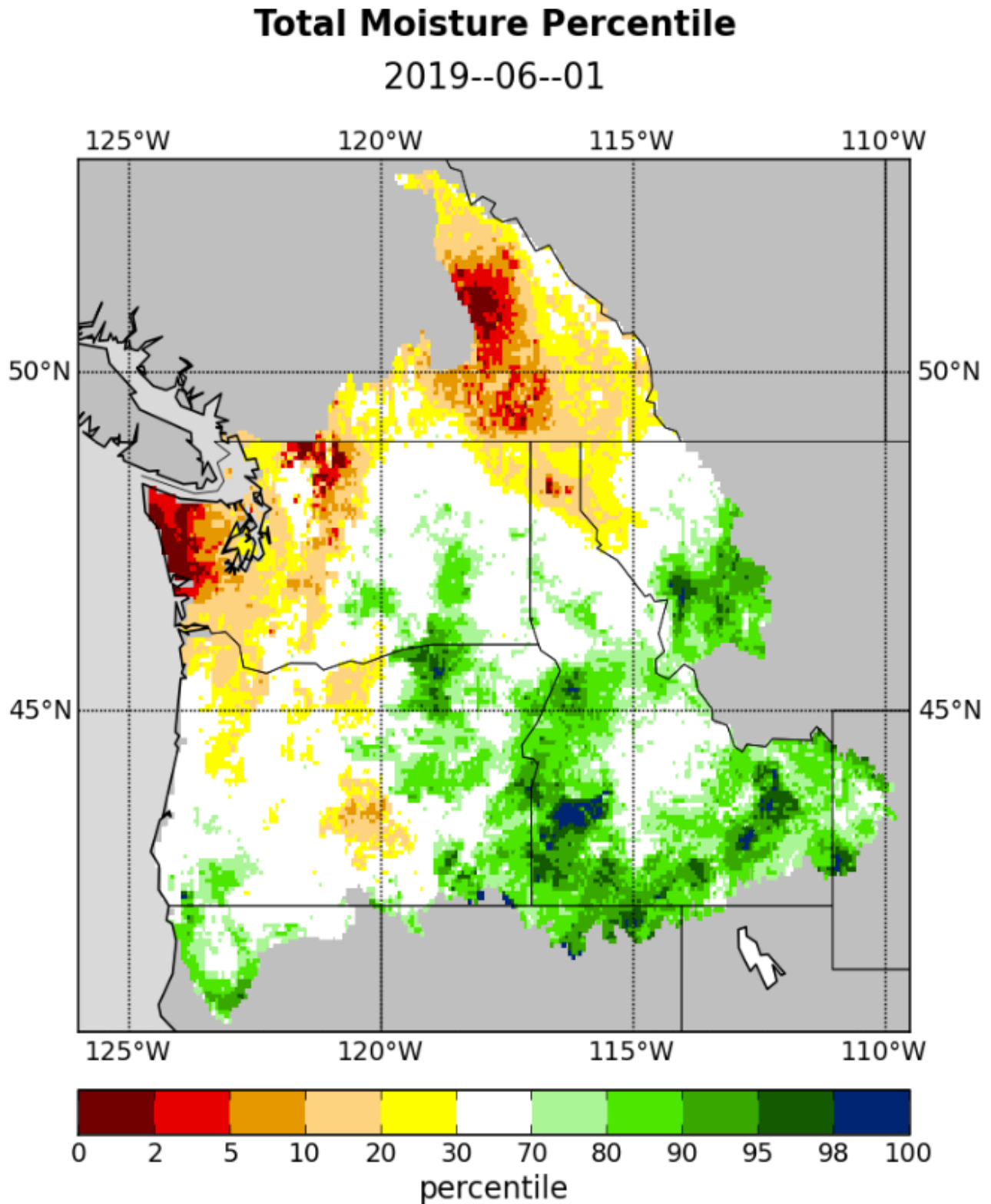
Website: http://www.cpc.ncep.noaa.gov/products/predictions/long_range/seasonal.php?lead=1



Total Moisture - Percentile

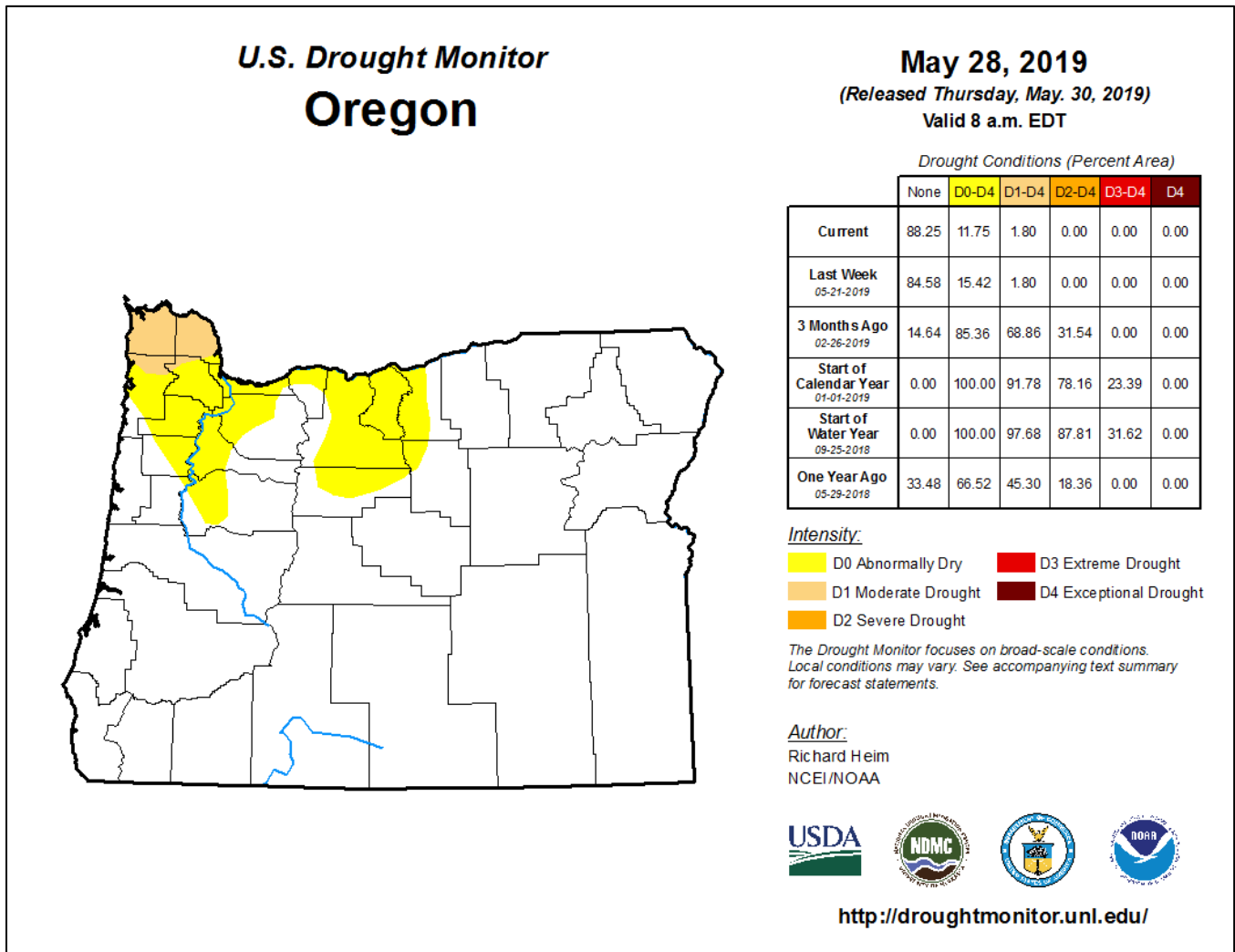
Total Moisture (STOT) is a moisture index calculated by adding Soil Moisture and Snow Water Equivalent. STOT represents the total water content of a region.

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

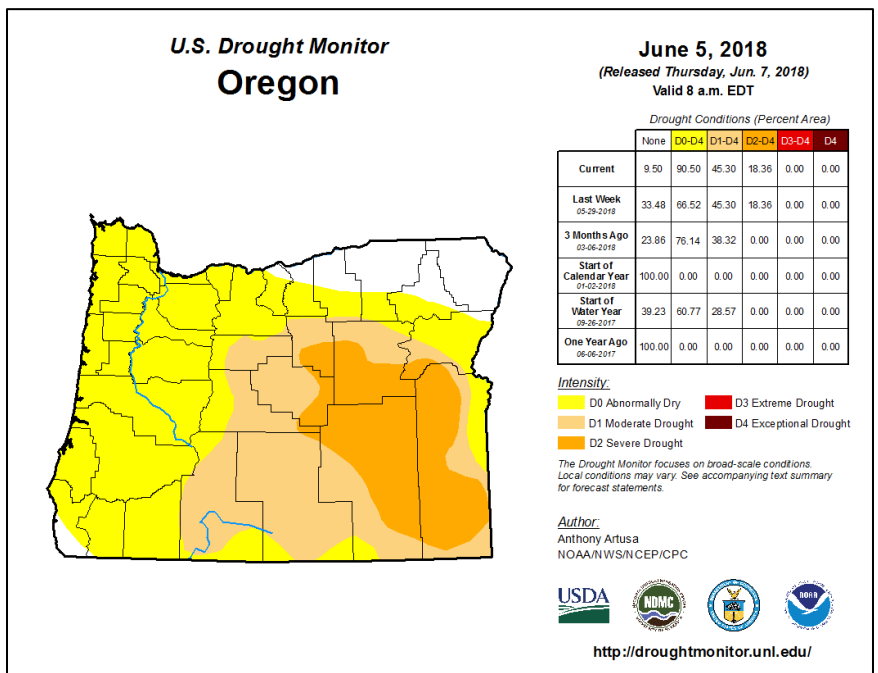


U.S. Drought Monitor for Oregon

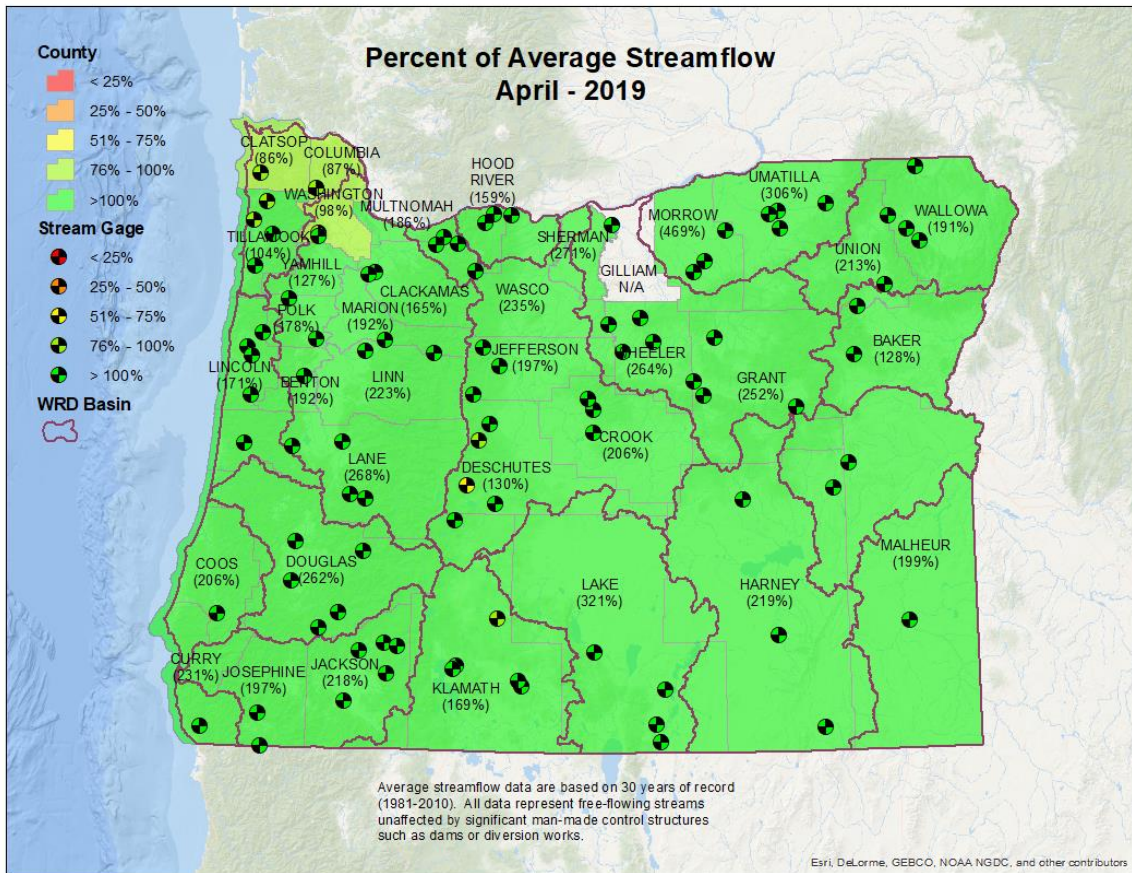
Website: <https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?OR>



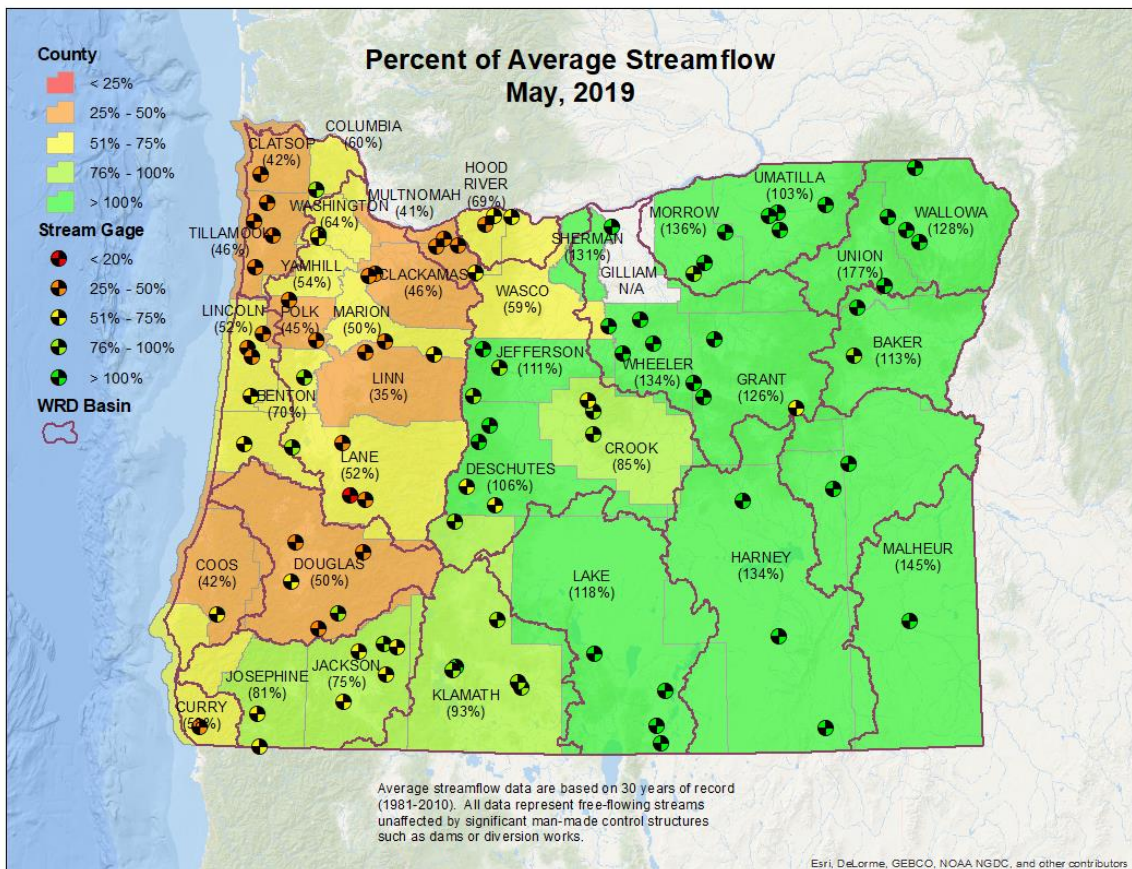
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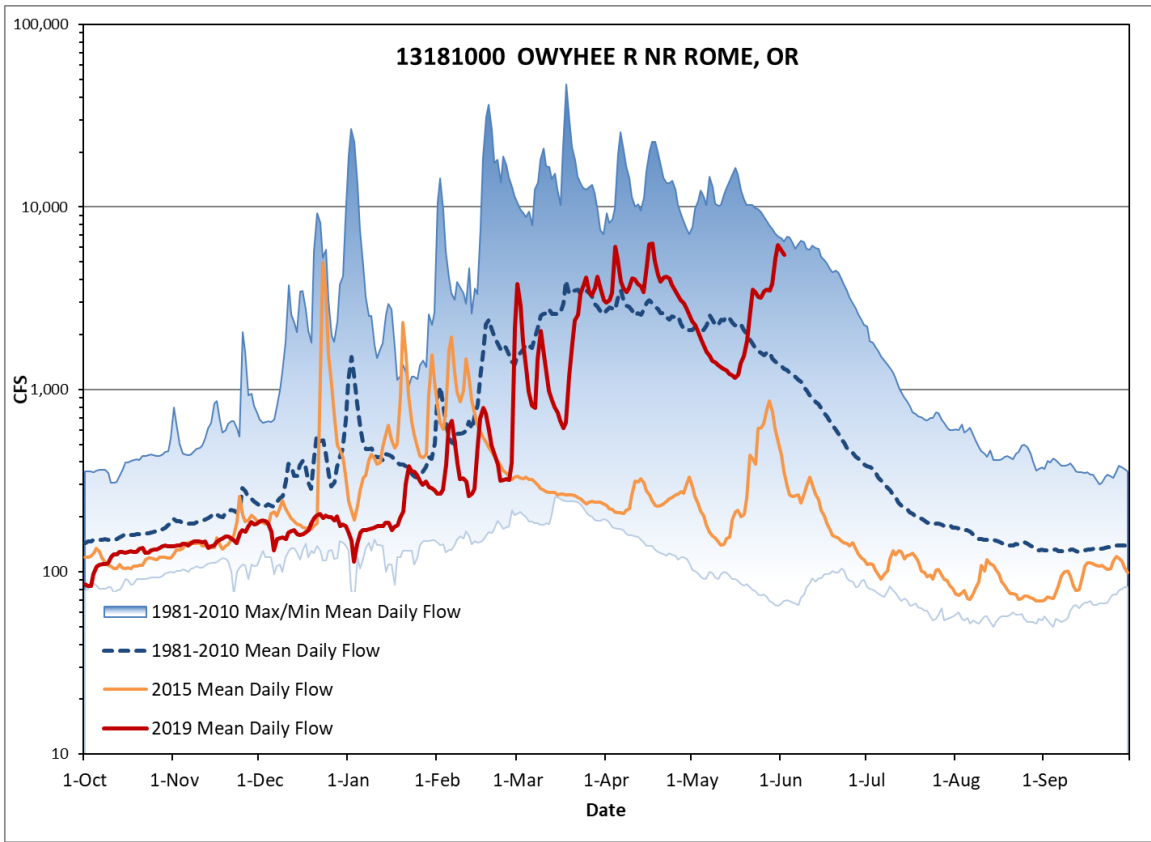
Streamflow Conditions by County - April



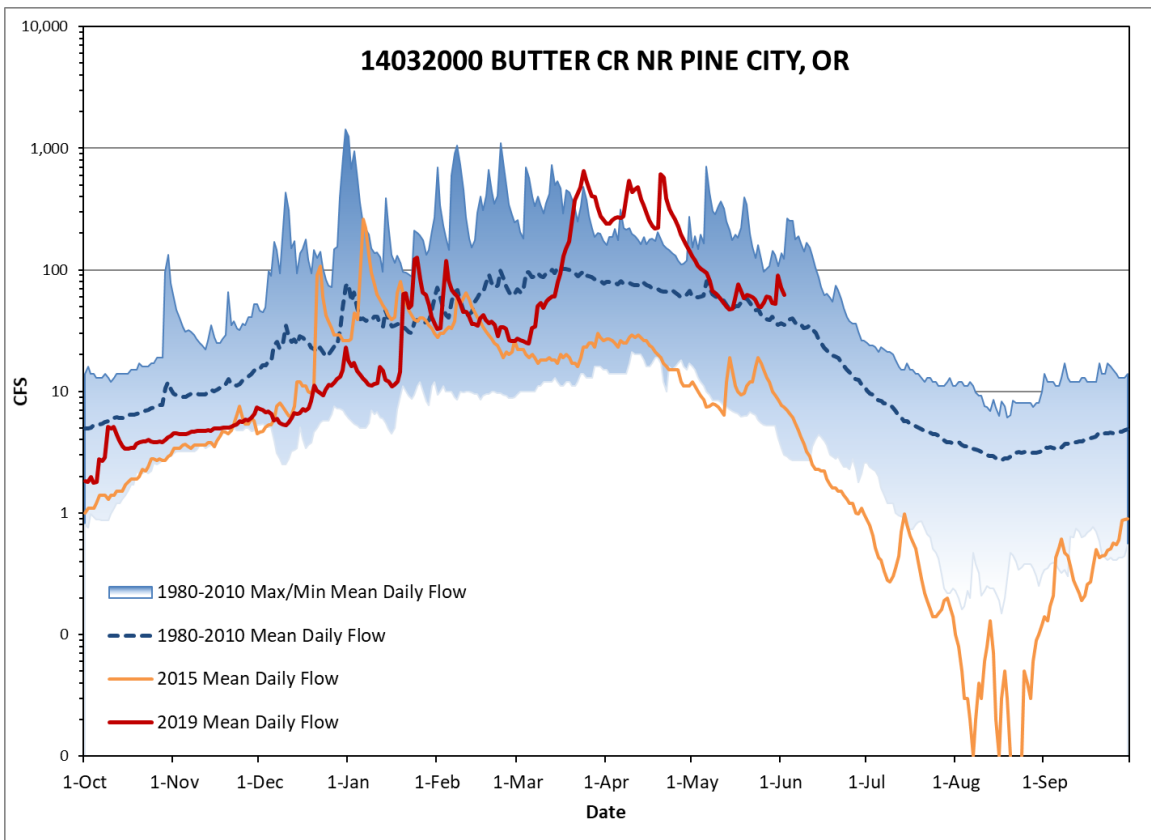
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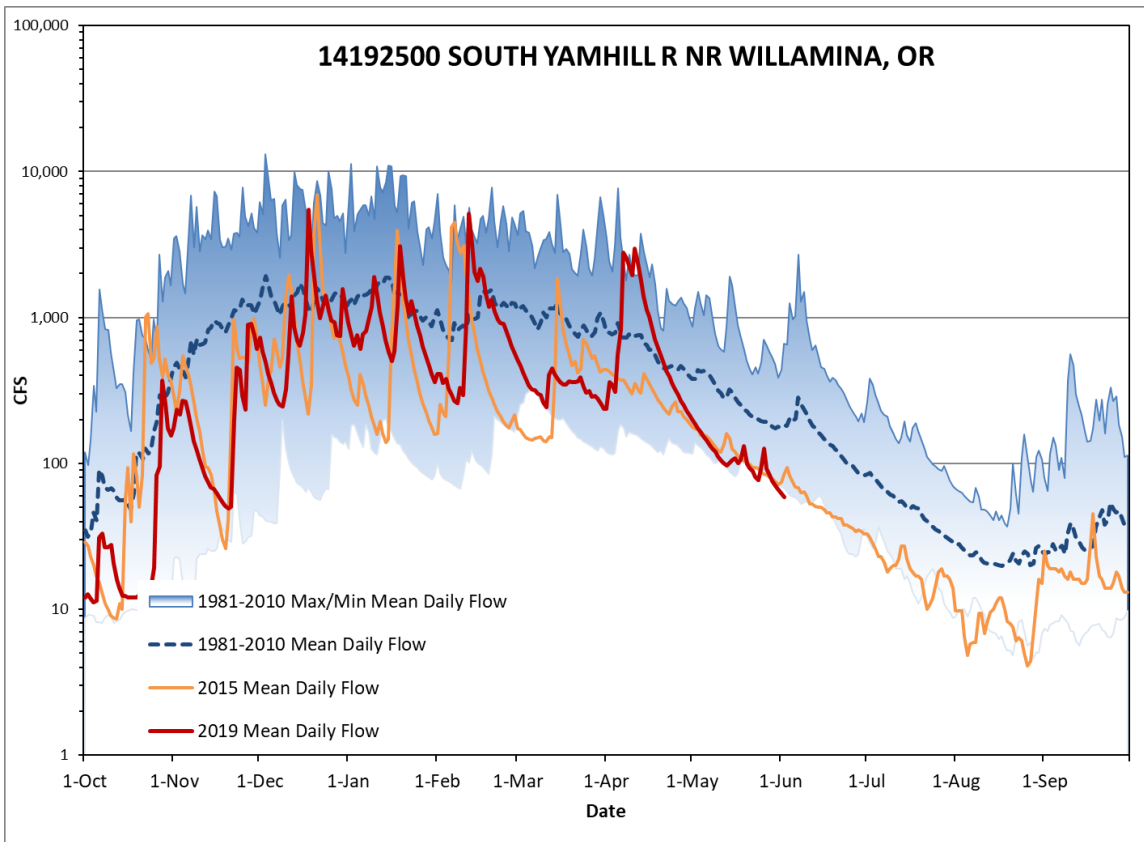
Streamflow Conditions – Owyhee Basin (Malheur County)



Streamflow Conditions – Umatilla Basin (Morrow County)



Streamflow Conditions – Willamette Basin (Polk County)



Streamflow Conditions – North Coast Basin (Tillamook County)

