

Oregon Water Conditions Report August 12, 2019



Oregon statewide water year precipitation at NRCS SNOTEL sites is up only slightly over the past two weeks at 93 percent of normal. The highest percent of normal values for water year precipitation have been in the Owyhee at 119 percent, while the lowest value is in the Hood, Sandy, and Lower Deschutes Basin at 81 percent of normal for the water year.

Precipitation over the [past two weeks](#) has ranged from below-normal across much of the state to localized areas of normal to above-normal in southeastern, central and southwest Oregon. For the [month of July](#), precipitation was well below-normal across most of the state with the exception of northwest and coastal regions where precipitation was normal to above-normal. In parts of the Rogue Basin precipitation was only 5 percent of normal.

Temperatures over the [past two weeks](#) were generally warmer than normal across most of the state. For the [month of July](#), temperatures were normal to below-normal across most of the state.

Over the next [8 to 14 days](#), the NOAA Climate Prediction Center is forecasting above-normal temperatures across western Oregon and the southwest corner of the state, transitioning to below-normal in the northeast corner. The precipitation outlook is for slightly above-normal precipitation probability across the state, with the highest probability in the northwest corner. The most recent [three month outlook](#) indicates increased probability 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 August 15, 2019.

El Niño has transitioned to [ENSO-neutral](#), which is most likely to continue through the 2019-2020 winter (50-55% chance). During July, ENSO-neutral conditions were reflected by the combination of below-average sea surface temperatures in the eastern equatorial Pacific Ocean and above-average SSTs in the central Pacific. For a more complete report, refer to the August 8, 2019 [diagnostic discussion](#) issued by the Climate Prediction Center. The next diagnostics discussion is scheduled for September 12, 2019. Another source of information is the latest [ENSO blog](#) on the climate.gov website.

Statewide streamflows for July were 81 percent of normal. This is only slightly lower than the 82 percent seen in June. Regionally for July, streamflow conditions were about 97 percent of normal east of the Cascades and 61 percent to the west. Flows in the Powder Basin were the lowest at about 40 percent of normal while the highest flows were in the Owyhee at about 170 percent of normal for the month. More recent data indicate a continued pattern where flows have dropped to below-normal levels in the North Coast, Mid Coast, Willamette, Sandy, and Umpqua Basins. To the east of the Cascades, streams continue to flow at close to normal rates. Recent weather appears to have helped to slow the decline of streamflows in western Oregon.

USACE Reservoirs: Rogue: Currently the system is at 61 percent of capacity and 39 percent below rule curve. The Lost Creek project is 62 percent full and 38 percent below rule curve with outflows of about 1,730 cfs and inflows close to 1,100 cfs. Applegate is at 57 percent of capacity and 42 percent below rule curve. Applegate outflows are 325 cfs with inflows at 56 cfs.

Willow Creek: The project is 62 percent full and 38 percent below rule curve. Project outflows are currently about 20 cfs; inflows are close to 15 cfs.

Willamette: The project is currently at 52 percent of capacity and 48 percent below rule curve. Detroit and Fern Ridge are the closest to normal for this time of year at 80 and 86 percent of capacity and 20 to 14 percent below normal. The flows in the Willamette River at Albany are about 5,380 cfs and flows at Salem are about 7,480 cfs.

USBR Reservoirs: Flood control operations ended in early June for most Reclamation reservoirs in Oregon. Most reservoirs filled to capacity with the exception of Ochoco reservoir on the Crooked River, Phillips reservoir on the Powder River, and reservoirs in the Upper Deschutes and Rogue River basins. All reservoirs have started drafting as demand for stored water has steadily increased with the warming temperatures. The reservoirs that filled remain to have storage levels in the upper quantile as compared to the historical average due in part to a late start in the irrigation season and relatively cooler temperatures.

Umatilla River Basin: McKay reservoir is at 65 percent of capacity. Outflows are just close to 180 cfs with inflows of about 5 cfs.

Deschutes River Basin: Ochoco and Prineville reservoirs are at 60 percent and 79 percent full respectively. Ochoco reservoir is releasing close to 15 cfs while Prineville reservoir is currently releasing over 290 cfs with inflows about 6 cfs.

Crescent Lake is at 66 percent, Wickiup is at 20 percent and Crane Prairie is at 76 percent of capacity.

Malheur River Basin: Warm Springs, Beulah, and Bully Creek reservoirs range from 66 to 56 percent full. All three are above normal for this time of year, increasing the chance of available carryover for next year.

Owyhee River Basin: Owyhee reservoir is 81 percent full which is well above normal with inflows of about 195 cfs.

Burnt and Powder River Basins: Phillips and Unity reservoirs are at 43 percent and 54 percent full. Phillips is releasing about 320 cfs with inflows around 45 cfs while Unity is releasing 123 cfs.

Tualatin River Basin: Scoggins reservoir is at 64 percent of capacity and releasing over 200 cfs.

The most recent update to the US Drought Monitor is showing a small amount of degradation over the past two weeks. The report now indicates that almost 35 percent of the state is listed as D0 (Abnormally Dry), with almost 11 percent listed as D1 (Moderate

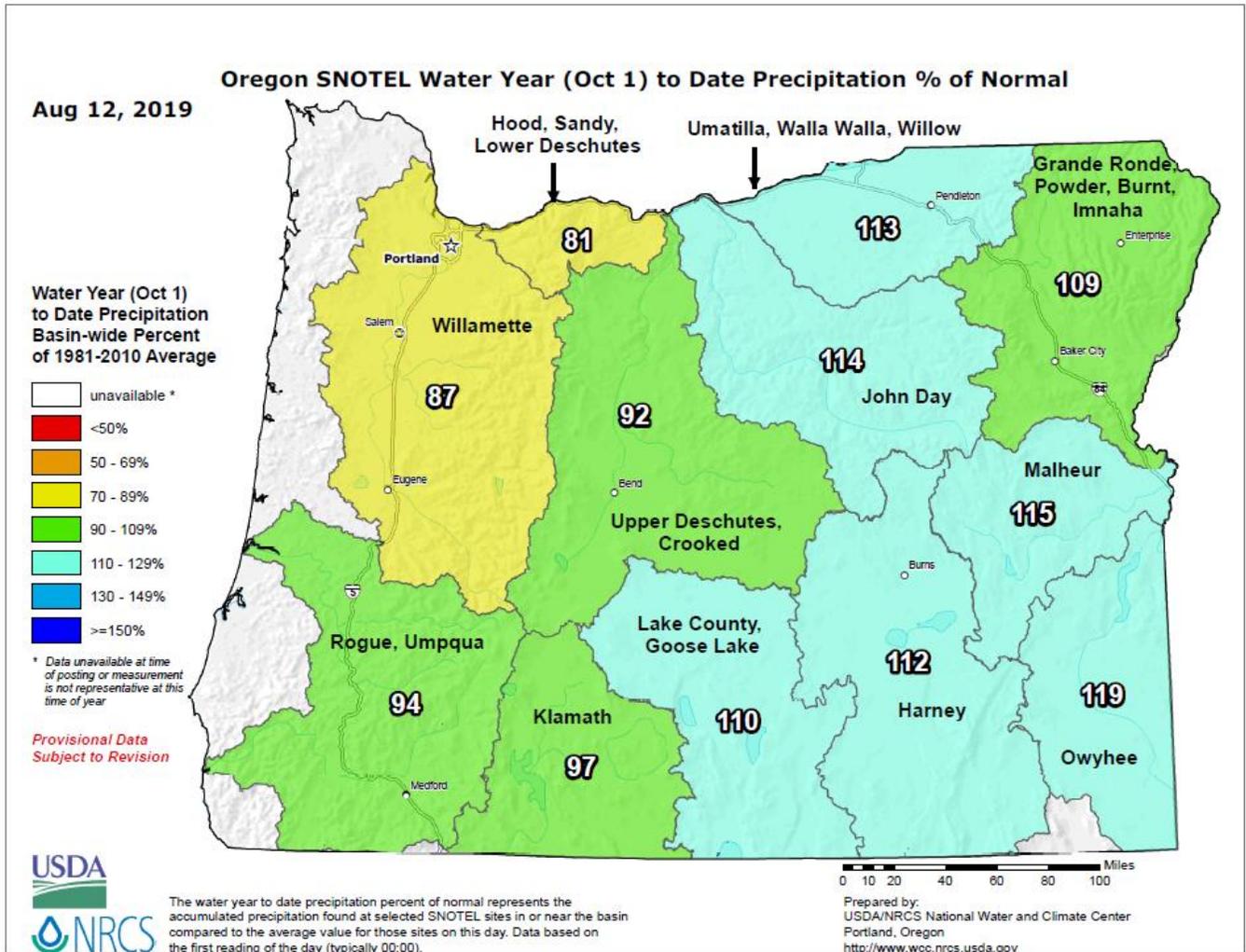
Drought). Degradation has slowed across western Oregon in response to the cooler weather seen in the past week.

Wildfire potential through September is predicted to be above normal across western Oregon. According to the [National Significant Wildland Fire Potential Outlook](#), above-normal significant large fire potential is expected in southwestern Oregon in August and September while other locations can expect normal significant large fire potential. Normal significant large fire potential is expected in all areas in October and November.

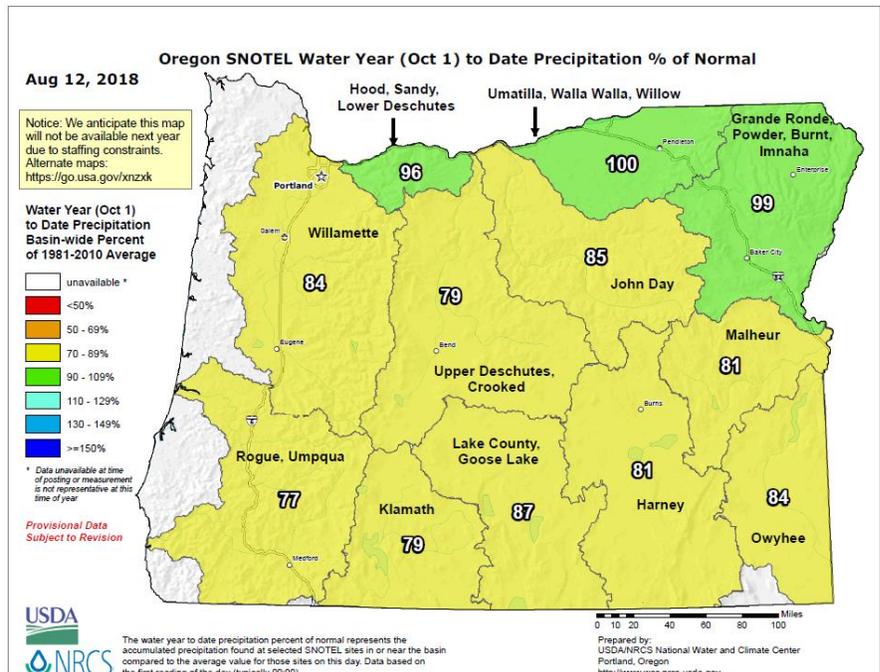
More information can also be accessed through the Northwest Interagency Coordination Center [website](#). Another recommended resource is the Oregon Office of Emergency Management’s [RAPTOR](#) incident mapping program which includes current situational information, such as wildfire perimeters, thermal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

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Precipitation (Mountain) - Percent of Normal



Compared to this time last year -

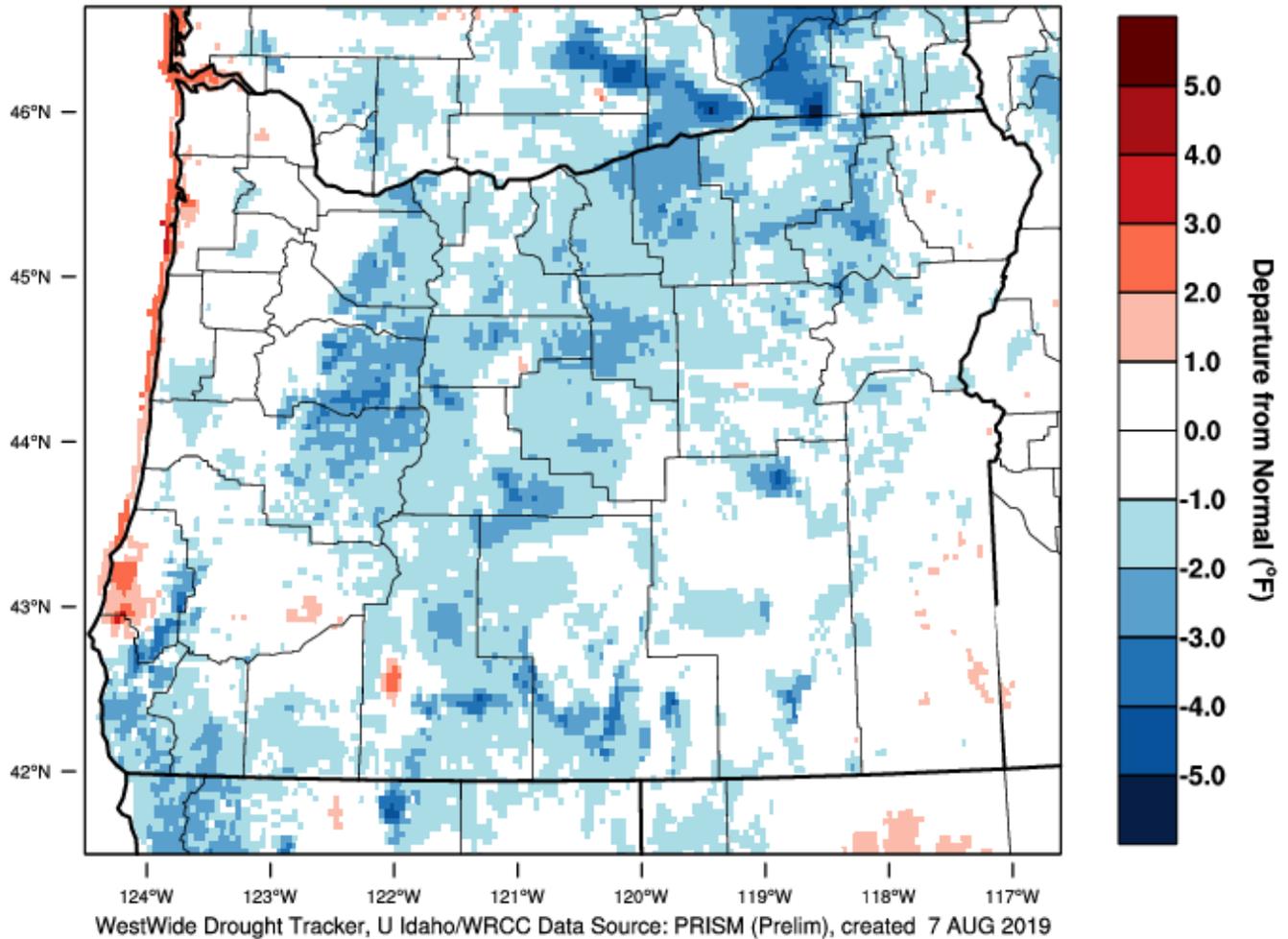


Temperature – (1 Month) Departure from Normal

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

PRISM > Temperature Anomaly 1 Month > Oregon

Oregon - Mean Temperature
July 2019 Departure from 1981-2010 Normal



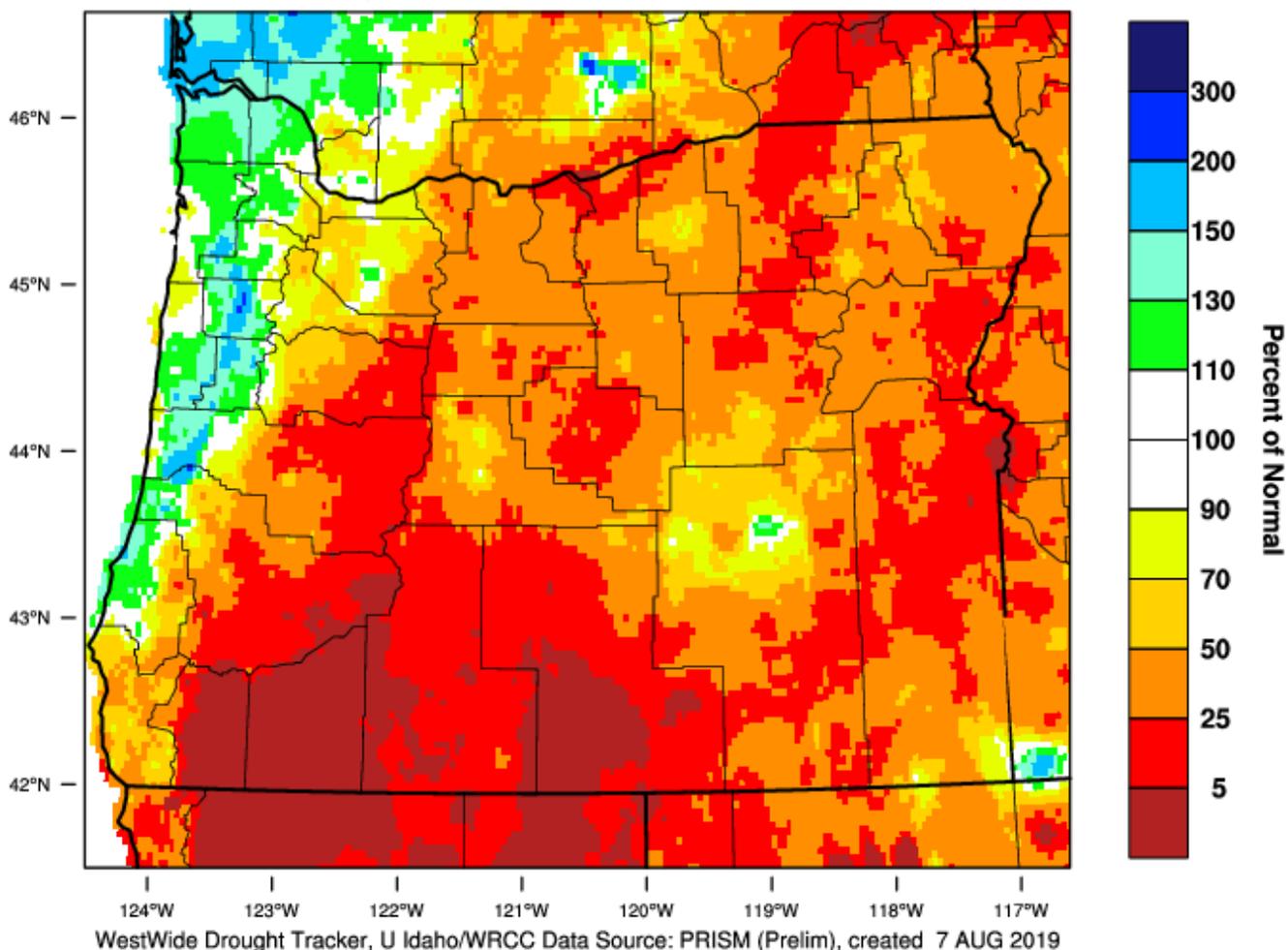
Precipitation – (1 Month) Percent of Normal

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Oregon - Precipitation

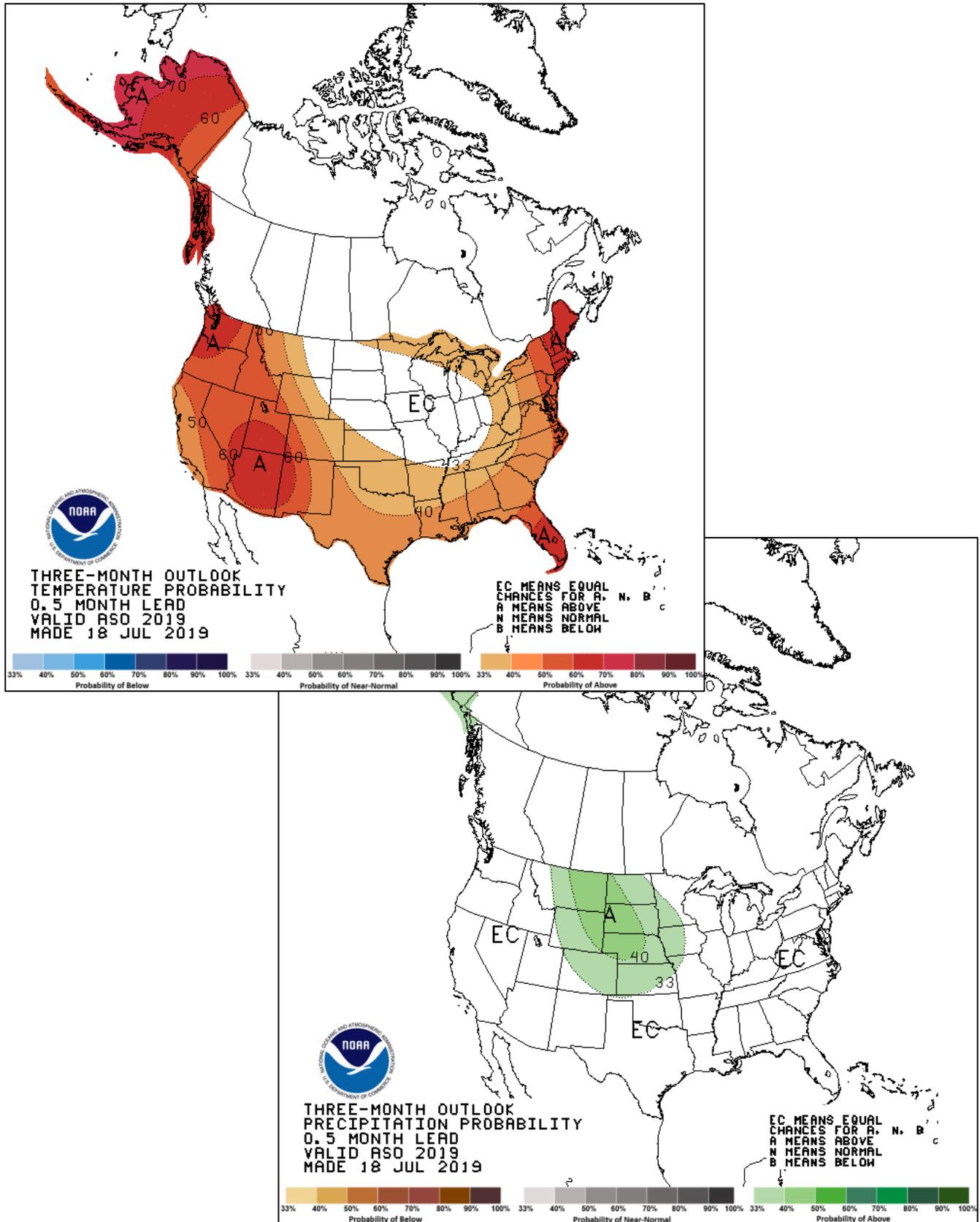
July 2019 Percent of 1981-2010 Normal



Three Month Temperature and Precipitation Outlook

August through October

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



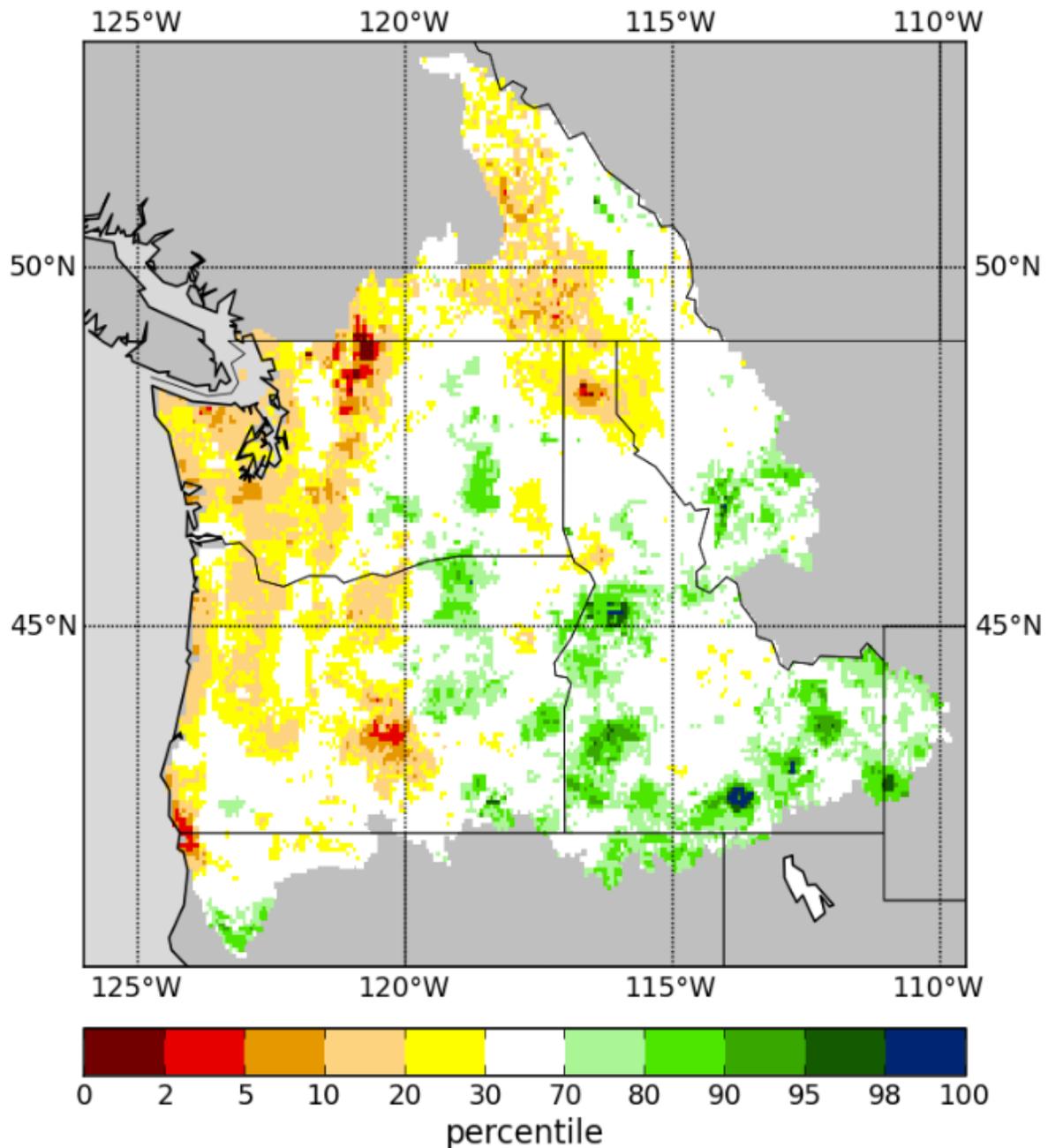
Total Moisture - Percentile

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

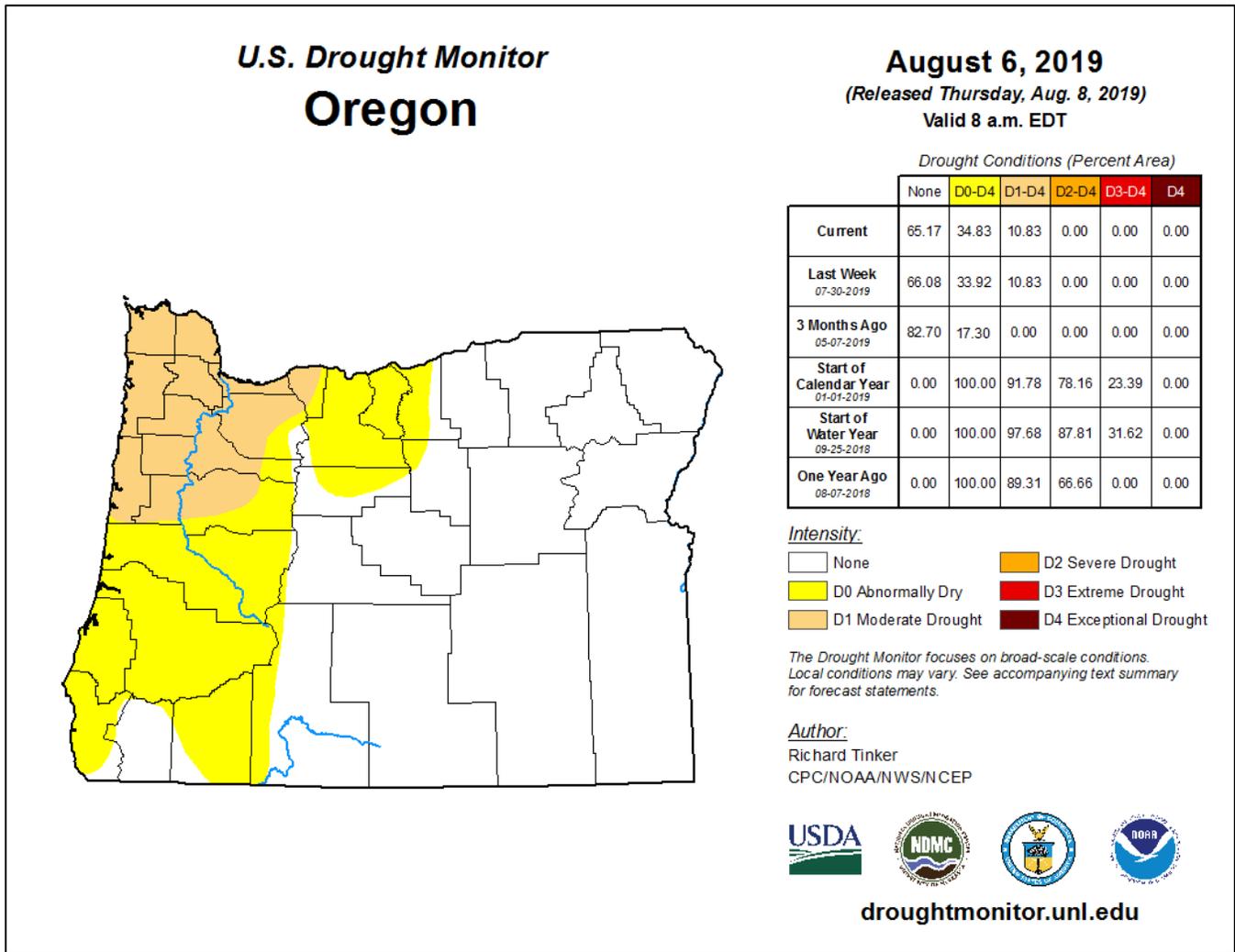
Total Moisture Percentile

2019--08--10

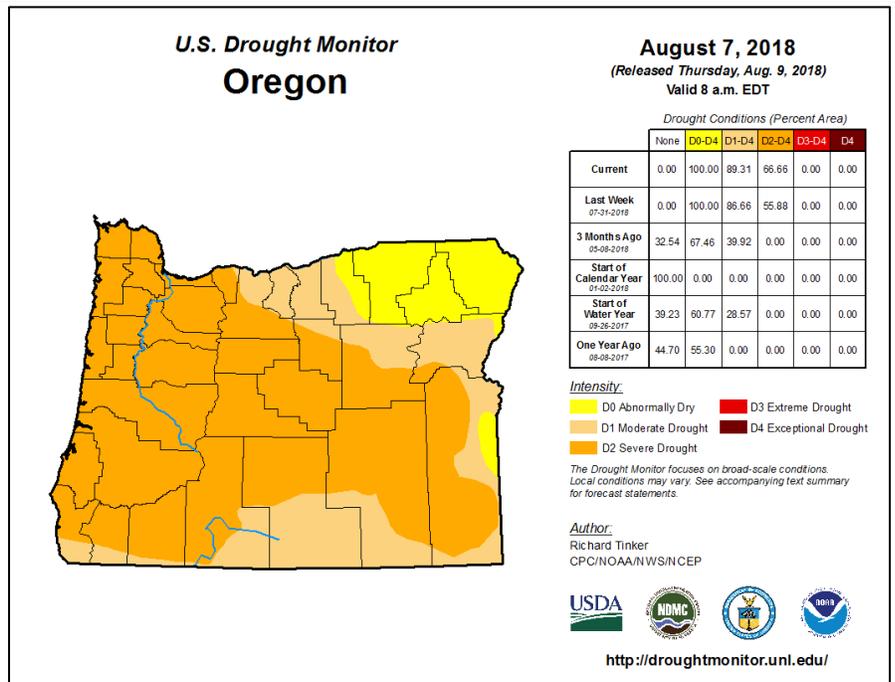


U.S. Drought Monitor for Oregon

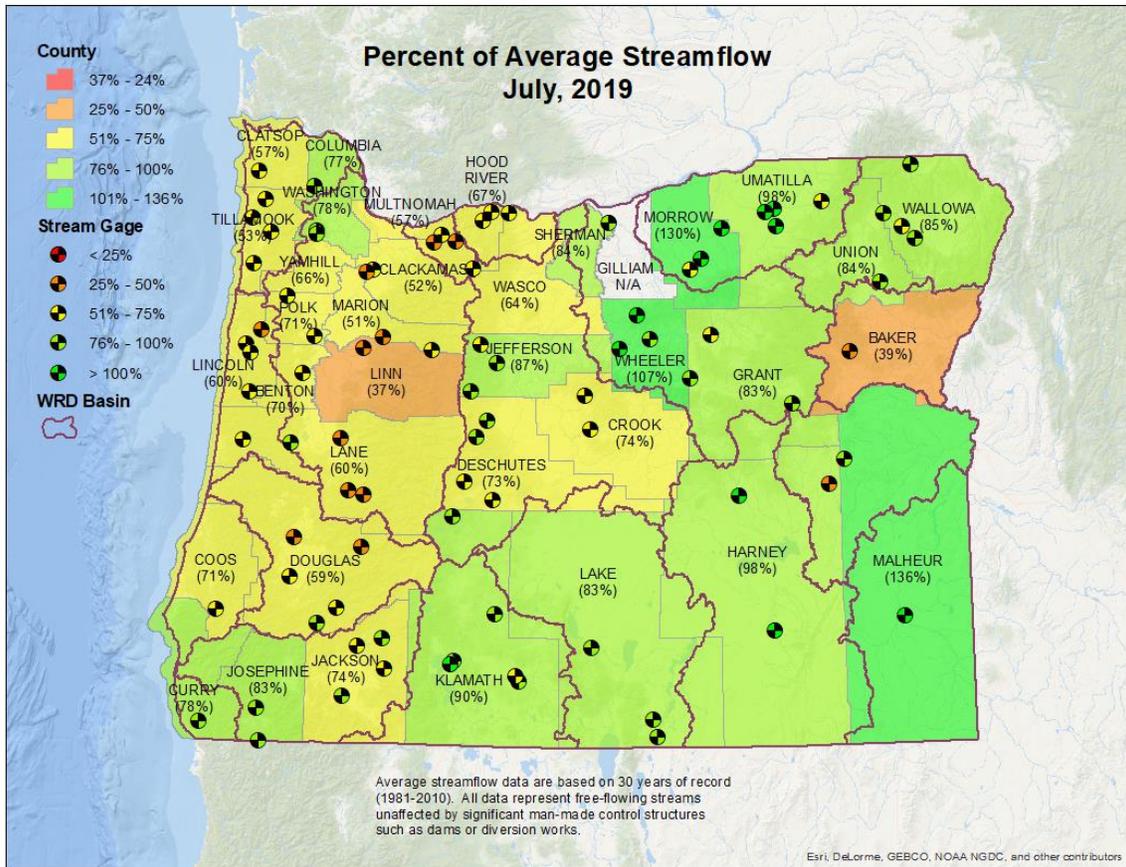
Website: <https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?OR>



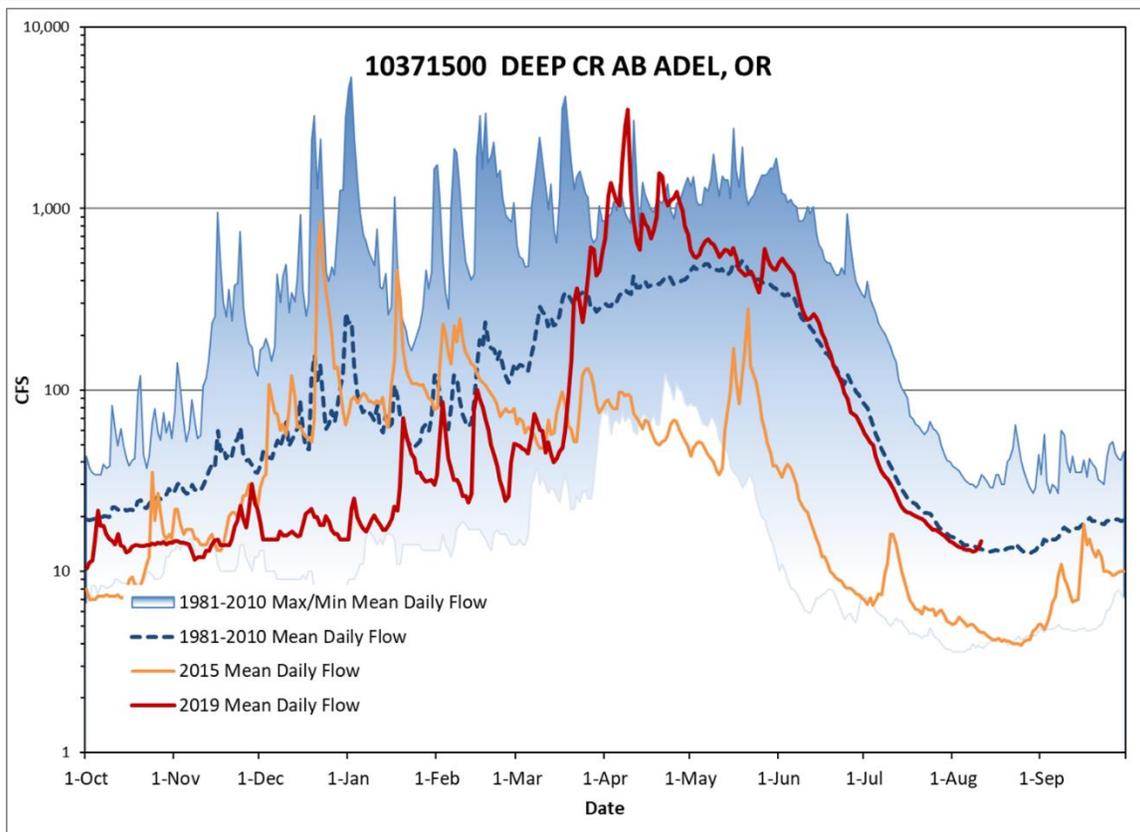
Compared to this time last year:



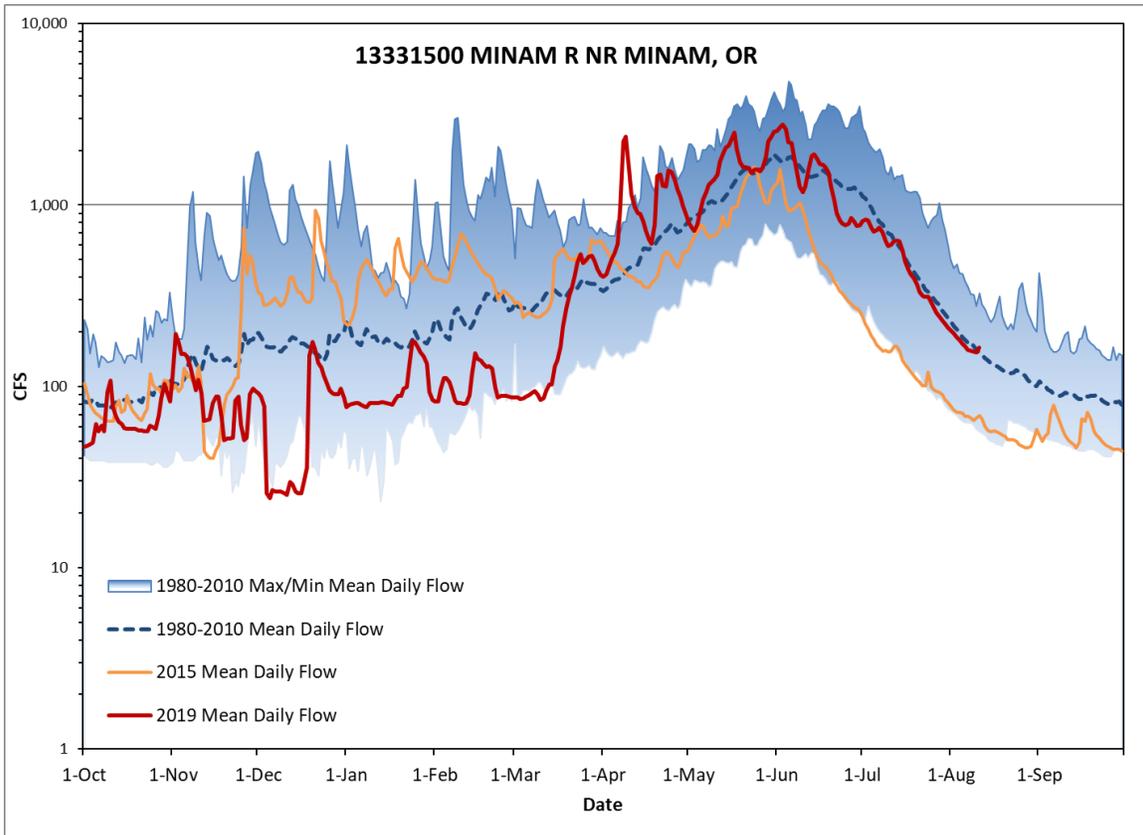
Streamflow Conditions by County – July



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



Streamflow Conditions – Grande Ronde Basin (Wallowa County)



Streamflow Conditions – Mid Coast Basin (Lincoln County)

