

Oregon

Water Conditions Report

September 9, 2019



Precipitation over the [past two weeks](#) has ranged from below-normal across most of western and northeast Oregon to areas of normal to well above-normal in central and southeast Oregon. For the [month of August](#), precipitation was also varied across the state. Anomalies ranged from below-normal in most of western Oregon, to above-normal in central and southwest Oregon, and back to below-normal in eastern Oregon.

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 120 percent of normal, while the lowest value is in the Hood, Sandy, and Lower Deschutes basin at 81 percent of normal for the water year. Some SNOTEL sites in the Blue Mountains of eastern Oregon have received over an inch of precipitation over the last seven days.

Temperatures over the [past two weeks](#) have been above-normal across the state. For the [month of August](#), temperatures were also above-normal across the state.

Over the next [8 to 14 days](#), the NOAA Climate Prediction Center is forecasting above-normal temperatures west of the Cascades with equal chances of above or below normal to the east. The precipitation outlook is for above normal chances across the. The most recent [three month outlook](#) indicates increased probability of above-normal temperatures across the state. The precipitation outlook for the same period is for equal chances of above or below normal precipitation for the state. The next long-term outlook will be issued on September 19, 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 diagnostic discussion is scheduled for September 12, 2019. Another source of information is the latest [ENSO blog](#) on the climate.gov website.

Statewide streamflows for August were 84 percent of normal. This is only slightly higher than the 81 percent seen in July. Regionally for August, streamflow conditions were about 91 percent of normal east of the Cascades and 73 percent to the west. Flows in the Sandy Basin were the lowest at about 55 percent of normal while the highest flows were in the Owyhee and Umatilla basins at about 120 percent of normal for the month. More recent data indicate a continued pattern where streams are flowing at rates lower than 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.

USACE Reservoirs: Rogue: The system is currently 44 percent full and 46 percent below rule curve. Lost Creek is 46 percent full and 45 percent below rule curve. Inflows are around 1,060cfs with outflows of about 1,465 cfs. Applegate is at 35 percent of capacity and 54 percent below rule curve. Inflows are at 27 cfs while outflows are holding at a little over 300 cfs. Current fisheries goals are the enhancement of rearing conditions for juvenile salmonids, and minimizing pre-spawn mortality of adult Spring Chinook salmon, while increasing summer rearing area for juvenile Coho salmon, juvenile steelhead, and cutthroat trout.

Willow Creek: The Willow Creek Project is currently 36 percent full and 64 percent below rule curve. The current project objectives are to pass inflow, as well as to meet the current irrigation demand of 17 cfs. Inflows are currently 8.9 cfs with outflows just under 20 cfs.

Willamette: The Willamette system is 37 percent full and 54 percent below rule curve. Projects are drafting to meet minimum mainstem and tributary flows required by the BiOp. Fall Creek releases have been ramped up to ~650 cfs to aid in augmenting mainstem flow and meet Albany targets. Flows in the Willamette River at Albany are 5,580 cfs with flows at Salem at 8,860 cfs.

USBR Reservoirs: Most reservoirs filled to capacity to start the irrigation season 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 increased with the seasonal decrease in natural stream flows. The reservoirs that filled continue to have above average storage levels as compared to the historical average. Water Managers will be watching these reservoirs closely over the next month to determine whether additional releases would be necessary in order to meet storage space requirements for the upcoming water year. Most reservoirs are currently better positioned this year as compared to last year in terms of carry-over storage.

Umatilla River Basin: McKay reservoir is at 49 percent of capacity. Outflows are close to 185 cfs with inflows of about 2 cfs.

Deschutes River Basin: Ochoco and Prineville reservoirs are at 50 percent and 69 percent full respectively. Ochoco reservoir is releasing close to 14 cfs while Prineville reservoir is currently releasing about 290 cfs with inflows about 2 cfs.

Crescent Lake is at 63 percent, Wickiup is at 10 percent and Crane Prairie is at 65 percent of capacity.

Malheur River Basin: Warm Springs, Beulah, and Bully Creek reservoirs range from 53 to 33 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 70 percent full which is well above normal with inflows of about 185 cfs.

[Burnt and Powder River Basins](#): Phillips and Unity reservoirs are at 25 percent and 33 percent full. Phillips is releasing about 130 cfs with inflows around 2 cfs while Unity is releasing just under 100 cfs.

[Tualatin River Basin](#): Scoggins reservoir is at 46 percent of capacity and releasing over 160 cfs.

The most recent update to the [US Drought Monitor](#) shows a slight improvement in conditions over the past two weeks. The most recent report indicates that just under 32 percent of the state is listed as D0 (Abnormally Dry), with almost 11 percent listed as D1 (Moderate Drought).

Wildfire potential through December is predicted to be normal across Oregon.

According to the [National Significant Wildland Fire Potential Outlook](#), large fire activity has been limited across the Northwest Geographic Area this fire season and should continue to be limited the rest of 2019. At the current time, there are only three large fires ongoing in the region, two in Oregon and one in Washington.

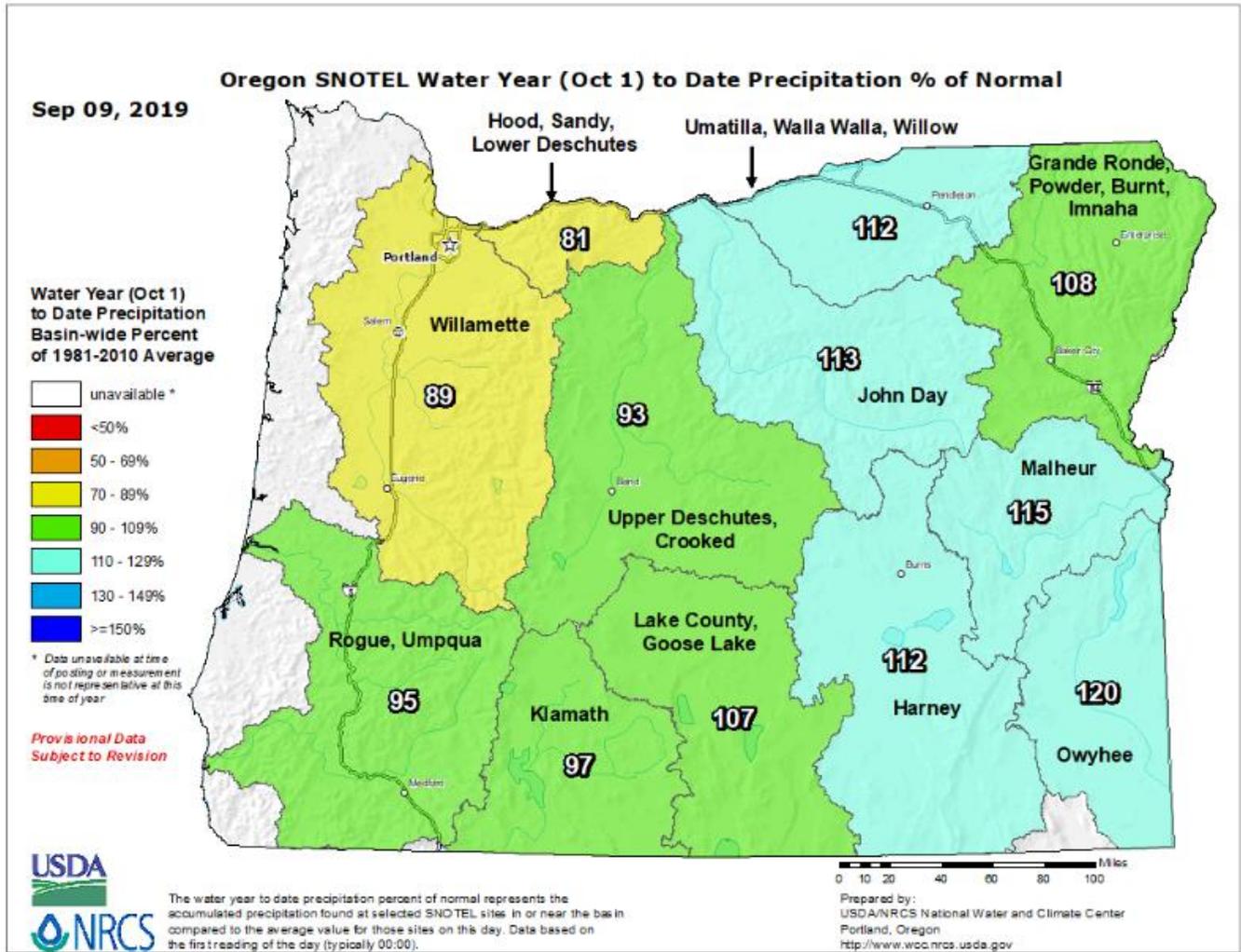
More information can also be accessed through the Northwest Interagency Coordination Center [website](#). Another recommended resource is the Oregon Office of Emergency Management’s [RAPTOR](#) incident mapping program which includes current situational information, such as wildfire perimeters, thermal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

Data & Products:

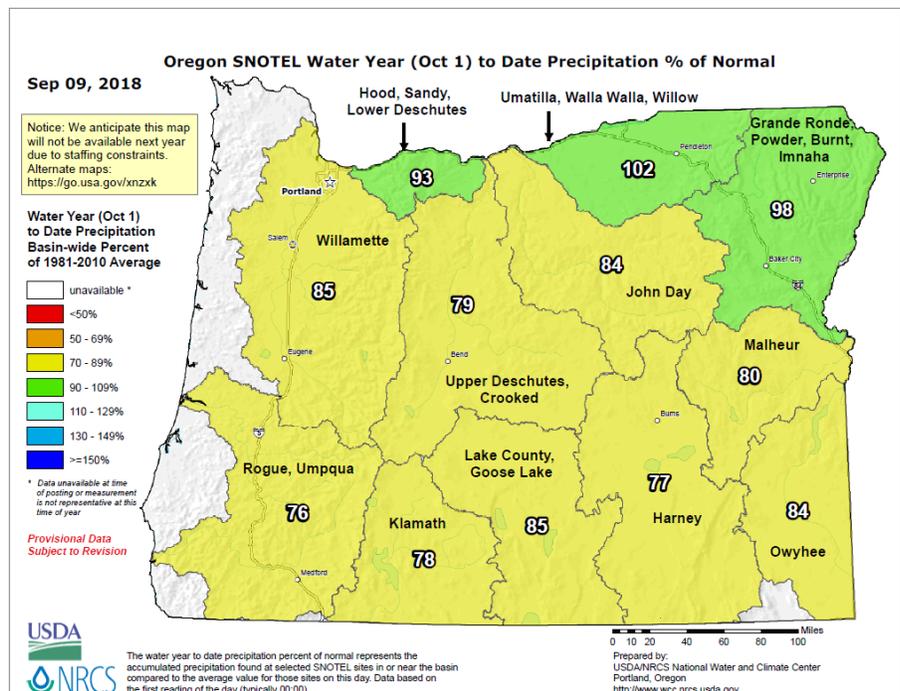
Page:

Precipitation (Mountain) - Percent of Normal	4
Temperature – (1 Month) Departure from Normal.....	5
Precipitation – (1 Month) Percent of Normal	6
Three Month Temperature and Precipitation Outlook	7
Total Moisture - Percentile	8
U.S. Drought Monitor for Oregon	9
Streamflow Conditions by County – August	10
Streamflow Conditions – Umpqua Basin (Douglas County)	10
Streamflow Conditions – Hood River Basin (Hood River County)	11
Streamflow Conditions – Umatilla Basin (Umatilla County)	11

Precipitation (Mountain) - Percent of Normal



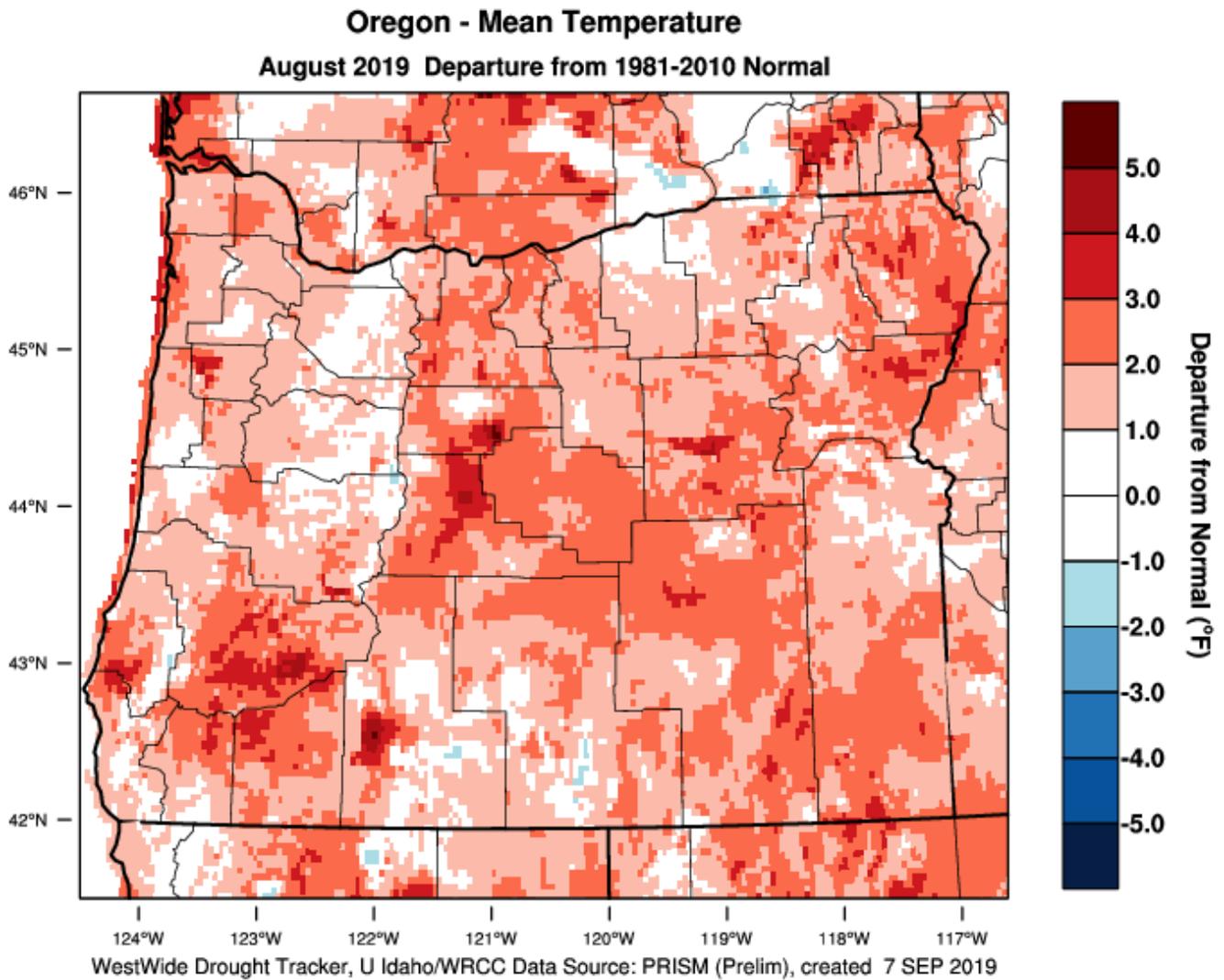
Compared to this time last year -



Temperature – (1 Month) Departure from Normal

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

PRISM > Temperature Anomaly 1 Month > Oregon



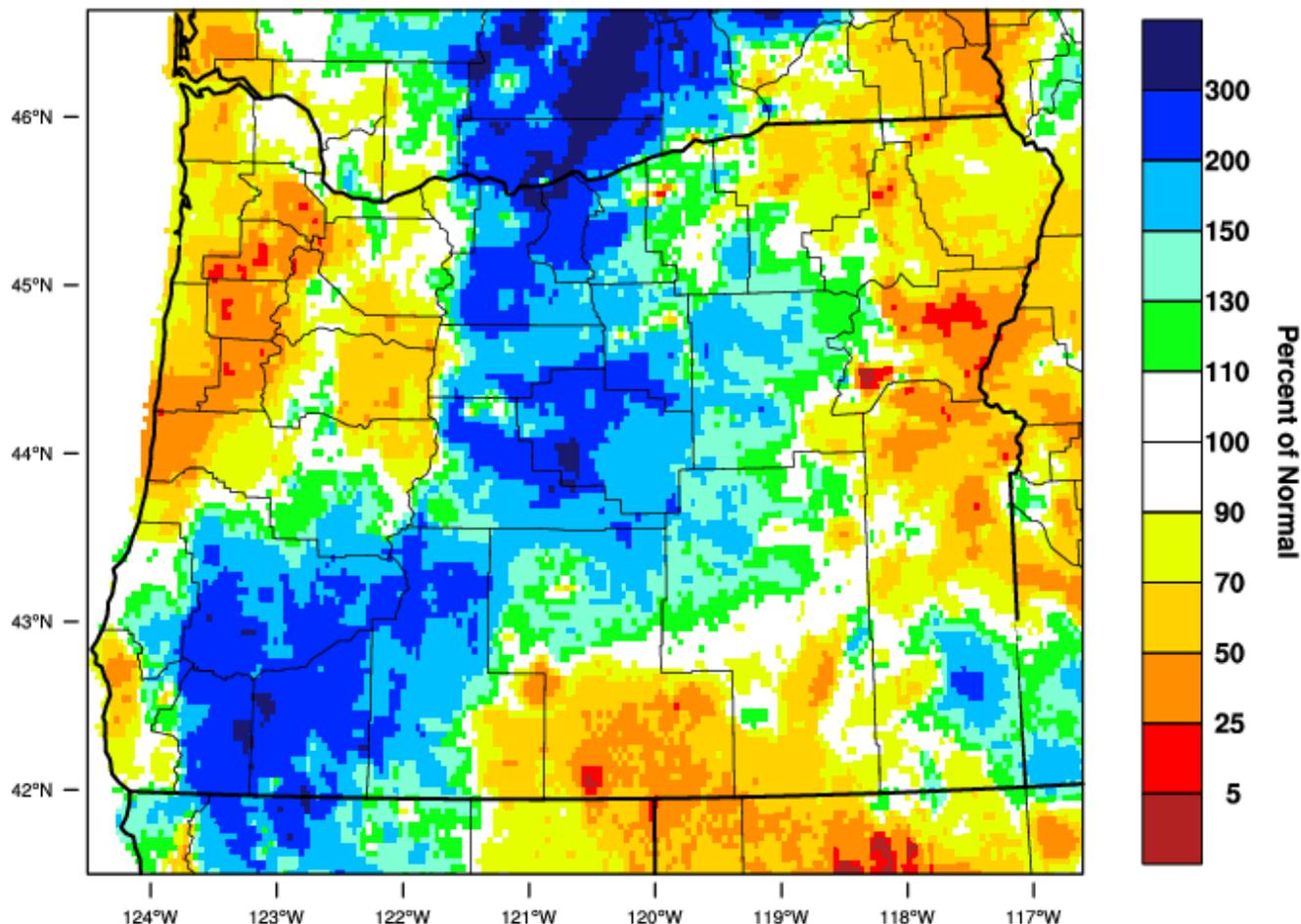
Precipitation – (1 Month) Percent of Normal

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

PRISM > Precipitation Anomaly 1 Month > Oregon

Oregon - Precipitation

August 2019 Percent of 1981-2010 Normal

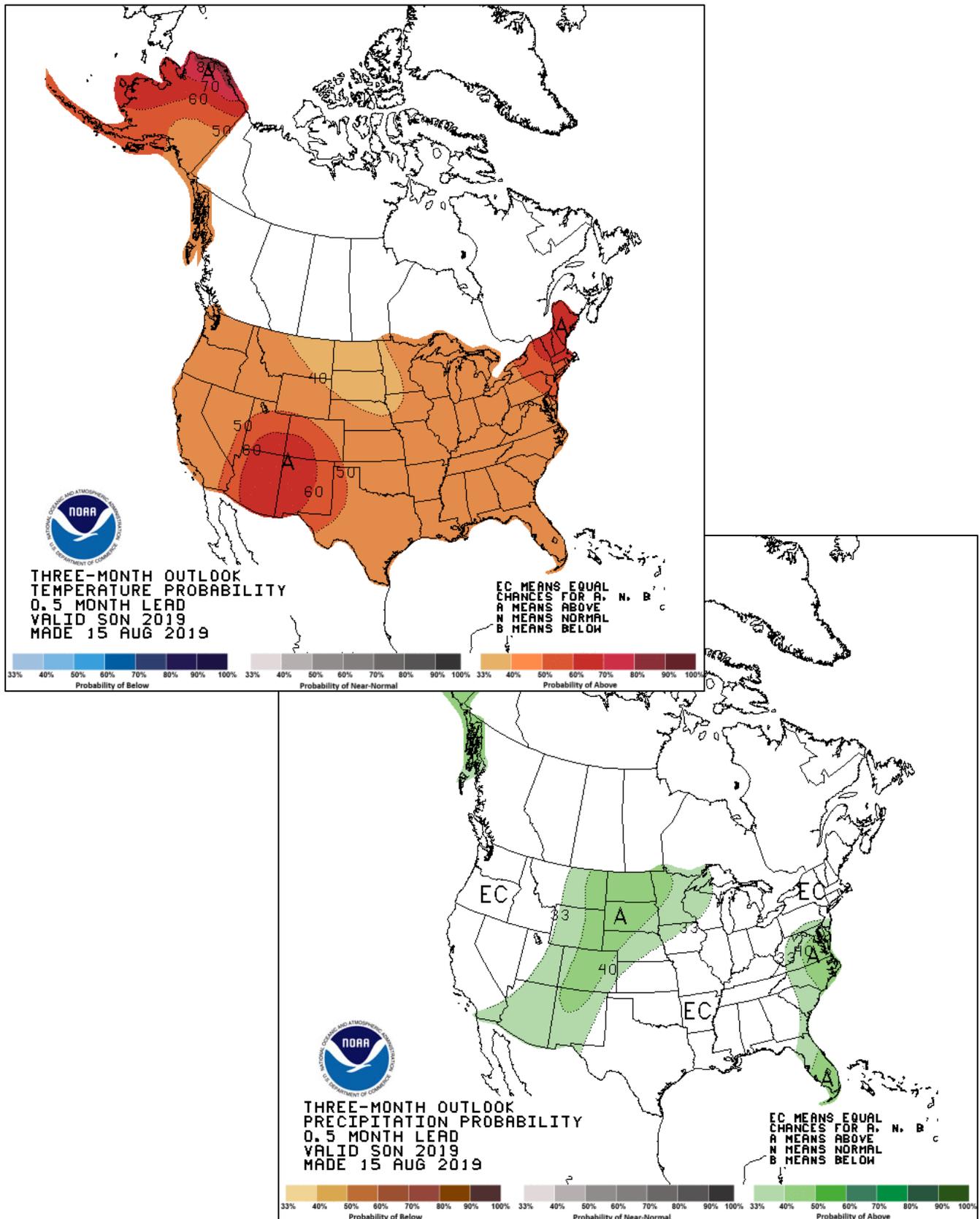


WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 7 SEP 2019

Three Month Temperature and Precipitation Outlook

September through November

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



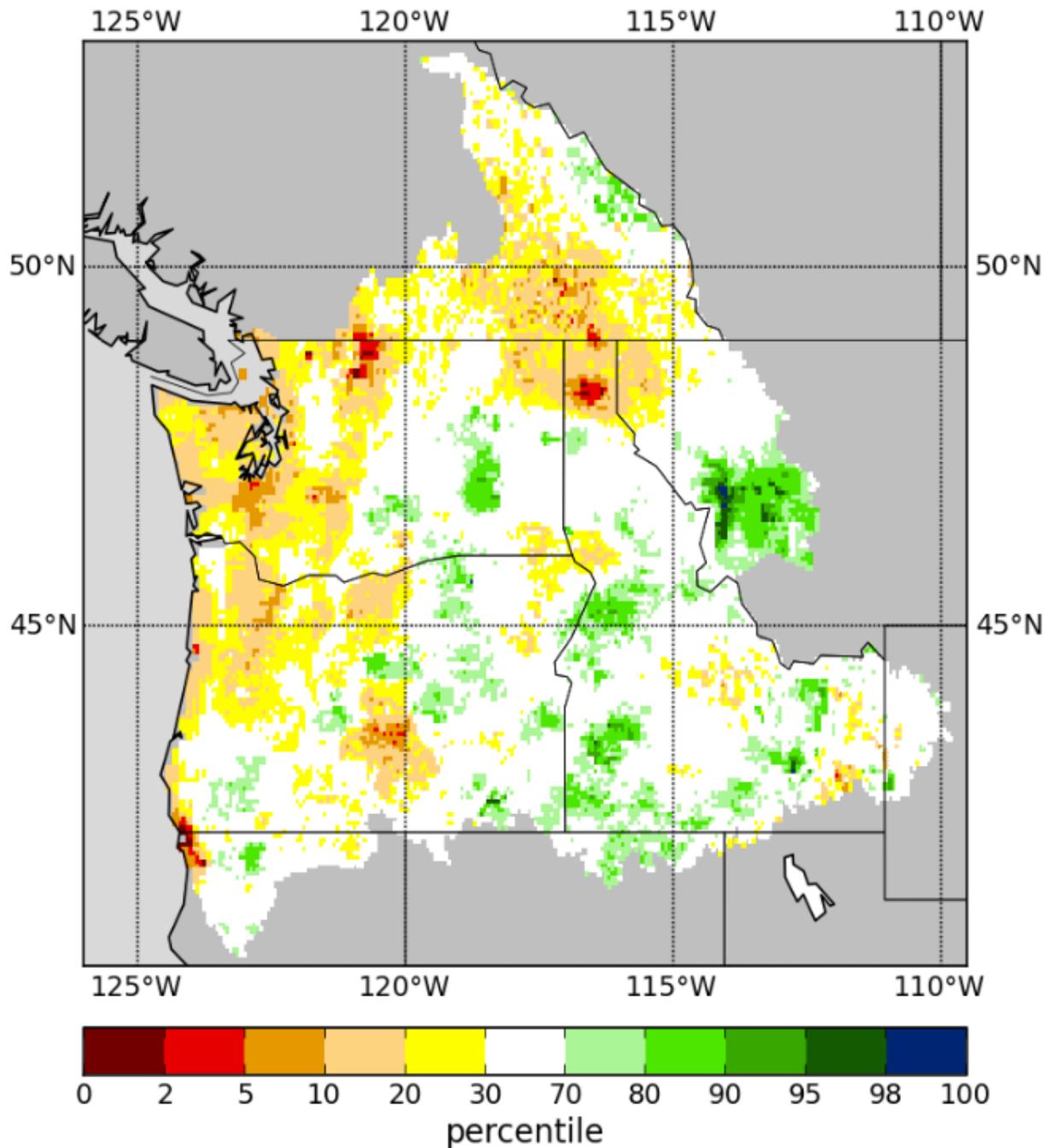
Total Moisture - Percentile

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

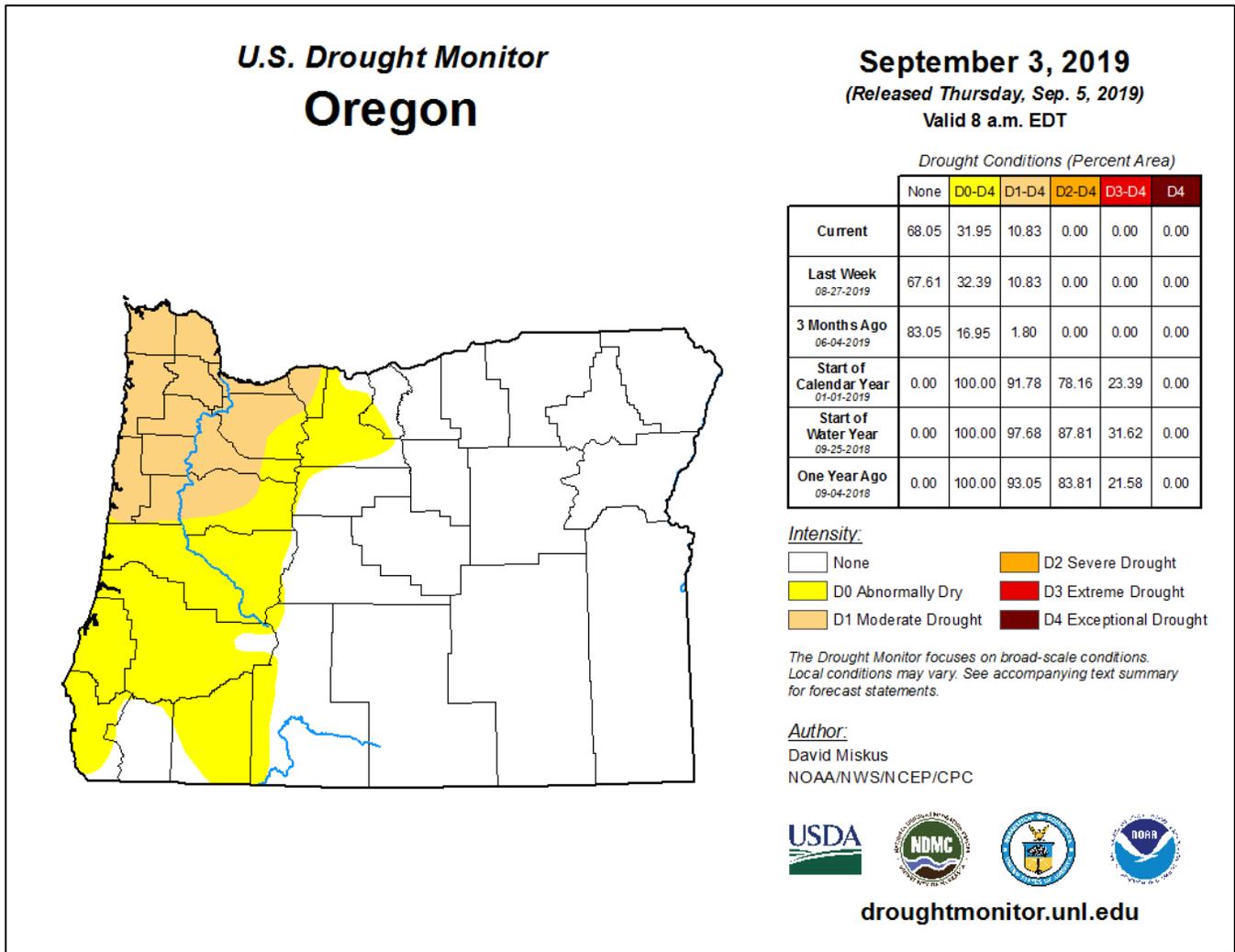
Total Moisture Percentile

2019--09--07

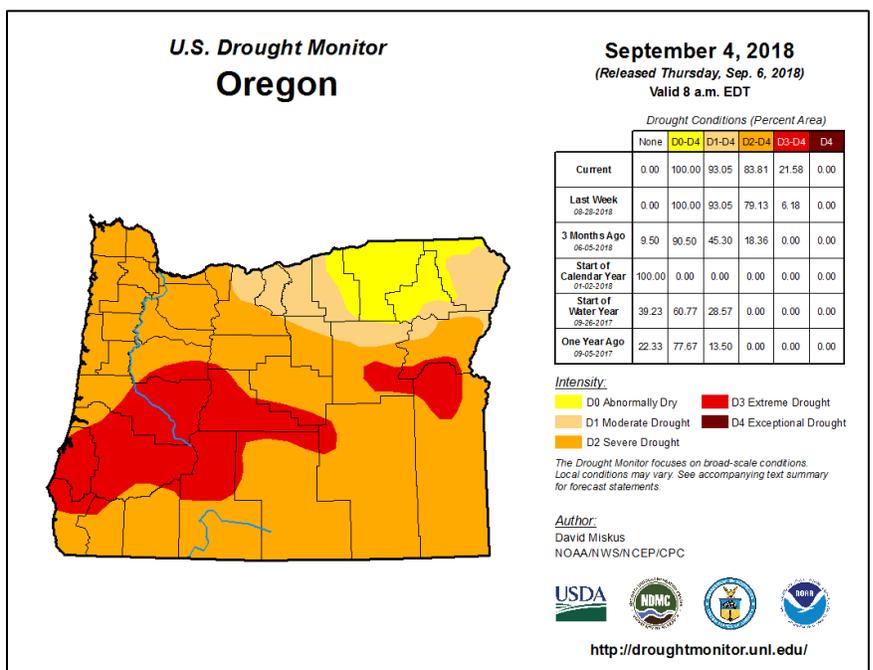


U.S. Drought Monitor for Oregon

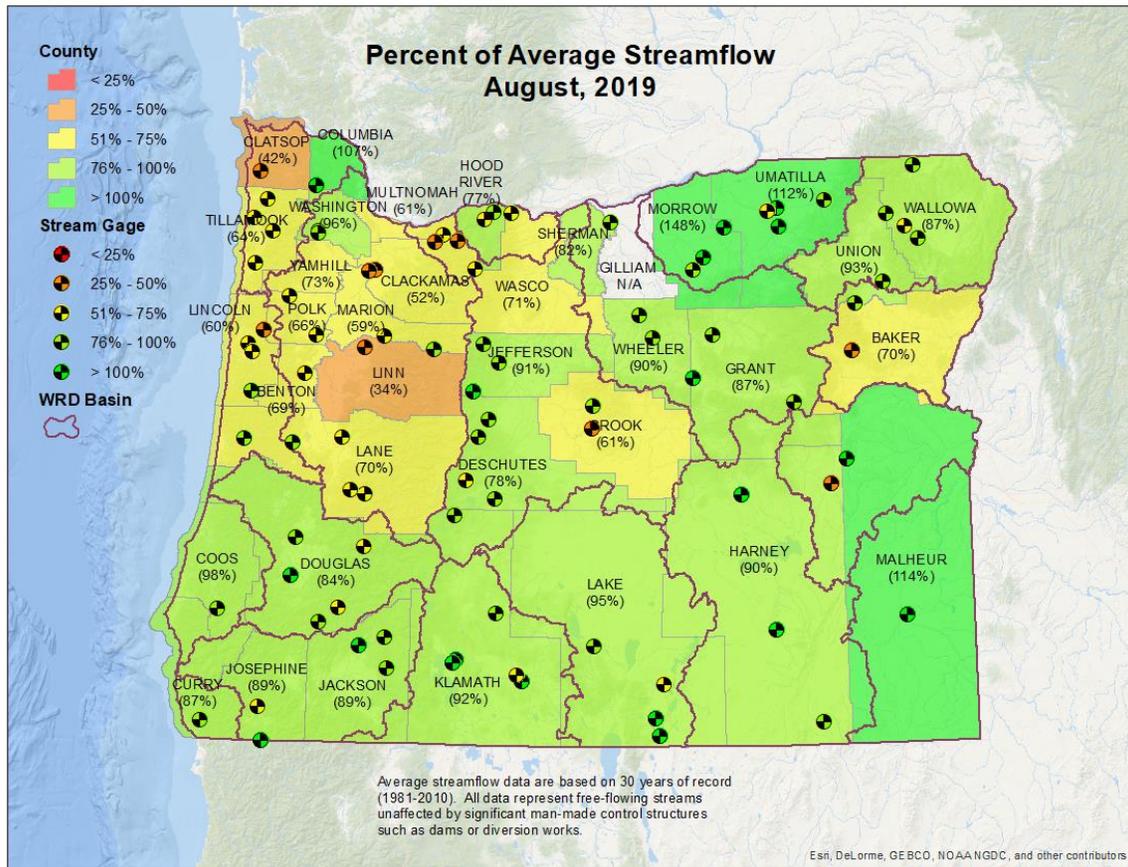
Website: <https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?OR>



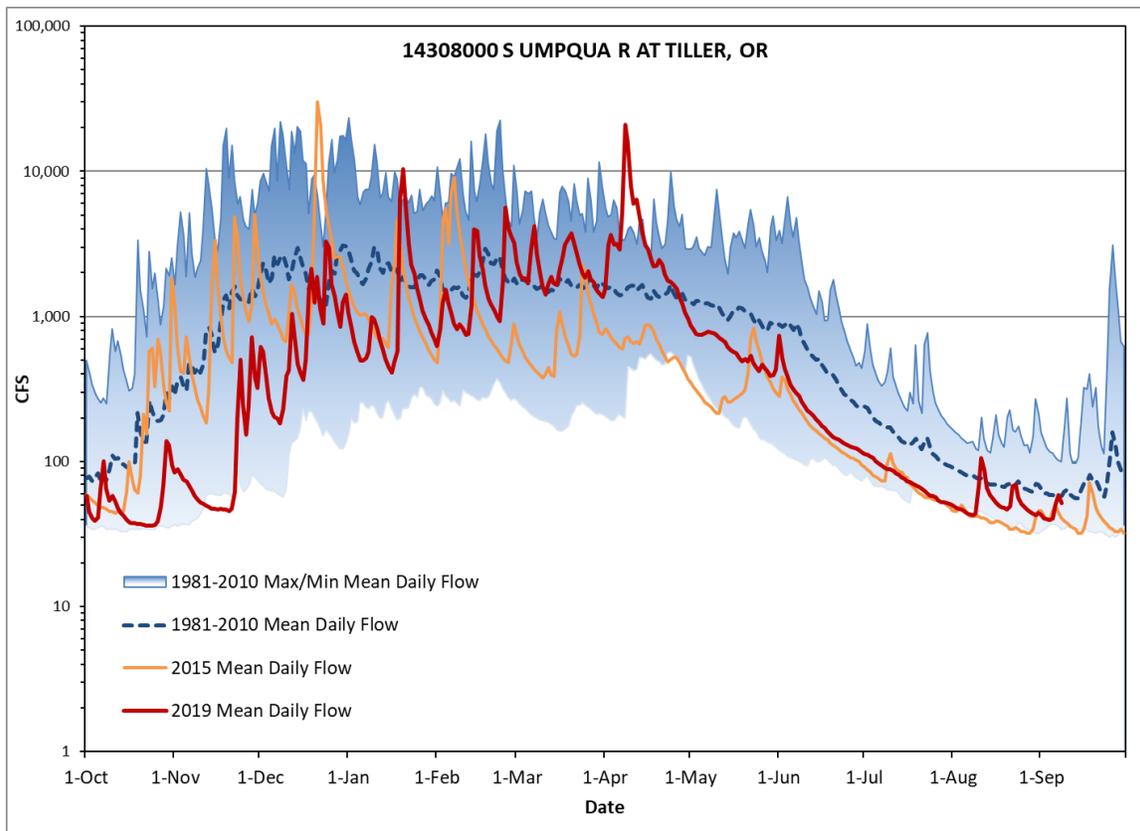
Compared to this time last year:



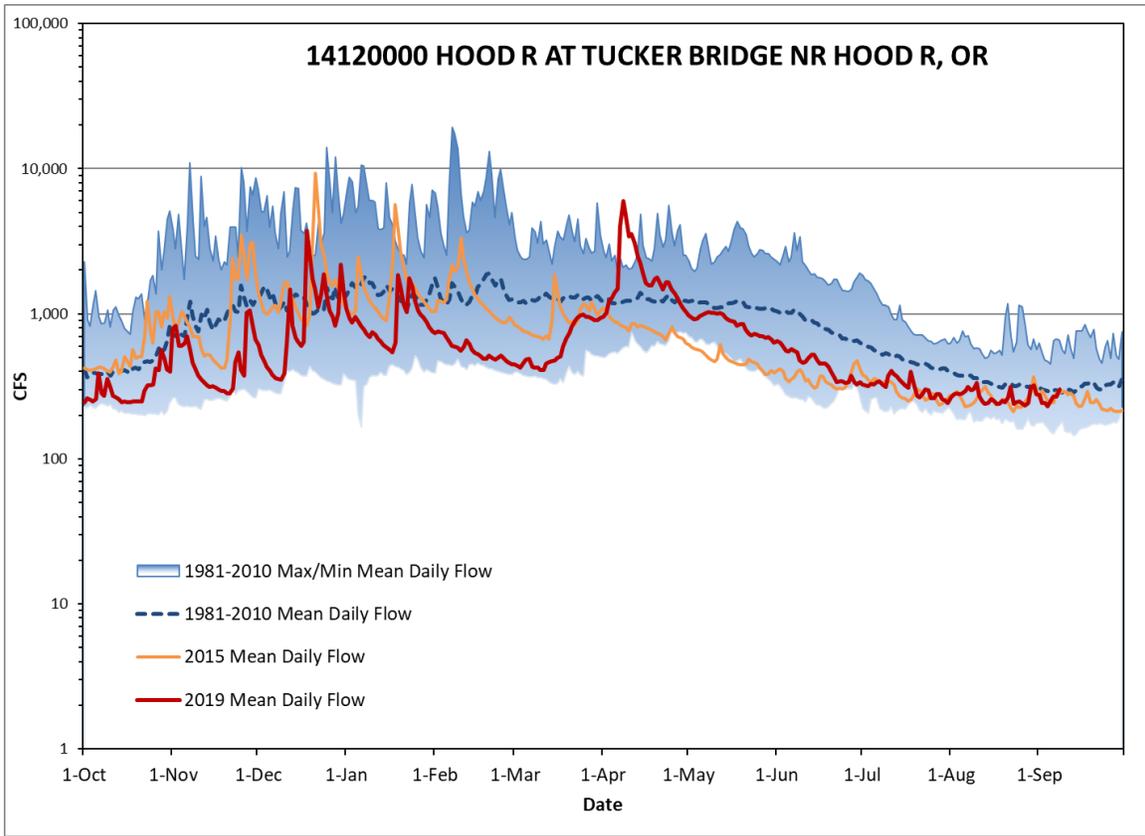
Streamflow Conditions by County – August



Streamflow Conditions – Umpqua Basin (Douglas County)



Streamflow Conditions – Hood River Basin (Hood River County)



Streamflow Conditions – Umatilla Basin (Umatilla County)

