

Oregon Water Conditions Report October 7, 2019



Oregon statewide water year precipitation at NRCS SNOTEL sites for 2019 (October 1, 2018 through September 30, 2019) stands at 98 percent of normal. The highest percent of normal values for water year precipitation in 2019 were in the Owyhee basin at 122 percent of normal, while the lowest value was in the Hood, Sandy, and Lower Deschutes basin at 84 percent of normal for the water year. At this time, statewide water year precipitation at NRCS SNOTEL sites is 62 percent of normal for the first seven days of water year 2020. Current values for water year 2020 vary from 20 percent of normal in the Umatilla, Walla Walla, and Willow basin to 153 percent in the Harney basin. The wide variability is due to the limited days in the water year and the localized effects of storm impacts on specific SNOTEL sites.

Precipitation over the [past two weeks](#) has ranged between 0.5 inches below normal to almost 1 inch above normal across most of the state. The exception being in the north coast region where precipitation has been almost 2 inches below normal. For the [month of September](#), precipitation was well above normal across much the state. In areas of southwest and south central Oregon anomalies ranged up to 300 percent of normal.

Temperatures over the [past two weeks](#) have been below-normal across almost all of the state. Temperatures across a large portion of central and south central Oregon have been close to 8 degrees below normal for this time of year. For the [month of September](#), temperatures were generally normal to below-normal across the state.

Over the next [8 to 14 days](#), the NOAA Climate Prediction Center is forecasting an increased probability of above-normal temperatures across the state. The precipitation outlook is for above-normal probability across the state. 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 below-normal precipitation for all but northeast and eastern Oregon where there are equal chances of above or below normal precipitation. The next long-term outlook will be issued on October 17, 2019.

[ENSO-neutral](#) is favored during the Northern Hemisphere fall 2019 (~75 percent chance), continuing through spring 2020 (55-60 percent chance). During August, ENSO-neutral continued as reflected by near-average sea surface temperatures across most of the central and eastern equatorial Pacific Ocean. For a more complete report, refer to the September 12, 2019 [diagnostic discussion](#) issued by the Climate Prediction Center. The next diagnostic discussion is scheduled for October 10, 2019. Another source of information is the latest [ENSO blog](#) on the climate.gov website.

Statewide streamflows for September were 114 percent of normal. This is notably higher than the 84 percent seen in August. Regionally for September, streamflow conditions were about 100 percent of normal east of the Cascades and almost 130 percent to the west. Flows in the Hood and Malheur basins were the lowest at about 84 percent of normal while the highest flows were in the Umpqua and South Coast basins at just over 190 percent of

normal for the month. Streamflows for the water year ended up right at 100 percent of normal for the state.

USACE Reservoirs: Rogue: The system is currently 38 percent full and 25 percent below rule curve. Lost Creek is 43 percent full and 22 percent below rule curve. Inflows are around 1,000 cfs with outflows of about 1,200 cfs. Applegate is at 18 percent of capacity and 38 percent below rule curve. Inflows are close to 70 cfs while outflows are holding at 200 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 28 percent full and 72 percent below rule curve. Inflows are currently 7 cfs with outflows just under 2.4 cfs.

Willamette: The Willamette system is 24 percent full and 37 percent below rule curve. Projects are drafting to meet minimum mainstem and tributary flows required by the BiOp. Flows in the Willamette River at Albany are 5,200 cfs with flows at Salem at 8,830 cfs.

USBR Reservoirs: Most reservoirs continue to be better positioned this year as compared to last year in terms of carry-over storage.

Umatilla River Basin: McKay reservoir is at 38 percent of capacity. Outflows are close to 116 cfs with inflows of about 6 cfs.

Deschutes River Basin: Ochoco and Prineville reservoirs are at 46 percent and 62 percent full respectively. Ochoco reservoir is releasing close to 12 cfs while Prineville reservoir is currently releasing about 100 cfs with inflows about 30 cfs.

Crescent Lake is at 53 percent, Wickiup is at 11 percent and Crane Prairie is at 63 percent of capacity.

Malheur River Basin: Warm Springs, Beulah, and Bully Creek reservoirs range from 50 to 23 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 63 percent full which is well above normal. Inflows are currently about 157 cfs.

Burnt and Powder River Basins: Phillips and Unity reservoirs are at 22 percent and 27 percent full respectively. Phillips is releasing about 13 cfs with inflows around 7 cfs while Unity is releasing just under 15 cfs.

Tualatin River Basin: Scoggins reservoir is at 41 percent of capacity and releasing 58 cfs.

The most recent update to the US Drought Monitor continues to show marked improvement in conditions over the past two weeks. The most recent report indicates that just under 11.5 percent of the state is listed as D0 (Abnormally Dry), with no area listed as D1 (Moderate Drought).

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

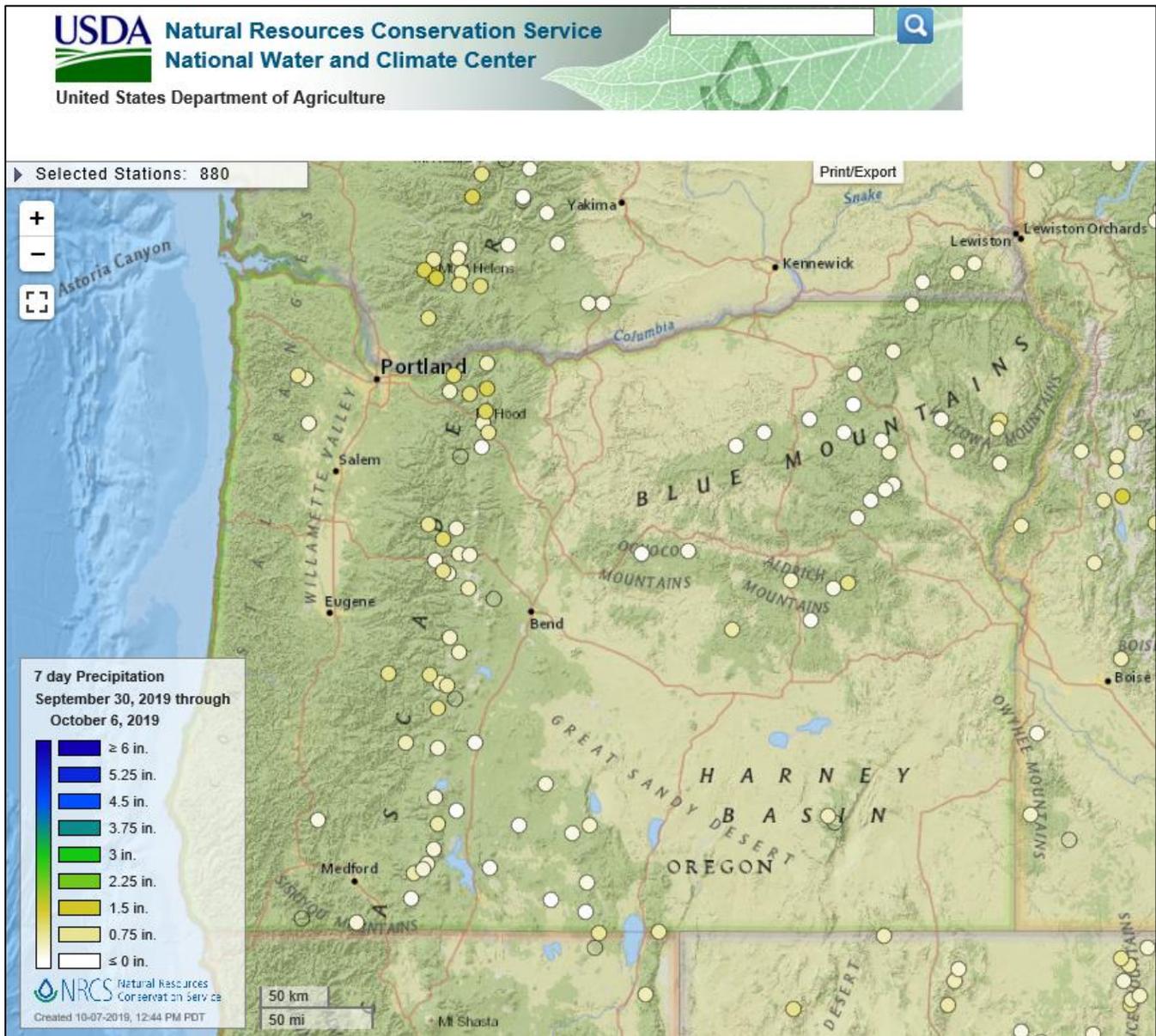
According to the [National Significant Wildland Fire Potential Outlook](#), large fire activity has been limited across the Northwest Geographic Area this fire season and should continue to be limited the rest of 2019. At the current time, there are only three large fires ongoing in the region, two in 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) – 7 Day	4
Precipitation – (1 Month) Percent of Normal	5
Temperature – (1 Month) Departure from Normal	6
Three Month Temperature and Precipitation Outlook	7
Total Moisture - Percentile	8
U.S. Drought Monitor for Oregon	9
Streamflow Conditions by County – September	10
Streamflow Conditions by County – 2019 Water Year	10
Streamflow Conditions – Hood Basin (Hood River County)	11
Streamflow Conditions – South Coast Basin (Coos County)	11

Precipitation (Mountain) – 7 Day

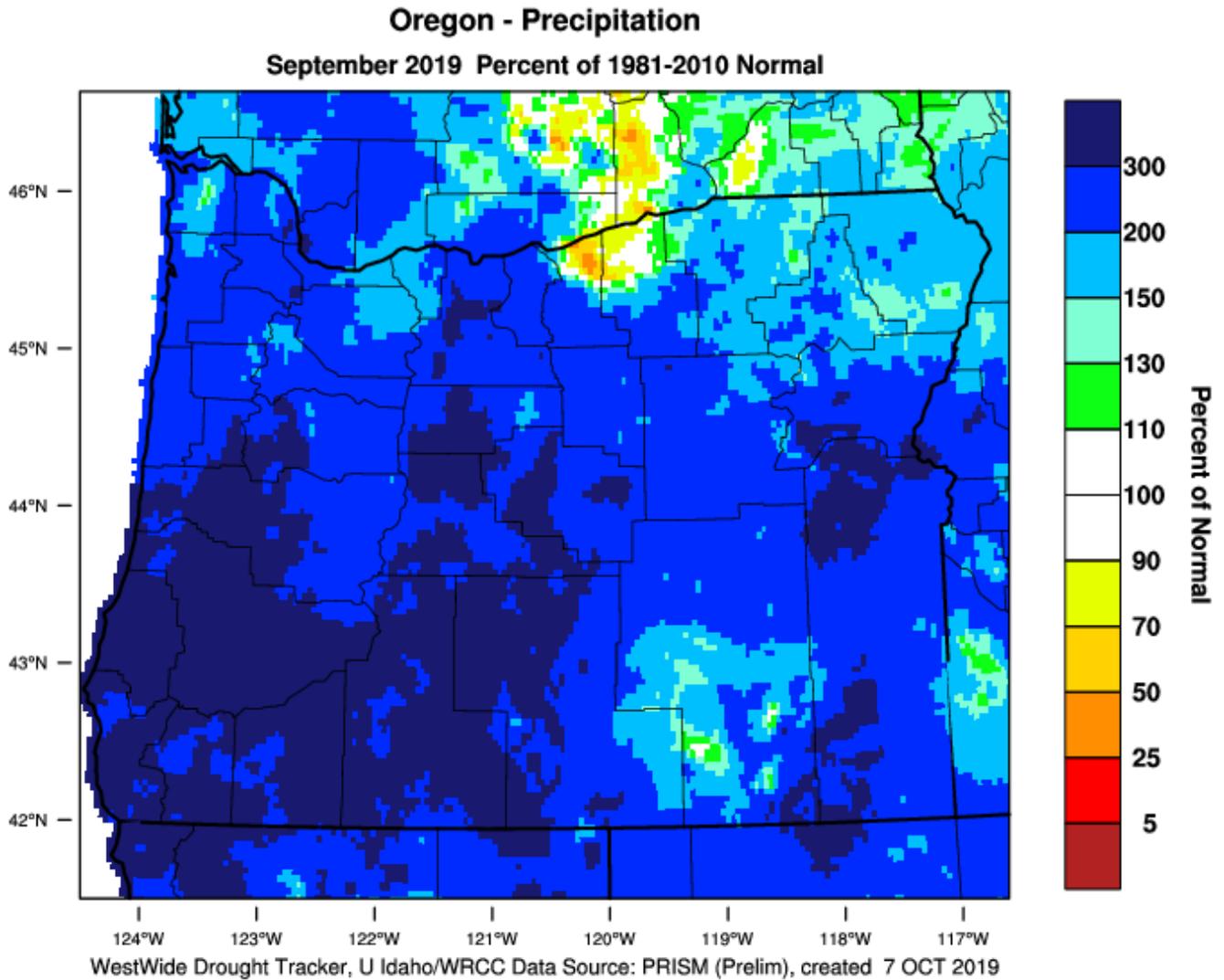
7-day precipitation (inches) – September 30, 2019 through October 6, 2019



Precipitation – (1 Month) Percent of Normal

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

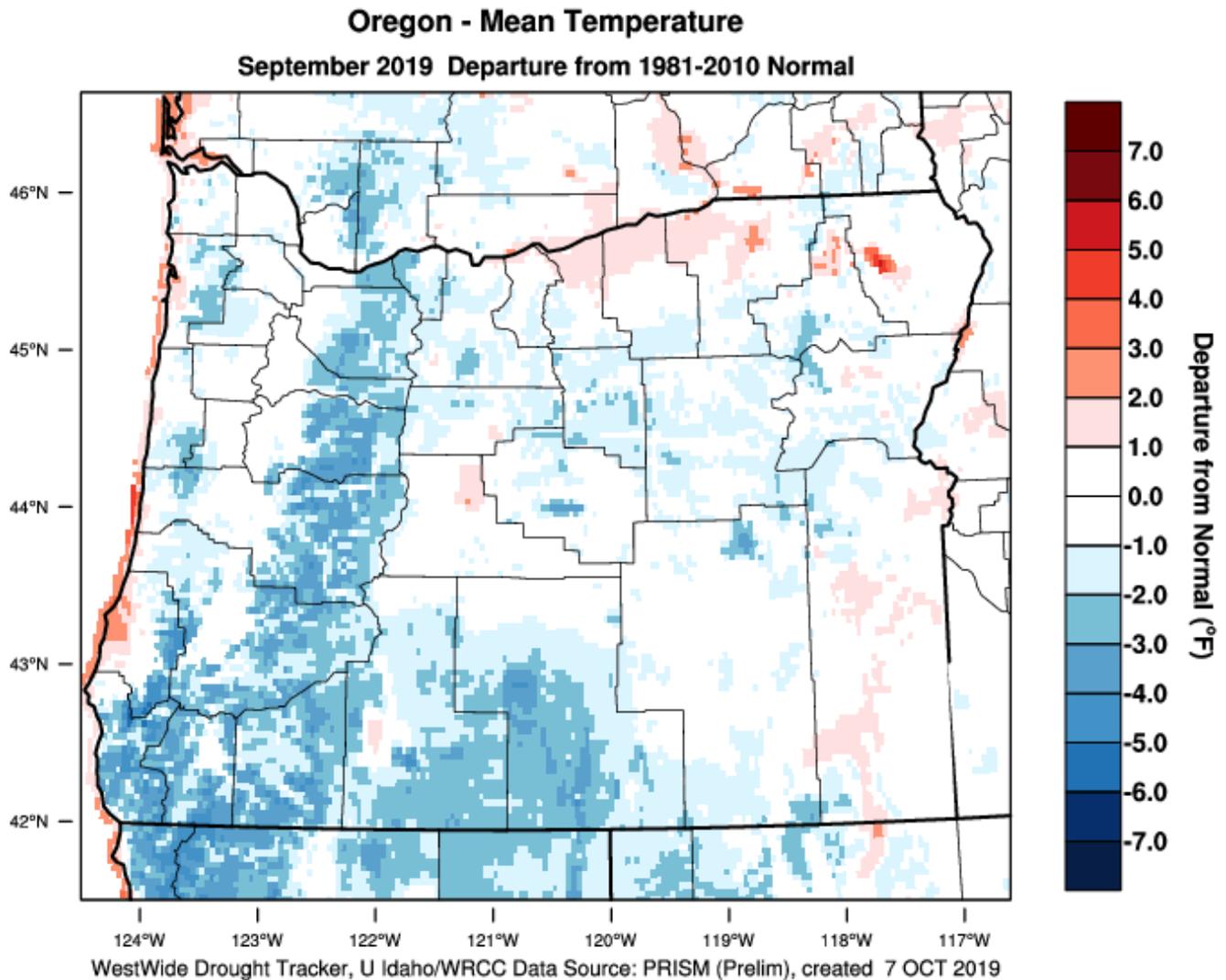
PRISM > Precipitation Anomaly 1 Month > Oregon



Temperature – (1 Month) Departure from Normal

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

PRISM > Temperature Anomaly 1 Month > Oregon

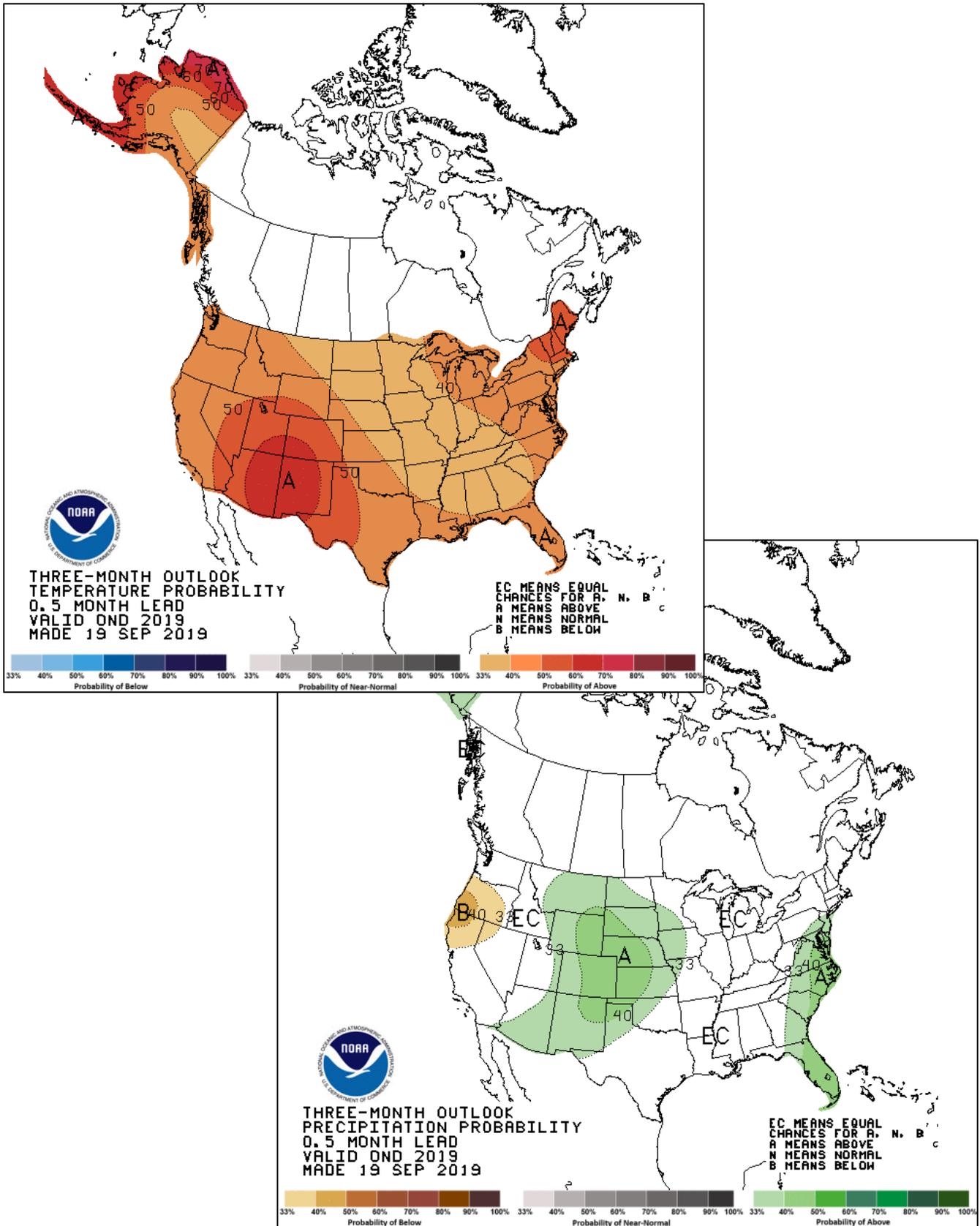


[Download PRISM Temperature Anomaly 1 Month NETCDF Data for United States](#)

Three Month Temperature and Precipitation Outlook

October through December

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



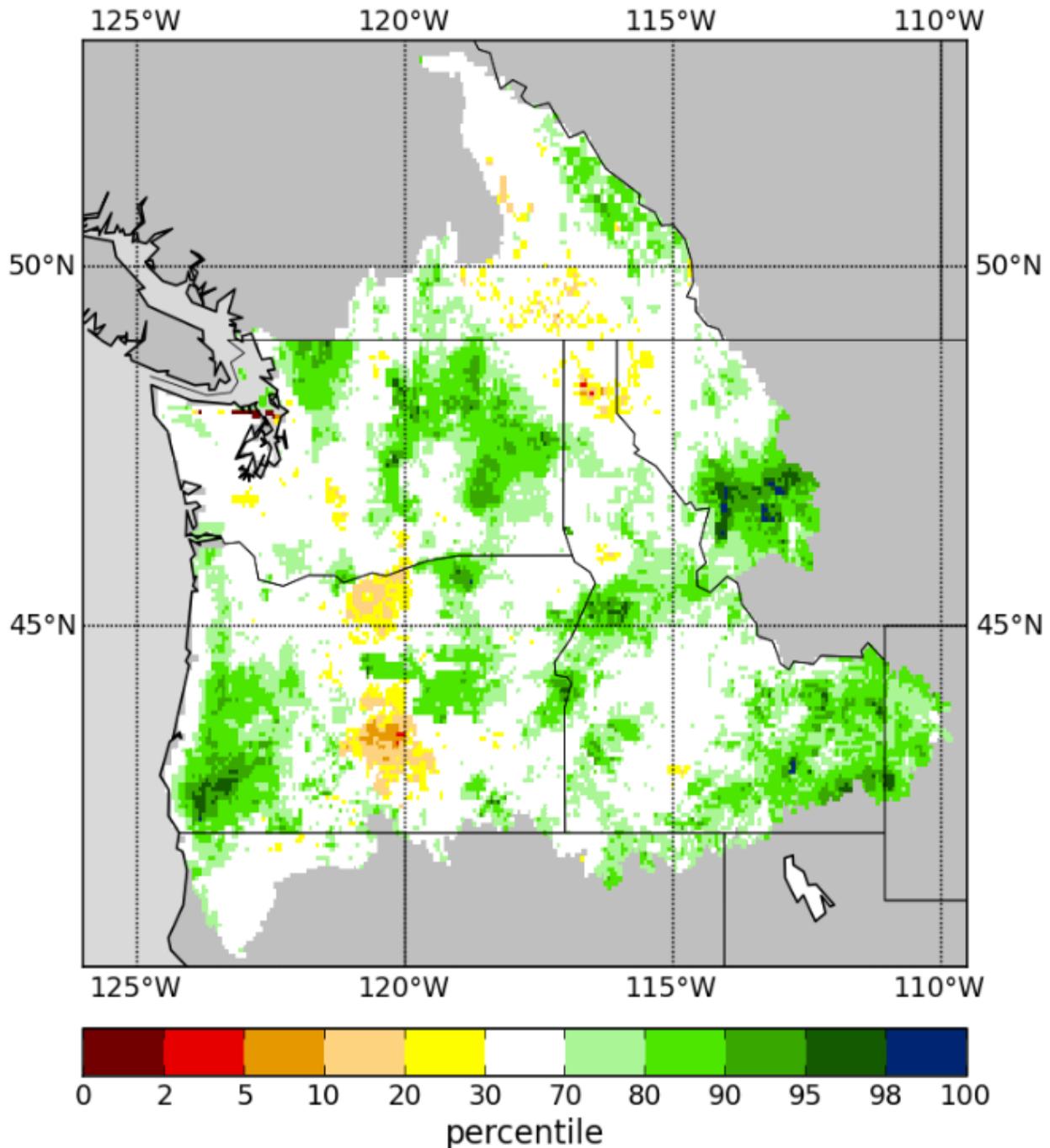
Total Moisture - Percentile

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

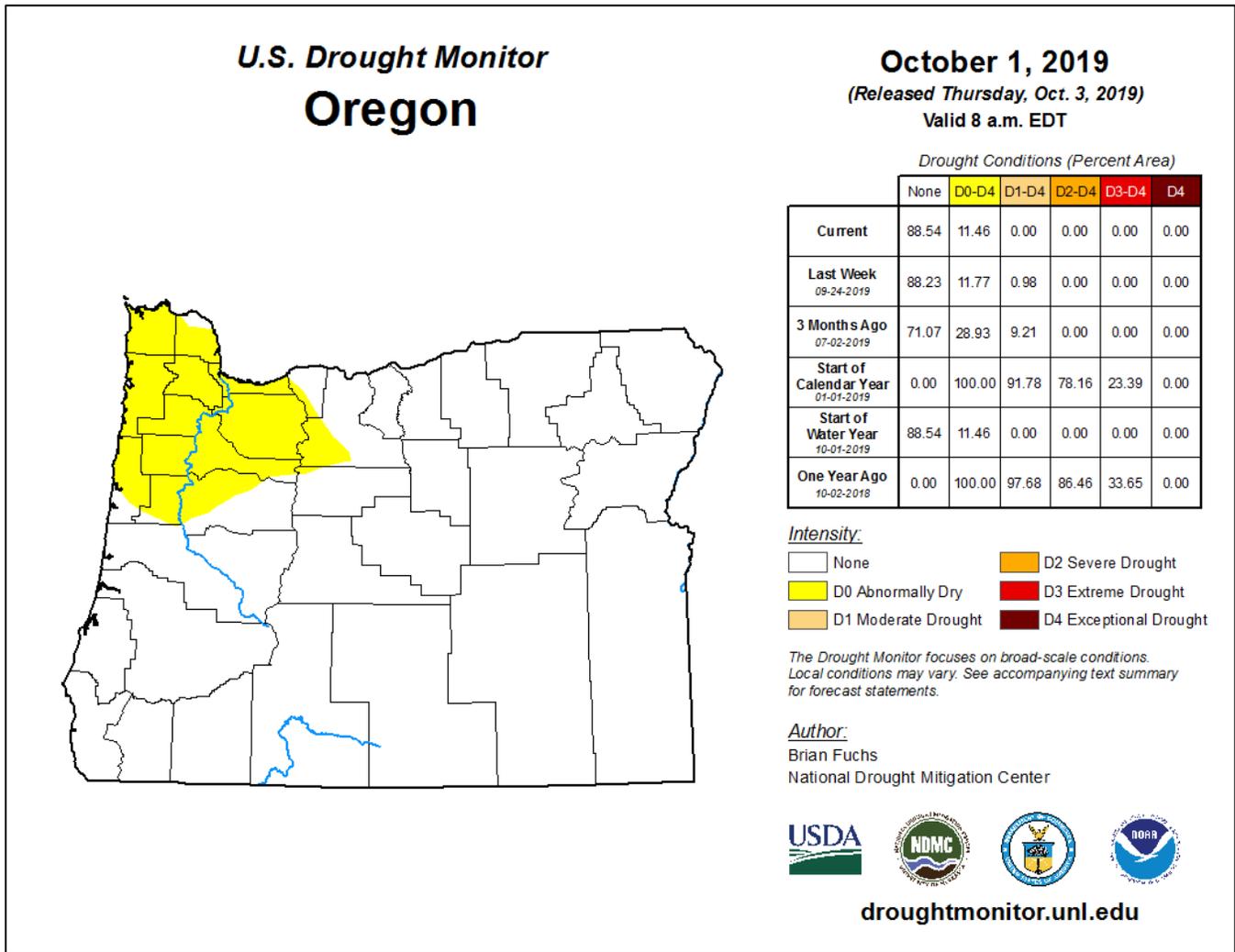
Total Moisture Percentile

2019--10--05

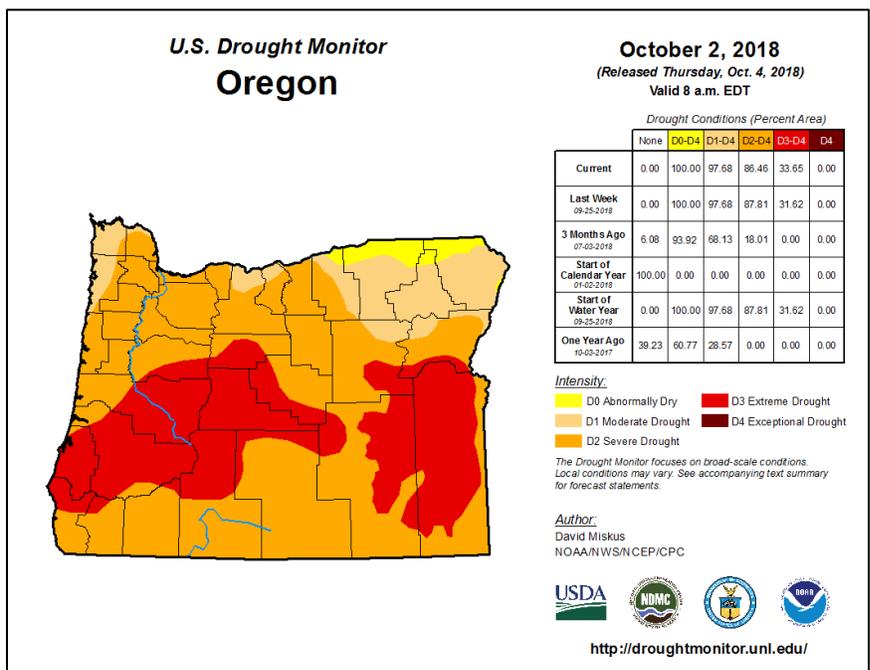


U.S. Drought Monitor for Oregon

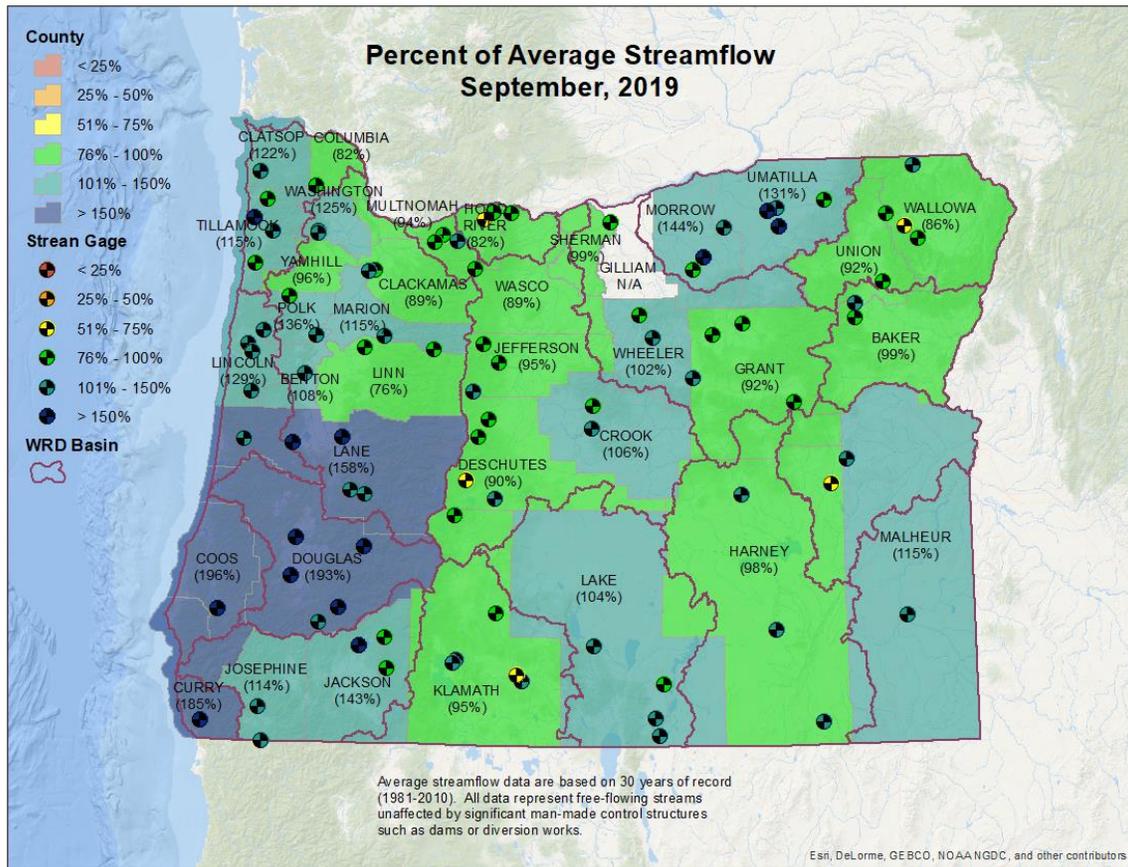
Website: <https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?OR>



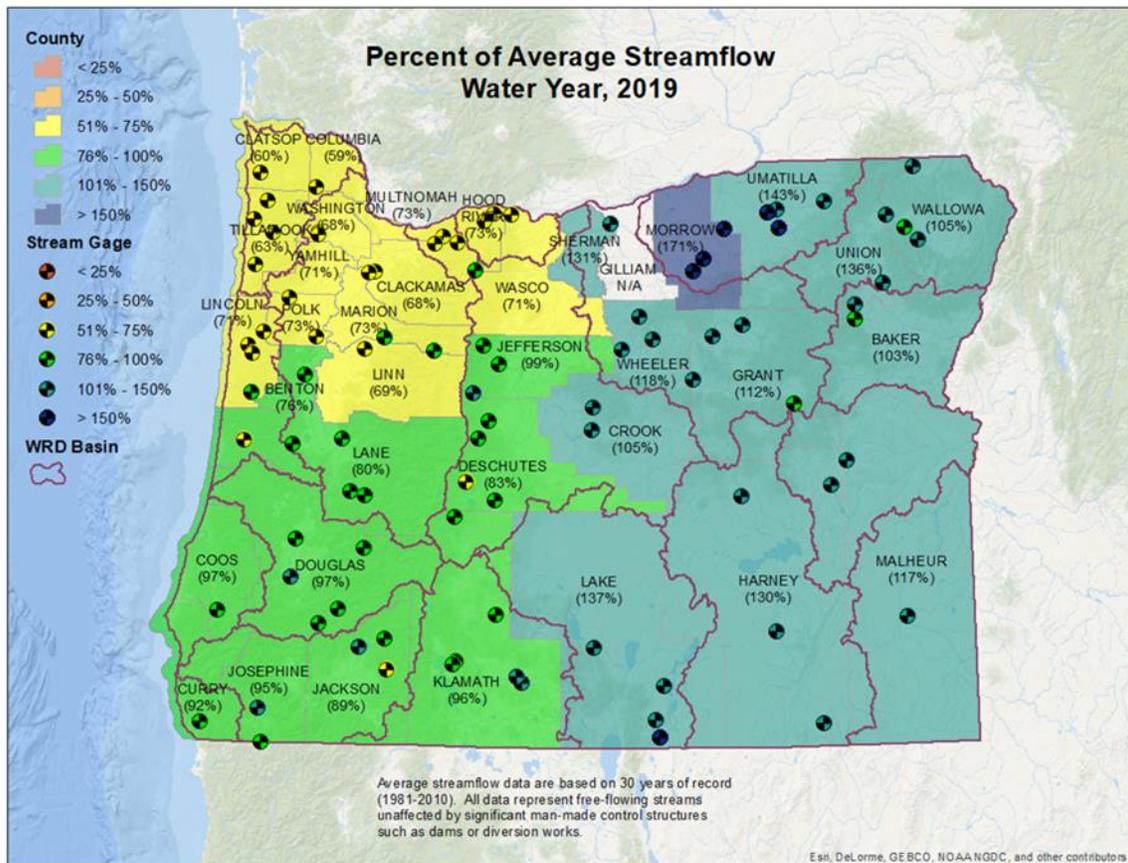
Compared to this time last year:



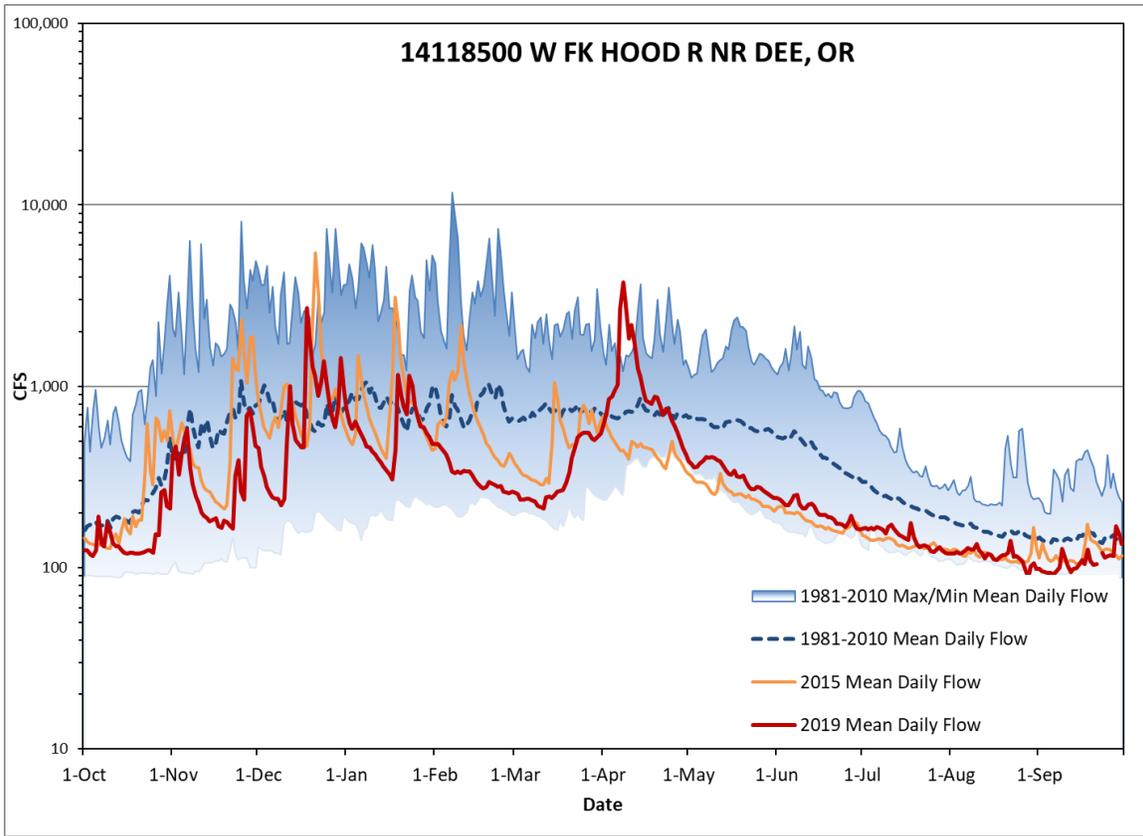
Streamflow Conditions by County – September



Streamflow Conditions by County – 2019 Water Year



Streamflow Conditions – Hood Basin (Hood River County)



Streamflow Conditions – South Coast Basin (Coos County)

