

Oregon Water Conditions Report July 29, 2019



Oregon statewide water year precipitation at NRCS SNOTEL sites has been holding steady over the past two weeks at 92 percent of normal. The highest percent of normal values for water year precipitation have been in the Owyhee at 118 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 areas of above-normal amounts in south eastern Oregon and the eastern Willamette Valley. For the [month of June](#), precipitation was well below-normal across most of the state. In parts of the Rogue Basin precipitation was only 5 percent of normal.

Temperatures over the [past two weeks](#) were generally cooler than normal across central and eastern Oregon and warmer than normal west of the Cascades. For the [month of June](#), temperatures were normal to below-normal in the southeast regions of the state transitioning to well above normal for large areas of western, central and north central Oregon. Data collection and subsequent statistics for July are not quite complete but should be available by the next report.

Over the next [8 to 14 days](#), the NOAA Climate Prediction Center is forecasting above-normal temperatures across the state with the highest probability in the northwest corner. The precipitation outlook for the same period is for slightly above-normal precipitation probability across the state. 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.

A transition from [El Niño](#) to ENSO-neutral is expected in the next month or two, with ENSO-neutral most likely to continue through Northern Hemisphere fall and winter. During June, El Niño was reflected in the continued presence of above average sea surface temperatures (SSTs) across the central equatorial Pacific Ocean. For a more complete report, refer to the July 11, 2019 [diagnostic discussion](#) issued by the Climate Prediction Center. The next diagnostics discussion is scheduled for August 8, 2019. Another source of information is the latest [ENSO blog](#) on the climate.gov website.

Statewide streamflows for June were 84 percent of normal. This is lower than the 92 percent seen in May. Regionally for June, streamflow conditions were about 110 percent of normal east of the Cascades but only 42 percent to the west. Flows in the Sandy Basin were the lowest at about 36 percent of normal while the highest flows were in the Malheur at about 160 percent of normal for the month. More recent data indicate a continued pattern where flows have dropped to very low 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. July flows are likely to end up similar to June overall but streams in

western Oregon are tracking a little better at around 60percent with flows east of the Cascades slightly below normal for this time of year.

USACE Reservoirs: Rogue: Currently the system is at 67 percent of capacity and 33 percent below rule curve. The Lost Creek project is 67 percent full and 33 percent below rule curve with outflows of about 1,730 cfs and inflows close to 1,140 cfs. Applegate is at 67 percent of capacity and 32 percent below rule curve. Applegate outflows are 322 cfs with inflows at 79 cfs.

Willow Creek: The project is 77 percent full and 23 percent below rule curve. Project outflows are currently about 20 cfs; inflows are close to 11 cfs.

Willamette: The project is currently at 59 percent of capacity and 41 percent below rule curve. Detroit and Fern Ridge are the closest to normal for this time of year at 84 and 89 percent of capacity and 16 to 11 percent below normal. The flows in the Willamette River at Albany are about 4,940 cfs and flows at Salem are about 7,060 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 74 percent of capacity. Outflows are just under 200 cfs with inflows close to zero (0 cfs).

Deschutes River Basin: Ochoco and Prineville reservoirs are at 66 percent and 85 percent full respectively. Ochoco reservoir is releasing close to 15 cfs while Prineville reservoir is currently releasing over 280 cfs with inflows about 4 cfs.

Crescent Lake is at 70 percent, Wickiup is at 27 percent and Crane Prairie is at 82 percent of capacity.

Malheur River Basin: Warm Springs, Beulah, and Bully Creek reservoirs range from 75 to 67 percent full.

Owyhee River Basin: Owyhee reservoir is 87 percent full with inflows of about 260 cfs.

Burnt and Powder River Basins: Phillips and Unity reservoirs are at 55 percent and 67 percent full. Phillips is releasing about 240 cfs with inflows around 30 cfs while Unity is releasing 130 cfs.

Tualatin River Basin: Scoggins reservoir is at 74 percent of capacity and releasing over 180 cfs.

The most recent update to the [US Drought Monitor](#) is showing no change over the past two weeks. The report continues to indicate that 34 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.

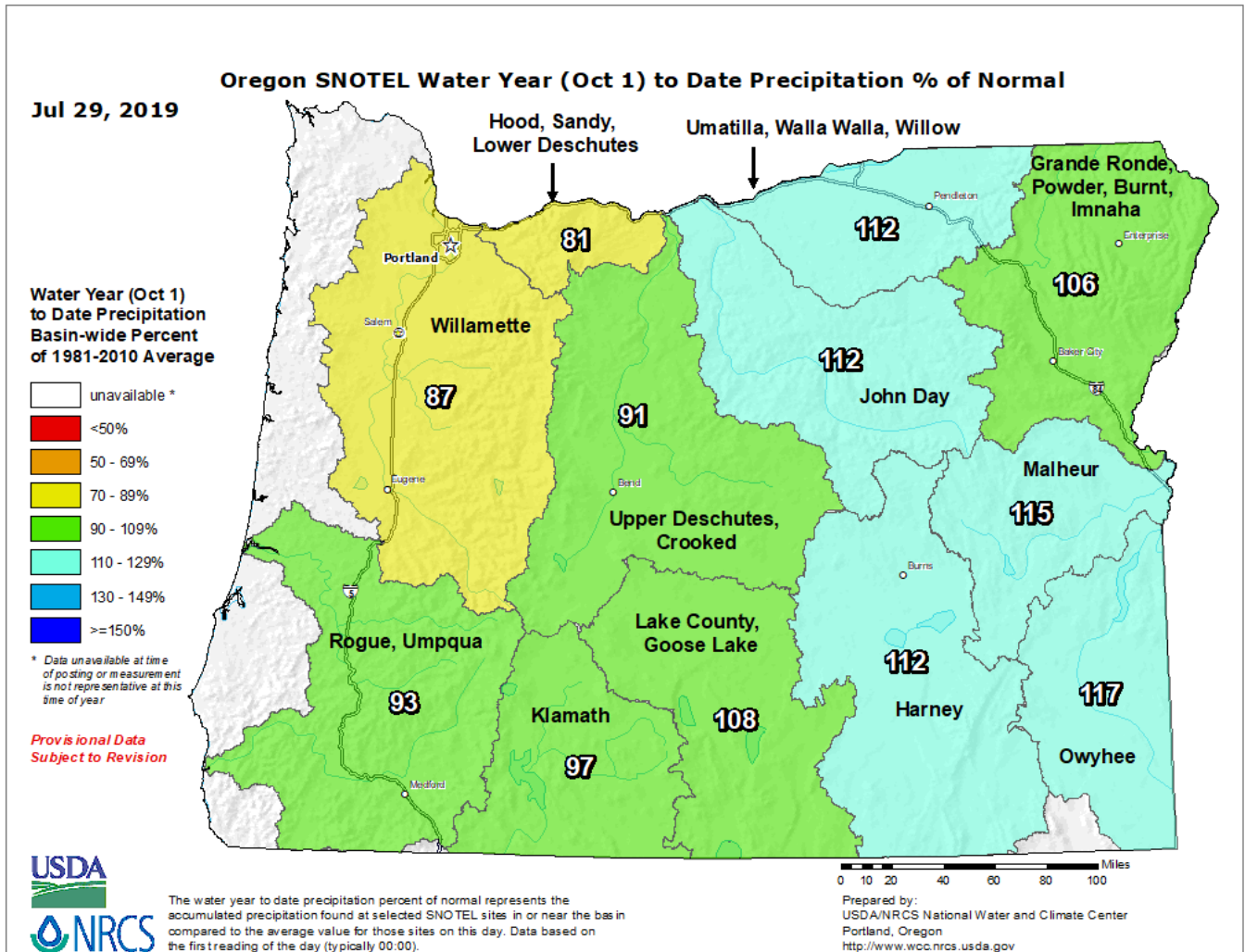
Wildfire potential through September is predicted to be above normal across western Oregon. According to the [National Significant Wildland Fire Potential Outlook](#), normal significant large fire potential is expected across the Northwest during the outlook period except west of the Cascade crest in Washington and Oregon 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 for areas west of the Cascades.

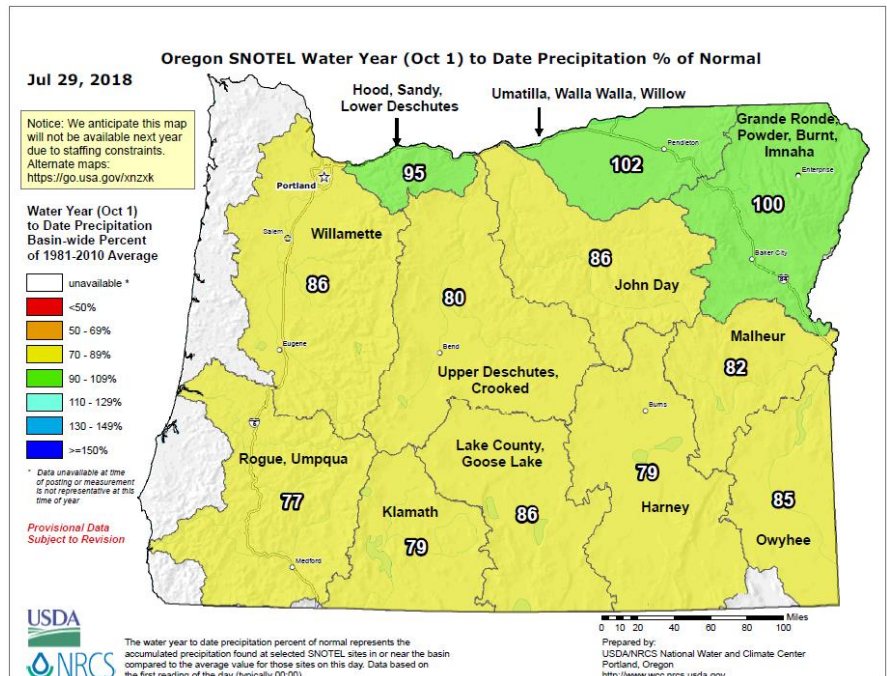
More information can also be accessed through the Northwest Interagency Coordination Center [website](#). Another recommended resource is the Oregon Office of Emergency Management’s [RAPTOR](#) incident mapping program which includes current situational information, such as wildfire perimeters, thermal 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 – July (estimated)	10
Streamflow Conditions – John Day Basin (Wheeler County)	10
Streamflow Conditions – Owyhee Basin (Malheur County)	11
Streamflow Conditions – Willamette Basin (Lane County)	11

Precipitation (Mountain) - Percent of Normal



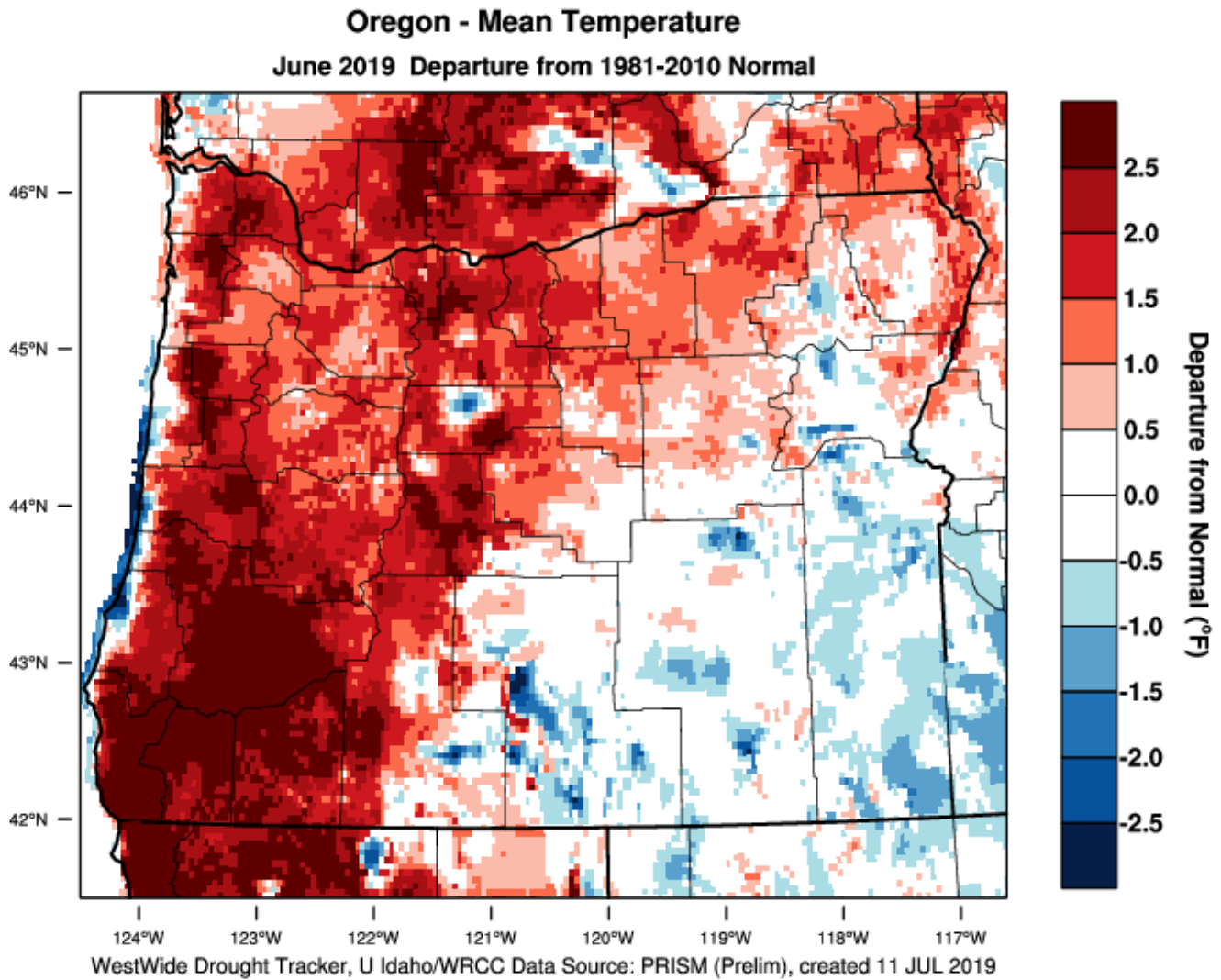
Compared to this time last year -



Temperature – (1 Month) Departure from Normal

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

PRISM > Temperature Anomaly 1 Month > Oregon



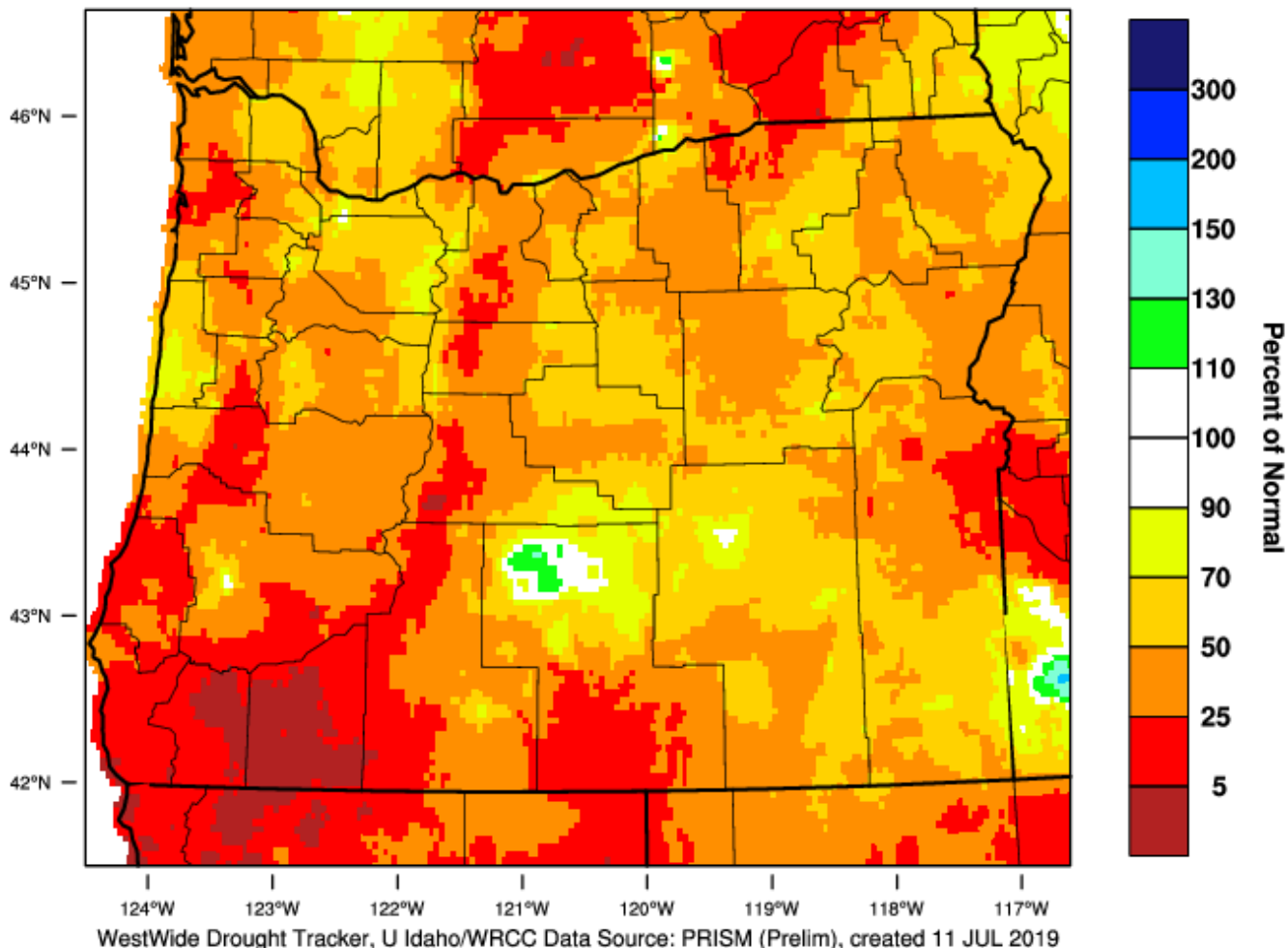
Precipitation – (1 Month) Percent of Normal

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

PRISM > Precipitation Anomaly 1 Month > Oregon

Oregon - Precipitation

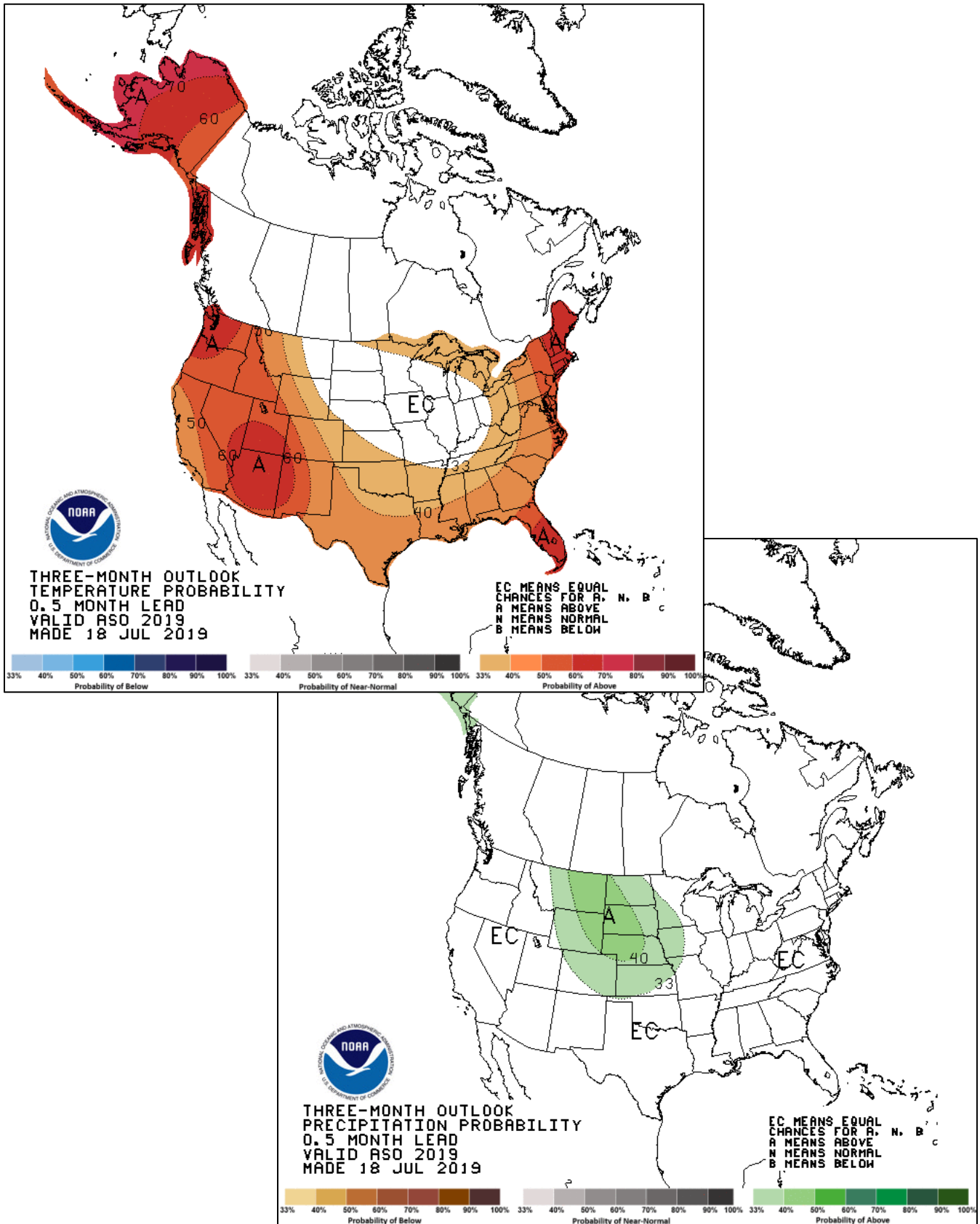
June 2019 Percent of 1981-2010 Normal



Three Month Temperature and Precipitation Outlook

August through October

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



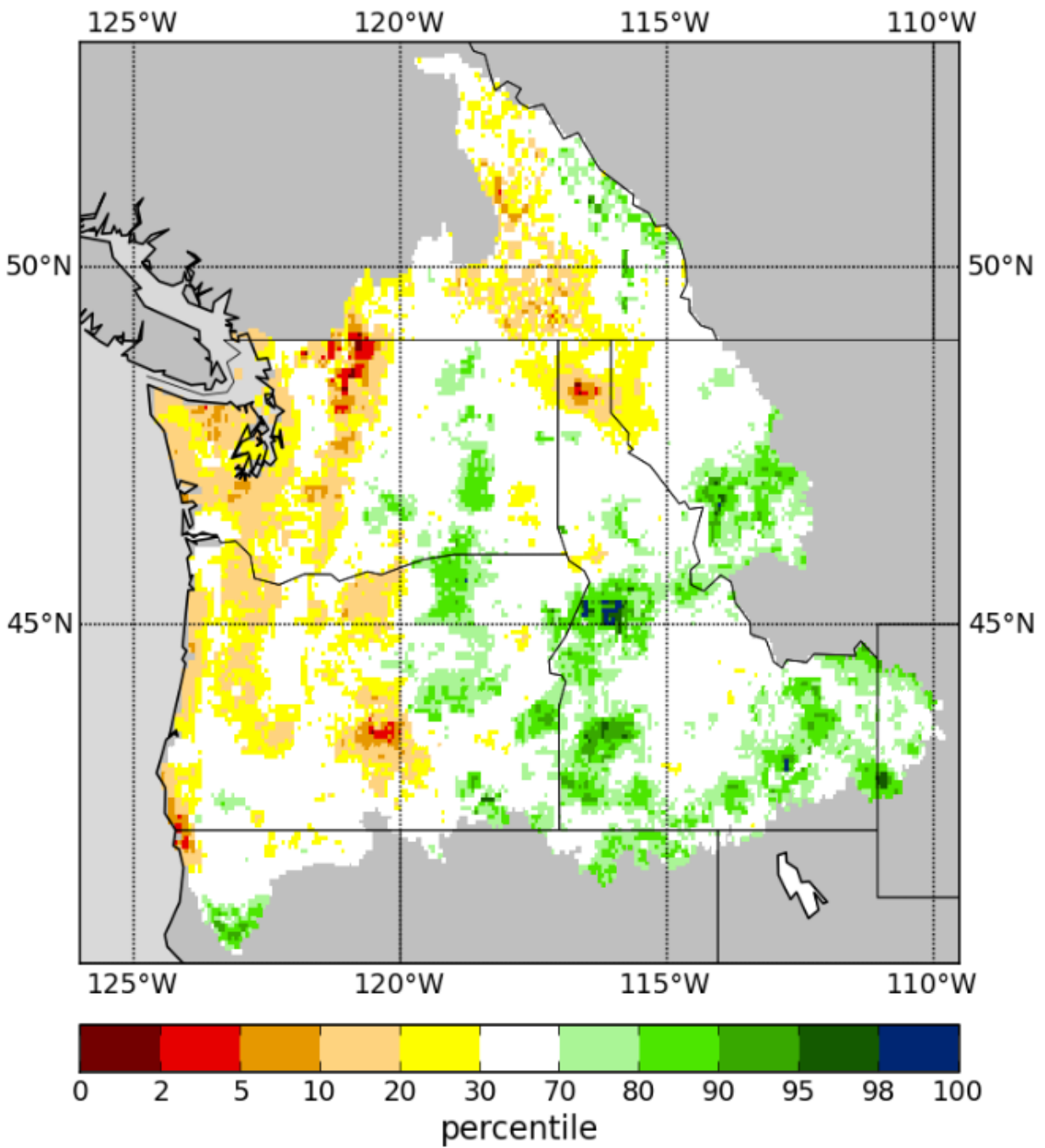
Total Moisture - Percentile

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

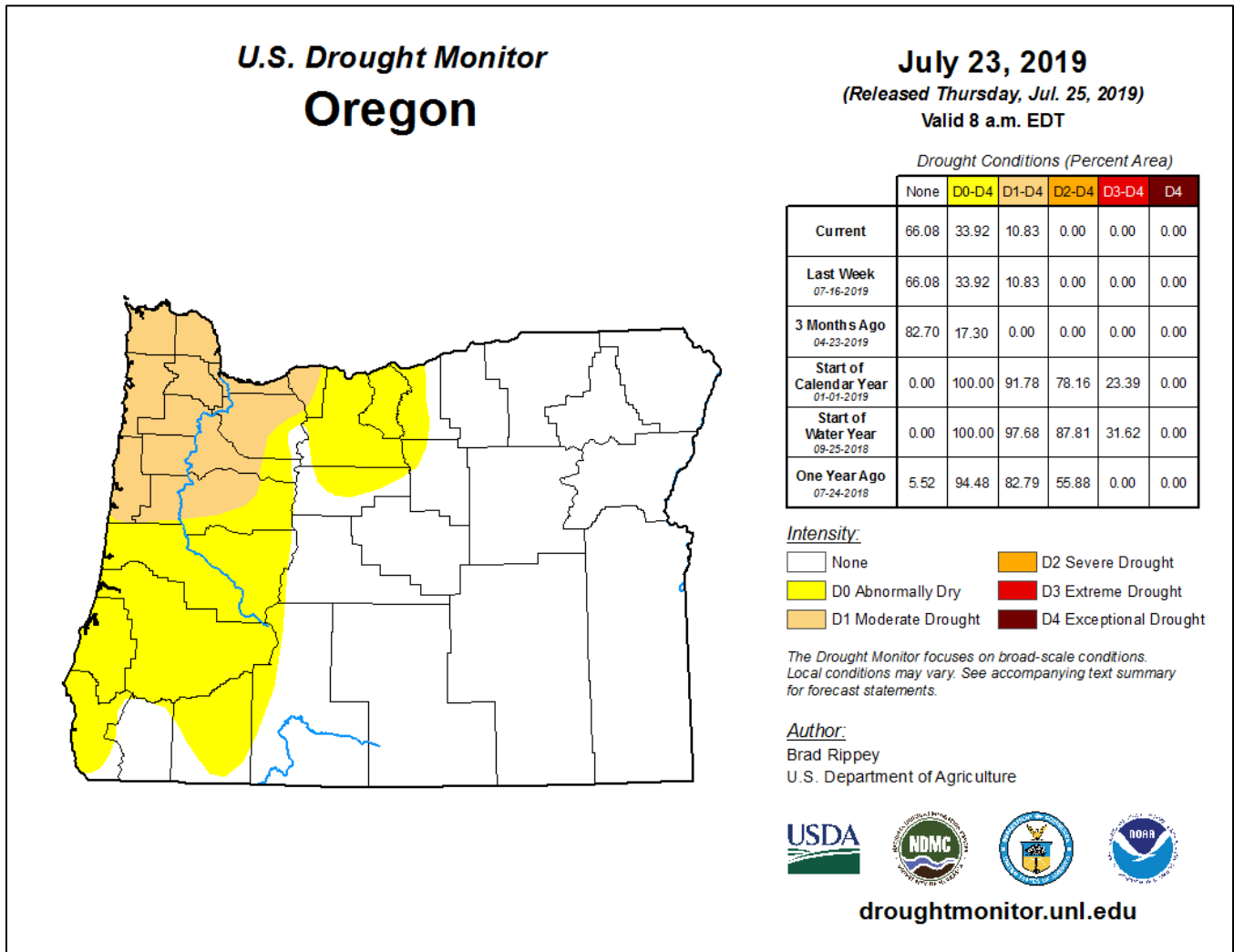
Total Moisture Percentile

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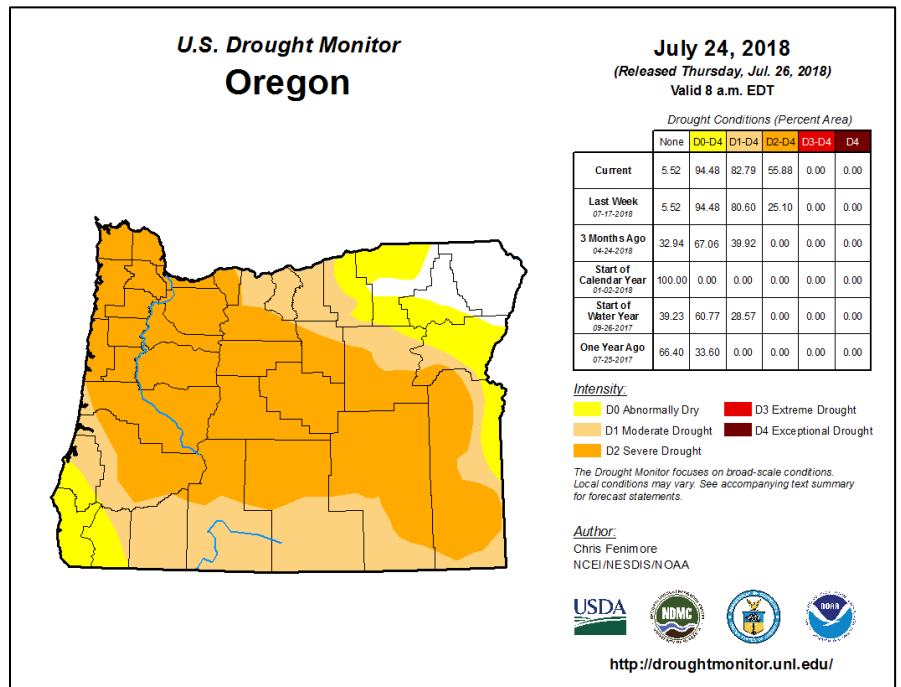


U.S. Drought Monitor for Oregon

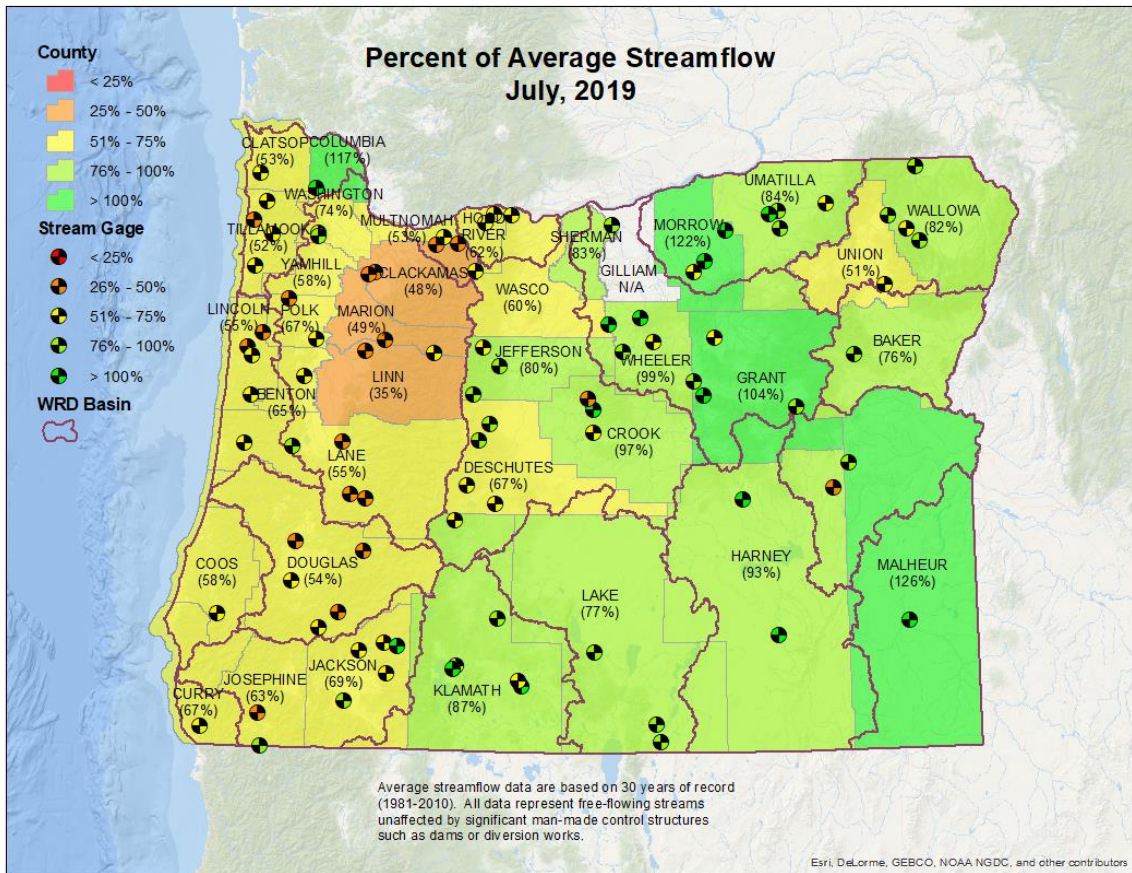
Website: <https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?OR>



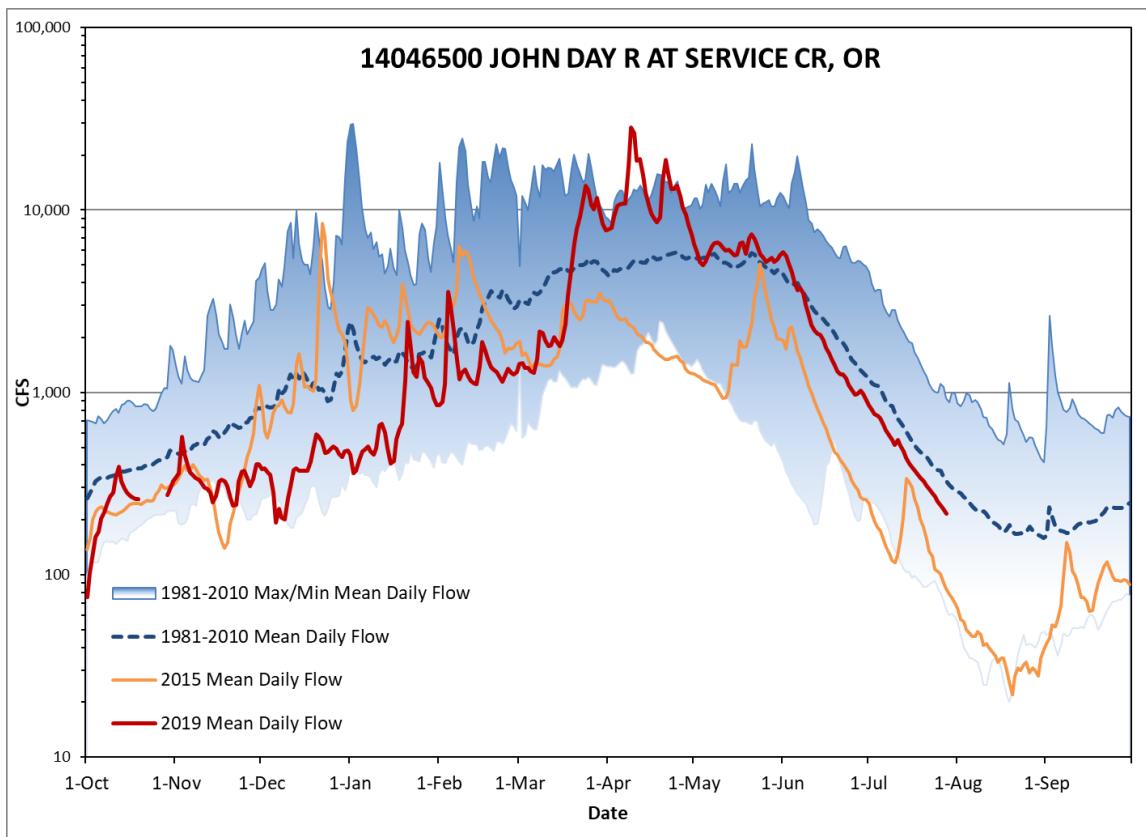
Compared to this time last year:



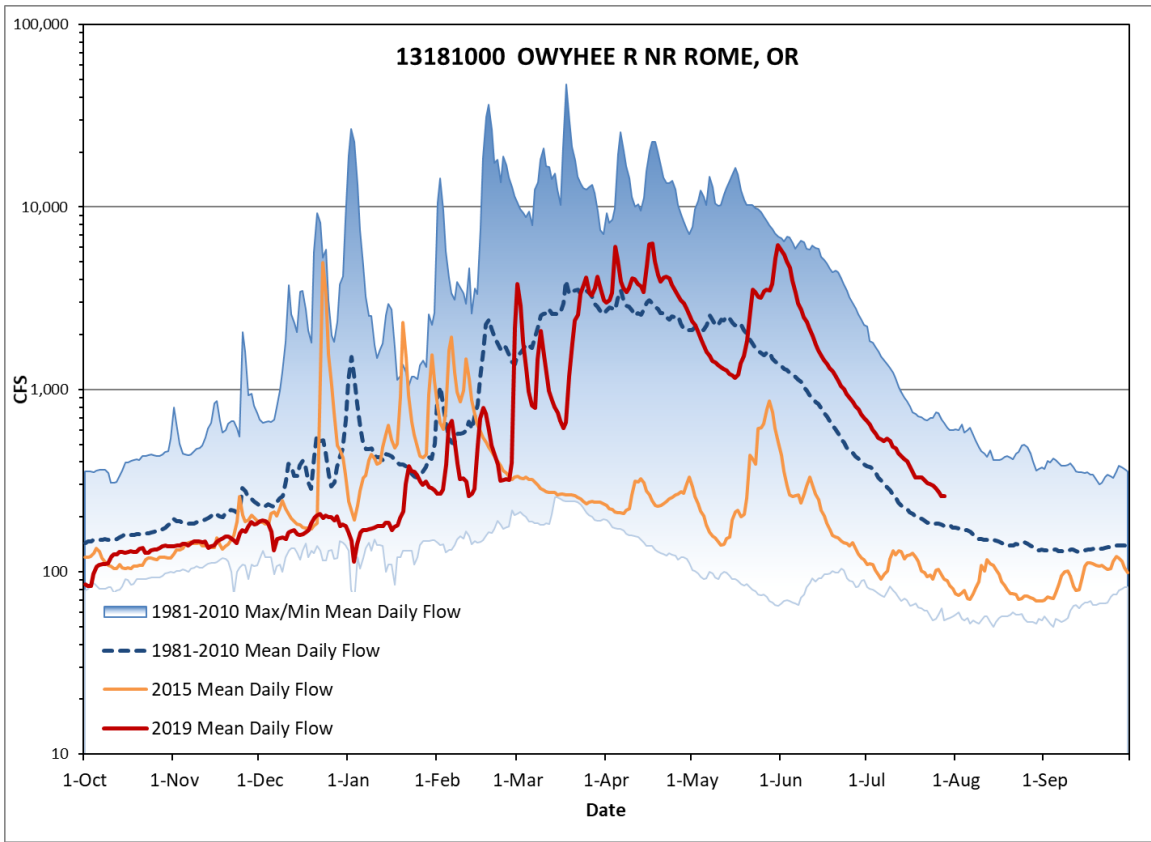
Streamflow Conditions by County – July (estimated)



Streamflow Conditions – John Day Basin (Wheeler County)



Streamflow Conditions – Owyhee Basin (Malheur County)



Streamflow Conditions – Willamette Basin (Lane County)

