

Oregon

Water Conditions Report

November 18, 2019



Current Oregon statewide water year precipitation at NRCS SNOTEL sites is only 45 percent of normal. Basin precipitation values range from 21 percent of normal in the Lake County, Goose Lake basin to 71 percent of normal in the Umatilla, Walla Walla, Willow Creek basin. Statewide percent of normal values continue to decrease rapidly due to the lack of precipitation since the beginning of the water year.

Minor snow water equivalent (SWE) values are currently being measured at some higher elevation SNOTEL sites mainly in NE Oregon. Most values are generally less than 1 inch of SWE, with most SNOTEL sites having no measurable SWE.

Precipitation over the [past two weeks](#) has been well below-normal, ranging from almost an inch below normal east of the Cascades to over 5 inches below normal in parts of southwestern Oregon. For the [month of October](#), precipitation was below-normal across much the state. In areas of southwest and south central Oregon anomalies ranged between 25 and 50 percent of normal.

Temperatures over the [past two weeks](#) have been below-normal across much of eastern Oregon. West of the Cascades, temperatures ranged from over 6 degrees above normal in Jackson County to almost six degrees cooler than normal in parts of the mid coast and western Willamette Valley. For the [month of October](#), temperatures were below-normal across the state. Especially in eastern Oregon where temperatures were up to 8 degrees cooler than normal for this time of year.

Over the next [8 to 14 days](#), the NOAA Climate Prediction Center is forecasting an increased probability of below-normal temperatures along with below-normal precipitation 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 in the southwest corner of the state with equal chances of above or below normal probability for the rest of the state. The next long-term outlook will be issued on November 21, 2019.

[ENSO-neutral](#) is favored during the Northern Hemisphere winter 2019-20 (~70 percent chance), continuing through spring 2020 (60 to 65 percent chance). Near-to-average average sea surface temperatures (SSTs) were observed in the east-central tropical Pacific Ocean during October. For a more complete report, refer to the November 14, 2019 [diagnostic discussion](#) issued by the Climate Prediction Center. The next diagnostic discussion is scheduled for December 12, 2019. Another source of information is the latest [ENSO blog](#) on the climate.gov website.

Statewide streamflows for October were 107 percent of normal. This is somewhat lower than the 114 percent seen in September. Regionally for October, streamflow conditions were about 105 percent of normal east of the Cascades and about 110 percent to the west. Flows in the South Coast were the lowest at about 53 percent of normal while the highest flows were in the Sandy, North Coast, Mid Coast, and Umatilla basins at a little over

130 percent of normal for the month. Streamflows for the 2019 water year ended up right at 100 percent of normal for the state. In response to recent dry weather, flows in many streams in western Oregon have declined significantly over the past two weeks. In some areas of southwestern Oregon stream flows are less than 10 percent of normal.

USACE Reservoirs: The system is currently offline. For the most recent information, please try the following links at a later date:

Rogue:

Willow Creek:

Willamette:

USBR Reservoirs: Most reservoirs started the current Water Year with above average carry-over storage primarily due to a late start in the previous Water Year's irrigation season and higher than average inflows especially for the Central and Eastern Oregon river basins. Reclamation water managers will be watching the Oregon projects closely over the winter to ensure that minimum winter space requirements are maintained for flood control considerations.

Eastern Oregon reservoirs have started refill immediately after irrigation releases ended in early October. Irrigation in the Deschutes, Crooked, and Umatilla River basins also ended in early October and storage levels continue to decrease as reservoirs meet downstream ecological flow targets. The Rogue River basin is the outlier having started the Water Year with below average carry-over storage. Storage levels have remained somewhat static with typical refill starting in December and January that coincides with the rainy season for this region of Oregon. Since Rogue basin projects failed to fill this last Water Year, a good Water Year is sorely needed to allow the basin to catch up.

Umatilla River Basin: McKay reservoir is at 21 percent of capacity. Outflows are close to 123 cfs with inflows of about 12 cfs.

Deschutes River Basin: Ochoco and Prineville reservoirs are at 45 percent and 59 percent full respectively. Ochoco reservoir is releasing less than 5 cfs while Prineville reservoir is currently releasing just under 95 cfs with inflows about 42 cfs.

Crescent Lake is at 51 percent, Wickiup is at 29 percent and Crane Prairie is at 71 percent of capacity.

Malheur River Basin: Warm Springs, Beulah, and Bully Creek reservoirs are at 52, 29, and 47 percent full respectively. 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 well above normal at 63 percent. Inflows are currently about 205 cfs.

Burnt and Powder River Basins: Phillips and Unity reservoirs are at 22 percent and 29 percent full respectively. Phillips is releasing about 13 cfs with inflows around 13 cfs while Unity is also releasing about 13 cfs.

[Tualatin River Basin](#): Scoggins reservoir is at 34 percent of capacity and releasing 58 cfs.

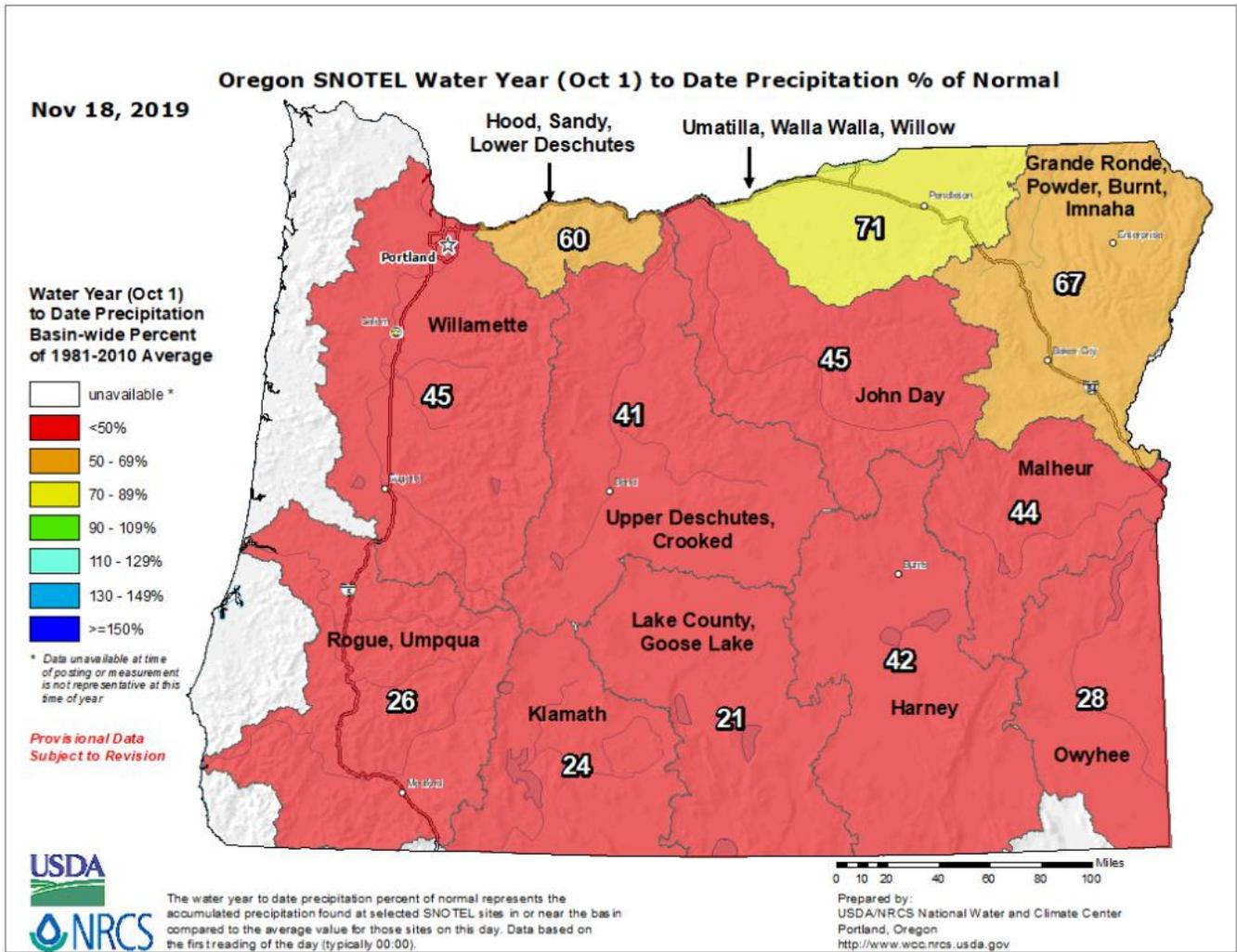
The most recent update to the [US Drought Monitor](#) continues to indicate that there are no longer any areas of the state listed in any drought category. However if there is no marked change in weather patterns in the coming weeks, this may change especially in southwest Oregon.

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 no large fires ongoing in the region. 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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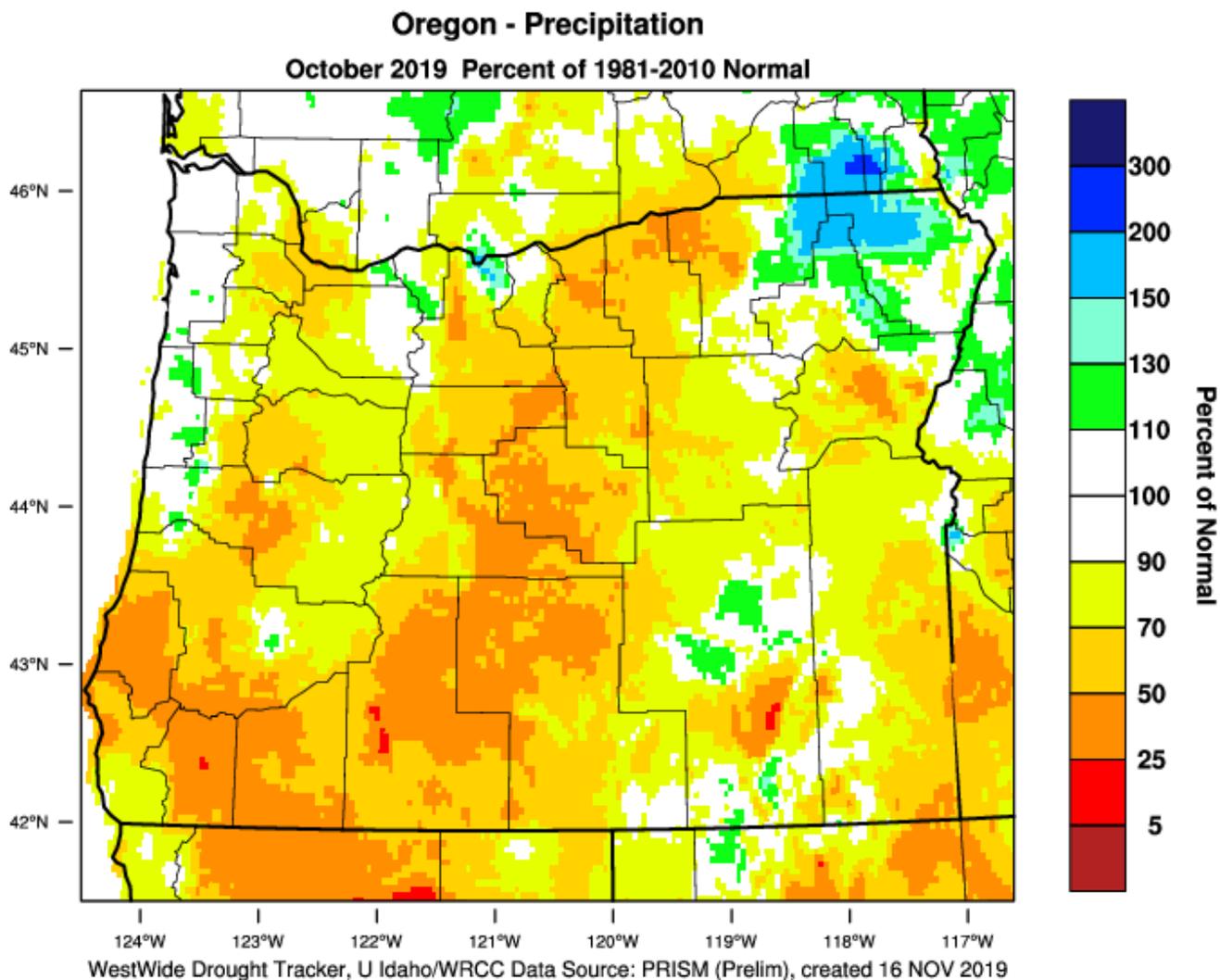
Precipitation (Mountain) - Percent of Normal



Precipitation – (1 Month) Percent of Normal

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

PRISM > Precipitation Anomaly 1 Month > Oregon



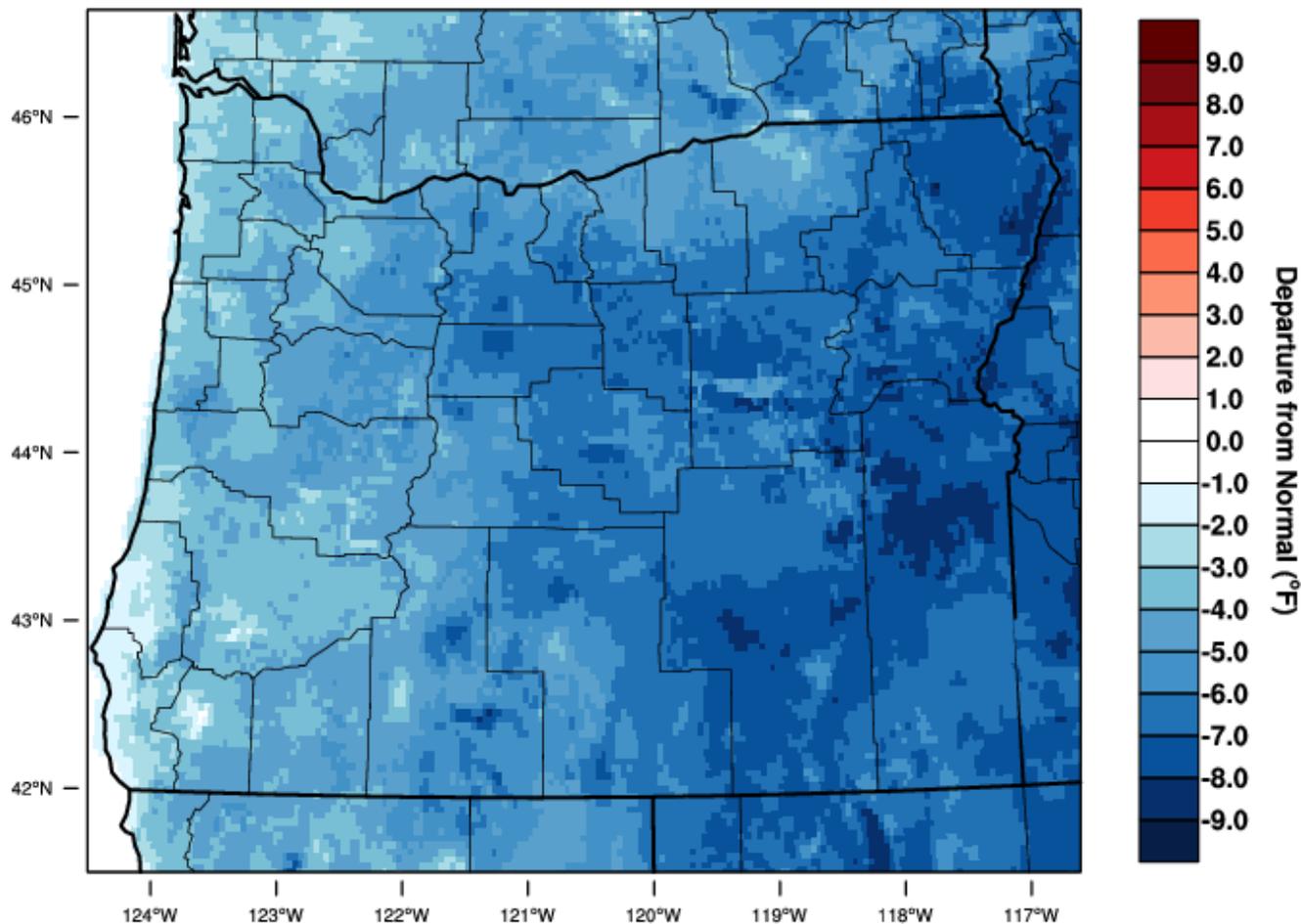
Temperature – (1 Month) Departure from Normal

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

PRISM > Temperature Anomaly 1 Month > Oregon

Oregon - Mean Temperature

October 2019 Departure from 1981-2010 Normal

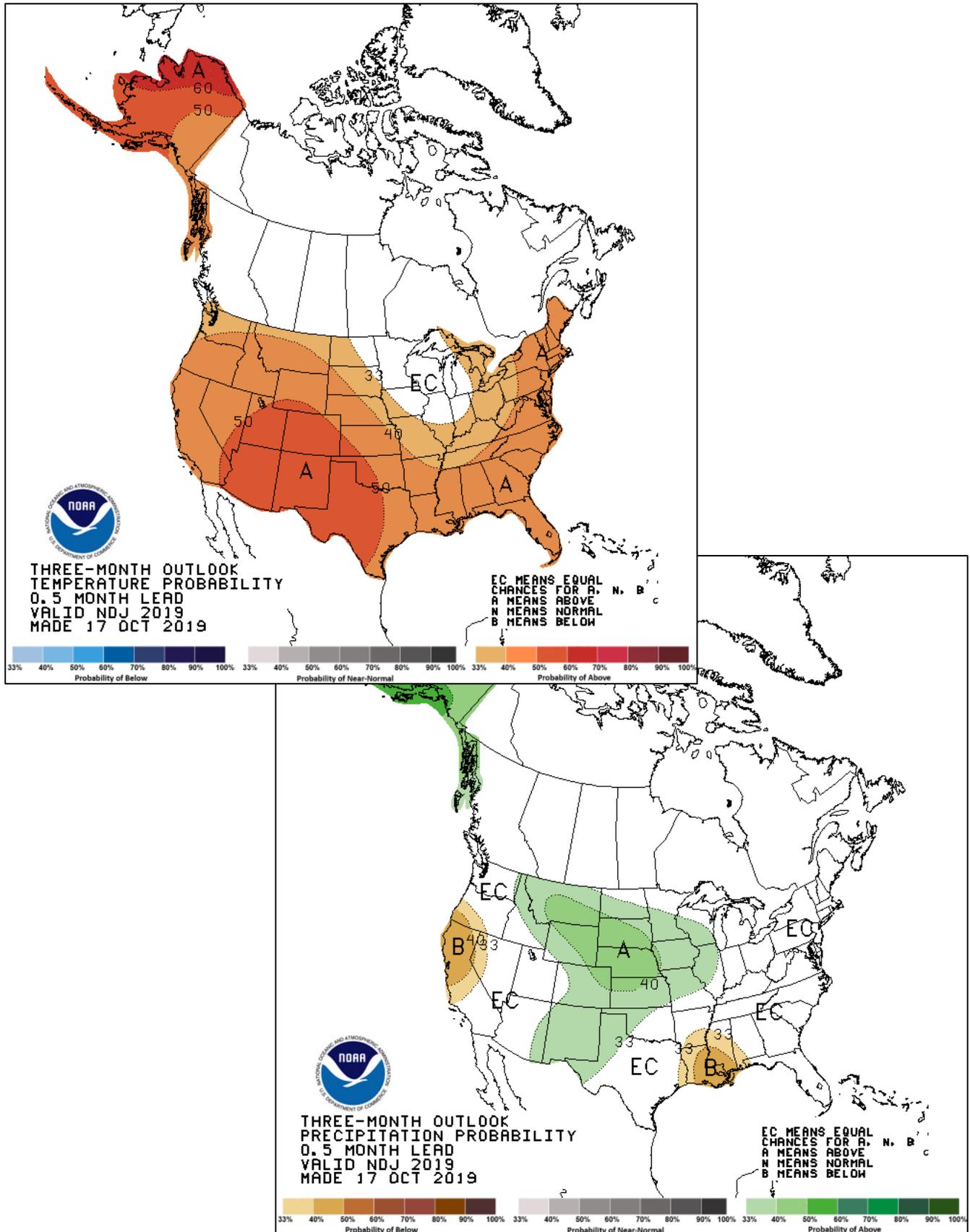


WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 16 NOV 2019

Three Month Temperature and Precipitation Outlook

November through January

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



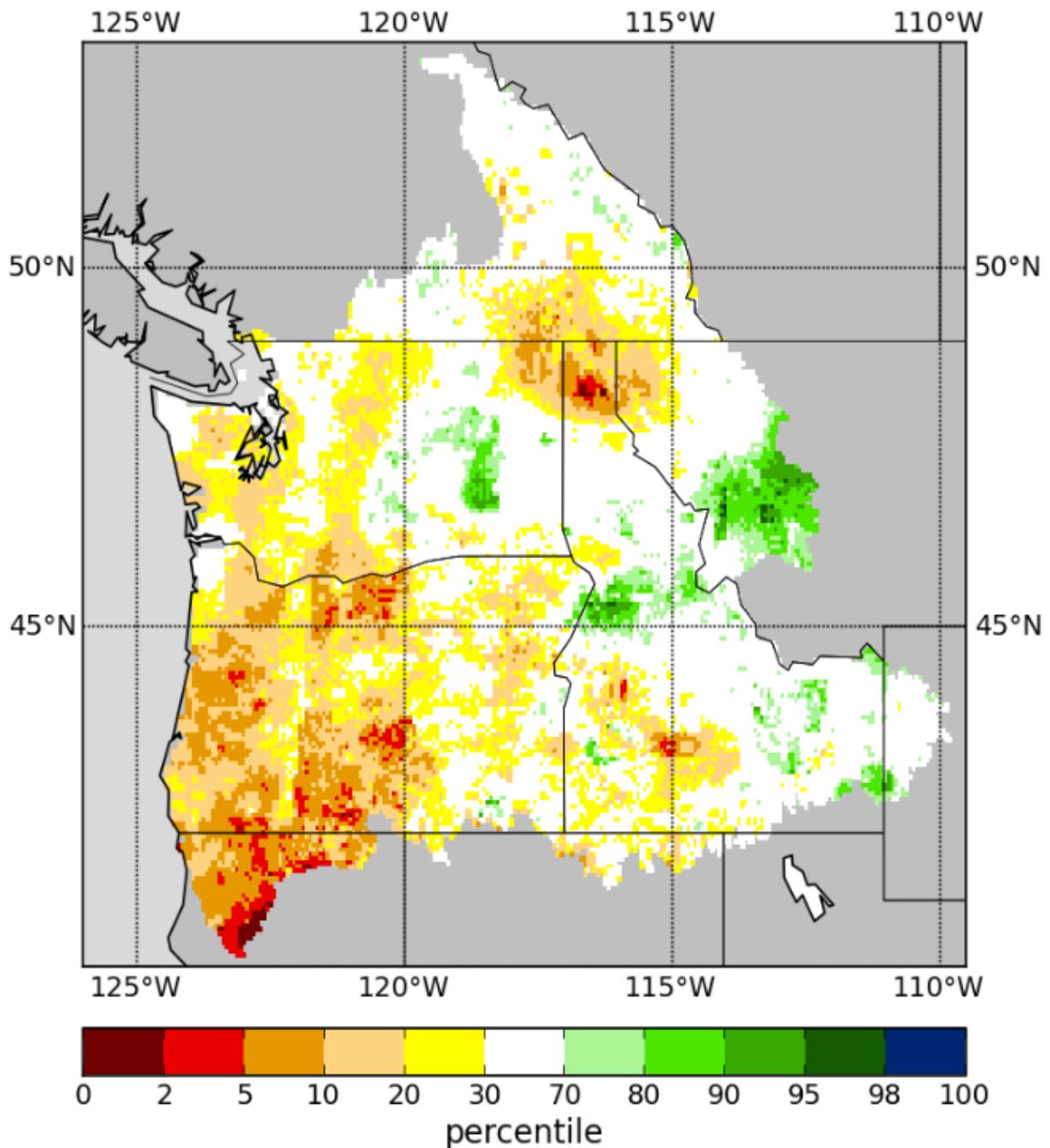
Total Moisture - Percentile

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--11--16

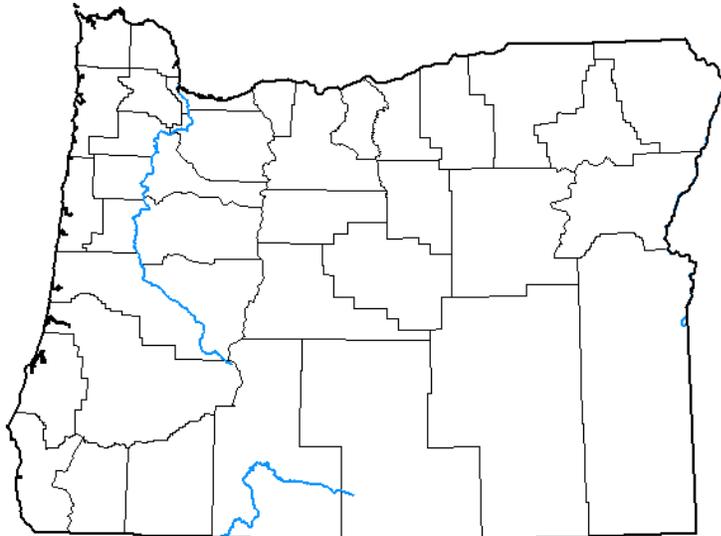


U.S. Drought Monitor for Oregon

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

U.S. Drought Monitor Oregon

November 12, 2019
(Released Thursday, Nov. 14, 2019)
Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	100.00	0.00	0.00	0.00	0.00	0.00
Last Week 11-05-2019	100.00	0.00	0.00	0.00	0.00	0.00
3 Months Ago 08-13-2019	67.61	32.39	10.83	0.00	0.00	0.00
Start of Calendar Year 01-01-2019	0.00	100.00	91.78	78.16	23.39	0.00
Start of Water Year 10-01-2019	88.54	11.46	0.00	0.00	0.00	0.00
One Year Ago 11-13-2018	0.00	100.00	97.63	86.23	34.26	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

Deborah Bathke
National Drought Mitigation Center

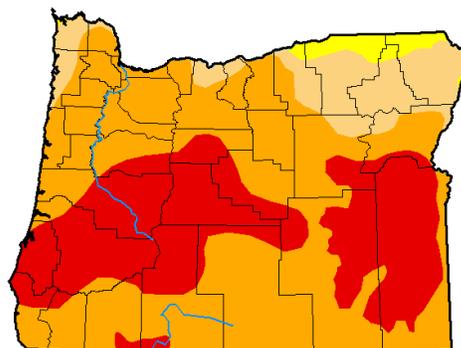


droughtmonitor.unl.edu

Compared to this time last year:

U.S. Drought Monitor Oregon

November 13, 2018
(Released Thursday, Nov. 15, 2018)
Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	97.63	86.23	34.26	0.00
Last Week 11-06-2018	0.00	100.00	97.63	86.23	34.26	0.00
3 Months Ago 08-14-2018	0.00	100.00	93.05	69.79	6.18	0.00
Start of Calendar Year 01-02-2018	100.00	0.00	0.00	0.00	0.00	0.00
Start of Water Year 09-25-2018	0.00	100.00	97.68	87.81	31.62	0.00
One Year Ago 11-14-2017	88.18	11.82	0.00	0.00	0.00	0.00

Intensity:

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

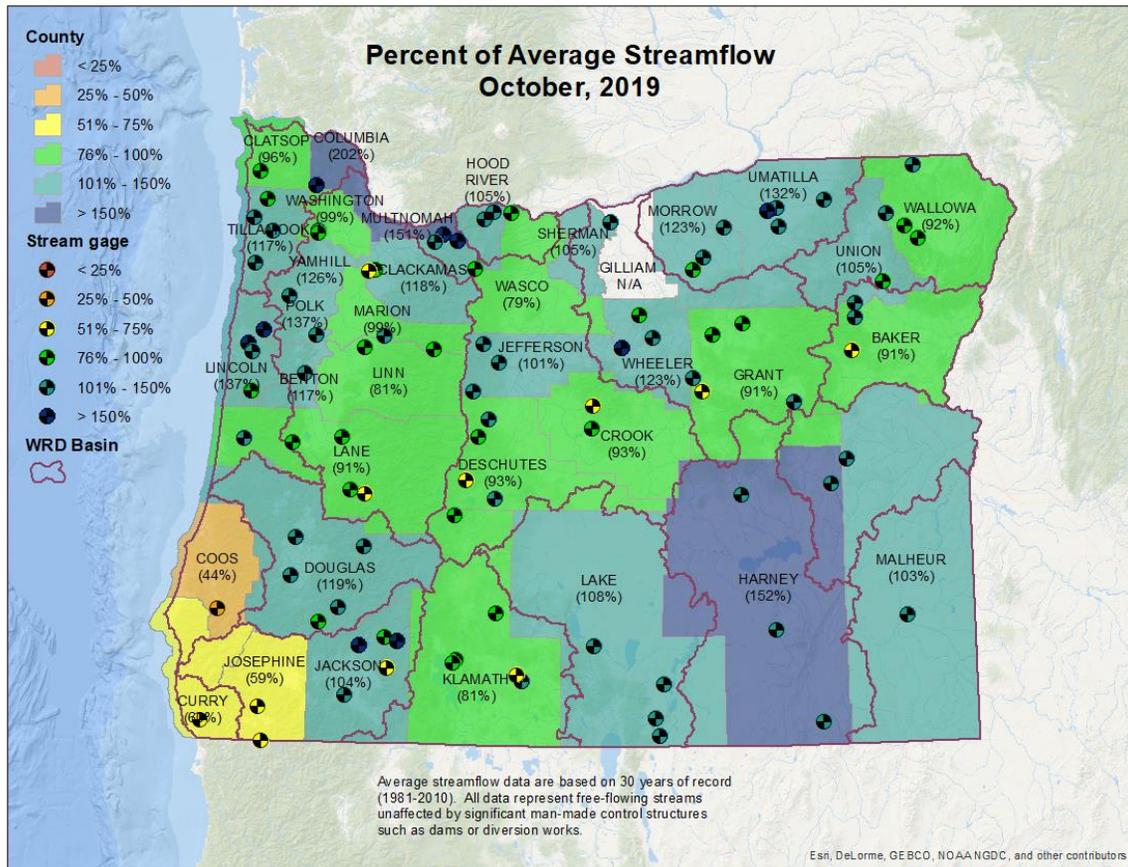
Author:

David Simeral
Western Regional Climate Center



<http://droughtmonitor.unl.edu/>

Streamflow Conditions by County – October



Streamflow Conditions – Rogue Basin (Jackson County)

