

Oregon Water Conditions Report



November 30, 2020

HIGHLIGHTS

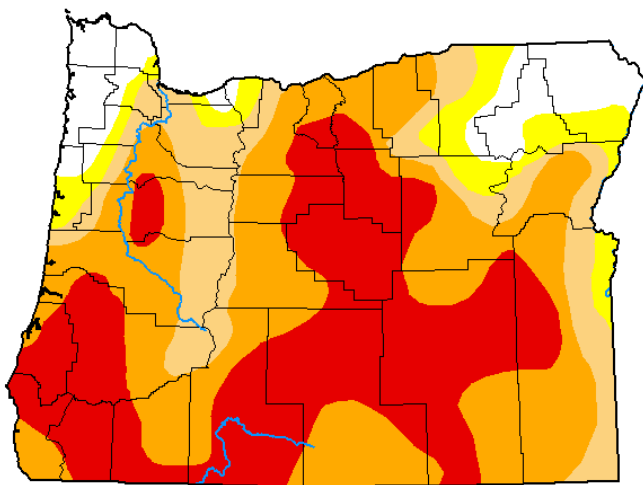
- The Water Supply Outlook is beginning to incorporate [NRCS](#) SNOTEL precipitation and snow-water equivalent infographics as snowfall begins to accumulate. Currently, Oregon is measuring 147% of the median snow-water equivalent (SWE) at statewide SNOTEL sites.
- Statewide precipitation at SNOTEL sites is measuring 94% of normal. NRCS basin values range from a low of 64% of normal in the Owyhee basin to a high of 118% in the Umatilla-Walla Walla-Willow basin.
- Precipitation over the past [two weeks](#) has been below normal for much of the state with the exception of small regions of southwestern and southeastern Oregon. Western Oregon experienced deficits of nearly two to three inches of precipitation overall, while nearly all of eastern Oregon measured up to an inch below normal precipitation.
- Temperatures over the past [two weeks](#) have been highly variable throughout the state. A significant portion of southern Oregon, as well as parts of northwestern and northeastern Oregon, experienced temperatures up to four degrees below normal. Most of central and eastern Oregon experienced above average temperatures.
- Outlooks over the next [8 - 14 days](#) indicate increased probabilities of above normal temperatures for central and western Oregon and equal chances of above or below normal temperatures for eastern Oregon. Below normal precipitation is forecasted statewide, with higher probabilities in southern Oregon.
- [Seasonal climate outlooks](#) favor below normal temperatures for swaths of northeastern and north-central Oregon, with much of the rest of the state indicating equal chances of above or below normal temperatures. Probabilities indicate a small portion of southeastern Oregon is projected to experience above normal temperatures. The northern half of Oregon is forecasted to receive above normal precipitation, while the southern half of the state is forecasted as having equal chances of above or below normal precipitation.
- The US Drought Monitor remains largely unchanged for much of Oregon. Coverage indicates minor expansion and fluctuation of D3 conditions, as well as slightly increased coverage of areas not listed in drought condition.
- Streamflows for the month of October measured 74% of normal, with basins in the northern regions of the state faring better than the south. Current 7-day average streamflows are measuring near normal in the Willamette Valley and trending below normal towards southwestern Oregon. Streamflows are more variable east of the Cascades with a mix of normal to below normal streamflows.
- Storage reservoirs have since transitioned to the storage season and continue to balance needs to meet in-stream demands.

DROUGHT CONDITIONS

The most recent update to the US Drought Monitor indicates slight expansion of D3 coverage overall, however the coverage has changed in some regions. Conditions in the Willamette Valley have improved from D3 to D2, while conditions in some regions of southeastern Oregon have deteriorated from D2 to D3. Over 91 percent of the state is classified as D0 (abnormally dry) conditions, 84 percent is classified as D1 (moderate drought), nearly 70 percent classified as D2 (severe drought), and 34 percent is classified as D3 (extreme drought).

U.S. Drought Monitor Oregon

November 24, 2020
(Released Wednesday, Nov. 25, 2020)
Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	8.67	91.33	84.36	69.68	34.27	0.00
Last Week 11-17-2020	8.67	91.33	84.36	69.68	33.39	0.00
3 Months Ago 08-25-2020	8.77	91.23	78.00	54.42	17.61	0.00
Start of Calendar Year 12-31-2019	2.40	97.60	24.46	0.00	0.00	0.00
Start of Water Year 09-29-2020	6.50	93.50	84.77	65.53	33.59	0.00
One Year Ago 11-26-2019	44.34	55.66	0.00	0.00	0.00	0.00

Intensity:

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

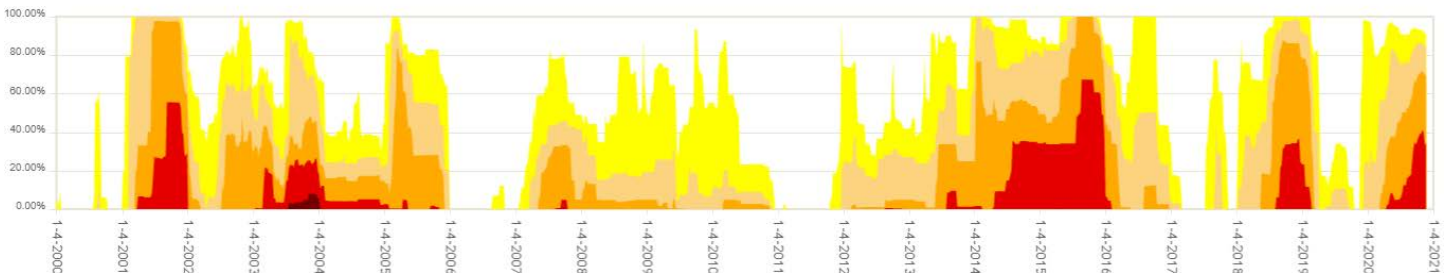
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:
Richard Heim
NCEI/NOAA

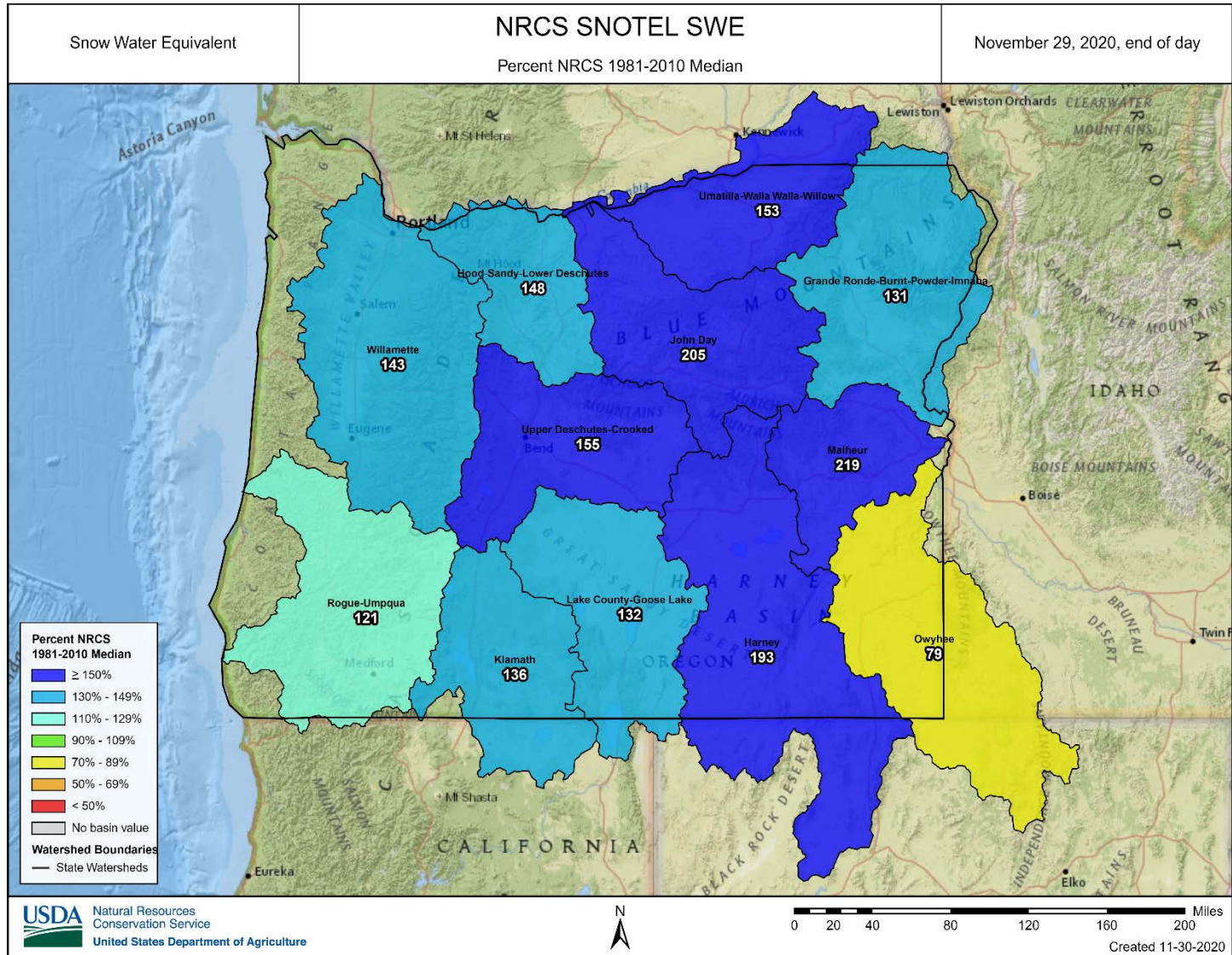


droughtmonitor.unl.edu

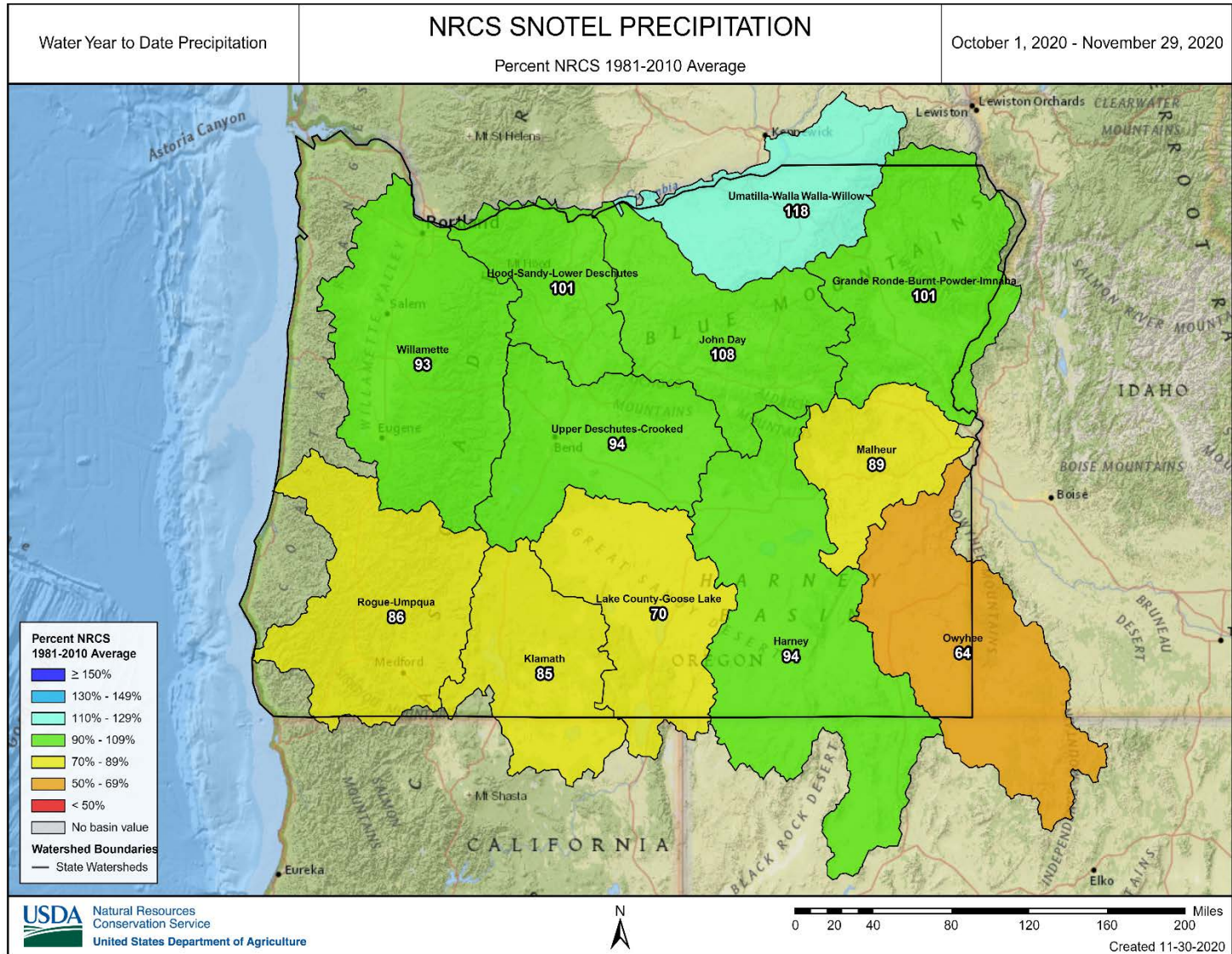
Oregon Percent Area



CLIMATE CONDITIONS
SNOW WATER EQUIVALENT

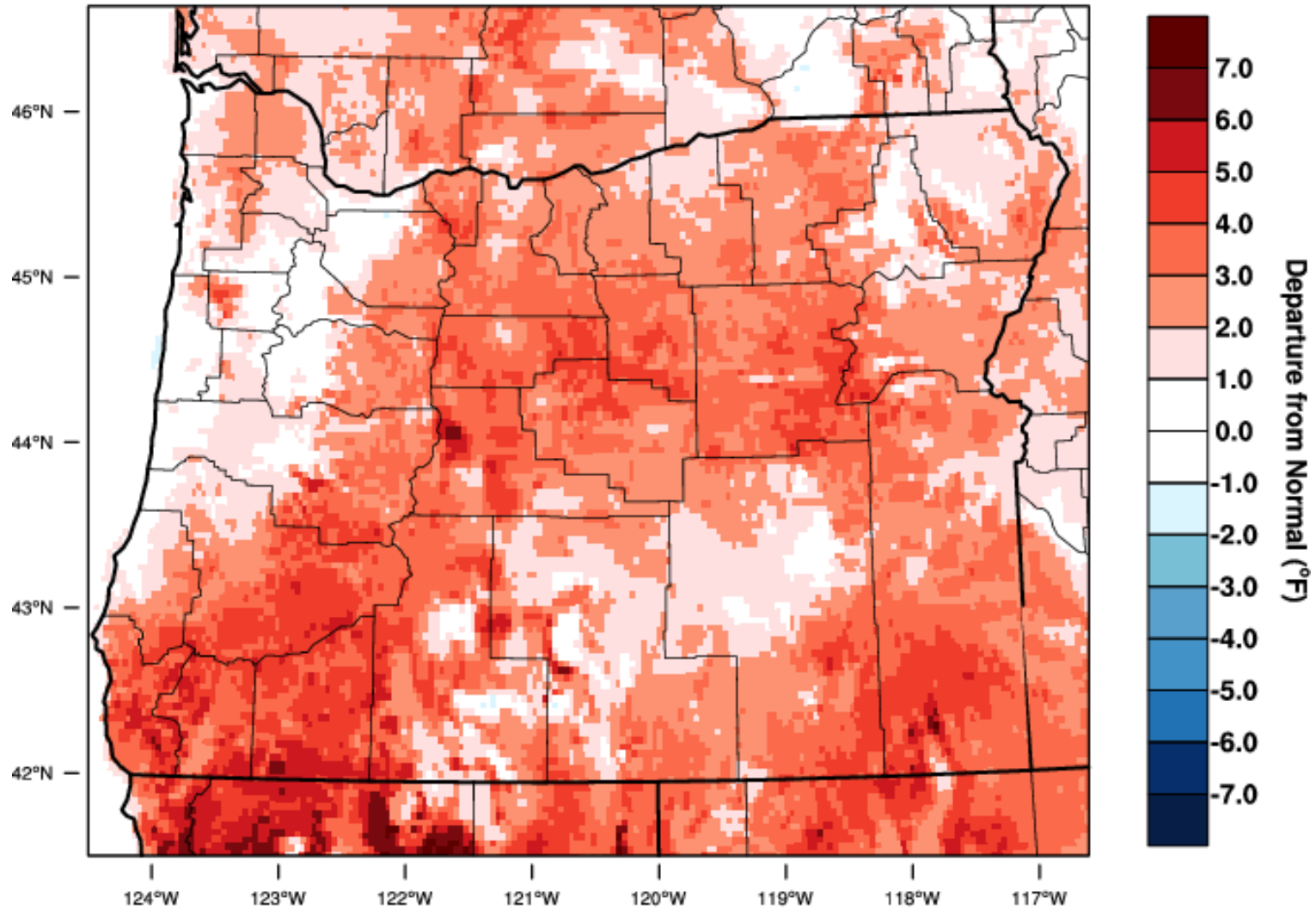


PRECIPITATION



Oregon - Mean Temperature

October 2020 Departure from 1981-2010 Normal

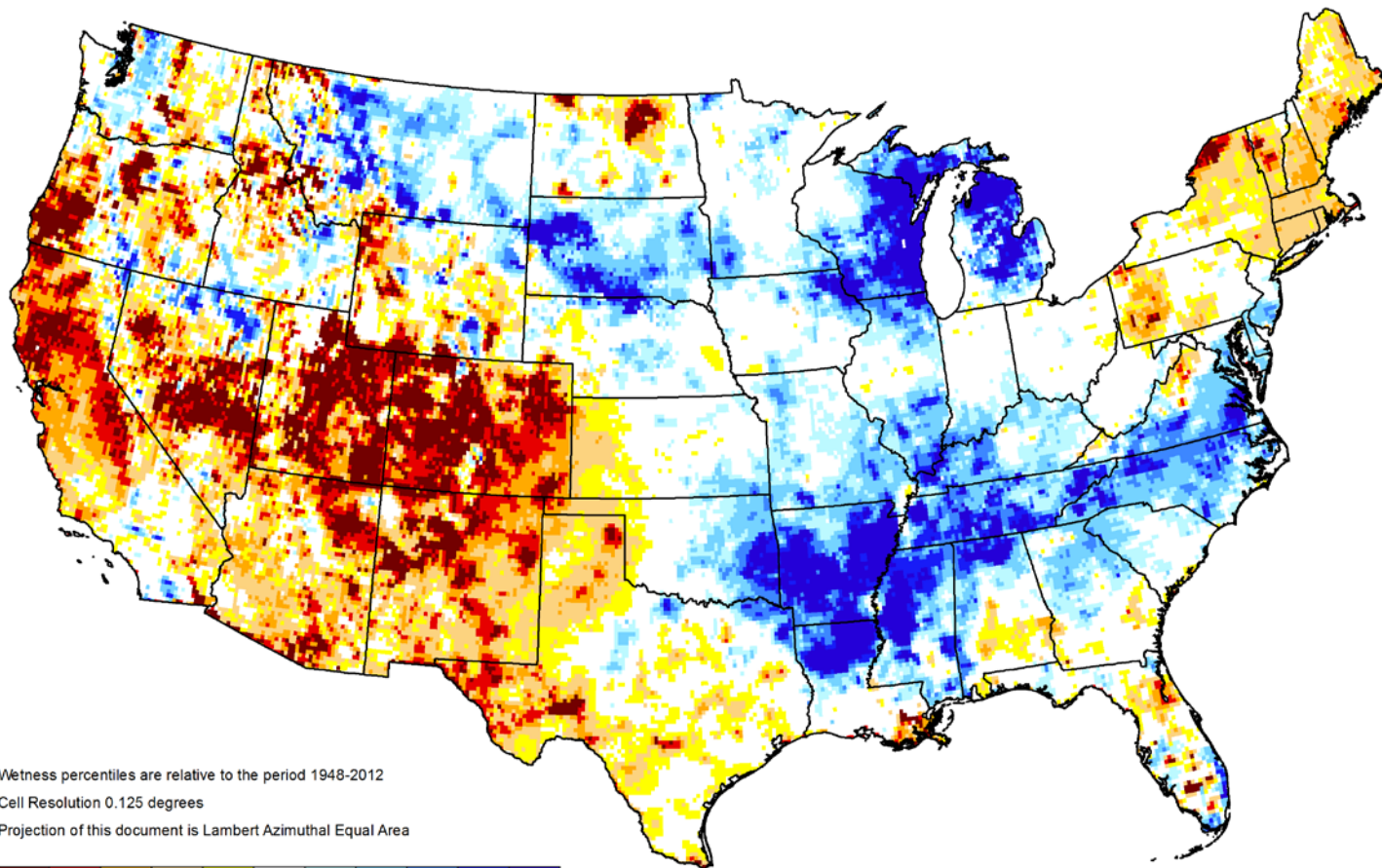


WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 16 NOV 2020

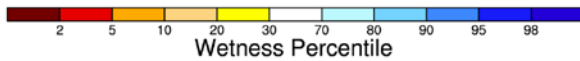


GRACE-Based Shallow Groundwater Drought Indicator

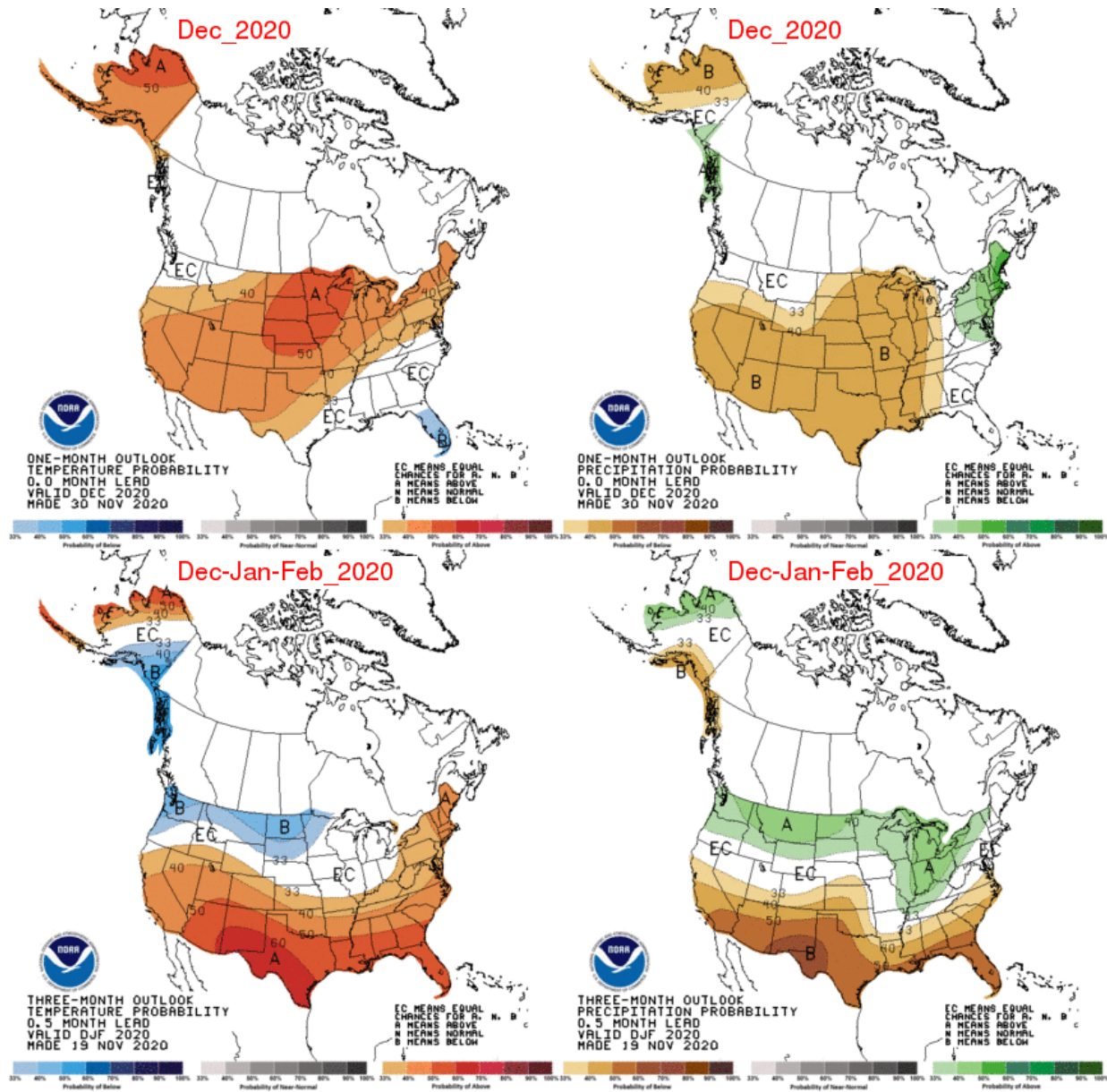
November 23, 2020

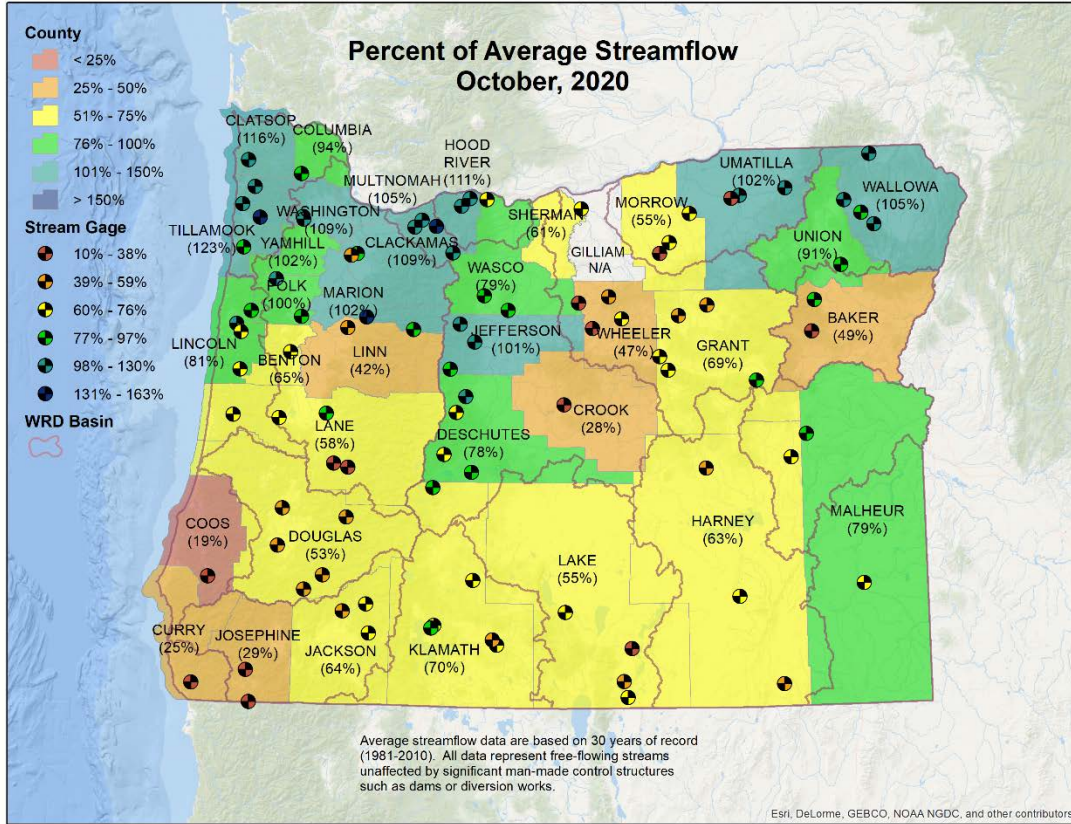


Wetness percentiles are relative to the period 1948-2012
Cell Resolution 0.125 degrees
Projection of this document is Lambert Azimuthal Equal Area



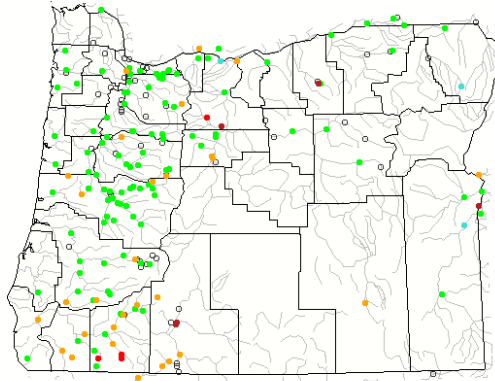
<https://nasagrace.unl.edu>





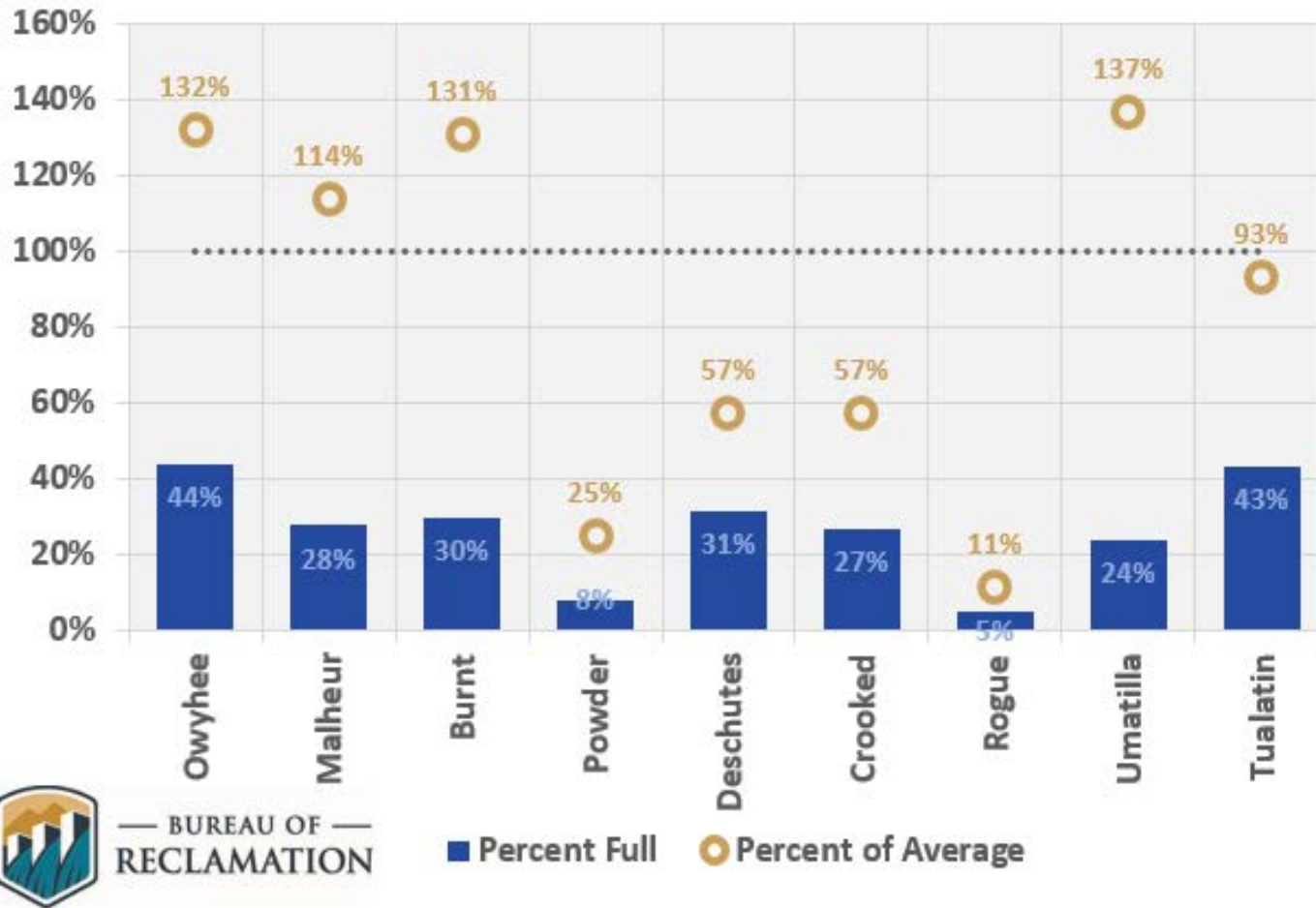
Map of 7-day average streamflow compared to historical streamflow for the day of the year (Oregon)

Sunday, November 29, 2020



Explanation - Percentile classes						
●	●	●	●	●	●	○
Low	<10	10-24	25-75	76-90	>90	High
	Much below normal	Below normal	Normal	Above normal	Much above normal	Not-ranked

November 29 Reservoir Storage



RESOURCES / REFERENCES

Released every Thursday, the [US Drought Monitor](#) provides a weekly assessment of drought conditions. The USDM provides a [network infographic](#) which depicts the network of observers who gather and report information about conditions and drought impacts.

The [NRCS Snow Survey](#) Program provides mountain snowpack data and streamflow forecasts for Oregon and the western United States.

The [WestWide Drought Tracker](#) uses data from [PRISM](#) to provide easy access to fine-scale drought monitoring and climate products, such as the figures depicting climate conditions within this report.

The National Weather Service's [Climate Prediction Center](#) offers [weekly](#), [monthly](#), and [seasonal](#) climate outlooks illustrating the probabilities of temperatures and precipitation.

The [Regional Climate Centers](#) (RCC) working with NOAA partners, deliver climate services at national, regional, and state levels. Climate [anomaly maps of Oregon](#) are updated daily at around noon PST.

NASA's [Gravity Recovery and Climate Experiment](#) (GRACE) provide satellite-based observations of soil moisture conditions that are useful as drought indicators, helpful in describing current wet or dry soil conditions.

USGS [Water Watch](#) provides maps of real-time and average streamflow conditions at USGS sites throughout the state.

Reservoir storage "teacup" diagrams are offered by both the [US Bureau of Reclamation](#) and [US Army Corps of Engineers](#). The diagrams represent the level of fill in the reservoirs as both percent full and as a ratio of volume of water currently in the reservoir to the volume of water in the reservoir when it is full.

Oregon wildfire information can be found through [InciWeb](#) and the Oregon Department of Forestry's [Wildfire News](#), along with the [National Interagency Fire Center](#) which offers outlooks on the significant wildland fire potential.

Oregon Office of Emergency Management maintains a [hydrology/meteorology dashboard](#) which shows state and local drought declarations, as well as hosts many of the data sources to generate this report. Use the selection arrows at the bottom of your browser to navigate through the various sources.

US Department of Agriculture provides the [Weekly Weather and Crop Bulletin](#) as a vital source of information on US and global weather, climate, and agricultural developments, along with seasonally appropriate agrometeorological charts and tables. USDA's [Drought Programs and Assistance](#) offers links to programs and resources to help those struggling with persistent drought.