Oregon Water Conditions Report



August 8th, 2022

HIGHLIGHTS

The latest edition of the <u>US Drought Monitor</u> incorporated minor changes in drought severity in southeastern Oregon, while the rest of the state remains unchanged. See below for more information.

There have been no additional state or federal drought designations over recent weeks. Thus far in 2022, <u>17 Oregon counties</u> have received state drought declarations under ORS 536, while 29 counties have received <u>USDA</u> <u>crop disaster designations</u> due to drought.

<u>August precipitation</u> was well below average, with much of the state <u>averaging less than one inch</u>. Statewide water year precipitation is measuring 103% of the long-term average at NRCS SNOTEL sites.

<u>August temperatures</u> were well above average throughout Oregon, ranging from 1 °F to greater than 5 °F above the long-term average.

Soil moisture is measuring much drier than average across much of the state in the surface, root zone, and shallow groundwater profiles. <u>Evaporative demand over the past week</u> reflects conditions indicative of a flash drought in central and eastern Oregon, further stressing soil moisture and increasing demands for water supplies.

The <u>three-month climate outlook</u> for August through October indicates probabilities favoring above average temperatures statewide. Precipitation is forecast to be near average throughout much of the state, with parts of eastern Oregon expected to receive less than average.

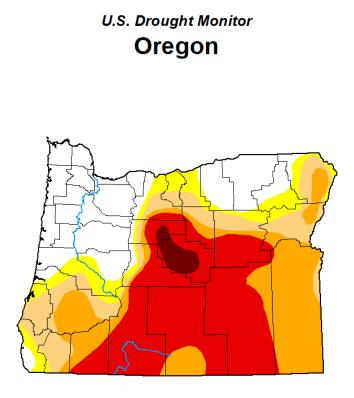
<u>Streamflows throughout July</u> were variable throughout the state. Flows in central and southeastern Oregon were well below average, while much of the rest of the state ranged from average to well above average. Similar conditions were present throughout the <u>first week of August</u>. See below for more information.

Reservoir storage in many <u>USBR</u> (including <u>Klamath</u>) systems is measuring well below average, with exceptions in the Tualatin, Umatilla, and Burnt River basins. Storage in <u>USACE</u> projects in the Willamette, Rogue, and Willow basins is average.

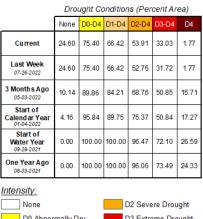
<u>Significant wildfire potential</u> for August ranges from average to above average throughout Oregon. Coverage of above average potential is forecast to expand in parts of western Oregon in September, while potential in southeastern Oregon is expected to reduce to average.

DROUGHT CONDITIONS

The US Drought Monitor indicates over 66% of Oregon is experiencing moderate (D1) to exceptional (D4) drought conditions. Recent change includes one-class degradations in portions of Harney and Malheur Counties due to high evaporative demand.



August 2, 2022 (Released Thursday, Aug. 4, 2022) Valid 8 a.m. EDT

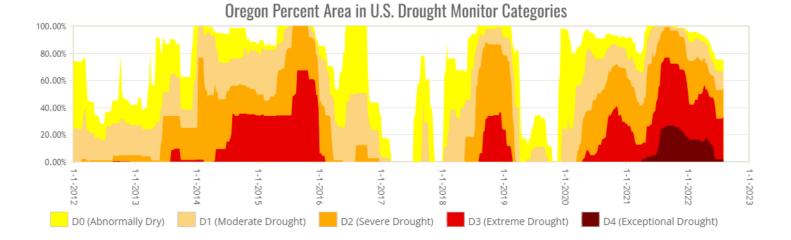


D0 Abnormally Dry D3 Extreme Drought

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

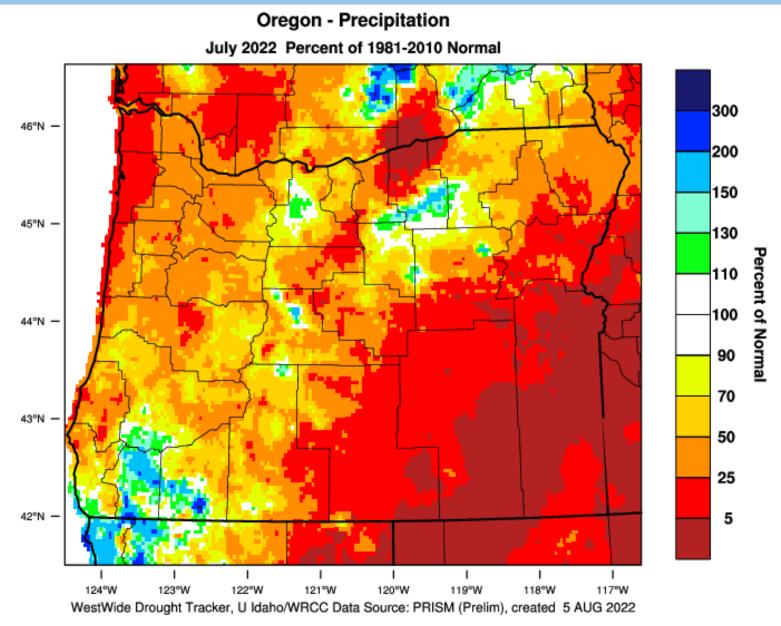
<u>Author:</u> Curtis Riganti National Drought Mitigation Center





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CLIMATE CONDITIONS PRECIPITATION



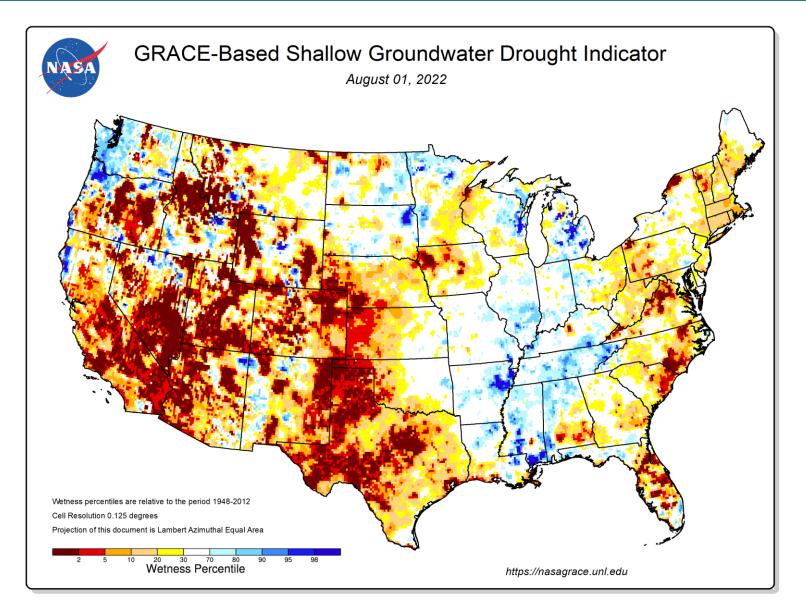
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TEMPERATURE

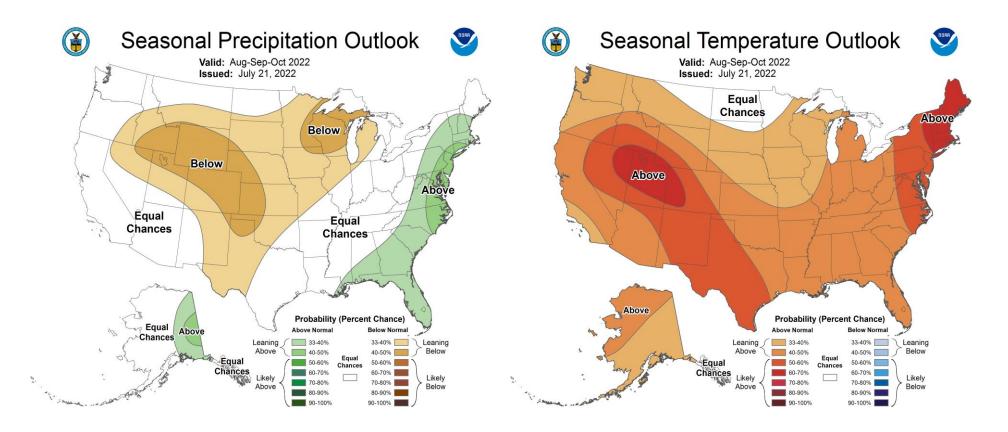
Oregon - Mean Temperature July 2022 Departure from 1981-2010 Normal 5.0 46°N -4.0 3.0 45°N -2.0 1.0 0.0 44°N --1.0 -2.0 43°N -3.0 -4.0 42°N --5.0 н 124°W 123°W 122°W 121°W 120°W 119°W 118°W 117°W WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 5 AUG 2022

Departure from Normal (°F)

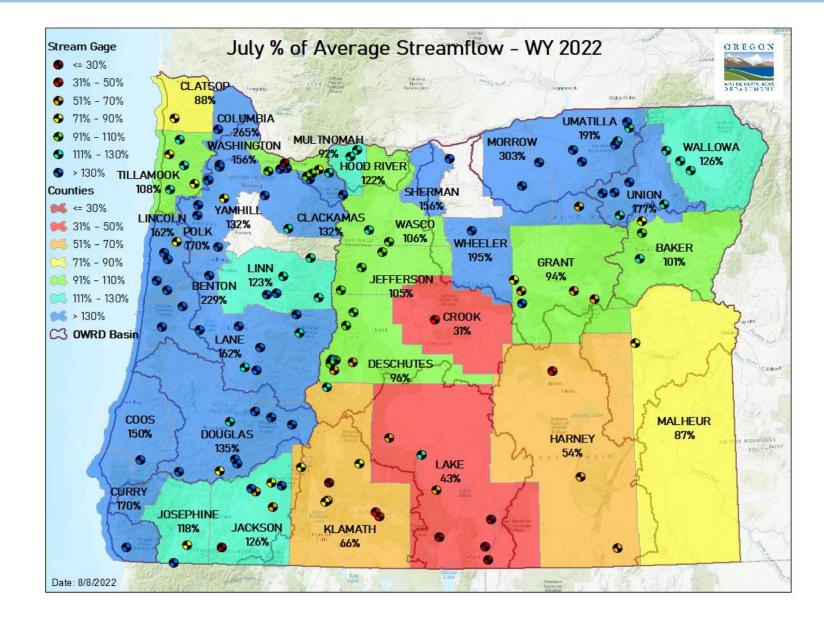
SOIL MOISTURE



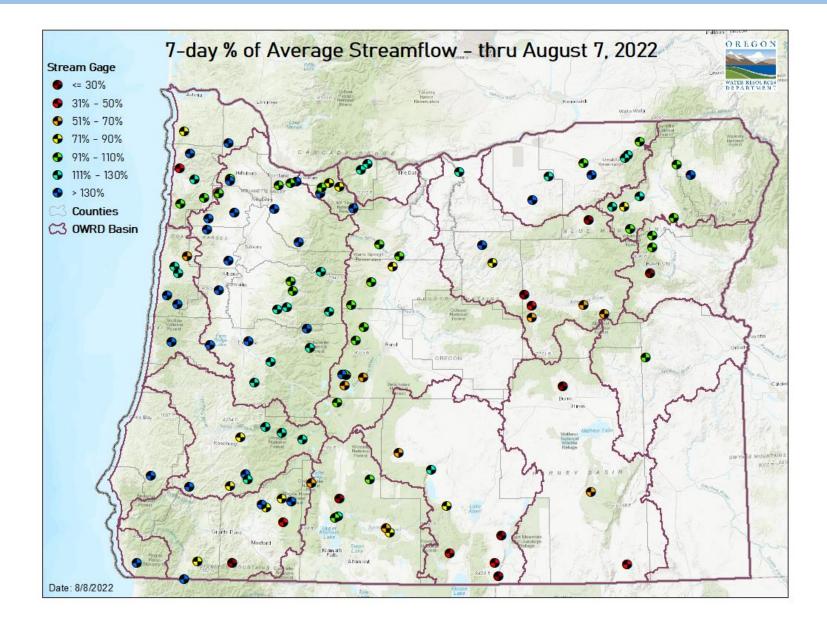
CLIMATE OUTLOOK



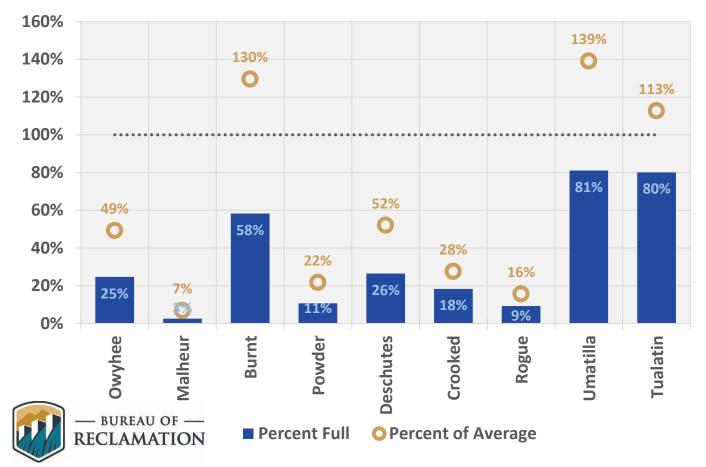
STREAMFLOW



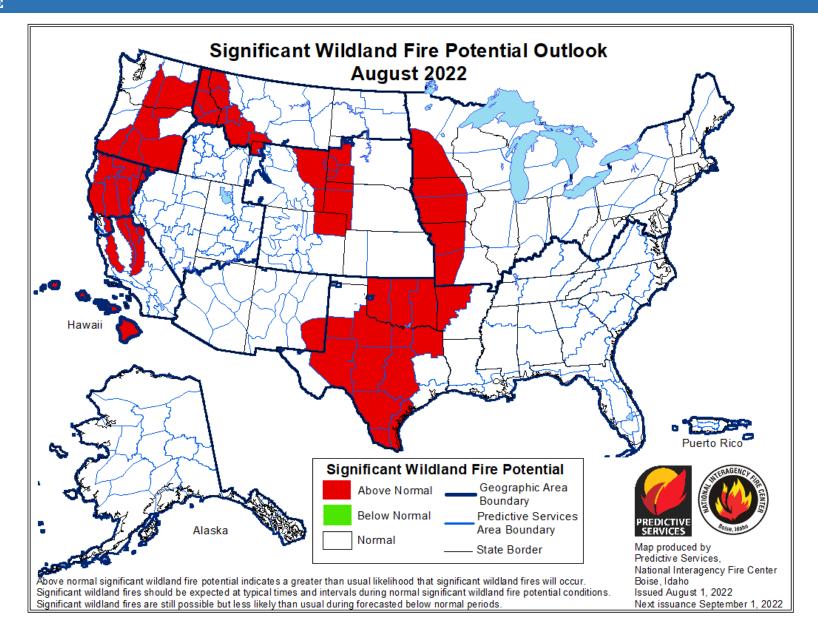
7-DAY



August 7 Reservoir Storage



WILDFIRE



RESOURCES/REFERENCES

Please visit <u>Oregon Water Resources Department's drought information page</u> to learn about current drought conditions, assistance programs, and potential drought tools.

If you are interested in submitting local drought-related conditions and impacts, please visit the <u>drought impacts toolkit</u> to learn more. <u>Click here</u> to visit the map of condition monitoring observer reports.

Released every Thursday, the <u>US Drought Monitor</u> provides a weekly assessment of drought conditions. The USDM provides a <u>network infographic</u> which depicts the network of observers who gather and report information about conditions and drought impacts.

The <u>WestWide Drought Tracker</u> uses data from <u>PRISM</u> to provide easy access to finescale drought monitoring and climate products, such as the figures depicting climate conditions within this report.

The National Weather Service's <u>Climate Prediction Center</u> offers <u>weekly</u>, <u>monthly</u>, and <u>seasonal</u> climate outlooks illustrating the probabilities of temperatures and precipitation.

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

NASA's <u>Gravity Recovery and Climate Experiment</u> (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 <u>Water Watch</u> provides maps of real-time and average streamflow conditions at USGS sites throughout the state.

Reservoir storage "teacup" diagrams are offered by both the <u>US Bureau of</u> <u>Reclamation</u> and <u>US Army Corps of Engineers</u>. 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 <u>InciWeb</u> and the Oregon Department of Forestry's <u>Wildfire News</u>, along with the <u>National Interagency Fire</u> <u>Center</u> which offers outlooks on the significant wildland fire potential.

Oregon Office of Emergency Management maintains a <u>hydrology/meteorology dashboard</u> 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 <u>Weekly Weather and Crop Bulletin</u> 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 <u>Drought Programs and Assistance</u> offers links to programs and resources to help those struggling with persistent drought.