

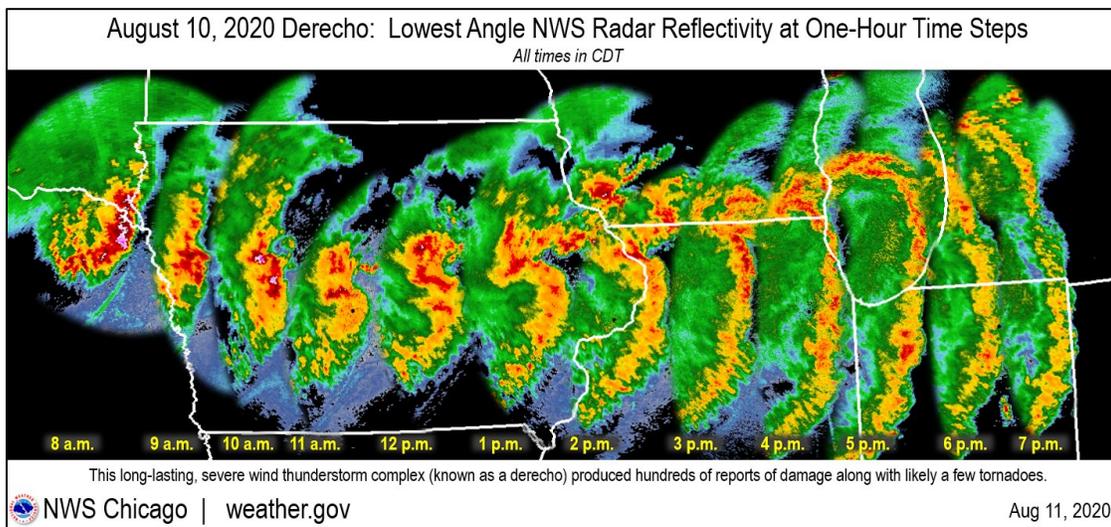
Water and Climate Update

August 13, 2020

The Natural Resources Conservation Service produces this weekly report using data and products from the [National Water and Climate Center](#) and other agencies. The report focuses on seasonal snowpack, precipitation, temperature, and drought conditions in the U.S.

Precipitation	2	Other Climatic and Water Supply Indicators	11
Temperature.....	6	More Information	18
Drought	8		

Severe damage left by powerful Midwest derecho storm



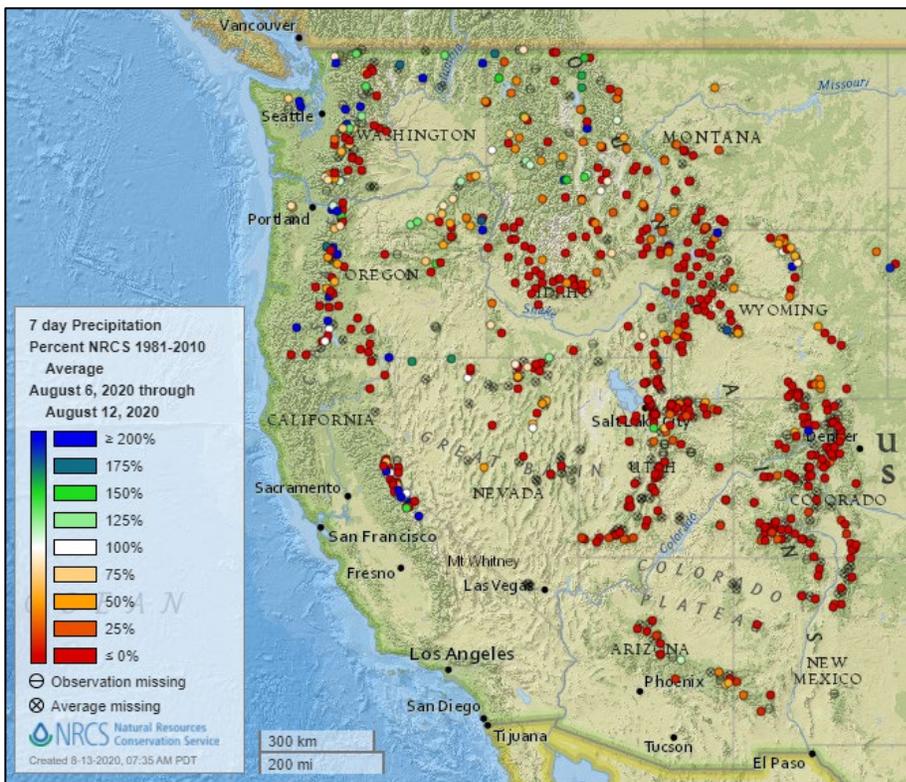
A severe, long-lasting straight windstorm, known as a derecho, left destruction across the Midwest on Monday. The fast-moving storm had widespread hurricane force winds of over 100 mph, heavy rain, severe thunderstorms, and at least seven tornadoes. Initially, over one million people were without power and several days later several hundred thousand are still waiting for a massive clean-up effort to clear downed trees and repair power lines. In Iowa, over 10 million acres of crops were damaged or destroyed, which can be seen on satellite imagery. Also damaged were many homes, roads, commercial and agricultural buildings, and facilities.

Related:

- [Hundreds of thousands in Iowa still without power after 112 mph winds near Cedar Rapids: 'It feels like we got kicked in the teeth'](#) Chicago Tribune (IL)
- [Monday's derecho damaged 10M acres of crops in Iowa; 600K still without power in Midwest](#) – USA Today
- [Iowa weather: Effects of Monday's derecho will linger for thousands of Iowans](#) – De Moines Register
- [Derecho, a huge wind storm, starts near Omaha and leaves path of destruction across Midwest](#) – Omaha.com (NE)
- [Midwest derecho devastates Iowa corn crop. Satellite imagery shows damage.](#) – Washington Post
- [Powerful derecho leaves path of devastation across Midwest](#) – ABC
- [Deadly derecho leaves path of destruction across Midwest, 1 million without power](#) – Indianapolis Star (IN)
- [What is a derecho? Iowa storm packed 100+ mph winds](#) – The Gazette (IA)

Precipitation

Last 7 Days, NRCS SNOTEL Network

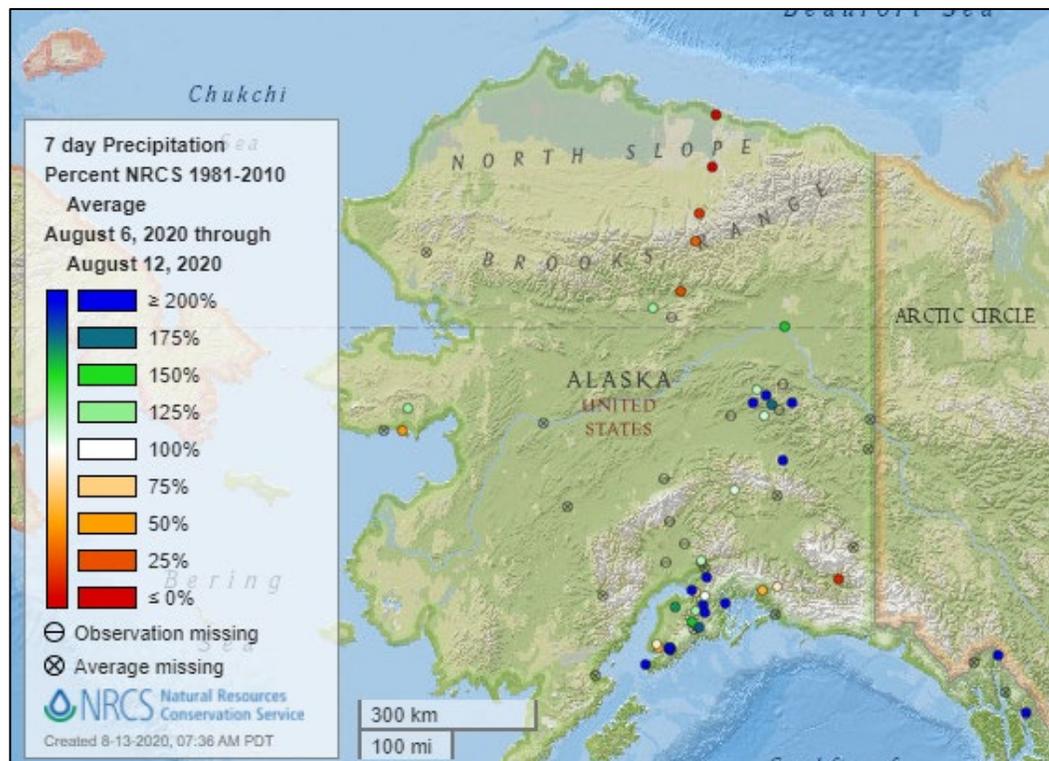


[7-day precipitation percent of average map](#)

See also:
[7-day total precipitation values \(inches\) map](#)

[Alaska 7-day precipitation percent of average map](#)

See also:
[Alaska 7-day total precipitation values \(inches\) map](#)



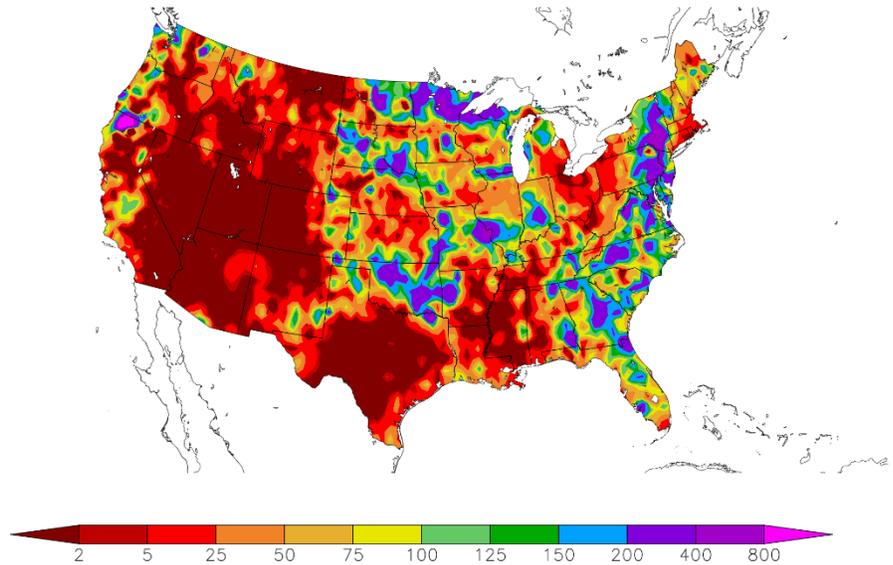
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

[7-day precipitation percent of normal map](#) for the continental U.S.

See also: [7-day total precipitation values \(inches\) map](#)

Percent of Normal Precipitation (%)
8/5/2020 – 8/11/2020



Generated 8/12/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

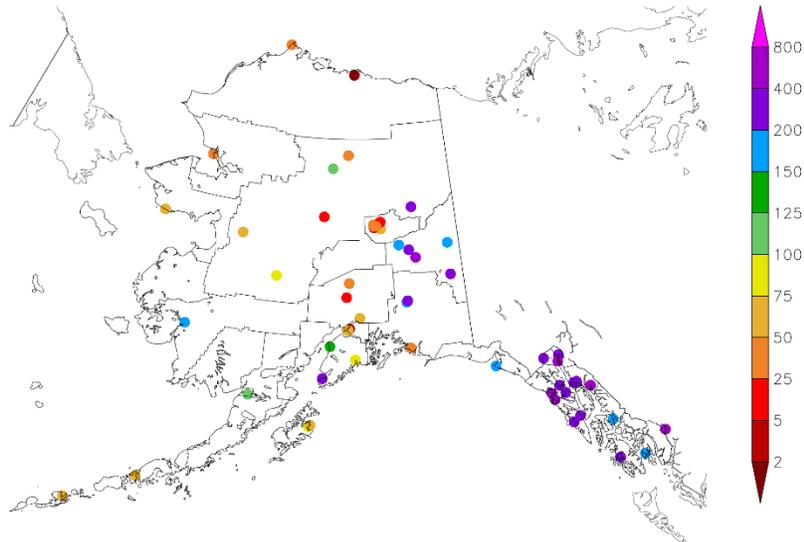
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

[7-day precipitation anomaly map](#) for Alaska.

See also: [7-day total precipitation values \(inches\) map](#)

Percent of Normal Precipitation (%)
8/5/2020 – 8/11/2020



Generated 8/12/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

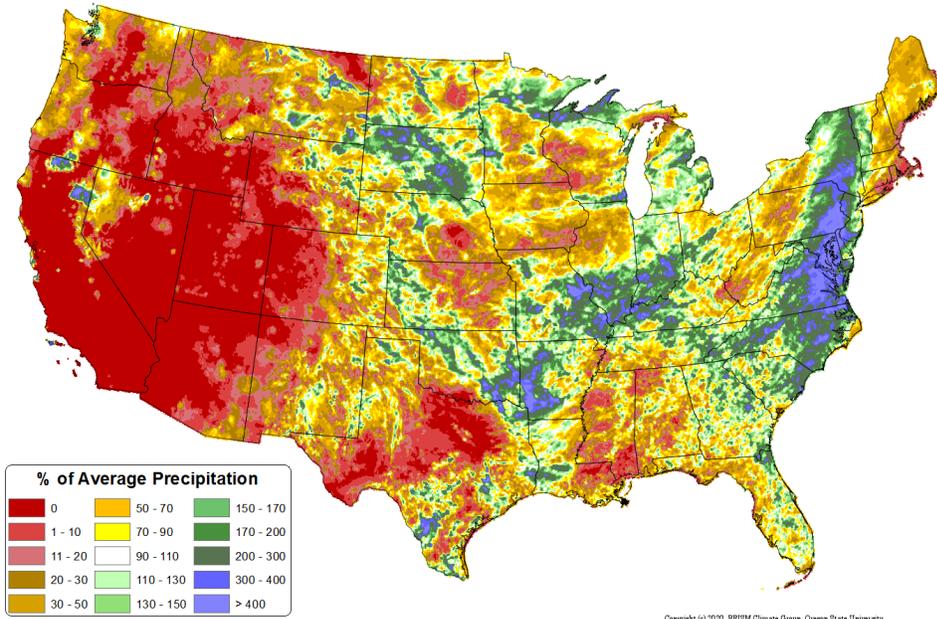
Water and Climate Update

Month to Date, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

Total Precipitation Anomaly: 01 Aug 2020 - 12 Aug 2020
Period ending 7 AM EST 12 Aug 2020
Base period: 1981-2010
(Map created 13 Aug 2020)

[Month to date national total precipitation percent of average map](#)



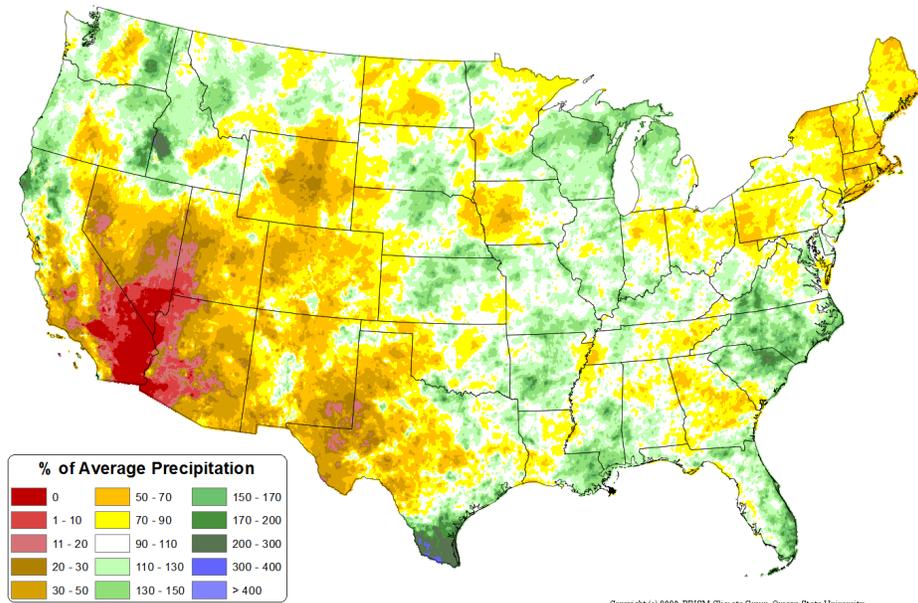
Copyright (c) 2020, PRISM Climate Group, Oregon State University

Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

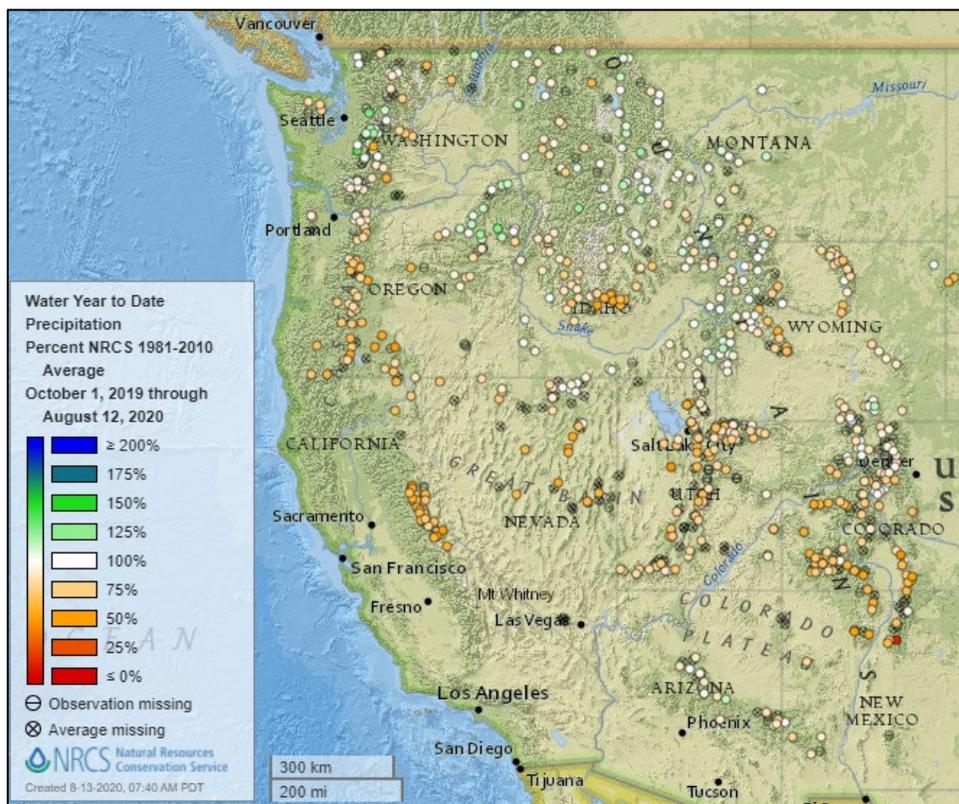
[May through July precipitation percent of average map](#)

Total Precipitation Anomaly: May 2020 - Jul 2020
Period ending 7 AM EST 31 Jul 2020
Base period: 1981-2010
(Map created 02 Aug 2020)



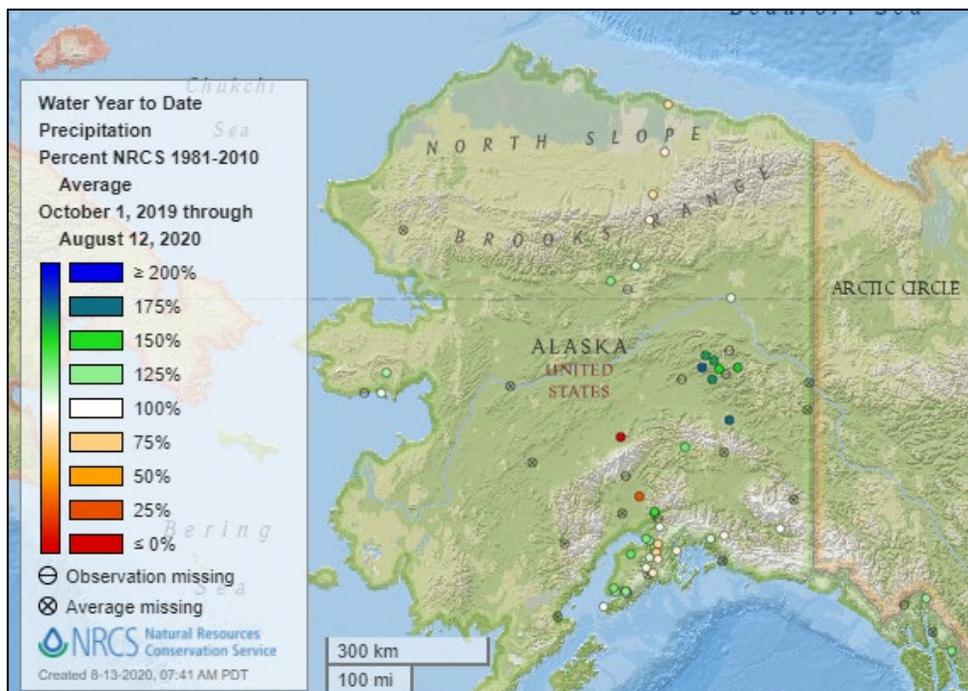
Copyright (c) 2020, PRISM Climate Group, Oregon State University

Water Year-to-Date, NRCS SNOTEL Network



[2020 water year-to-date precipitation percent of average map](#)

See also:
[2020 water year-to-date precipitation values \(inches\) map](#)



[Alaska 2020 water year-to-date precipitation percent of average map](#)

See also: [Alaska 2020 water year-to-date precipitation values \(inches\) map](#)

Temperature

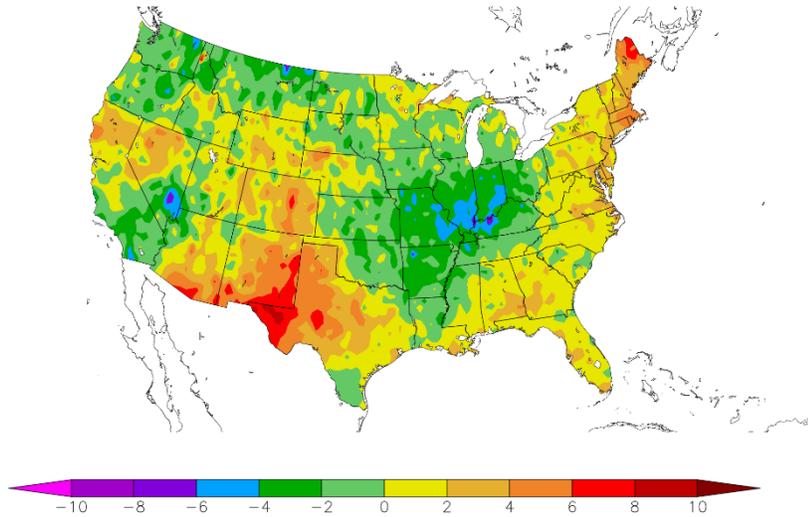
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

[7-day temperature anomaly map](#) for the contiguous U.S.

See also: [7-day temperature \(° F\) map](#)

Departure from Normal Temperature (F)
8/5/2020 – 8/11/2020



Generated 8/12/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

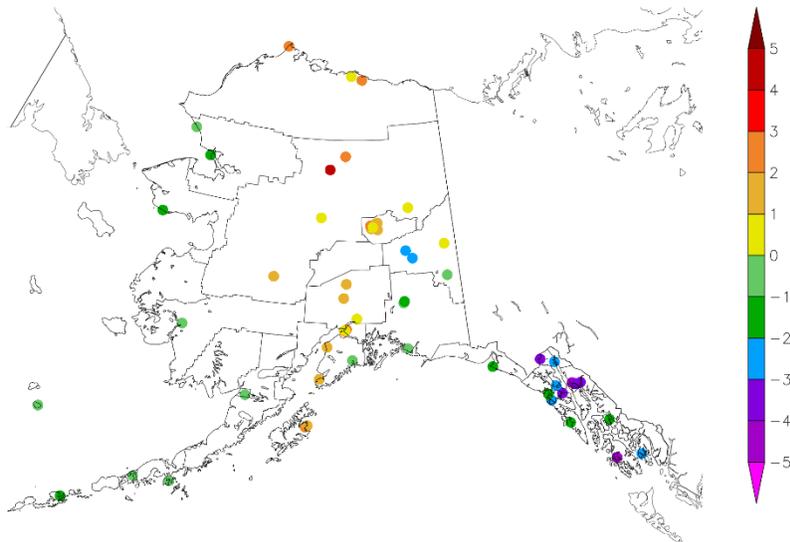
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

[7-day temperature anomaly map](#) for Alaska.

See also: [7-day temperature \(° F\) map](#)

Departure from Normal Temperature (F)
8/5/2020 – 8/11/2020



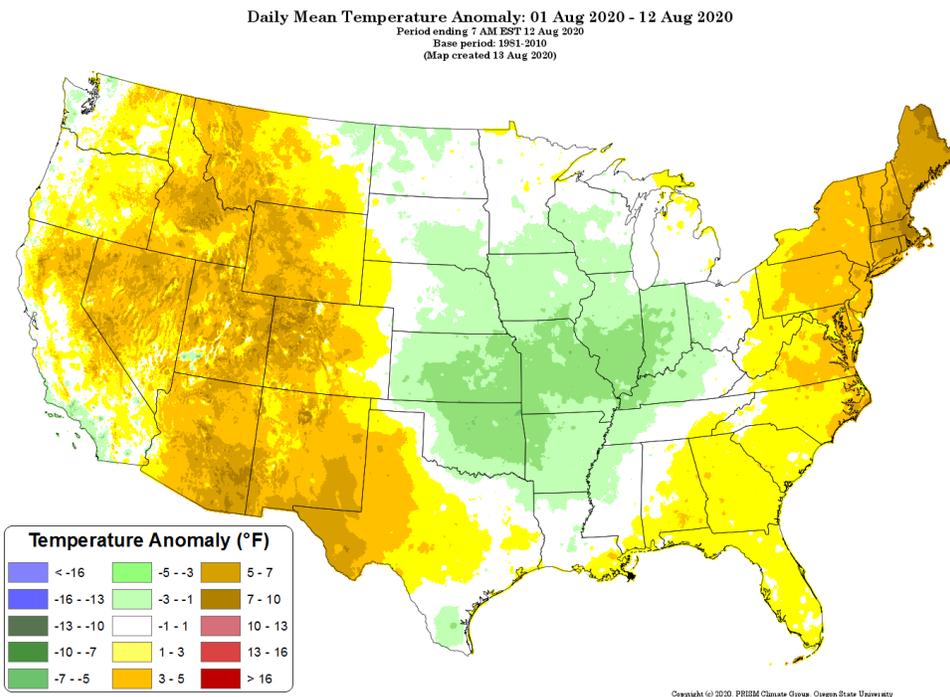
Generated 8/12/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

Month to Date, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

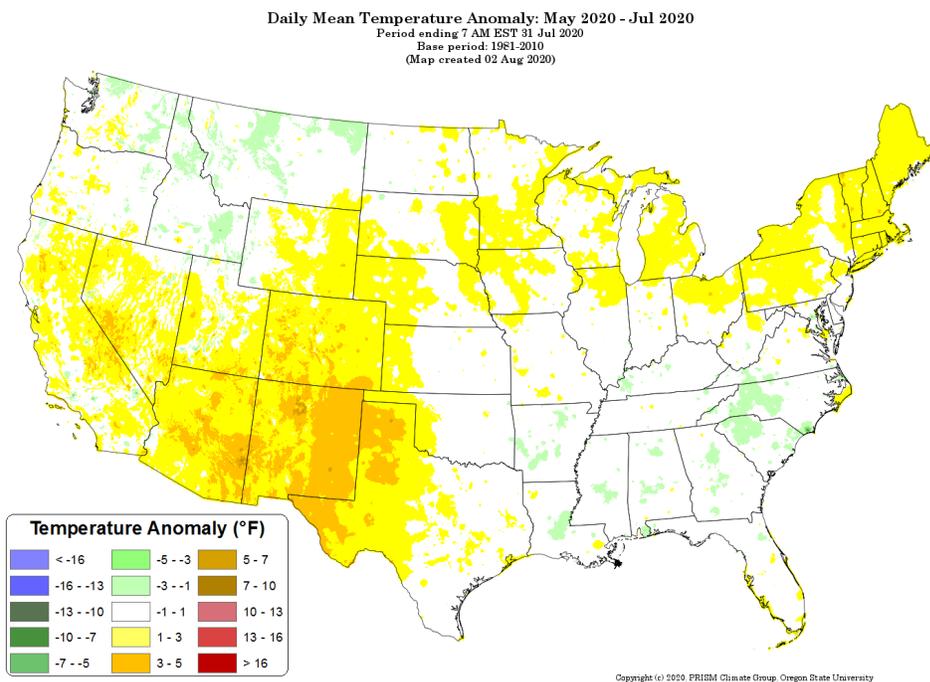
[Month to date national daily mean temperature anomaly map](#)



Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

[May through July 2020 daily mean temperature anomaly map](#)



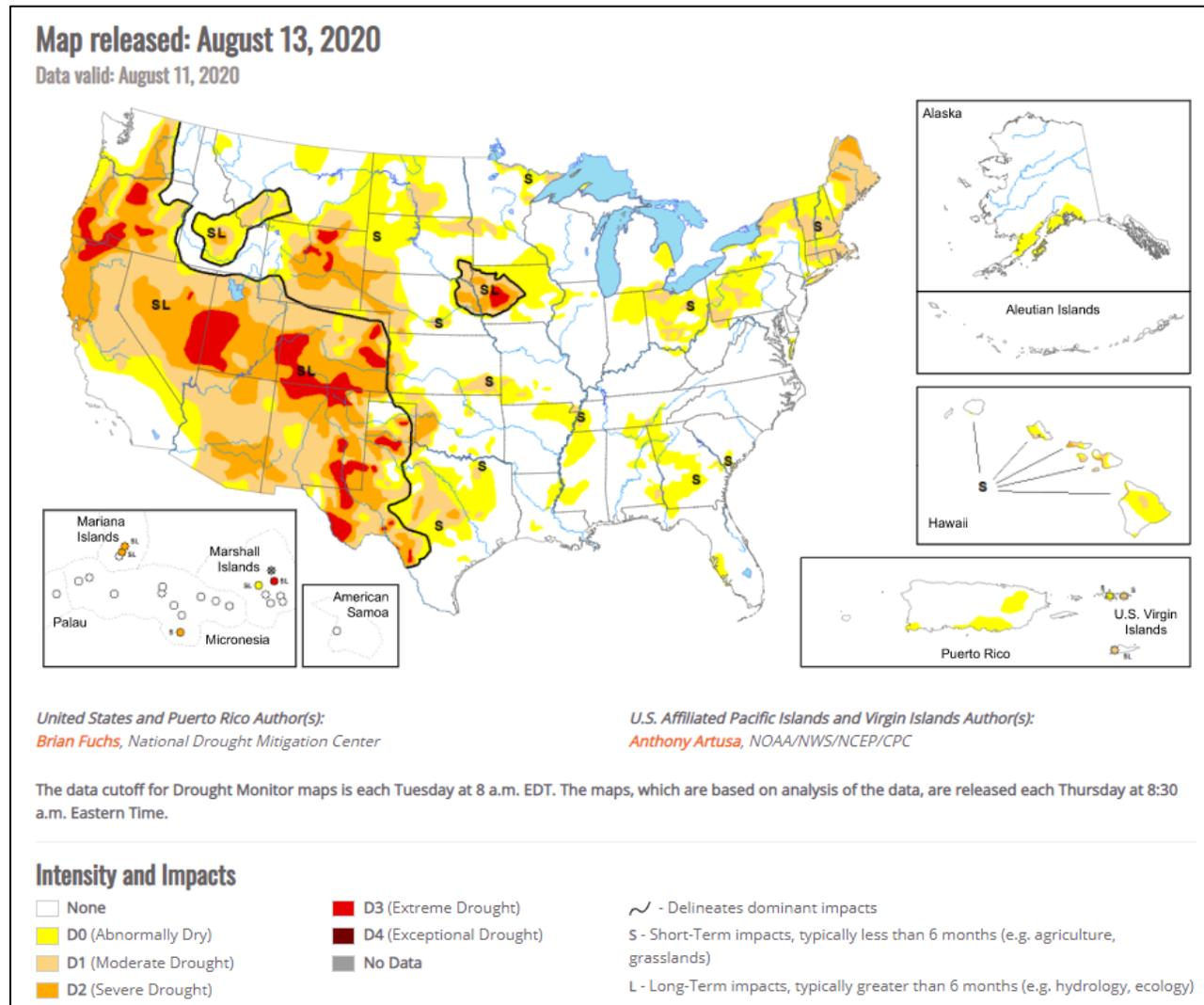
Drought

[U.S. Drought Monitor](#)

Source: National Drought Mitigation Center

[U.S. Drought Portal](#)

Source: NOAA



Current [National Drought Summary](#), August 13, 2020

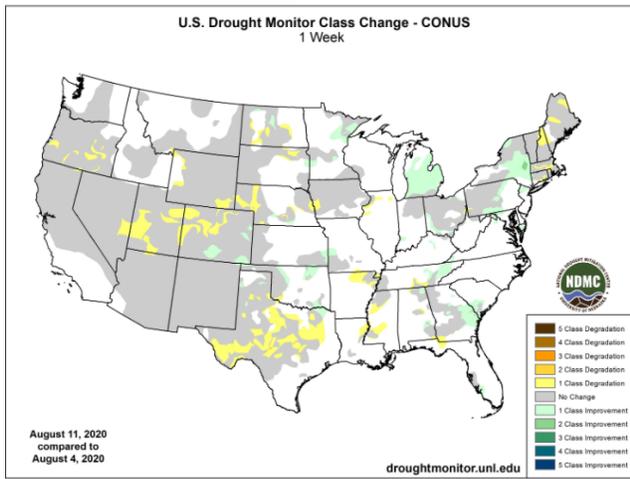
Source: National Drought Mitigation Center

“As Tropical Storm Isaias made its way up the east coast, many areas in the Northeast were beneficiaries of good precipitation amounts, but others missed out completely. In typical summer fashion, rains were hit and miss across the country, with the West and into the southern Plains as well as most areas of the South mainly being missed. Mixed precipitation was recorded through the Plains and Midwest as well as portions of the Southeast. A strong derecho ripped across the Midwest on August 10th with over 100 mph straight line winds doing damage to crops and property. Temperatures were cooler than normal over much of the Midwest and High Plains, with portions of Missouri and Illinois 6-8 degrees below normal for the week. Temperatures were near normal along much of the east coast and 6-8 degrees above normal over west Texas and into New Mexico.”

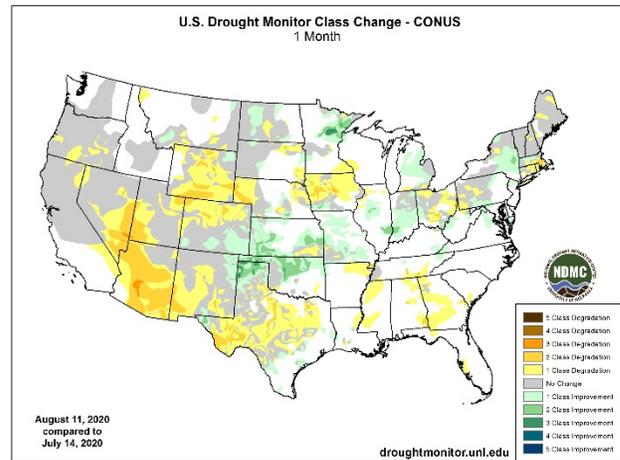
Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

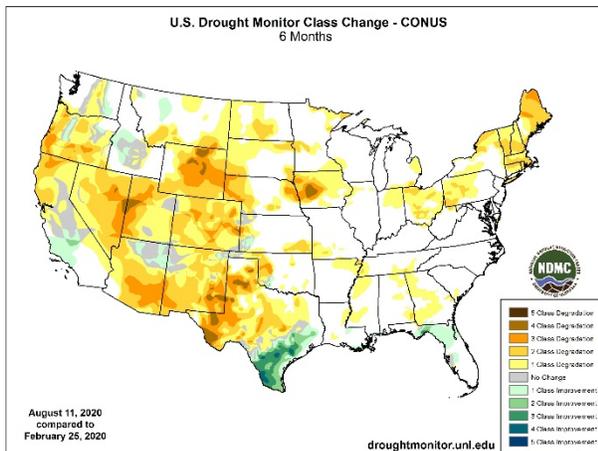
1 Week



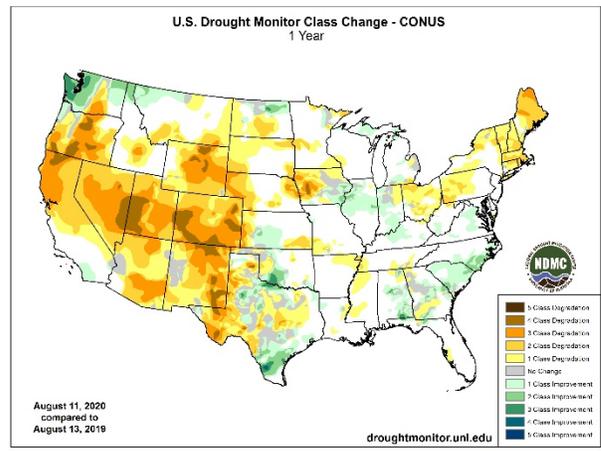
1 Month



6 Months



1 Year



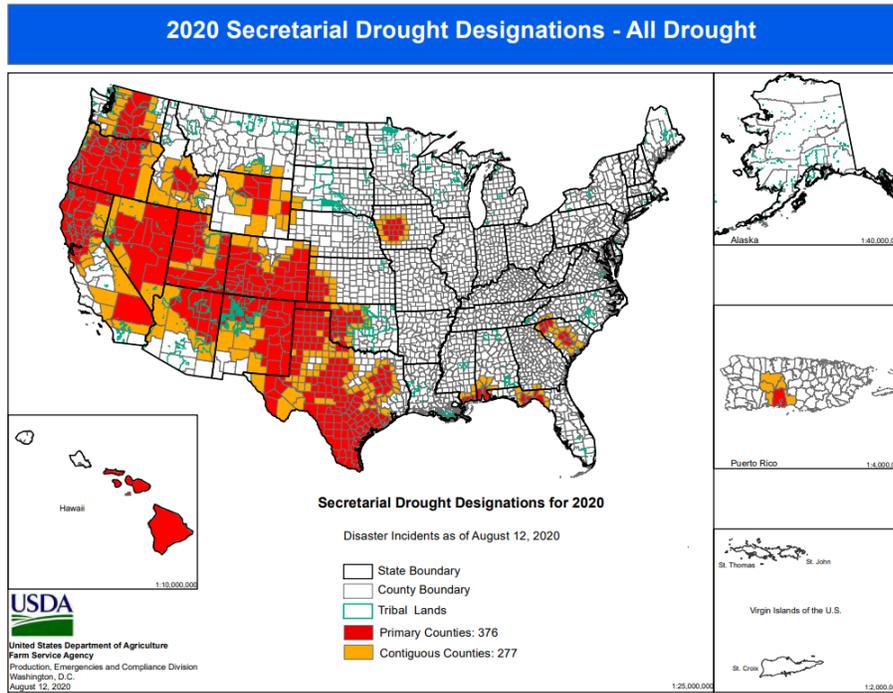
[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

Highlighted Drought Resources

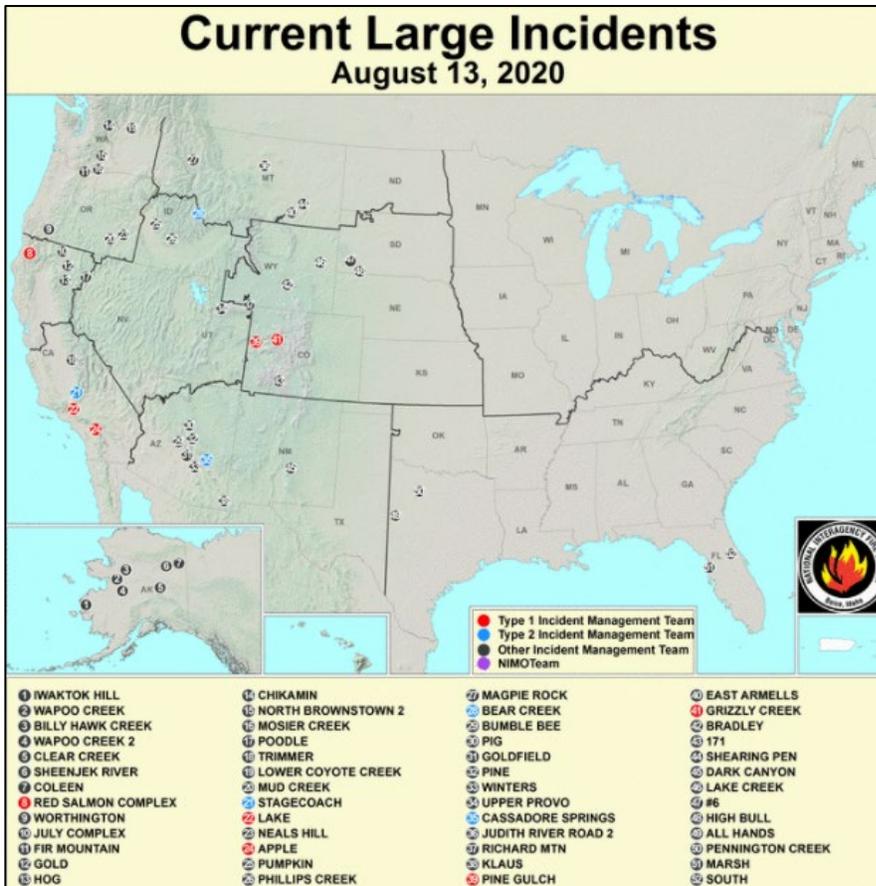
- [Drought Impact Reporter](#)
- [Quarterly Regional Climate Impacts and Outlook](#)
- [U.S. Drought Portal Indicators and Monitoring](#)
- [U.S. Population in Drought, Weekly Comparison](#)
- [USDA Disaster and Drought Information](#)

Secretarial Drought Designations

Source: USDA Farm Service Agency



Wildfires: USDA Forest Service Active Fire Mapping



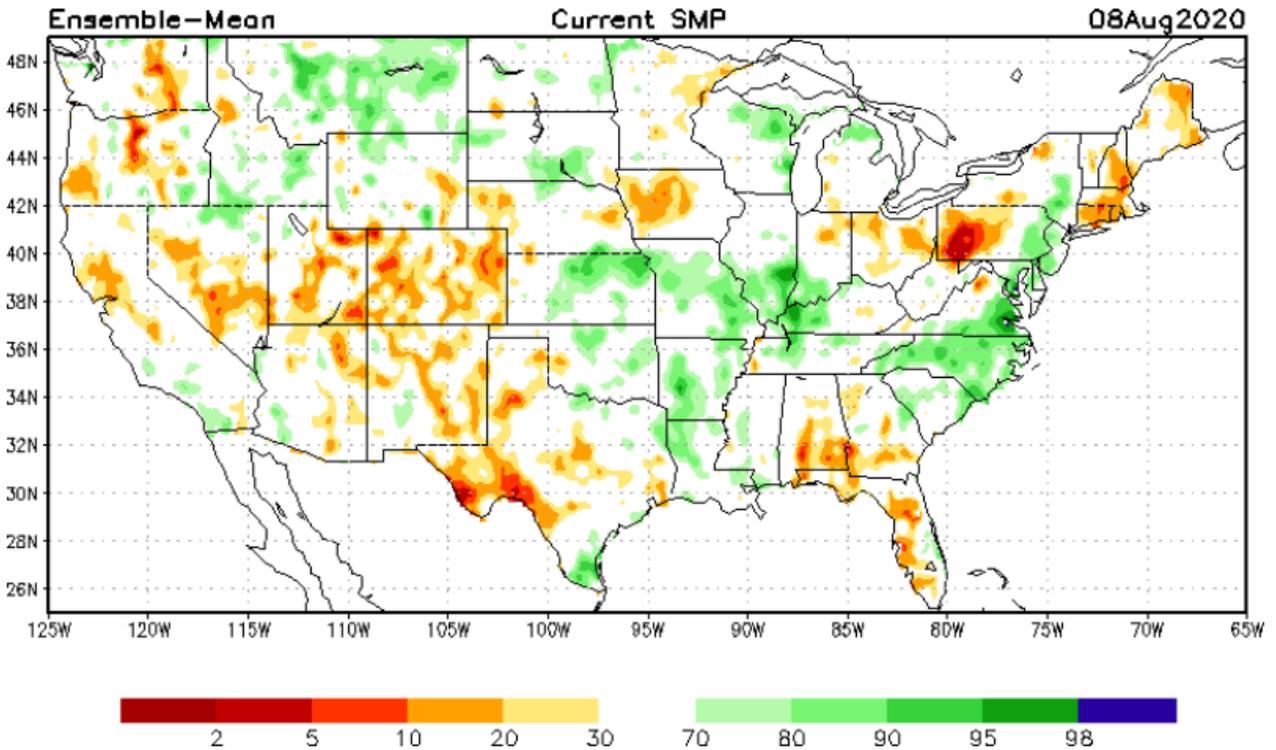
Highlighted Wildfire Resources

- [National Interagency Fire Center](#)
- [InciWeb Incident Information System](#)
- [Significant Wildland Fire Potential Outlook](#)

Other Climatic and Water Supply Indicators

Soil Moisture

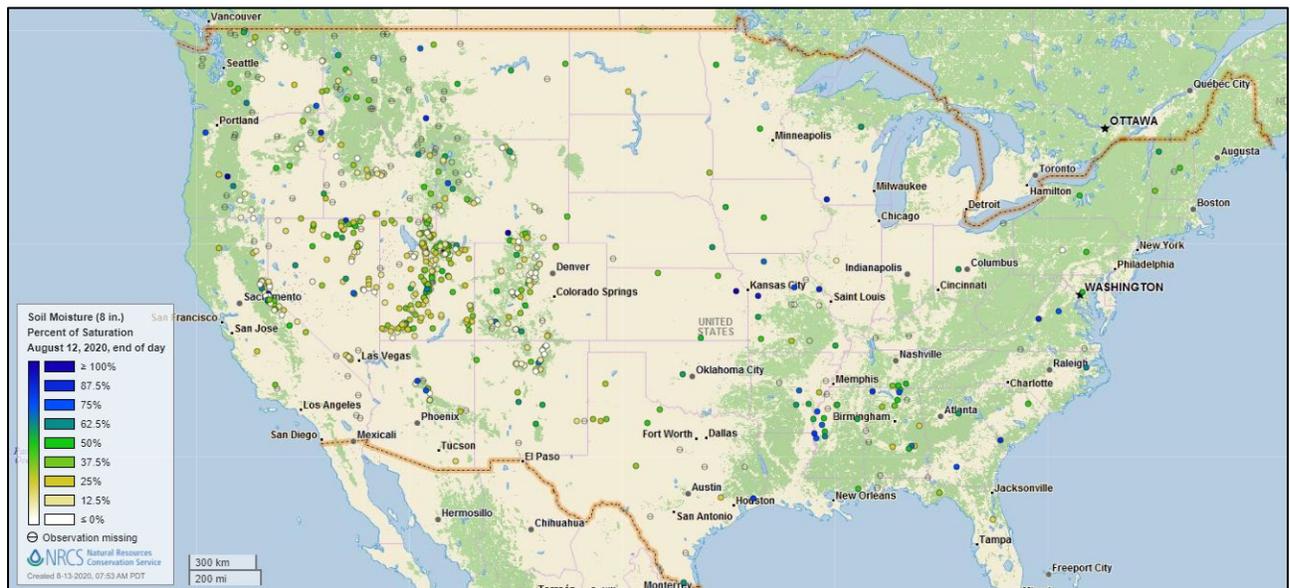
Source: NOAA National Centers for Environmental Prediction



[Modeled soil moisture percentiles](#) as of August 8, 2020

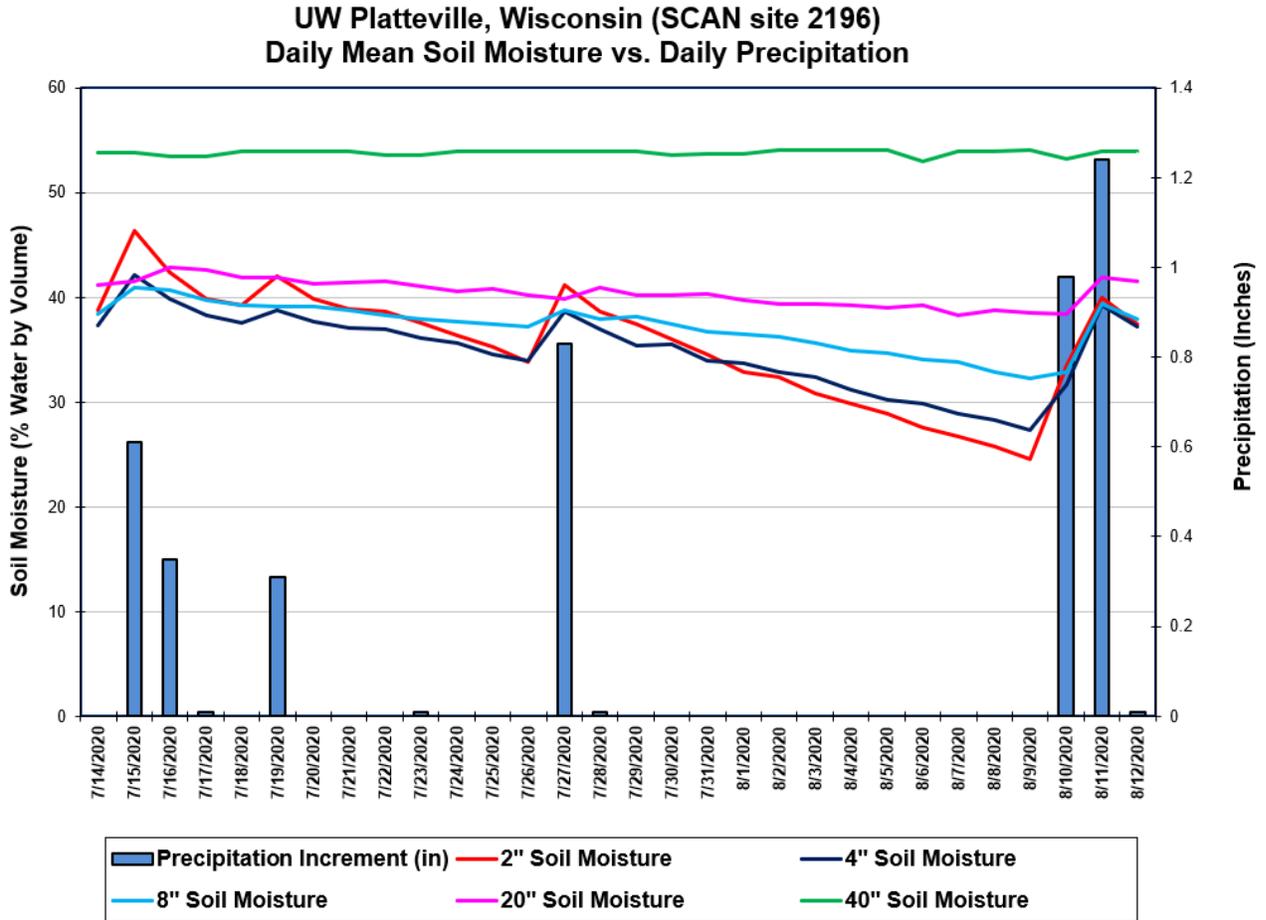
Soil Moisture Percent of Saturation

Source: NRCS SNOTEL and [Soil Climate Analysis Network](#) (SCAN)



Soil Moisture Data

Source: NRCS [Soil Climate Analysis Network](#) (SCAN)



This chart shows the soil moisture and precipitation for the last 30 days at the [UW Platteville](#) SCAN site in Wisconsin. Precipitation associated with the derecho on August 10-11 resulted in increased soil moisture at all sensor depths. Accumulated precipitation for the period was 4.36".

Soil Moisture Data Portals

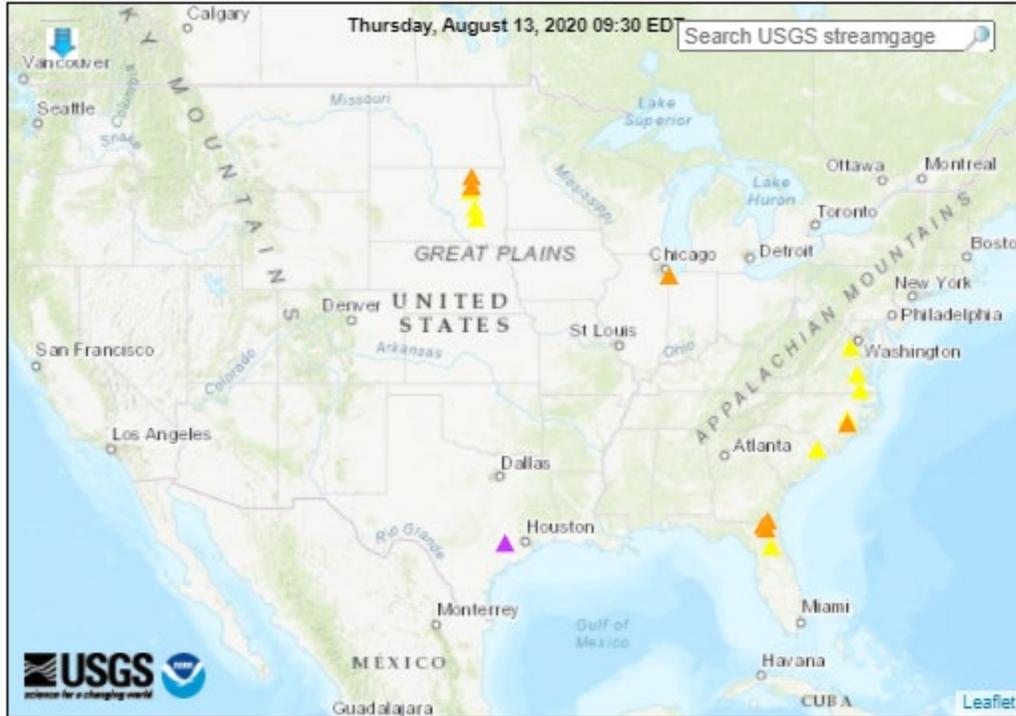
- [CRN Soil Moisture](#)
- [Texas A&M University North American Soil Moisture Database](#)
- [University of Washington Experimental Modeled Soil Moisture](#)

Streamflow, Drought, Flood, and Runoff

Source: U.S. Geological Survey

Map of flood and high flow conditions

(8 in floods [major: 1, minor: 7], 9 in near-flood)



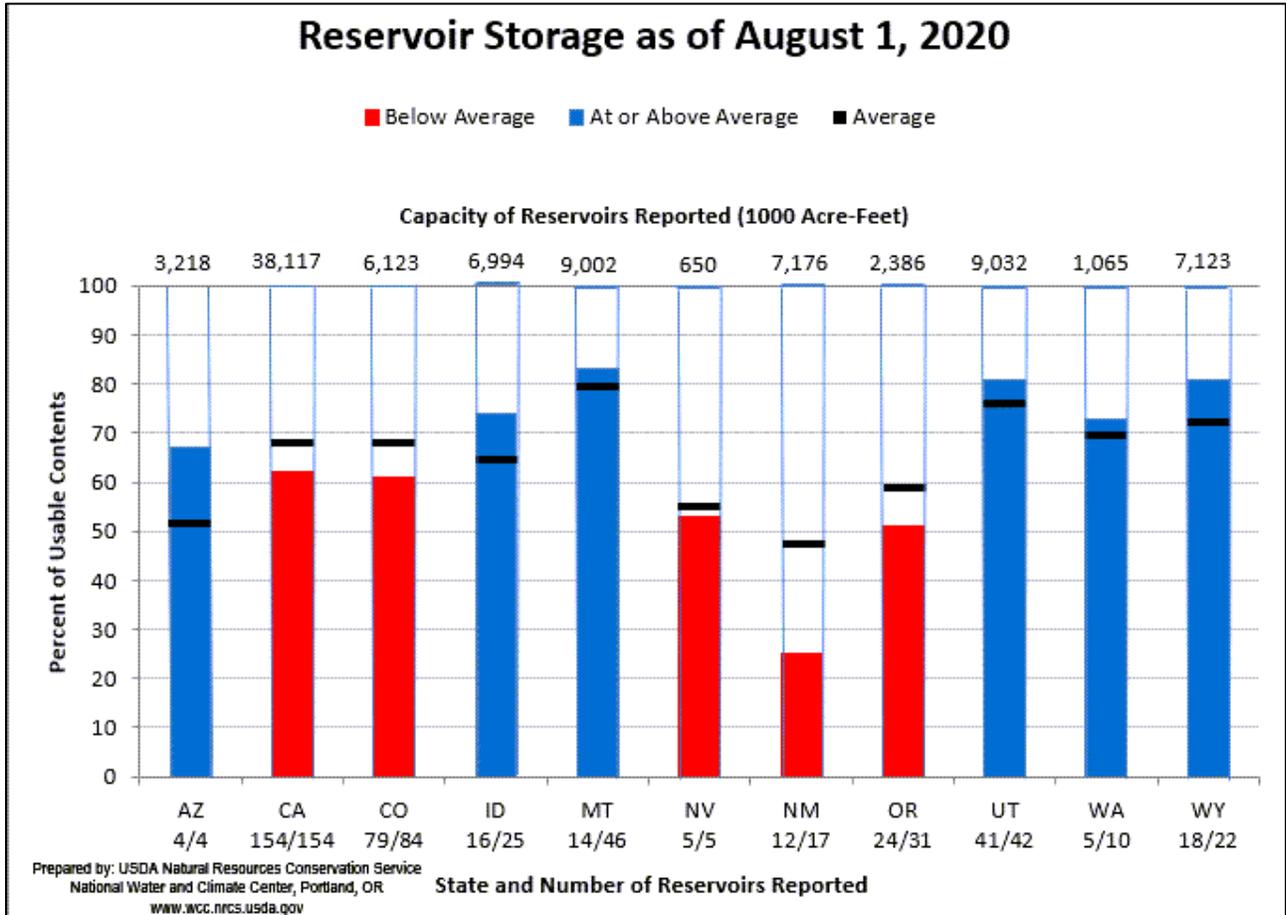
Explanation - Percentile classes						
<95	95-98	>= 99	Above action stage	Above flood stage	Above moderate flood stage	Above major flood stage
			△ Streamgage with flood stage	○ Streamgage without flood stage		

[WaterWatch: Streamflow, drought, flood, and runoff conditions](#)

Reservoir Storage

Western States Reservoir Storage

Source: NRCS National Water and Climate Center



August 1, 2020 Reservoir Storage: [Chart](#) | [Dataset](#)

Hydromet Teacup Reservoir Depictions

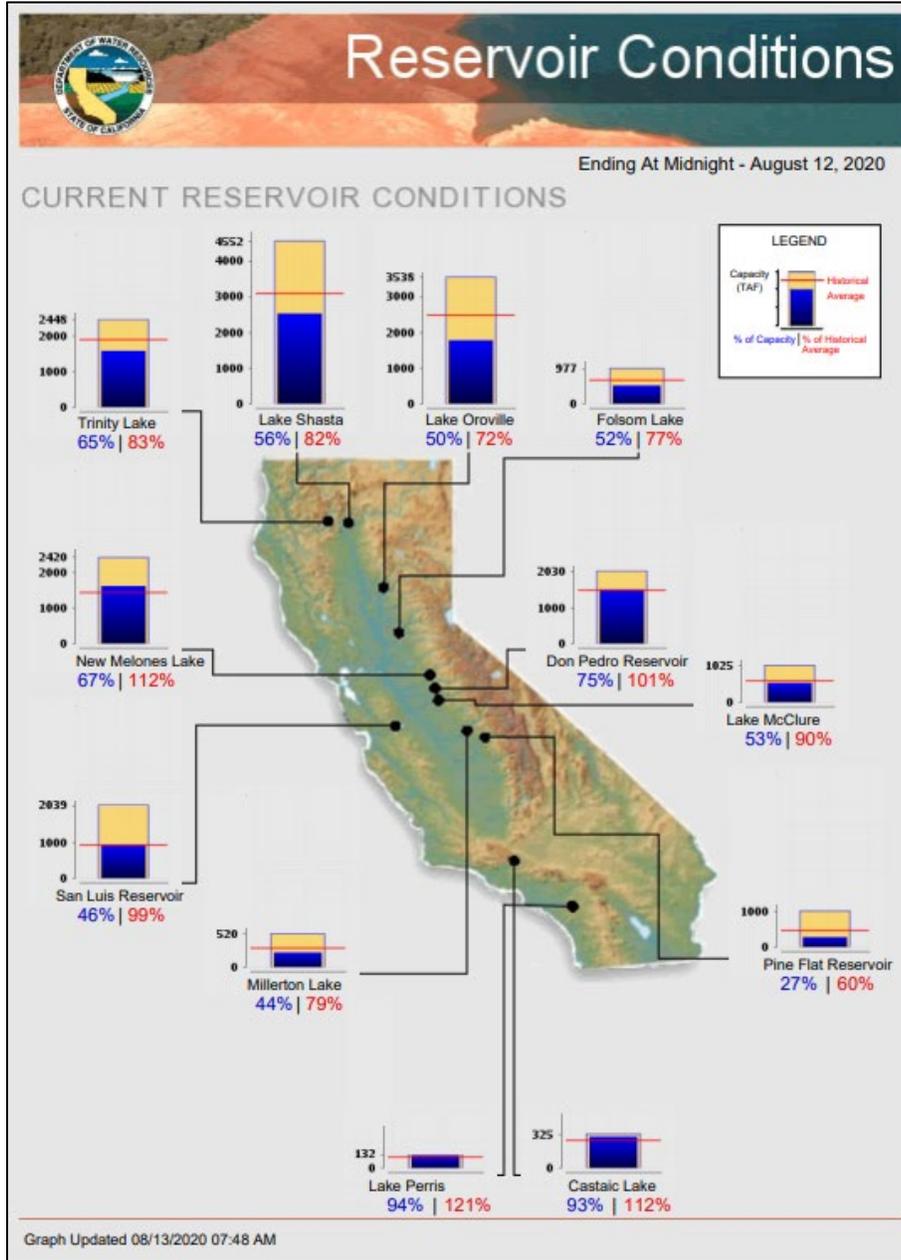
Source: U.S. Bureau of Reclamation

- [Upper Colorado](#)
- [Pacific Northwest/Snake/Columbia](#)
- [Sevier River Water, Utah](#)
- [Upper Missouri, Kansas, Oklahoma, Texas](#)

Water and Climate Update

Current California Reservoir Conditions

Source: California Department of Water Resources



[Current California Reservoir Conditions](#)

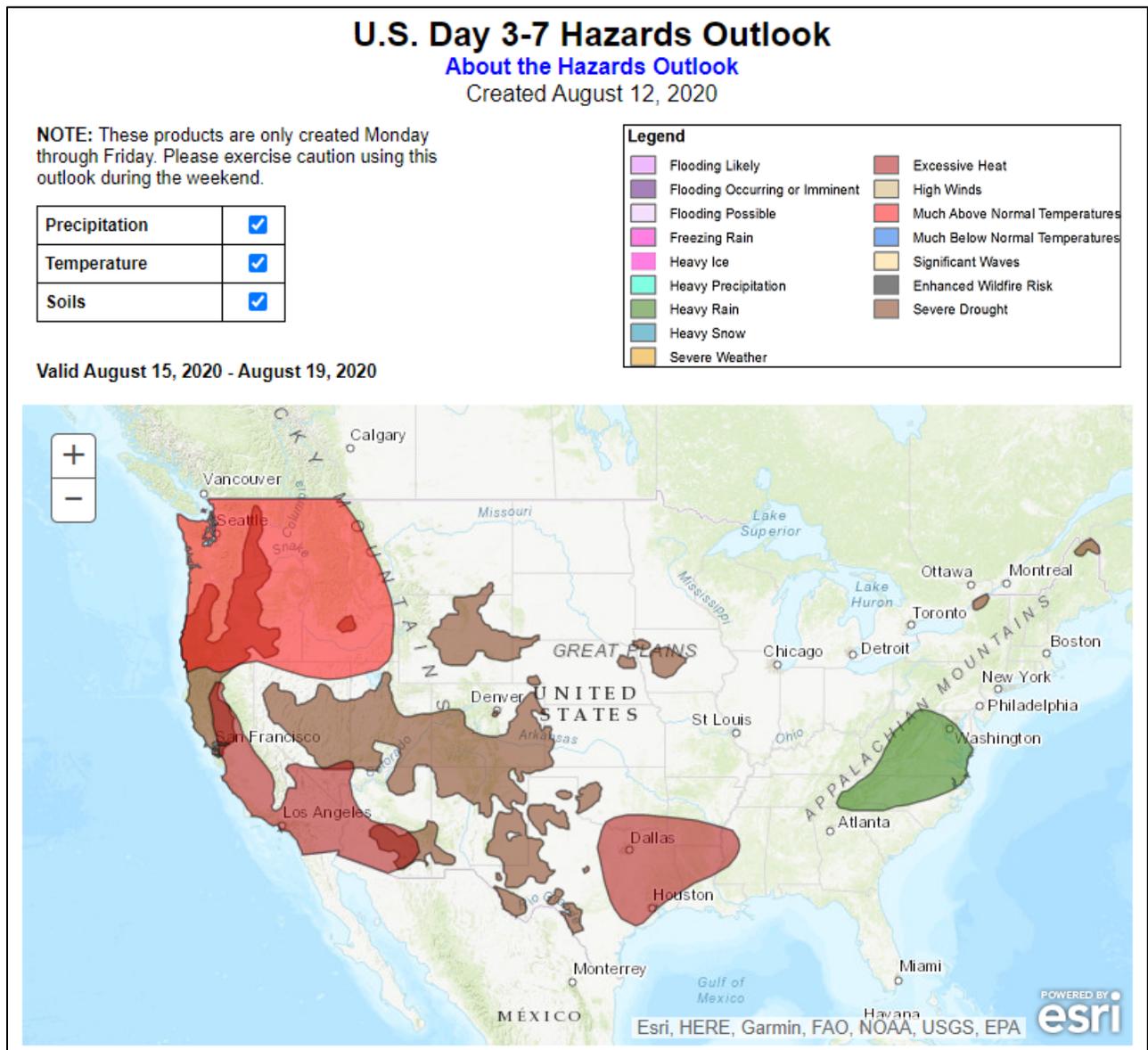
Agricultural Weather Highlights

Author: Brad Rippey, Agricultural Meteorologist, USDA/OCE/WAOB

National Outlook, Thursday, August 13, 2020: “Hot, mostly dry weather will dominate the western half of the country, with extreme heat persisting in most areas and returning during the weekend across the Northwest. Little or rain will fall during the next 5 days from the Pacific Coast to the High Plains. Meanwhile, cooler air will gradually replace very warm, humid conditions across the eastern half of the U.S. By early next week, lingering heat and humidity should be mostly limited to the lower Southeast, including Florida. Stormy weather will persist through Friday in the upper Midwest, where additional rainfall could total 1 to 3 inches. Elsewhere, showers and thunderstorms will continue through the weekend in the middle and southern Atlantic States, where 1- to 3-inch totals should also occur. Locally higher amounts in the mid-Atlantic could result in flash flooding. The NWS 6- to 10-day outlook for August 18 – 22 calls for below-normal temperatures across much of the eastern half of the U.S., while hotter-than-normal conditions will cover southern Florida, much of New England, and from the Pacific Coast to the High Plains. Meanwhile, near- or below-normal rainfall across most of the country should contrast with wetter-than-normal weather in southern sections of California and Texas, parts of the Pacific Northwest, and the southern Atlantic States.”

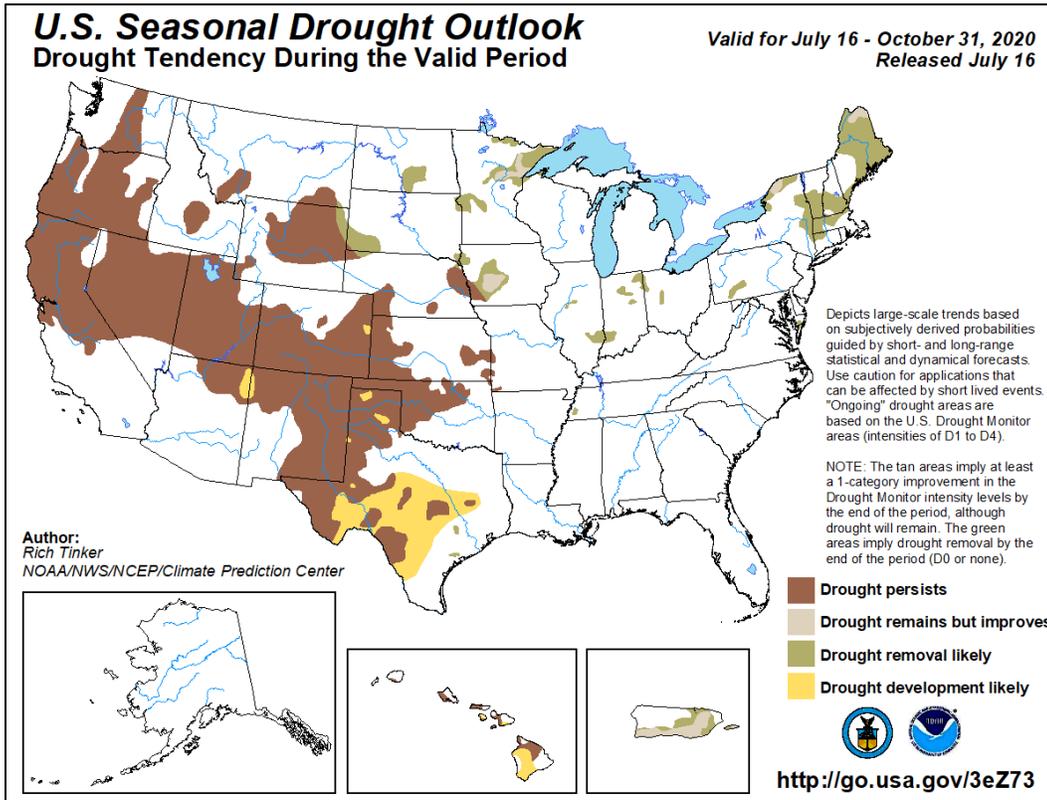
Weather Hazards Outlook: [August 15 - 19, 2020](#)

Source: NOAA Weather Prediction Center



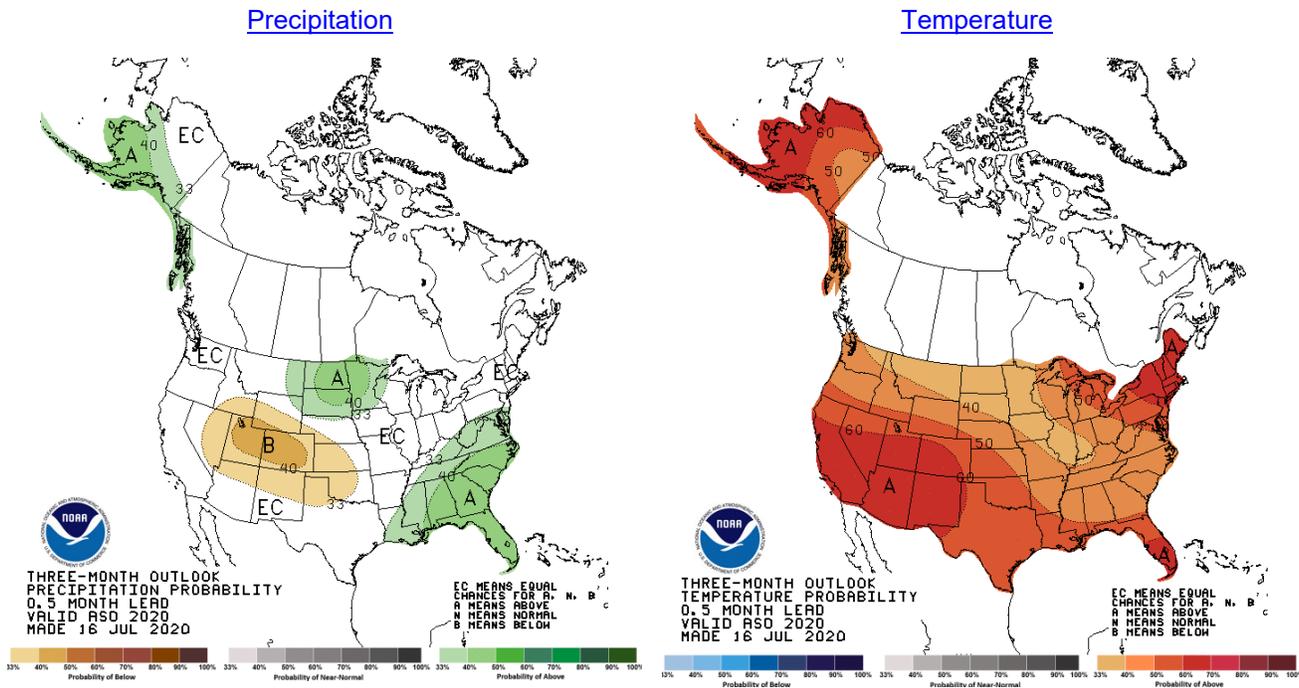
Seasonal Drought Outlook: [July 16 – October 31, 2020](#)

Source: National Weather Service



Climate Prediction Center 3-Month Outlook

Source: National Weather Service



[August-September-October \(ASO\) 2020 precipitation and temperature outlook summaries](#)

More Information

The NRCS [National Water and Climate Center](#) publishes this weekly report. We welcome your feedback. If you have questions or comments, please [contact us](#).