

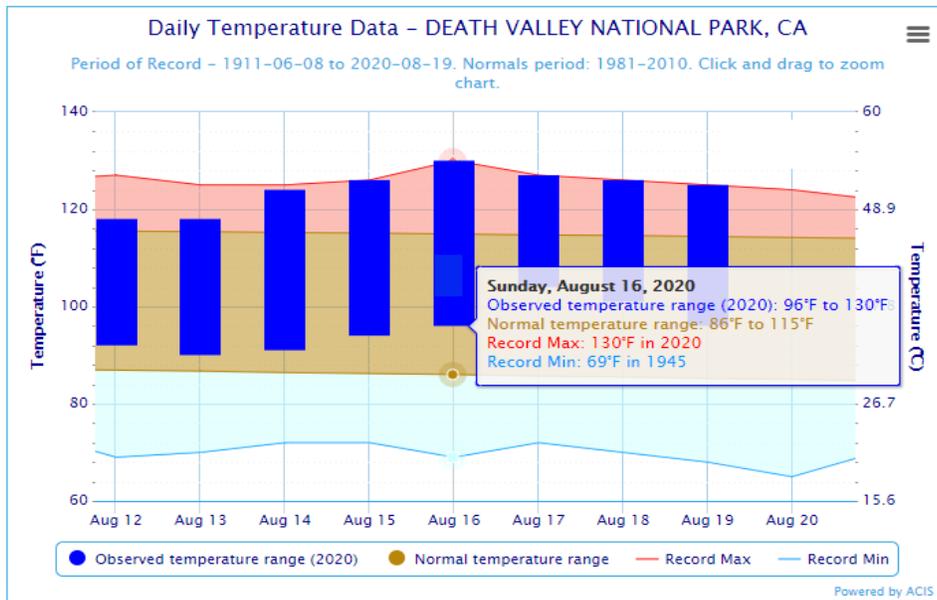
# Water and Climate Update

## August 20, 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.

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### Record heat scorching the West, fueling wildfires



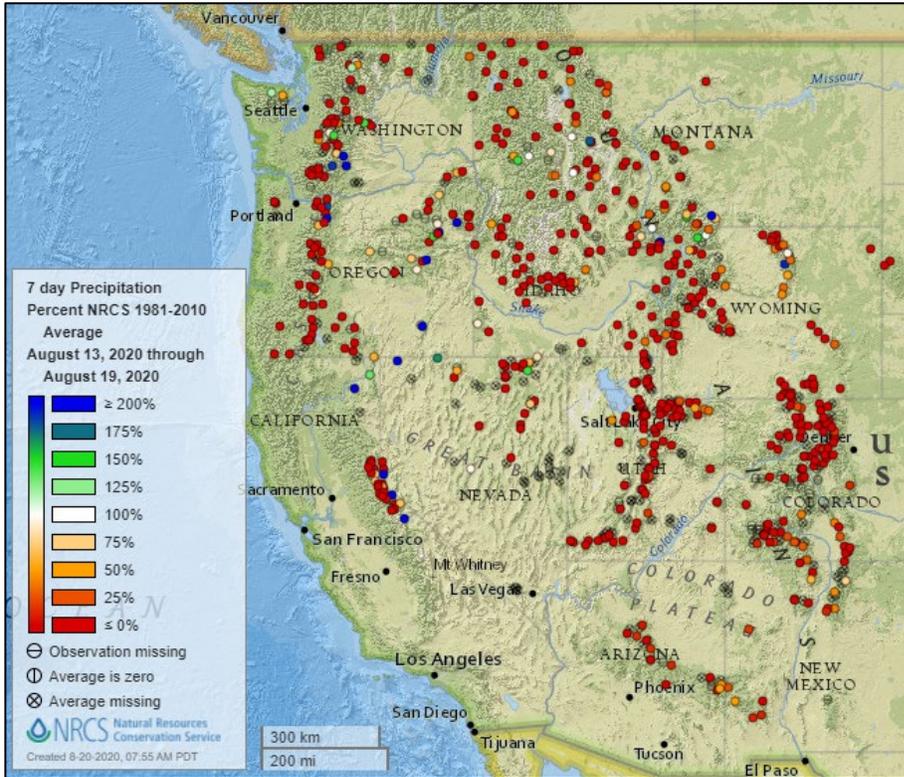
A heatwave has dominated the West, with record temperatures reported across the region. A possible new world record high temperature of 130° Fahrenheit was recorded in Death Valley, California on Sunday, August 16. On Sunday alone, California received more than 10,800 lightning strikes starting 367 fires. Nationally, 86 large fires have burned over 879,000 acres. Almost 20,000 wildland firefighters and support personnel are assigned to fight these fires with the National Guard assisting firefighters in Washington and California. The heat and large power demand have caused rolling blackouts in California.

**Related:**

- [Las Vegas bakes in record temperatures amid heat wave across Western U.S.](#) – Las Vegas Sun
- [Record temperatures set in these Southern California cities on Aug. 18](#) – Los Angeles Daily News
- [Excessive heat: No end in sight for triple-digit Valley temperatures, wildfire smoke](#) – The Fresno Bee
- [Fresno hits a record high as state heat wave continues weeklong march](#) – The Fresno Bee on MSN.com
- [New global temperature record set in California's Death Valley](#) – Reuters
- [Billings reaches 100 degrees, breaks daily temp record](#) – Billings Gazette
- [With 367 wildfires raging, Cal Fire to all California residents: 'Be ready to go'](#) – Los Angeles Daily News
- [Californians Urged to Conserve Energy Again Amid Heat Wave](#) – U.S. News & World Report

# Precipitation

## Last 7 Days, NRCS SNOTEL Network

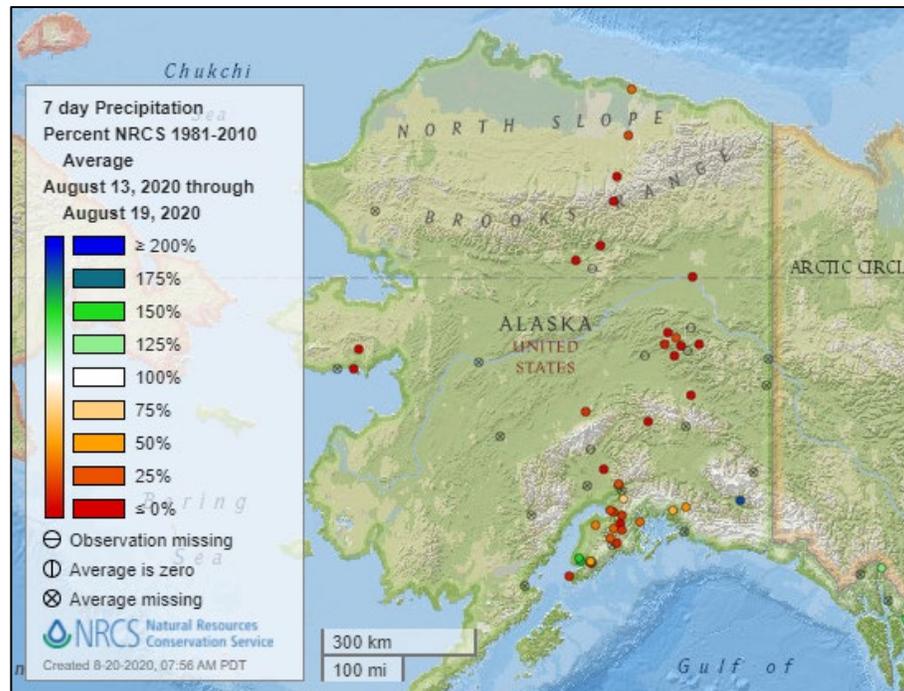


[7-day precipitation percent of average map](#)

**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](#)



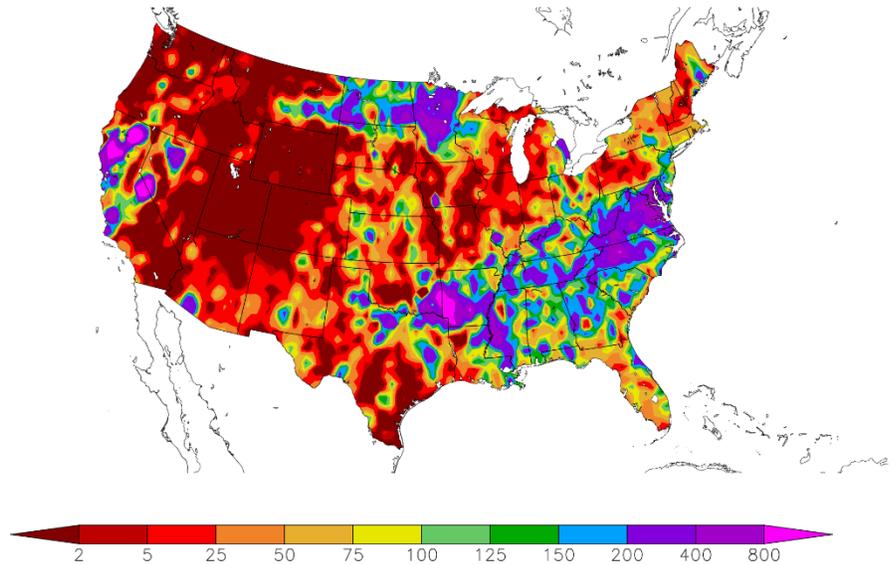
### Last 7 Days, National Weather Service (NWS) Networks

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 (%)  
8/12/2020 – 8/18/2020



Generated 8/19/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

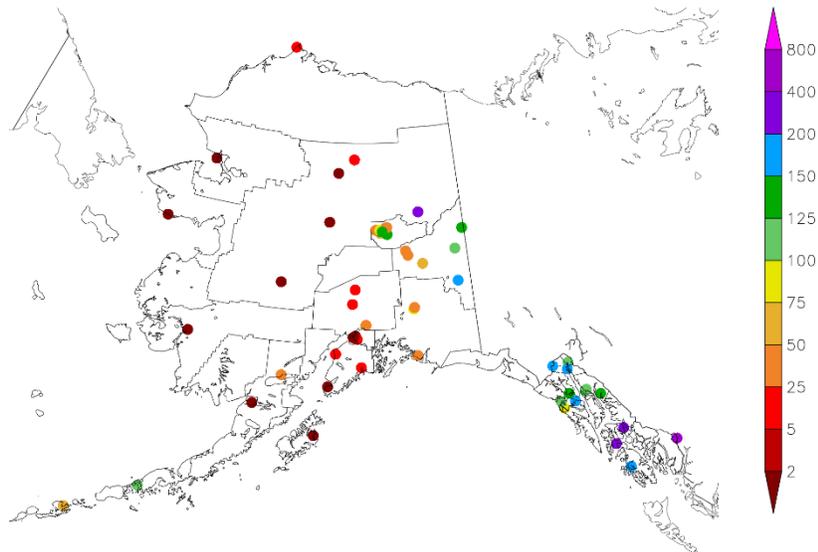
### Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Percent of Normal Precipitation (%)  
8/12/2020 – 8/18/2020



Generated 8/19/2020 at HPRCC using provisional data.

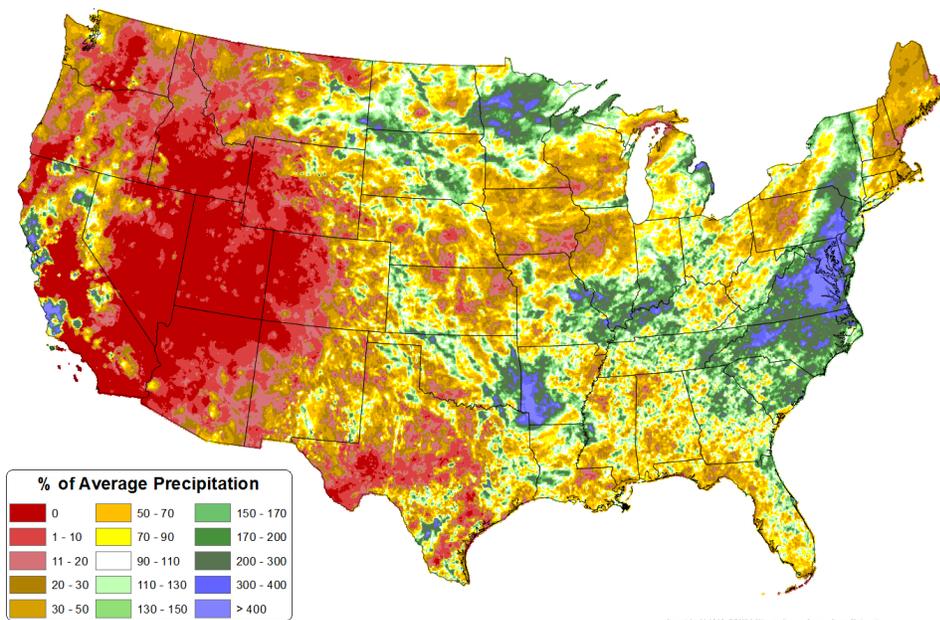
NOAA Regional Climate Centers

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

Source: PRISM

Total Precipitation Anomaly: 01 Aug 2020 - 18 Aug 2020  
Period ending 7 AM EST 18 Aug 2020  
Base period: 1981-2010  
(Map created 19 Aug 2020)

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



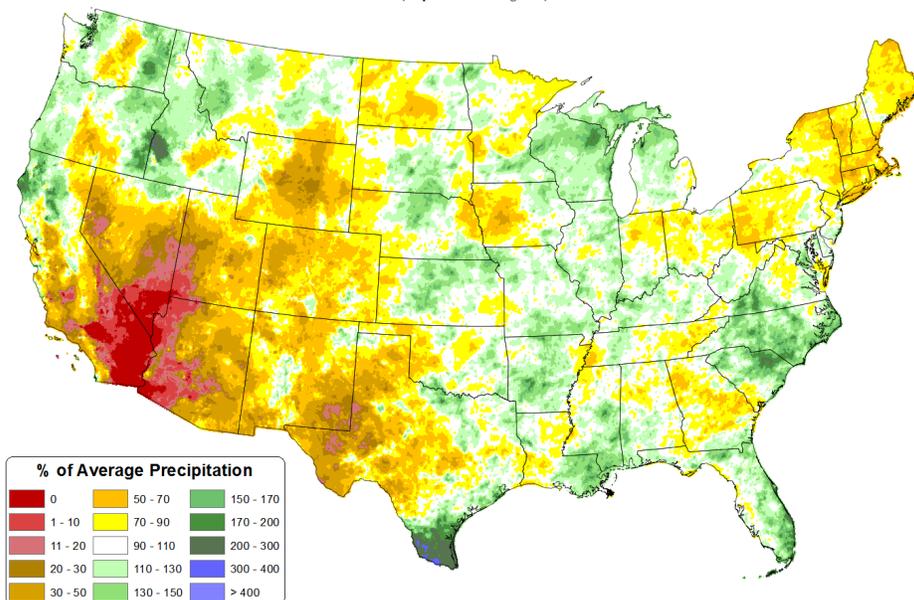
Copyright (c) 2020, PRISM Climate Group, Oregon State University

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

Source: PRISM

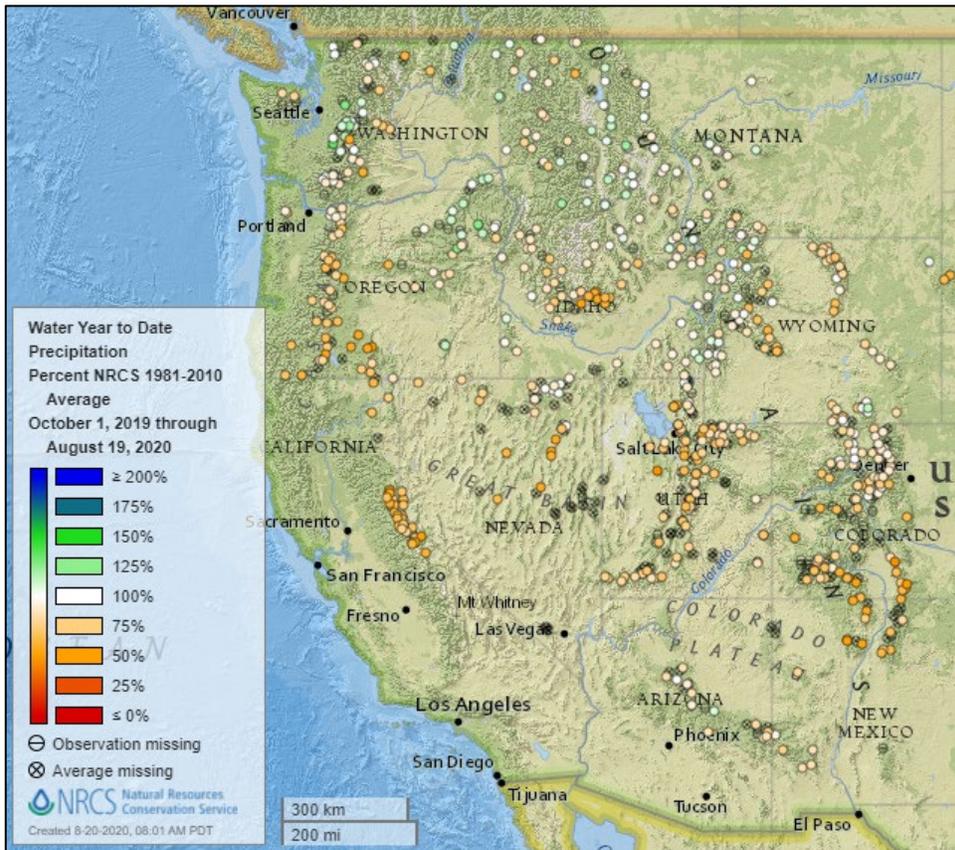
[May through July precipitation percent of average map](#)

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



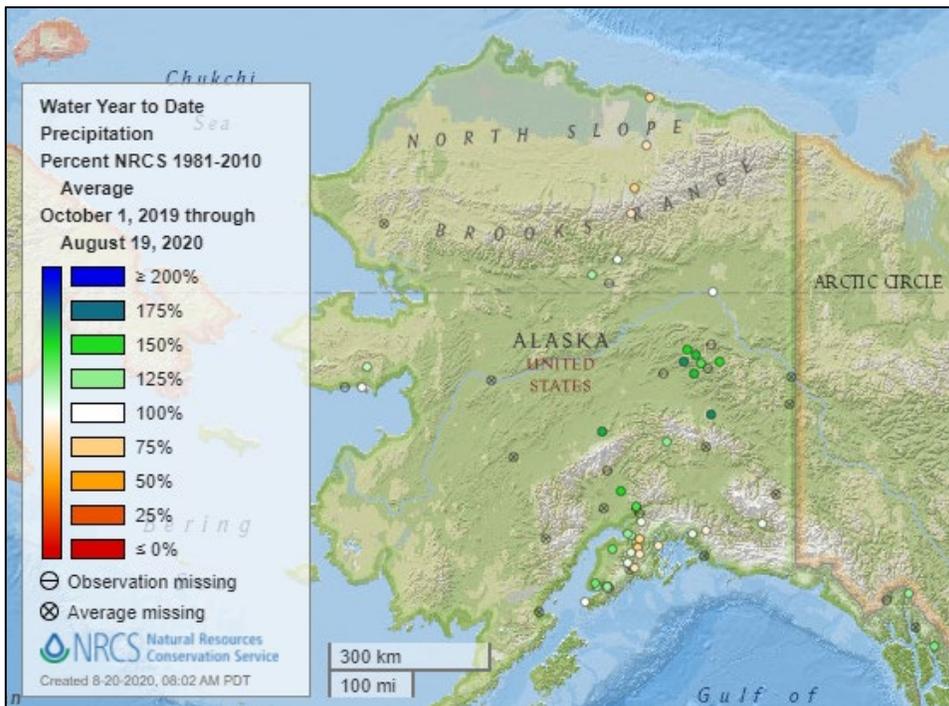
Copyright (c) 2020, PRISM Climate Group, Oregon State University

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

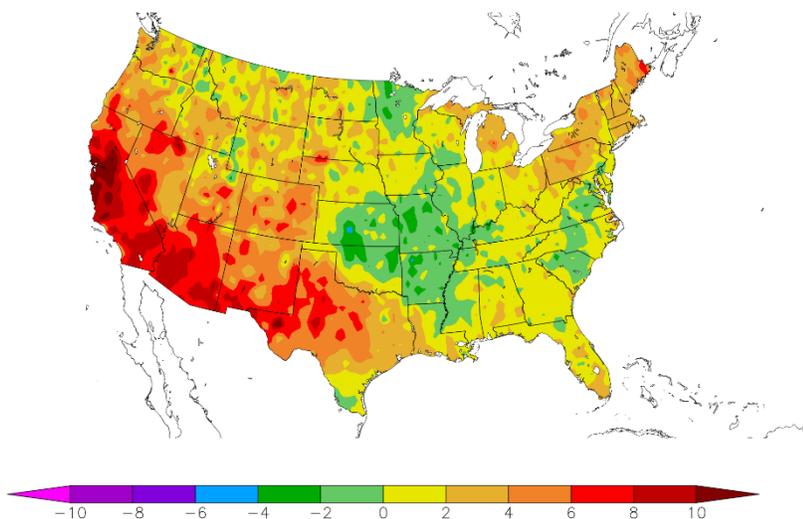
### Last 7 Days, National Weather Service (NWS) Networks

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)  
8/12/2020 – 8/18/2020



Generated 8/19/2020 at IPRCC using provisional data.

NOAA Regional Climate Centers

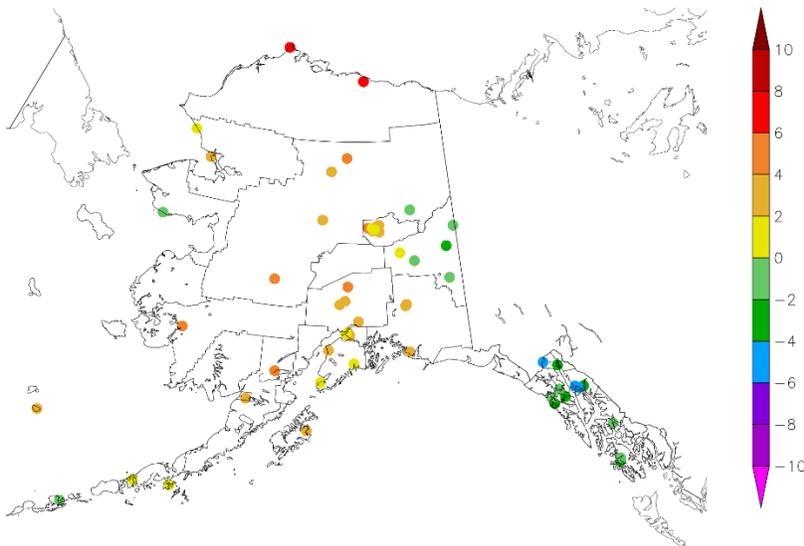
### Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)  
8/12/2020 – 8/18/2020



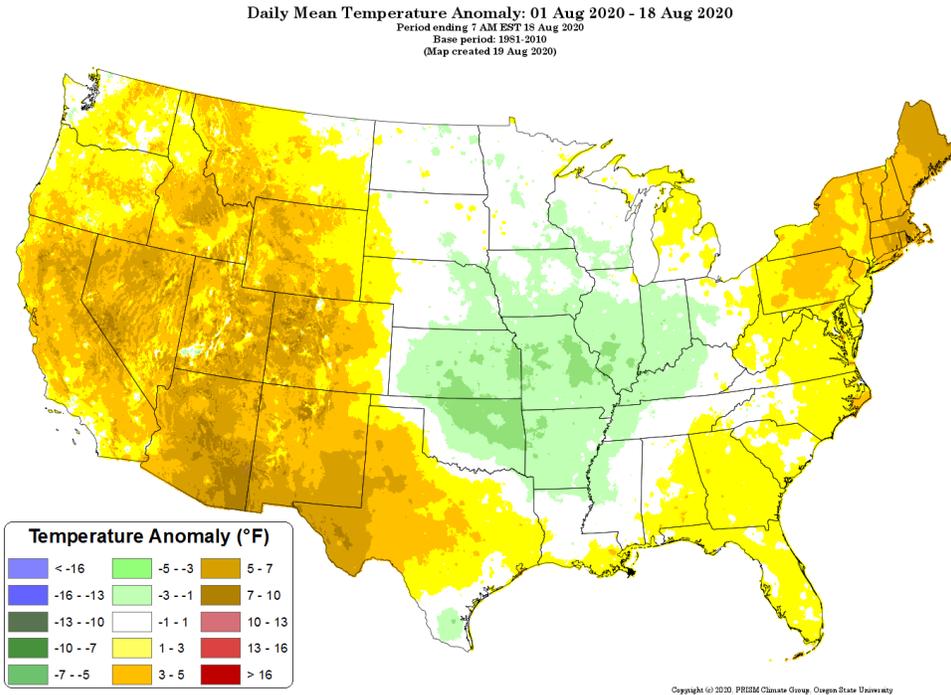
Generated 8/19/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

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

Source: PRISM

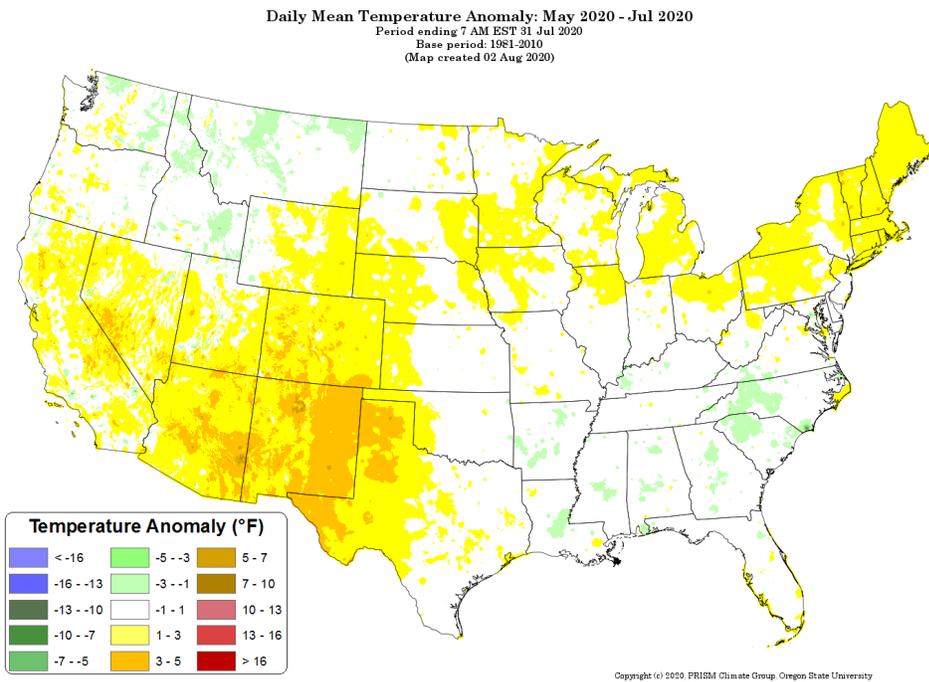
[Month to date national daily mean temperature anomaly map](#)



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

Source: PRISM

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



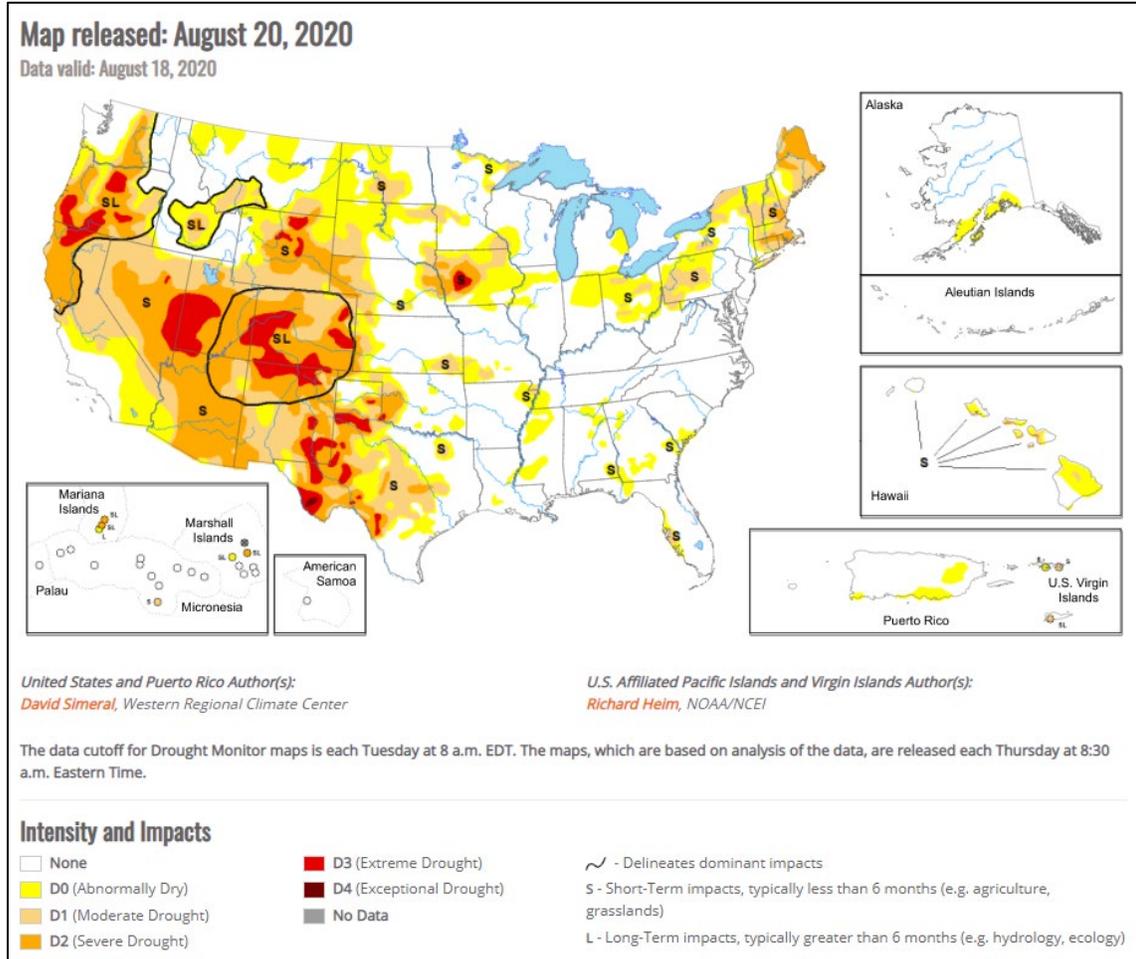
# Drought

## [U.S. Drought Monitor](#)

Source: National Drought Mitigation Center

## [U.S. Drought Portal](#)

Source: NOAA



## Current [National Drought Summary](#), August 20, 2020

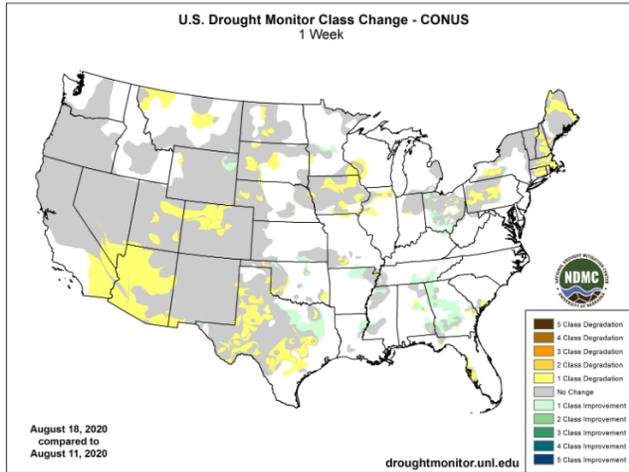
Source: National Drought Mitigation Center

“This U.S. Drought Monitor week saw intensification of drought across parts of the western U.S. as hot and dry conditions persisted with a historic heat wave currently gripping much of the region. Since last Friday, dozens of high temperature records were broken across the West including a scorching 130° F recorded at the Furnace Creek Visitor’s Center in Death Valley National Park. If verified, this high would represent the hottest temperature on Earth since 1913. Accompanying the extreme heat, numerous lightning-ignited wildfires broke out across California during the past week causing air-quality issues across parts of the region. In the Southwest, the continued weak monsoon has led to expansion and intensification of drought-related conditions with areas of Arizona and New Mexico observing less than 50% of normal precipitation since the beginning of the monsoon season. Similarly, drought conditions in the western half of Texas have deteriorated from persistent dry conditions and extreme heat. In the Midwest, short-term precipitation deficits (past 60 days) have led to the expansion of areas of drought, particularly in Iowa, where impacts are being reported in the agricultural sector. In the Northeast, anomalously warm temperatures and below-normal precipitation during the past 90-day period have led to deterioration in drought-related conditions in parts of New England—including Massachusetts where state officials declared a Level 2 drought on August 14 for all regions of the state.”

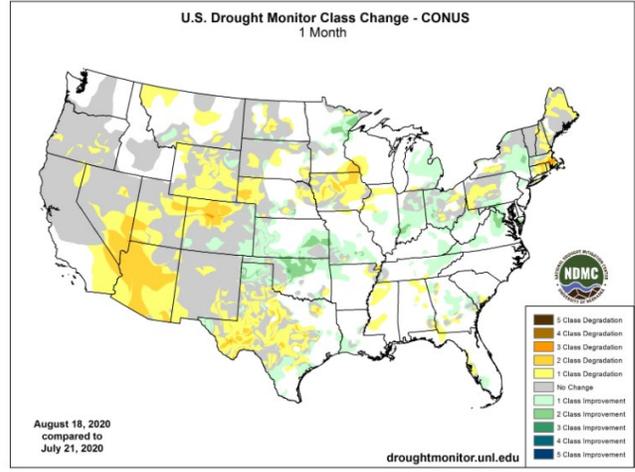
## Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

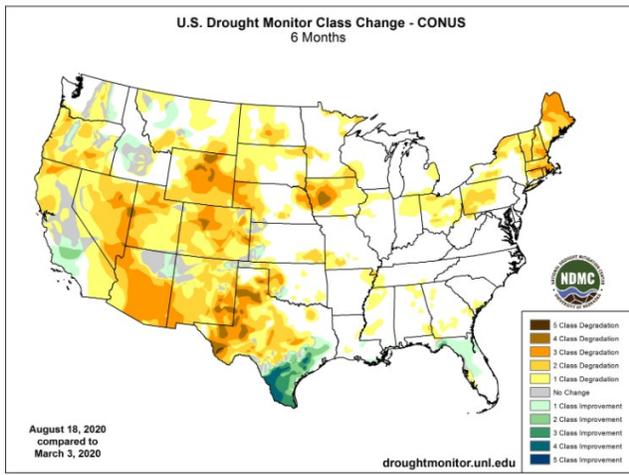
### 1 Week



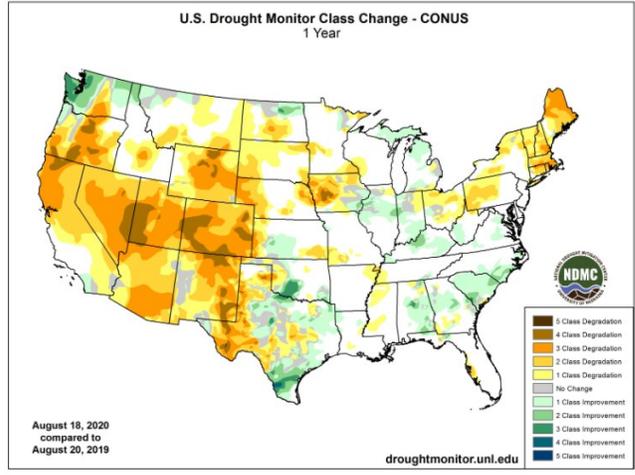
### 1 Month



### 6 Months



### 1 Year



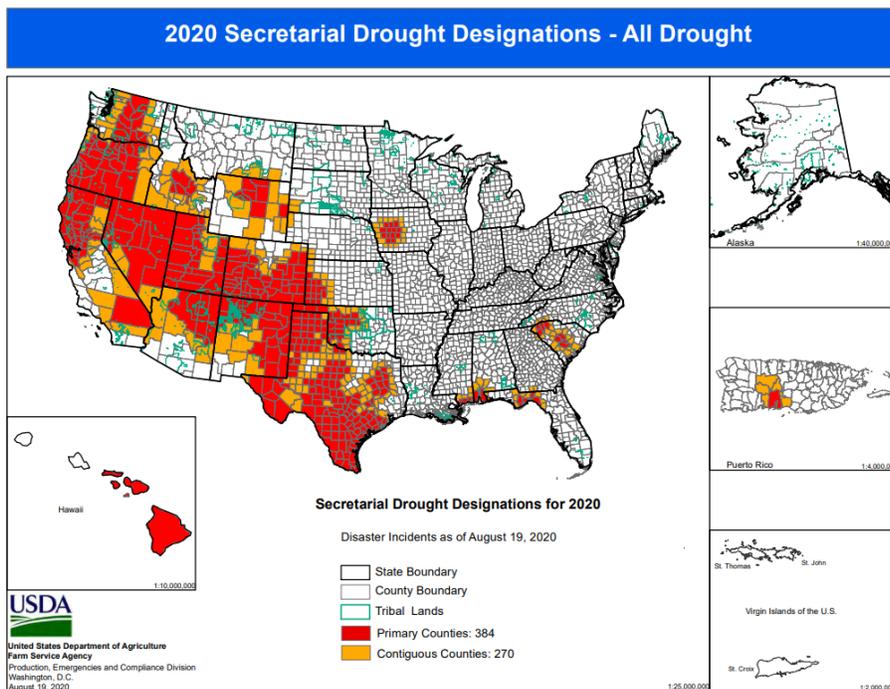
[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

## 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



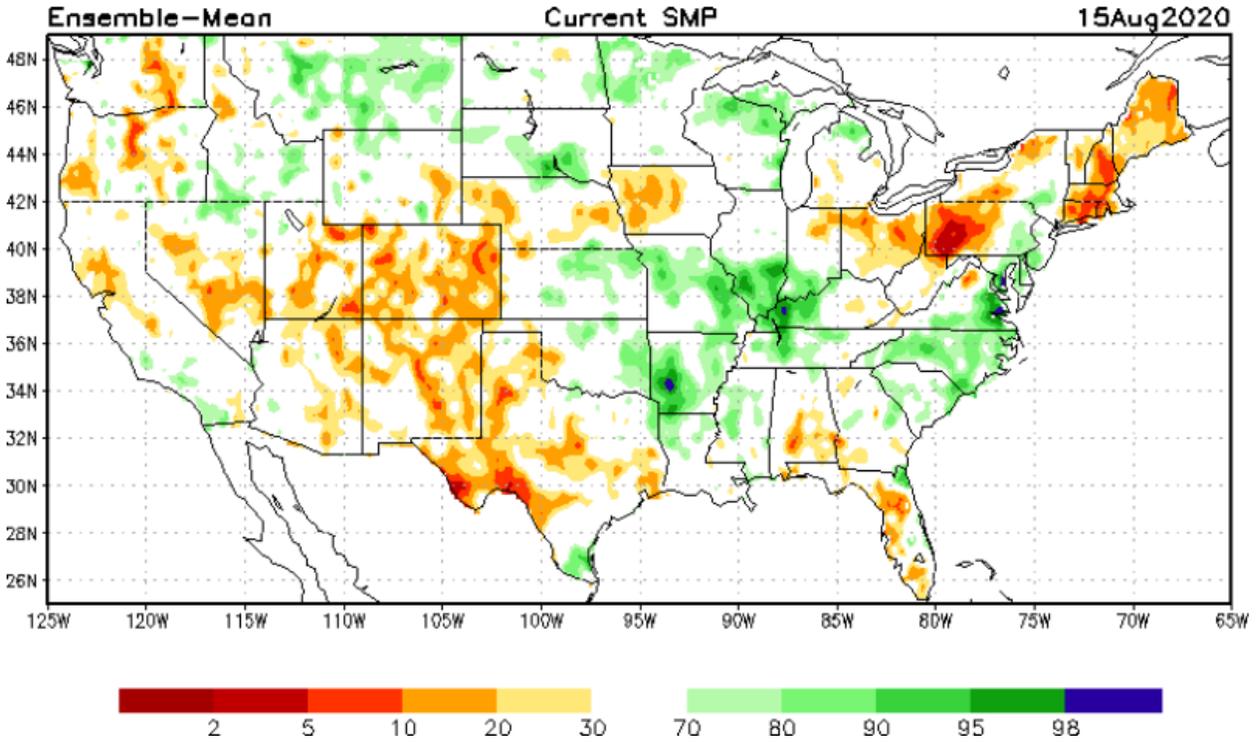
### Highlighted Wildfire Resources

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

## Other Climatic and Water Supply Indicators

### Soil Moisture

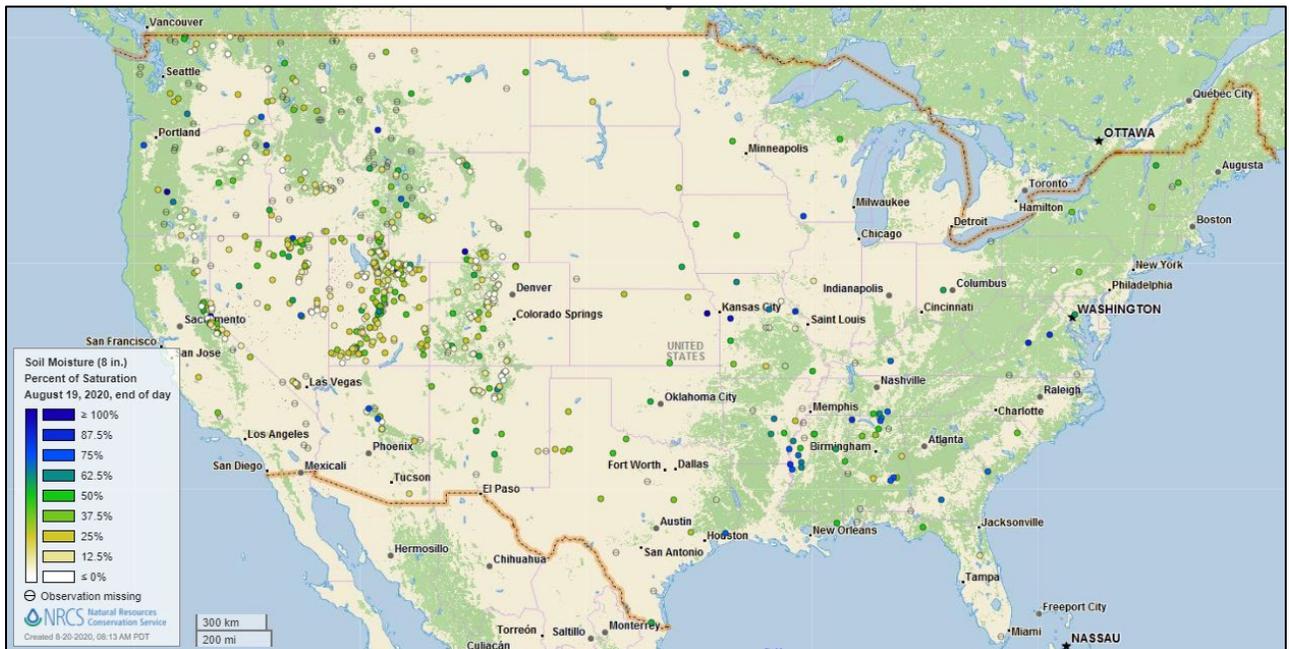
Source: NOAA National Centers for Environmental Prediction



[Modeled soil moisture percentiles](#) as of August 15, 2020

### Soil Moisture Percent of Saturation

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

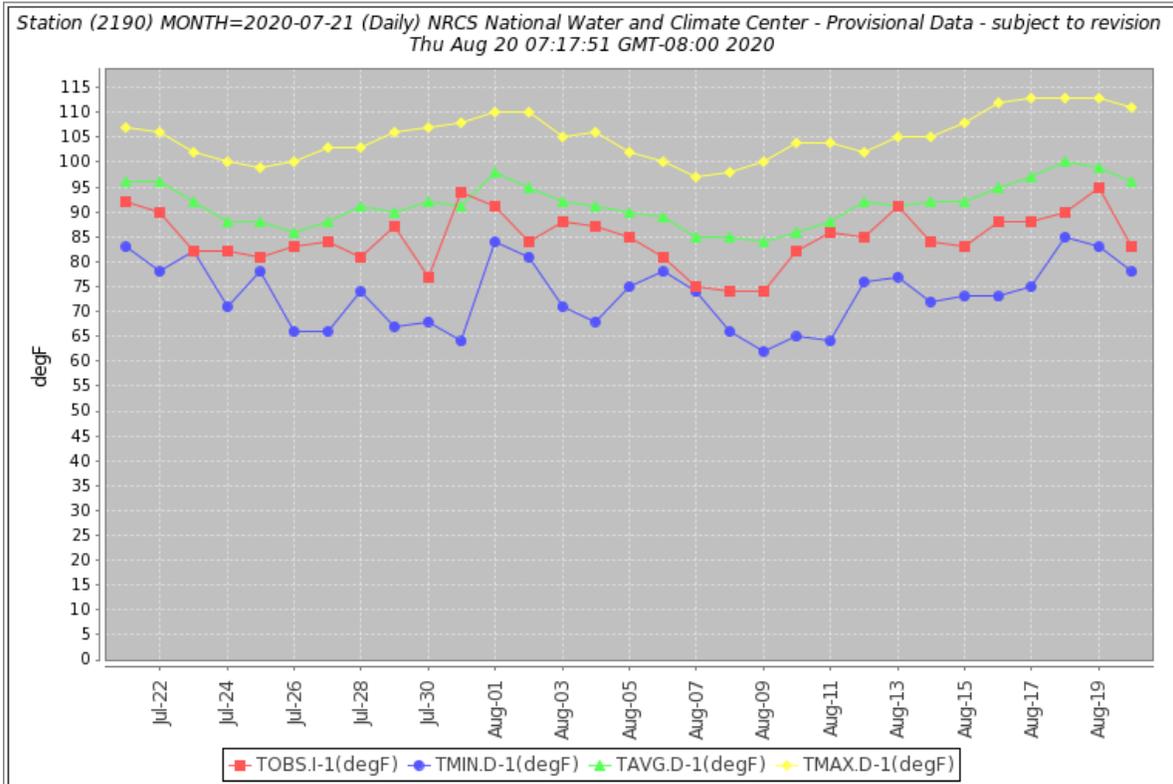


### Soil Moisture Data Portals

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

### SCAN Air Temperature

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



To illustrate the extreme temperatures in southern California, this chart shows the minimum, maximum, and average daily air temperature for the last 30 days at the [Death Valley Jct](#) SCAN site 2190. The elevation at this site is 2,062 feet, compared to the elevation at the lowest point of Death Valley at -282 feet. Despite the elevation difference, the air temperature sensor at this SCAN site demonstrates the extremely high temperatures in the region.

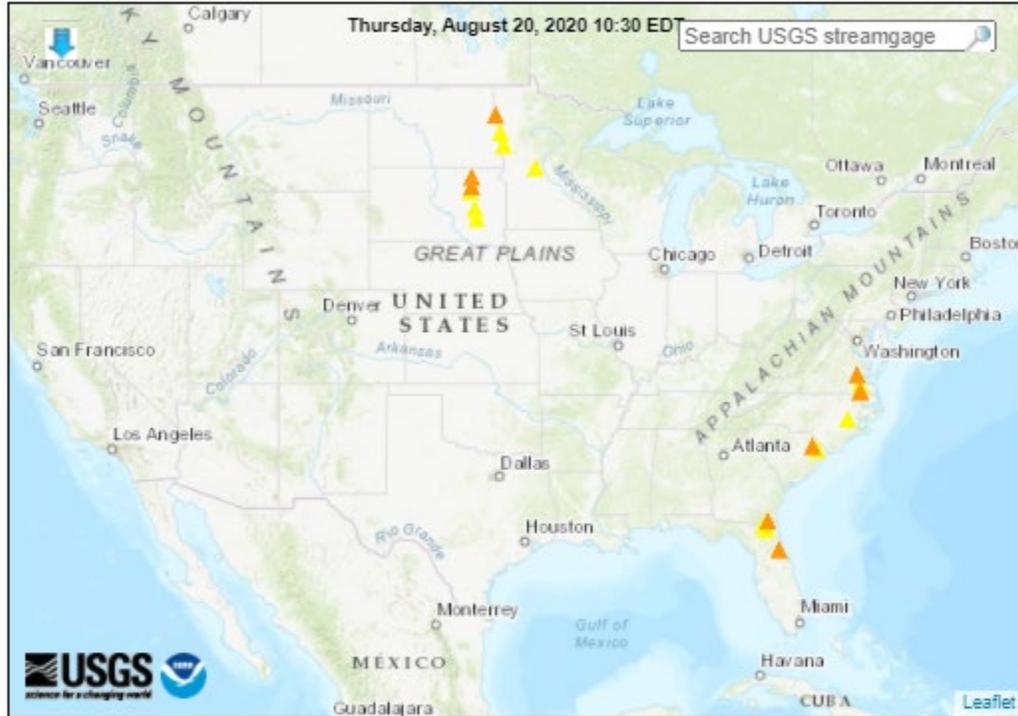
Note: Daily sensors (TMIN.D-1, TAVG.D-1, TMAX.D-1) report a summary value of hourly data for the previous day. The instantaneous sensor (TOBS.I-1) reports a single observation - taken at the beginning of an interval, which is midnight for a daily report.

**Streamflow, Drought, Flood, and Runoff**

Source: U.S. Geological Survey

**Map of flood and high flow conditions**

(9 in floods [minor: 9], 11 in near-flood)



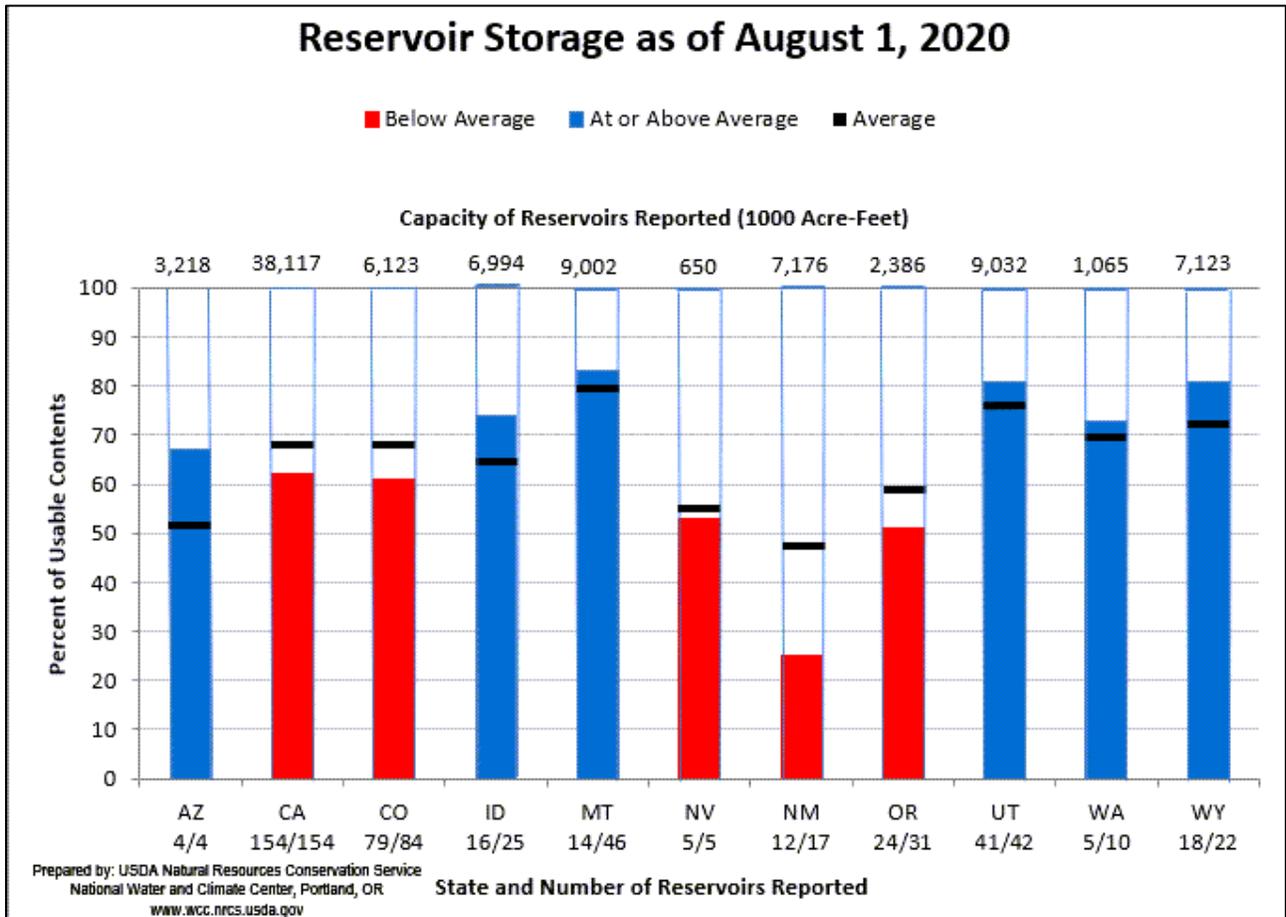
Explanation - Percentile classes						
<95	95-98	>= 99	Above action stage	Above flood stage	Above moderate flood stage	Above major flood stage
			△ Streamgage with flood stage	○ Streamgage without flood stage		

[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](#)

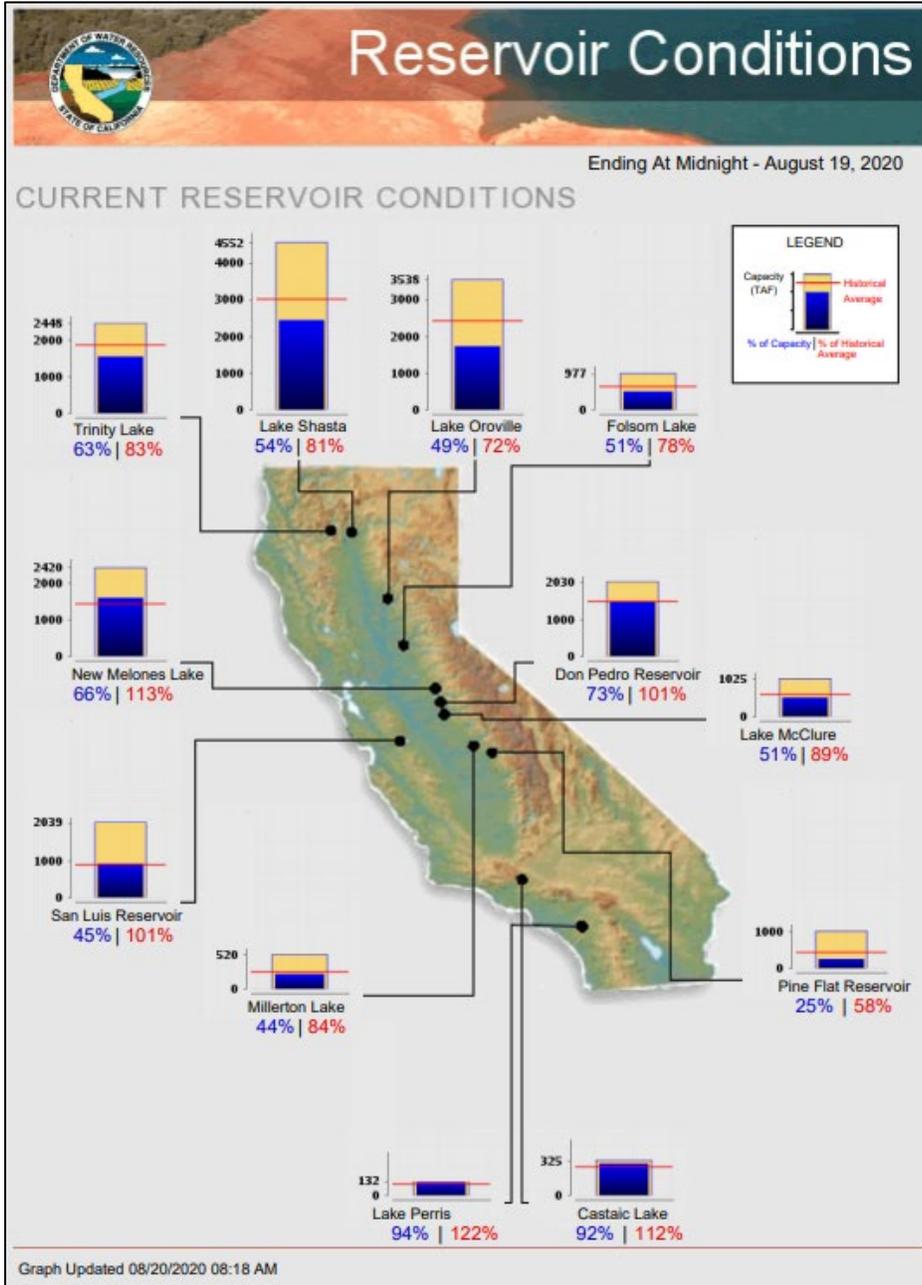
### Hydromet Teacup Reservoir Depictions

Source: U.S. Bureau of Reclamation

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

**Current California Reservoir Conditions**

Source: California Department of Water Resources



[Current California Reservoir Conditions](#)

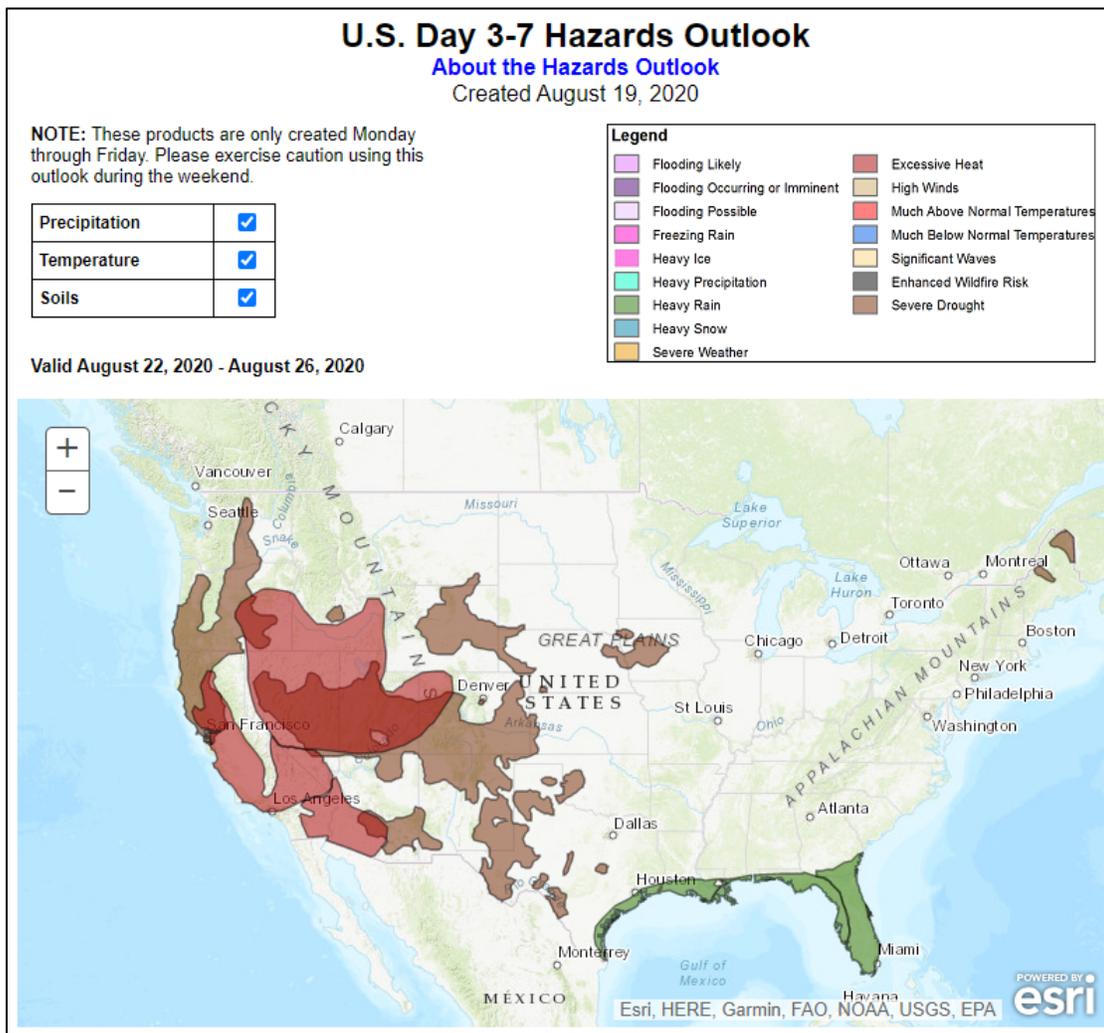
### Agricultural Weather Highlights

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

**National Outlook, Thursday, August 20, 2020:** “A Western heat wave will maintain its grip, except for a spell of cooler weather in the Pacific Northwest. Early next week, however, the core area of extreme heat will shift eastward across the northern Plains. The South, East, and Midwest will experience a warming trend; by week’s end, above-normal temperatures will prevail across the lower Great Lakes region and the Northeast. Meanwhile, most of the country will receive little or no rain. In the West, showers should occur in the Pacific Northwest, although lightning strikes (without the benefit of rain) could ignite new wildfires in other areas. Farther east, spotty showers will occur from the Great Lakes region to New England, while rain will continue in the Southeast. Five day rainfall totals could reach 2 to 5 inches or more in parts of Florida, especially if newly formed Tropical Depression Thirteen strengthens and approaches the southern Atlantic Coast early next week. The NWS 6- to 10-day outlook for August 25 – 29 calls for warmer-than-normal weather nationwide, except for near- or below-normal temperatures along portions of the Canadian border. Meanwhile, drier-than-normal conditions in the Pacific Northwest and from the Desert Southwest to the central and southern Plains should contrast with near- or above-normal rainfall across the remainder of the country.”

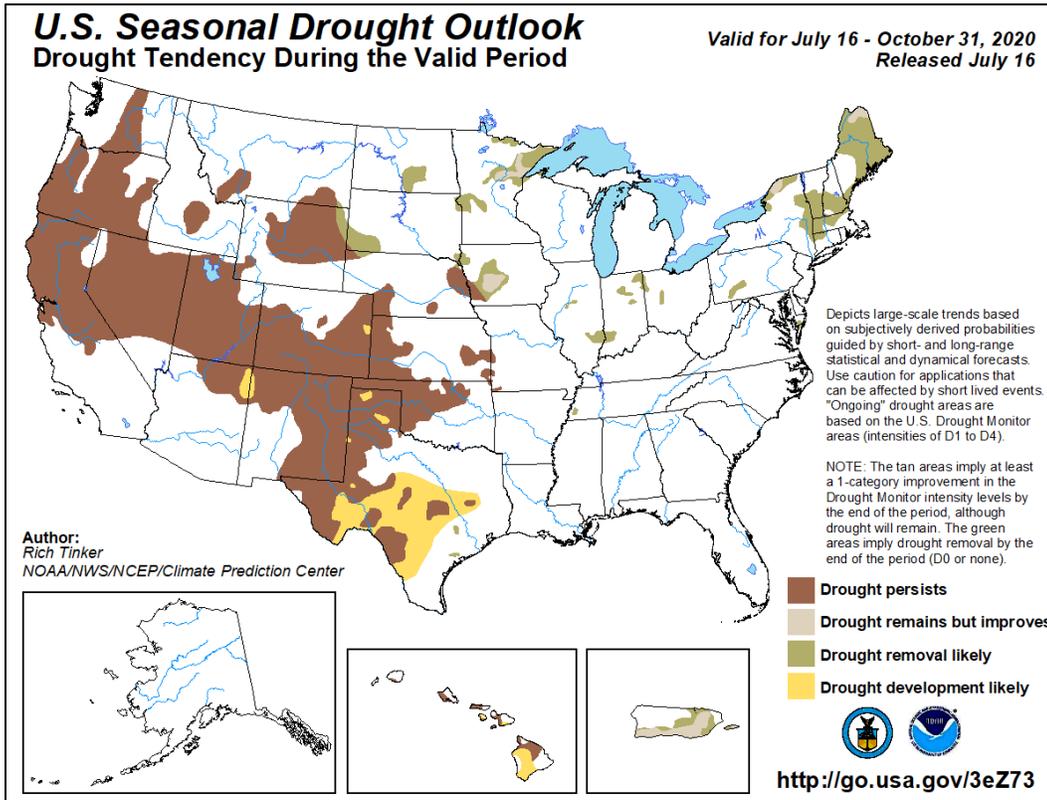
### Weather Hazards Outlook: August 22 - 26, 2020

Source: NOAA Weather Prediction Center



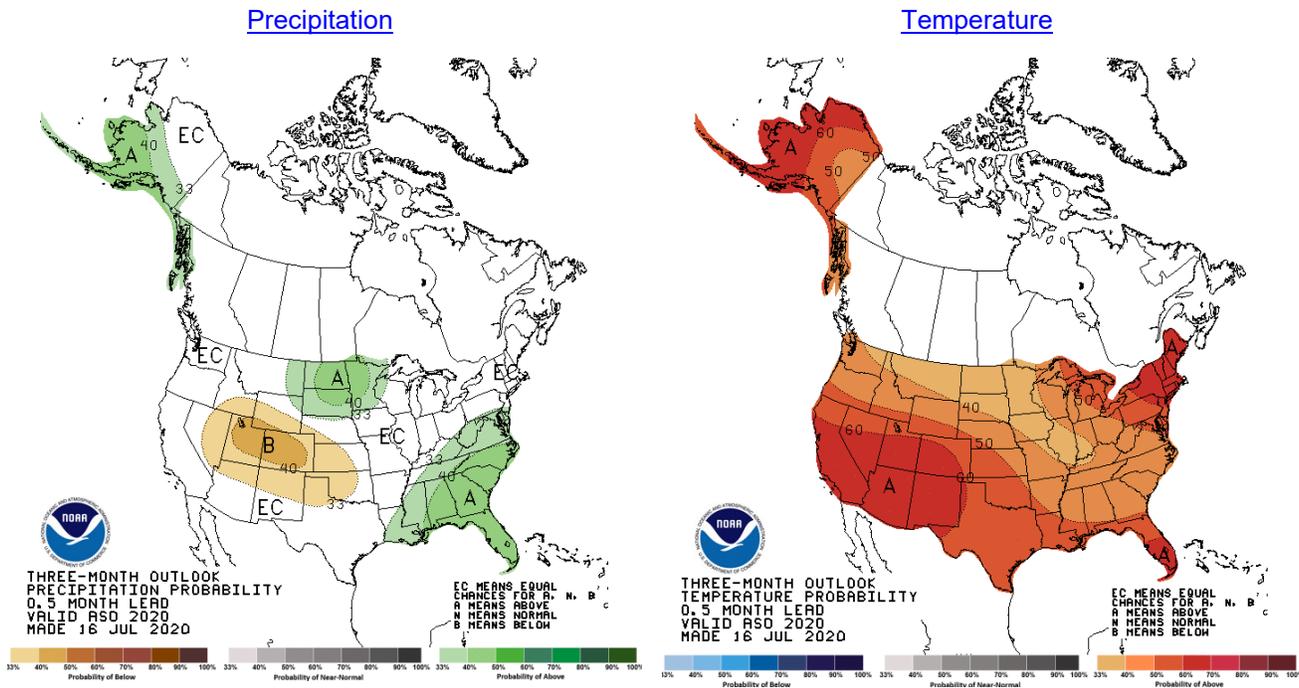
**Seasonal Drought Outlook: [July 16 – October 31, 2020](#)**

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](#).