

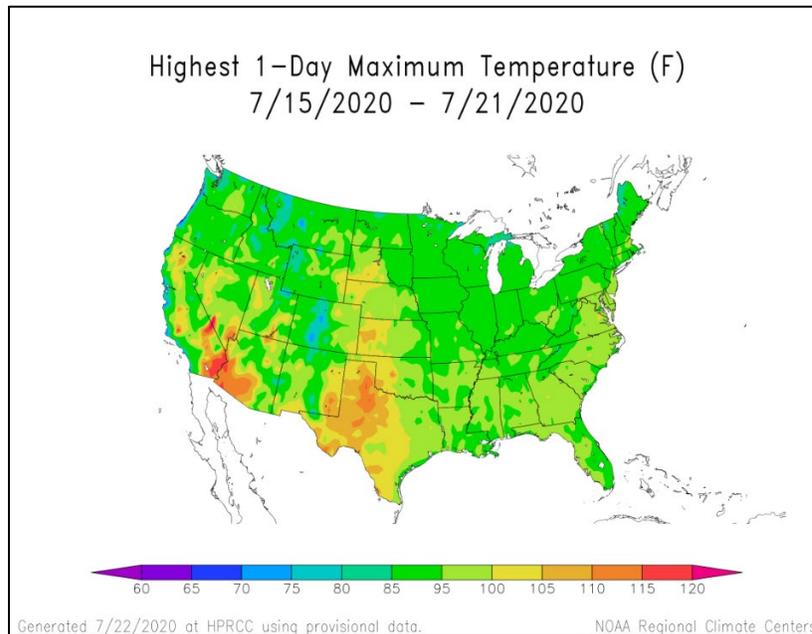
# Water and Climate Update

July 23, 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		

## Record heat across the U.S.



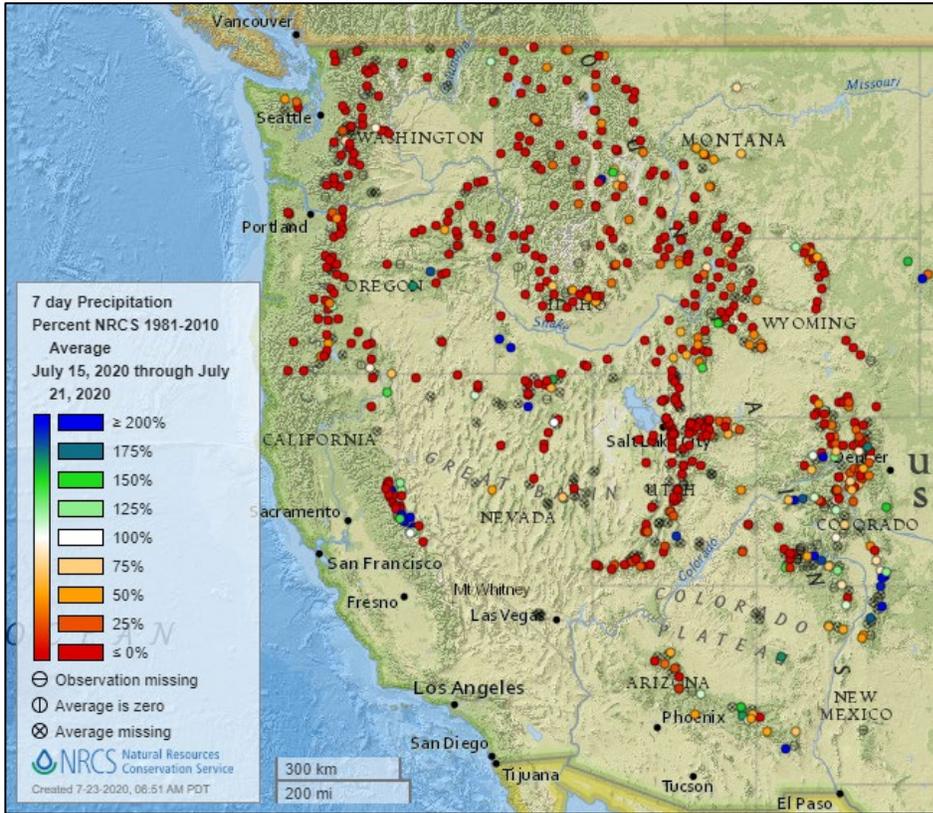
Record heat was reported along the U.S. Death Valley in California, reaching 128° Fahrenheit on Sunday, the highest global temperature recorded since 2017. Dozens of daily records also fell across the country this week. Phoenix, Arizona reported a new daily record of 116°, with a record of 110° in Roswell, New Mexico. An all-time record of 116° was reported in the town of Borger in the Panhandle of Texas; a record of 102° was reported at the Norfolk International Airport surpassing the old record of 101° set in 1942. The ACIS map above from the [High Plains Regional Climate Center](#) shows yellow and orange areas recording temperatures higher than 100° F during the past week. Excessive heat advisories and warnings were posted across the country.

**Related:**

- [90% of Americans will swelter in 90F coast to coast heatwave this weekend as country braces to break temperature records](#) – The Sun
- ['Dangerous' heat wave scorches East but 'cooler' temps on the way](#) – USA today
- [It will feel like 110 degrees on the East Coast on Monday](#) – CNN
- [For the first time in recorded history, Hampton Roads hits 100 for the 4th straight day](#) – Virginian-Pilot (VA)
- [The heat continues](#) – AZFamily (AZ)
- [Death Valley sets record for planet's hottest temperature in years — and the heat wave is forecast to spread](#) – CBS News

# Precipitation

## Last 7 Days, NRCS SNOTEL Network

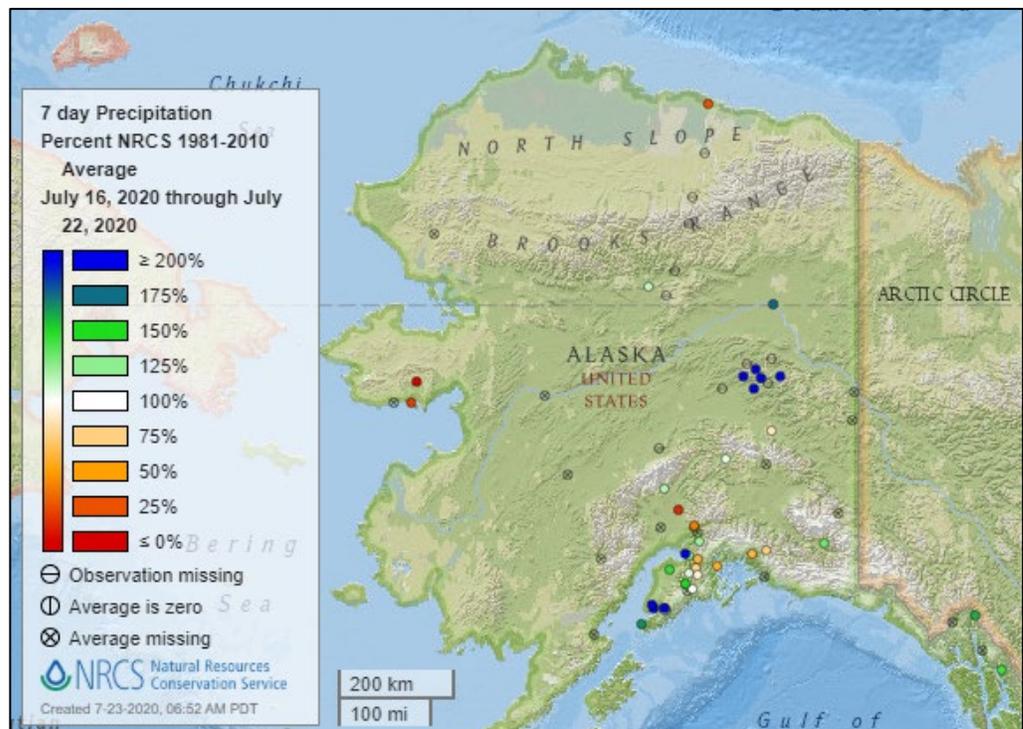


[7-day precipitation percent of average map](#)

**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](#)



# Water and Climate Update

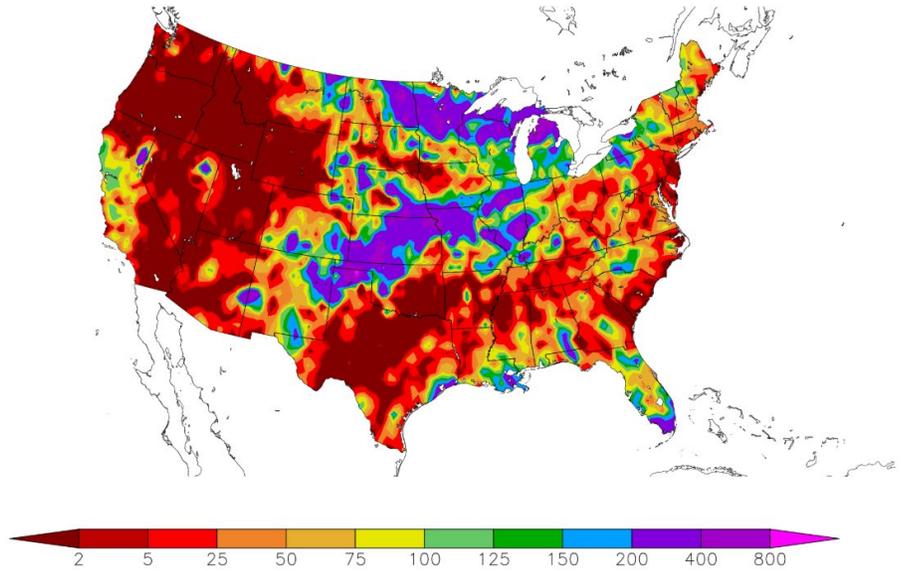
## Last 7 Days, National Weather Service (NWS) Networks

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 (%)  
7/15/2020 – 7/21/2020



Generated 7/22/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

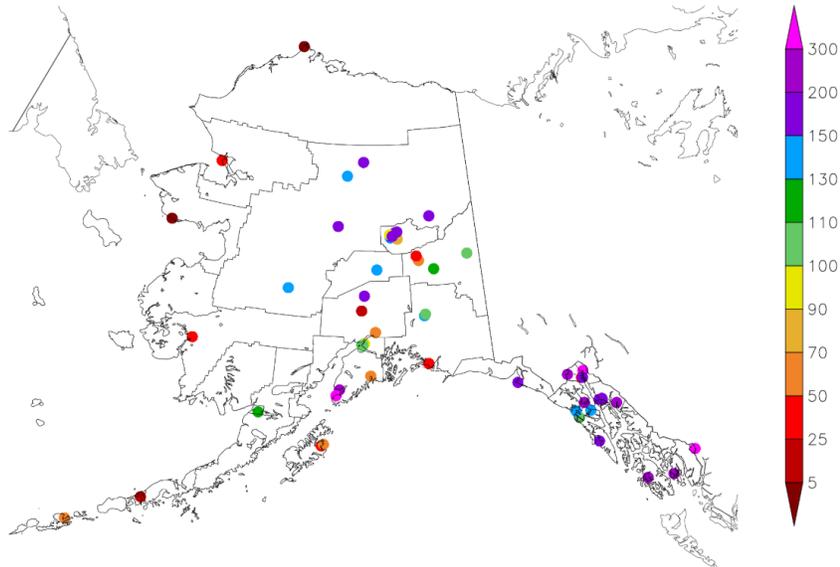
## Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Percent of Normal Precipitation (%)  
7/15/2020 – 7/21/2020



Generated 7/22/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

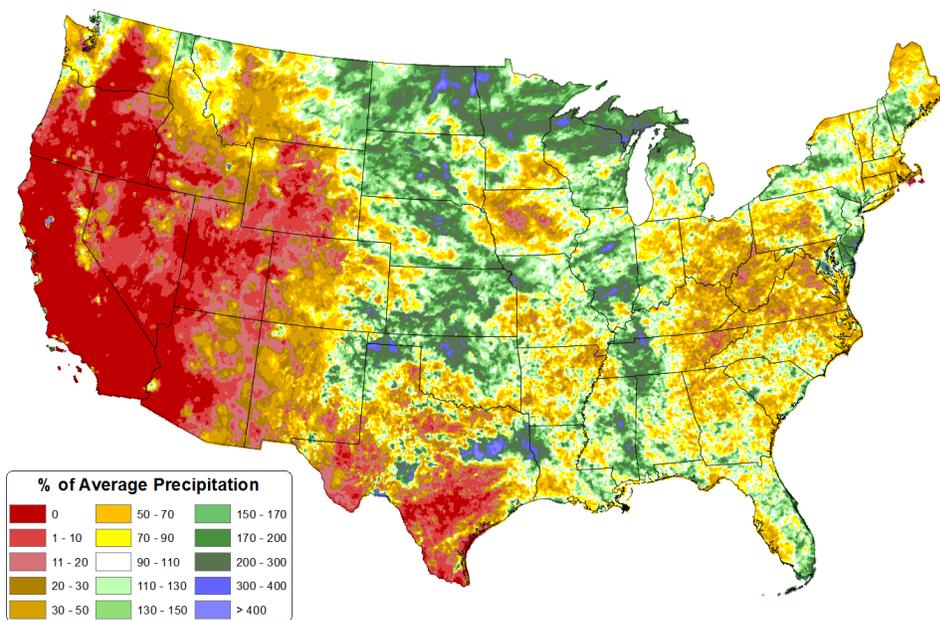
# Water and Climate Update

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

Source: PRISM

Total Precipitation Anomaly: 01 Jul 2020 - 22 Jul 2020  
Period ending 7 AM EST 22 Jul 2020  
Base period: 1981-2010  
(Map created 23 Jul 2020)

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



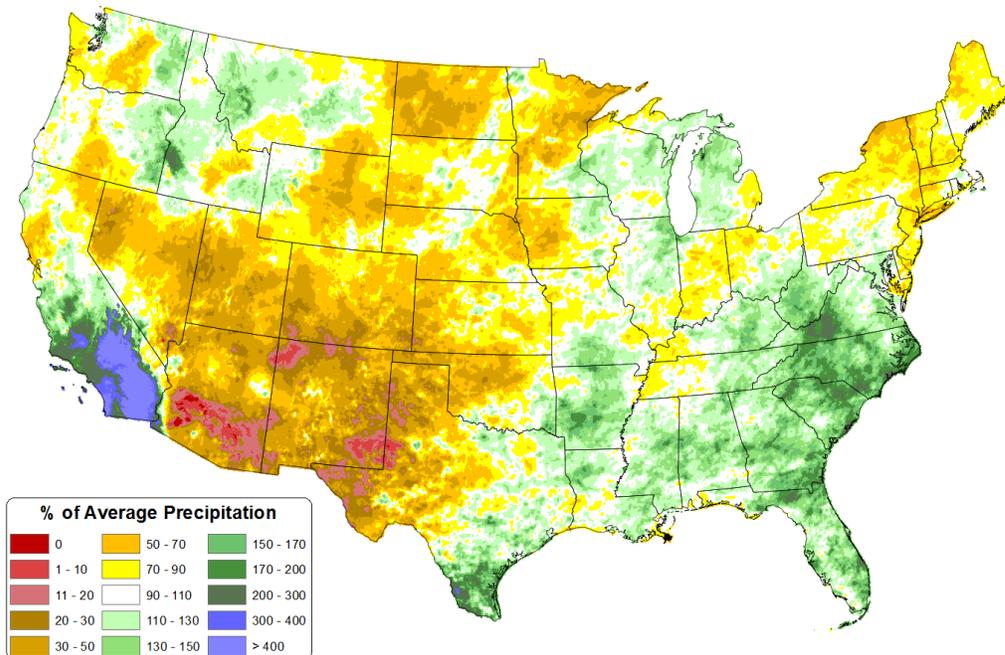
Copyright (c) 2020, PRISM Climate Group, Oregon State University

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

Source: PRISM

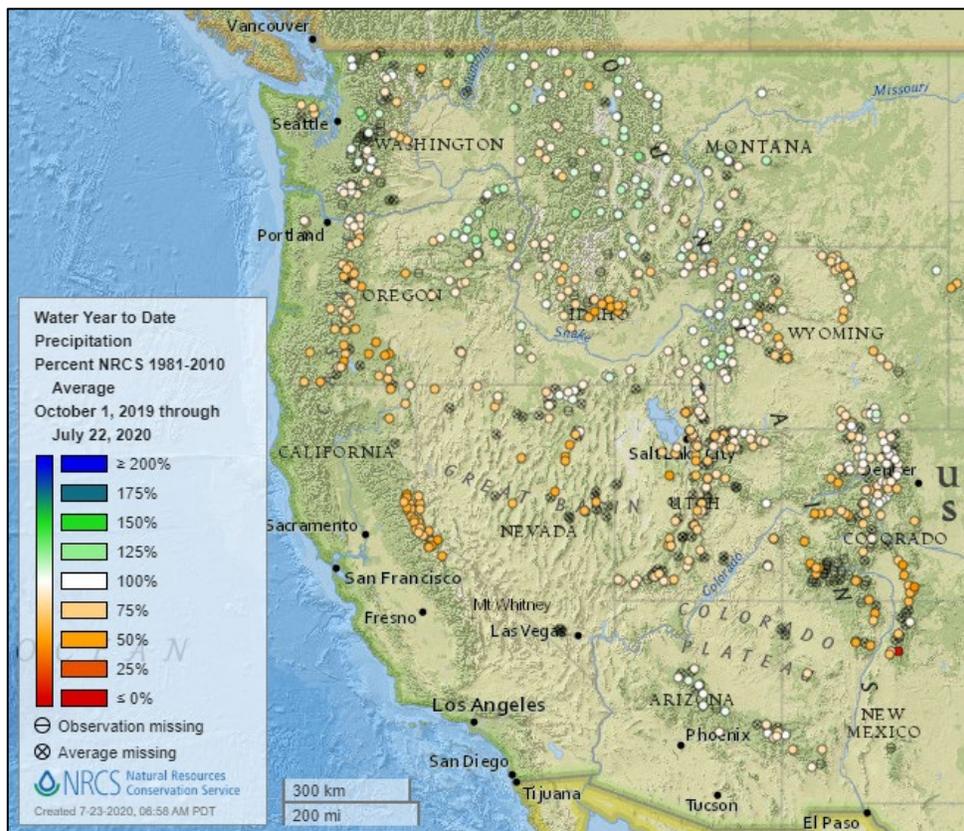
[April through June precipitation percent of average map](#)

Total Precipitation Anomaly: Apr 2020 - Jun 2020  
Period ending 7 AM EST 30 Jun 2020  
Base period: 1981-2010  
(Map created 02 Jul 2020)



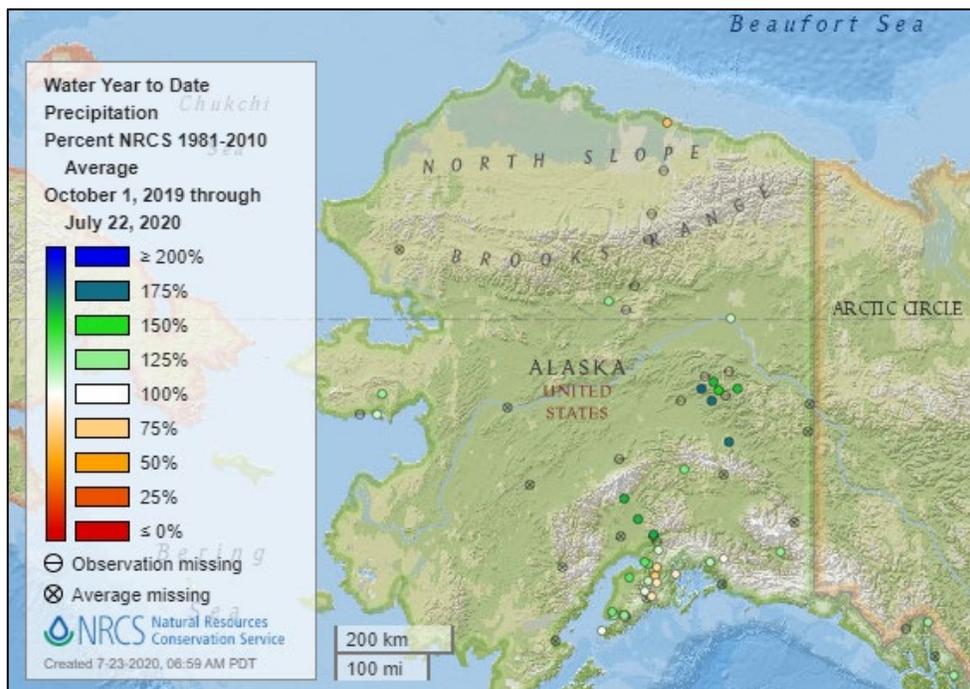
Copyright (c) 2020, PRISM Climate Group, Oregon State University

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

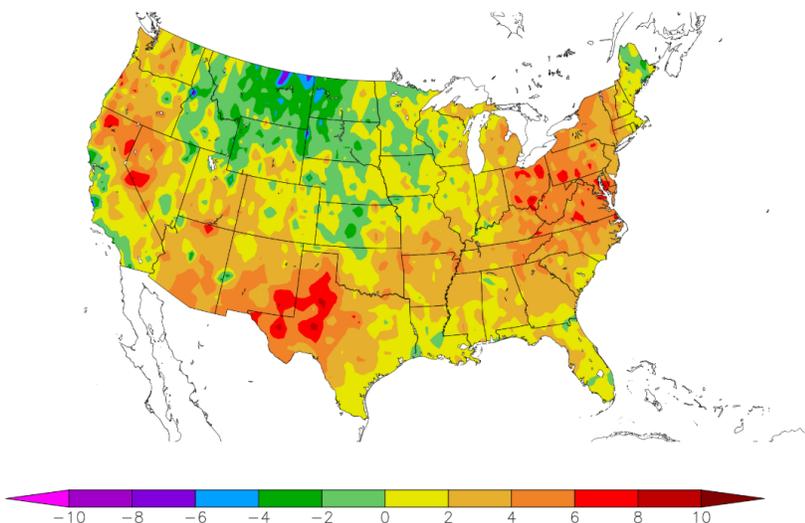
### Last 7 Days, National Weather Service (NWS) Networks

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)  
7/15/2020 – 7/21/2020



Generated 7/22/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

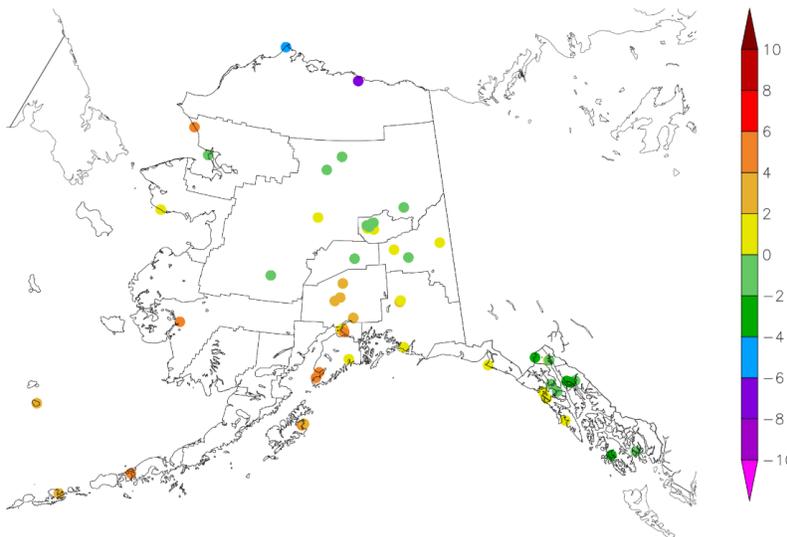
### Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)  
7/15/2020 – 7/21/2020



Generated 7/22/2020 at HPRCC using provisional data.

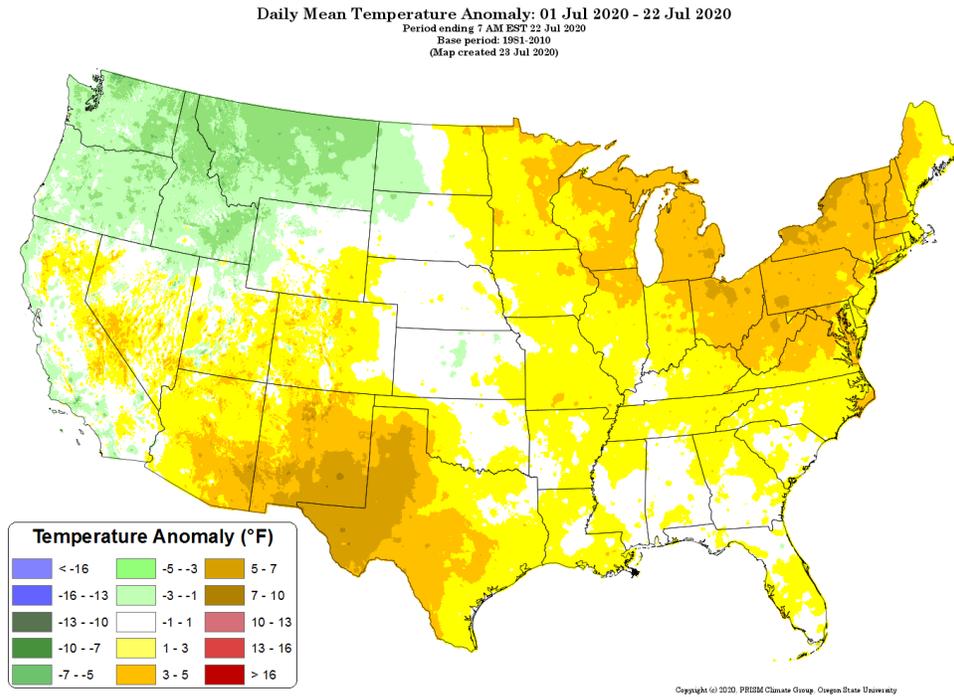
NOAA Regional Climate Centers

# Water and Climate Update

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

Source: PRISM

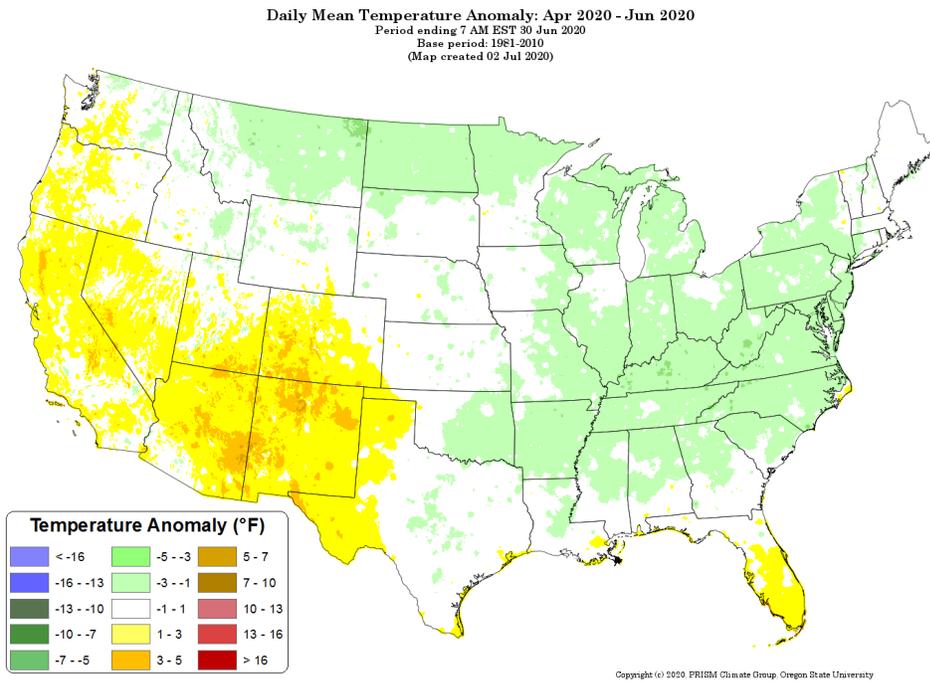
[Month to date national daily mean temperature anomaly map](#)



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

Source: PRISM

[April through June 2020 daily mean temperature anomaly map](#)



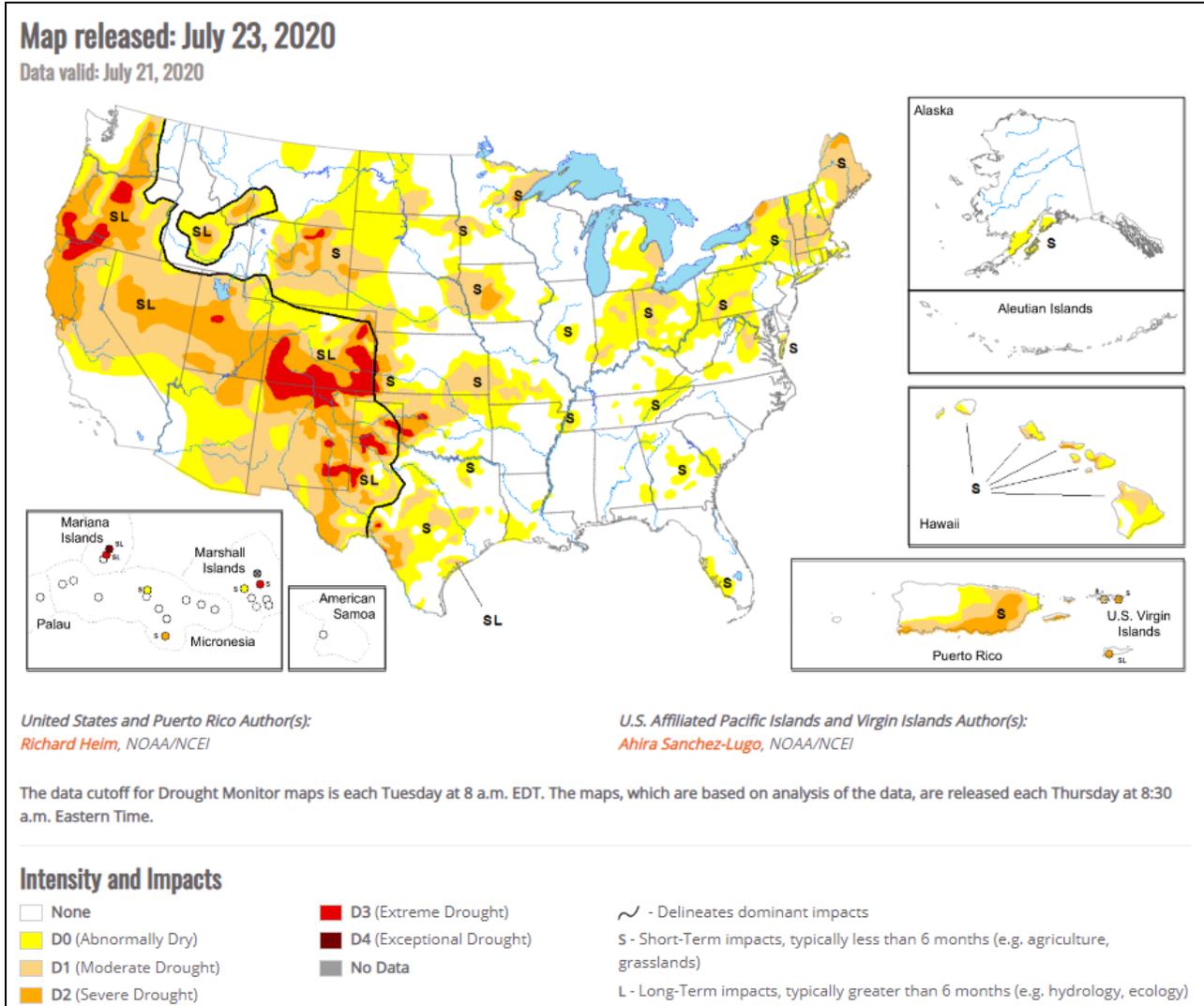
## Drought

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

Source: National Drought Mitigation Center

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

Source: NOAA



### Current [National Drought Summary](#), July 23, 2020

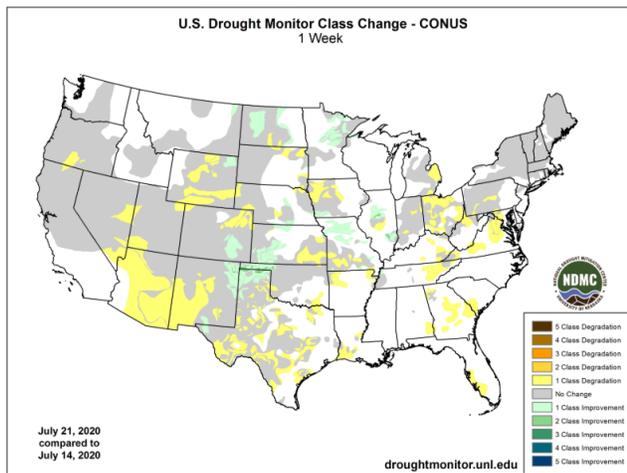
Source: National Drought Mitigation Center

“High pressure dominated the southern half of the contiguous U.S. (CONUS) during this U.S. Drought Monitor (USDM) week. Upper-level weather systems tracked across the U.S.-Canadian border, dragging surface lows and fronts along with them. The frontal systems tapped Gulf of Mexico moisture to drop locally heavy rain across parts of the Plains to Midwest, while convective thunderstorms peppered coastal areas of the Gulf. The high-pressure ridge inhibited precipitation across much of the southern Plains to Southeast, and across most of the West. It also kept temperatures unusually hot, with daily maximums exceeding 90 degrees F across the South throughout the week and across much of the West for most of the week. The excessive heat spread into the northern Plains, Midwest, and into the Northeast as the week wore on. The persistent heat increased evapotranspiration, which dried soils and stressed crops and other vegetation. The locally heavy rains brought temporary relief from the heat and dryness, but only for those areas in the Plains and Midwest lucky enough to receive the rain.”

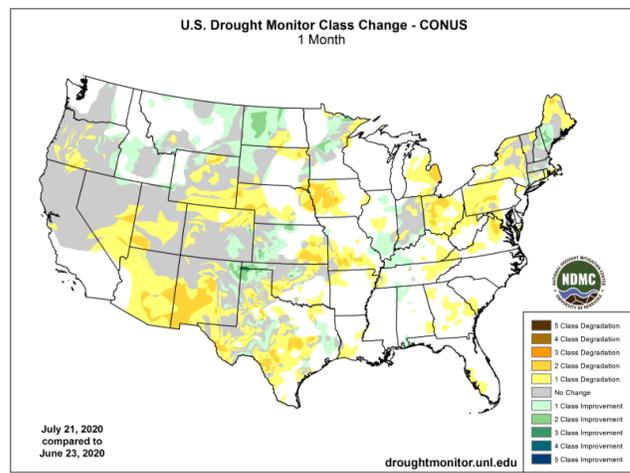
## Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

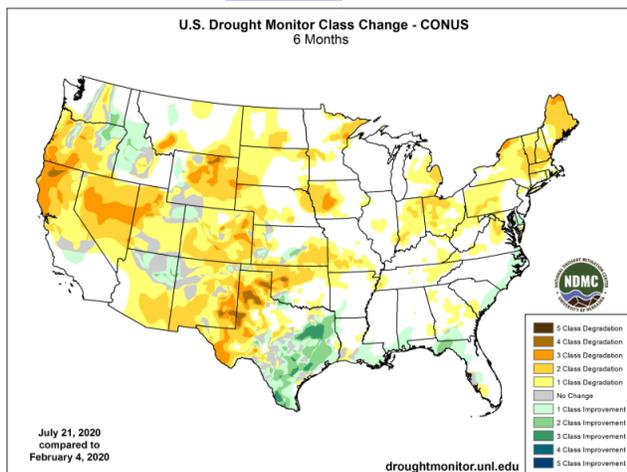
### 1 Week



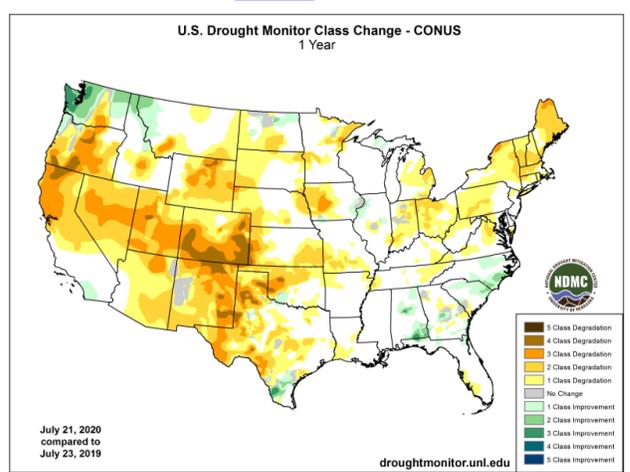
### 1 Month



### 6 Months



### 1 Year



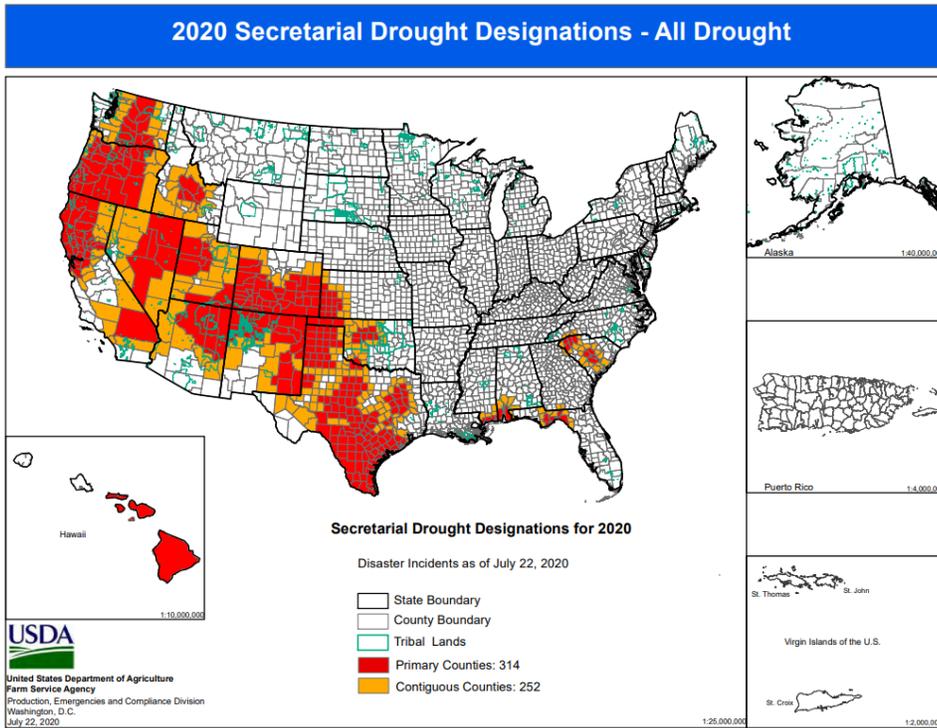
[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

## Highlighted Drought Resources

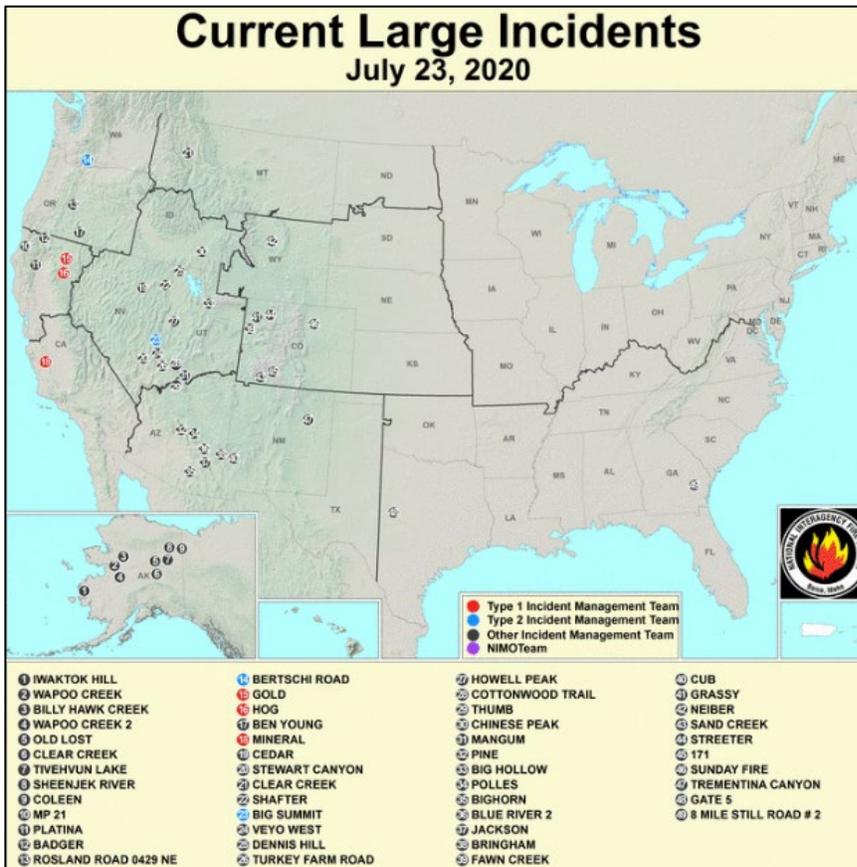
- [Drought Impact Reporter](#)
- [Quarterly Regional Climate Impacts and Outlook](#)
- [U.S. Drought Portal Indicators and Monitoring](#)
- [U.S. Population in Drought, Weekly Comparison](#)
- [USDA Disaster and Drought Information](#)

**Secretarial Drought Designations**

Source: USDA Farm Service Agency



**Wildfires: USDA Forest Service Active Fire Mapping**



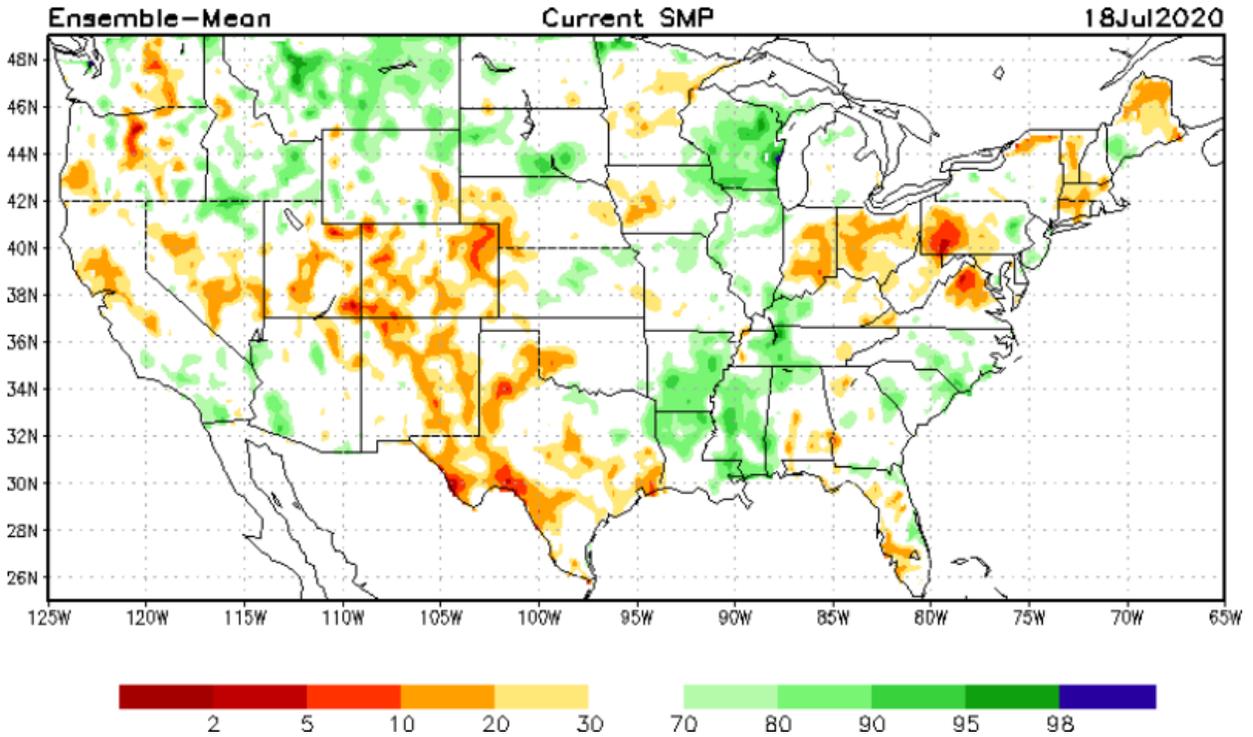
**Highlighted  
Wildfire  
Resources**

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

## Other Climatic and Water Supply Indicators

### Soil Moisture

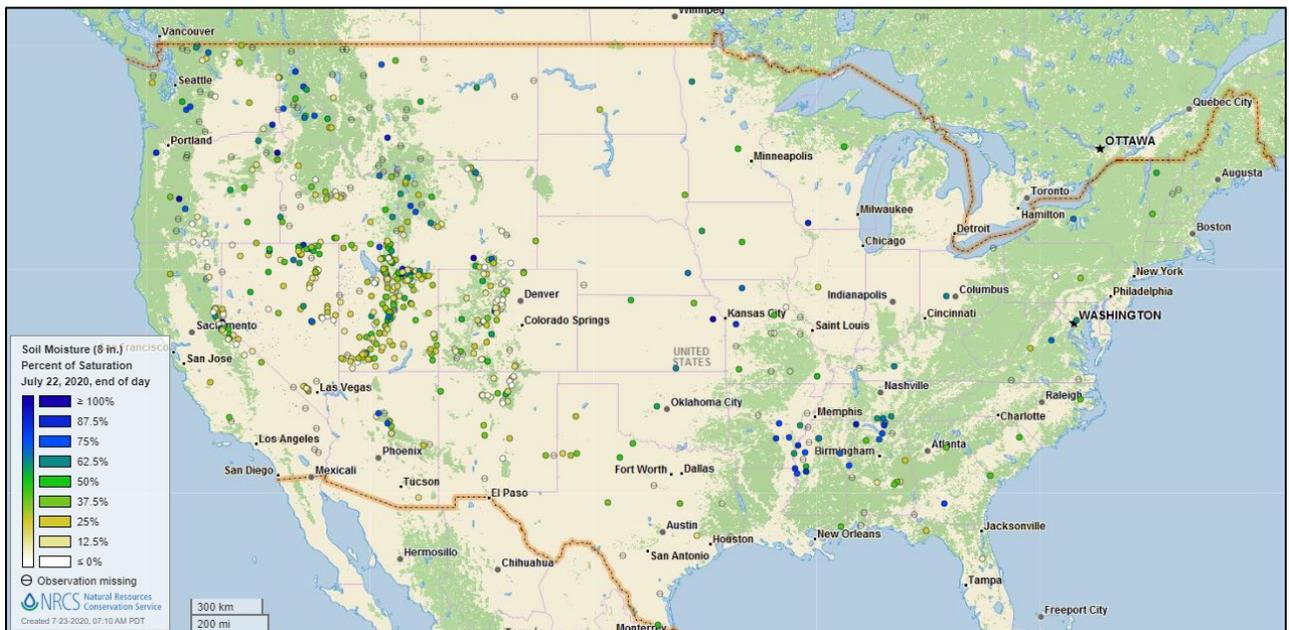
Source: NOAA National Centers for Environmental Prediction



[Modeled soil moisture percentiles](#) as of July 18, 2020

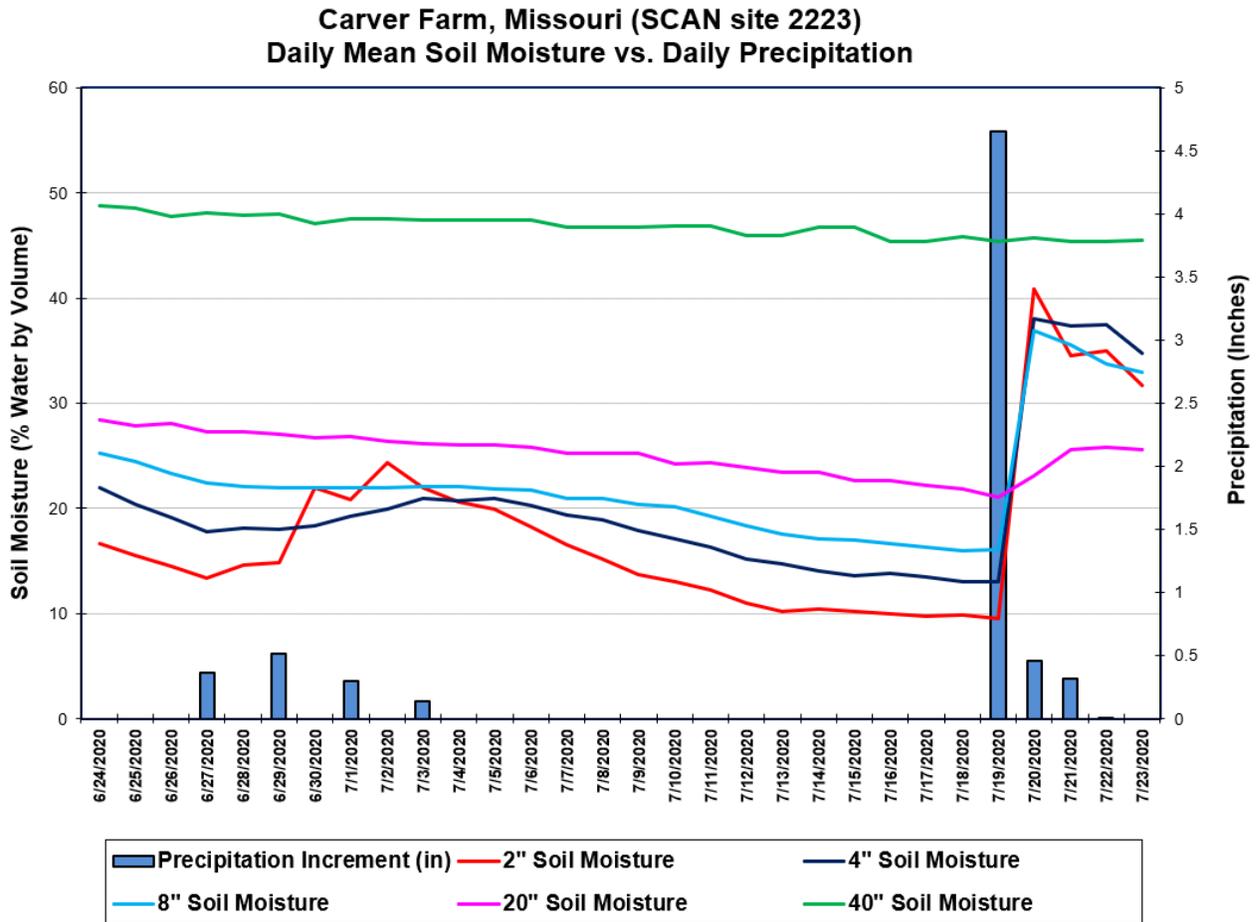
### Soil Moisture Percent of Saturation

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 [Carver Farm](#) SCAN site in Missouri. The precipitation at this site from July 19-21 totaled 5.43 inches and resulted in increased soil moisture at the -2", -4", -8", and -20" sensors.

### Soil Moisture Data Portals

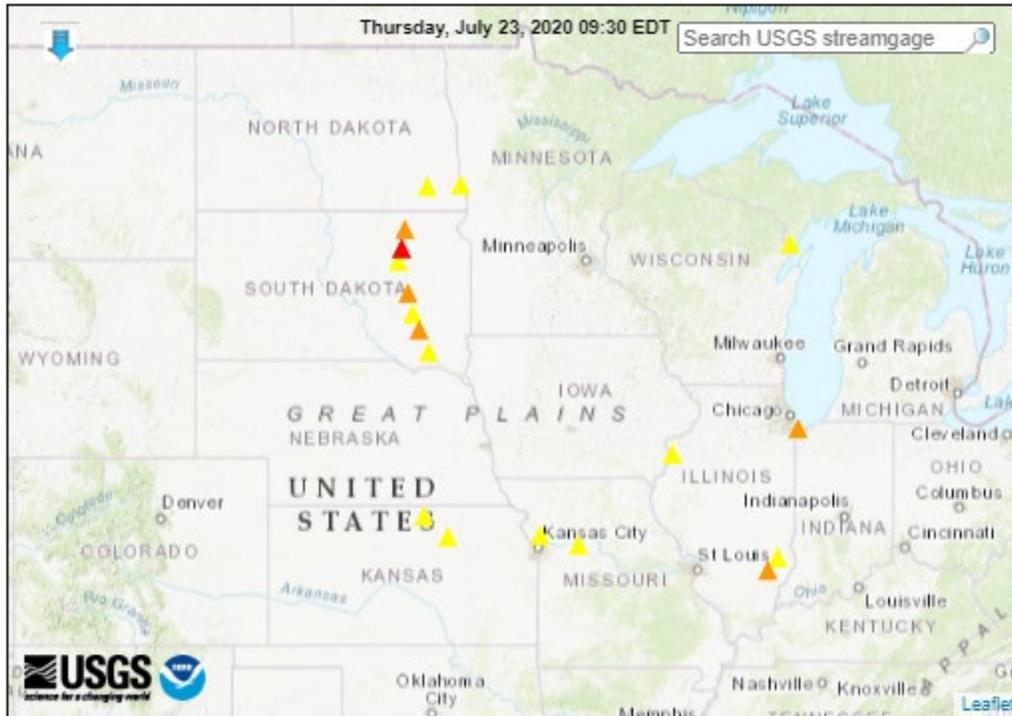
- [CRN Soil Moisture](#)
- [Texas A&M University North American Soil Moisture Database](#)
- [University of Washington Experimental Modeled Soil Moisture](#)

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

Source: U.S. Geological Survey

**Map of flood and high flow conditions**

(6 in floods [moderate: 1, minor: 5], 14 in near-flood)



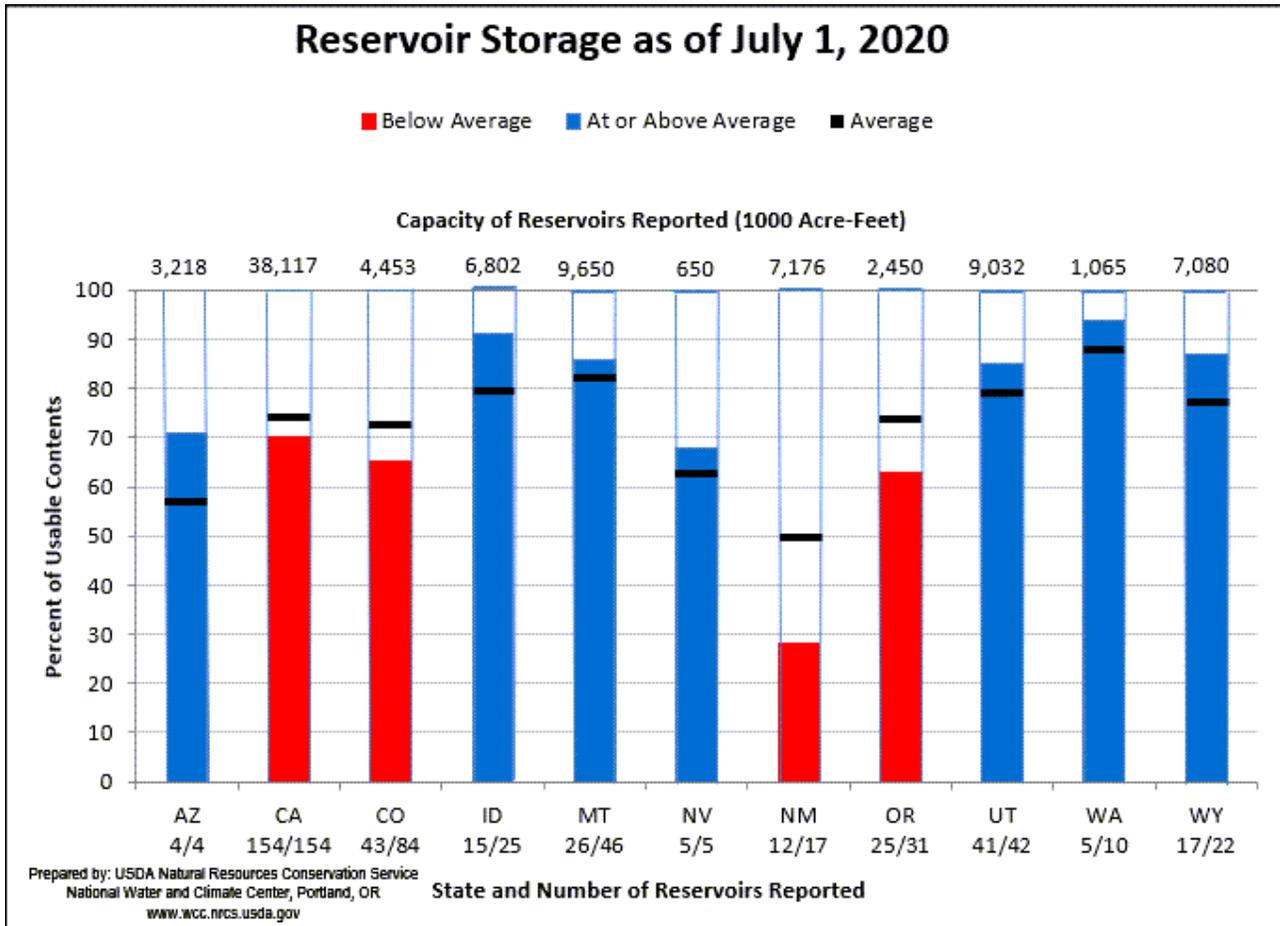
Explanation - Percentile classes						
<95	95-98	>= 99	Above action stage	Above flood stage	Above moderate flood stage	Above major flood stage
			△ Streamgage with flood stage	○ Streamgage without flood stage		

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

## Reservoir Storage

### Western States Reservoir Storage

Source: NRCS National Water and Climate Center



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

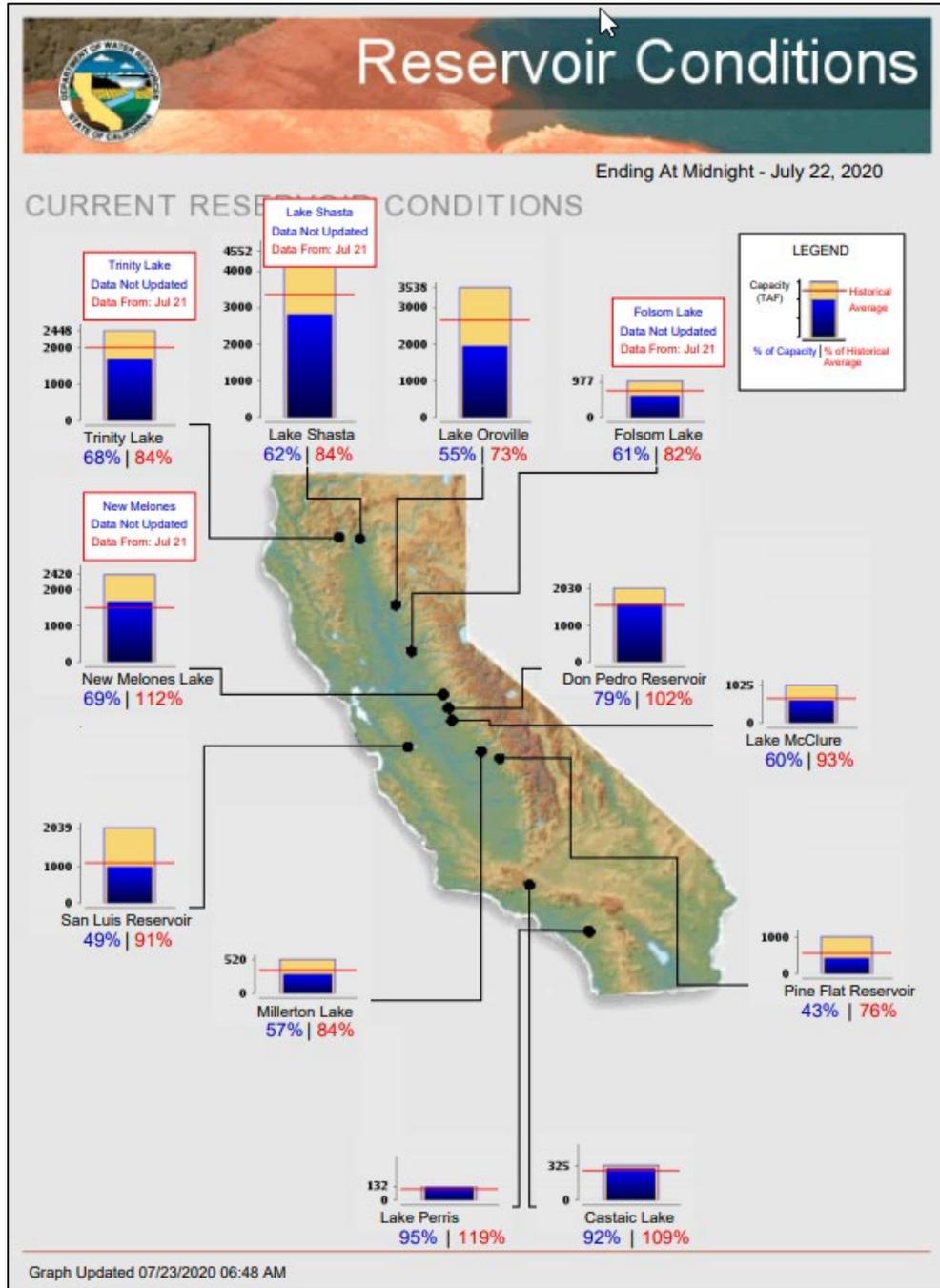
### Hydromet Teacup Reservoir Depictions

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](#)

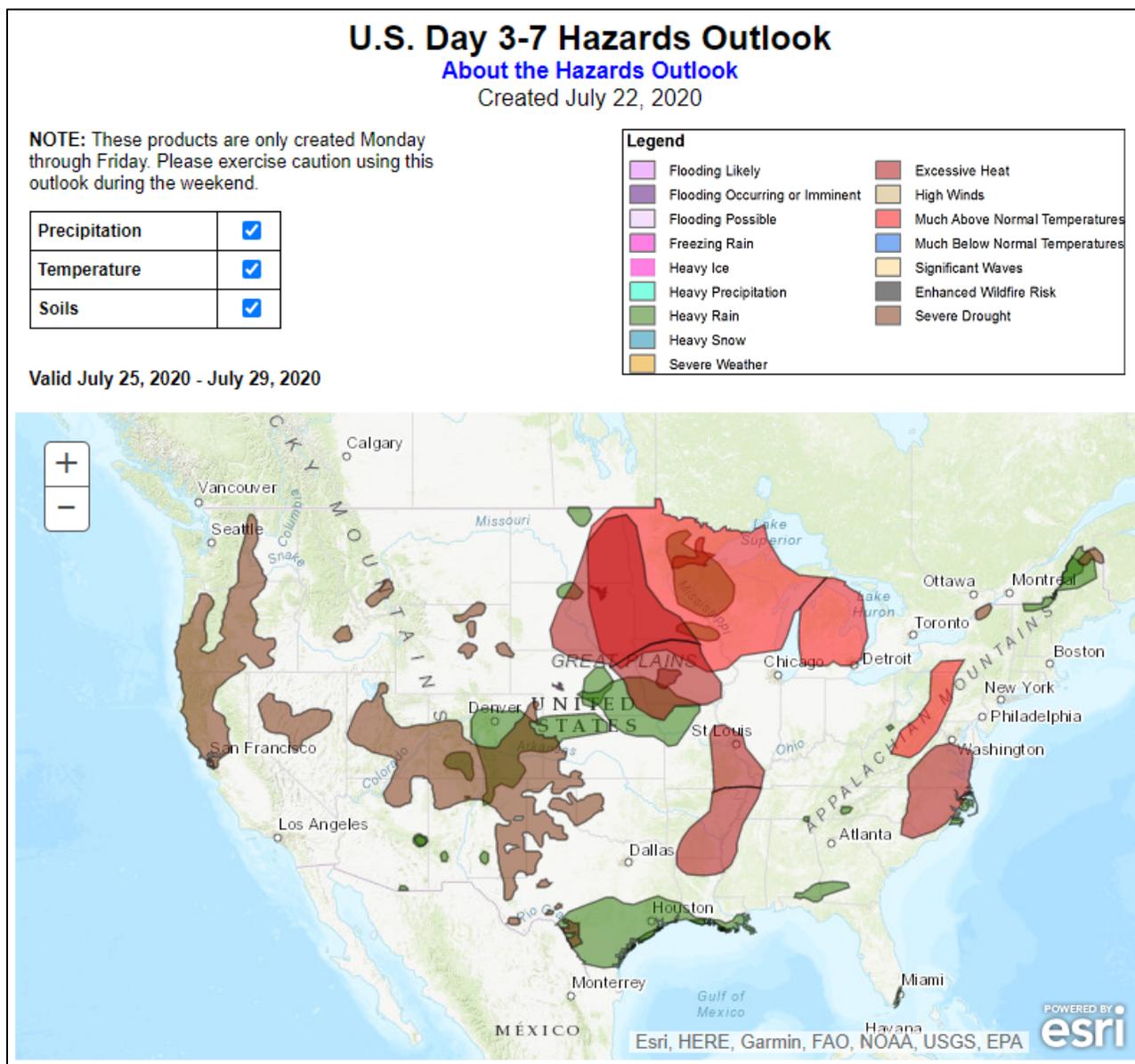
### Agricultural Weather Highlights

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

**National Outlook, Thursday, July 23, 2020:** “Tropical Depression Eight, which may become a tropical storm before making landfall, should reach the Texas coast on Saturday. Rainfall associated with the tropical system could reach 3 to 5 inches or more in coastal sections of Louisiana and Texas. Meanwhile, rain will end tonight across the Northeast but linger into the weekend in the Carolinas and portions of neighboring states. Farther west, an east-bound cold front infused with moisture from the Southwestern monsoon circulation will continue to generate widespread showers. Five-day rainfall totals could reach 1 to 3 inches or more from the Four Corners States into the upper Midwest. Elsewhere, mostly dry weather will prevail during the next 5 days across the southern Plains, Great Basin, and Pacific Coast States. The NWS 6- to 10-day outlook for July 28 – August 1 calls for the likelihood of near or above-normal temperatures and rainfall across much of the country. Cooler-than-normal conditions will be confined to portions of the central and southern Plains and the mid-South, while drier-than-normal weather should be limited to the Great Basin and most of the nation’s northern tier.”

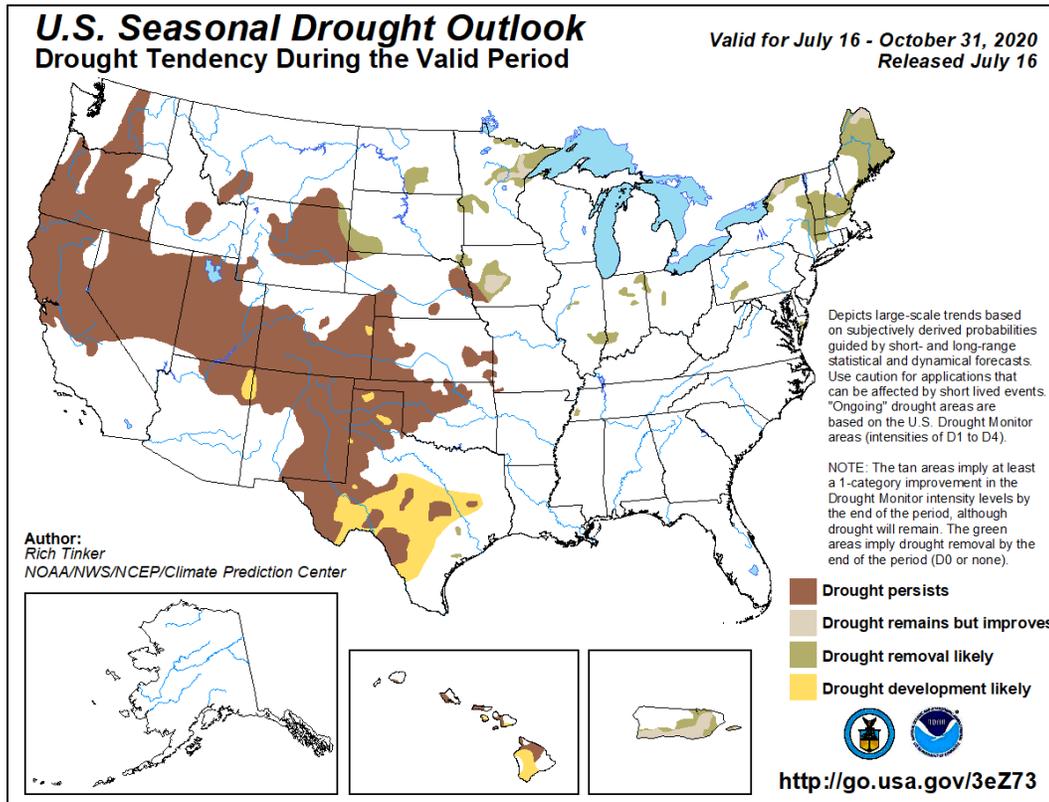
### Weather Hazards Outlook: [July 25 – 29, 2020](#)

Source: NOAA Weather Prediction Center



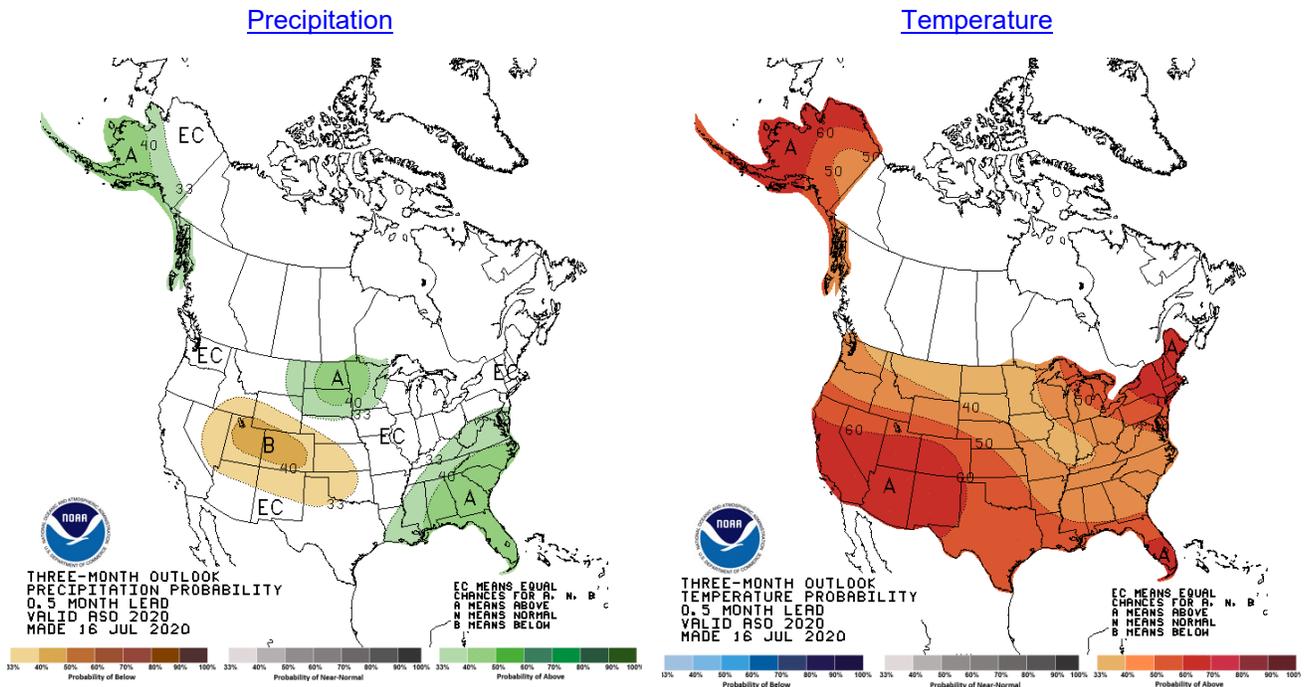
Seasonal Drought Outlook: [July 16 – October 31, 2020](#)

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](#).