

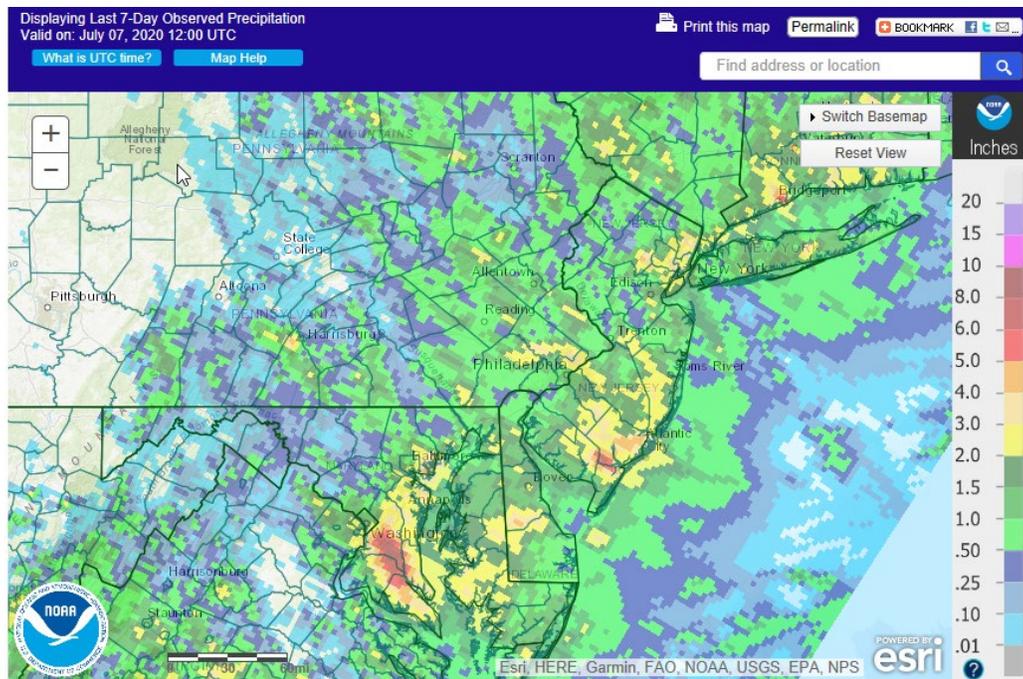
# Water and Climate Update

July 9, 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 .....	17
Drought .....	8		

## Severe storms and flooding across Washington D.C. area



Severe storms swept through Washington D.C. this week, with torrential rain, damaging winds, hail, and flash flooding in the region. Rain totals from the National Weather Service topped 8 inches in a large area southeast of the nation’s capital. Damage included widespread power outages, downed trees, and flooded roads. Heavy rain and flooding were also reported in Georgia and South Carolina. A new storm developing in the Atlantic off the Carolinas is expected to bring more rain along the East Coast in the coming days.

**Related:**

[Heavy storms, flooding continue across parts of D.C. area and could linger through predawn Tuesday](#) – Washington Post

[Heavy rain deluges Georgia, South Carolina, with as much as 12 inches reported](#) – Atlanta Journal Constitution (GA)

[Flash floods in Philly area submerge cars; ‘ring of fire’ storms produce nearly 6 inches of rain, and hail](#) – Philadelphia Inquirer (PA)

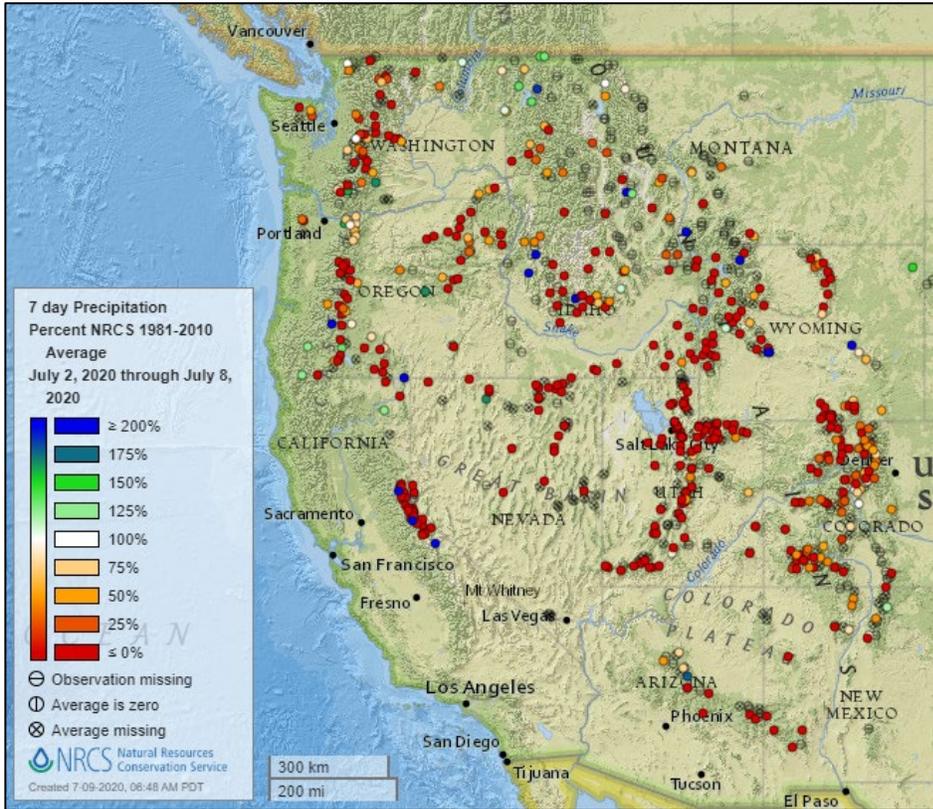
[N.J. hit with ping pong ball-sized hail and flooding after heavy downpour](#) – NJ.com on MSN.com

[Thunderstorms Bring Strong Winds, Flooding to DC Area](#) – NBC Washington (DC).

[Heavy Rain, Wind Causes Flooding Throughout Some Parts Of Maryland](#) – CBS Baltimore (MD)

# Precipitation

## Last 7 Days, NRCS SNOTEL Network

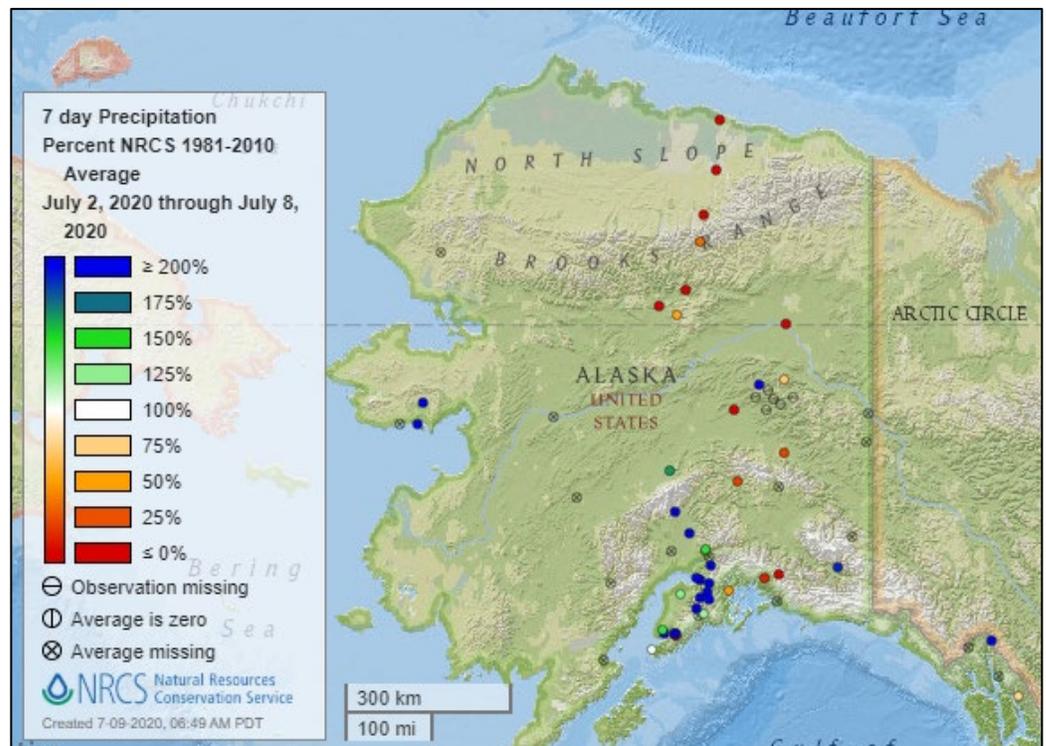


[7-day precipitation percent of average map](#)

**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](#)



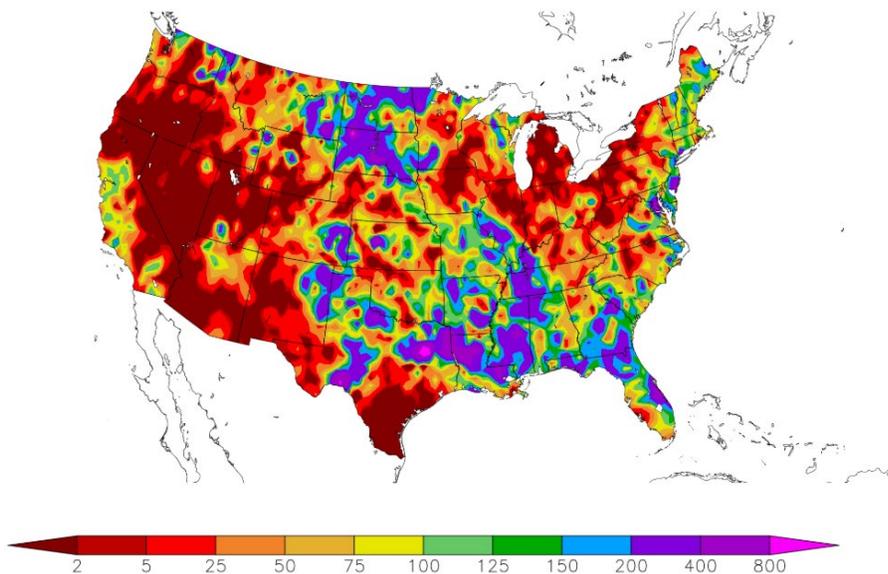
**Last 7 Days, National Weather Service (NWS) Networks**

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 (%)  
7/1/2020 – 7/7/2020



Generated 7/8/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

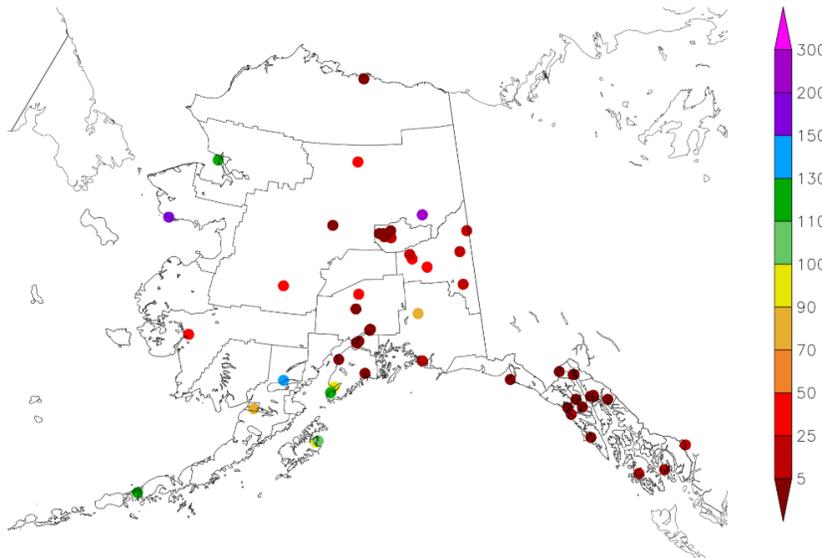
**Last 7 Days, National Weather Service (NWS) Networks**

Source: Regional Climate Centers

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

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

Percent of Normal Precipitation (%)  
7/1/2020 – 7/7/2020



Generated 7/8/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

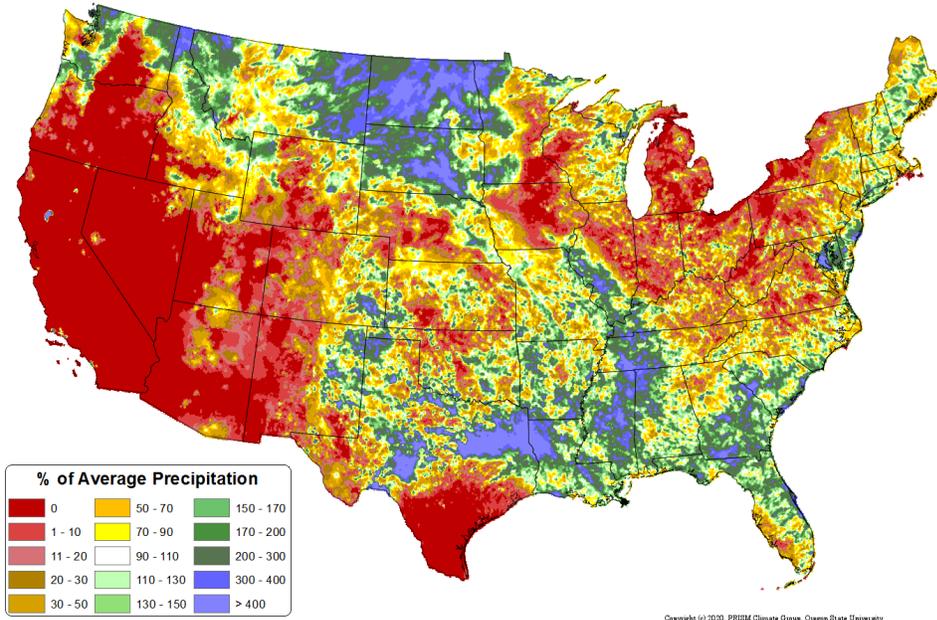
# Water and Climate Update

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

Source: PRISM

Total Precipitation Anomaly: 01 Jul 2020 - 08 Jul 2020  
Period ending 7 AM EST 08 Jul 2020  
Base period: 1981-2010  
(Map created 09 Jul 2020)

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

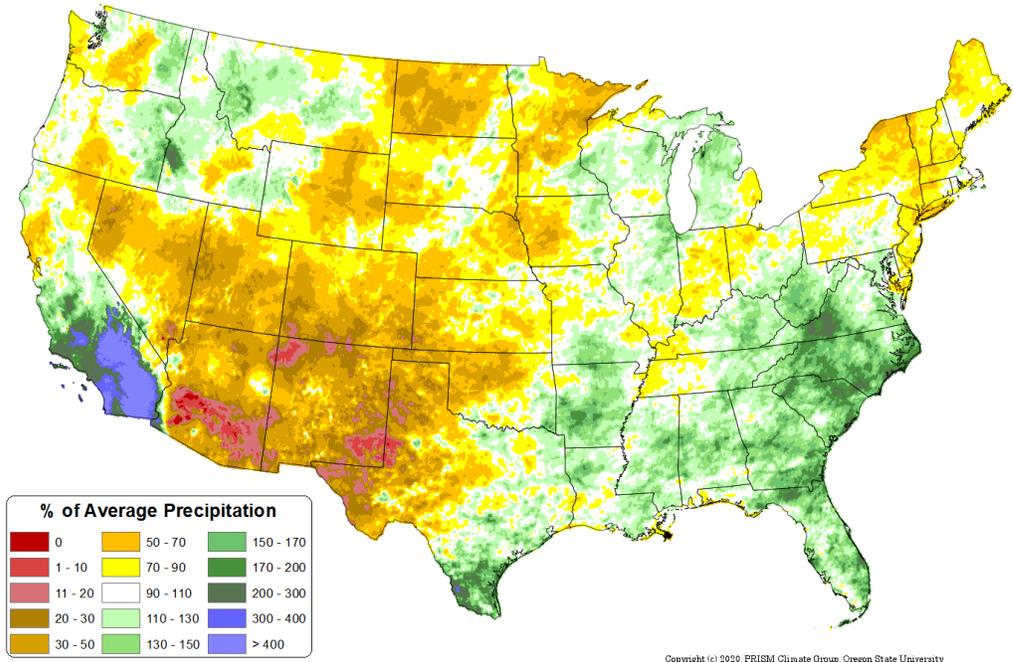


## Last 3 Months, All Available Data Including SNOTEL and NWS Networks

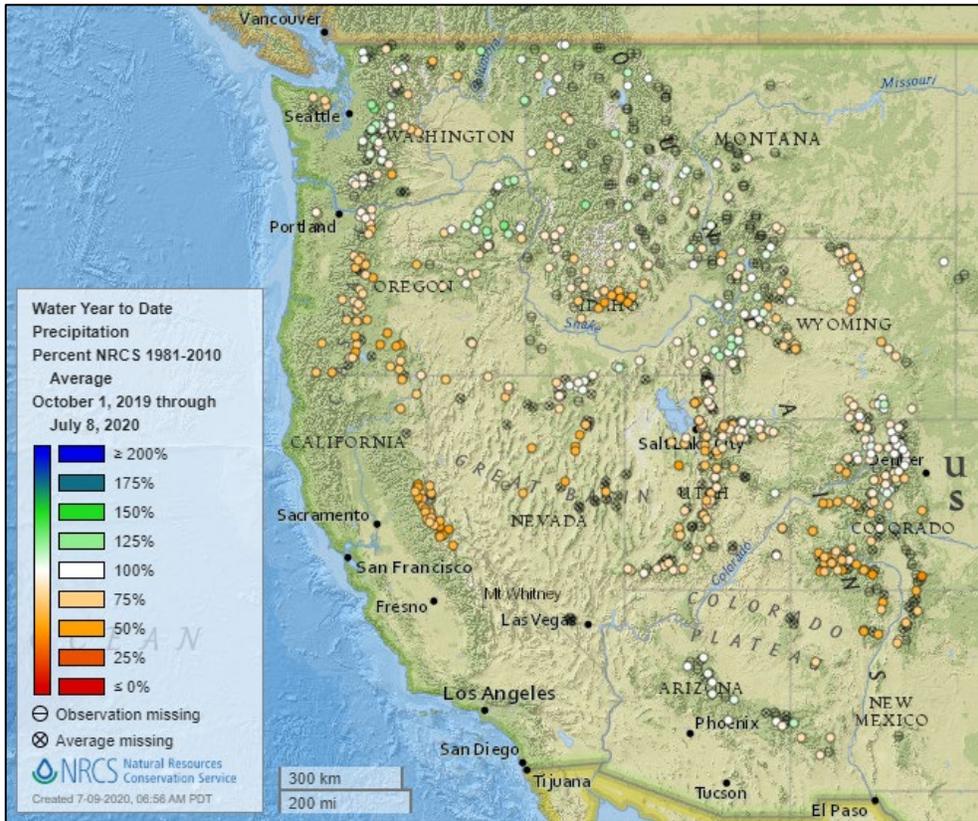
Source: PRISM

[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)

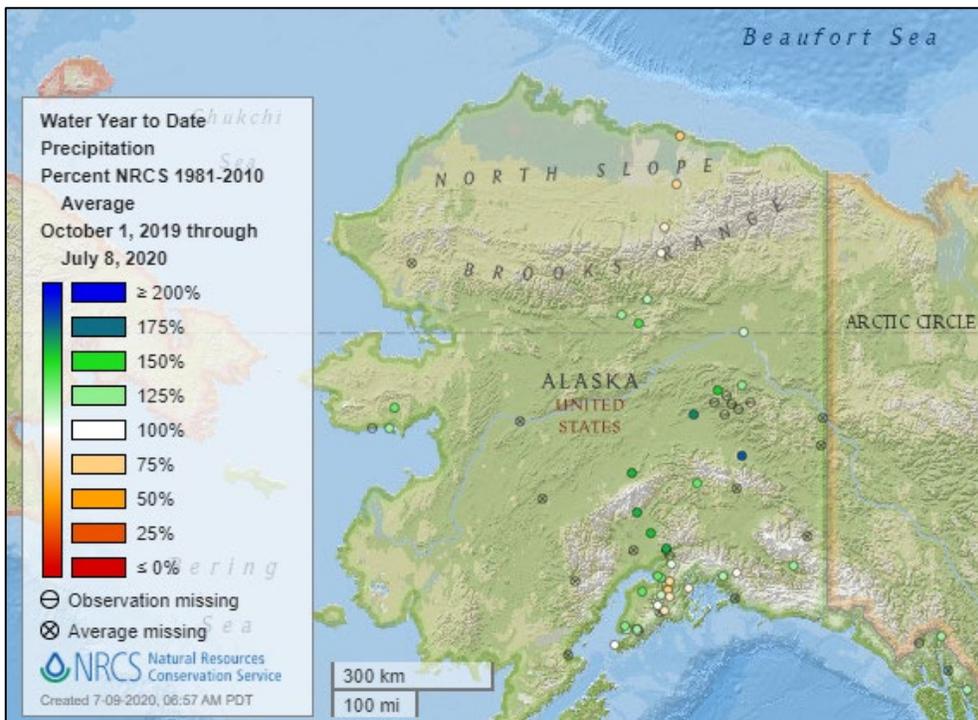


Water Year-to-Date, NRCS SNOTEL Network



[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

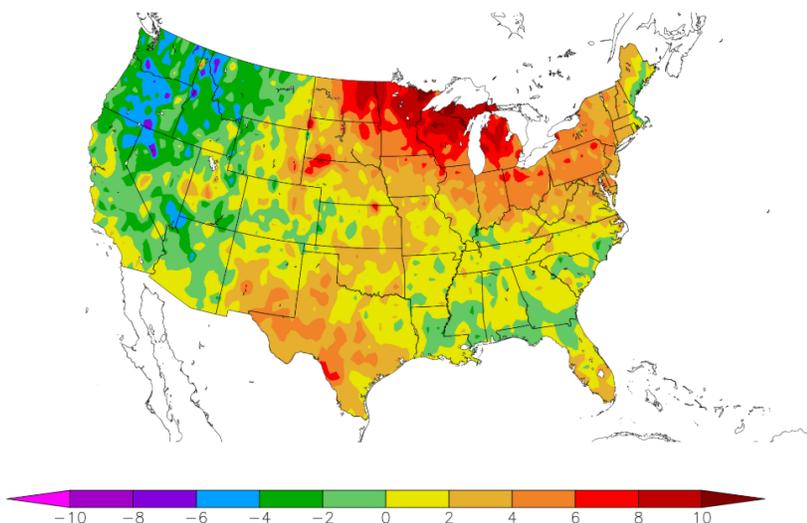
### Last 7 Days, National Weather Service (NWS) Networks

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)  
7/1/2020 – 7/7/2020



Generated 7/8/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

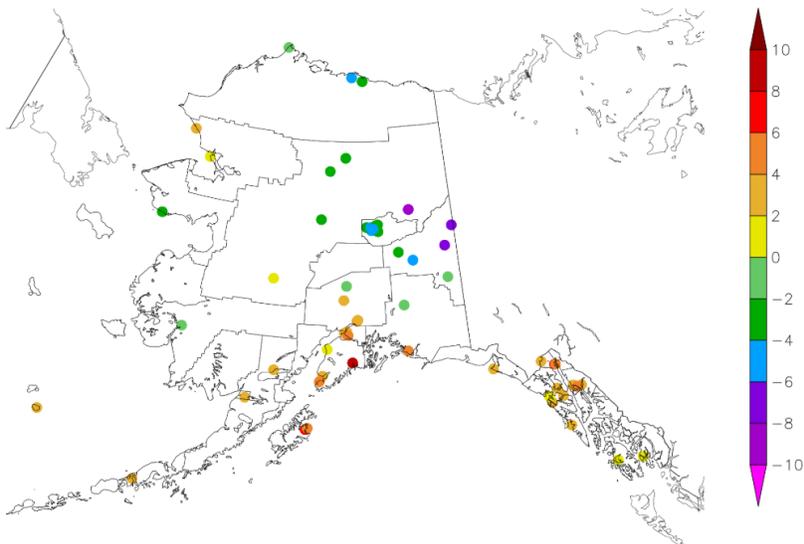
### Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)  
7/1/2020 – 7/7/2020



Generated 7/8/2020 at HPRCC using provisional data.

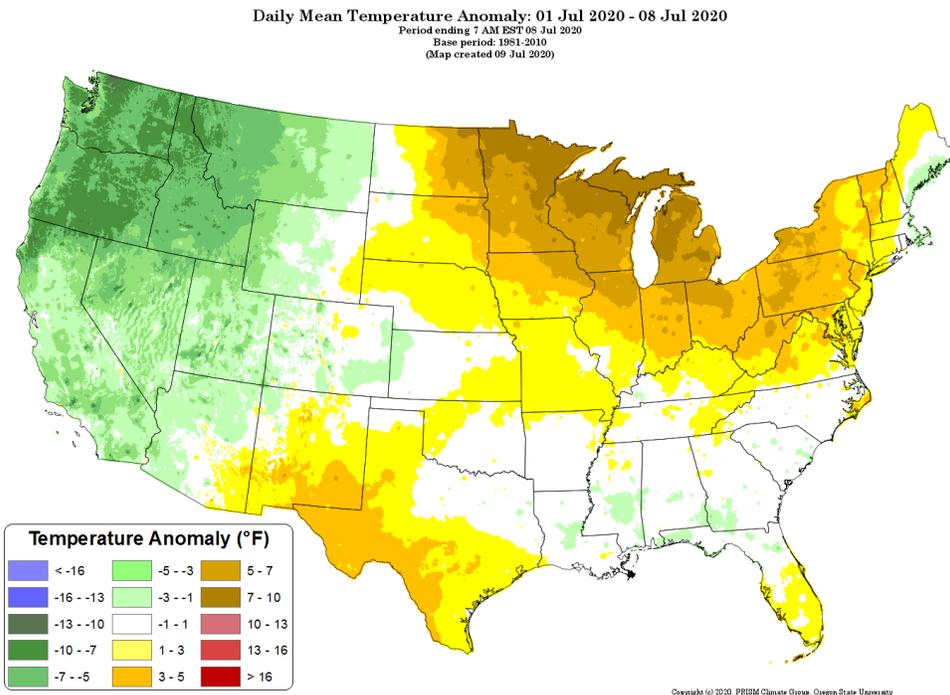
NOAA Regional Climate Centers

# Water and Climate Update

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

Source: PRISM

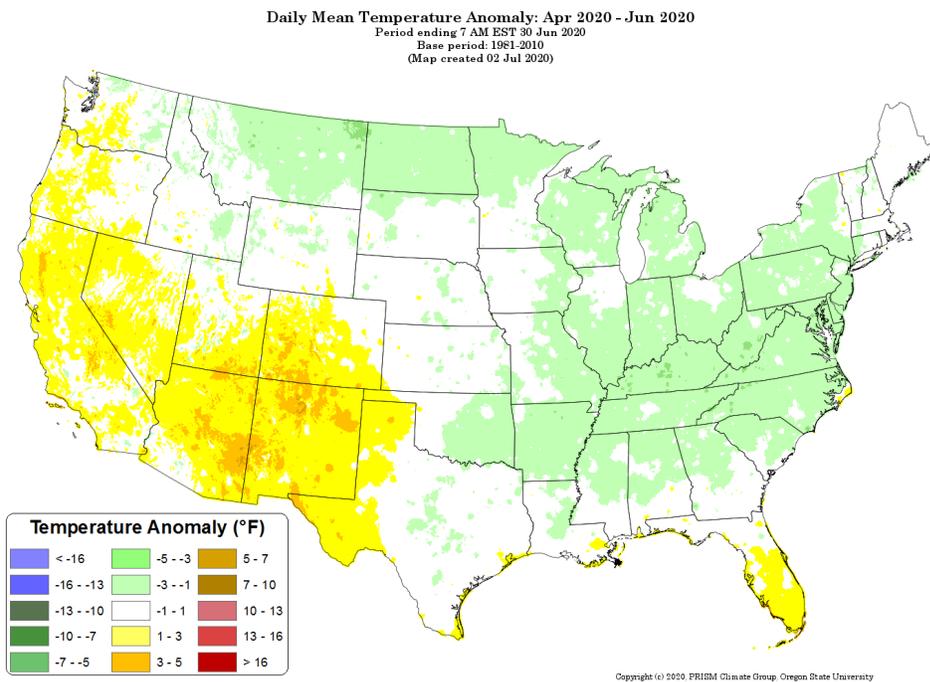
[Month to date national daily mean temperature anomaly map](#)



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

Source: PRISM

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



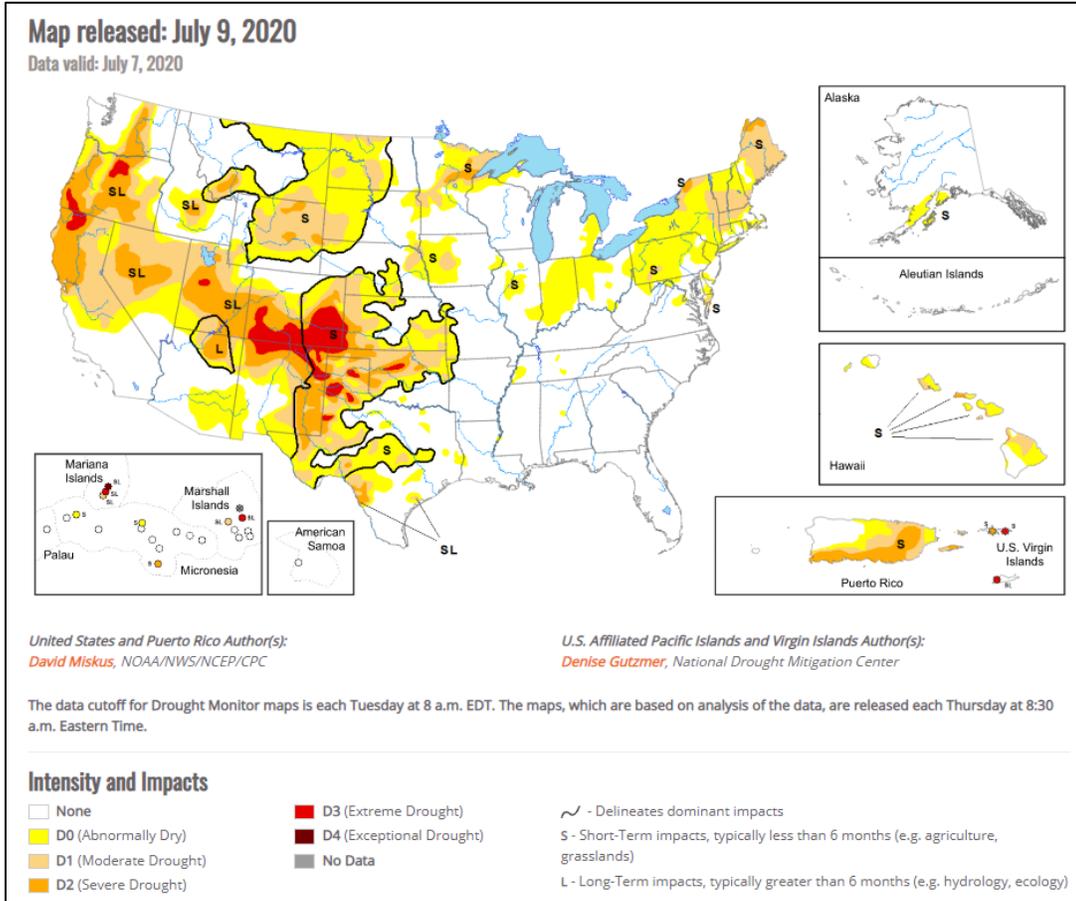
## Drought

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

Source: National Drought Mitigation Center

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

Source: NOAA



### Current [National Drought Summary](#), July 9, 2020

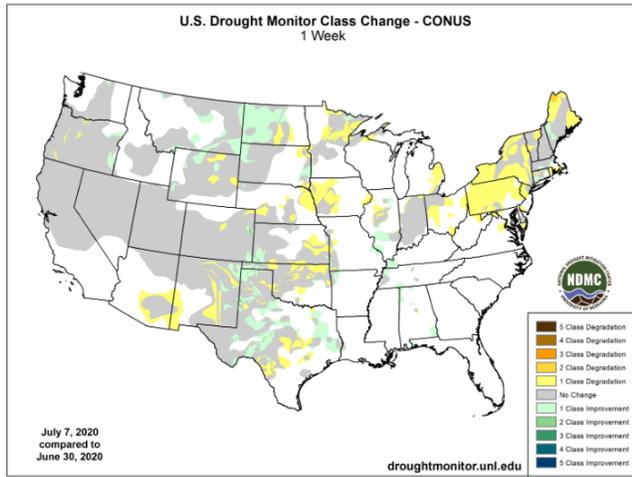
Source: National Drought Mitigation Center

“A trough of low pressure over the West kept much of the Northwest and Southwest unseasonably cool for early July, while high pressure, high humidity, and stalled or slow-moving fronts were the focus for scattered showers and thunderstorms across most of the Plains, middle and lower Mississippi and Tennessee River Valleys, the Southeast, and along eastern sections of the mid-Atlantic and New England. The greatest weekly totals (more than 2 inches) fell on the Dakotas, western parts of Illinois, Kentucky, and Tennessee, the lower Mississippi Valley, and along the eastern two-thirds of the Gulf and the southern Atlantic Coasts (including Florida). Light to moderate amounts (0.5-2 inches) were reported from western Washington eastward to western Minnesota, throughout most of the Plains and Southeast, and in eastern sections of the Northeast. Little or no precipitation fell on most of the Far West, Southwest, southern Texas, the Corn Belt, and western portions of the mid-Atlantic and New England. Temperatures averaged above normal east of the Rockies, especially in the Northern Great Plains, upper Midwest, and Great Lakes region that saw weekly departures of +4 to 10 degrees F. Temperatures averaged close to normal in the Southeast and lower Mississippi River Valley where frequent bouts of rain and clouds kept readings down. In Hawaii, windward shower activity increased later in the period, but was not enough to make any major improvements. Subnormal rainfall continued across Puerto Rico except in northwestern sections of the island, deteriorating conditions across eastern areas. In Alaska, light precipitation was measured at most stations, but a dry June around the Kenai Peninsula area warranted some D0 in southwestern Alaska.”

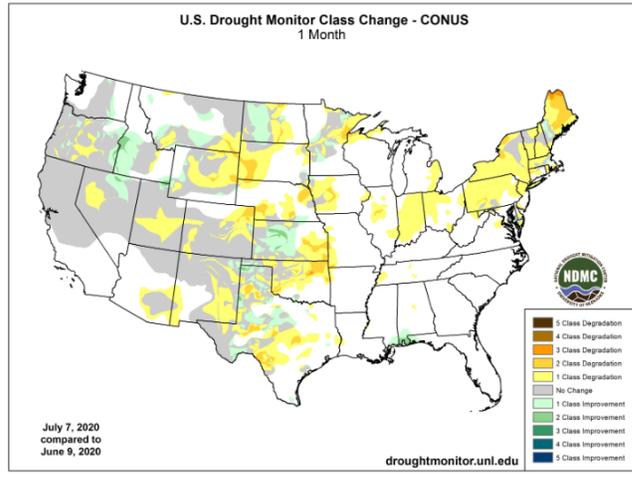
## Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

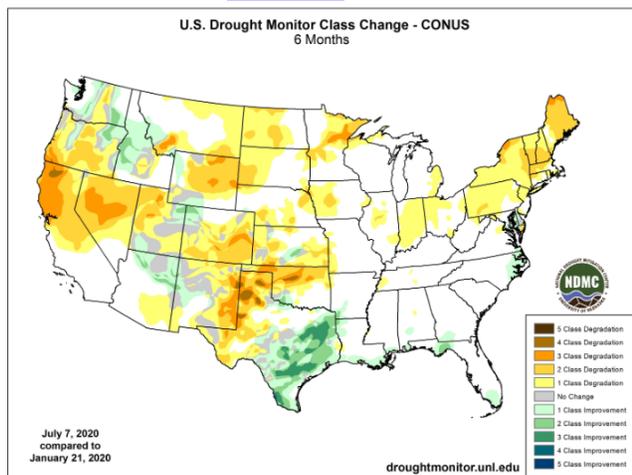
### 1 Week



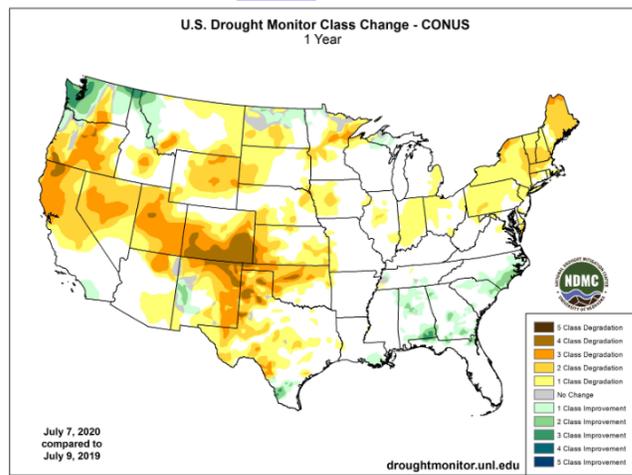
### 1 Month



### 6 Months



### 1 Year



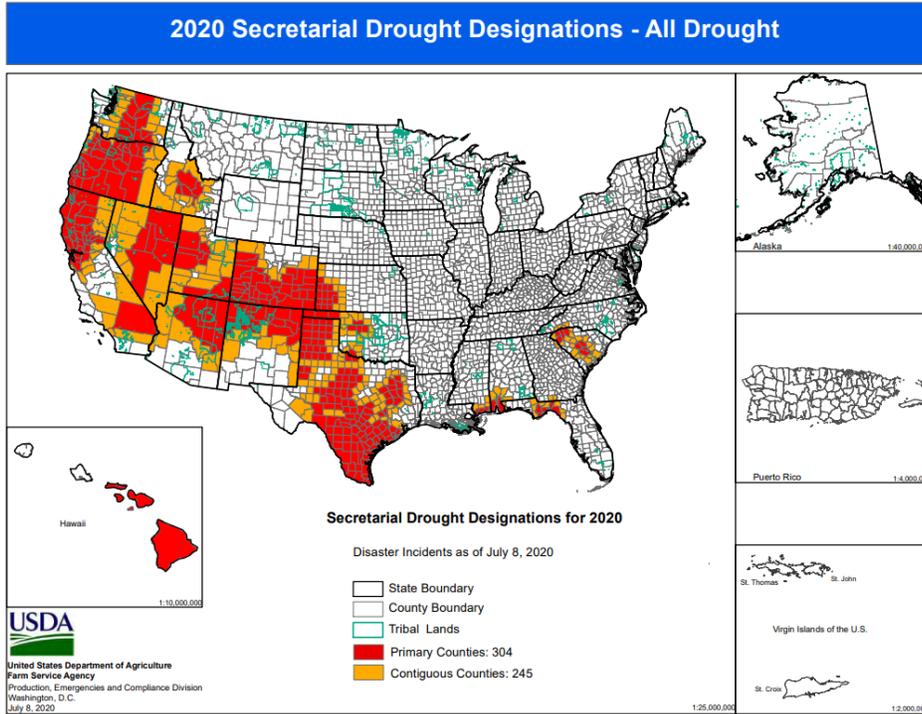
[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

## Highlighted Drought Resources

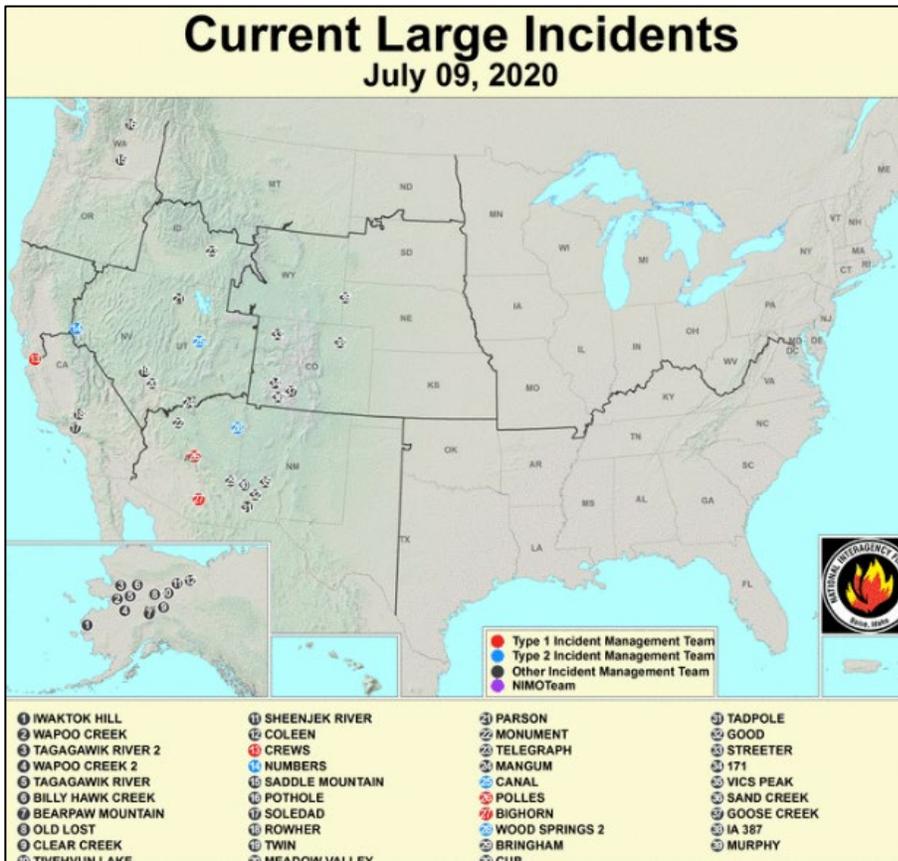
- [Drought Impact Reporter](#)
- [Quarterly Regional Climate Impacts and Outlook](#)
- [U.S. Drought Portal Indicators and Monitoring](#)
- [U.S. Population in Drought, Weekly Comparison](#)
- [USDA Disaster and Drought Information](#)

**Secretarial Drought Designations**

Source: USDA Farm Service Agency



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



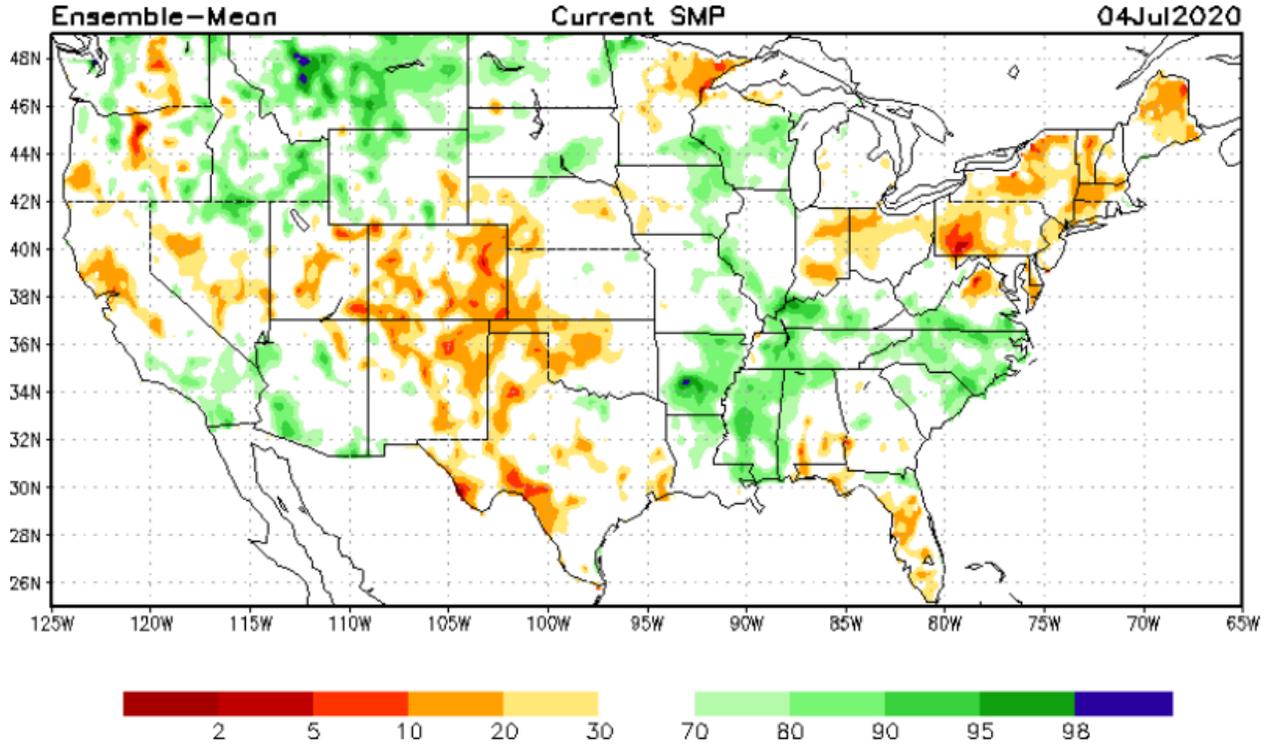
**Highlighted Wildfire Resources**

- [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 4, 2020

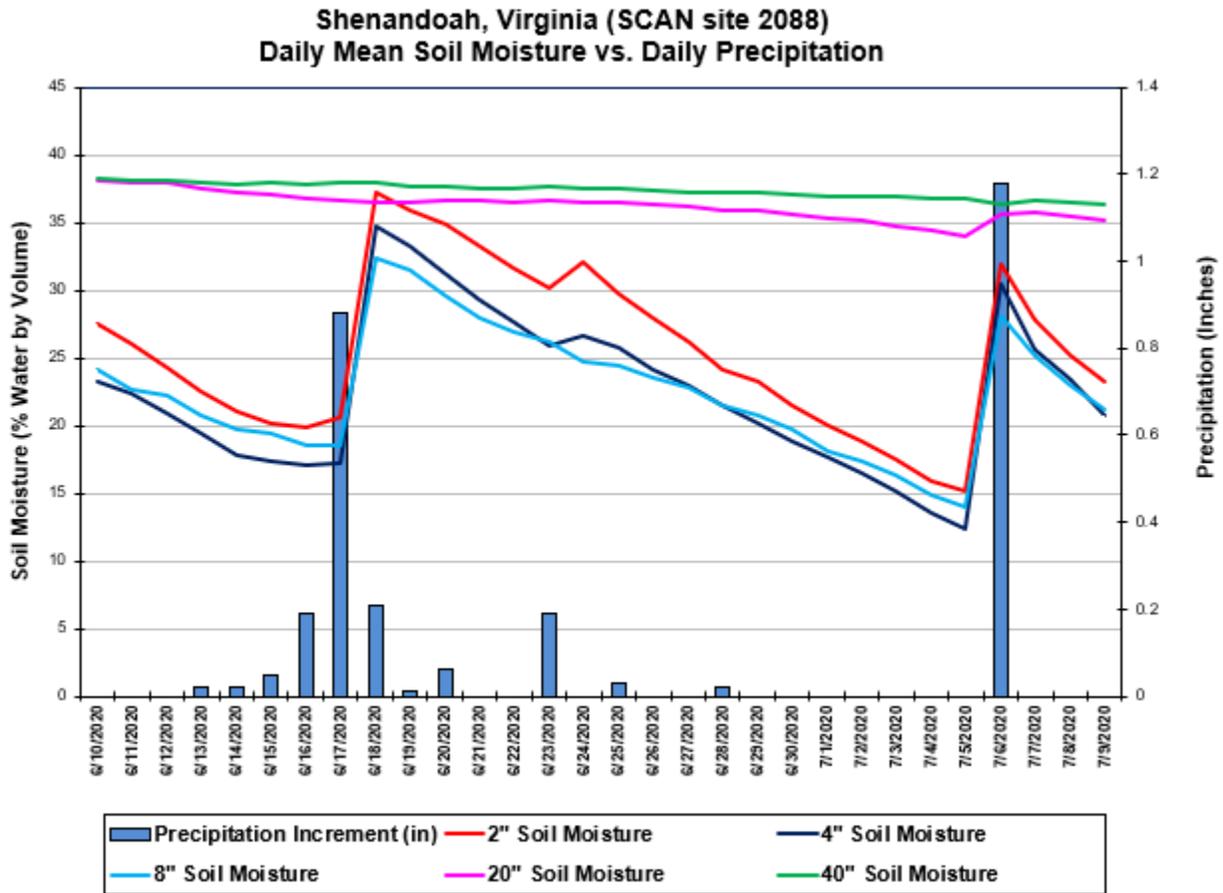
### Soil Moisture Percent of Saturation

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



### Soil Moisture Data

Source: NRCS [Soil Climate Analysis Network](https://www.nrcs.usda.gov/soil-climate-analysis-network) (SCAN)



This chart shows the soil moisture and precipitation for the last 30 days at the [Shenandoah](#) SCAN site in Virginia. Precipitation on July 6 resulted in increased soil moisture at the -2", -4", -8", and -20" sensor depths.

### Soil Moisture Data Portals

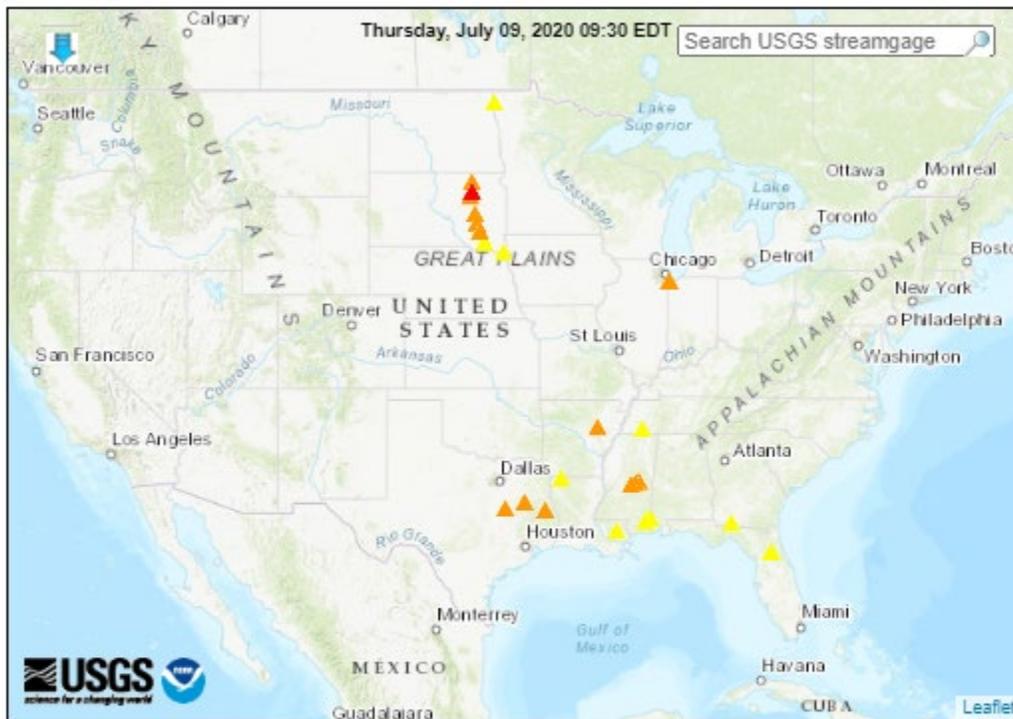
- [CRN Soil Moisture](#)
- [Texas A&M University North American Soil Moisture Database](#)
- [University of Washington Experimental Modeled Soil Moisture](#)

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

Source: U.S. Geological Survey

**Map of flood and high flow conditions**

(14 in floods [moderate: 1, minor: 13], 10 in near-flood)



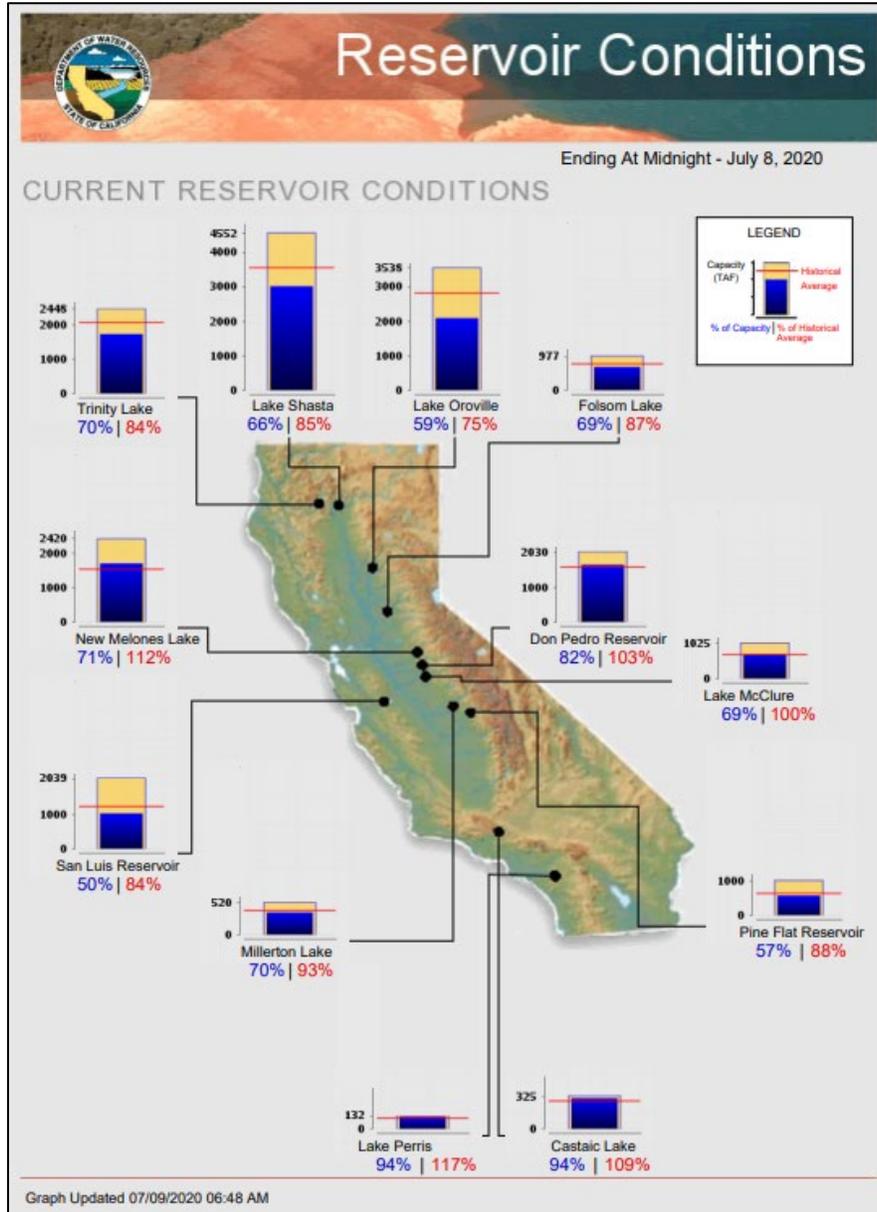
Explanation - Percentile classes						
<95	95-98	>= 99	Above action stage	Above flood stage	Above moderate flood stage	Above major flood stage
Streamgauge with flood stage			Streamgauge without flood stage			

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

## Reservoir Storage

### Current California Reservoir Conditions

Source: California Department of Water Resources



[Current California Reservoir Conditions](#)

### 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](#)

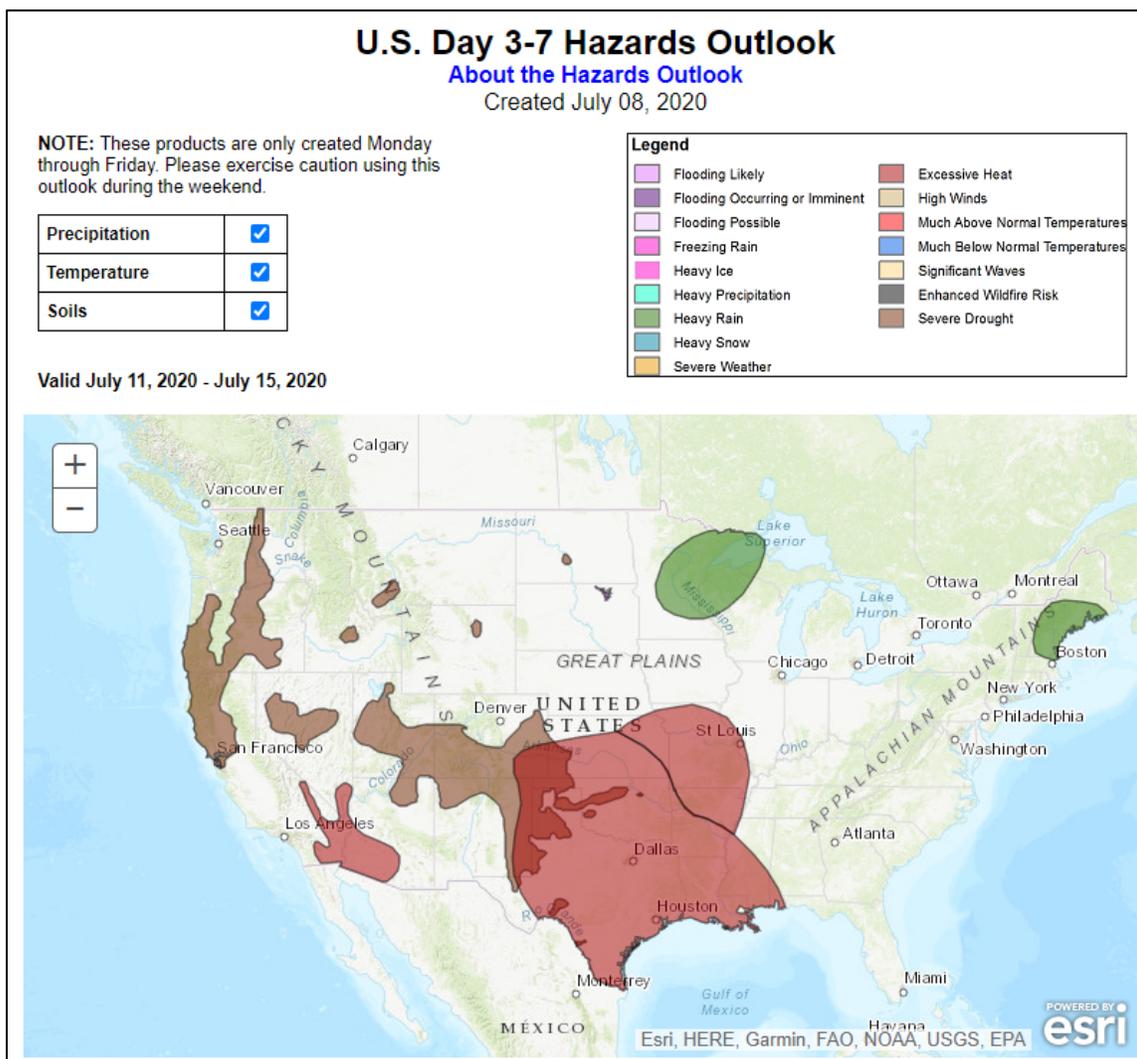
### Agricultural Weather Highlights

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

**National Outlook, Thursday, July 9, 2020:** “A low-pressure system near the North Carolina coastline could become a tropical storm later today or on Friday. Regardless of development, the storm system will move northeastward near the Atlantic Seaboard, delivering at least 1 to 3 inches of rain across the northeastern U.S. If tropical-storm formation occurs, gusty winds may accompany the Northeastern rainfall. Meanwhile, a series of cold fronts will maintain the likelihood of scattered showers and thunderstorms across the remainder of the central and eastern U.S. Five-day rainfall totals could reach 1 to 2 inches in the Midwest. In contrast, dry weather will prevail in most areas from the Pacific Coast to the High Plains. Intensifying heat will accompany the dry weather across the southern High Plains and the Southwest, further stressing rangeland, pastures, and summer crops. The NWS 6- to 10-day outlook for July 14 – 18 calls for the likelihood of above-normal temperatures along and east of a line from the Four Corners region into the upper Midwest, while cooler-than-normal weather will cover northern sections of the Rockies and Plains, as well as much of the Far West. Meanwhile, near- or below-normal rainfall across most of the country should contrast with wetter-than-normal weather in southern Florida and across the nation’s northern tier from Washington to Michigan.”

### Weather Hazards Outlook: [July 11 – 15, 2020](#)

Source: NOAA Weather Prediction Center

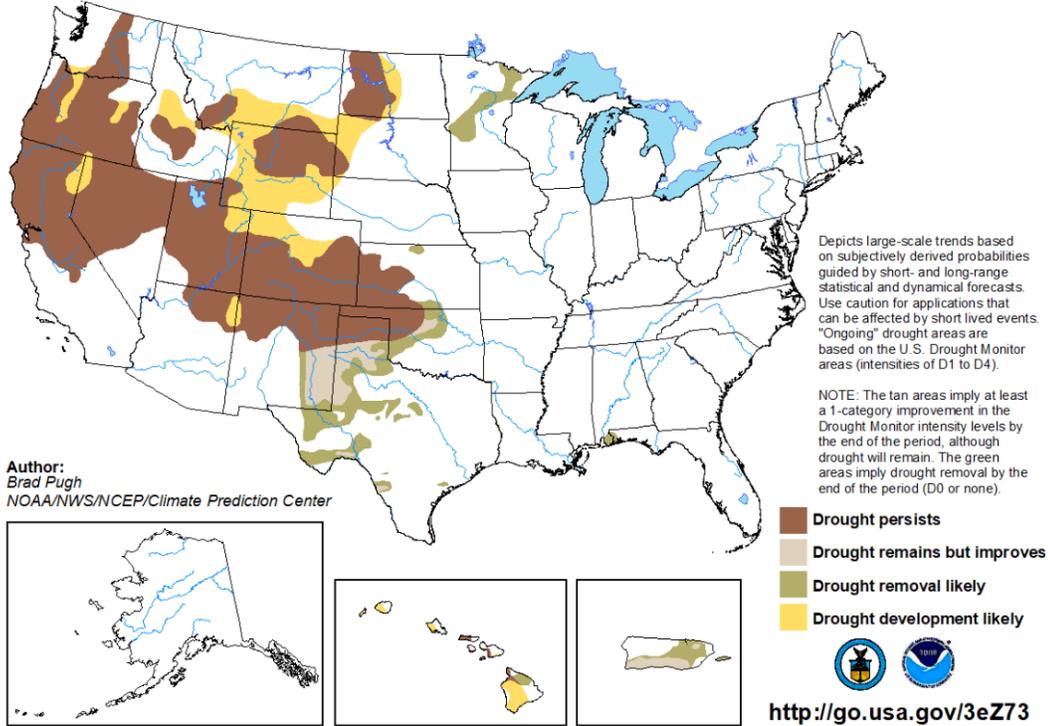


**Seasonal Drought Outlook: [June 18 – September 30, 2020](#)**

Source: National Weather Service

**U.S. Seasonal Drought Outlook**  
Drought Tendency During the Valid Period

Valid for June 18 - September 30, 2020  
Released June 18

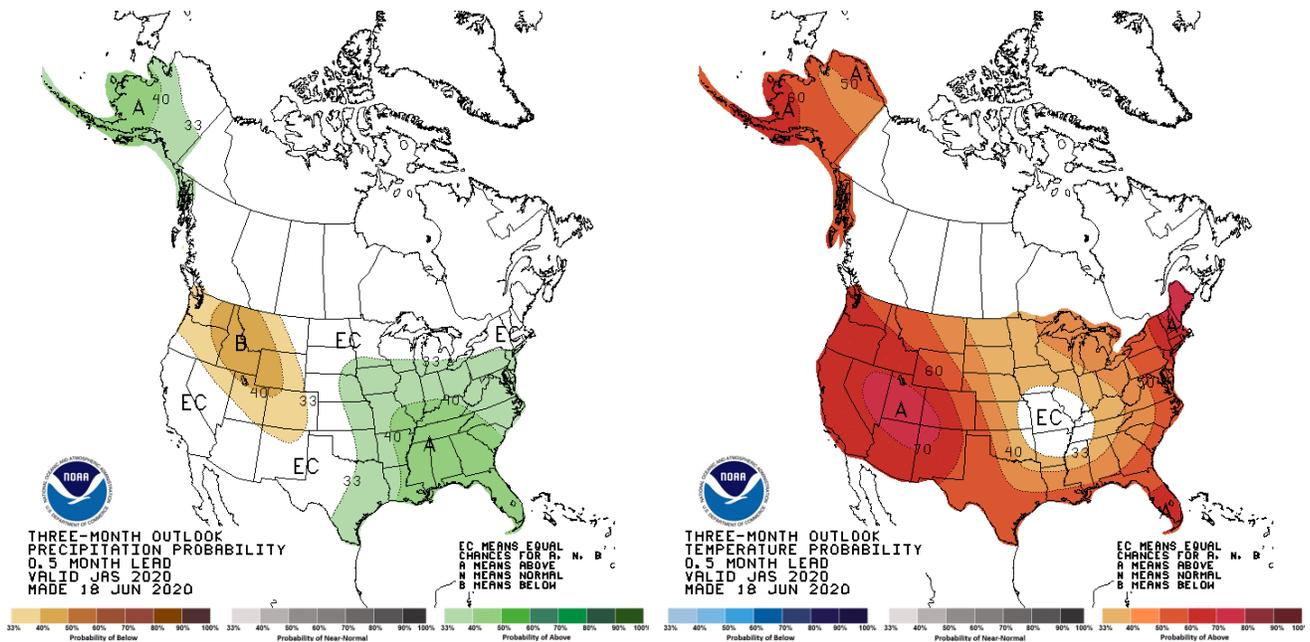


**Climate Prediction Center 3-Month Outlook**

Source: National Weather Service

Precipitation

Temperature



[July-August=September \(JAS\) 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](#).