

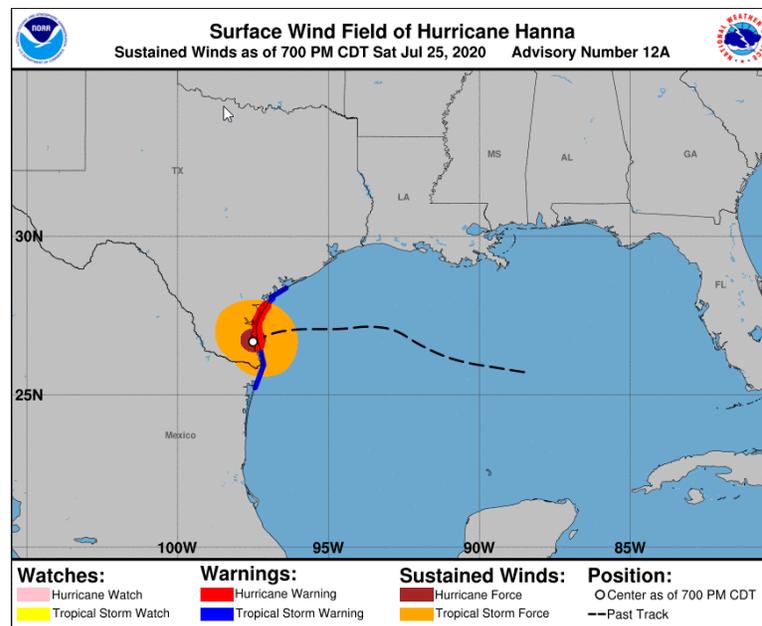
# Water and Climate Update

## July 30, 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		

### Hurricane Hanna makes landfall in southern Texas



Hurricane Hanna was a Category 1 storm when it reached the Texas coast late Saturday. Winds were recorded at 90 mph when it made landfall on Padre Island, 130 miles south of Corpus Christi. At the peak of the storm, 200,000 homes and businesses were without power. Rainfall totals topped 12 inches with some higher amounts in nearby Mexico. Damage was reported as the result of flash flooding, high winds, and a strong storm surge.

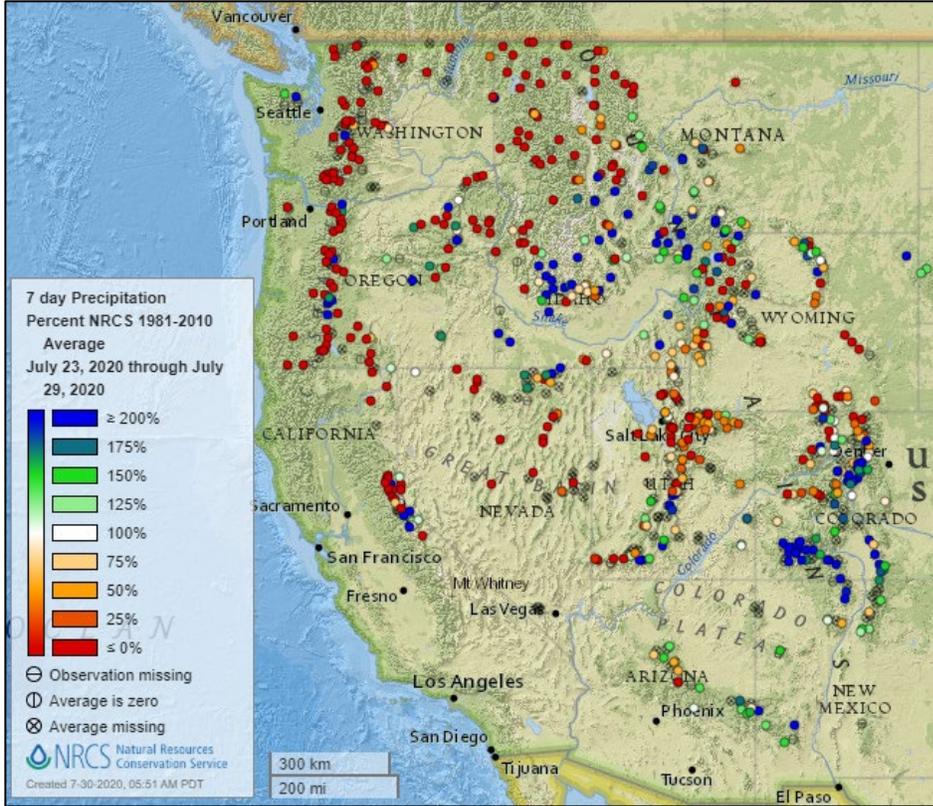
On Monday, Hurricane Douglas grazed the Hawaiian Islands in the Pacific. The storm turned slightly from its predicted track and missed the island of Kauai by 39 miles. If the hurricane had made landfall, it would have been only the third recorded hurricane to do so on the Hawaiian Islands.

**Related:**

- [Thousands of Texans remain without power in the aftermath of Hurricane Hanna](#) – The Texas Tribune
- [Hurricane Hanna pummels Texas and Mexico](#) - Reuters
- [Hurricane Hanna makes landfall, causes severe flooding near Indianola](#) – Victoria Advocate (TX)
- [Hawaii ‘breathing a sigh of relief’ as Douglas pulls away after just grazing islands](#) –Washington Post
- [Hurricane Hanna Photos Reveal Texas Destruction, Flooding in Corpus Christi](#) – Newsweek
- [Flooding, damage, power outages in Texas after Hurricane Hanna](#) – UPI.com
- [Hurricane Hanna slams Corpus Christi-area with flooding, damage: Sunday updates](#) - The Corpus Christi Caller Times on MSN.com

# Precipitation

## Last 7 Days, NRCS SNOTEL Network

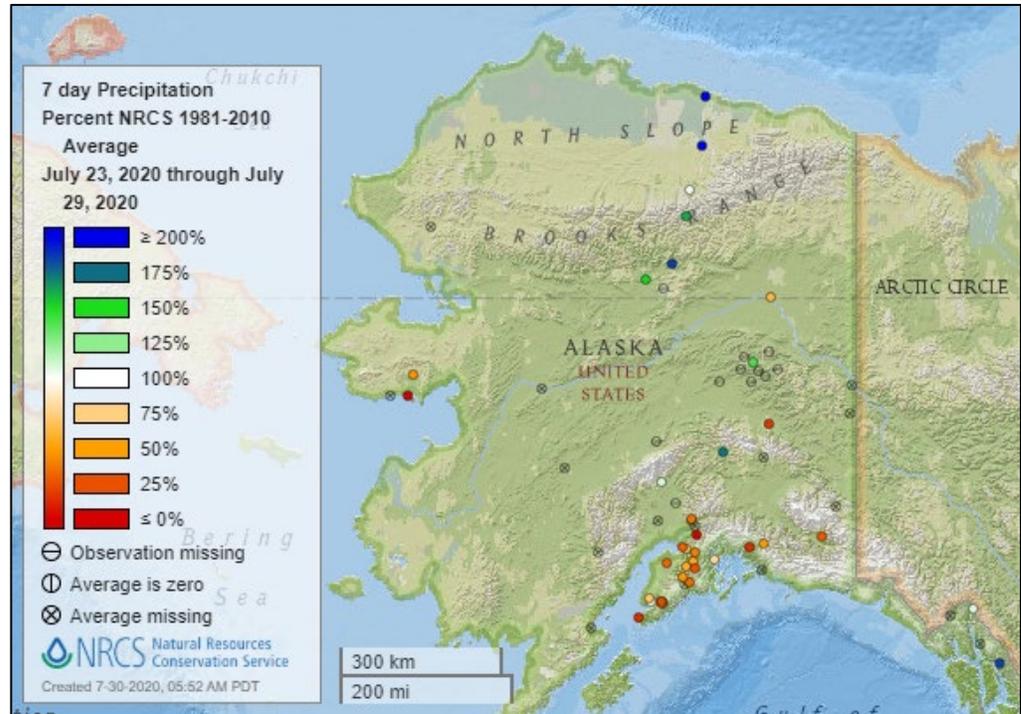


[7-day precipitation percent of average map](#)

**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](#)



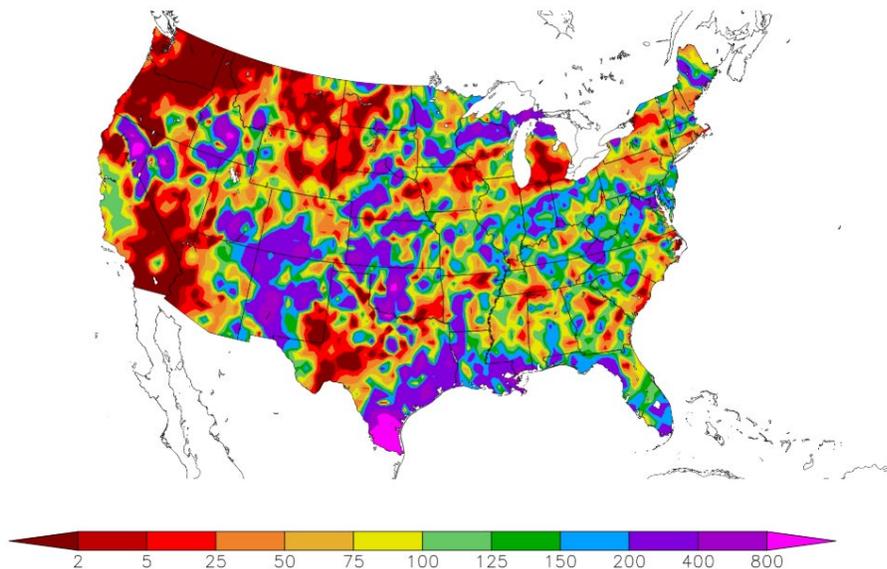
### Last 7 Days, National Weather Service (NWS) Networks

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 (%)  
7/22/2020 – 7/28/2020



Generated 7/29/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

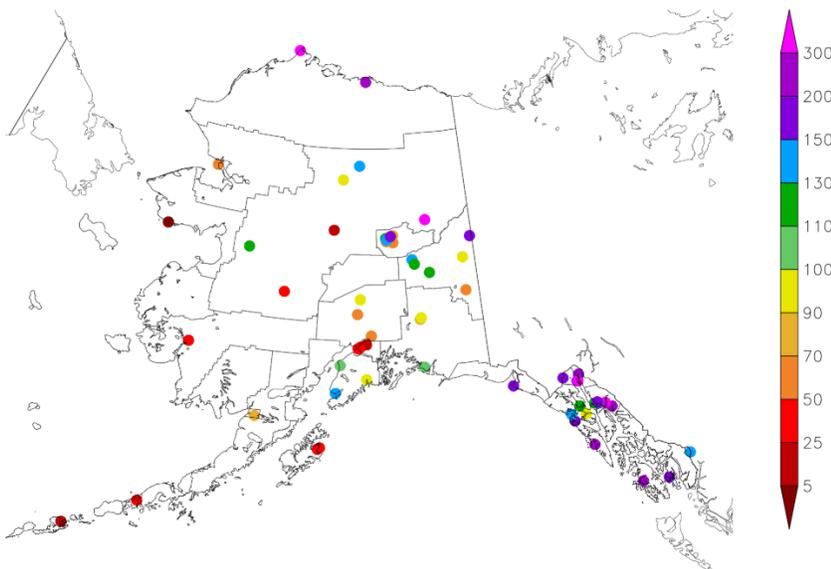
### Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Percent of Normal Precipitation (%)  
7/22/2020 – 7/28/2020



Generated 7/29/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

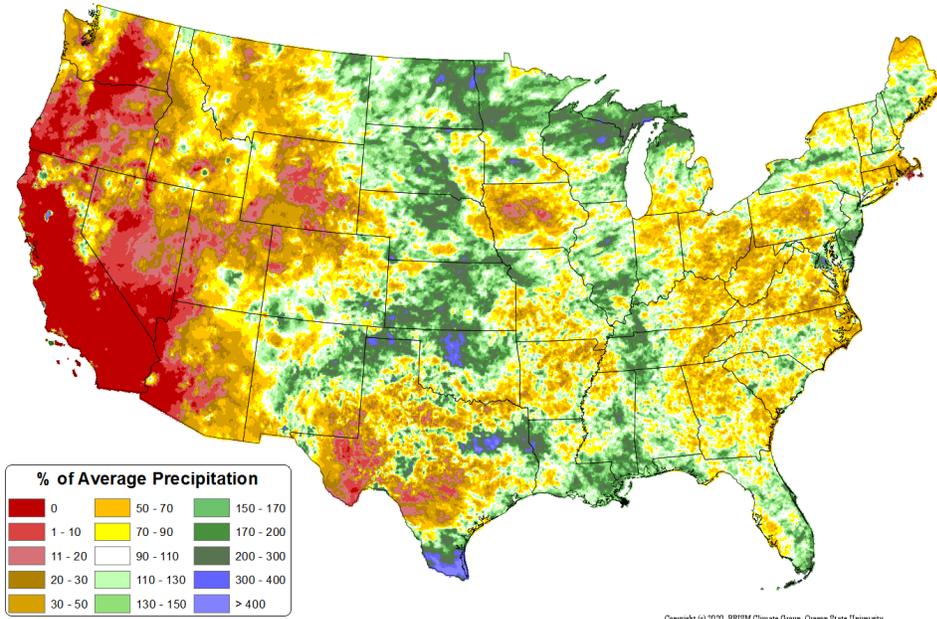
# Water and Climate Update

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

Source: PRISM

Total Precipitation Anomaly: 01 Jul 2020 - 29 Jul 2020  
Period ending 7 AM EST 29 Jul 2020  
Base period: 1981-2010  
(Map created 30 Jul 2020)

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

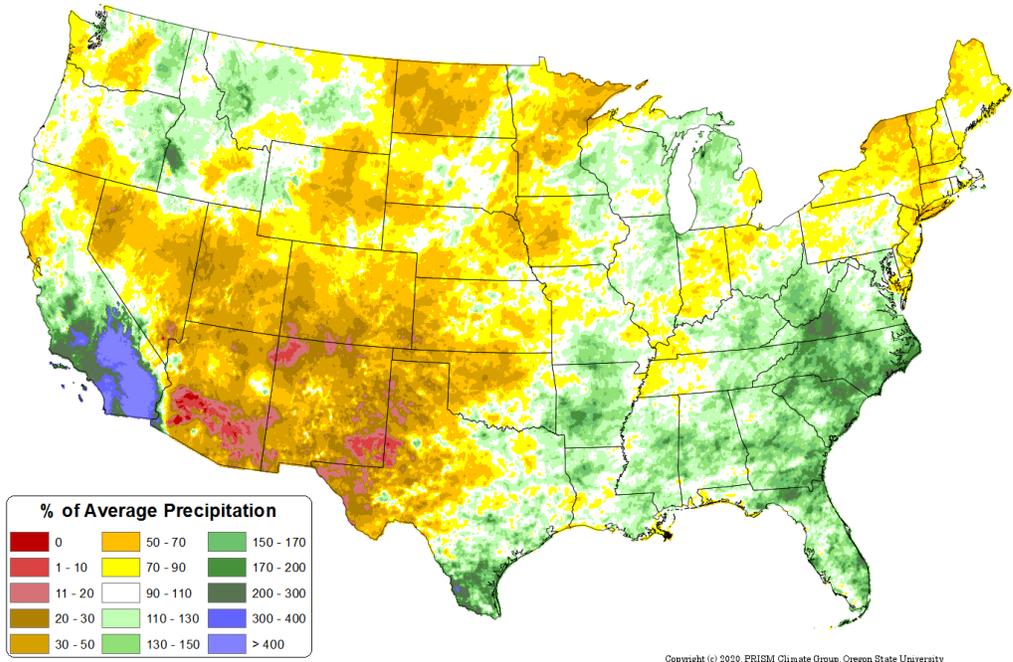


## Last 3 Months, All Available Data Including SNOTEL and NWS Networks

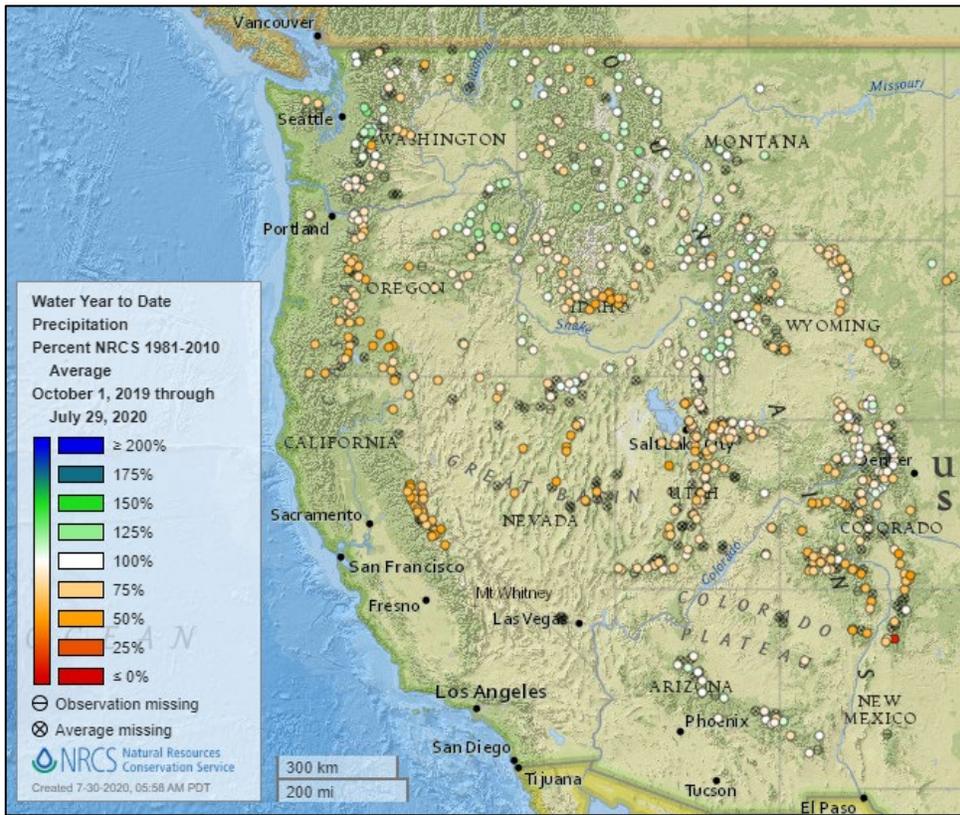
Source: PRISM

[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)

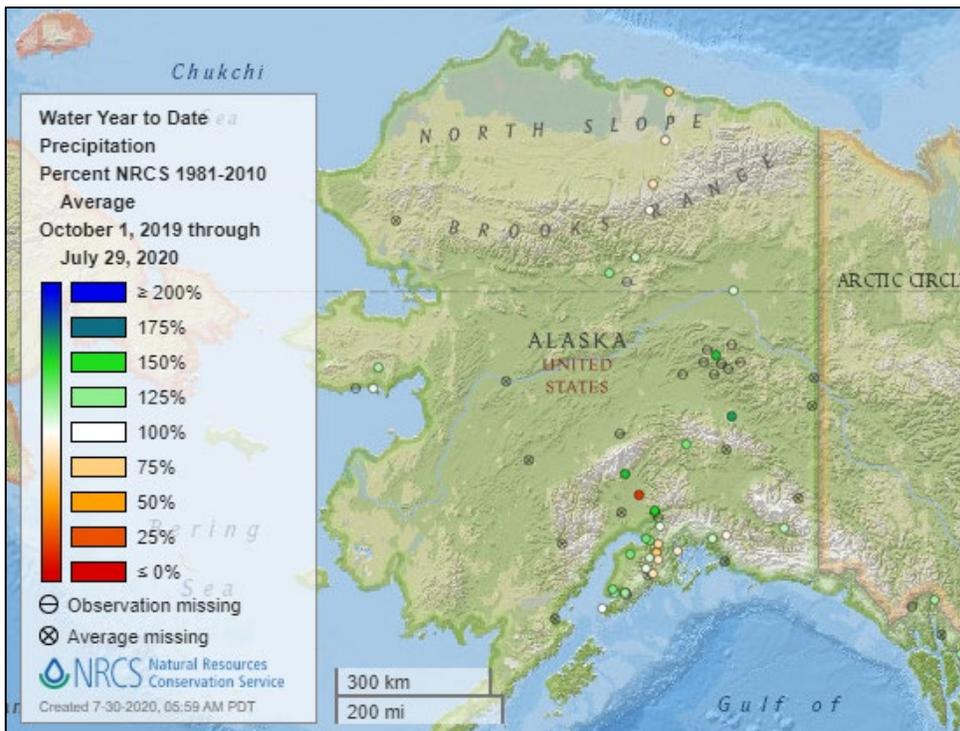


Water Year-to-Date, NRCS SNOTEL Network



[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

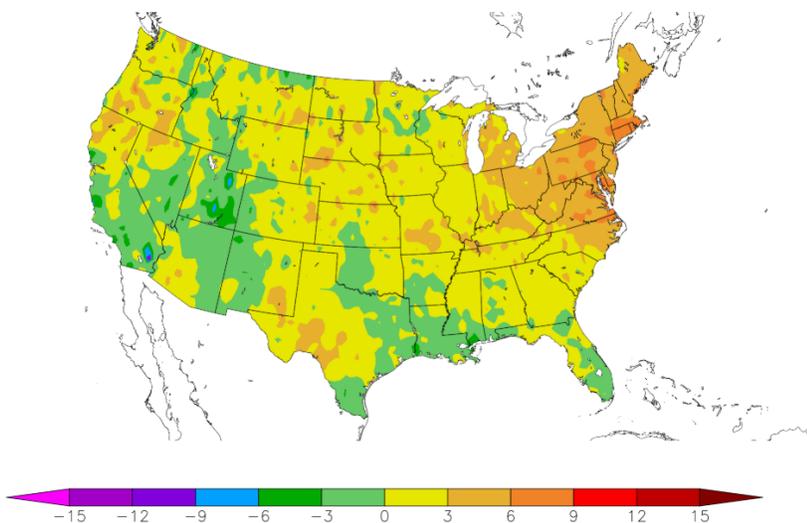
### Last 7 Days, National Weather Service (NWS) Networks

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)  
7/22/2020 – 7/28/2020



Generated 7/29/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

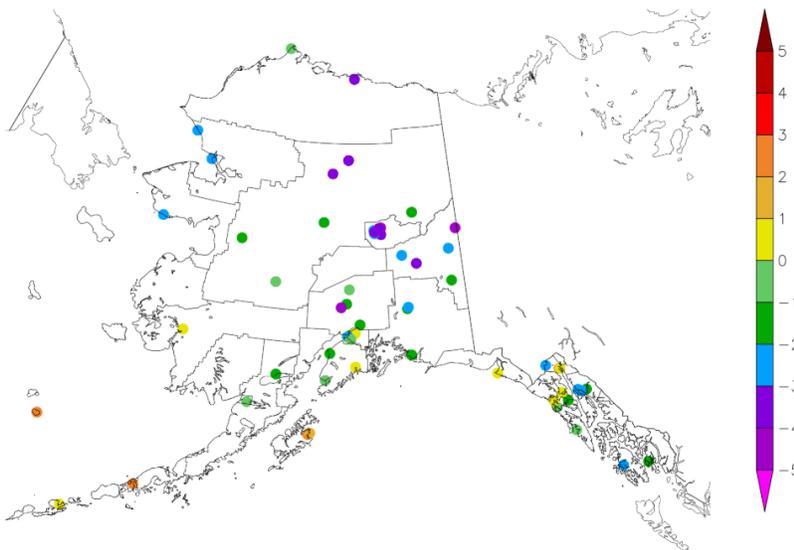
### Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)  
7/22/2020 – 7/28/2020



Generated 7/29/2020 at HPRCC using provisional data.

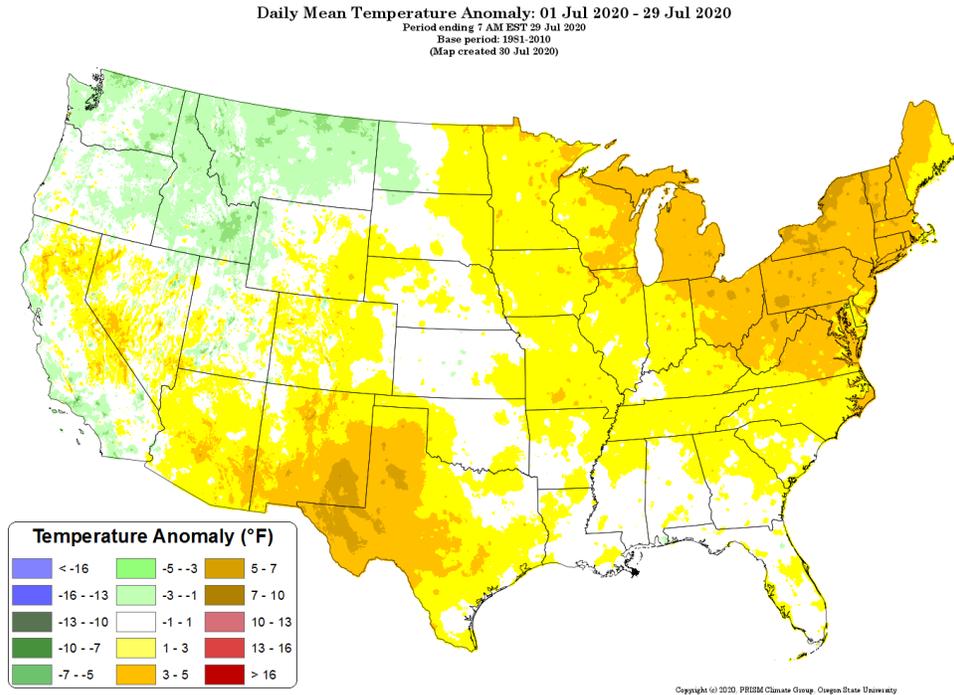
NOAA Regional Climate Centers

# Water and Climate Update

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

Source: PRISM

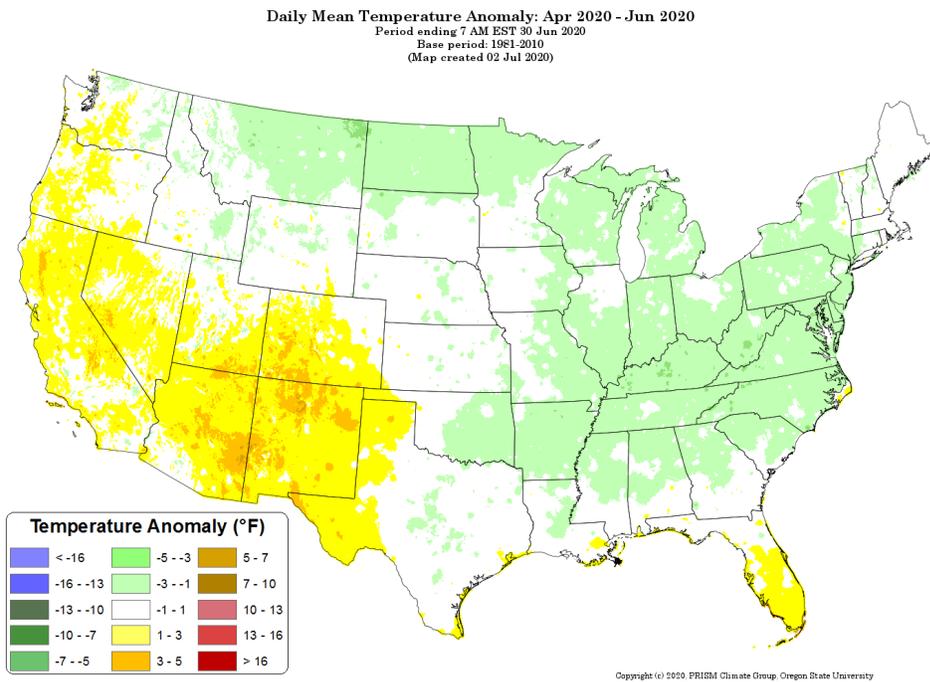
[Month to date national daily mean temperature anomaly map](#)



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

Source: PRISM

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



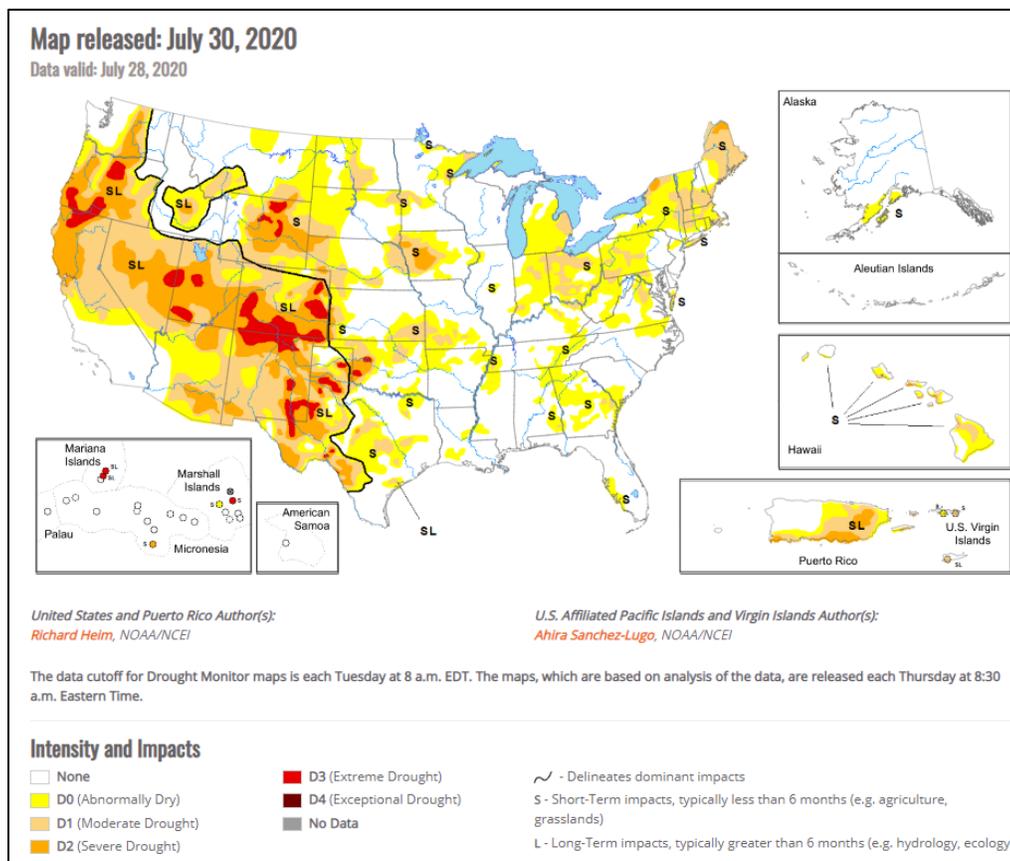
## Drought

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

Source: National Drought Mitigation Center

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

Source: NOAA



### [Current National Drought Summary, July 30, 2020](#)

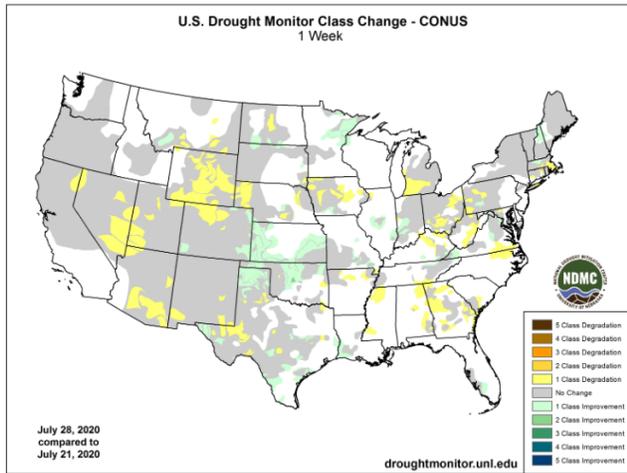
Source: National Drought Mitigation Center

“High pressure dominated the southern half of the contiguous U.S. (CONUS) again 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 High brought hot temperatures to much of the South, East, and West, with daily maximum temperatures exceeding 90 degrees F every day. The fronts brought cooler temperatures to the Upper Midwest at the beginning of the week, but maximum temperatures began to exceed 90 degrees across the Plains and eastward as the week wore on. The hot temperatures increased evapotranspiration (ET) which dried soils and stressed crops and other vegetation. This was seen in ET models such as the EDDI and ESI and several soil moisture models, satellite observations of soil moisture, and agricultural field reports. As noted by the U.S. Department of Agriculture (USDA) on July 27, 50 percent or more of the topsoil moisture was short or very short (dry or very dry) in states across the Northeast, Midwest, Southeast, southern Plains, southern to central Rockies, and Far West. For the nation as a whole, 37 percent of the topsoil moisture and 35 percent of the subsoil moisture was short or very short, and 30 percent of the pasture and rangeland was in poor to very poor condition. Drought or abnormal dryness expanded or intensified across parts of the West, Midwest, Southeast, and Northeast where little to no rain fell and 30- to 90-day precipitation deficits mounted. But locally heavy rainfall was generated by the fronts in parts of the Plains, Midwest, and East. Heavy rain also fell across southern Texas when Hurricane Hanna struck, and Hurricane Douglas graced parts of Hawaii with beneficial rain. Where the rain fell on drought or abnormally dry areas in these regions, contraction occurred.”

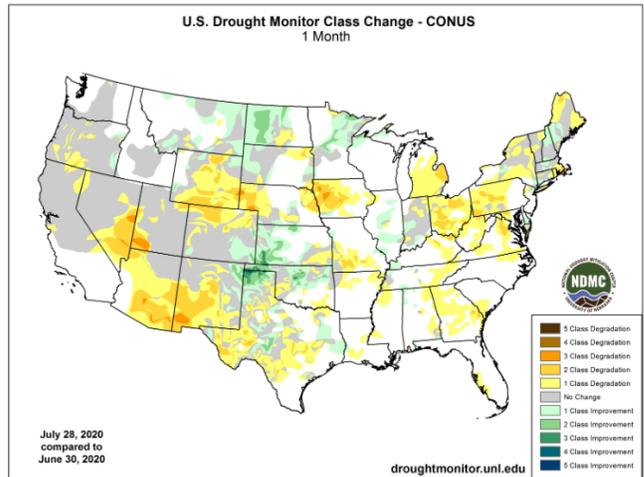
## Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

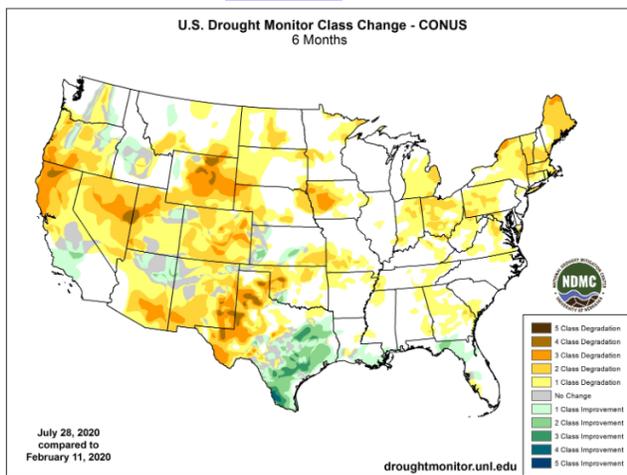
### 1 Week



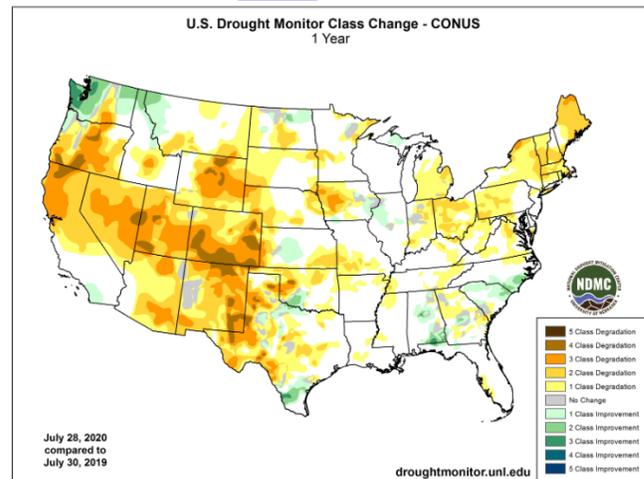
### 1 Month



### 6 Months



### 1 Year



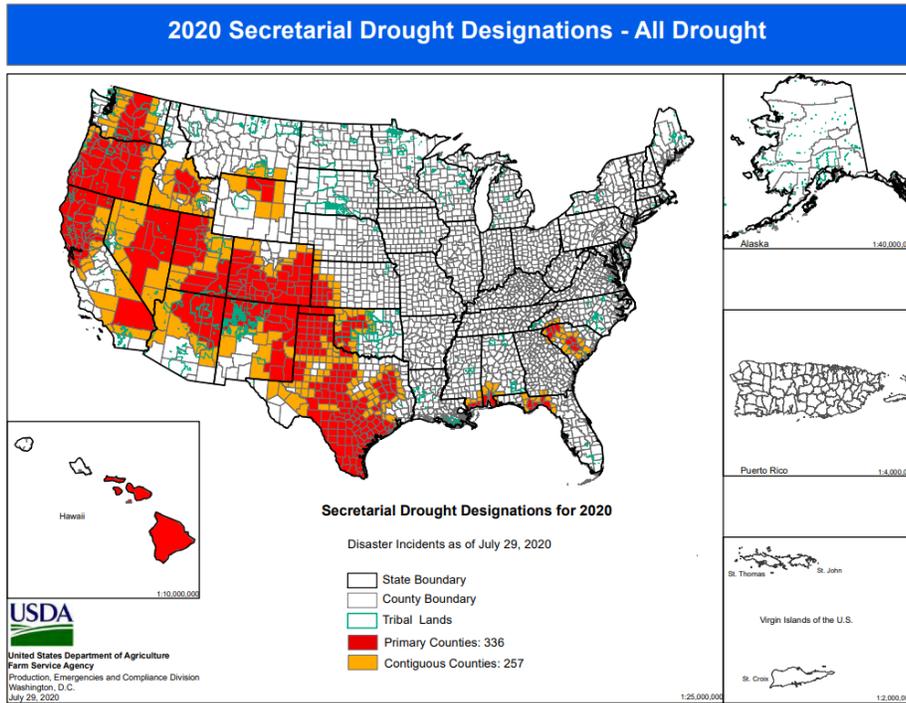
[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

## 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**



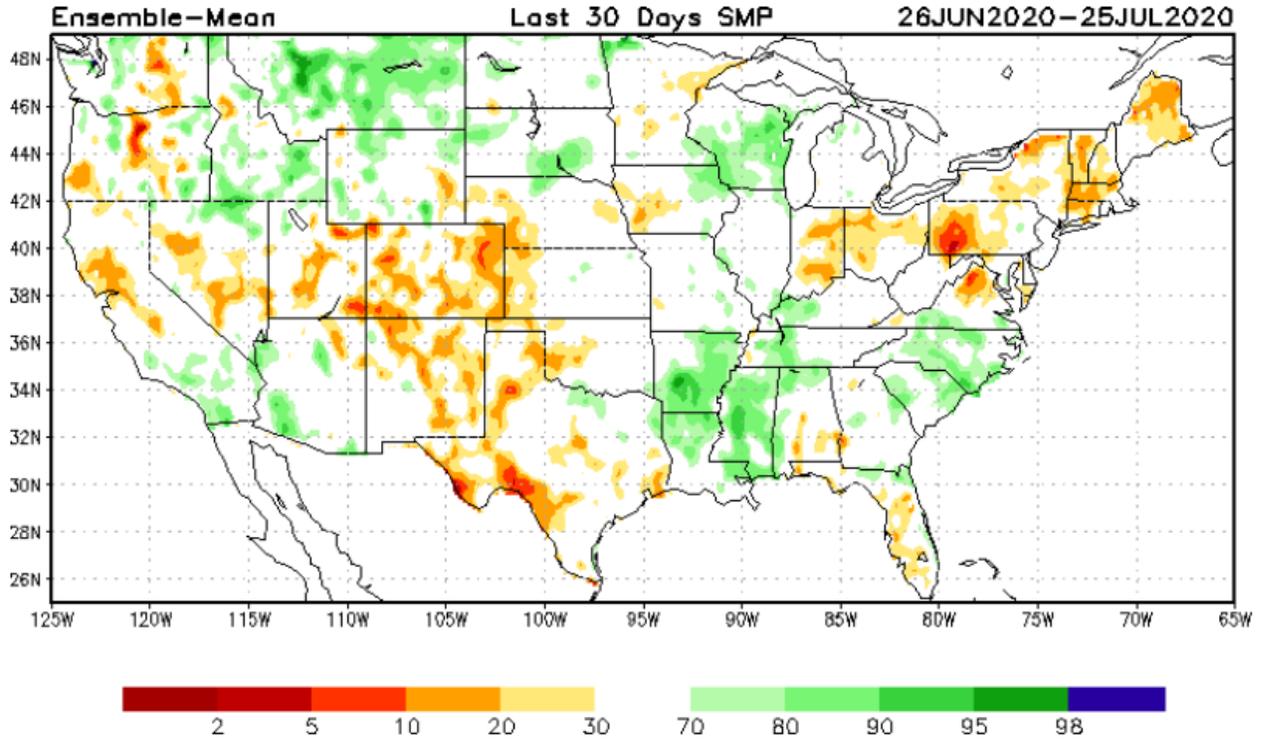
**Highlighted Wildfire Resources**

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

## Other Climatic and Water Supply Indicators

### Soil Moisture

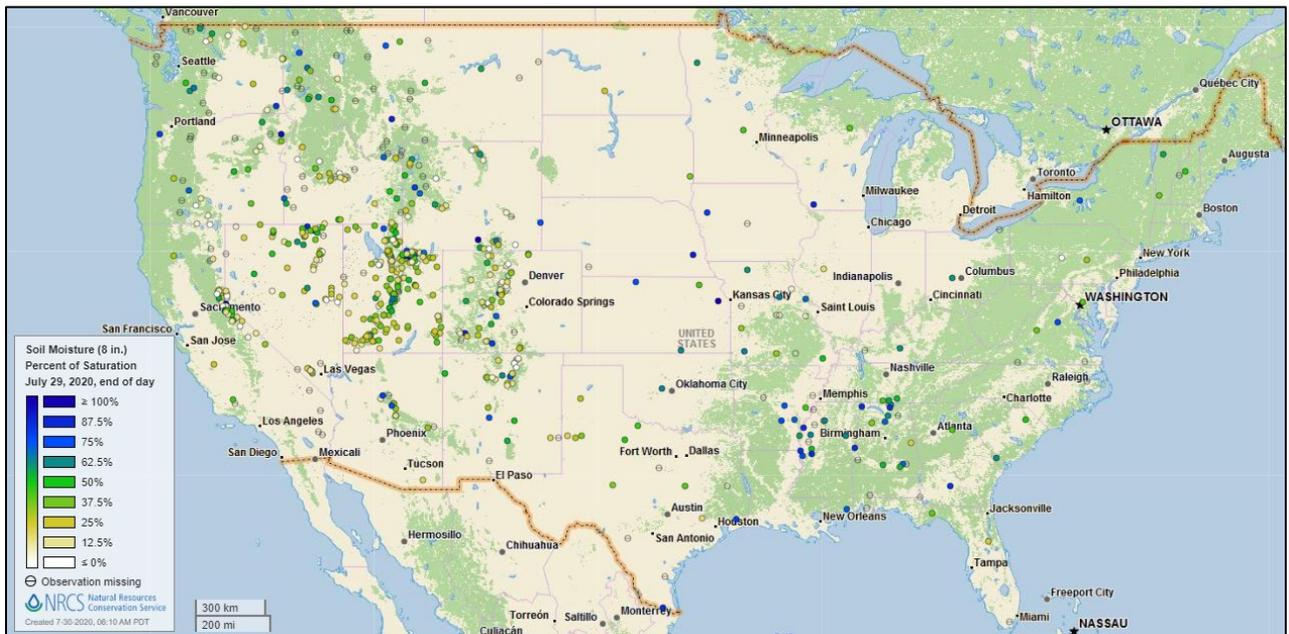
Source: NOAA National Centers for Environmental Prediction



[Modeled soil moisture percentiles](#) as of July 25, 2020

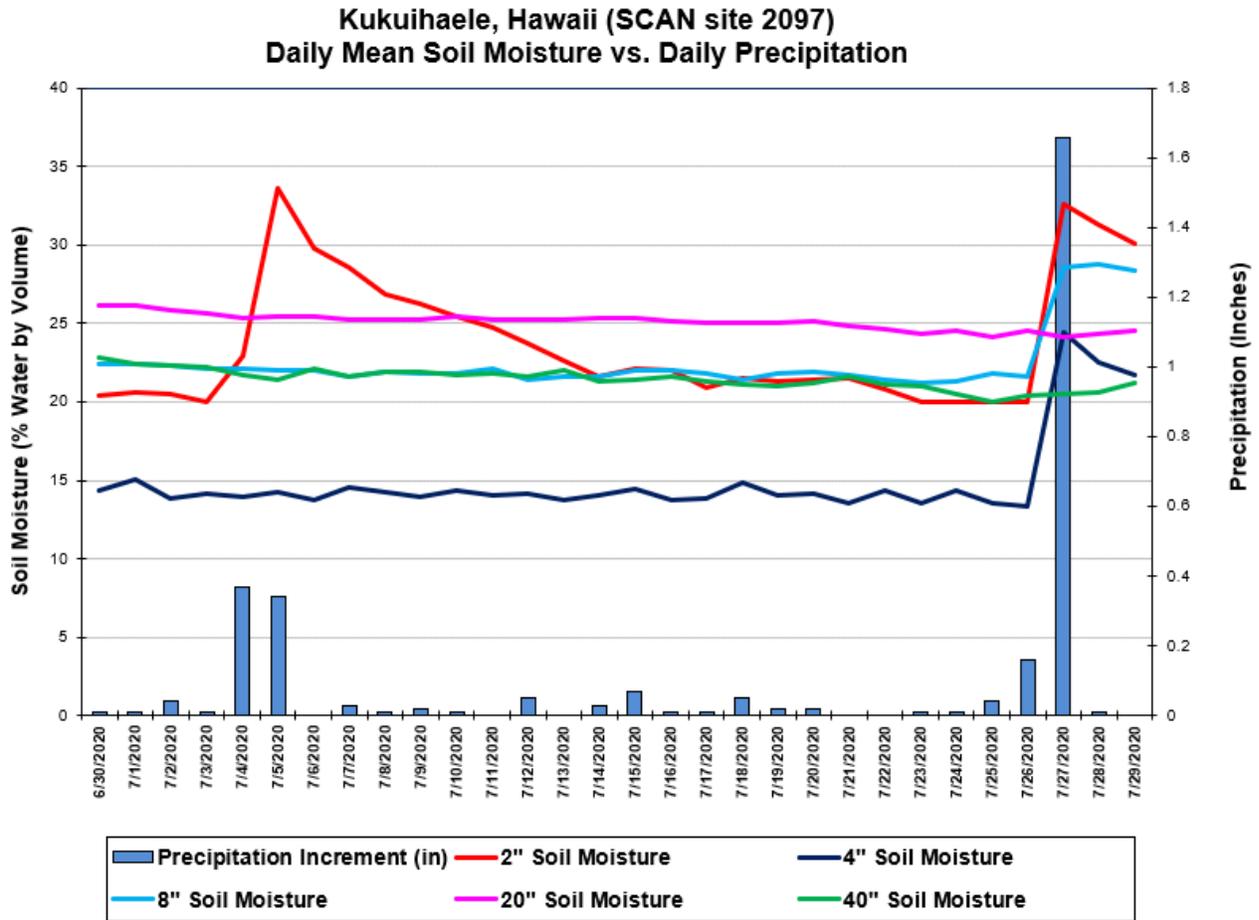
### Soil Moisture Percent of Saturation

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 [Kukuihaele](#) SCAN site in Hawaii. The precipitation at this site from July 25-27 totaled 1.87 inches and resulted in increased soil moisture at the -2", -4", and -8" sensors. The -20" and -40" sensors showed a slight increase in soil moisture.

**Soil Moisture Data Portals**

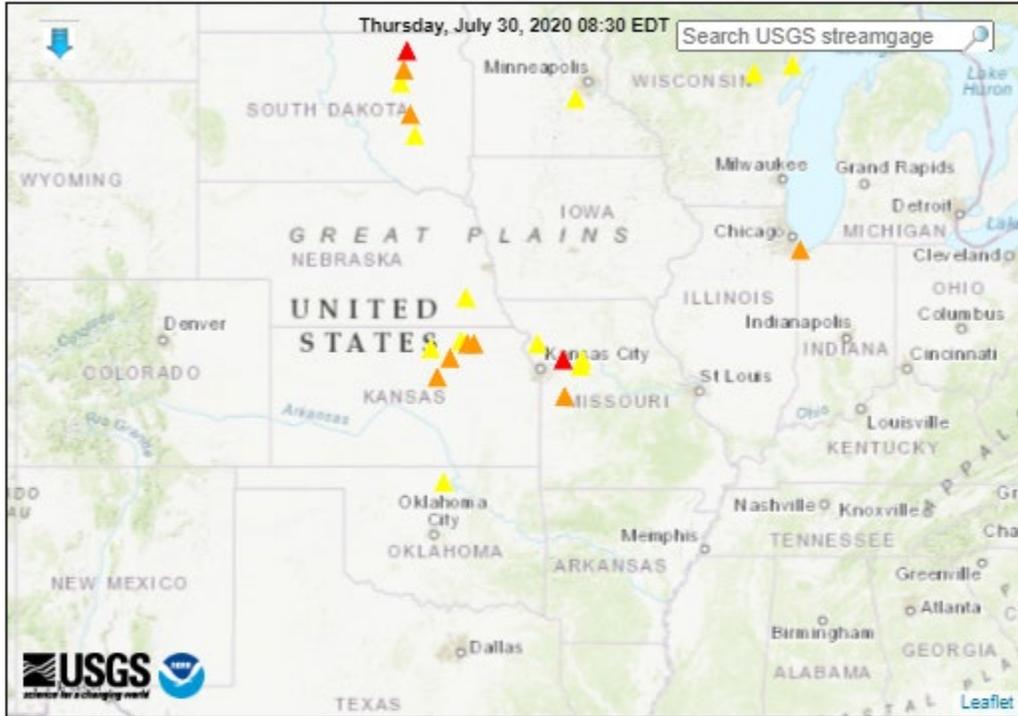
- [CRN Soil Moisture](#)
- [Texas A&M University North American Soil Moisture Database](#)
- [University of Washington Experimental Modeled Soil Moisture](#)

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

Source: U.S. Geological Survey

**Map of flood and high flow conditions**

(15 in floods [moderate: 2, minor: 13], 30 in near-flood)



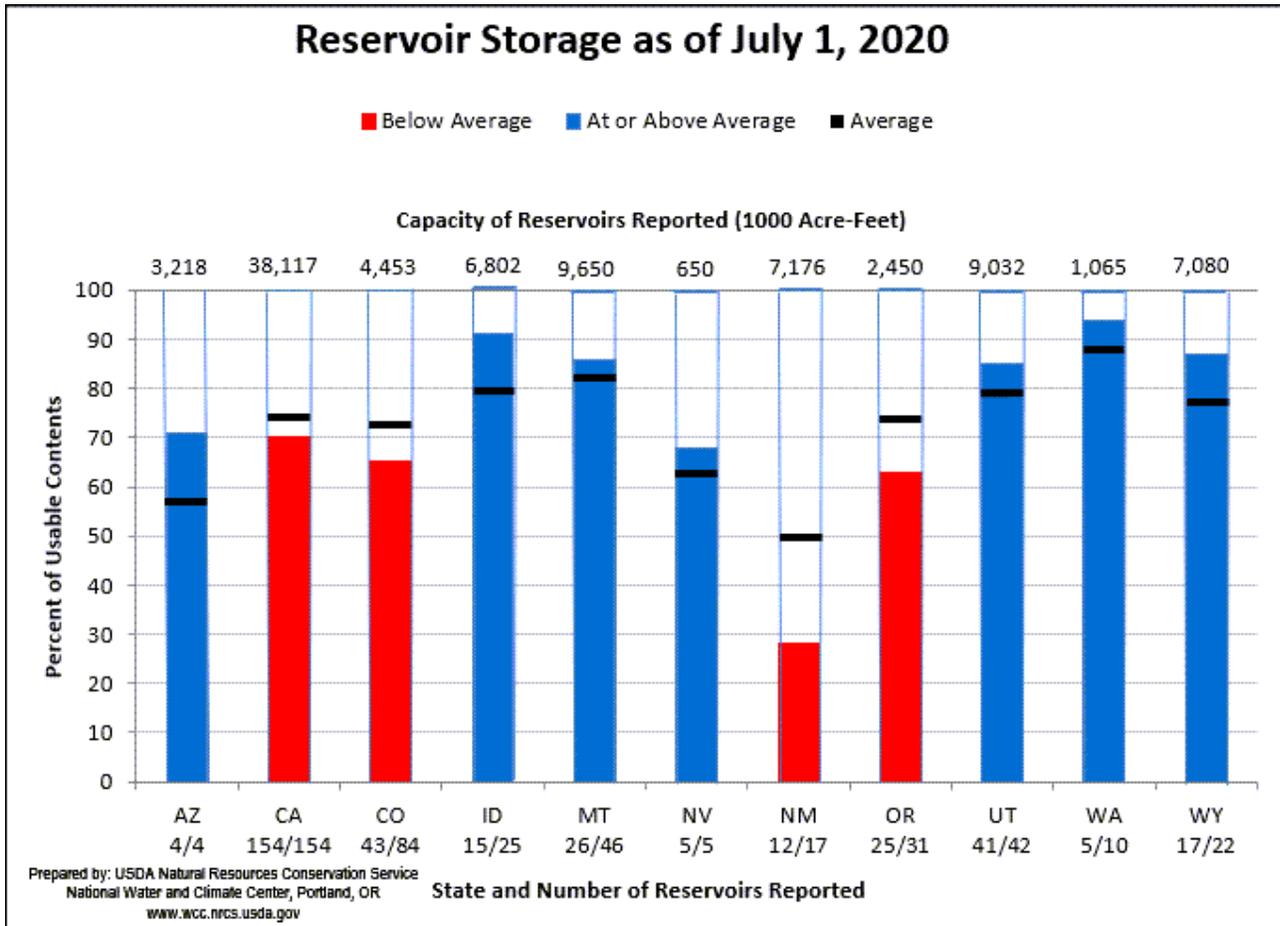
Explanation - Percentile classes						
<95	95-98	>= 99	Above action stage	Above flood stage	Above moderate flood stage	Above major flood stage
			△ Streamgage with flood stage	○ Streamgage without flood stage		

[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](#)

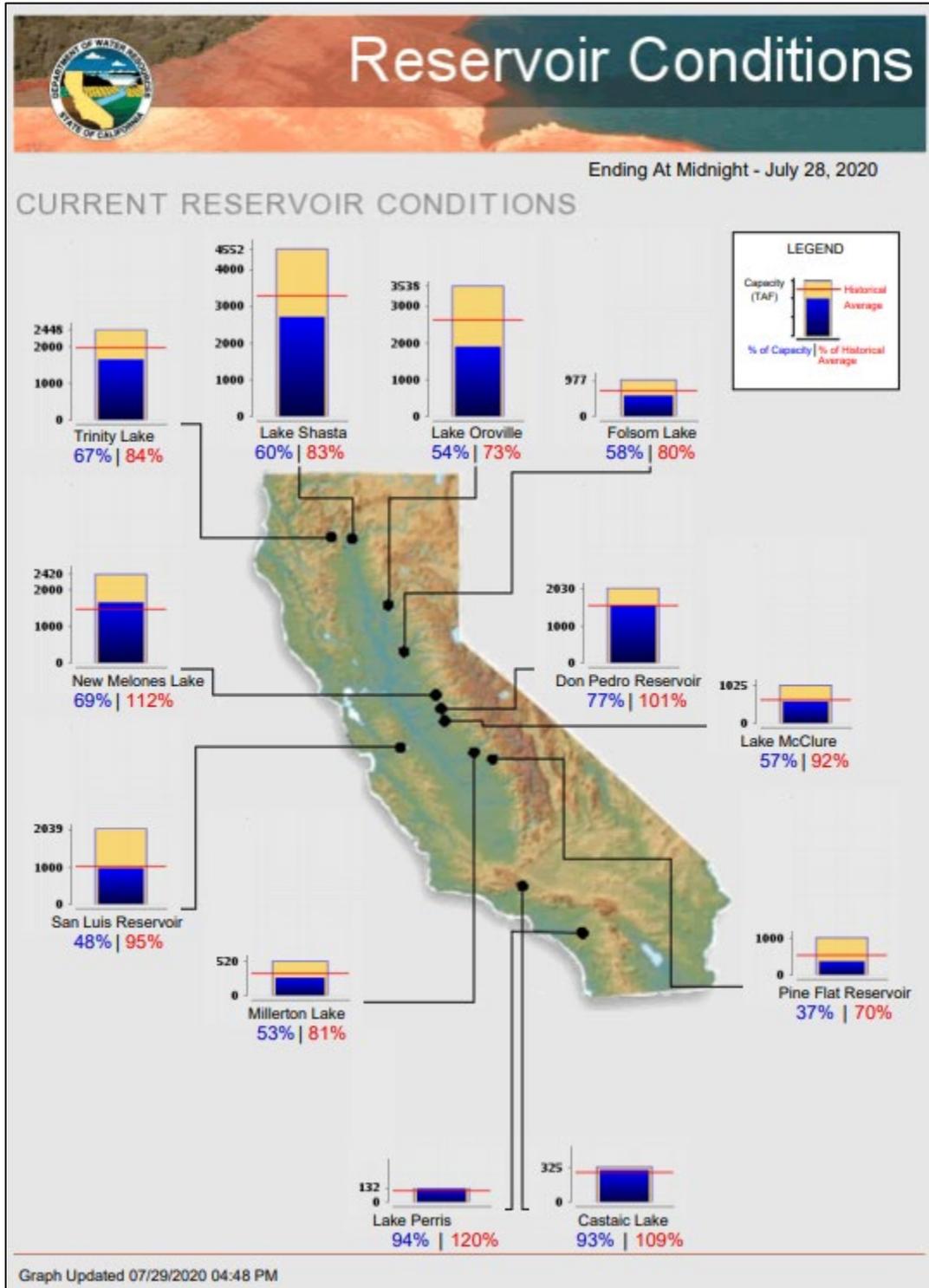
### Hydromet Teacup Reservoir Depictions

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

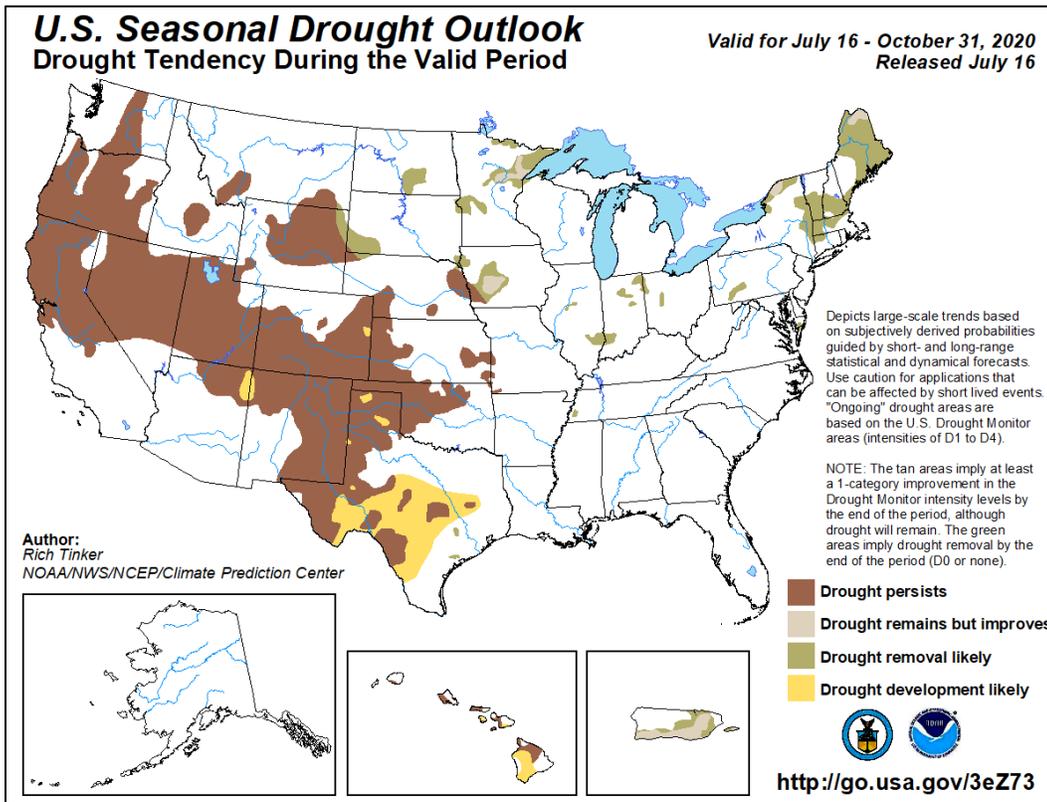


[Current California Reservoir Conditions](#)



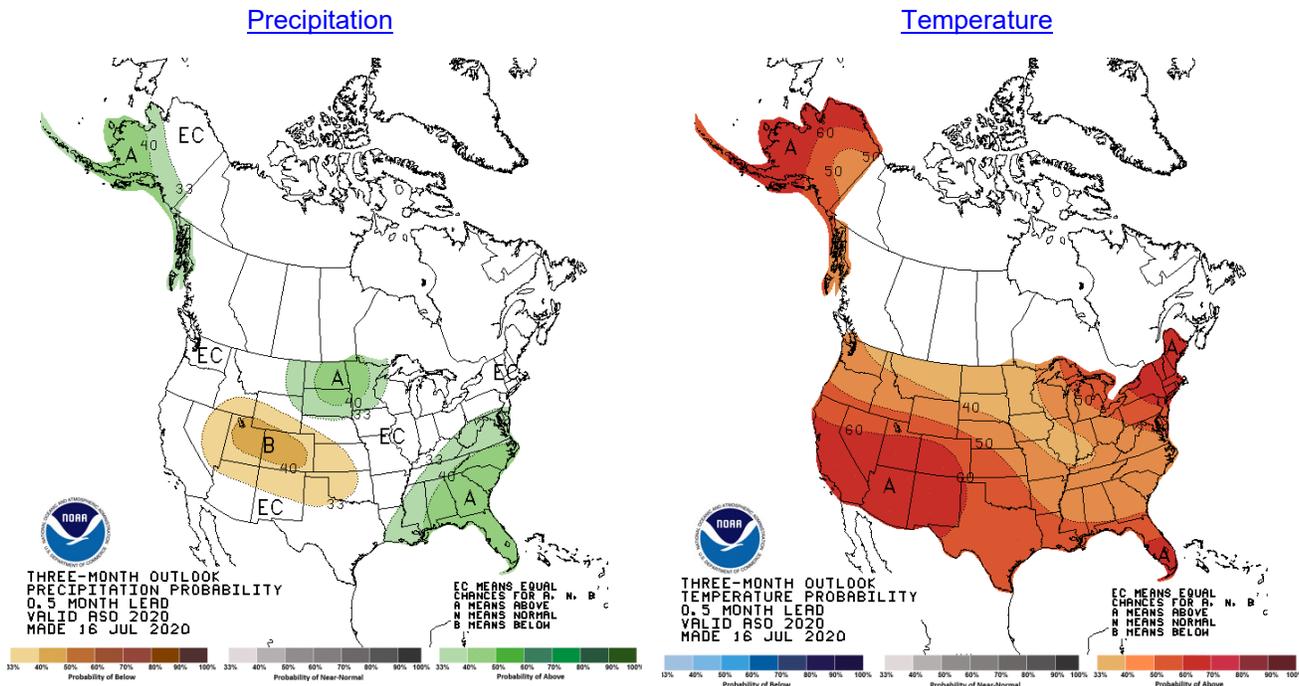
**Seasonal Drought Outlook: July 16 – October 31, 2020**

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](#).