



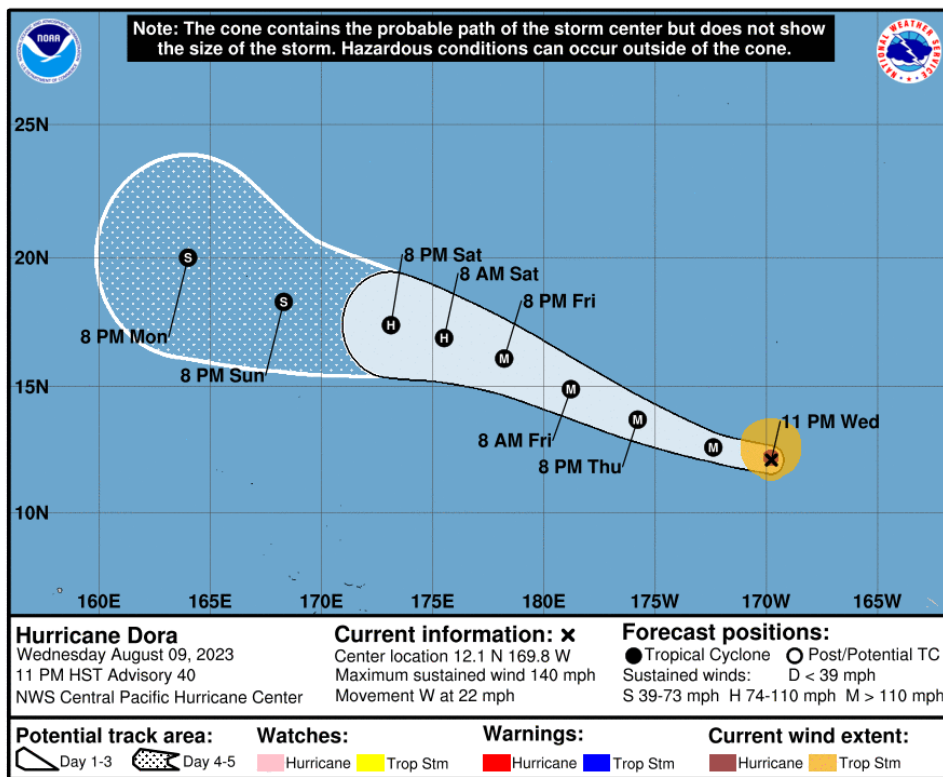
# Water and Climate Update

## August 10, 2023

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		

### High winds from Hurricane Dora fuel wildfires in Hawai'i



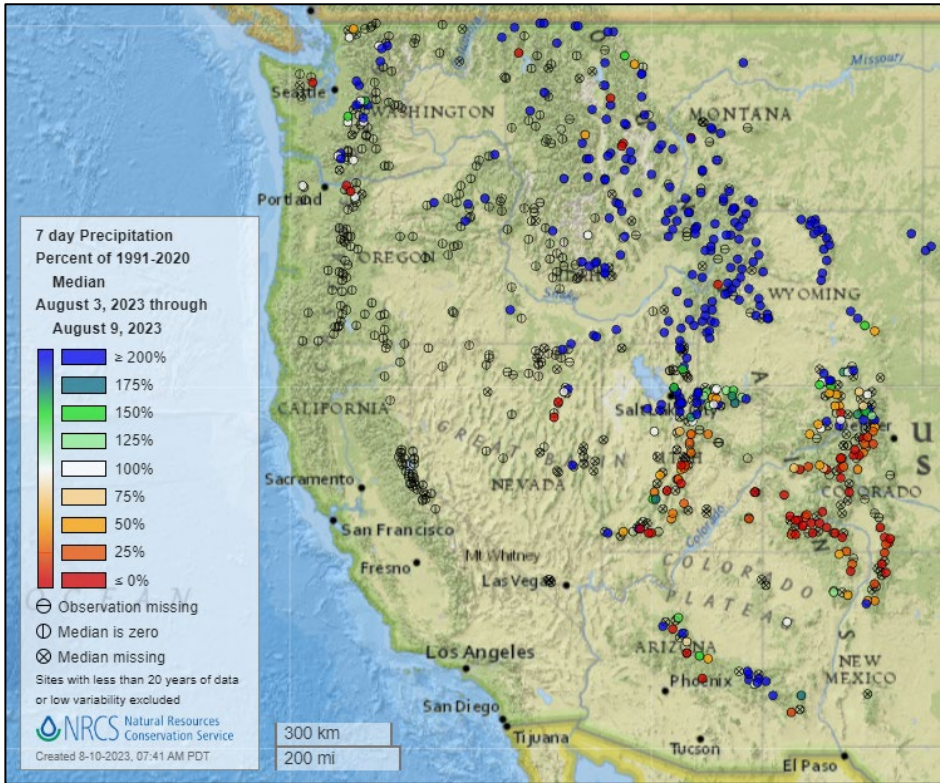
A combination of high winds related to Hurricane Dora and dry conditions fueled the spread of wildfires that raged across Maui on August 8-9. Hurricane Dora passed nearly 500 miles to the south of the islands, but the associated trade winds that developed from the inland-to-offshore pressure difference resulted in wind gusts up to 80 mph. The fires quickly spread out of control and prompted rapid evacuations, claiming dozens of lives and causing extensive damage. The town of Lahaina was destroyed as people fled to the ocean to escape the flames.

#### Related:

- [What caused Maui's deadly wildfires? How dry conditions and Hurricane Dora set the stage for inferno that ripped through paradise](#) - Daily Mail
- [Maui surveys the burned wreckage caused by the deadliest US wildfire in years](#) – AP News
- [Deadly wildfires burning across Maui prompt evacuations](#) – CNN
- [Hawaii wildfires death toll increases to 36, Maui officials say](#) – Washington Post

# Precipitation

## Last 7 Days, NRCS SNOTEL Network

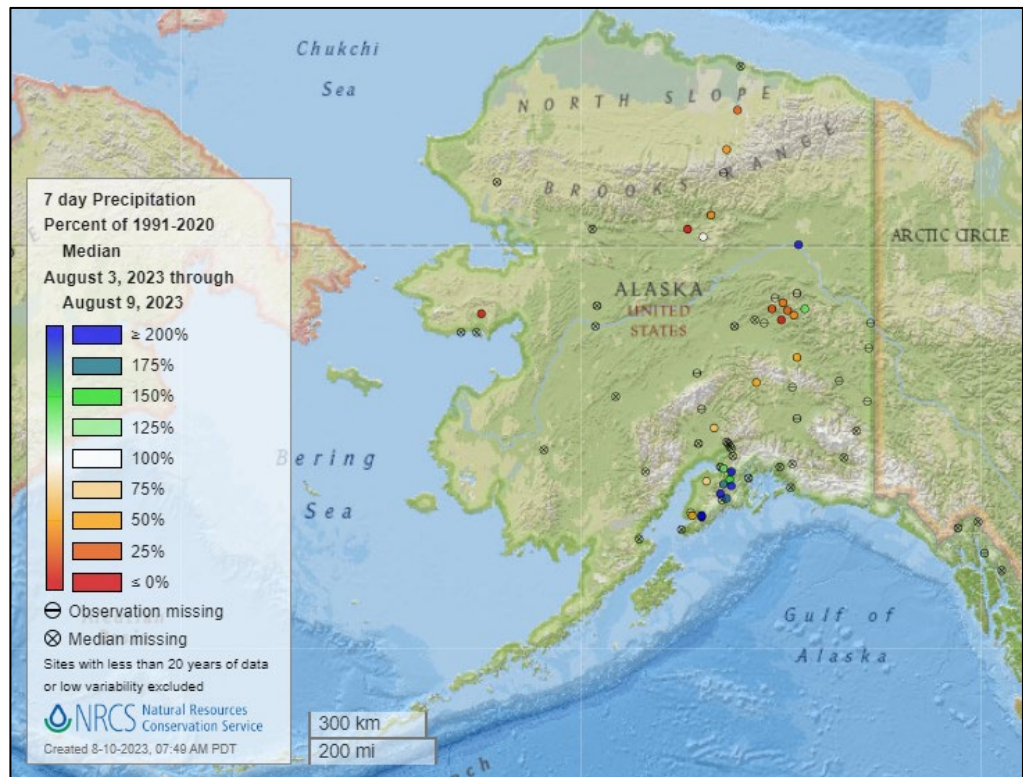


[7-day precipitation percent of median map](#)

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

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

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



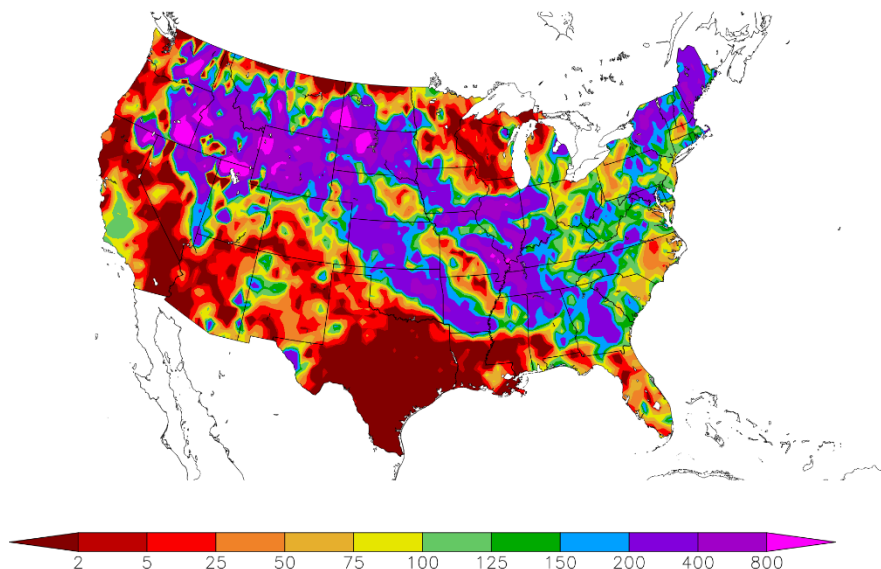
### Last 7 Days, National Weather Service (NWS) Networks

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 (%)  
8/3/2023 – 8/9/2023



Generated 8/10/2023 at HPRCC using provisional data.

NOAA Regional Climate Centers

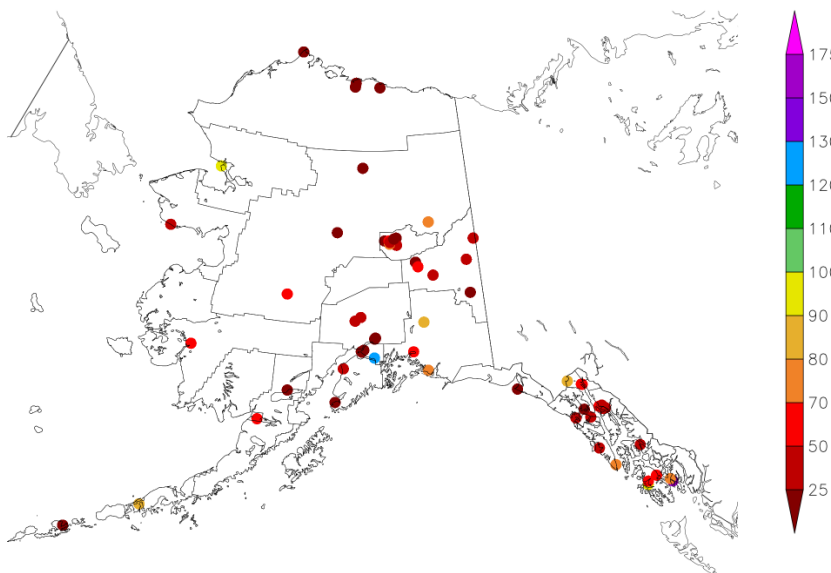
### Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

[7-day precipitation percent of normal map](#) for Alaska.

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

Percent of Normal Precipitation (%)  
8/3/2023 – 8/9/2023



Generated 8/10/2023 at HPRCC using provisional data.

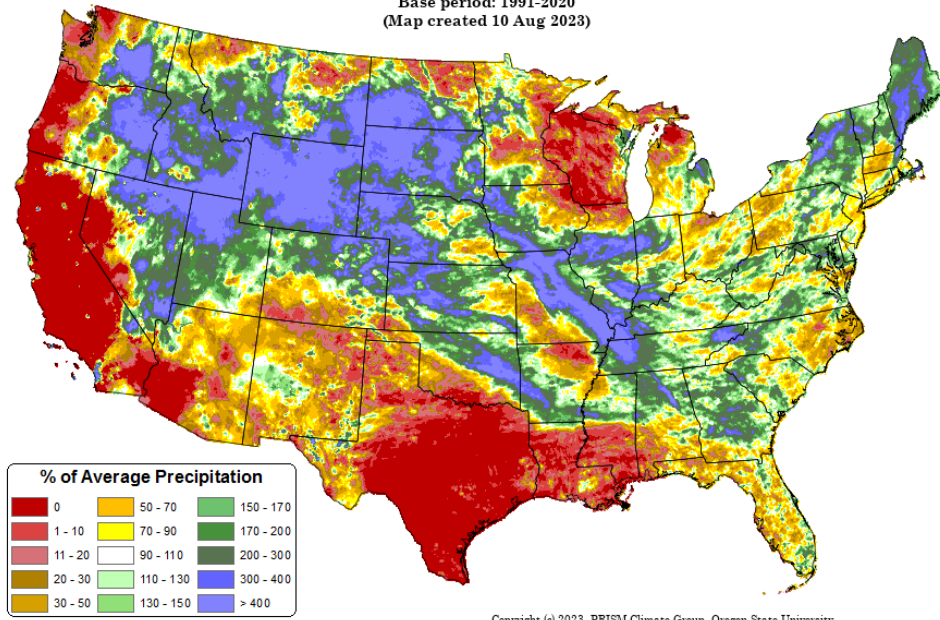
NOAA Regional Climate Centers

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

Source: PRISM

Total Precipitation Anomaly: 01 Aug 2023 - 09 Aug 2023  
Period ending 7 AM EST 09 Aug 2023  
Base period: 1991-2020  
(Map created 10 Aug 2023)

[Month-to-date national total precipitation anomaly map](#)



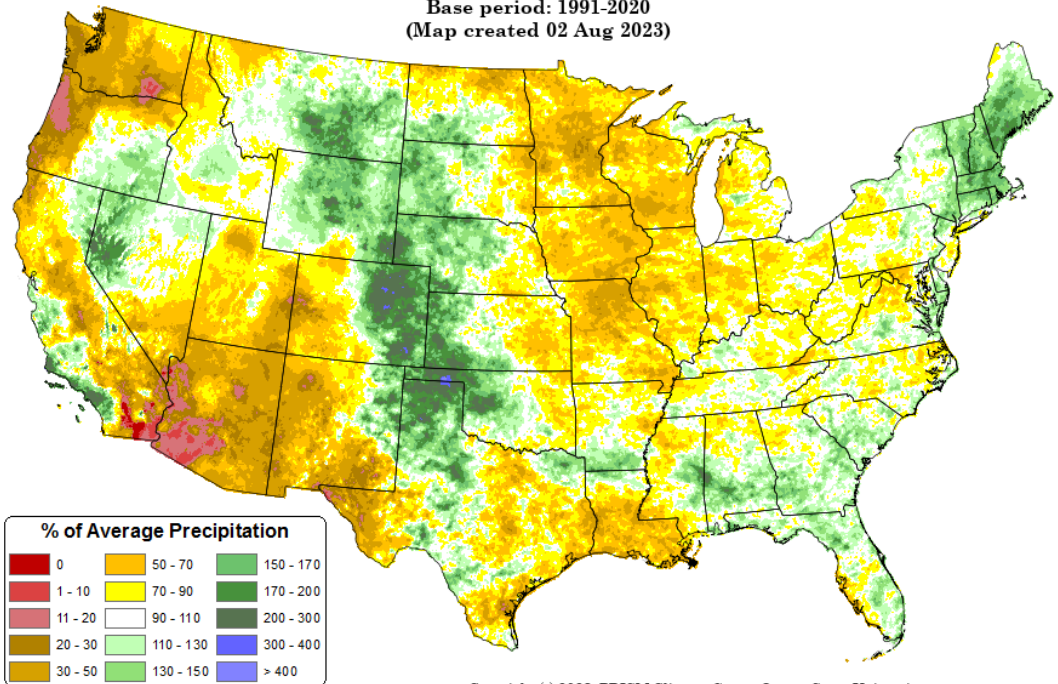
Copyright (c) 2023, PRISM Climate Group, Oregon State University

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

Source: PRISM

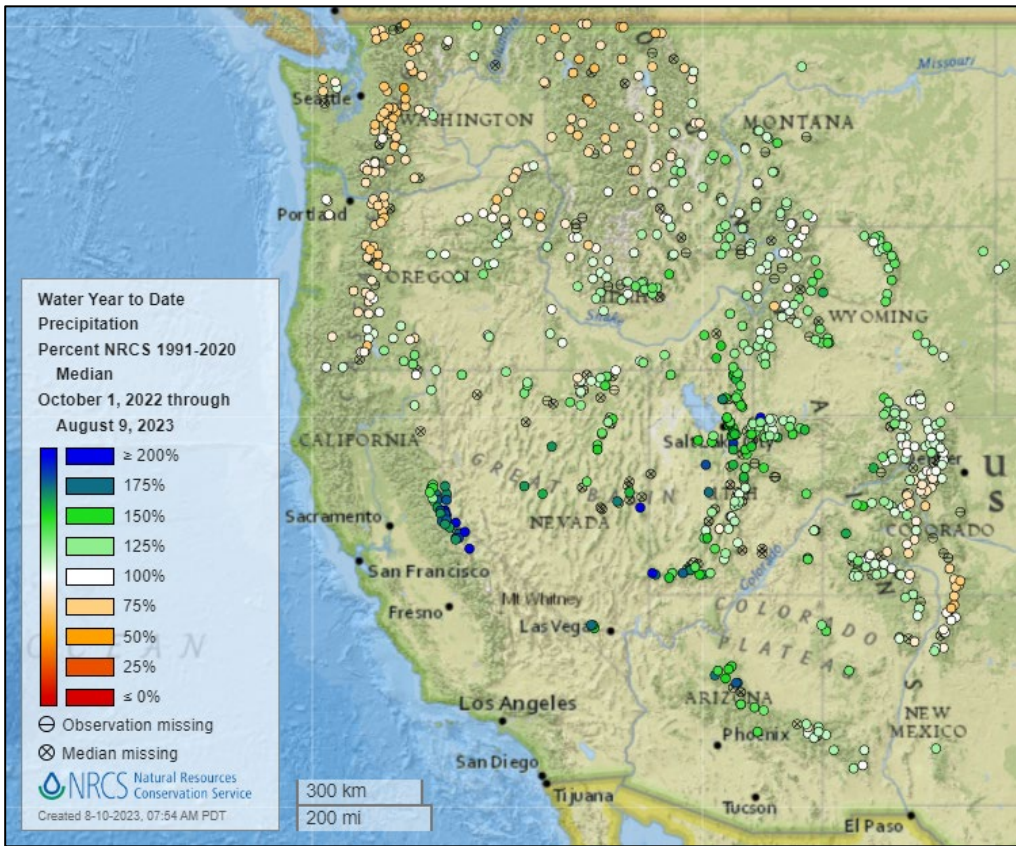
[May through July 2023 precipitation anomaly map](#)

Total Precipitation Anomaly: May 2023 - Jul 2023  
Period ending 7 AM EST 31 Jul 2023  
Base period: 1991-2020  
(Map created 02 Aug 2023)



Copyright (c) 2023, PRISM Climate Group, Oregon State University

Water Year-to-Date, NRCS SNOTEL Network

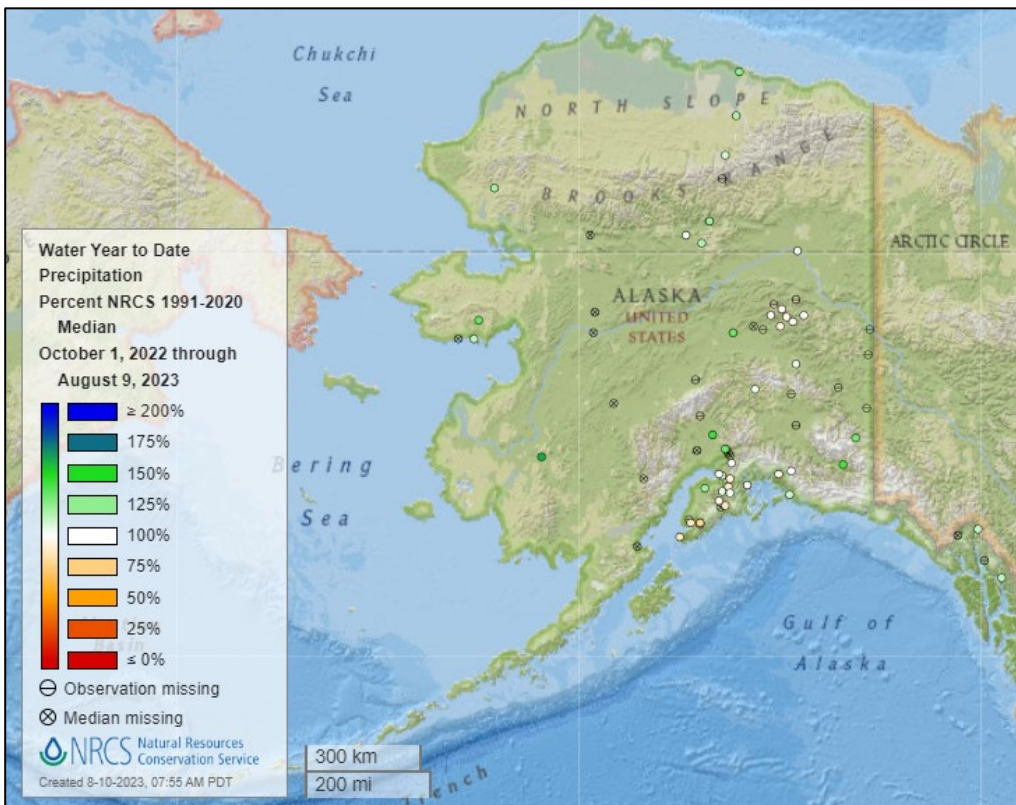


[2023 water year-to-date precipitation percent of median map](#)

**See also:**

[2023 water year-to-date precipitation percent of average map](#)

[2023 water year-to-date precipitation values \(inches\) map](#)



[Alaska 2023 water year-to-date precipitation percent of median map](#)

**See also:**

[Alaska 2023 water year-to-date precipitation percent of average map](#)

[Alaska 2023 water year-to-date precipitation values \(inches\) map](#)

## Temperature

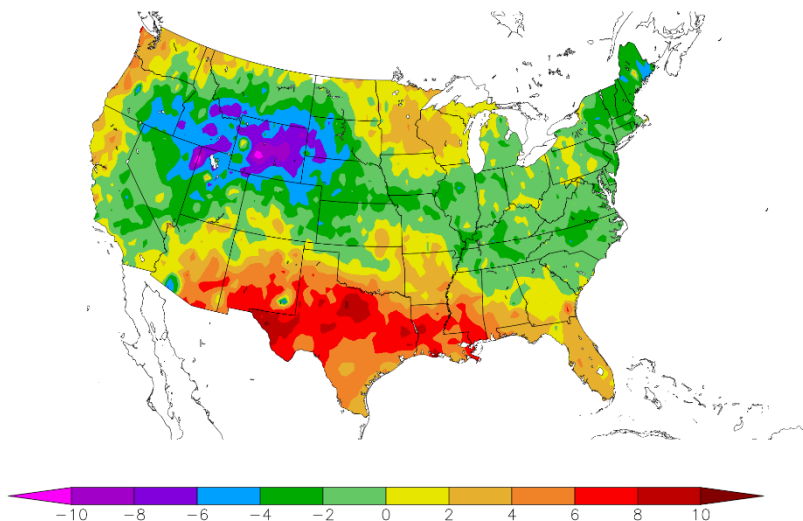
### Last 7 Days, National Weather Service (NWS) Networks

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)  
8/3/2023 – 8/9/2023



Generated 8/10/2023 at HPRCC using provisional data.

NOAA Regional Climate Centers

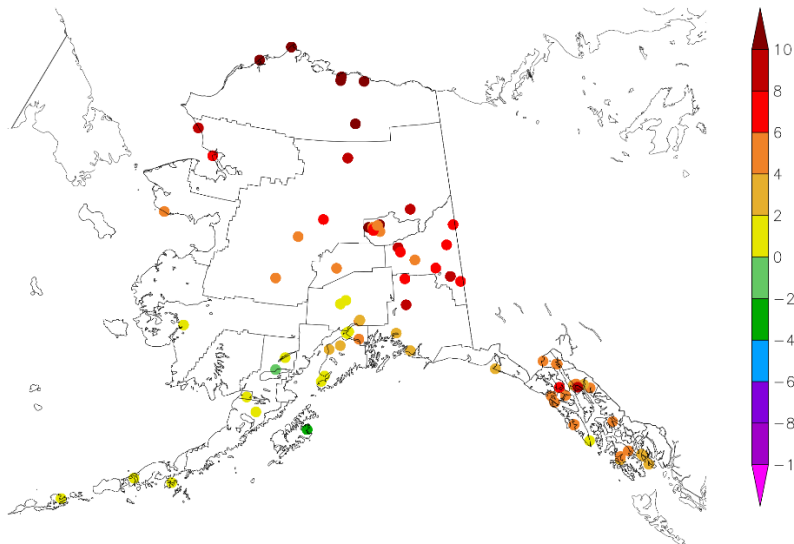
### Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)  
8/3/2023 – 8/9/2023



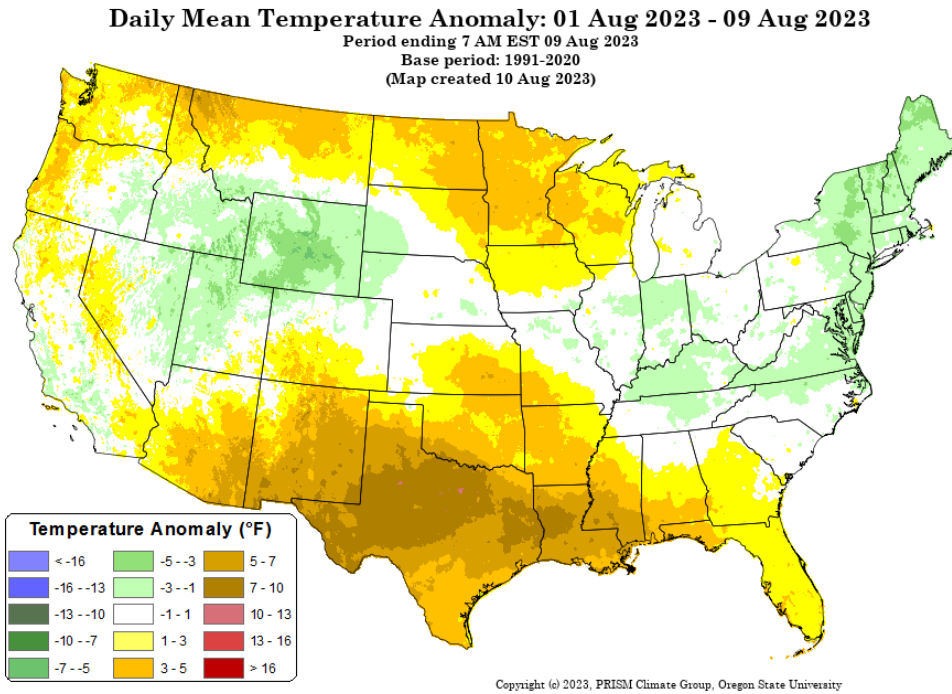
Generated 8/10/2023 at HPRCC using provisional data.

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

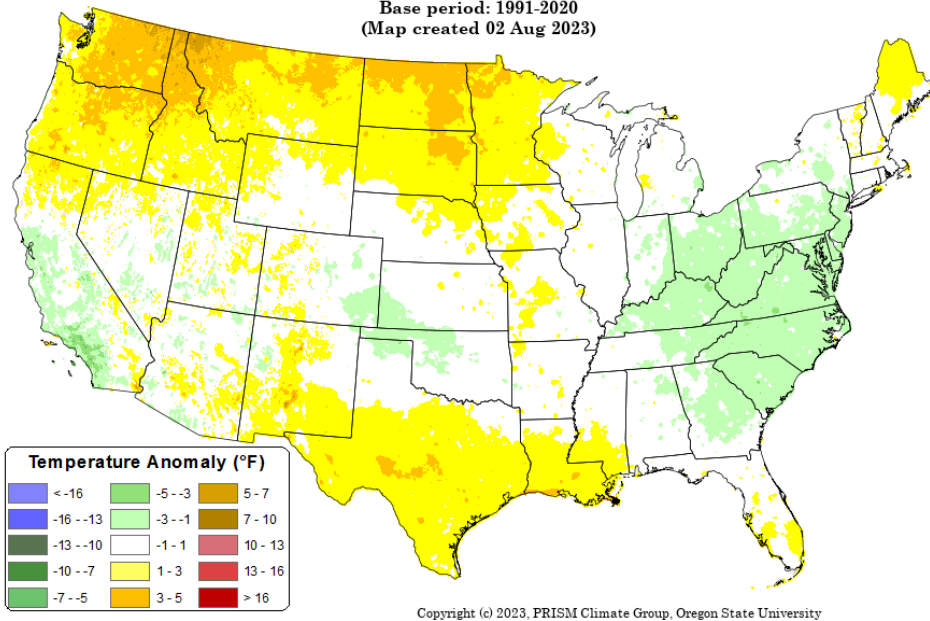
Daily Mean Temperature Anomaly: May 2023 - Jul 2023

Period ending 7 AM EST 31 Jul 2023

Base period: 1991-2020

(Map created 02 Aug 2023)

[May through July 2023 daily mean temperature anomaly map](#)



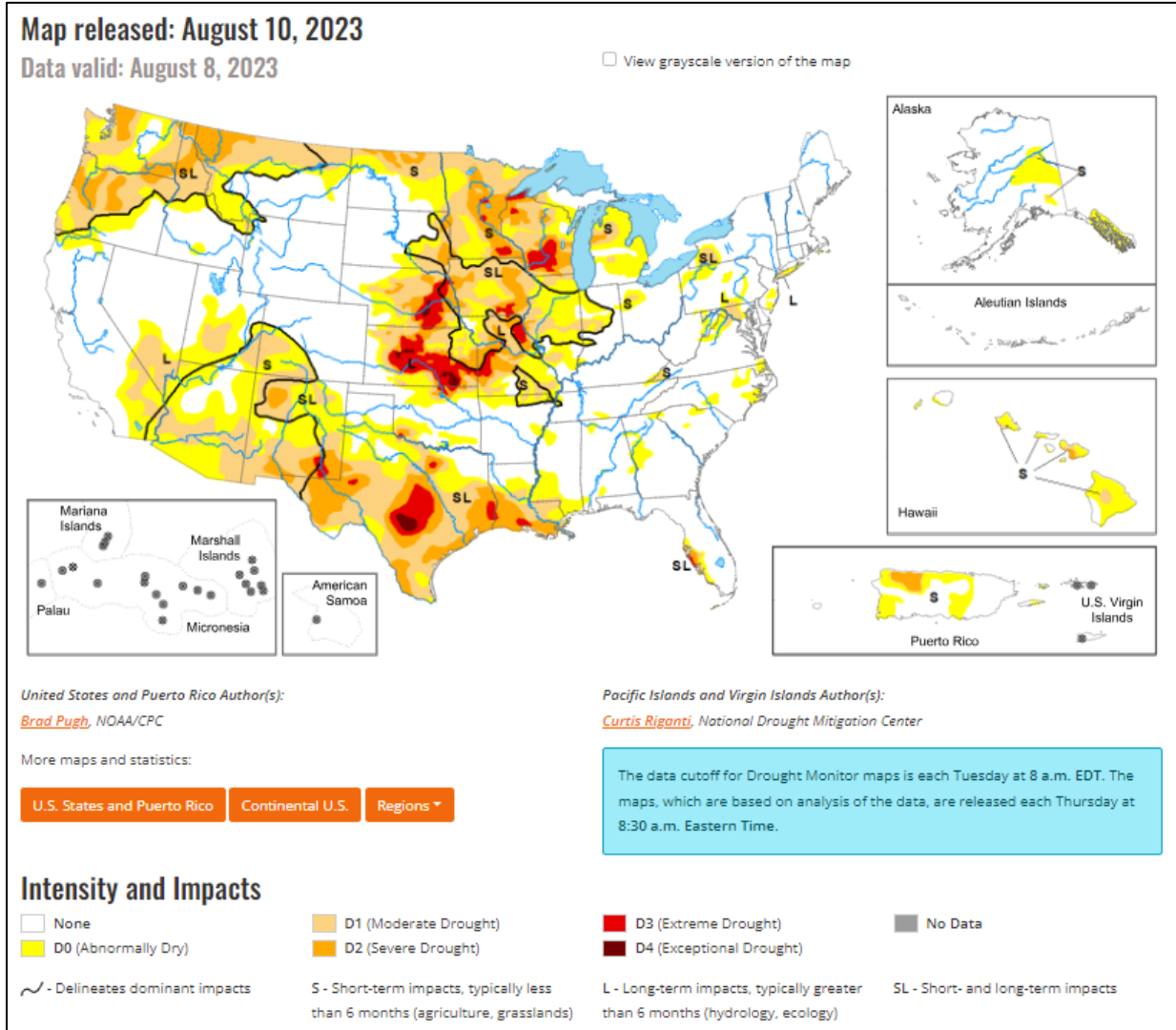
## Drought

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

Source: National Drought Mitigation Center

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

Source: NOAA



### Current [National Drought Summary](#), August 08, 2023

Source: National Drought Mitigation Center

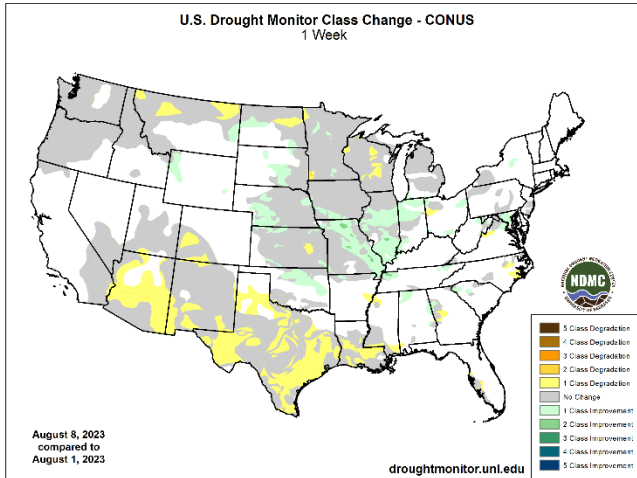
“A strong area of mid-level high pressure, anchored over the southern tier of the country, continued to promote above-normal temperatures and mostly dry weather across the Rio Grande Valley, Texas, and the lower Mississippi Valley. Weekly temperatures (August 2 to 8) averaged more than 6 degrees F above normal across portions of Louisiana, Texas, and southern New Mexico. The persistence of this pattern led to rapidly developing and intensifying drought across Texas and the lower Mississippi Valley. The Monsoon remains suppressed with increasing short-term drought across Arizona, New Mexico and southwest Colorado. Frequent rounds of heavy rainfall occurred from the central Great Plains southeastward to the middle Mississippi Valley. During the first week of August, parts of Missouri received 5 to 10 inches (locally more) of rainfall. The wet start to August resulted in improving drought across parts of the Corn Belt. Farther to the north, drought continues to intensify across Wisconsin. On August 7, a severe weather outbreak with heavy rainfall affected the East. Short-term drought expanded this past week across parts of the Hawaiian Islands.”



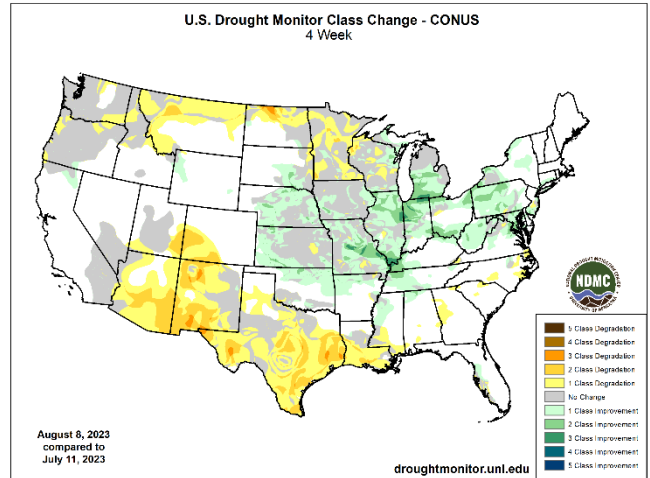
## Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

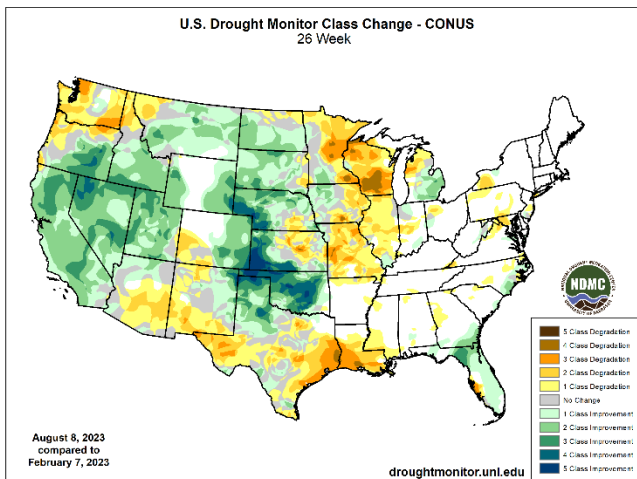
### 1 Week



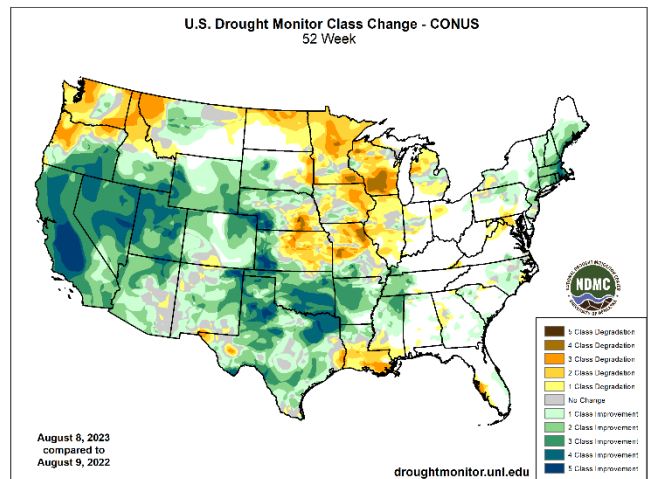
### 1 Month



### 6 Months



### 1 Year



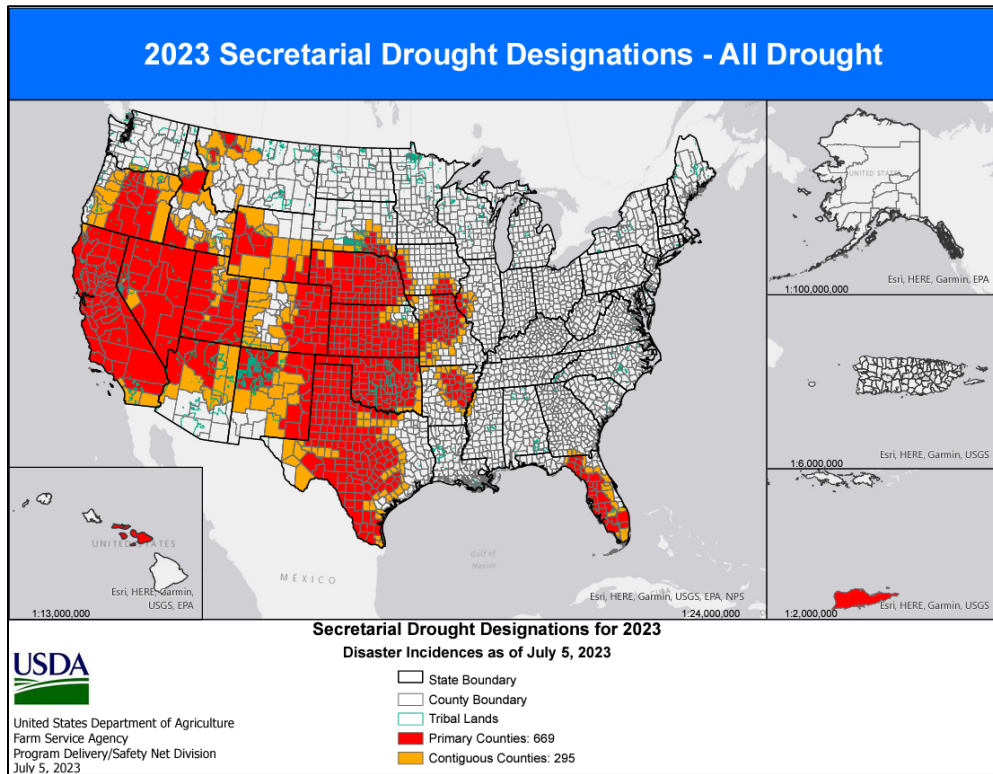
[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

## 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](#)

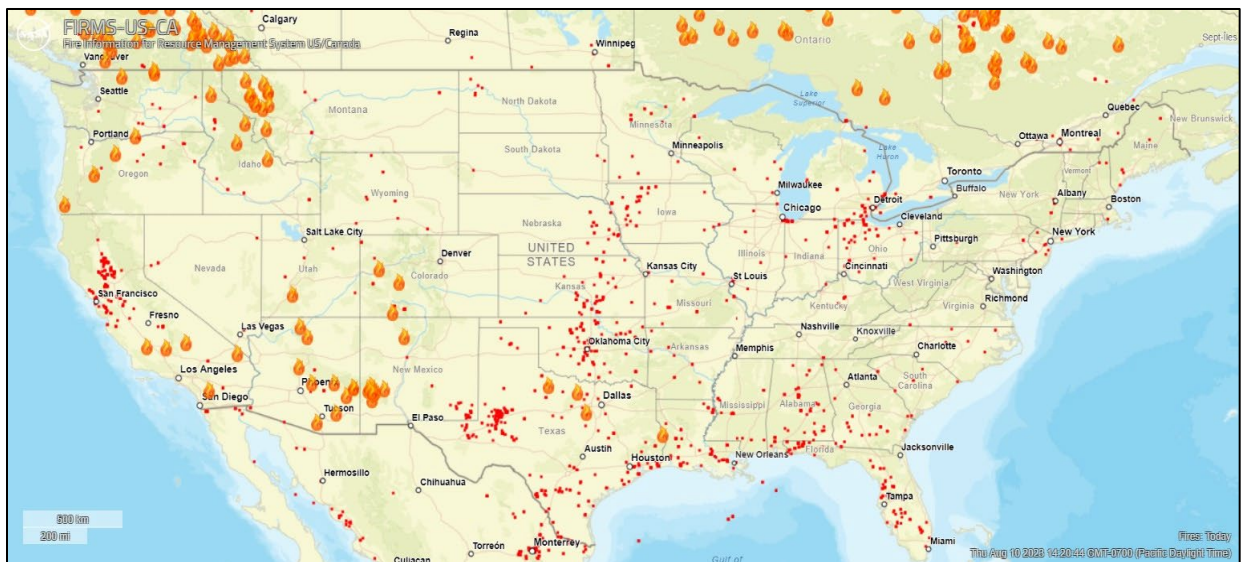
### USDA Secretarial Drought Designations

Source: USDA Farm Service Agency



### Wildfires: Fire Information for Resource Management System US/Canada

Source: NASA/USDA Forest Service



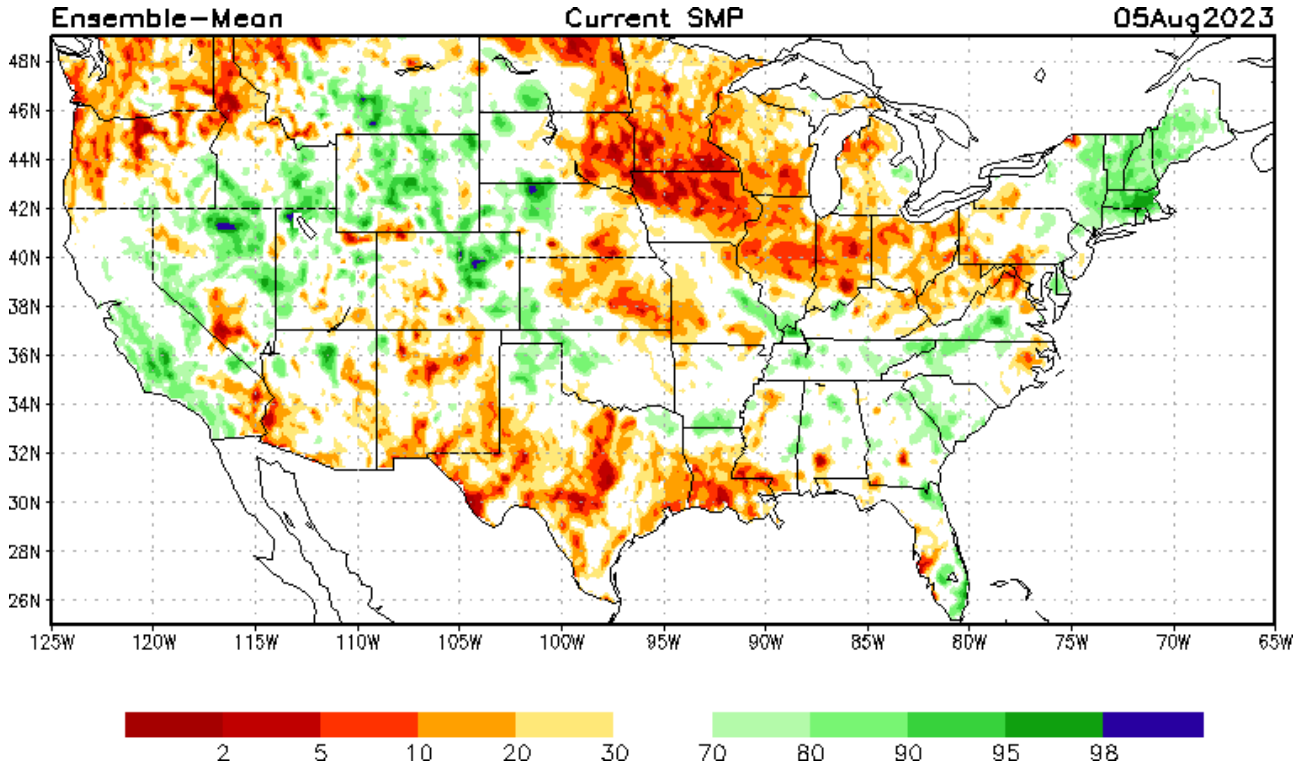
#### Highlighted Wildfire Resources

- [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

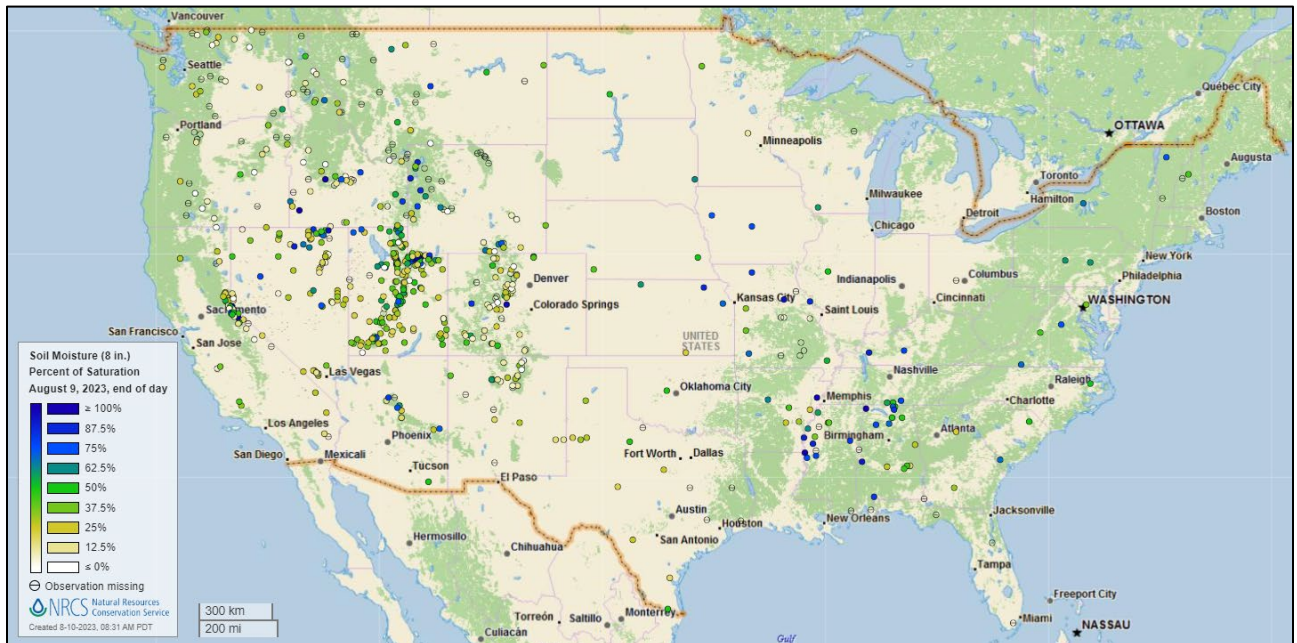


[Modeled soil moisture percentiles](#) as of August 05, 2023

### Soil Moisture Percent of Saturation

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

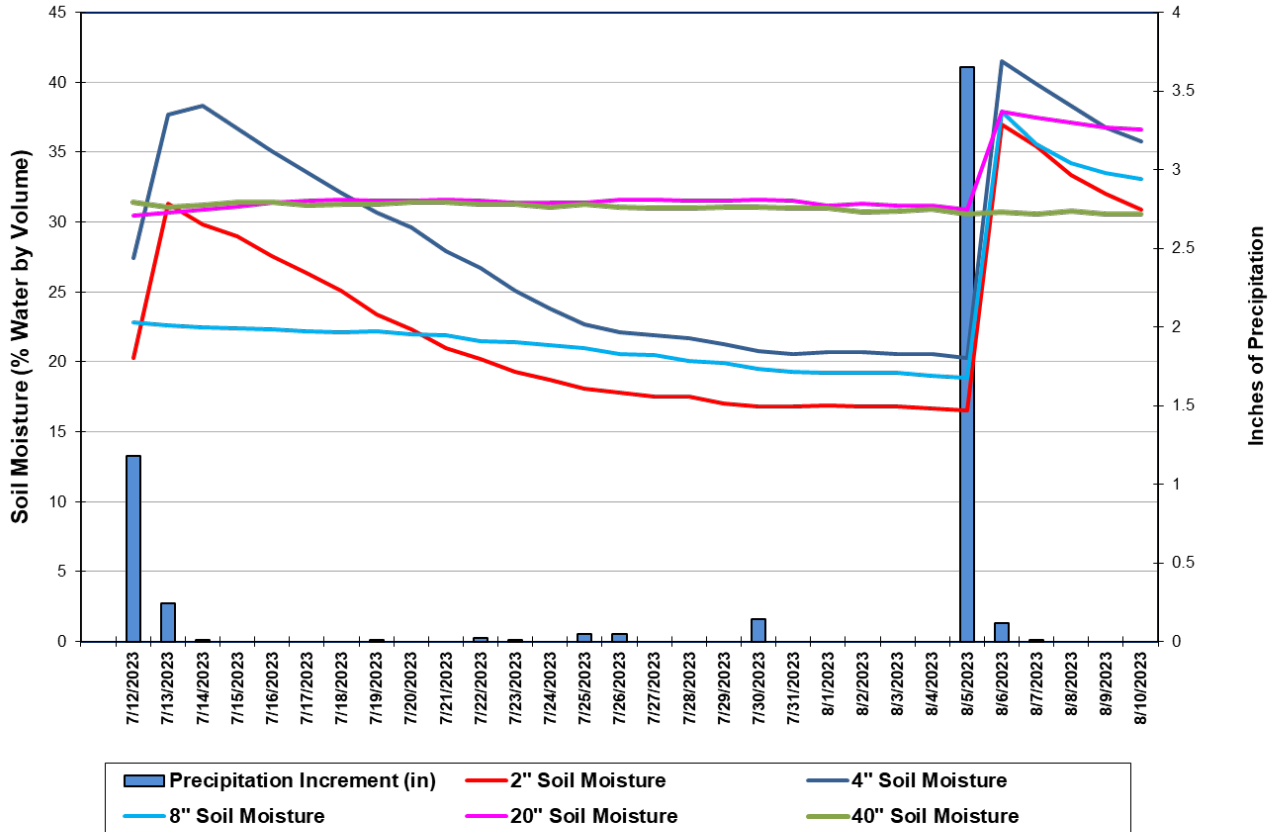
[U.S. soil moisture map at 8-inch depth:](#)



**Soil Moisture**

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

**Eros Data Center, South Dakota (SCAN site 2072)  
Daily Mean Soil Moisture vs. Daily Precipitation**



This chart shows the precipitation and soil moisture for the last 30 days at the [Eros Data Center](#) SCAN site in South Dakota. Soil moisture levels at the -2 and -4-inch soil sensors increased after the site received 1.43 inches of precipitation between July 12 through 14. A gradual decline in soil moisture can be seen at the more shallow sensors after the event, until a powerful storm brought 3.65 inches of precipitation on August 5, and provided a sharp increase in moisture at all sensor depths except the deepest sensor at 40 inches underground. Total precipitation for the 30-day period was 5.49 inches.

**Soil Moisture Data Portals**

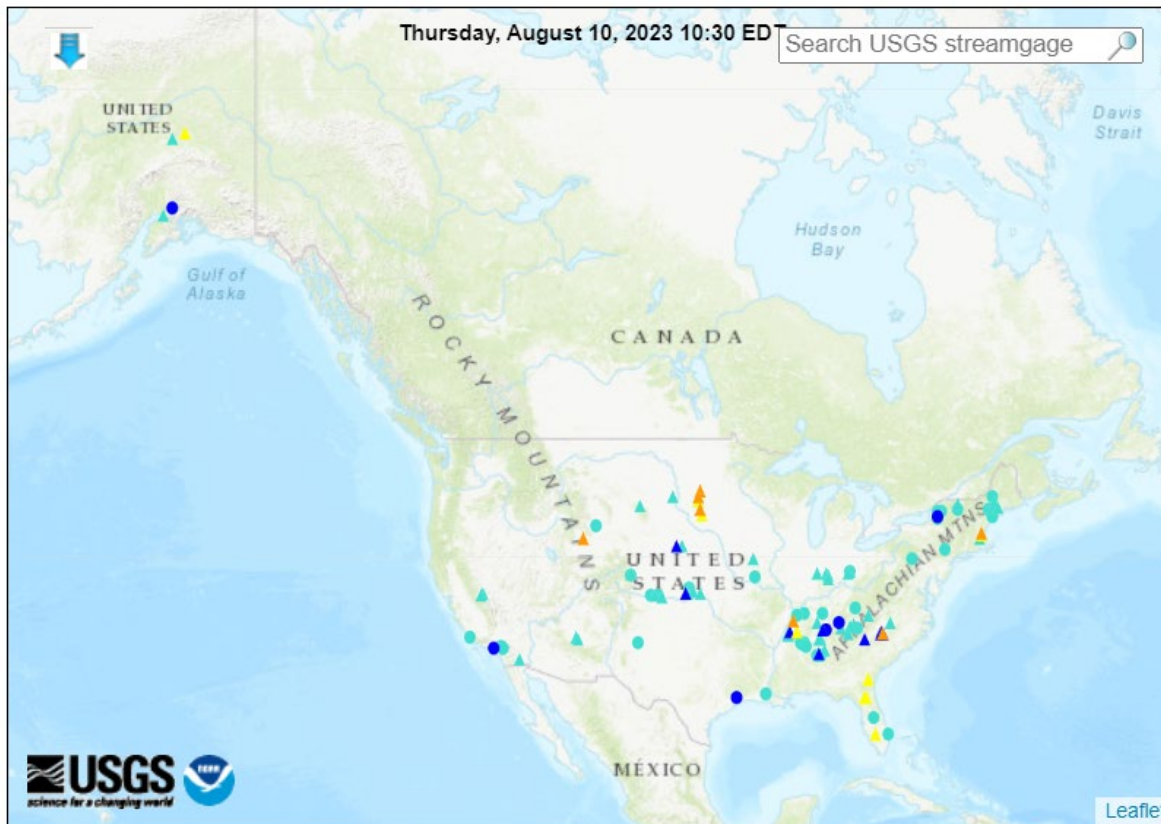
- [USCRN Soil Moisture](#)
- [National Soil Moisture Network](#)
- [NOAA Climate Prediction Center Soil Moisture](#)
- [NASA Grace](#)

### Streamflow, Drought, Flood, and Runoff

Source: U.S. Geological Survey [WaterWatch Streamflow Map](#)

### Map of flood and high flow conditions

(7 in floods [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

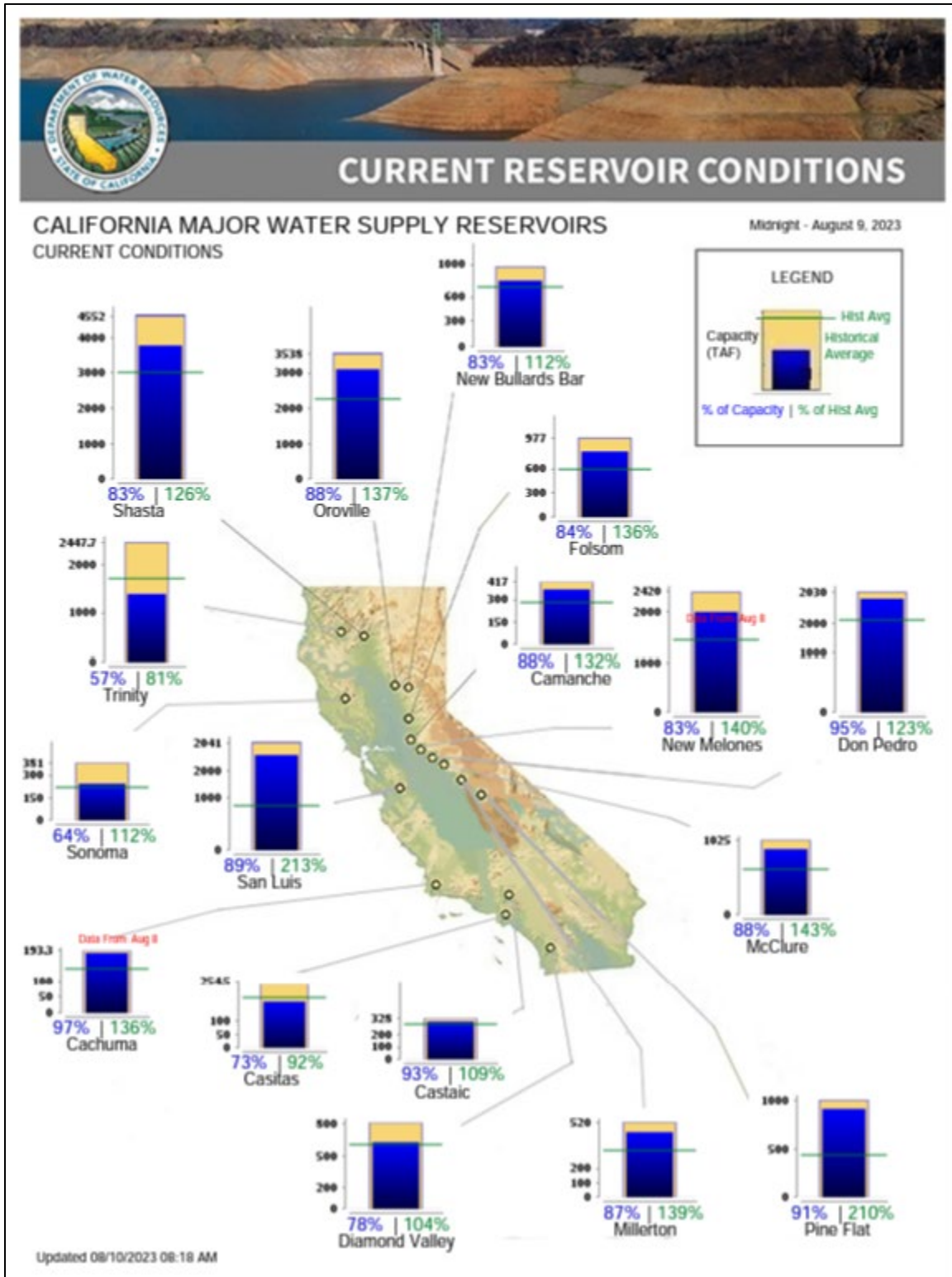
#### Hydromet Teacup Reservoir Depictions

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 10, 2023:** “Search and recovery efforts will continue across Maui, Hawaii, in areas affected by recent and ongoing wildfires, which have caused devastation in Lahaina. Wildfire containment efforts, which are being aided by diminishing winds, will also continue across parts of the Big Island. Meanwhile on the U.S. mainland, building Western heat will result in significantly elevated temperatures, especially in northern California and the Pacific Northwest. East of the Rockies, extreme heat will remain mostly confined to the Deep South, from Texas to the southern Atlantic Coast. Widespread precipitation will fall during the next 5 days across the eastern half of the U.S., except in the western Gulf Coast region. Some of the heaviest rain, locally 1 to 3 inches or more, should fall in the Midwest and Northeast. Elsewhere, hot, dry weather in the Northwest will contrast with scattered, monsoon-related showers in the Southwest. The NWS 6- to 10-day outlook for August 15 – 19 calls for the likelihood of hotter-than-normal conditions throughout the southern, western, and eastern U.S., while near- or below-normal temperatures will be confined to the northern Plains and upper Midwest. Meanwhile, near- or below-normal rainfall across much of the South and West should contrast with wetter-than-normal weather in northern California, southern Florida, and from the northern Plains to New England.”

## Weather Hazards Outlook: [August 12 – 16, 2023](#)

Source: NOAA Weather Prediction Center















### U.S. Day 3-7 Hazards Outlook

[About the Hazards Outlook](#)

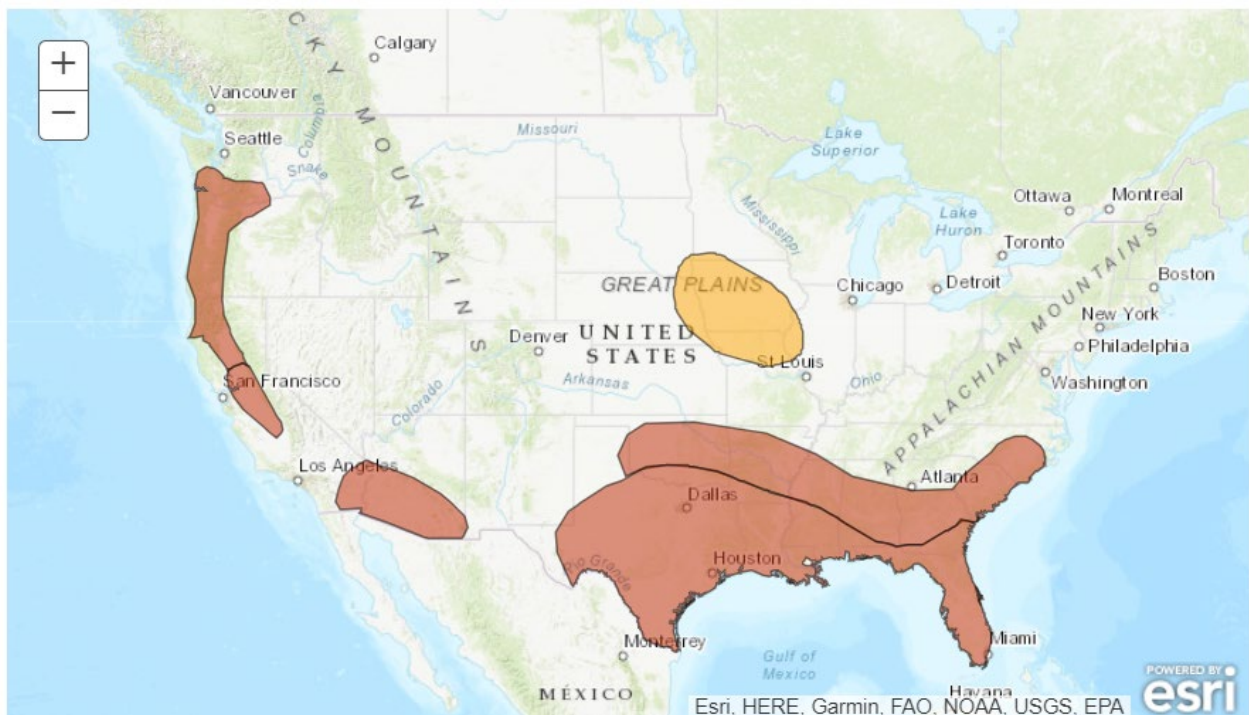
Created August 09, 2023

**NOTE:** These products are only created Monday through Friday. Please exercise caution using this outlook during the weekend.

Precipitation	<input checked="" type="checkbox"/>
Temperature	<input checked="" type="checkbox"/>
Wildfires	<input checked="" type="checkbox"/>
Soils	<input type="checkbox"/>

Legend			
	Flooding Likely		Hazardous Heat
	Flooding Occurring or Imminent		Hazardous Cold
	Flooding Possible		Frost/Freeze
	Freezing Rain		High Winds
	Heavy Precipitation		Significant Waves
	Heavy Rain		Critical Wildfire Risk
	Heavy Snow		Severe Weather

Valid August 12, 2023 - August 16, 2023

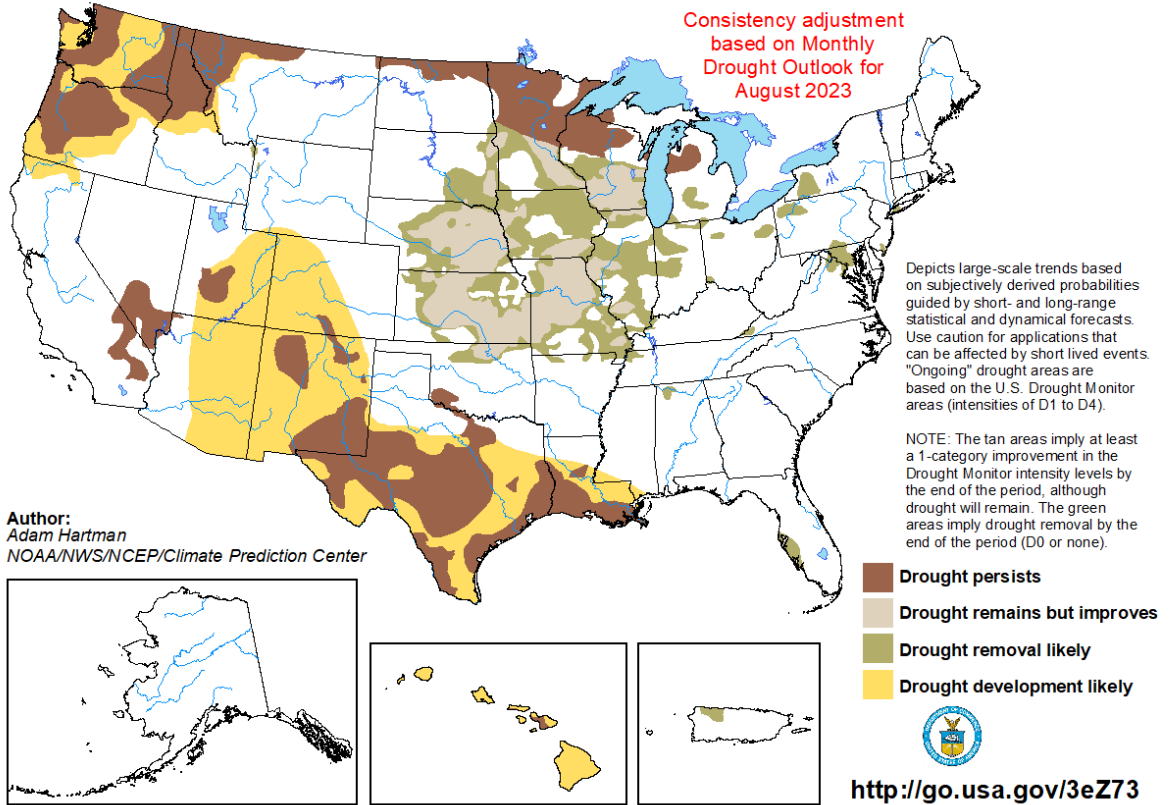


**Seasonal Drought Outlook: [August 01 – October 31, 2023](#)**

Source: National Weather Service

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

Valid for August 1 - October 31, 2023  
Released July 31, 2023

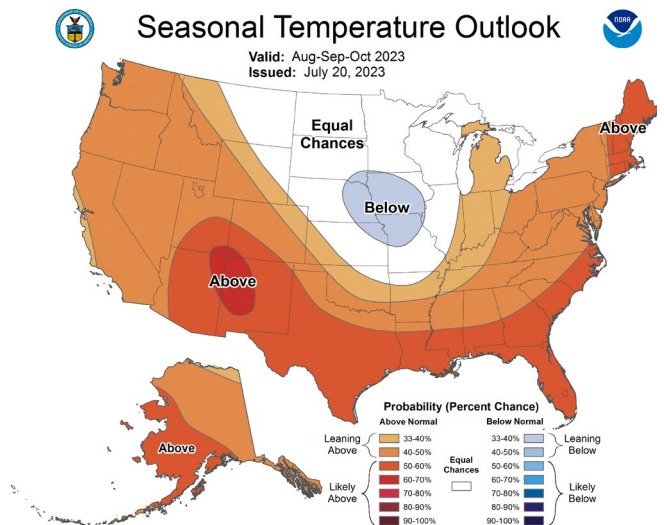
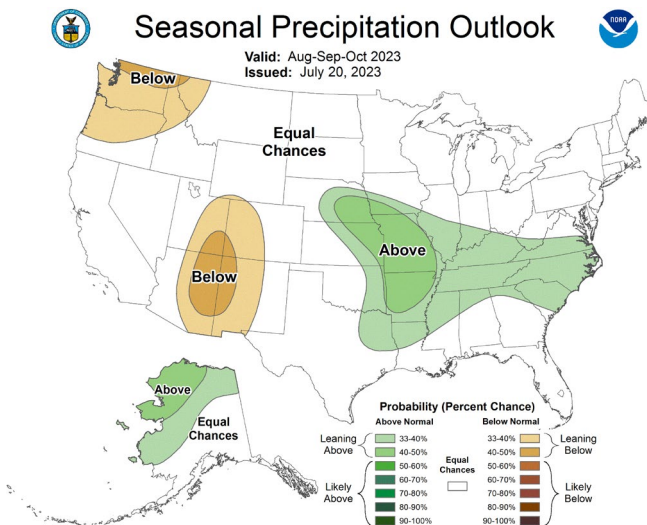


**Climate Prediction Center Three-month Outlook**

Source: National Weather Service

Precipitation

Temperature



[August-September-October 2023 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](#).