



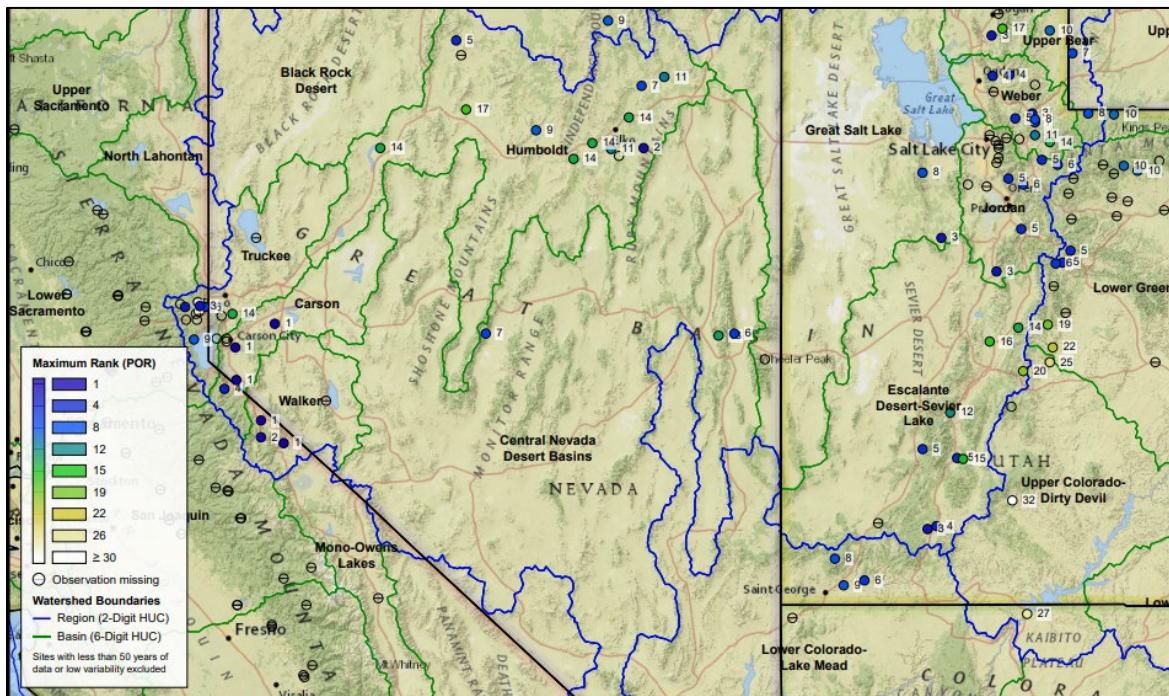
# Water and Climate Update

## August 03, 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		

## Snowmelt runoff sets streamflow records in the Southwest



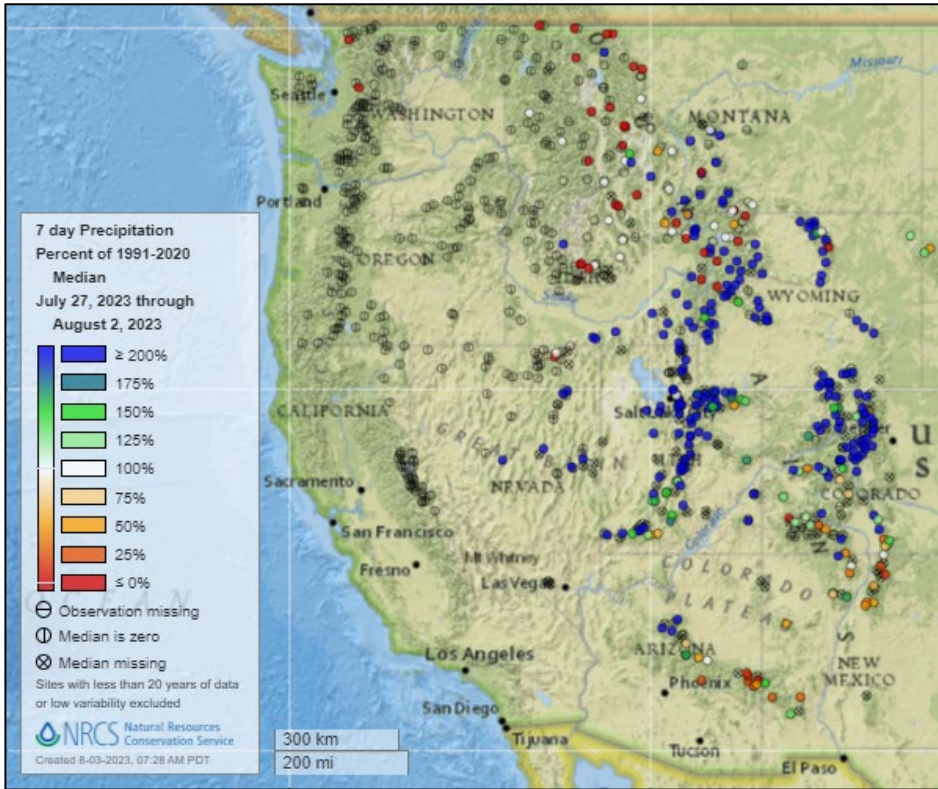
Across the western U.S., many areas received record or near-record amounts of snowpack over the winter. With the spring and summer temperatures melting the abundant snow, a record volume of streamflow has been recorded in several basins in the southwestern U.S., providing more water for the area later into the summer than is typically seen. The Walker and Carson basins near the California-Nevada border, for example, have reported the largest volume of streamflow for April through July that has ever been observed in roughly a century, when the records began. The ample runoff is helping fill reservoirs that have been depleted from years of drought conditions.

### Related:

- [2023 April through July Streamflow Runoff, Ranked Against Period of Record](#) – Interactive Map, NRCS Snow Survey and Water Supply Forecasting Program
- [WATCH: Satellite images show dramatic rise in Lake Powell water levels](#) – ABC4 News (UT)
- [Lake Mead Is Still Rising, Could It Reach 2021 Levels?](#) – Newsweek
- [Returning rapids bring new life to the Colorado River](#) – The Times-Independent (UT)

# Precipitation

## Last 7 Days, NRCS SNOTEL Network

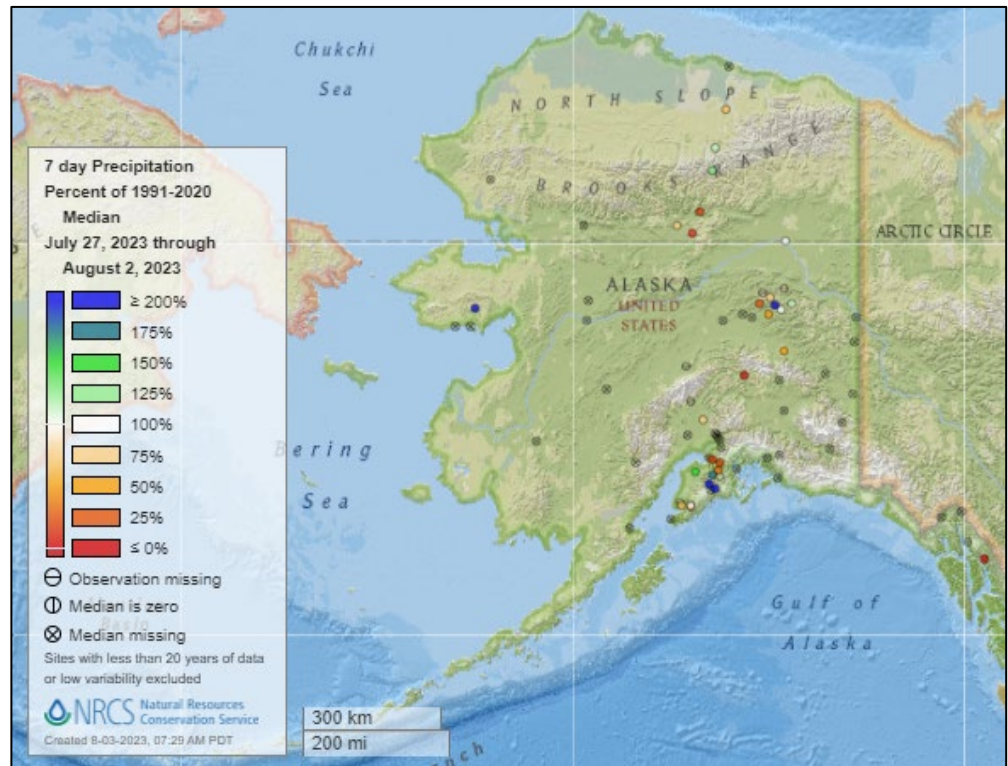


[7-day precipitation percent of median map](#)

**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](#)





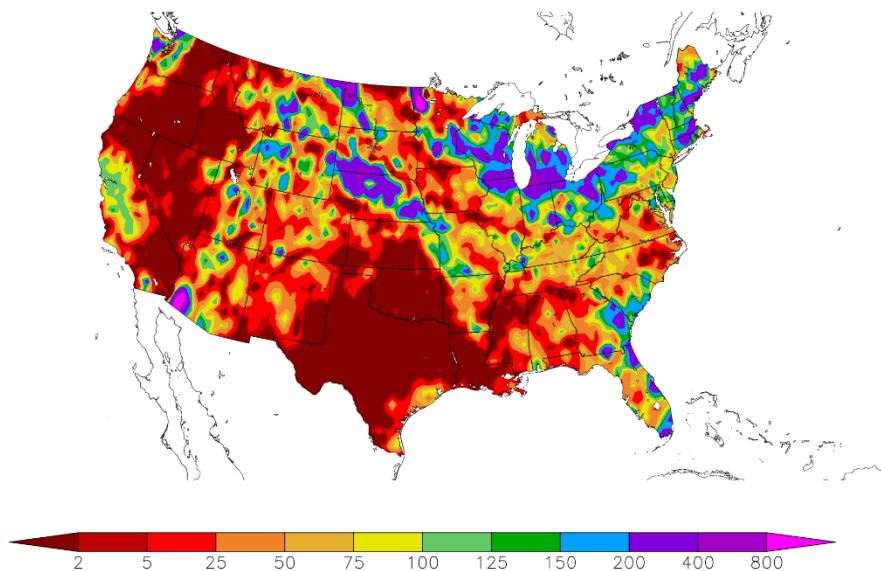
### Last 7 Days, National Weather Service (NWS) Networks

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 (%)  
7/25/2023 – 7/31/2023



Generated 8/1/2023 at HPRCC using provisional data.

NOAA Regional Climate Centers

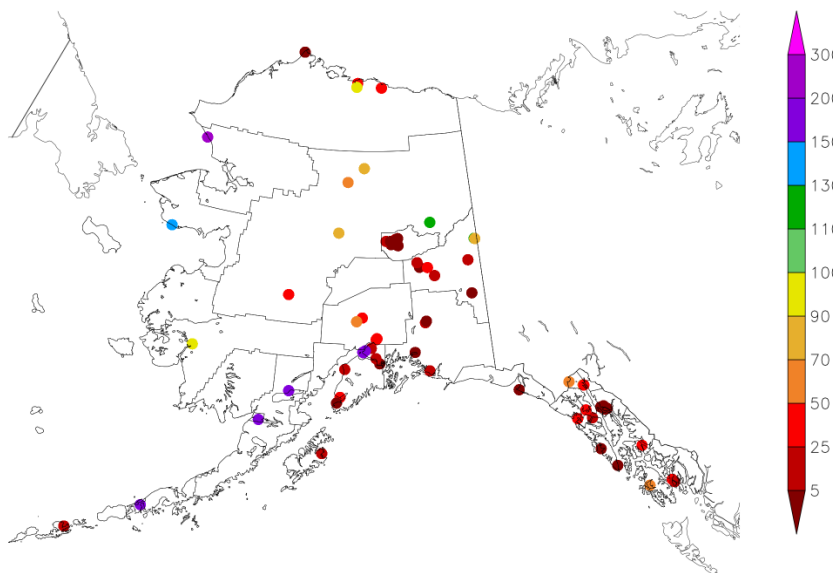
### Last 7 Days, National Weather Service (NWS) Networks

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 (%)  
7/25/2023 – 7/31/2023



Generated 8/1/2023 at HPRCC using provisional data.

NOAA Regional Climate Centers

### Monthly, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

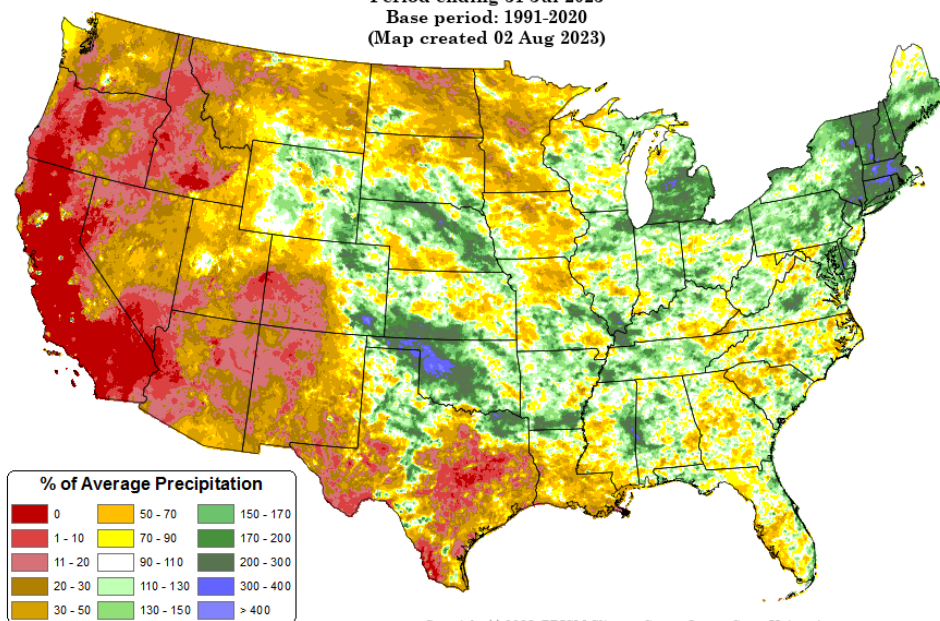
#### Total Precipitation Anomaly: Jul 2023

Period ending 31 Jul 2023

Base period: 1991-2020

(Map created 02 Aug 2023)

[Monthly 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

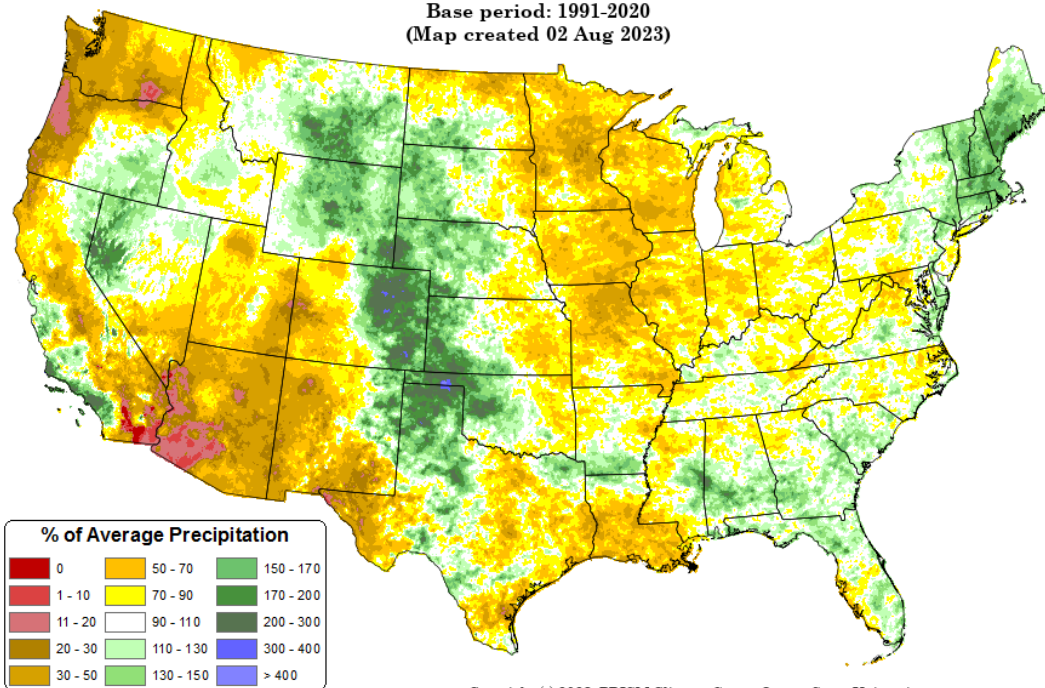
[May through July 2023 precipitation anomaly map](#)

#### Total Precipitation Anomaly: May 2023 - Jul 2023

Period ending 7 AM EST 31 Jul 2023

Base period: 1991-2020

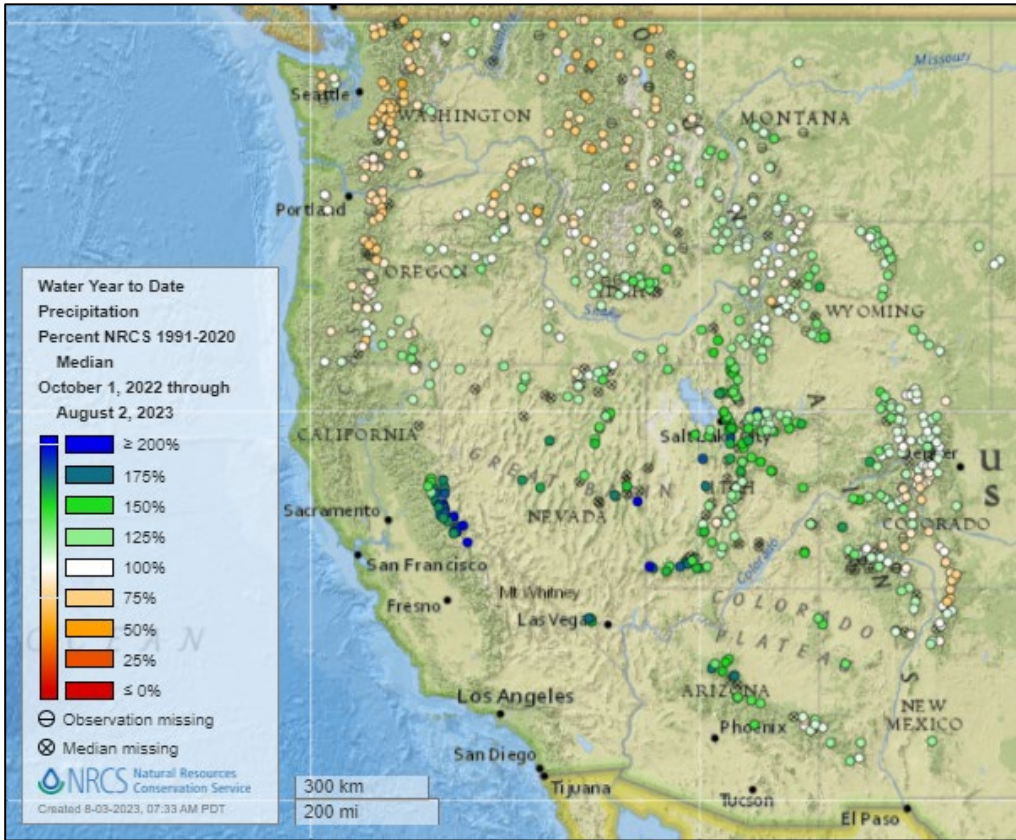
(Map created 02 Aug 2023)



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Water Year-to-Date, NRCS SNOTEL Network

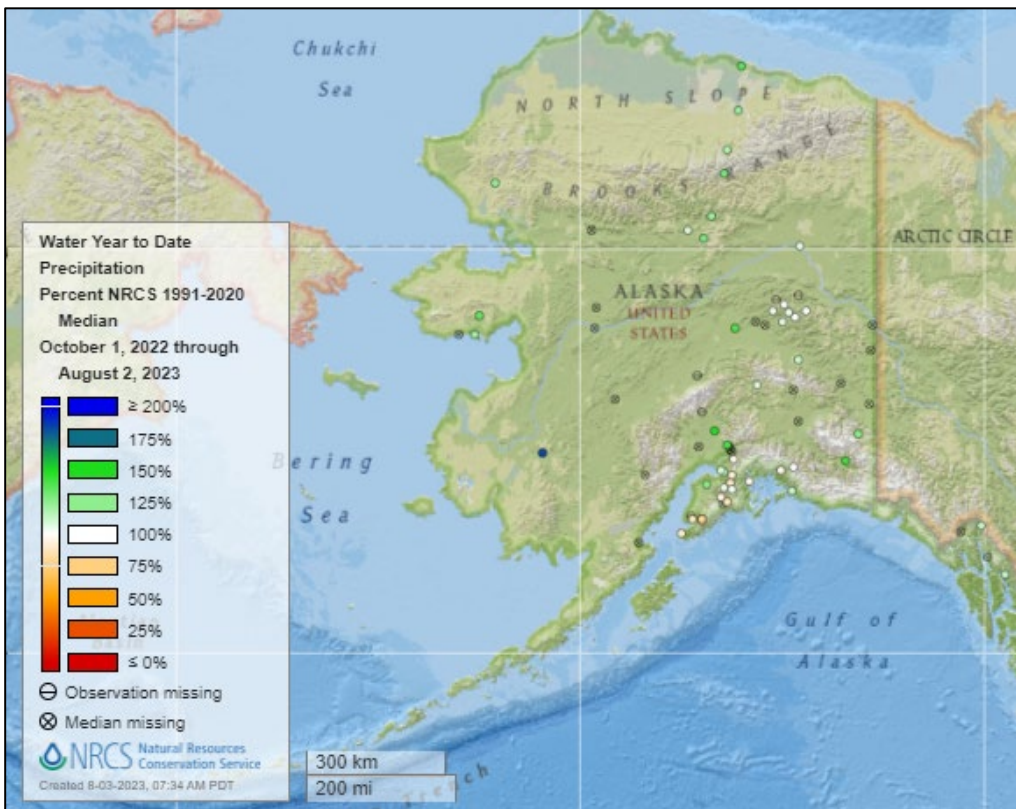


[2023 water year-to-date precipitation percent of median map](#)

**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

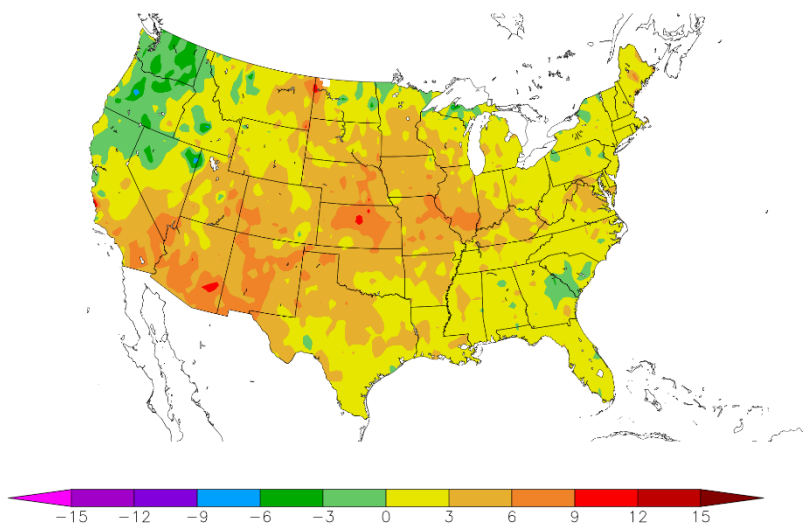
### Last 7 Days, National Weather Service (NWS) Networks

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)  
7/25/2023 – 7/31/2023



Generated 8/1/2023 at HPRCC using provisional data.

NOAA Regional Climate Centers

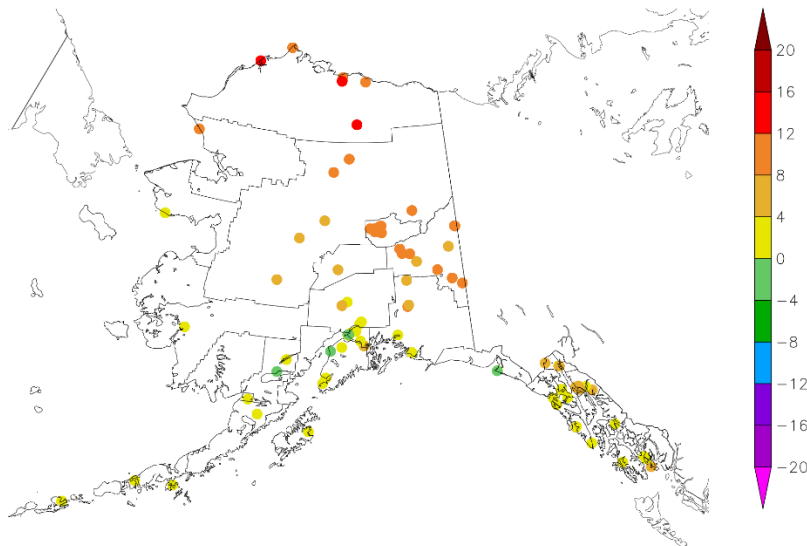
### Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)  
7/25/2023 – 7/31/2023



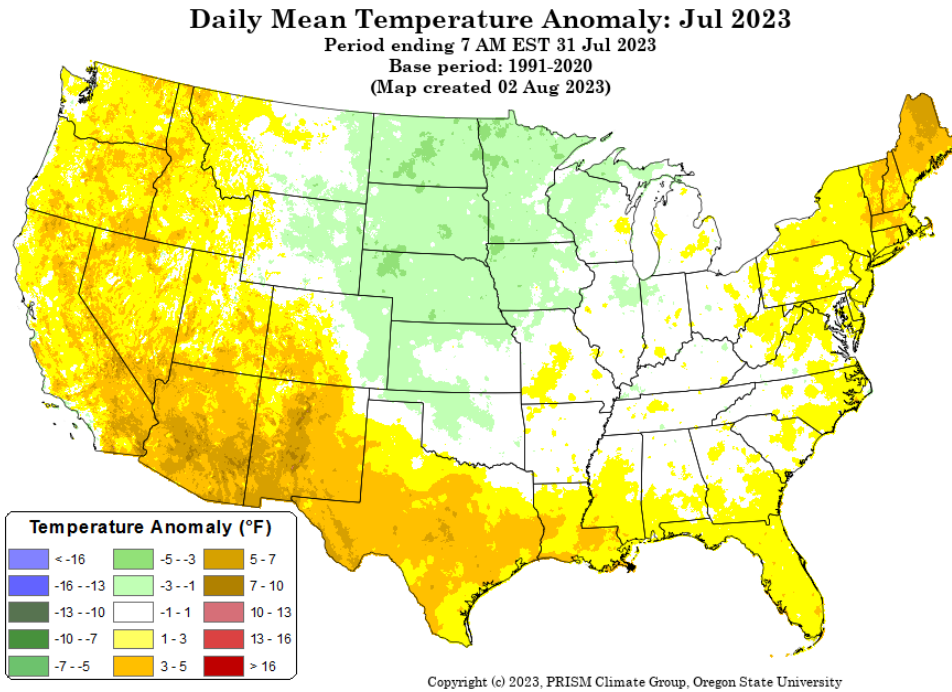
Generated 8/1/2023 at HPRCC using provisional data.

NOAA Regional Climate Centers

Monthly, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

[Monthly national daily mean temperature anomaly map](#)

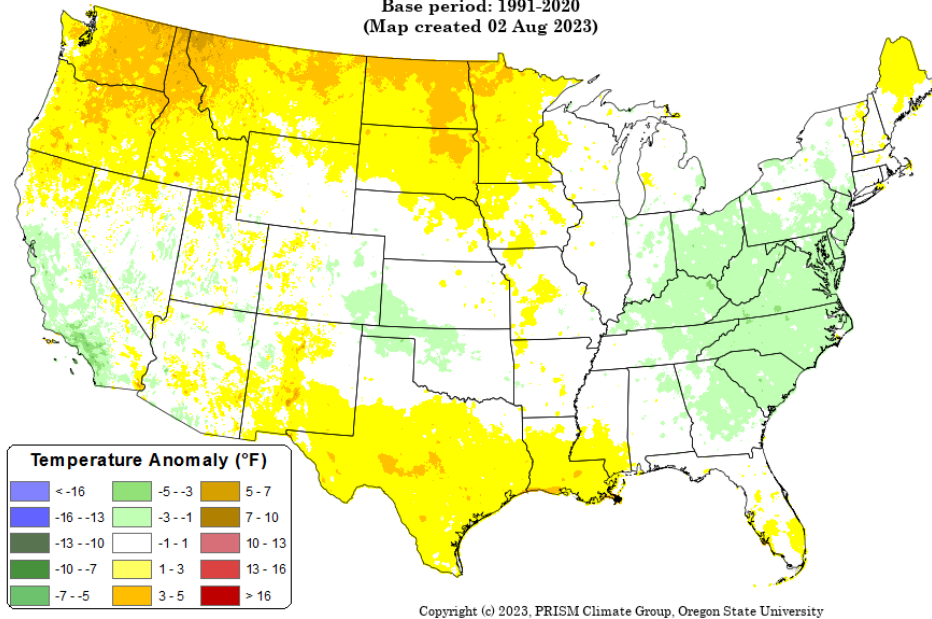


Last 3 Months, All Available Data Including SNOTEL and NWS Networks

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](#)





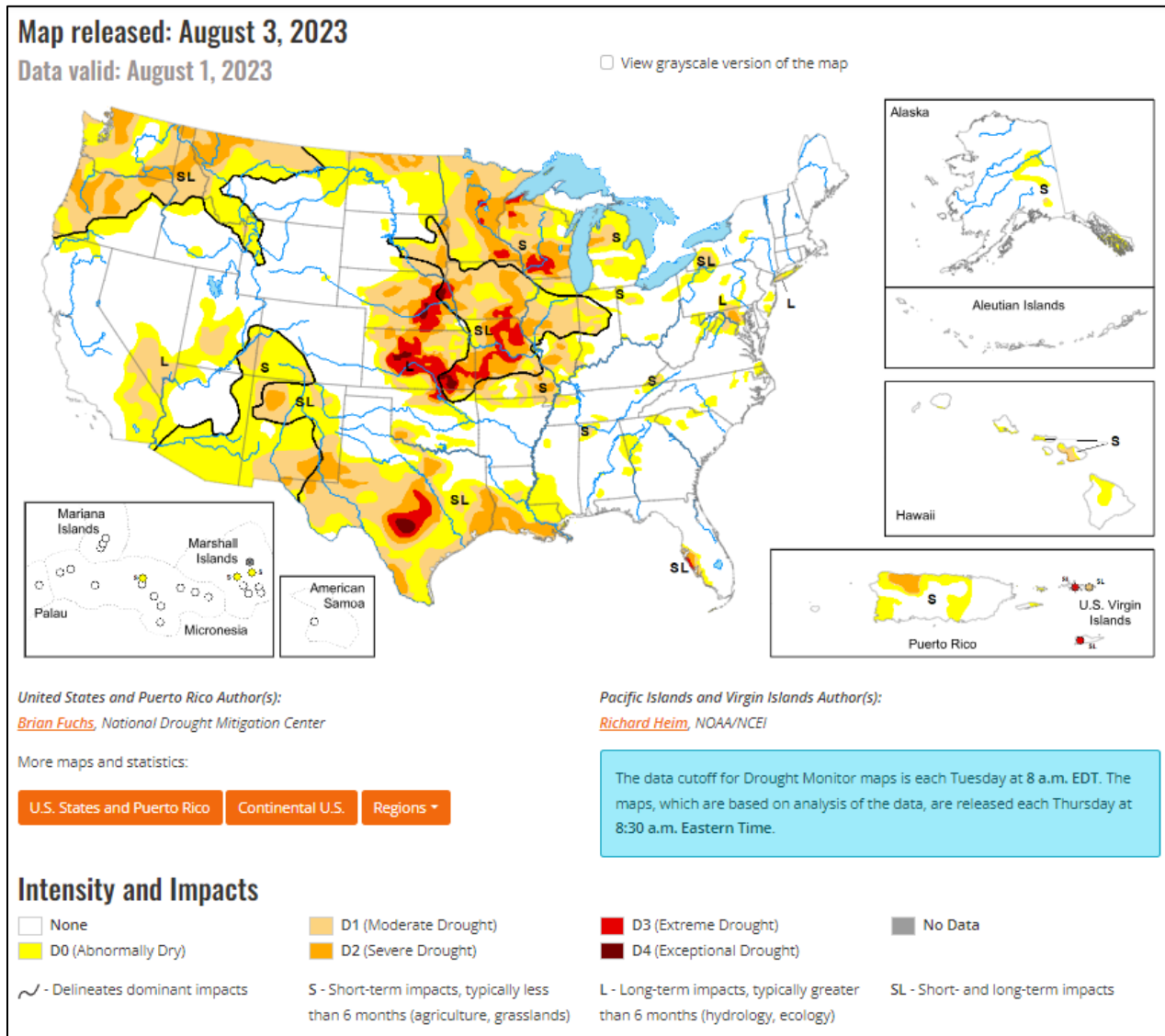
## Drought

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

Source: National Drought Mitigation Center

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

Source: NOAA



### Current [National Drought Summary](#), August 01, 2023

Source: National Drought Mitigation Center

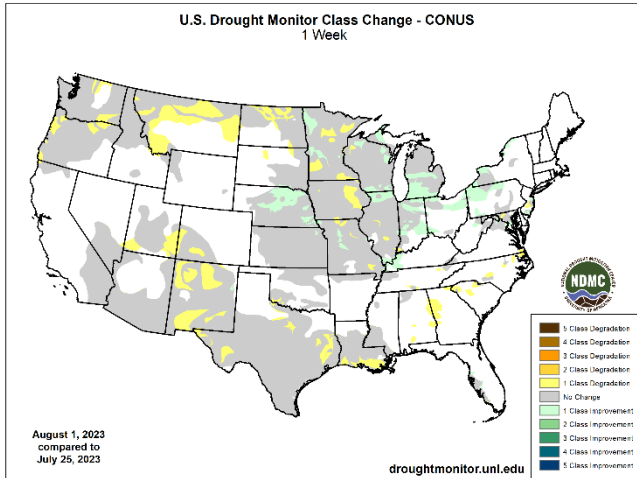
“Dry conditions dominated the West and southern Plains, coupled with above-normal temperatures. Precipitation was most widespread throughout much of the upper Midwest and central Plains and into the Northeast. Almost the entire country had near- to above-normal temperatures this last week, with the greatest departures over the Southwest and central Plains where temperatures were at least 4-7 degrees above normal. Cooler-than-normal temperatures were recorded in the Pacific Northwest with departures of 3-6 degrees below normal. At the end of the current U.S. Drought Monitor period, significant rains developed over portions of the Midwest and central Plains, and they will be accounted for in the next analysis.”



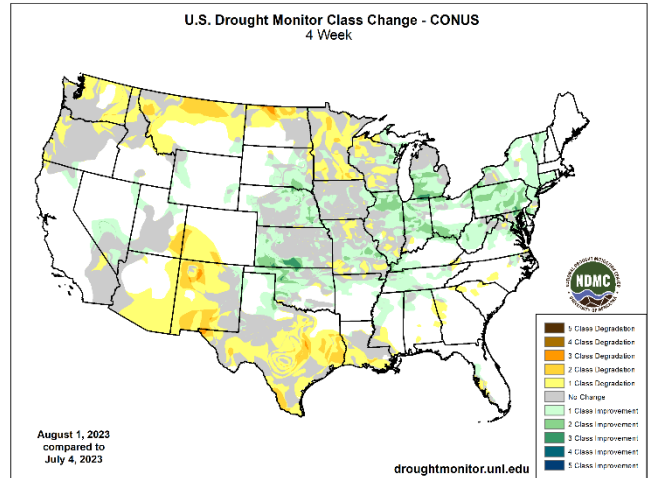
## Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

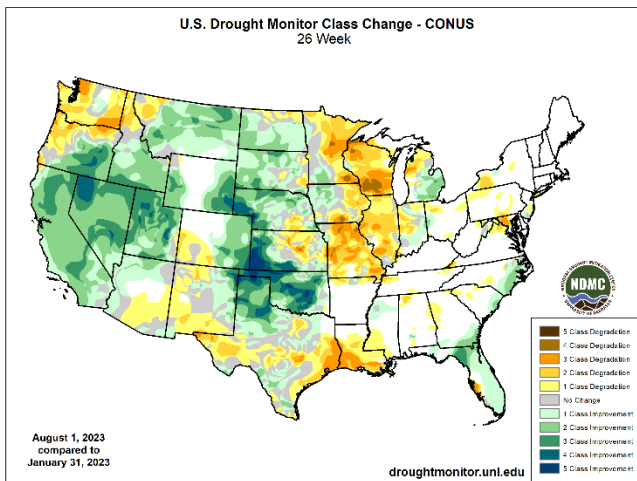
### 1 Week



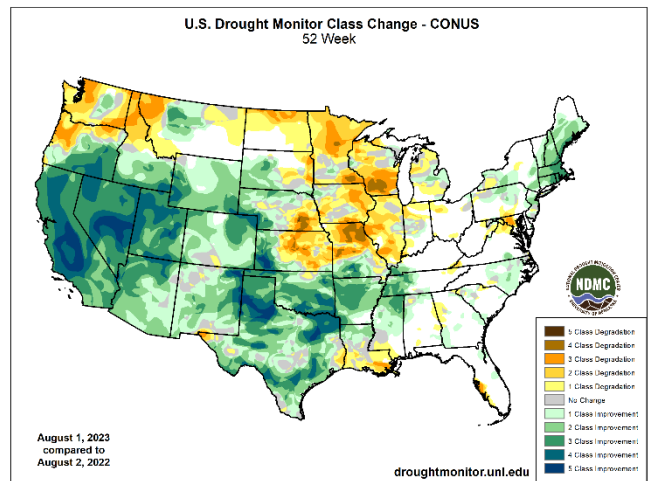
### 1 Month



### 6 Months



### 1 Year



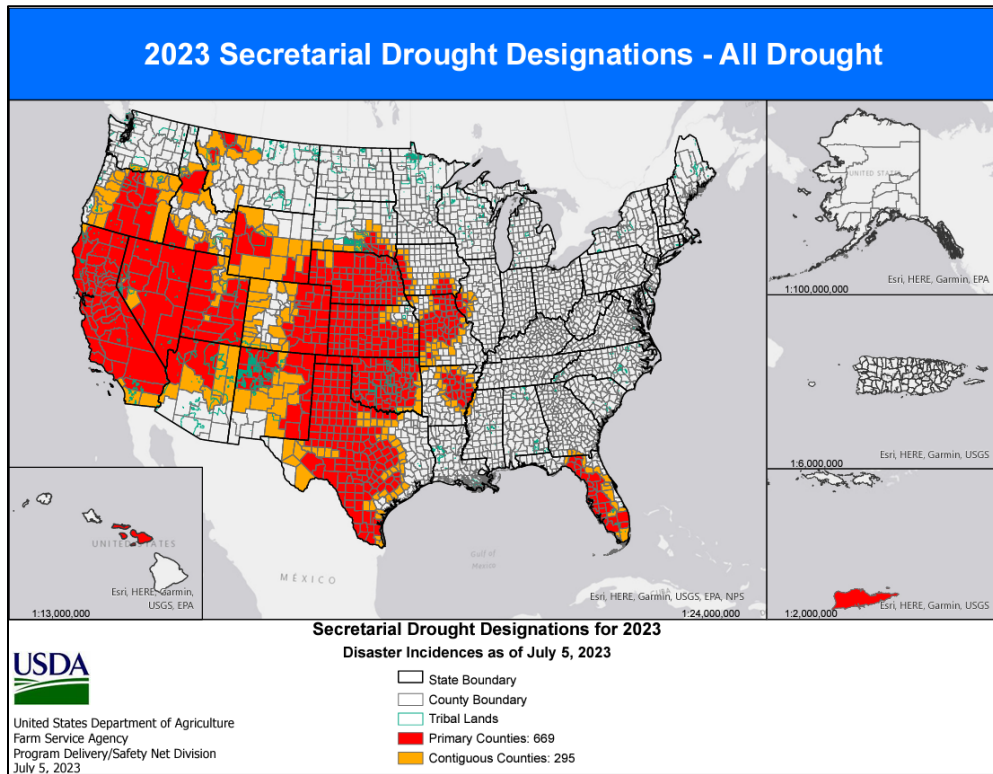
[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

## Highlighted Drought Resources

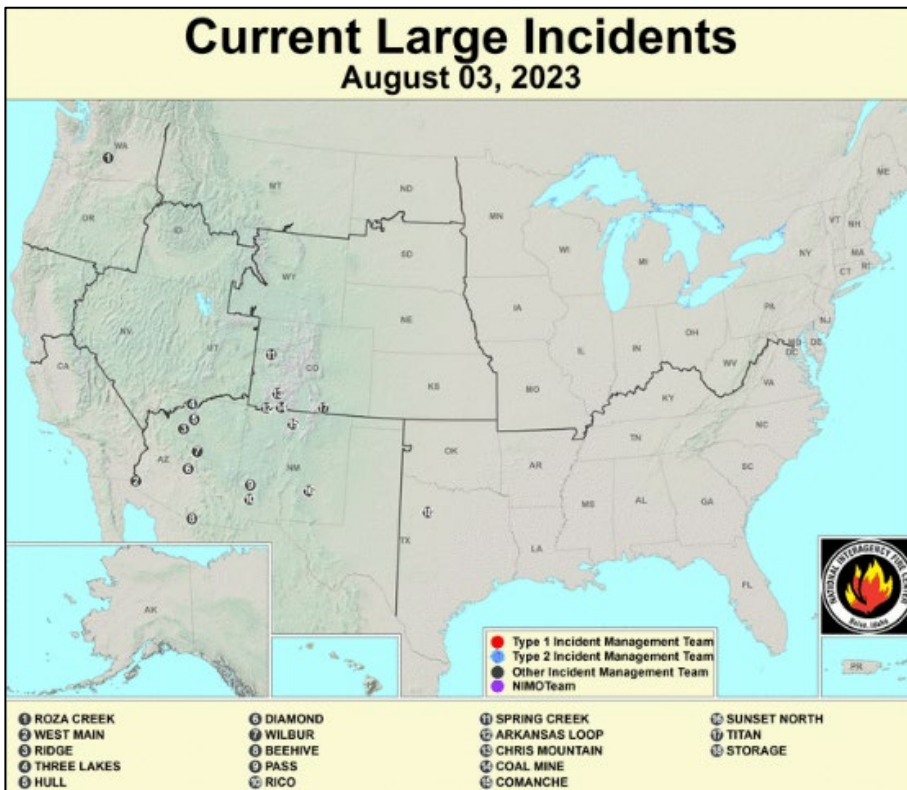
- [Drought Impact Reporter](#)
- [Quarterly Regional Climate Impacts and Outlook](#)
- [U.S. Drought Portal Indicators and Monitoring](#)
- [U.S. Population in Drought, Weekly Comparison](#)
- [USDA Disaster and Drought Information](#)

**USDA Secretarial Drought Designations**

Source: USDA Farm Service Agency



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



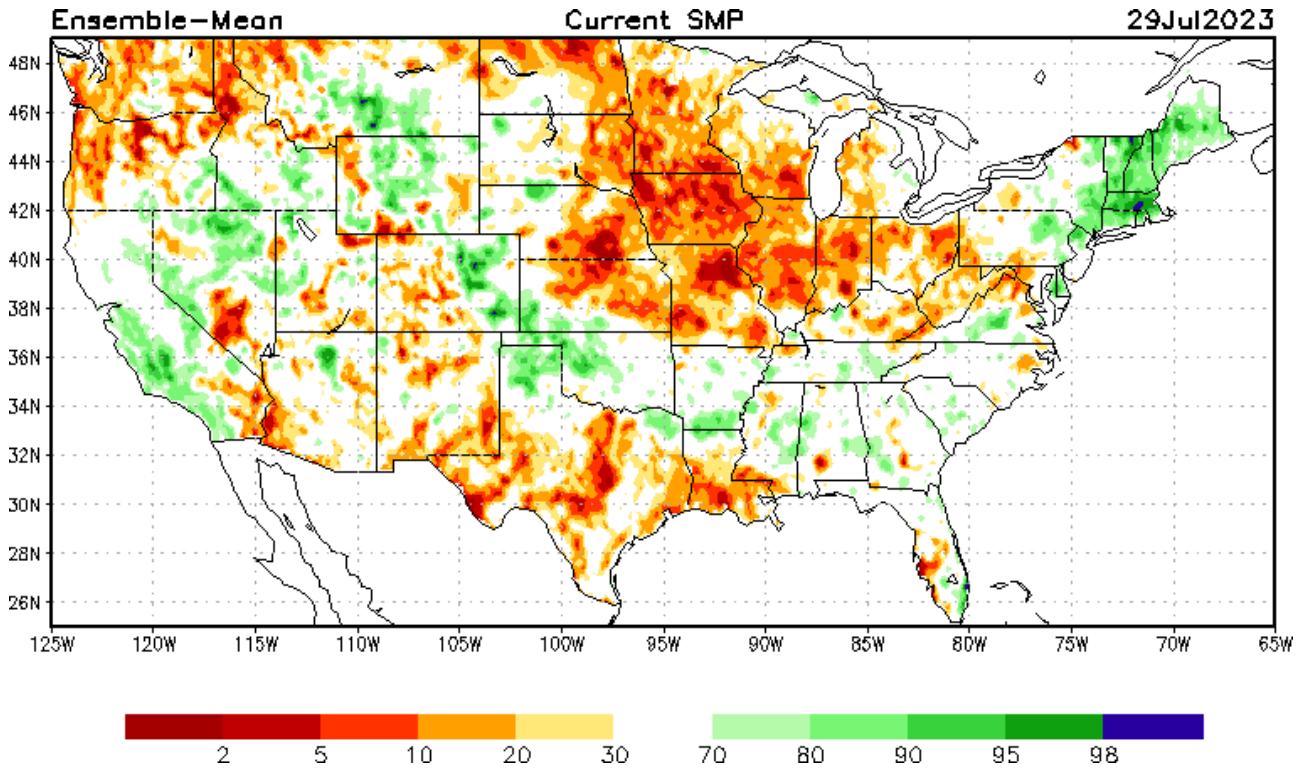
**Highlighted Wildfire Resources**

- [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

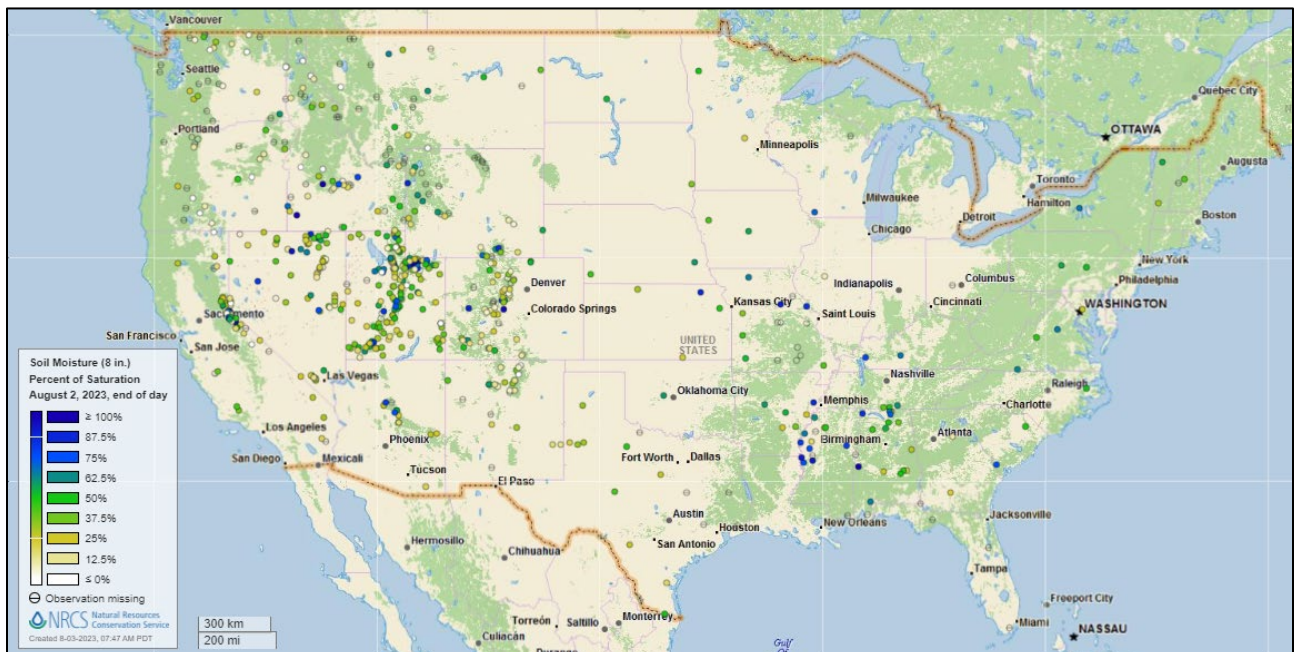


[Modeled soil moisture percentiles](#) as of July 29, 2023

### Soil Moisture Percent of Saturation

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

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

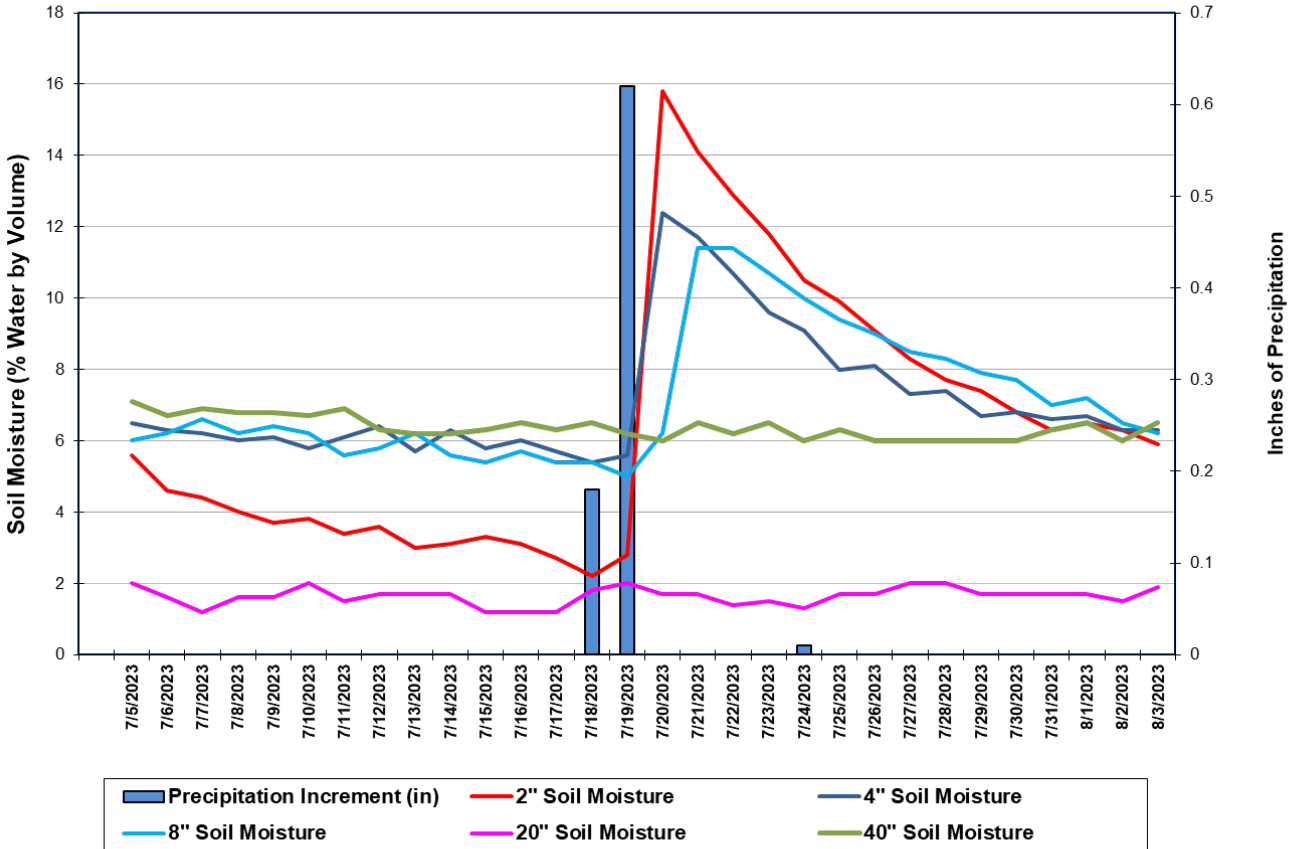




**Soil Moisture**

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

**Marble Creek, California (SCAN site 2149)  
Daily Mean Soil Moisture vs. Daily Precipitation**



This chart shows the precipitation and soil moisture for the last 30 days at the [Marble Creek](#) SCAN site in California. After the site received 0.80 inches of precipitation between July 18 - 19, soil moisture levels increased at the -2, -4, and -8-inch sensor depths. Total precipitation for the 30-day period was 0.81 inches.

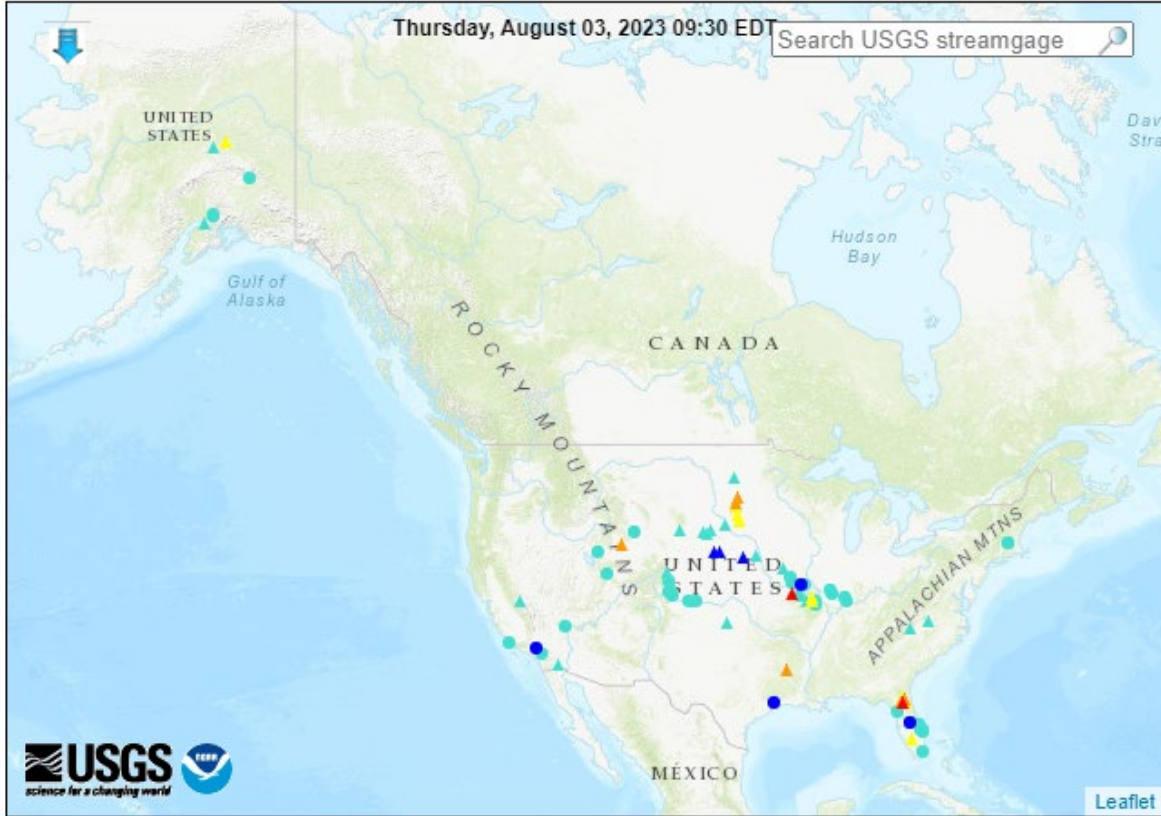
**Soil Moisture Data Portals**

- [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 (8 in floods [moderate: 2, minor: 6], 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

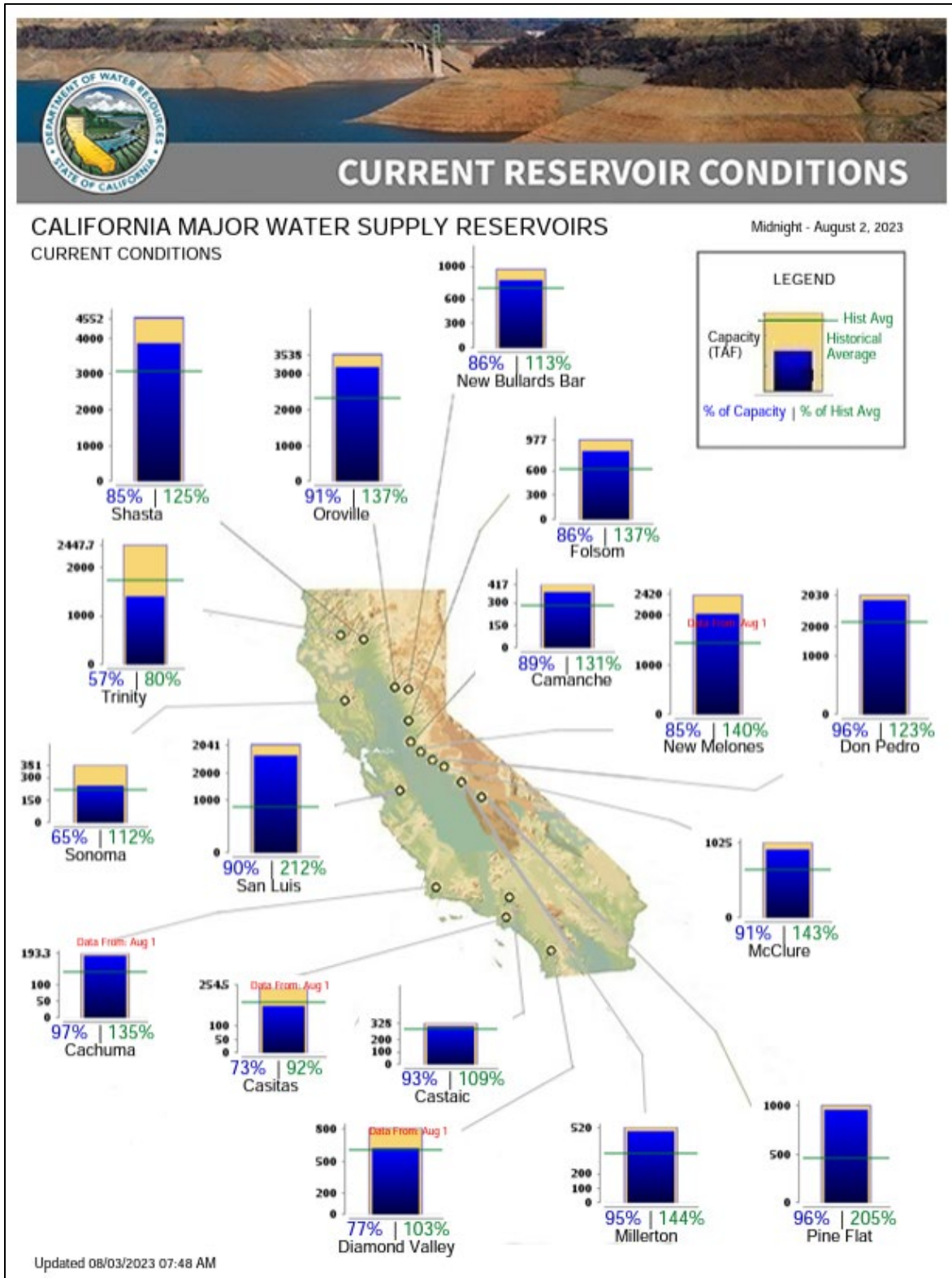
#### Hydromet Teacup Reservoir Depictions

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 03, 2023:** “For the remainder of the week, hot weather will remain focused across the south-central U.S., while extreme heat will return across the Desert Southwest. By early next week, heat will expand northward in the western U.S., while cool conditions will prevail across the northern Plains and the Midwest. During the next several days, a low-pressure system laden with moisture associated with the Southwestern monsoon circulation will drift eastward across the northern U.S. Five-day rainfall totals could reach 1 to 3 inches or more from the northern Rockies into the Great Lakes and Northeastern States. A separate area of precipitation will affect the Southeast, while negligible rain will fall from California to the western Gulf Coast region. The NWS 6- to 10-day outlook for August 8 – 12 calls for the likelihood of above-normal temperatures in the South and much of the Far West, while cooler-than-normal conditions will cover an area stretching from northern sections of the Rockies and Plains into the Midwest and northern New England. Meanwhile, below-normal rainfall in the Southwest and the Rio Grande Valley should contrast with wetter-than-normal weather in most other areas, including the Plains, Midwest, Northwest, mid-South, and much of the eastern U.S.”

### Weather Hazards Outlook: [August 05 – 09, 2023](#)

Source: NOAA Weather Prediction Center















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

[About the Hazards Outlook](#)

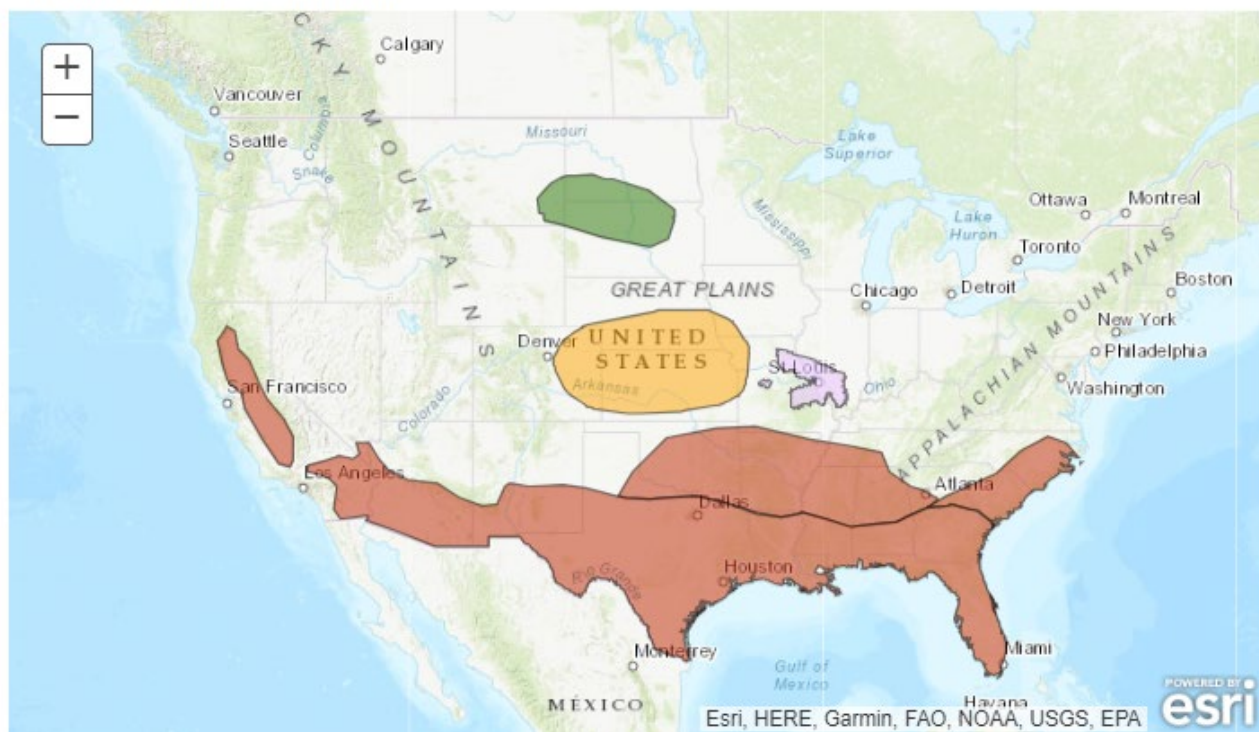
Created August 02, 2023

**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 05, 2023 - August 09, 2023

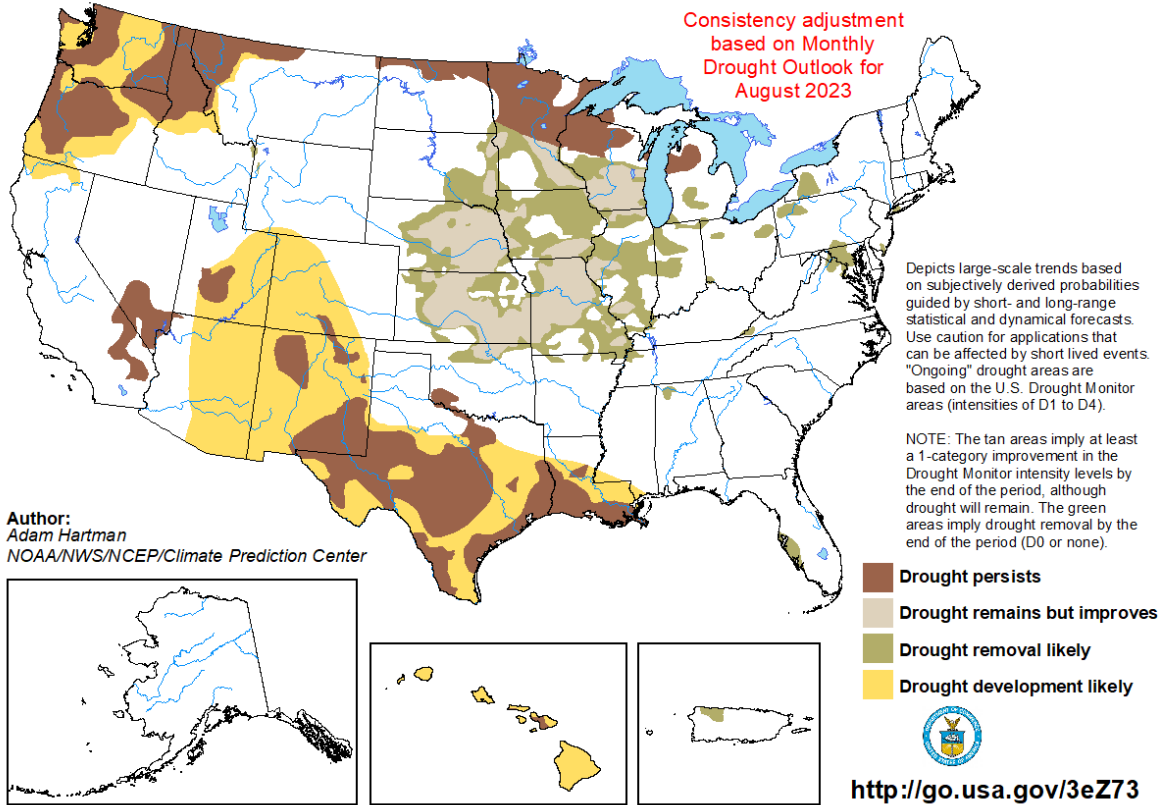


**Seasonal Drought Outlook: [August 01 – October 31, 2023](#)**

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

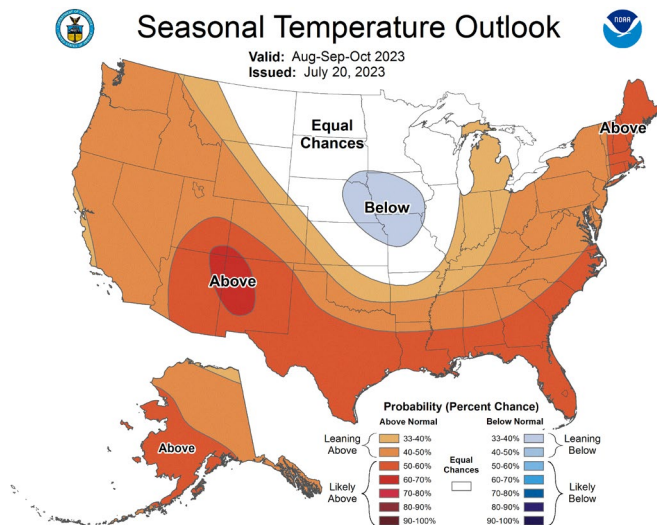
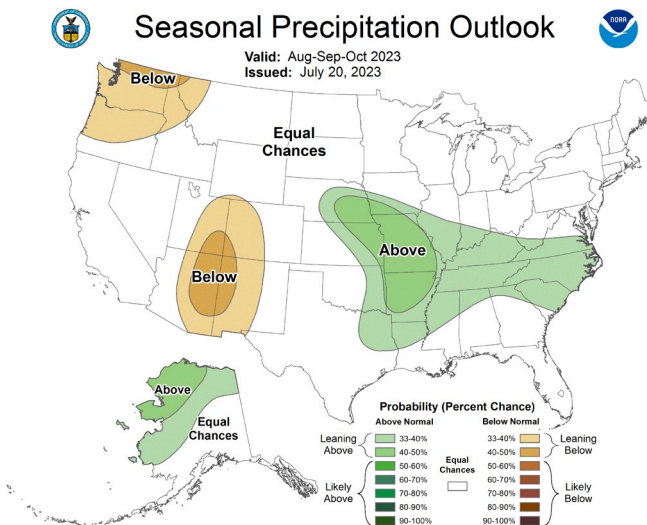


**Climate Prediction Center Three-month Outlook**

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](#).