



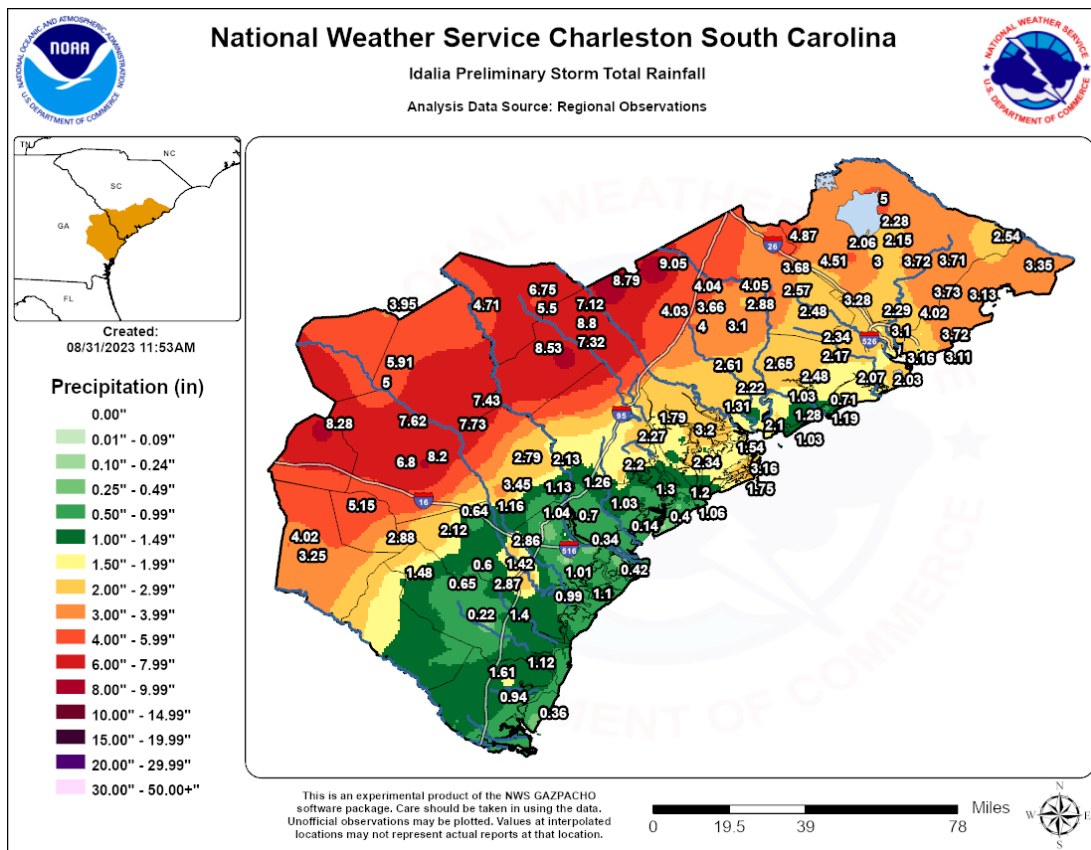
# Water and Climate Update

## August 31, 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 .....	12
Temperature.....	6	More Information .....	18
Drought .....	8		

## Hurricane Idalia makes landfall in the Southeast



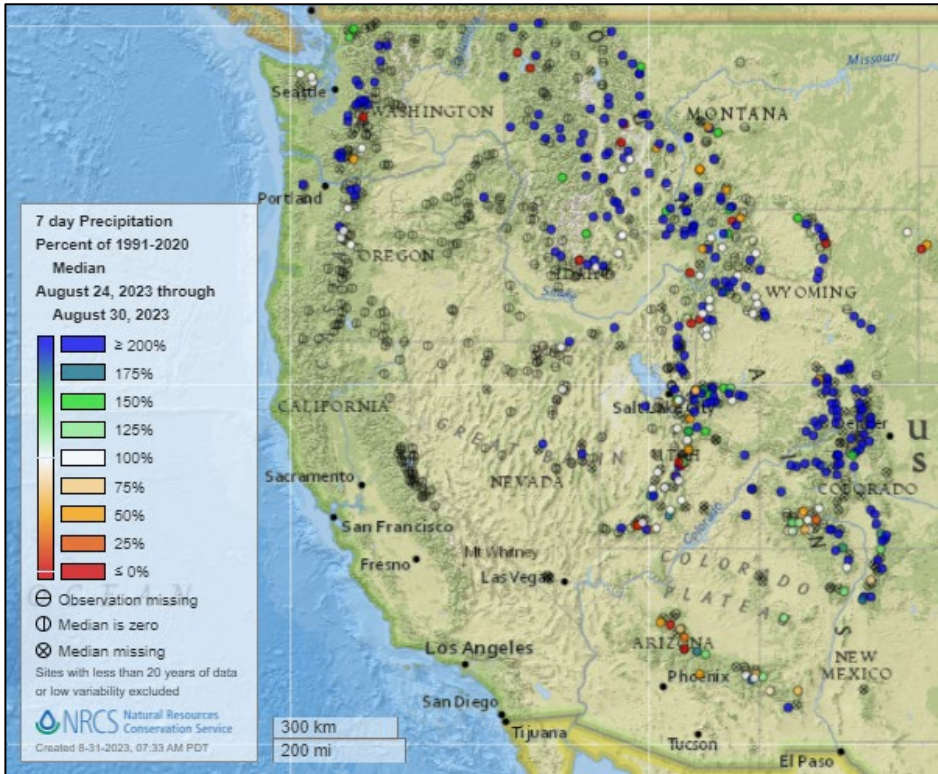
Idalia made landfall in Florida on August 30 as a Category 3 hurricane, bringing winds up to 125 mph that overturned cars and damaged structures. The storm was eventually downgraded to a tropical storm but remained a powerful force as it moved up the coast of the southeastern U.S., delivering ample rainfall, sustained winds up to 60 mph, and coastal flooding. The full supermoon on August 30 brought higher tides, intensifying the flooding from the storm surge. Hundreds of thousands have been left without power in the wake of the storm.

### Related:

- [Hurricane Idalia hits Florida with 125 mph winds, flooding streets, snapping trees and cutting power](#) - AP News
- [Hurricane Idalia's aftermath: Over 250,000 homes and businesses without power](#) - NPR
- [August 30, 2023 - Idalia makes Florida landfall](#) - CNN

# Precipitation

## Last 7 Days, NRCS SNOTEL Network

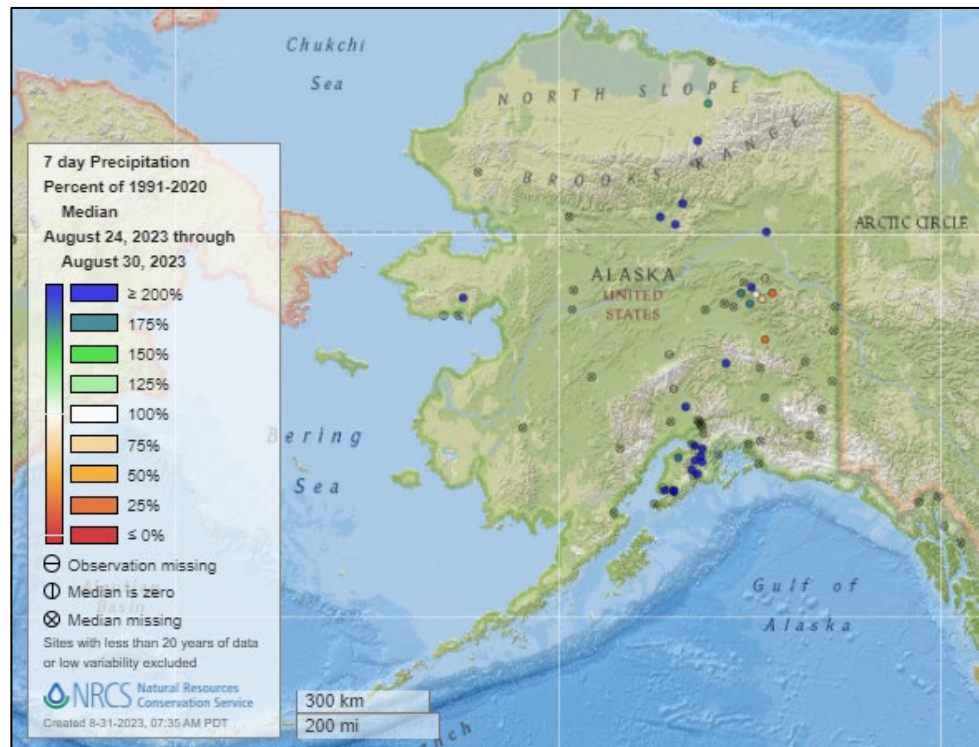


[7-day precipitation percent of median map](#)

**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](#)



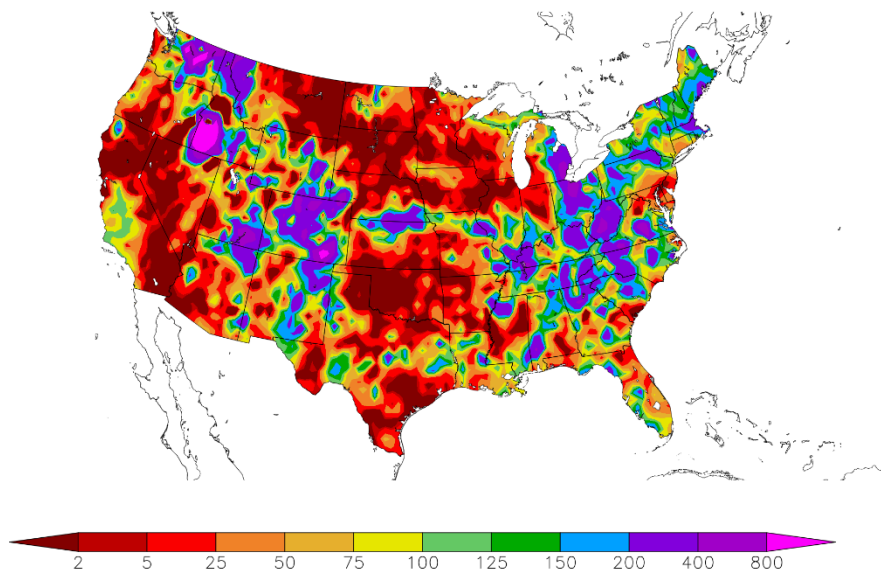
### Last 7 Days, National Weather Service (NWS) Networks

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 (%)  
8/24/2023 – 8/30/2023



Generated 8/31/2023 at HPRCC using provisional data.

NOAA Regional Climate Centers

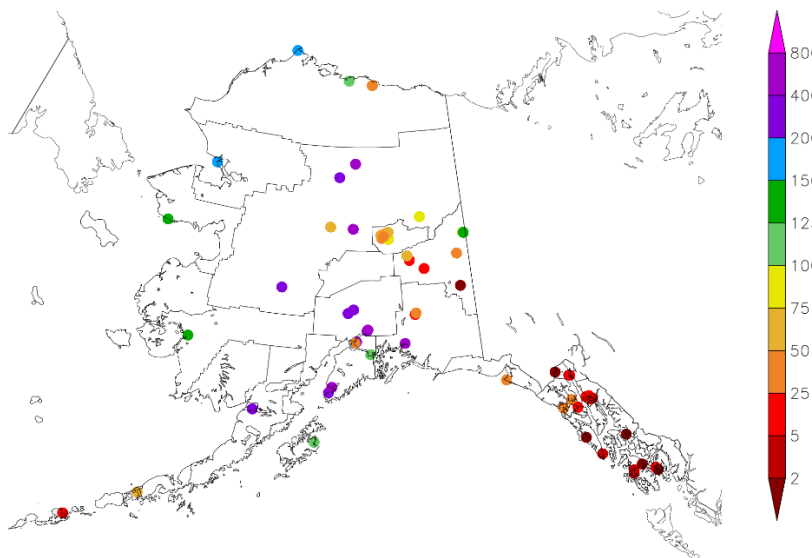
### Last 7 Days, National Weather Service (NWS) Networks

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 (%)  
8/24/2023 – 8/30/2023



Generated 8/31/2023 at HPRCC using provisional data.

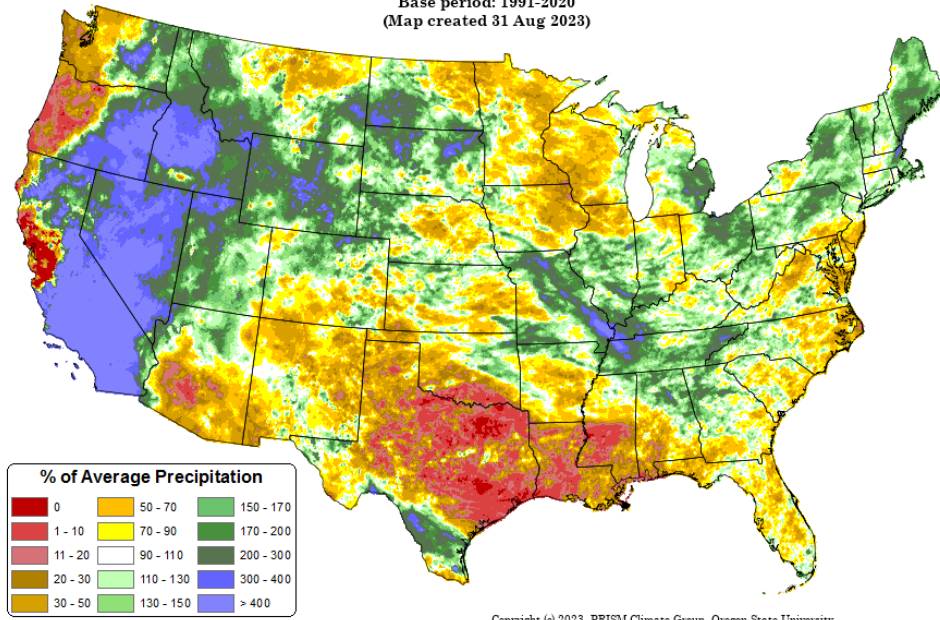
NOAA Regional Climate Centers

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

Source: PRISM

Total Precipitation Anomaly: 01 Aug 2023 - 30 Aug 2023  
Period ending 7 AM EST 30 Aug 2023  
Base period: 1991-2020  
(Map created 31 Aug 2023)

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



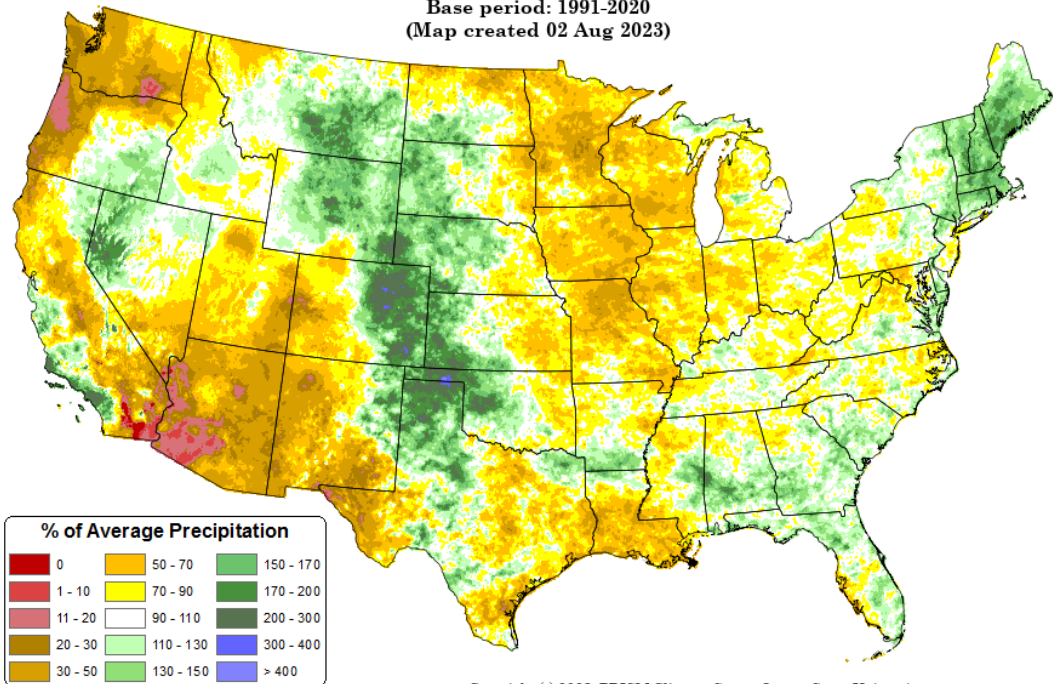
Copyright (c) 2023, PRISM Climate Group, Oregon State University

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

Source: PRISM

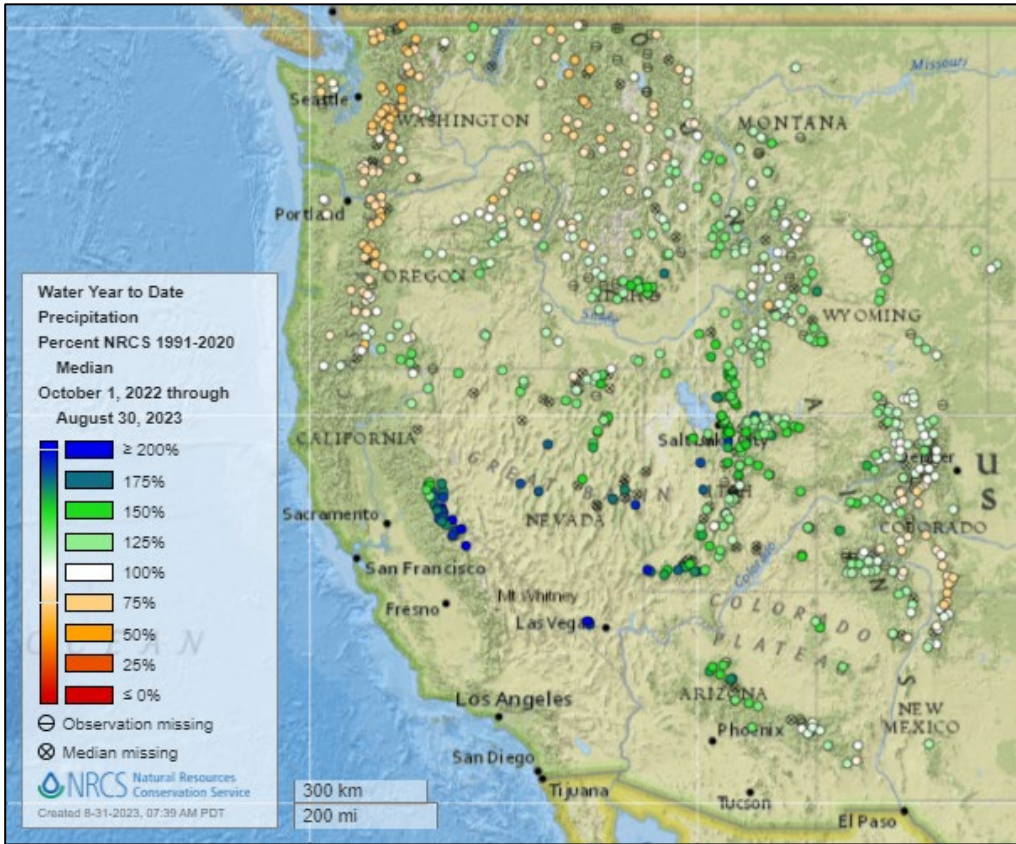
[May through July 2023 precipitation anomaly map](#)

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

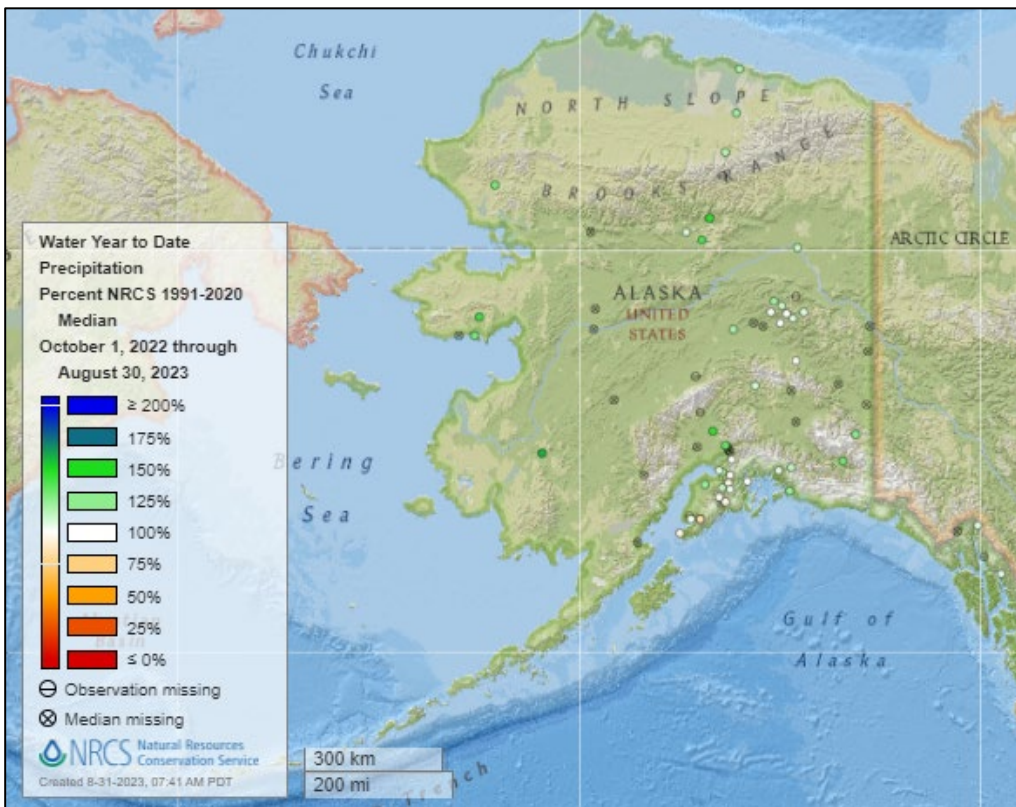


[2023 water year-to-date precipitation percent of median map](#)

**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

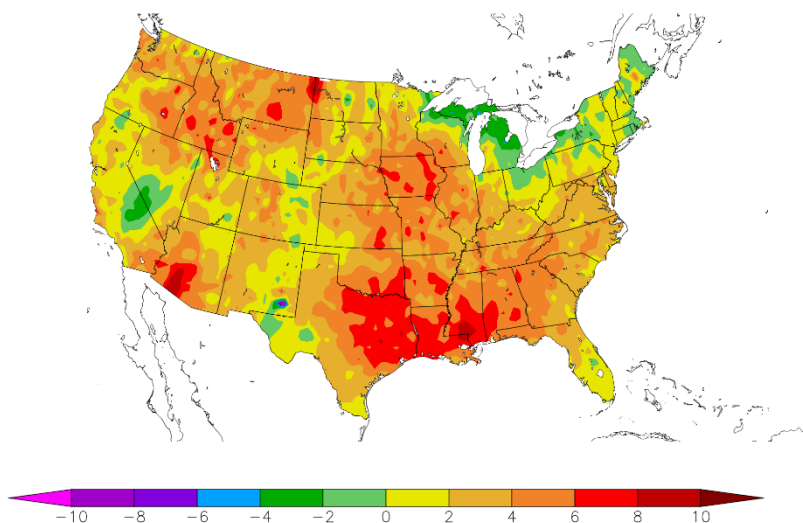
### Last 7 Days, National Weather Service (NWS) Networks

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)  
8/24/2023 – 8/30/2023



Generated 8/31/2023 at HPRCC using provisional data.

NOAA Regional Climate Centers

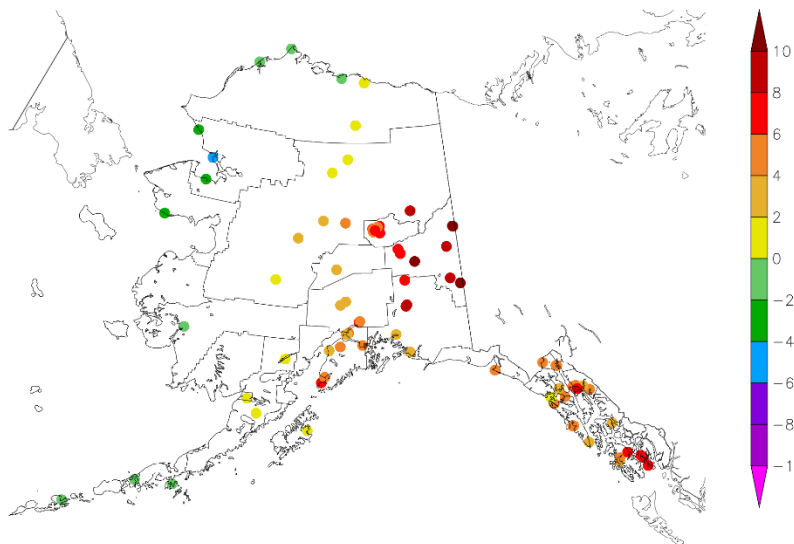
### Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)  
8/24/2023 – 8/30/2023



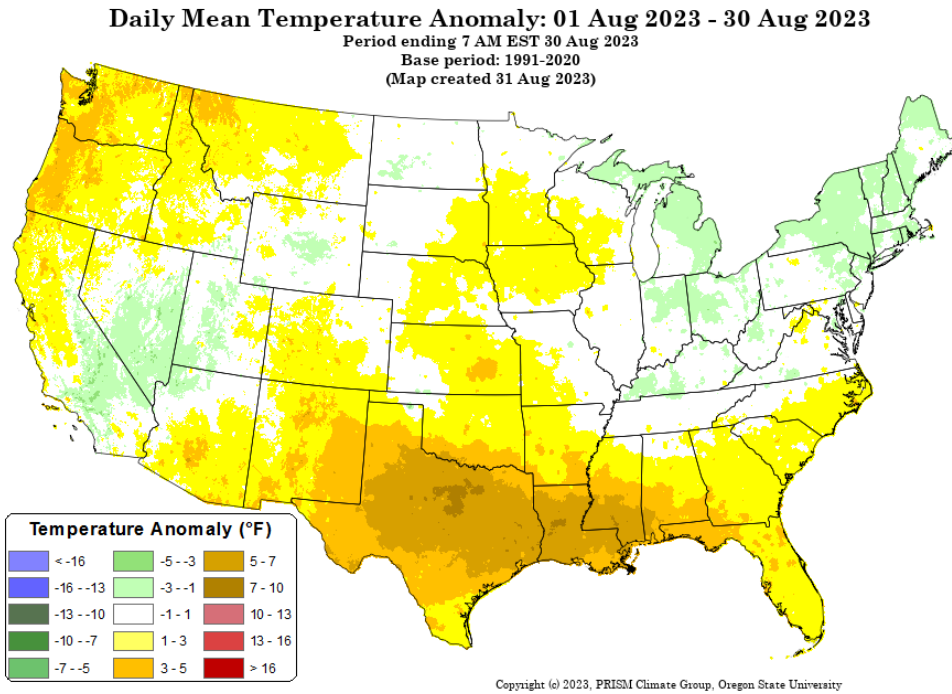
Generated 8/31/2023 at HPRCC using provisional data.

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

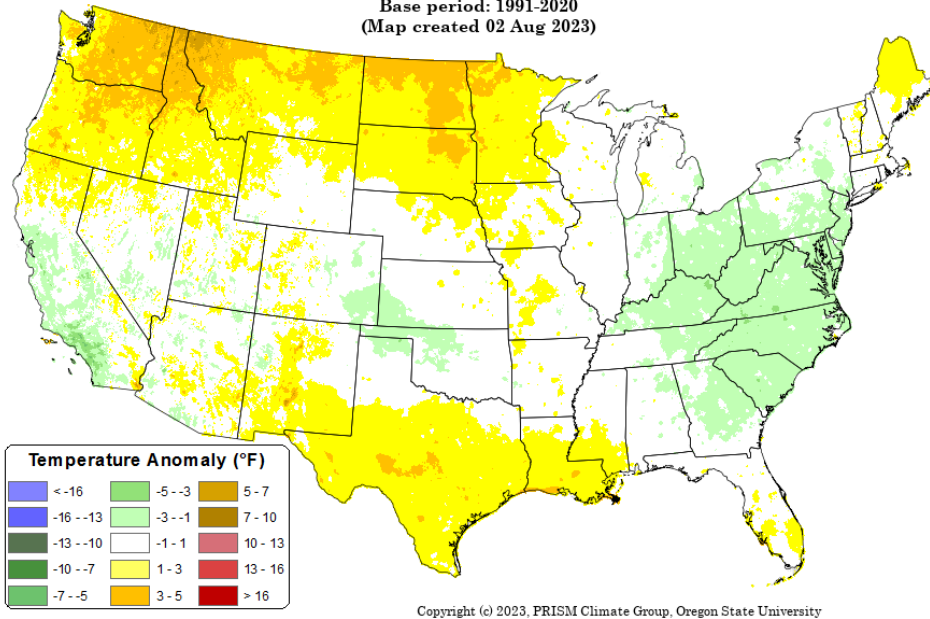
Daily Mean Temperature Anomaly: May 2023 - Jul 2023

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](#)



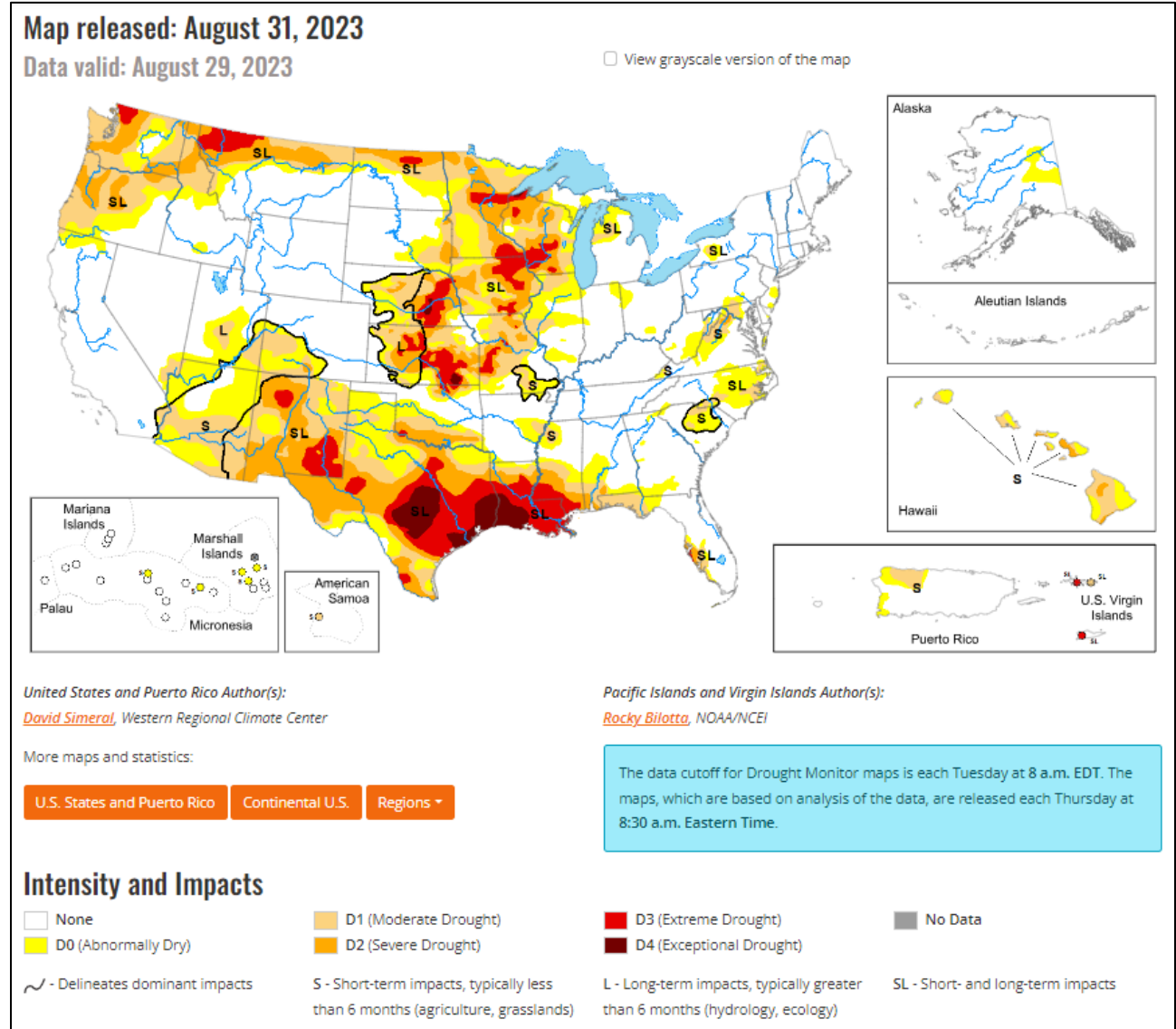
# Drought

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

Source: National Drought Mitigation Center

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

Source: NOAA





### Current [National Drought Summary](#), August 29, 2023

Source: National Drought Mitigation Center

“This U.S. Drought Monitor (USDM) week saw continued intensification of drought across areas of the Midwest, South, Southwest, and the Pacific Northwest. In the Midwest, extreme heat impacted areas of the region including Minnesota, Iowa, Missouri, Wisconsin, and Illinois with temperatures soaring 6 to 10+ degrees F above normal. Daily high temperature records were broken across the region during the past week including in Chicago (98), Milwaukee (101), Minneapolis (101), and Des Moines (100). Similarly, areas of the South including the northern Gulf Coast of Texas, Louisiana, and southern Mississippi saw continued drought-related deterioration on this week’s map as the heatwave continued to push high temperatures over 100 degrees F with numerous records broken during the past week. Record daily highs were set or tied in various southern cities including Houston (109), San Antonio (104), Austin (107), Dallas (109), Baton Rouge (106), New Orleans (103), Jackson (106), and Mobile (101). In Louisiana and southern Mississippi, the continued hot and dry conditions have led to numerous wildfire outbreaks as well as widespread poor hydrologic conditions and severe impacts within the agricultural sector. In the Southwest, monsoon precipitation has been well below normal across much of the region with areas of southern Arizona and New Mexico reporting rainfall deficits ranging from 3 to 6 inches since the beginning of July. In the Pacific Northwest, areas of drought expanded on the map in Oregon, Washington, and Montana in response to a combination of above-normal temperatures over the past 90-day period, precipitation shortfalls, and poor surface water conditions. Conversely, some areas saw improved drought-related conditions on the map, including southern Texas where heavy rains, in association with Tropical Storm Harold last week, provided much-needed moisture to the region. Rainfall accumulations along the southern Gulf Coast and South Texas Plains regions ranged from 2 to 6 inches. In the Southeast, areas of Florida braced themselves for the impacts of Hurricane Idalia as it intensified rapidly early this week. The hurricane made landfall in the Big Bend region of Florida early Wednesday morning (8/30) as a dangerous Category 3 hurricane bringing a life-threatening storm surge, catastrophic winds, and severe flooding.”

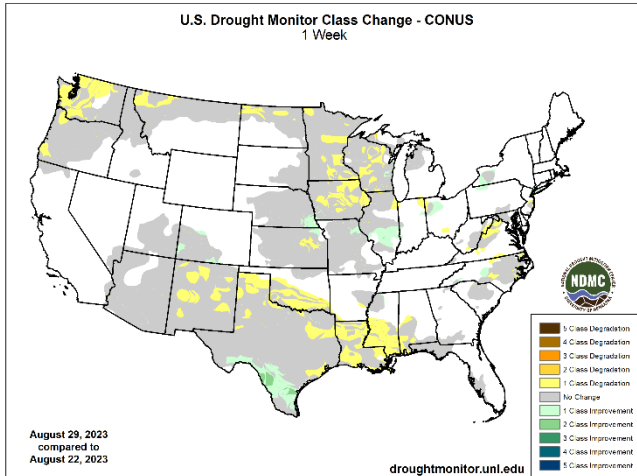
### National Drought Summary – Looking Ahead

“The NWS WPC 7-Day Quantitative Precipitation Forecast (QPF) calls for heavy precipitation accumulations ranging from 4 to 10+ inches in association with impacts of Hurricane Idalia, which is forecast to bring very heavy rains across the Big Bend region of Florida as well as across areas of the Coastal Plain of Georgia and the Carolinas. In the Northeast, dry conditions are expected, while most of the South, Midwest, and the Plains states are forecasted to experience generally dry conditions. In the West, some light to moderate accumulations ranging from 1 to 3 inches are expected across portions of Arizona, Utah, and in isolated areas of the central and northern Rockies. The CPC 6-10 Day Outlooks call for a moderate-to-high probability of above-normal temperatures across much of the conterminous U.S. in an area extending from the Rocky Mountains to the Eastern Seaboard, while near-normal temperatures are expected over the remainder of the West except in Washington state where temperatures are forecasted to be below normal. In terms of precipitation, below-normal precipitation is expected across much of the southern tier of the conterminous U.S. as well as portions of the Mid-Atlantic, Great Basin, and Intermountain West. Meanwhile, above-normal precipitation is forecasted for areas of the Upper Midwest, Northern Plains, and the Pacific Northwest.”

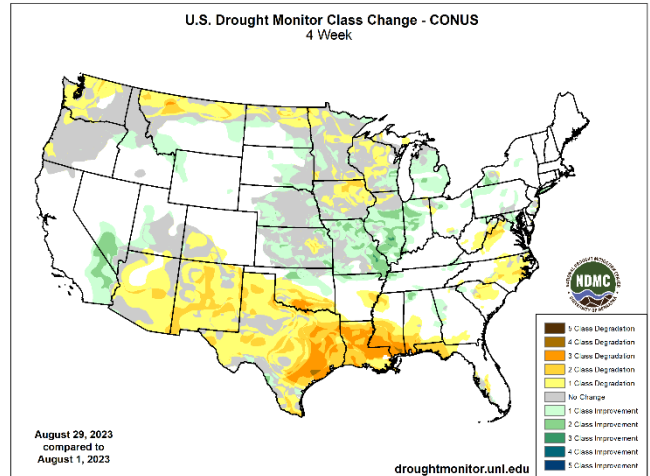
## Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

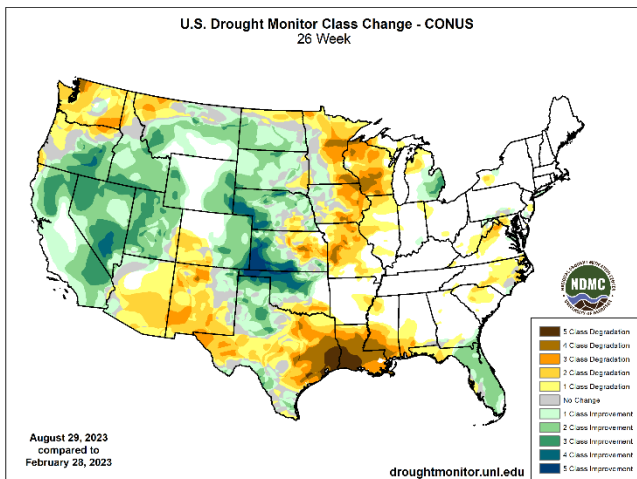
### 1 Week



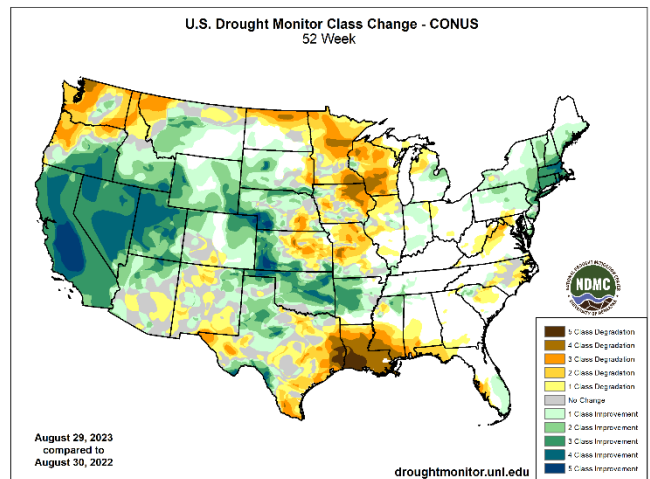
### 1 Month



### 6 Months



### 1 Year



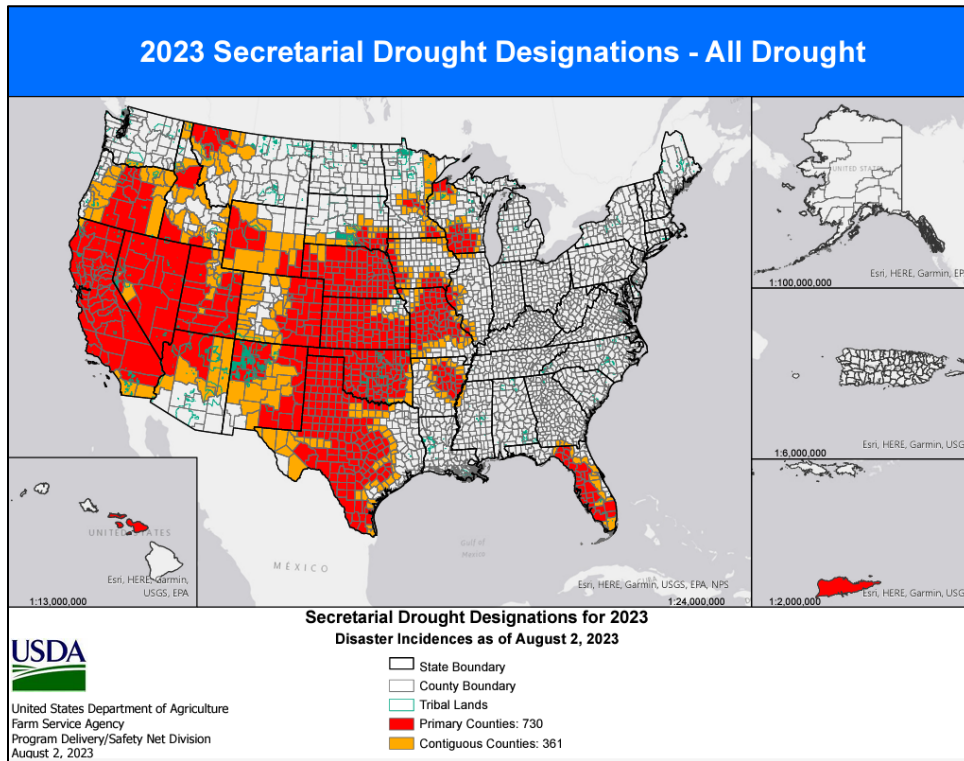
[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

## 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](#)

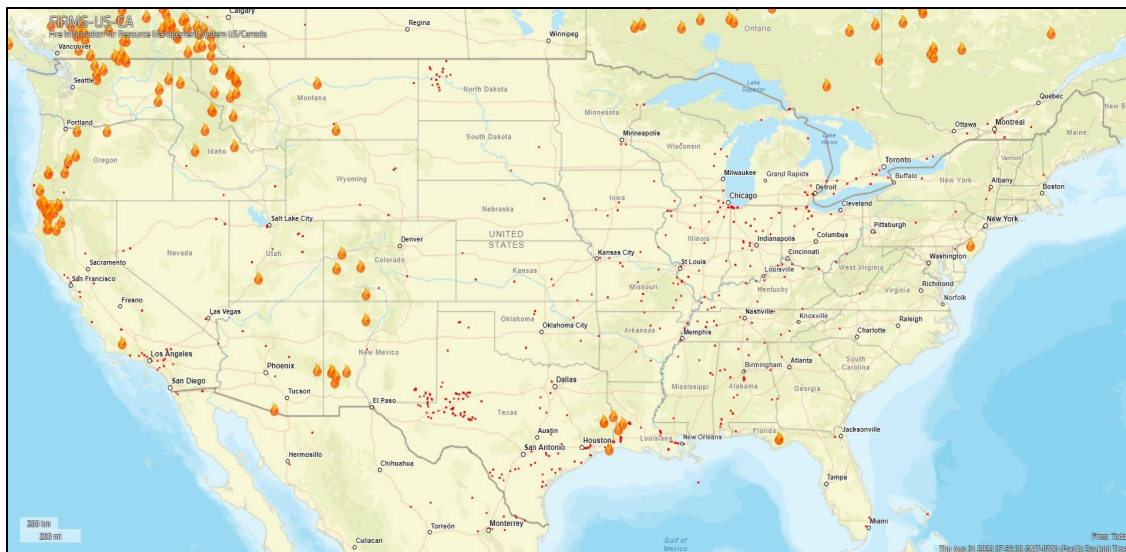
### USDA Secretarial Drought Designations

Source: USDA Farm Service Agency



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

Source: NASA/USDA Forest Service



Current active wildfires larger than 1,000 acres in size

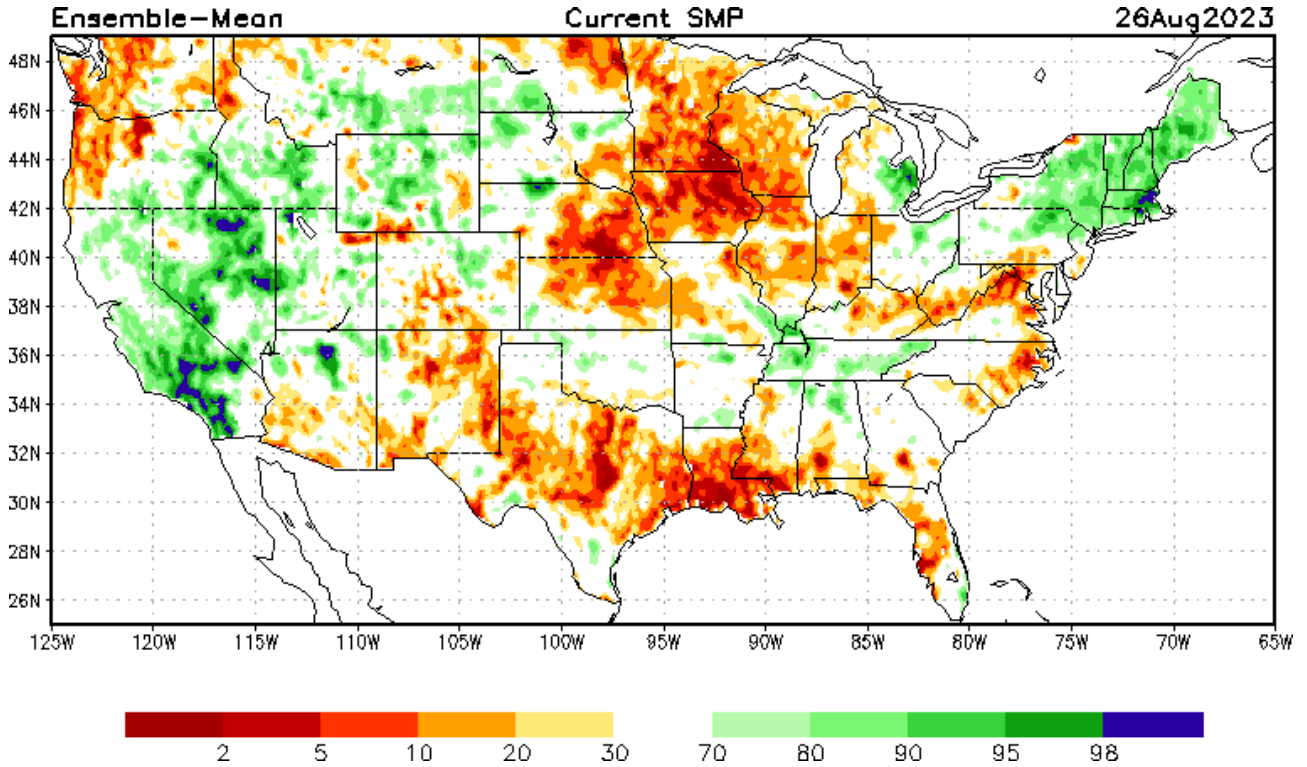
#### Highlighted Wildfire Resources

- [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

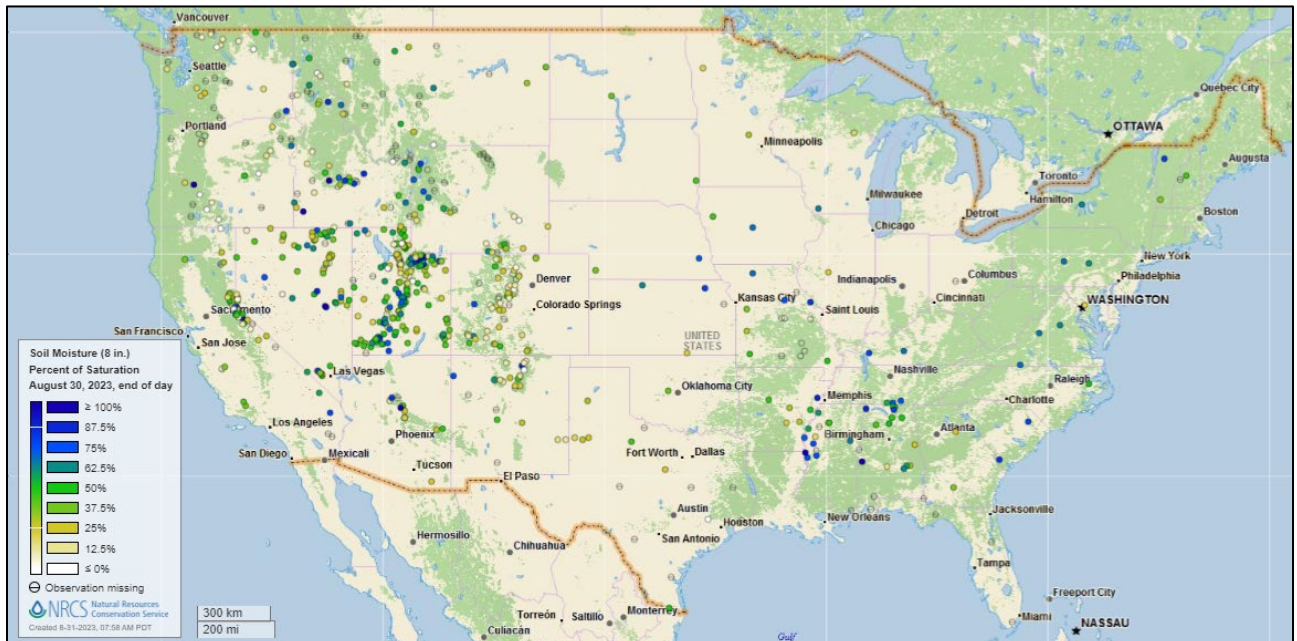


[Modeled soil moisture percentiles](#) as of August 26, 2023

### Soil Moisture Percent of Saturation

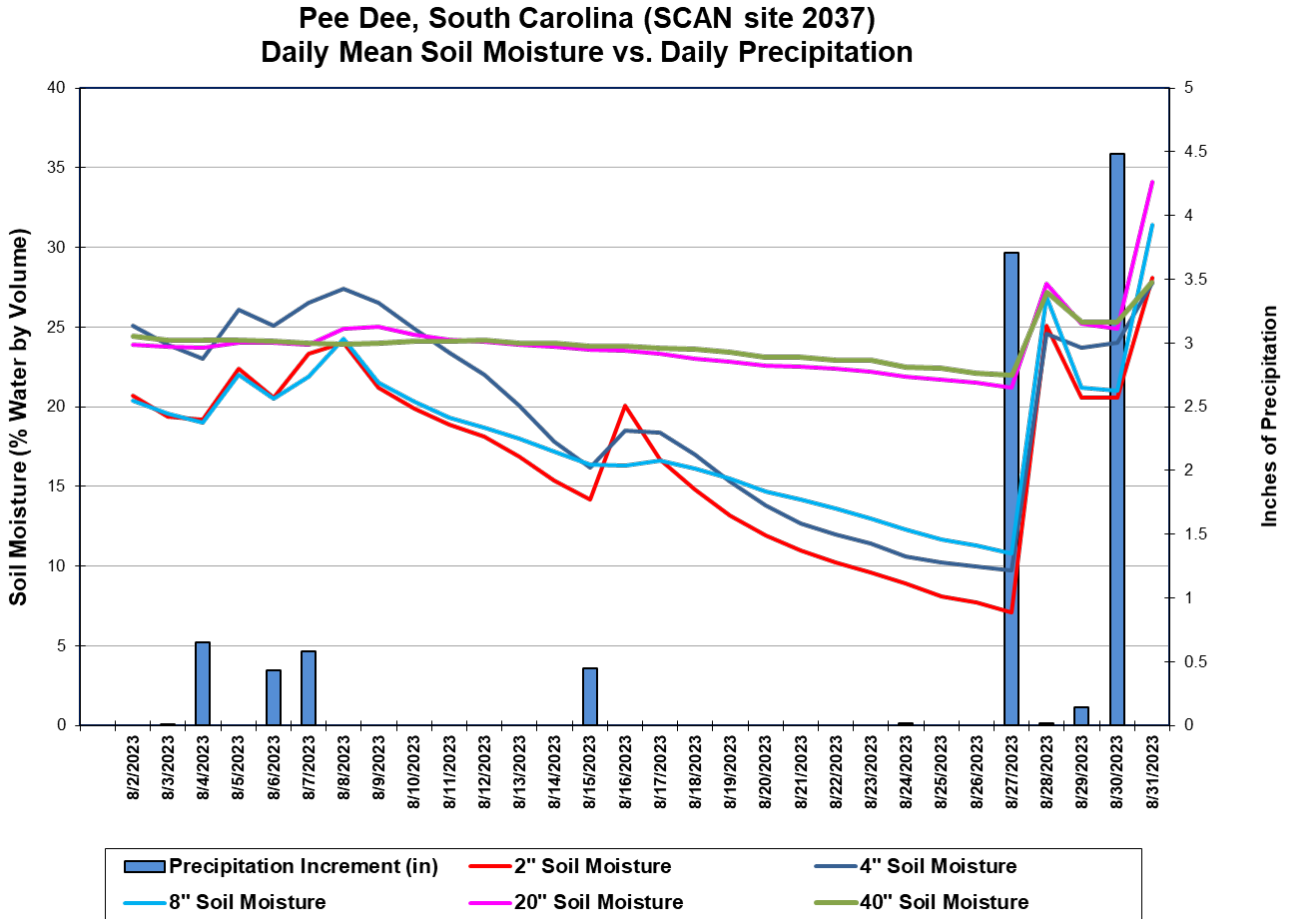
Source: NRCS SNOTEL and [Soil Climate Analysis Network](#) (SCAN)

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



**Soil Moisture**

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



This chart shows the precipitation and soil moisture for the last 30 days at the [Pee Dee](#) SCAN site in South Carolina. Some initial increases in soil moisture at the site occurred after sporadic precipitation events during the first half of the period. Soil moisture levels gradually declined during the latter half of the period until powerful storms, including Tropical Storm Idalia, brought 8.35 inches of precipitation to the site between August 27-30. Total precipitation for the 30-day period was 10.49 inches.

**Soil Moisture Data Portals**

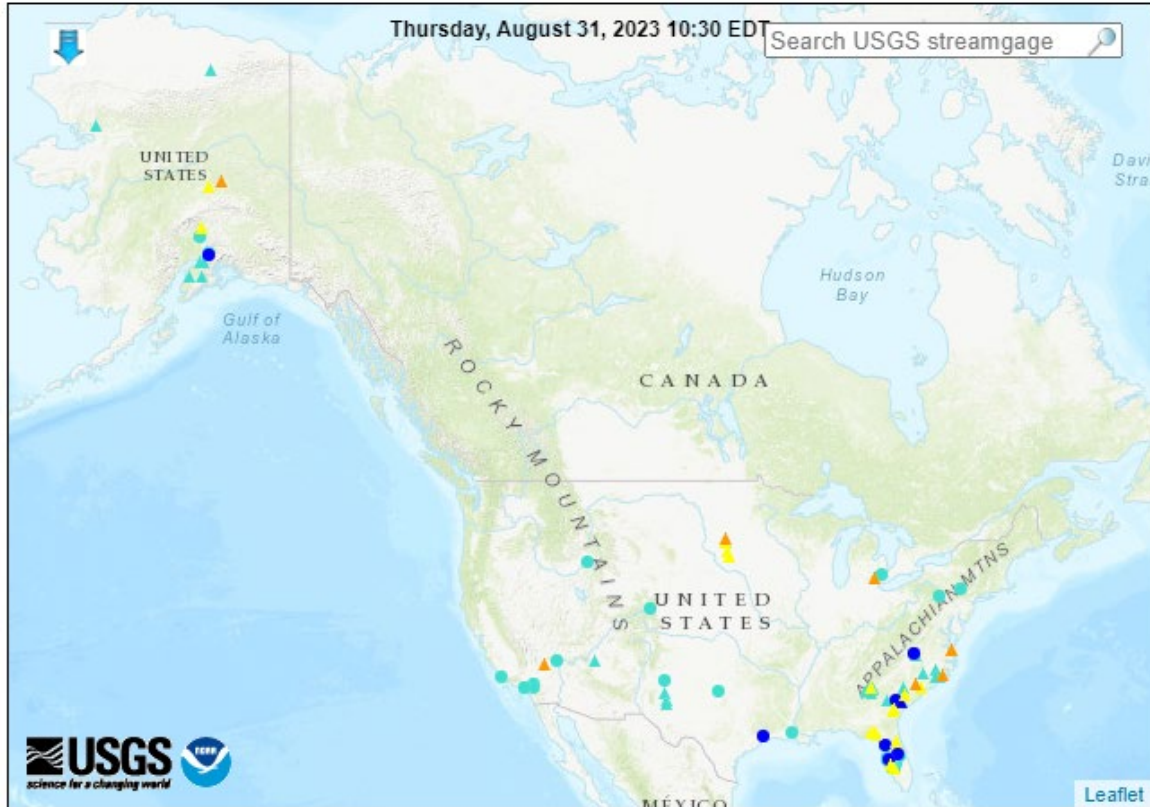
- [USCRN Soil Moisture](#)
- [National Soil Moisture Network](#)
- [NOAA Climate Prediction Center Soil Moisture](#)
- [NASA Grace](#)

### Streamflow, Drought, Flood, and Runoff

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

## Map of flood and high flow conditions

(8 in floods [minor: 8], 17 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

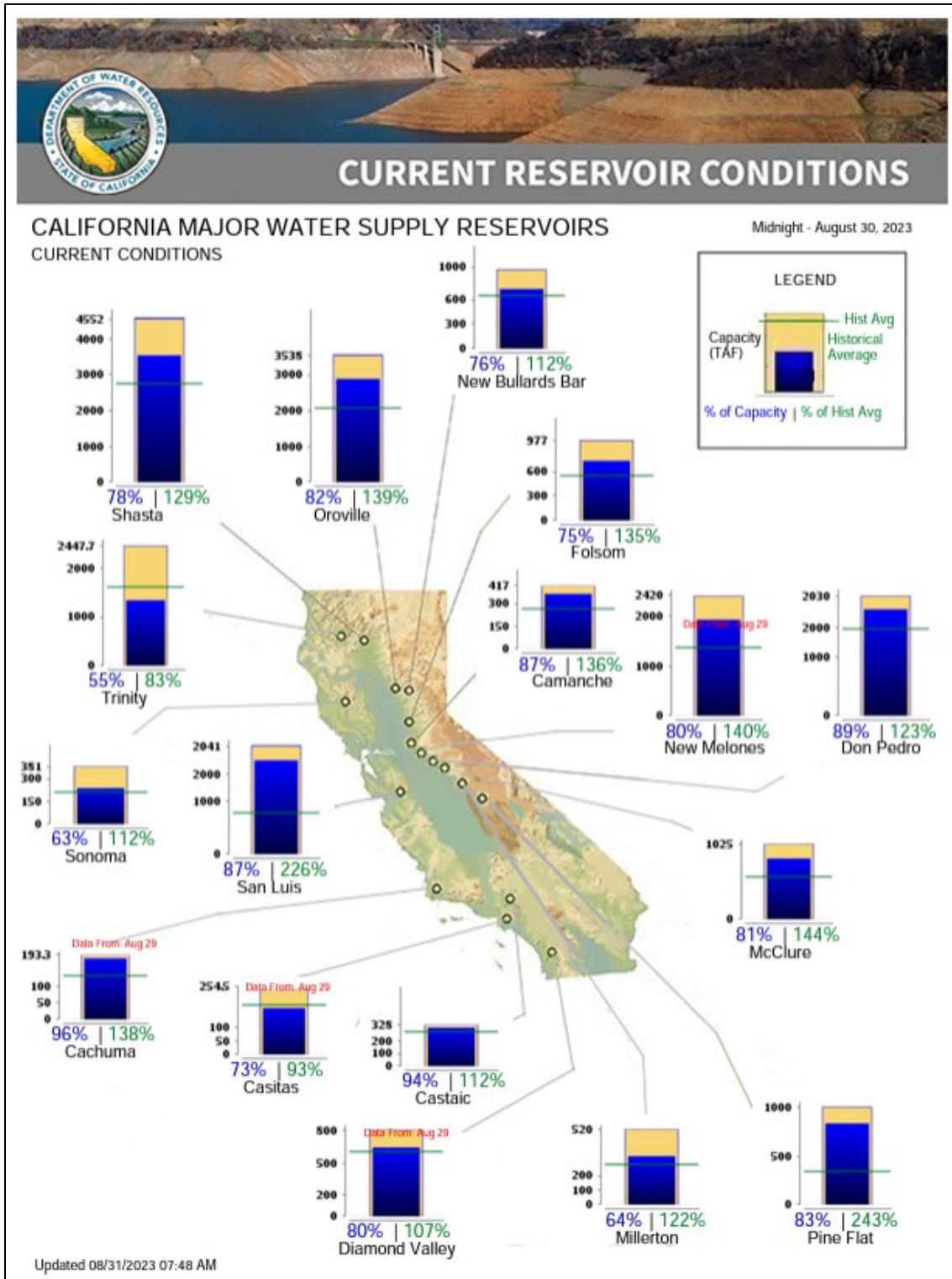
#### Hydromet Teacup Reservoir Depictions

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 31, 2023:** “Idalia will continue move farther offshore, with gradually diminishing impacts along the middle Atlantic Coast. Much of the remainder of the country will experience tranquil weather during the next 5 days, with significant rainfall largely limited to parts of the western U.S. Notably, a late-season monsoon surge—starting on Friday—could result in locally heavy rain from Arizona to Montana. Meanwhile, a disturbance drifting westward along the Gulf Coast could result in heavy showers from Florida to Louisiana. Elsewhere, dry weather will prevail at least into early next week across much of the remainder of the central and eastern U.S. Late-season heat will accompany the dry weather, especially across the Plains and Midwest. Weekend temperatures could reach 100°F or higher as far north as South Dakota and southern Minnesota. The NWS 6- to 10-day outlook for September 5 – 9 calls for the likelihood of near- or above-normal temperatures and near- or below normal rainfall across much of the country. Cooler-than-normal conditions will be confined to the Pacific Northwest, while wetter-than-normal weather should be limited to the nation’s northern tier, from the Pacific Northwest to Minnesota.”

### Weather Hazards Outlook: [September 02 – 06, 2023](#)

Source: NOAA Weather Prediction Center















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

[About the Hazards Outlook](#)

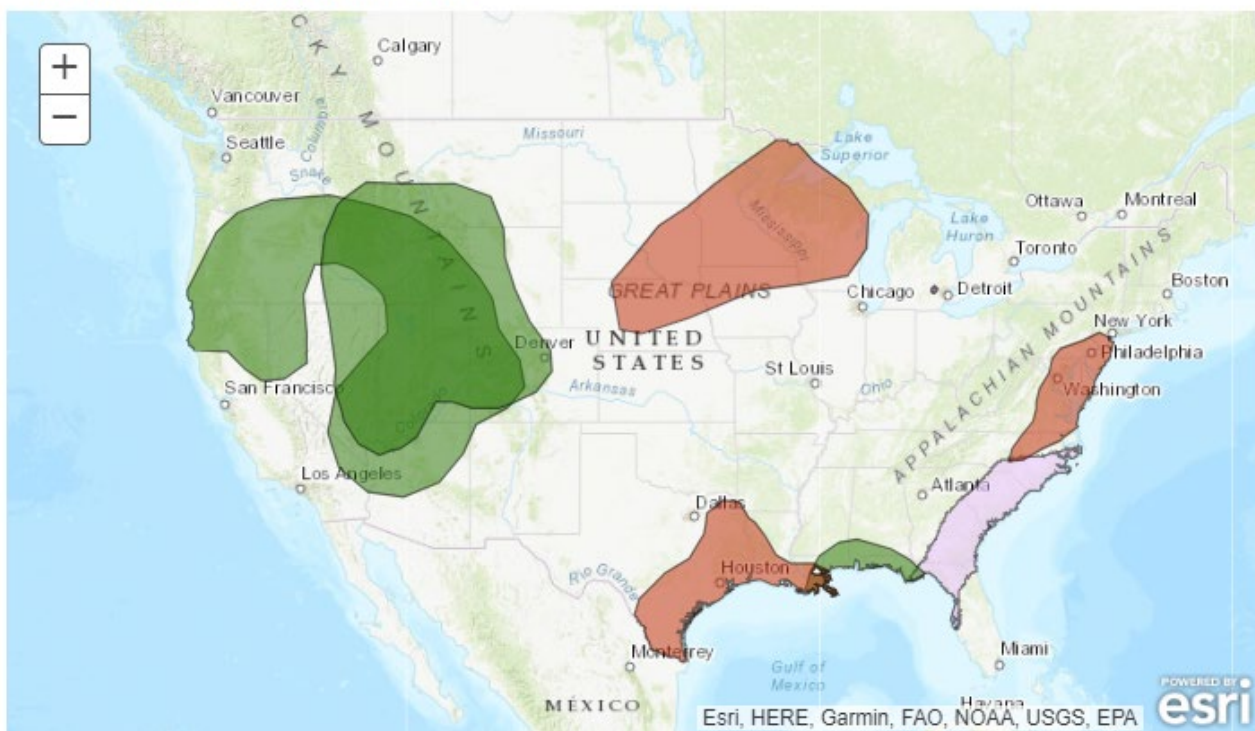
Created August 30, 2023

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 September 02, 2023 - September 06, 2023



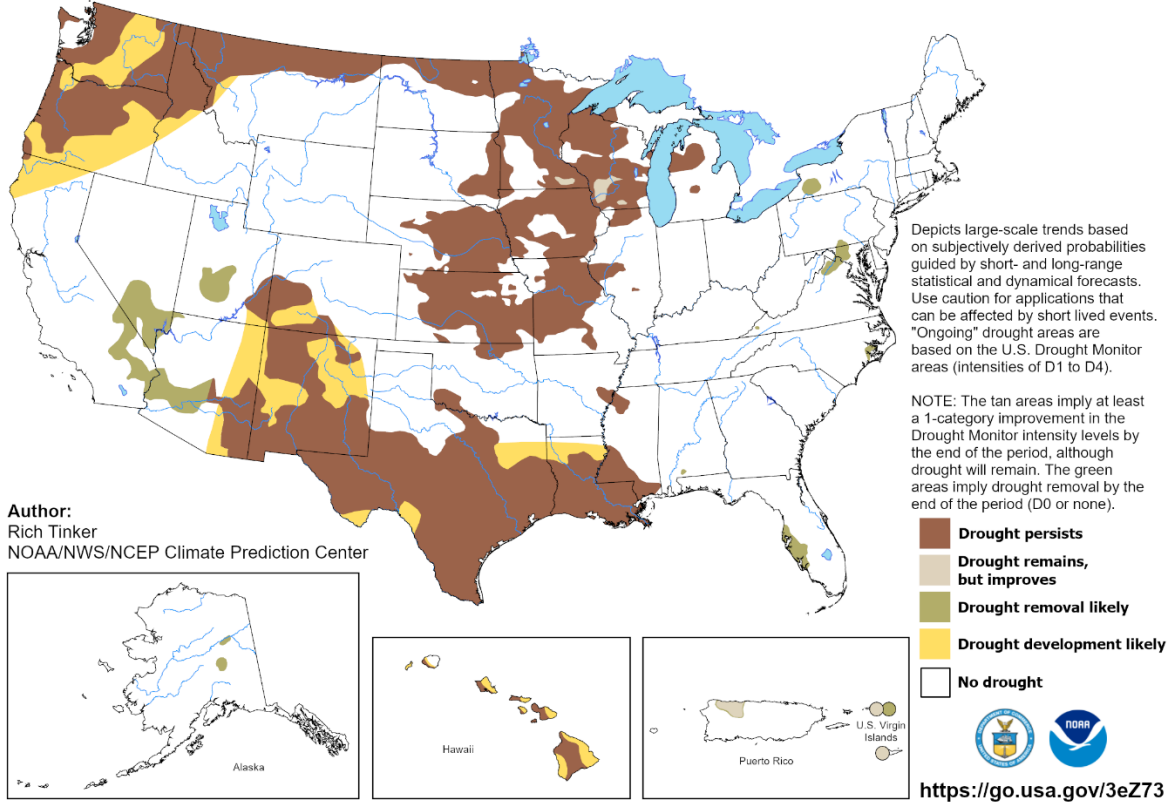


**Seasonal Drought Outlook: [August 17 – November 30, 2023](#)**

Source: National Weather Service

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

Valid for August 17 - November 30, 2023  
Released August 17, 2023

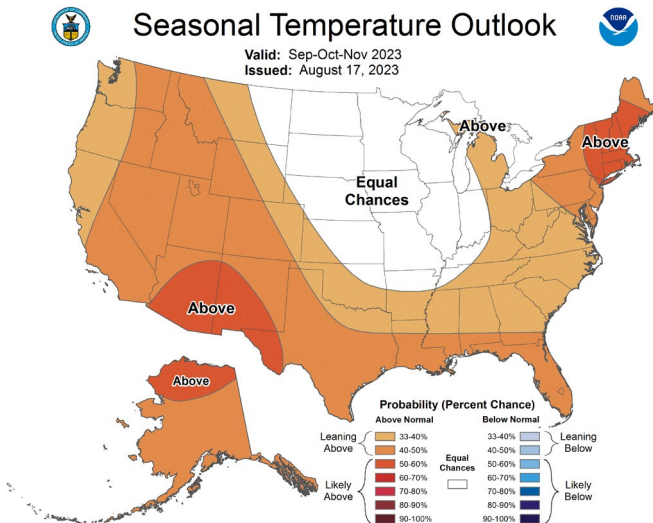
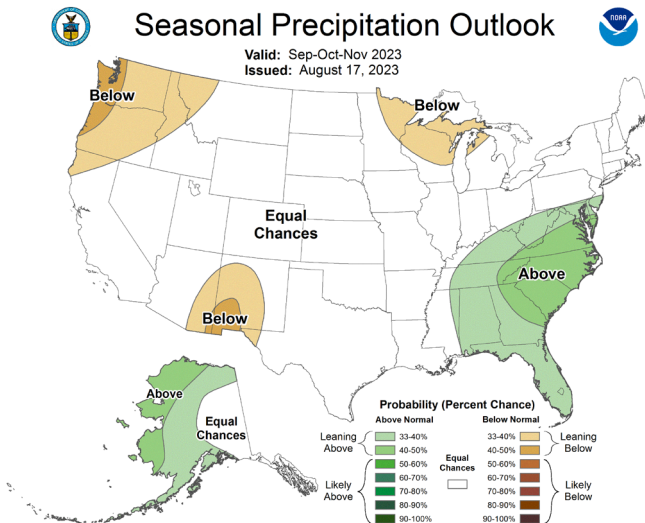


**Climate Prediction Center Three-month Outlook**

Source: National Weather Service

Precipitation

Temperature



[September-October-November 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](#).