



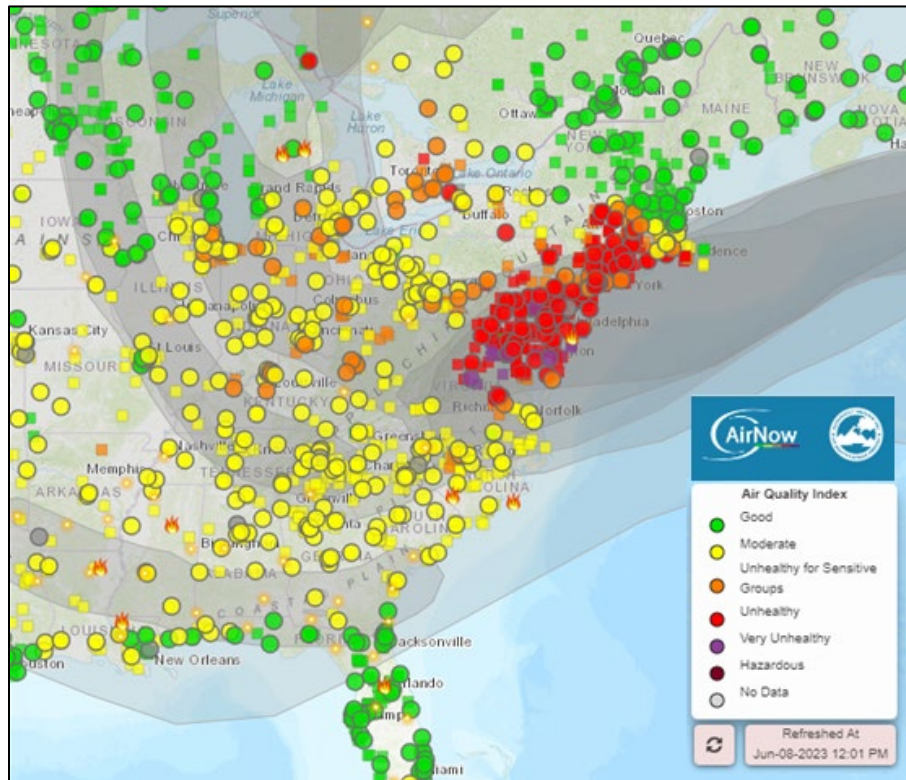
# Water and Climate Update

June 8, 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.

Snow .....	2	Drought .....	10
Precipitation .....	4	Other Climatic and Water Supply Indicators....	13
Temperature.....	8	More Information.....	19

## Canadian wildfire smoke inundates the Northeast



Canada is experiencing an unusually early wildfire season, with over 400 fires currently burning at various locations from coast to coast. Atmospheric circulation patterns are ushering the smoke into the U.S., with New York claiming the worst air quality in the world as of June 7. As the wildfires rage, the smoke is beginning to affect the Midwest and even parts of the Southeast. Flights, schools, and outdoor events have been cancelled or delayed in the region due to health concerns from smoke and pollutant inhalation.

**Related:**

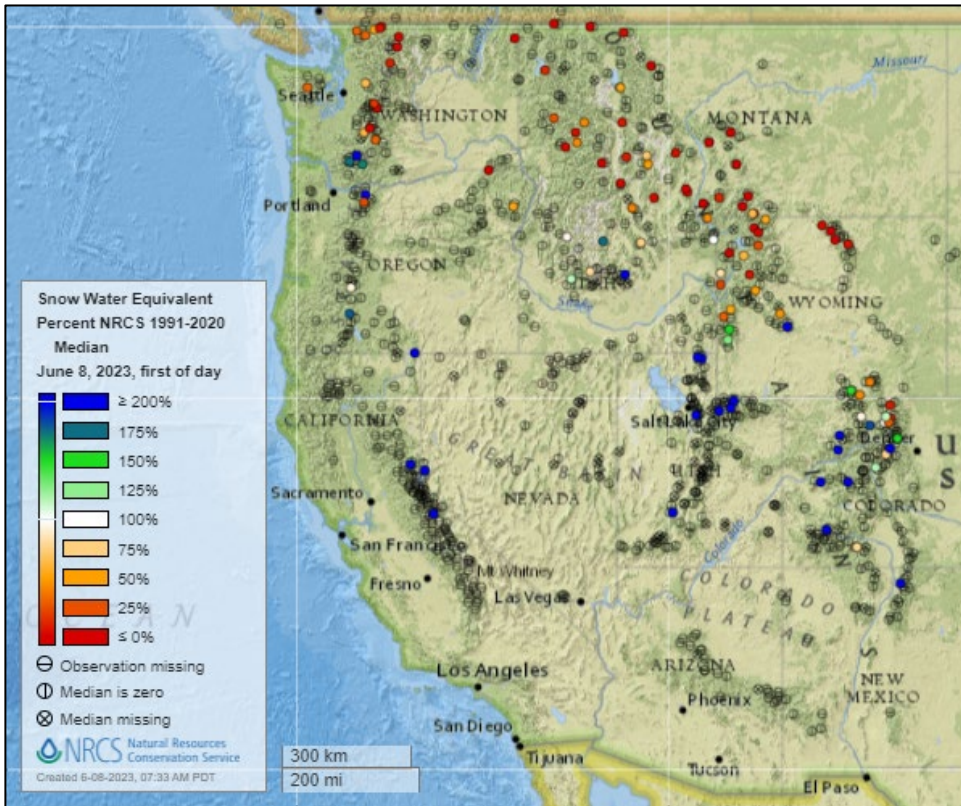
[Canada on track for its worst-ever wildfire season](#) - Reuters

[Air quality live updates: New York City has the worst air in the world as smoke from Canadian wildfires rolls in](#) – NBC

[Satellite photos show US East Coast engulfed by smoke from Canadian wildfires](#) - Space.com

[Satellite images show Canadian wildfire smoke enveloping U.S. East Coast as air quality deteriorates](#) – CBS

# Snow



[Snow water equivalent percent of median map](#)

**See also:**  
[Snow water equivalent values \(inches\) map](#)

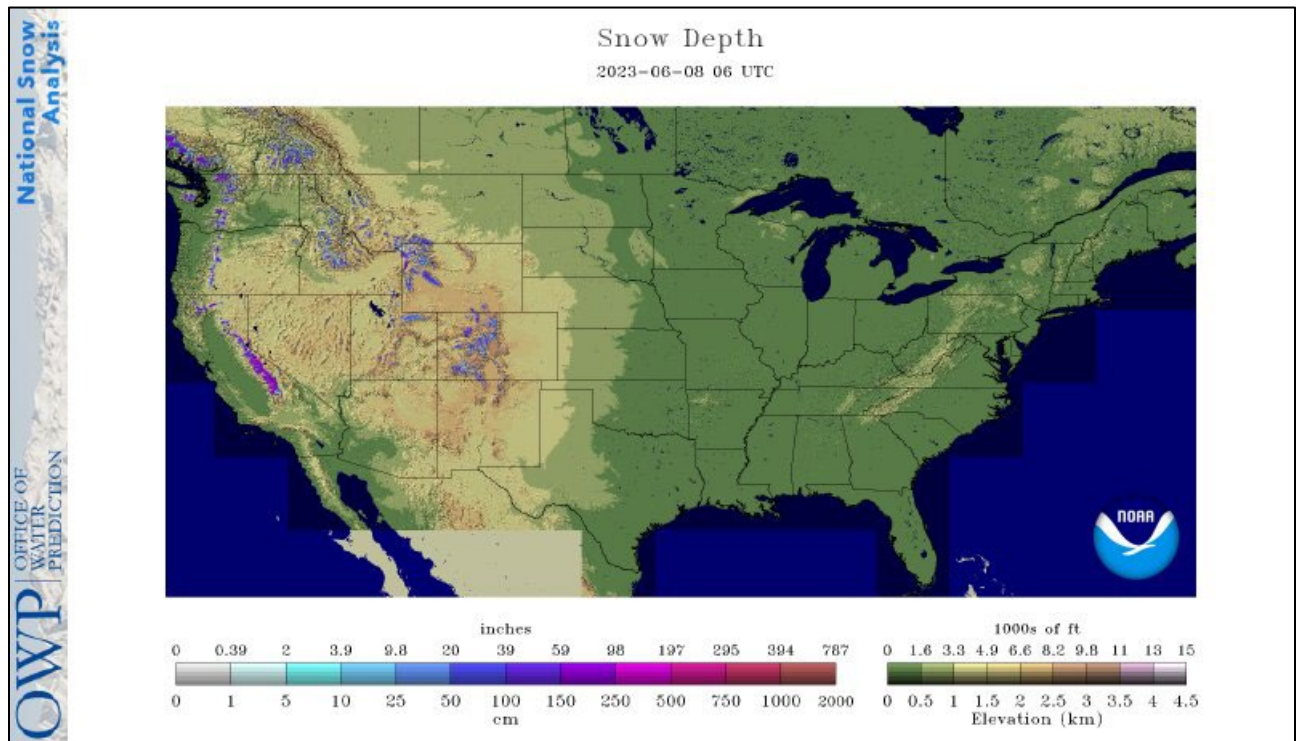


[Alaska snow water equivalent percent of median map](#)

**See also:**  
[Alaska snow water equivalent values \(inches\) map](#)

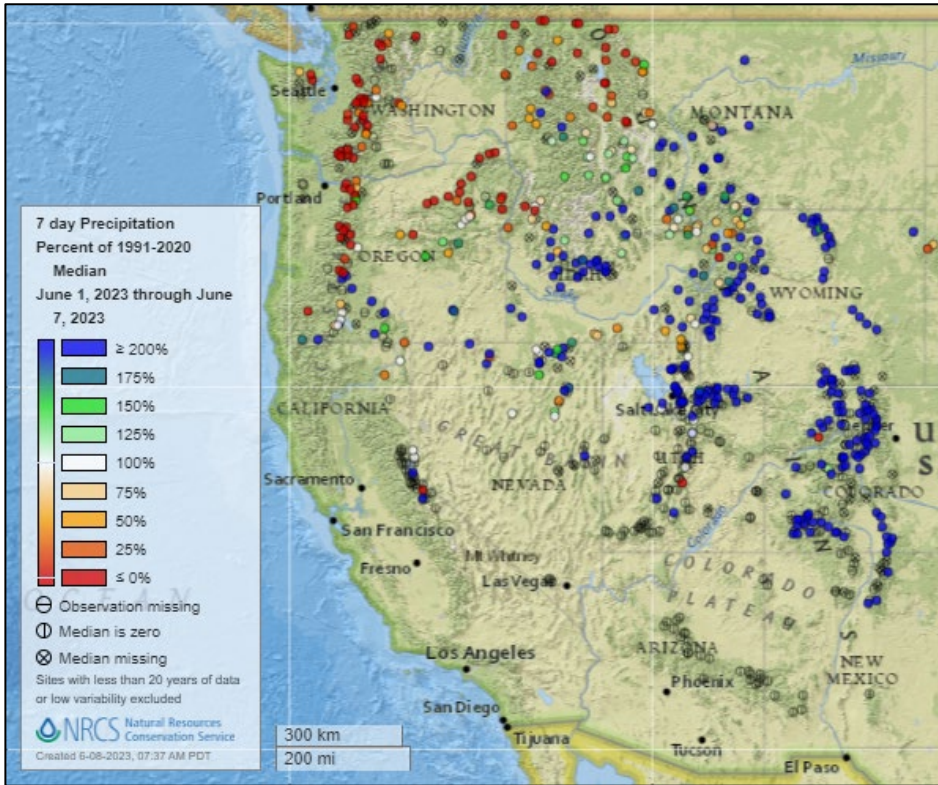
**Current Snow Depth, National Weather Service Snow Analysis**

Source: NOAA NWS National Operational Hydrologic Remote Sensing Center



## Precipitation

### Last 7 Days, NRCS SNOTEL Network

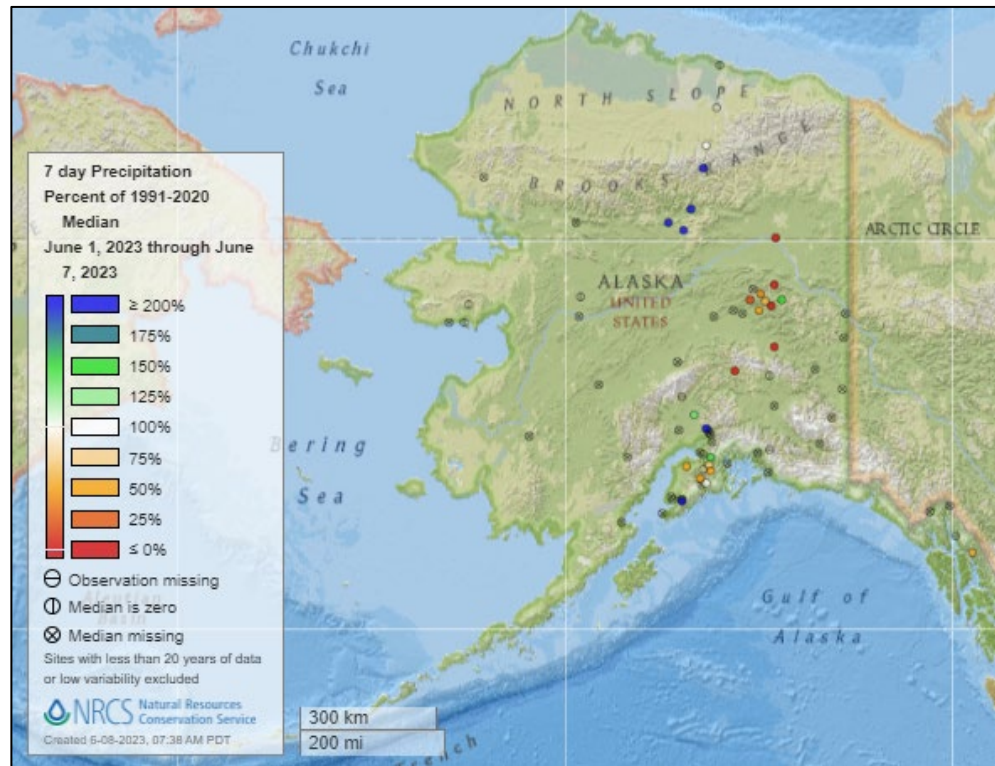


[7-day precipitation percent of median map](#)

**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](#)



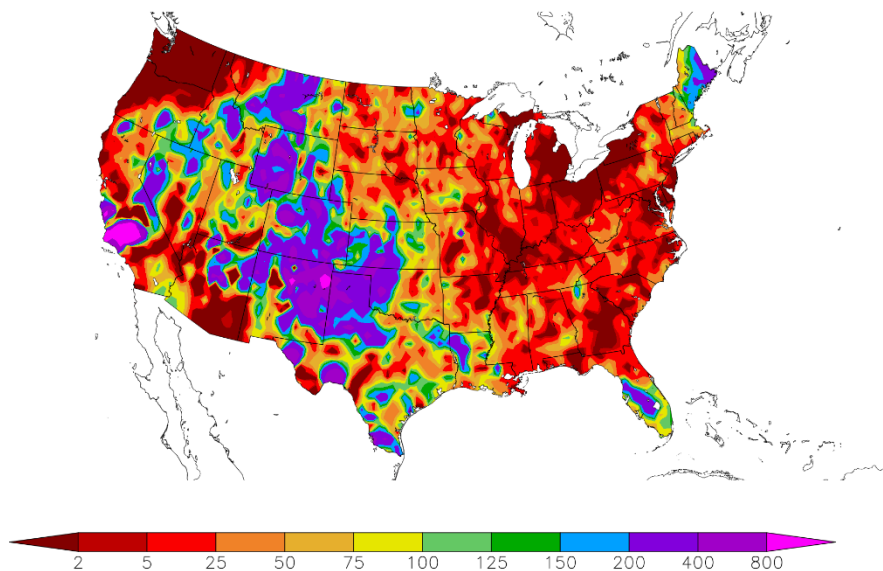
### Last 7 Days, National Weather Service (NWS) Networks

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 (%)  
6/1/2023 – 6/7/2023



Generated 6/8/2023 at HPRCC using provisional data.

NOAA Regional Climate Centers

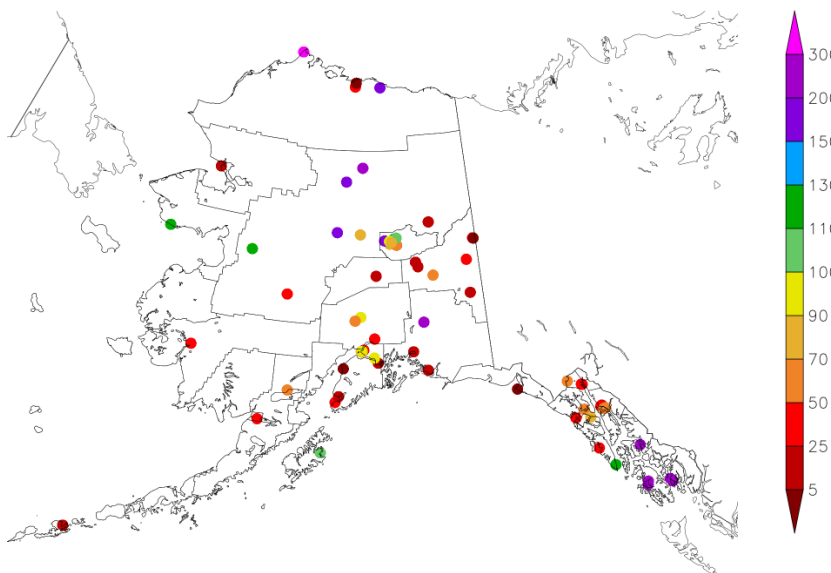
### Last 7 Days, National Weather Service (NWS) Networks

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 (%)  
6/1/2023 – 6/7/2023



Generated 6/8/2023 at HPRCC using provisional data.

NOAA Regional Climate Centers

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

Source: PRISM

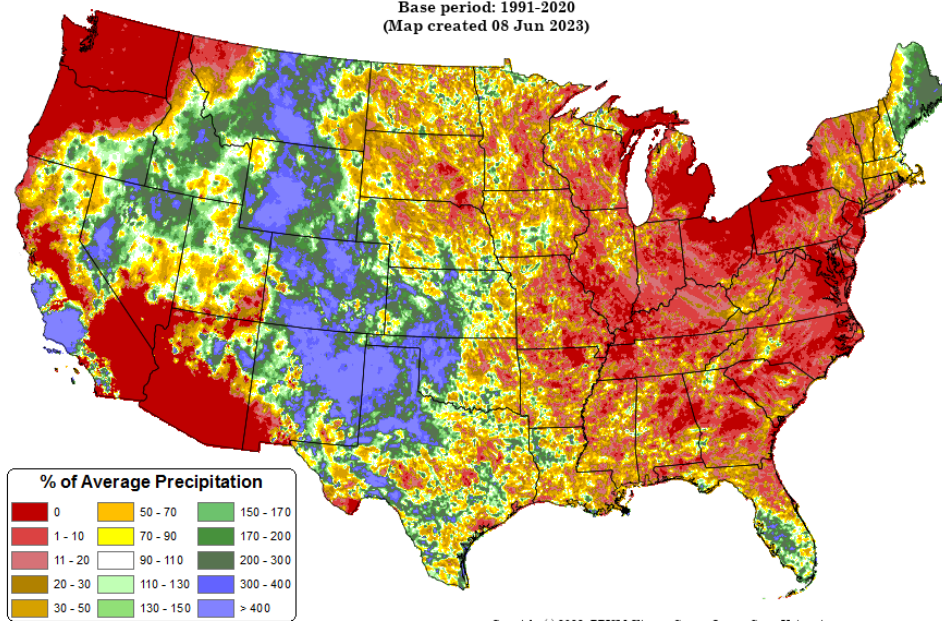
#### Total Precipitation Anomaly: 01 Jun 2023 - 07 Jun 2023

Period ending 7 AM EST 07 Jun 2023

Base period: 1991-2020

(Map created 08 Jun 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

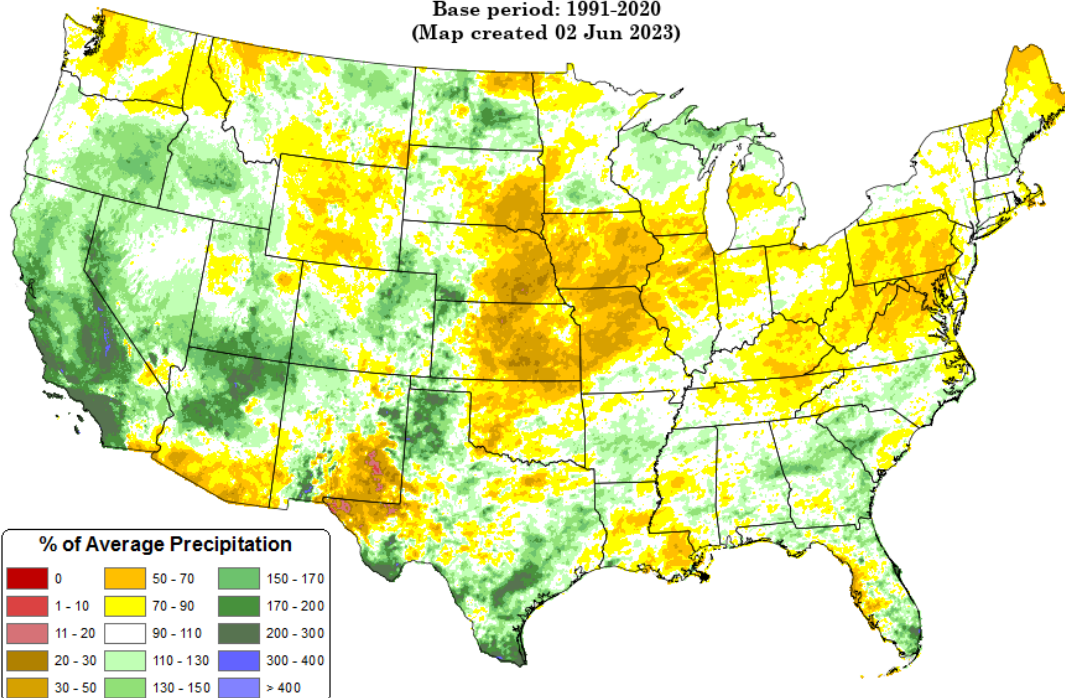
[March through May 2023 precipitation anomaly map](#)

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

Period ending 7 AM EST 31 May 2023

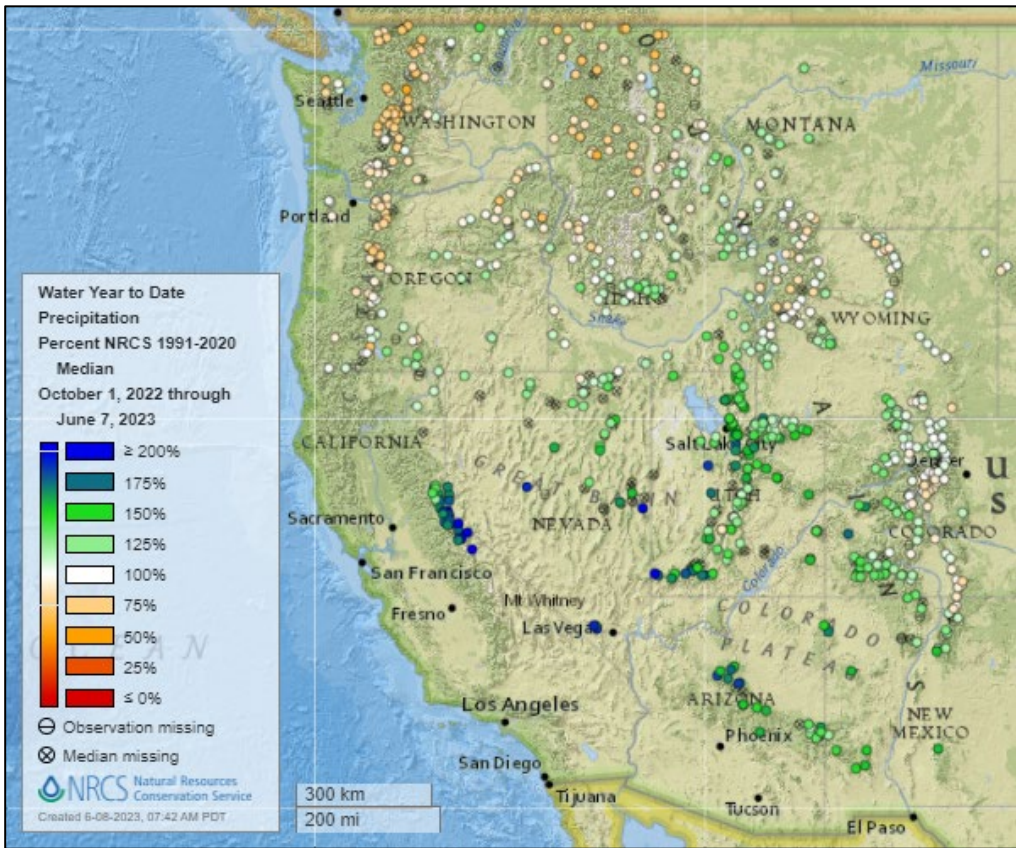
Base period: 1991-2020

(Map created 02 Jun 2023)



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

Water Year-to-Date, NRCS SNOTEL Network

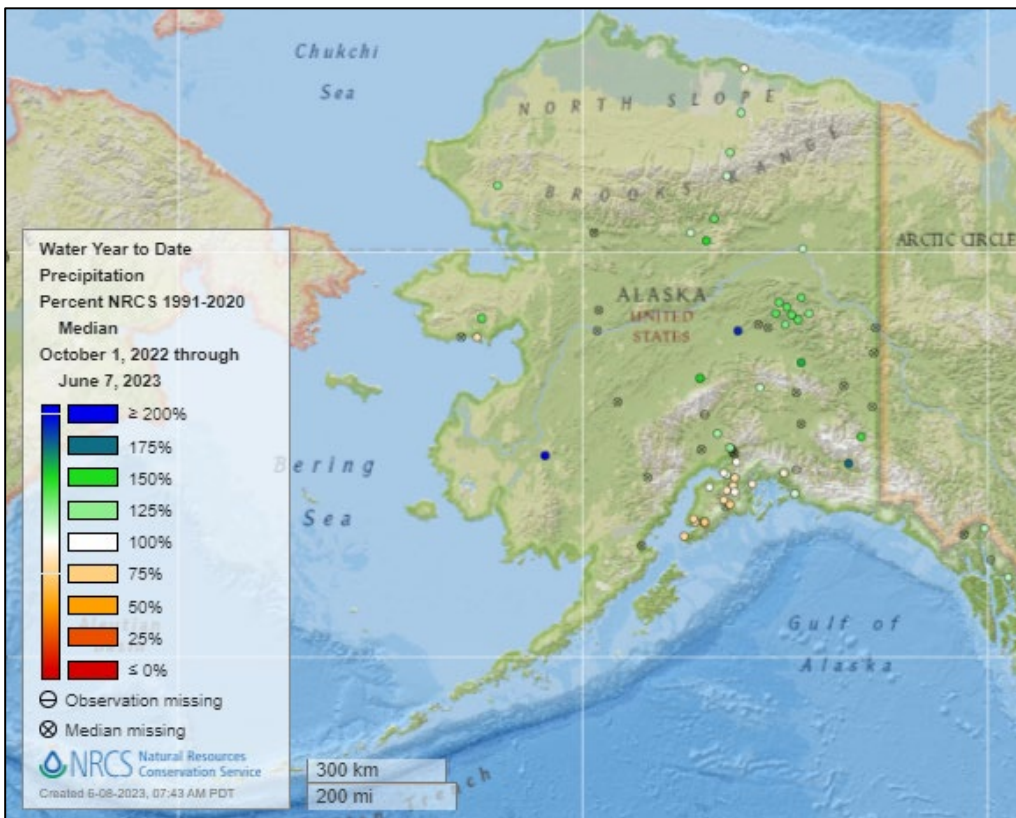


[2023 water year-to-date precipitation percent of median map](#)

**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

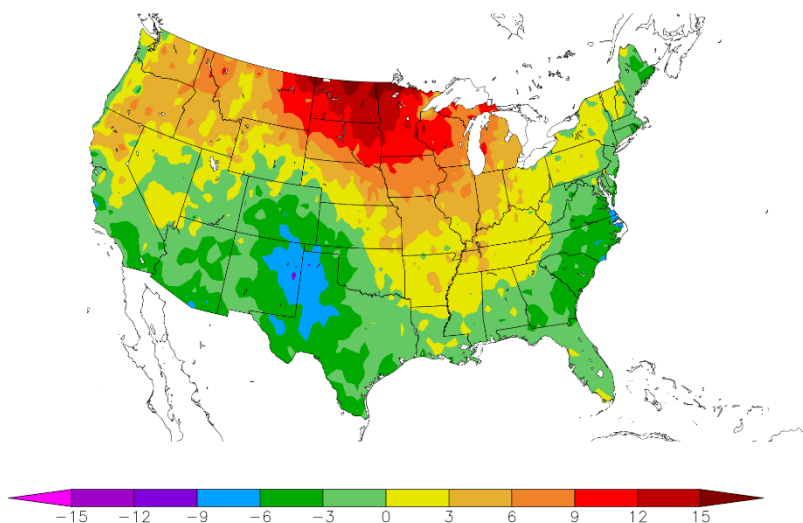
### Last 7 Days, National Weather Service (NWS) Networks

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)  
6/1/2023 – 6/7/2023



Generated 6/8/2023 at HPRCC using provisional data.

NOAA Regional Climate Centers

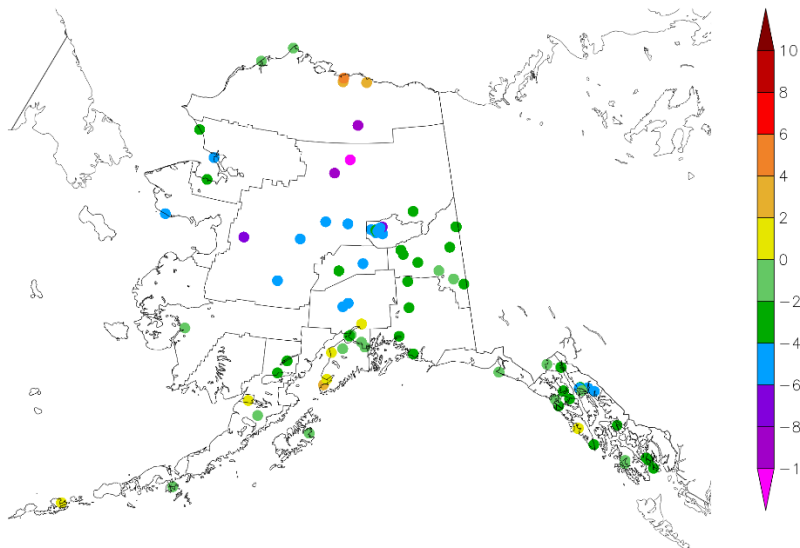
### Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)  
6/1/2023 – 6/7/2023



Generated 6/8/2023 at HPRCC using provisional data.

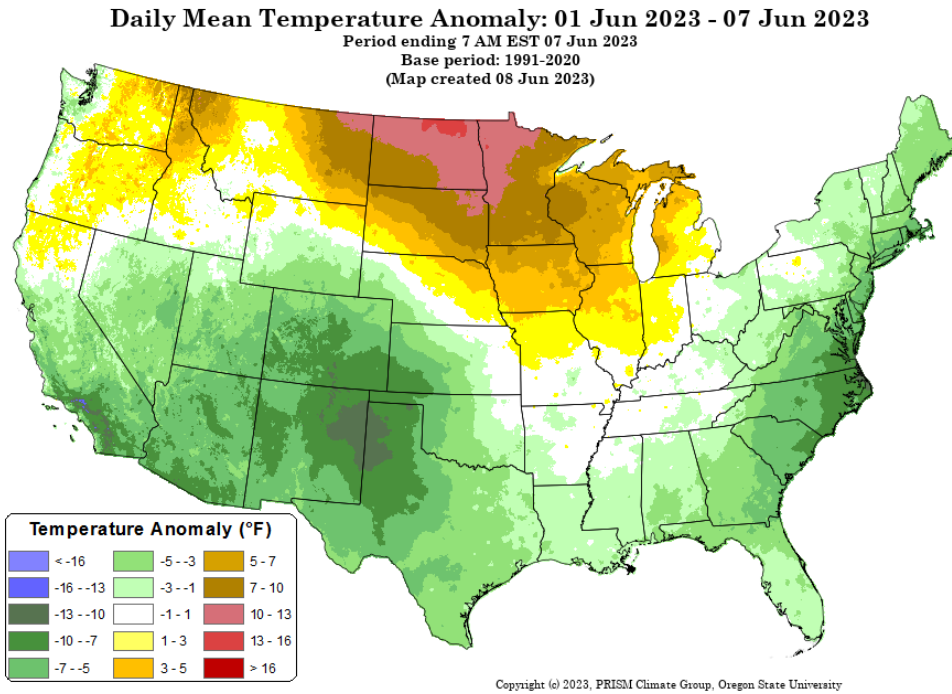
NOAA Regional Climate Centers



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

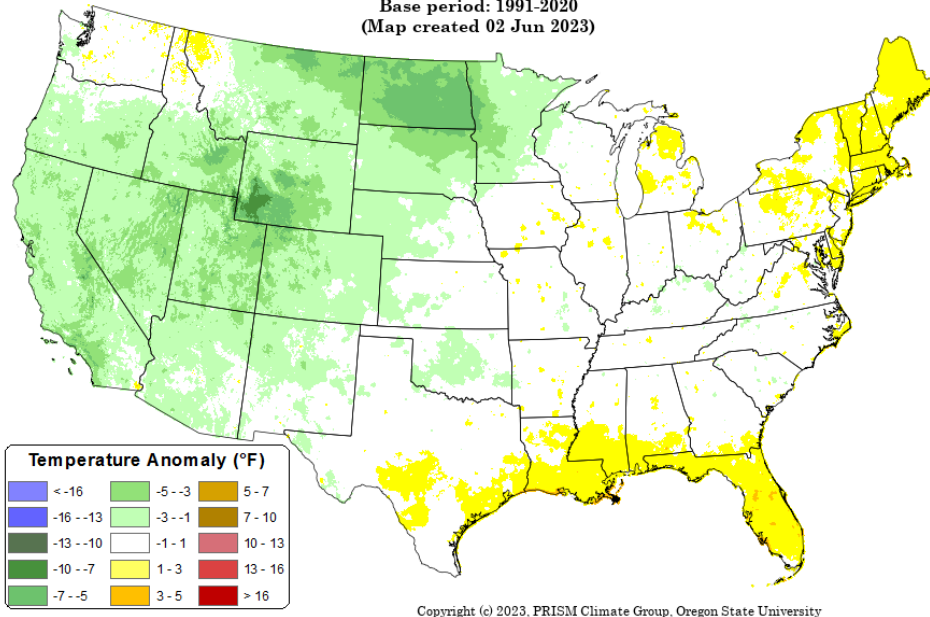
Source: PRISM

Daily Mean Temperature Anomaly: Mar 2023 - May 2023

Period ending 7 AM EST 31 May 2023

Base period: 1991-2020

(Map created 02 Jun 2023)



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

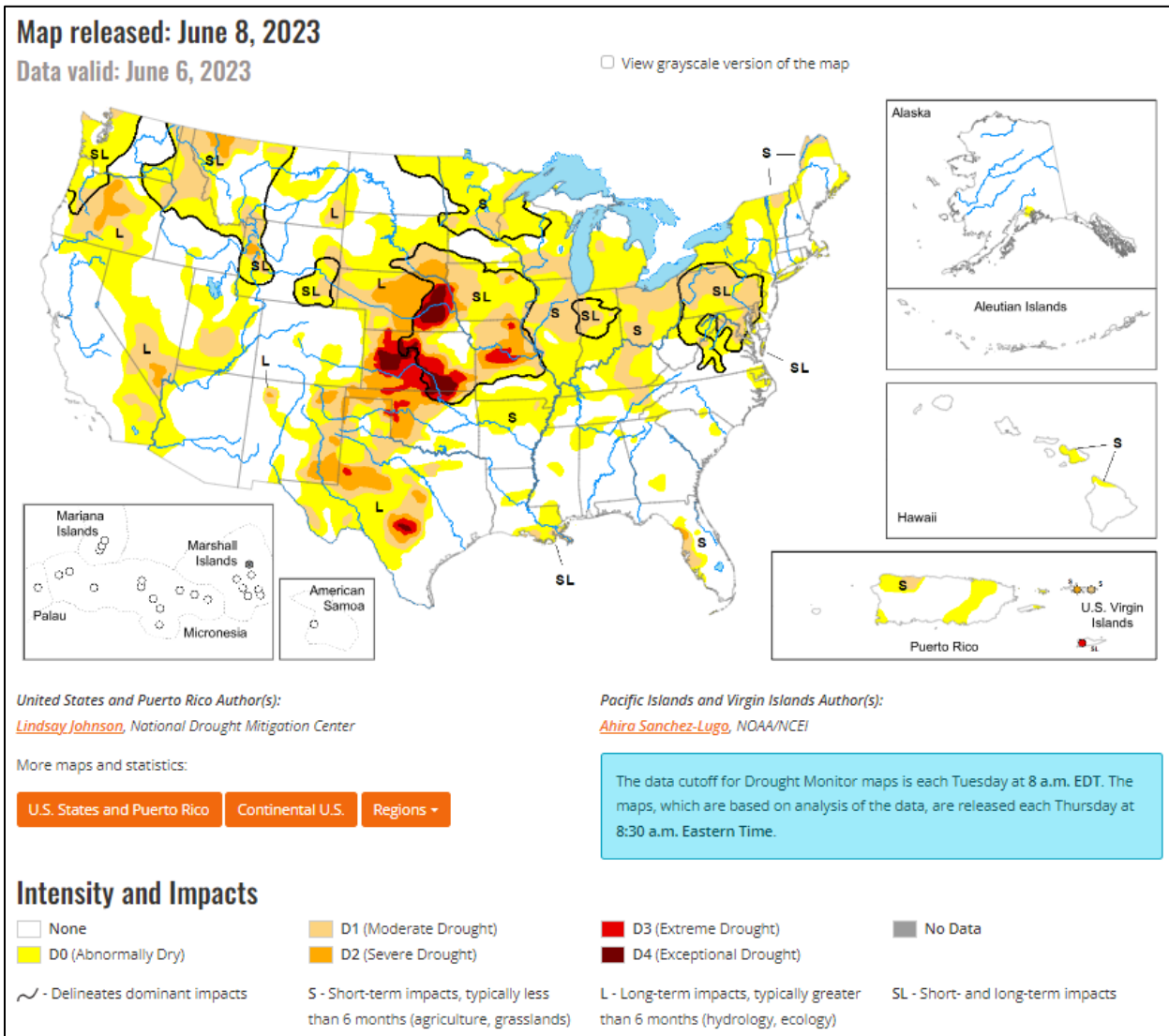
## Drought

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

Source: National Drought Mitigation Center

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

Source: NOAA



### [Current National Drought Summary, June 06, 2023](#)

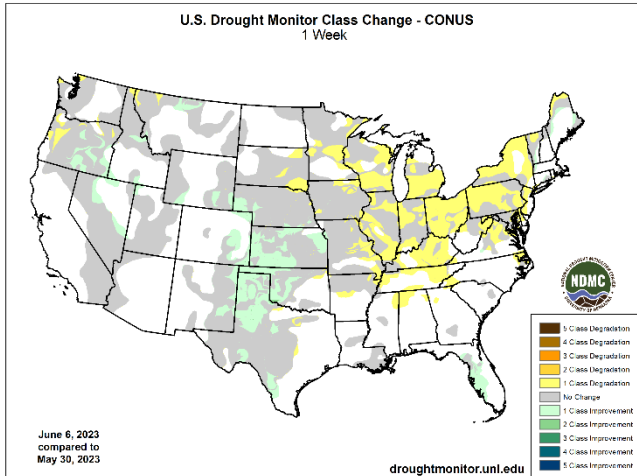
Source: National Drought Mitigation Center

“Heavy rains fell this week across some of the western parts of the Central and Southern Great Plains, especially in the Texas Panhandle and western Oklahoma and Kansas, leading to widespread improvements to ongoing drought in the western Great Plains. Heavy rains in the central and southern Florida Peninsula also led to improvements to ongoing drought and abnormal dryness in the southwest Florida Peninsula. Widespread degradations occurred in the Midwest and western portions of the Northeast, amid very dry and warm recent weather. In the West, some minor improvements occurred in parts of Nevada, Utah and Idaho, where high streamflows and large precipitation amounts from the winter into May led to a reassessment of conditions. Degradations were made in a few parts of western Montana and northwest Washington, where precipitation deficits mounted amid declining soil moisture and streamflow.”

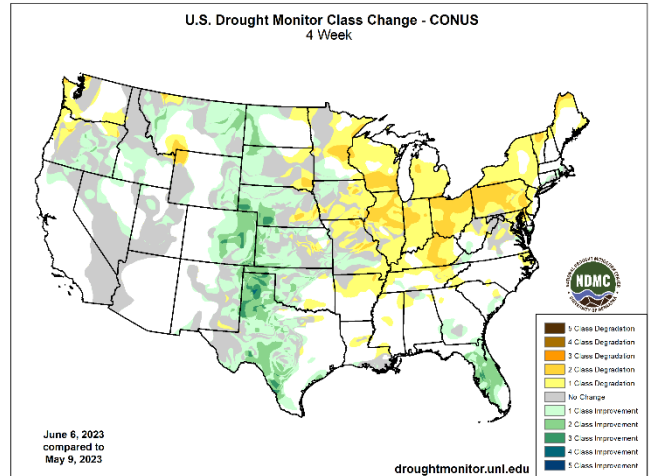
## Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

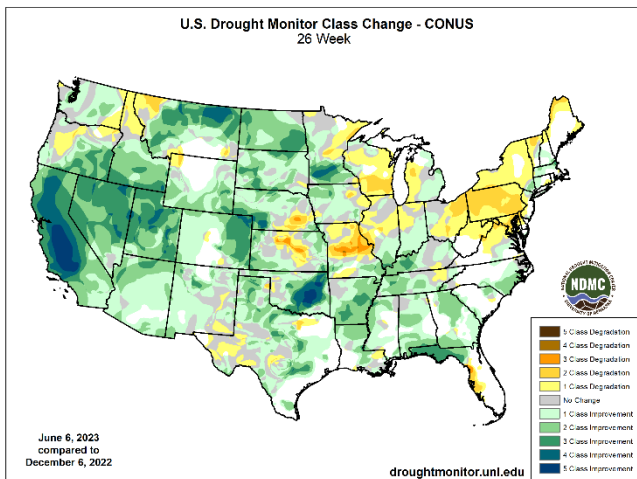
### 1 Week



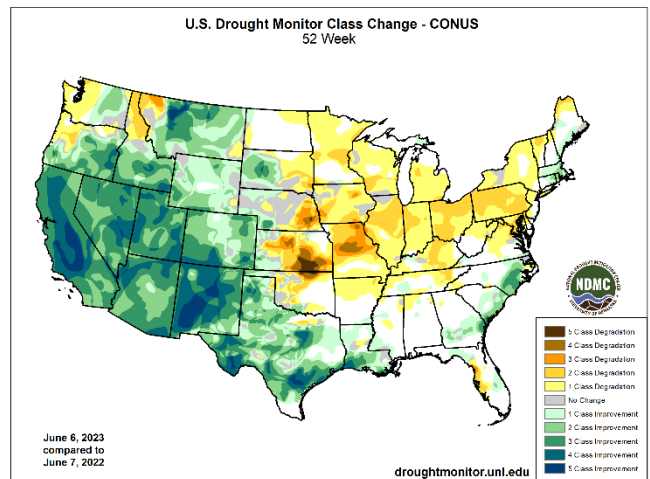
### 1 Month



### 6 Months



### 1 Year



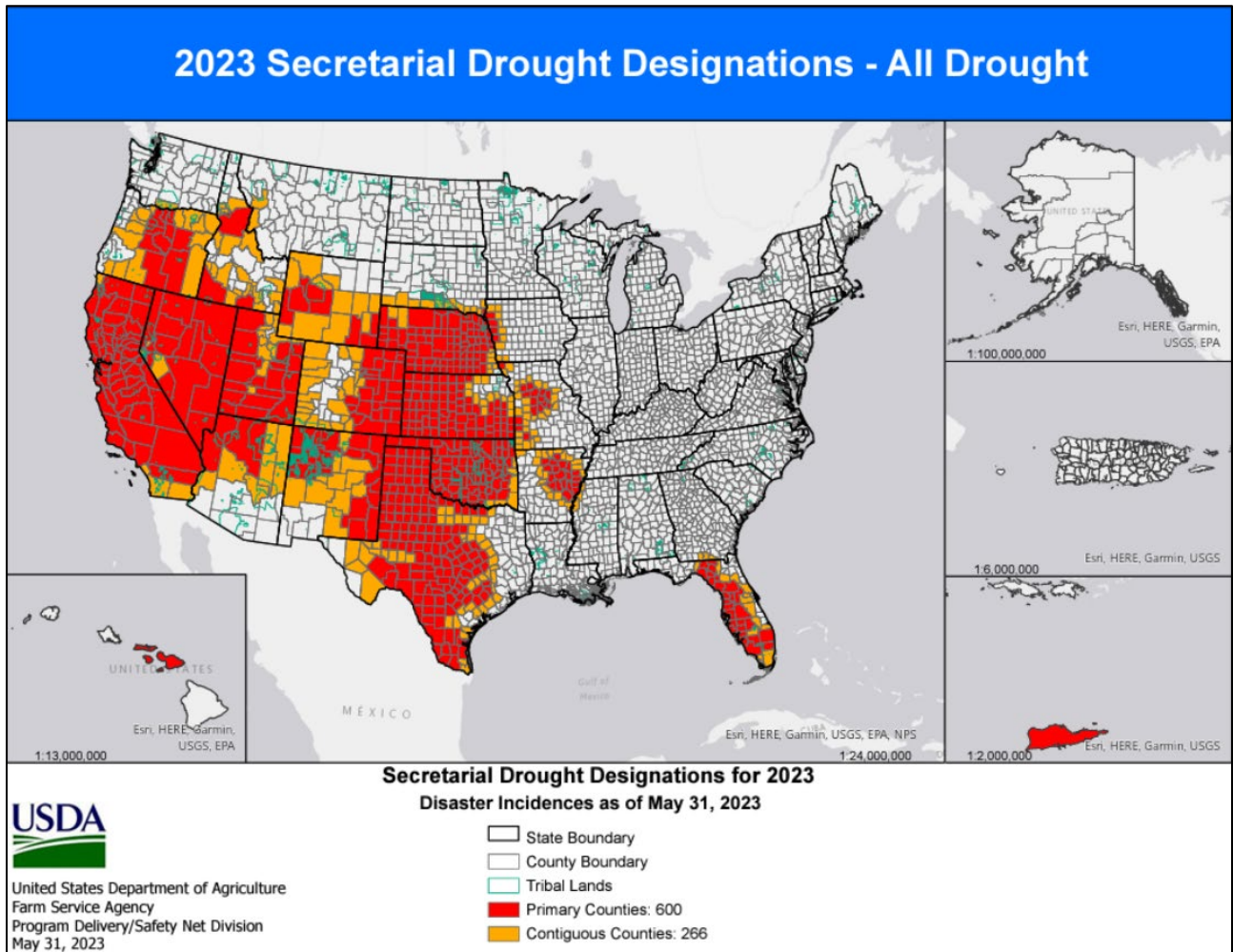
[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

## 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](#)**

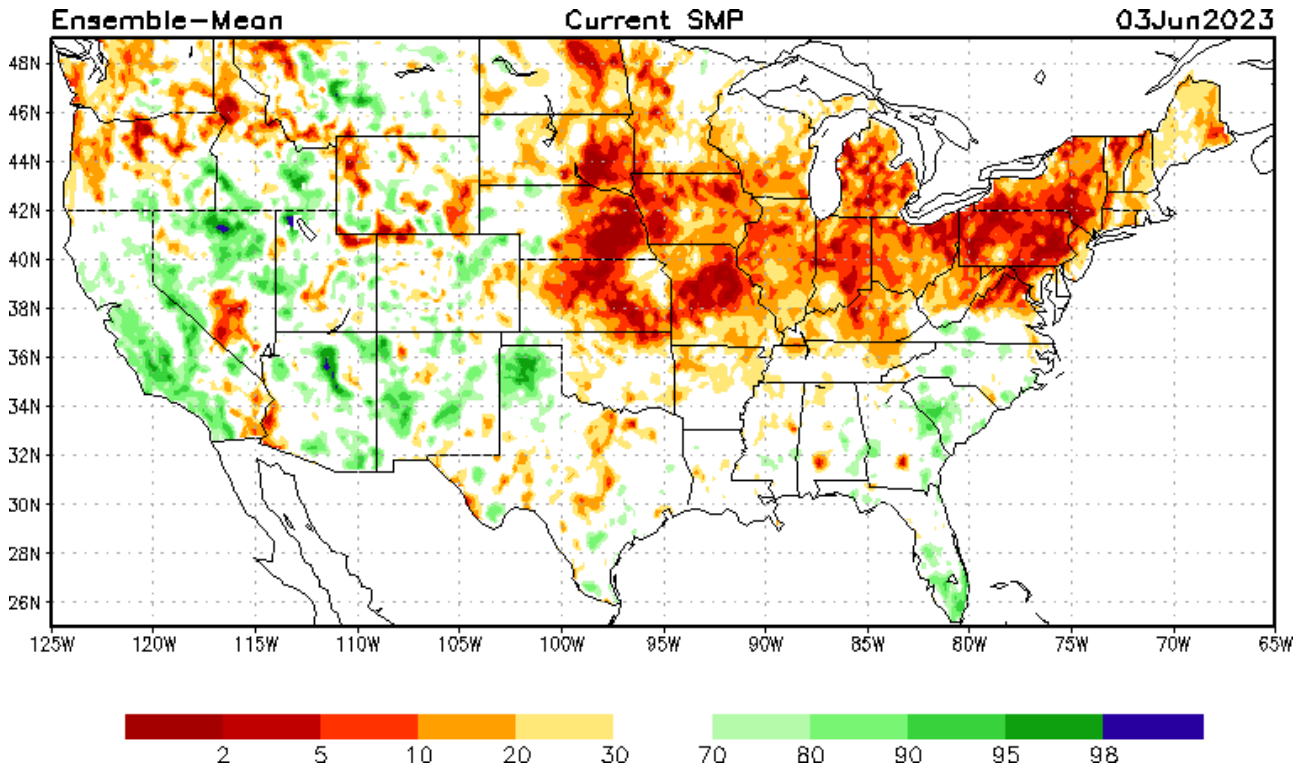
Source: USDA Farm Service Agency



## Other Climatic and Water Supply Indicators

### Soil Moisture

Source: NOAA National Centers for Environmental Prediction

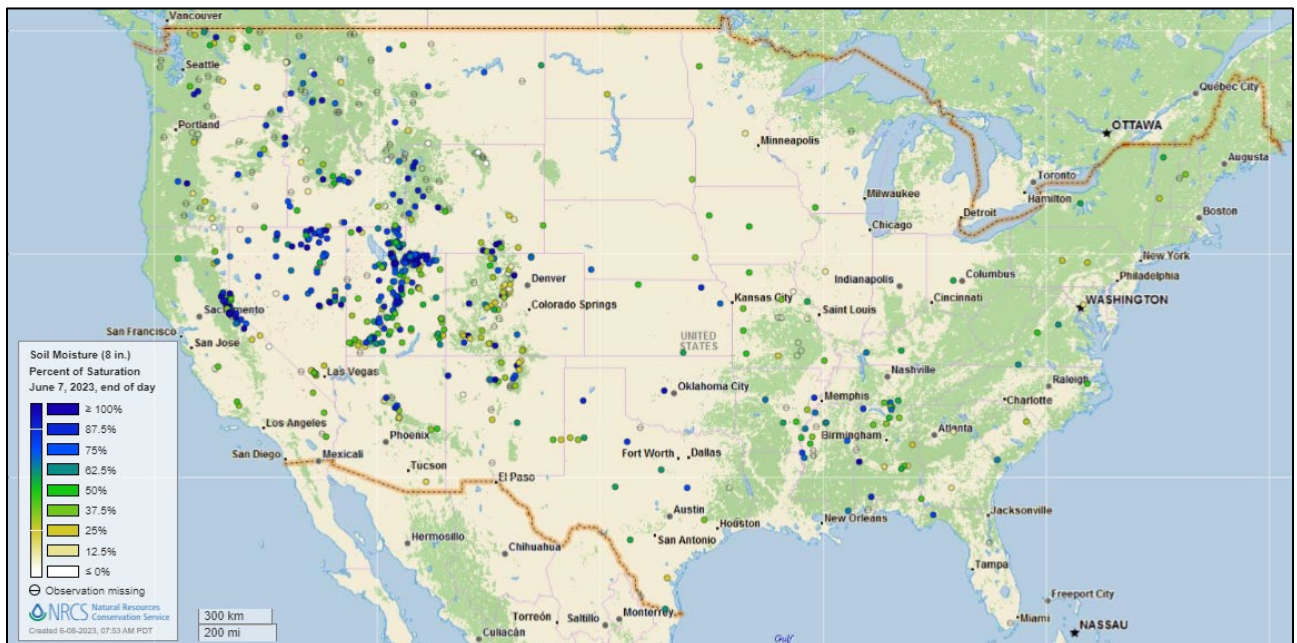


[Modeled soil moisture percentiles](#) as of June 03, 2023

### Soil Moisture Percent of Saturation

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

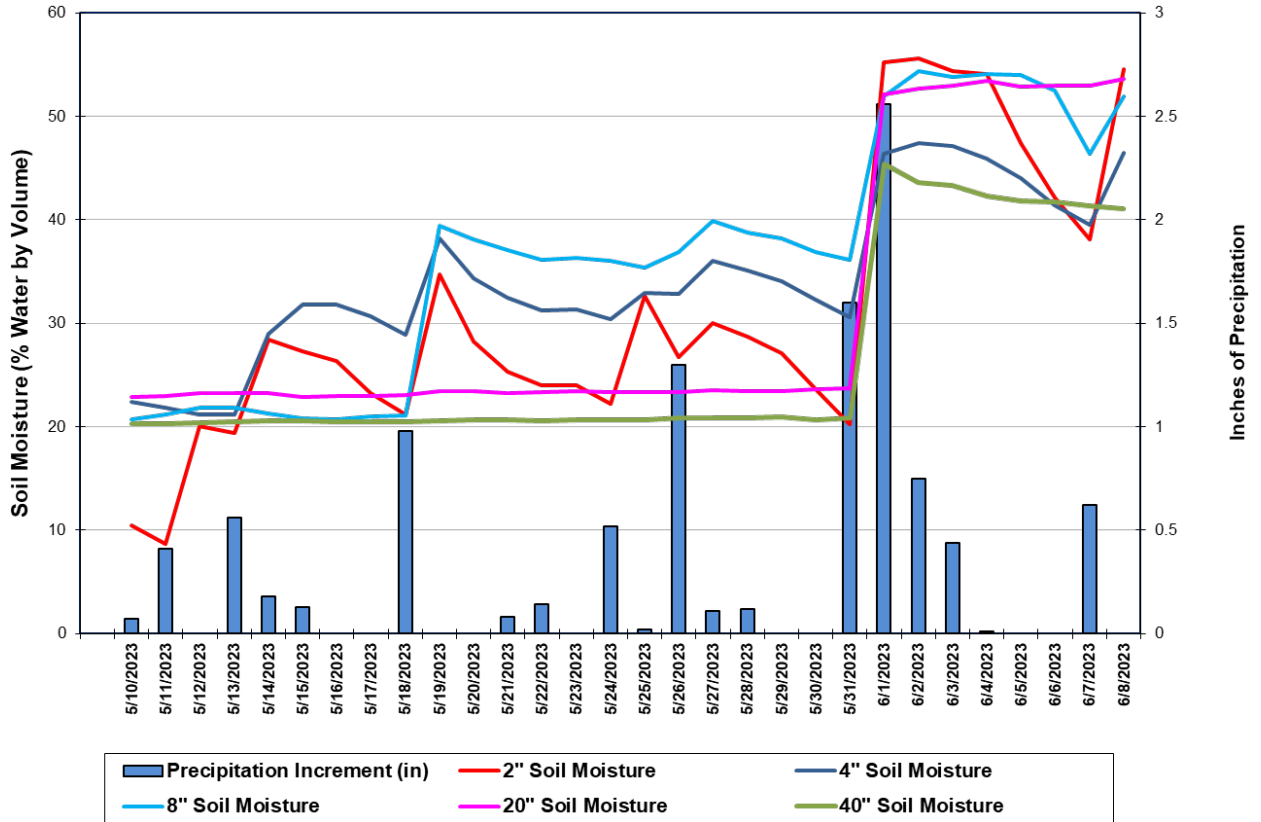
[U.S. soil moisture map at 8-inch depth:](#)



**Soil Moisture**

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

**Bushland #1, Texas (SCAN site 2006)**  
**Daily Mean Soil Moisture vs. Daily Precipitation**



This chart shows the precipitation and soil moisture for the last 30 days at the [Bushland #1](#) SCAN site in Texas. Precipitation events throughout the period lead to a steady increase in soil moisture for the -2, -4, and -8-inch soil sensors. From May 31 to June 3, the site received a total of 5.35 inches of precipitation, with dramatic increases in soil moisture reported at all sensor depths during the event. Total precipitation for the 30-day period was 10.6 inches.

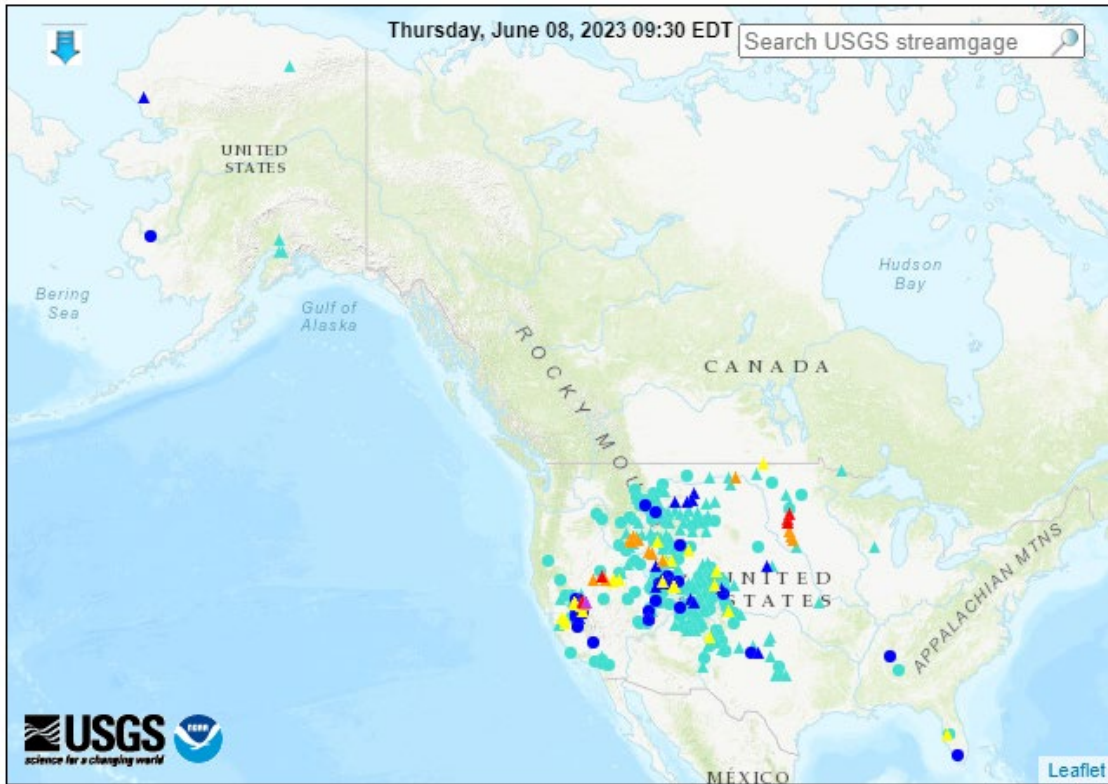
**Soil Moisture Data Portals**

- [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 (22 in floods [major: 1, moderate: 6, minor: 15], 23 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

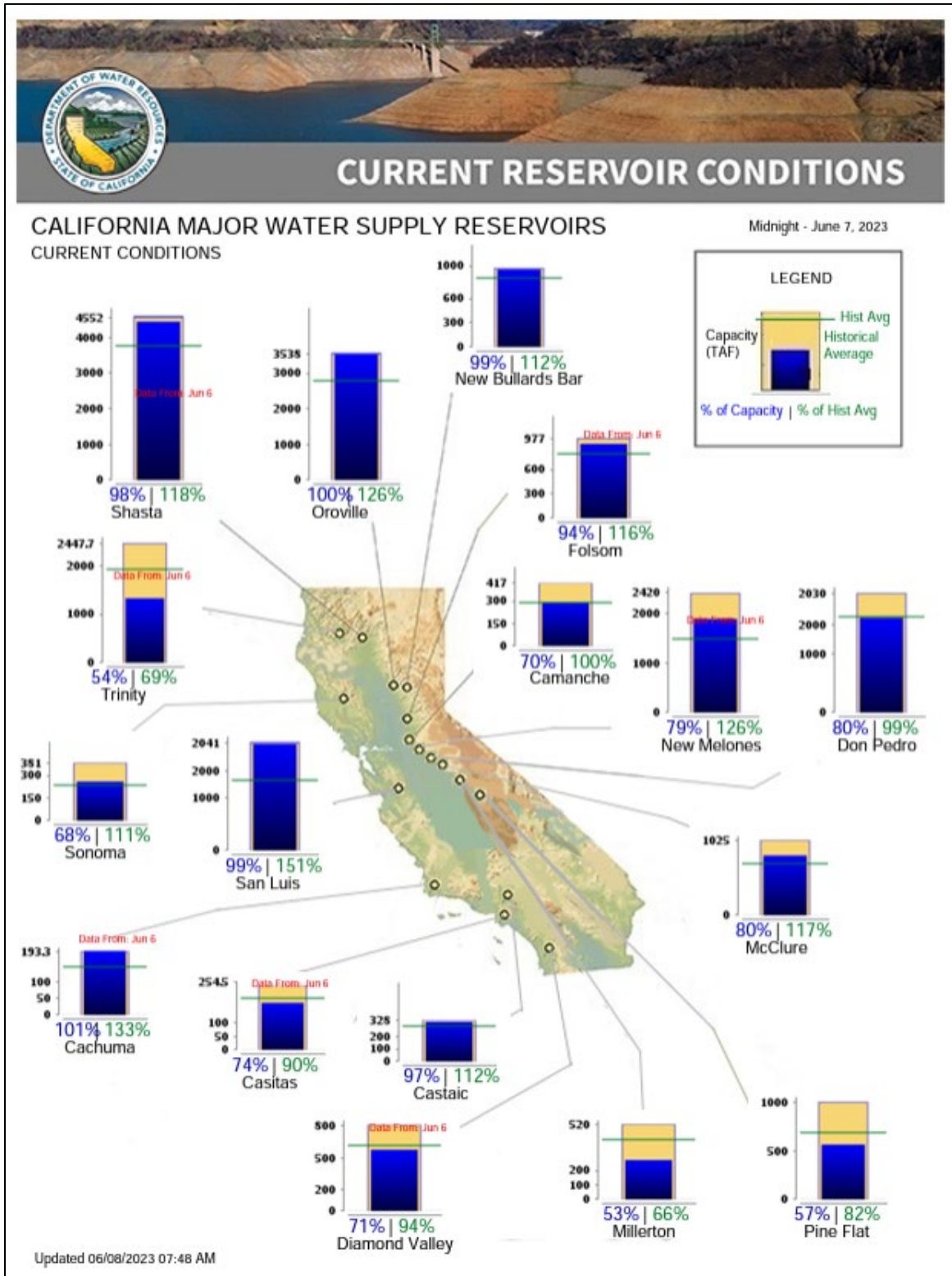
#### Hydromet Teacup Reservoir Depictions

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 June 8, 2023:** “Smoke and haze will continue to plague portions of the eastern half of the U.S. for the next several days. Meanwhile, late-week showers will become more numerous across the Plains, especially from Montana to Kansas, with 1- to 3-inch totals possible. Rain could become heavy enough in northern sections of the High Plains and adjacent Rockies to spark flash flooding. During the weekend, much-needed rain will shift into parts of the southern and eastern Corn Belt, where 1- to 2-inch totals may occur. Shower activity will also increase across the southern and eastern U.S. Elsewhere, building heat across the Deep South late in the weekend and early next week should push temperatures to 100°F or higher in the south-central U.S. including much of Texas. The NWS 6- to 10-day outlook for June 13 – 17 calls for the likelihood of near- or above-normal temperatures and precipitation across much of the country. Cooler-than-normal conditions should be confined to the southern two-thirds of the western U.S. and an area stretching from the Ohio Valley to the middle Atlantic Coast. Meanwhile, drier-than-normal conditions should be limited to the upper Great Lakes region and the nation’s southern tier, mainly from southern New Mexico to Florida.”

### Weather Hazards Outlook: [June 10 – 14, 2023](#)

Source: NOAA Weather Prediction Center



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

[About the Hazards Outlook](#)

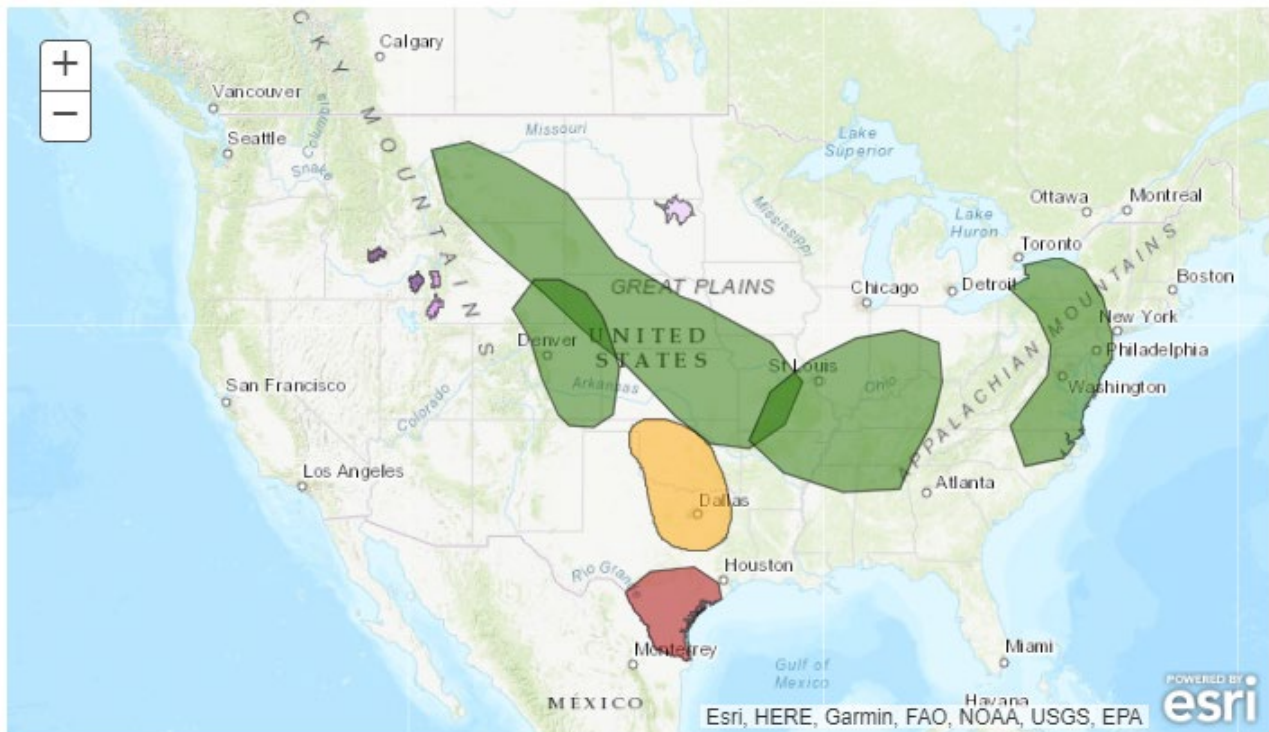
Created June 07, 2023

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"/>
Soils	<input type="checkbox"/>

Legend			
	Flooding Likely		Excessive Heat
	Flooding Occurring or Imminent		High Winds
	Flooding Possible		Much Above Normal Temperatures
	Freezing Rain		Much Below Normal Temperatures
	Heavy Ice		Significant Waves
	Heavy Precipitation		Enhanced Wildfire Risk
	Heavy Rain		Severe Drought
	Heavy Snow		
	Severe Weather		

Valid June 10, 2023 - June 14, 2023

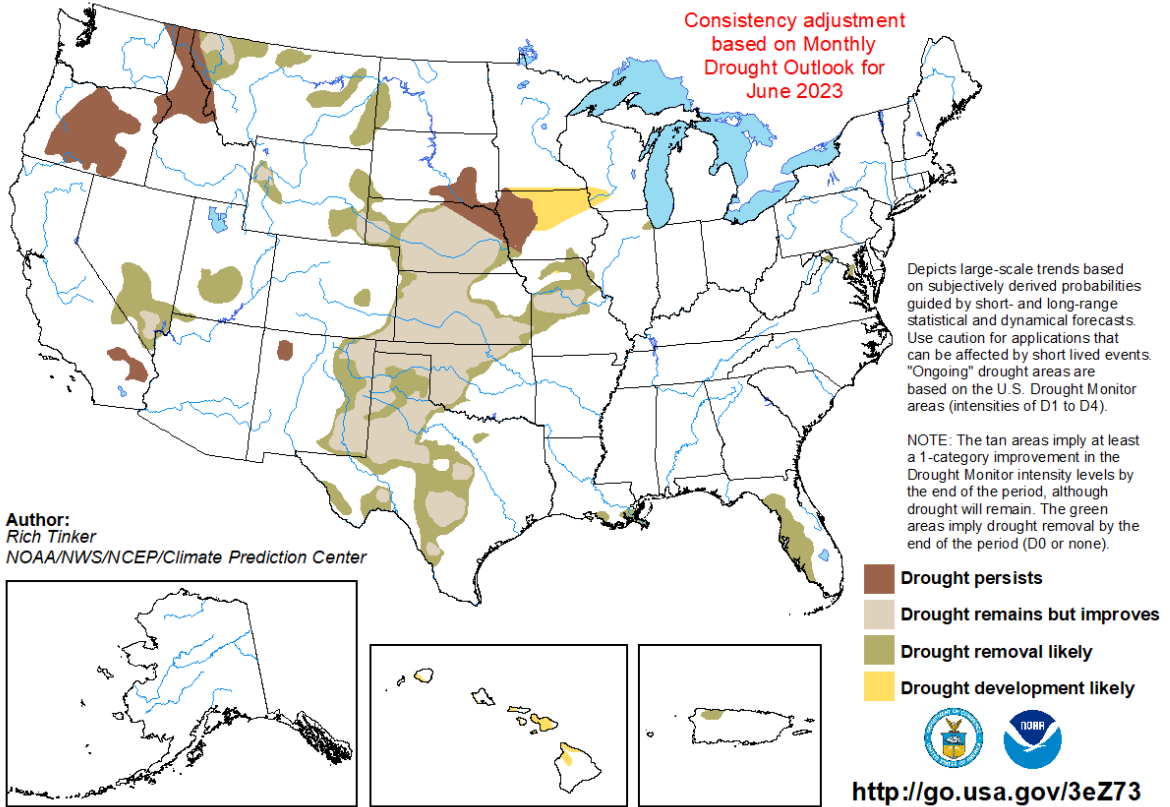


**Seasonal Drought Outlook: June 1 – August 31, 2023**

Source: National Weather Service

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

Valid for June 1 - August 31, 2023  
Released May 31, 2023

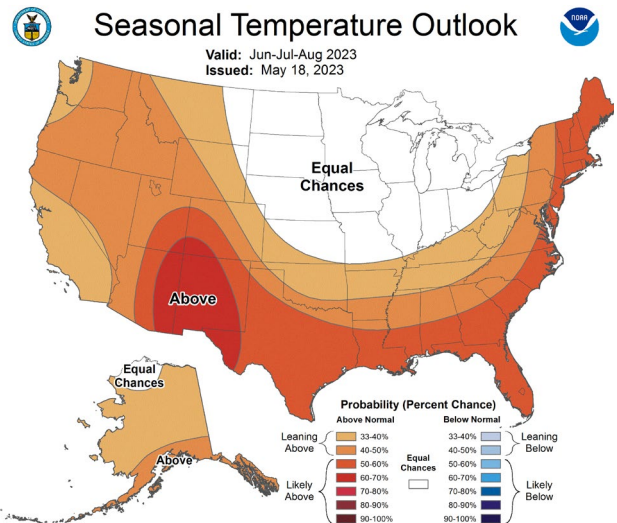
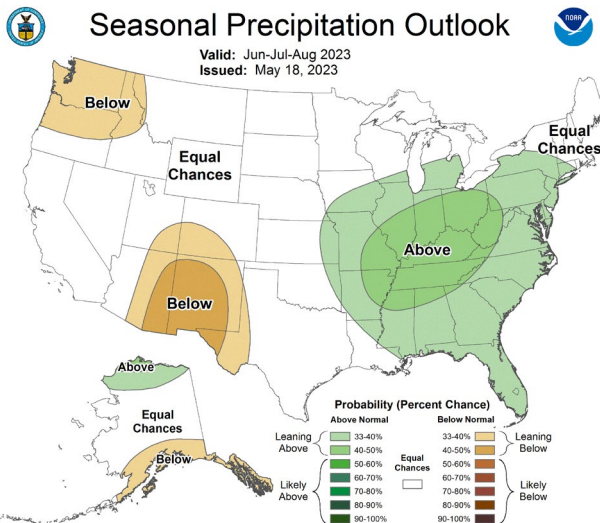


**Climate Prediction Center Three-month Outlook**

Source: National Weather Service

Precipitation

Temperature



[June-July-August 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](#).