



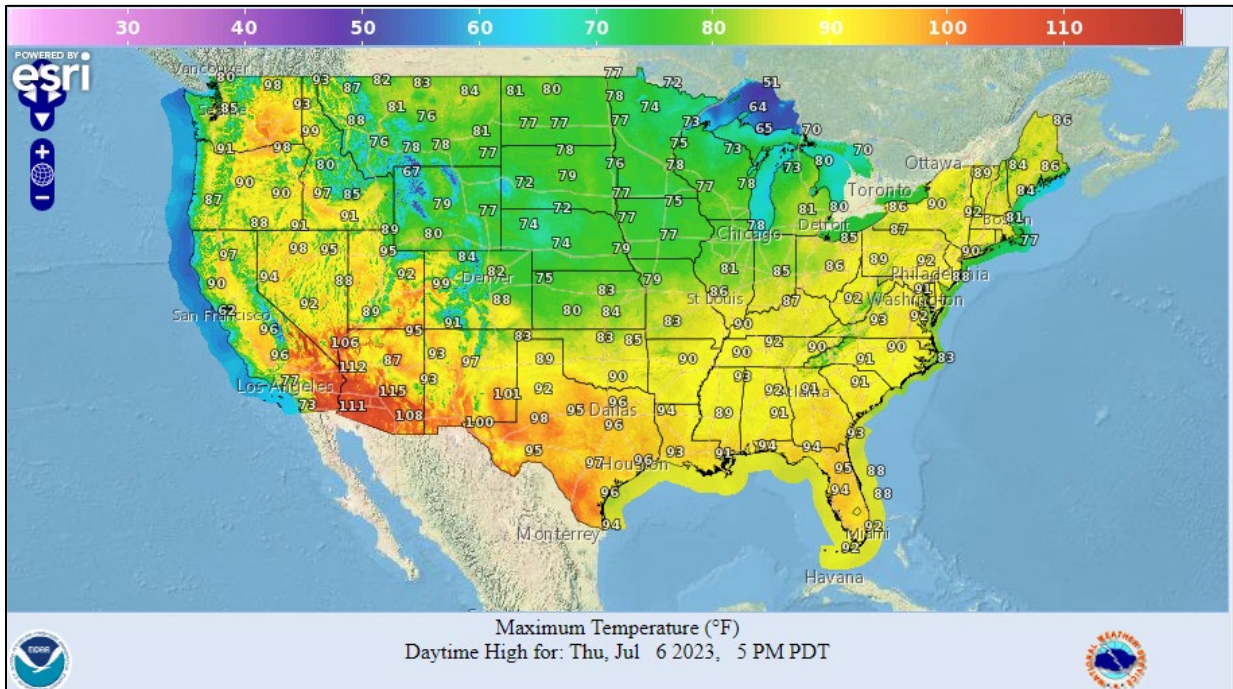
Water and Climate Update

July 06, 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		

Relentless heat continues across the U.S.



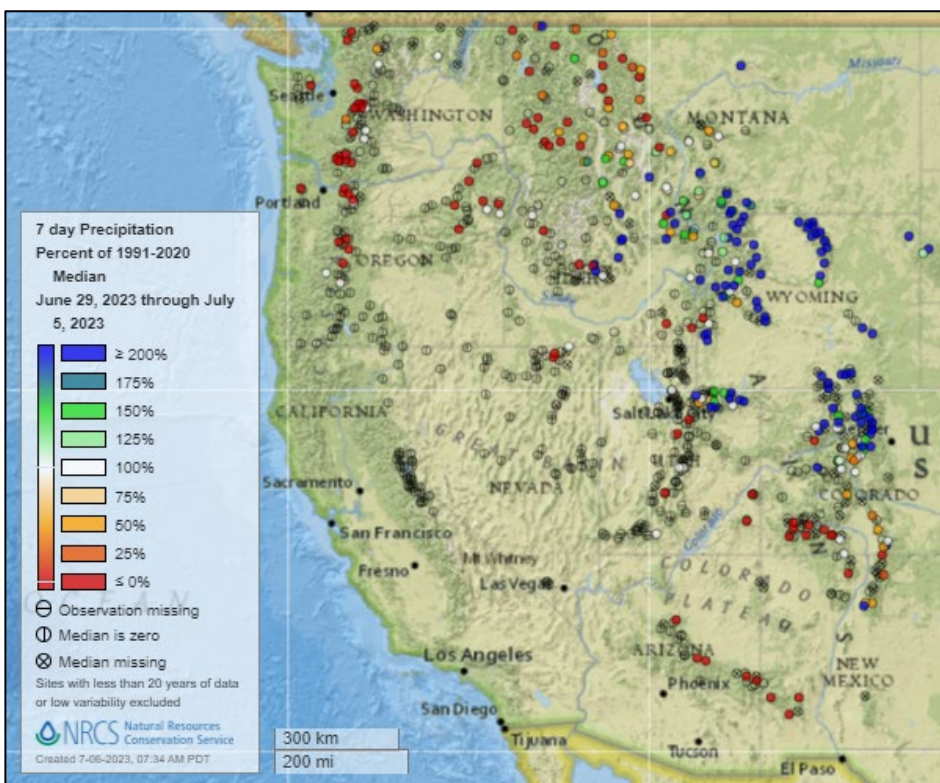
As the southern U.S. continues to battle record-breaking heat, parts of the West have been experiencing their own blistering conditions over the last week. Many locations across the country have experienced temperatures well above 100°F, and the heat is only expected to continue according to forecasts from the National Weather Service. In addition to excessive heat warnings being declared in multiple regions, the threat of wildfire danger is increased as high heat and low humidity prevail.

Related:

- [El Niño is here and the world must prepare for more extreme heat, UN weather agency warns – CNN](#)
- [Earth's hottest day? July 4 set a record, scientists say – USA Today](#)
- [Heat alerts for 60 million Americans Tuesday: Is climate change to blame? – AP News](#)
- [Tracking Dangerous Heat in the U.S. – The New York Times](#)
- [Triple-digit heat continues to scorch parts of the U.S. – NBC News](#)

Precipitation

Last 7 Days, NRCS SNOTEL Network

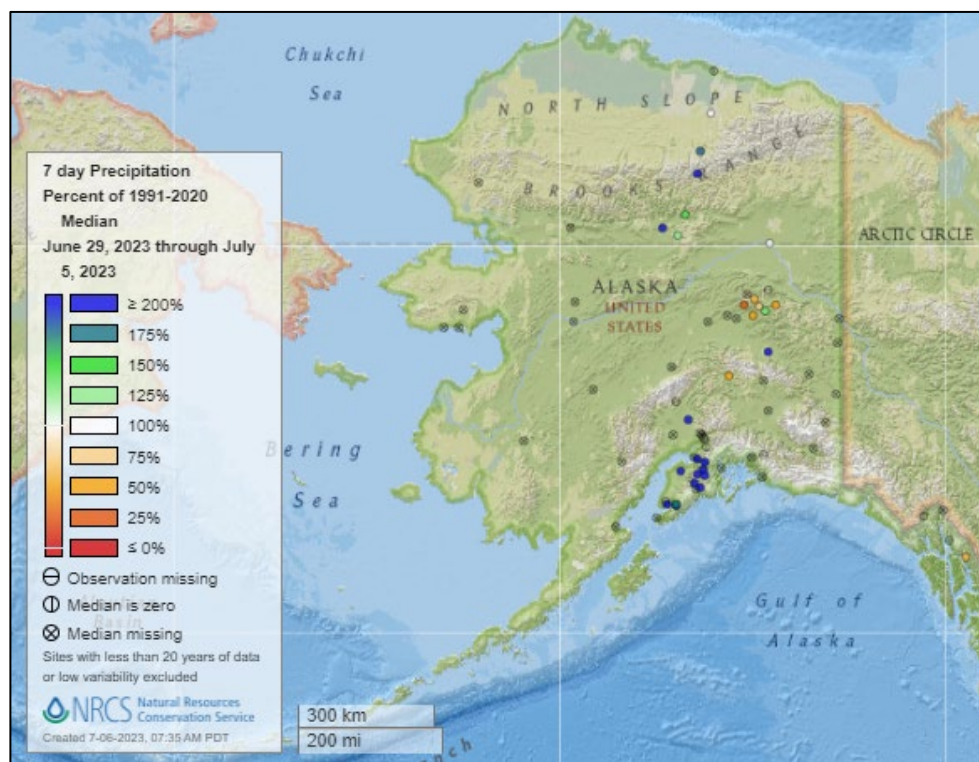


[7-day precipitation percent of median map](#)

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](#)



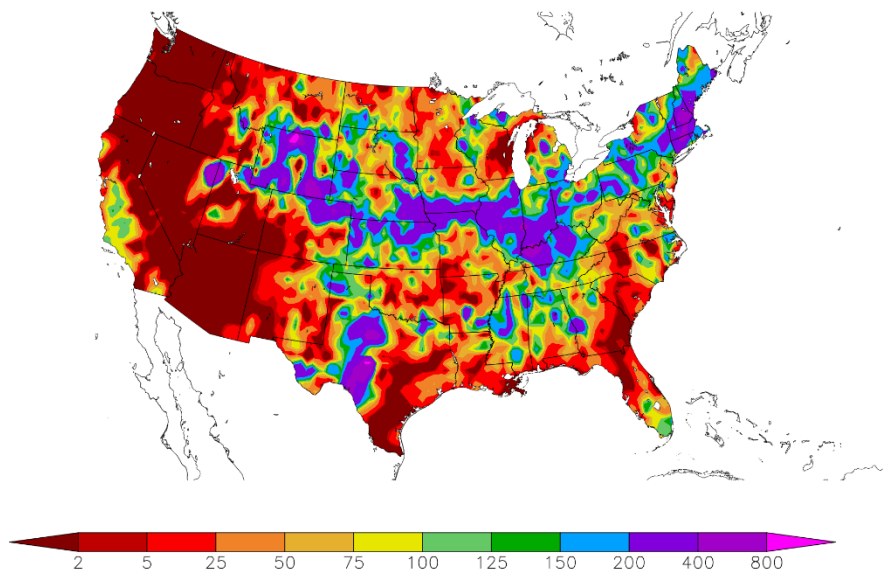
Last 7 Days, National Weather Service (NWS) Networks

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 (%)
6/29/2023 – 7/5/2023



Generated 7/6/2023 at HPRCC using provisional data.

NOAA Regional Climate Centers

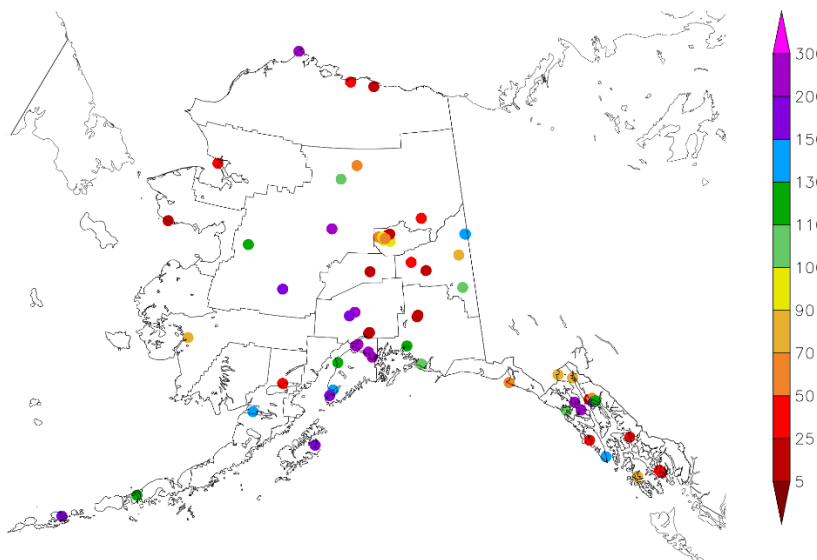
Last 7 Days, National Weather Service (NWS) Networks

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 (%)
6/29/2023 – 7/5/2023



Generated 7/6/2023 at HPRCC using provisional data.

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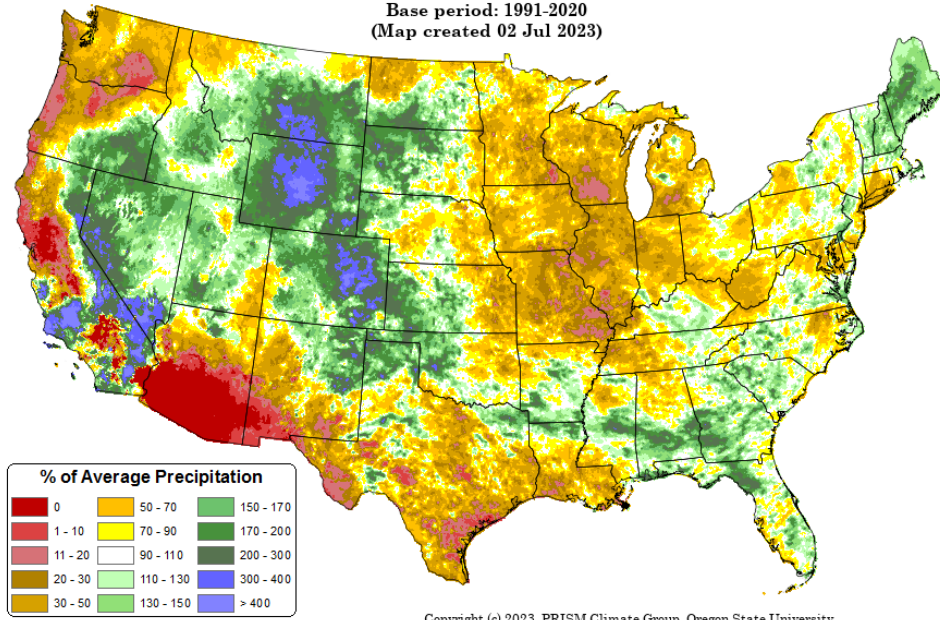
Monthly, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

Total Precipitation Anomaly: Jun 2023

Period ending 30 Jun 2023
Base period: 1991-2020
(Map created 02 Jul 2023)

[Monthly national total precipitation anomaly map](#)



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

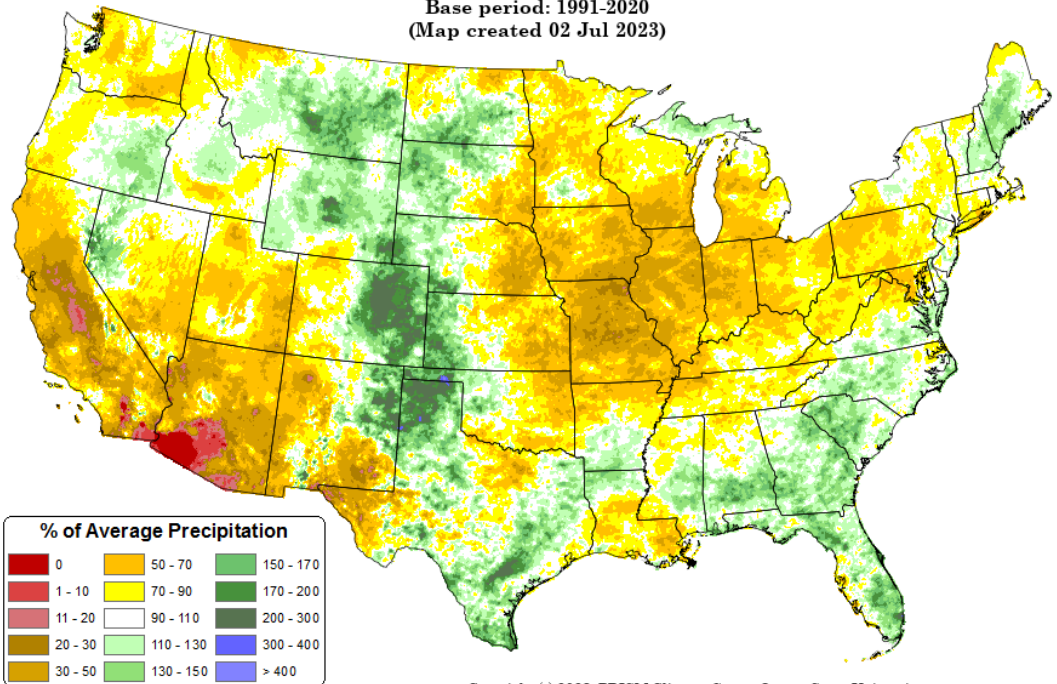
Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

[April through June 2023 precipitation anomaly map](#)

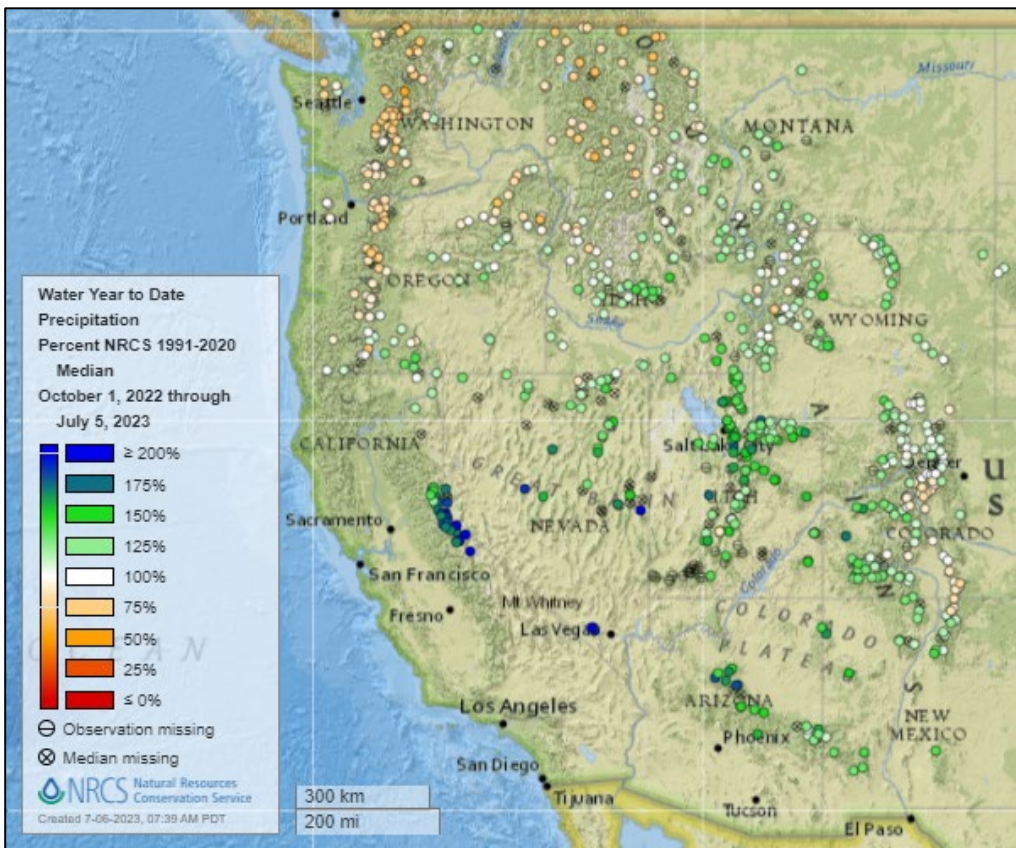
Total Precipitation Anomaly: Apr 2023 - Jun 2023

Period ending 7 AM EST 30 Jun 2023
Base period: 1991-2020
(Map created 02 Jul 2023)



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

Water Year-to-Date, NRCS SNOTEL Network

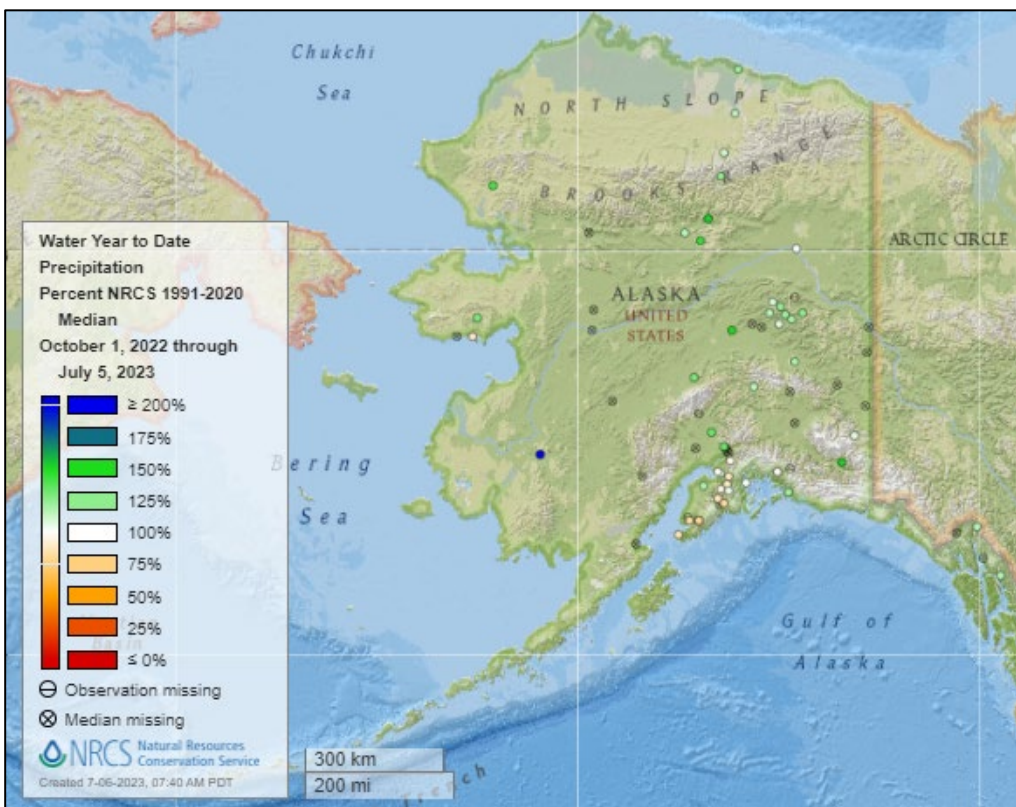


[2023 water year-to-date precipitation percent of median map](#)

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

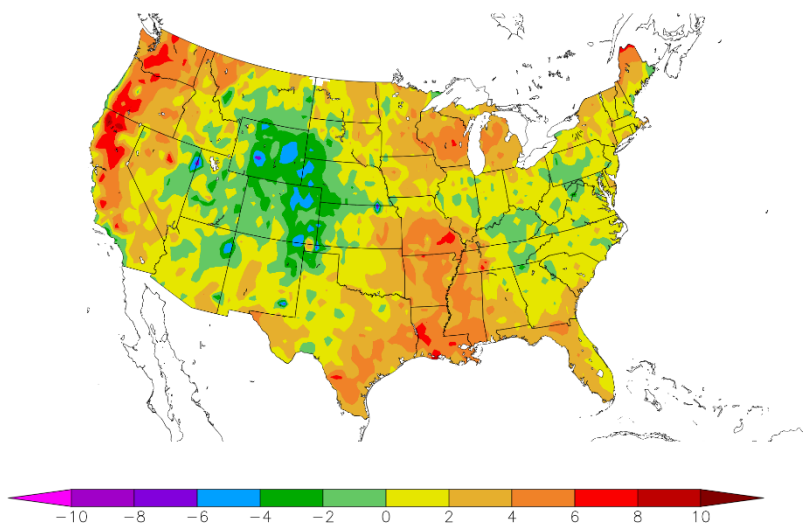
Last 7 Days, National Weather Service (NWS) Networks

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)
6/29/2023 – 7/5/2023



Generated 7/6/2023 at HPRCC using provisional data.

NOAA Regional Climate Centers

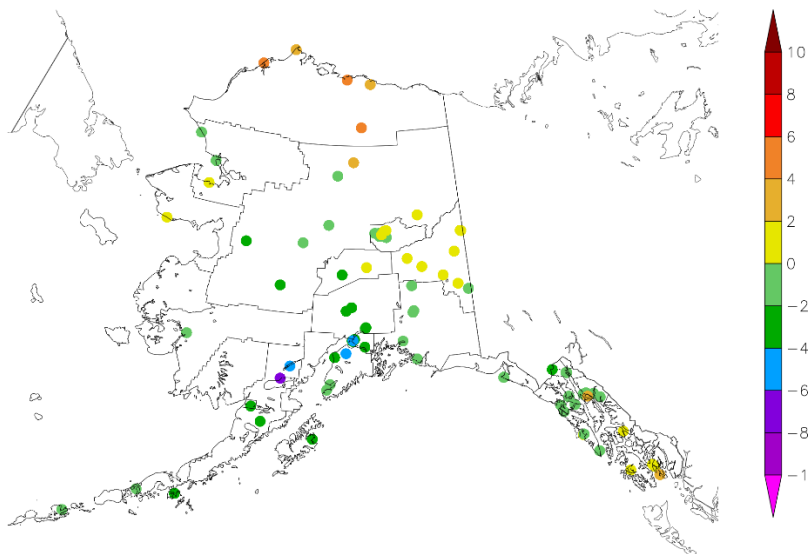
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)
6/29/2023 – 7/5/2023



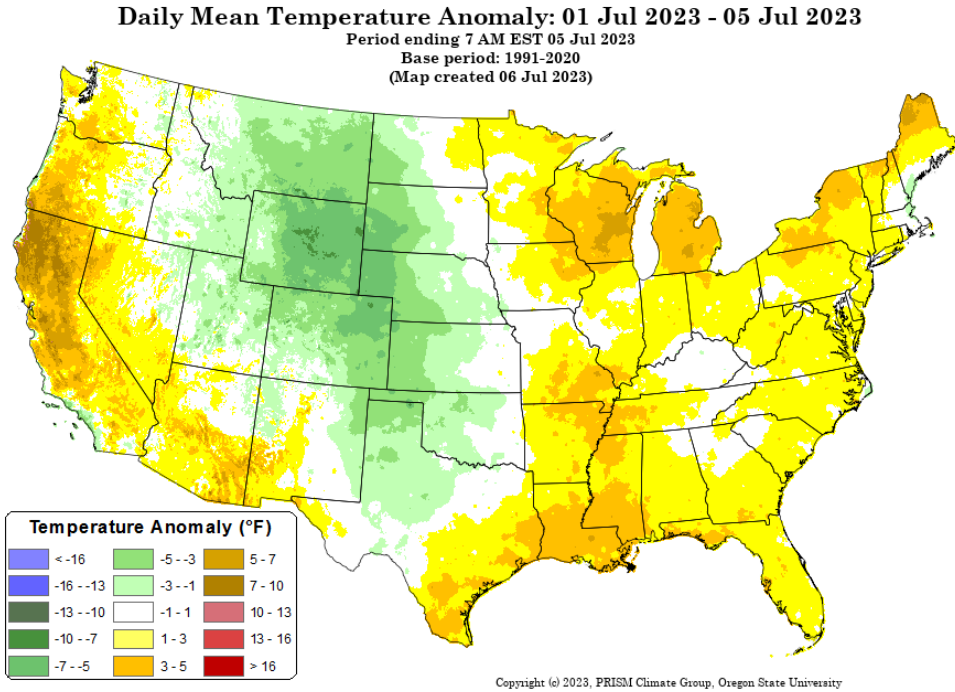
Generated 7/6/2023 at HPRCC using provisional data.

NOAA Regional Climate Centers

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

Source: PRISM

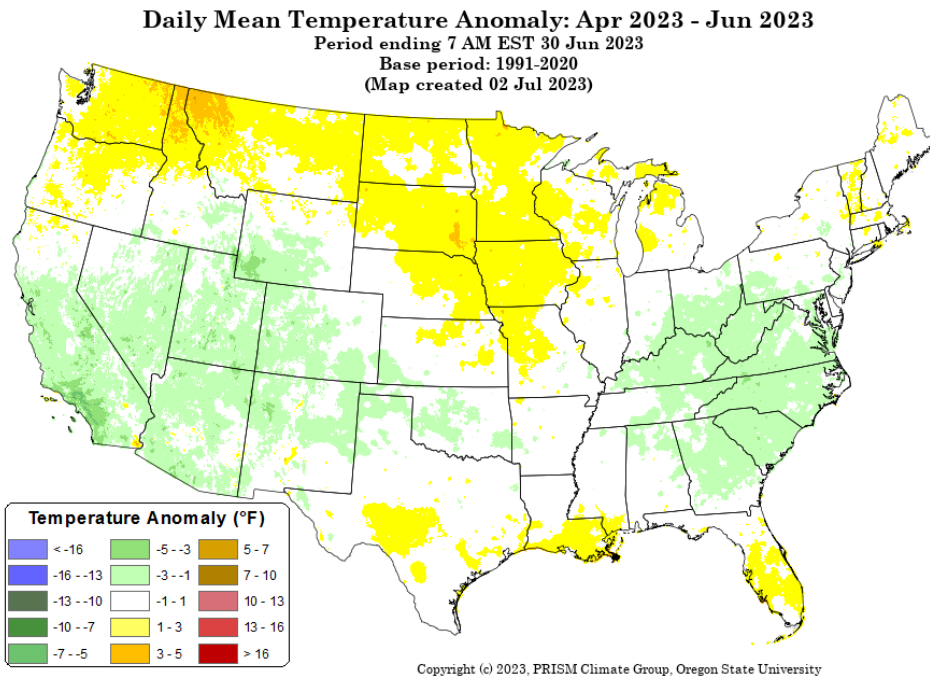
[Month-to-date national daily mean temperature anomaly map](#)



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

Source: PRISM

[April through June 2023 daily mean temperature anomaly map](#)



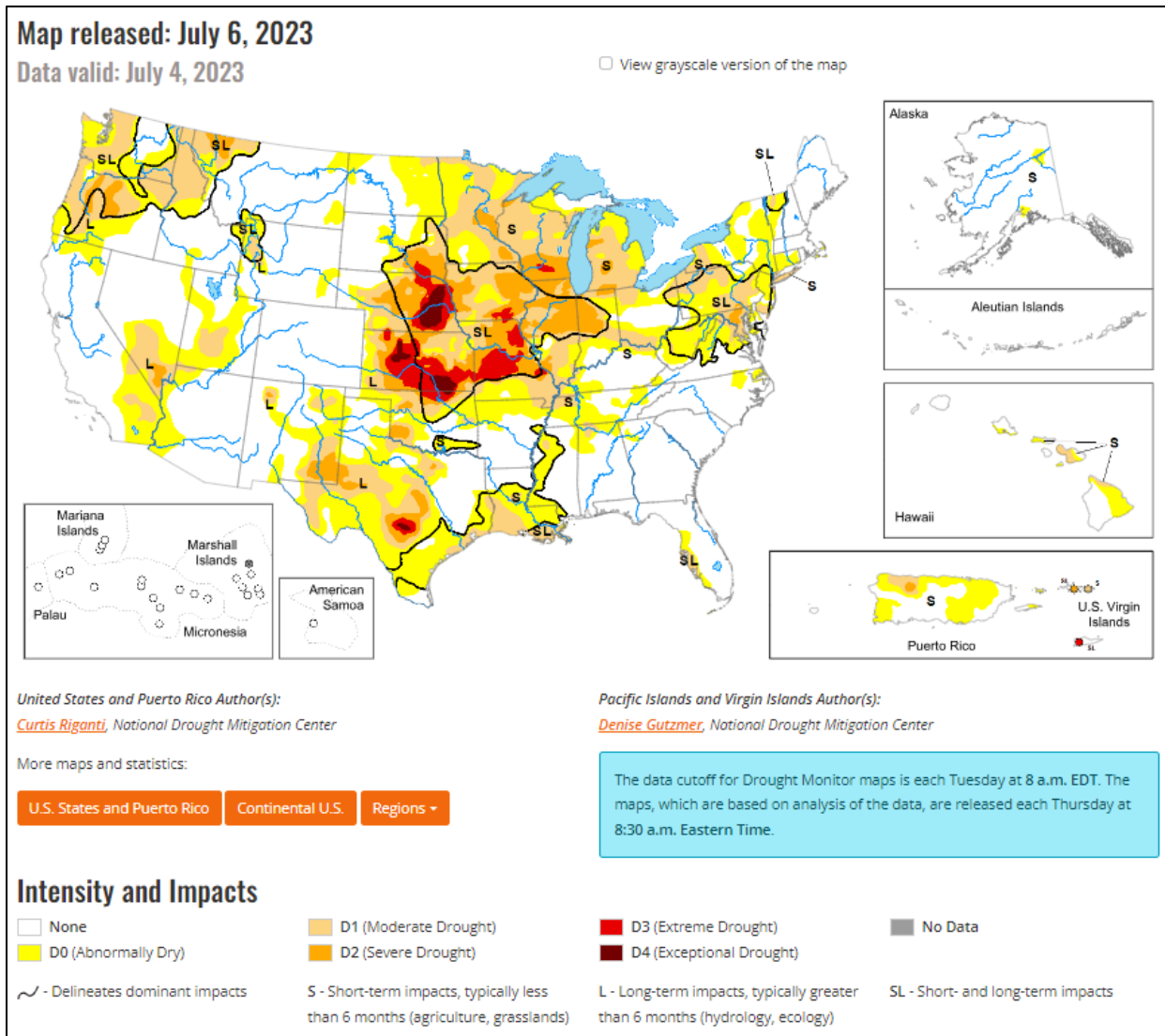
Drought

[U.S. Drought Monitor](#)

Source: National Drought Mitigation Center

[U.S. Drought Portal](#)

Source: NOAA



[Current National Drought Summary, July 04, 2023](#)

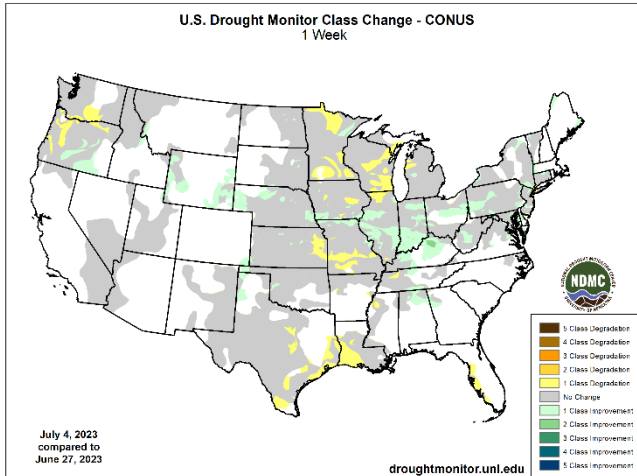
Source: National Drought Mitigation Center

“Heavy rains fell this week across parts of the Midwest, Ohio River Valley and Northeast, which led to widespread improvements from southeast Nebraska to central Illinois, southern Indiana, and central and eastern Kentucky. To the south and west, in southern Missouri, the Texas-Louisiana border and other parts of central Texas, drier weather led to worsening precipitation deficits, and significant problems with hay production in parts of southern Missouri. Dry weather in the Upper Midwest led to further degrading conditions in parts of Michigan, Wisconsin and Minnesota. A re-evaluation of conditions in parts of the western Great Plains led to some improvements to long-term dryness and long-term moderate drought in the Texas and Oklahoma Panhandle region, and in western Nebraska and eastern Wyoming, respectively. A mix of degradations and improvements occurred in the Pacific Northwest. No changes were made to the USDM depictions this week outside of the Lower 48.”

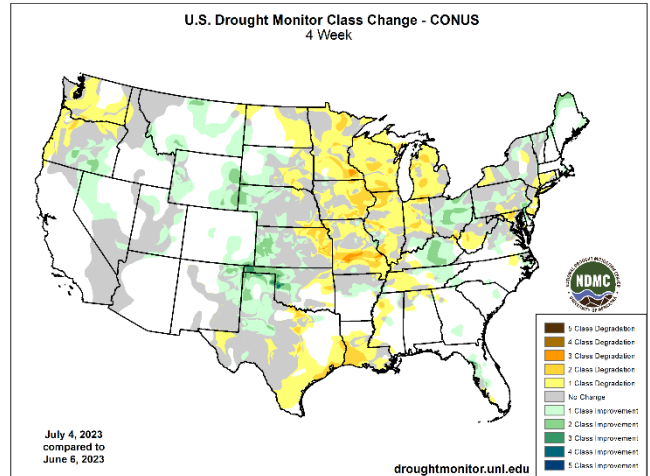
Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

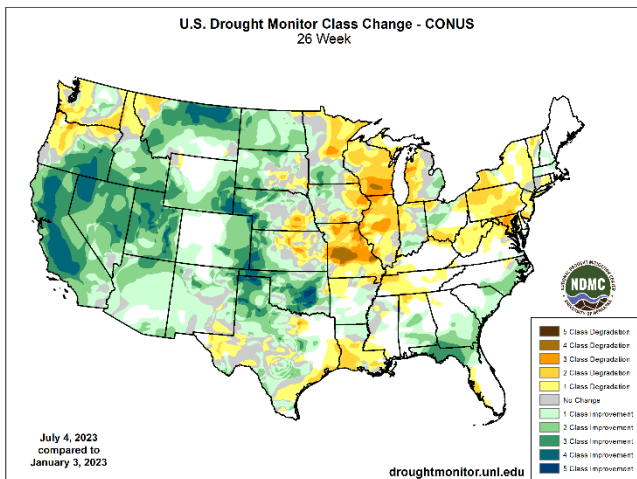
1 Week



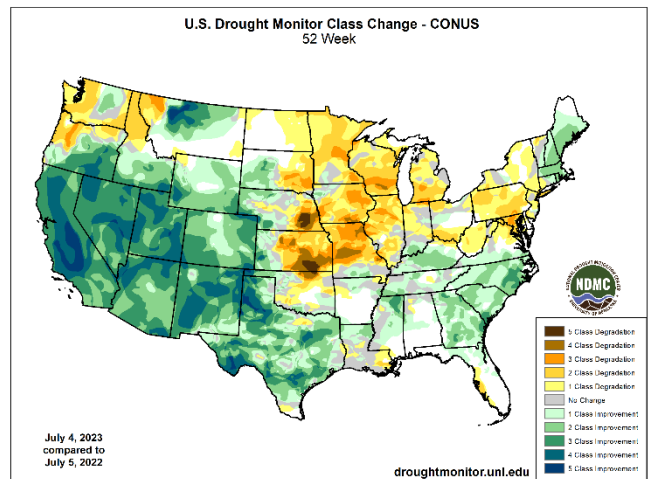
1 Month



6 Months



1 Year



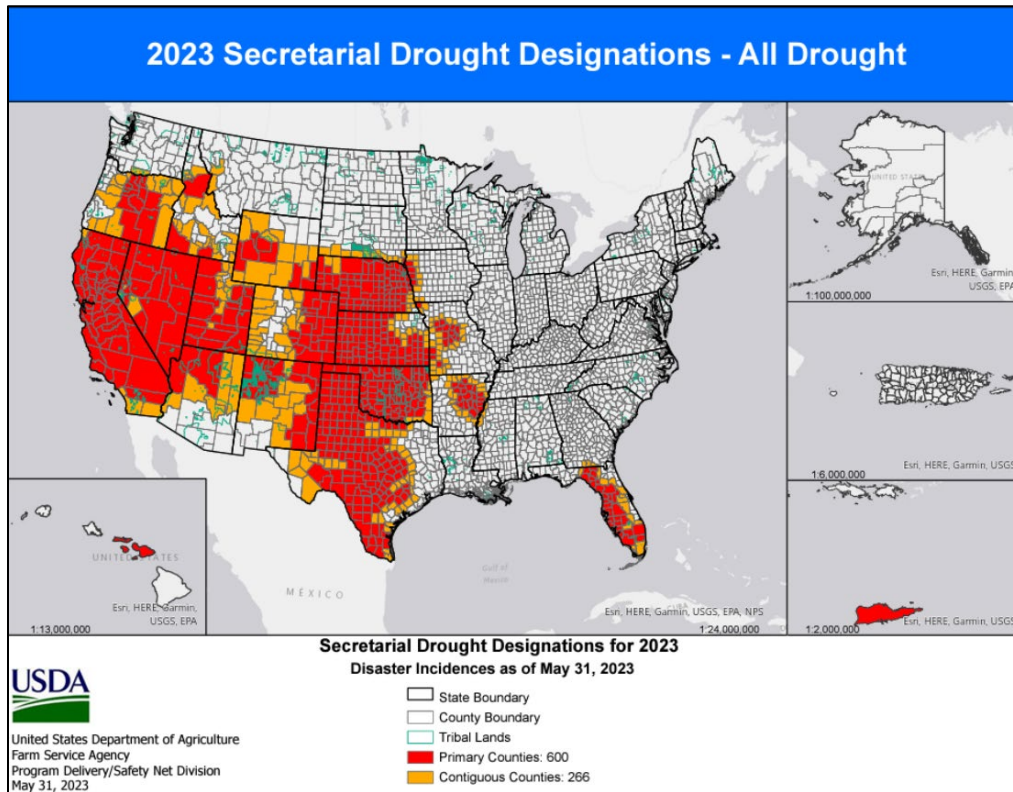
[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

Highlighted Drought Resources

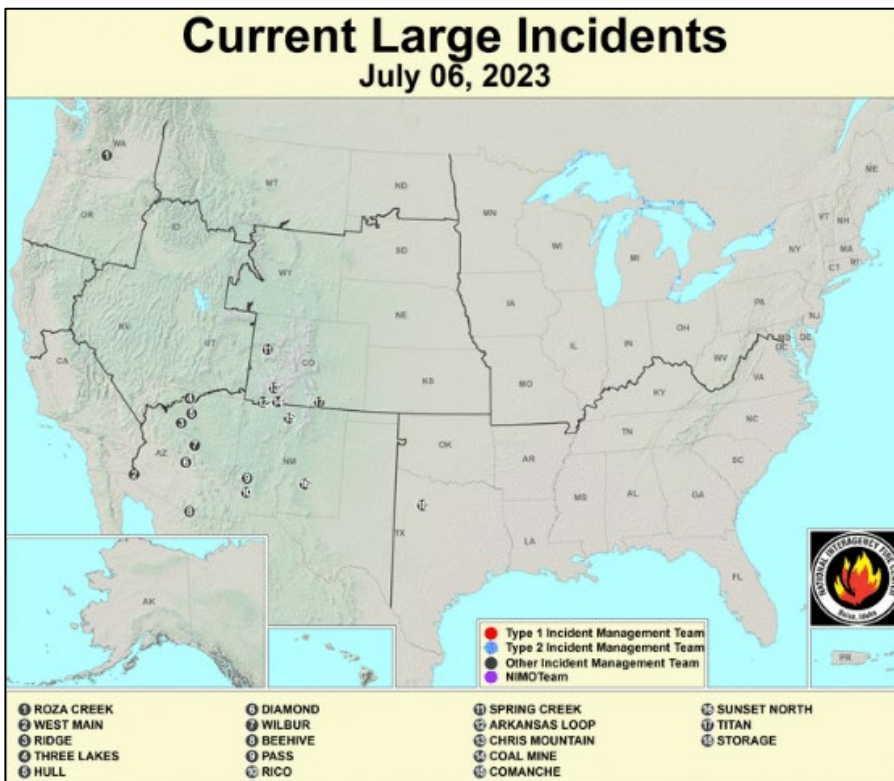
- [Drought Impact Reporter](#)
- [Quarterly Regional Climate Impacts and Outlook](#)
- [U.S. Drought Portal Indicators and Monitoring](#)
- [U.S. Population in Drought, Weekly Comparison](#)
- [USDA Disaster and Drought Information](#)

USDA Secretarial Drought Designations

Source: USDA Farm Service Agency



Wildfires: USDA Forest Service Active Fire Mapping



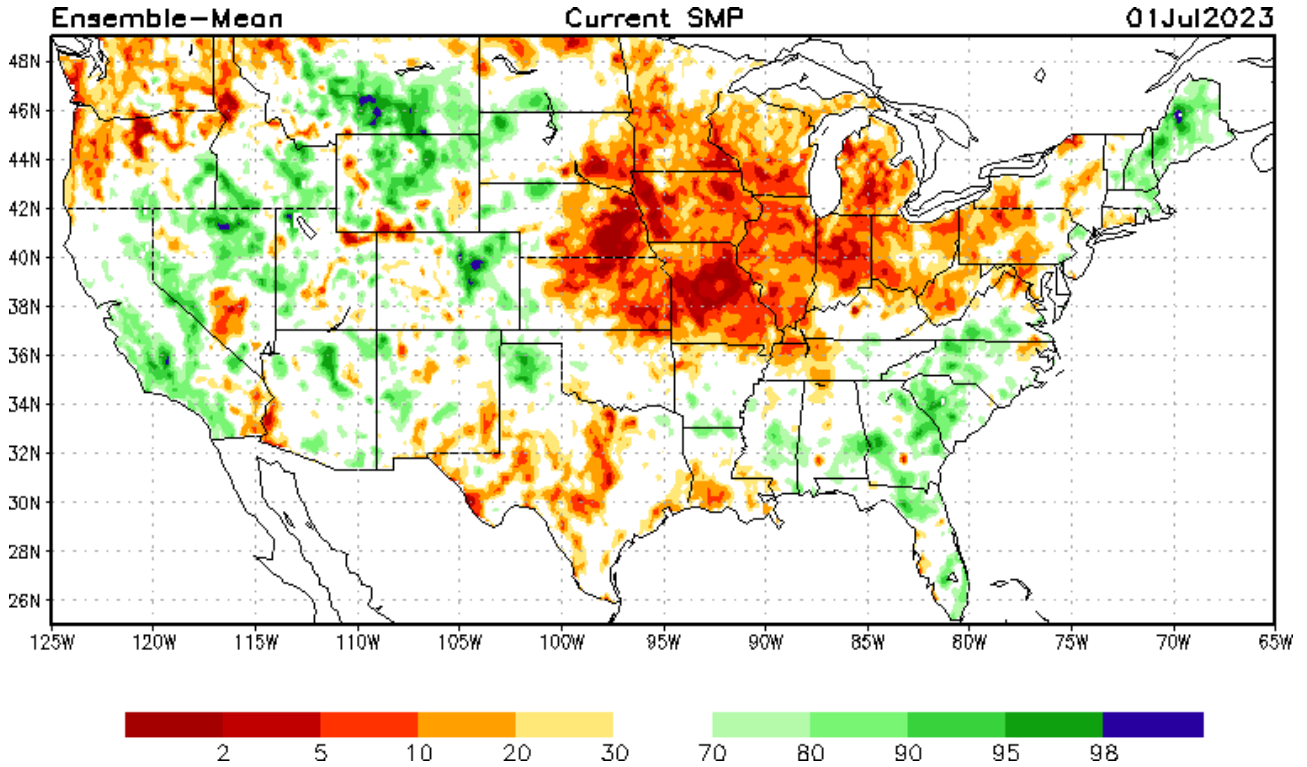
**Highlighted
Wildfire
Resources**

- [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

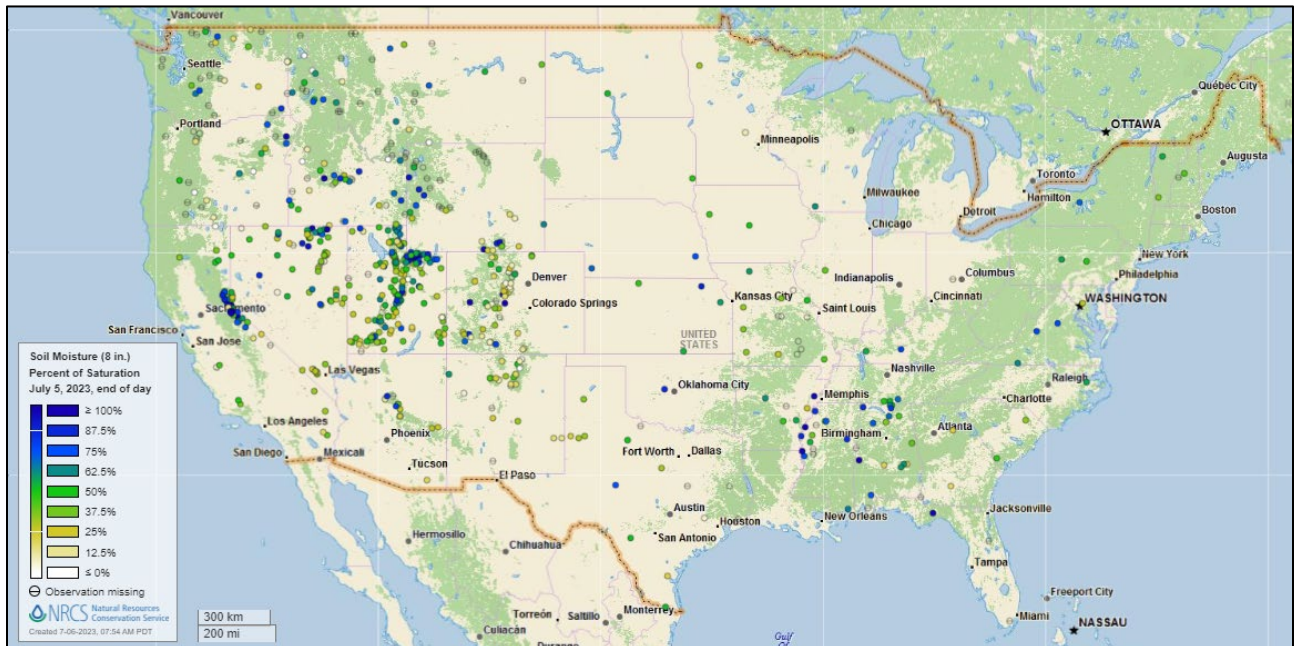


[Modeled soil moisture percentiles](#) as of July 01, 2023

Soil Moisture Percent of Saturation

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

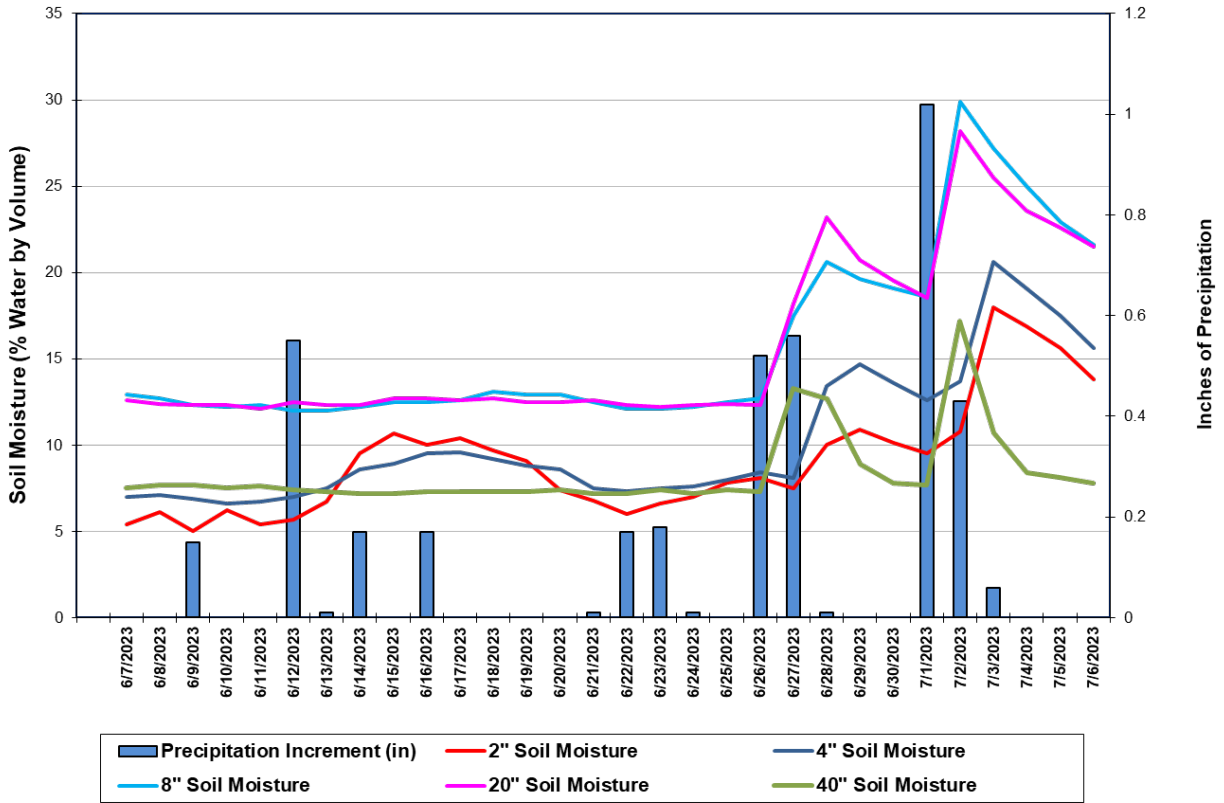
[U.S. soil moisture map at 8-inch depth:](#)



Soil Moisture

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

Mahantango Ck, Pennsylvania (SCAN site 2028)
Daily Mean Soil Moisture vs. Daily Precipitation



This chart shows the precipitation and soil moisture for the last 30 days at the [Mahantango Ck](#) SCAN site in Pennsylvania. Soil sensors reported a dramatic fluctuation in soil moisture readings at all sensor depths after the site received 2.96 inches of precipitation between June 26 – July 3. Total precipitation for the 30-day period was 4.02 inches.

Soil Moisture Data Portals

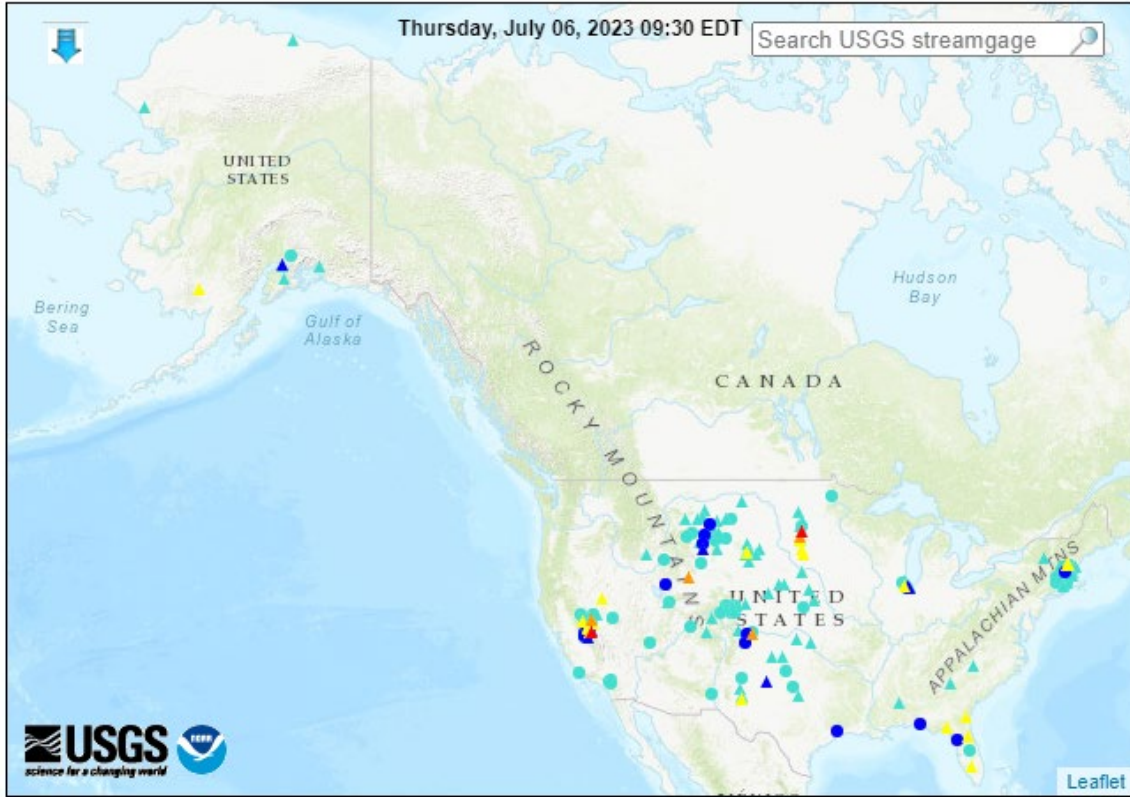
- [USCRN Soil Moisture](#)
- [National Soil Moisture Network](#)
- [NOAA Climate Prediction Center Soil Moisture](#)
- [NASA Grace](#)

Streamflow, Drought, Flood, and Runoff

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

Map of flood and high flow conditions

(6 in floods [moderate: 2, minor: 4], 19 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

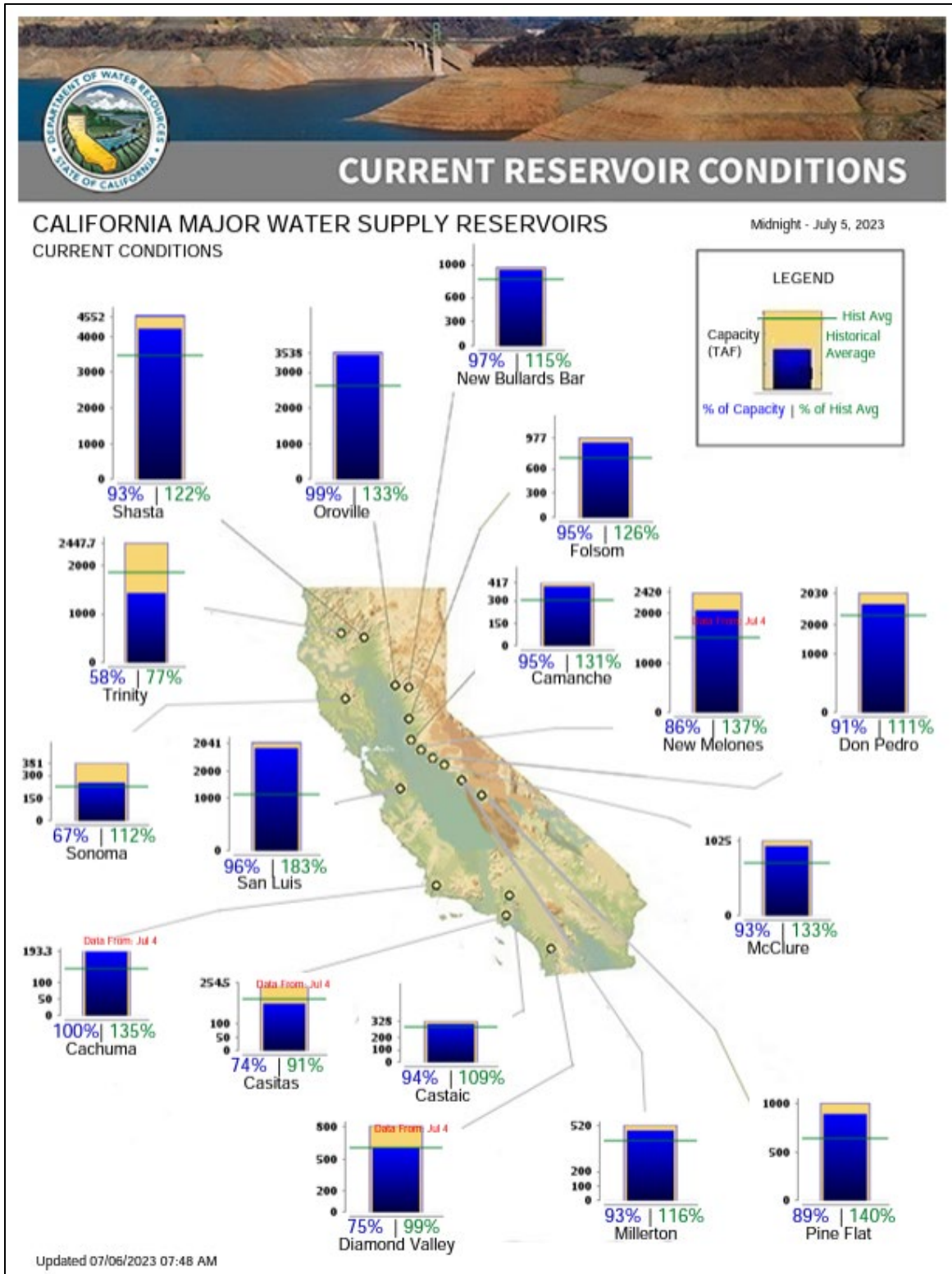
Hydromet Teacup Reservoir Depictions

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 July 06, 2023: “Through the weekend and into next week, hot weather will prevail across the South and much of the West, with the most anomalous heat becoming re-established across Texas and portions of neighboring states. Meanwhile in the Desert Southwest, pre-monsoon heat will regularly push temperatures to 110°F or higher at low-elevation sites. Minimal rainfall will accompany the Western heat, aside from ongoing showers in the central Rockies. Locally heavy showers will also extend eastward across parts of Kansas, Oklahoma, and the mid-South, including the Mississippi Delta. Five-day rainfall in those areas could total 2 to 4 inches or more. A separate area of rain, totaling 1 to 3 inches, will affect the middle and northern Atlantic States. In the Midwest, meaningful rain will be confined to the southern tier of the Corn Belt, with mostly dry weather expected during the next 5 days in the northern Corn Belt. The NWS 6- to 10-day outlook for July 11 – 15 calls for the likelihood of above-normal temperatures in New England and throughout the southern and western U.S., while cooler-than-normal conditions will cover the northern Plains and the Midwest. Meanwhile, near- or above-normal rainfall along and northeast of a line from the northern Rockies to the Mississippi Delta should contrast with drier-than-normal weather in most areas from Oregon and California to the western Gulf Coast region.”

Weather Hazards Outlook: [July 08 – 12, 2023](#)

Source: NOAA Weather Prediction Center















U.S. Day 3-7 Hazards Outlook

[About the Hazards Outlook](#)

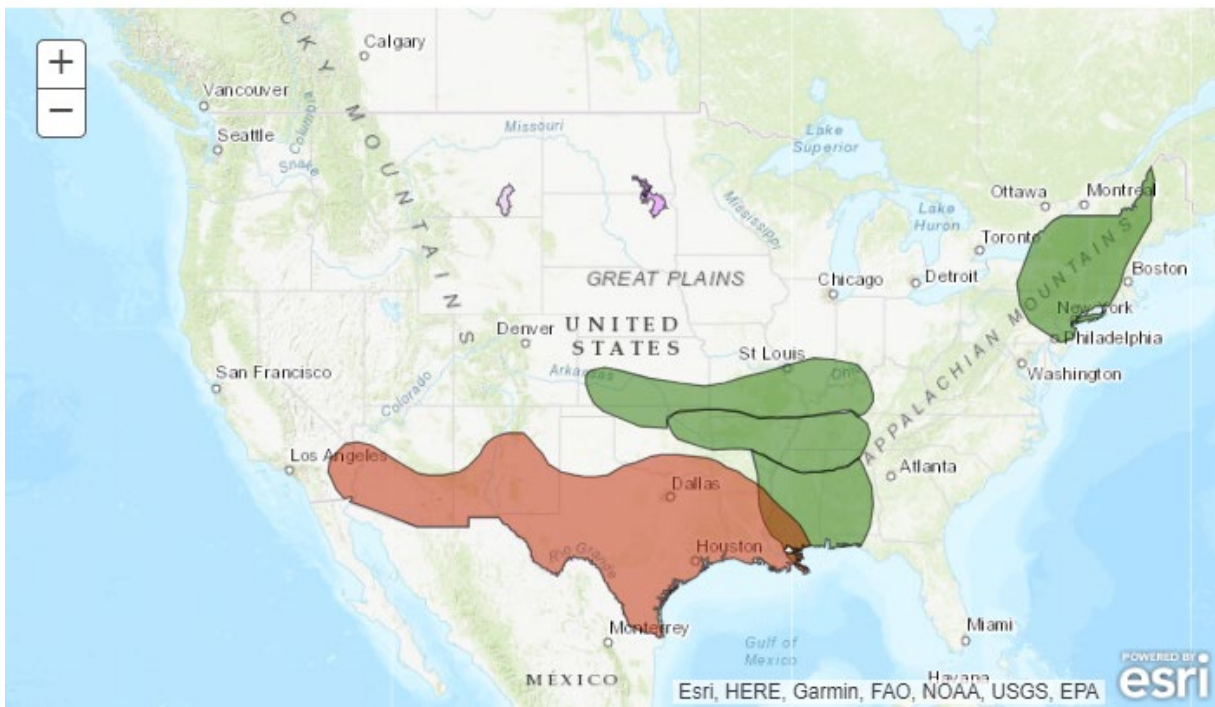
Created July 05, 2023

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 July 08, 2023 - July 12, 2023

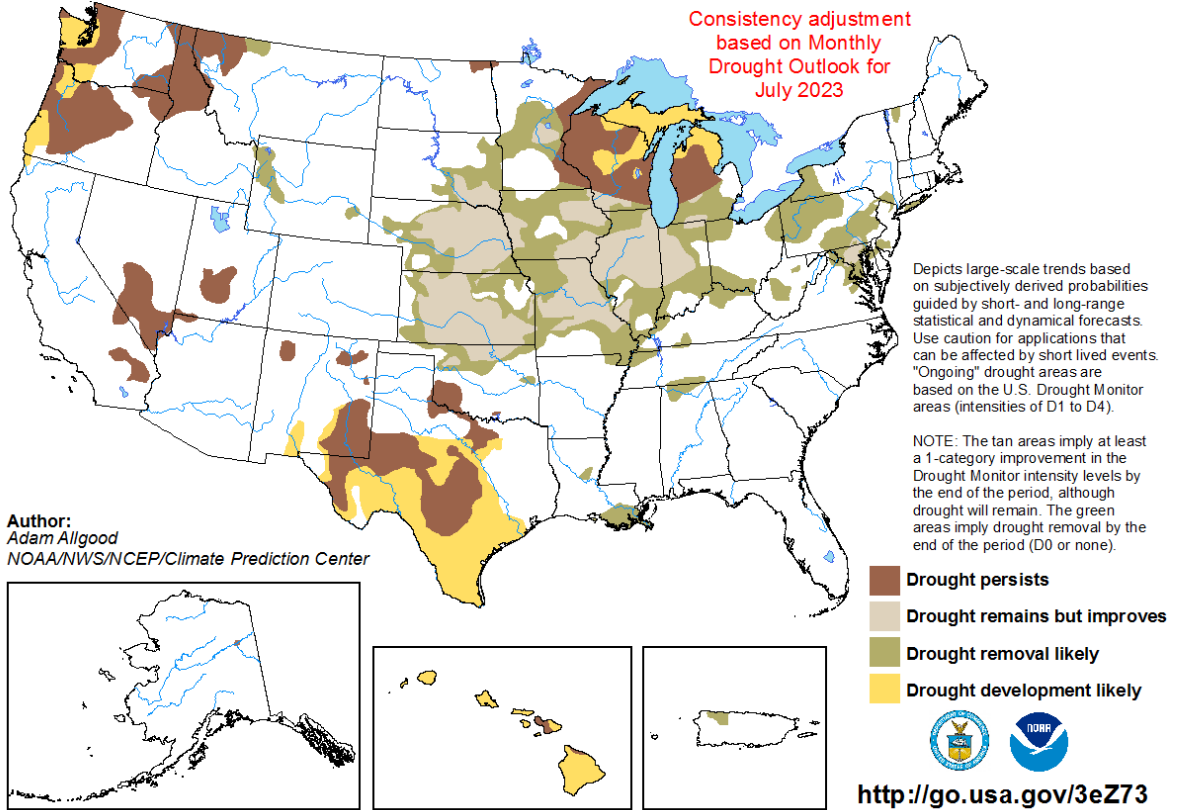


Seasonal Drought Outlook: July 01 – September 30, 2023

Source: National Weather Service

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

Valid for July 1 - September 30, 2023
Released June 30, 2023

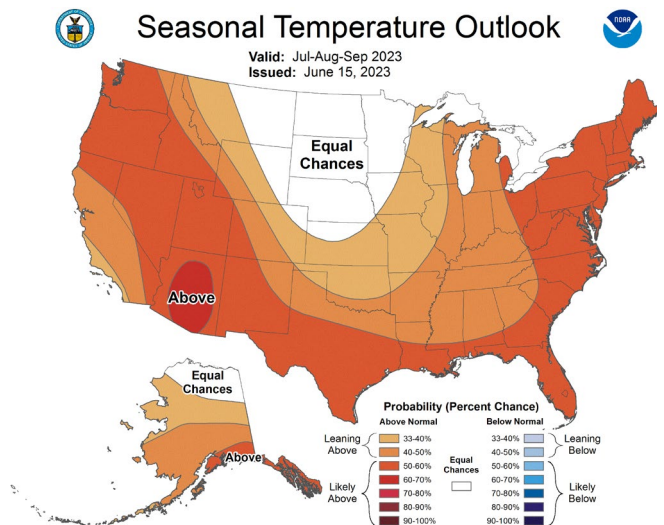
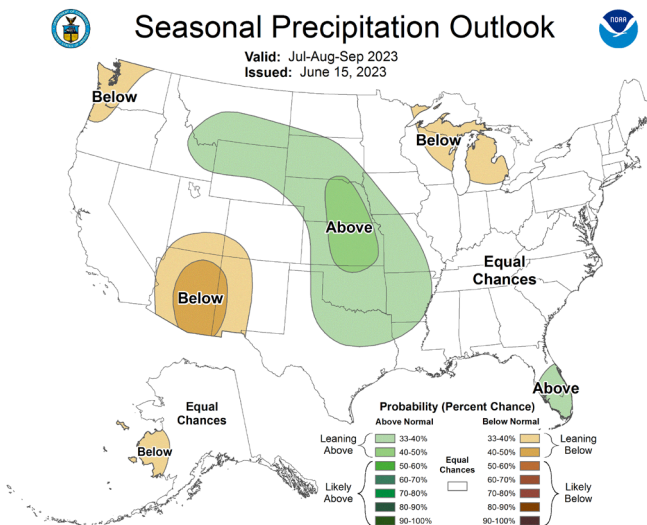


Climate Prediction Center Three-month Outlook

Source: National Weather Service

Precipitation

Temperature



[July-August-September 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](#).