



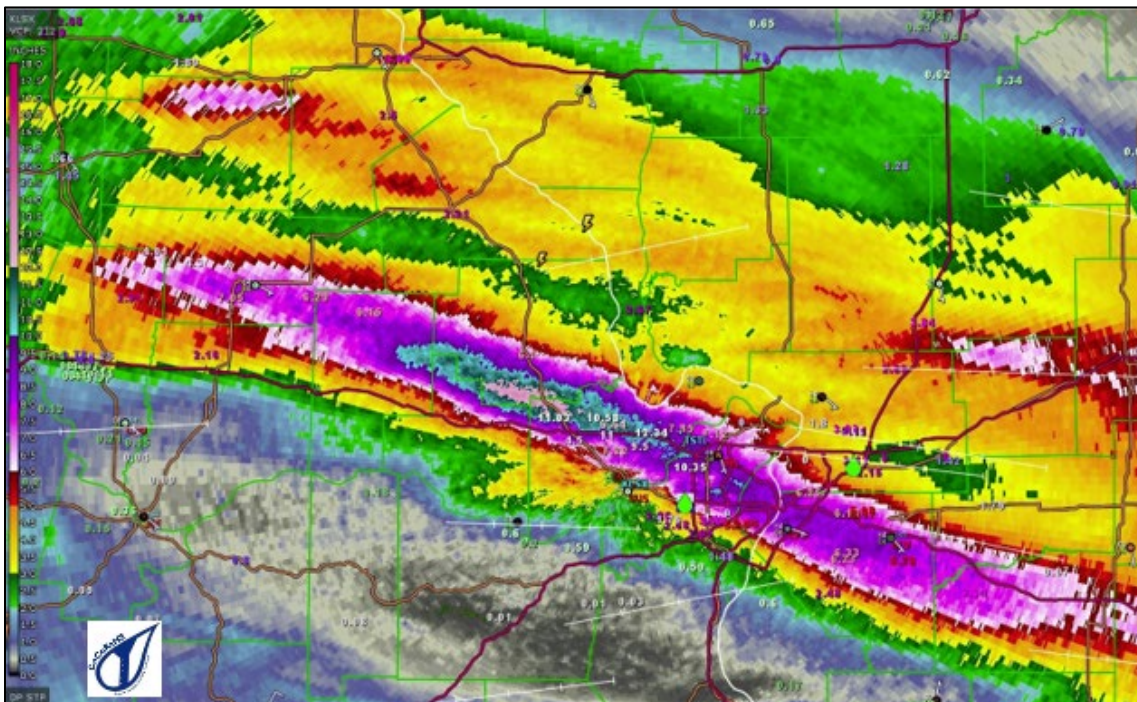
Water and Climate Update

July 28, 2022

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		

Record rainfall prompts flash flooding in St. Louis area



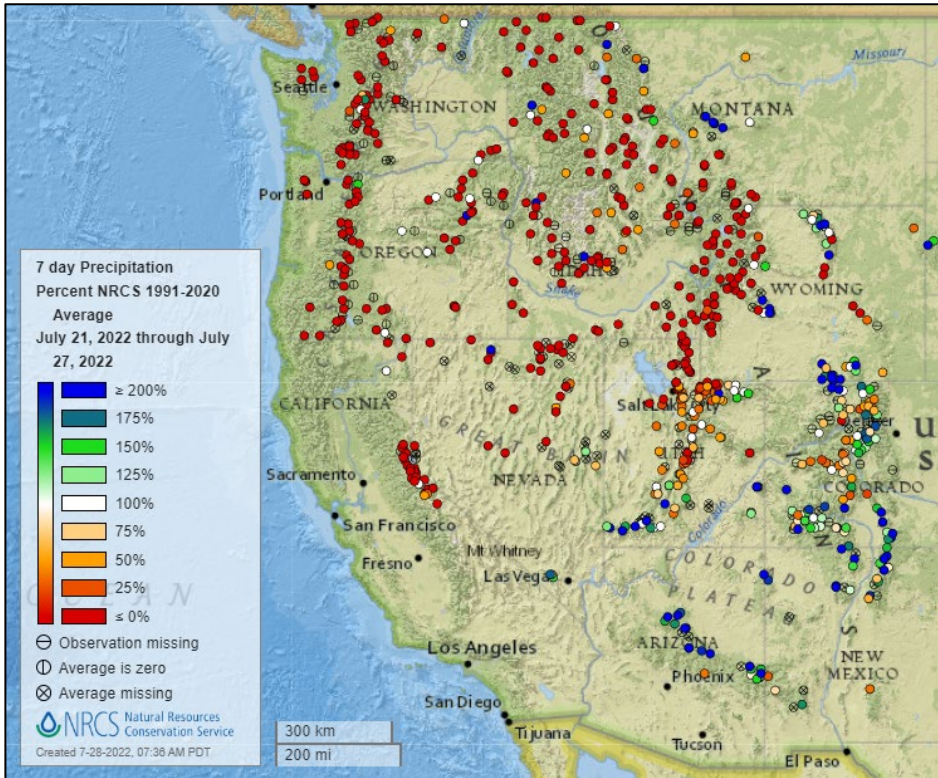
Record rainfall of 8.64 inches fell in St. Louis, Missouri on July 26, smashing their previous one-day record of 6.85 inches set in 1915. Most of the rain fell in a few short hours after midnight when the system stalled, dumping rain in a narrow band over the area. The heaviest daily rainfall of 12-13 inches fell northwest of St. Louis near the town of St. Peters, where one Community Collaborative Rain, Hail and Snow Network observer reported 12.34 inches. Flash flood emergency alerts were issued with many water rescue emergencies and evacuations from vehicles and homes.

Related:

- [Record rain causes heavy flooding in St. Louis area; 1 dead](#) – AP
- [ABC News Live: Record-breaking rainfall causes flash flooding in St. Louis](#) – ABC News
- [Residents describe having to flee their homes barefoot after record-breaking flooding in St. Louis. And there's more rain on the way](#) – CNN
- [At least 1 person is dead in historic St. Louis rainfall as cars are stranded on flooded streets and residents flee homes](#) – NBC News
- [St. Louis County residents devastated by historic flooding](#) – KSDK-TV (MO)
- [Record rain in St. Louis area brings flooding, highway closures, one death](#) – St. Louis Post-Dispatch (MO)

Precipitation

Last 7 Days, NRCS SNOTEL Network

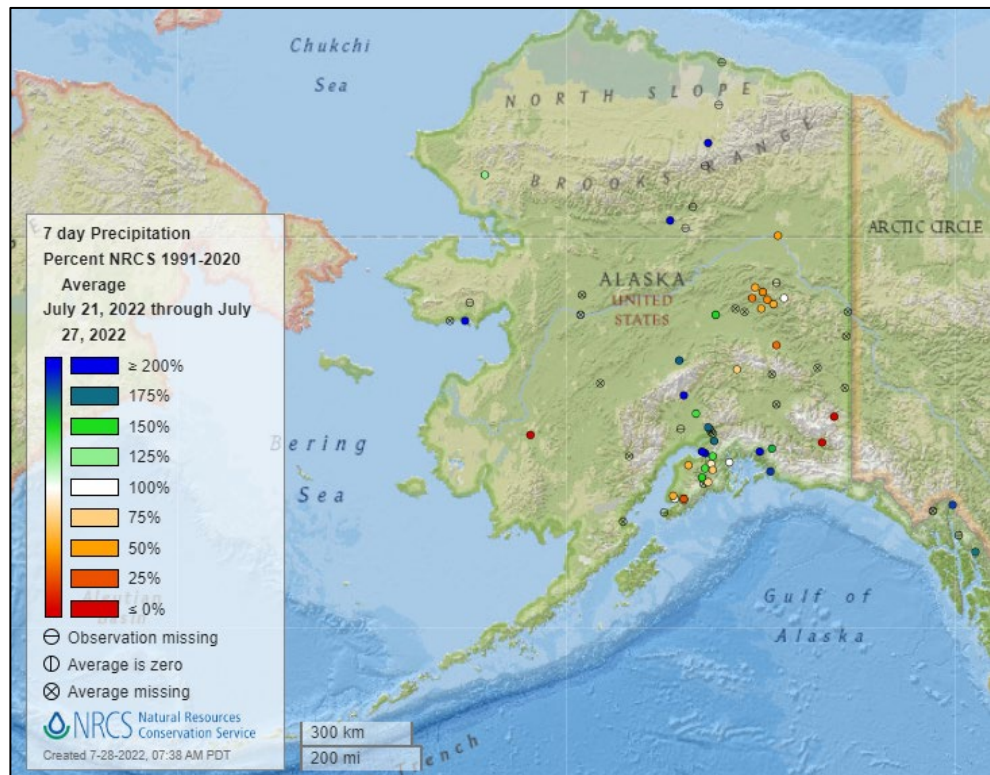


[7-day precipitation percent of average map](#)

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

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

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



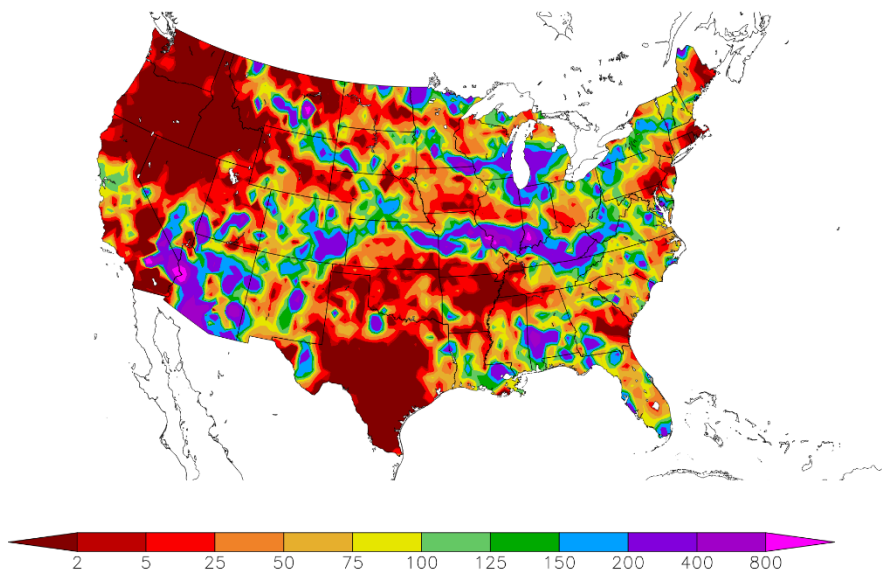
Last 7 Days, National Weather Service (NWS) Networks

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 (%)
7/21/2022 – 7/27/2022



Generated 7/28/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

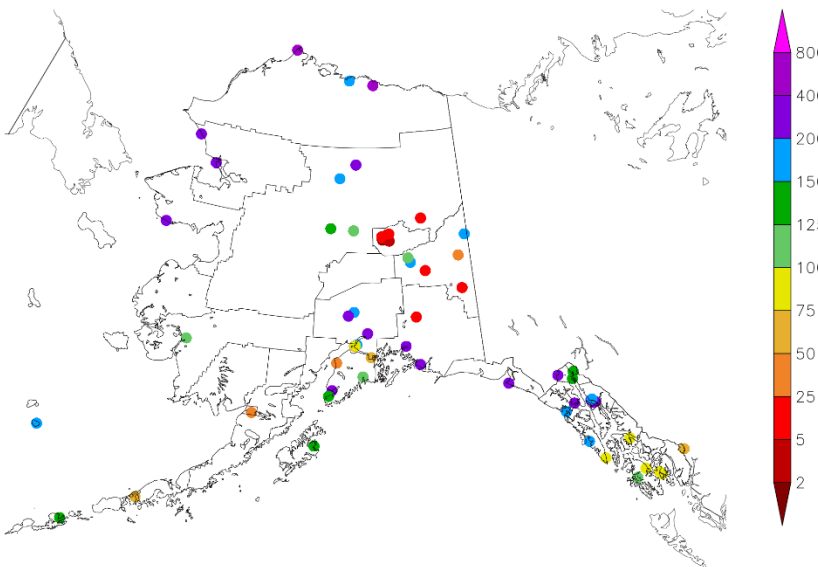
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Percent of Normal Precipitation (%)
7/21/2022 – 7/27/2022



Generated 7/28/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

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

Source: PRISM

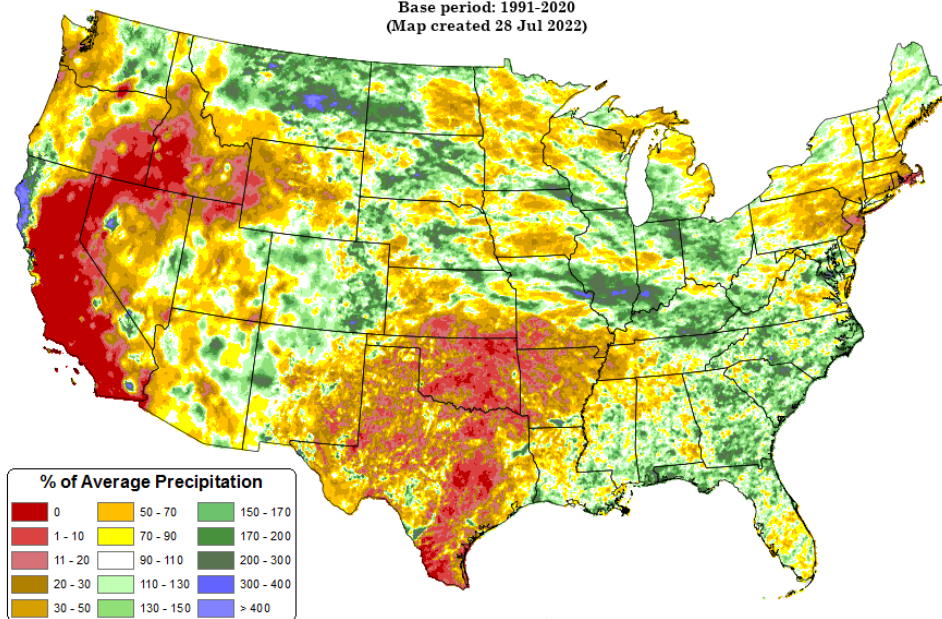
Total Precipitation Anomaly: 01 Jul 2022 - 27 Jul 2022

Period ending 7 AM EST 27 Jul 2022

Base period: 1991-2020

(Map created 28 Jul 2022)

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



Copyright (c) 2022, PRISM Climate Group, Oregon State University

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

Source: PRISM

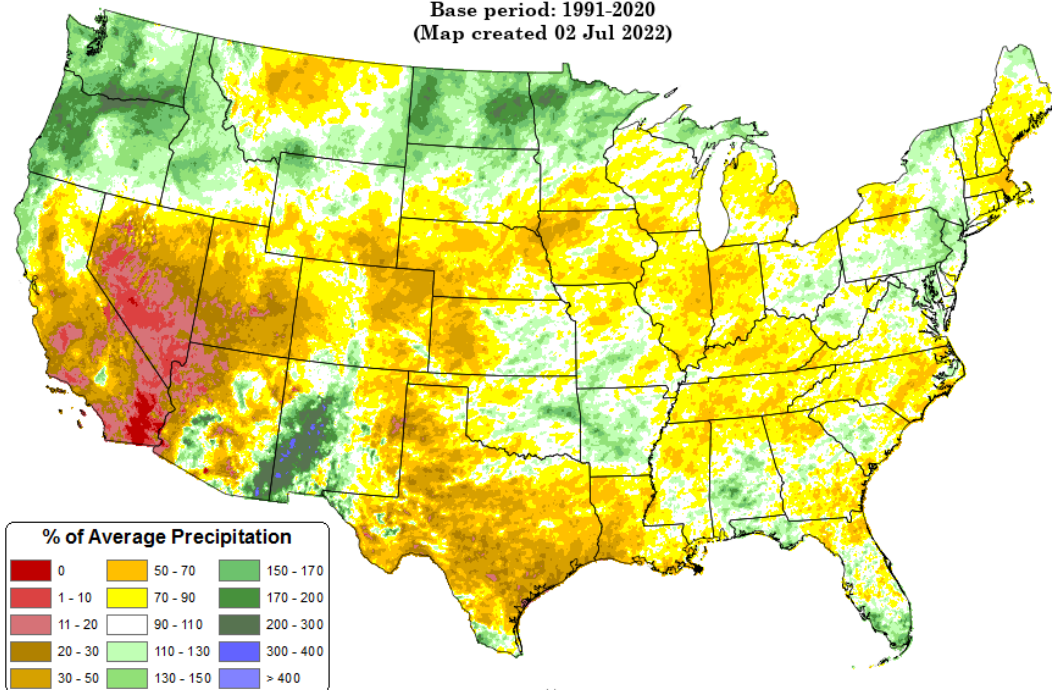
[April through June 2022 precipitation anomaly map](#)

Total Precipitation Anomaly: Apr 2022 - Jun 2022

Period ending 7 AM EST 30 Jun 2022

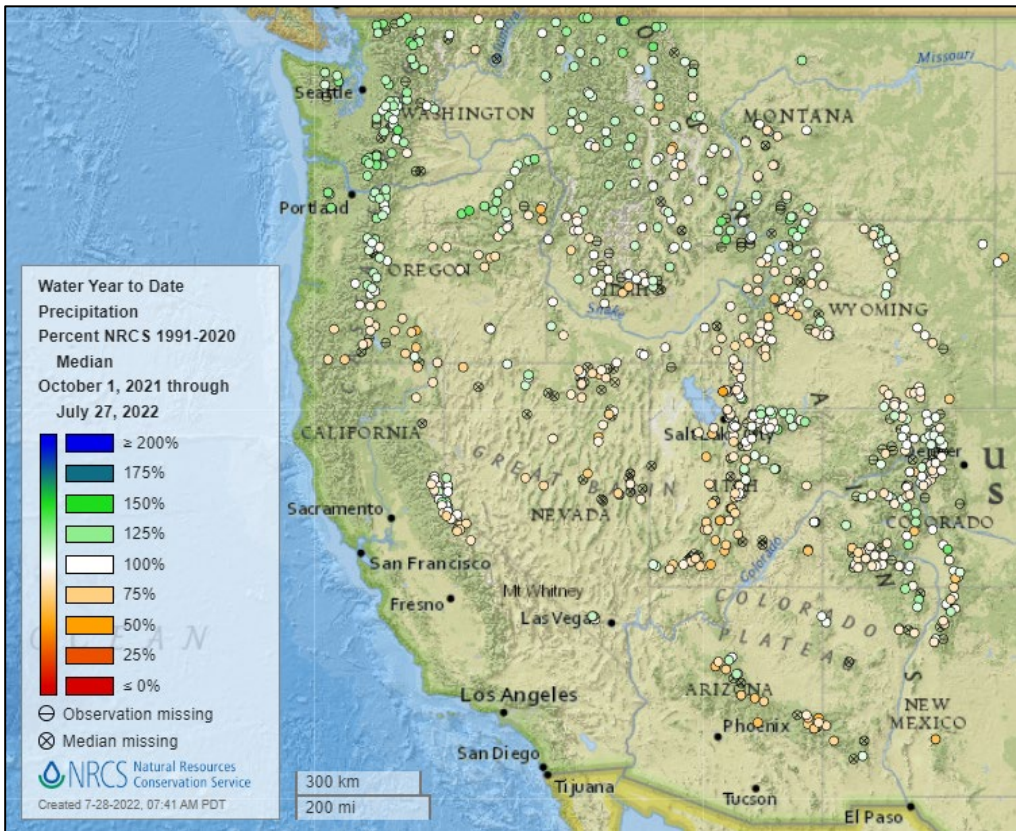
Base period: 1991-2020

(Map created 02 Jul 2022)



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Water Year-to-Date, NRCS SNOTEL Network

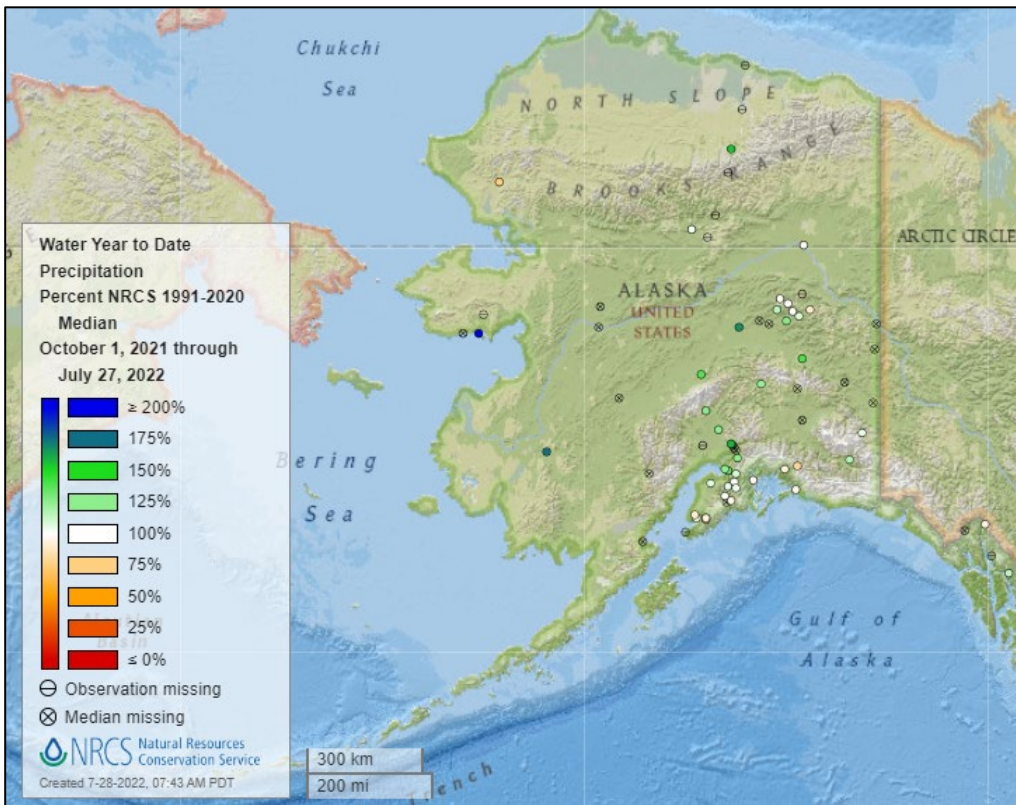


[2022 water year-to-date precipitation percent of median map](#)

See also:

[2022 water year-to-date precipitation percent of average map](#)

[2022 water year-to-date precipitation values \(inches\) map](#)



[Alaska 2022 water year-to-date precipitation percent of median map](#)

See also:

[Alaska 2022 water year-to-date precipitation percent of average map](#)

[Alaska 2022 water year-to-date precipitation values \(inches\) map](#)

Temperature

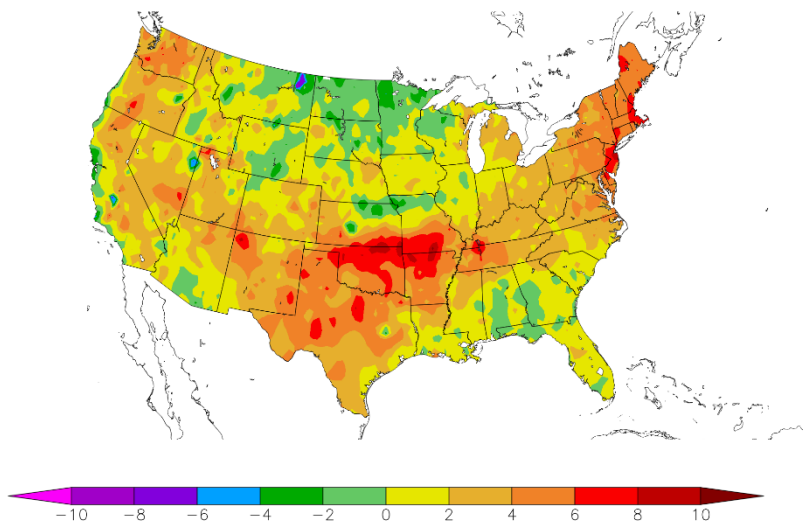
Last 7 Days, National Weather Service (NWS) Networks

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)
7/21/2022 – 7/27/2022



Generated 7/28/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

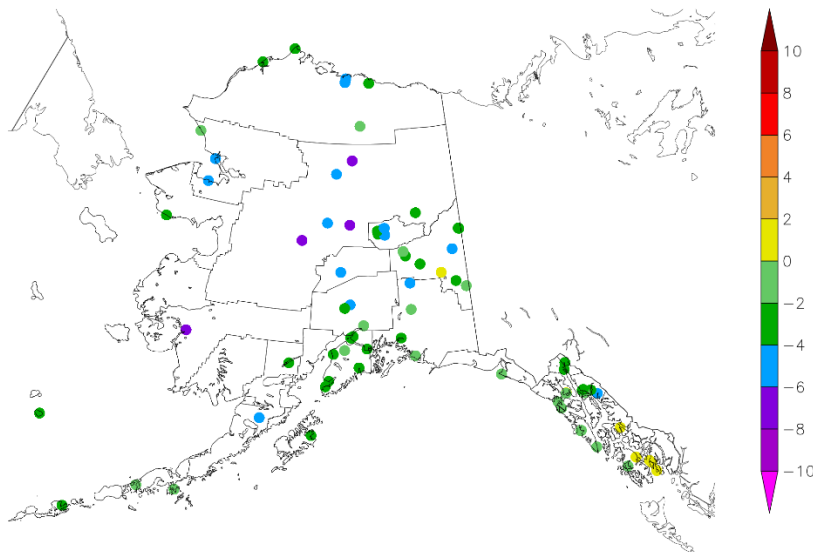
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)
7/21/2022 – 7/27/2022



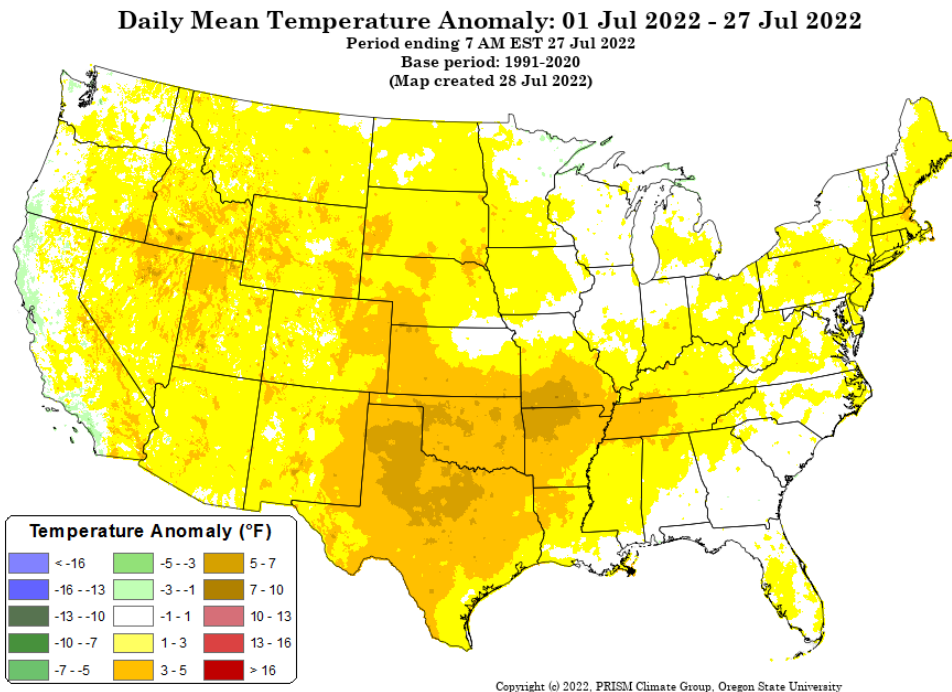
Generated 7/28/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

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

Source: PRISM

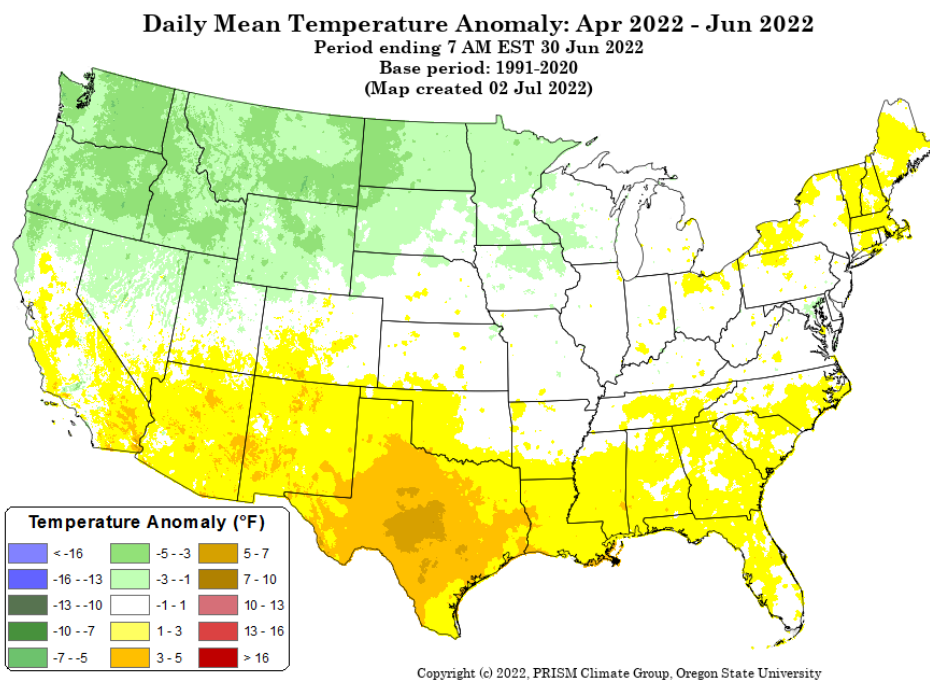
[Month-to-date national daily mean temperature anomaly map](#)



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

Source: PRISM

[April through June 2022 daily mean temperature anomaly map](#)



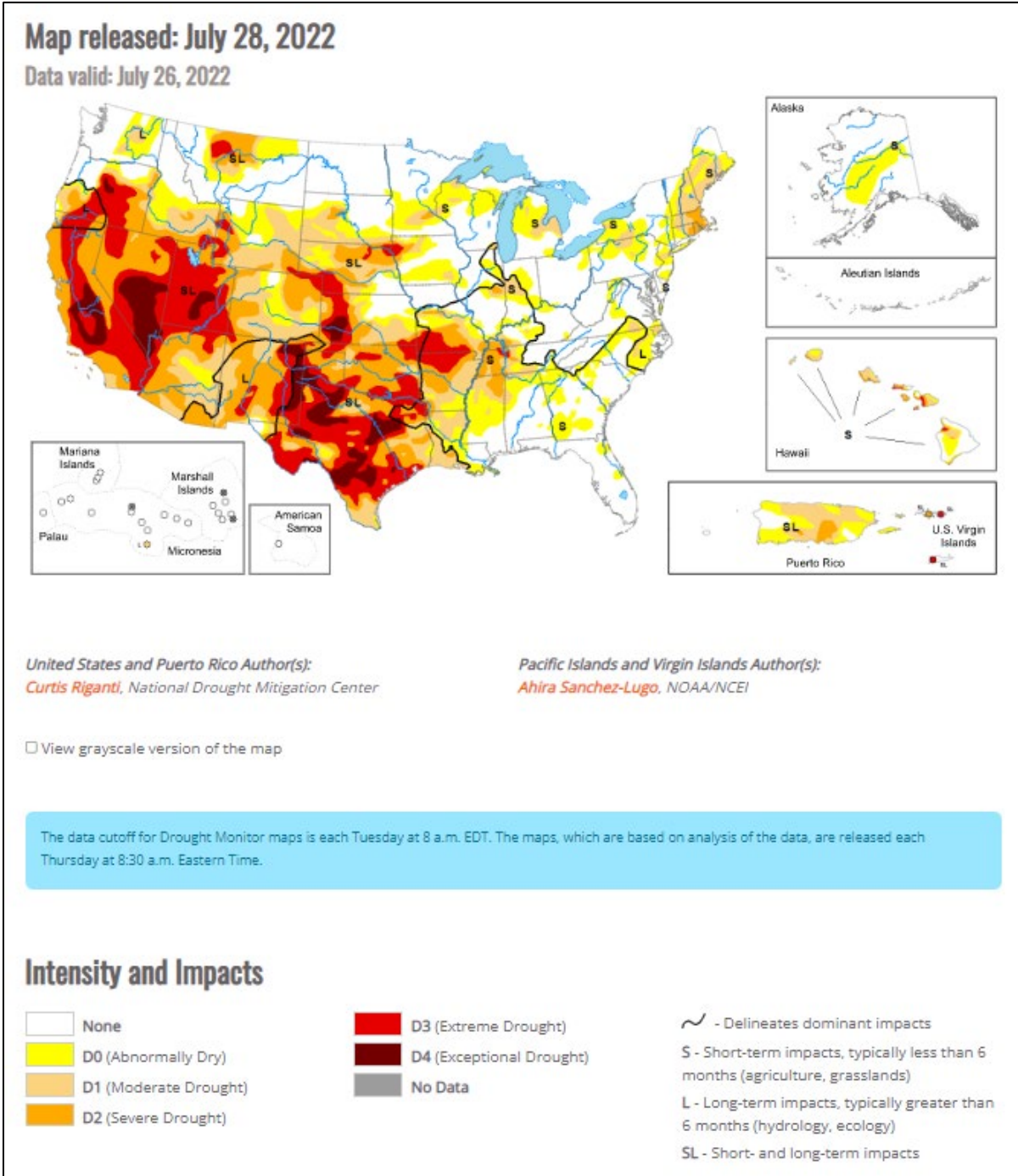
Drought

[U.S. Drought Monitor](#)

Source: National Drought Mitigation Center

[U.S. Drought Portal](#)

Source: NOAA



Current [National Drought Summary](#), July 26, 2022

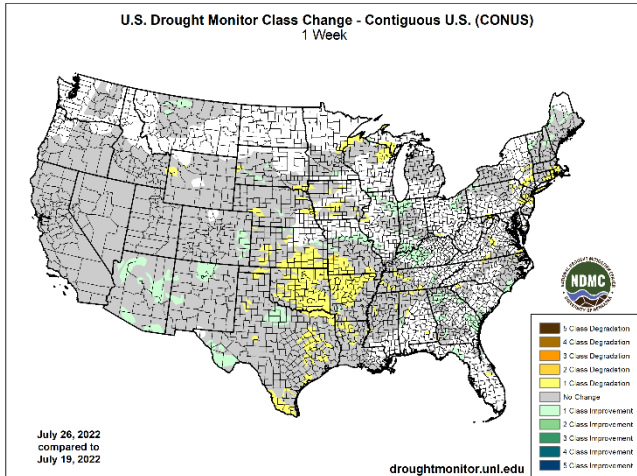
Source: National Drought Mitigation Center

“Drought persisted across much of the West this week, while flash drought over parts of the Great Plains, Ozarks, and Mississippi Valley continued to intensify and cause agricultural problems. Short-term drought also expanded over parts of the Northeast this week, where deficits in short-term precipitation and streamflows mounted in some areas. Conditions locally improved in parts of the Southwest due to an influx of rainfall from the North American Monsoon. Farther east into the lower Great Plains and Midwest, localized heavy rainfall led to improvements, including severe flooding in the St. Louis Metro area, which previously had been experiencing abnormally dry conditions. In Alaska, moderate drought was mostly removed after recent rainfall improved conditions there.”

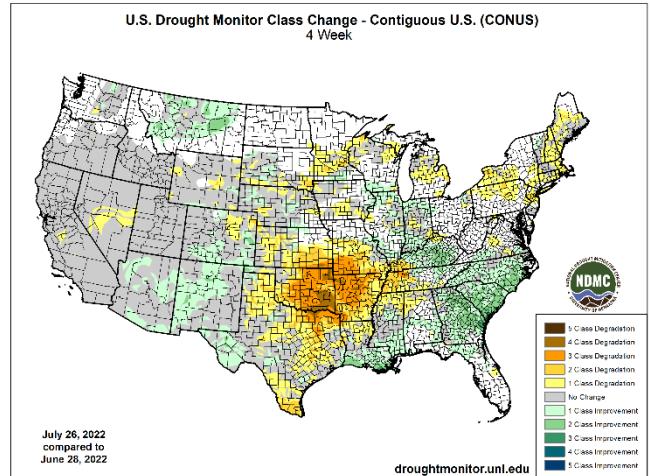
Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

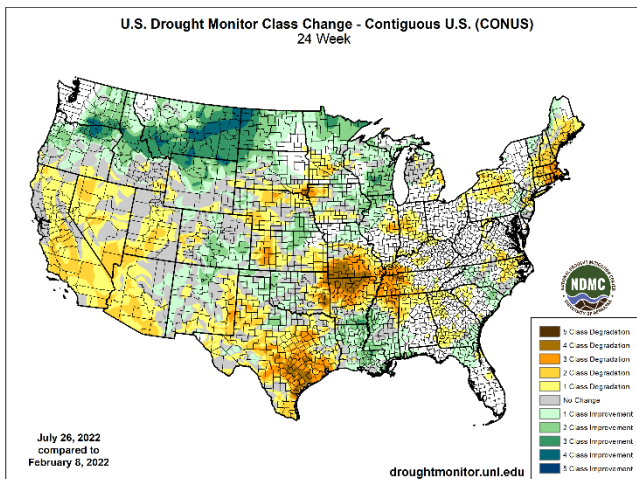
1 Week



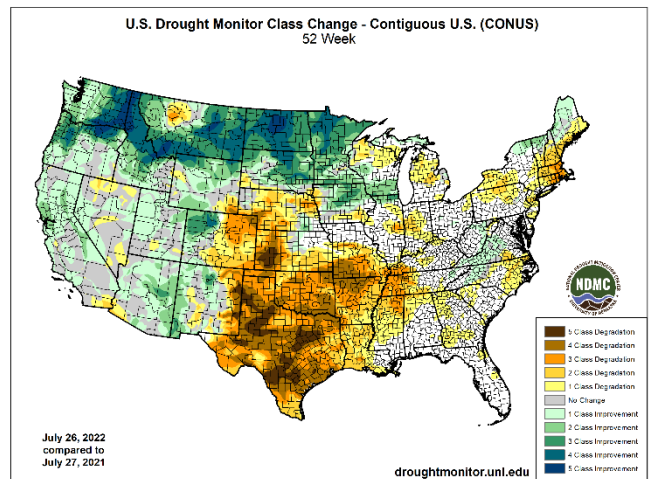
1 Month



6 Months



1 Year



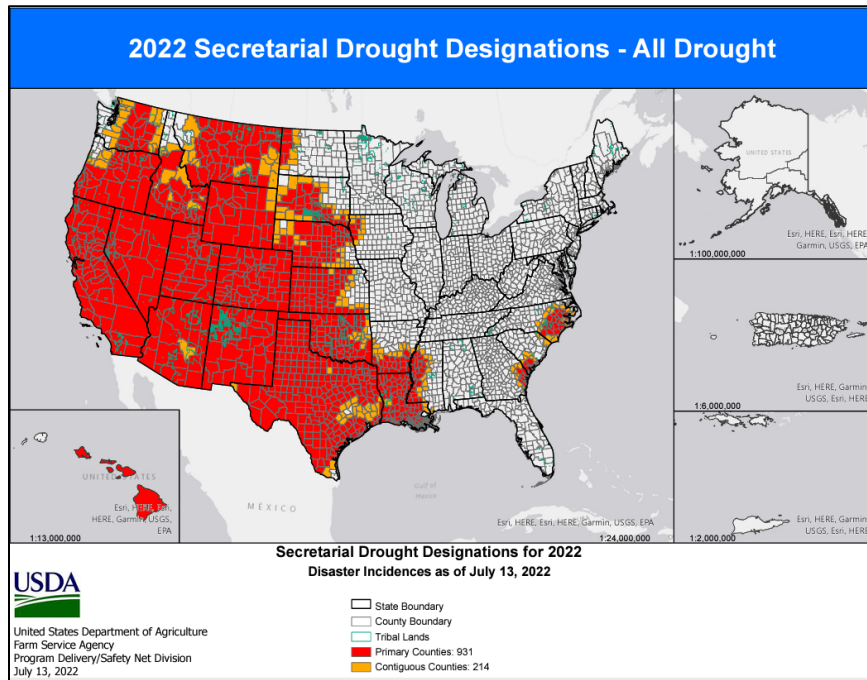
[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

Highlighted Drought Resources

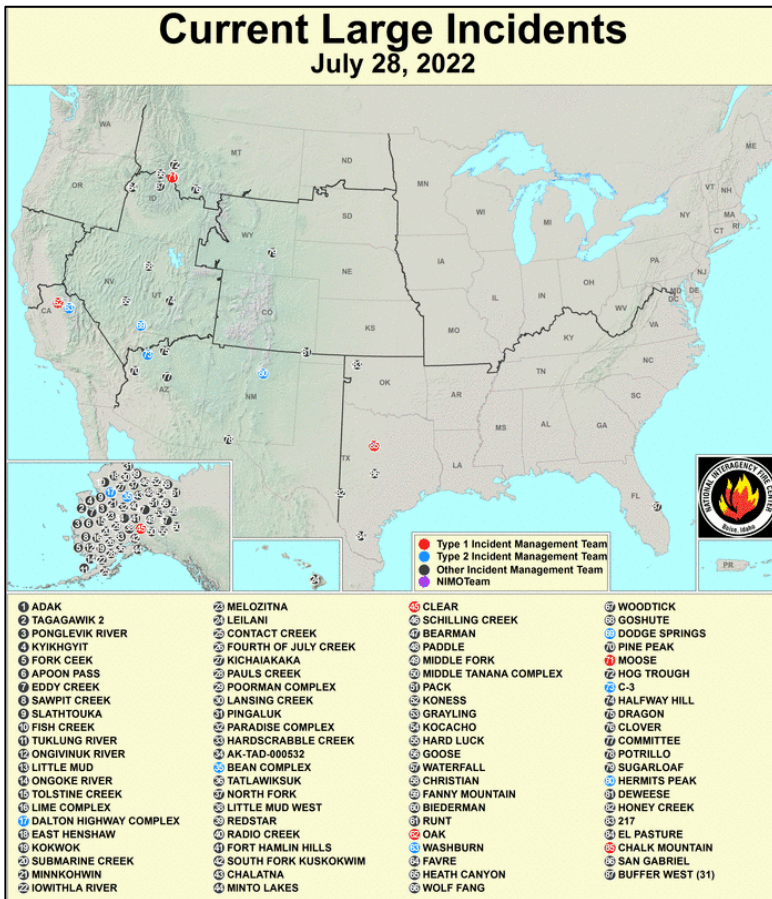
- [Drought Impact Reporter](#)
- [Quarterly Regional Climate Impacts and Outlook](#)
- [U.S. Drought Portal Indicators and Monitoring](#)
- [U.S. Population in Drought, Weekly Comparison](#)
- [USDA Disaster and Drought Information](#)

USDA Secretarial Drought Designations

Source: USDA Farm Service Agency



Wildfires: USDA Forest Service Active Fire Mapping



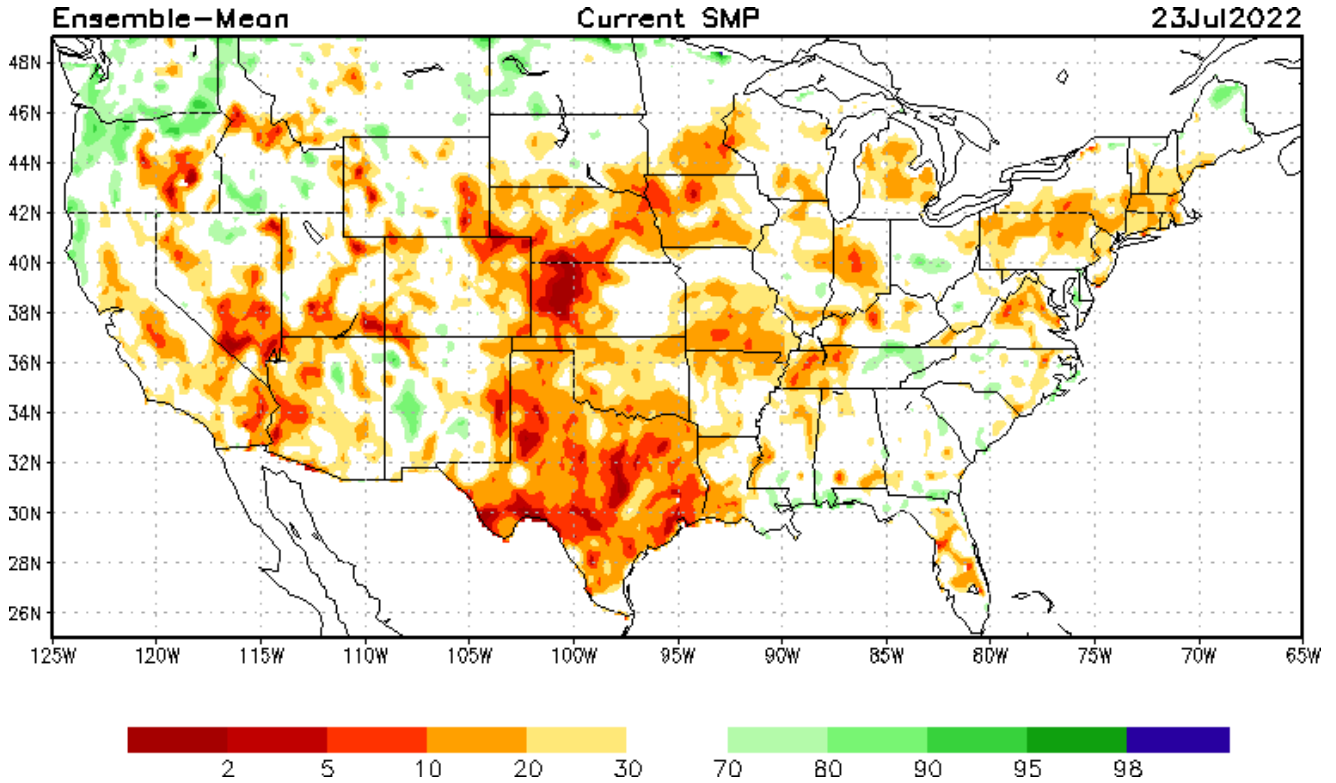
**Highlighted
Wildfire
Resources**

- [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

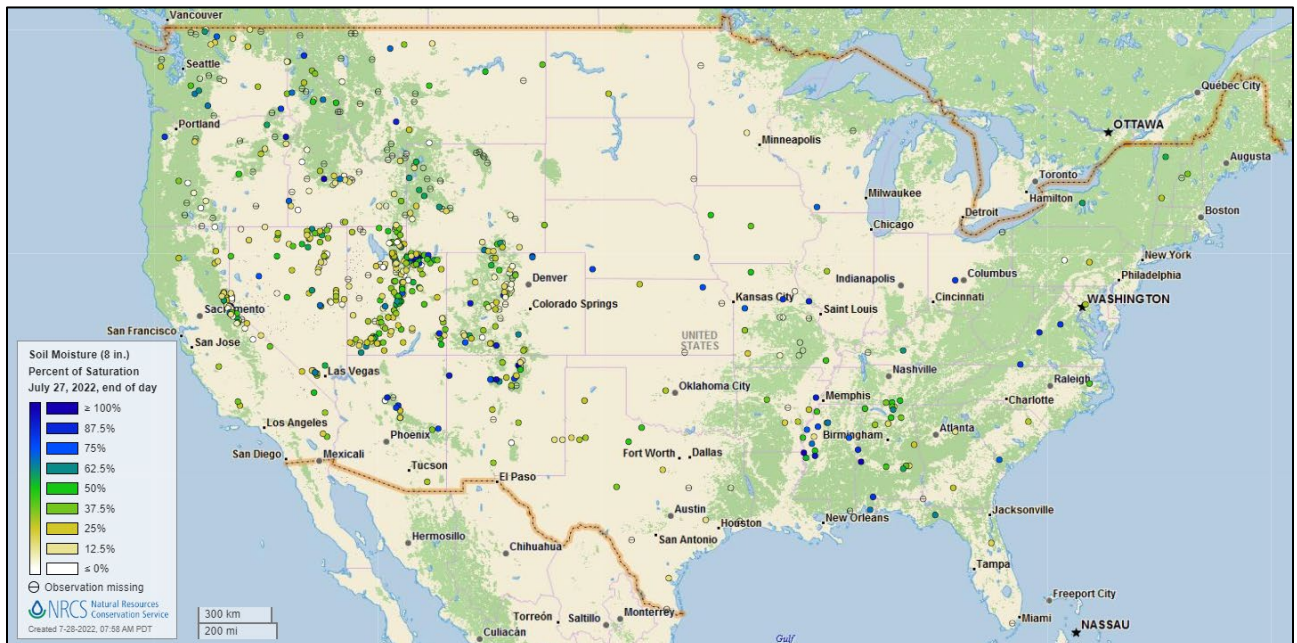


[Modeled soil moisture percentiles](#) as of July 23, 2022

Soil Moisture Percent of Saturation

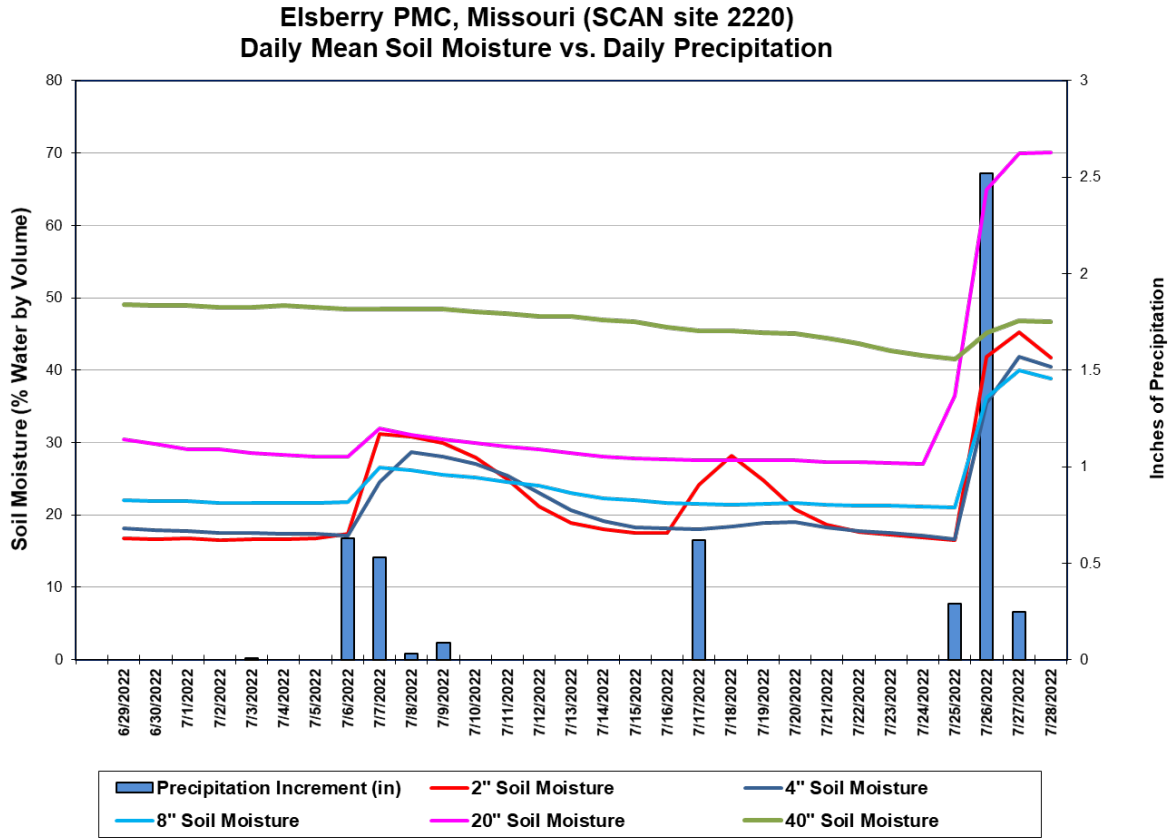
Source: NRCS SNOTEL and [Soil Climate Analysis Network](#) (SCAN)

[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 [Elsberry PMC](#) SCAN site in Missouri. Soil moisture levels at all sensor depths increased from the 2.52 inches of rainfall received on July 26. Total precipitation received during the period was 4.97 inches.

Soil Moisture Data Portals

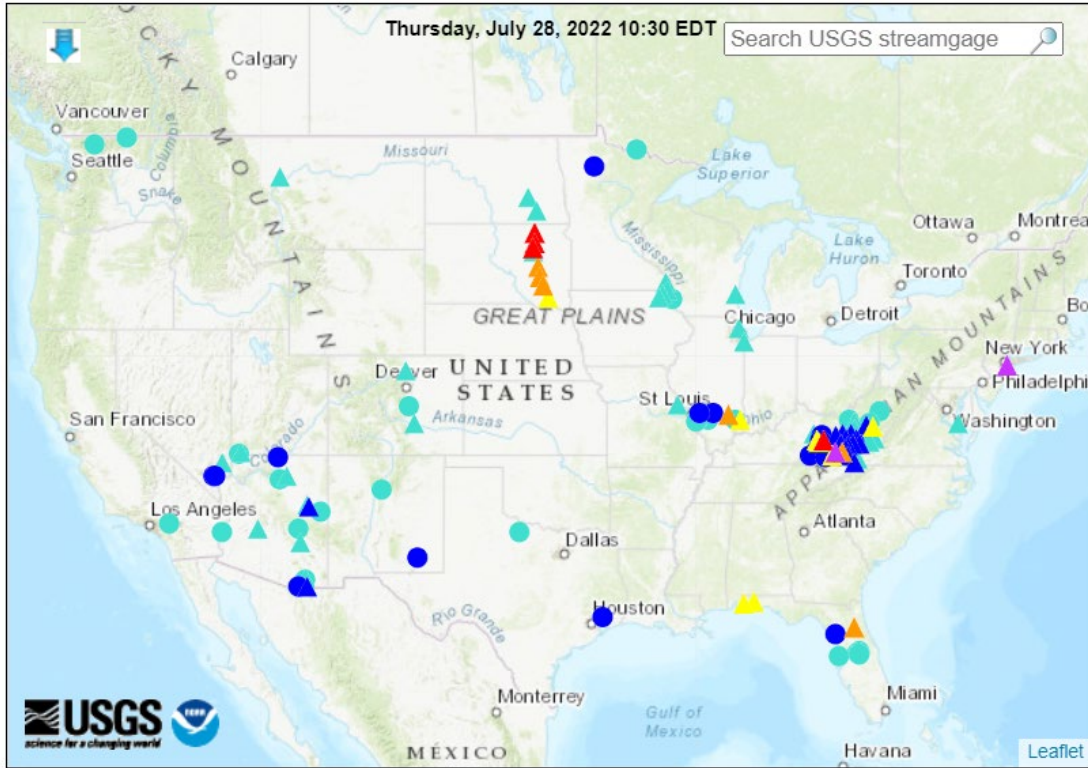
- [USCRN Soil Moisture](#)
- [National Soil Moisture Network](#)
- [NOAA Climate Prediction Center Soil Moisture](#)
- [NASA Grace](#)

Streamflow, Drought, Flood, and Runoff

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

Map of flood and high flow conditions

(12 in floods [major: 2, moderate: 4, minor: 6], 8 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 without flood stage			△ Streamgage with flood stage			

[WaterWatch: Streamflow, drought, flood, and runoff conditions](#)

Reservoir Storage

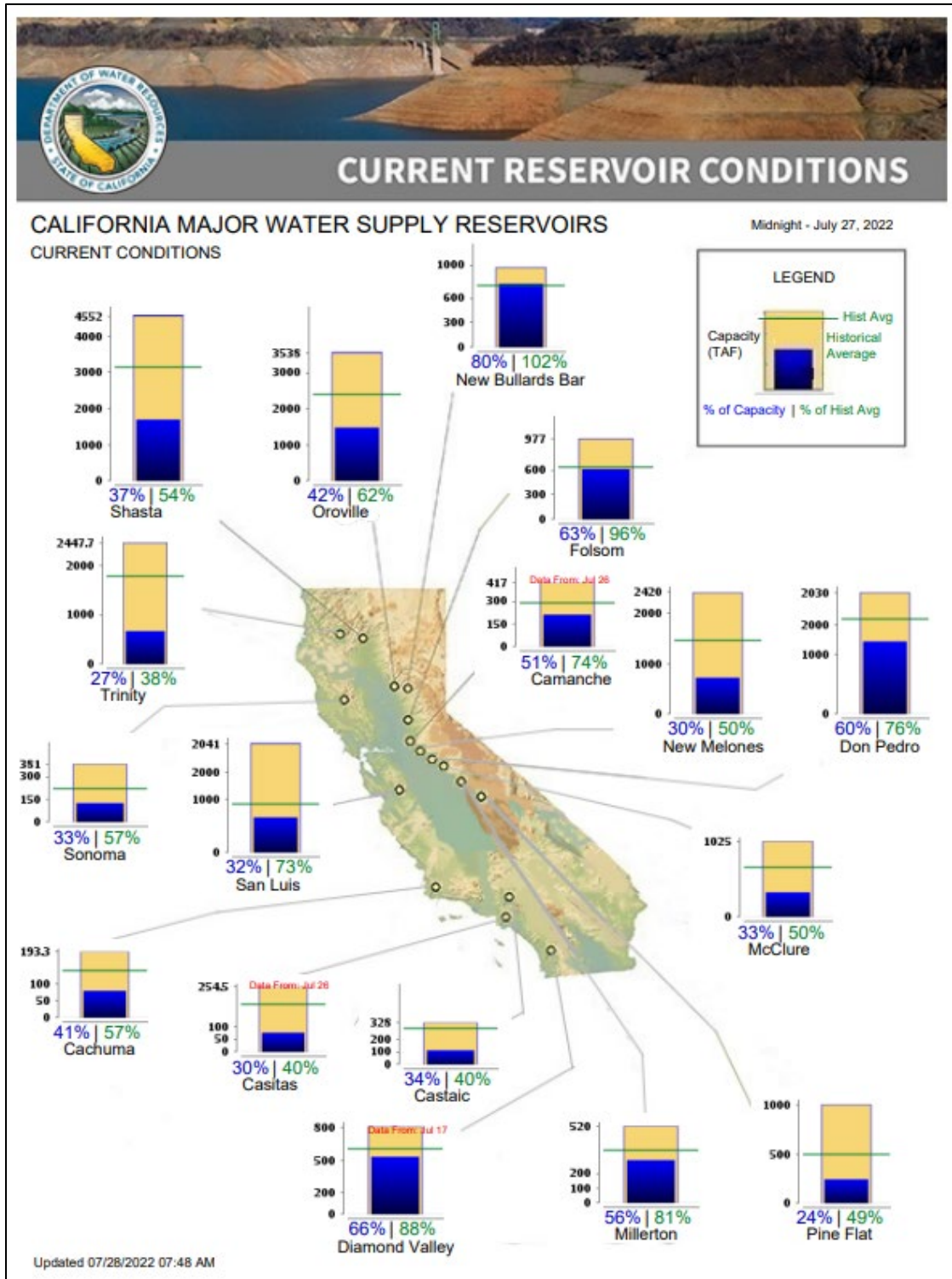
Hydromet Teacup Reservoir Depictions

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 28, 2022: “During the next several days, dry lightning strikes could ignite new wildfires across portions of the interior Northwest. Late in the weekend and early next week, Western heat will slowly ease. However, extreme heat will shift eastward, with triple-digit (100-degree) high temperatures developing by Monday on the northern High Plains. Heat will also begin to build across the western Corn Belt, but temperatures in the remainder of the Midwest will be favorable for reproductive to filling summer crops. Hot, mostly dry weather will linger, however, across the Deep South, from Texas to the southern Atlantic Coast. During the next several days, periods of significant rain should fall from the Four Corners region eastward to the middle Atlantic Coast, including southern Kansas, northern Oklahoma, the Ozark Plateau, and the Tennessee Valley. In contrast, little or no rain will fall across the Pacific Coast States and the northern half of the U.S. The NWS 6- to 10-day outlook for August 2 – 6 calls for the likelihood of above-normal temperatures throughout the central and eastern U.S., while cooler-than-normal conditions will prevail in the West. Meanwhile, near- or below-normal rainfall in most areas from the Plains to the East Coast should contrast with wetter-than-normal weather in the West, except along and near the Pacific Coast.”

Weather Hazards Outlook: [July 30 – August 03, 2022](#)

Source: NOAA Weather Prediction Center

U.S. Day 3-7 Hazards Outlook

[About the Hazards Outlook](#)

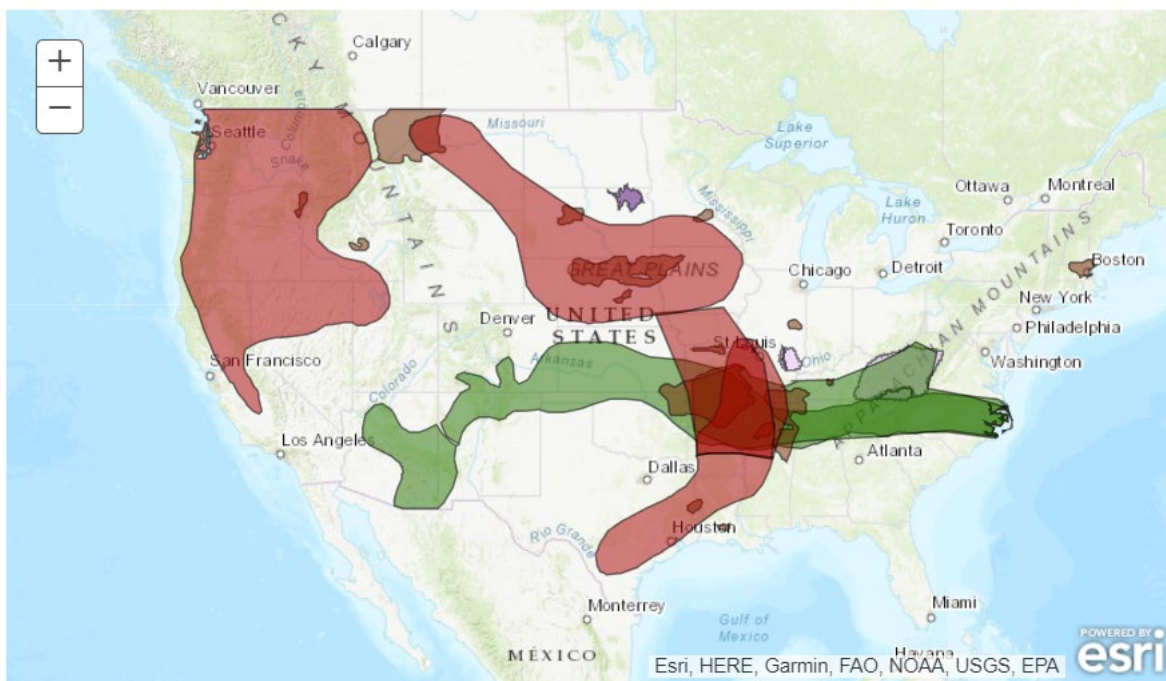
Created July 27, 2022

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 checked="" 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 July 30, 2022 - August 03, 2022

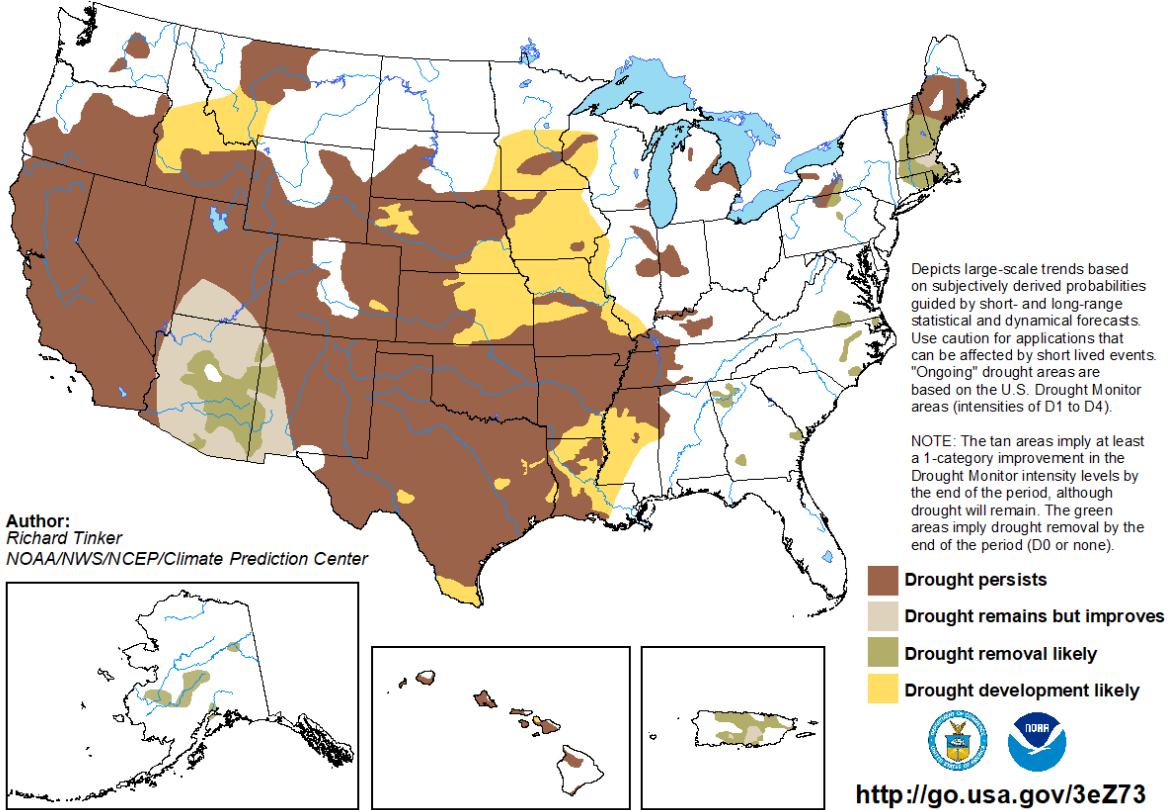


Seasonal Drought Outlook: [July 21 – October 31, 2022](#)

Source: National Weather Service

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

Valid for July 21 - October 31, 2022
Released July 21

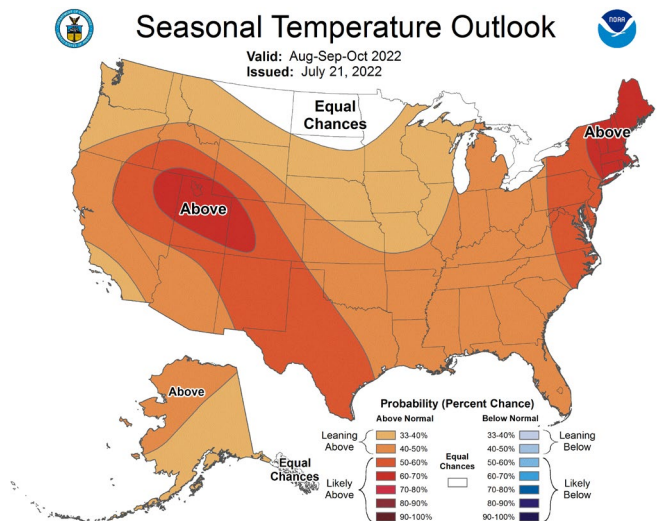
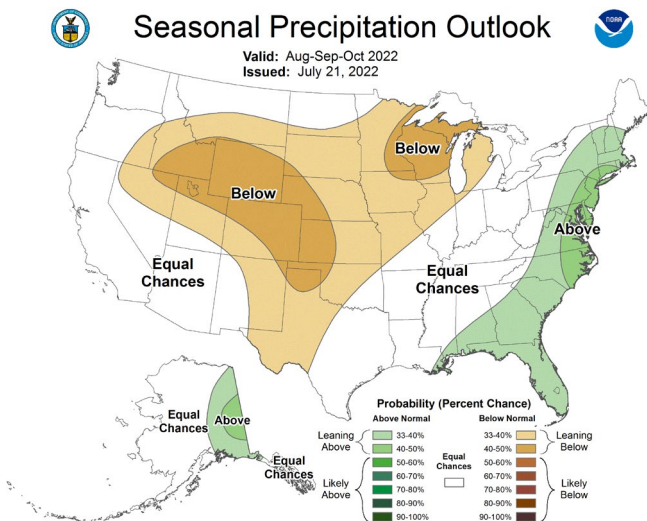


Climate Prediction Center 3-Month Outlook

Source: National Weather Service

Precipitation

Temperature



[August-September-October 2022 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](#).