



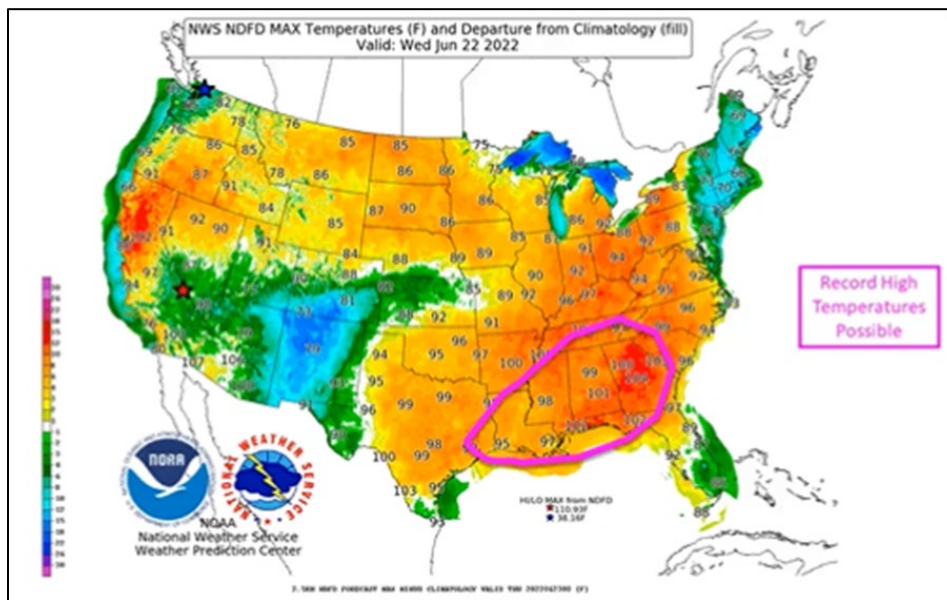
Water and Climate Update

June 23, 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		

Summer begins with heat wave and record temperatures



As summer officially begins, the country is dominated by a heatwave with record high temperatures. As of June 21, 35 million Americans were under heat advisories with some areas experiencing a heatwave continuing from last week. The heat dome dominated the Plains as temperatures reached 15-20 degrees above normal. As the heat moves east, the high temperatures are expected to topple scores of records. Cities in the South are forecasted to have dangerous heat indexes well above 100 degrees.

Related:

[At least a dozen high-temperature records were tied or broken across Eastern US in latest heat wave](#) – CNN

[Summer officially begins with record heat as 65 million Americans can expect highs above 100° this week](#) – CNN

[Massive heat dome to bake large parts of US this week: ‘Like a convection oven’](#) – NY Post

[Second heat wave expected to bring temps above 100 for 20% of people in US](#) - CNN

[Dangerous heat hits South, North and West: Latest forecast](#) – ABC News

[Graphics: Record-high temperatures from heat dome affect millions](#) – Tennessean

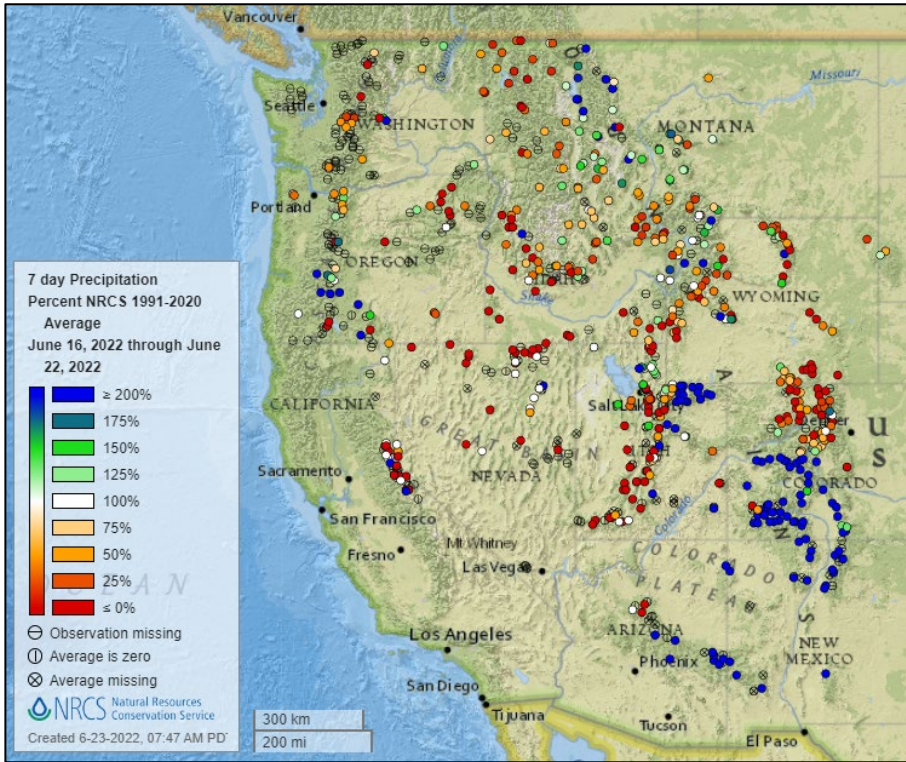
[Heat wave threatens 100 million people in the US, closing schools and killing cattle. It may last another week.](#) – Business Insider

[Extreme heat stretches into second straight week for most Americans](#) – Yahoo News

[First day of summer to bring ‘extreme’ heat, humidity and possibly buckled roads to parts of US](#) – USA Today.

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](#)



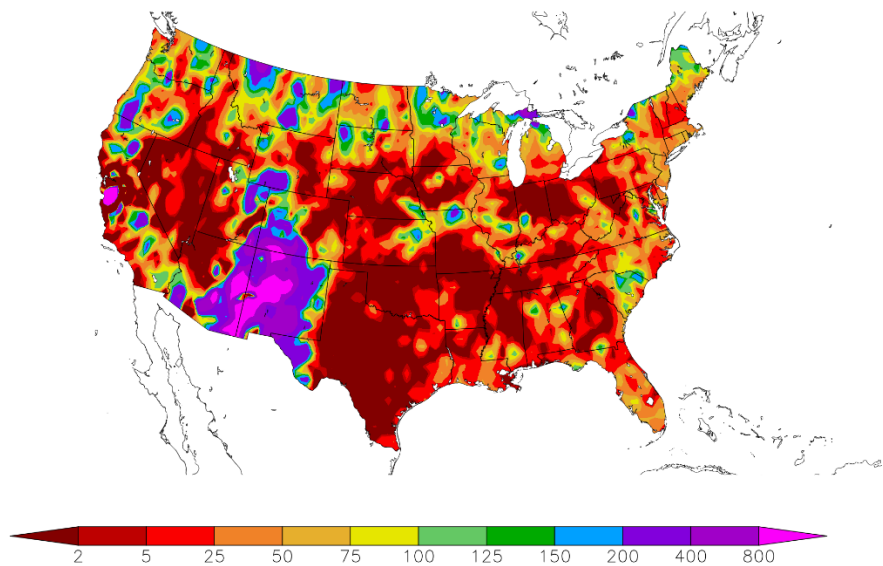
Last 7 Days, National Weather Service (NWS) Networks

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 (%)
6/16/2022 – 6/22/2022



Generated 6/23/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

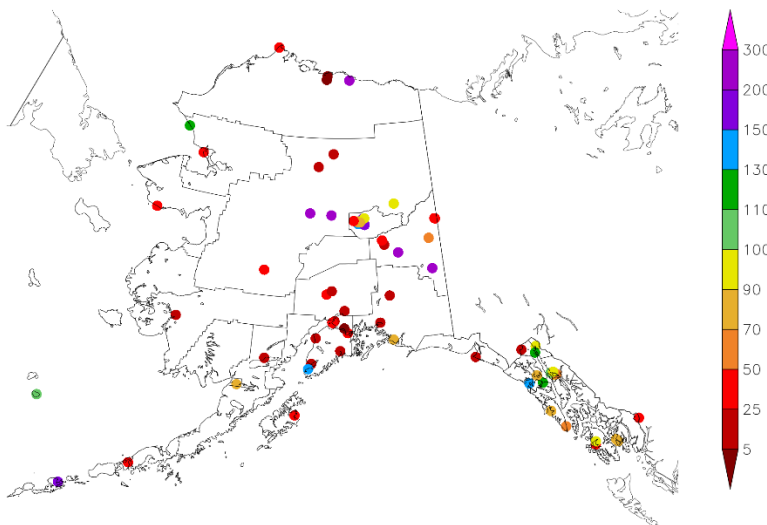
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Percent of Normal Precipitation (%)
6/16/2022 – 6/22/2022



Generated 6/23/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

Monthly, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

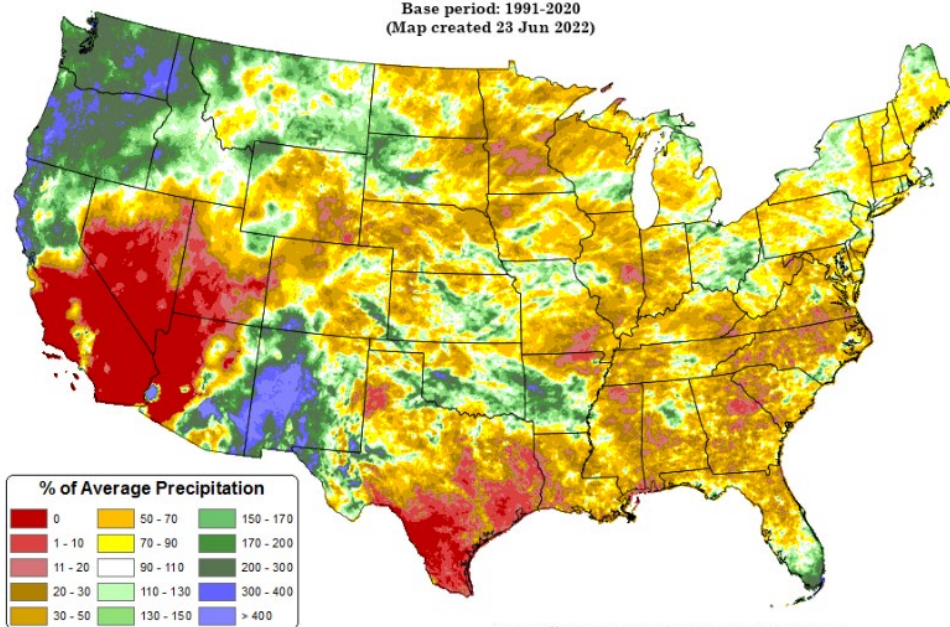
Total Precipitation Anomaly: 01 Jun 2022 - 22 Jun 2022

Period ending 7 AM EST 22 Jun 2022

Base period: 1991-2020

(Map created 23 Jun 2022)

[Monthly national total precipitation anomaly map](#)



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

Source: PRISM

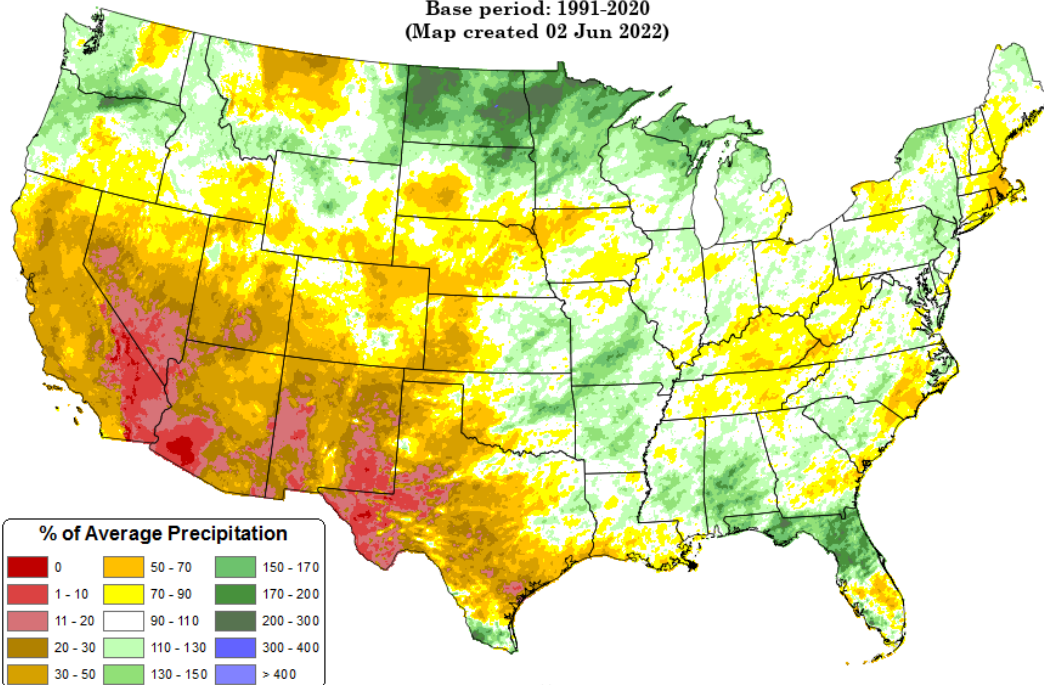
[March through May 2022 precipitation anomaly map](#)

Total Precipitation Anomaly: Mar 2022 - May 2022

Period ending 7 AM EST 31 May 2022

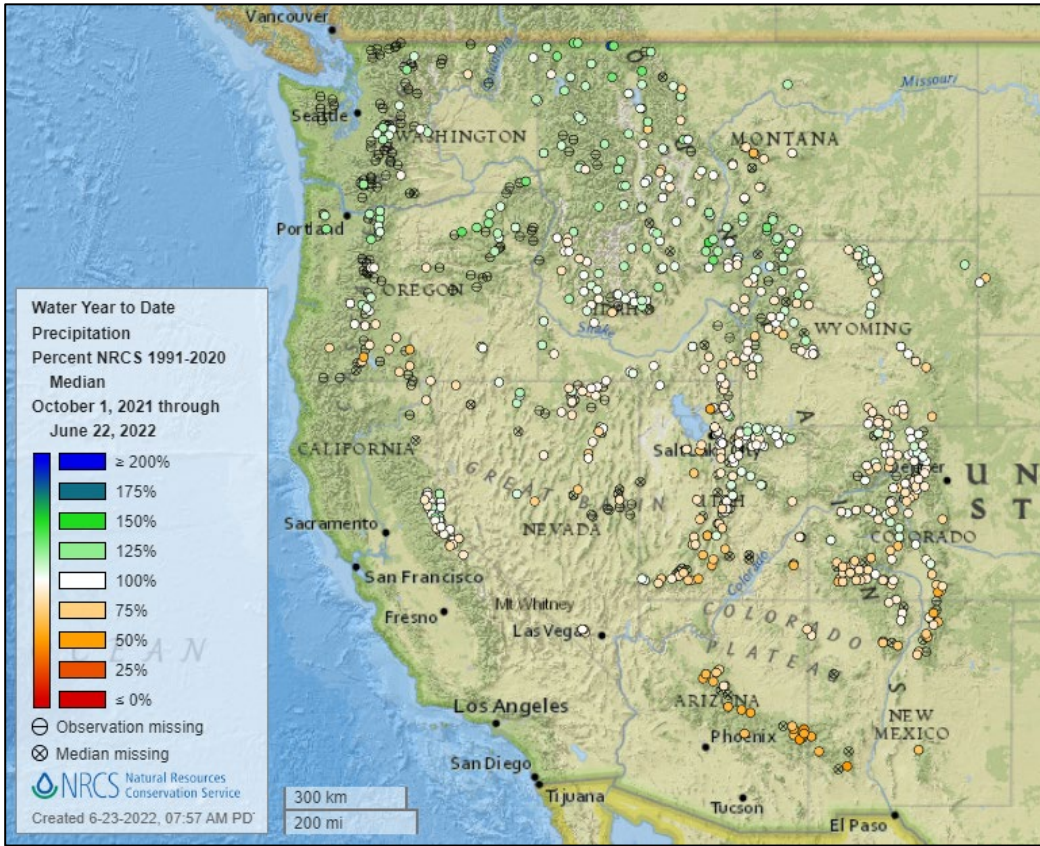
Base period: 1991-2020

(Map created 02 Jun 2022)



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

Water Year-to-Date, NRCS SNOTEL Network

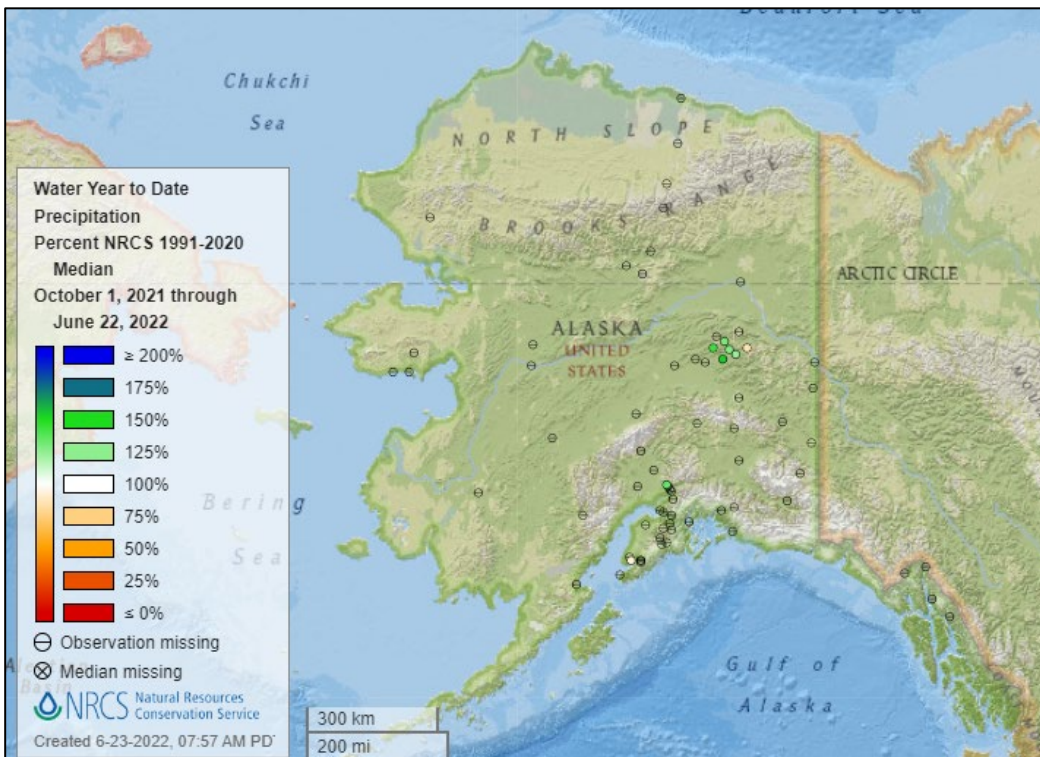


[2022 water year-to-date precipitation percent of median map](#)

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

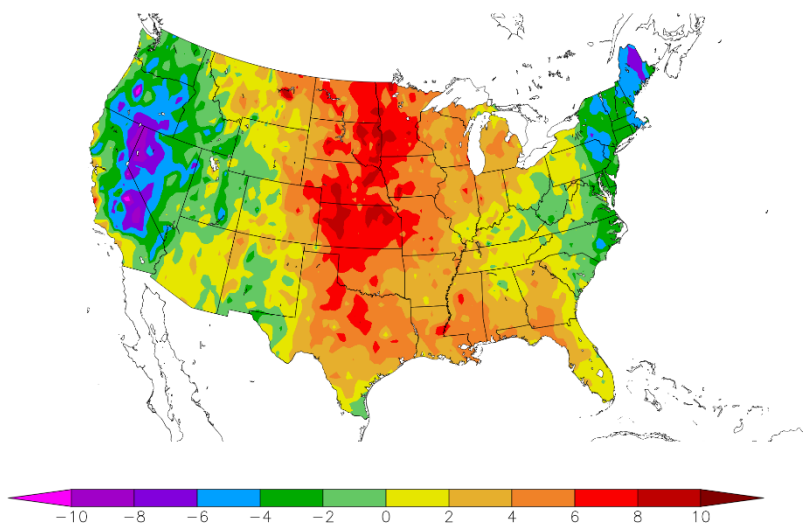
Last 7 Days, National Weather Service (NWS) Networks

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)
6/16/2022 – 6/22/2022



Generated 6/23/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

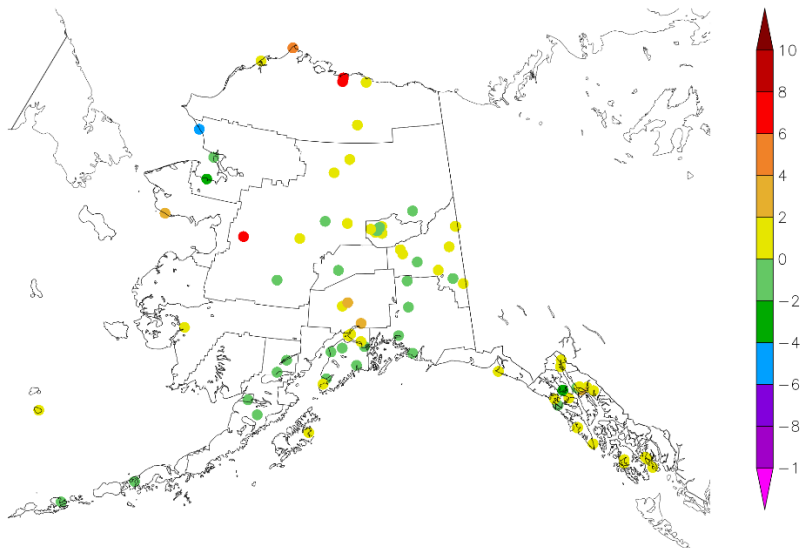
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)
6/16/2022 – 6/22/2022



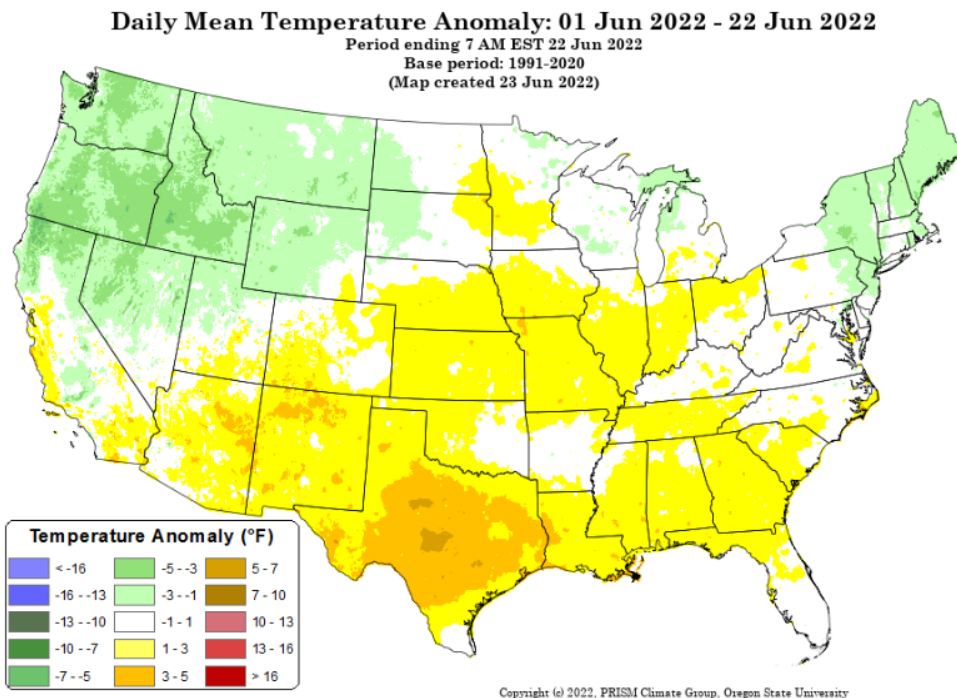
Generated 6/23/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

Monthly, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

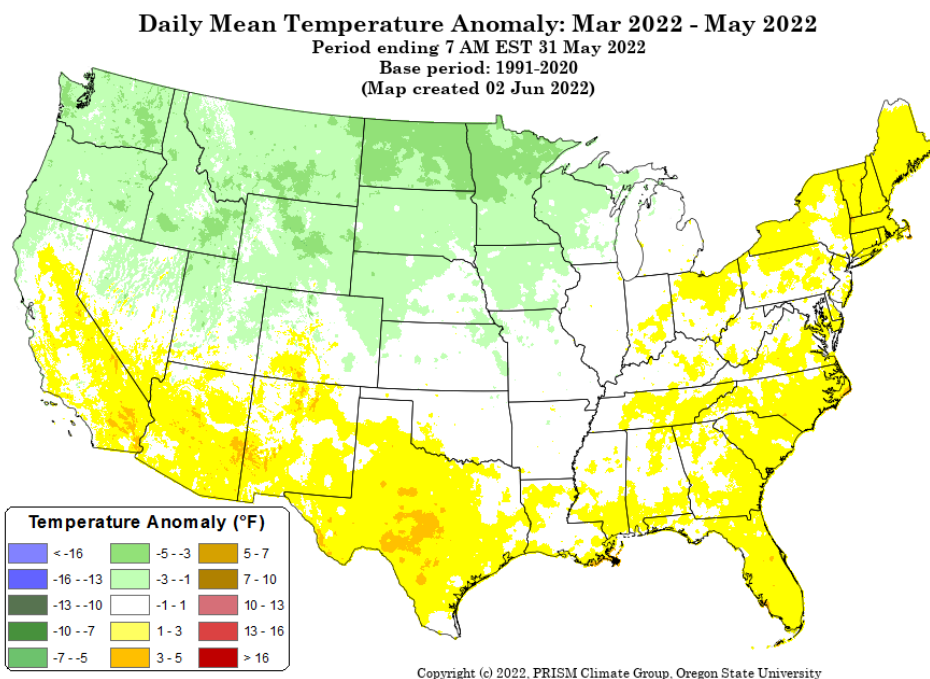
[Monthly national daily mean temperature anomaly map](#)



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

Source: PRISM

[March through May 2022 daily mean temperature anomaly map](#)



Drought

[U.S. Drought Monitor](#)

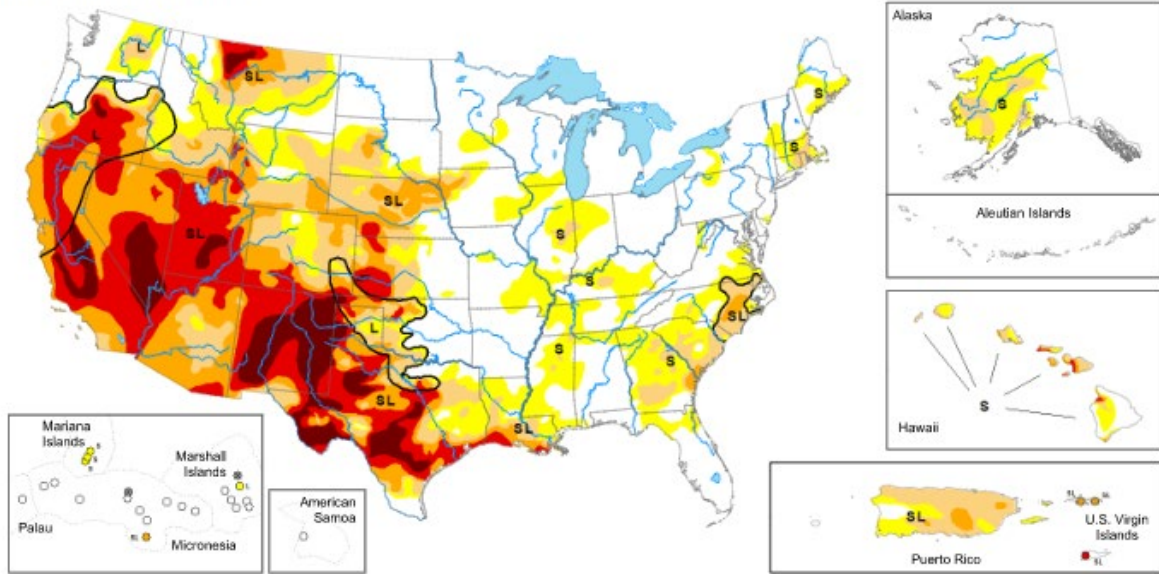
Source: National Drought Mitigation Center

[U.S. Drought Portal](#)

Source: NOAA

Map released: June 23, 2022

Data valid: June 21, 2022



United States and Puerto Rico Author(s):
Adam Hartman, NOAA/NWS/NCEP/CPC

Pacific Islands and Virgin Islands Author(s):
Denise Gutzmer, National Drought Mitigation Center

View grayscale version of the map

The data cutoff for Drought Monitor maps is each Tuesday at 8 a.m. EDT. The maps, which are based on analysis of the data, are released each Thursday at 8:30 a.m. Eastern Time.

Intensity and Impacts



- Delineates dominant impacts
 S - Short-term impacts, typically less than 6 months (agriculture, grasslands)
 L - Long-term impacts, typically greater than 6 months (hydrology, ecology)
 SL - Short- and long-term impacts

Current [National Drought Summary](#), June 21, 2022

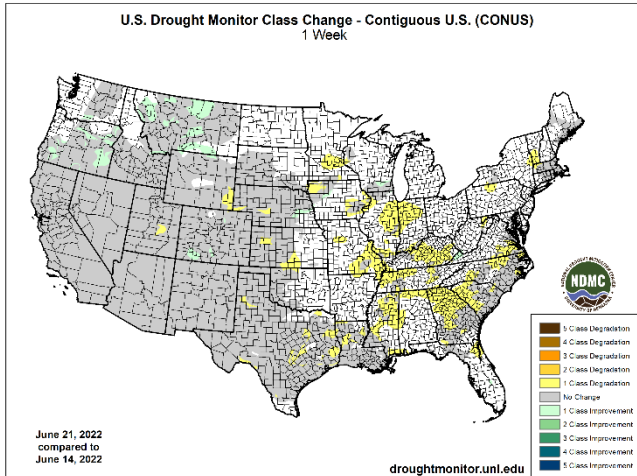
Source: National Drought Mitigation Center

“Much above-normal temperatures plagued much of the central and eastern contiguous U.S. (CONUS) this week from the Great Plains eastward to the Mississippi Valley and Southeast. The western third of CONUS, the Northeast, and coastal Mid-Atlantic experienced seasonal to below-normal temperatures. Precipitation was lacking in many locations that experienced excessive (in some cases record) heat, leading to widespread expansion of abnormal dryness and moderate drought conditions along the Mississippi and Ohio Valleys, the Southern Plains, and the Southeast. From the Central Plains northward, despite the excessive heat (daytime high temperatures above 100°F several days this week), recent improvements driven by an active storm track leading up to this week resulted in modest, more targeted degradations in the drought depiction. Another week of heavy rainfall warranted improvements in Montana. In the Pacific Northwest, below-normal temperatures and recent improvements from an active weather pattern leading up to this week resulted in improvements in some of the long-term drought indicators. Heavy rainfall associated with the Southwest Monsoon also fell across parts of the Four Corners region. However, this only acted to halt any further degradations this week. Given drought is strongly entrenched in the Four Corners, an active Southwest Monsoon circulation will need to persist for conditions to improve.”

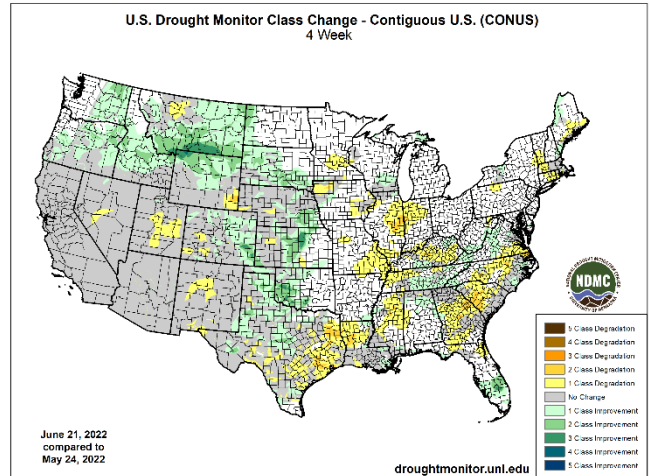
Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

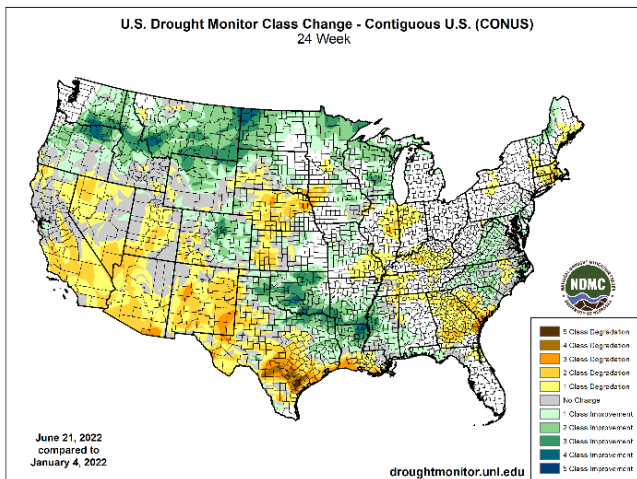
1 Week



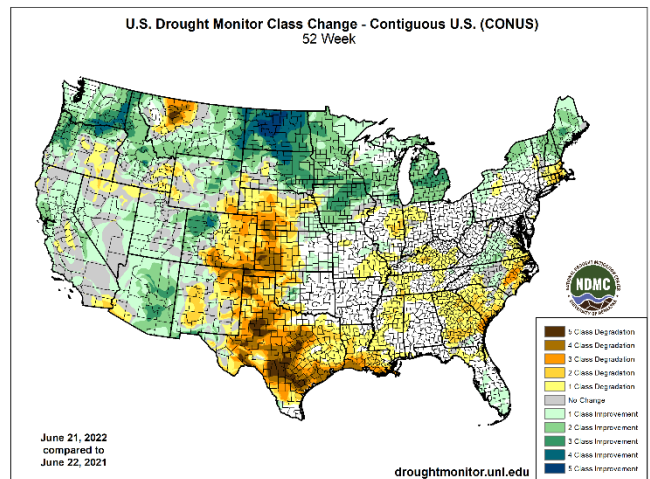
1 Month



6 Months



1 Year



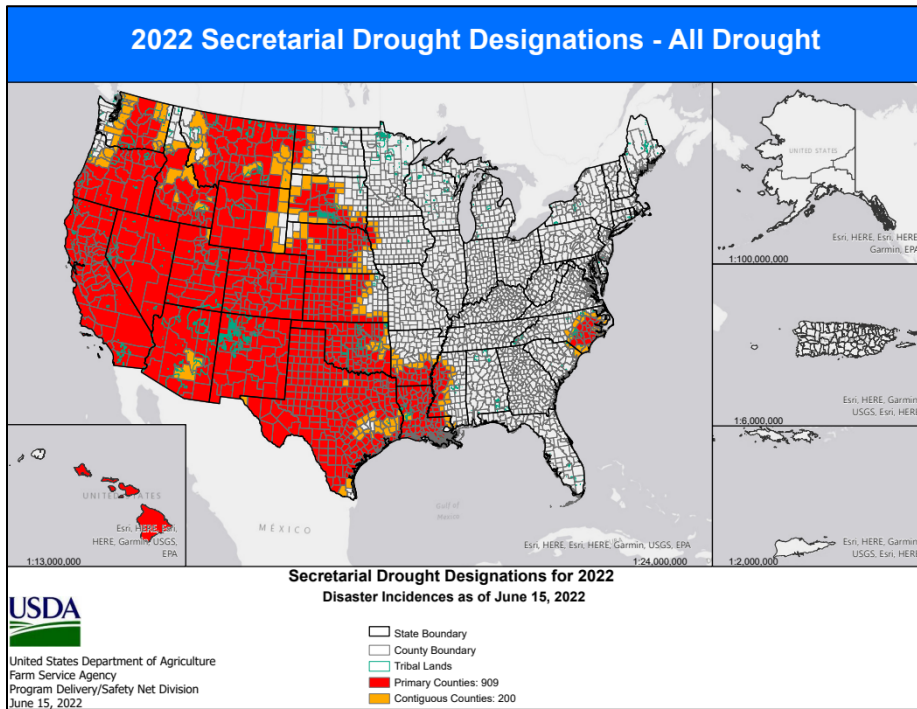
[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

Highlighted Drought Resources

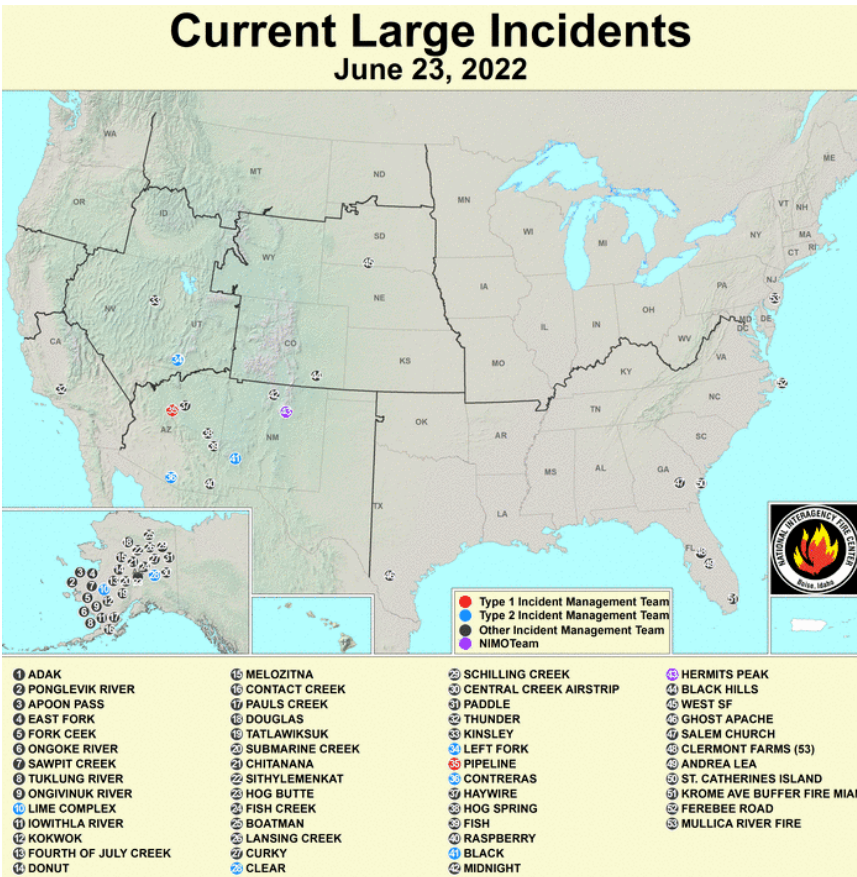
- [Drought Impact Reporter](#)
- [Quarterly Regional Climate Impacts and Outlook](#)
- [U.S. Drought Portal Indicators and Monitoring](#)
- [U.S. Population in Drought, Weekly Comparison](#)
- [USDA Disaster and Drought Information](#)

USDA Secretarial Drought Designations

Source: USDA Farm Service Agency



Wildfires: USDA Forest Service Active Fire Mapping



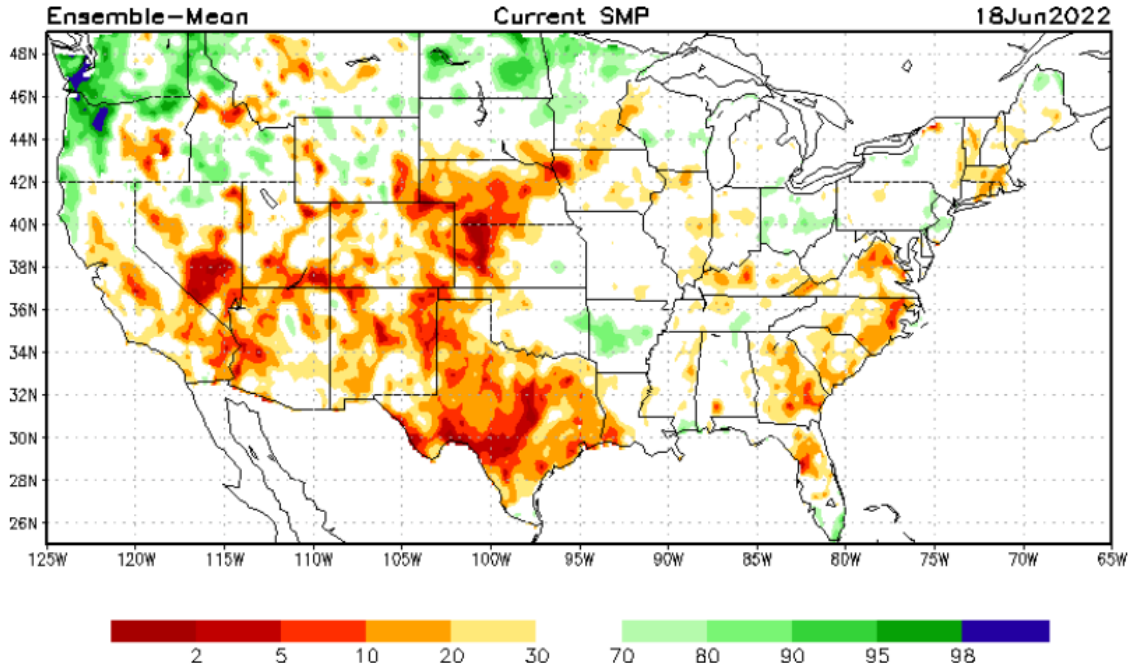
Highlighted Wildfire Resources

- [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

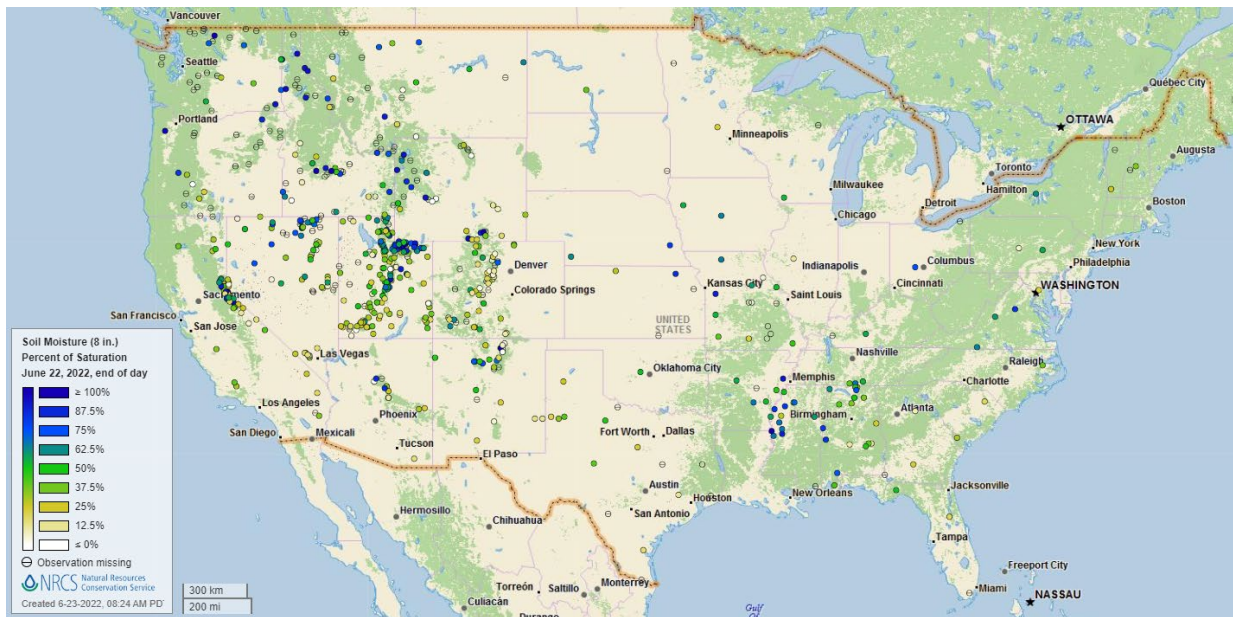


[Modeled soil moisture percentiles](#) as of June 18, 2022

Soil Moisture Percent of Saturation

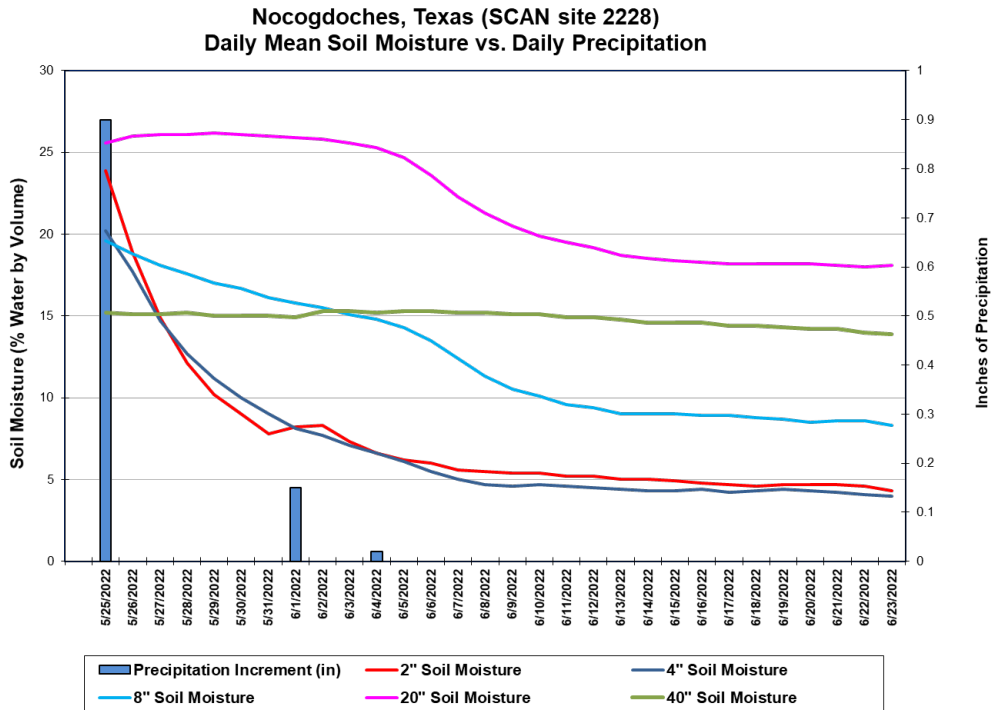
Source: NRCS SNOTEL and [Soil Climate Analysis Network](#) (SCAN)

[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 [Nocogdoches](#) SCAN site in Texas. The soil moisture at all sensors has decreased since the precipitation received on May 25 of 0.90 inches. The total precipitation for the period was 1.07 inches.

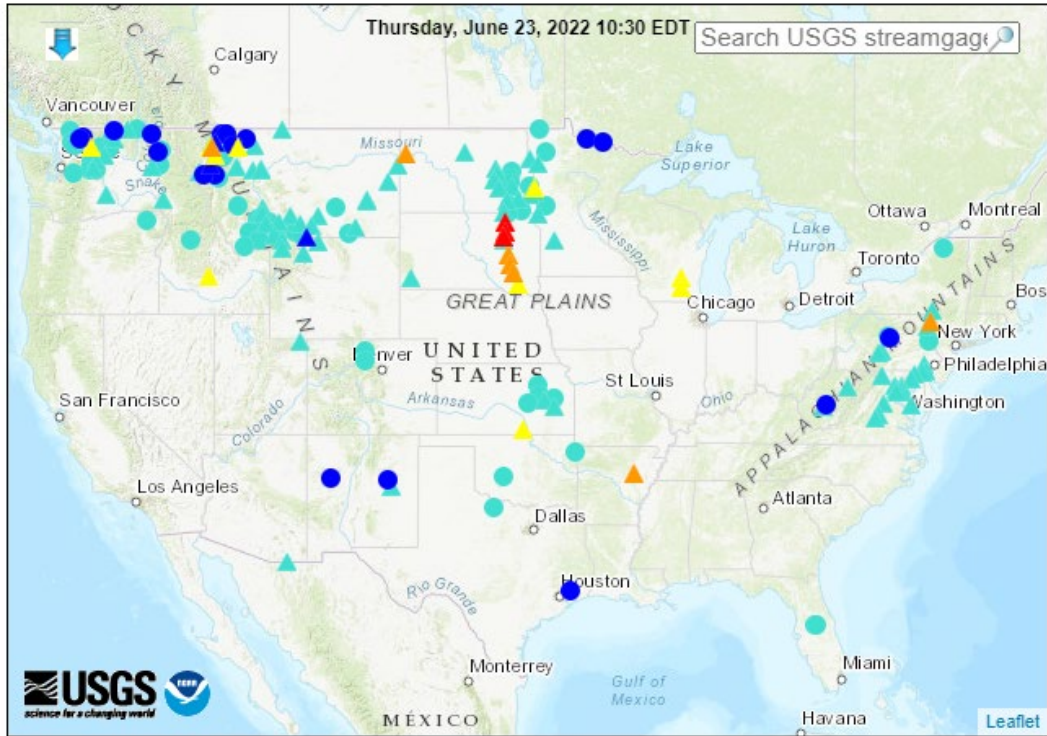
Soil Moisture Data Portals

- [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 (10 in floods [moderate: 3, minor: 7], 11 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

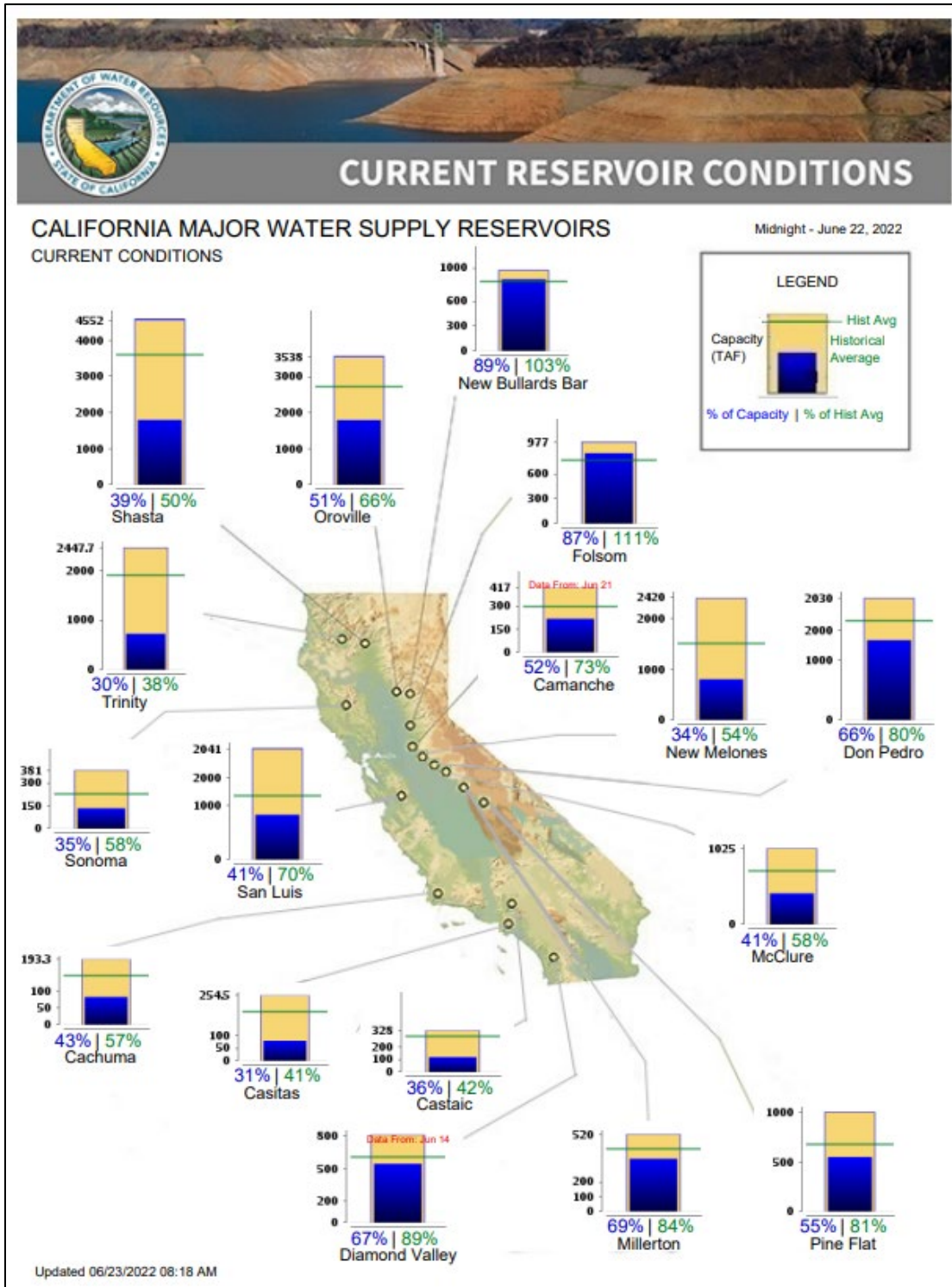
Hydromet Teacup Reservoir Depictions

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](#)

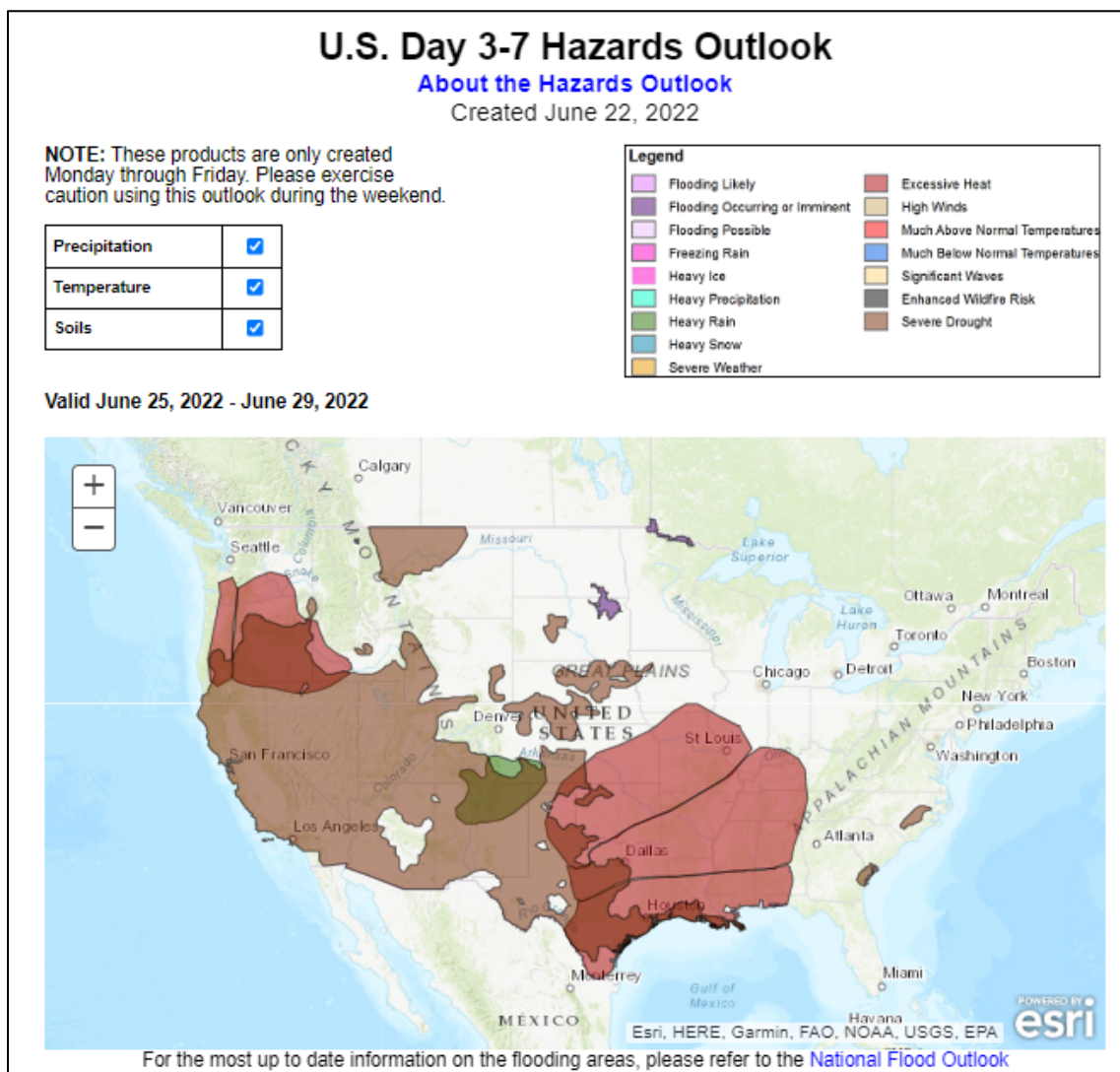
Agricultural Weather Highlights

Author: Brad Rippey, Agricultural Meteorologist, USDA/OCE/WAOB

National Outlook, Thursday, June 23, 2022: “A Western heat wave should peak in coverage and intensity late in the weekend or early next week. Meanwhile, the northern and central Plains and the Midwest will experience a reprieve from hot conditions. Significantly above-normal temperatures will linger, however, across the Deep South. Even with subtly shifting weather patterns, meaningful rain will be scarce during the next 5 days. In fact, completely dry weather should prevail in much of California and the Northwest. Only spotty showers will occur across the northern High Plains, southeastern Plains, mid-South, and lower Midwest. In contrast, locally heavy showers may occur during the next 5 days in several areas, including Florida, as well as the southern Rockies, upper Great Lakes region, and portions of the northern and central Appalachians. The NWS 6- to 10-day outlook for June 28 – July 2 calls for the likelihood of near- or above-normal temperatures nationwide, except for cooler-than-normal conditions in the upper Great Lakes region, along the middle Atlantic Coast, and across parts of the Southwest. Meanwhile, near- or below-normal rainfall across most of the eastern half of the U.S. should contrast with near- or above-normal rainfall in much of the West. Exceptions to that pattern may include wet weather in the upper Great Lakes region and dry conditions in the northern Great Basin.”

Weather Hazards Outlook: [June 25 – 29, 2022](#)

Source: NOAA Weather Prediction Center

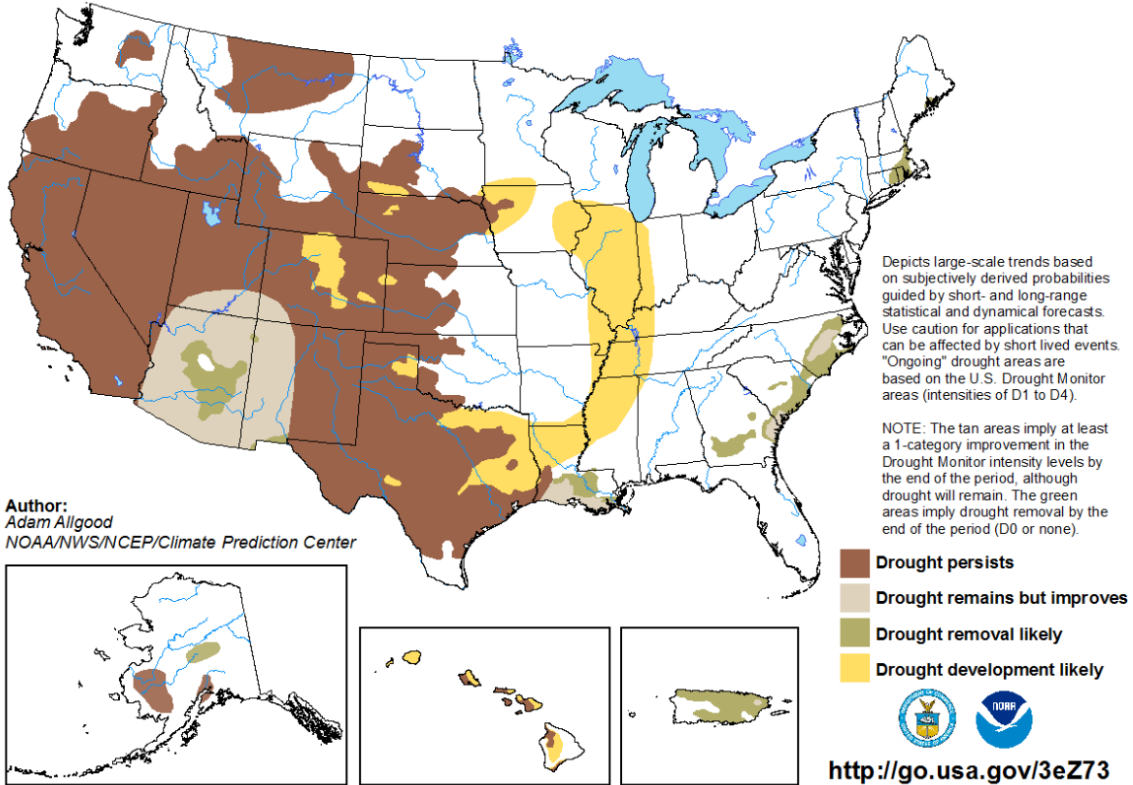


Seasonal Drought Outlook: [June 16 – September 30, 2022](#)

Source: National Weather Service

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

Valid for June 16 - September 30, 2022
Released June 16

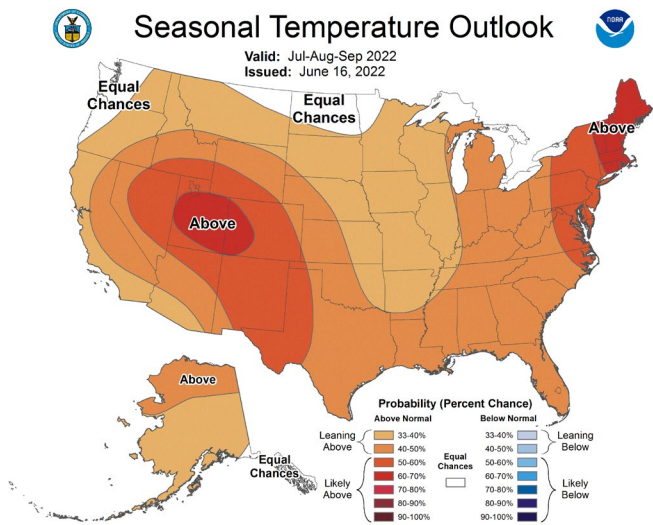
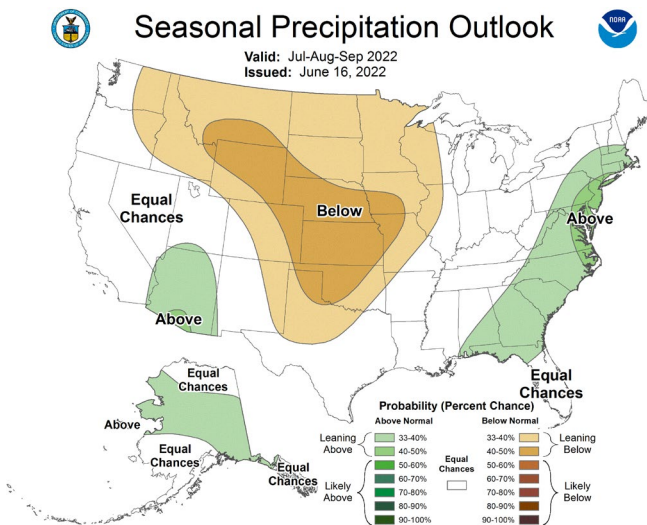


Climate Prediction Center 3-Month Outlook

Source: National Weather Service

Precipitation

Temperature



[July-August-September 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](#).