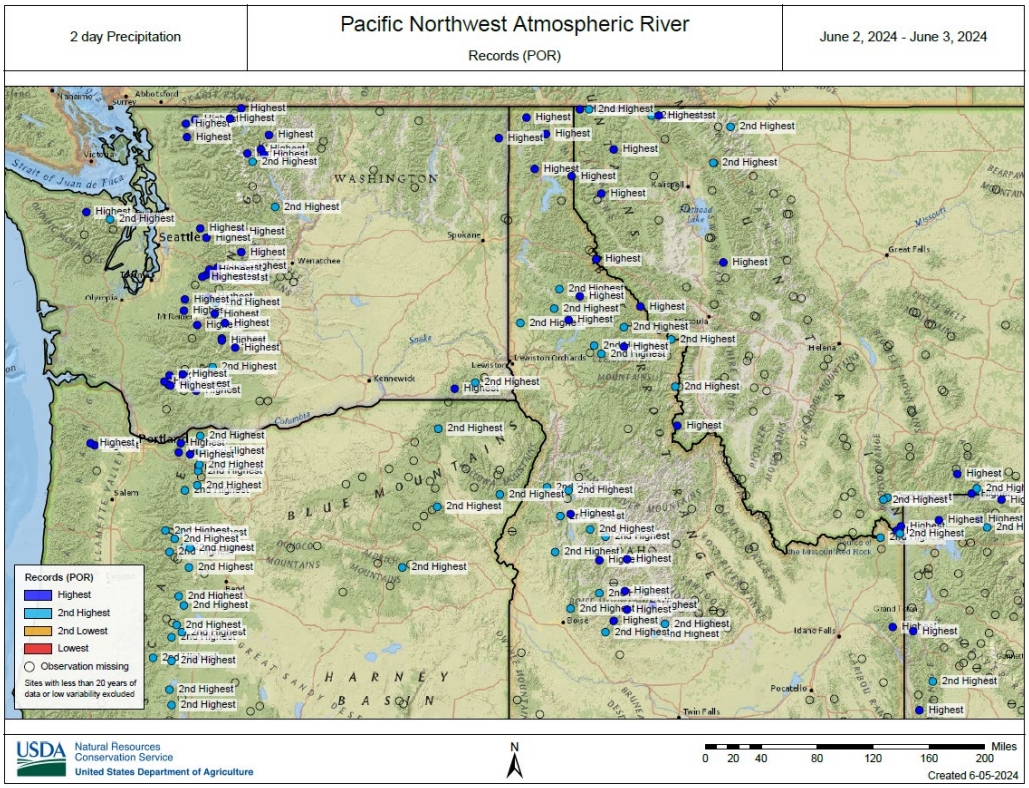
United States Department of Agriculture

Water and Climate Update

June 06, 2024

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.

Pacific Northwest receives record-breaking June precipitation



An atmospheric river swept through the Pacific Northwest during the first few days of June, breaking several daily precipitation records during the period. SNOTEL sites in Washington, Oregon, Idaho, western Montana, and northwest Wyoming received record precipitation for June 2 and 3, including just over three inches of precipitation recorded in the Washington Cascades, east of the Seattle-metro area, during the two-day span. Olympia, WA received 1.08 inches of precipitation on June 2, the most recorded for the day since records began in 1953. The storm also brought high winds, causing power outages for thousands of residents in western Washington.

Related:

SNOTEL precipitation records, June 2nd-3rd – Interactive Map, NRCS Snow Survey and Water Supply Forecasting Program

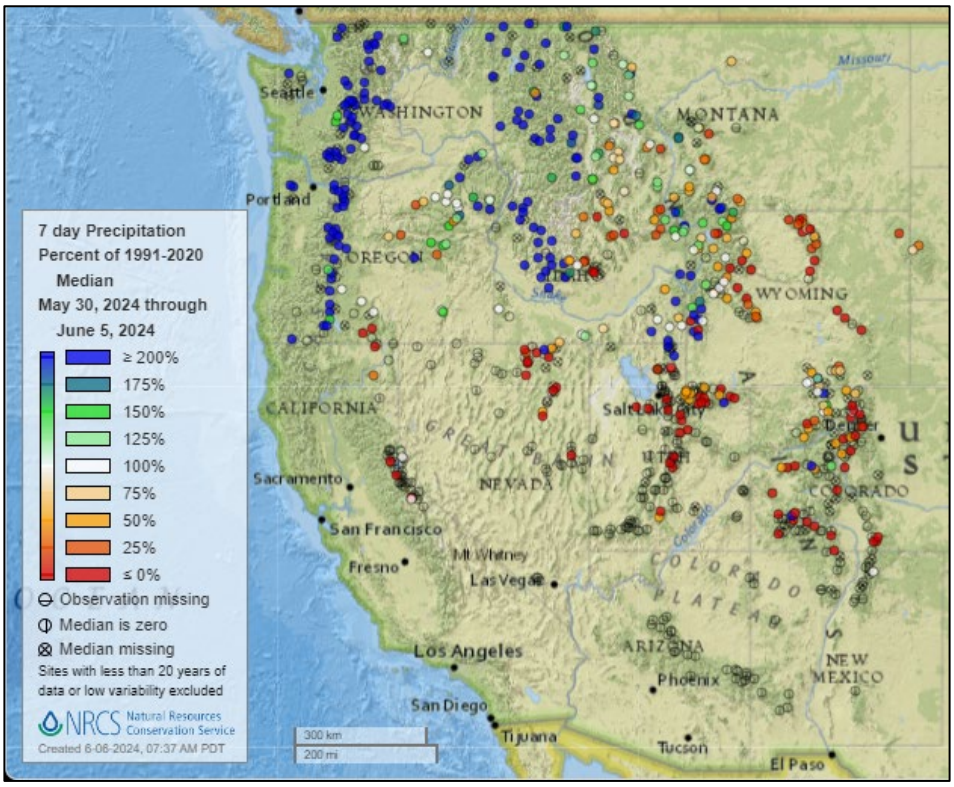
Thousands without power after wind, record rainfall in Western WA – The Seattle Times (WA)

What does June rain mean for Western Washington's 2024 summer? – KUOW, NPR

Atmospheric Rivers in the Northwest – USDA Climate Hubs

Precipitation

Last 7 Days, NRCS SNOTEL Network

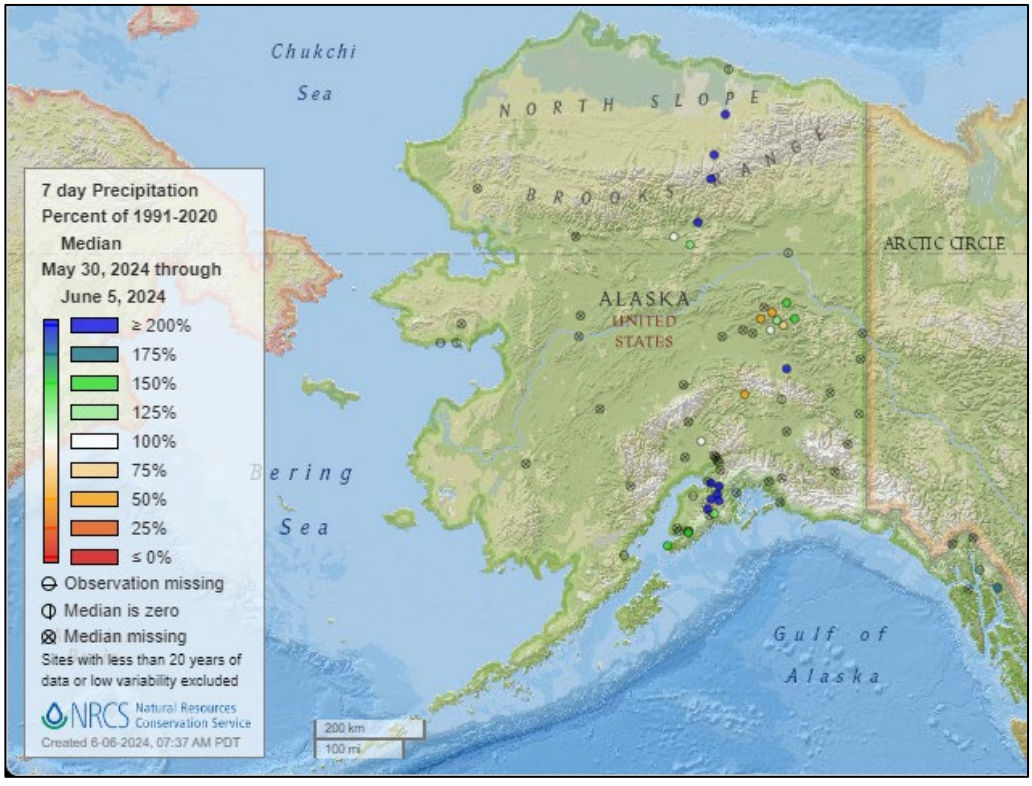


[7-day precipitation percent of median map]

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]

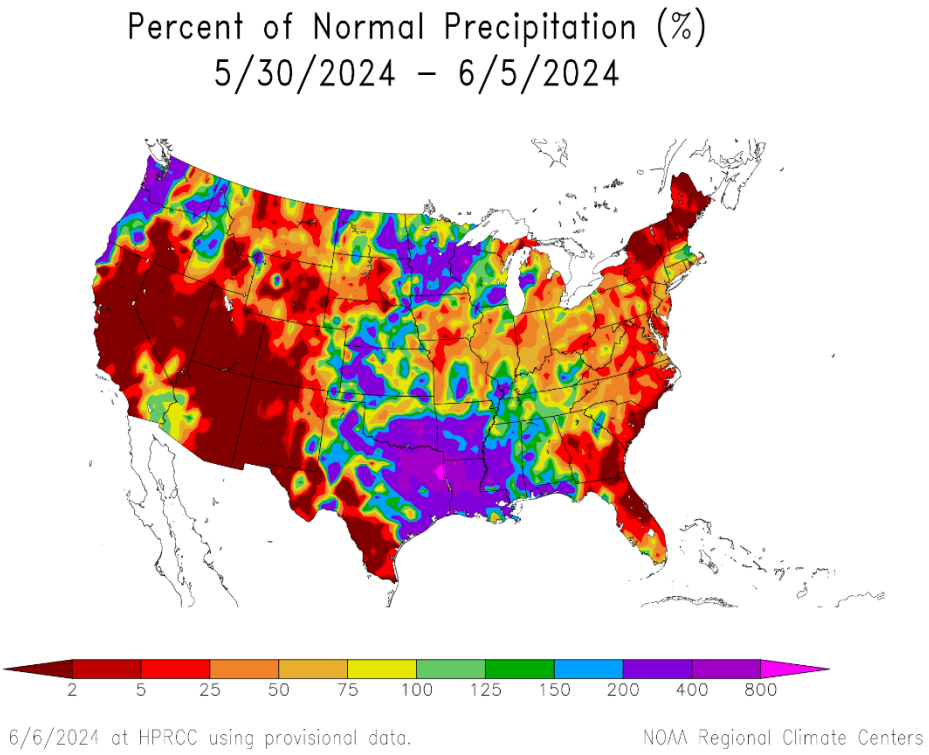


Last 7 Days, National Weather Service (NWS) Networks

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]

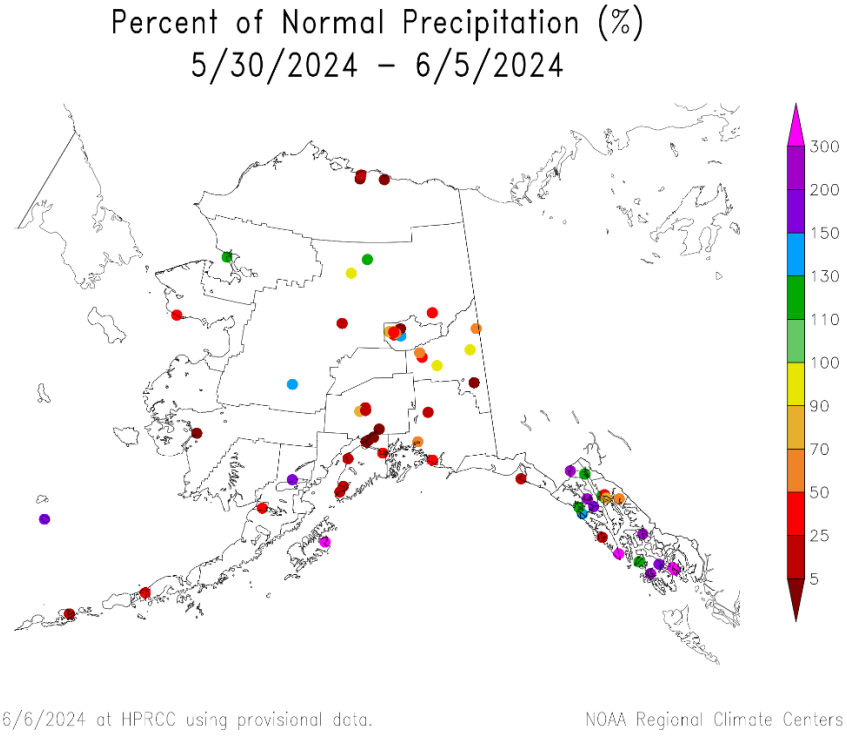


Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

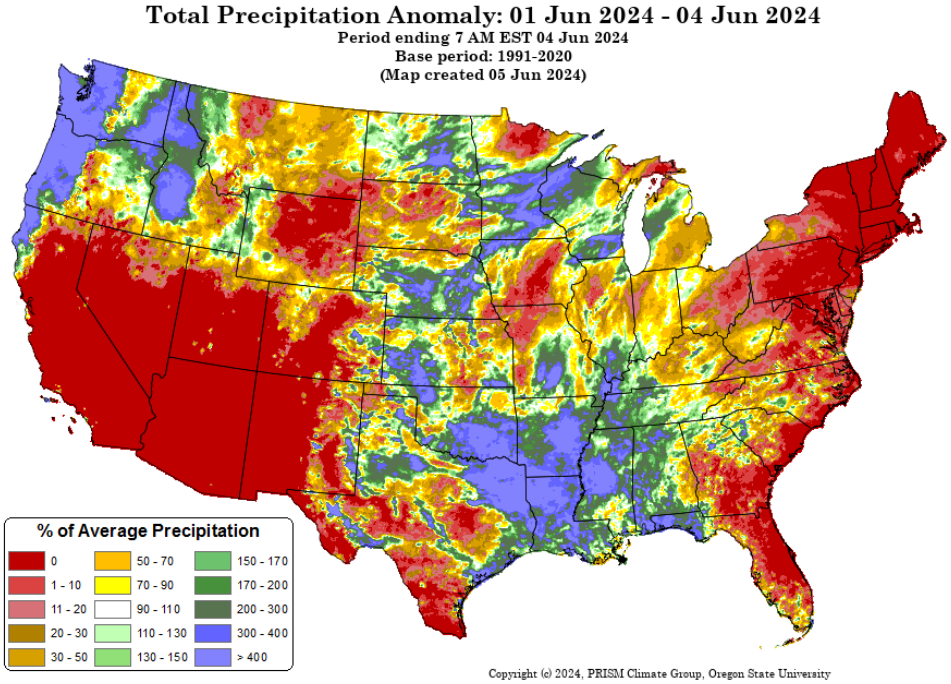
[7-day precipitation percent of normal map] for Alaska.

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



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

Source: PRISM

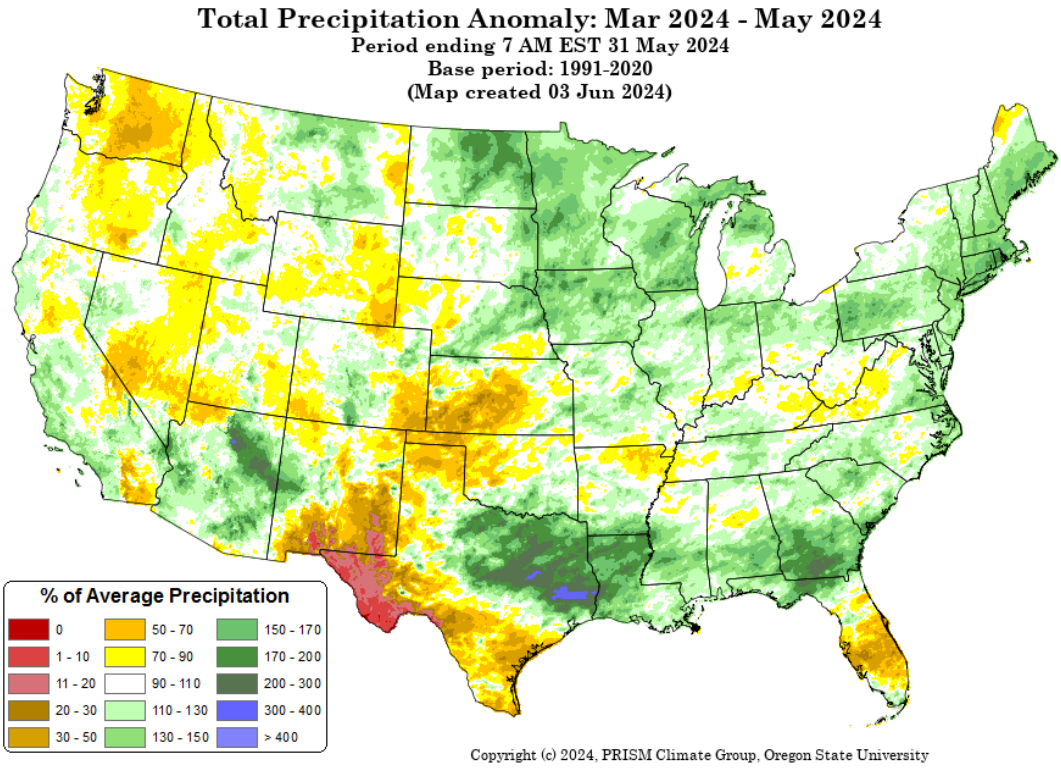


Month-to-date national total precipitation anomaly map

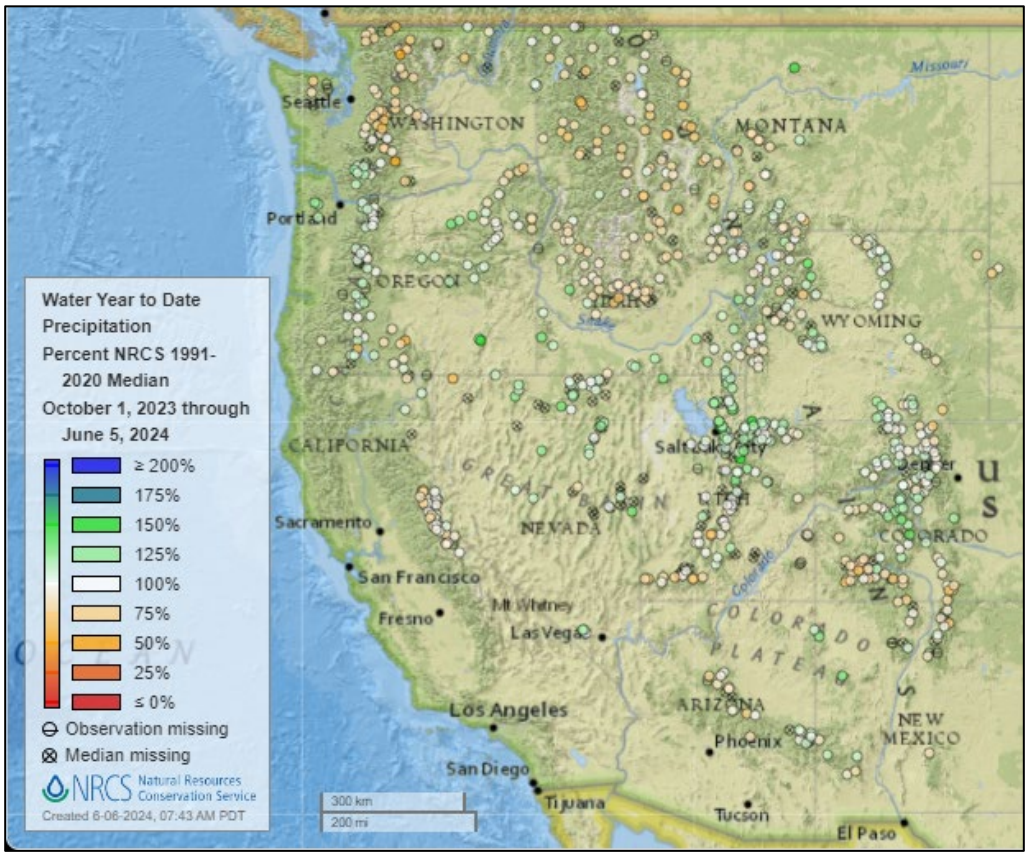
Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

March through May 2024 precipitation anomaly map



Water Year-to-Date, NRCS SNOTEL Network



[2024 water year-to-date precipitation percent of median map]

See also:

[2024 water year-to-date precipitation percent of average map]

[2024 water year-to-date precipitation values (inches) map]

[Alaska 2024 water year-to-date precipitation percent of median map]

See also:

[Alaska 2024 water year-to-date precipitation percent of average map]

[Alaska 2024 water year-to-date precipitation values (inches) map]

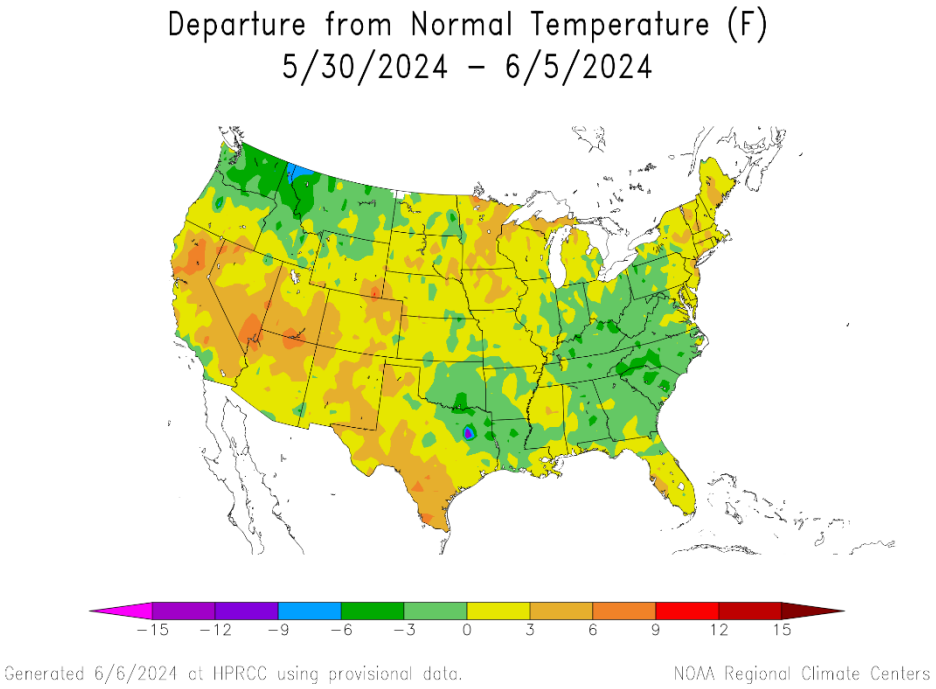
Temperature

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

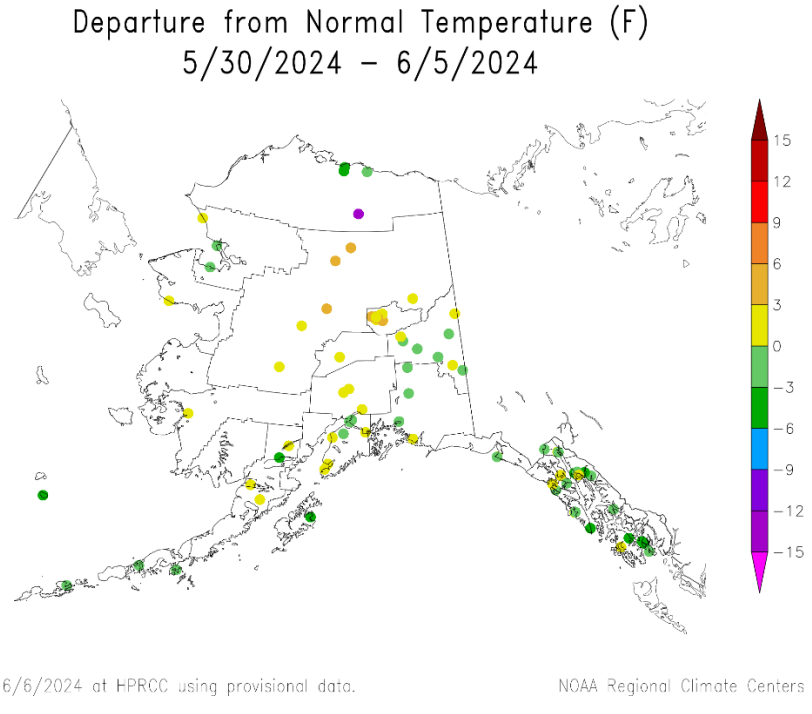


Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

7-day temperature anomaly map for Alaska.

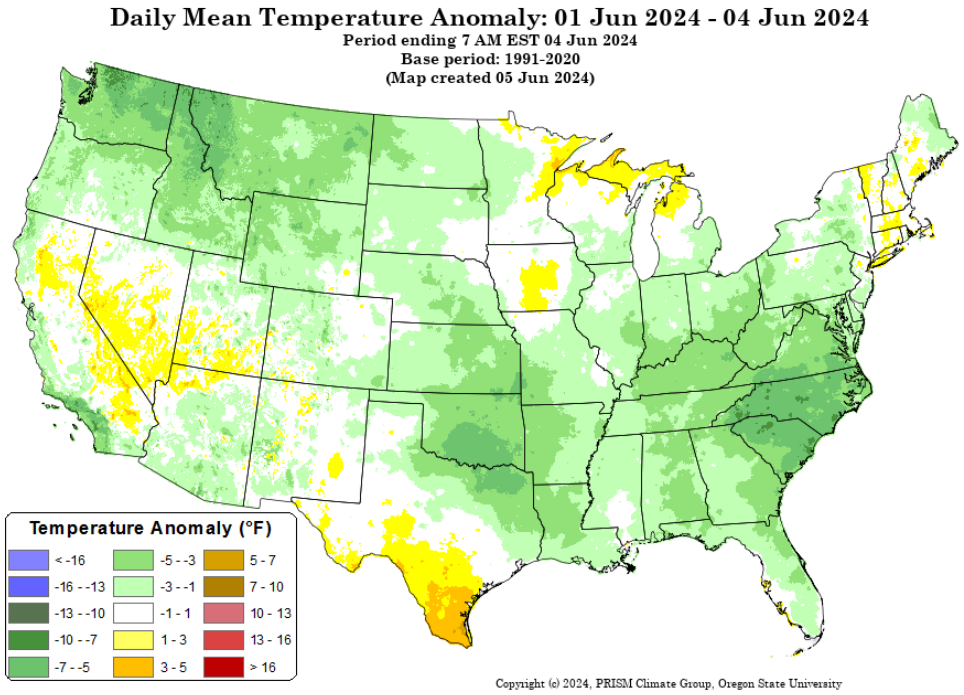
See also: 7-day temperature (° F) map



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

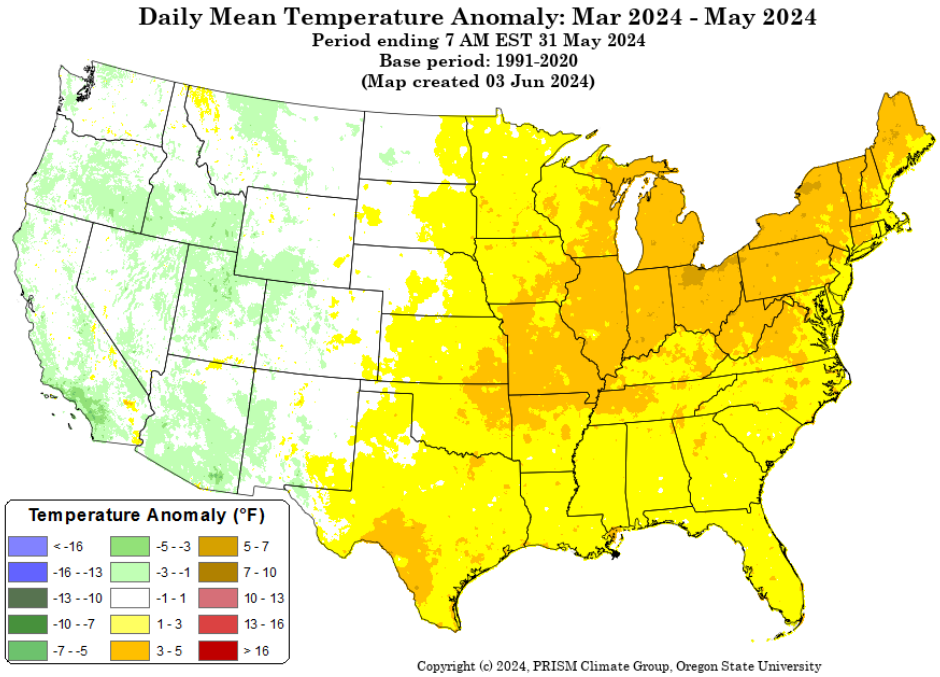
Source: PRISM

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



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

Source: PRISM

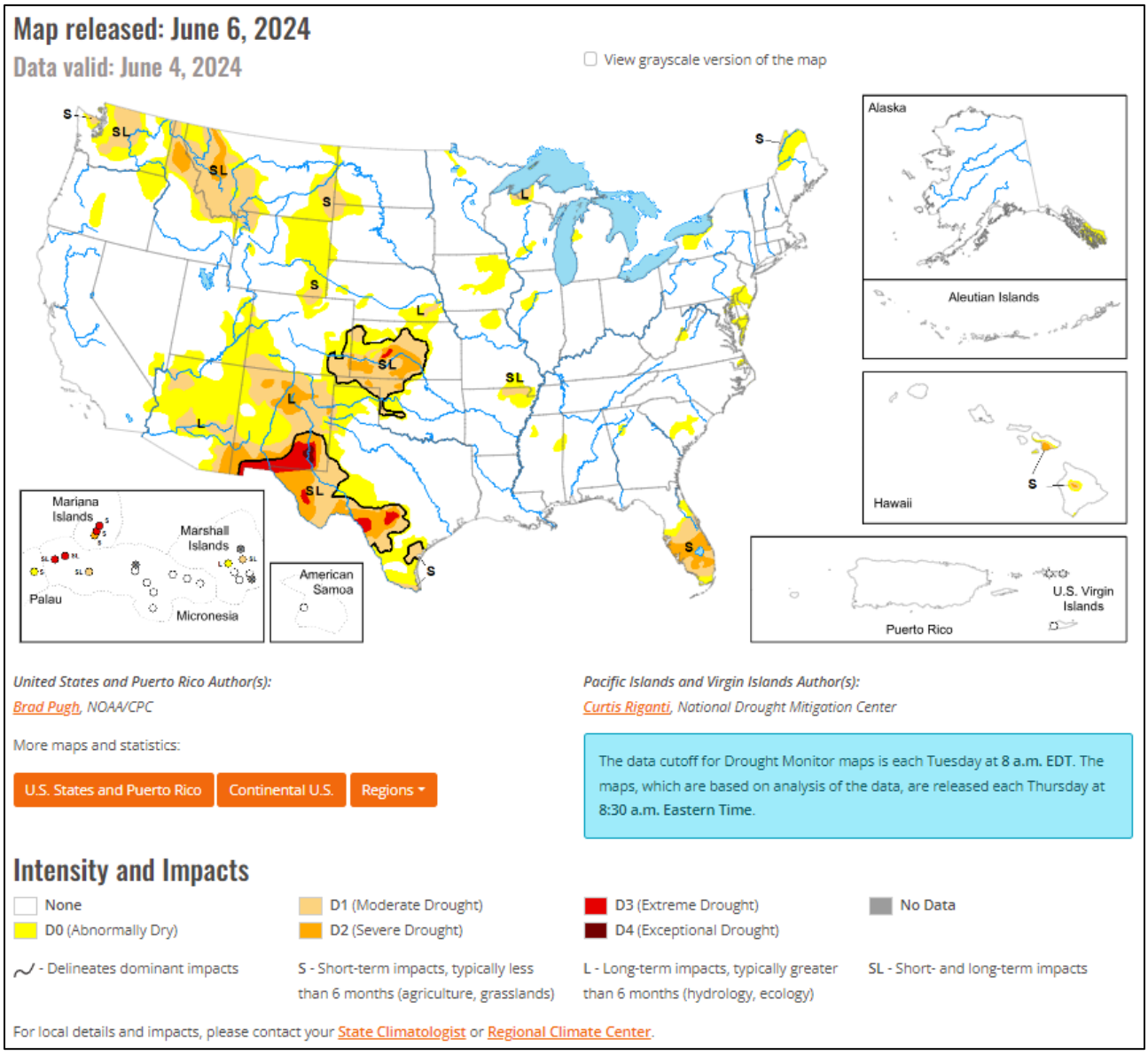


[March through May 2024 daily mean temperature anomaly map]

Drought

U.S. Drought Monitor
Source: National Drought Mitigation Center

U.S. Drought Portal
Source: NOAA



Current National Drought Summary, June 04, 2024

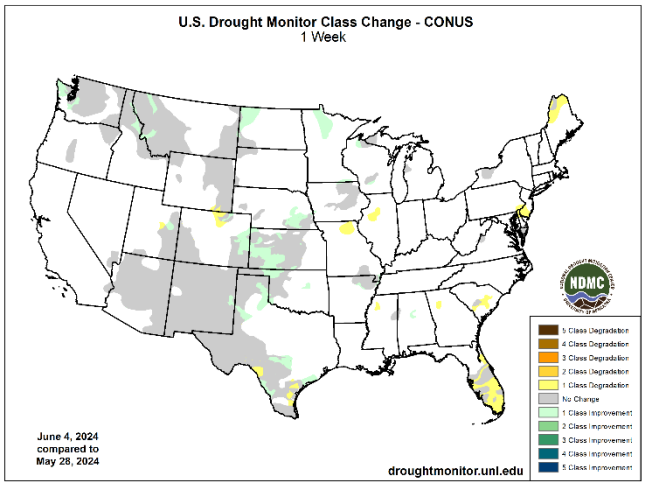
Source: National Drought Mitigation Center

“Following a stormy pattern with frequent periods of heavy precipitation and severe weather outbreaks, major drought improvement occurred this spring across the Great Plains and Mississippi Valley. Recent heavy precipitation from May 28 to June 3 resulted in additional improvements to parts of the central and southern Great Plains. A dry start to the thunderstorm season and above-normal temperatures continued to result in drought expansion and intensification across the southern half of the Florida Peninsula. Anomalously heavy precipitation for late May into the beginning of June led to drought improvement across parts of Washington, northern Idaho, and western Montana. Alaska and Puerto Rico remain drought-free, while drought of varying intensity persists for parts of Maui and the Big Island of Hawaii.”

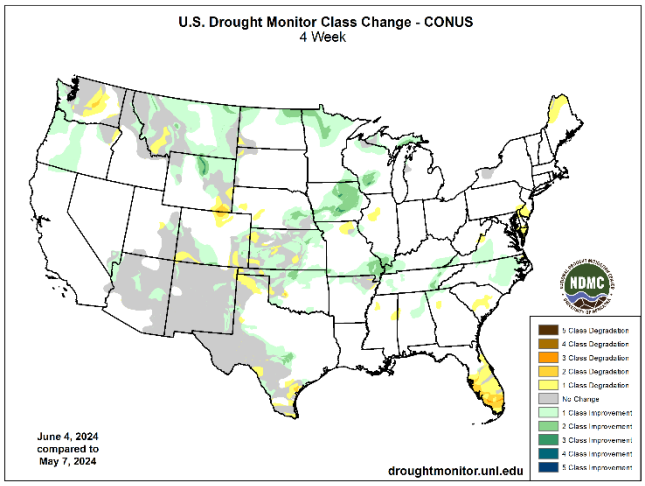
Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

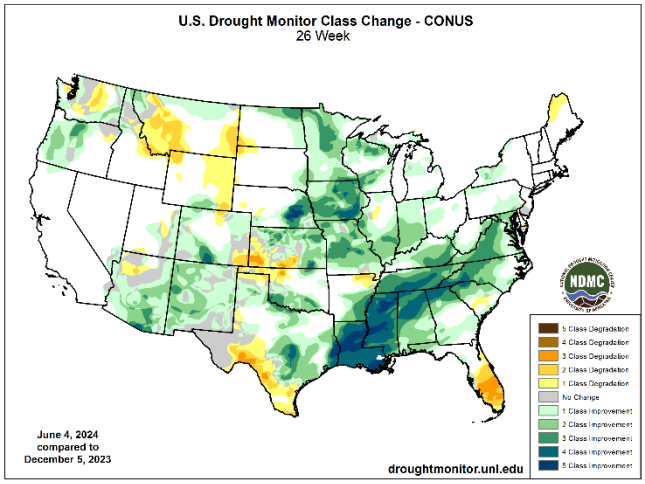
1 Week



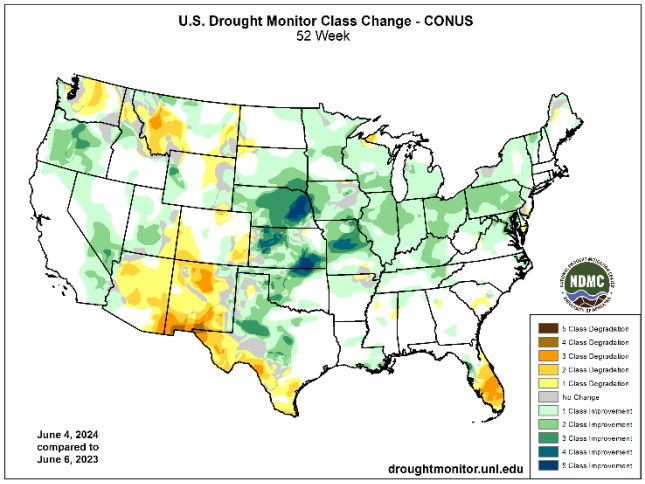
1 Month



6 Months



1 Year



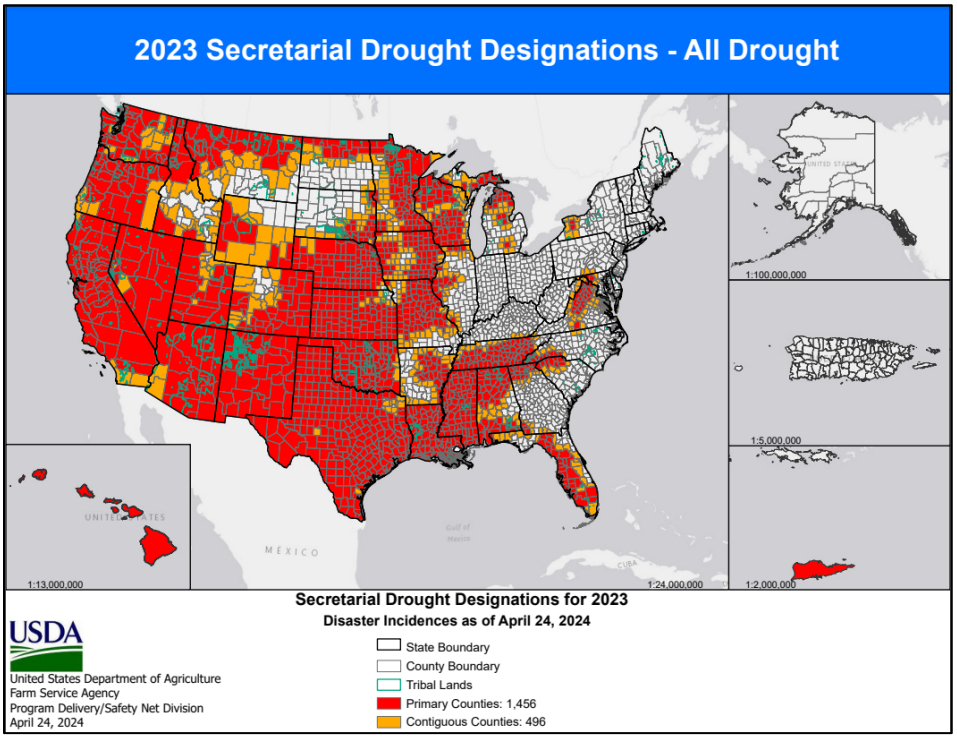
Changes in drought conditions over the last 12 months for the contiguous U.S.

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

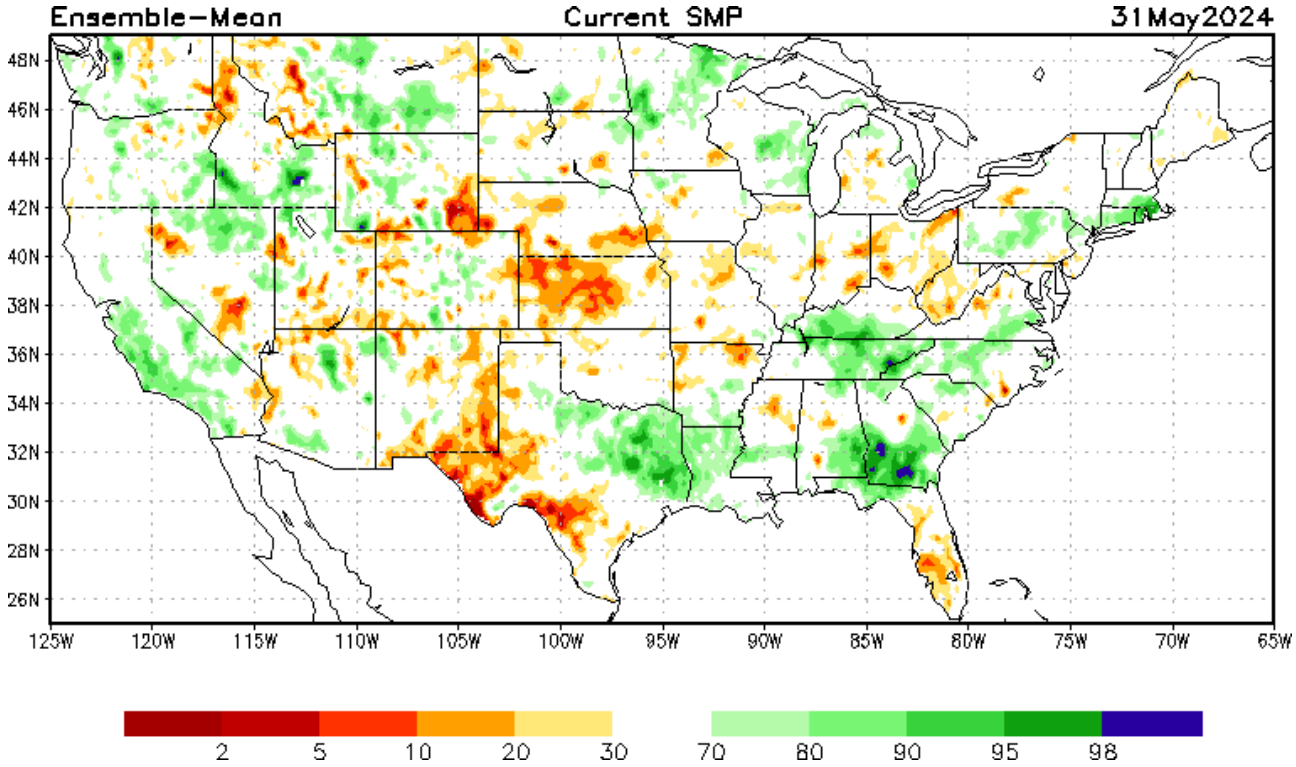
Highlighted Wildfire Resources

- 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

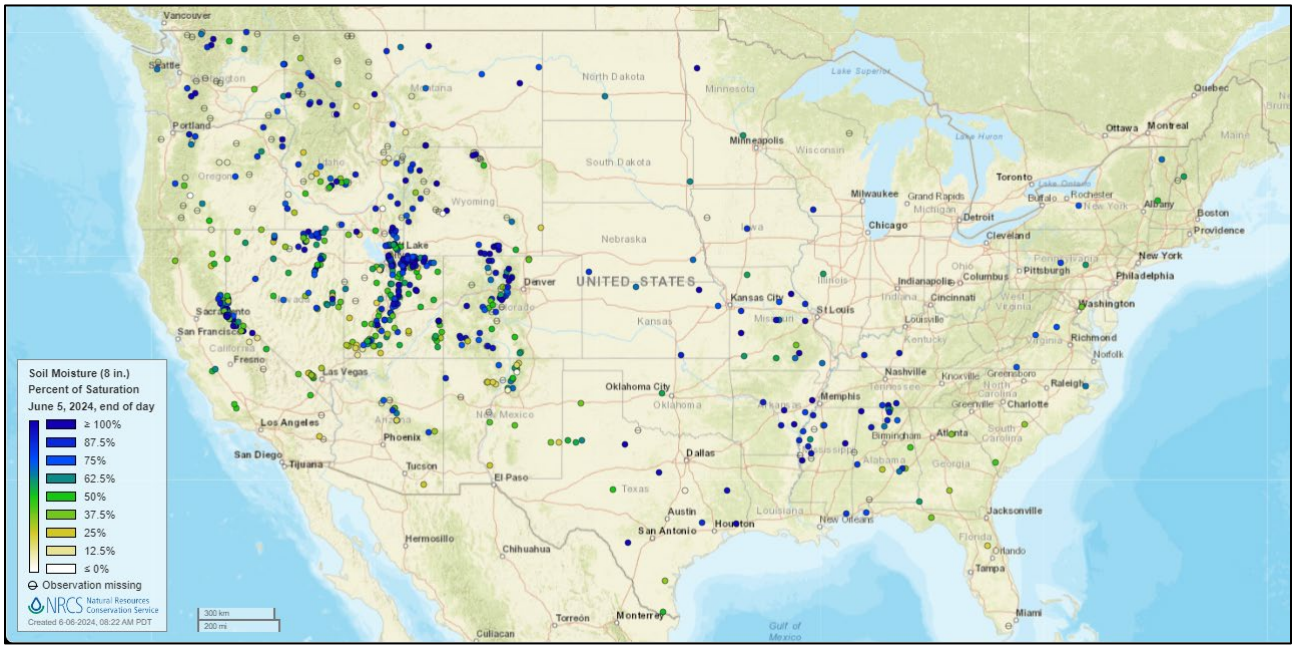


Modeled soil moisture percentiles as of May 31, 2024

Soil Moisture Percent of Saturation

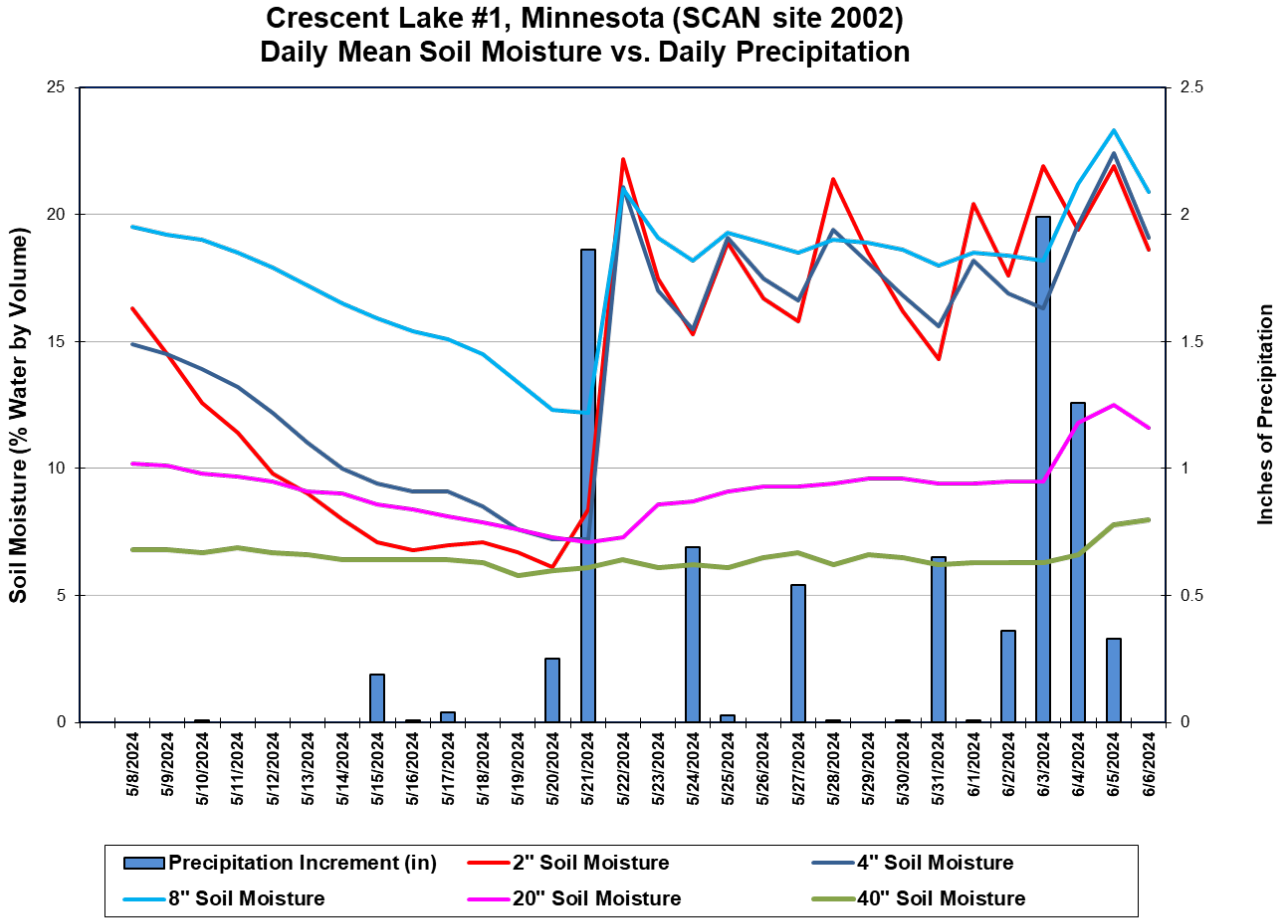
Source: NRCS SNOTEL and Soil Climate Analysis Network (SCAN)

U.S. soil moisture map at 8-inch depth:



Soil Moisture

Source: NRCS Soil Climate Analysis Network (SCAN)



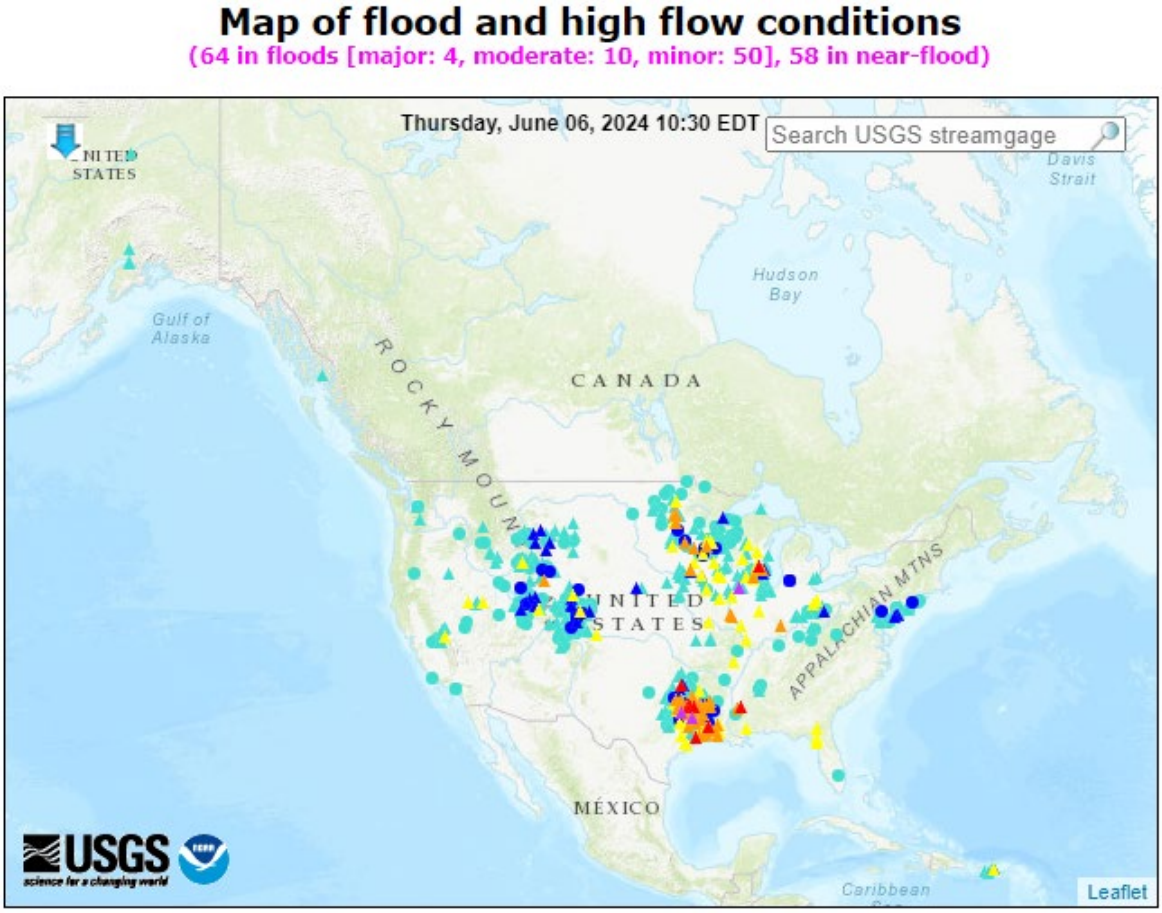
This chart shows the precipitation and soil moisture for the last 30 days at the Crescent Lake #1 SCAN site in Minnesota. From May 21 through June 5, the site received 7.74 inches of precipitation, with dramatic increases and fluctuations in soil moisture being recorded at the -2, -4, and -8-inch soil sensor depths. The deeper soil sensors, 20 and 40 inches beneath land surface, recorded subtle changes in soil moisture during this half of the period. Total precipitation for the 30-day period was 8.24 inches.

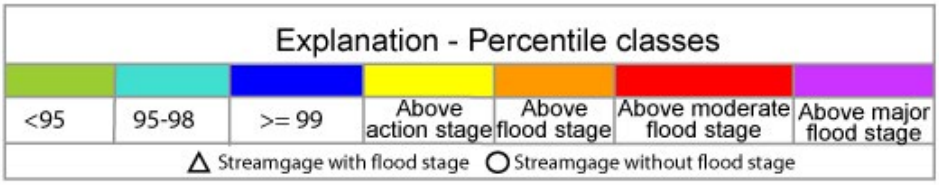
Soil Moisture Data Portals

- 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]





[WaterWatch: Streamflow, drought, flood, and runoff conditions]

Reservoir Storage

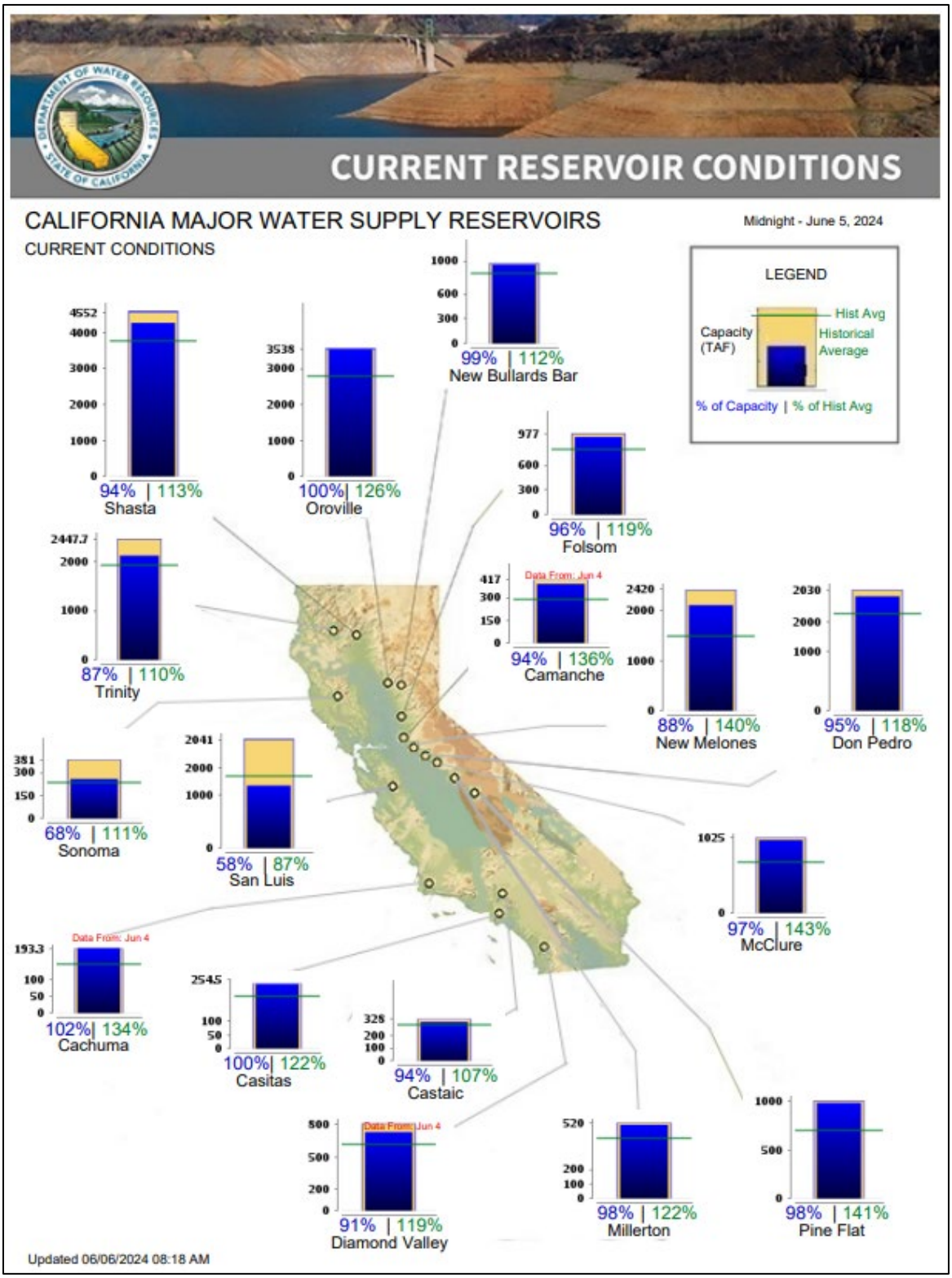
Hydromet Teacup Reservoir Depictions

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

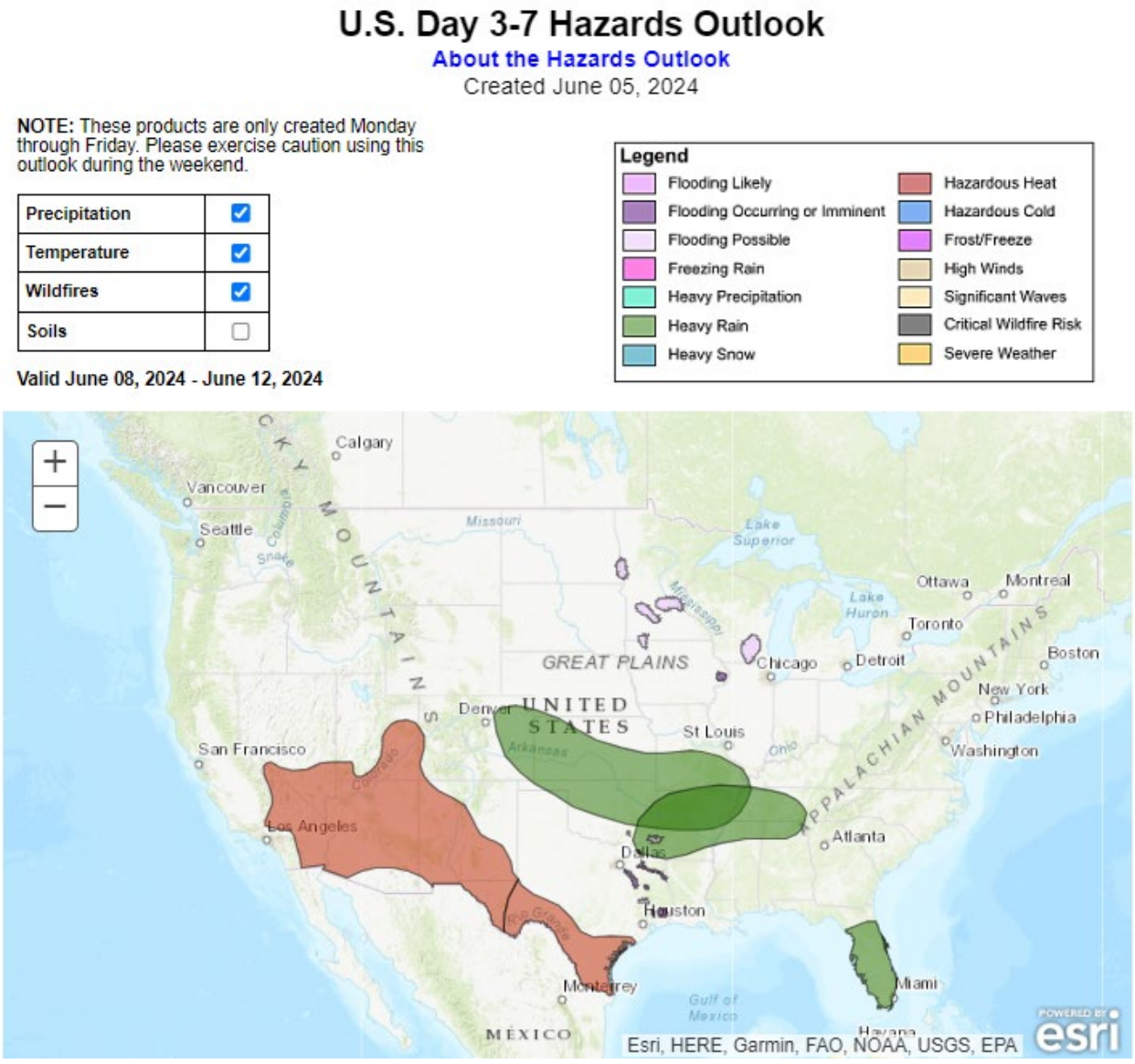
Agricultural Weather Highlights

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

National Outlook, Thursday June 06, 2024: "For today, thundershowers in the eastern U.S. will occur in advance of a cold front moving toward the Atlantic Coast. During the next few days, a period of pleasantly cool, breezy weather will settle across areas from the northern Plains into the Northeast. However, some areas in the Great Lakes States may experience occasional showers. Meanwhile, scattered showers and thunderstorms will develop late in the week near the boundary between cool air in the North and early-season heat across the Deep South. Five-day rainfall totals could reach 1 to 3 inches from the eastern slopes of the central and southern Rockies and the southern Appalachians. Meanwhile, blazing heat will persist through the weekend from the Desert Southwest to the southern Atlantic Coast, with temperatures routinely topping 100°F into the weekend across much of western Texas. Late-week temperatures will exceed 110°F in parts of the Desert Southwest. The NWS 6- to 10-day outlook for June 11 – 15 calls for the likelihood of near- or above-normal temperatures nationwide, except for cooler-than-normal conditions from the mid-South into the Ohio Valley and interior Southeast. Meanwhile, near- or below-normal rainfall across most of the country should contrast with wetter-than-normal weather from the Great Basin to the southern High Plains."

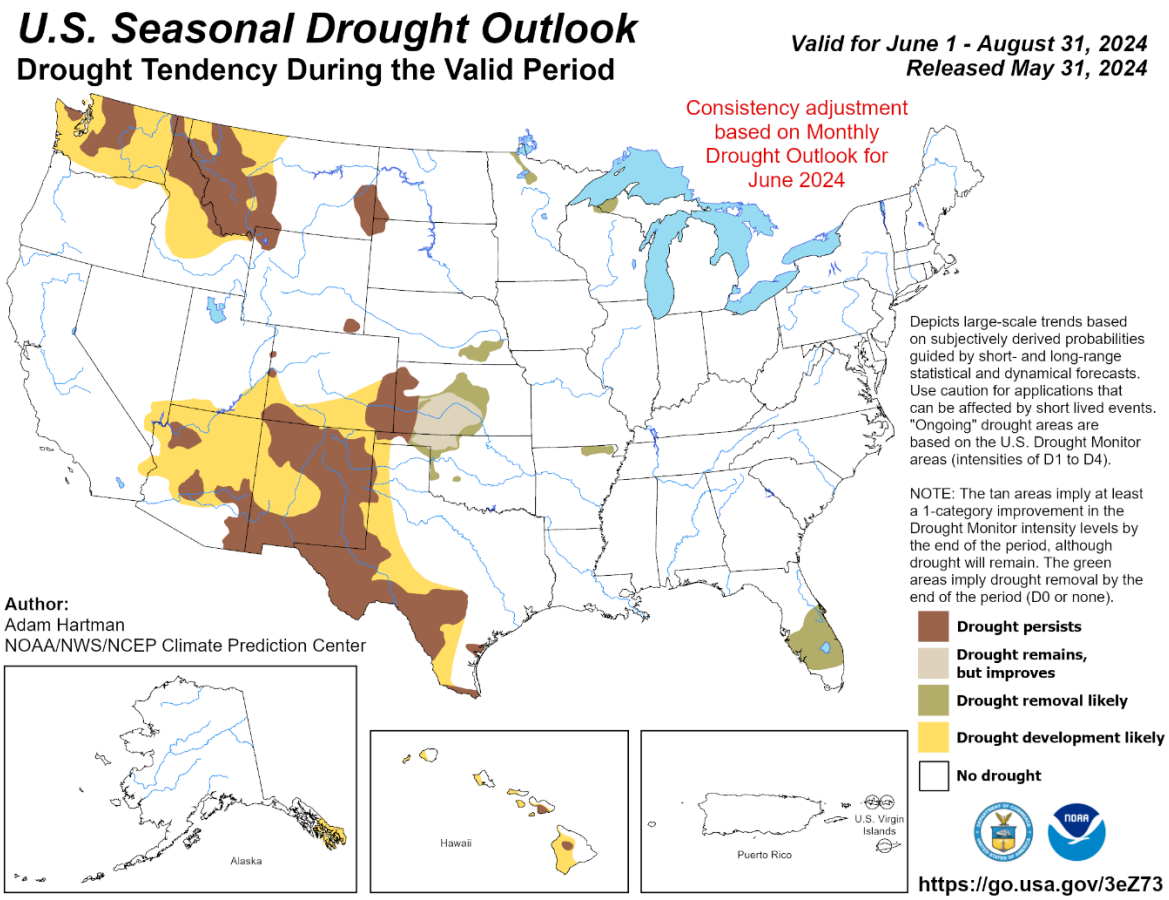
Weather Hazards Outlook: June 08 – 12, 2024

Source: NOAA Weather Prediction Center



Seasonal Drought Outlook: June 01 – August 31, 2024

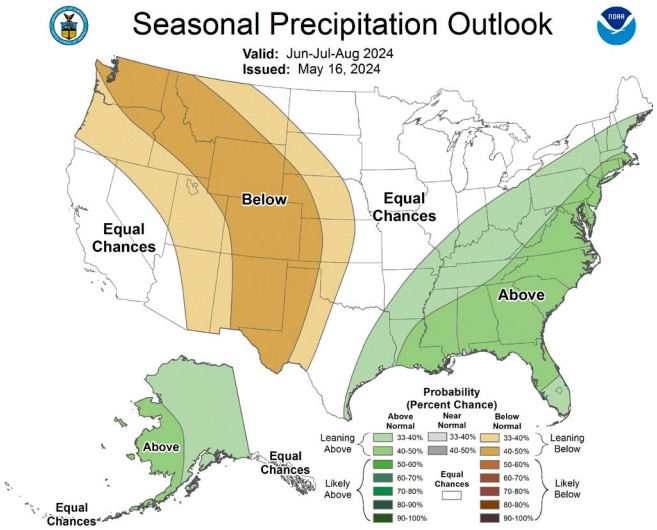
Source: National Weather Service



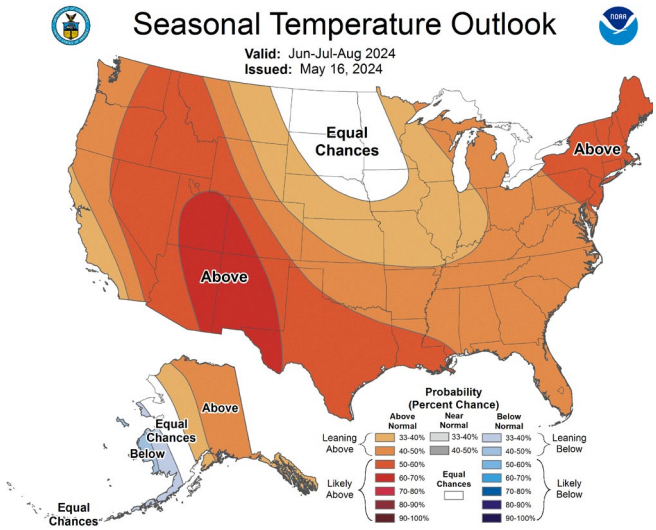
Climate Prediction Center Three-month Outlook

Source: National Weather Service

Precipitation



Temperature



June-July-August 2024 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.