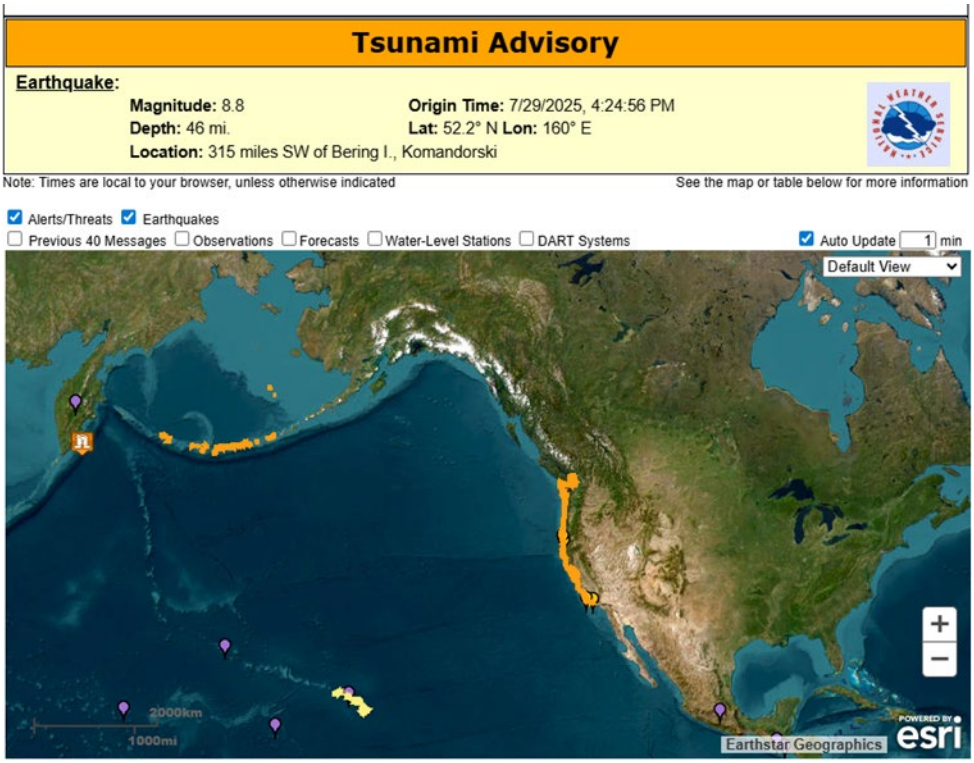
United States Department of Agriculture

Water and Climate Update

July 31, 2025

The Natural Resources Conservation Service (NRCS) 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.

Tsunami waves reach the Pacific Coast

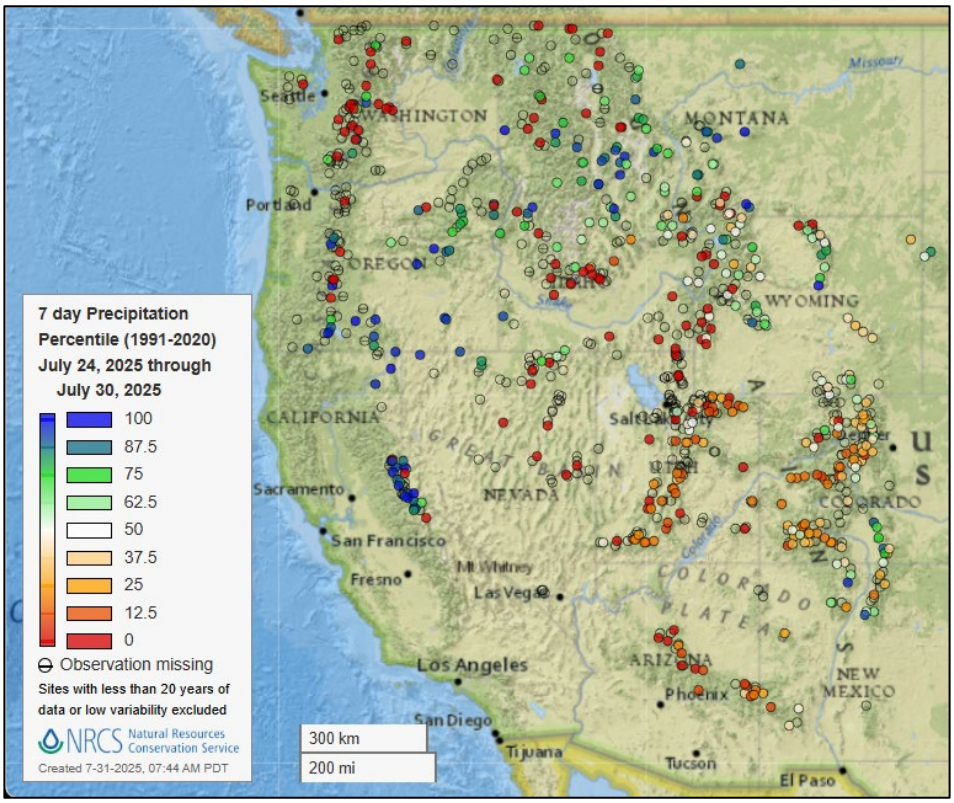


On July 29, an 8.8 magnitude earthquake occurred off the Russian coast, sending tsunami waves to the U.S. and other parts of the world. The biggest waves to reach the U.S. were recorded in Maui, Hawaii at over five feet in amplitude, but only minor flooding occurred from the event. The threat of the tsunami prompted the governor of Hawaii to briefly issue evacuation notices. The California coast measured waves over three feet in amplitude, along with erratic tidal swings of over one foot during short,15-minute intervals. Overall, impacts were minimal to the U.S. coast.

Related:
A tsunami makes its way across the Pacific, with waves hitting the U.S. West Coast – NPR
Tsunami evacuation orders lifted in Hawaii, threat to West Coast eases: Live updates – USA Today
Live updates: Tsunami waves reach Hawaii, California after huge quake off Russia – NBC News

Precipitation

Last 7 Days, NRCS SNOTEL Network

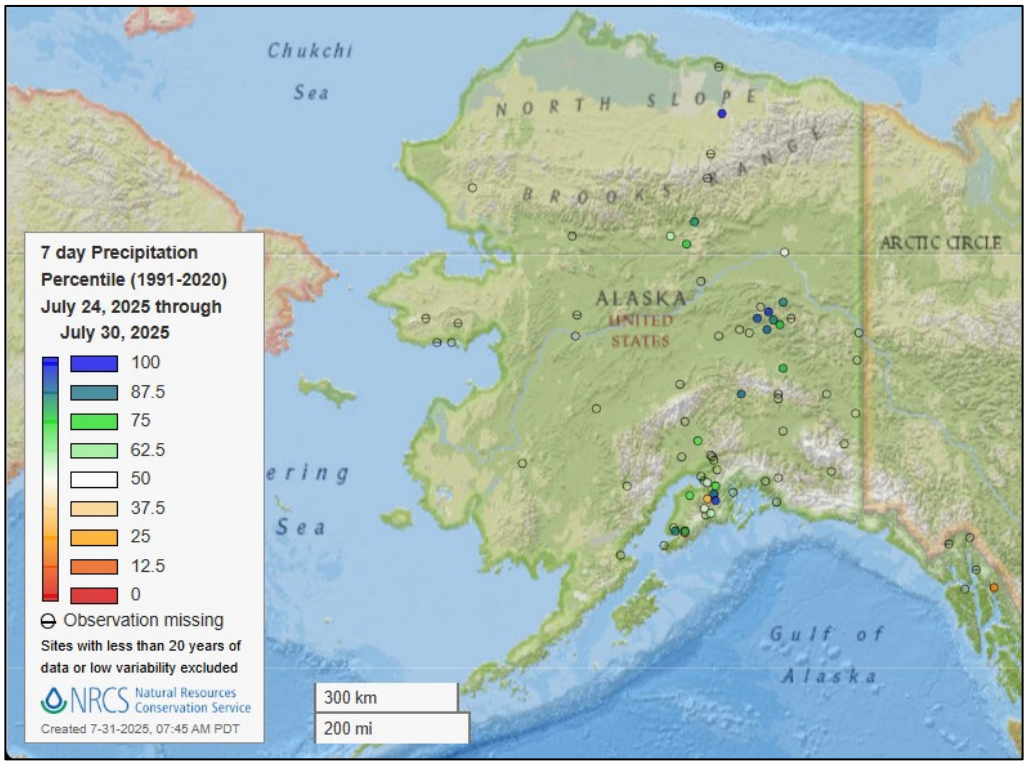


[7-day precipitation percentile map]

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

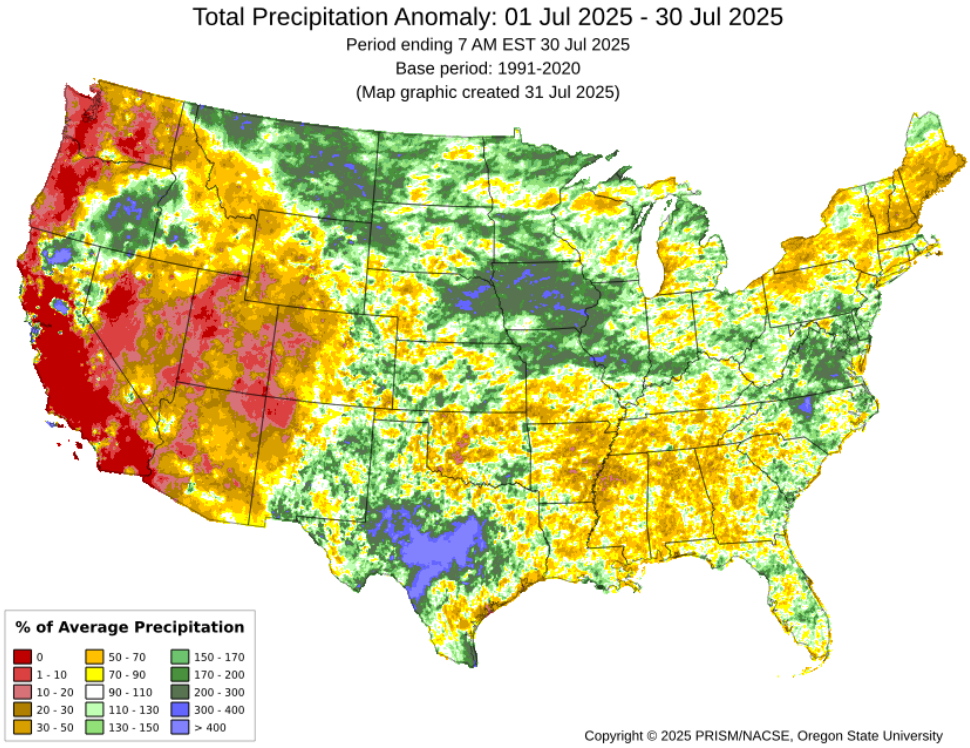
[Alaska 7-day precipitation percentile map]

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



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

Source: PRISM

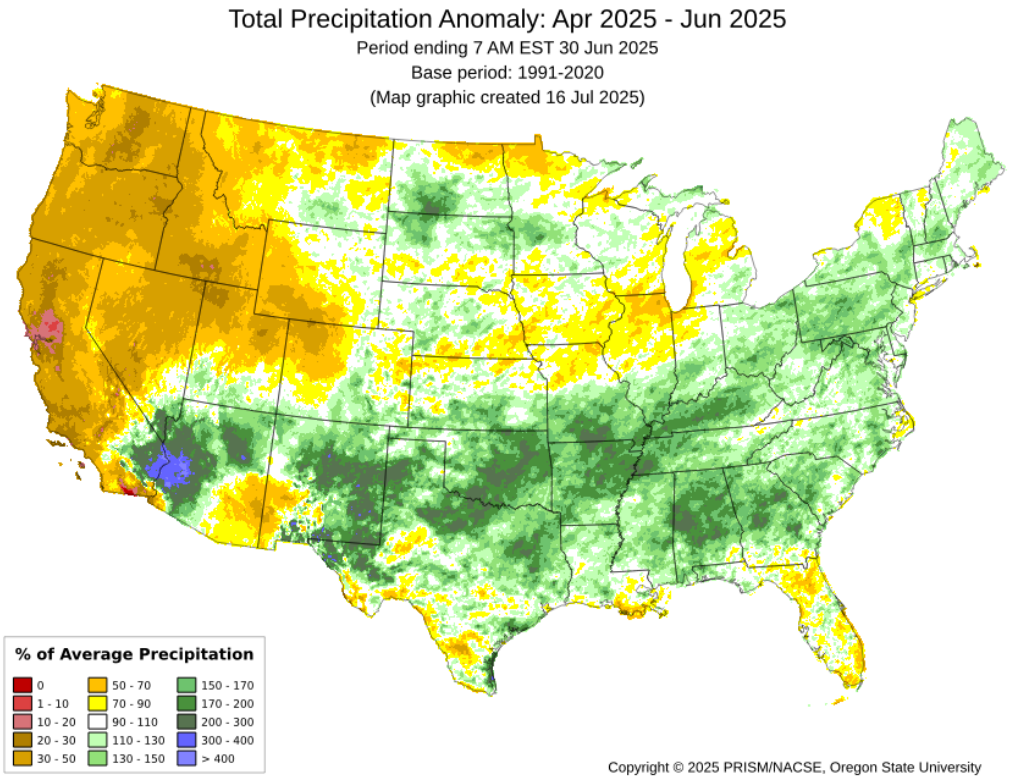


Month-to-date national total precipitation anomaly map

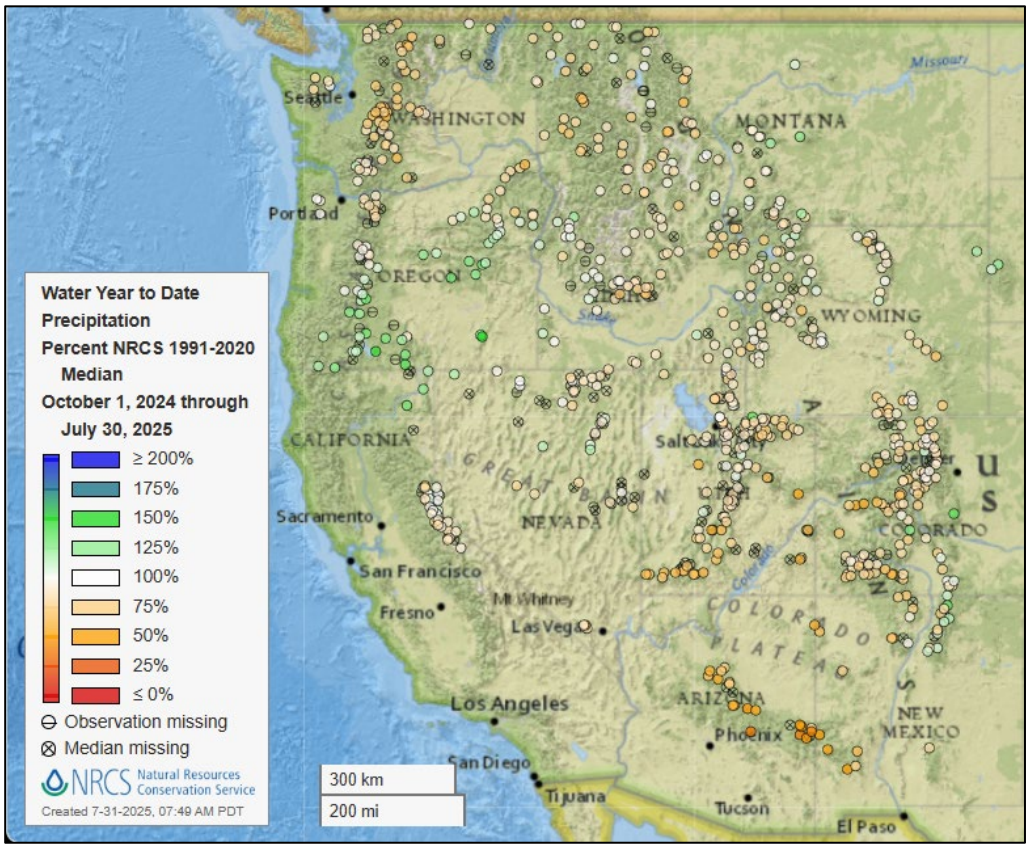
Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

April through June 2025 precipitation anomaly map



Water Year-to-Date, NRCS SNOTEL Network

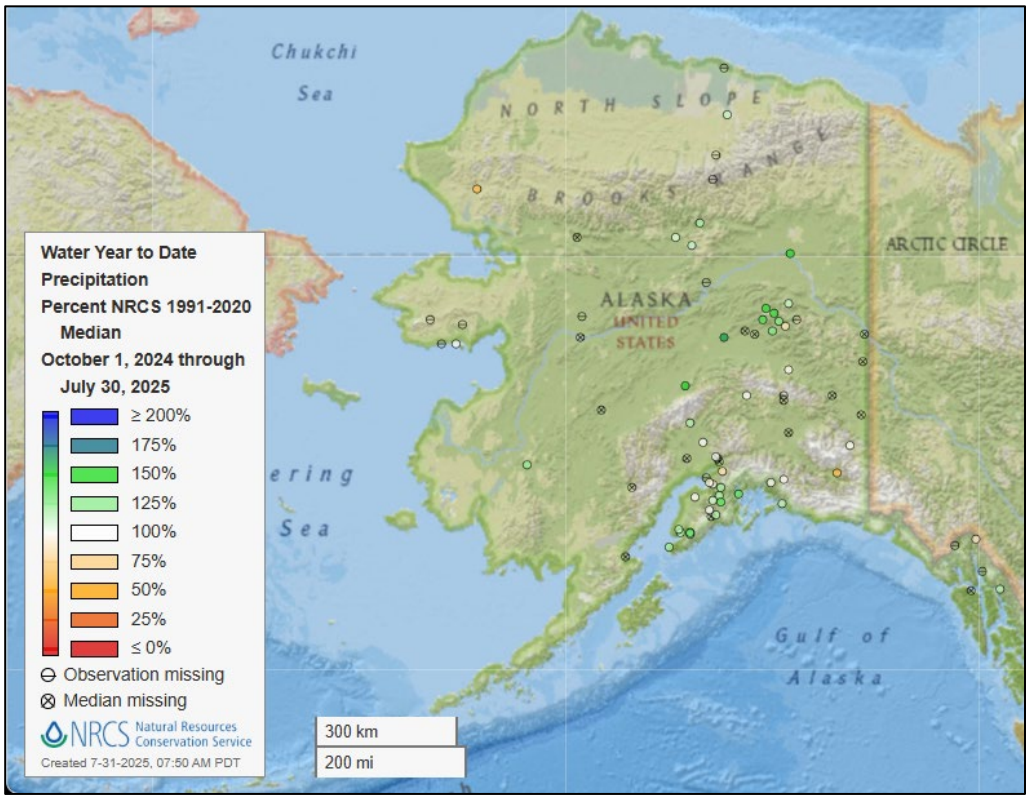


[2025 water year-to-date precipitation percent of median map]

See also:

[2025 water year-to-date precipitation percent of average map]

[2025 water year-to-date precipitation values (inches) map]



[Alaska 2025 water year-to-date precipitation percent of median map]

See also:

[Alaska 2025 water year-to-date precipitation percent of average map]

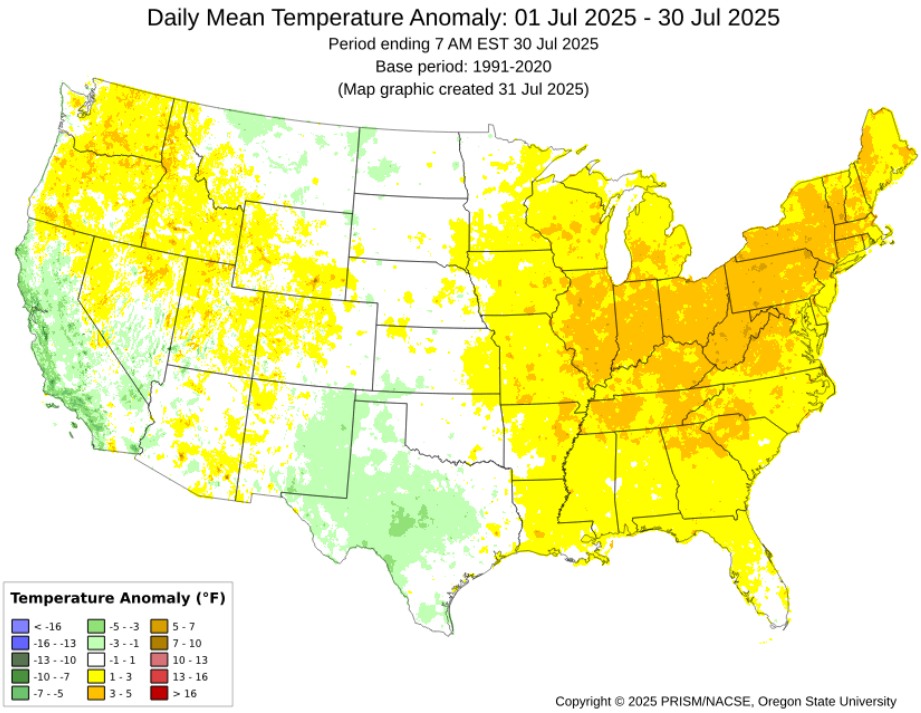
[Alaska 2025 water year-to-date precipitation values (inches) map]

Temperature

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

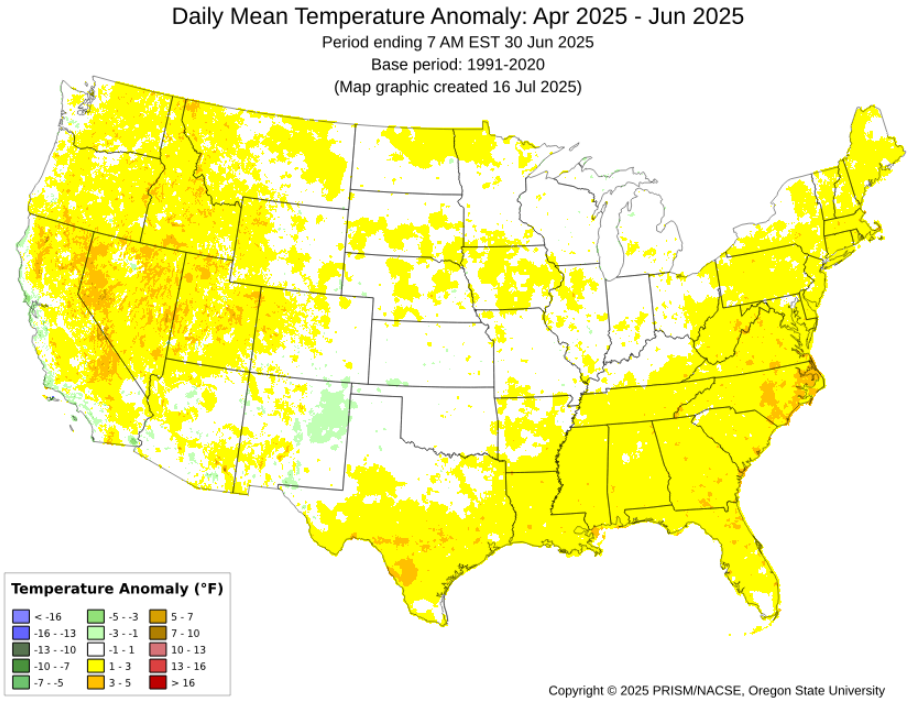
Source: PRISM

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



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

Source: PRISM

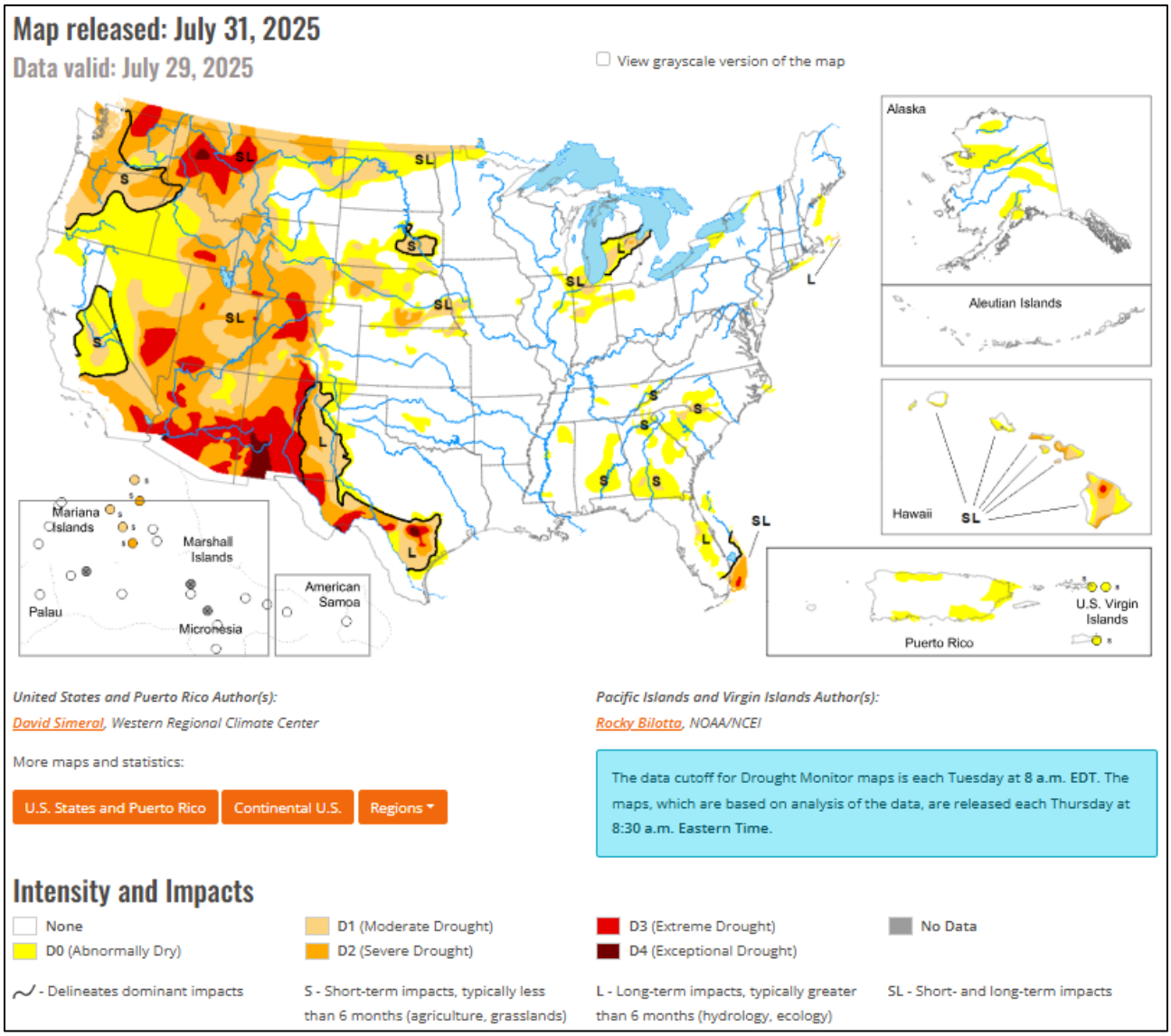


[April through June 2025 daily mean temperature anomaly map]

Drought

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

U.S. Drought Portal
Source: NOAA



Current National Drought Summary, July 29, 2025

Source: National Drought Mitigation Center

“This U.S. Drought Monitor (USDM) week saw continued improvement in drought-related conditions across areas of the Midwest (Michigan, Ohio, Indiana, Illinois, Iowa, Minnesota), central and northern Plains (Kansas, Nebraska, Dakotas, eastern Montana), South (Texas), and in the Desert Southwest (New Mexico). During the past week, the most significant rainfall accumulations were observed across areas of Kansas, Missouri, Iowa, and Minnesota, where they ranged from 3 to 7+ inches. Elsewhere, short-term precipitation shortfalls (past 30 to 60 days) led to continued expansion of Abnormally Dry (D0) areas across the Southeast states including the Carolinas, Georgia, and Alabama as well as the introduction of isolated areas of Moderate Drought (D1) in Alabama, Georgia, and South Carolina where agriculture-related drought impacts are being reported. In the South, drought conditions continued to improve in western portions of Texas as well as in areas of eastern New Mexico where monsoonal storms have provided some minor relief to areas experiencing long-term drought. In the West, conditions continued to deteriorate across the Pacific Northwest (Oregon, Washington, Idaho) and areas of the Intermountain West (Wyoming, Utah, and Colorado), while areas of eastern Montana saw improvement in drought in response to precipitation events during the past few weeks. In terms of reservoir storage in the West, California’s major reservoirs continue to be at or above historical averages for the date (July 29), with the state’s two largest reservoirs, Lake Shasta and Lake Oroville, at 105% and 116% of average, respectively. In the Southwest, the U.S. Bureau of Reclamation is reporting (July 27) Lake Powell at 32% full (46% of average), Lake Mead at 31% full (51%), and the total Colorado system at 39% of capacity (compared to 44% of capacity the same time last year).”

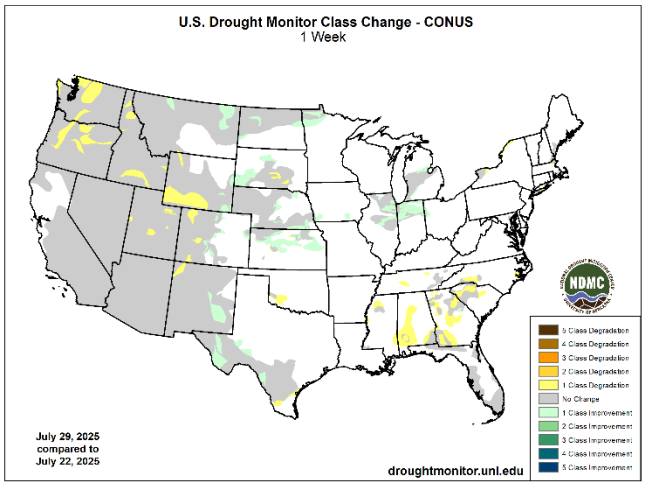
National Drought Summary – Looking Ahead

“The NWS Weather Prediction Center (WPC) 7-Day Quantitative Precipitation Forecast (QPF) calls for generally dry conditions across much of the western U.S. except for some light shower activity (accumulations generally <1 inch) across areas of the Rockies (Idaho, Montana, Wyoming, Colorado) and mountain ranges of New Mexico. East of the Rockies, light-to-moderate accumulations (ranging from 1 to 4 inches) are expected across areas of the Plains states with the heaviest accumulations expected in western Oklahoma. In the lower Midwest, Mid-Atlantic, South (Gulf Coast areas), and portions of the Southeast, 1 to 5+ inch accumulations are forecast, with the heaviest accumulation expected along the coastal plains of Carolina and Georgia. The Climate Prediction Center (CPC) 6-10-day outlooks call for a moderate-to-high probability of above-normal temperatures across the Desert Southwest, southeastern portions of the Intermountain West, Plains, Midwest, New England, South, and southern portions of the Southeast region. In contrast, below-normal temperatures are forecast for areas of the West, including southern California, the Great Basin, and Pacific Northwest. In terms of precipitation, there is a low-to-moderate probability of above-normal precipitation across the Pacific Northwest, northern portions of the Intermountain West, northern Plains Midwest, Mid-Atlantic, and Southeast. Elsewhere, below-normal precipitation is expected across the southern half of the western U.S., southern Plains, and Texas.”

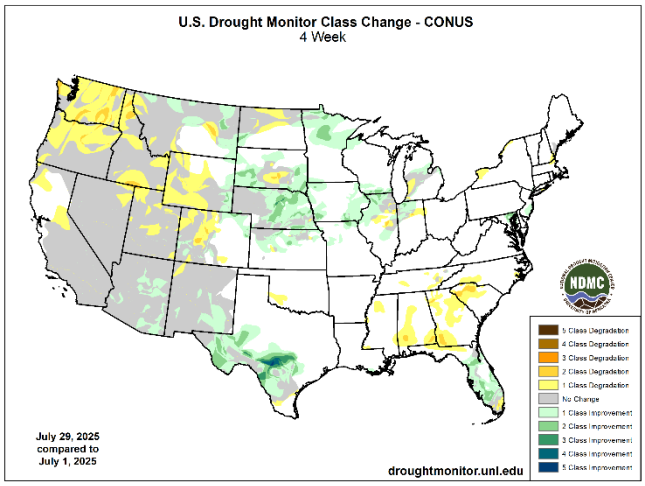
Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

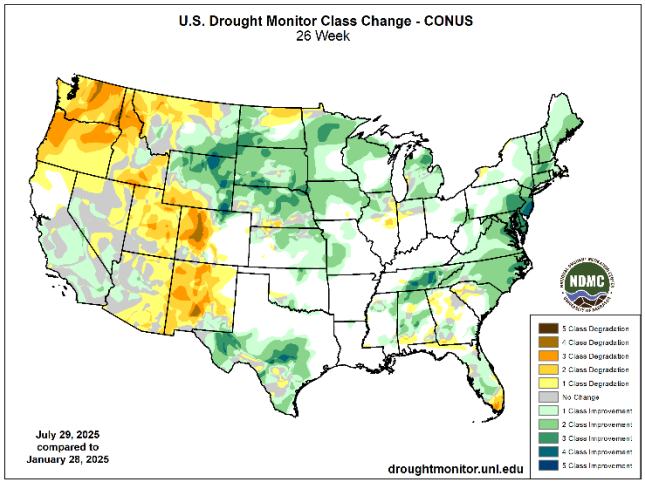
1 Week



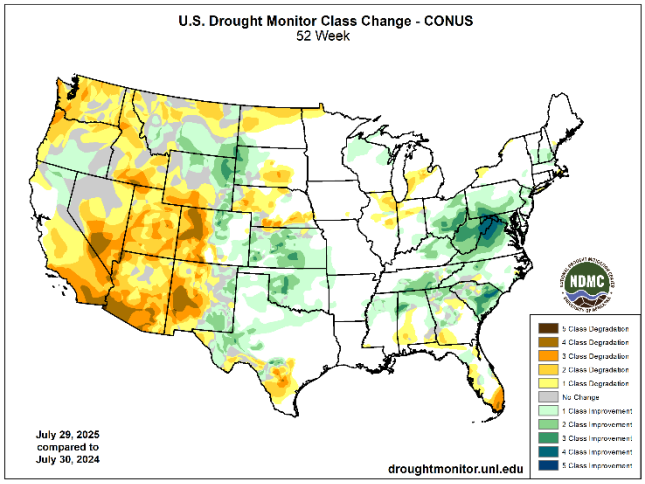
1 Month



6 Months



1 Year



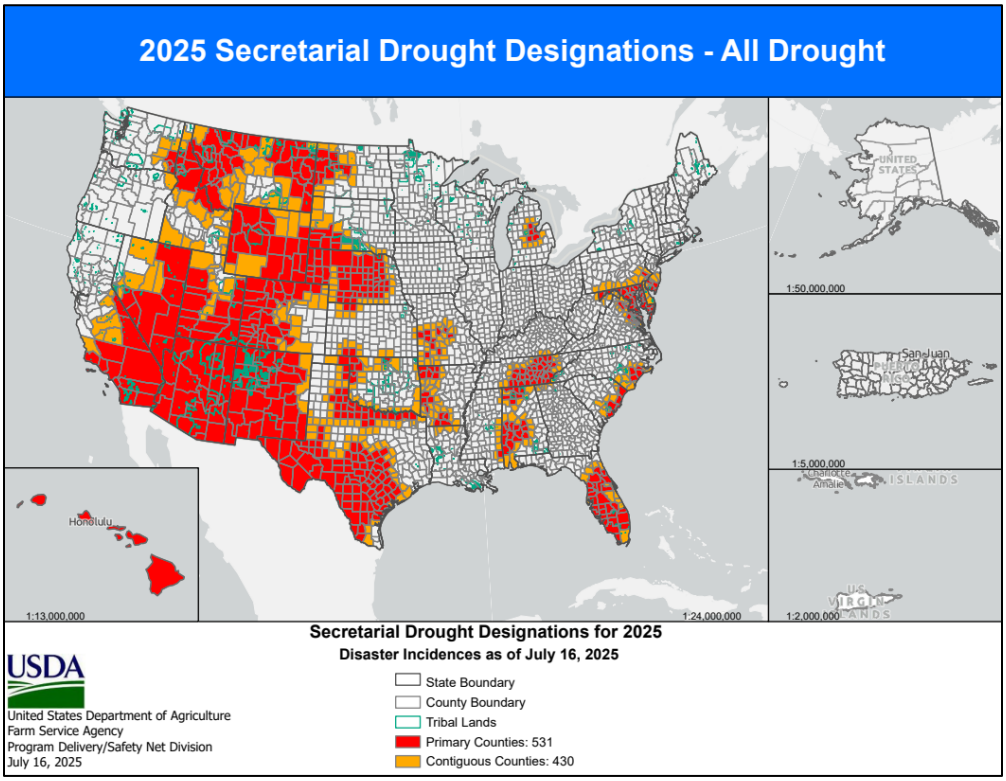
Changes in drought conditions over the last 12 months for the contiguous U.S.

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 large wildland fires, as classified by the National Interagency Coordination Center

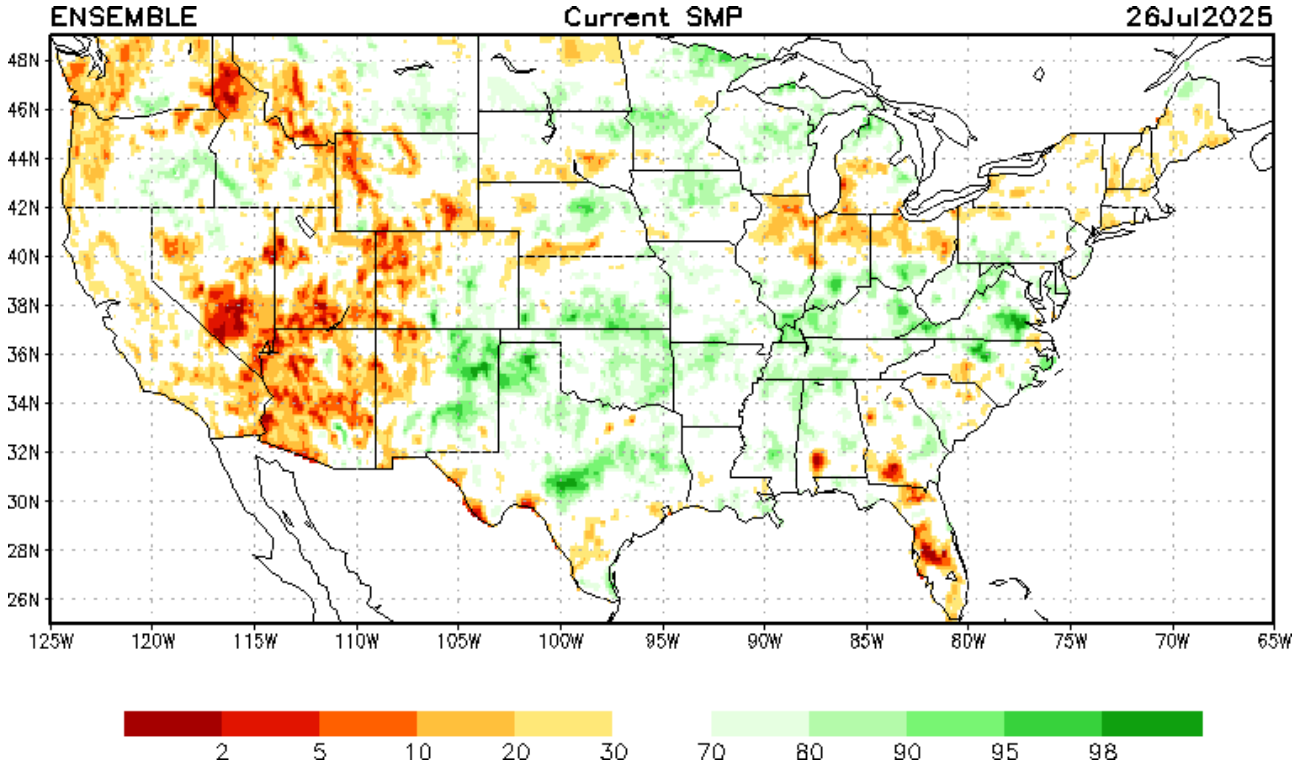
Highlighted Wildfire Resources

- 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

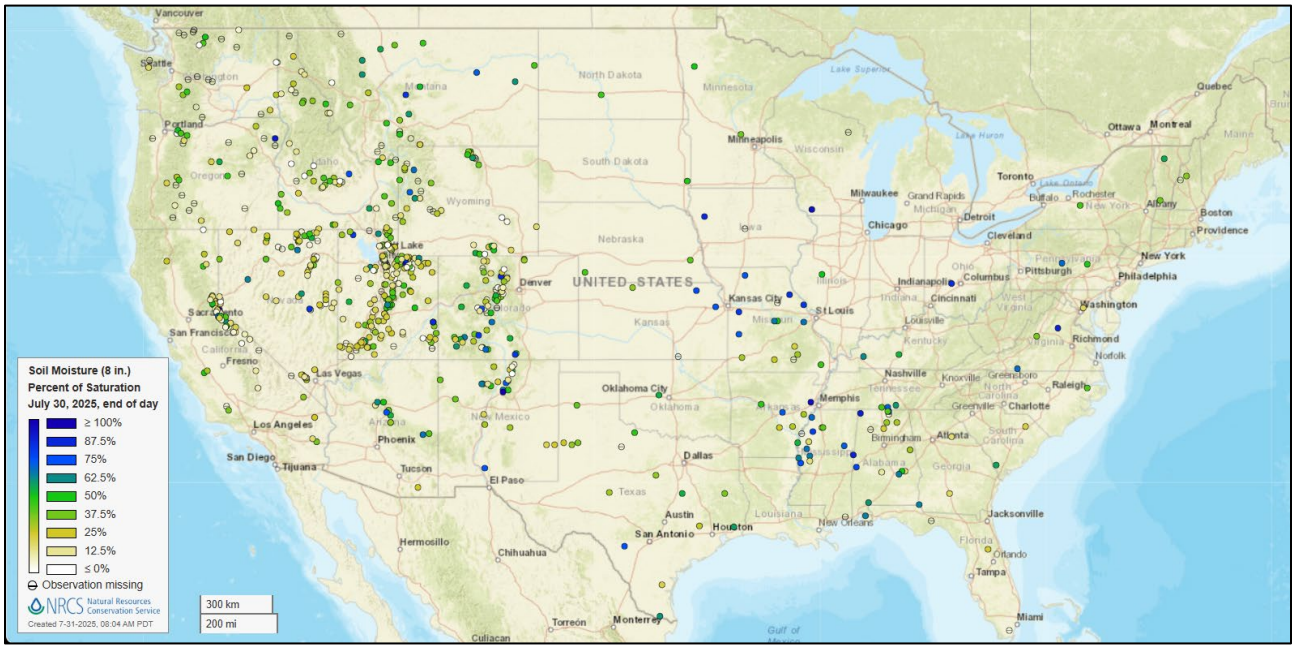


Modeled soil moisture percentiles as of July 26, 2025

Soil Moisture Percent of Saturation

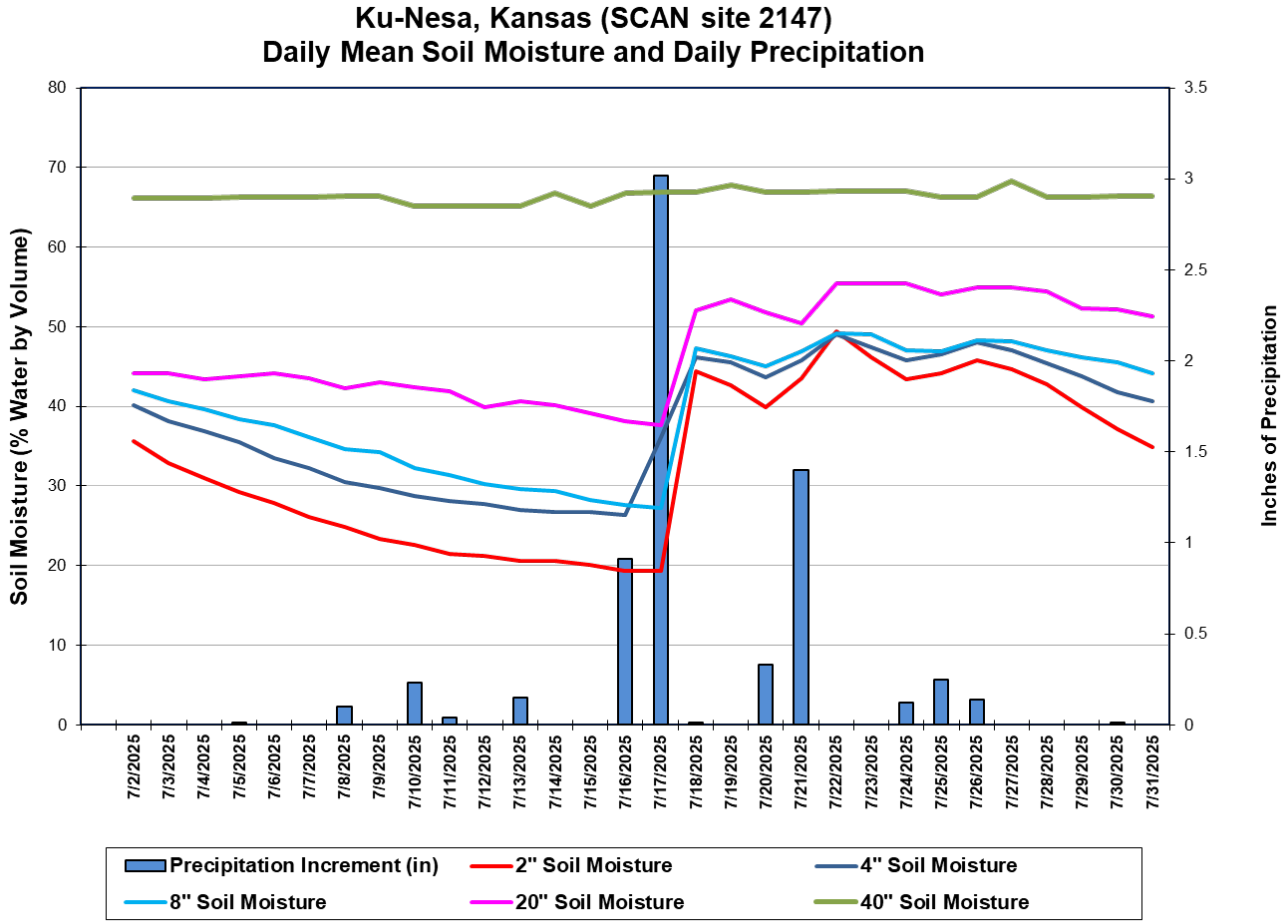
Source: NRCS SNOTEL and Soil Climate Analysis Network (SCAN)

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



Soil Moisture

Source: NRCS Soil Climate Analysis Network (SCAN)



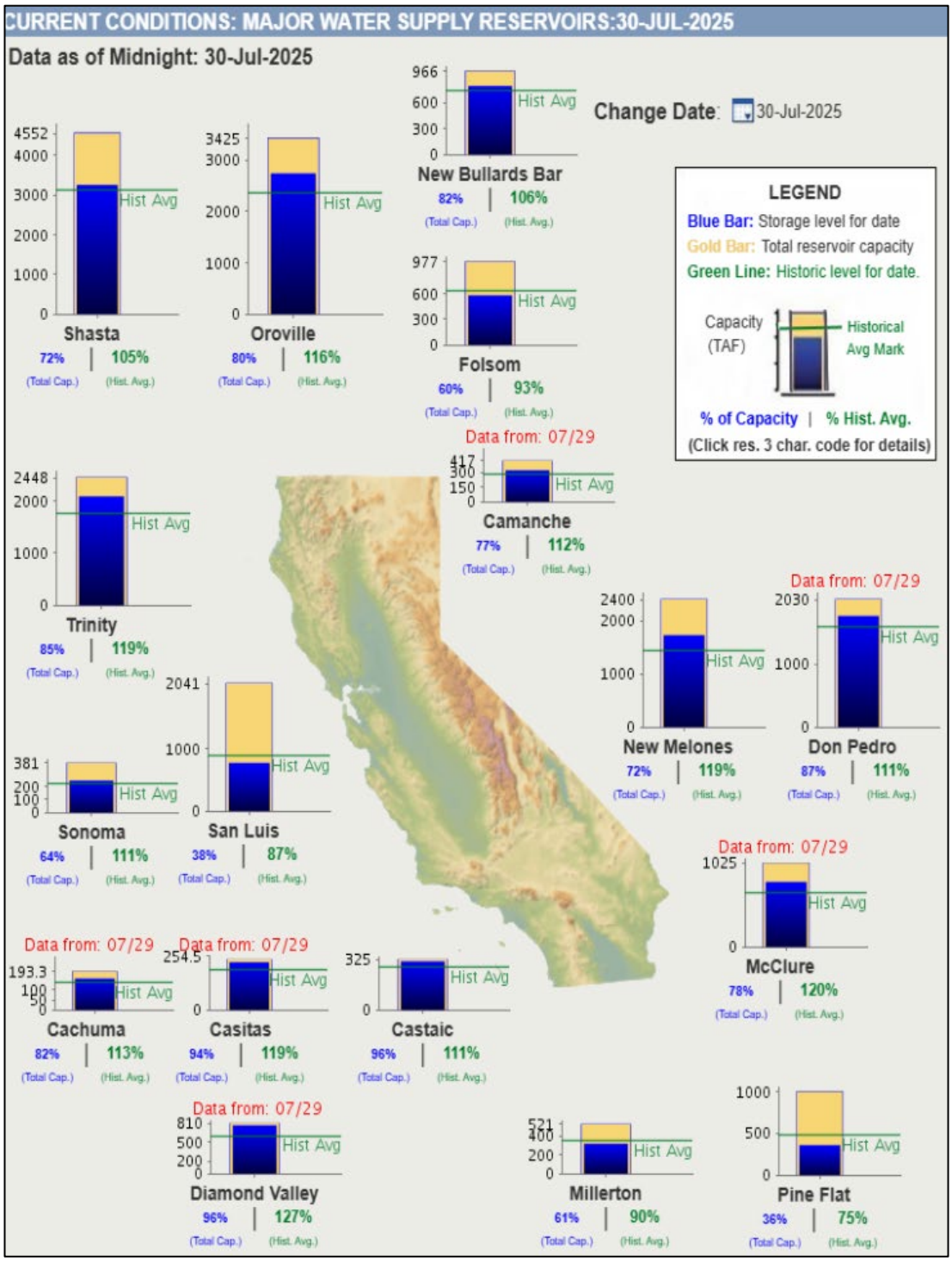
This chart shows the precipitation and soil moisture for the last 30 days at the Ku-Nesa SCAN site in Kansas. After the site received 3.93 inches of precipitation between July 16-17, soil sensors at all depths except the -40-inch sensor recorded pronounced increases in soil moisture levels. Total precipitation for the 30-day period was 6.72 inches.

Soil Moisture Data Portals

- USCRN Soil Moisture
- National Soil Moisture Network
- NOAA Climate Prediction Center Soil Moisture
- NASA Grace

Current California Reservoir Conditions

Source: California Department of Water Resources



[Current California Reservoir Conditions]

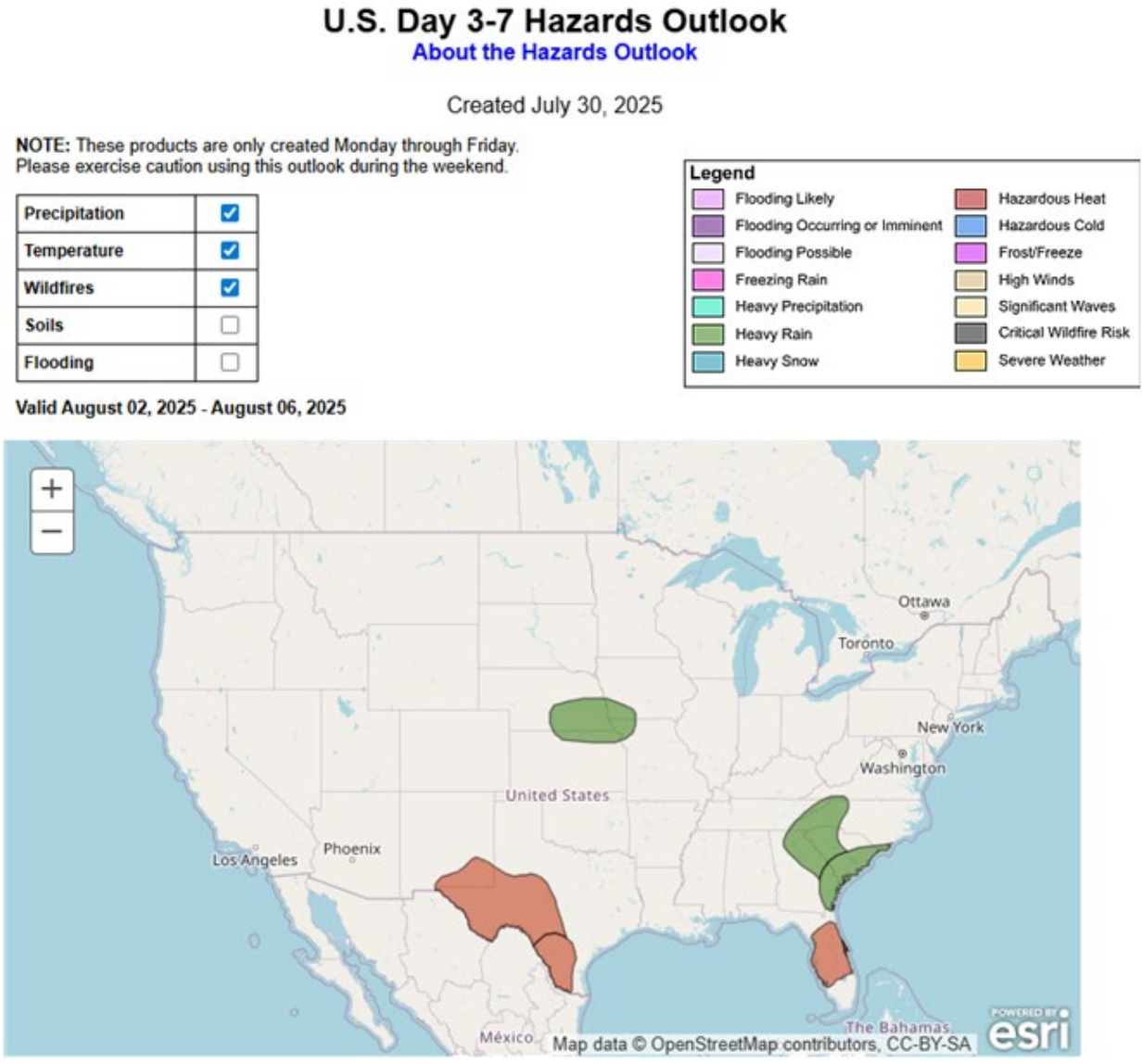
Agricultural Weather Highlights

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

National Outlook, Thursday July 31, 2025: "A reprieve from heat and humidity will occur for the next several days east of the Rockies, except across the Deep South. By early next week, however, hot weather will return across the High Plains, while temperatures will rebound to near-normal levels in many other areas. Lingering heat in the South will be particularly intense across the south-central U.S., including much of Texas. Meanwhile, heavy showers and locally severe thunderstorms will flare later today across the middle Atlantic States, followed by a southward shift in the heaviest rain. Five-day rainfall totals could reach 2 to 6 inches across the lower Southeast, including northern Florida, southern Georgia, and the coastal Carolinas. Scattered showers and thunderstorms will also affect the Plains and Northwest during the next several days, while mostly dry weather will prevail in California, the Great Basin, and much of the Southwest. The NWS 6- to 10-day outlook for August 5 – 9 calls for near- or above-normal temperatures nationwide, except for cooler-than-normal conditions across the interior Northwest. Southern sections of the Plains and Rockies will have the greatest likelihood of experiencing unusually hot weather. Meanwhile, above-normal rainfall across much of the northern and eastern U.S. should contrast with drier-than-normal weather from the Great Basin and Southwest to the central and southern Plains."

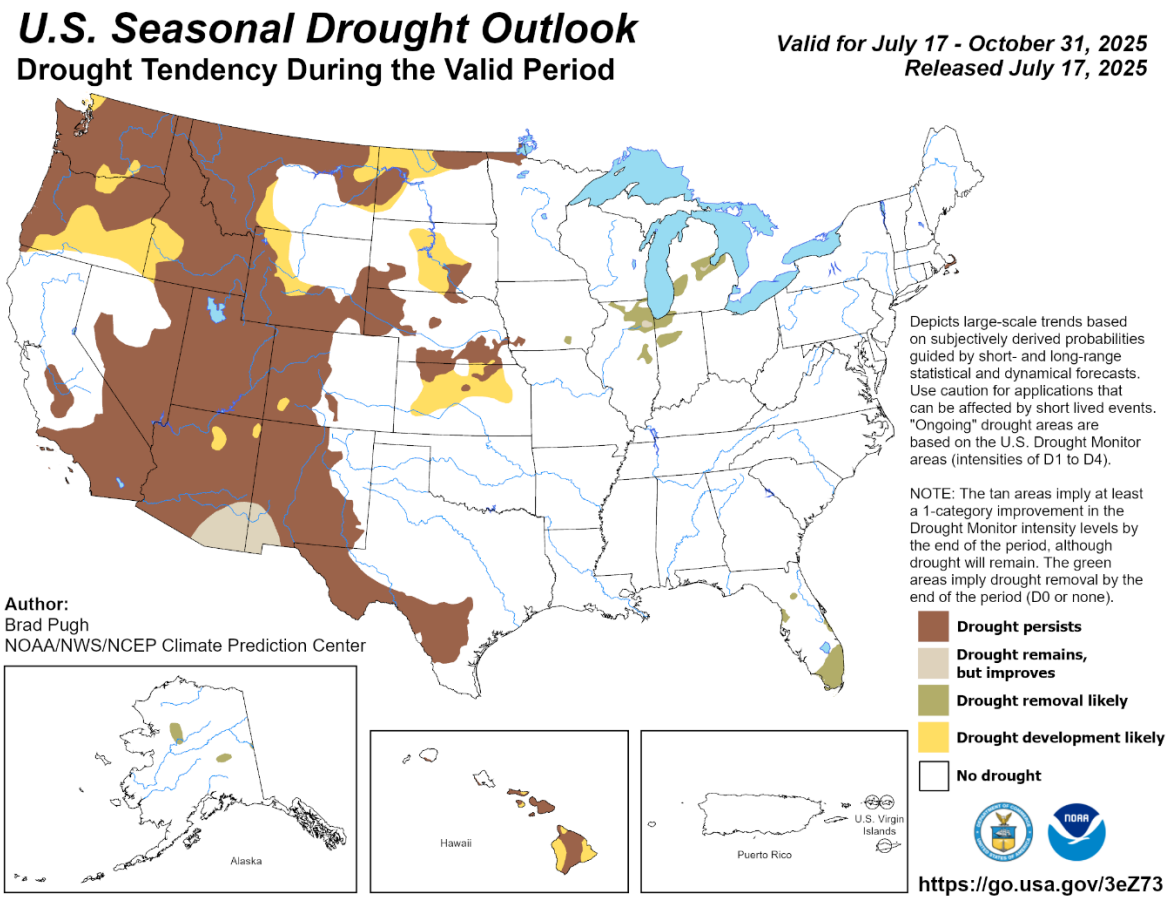
Weather Hazards Outlook: August 02 – 06, 2025

Source: NOAA Weather Prediction Center



Seasonal Drought Outlook: July 17 – October 31, 2025

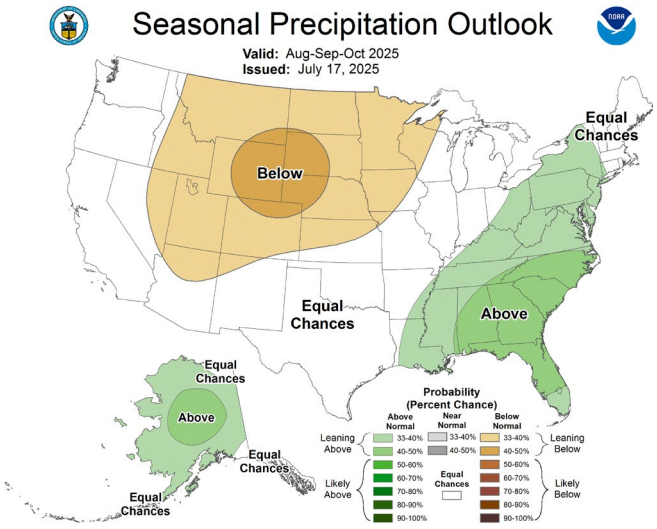
Source: National Weather Service



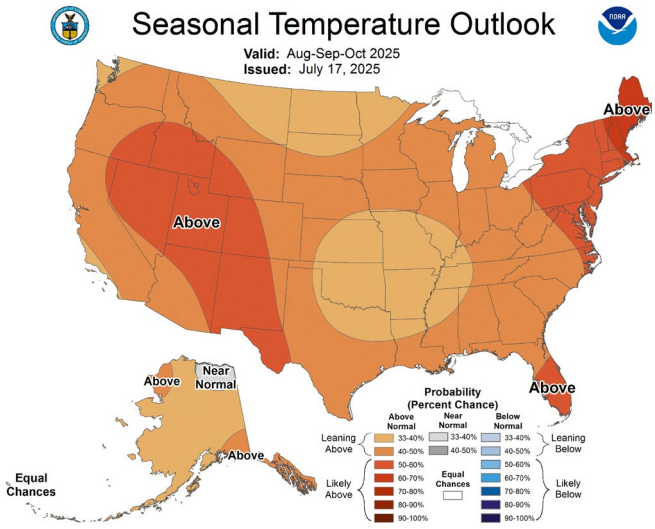
Climate Prediction Center Three-month Outlook

Source: National Weather Service

Precipitation



Temperature



August-September-October 2025 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.