



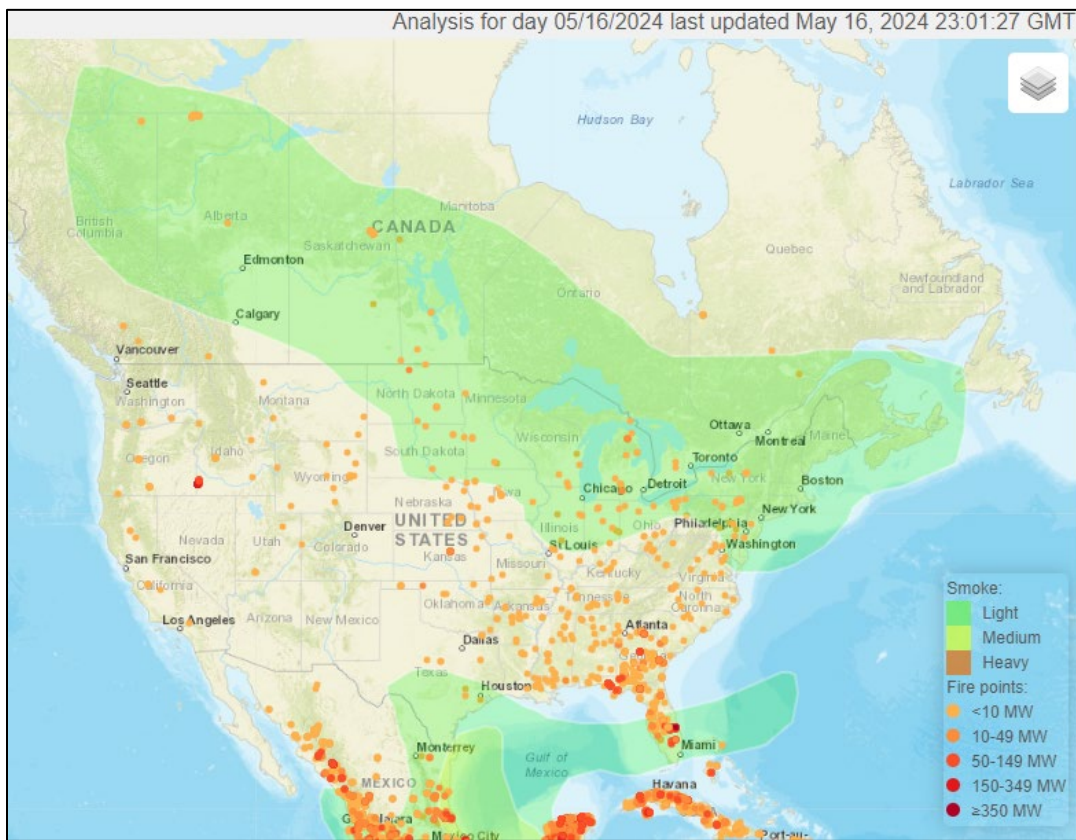
Water and Climate Update

May 16, 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.

| | | | |
|---------------------|---|--|----|
| Snow | 2 | Drought | 10 |
| Precipitation | 4 | Other Climatic and Water Supply Indicators | 13 |
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Smoke from Canadian wildfires descends into the U.S.

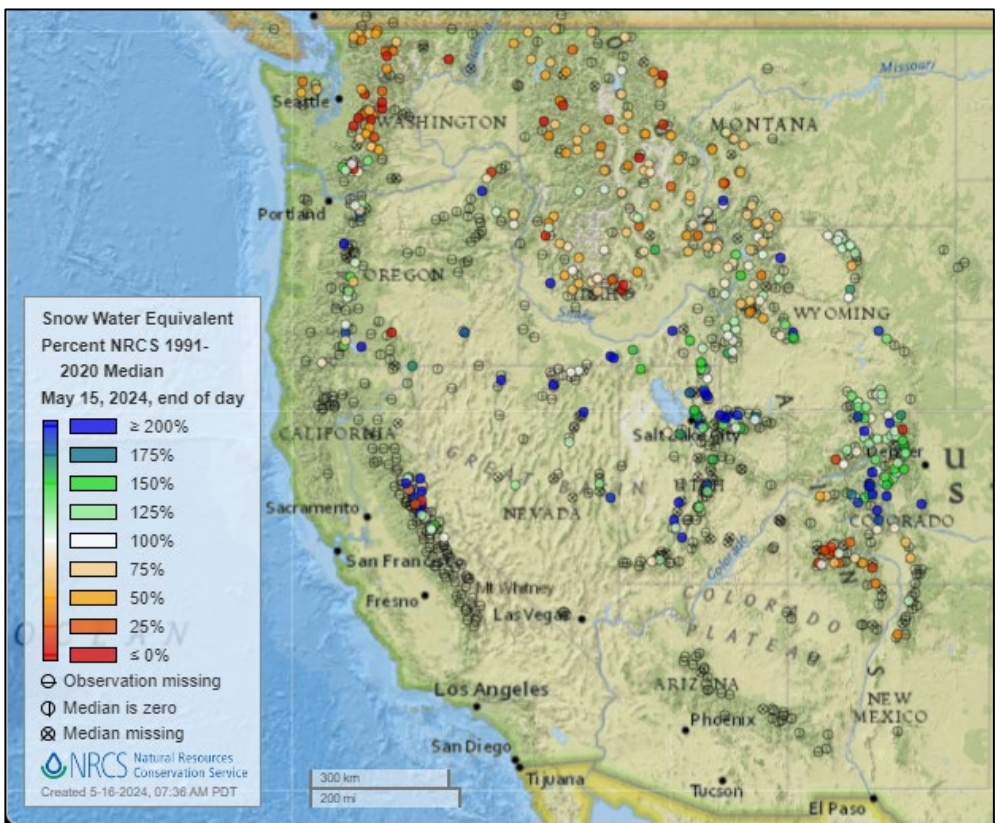


The Canadian Interagency Forest Fire Centre is reporting over 120 active wildfires in Canada as of May 16, with 30 labeled as “out of control.” Smoke from the wildfires is drifting into the U.S. and degrading air quality for some regions. Montana, Wisconsin, North and South Dakota, and Minnesota were all placed under air quality alerts on May 13, and winds are carrying the smoke to other parts of the U.S. as of May 16. Last year, Canada experienced a record fire season, charring over 45 million acres and enveloping many parts of the U.S. in smoke.

Related:

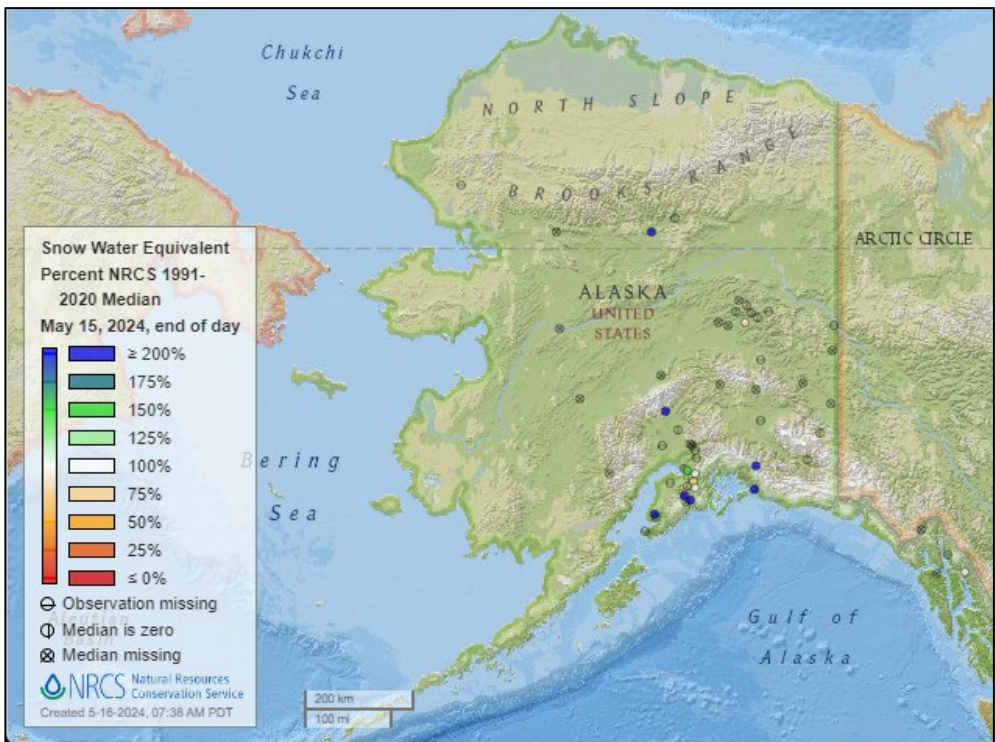
- [Canadian wildfires trigger air quality alerts across 4 U.S. states](#) - NBC News
- [Wildfire smoke could impact US again as Canada braces for another fiery summer](#) – ABC News
- [Canada wildfire smoke put this city’s air quality among U.S. worst](#) - The Washington Post
- [Canadian Interagency Forest Fire Centre Inc](#) - Canadian Interagency Forest Fire Centre Inc.

Snow



[Snow water equivalent percent of median map](#)

See also:
[Snow water equivalent values \(inches\) map](#)

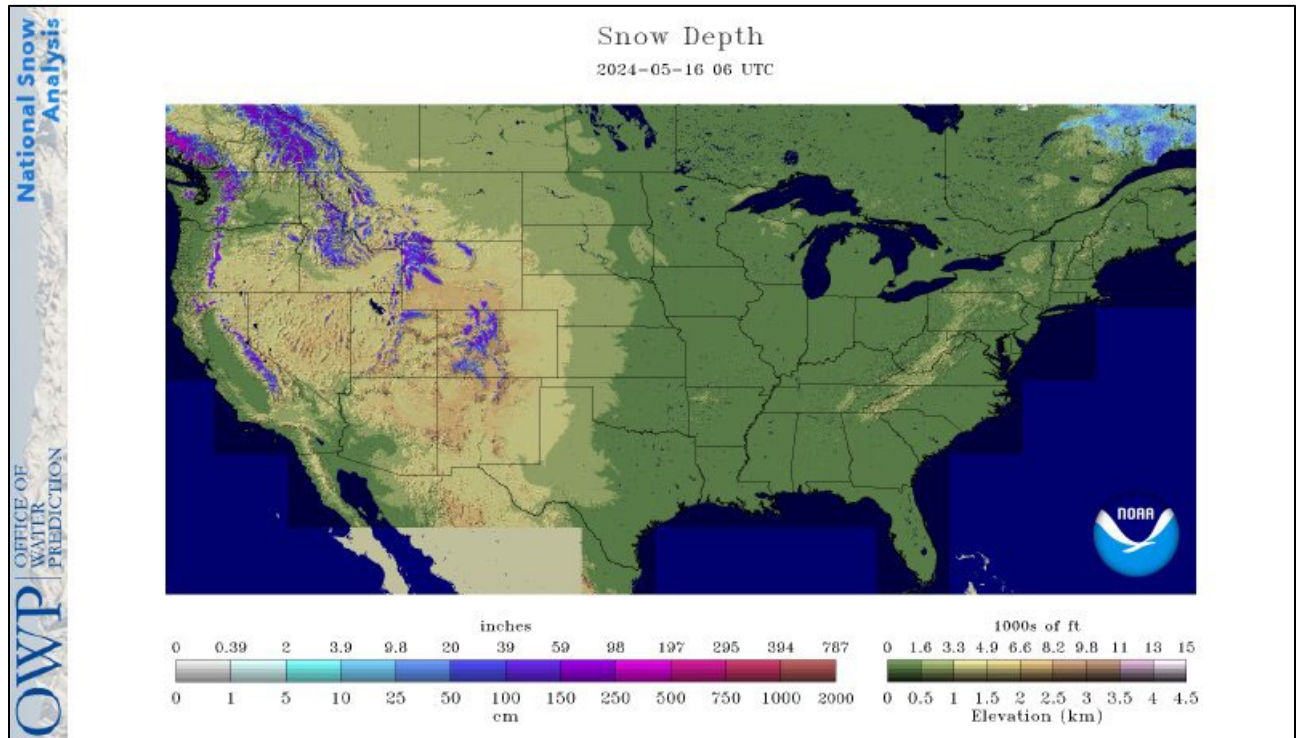


[Alaska snow water equivalent percent of median map](#)

See also:
[Alaska snow water equivalent values \(inches\) map](#)

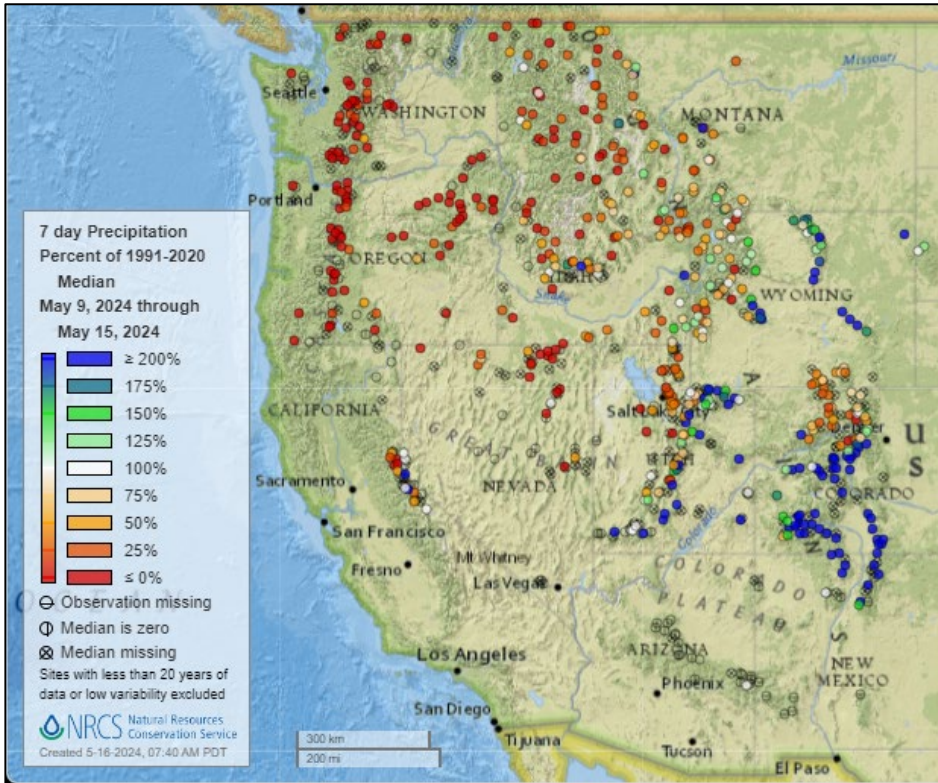
Current Snow Depth, National Weather Service Snow Analysis

Source: NOAA NWS National Operational Hydrologic Remote Sensing Center



Precipitation

Last 7 Days, NRCS SNOTEL Network

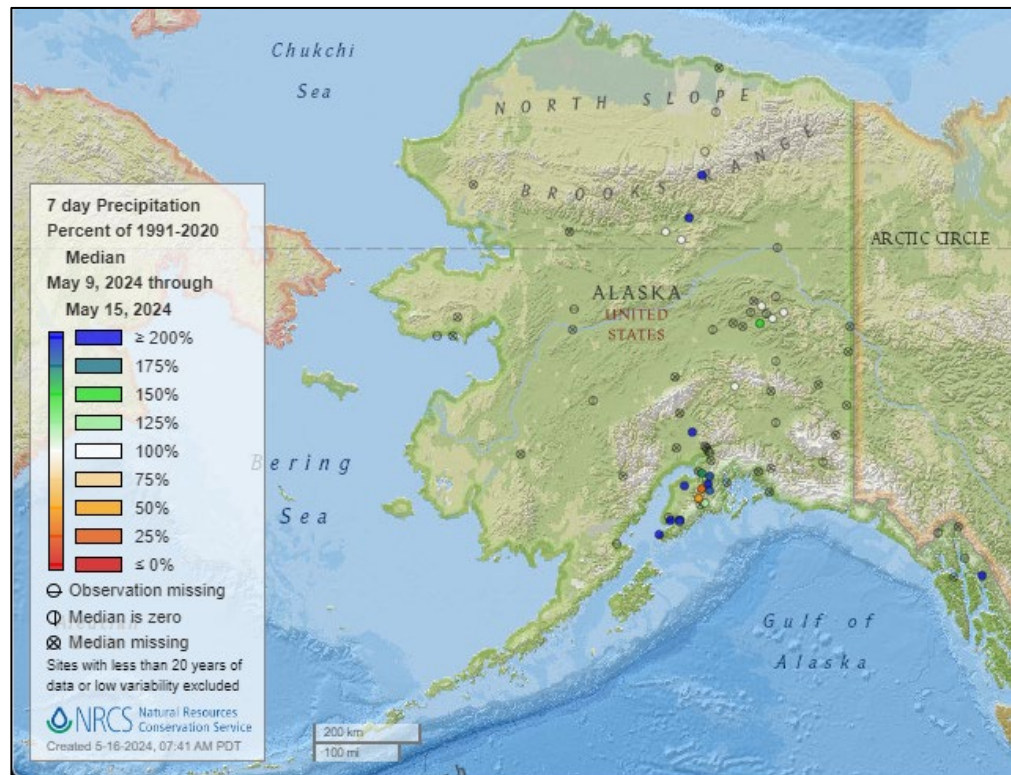


[7-day precipitation percent of median map](#)

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](#)



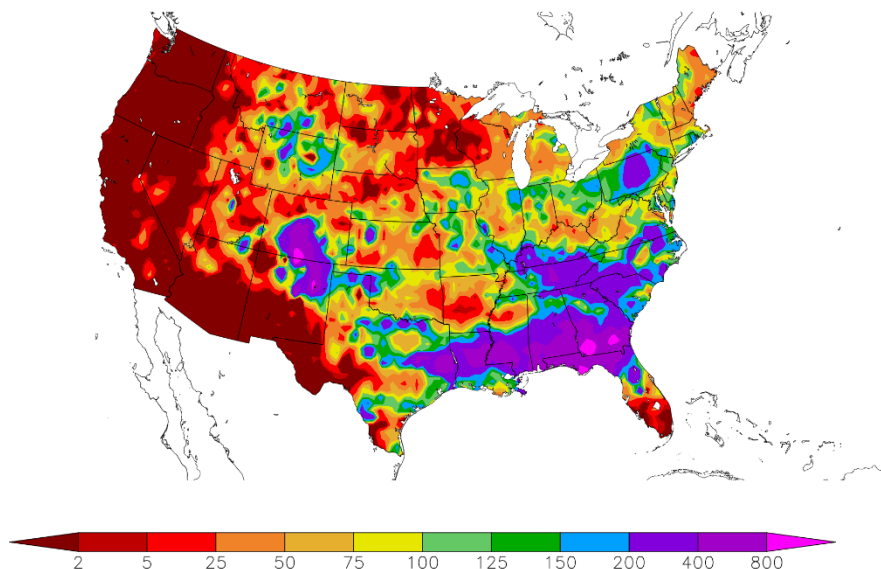
Last 7 Days, National Weather Service (NWS) Networks

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 (%)
5/9/2024 – 5/15/2024



Generated 5/16/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

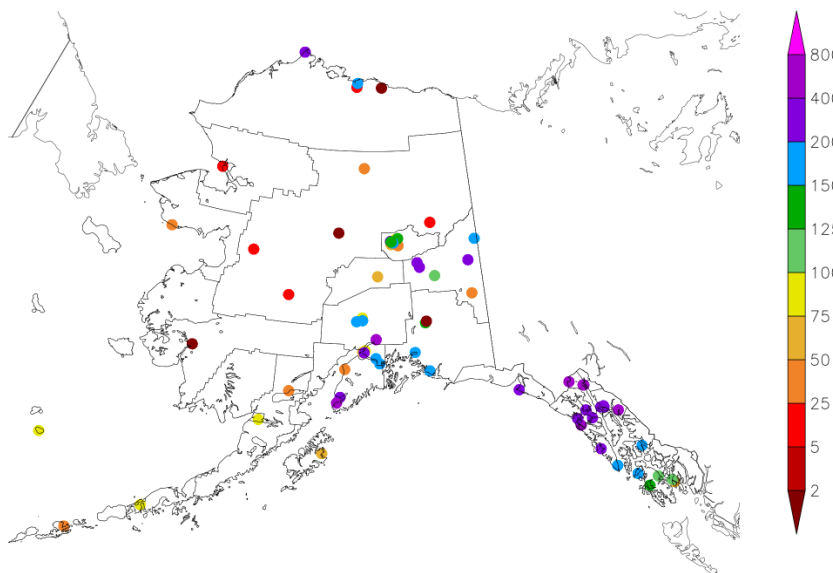
Last 7 Days, National Weather Service (NWS) Networks

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 (%)
5/9/2024 – 5/15/2024



Generated 5/16/2024 at HPRCC using provisional data.

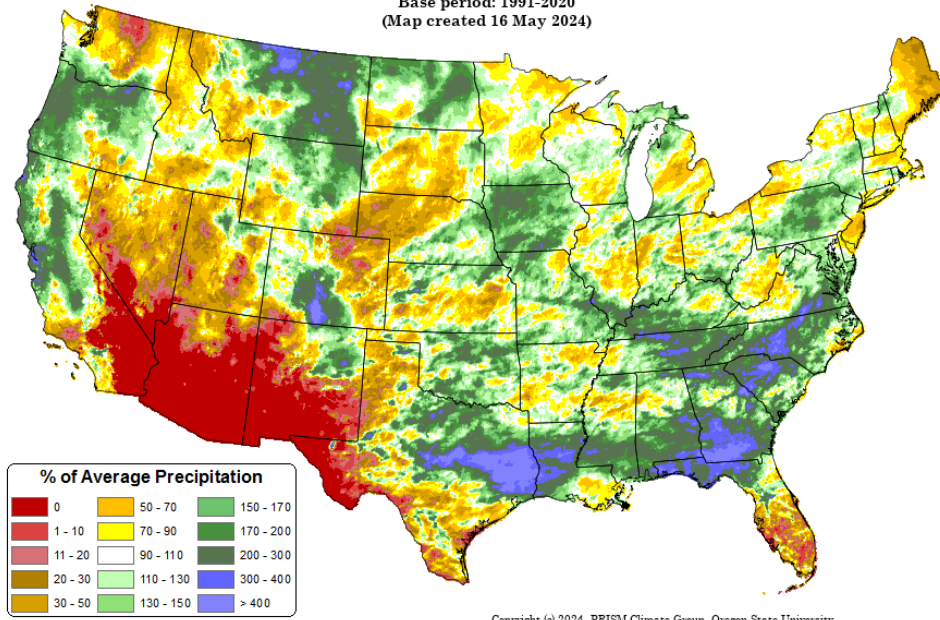
NOAA Regional Climate Centers

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

Source: PRISM

Total Precipitation Anomaly: 01 May 2024 - 15 May 2024
Period ending 7 AM EST 15 May 2024
Base period: 1991-2020
(Map created 16 May 2024)

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



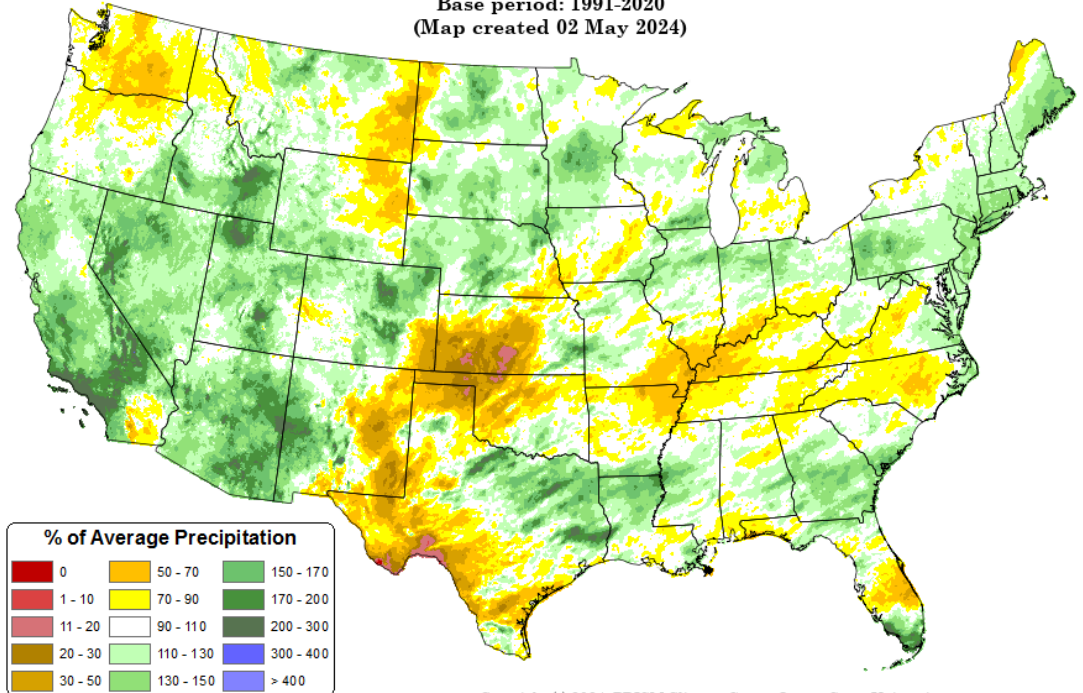
Copyright (c) 2024, PRISM Climate Group, Oregon State University

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

Source: PRISM

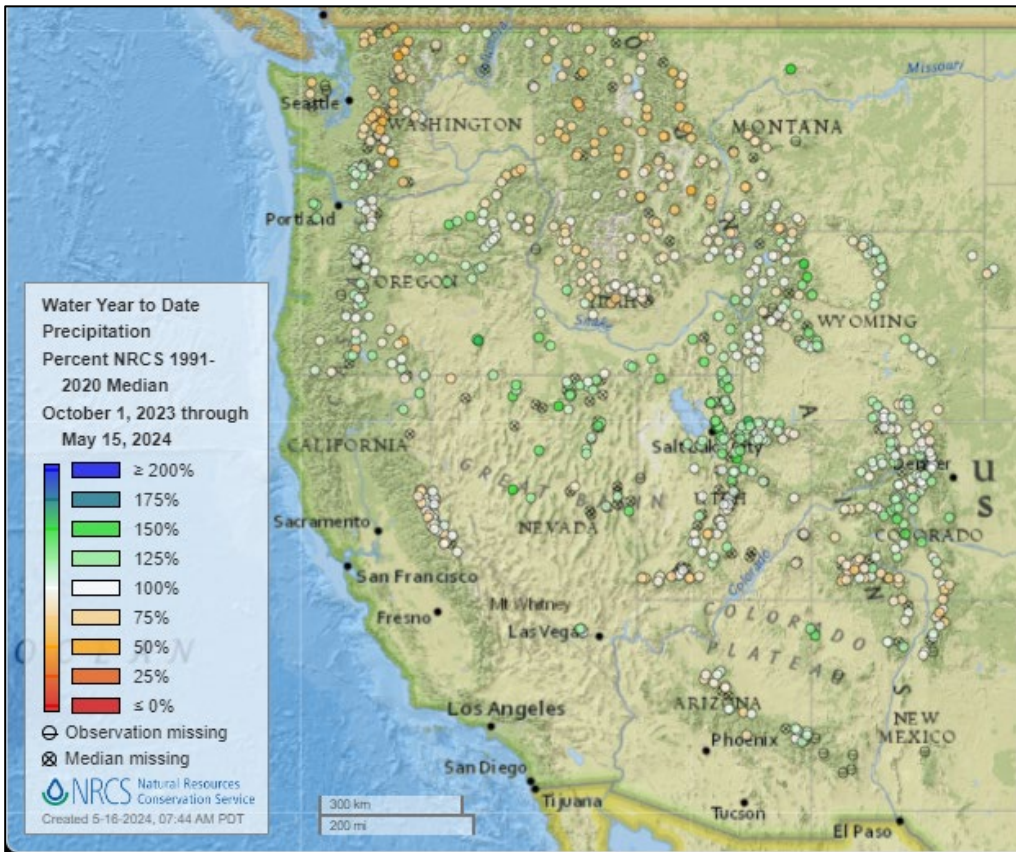
[February through April 2024 precipitation anomaly map](#)

Total Precipitation Anomaly: Feb 2024 - Apr 2024
Period ending 7 AM EST 30 Apr 2024
Base period: 1991-2020
(Map created 02 May 2024)



Copyright (c) 2024, PRISM Climate Group, Oregon State University

Water Year-to-Date, NRCS SNOTEL Network

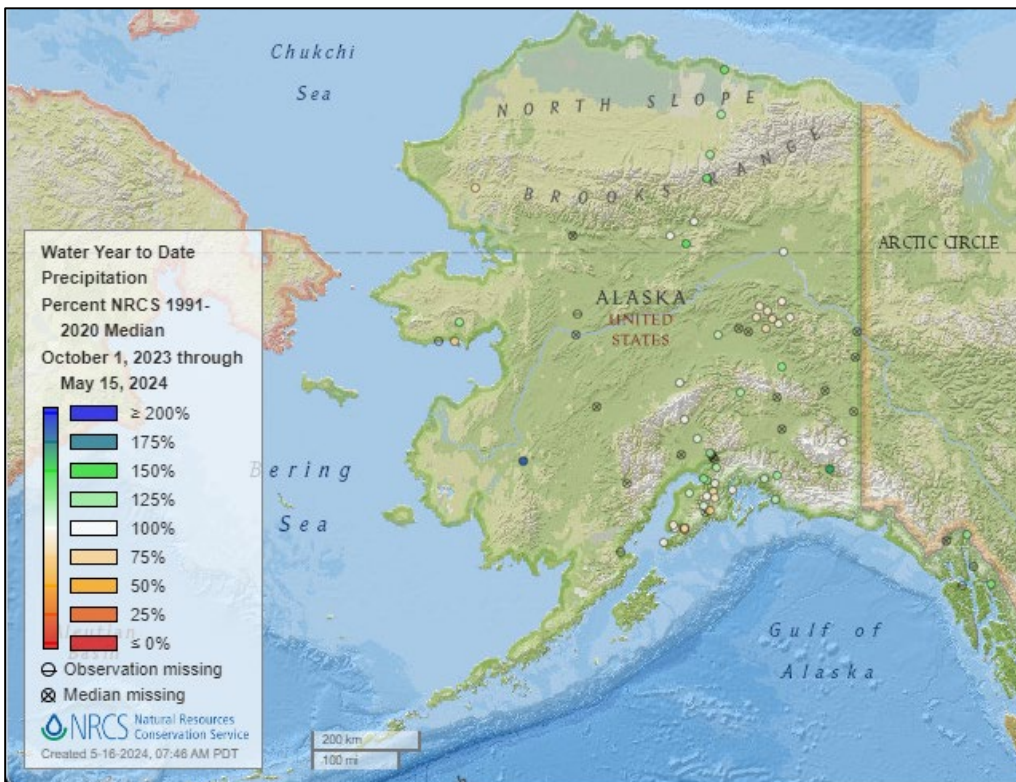


[2024 water year-to-date precipitation percent of median map](#)

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

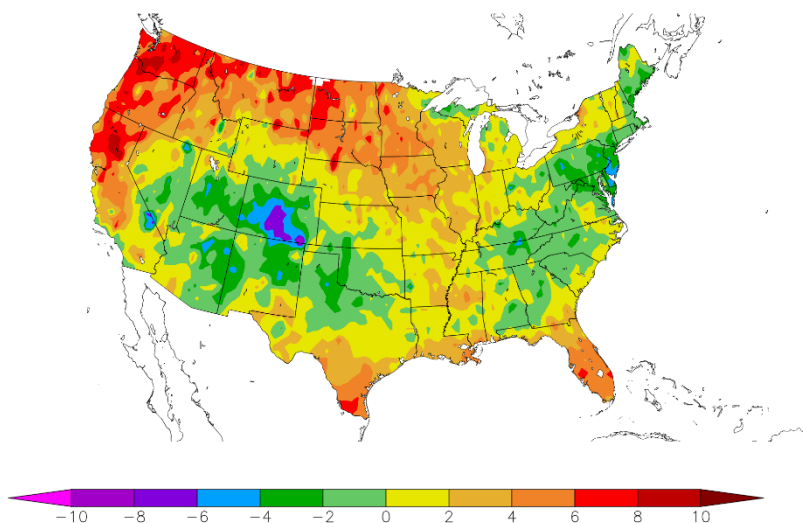
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

[7-day temperature anomaly map](#) for the contiguous U.S.

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

Departure from Normal Temperature (F)
5/9/2024 – 5/15/2024



Generated 5/16/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

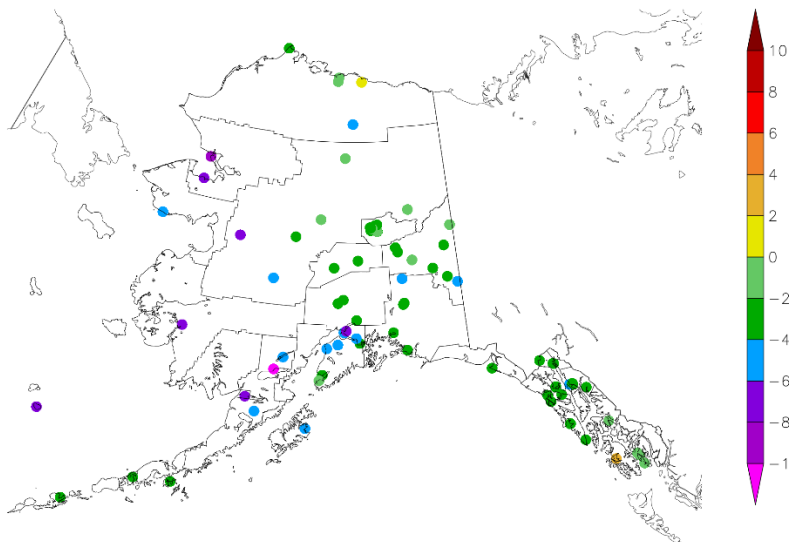
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)
5/9/2024 – 5/15/2024



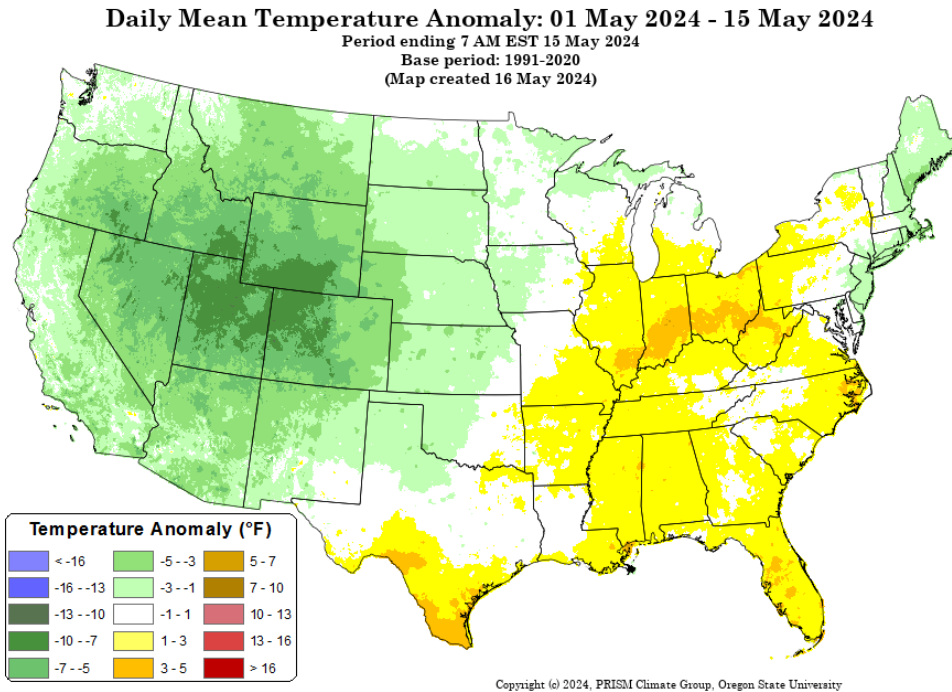
Generated 5/16/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

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

Source: PRISM

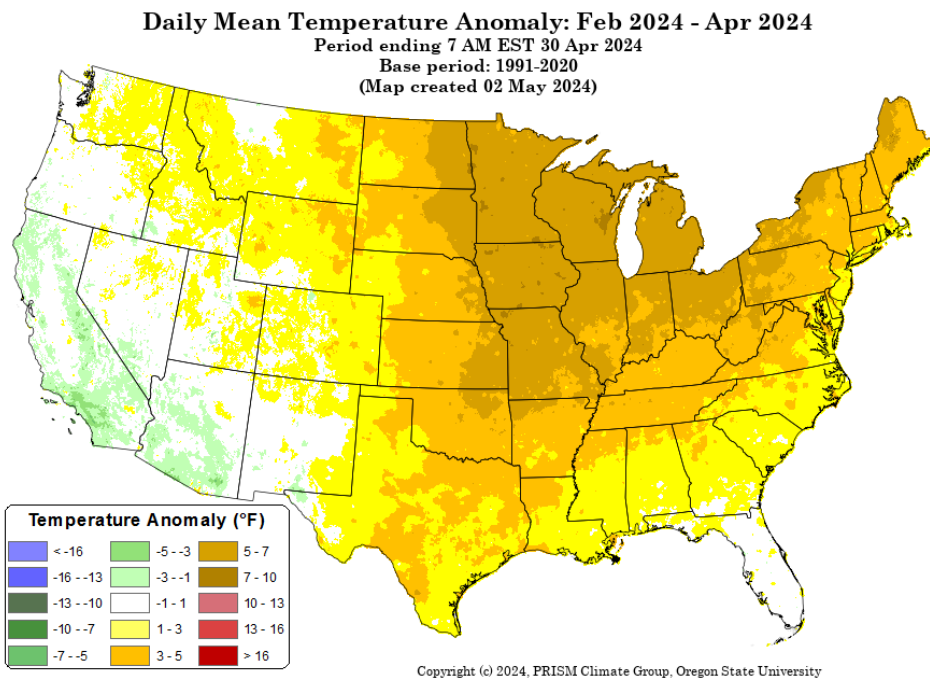
[Month-to-date national daily mean temperature anomaly map](#)



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

Source: PRISM

[February through April 2024 daily mean temperature anomaly map](#)



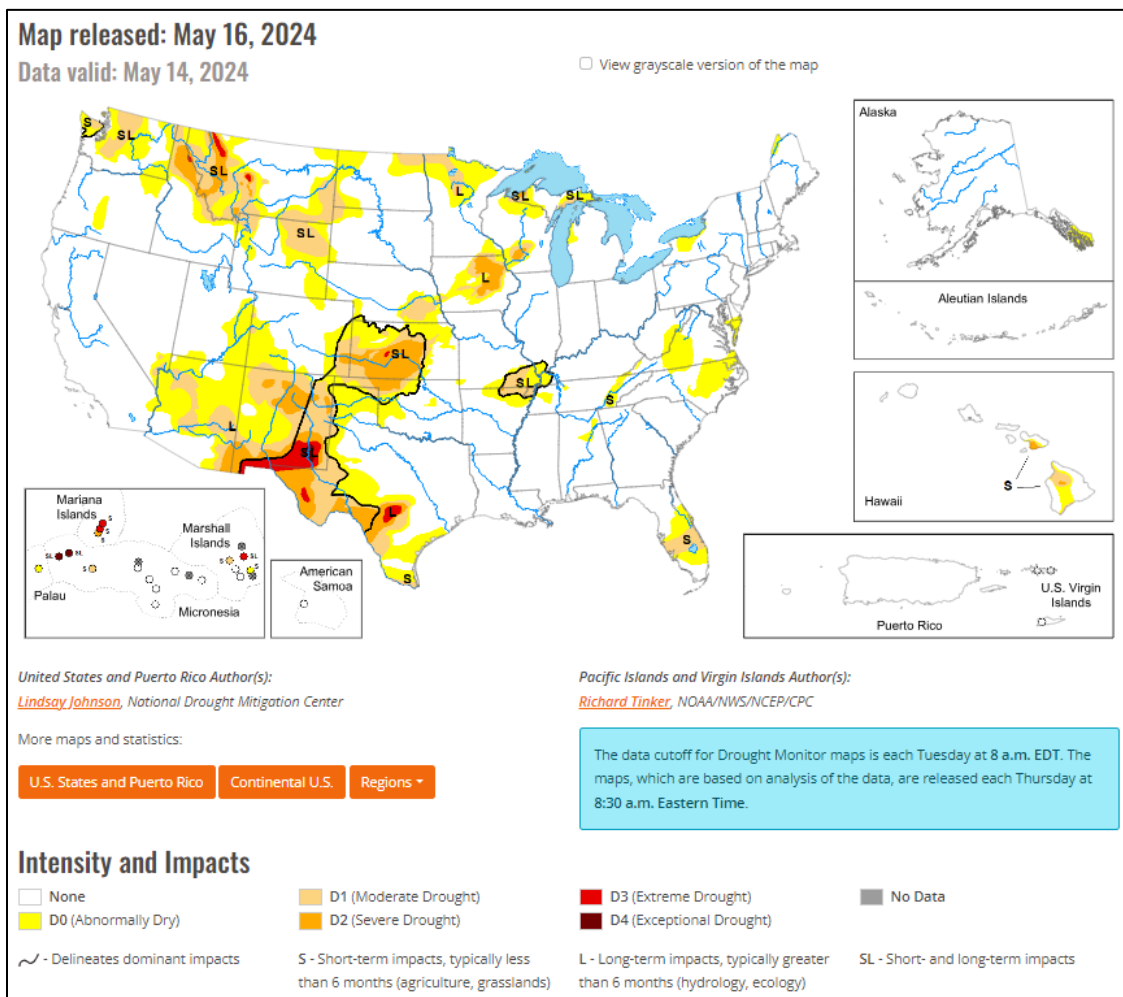
Drought

[U.S. Drought Monitor](#)

Source: National Drought Mitigation Center

[U.S. Drought Portal](#)

Source: NOAA



[Current National Drought Summary, May 14, 2024](#)

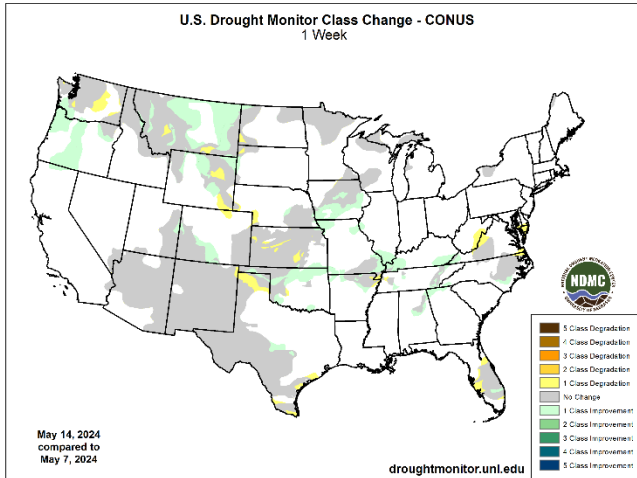
Source: National Drought Mitigation Center

“Heavy precipitation fell across the Rocky Mountains of Montana, Wyoming and Colorado, as well as a large part of the South and southern Midwest. This brought widespread improvements to much of the South and Midwest, with scattered or widespread improvements in the Great Plains and Midwest. Heavy precipitation falling over the Southeast brought improvements from central Alabama into the southern Appalachian Mountains, as well as the area surrounding the convergence of the Ohio, Mississippi, and Tennessee rivers. A small area of the Mid-Atlantic region missed out on much of the precipitation, leading to minor degradations. Very dry weather for the past few months led to increased fire danger in parts of the Florida Peninsula, and short-term moderate drought and abnormal dryness expanded in coverage. Texas saw isolated degradations in the panhandle and south – where record breaking temperatures converged with the lack of precipitation. The High Plains were a mixture of light to moderate precipitation, which greatly influenced where improvements or degradations were made. Kansas, Colorado and Wyoming saw improvements where measurable precipitation fell. Degradations occurred in western Kansas and eastern Wyoming, where trace amounts of precipitation fell. Montana saw heavy precipitation, which improved conditions across much of the state. Isolated storms in western Oregon and Washington brought widespread improvements in Oregon, which continued into southwestern Washington. Central Washington, meanwhile, missed out on the precipitation and saw further expansion of abnormal dryness.”

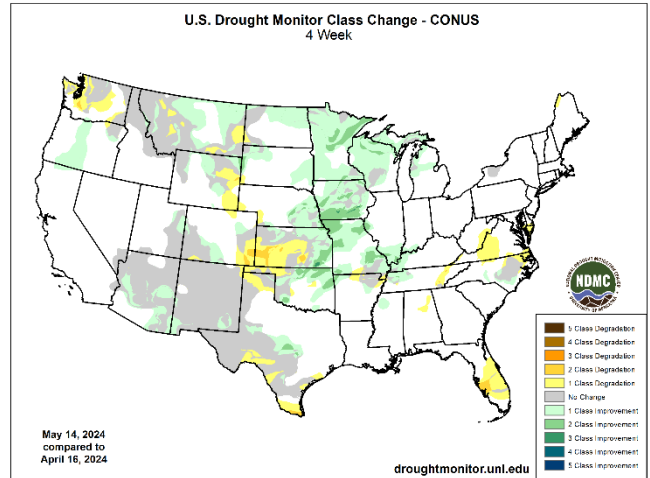
Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

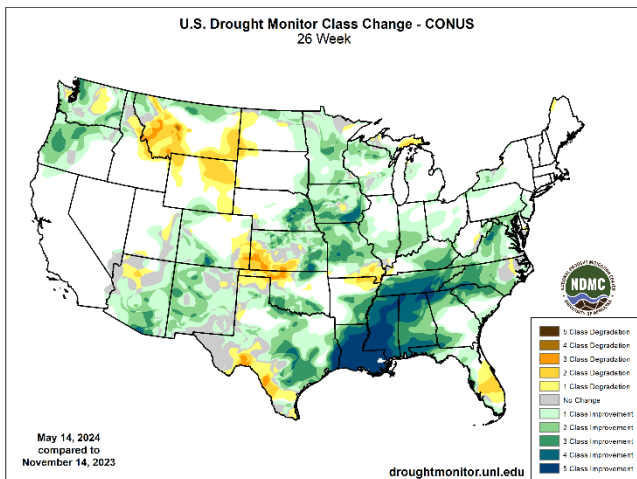
1 Week



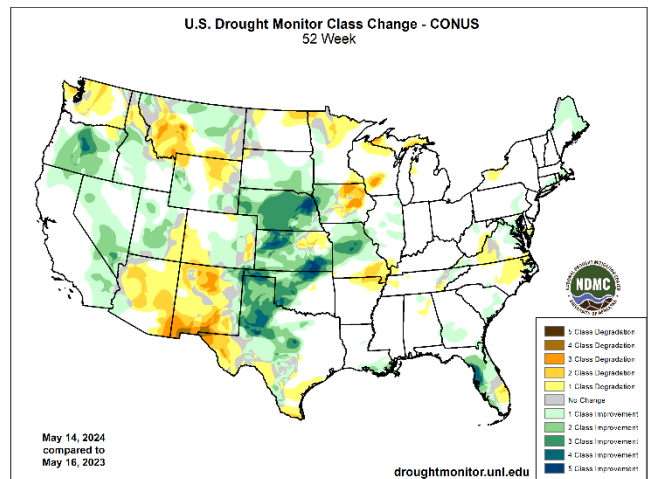
1 Month



6 Months



1 Year



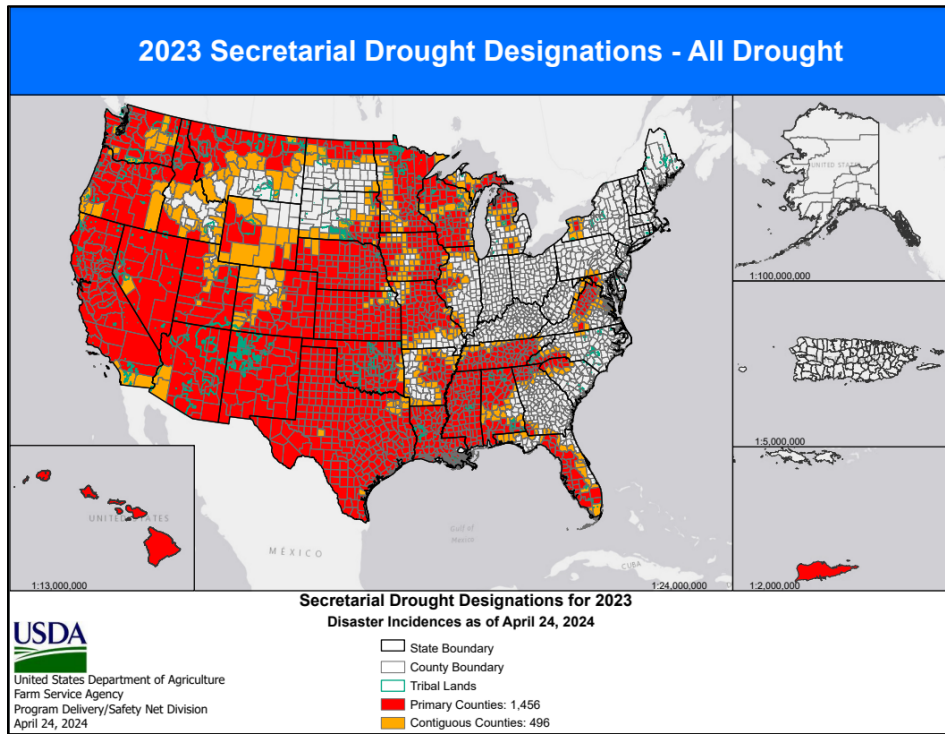
[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

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



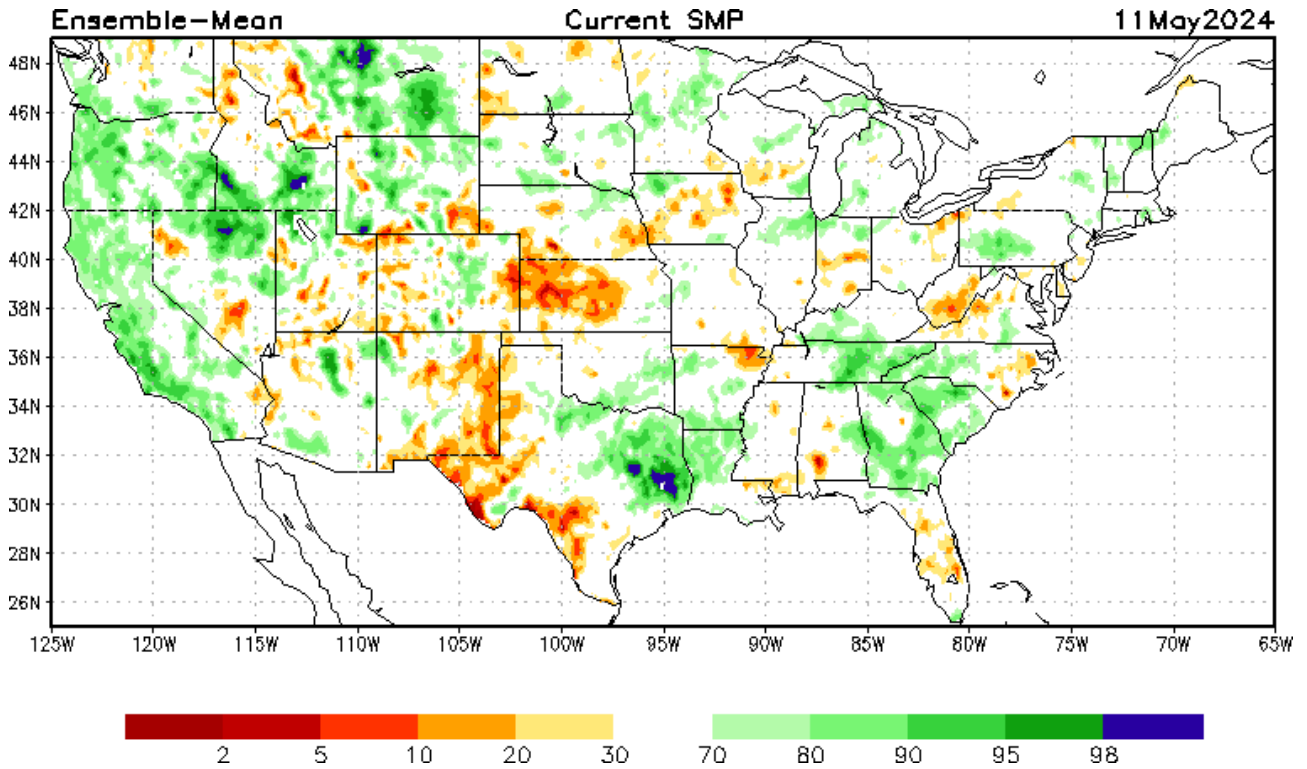
Highlighted Wildfire Resources

- [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

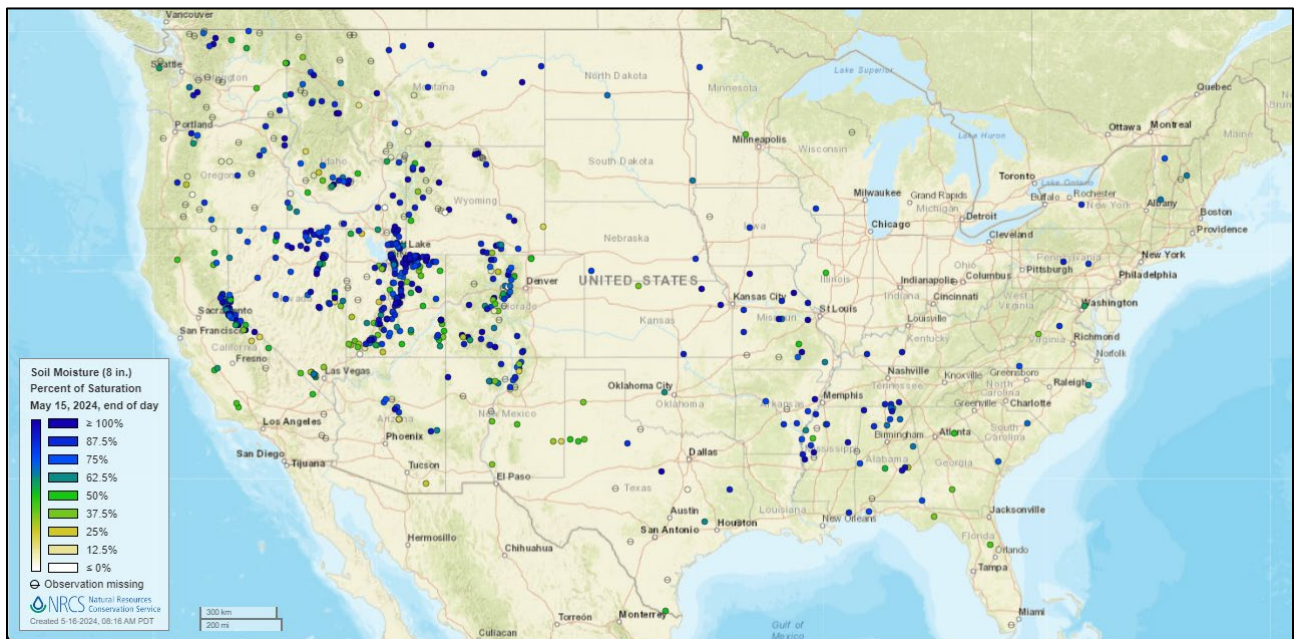


[Modeled soil moisture percentiles](#) as of May 11, 2024

Soil Moisture Percent of Saturation

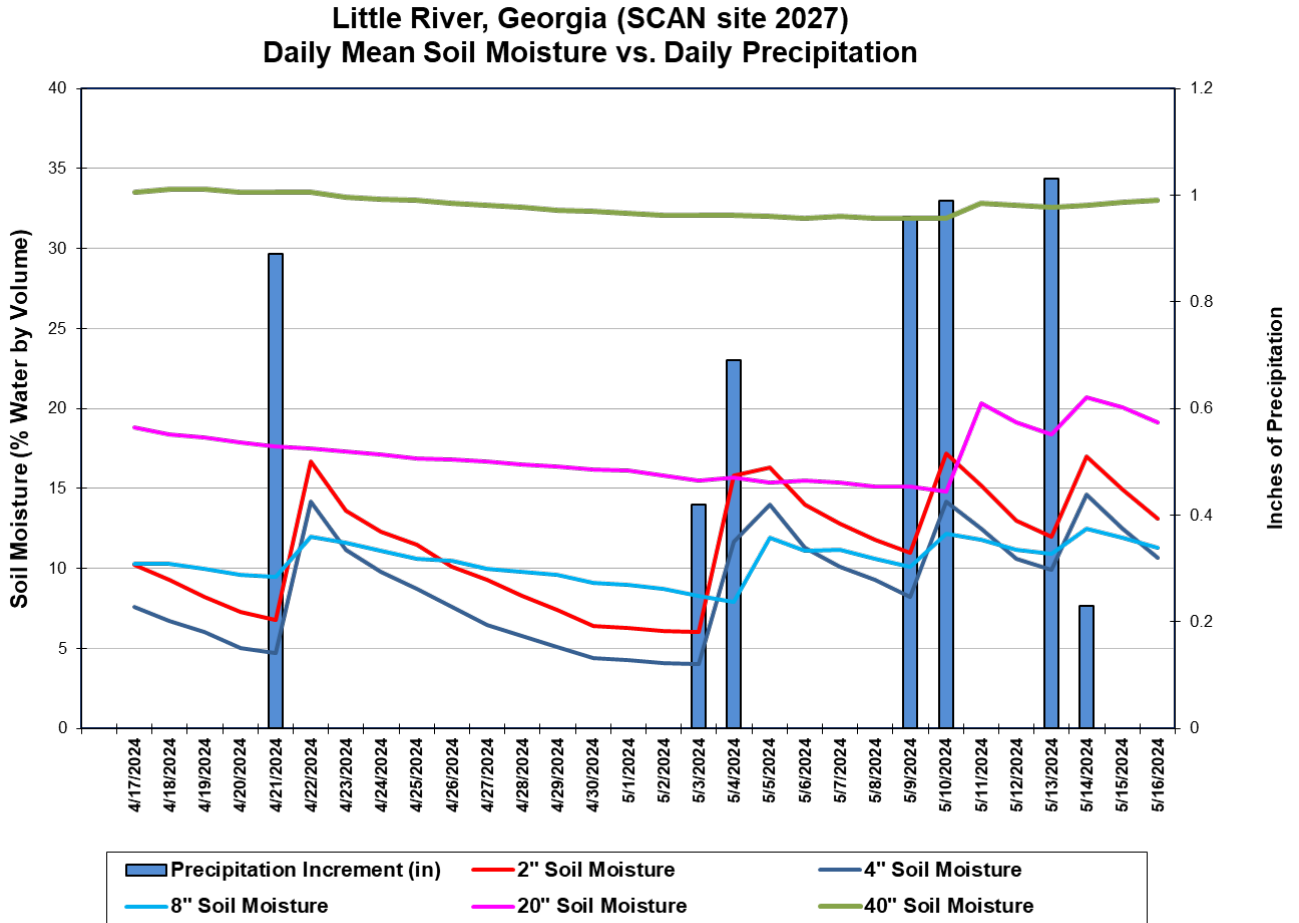
Source: NRCS SNOTEL and [Soil Climate Analysis Network](#) (SCAN)

[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 [Little River](#) SCAN site in Georgia. The deepest soil sensors 20 and 40 inches beneath land surface indicate little-to-no change in soil moisture after storms on April 21 and May 3-4 deposited a total of two inches of precipitation at the site. After a combined 3.21 inches of precipitation was received between May 9-14, soil sensors at all depths indicate a noticeable fluctuation in soil moisture. Total precipitation for the 30-day period was 5.21 inches.

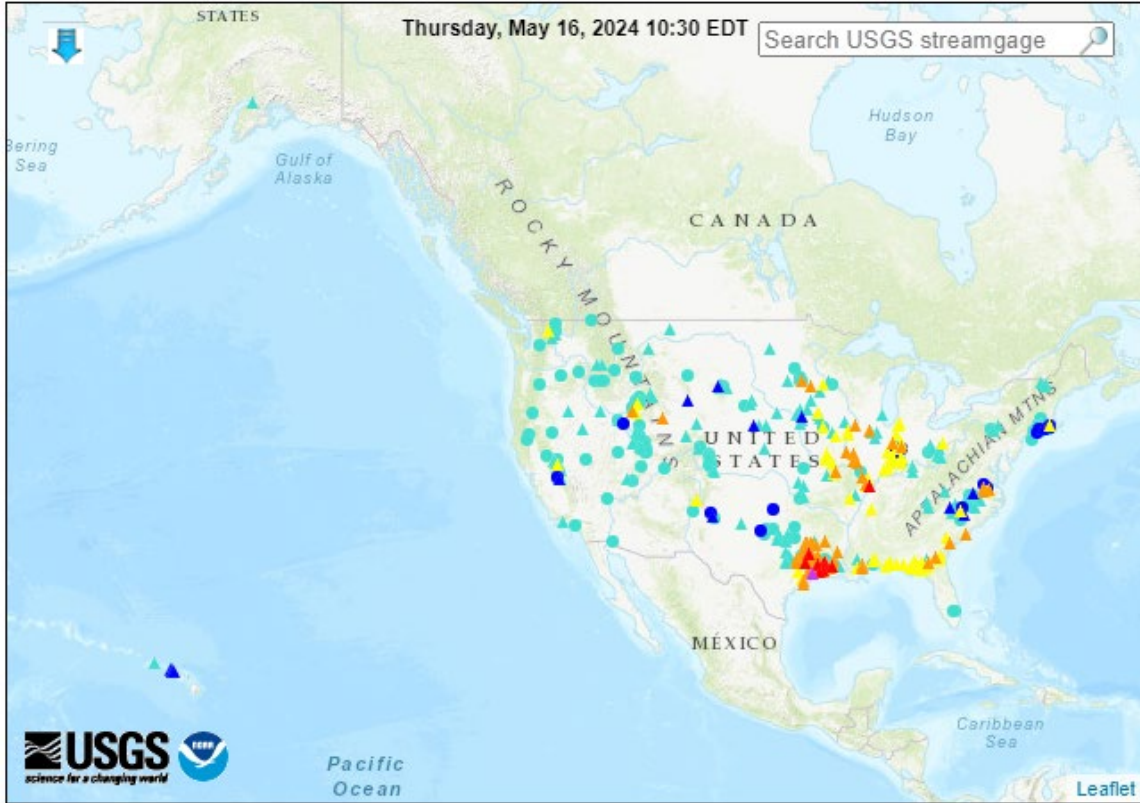
Soil Moisture Data Portals

- [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 (65 in floods [major: 1, moderate: 10, minor: 54], 64 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

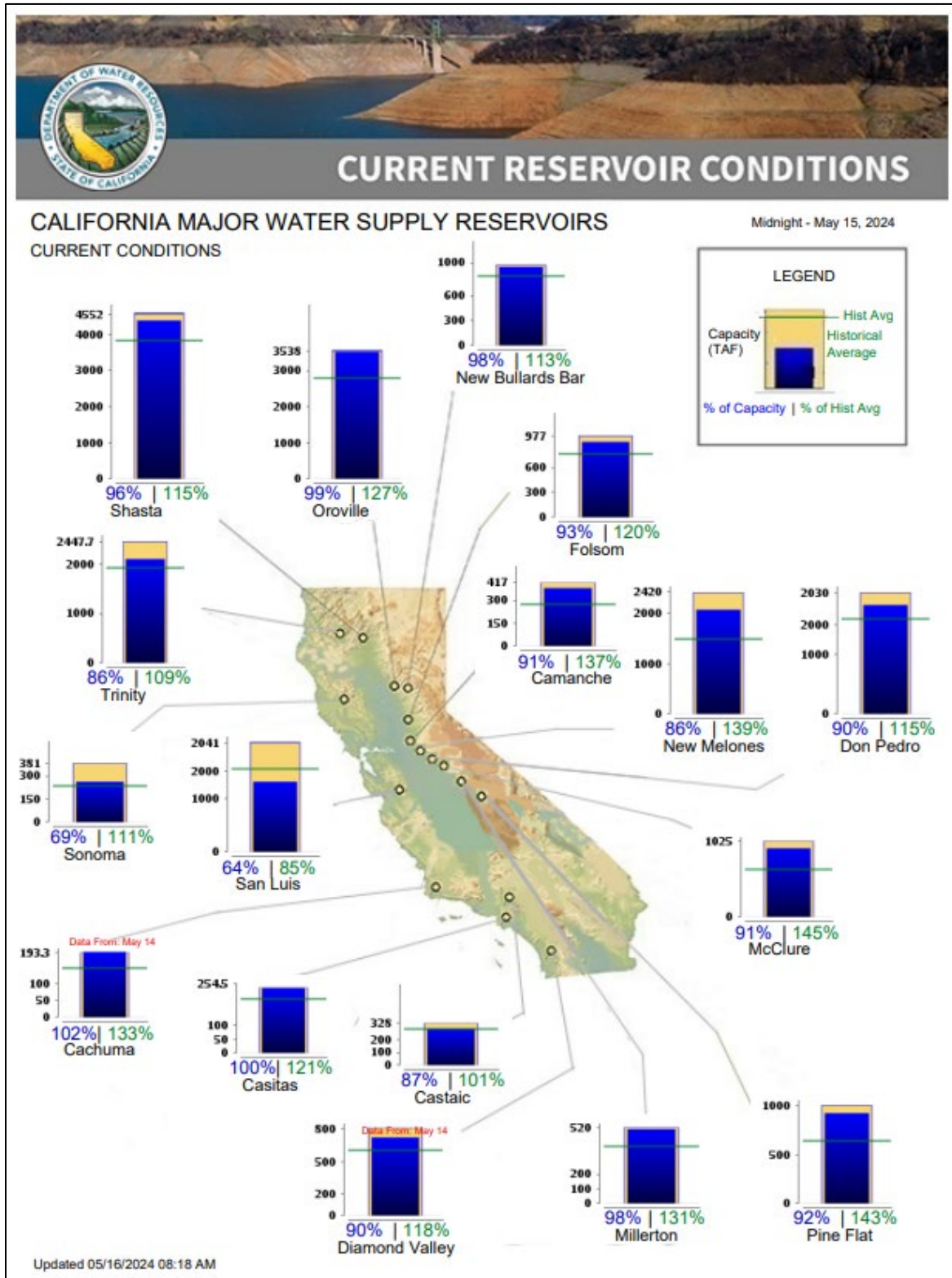
Hydromet Teacup Reservoir Depictions

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: Eric Luebehusen, Agricultural Meteorologist, USDA/OCE/WAOB

National Outlook, Thursday May 16, 2024: “A storm system will finally exit the eastern seaboard, allowing for a brief respite from damp, chilly conditions over the eastern third of the nation. However, another area of low pressure emerging onto the southern High Plains will drift east into the Ohio Valley by the weekend, renewing the threat of rain to close out the week from the southern Plains to the central and southern Atlantic Coast states. In the warm, humid air south of the storm’s center, locally heavy rain (2 inches or more) and severe thunderstorms are possible across the south-central U.S. While the rain will ease drought in parts of Oklahoma, the core central Plains’ Moderate to Extreme Drought (D1-D3) in Kansas will largely miss out. Meanwhile, Western warmth and dryness will continue, with temperatures again topping 100°F at lower elevations of the Desert Southwest; however, rain and mountain snow showers will precede and accompany sharply cooler weather over the nation’s northwestern quadrant. The NWS 6- to 10-day outlook for May 21 – 25 calls for the likelihood of near- or above-normal rainfall across much of the country save for drier-than-normal conditions from New Mexico southeastward to Florida. Warmer-than-normal temperatures are expected from Texas to the East Coast, while colder-than-normal conditions prevail over the northern half of the Plains and from the Rockies to the Pacific Coast.”

Weather Hazards Outlook: [May 18 – 22, 2024](#)

Source: NOAA Weather Prediction Center















U.S. Day 3-7 Hazards Outlook

[About the Hazards Outlook](#)

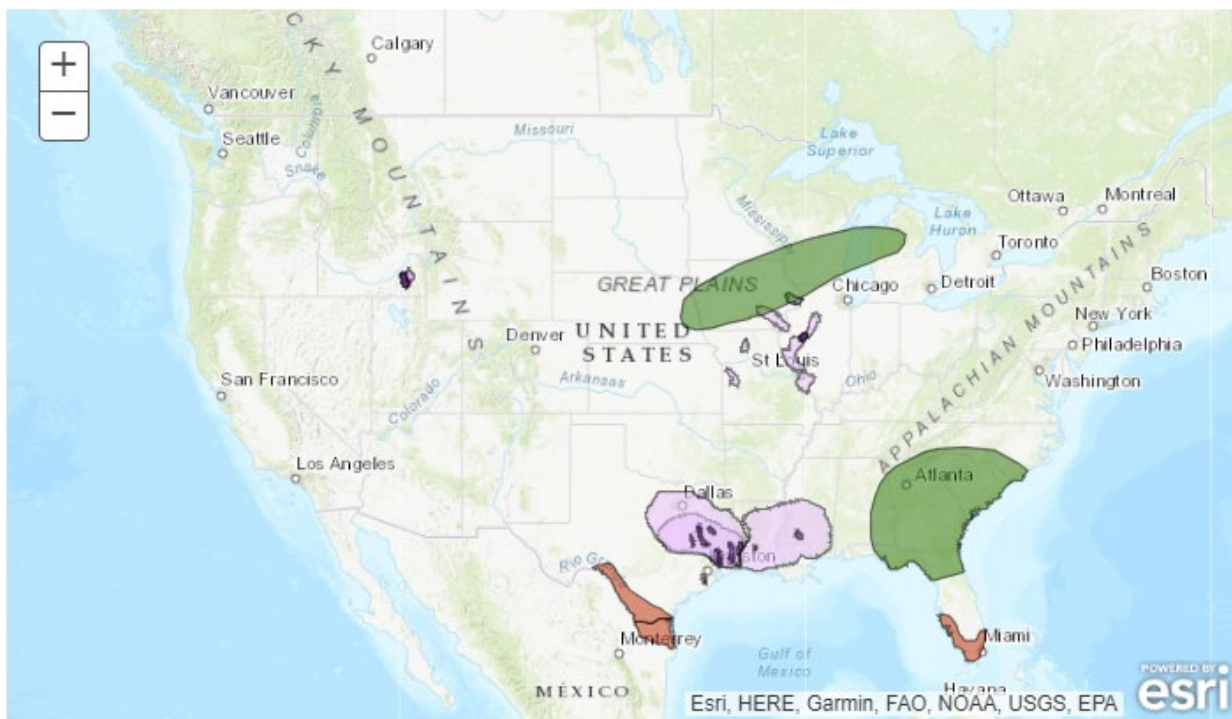
Created May 15, 2024

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 May 18, 2024 - May 22, 2024

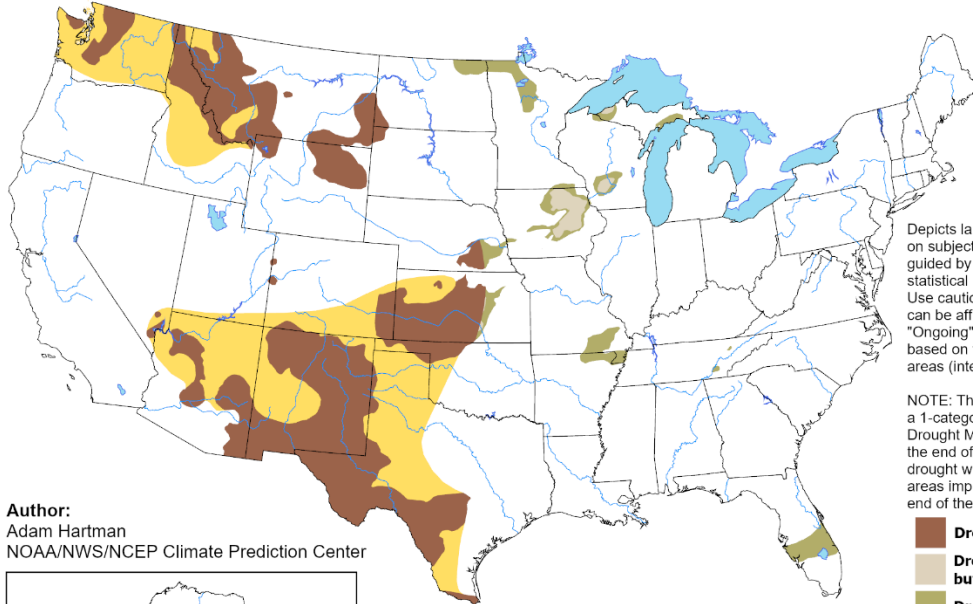


Seasonal Drought Outlook: [May 16 – August 31, 2024](#)

Source: National Weather Service

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

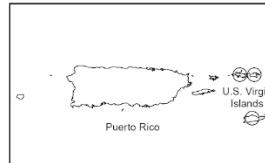
Valid for May 16 - August 31, 2024
Released May 16, 2024



Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

Author:
Adam Hartman
NOAA/NWS/NCEP Climate Prediction Center



- Drought persists
- Drought remains, but improves
- Drought removal likely
- Drought development likely
- No drought



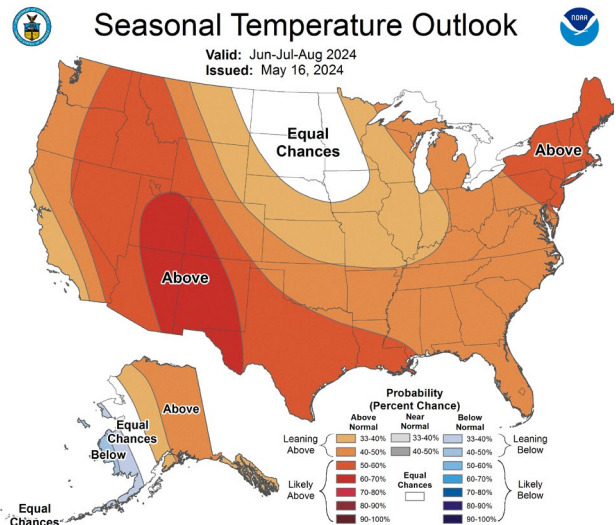
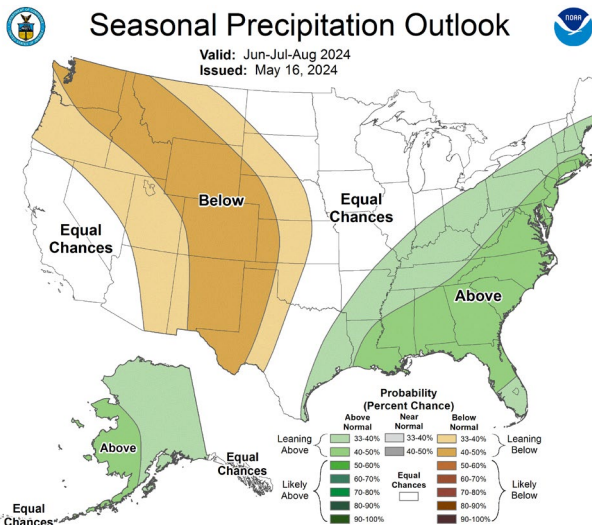
<https://go.usa.gov/3eZ73>

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](#).