



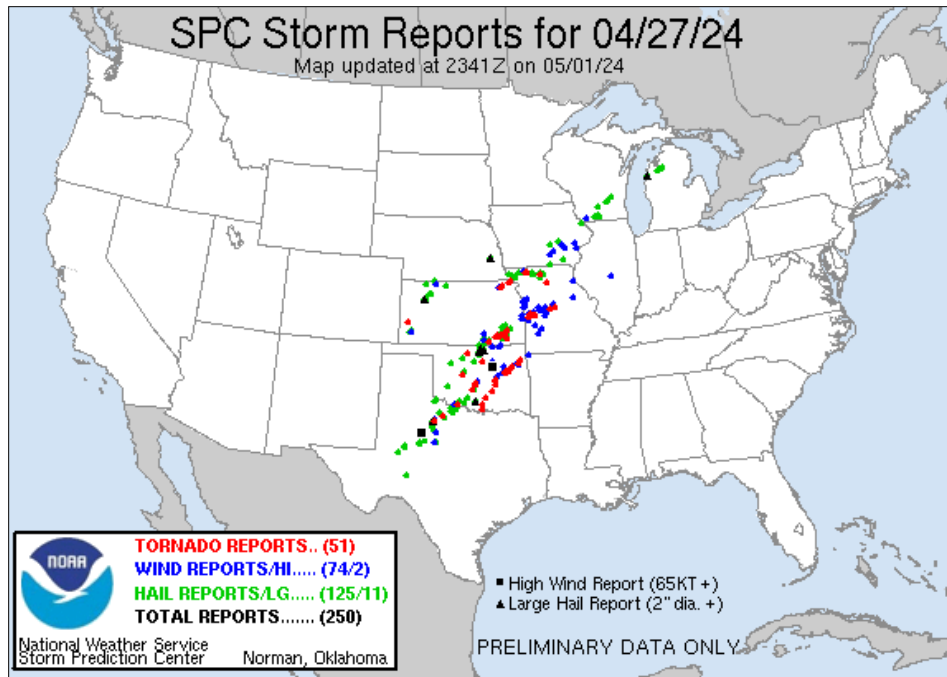
# Water and Climate Update

## May 02, 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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### Numerous tornadoes hit the Midwest

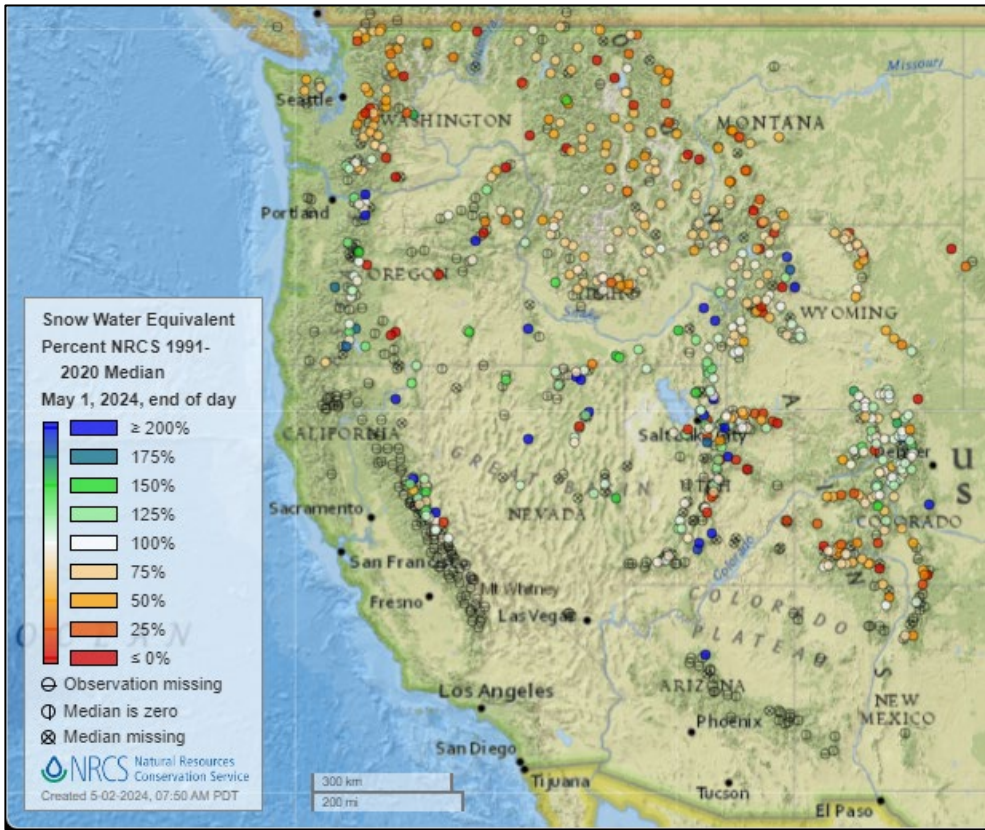


The final weekend in April brought severe weather to the Midwest and Great Plains, causing fatalities and extensive destruction. Over 100 confirmed tornadoes impacted the region between April 26-28, with winds exceeding 100 mph recorded during some of the events. On April 27 alone, the Storm Prediction Center reported 51 tornadoes with excessive rainfall, hail, and flash flooding throughout the region. As of May 2, the National Weather Service is forecasting potential additional bouts of severe weather and flash flooding to affect parts of the same region on the heels of the recent storms.

**Related:**

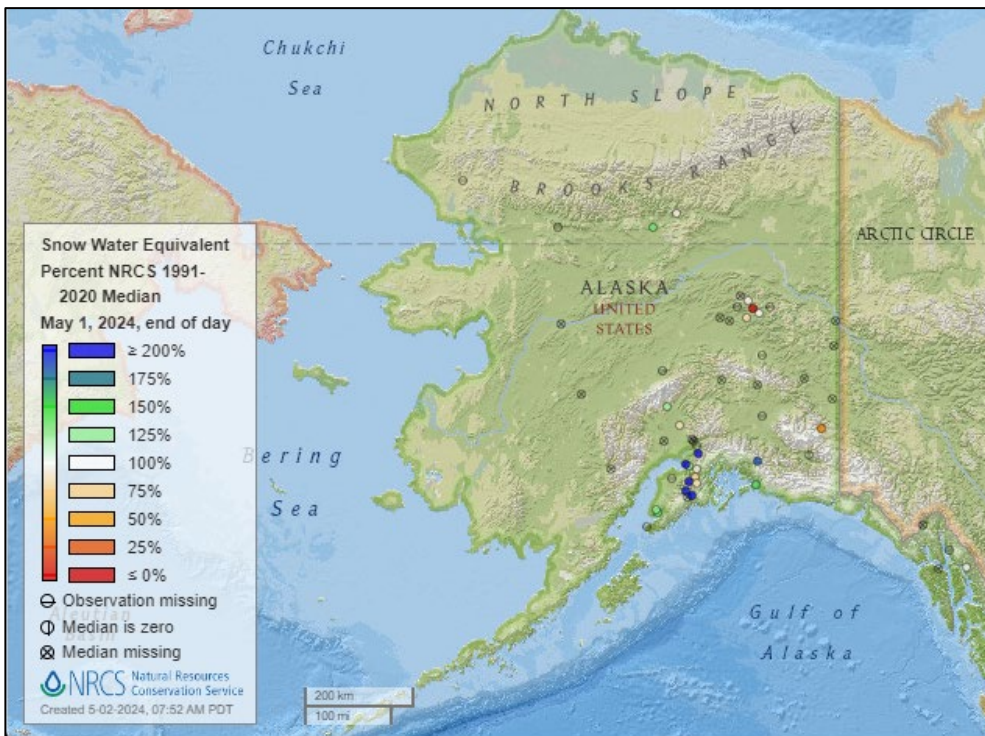
- [Multiple tornadoes, severe weather hit Midwest: See photos of damage, destruction](#) – USA Today
- [Residents begin going through the rubble after tornadoes hammer parts of Nebraska and Iowa](#) – AP News
- [FEMA Administrator Criswell surveys damage in wake of Oklahoma tornado](#) – Federal Times
- [The April 27-28, 2024 Tornado Outbreak and Flash Flooding Event](#) – National Weather Service, Norman, OK

## Snow



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

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

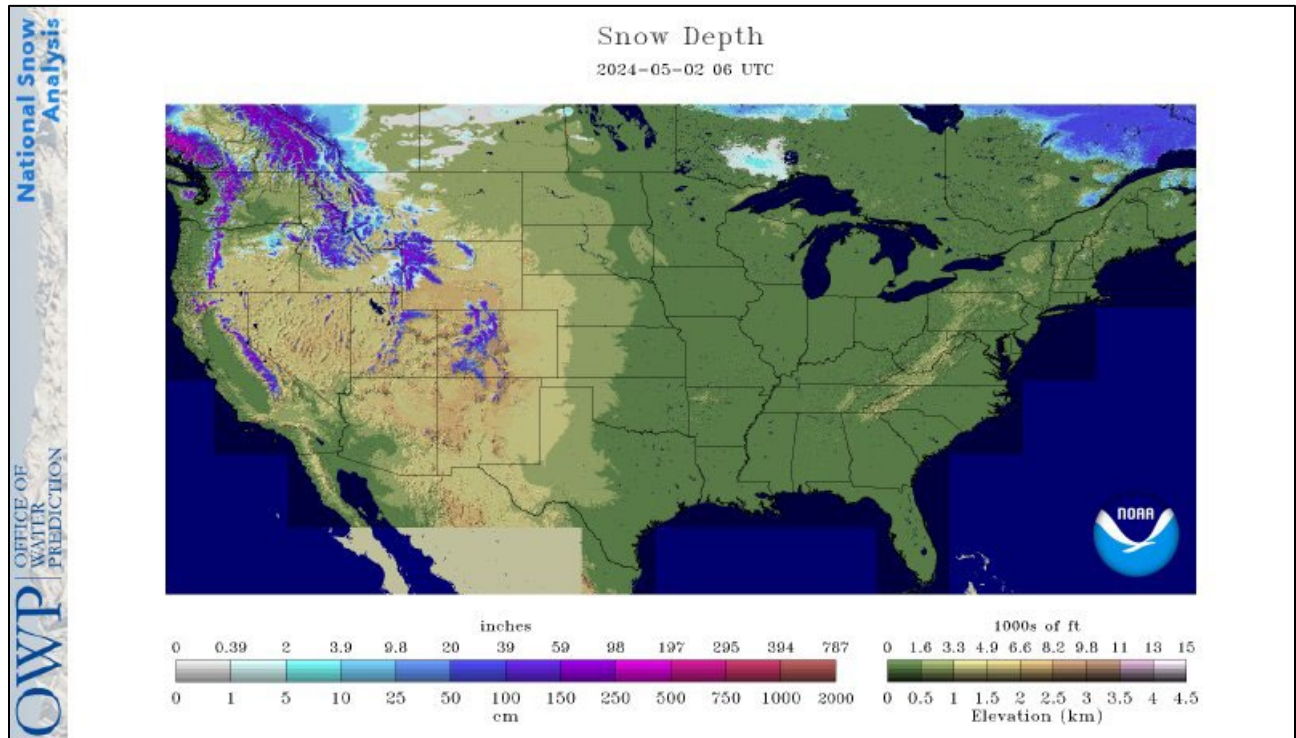


[Alaska snow water equivalent percent of median map](#)

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

**Current Snow Depth, National Weather Service Snow Analysis**

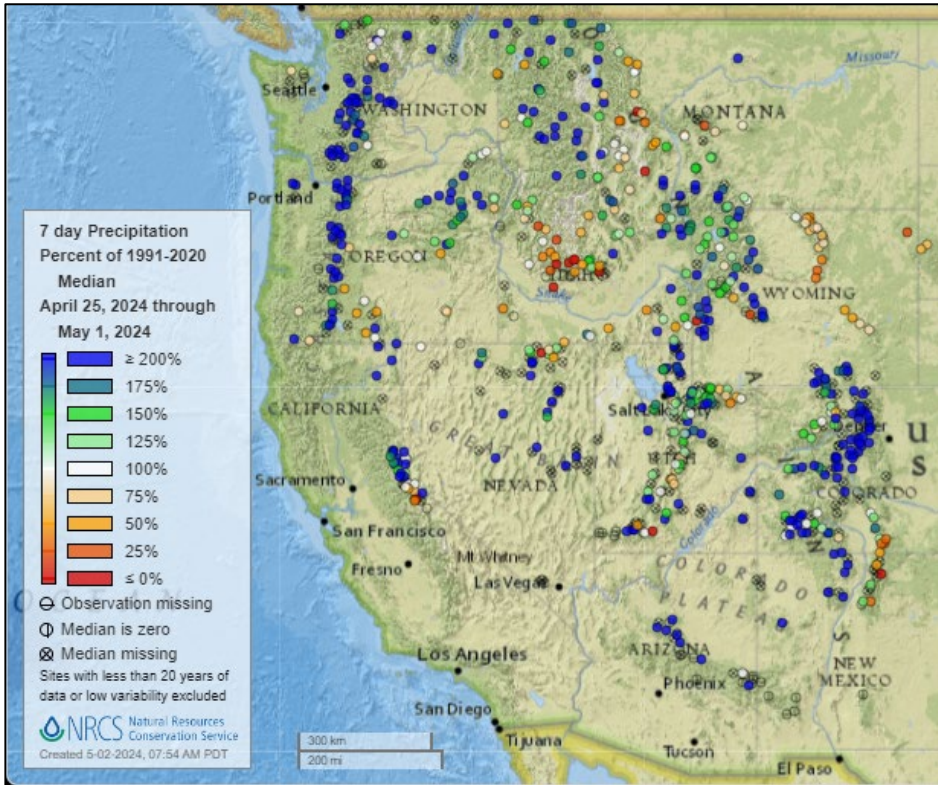
Source: NOAA NWS National Operational Hydrologic Remote Sensing Center





# Precipitation

## Last 7 Days, NRCS SNOTEL Network

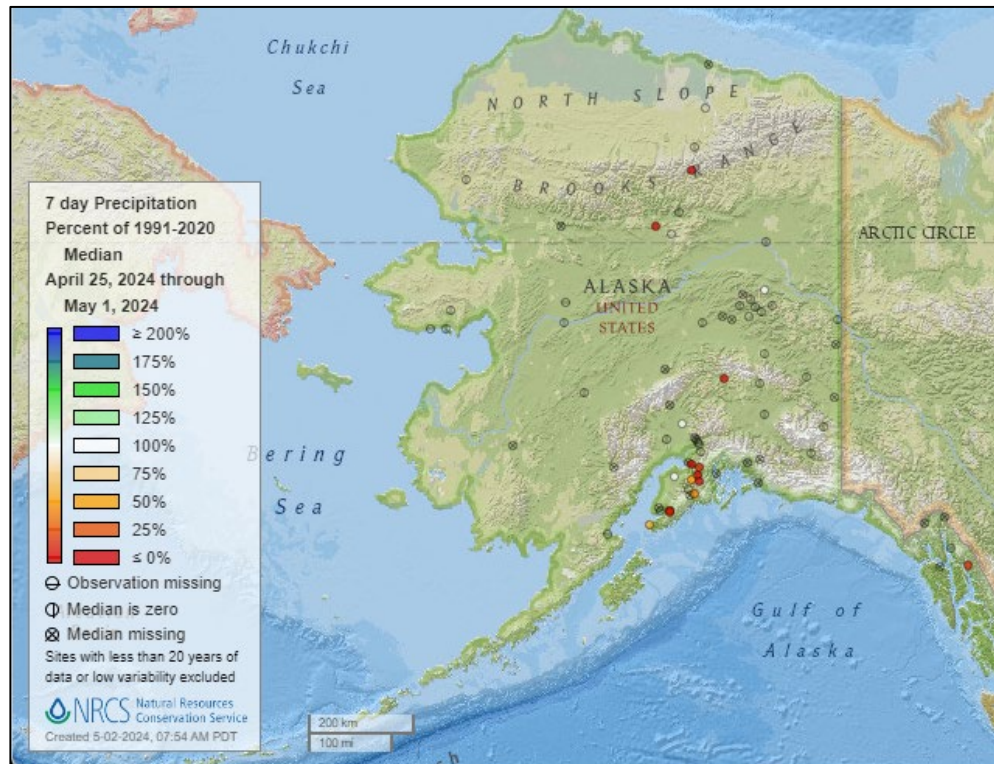


[7-day precipitation percent of median map](#)

**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](#)



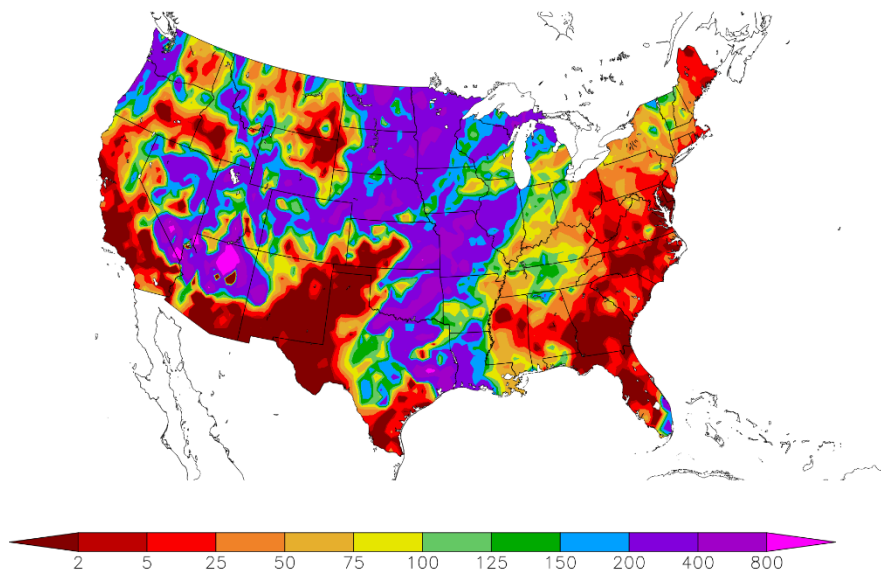
### Last 7 Days, National Weather Service (NWS) Networks

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 (%)  
4/25/2024 – 5/1/2024



Generated 5/2/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

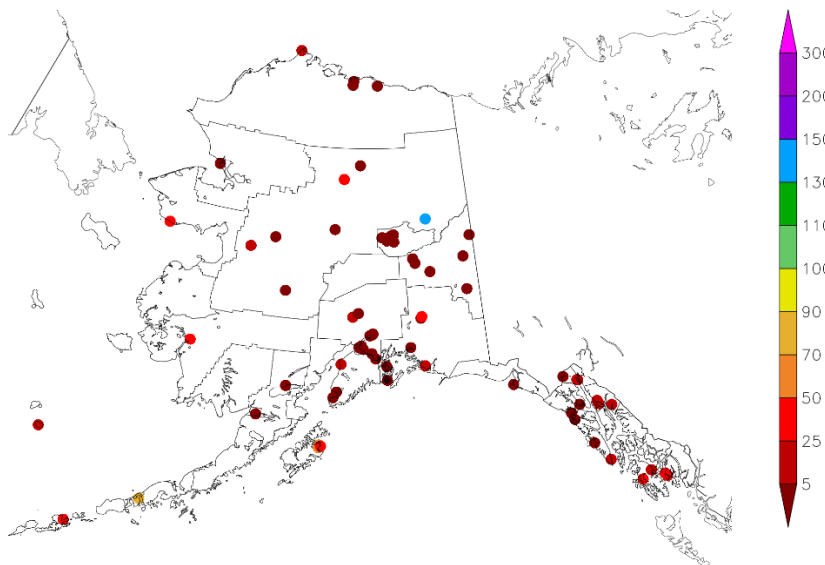
### Last 7 Days, National Weather Service (NWS) Networks

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 (%)  
4/25/2024 – 5/1/2024



Generated 5/2/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

### Monthly, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

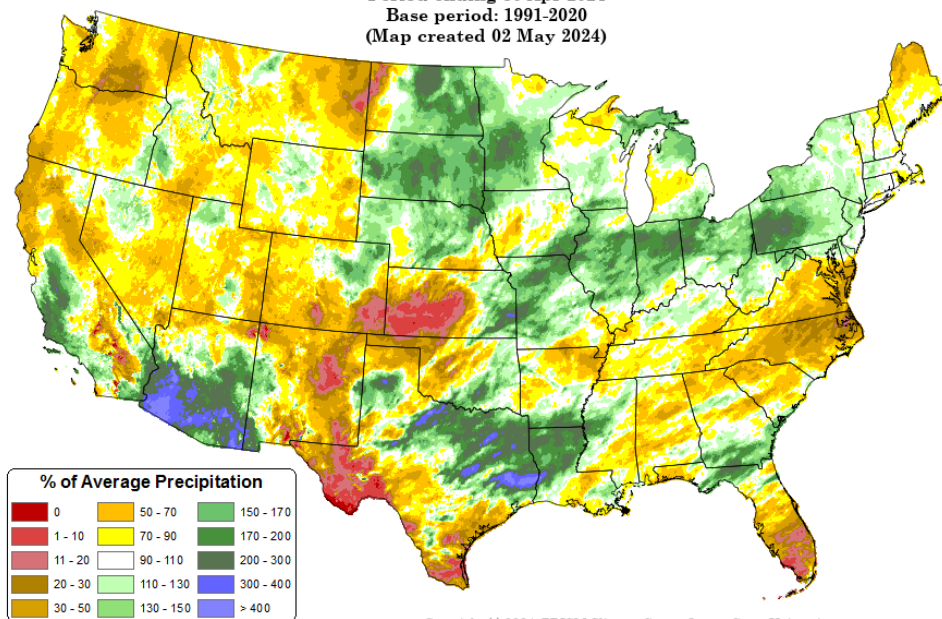
#### Total Precipitation Anomaly: Apr 2024

Period ending 30 Apr 2024

Base period: 1991-2020

(Map created 02 May 2024)

[Monthly national total precipitation anomaly map](#)



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

Source: PRISM

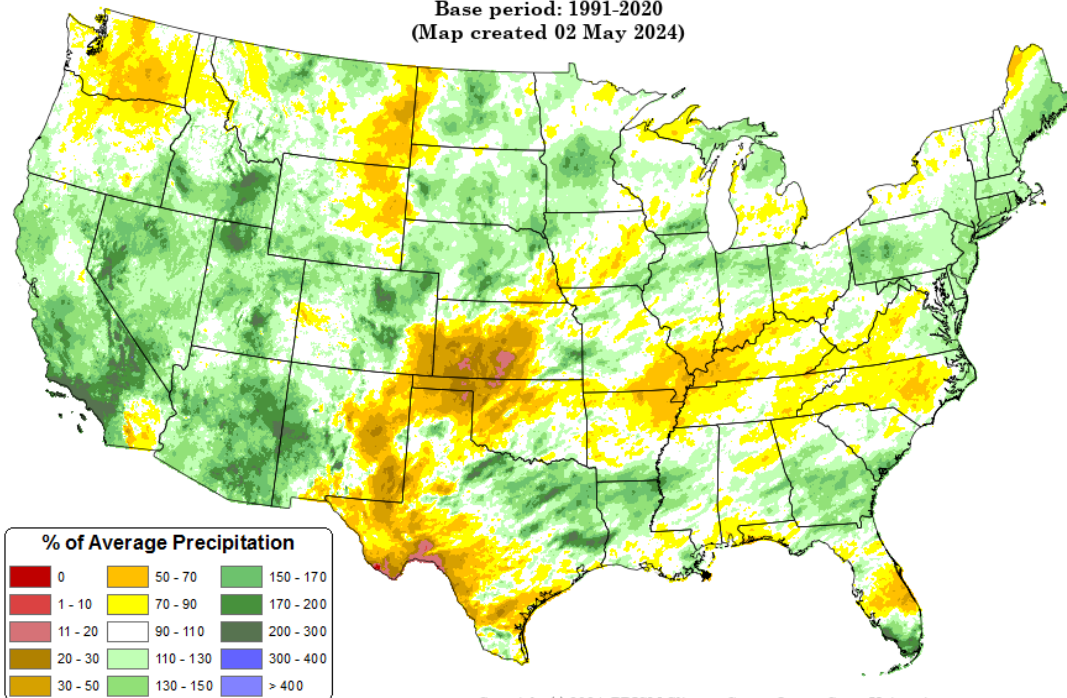
[February through April 2024 precipitation anomaly map](#)

#### Total Precipitation Anomaly: Feb 2024 - Apr 2024

Period ending 7 AM EST 30 Apr 2024

Base period: 1991-2020

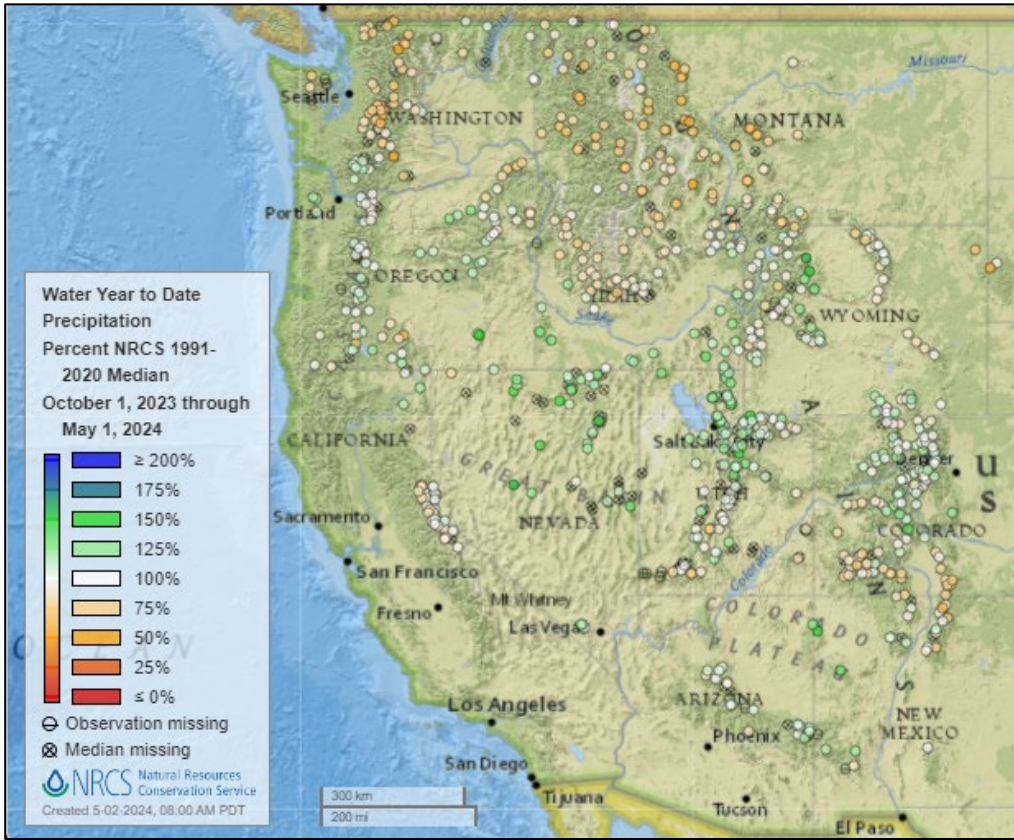
(Map created 02 May 2024)



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Water Year-to-Date, NRCS SNOTEL Network

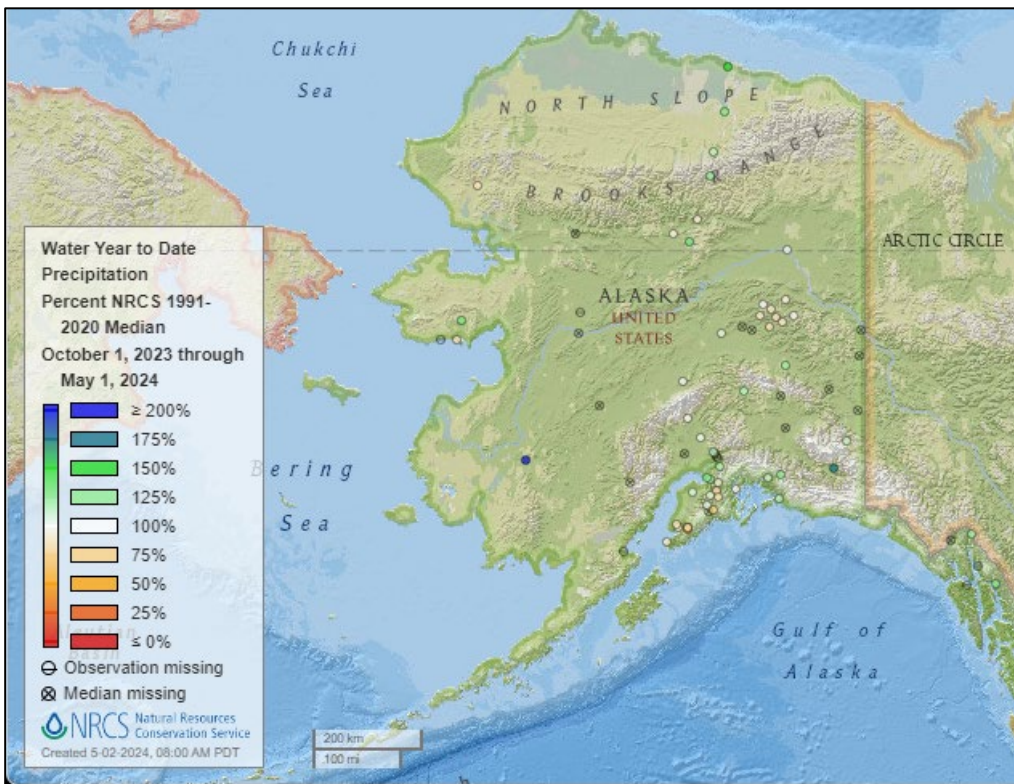


[2024 water year-to-date precipitation percent of median map](#)

**See also:**

[2024 water year-to-date precipitation 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 average map](#)

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

## Temperature

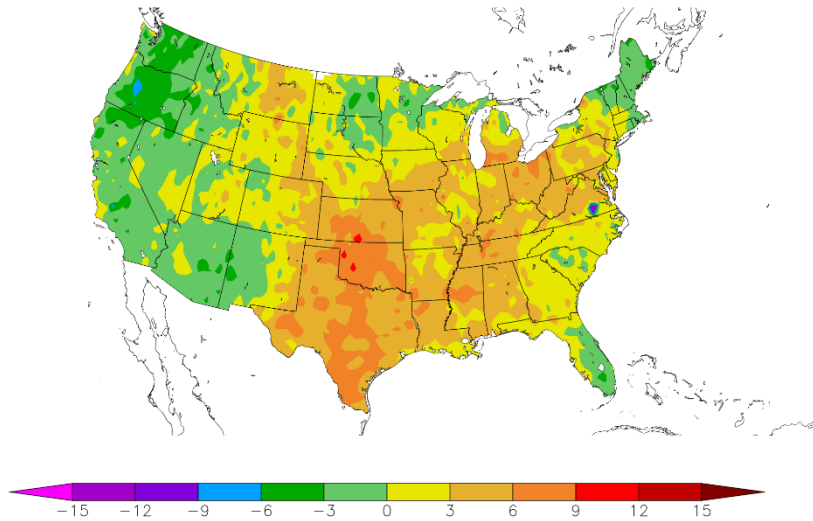
### Last 7 Days, National Weather Service (NWS) Networks

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)  
4/25/2024 – 5/1/2024



Generated 5/2/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

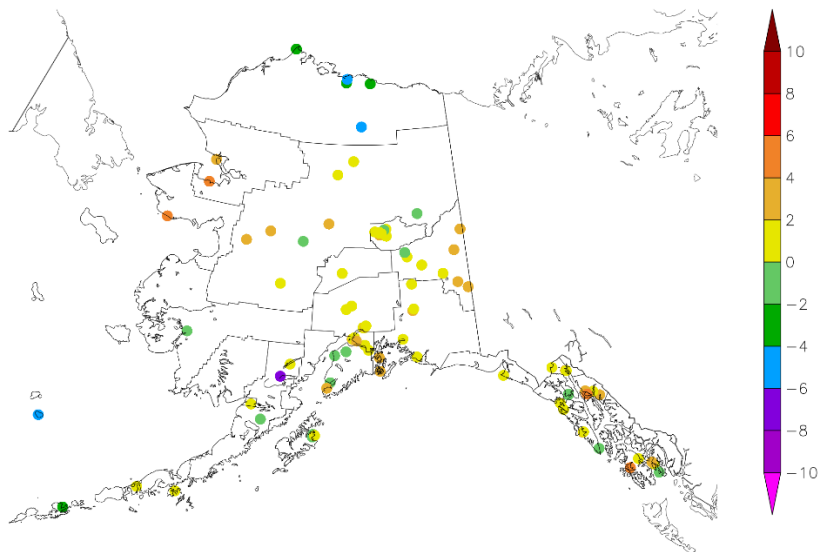
### Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)  
4/25/2024 – 5/1/2024



Generated 5/2/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers



Monthly, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

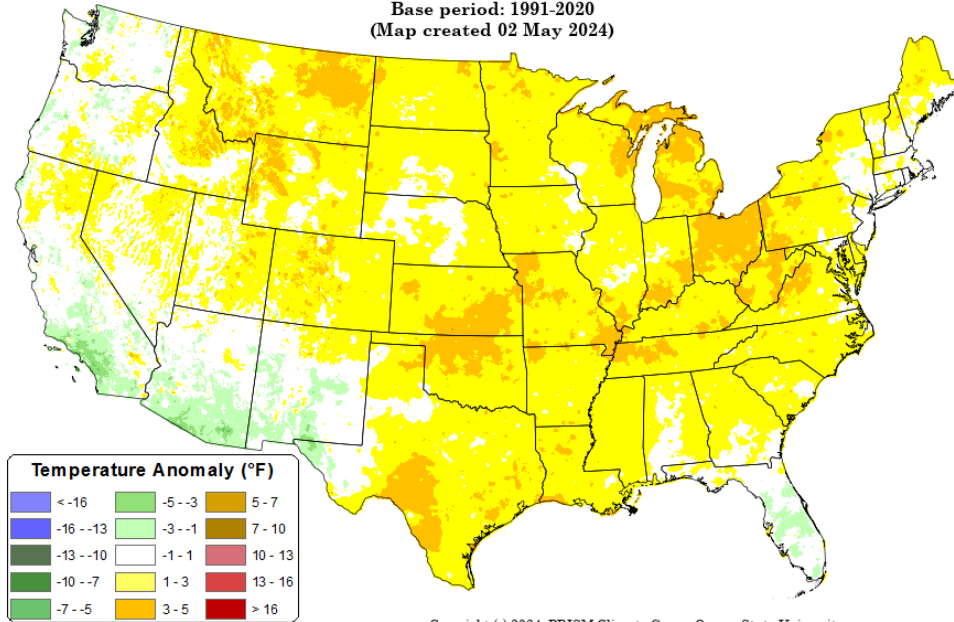
[Monthly national daily mean temperature anomaly map](#)

Daily Mean Temperature Anomaly: Apr 2024

Period ending 7 AM EST 30 Apr 2024

Base period: 1991-2020

(Map created 02 May 2024)



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

Source: PRISM

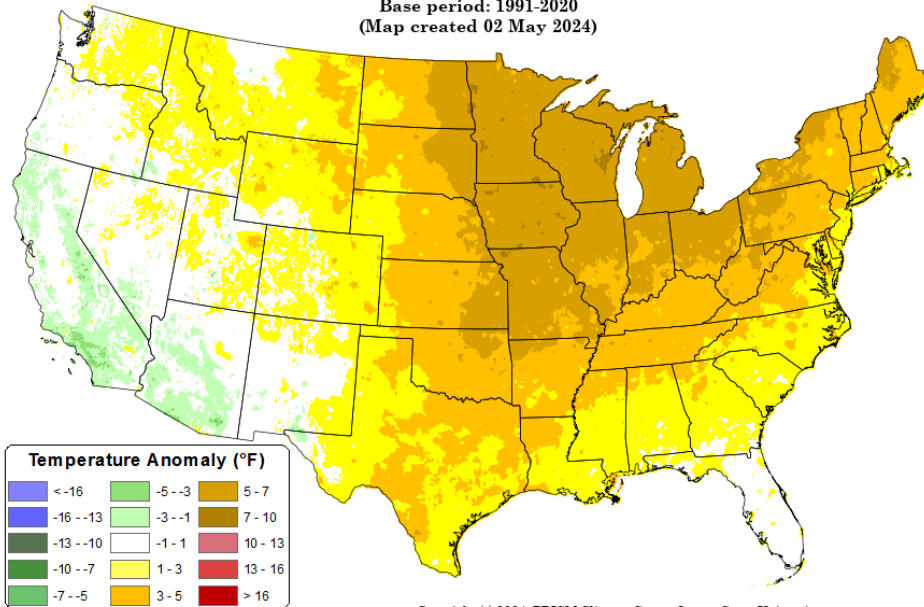
Daily Mean Temperature Anomaly: Feb 2024 - Apr 2024

Period ending 7 AM EST 30 Apr 2024

Base period: 1991-2020

(Map created 02 May 2024)

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



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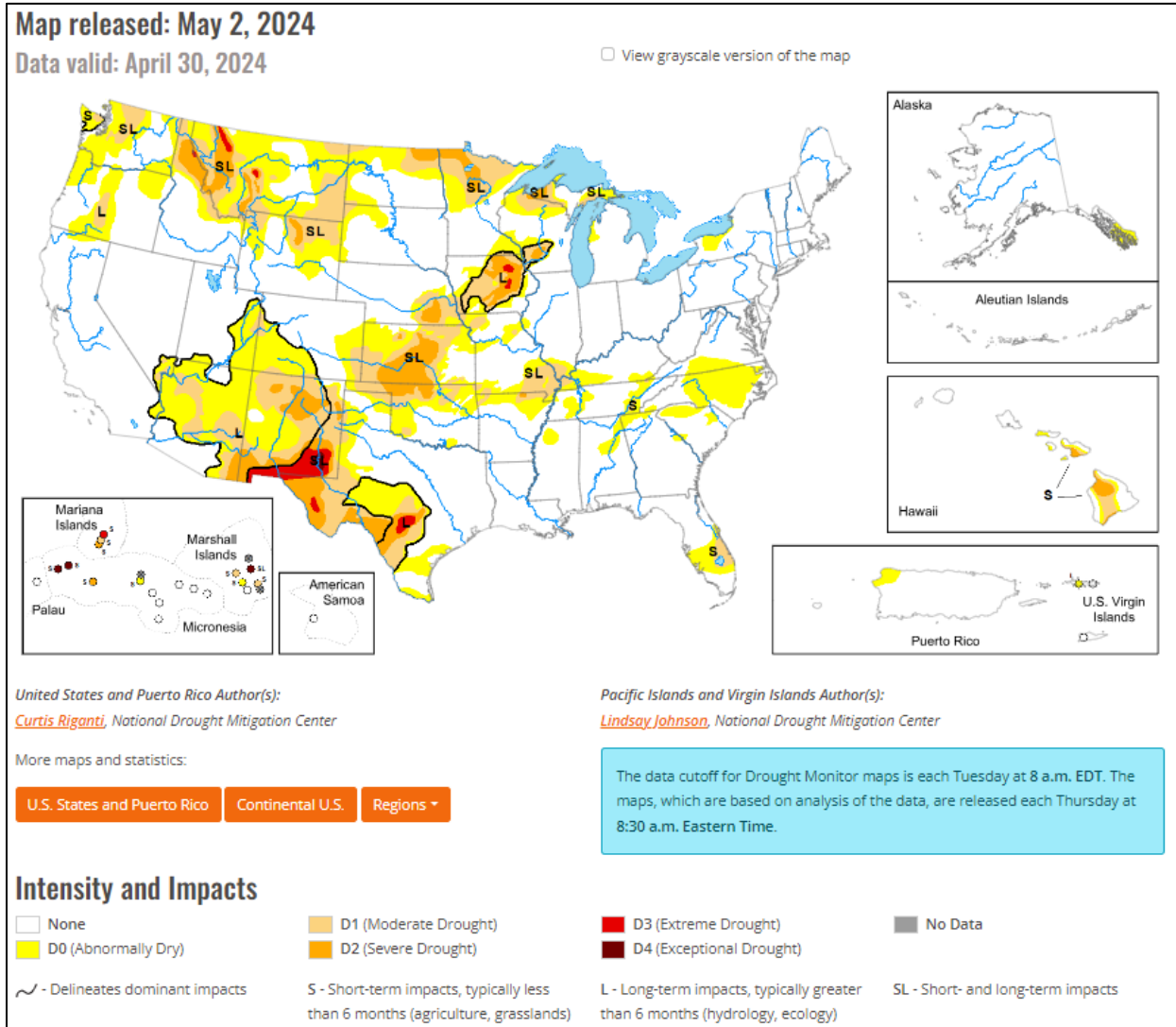
# Drought

## [U.S. Drought Monitor](#)

Source: National Drought Mitigation Center

## [U.S. Drought Portal](#)

Source: NOAA



## Current [National Drought Summary](#), April 30, 2024

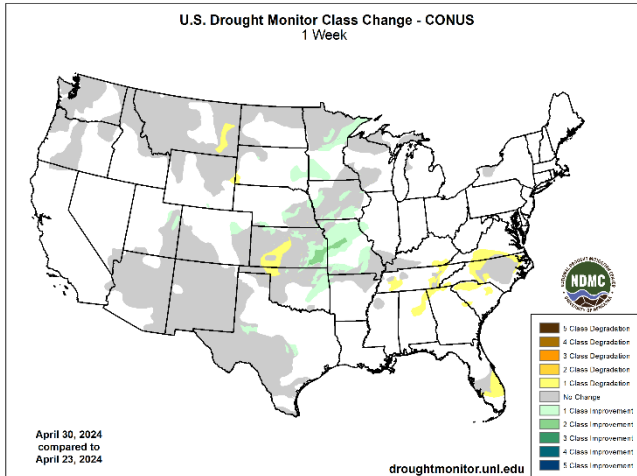
Source: National Drought Mitigation Center

“During the late week and weekend, a large severe weather outbreak brought large hail, damaging winds and numerous intense tornadoes to parts of the central and southern Great Plains and Midwest. The storm systems responsible for the severe weather outbreak also brought widespread moderate and heavy rain amounts to the central U.S., leading to widespread improvements in drought and abnormally dry conditions. To the southwest of the heavy rainfall, in northwest Oklahoma and southwest and central Kansas, severe drought expanded as flash drought continued to take hold during a very dry late winter and early-mid spring, leading to reports of very poor wheat conditions and dust storms. Recent dry weather over the last month, combined with a mostly dry week, led to the development of more areas of abnormal dryness and moderate drought over scattered parts of the Southeast, Tennessee and southeast Kentucky. Conditions mostly remained unchanged in the western U.S., though a few improvements occurred in Colorado and Utah after recent precipitation, while conditions worsened in parts of southeast Montana and the Black Hills region of South Dakota and adjacent northeast Wyoming amid recent dry weather. Heavy rains in the northeast part of Puerto Rico eased drought and abnormal dryness there as streamflows improved and crop stress lessened.”

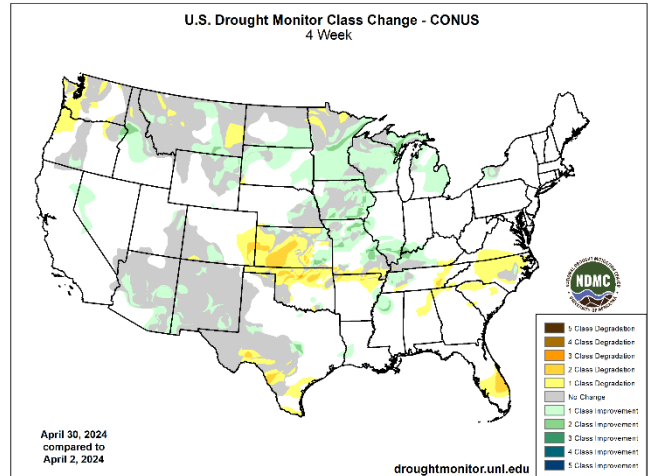
## Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

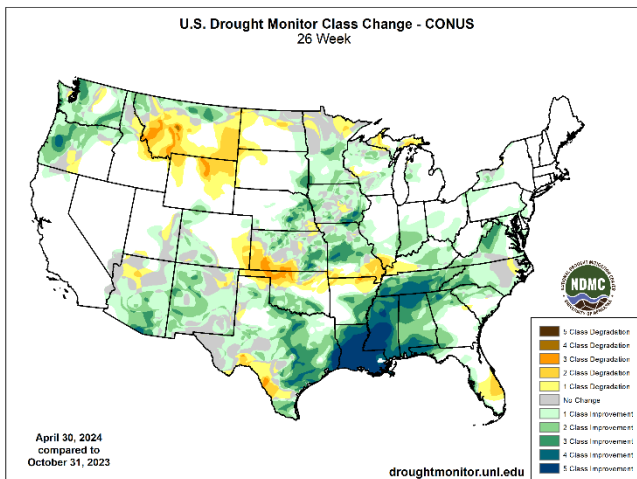
### 1 Week



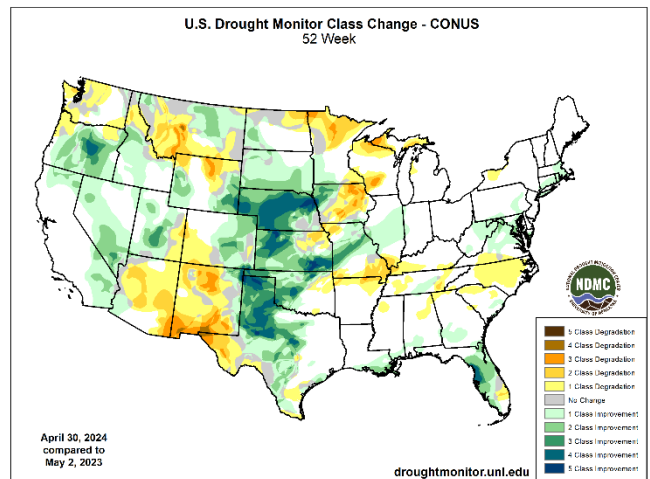
### 1 Month



### 6 Months



### 1 Year



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

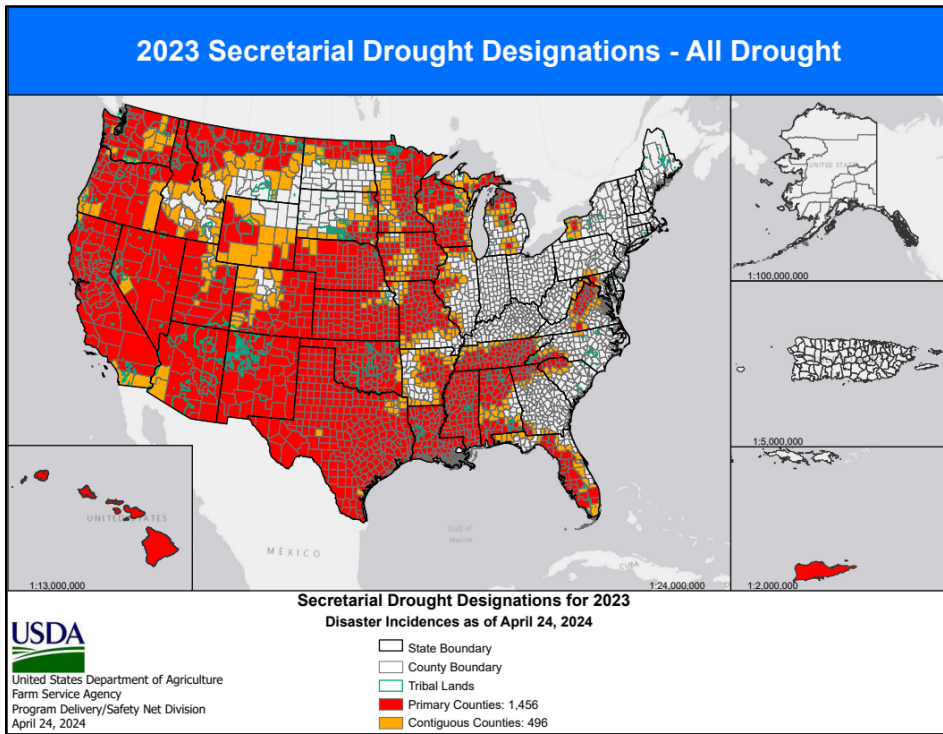
## Highlighted Drought Resources

- [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](#)



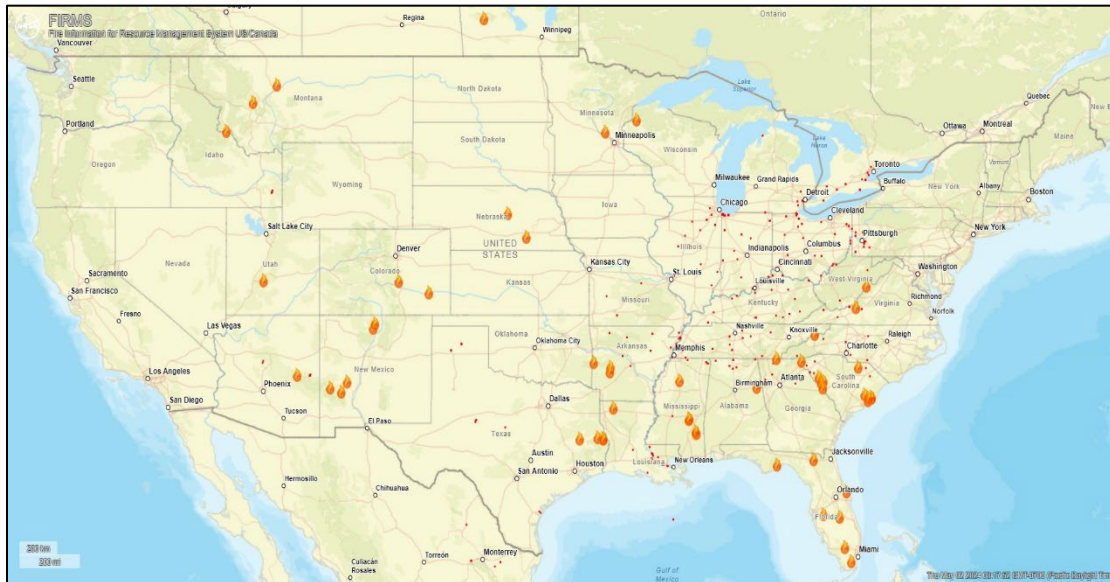
## USDA Secretarial [Drought Designations](#)

Source: USDA Farm Service Agency



## Wildfires: [Fire Information for Resource Management System US/Canada](#)

Source: NASA/USDA Forest Service



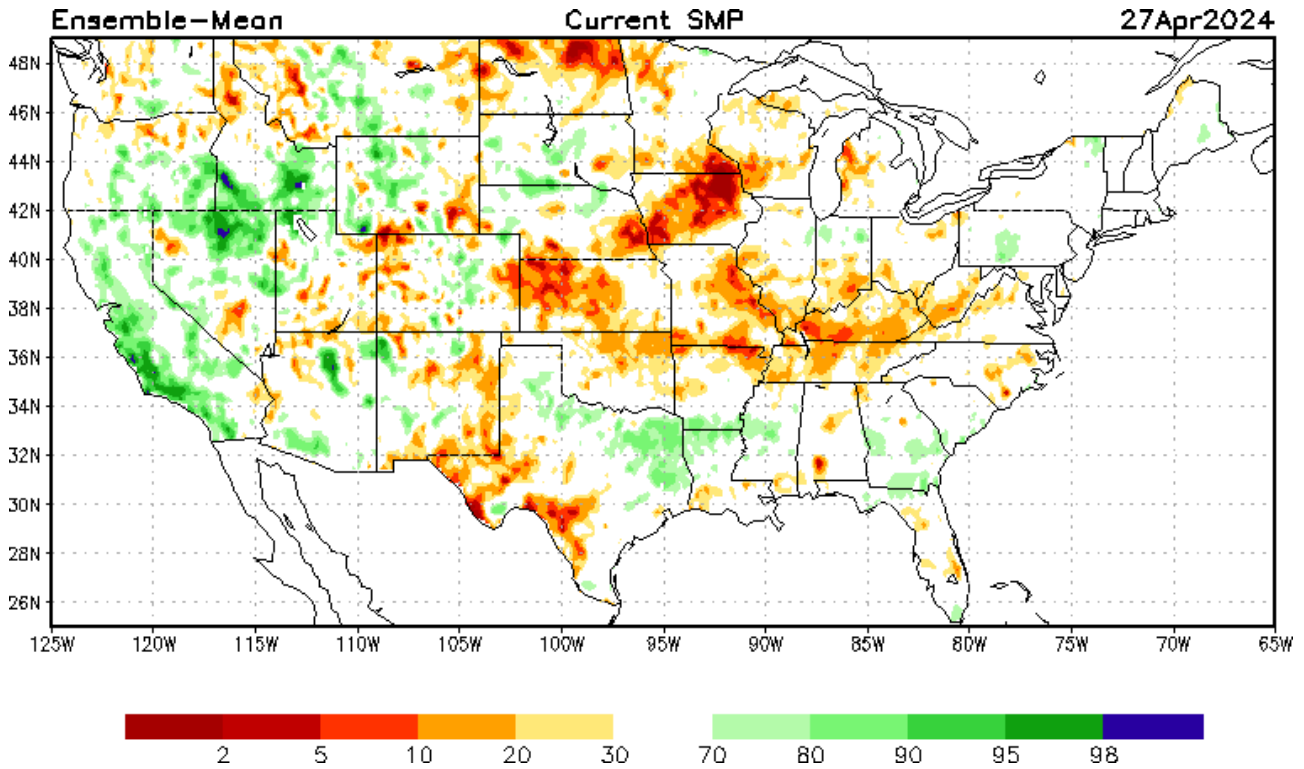
### Highlighted Wildfire Resources

- [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

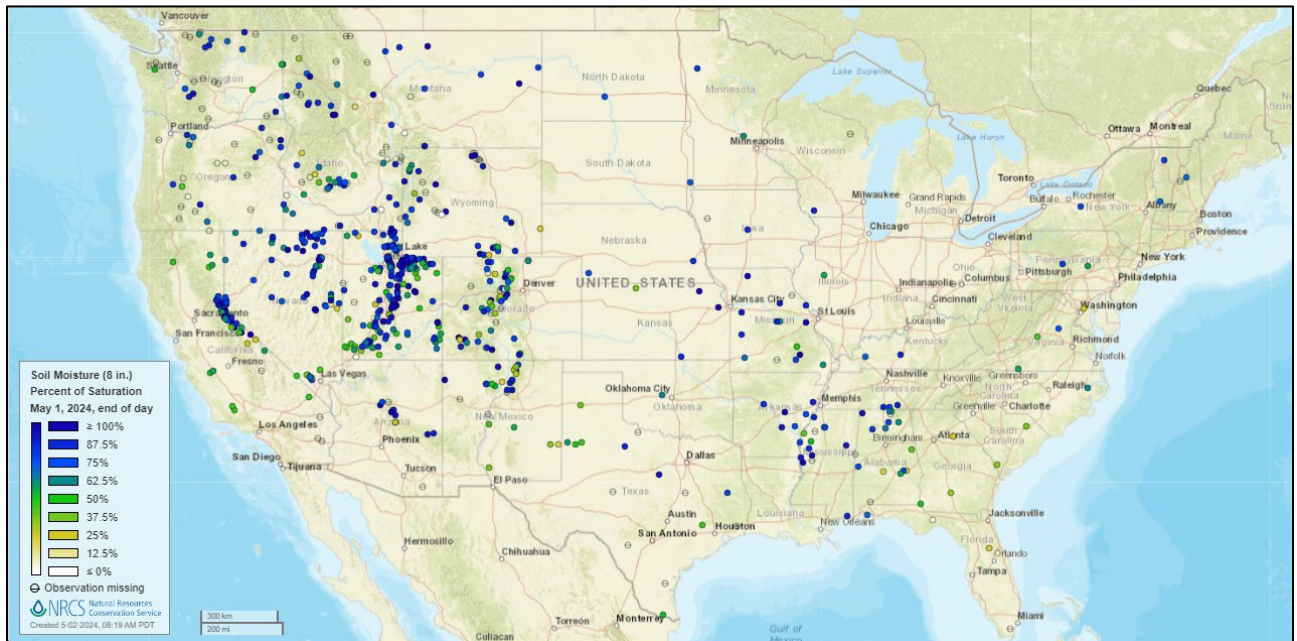


[Modeled soil moisture percentiles](#) as of April 27, 2024

### Soil Moisture Percent of Saturation

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

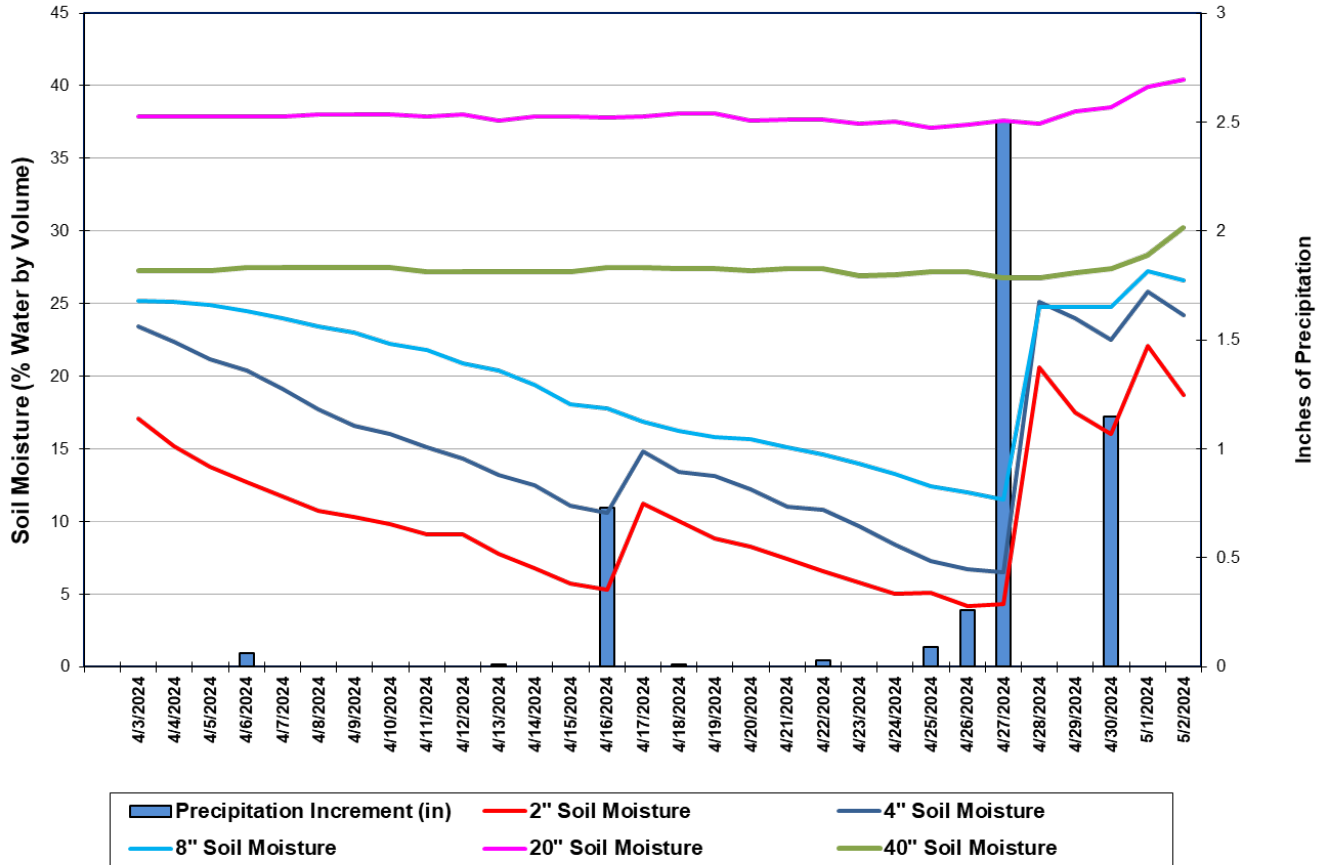
[U.S. soil moisture map at 8-inch depth:](#)



### Soil Moisture

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

Abrams, Kansas (SCAN site 2092)  
Daily Mean Soil Moisture vs. Daily Precipitation



This chart shows the precipitation and soil moisture for the last 30 days at the [Abrams](#) SCAN site in Kansas. Soil moisture levels steadily declined between April 03-16 according to the shallower soil sensors two, four, and eight inches beneath land surface. After the site received over an inch of precipitation on April 27 and 30, soil moisture levels can be seen increasing at these same sensor depths. Total precipitation for the 30-day period was 4.84 inches.

### Soil Moisture Data Portals

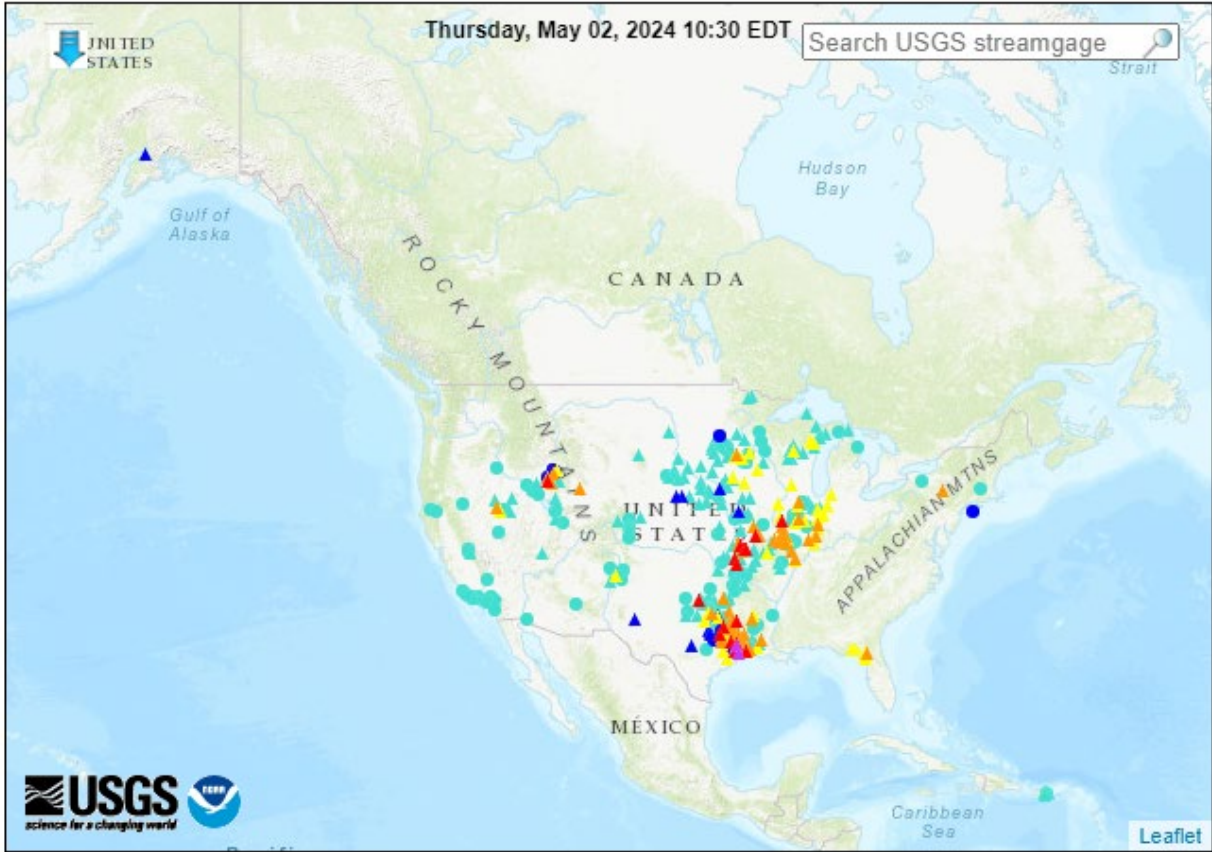
- [USCRN Soil Moisture](#)
- [National Soil Moisture Network](#)
- [NOAA Climate Prediction Center Soil Moisture](#)
- [NASA Grace](#)



### Streamflow, Drought, Flood, and Runoff

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

## Map of flood and high flow conditions (69 in floods [major: 2, moderate: 16, minor: 51], 46 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

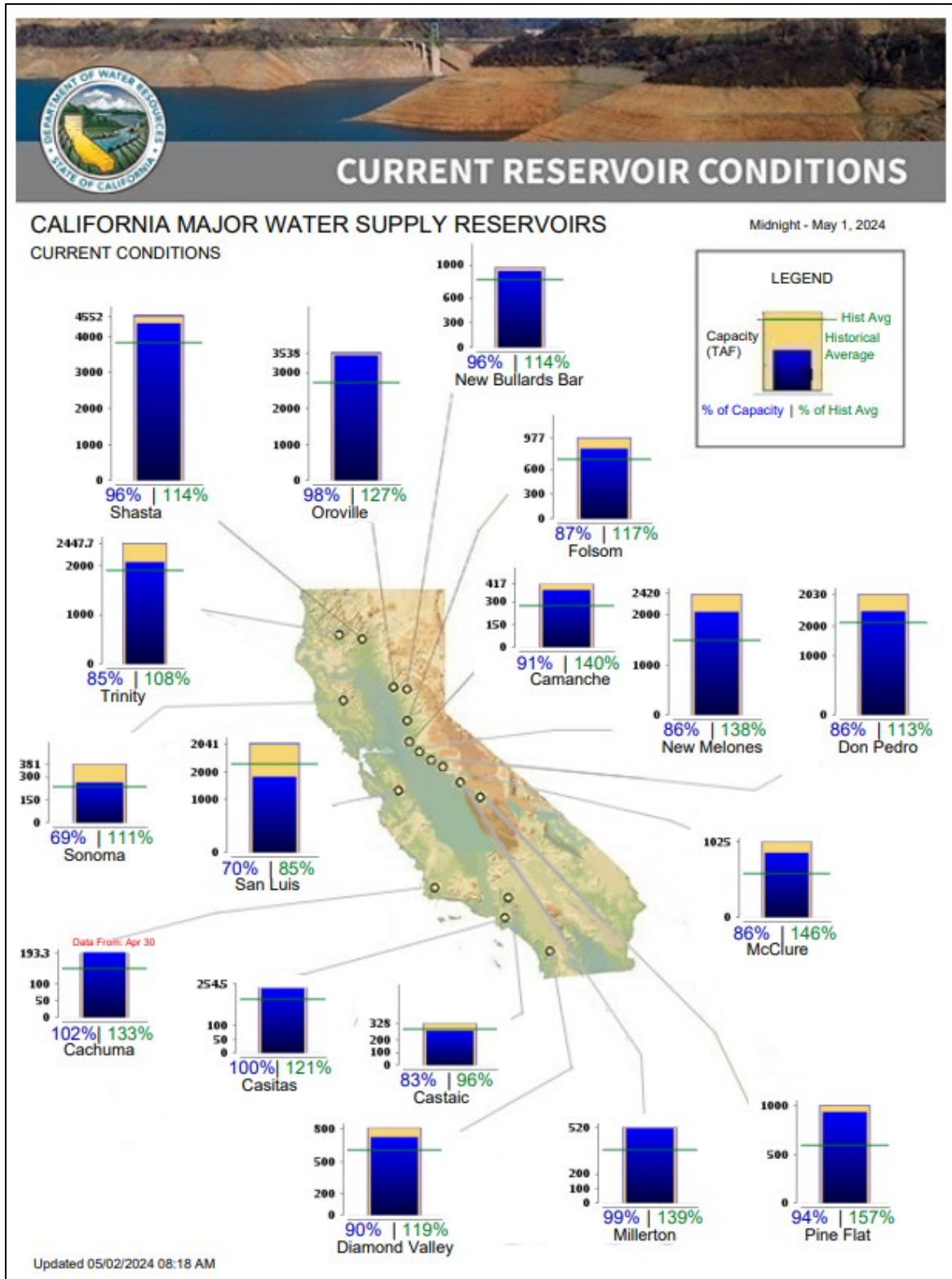
#### Hydromet Teacup Reservoir Depictions

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 May 02, 2024:** “Active weather will continue into next week, as multiple weather systems cross the country. A cold front currently approaching the Mississippi Valley will drift eastward and weaken, reaching the Atlantic Coast States during the weekend. A secondary cold front will follow, eventually merging with the initial front. Finally, a potent spring storm will arrive along the Pacific Coast on Saturday before pushing eastward toward the northern Plains by early next week. The threat of widespread severe thunderstorms will diminish during the weekend, only to return across the Plains by Monday. Five-day rainfall totals should exceed an inch in parts of the Northwest and many areas from the Plains eastward, with much higher amounts possible from the southern Plains into the lower Mississippi Valley. In contrast, rain will bypass the Southwest and most areas along and near the Gulf Coast. The NWS 6- to 10-day outlook for May 7 – 11 calls for the likelihood of below-normal temperatures across the northern High Plains and the West, while warmer-than-normal weather will prevail east of a line from the southern Rockies into the upper Great Lakes region. Meanwhile, near- or below-normal precipitation across the Deep South and along the Pacific Coast should contrast with wetter-than-normal conditions in much of the northern two-thirds of the U.S.”

## Weather Hazards Outlook: [May 04 – 08, 2024](#)

Source: NOAA Weather Prediction Center

### U.S. Day 3-7 Hazards Outlook















[About the Hazards Outlook](#)

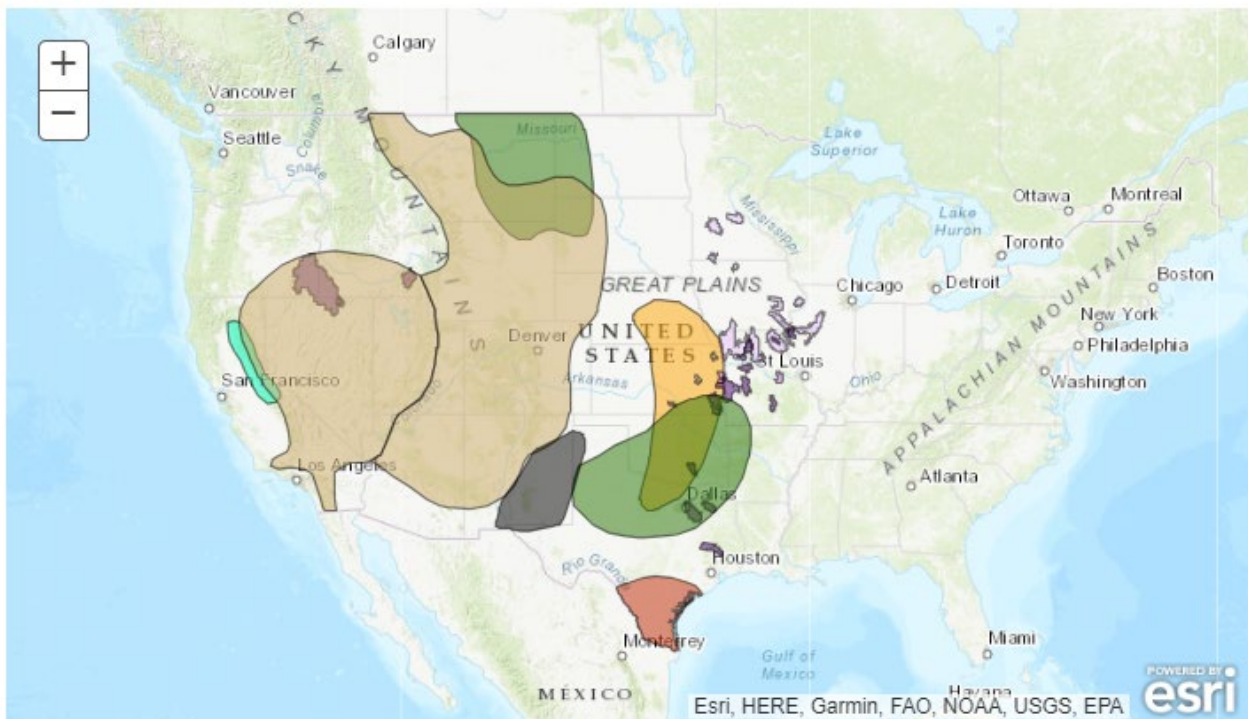
Created May 01, 2024

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"/>

Valid May 04, 2024 - May 08, 2024

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



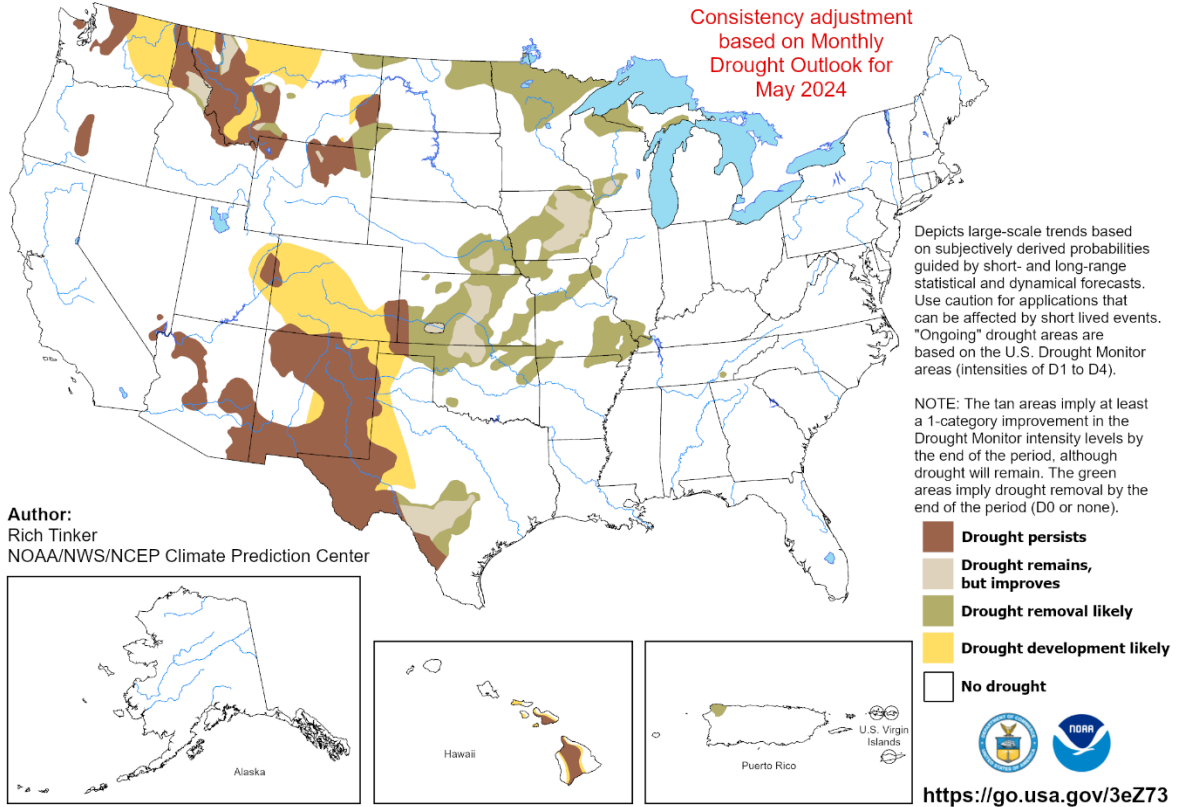


**Seasonal Drought Outlook: [May 01 – July 31, 2024](#)**

Source: National Weather Service

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

Valid for May 1 - July 31, 2024  
Released April 30, 2024

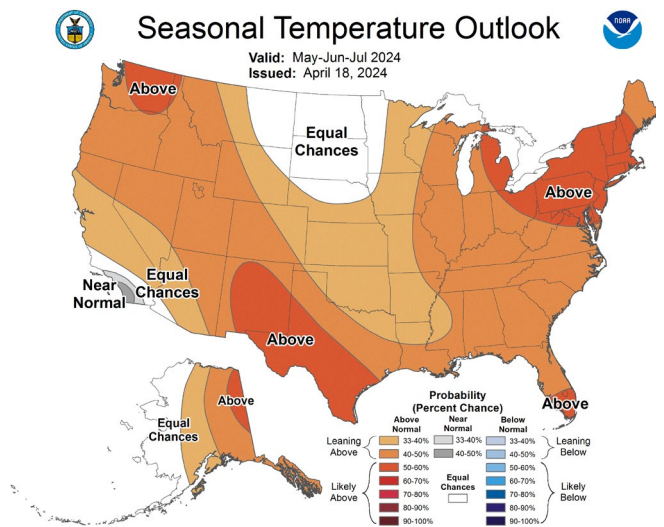
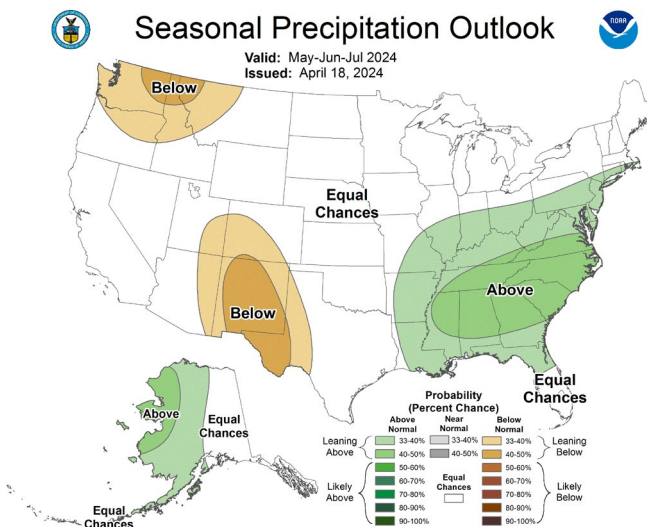


**Climate Prediction Center Three-month Outlook**

Source: National Weather Service

**Precipitation**

**Temperature**



[May-June-July 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](#).