



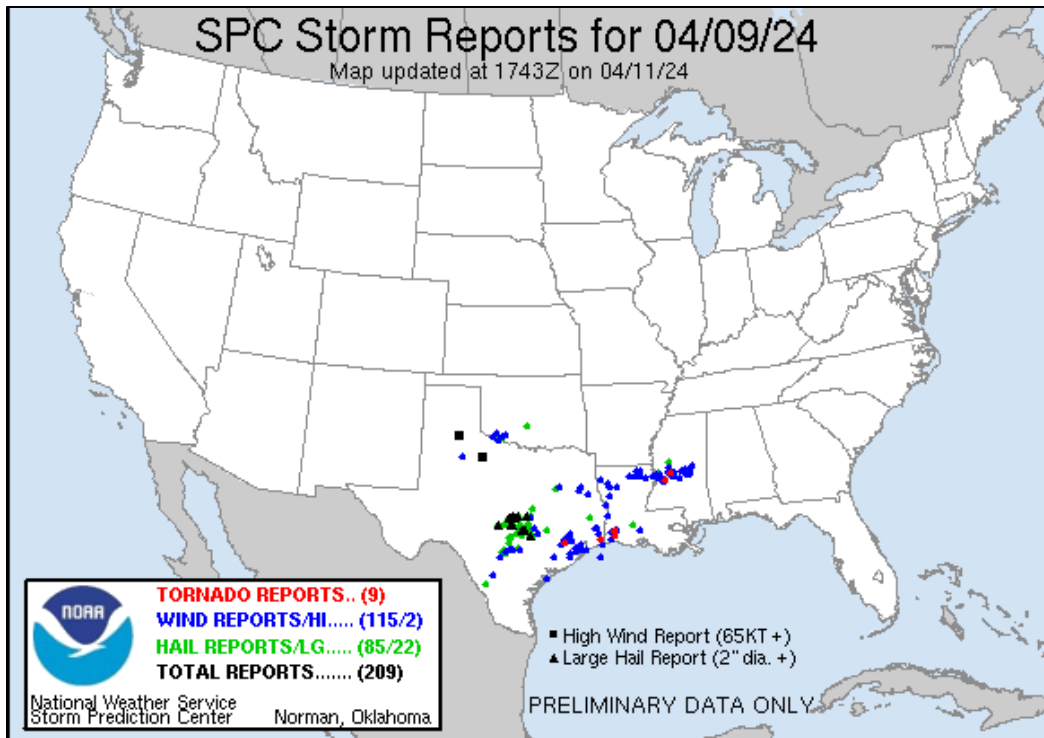
# Water and Climate Update

April 11, 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 |
| Temperature.....    | 8 | More Information .....                           | 19 |

## Severe weather impacts the Gulf Coast states



The Gulf Coast states experienced a variety of severe weather this week. On April 9, the Storm Prediction Center reported tornadoes, damaging winds over 60 mph, heavy rainfall, and hail over two inches in diameter in the region. Impacts from the event include downed trees, flooded cities and streets, and loss of power for hundreds of thousands of residents. In Mississippi, the threat of a levee break with rising floodwaters prompted a sheriff to evacuate residents of a Yazoo County neighborhood.

**Related:**

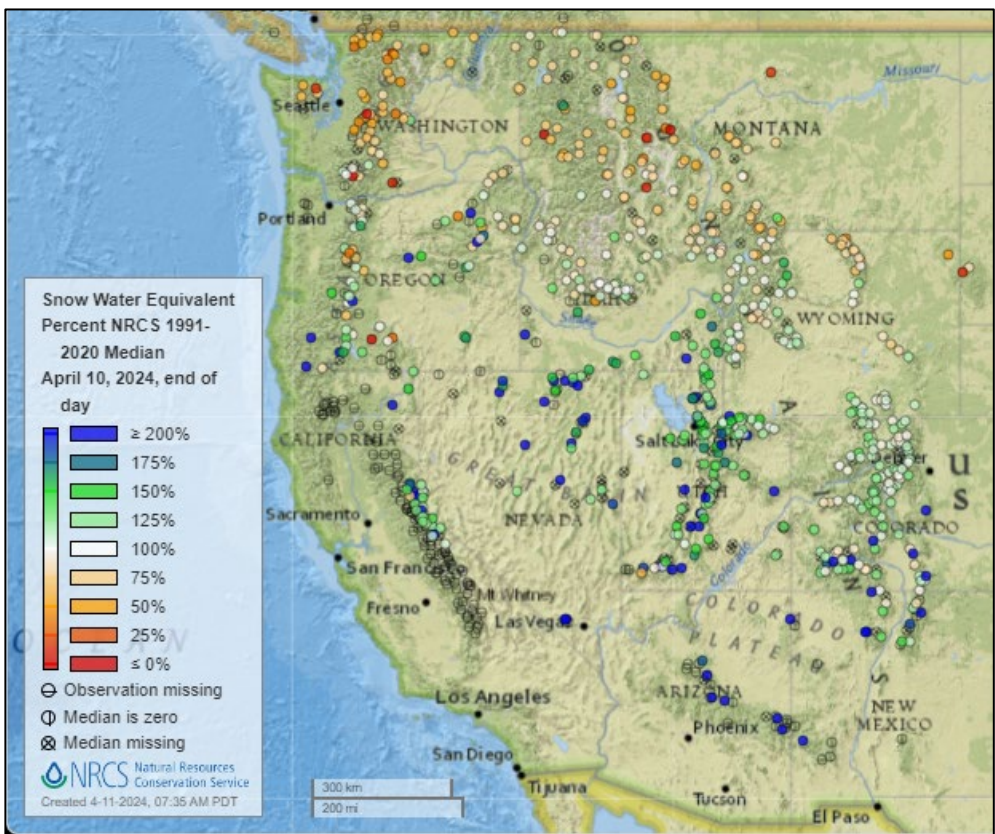
[NOAA/NWS Storm Prediction Center](#) – National Weather Service, Storm Prediction Center

[Tornadoes and Floods Batter Gulf Coast States](#) – The New York Times

['Evacuate IMMEDIATELY!!!' Mississippi sheriff warns levee will break amid powerful storm](#) – USA Today

[Dangerous tornado and flooding situation unfolding in South](#) – CNN

Snow



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

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

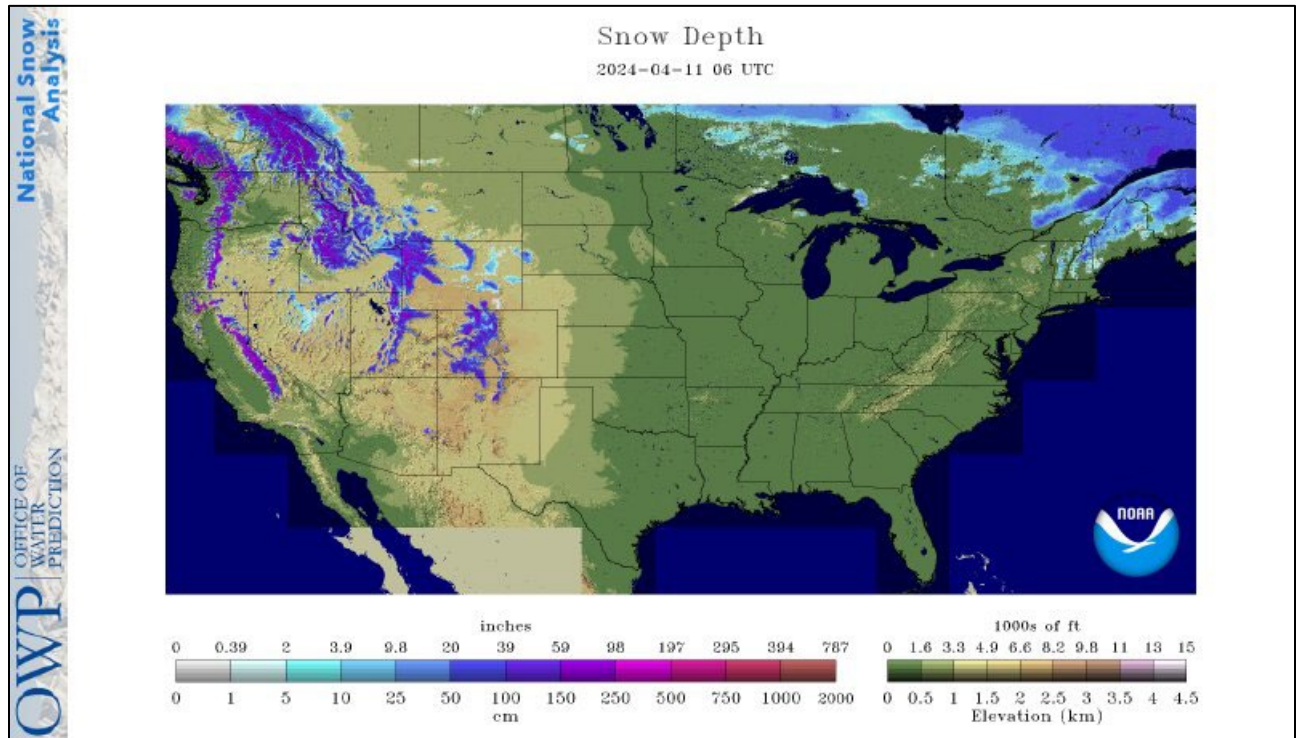


[Alaska snow water equivalent percent of median map](#)

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

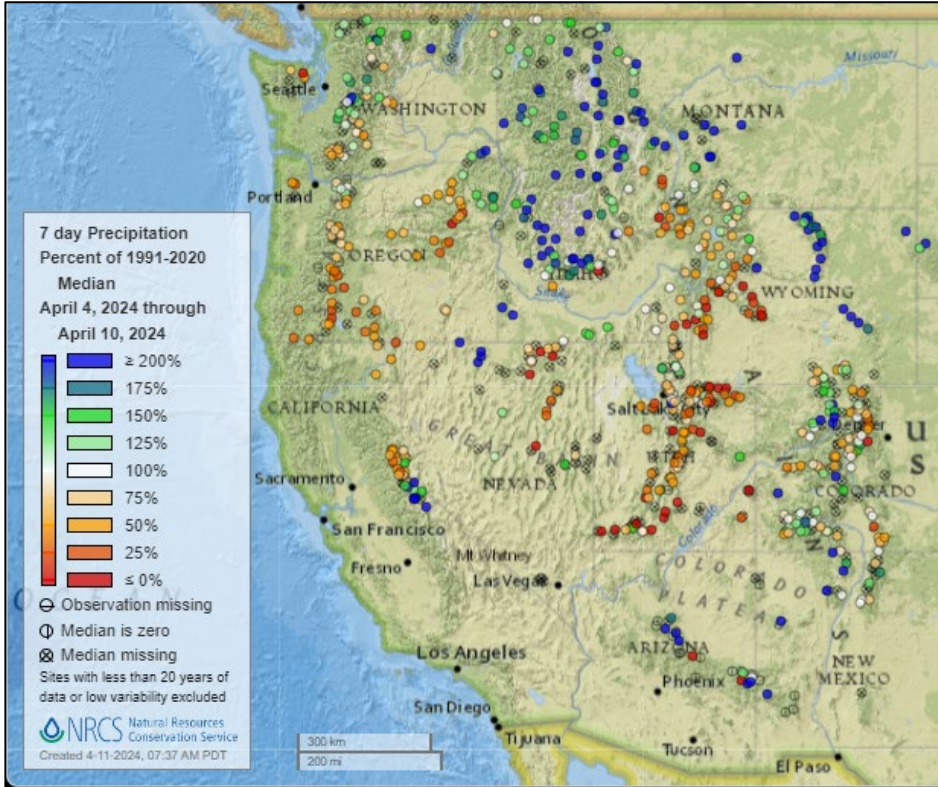
**Current Snow Depth, National Weather Service Snow Analysis**

Source: NOAA NWS National Operational Hydrologic Remote Sensing Center



## Precipitation

### Last 7 Days, NRCS SNOTEL Network

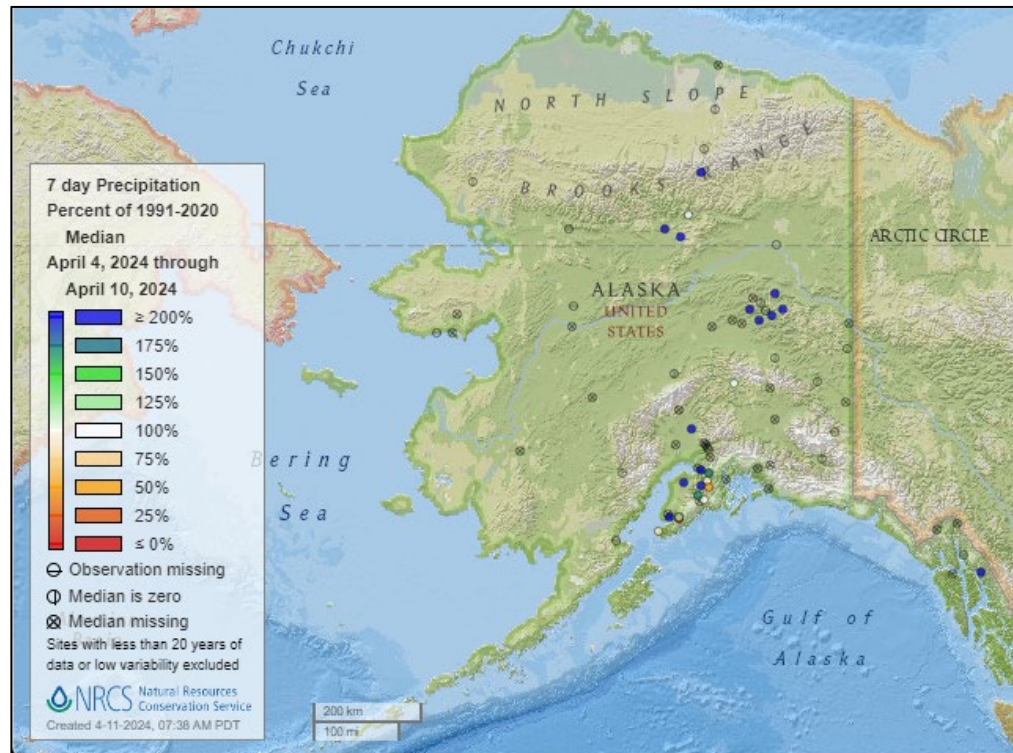


[7-day precipitation percent of median map](#)

**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](#)



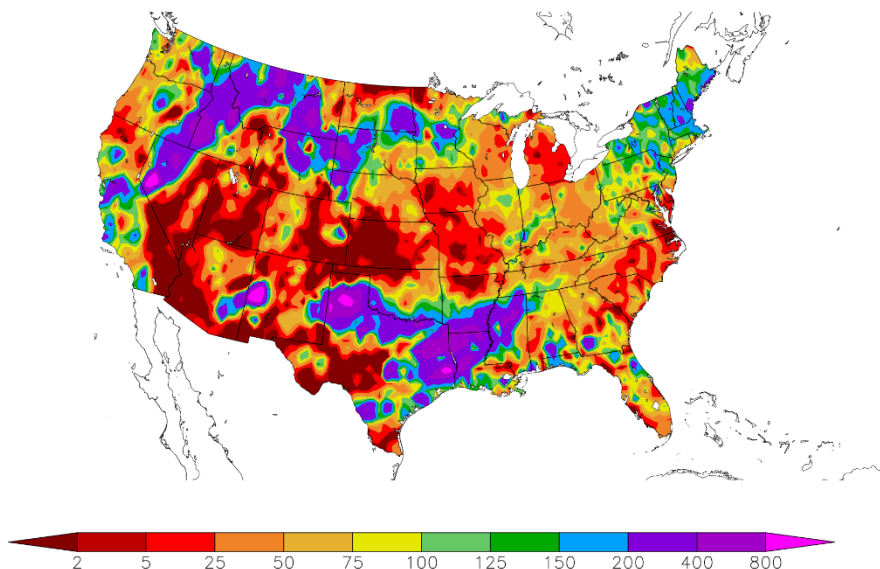
### Last 7 Days, National Weather Service (NWS) Networks

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 (%)  
4/4/2024 – 4/10/2024



Generated 4/11/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

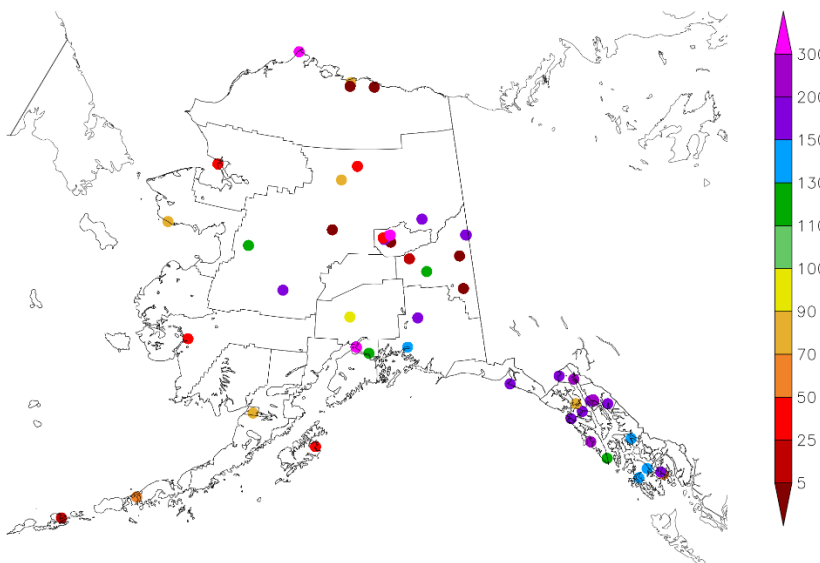
### Last 7 Days, National Weather Service (NWS) Networks

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 (%)  
4/4/2024 – 4/10/2024



Generated 4/11/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

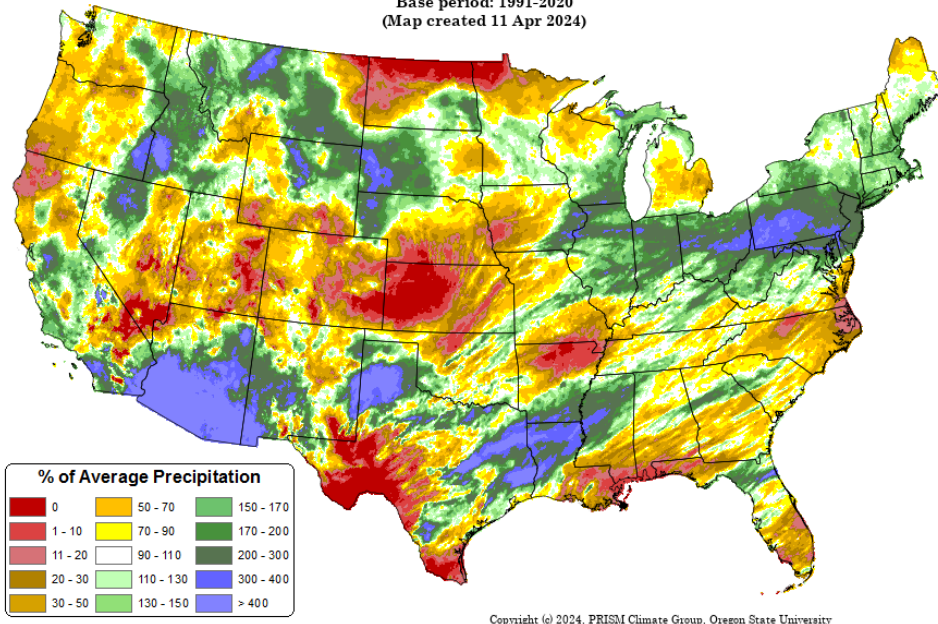
Month-to-Date, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

Total Precipitation Anomaly: 01 Apr 2024 - 10 Apr 2024

Period ending 7 AM EST 10 Apr 2024  
Base period: 1991-2020  
(Map created 11 Apr 2024)

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



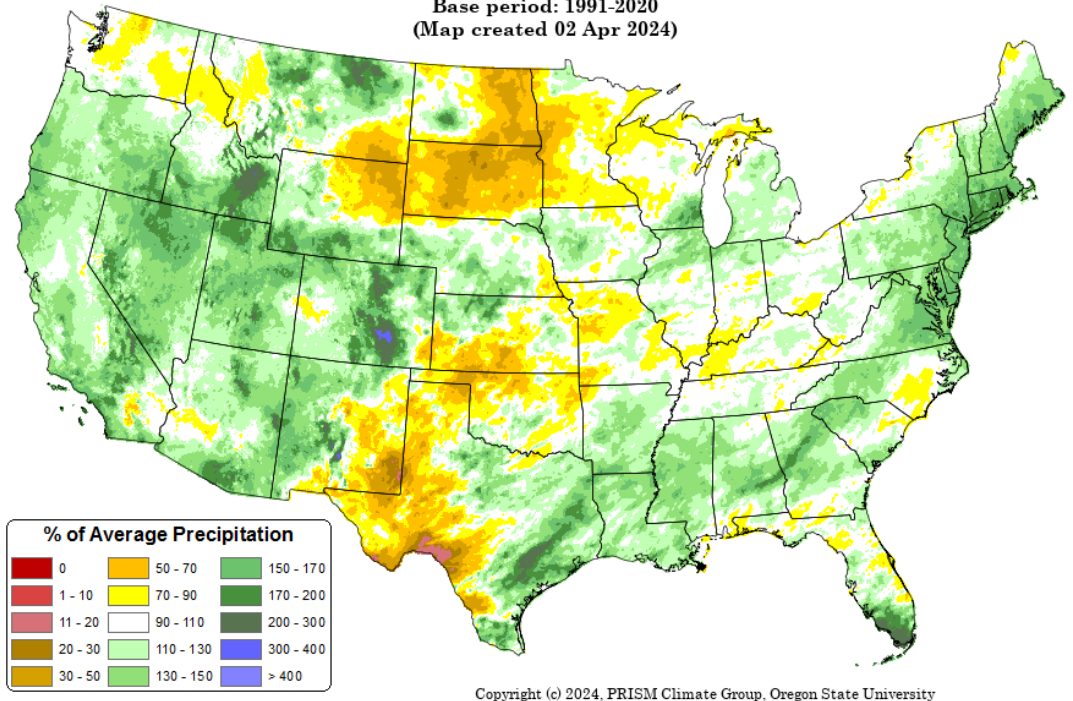
Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

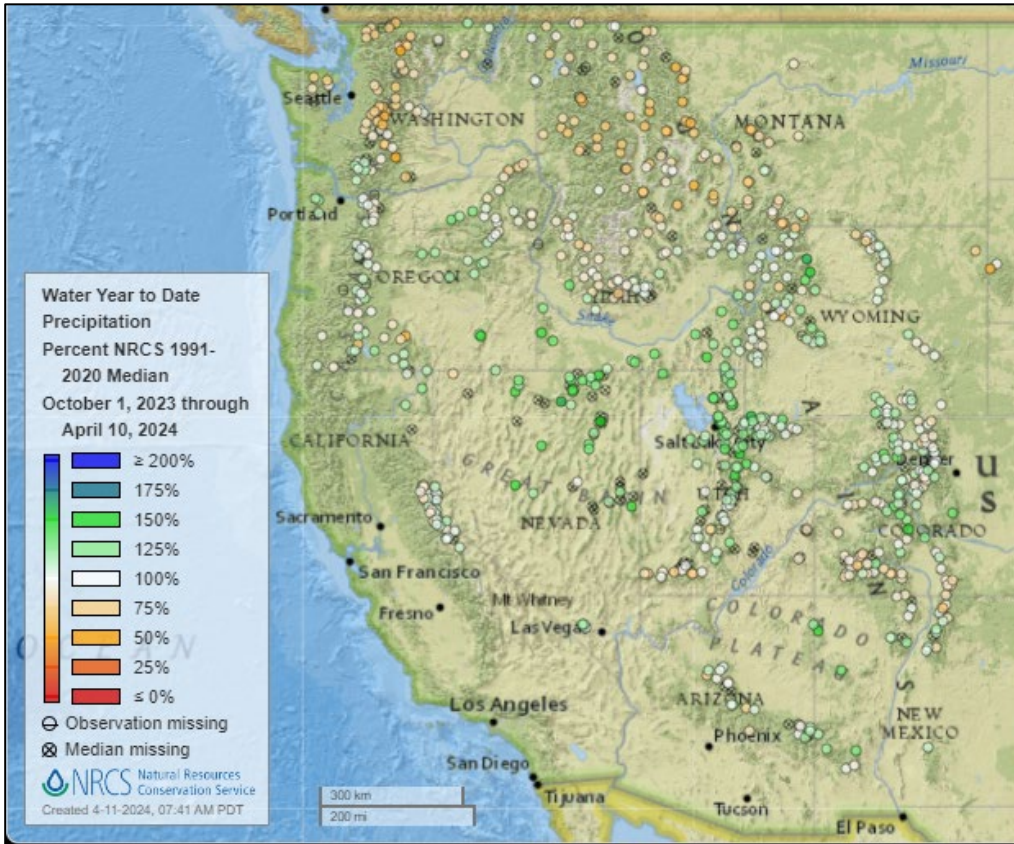
[January through March 2024 precipitation anomaly map](#)

Total Precipitation Anomaly: Jan 2024 - Mar 2024

Period ending 7 AM EST 31 Mar 2024  
Base period: 1991-2020  
(Map created 02 Apr 2024)



Water Year-to-Date, NRCS SNOTEL Network

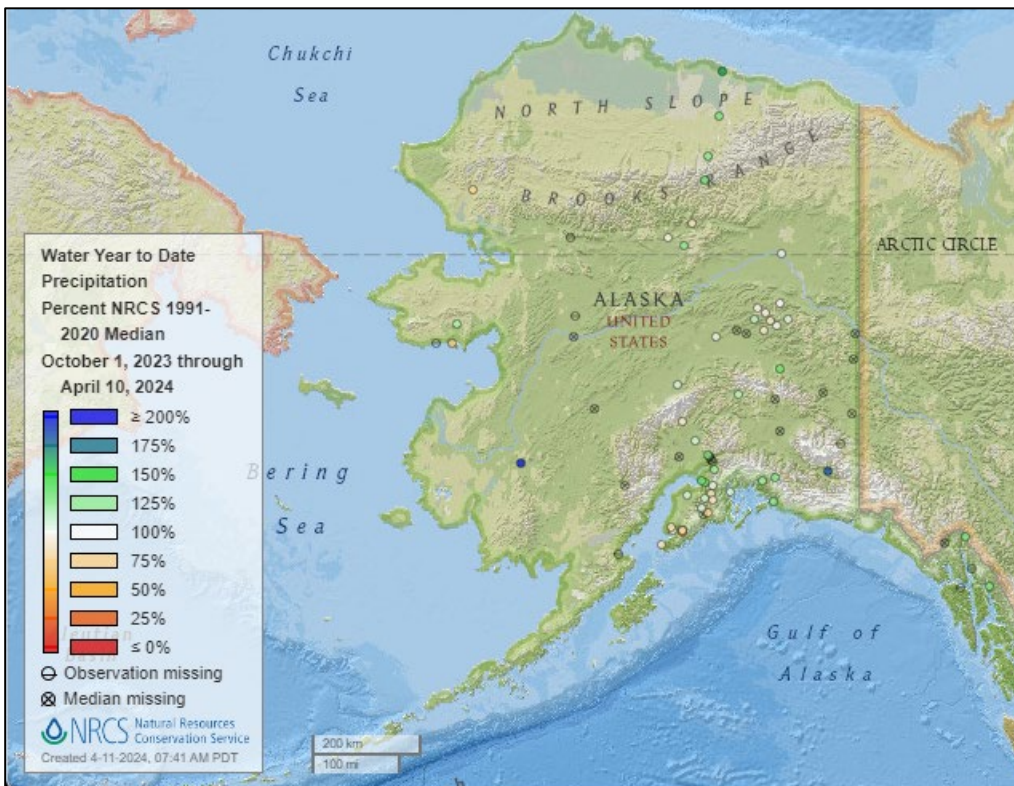


[2024 water year-to-date precipitation percent of median map](#)

**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

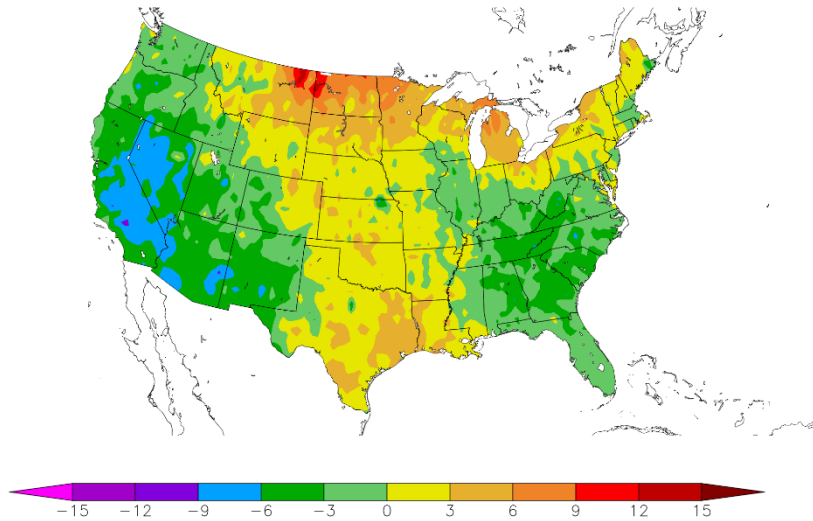
### Last 7 Days, National Weather Service (NWS) Networks

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)  
4/4/2024 – 4/10/2024



Generated 4/11/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

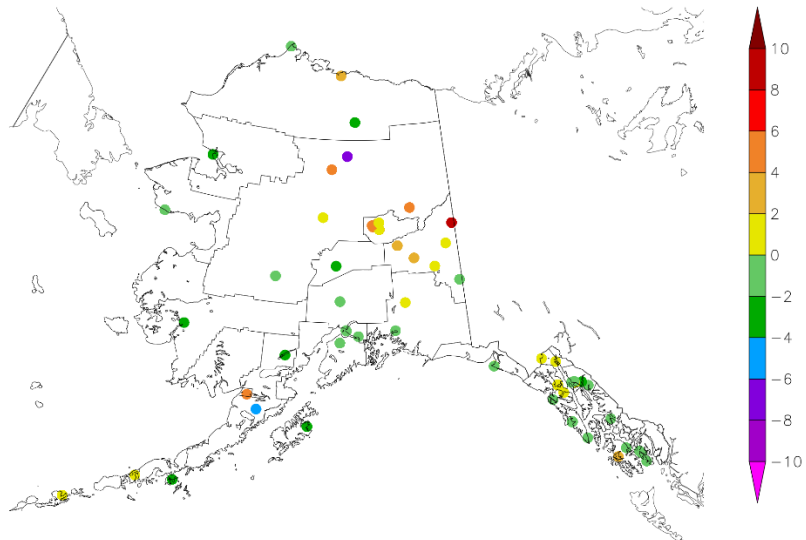
### Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)  
4/4/2024 – 4/10/2024



Generated 4/11/2024 at HPRCC using provisional data.

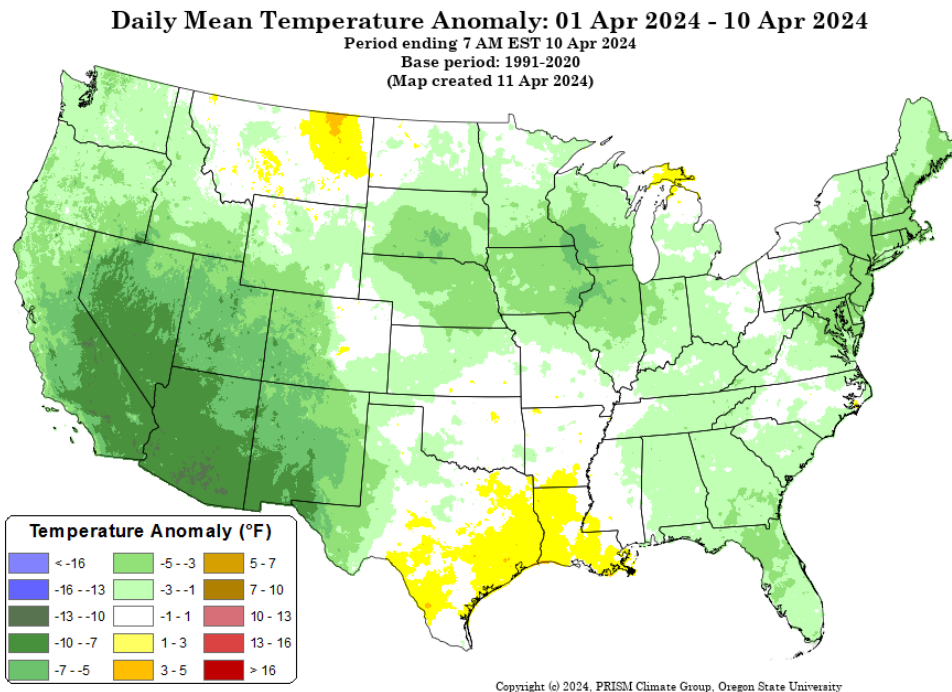
NOAA Regional Climate Centers



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

Source: PRISM

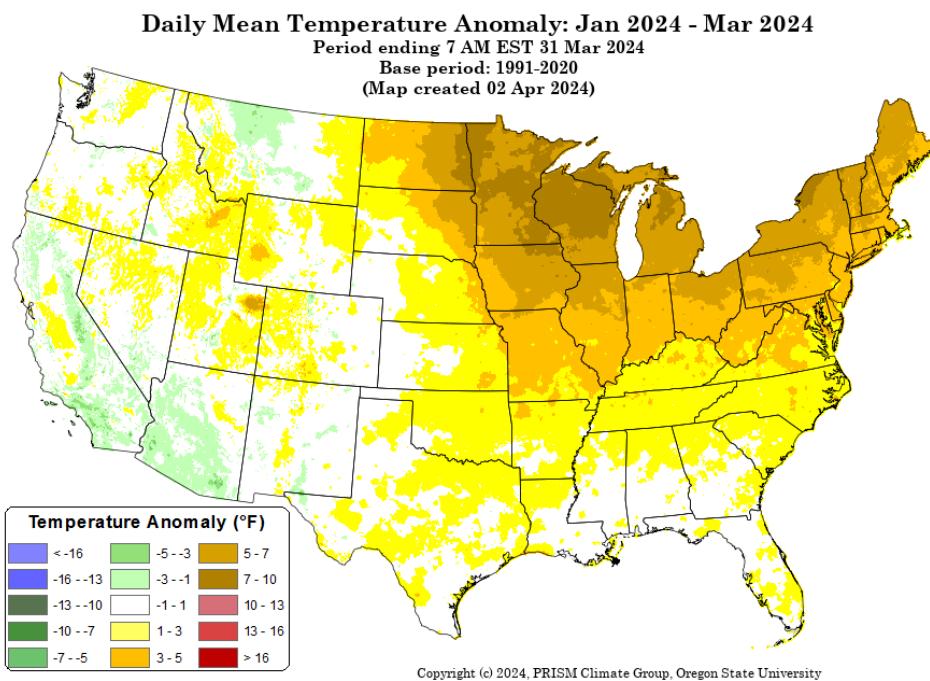
[Month-to-date national daily mean temperature anomaly map](#)



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

Source: PRISM

[January through March 2024 daily mean temperature anomaly map](#)



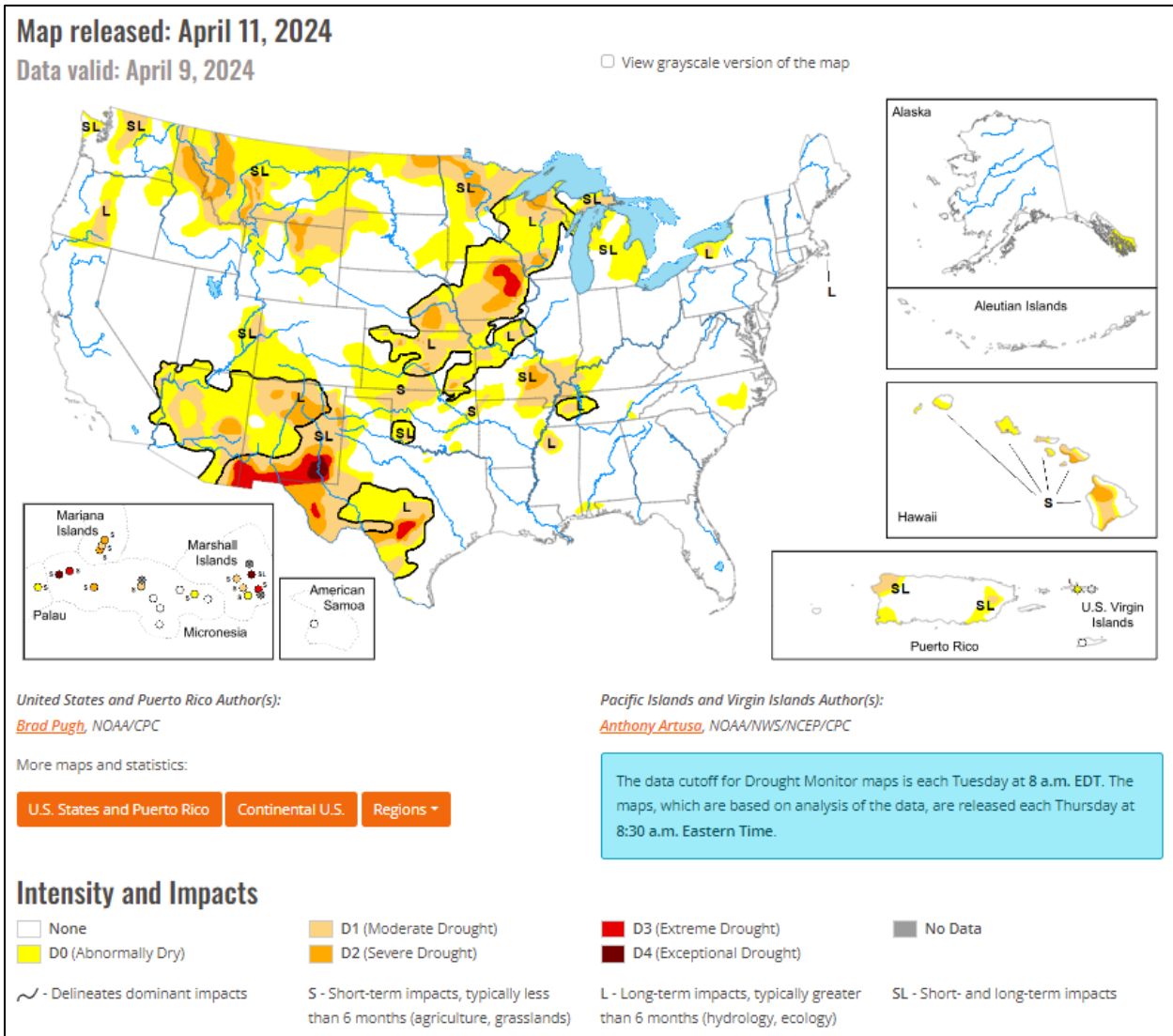
# Drought

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

Source: National Drought Mitigation Center

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

Source: NOAA



## Current [National Drought Summary](#), April 09, 2024

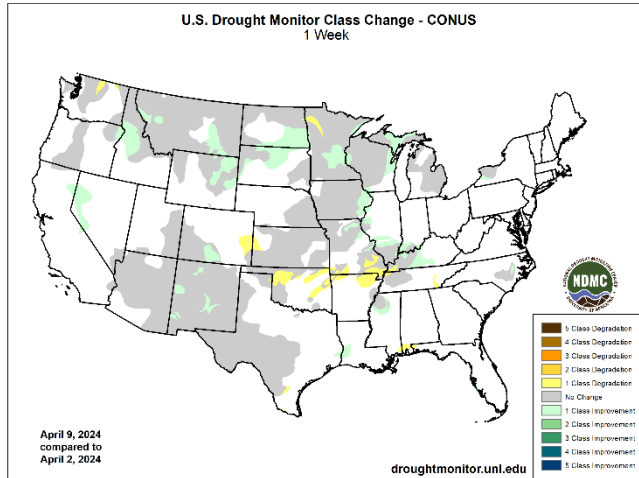
Source: National Drought Mitigation Center

“Following the El Nino winter and an active early spring pattern, drought coverage is at its lowest since the spring 2020. A strengthening low pressure system and trailing cold front progressed east from the Mississippi Valley to the East Coast at the beginning of April. This storm brought heavy snow (6 to 18 inches, locally more than 2 feet) to the Upper Peninsula of Michigan, Wisconsin, and northern New England. The recent precipitation (rain and snow) during the past few weeks continued to ease drought conditions across the Upper Midwest. From April 5 to 7, a strong storm system tracked east from the Rockies to the Great Plains. Heavy snowfall (6 to 12 inches, locally more) occurred across parts of Idaho, Montana, and Wyoming. Total precipitation amounts of 1 to 2 inches, liquid equivalent, resulted in drought improvement from the north-central Rockies to western South Dakota. Drought continued to develop or intensify across parts of the southern Great Plains and lower Ohio Valley along with Hawaii. Please note that heavy rainfall across the South, occurring after April 9th at 8am EDT, will be considered in next week’s U.S. Drought Monitor.”

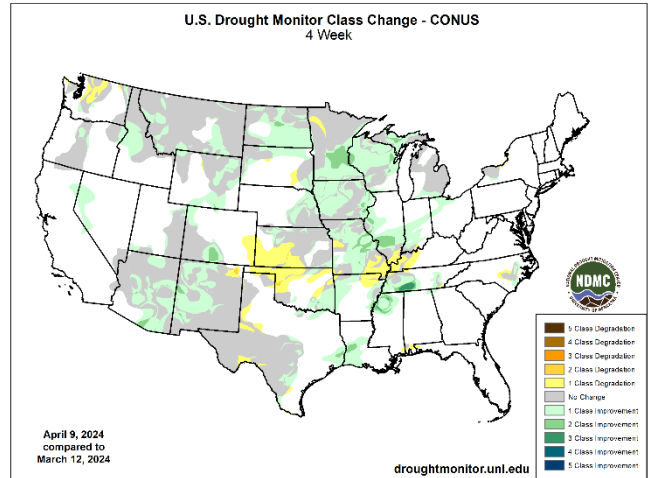
## Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

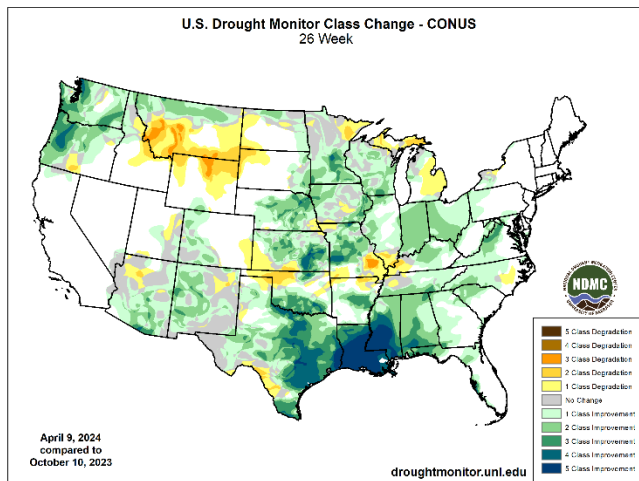
### 1 Week



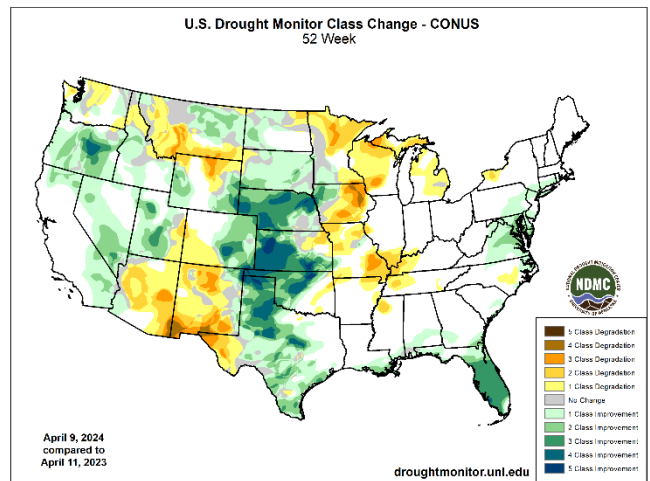
### 1 Month



### 6 Months



### 1 Year



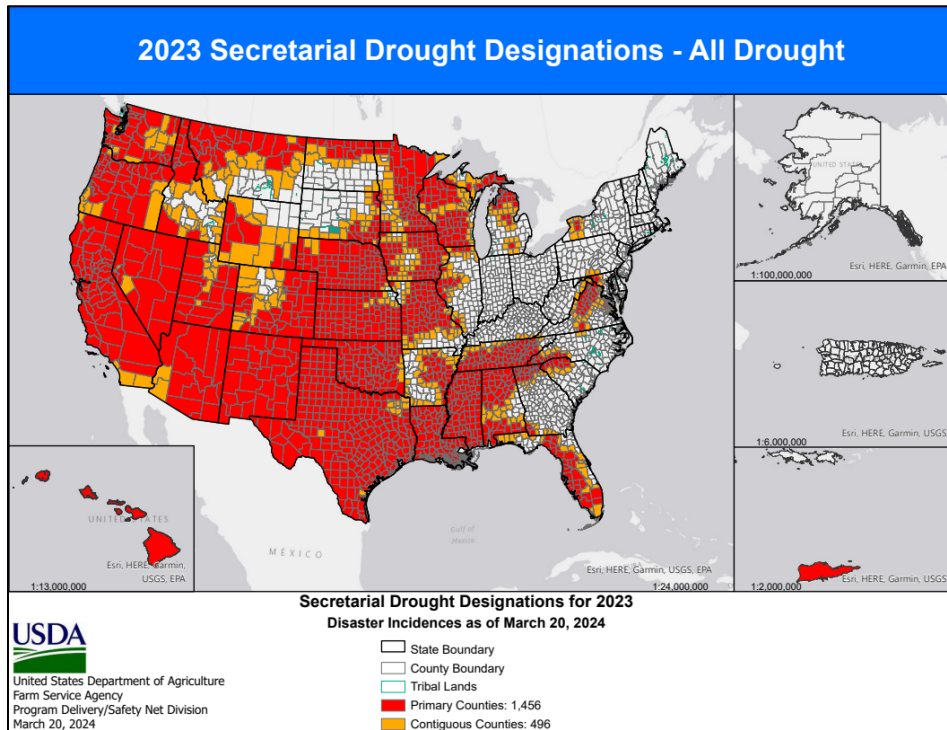
[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

## 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](#)

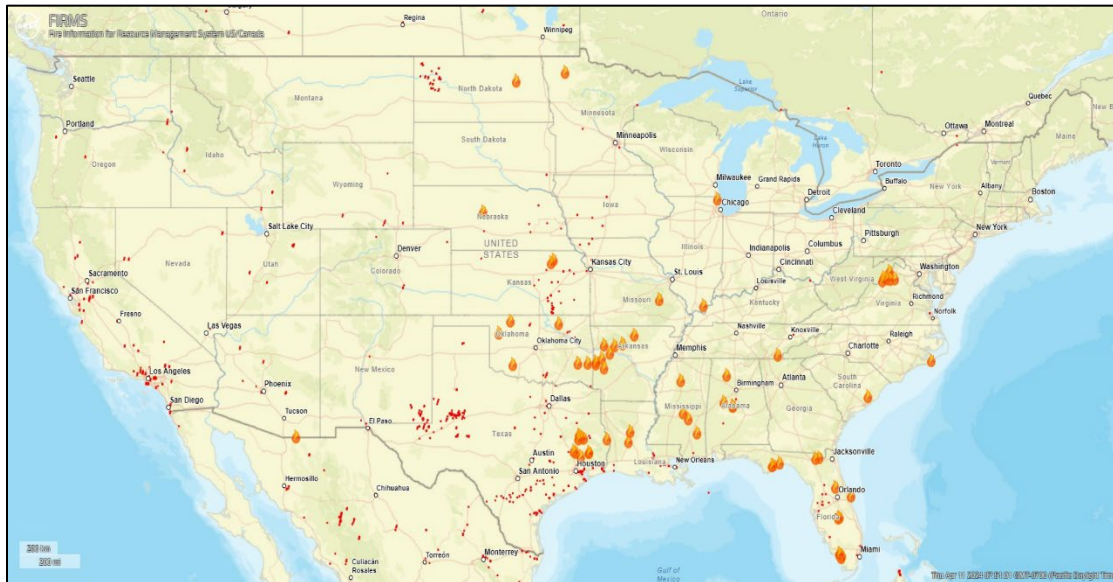
## USDA Secretarial [Drought Designations](#)

Source: USDA Farm Service Agency



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

Source: NASA/USDA Forest Service



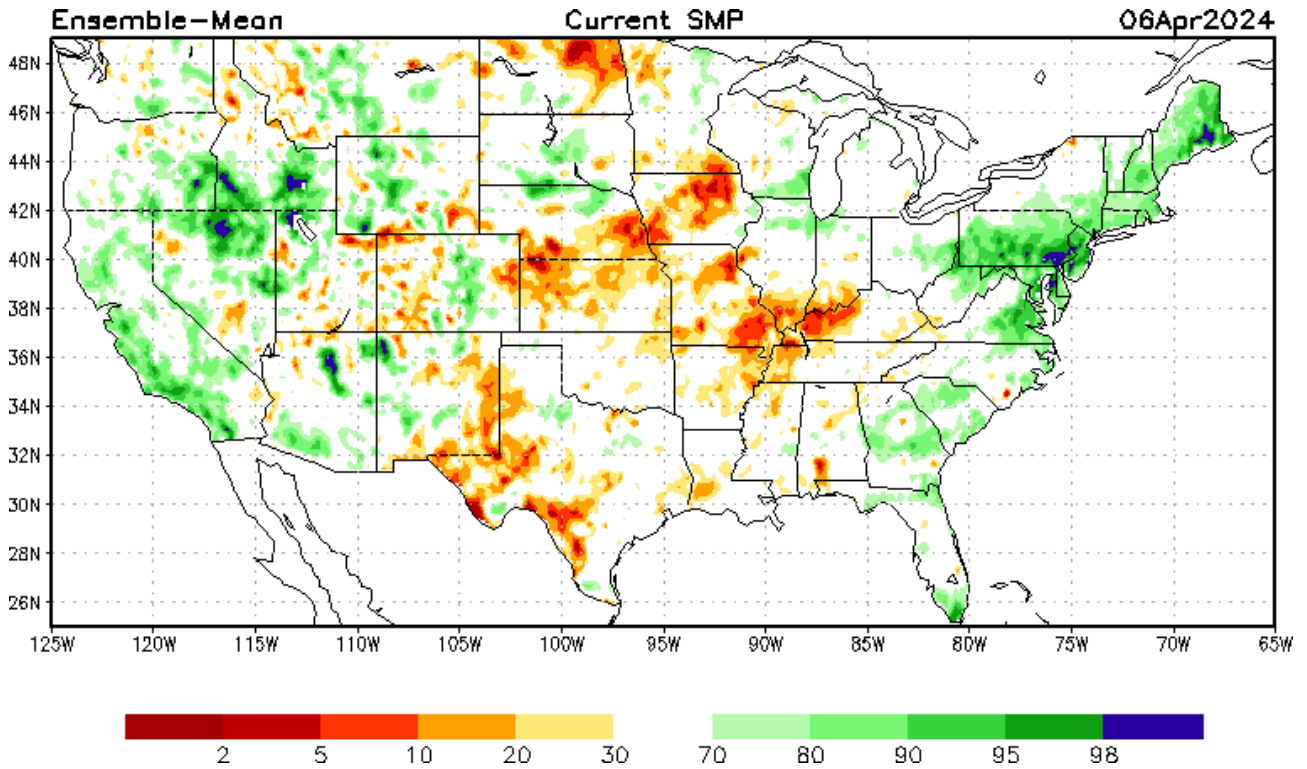
### Highlighted Wildfire Resources

- [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

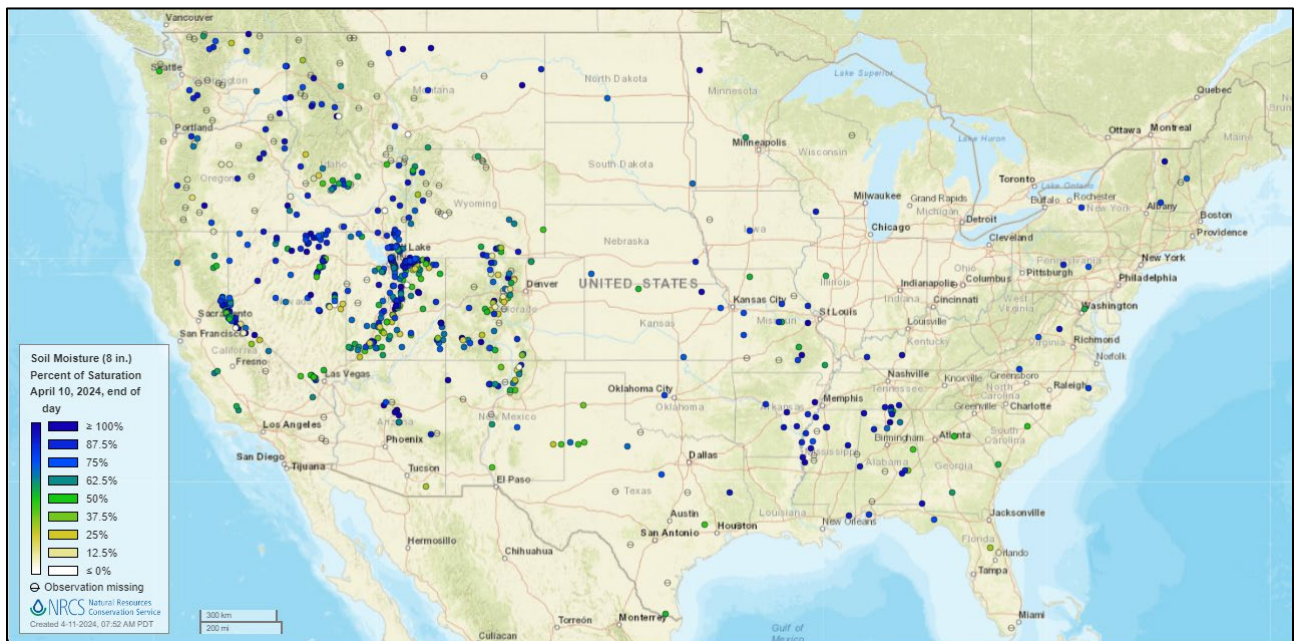


[Modeled soil moisture percentiles](#) as of April 06, 2024

### Soil Moisture Percent of Saturation

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

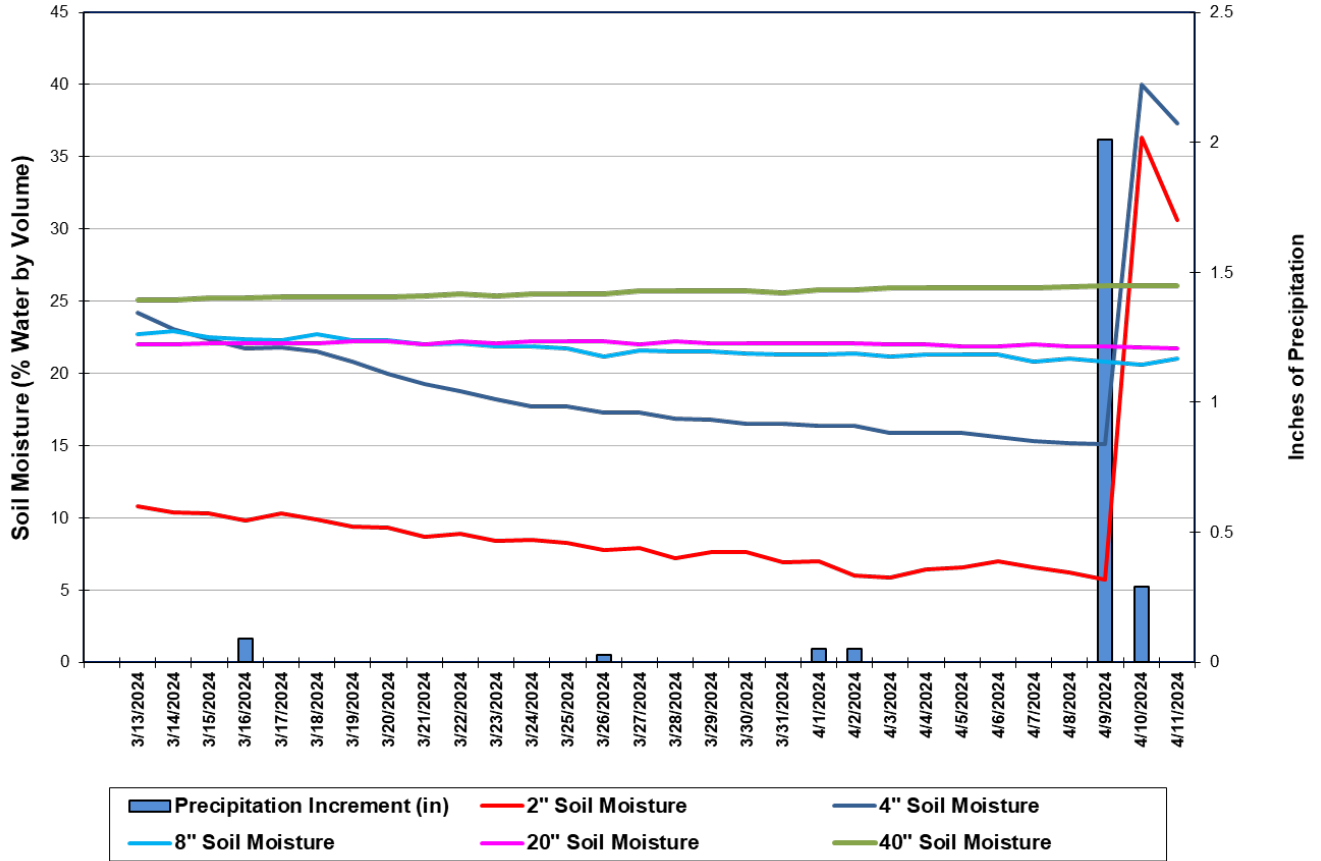
[U.S. soil moisture map at 8-inch depth:](#)



**Soil Moisture**

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

**Bushland #1, Texas (SCAN site 2006)**  
**Daily Mean Soil Moisture vs. Daily Precipitation**



This chart shows the precipitation and soil moisture for the last 30 days at the [Bushland #1](#) SCAN site in Texas. A strong storm delivered 2.3 inches of precipitation to the site between April 9-10, with soil sensors indicating a significant increase in soil moisture at the -2 and -4-inch depths immediately afterward. Total precipitation for the 30-day period was 2.52 inches.

**Soil Moisture Data Portals**

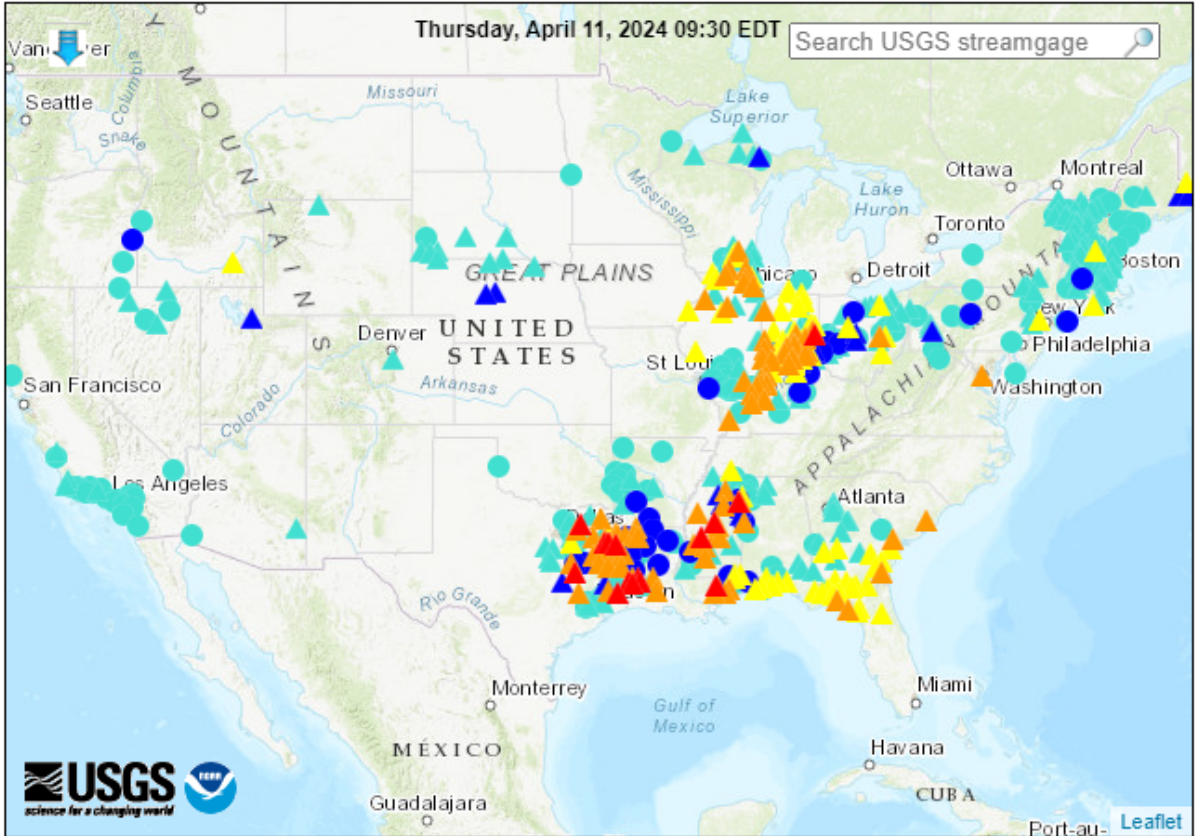
- [USCRN Soil Moisture](#)
- [National Soil Moisture Network](#)
- [NOAA Climate Prediction Center Soil Moisture](#)
- [NASA Grace](#)

**Streamflow, Drought, Flood, and Runoff**

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

**Map of flood and high flow conditions**

(99 in floods [moderate: 15, minor: 84], 88 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**

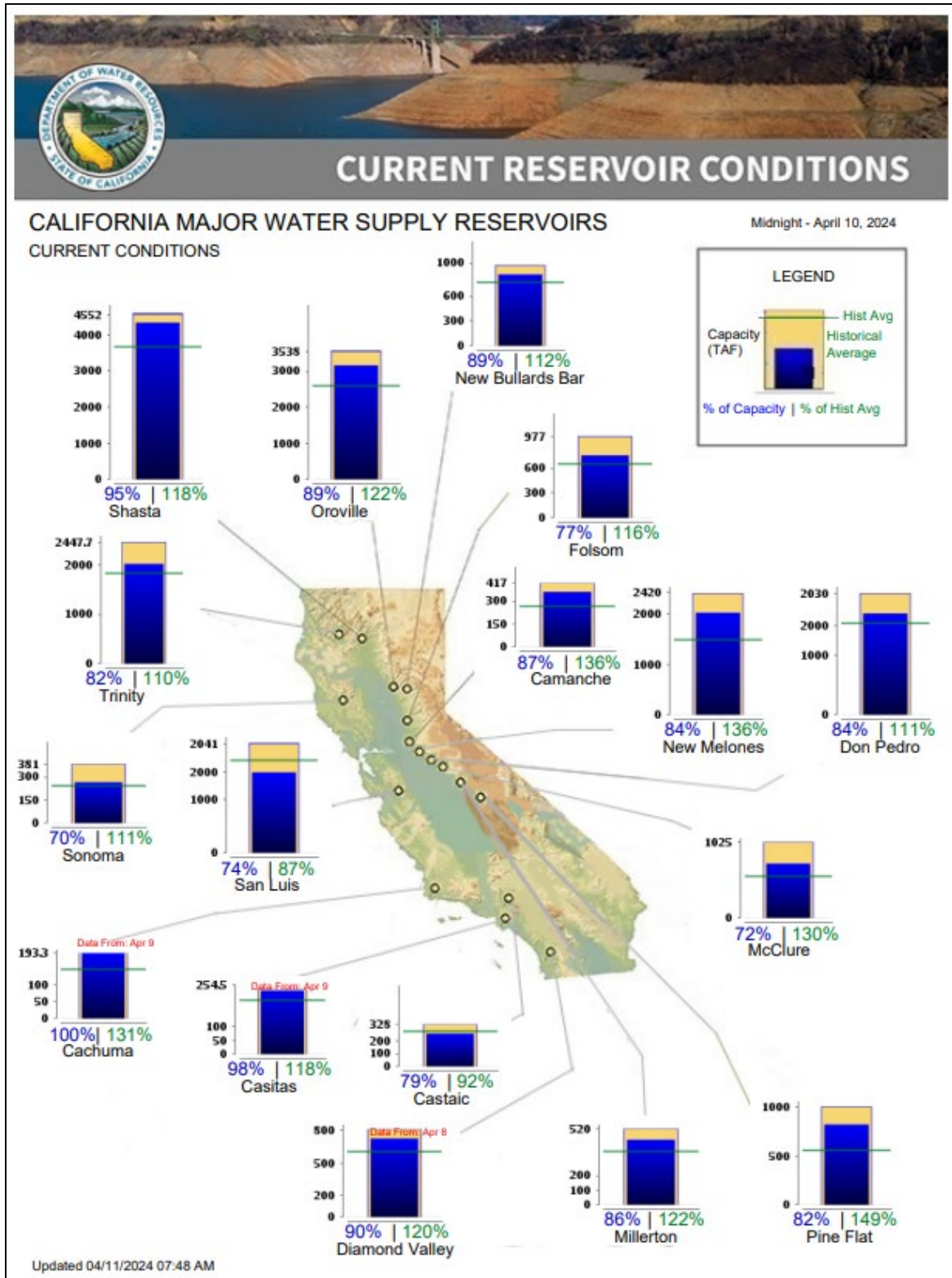
**Hydromet Teacup Reservoir Depictions**

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 April 11, 2024:** “A storm system currently centered over the lower Ohio Valley will be in the vicinity of Lake Huron by Friday morning. Around the same time, the storm’s trailing cold front will clear the Atlantic Seaboard, neutralizing the threat of severe thunderstorms. Still, additional rainfall associated with the system should reach 1 to 2 inches or more from the eastern Corn Belt and Ohio Valley into the Northeast, as well as portions of the southern Atlantic region. Farther west, a Pacific storm system should veer inland across California during the weekend, bearing rain and snow. By early next week, a powerful spring storm should arrive across the nation’s mid-section, with wind-, rain-, snow-, and thunderstorm-related impacts expected from the Plains into the Mississippi Valley. The NWS 6- to 10-day outlook for April 16 – 20 calls for the likelihood of below-normal temperatures from the Pacific Northwest to the northern High Plains, while warmer-than-normal weather will prevail in much of California, the Desert Southwest, and areas east of a line from the southern Rockies into the upper Mississippi Valley. Meanwhile, below-normal precipitation in the southern Atlantic region and the Far West should contrast with wetter-than-normal conditions from the Rockies to the Appalachians.”

### Weather Hazards Outlook: [April 13 – 17, 2024](#)

Source: NOAA Weather Prediction Center















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

[About the Hazards Outlook](#)

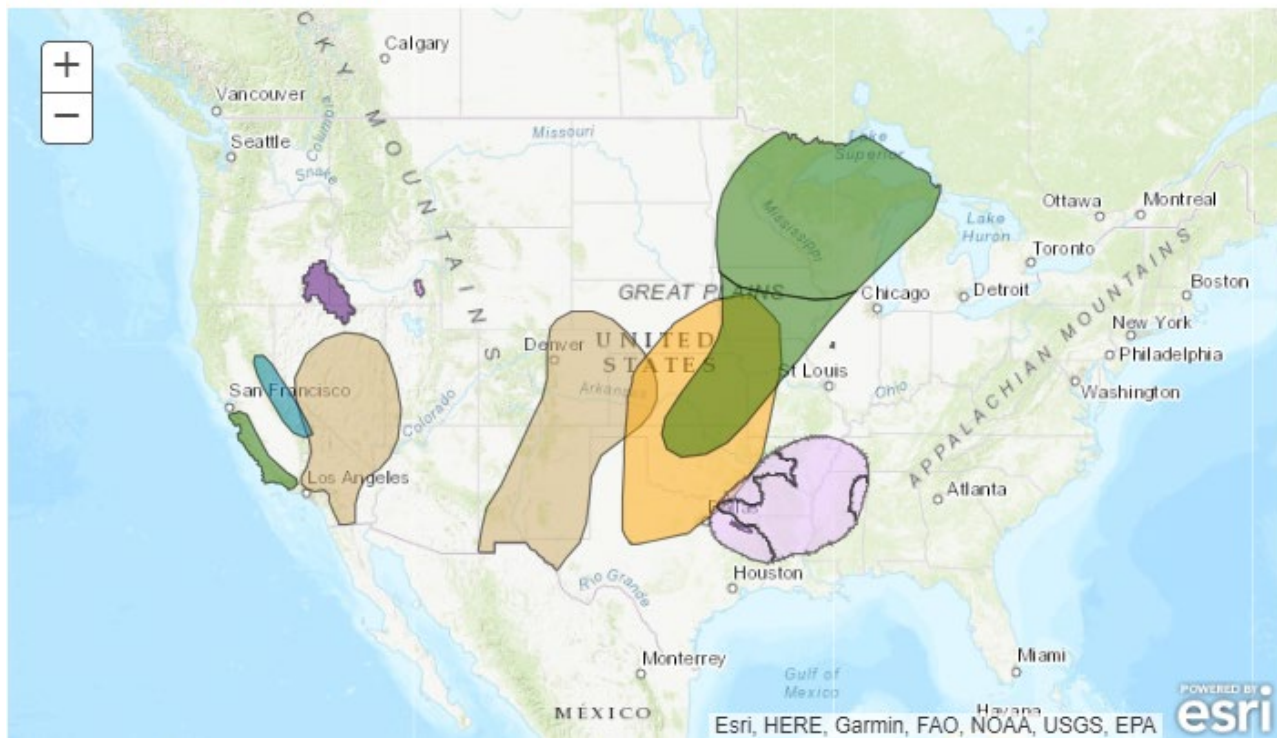
Created April 10, 2024

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 April 13, 2024 - April 17, 2024

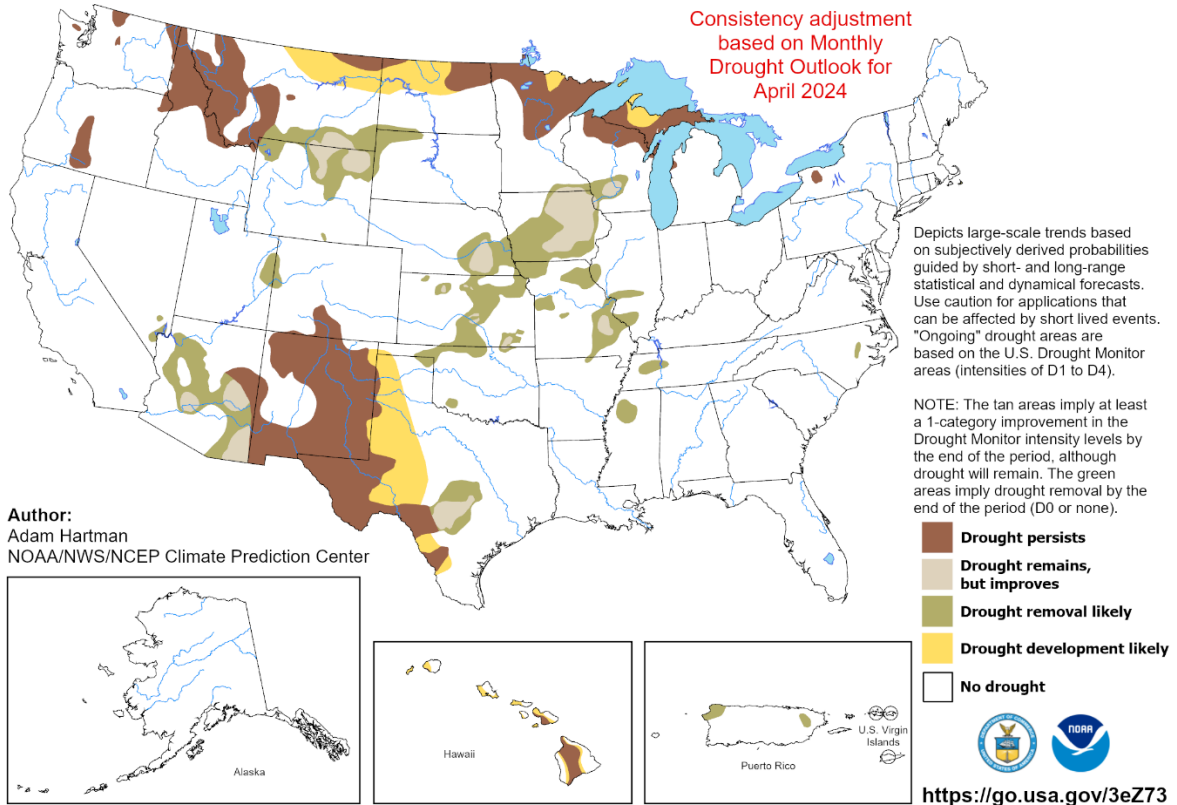


**Seasonal Drought Outlook: [April 01 – June 30, 2024](#)**

Source: National Weather Service

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

Valid for April 1 - June 30, 2024  
Released March 31, 2024

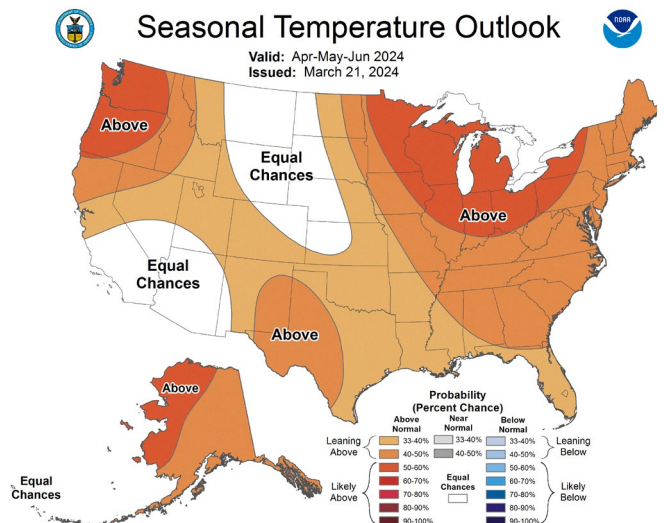
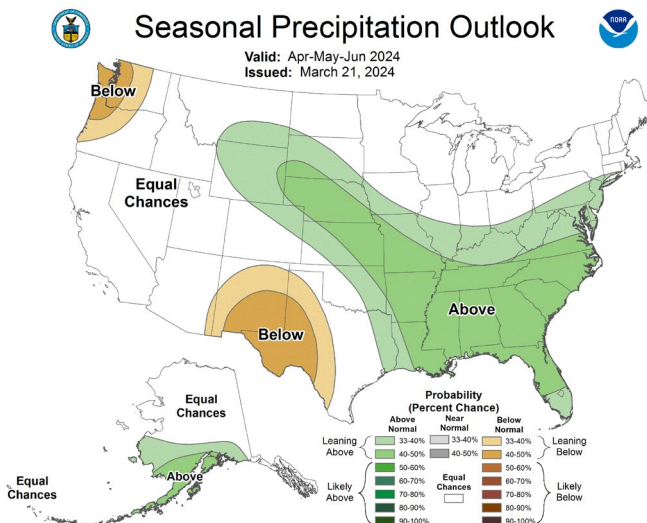


**Climate Prediction Center Three-month Outlook**

Source: National Weather Service

Precipitation

Temperature



[April-May-June 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](#).