



# Water and Climate Update

April 30, 2020

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.

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## Severe storms continue in the South and southern Plains this week



Strong storms are continuing this week, from the Texas Gulf Coast to the southern Plains, and across the South. Tornadoes, severe wind, and widespread precipitation was reported across six states. Hail and severe, hurricane-strength winds were recorded causing widespread damage and downed trees. On April 28, nearly 160,000 were without power in the Houston area. The National Weather Service had a report from a nearby coastal station of a maximum wind gust of 73 mph, and there were widespread reports of winds surpassing 40 mph.

**Related:**

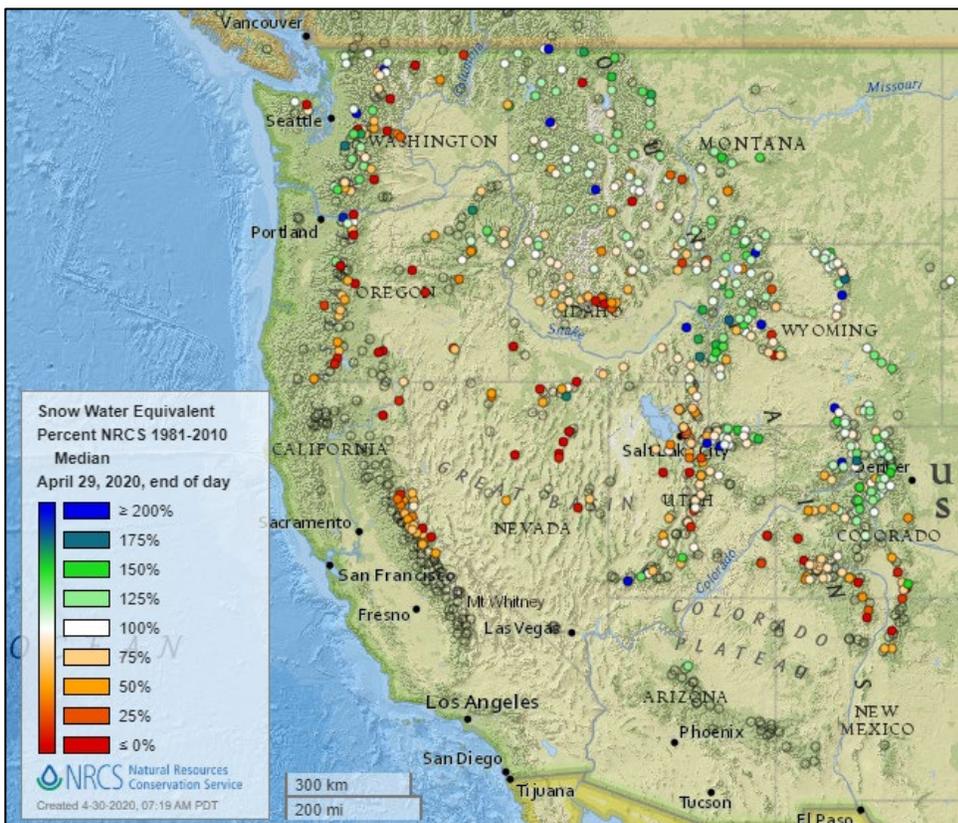
[Severe storms, tornadoes and 'massive' hail forecast for 42 million people across southern Plains](#) – USA Today

[Tornado warning, Severe thunderstorm warning, flash flood warning issued for parts of southeast Texas](#) – KHOU (TX)

[Power lines, trees downed across Arkansas after severe storms sweep through overnight](#) – Arkansas Democrat-Gazette (AR)

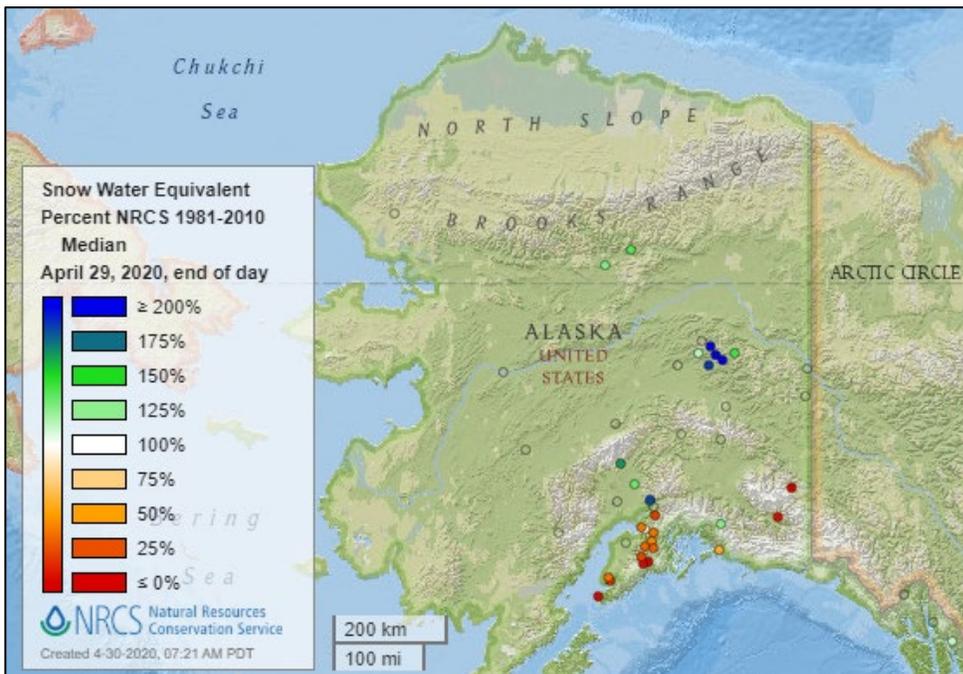
[Clouds glow orange after Oklahoma storm, severe weather impacts Houston as threat shifts to South](#) – Fox News

## Snow



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

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

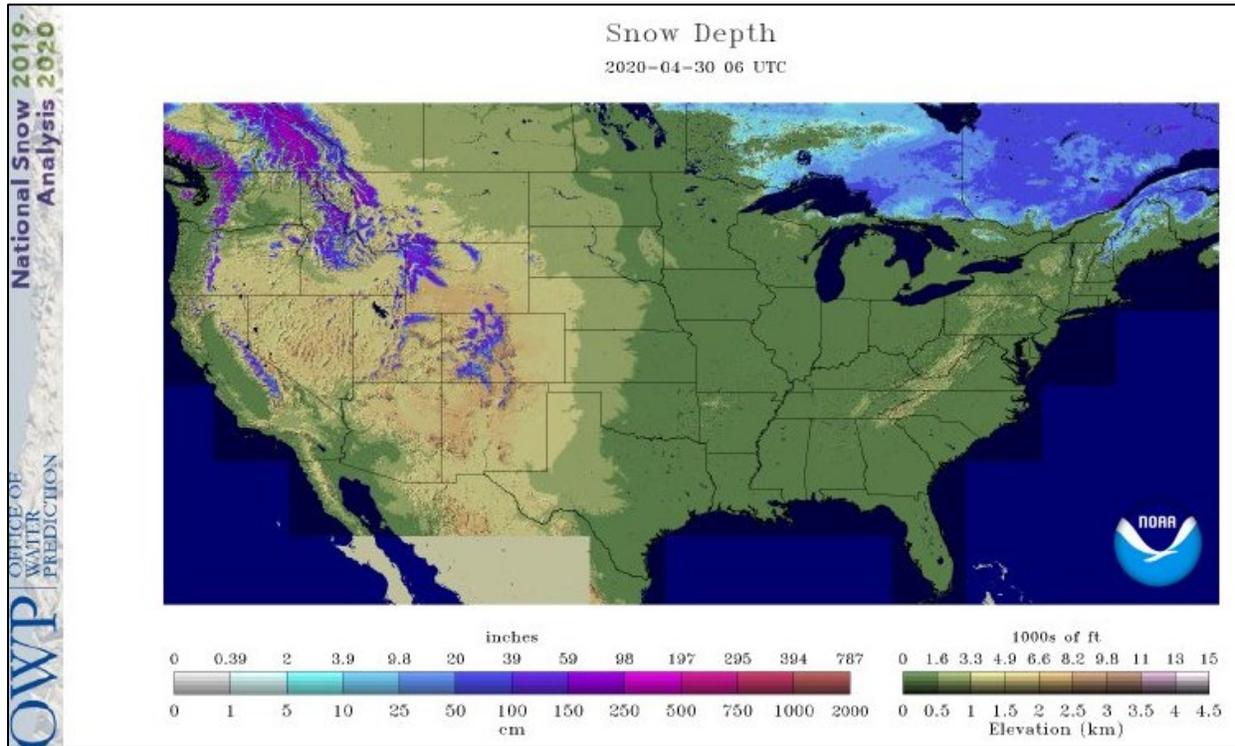


[Alaska snow water equivalent percent of median map](#)

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

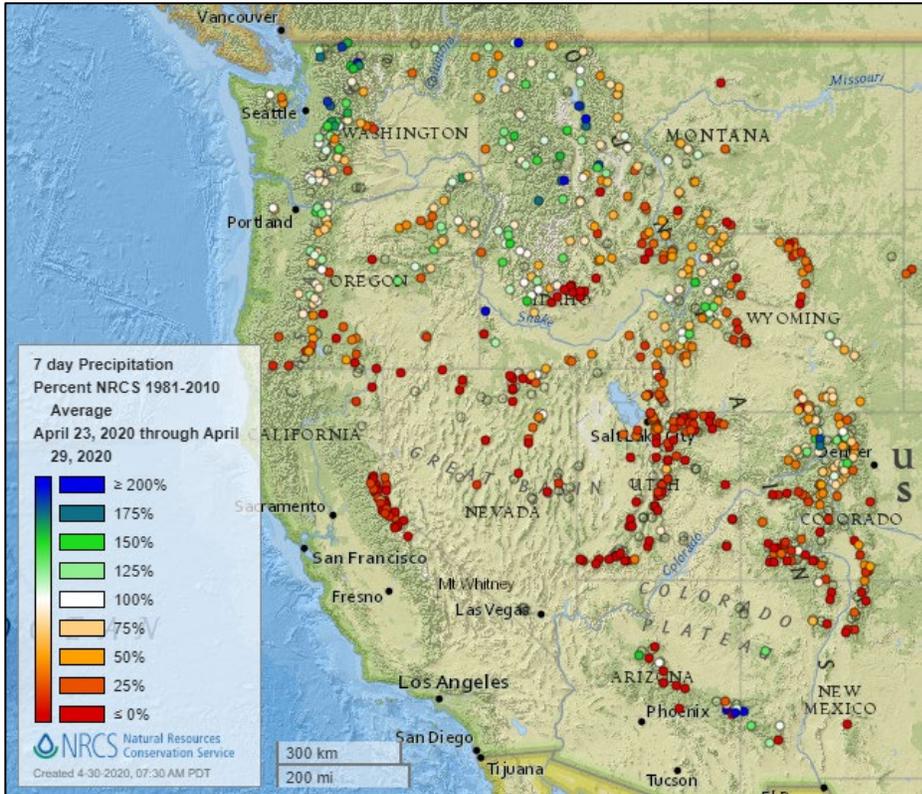
**Current Snow Depth, National Weather Service Snow Analysis**

Source: NOAA Office of Water Prediction



## Precipitation

### Last 7 Days, NRCS SNOTEL Network

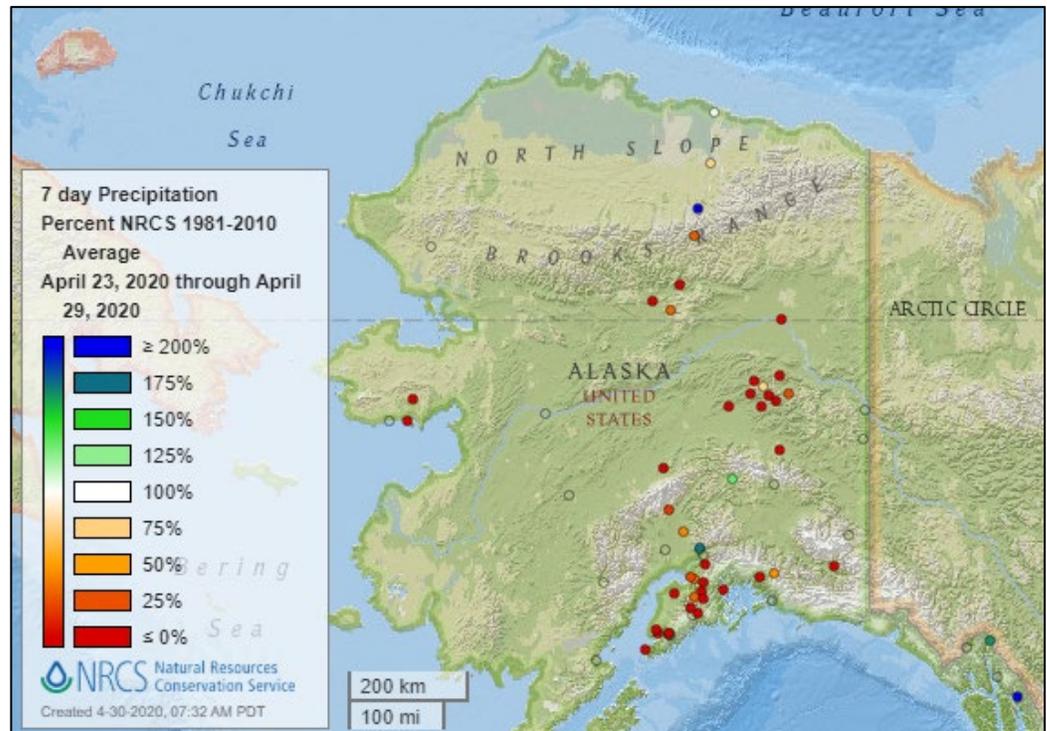


[7-day precipitation percent of average map](#)

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

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

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



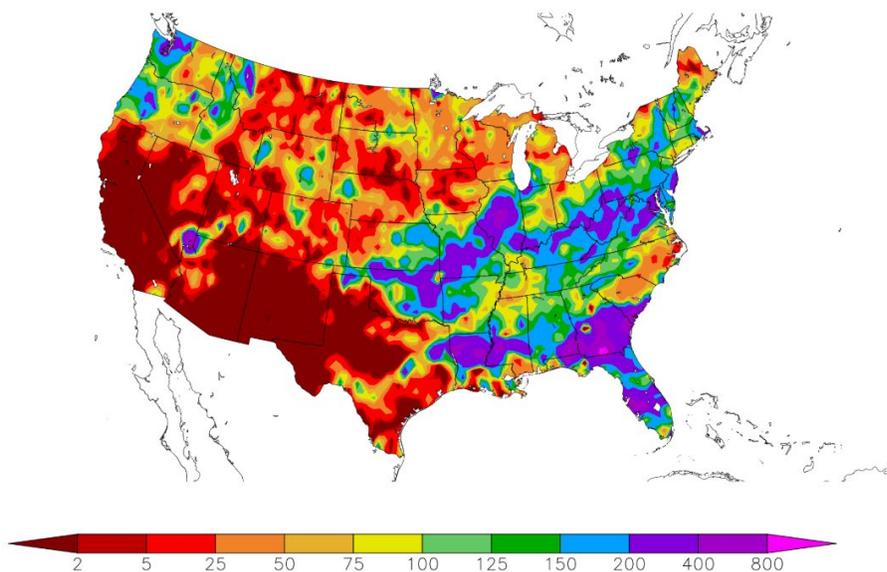
**Last 7 Days, National Weather Service (NWS) Networks**

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 (%)  
4/22/2020 – 4/28/2020



Generated 4/29/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

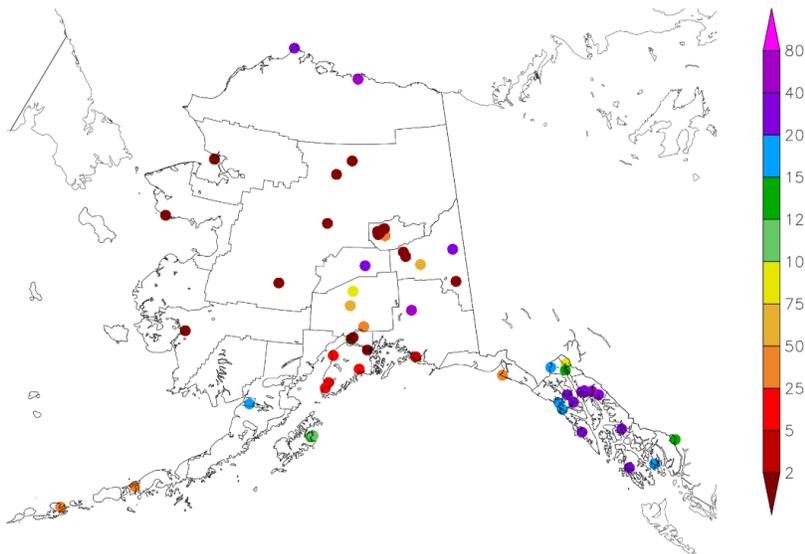
**Last 7 Days, National Weather Service (NWS) Networks**

Source: Regional Climate Centers

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

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

Percent of Normal Precipitation (%)  
4/22/2020 – 4/28/2020



Generated 4/29/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

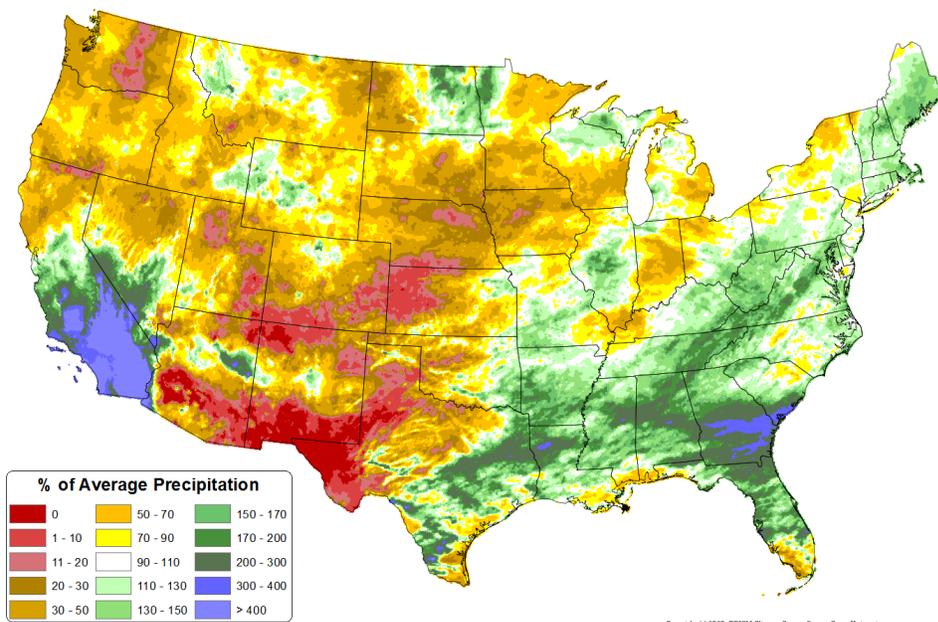
# Water and Climate Update

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

Source: PRISM

Total Precipitation Anomaly: 01 Apr 2020 - 29 Apr 2020  
Period ending 7 AM EST 29 Apr 2020  
Base period: 1981-2010  
(Map created 30 Apr 2020)

[Month-to-date national total precipitation percent of average map](#)

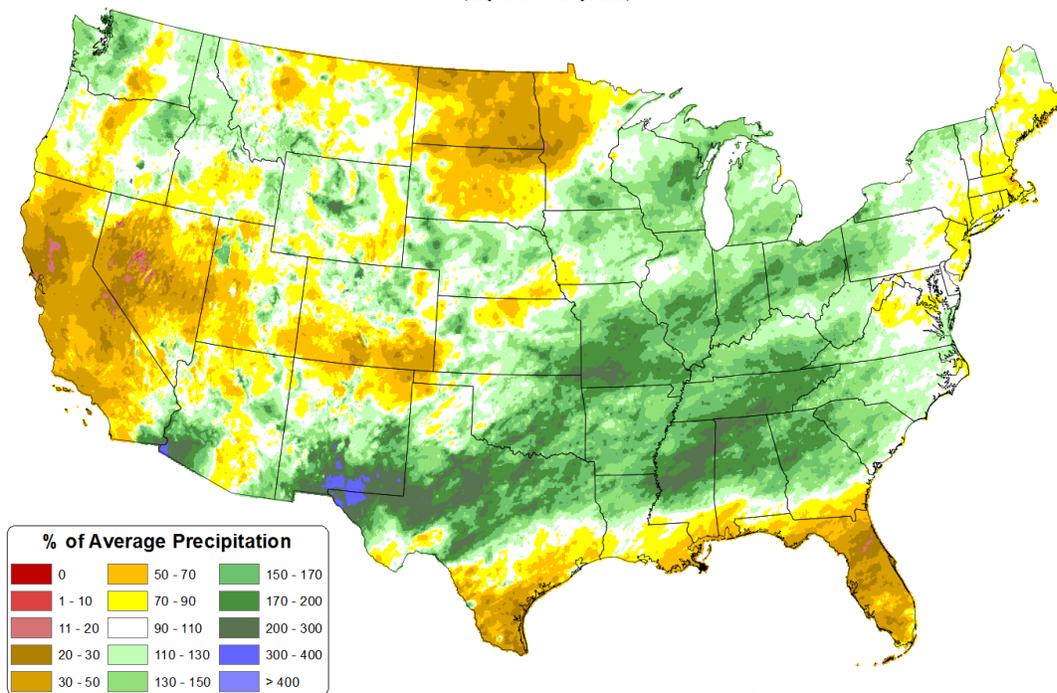


## Last 3 Months, All Available Data Including SNOTEL and NWS Networks

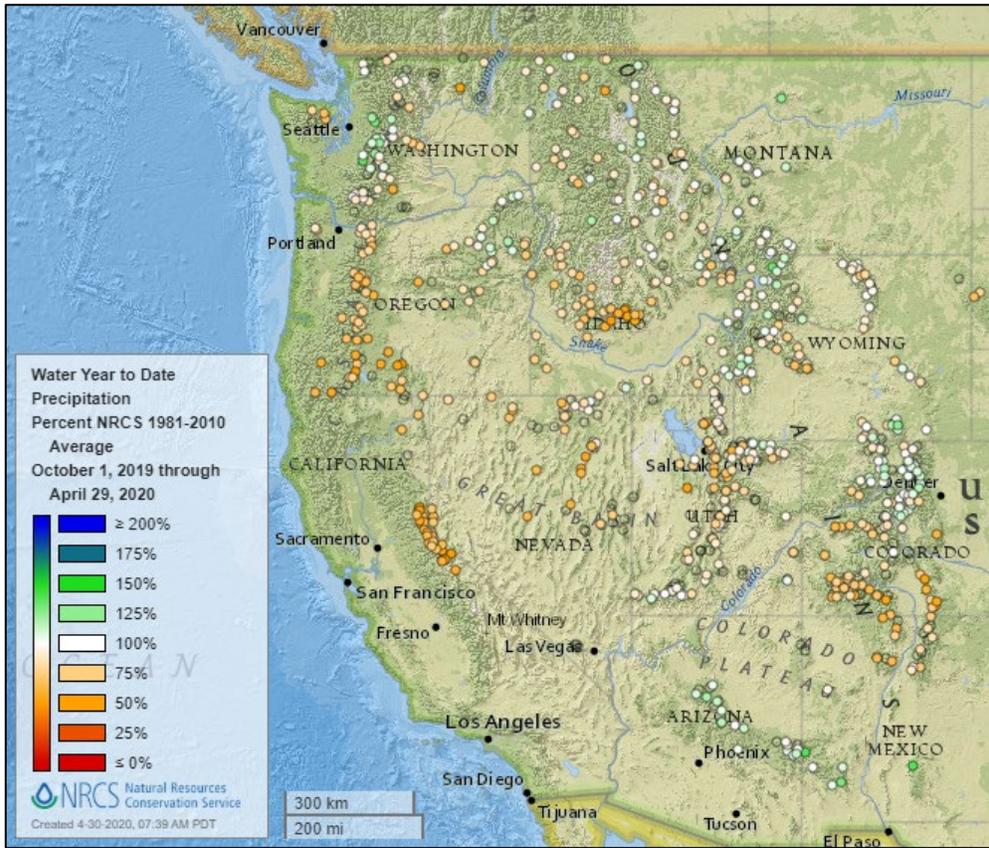
Source: PRISM

[January through March 2020 total precipitation percent of average map](#)

Total Precipitation Anomaly: Jan 2020 - Mar 2020  
Period ending 7 AM EST 31 Mar 2020  
Base period: 1981-2010  
(Map created 02 Apr 2020)

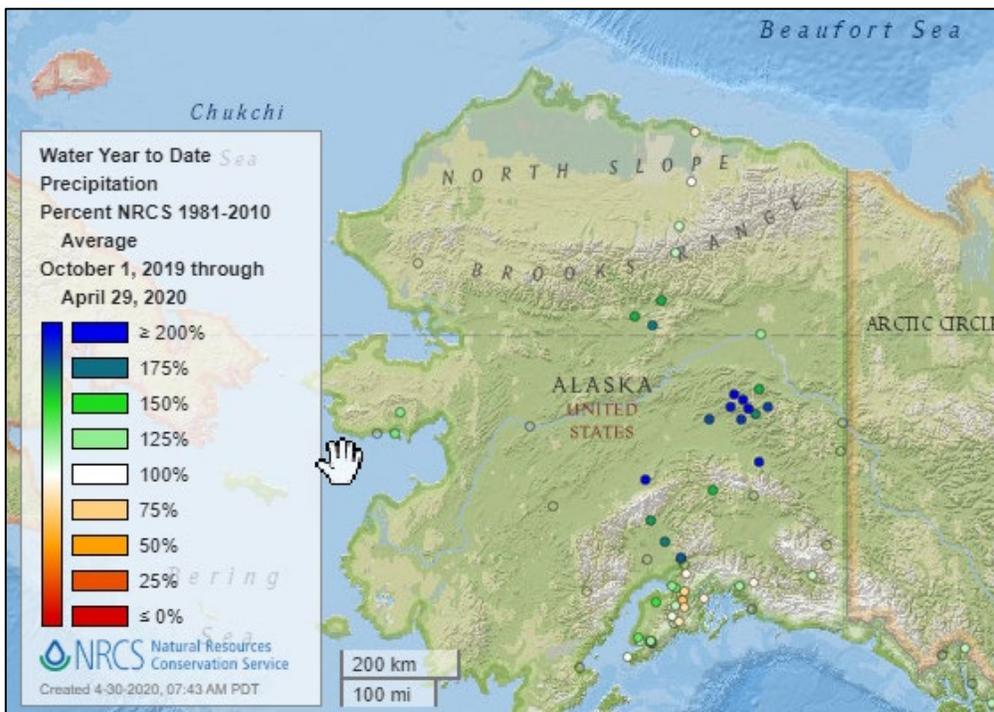


Water Year-to-Date, NRCS SNOTEL Network



[2020 water year-to-date precipitation percent of average map](#)

**See also:**  
[2020 water year-to-date precipitation values \(inches\) map](#)



[Alaska 2020 water year-to-date precipitation percent of average map](#)

**See also:** [Alaska 2020 water year-to-date precipitation values \(inches\) map](#)

## Temperature

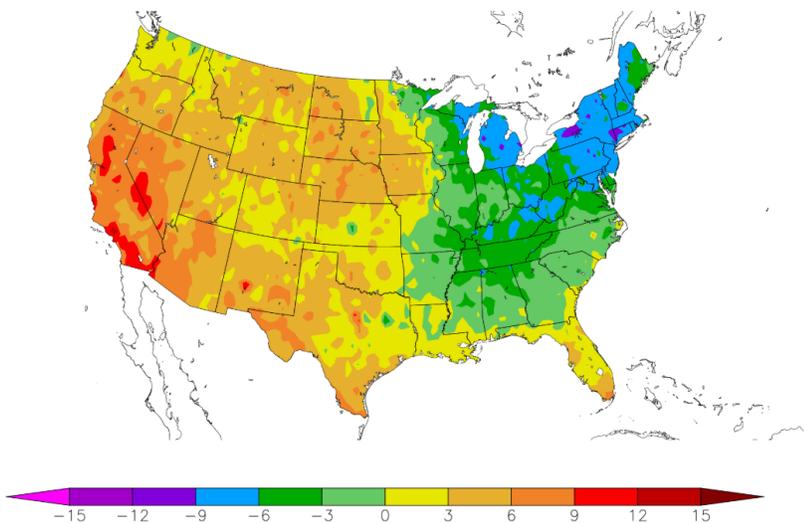
### Last 7 Days, National Weather Service (NWS) Networks

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)  
4/22/2020 – 4/28/2020



Generated 4/29/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

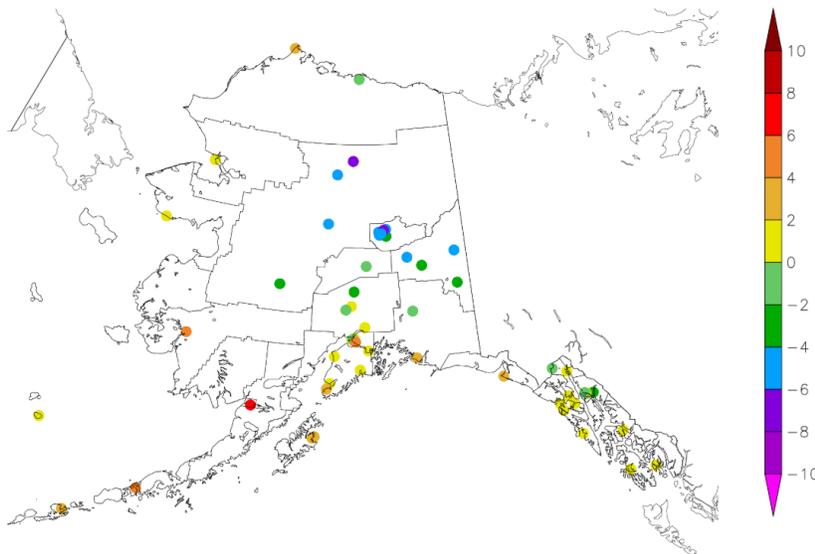
### Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)  
4/22/2020 – 4/28/2020



Generated 4/29/2020 at HPRCC using provisional data.

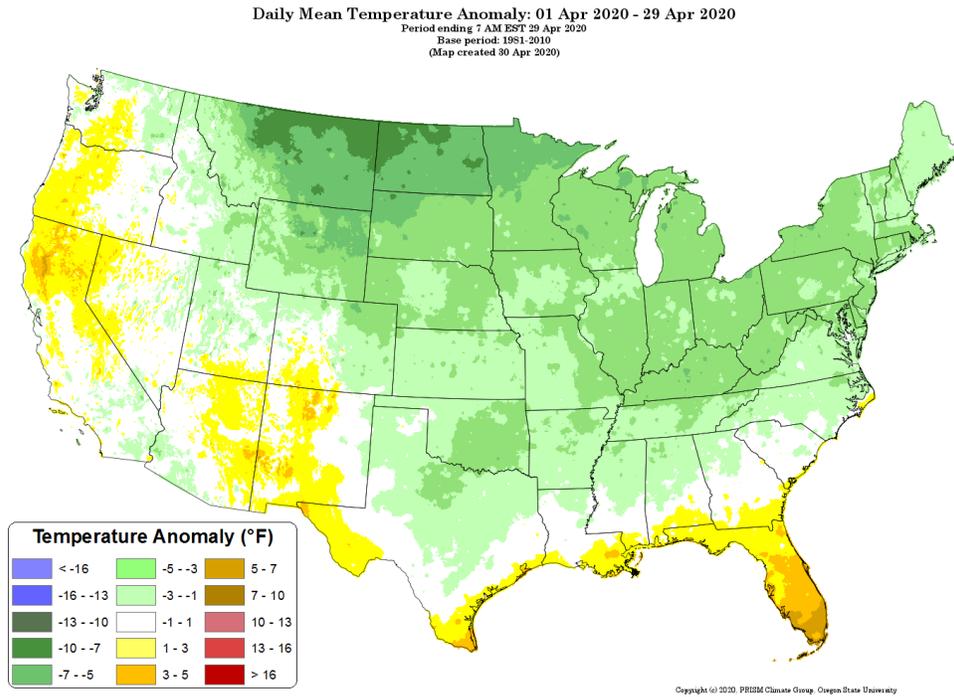
NOAA Regional Climate Centers

# Water and Climate Update

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

Source: PRISM

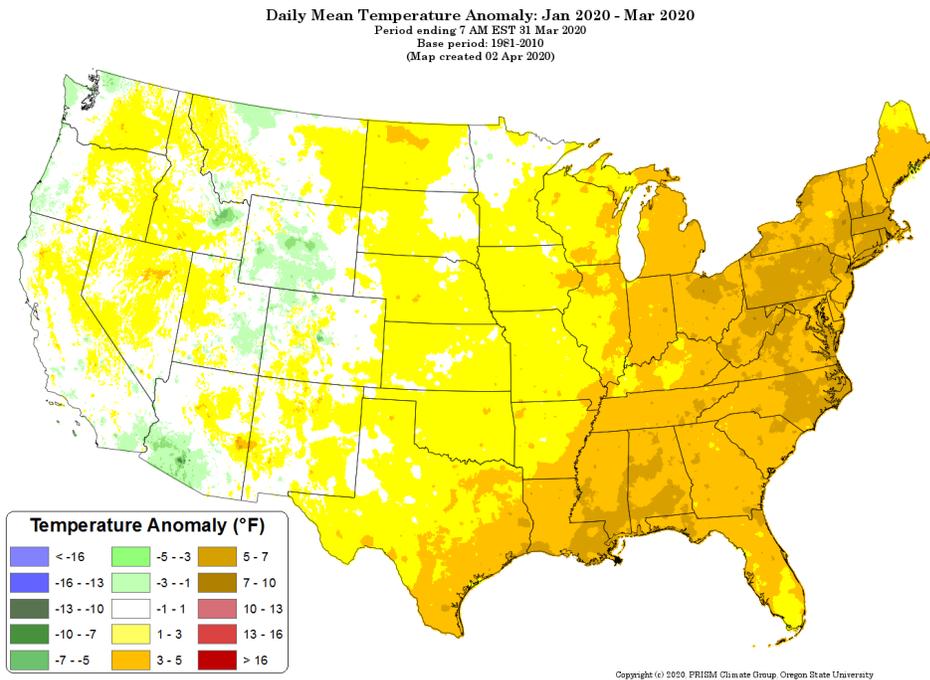
[Month-to-date national daily mean temperature anomaly map](#)



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

Source: PRISM

[January through March 2020 daily mean temperature anomaly map](#)



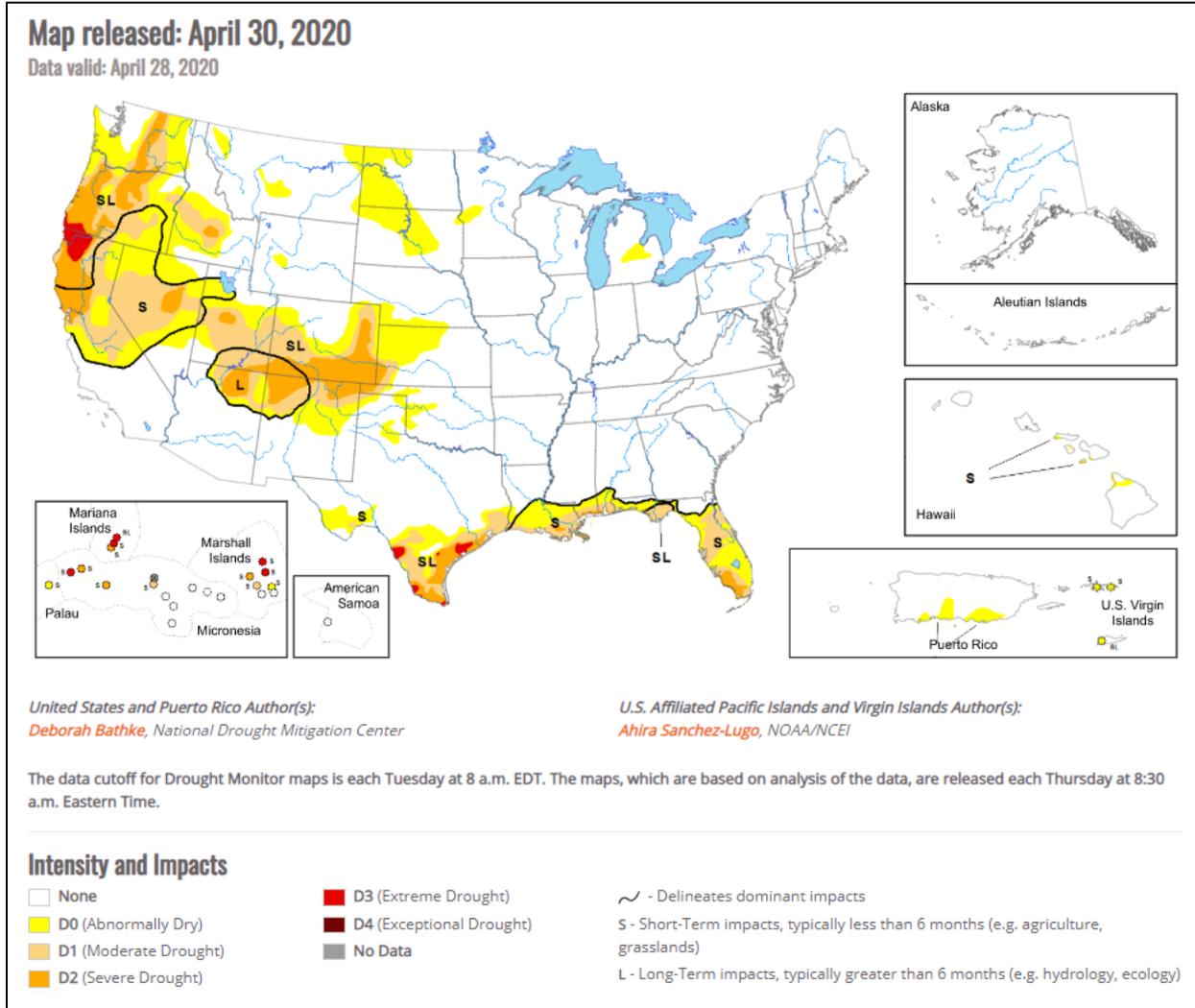
# Drought

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

Source: National Drought Mitigation Center

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

Source: NOAA



## [Current National Drought Summary, April 30, 2020](#)

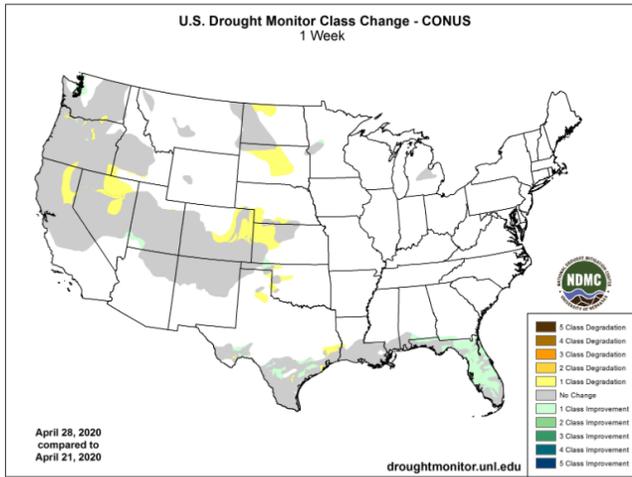
Source: National Drought Mitigation Center

“An active pattern of storms brought cold, wet weather to the Northeast, rain and locally severe thunderstorms to parts of the South, lower Midwest, and Southeast. Drought areas along the western Gulf Coast missed the heaviest rains, while those in the eastern half fared better. A ridge of high pressure over the West kept conditions warm and dry.”

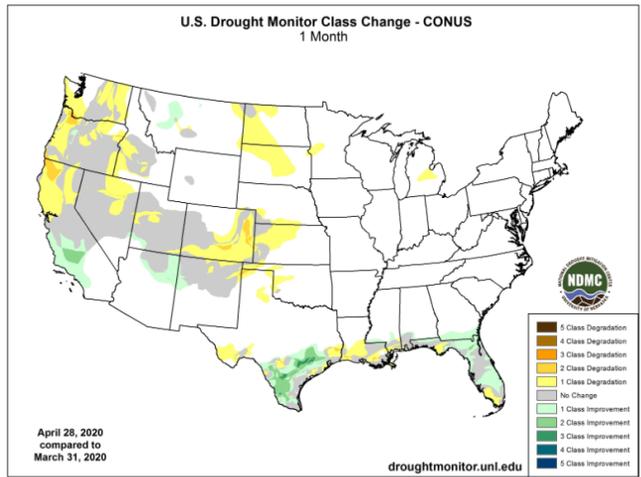
## Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

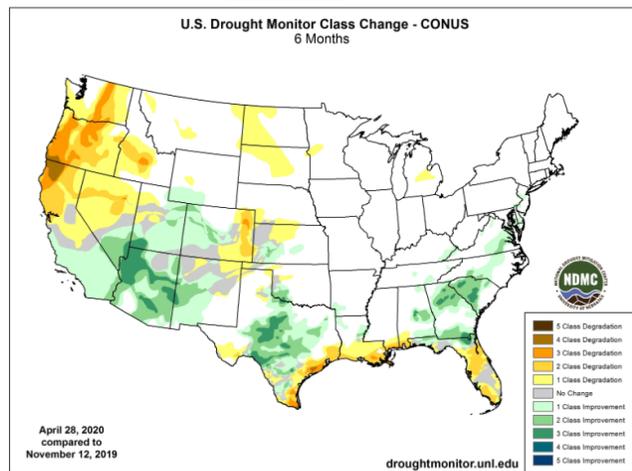
### 1 Week



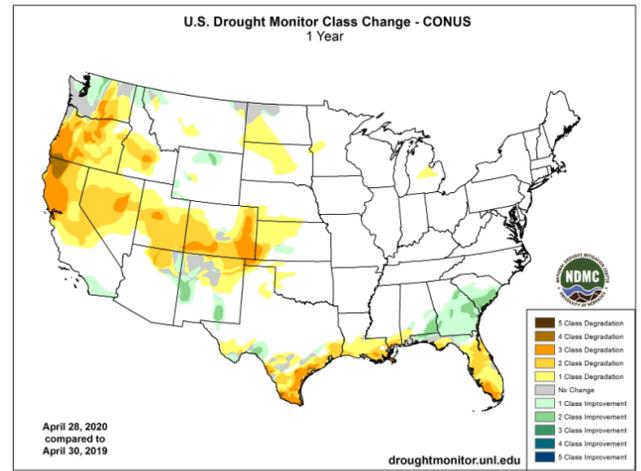
### 1 Month



### 6 Months



### 1 Year



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

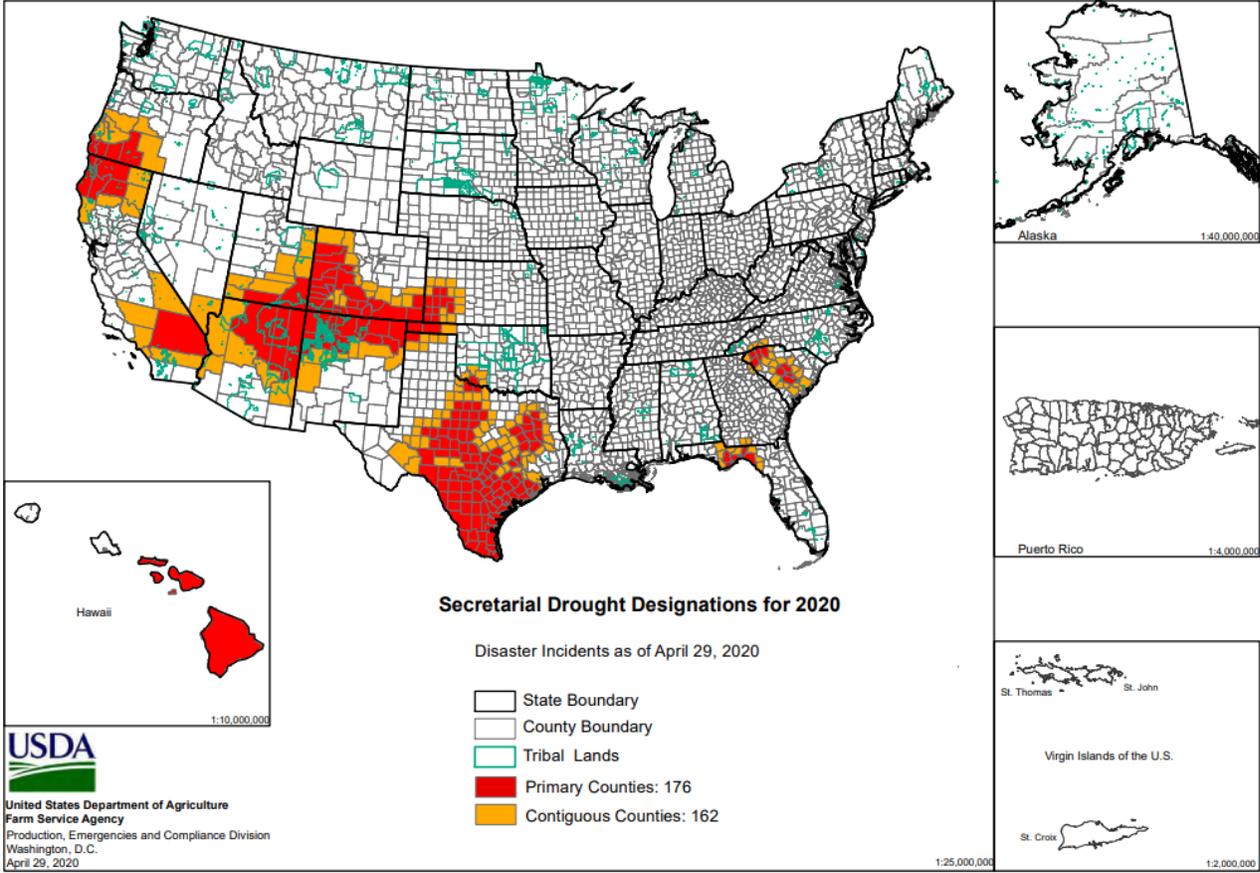
## Highlighted Drought Resources

- [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](#)

**Secretarial Drought Designations**

Source: USDA Farm Service Agency

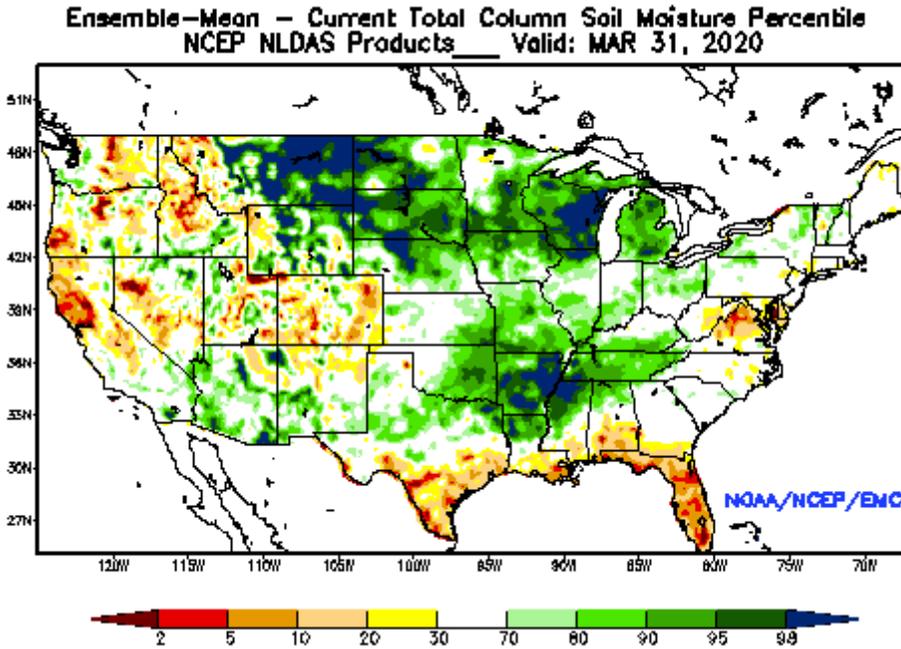
**2020 Secretarial Drought Designations - All Drought**



## Other Climatic and Water Supply Indicators

### Soil Moisture

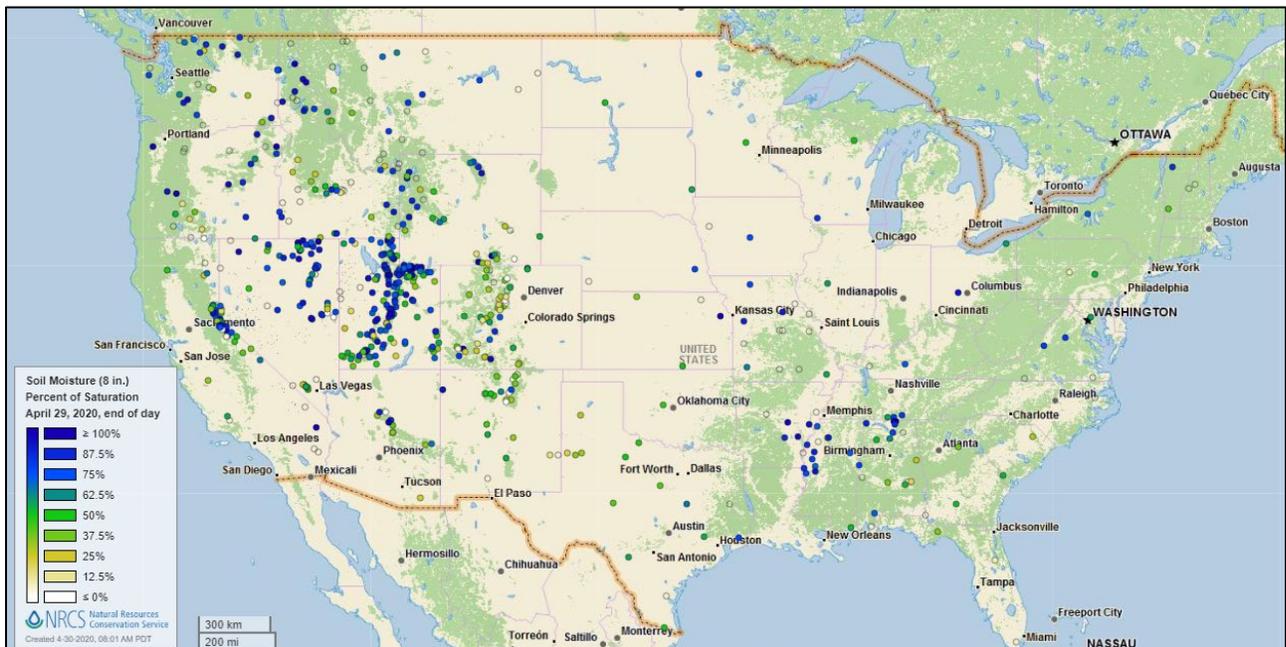
Source: NOAA National Centers for Environmental Prediction



[Modeled soil moisture percentiles](#) as of March 31, 2020

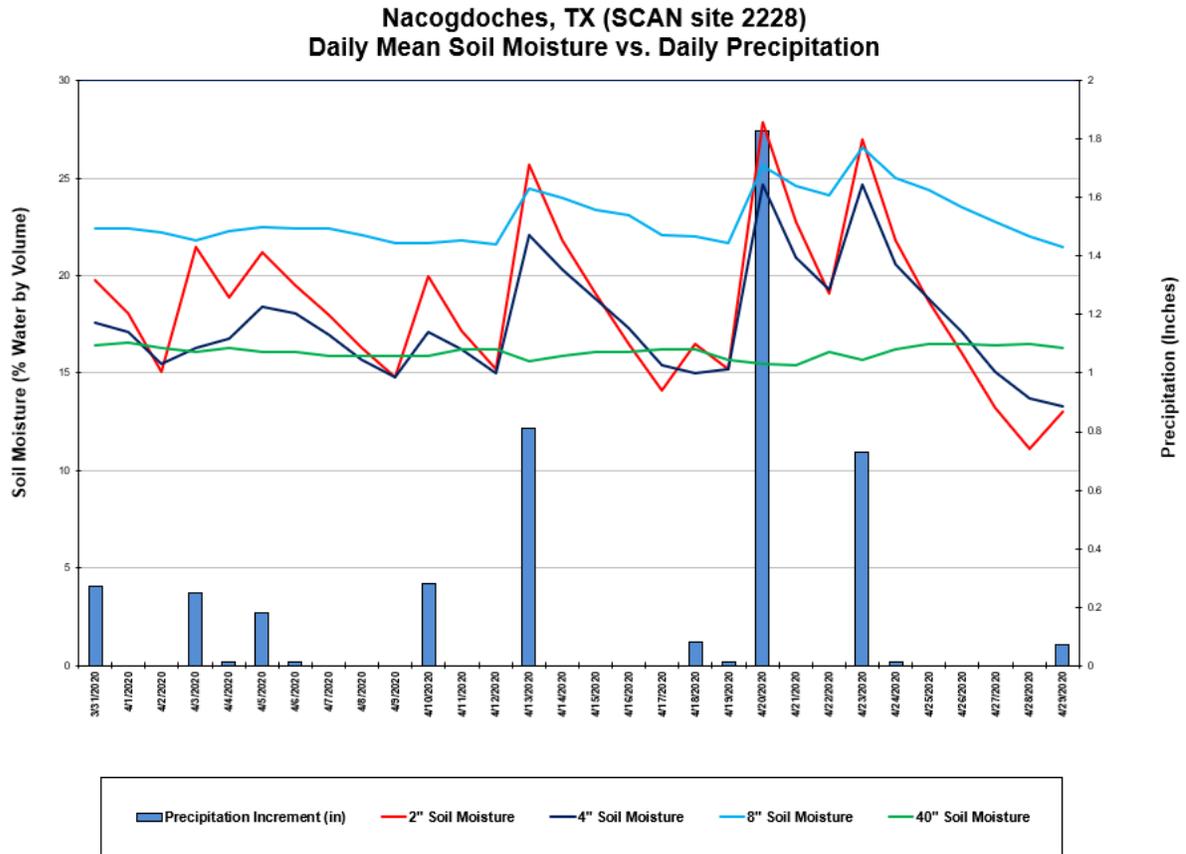
### Soil Moisture Percent of Saturation

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



### Soil Moisture Data

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



This chart shows the soil moisture and precipitation for the last 30 days at the [Nacogdoches](#) SCAN site in Texas. Several precipitation events throughout the month increased soil moisture at the -2", -4", and -8" sensors. Accumulated precipitation for the 30-day period totaled 5.3 inches.

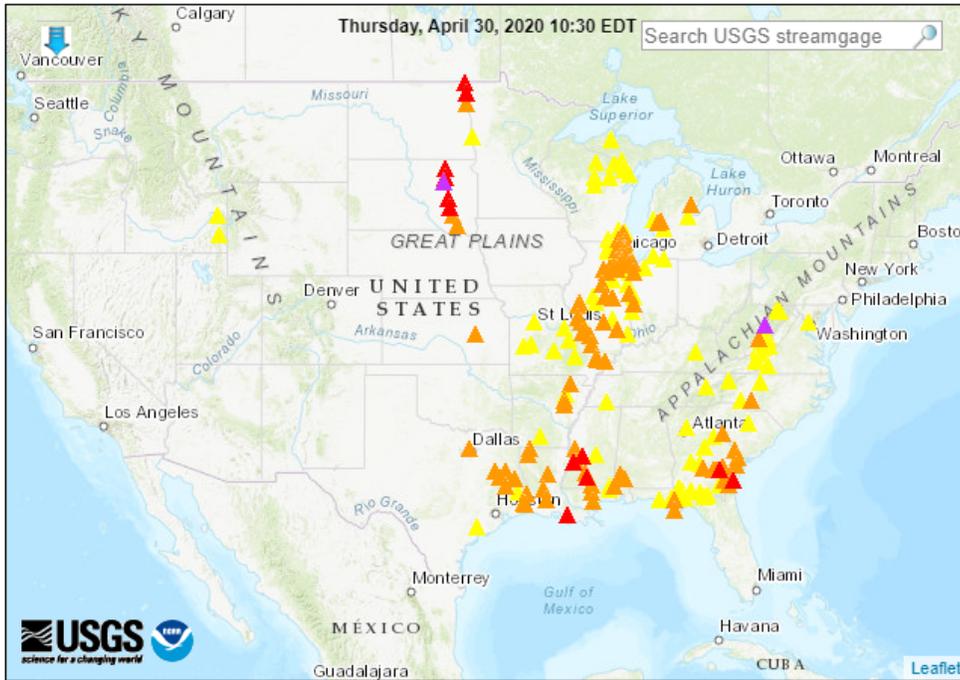
### Soil Moisture Data Portals

- [CRN Soil Moisture](#)
- [Texas A&M University North American Soil Moisture Database](#)
- [University of Washington Experimental Modeled Soil Moisture](#)

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

Source: U.S. Geological Survey

**Map of flood and high flow conditions**  
 (110 in floods [major: 2, moderate: 12, minor: 96], 91 in near-flood)



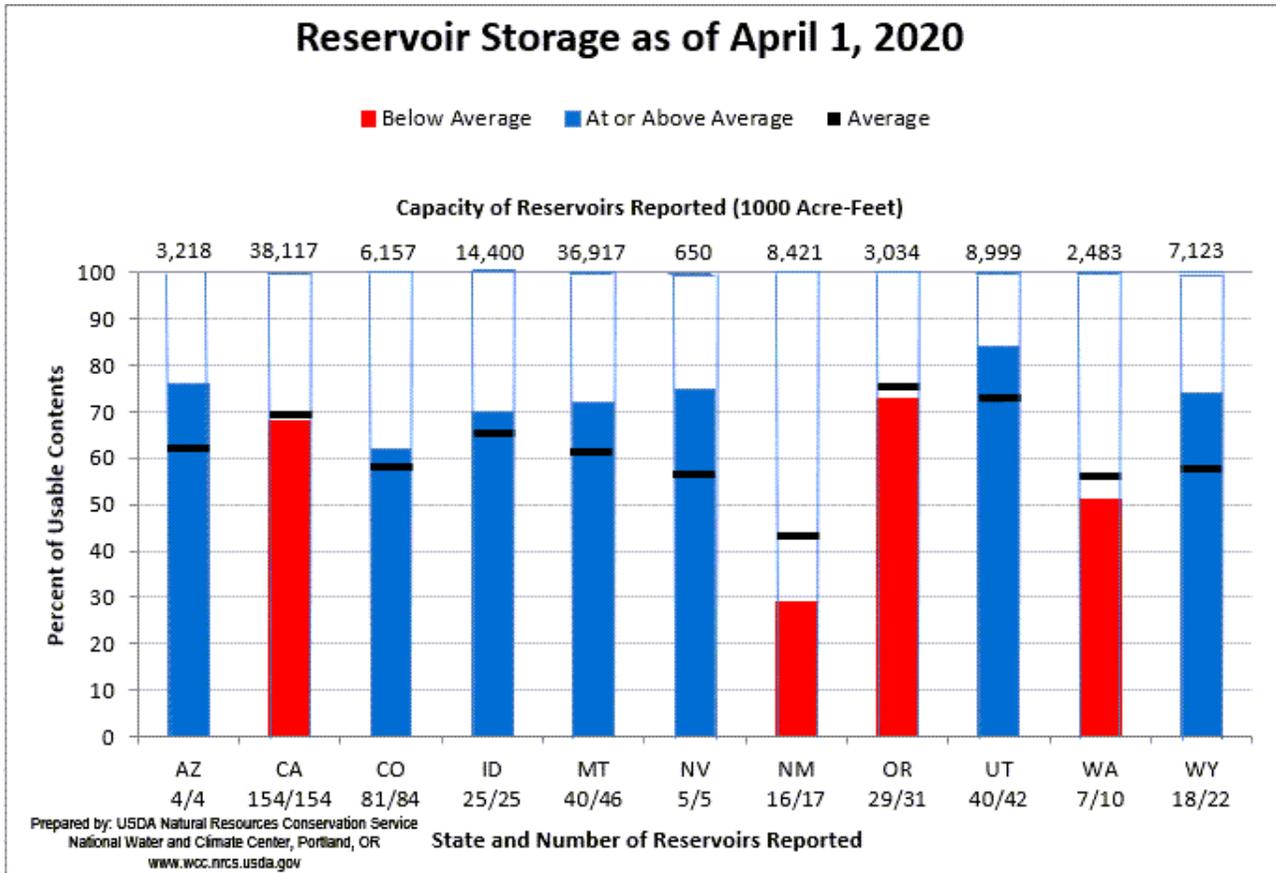
Explanation - Percentile classes						
<95	95-98	>= 99	Above action stage	Above flood stage	Above moderate flood stage	Above major flood stage
			▲ Streamgage with flood stage	○ Streamgage without flood stage		

[WaterWatch: Streamflow, drought, flood, and runoff conditions](#)

## Reservoir Storage

### Western States Reservoir Storage

Source: NRCS National Water and Climate Center



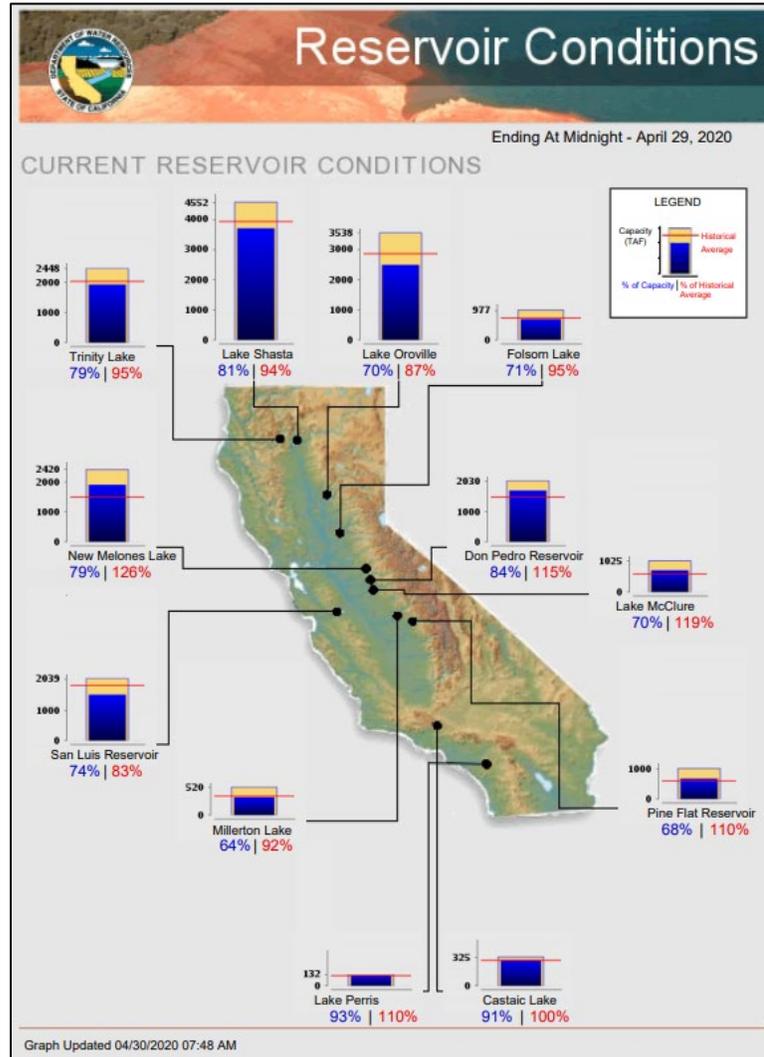
April 1, 2020 Reservoir Storage: [Chart](#) | [Dataset](#)

### 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](#)

## Short- and Long-Range Outlooks

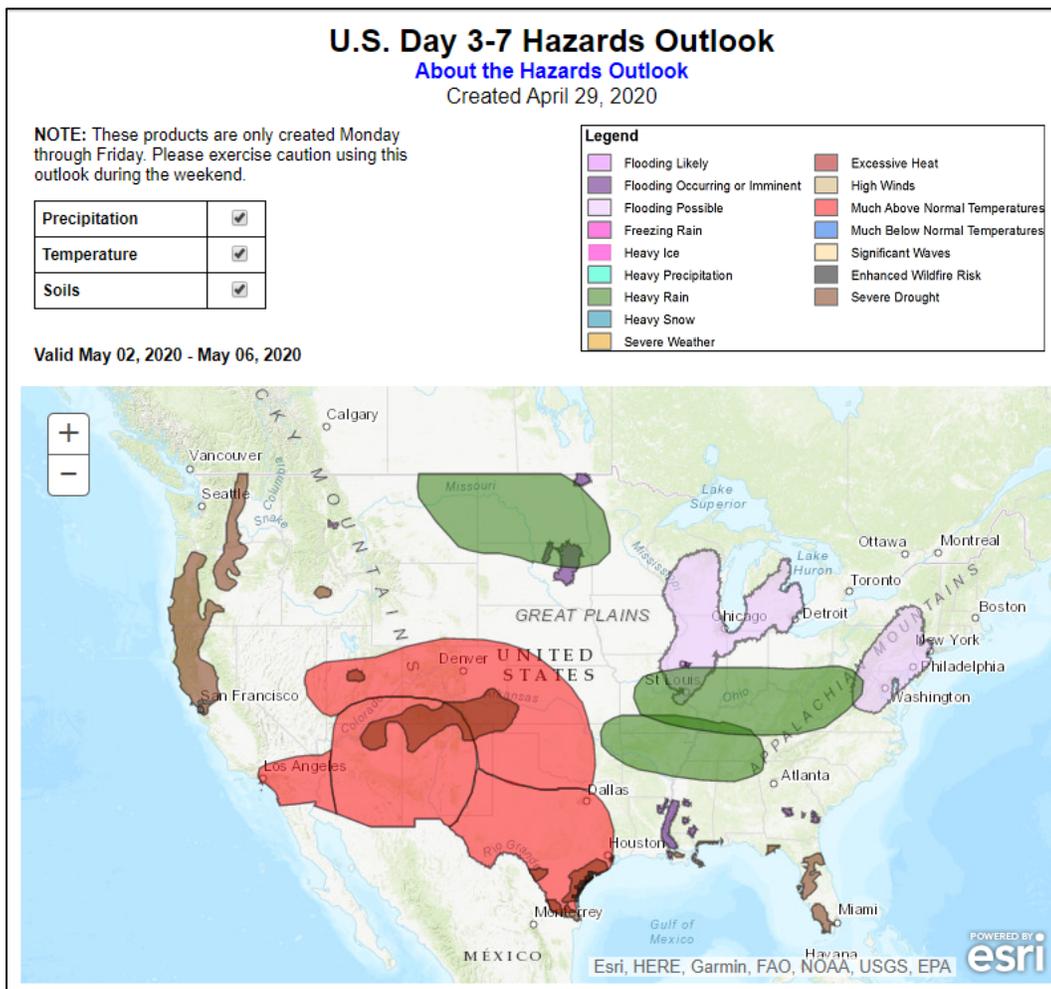
### Agricultural Weather Highlights

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

**National Outlook, Thursday, April 30, 2020:** “A slow-moving storm system currently centered near the Indiana-Michigan-Ohio triple point will drift eastward, reaching the northern Atlantic Coast by late Friday. Heavy rain will continue today in the middle Atlantic States, leading to flash flooding and river rises. Meanwhile, showers will slowly subside across the eastern Corn Belt. Following the storm’s departure, a series of weak disturbances will result in scattered, generally light showers across the northern two-thirds of the country. Dry weather should prevail across the nation’s southern tier. Elsewhere, an early-season hot spell across the Plains will peak on Friday, with high temperatures briefly topping the 90-degree mark as far north as Nebraska. Heat will linger into early next week, however, across the southern Plains, where temperatures may occasionally exceed 100°F. In contrast, a new surge of cool air will arrive early next week across the northern Plains, Midwest, and Northeast. The NWS 6- to 10-day outlook for May 5 – 9 calls for below-normal temperatures across much of the eastern half of the U.S., while warmer-than-normal weather will prevail from the Pacific Coast to the High Plains and across the Deep South from Texas to Florida. Meanwhile, near- or below-normal rainfall across most of the country should contrast with wetter-than-normal conditions along the middle and northern Atlantic Coast, in the Rio Grande Valley, and from southern sections of the Rockies and Plains into the mid-South.”

### Weather Hazards Outlook: [May 2 – 6, 2020](#)

Source: NOAA Weather Prediction Center

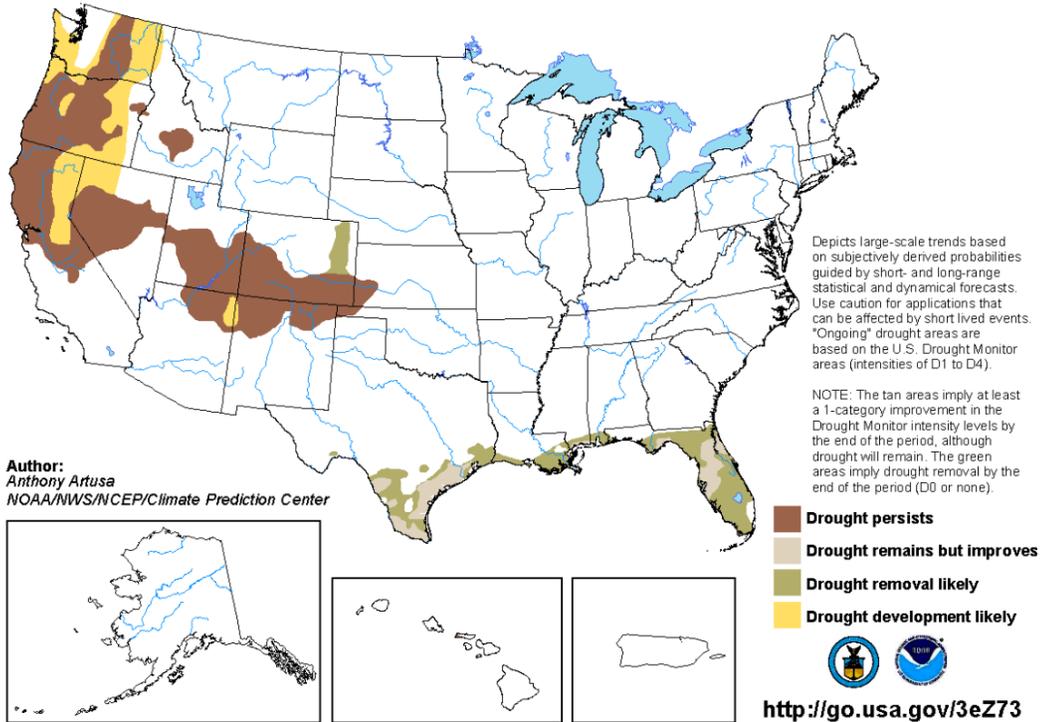


Seasonal Drought Outlook: [April 16 – July 31, 2020](#)

Source: National Weather Service

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

Valid for April 16 - July 31, 2020  
Released April 16

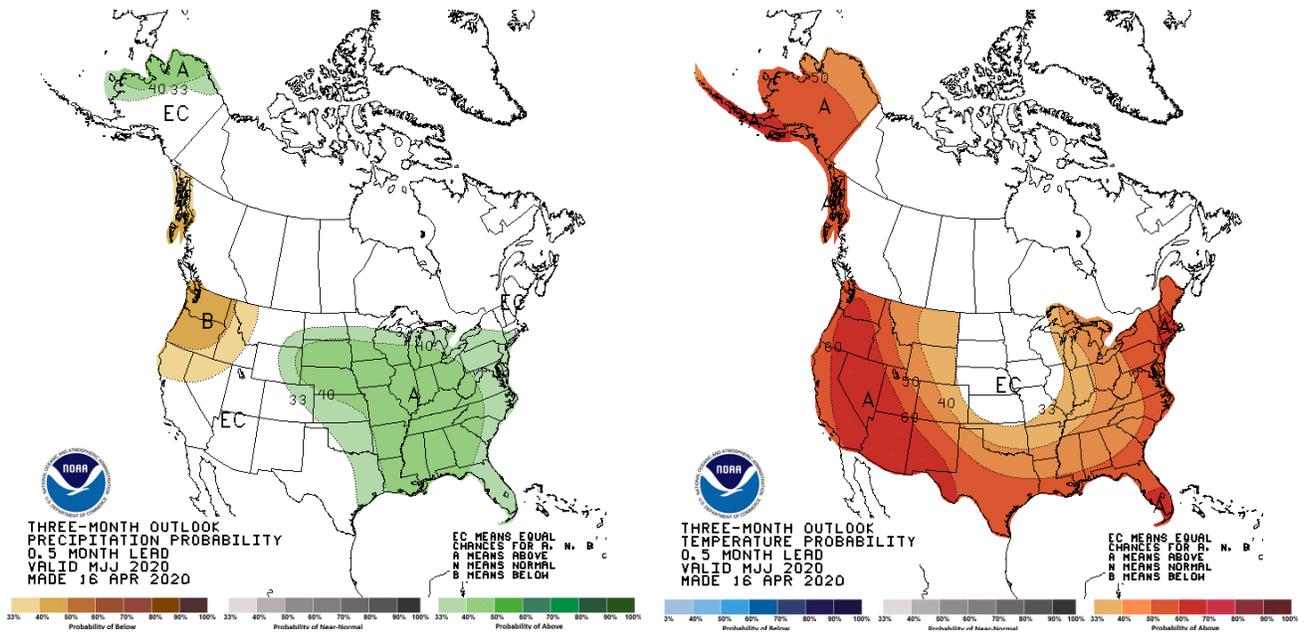


Climate Prediction Center 3-Month Outlook

Source: National Weather Service

[Precipitation](#)

[Temperature](#)



[May-June-July \(MJJ\) 2020 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](#).