

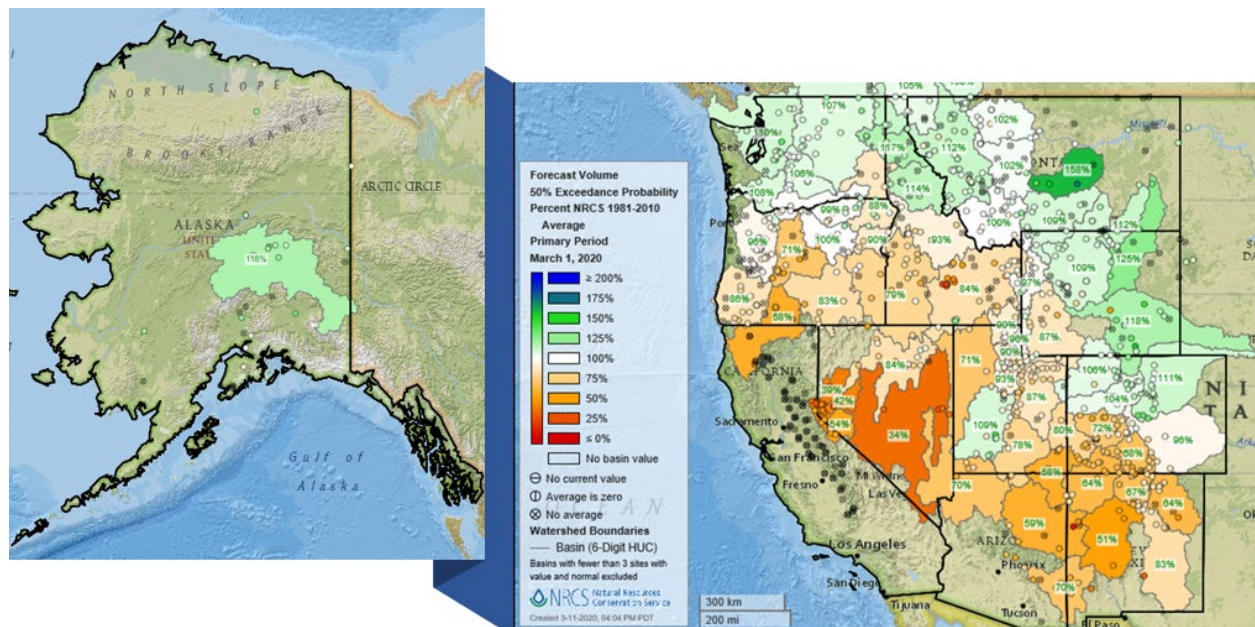
# Water and Climate Update

March 12, 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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## March 1 water supply forecasts for the western U.S.

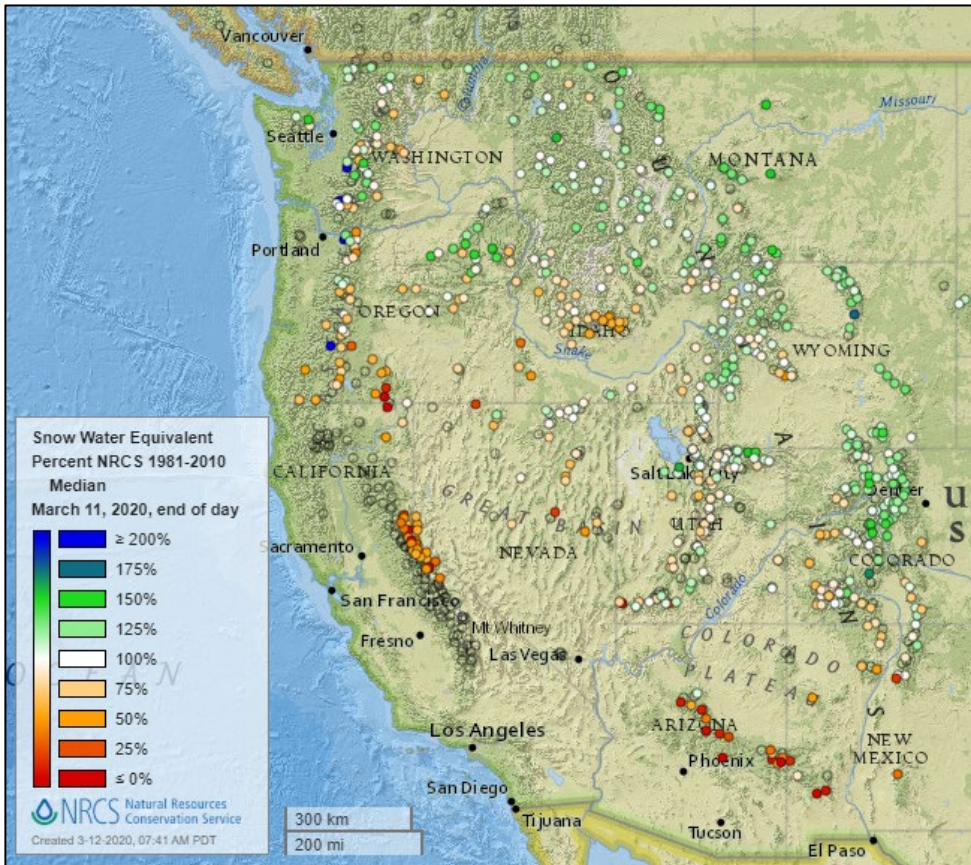


The water supply forecasts for the western U.S. have been just released based primarily on the snowpack in the mountains. Water supply for spring and summer use is less than normal, indicated by orange colors in the map. A very dry February in the Sierra Nevada and Southwest has decreased the expected snowmelt streamflow in this area. The areas with above normal expected water supply conditions are indicated in green along the east slope of the Rocky Mountains. Alaska currently has a mostly above normal forecast for water supply.

Related:

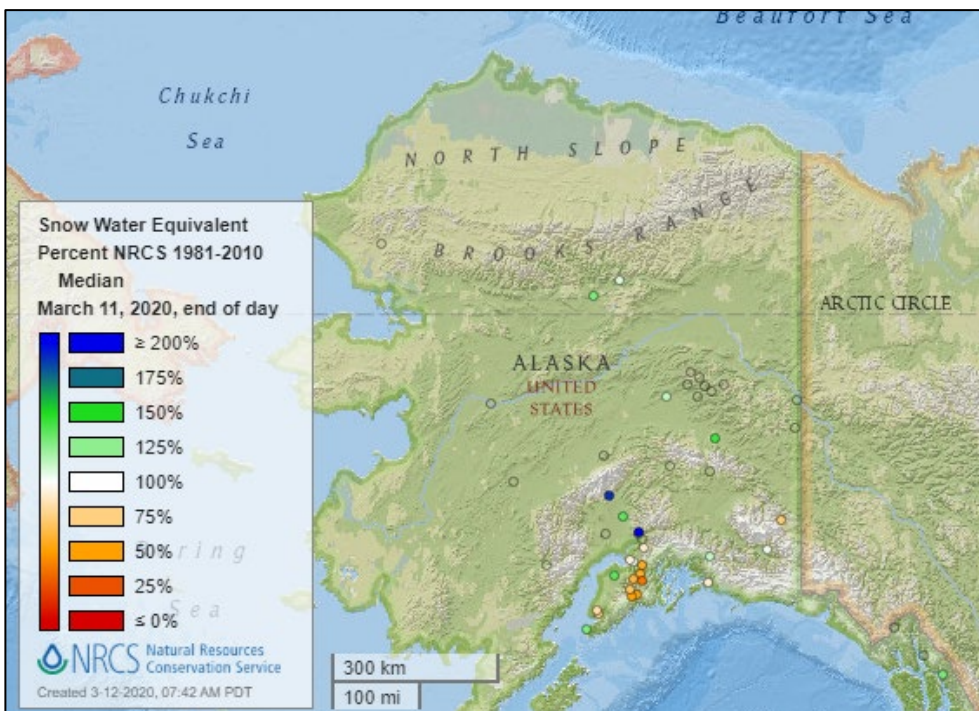
- [NRCS State Water Supply Outlook Reports – NRCS](#)
- [NRCS Idaho releases March 2020 Water Supply Outlook Report](#) – Idaho State Journal (ID)
- [Colorado mountain snowpack in “good spot” for water supply heading into spring](#) – The Denver Post (CO)
- [‘Normal to record-setting’ conditions boost state’s snowpack](#) – Bozeman Daily Chronicle (MT)
- [Drought conditions expand in California to nearly half the state](#) – Mercury News (CA)
- [Gov. Brown Declares Drought in Southern Oregon County](#) – US News & World report

## Snow



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

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



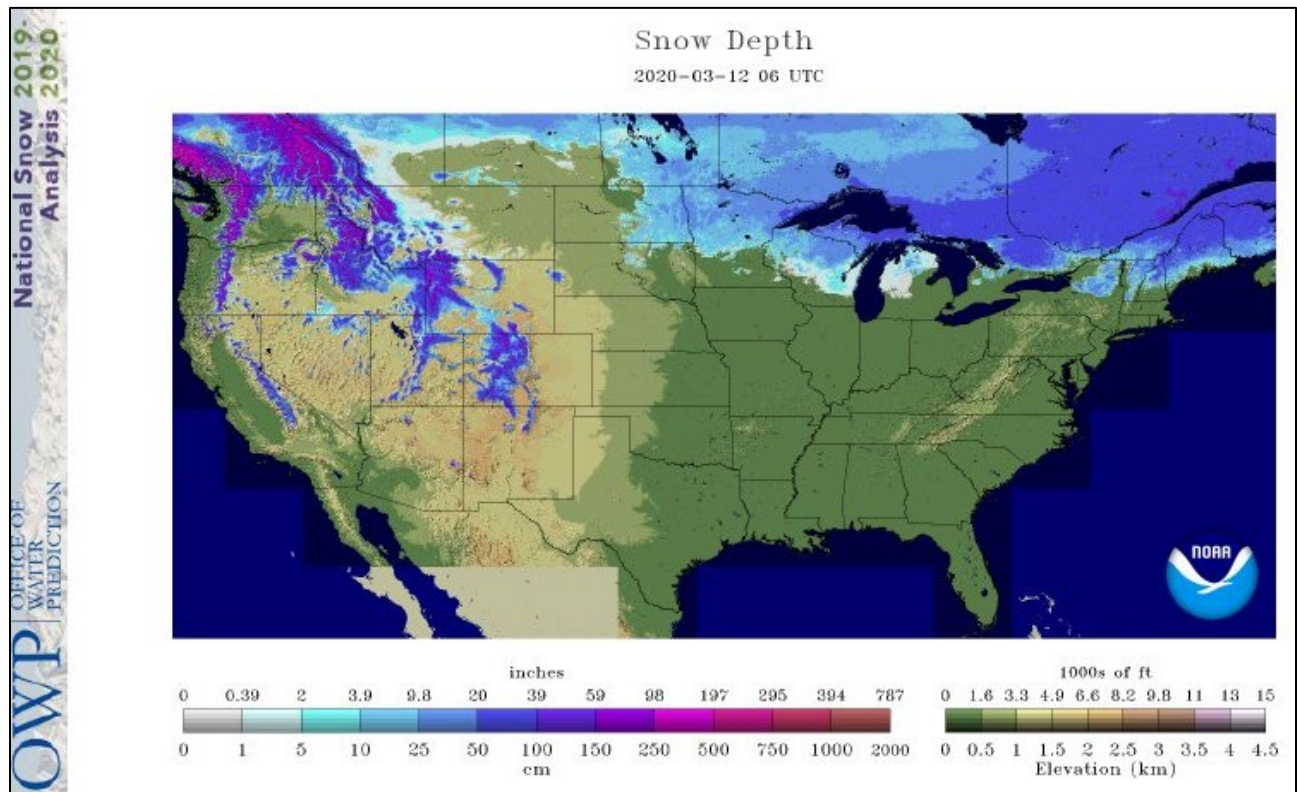
[Alaska snow water equivalent percent of median map](#)

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



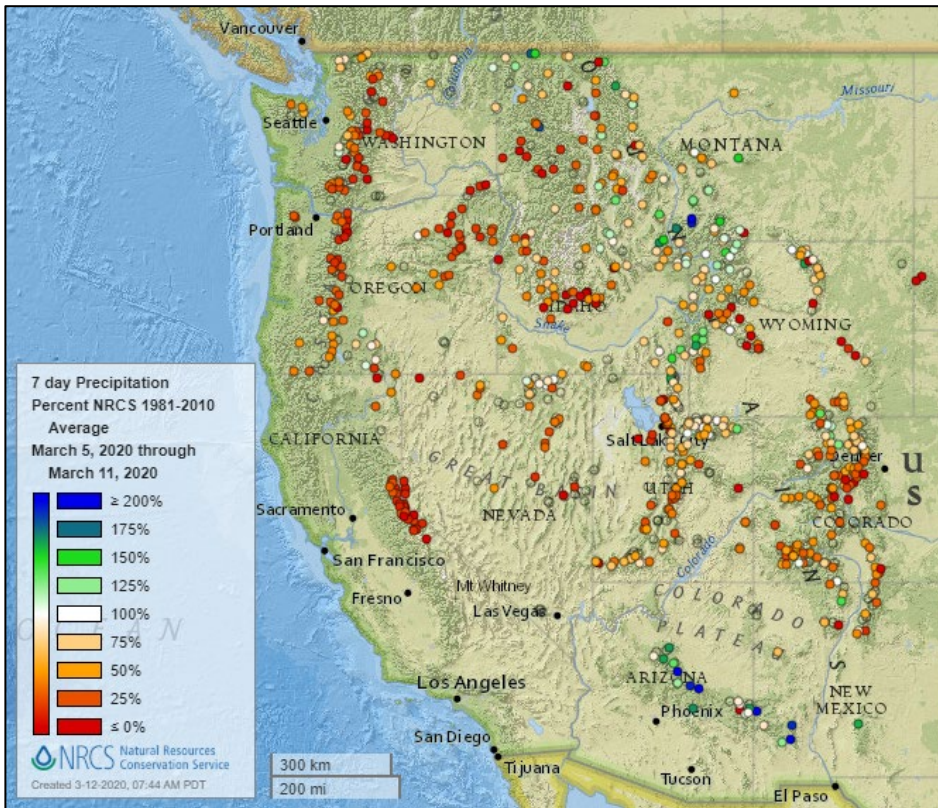
**Current Snow Depth, National Weather Service Snow Analysis**

Source: NOAA Office of Water Prediction



## Precipitation

### Last 7 Days, NRCS SNOTEL Network

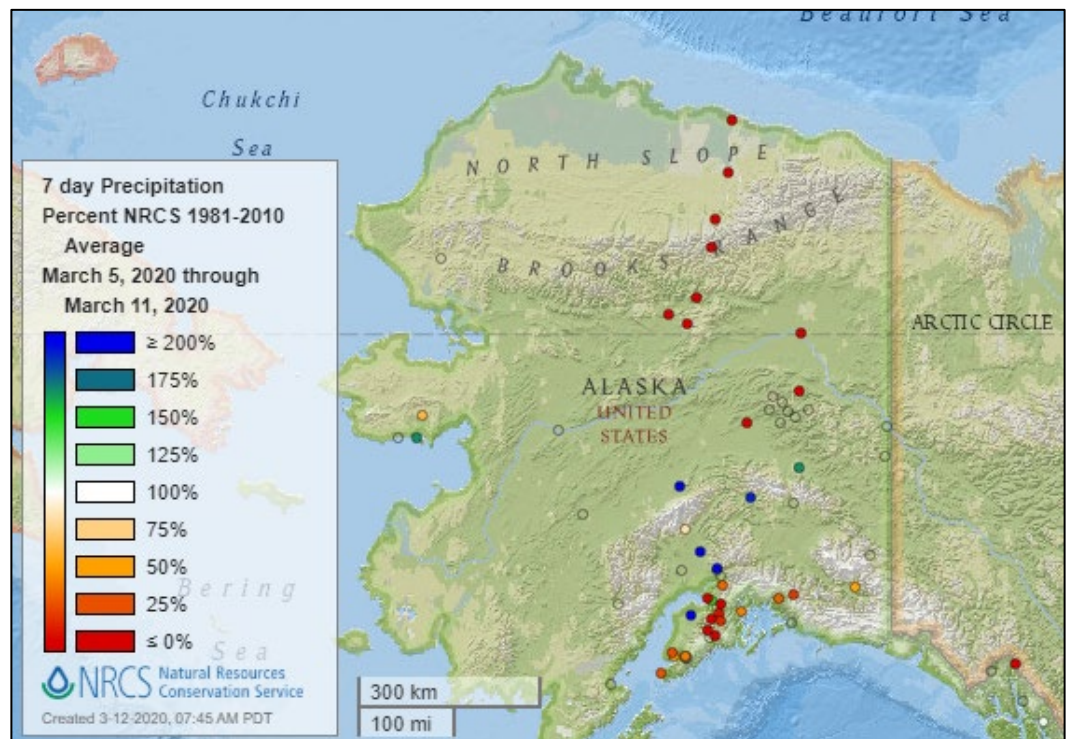


[7-day precipitation percent of average map](#)

**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](#)





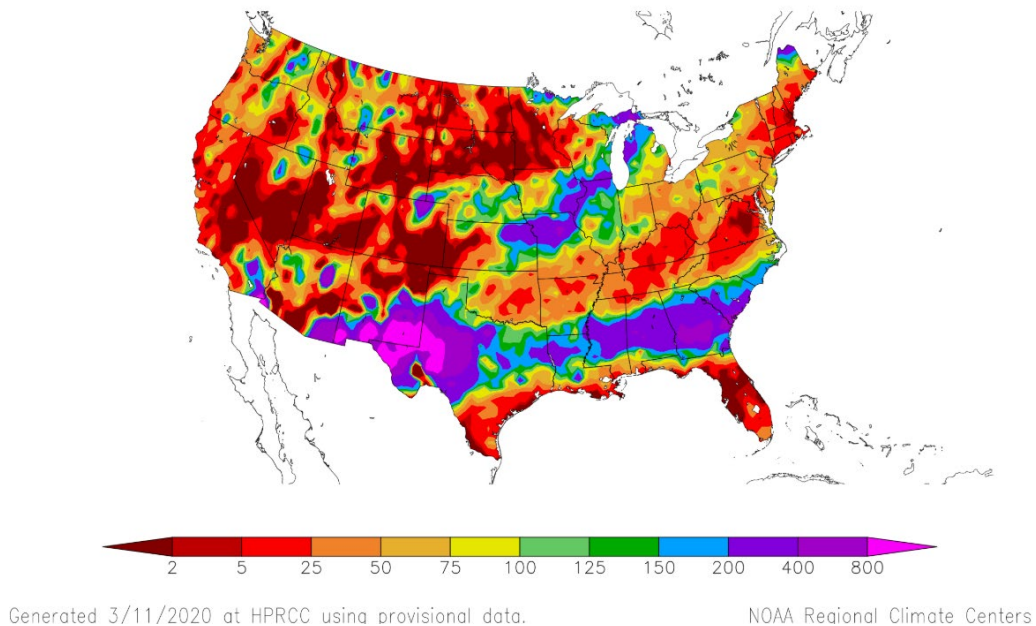
## Last 7 Days, National Weather Service (NWS) Networks

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 (%)  
3/4/2020 – 3/10/2020



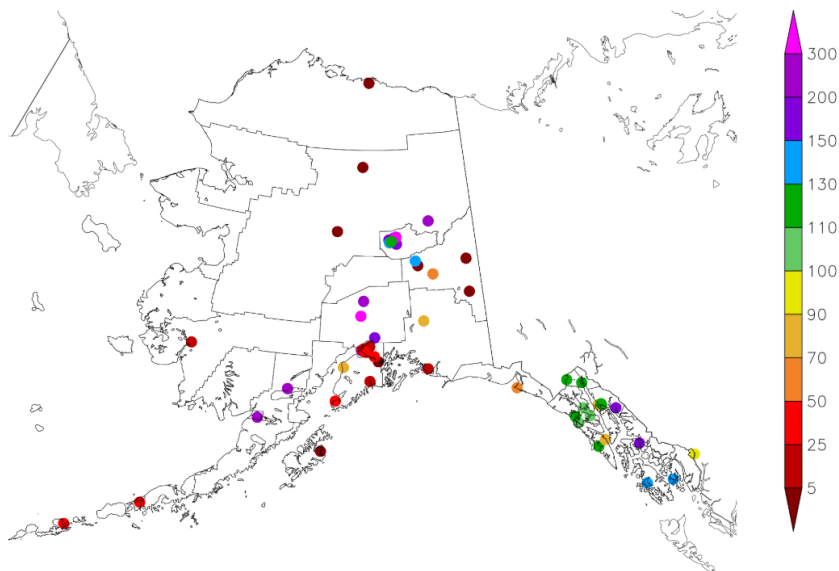
## Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

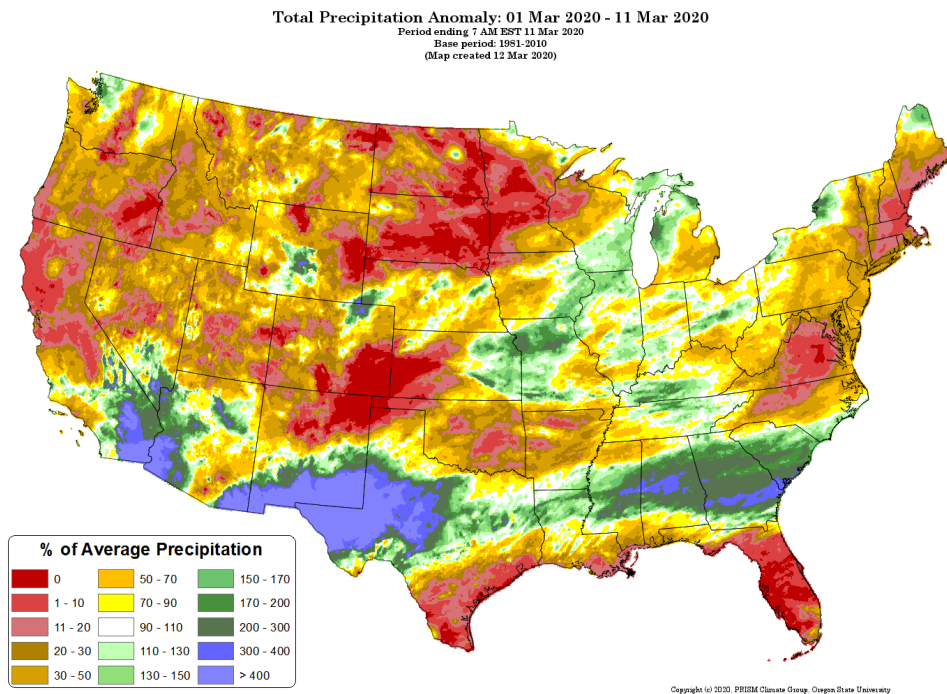
**See also:** [7-day total precipitation values \(inches\) map](#)

Percent of Normal Precipitation (%)  
3/4/2020 – 3/10/2020



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

Source: PRISM

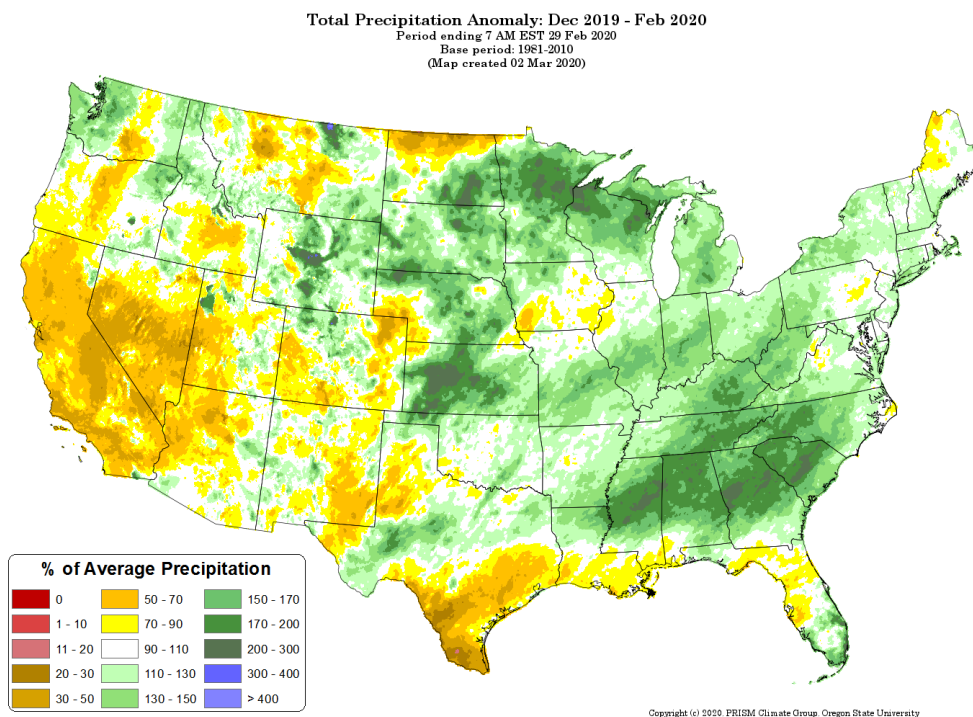


[Month-to-date national total precipitation percent of average map](#)

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

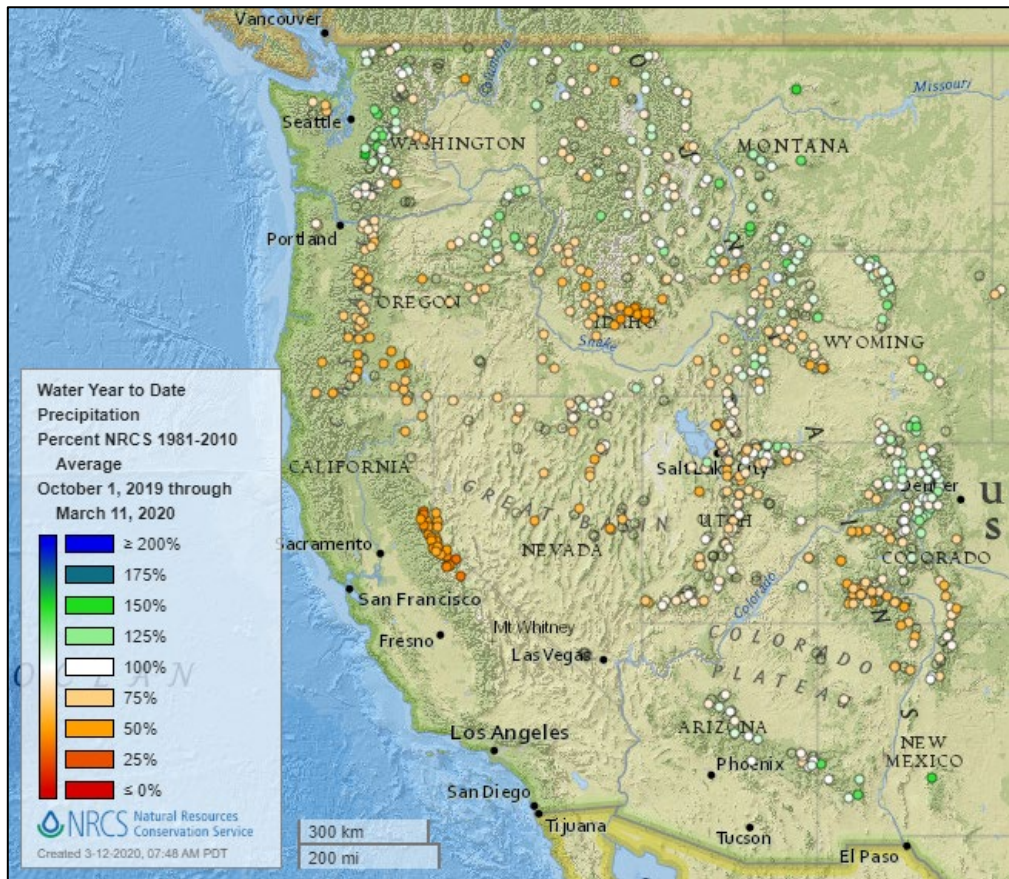
Source: PRISM

[December 2019 through February 2020 total precipitation percent of average map](#)



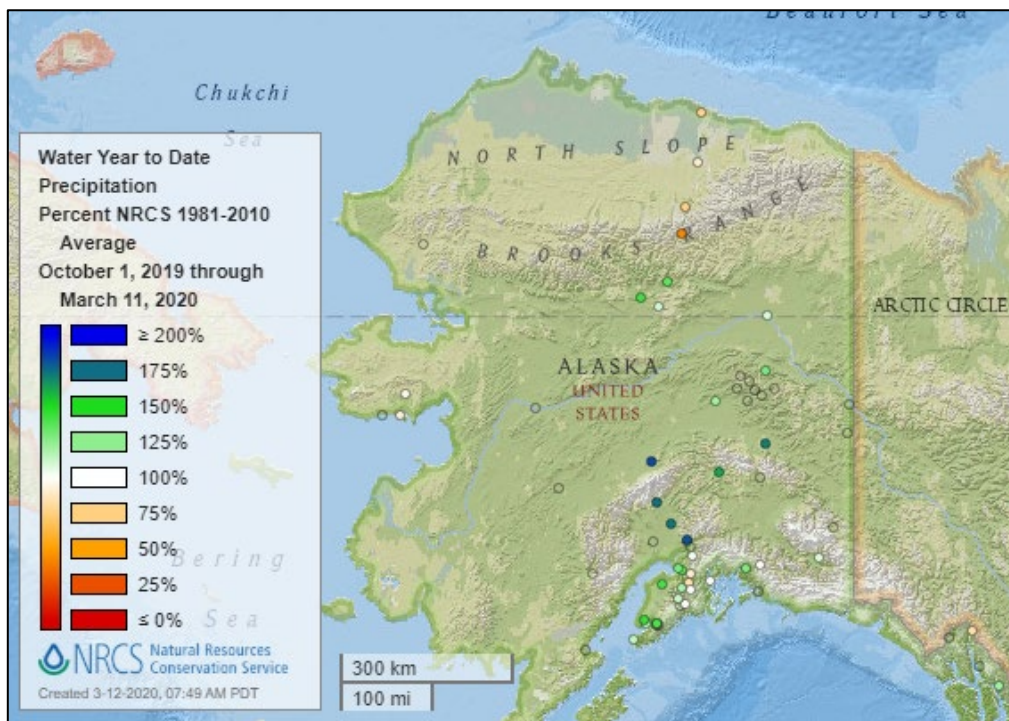


Water Year-to-Date, NRCS SNOTEL Network



[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

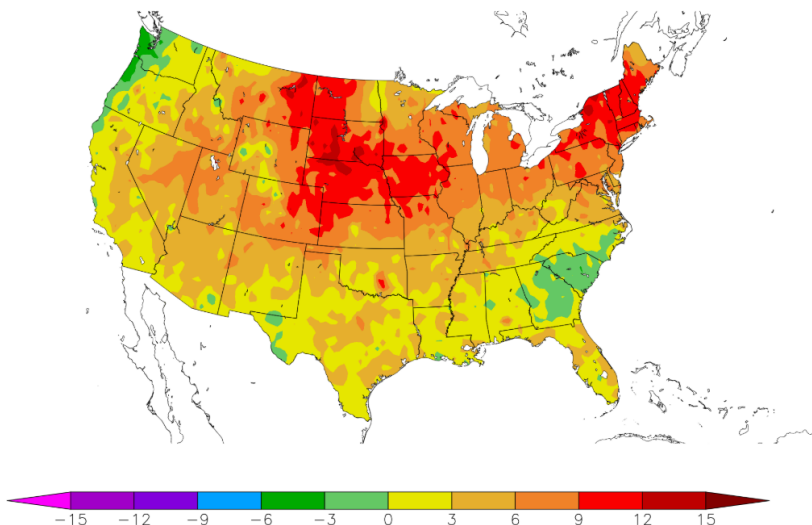
### Last 7 Days, National Weather Service (NWS) Networks

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)  
3/4/2020 – 3/10/2020



Generated 3/11/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

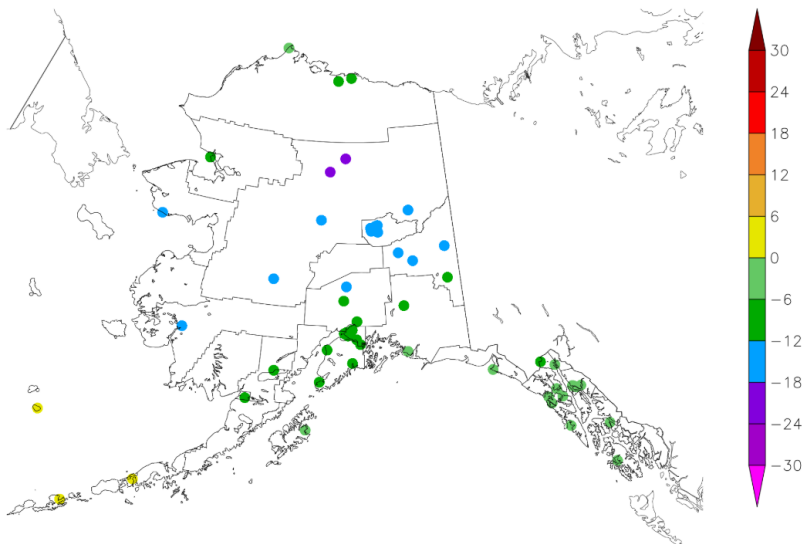
### Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)  
3/4/2020 – 3/10/2020



Generated 3/11/2020 at HPRCC using provisional data.

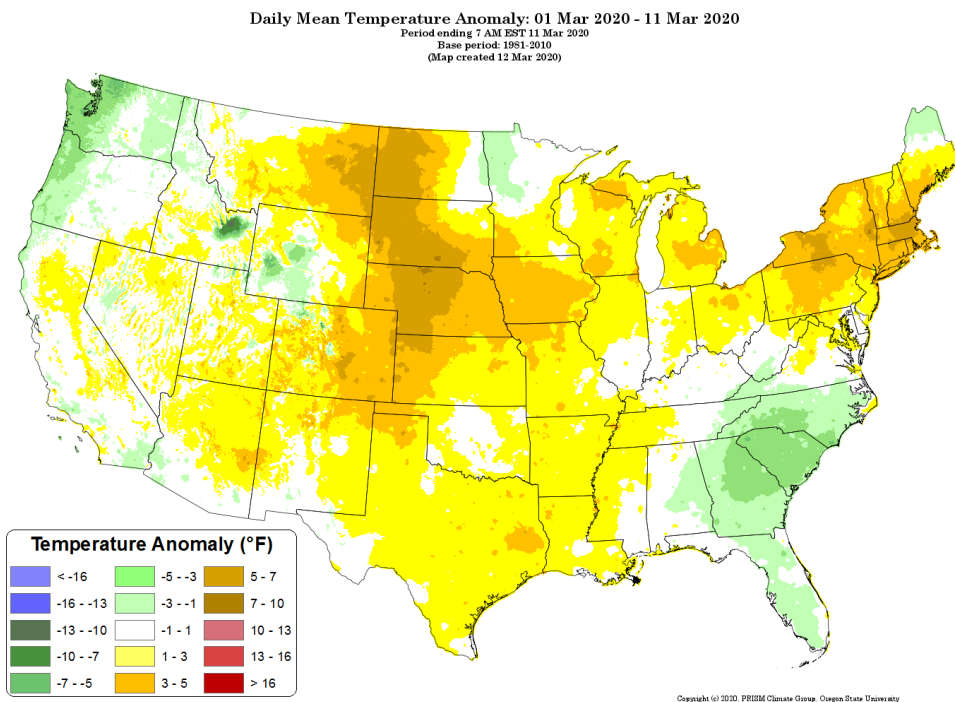
NOAA Regional Climate Centers



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

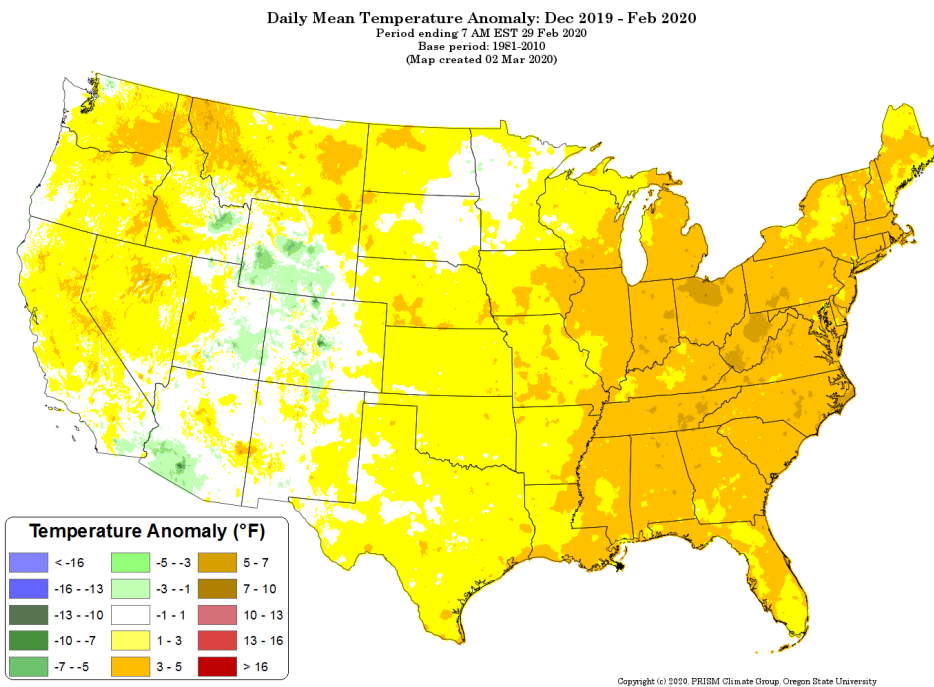
Source: PRISM

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



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

Source: PRISM



[December 2019  
through February 2020  
daily mean  
temperature anomaly  
map](#)

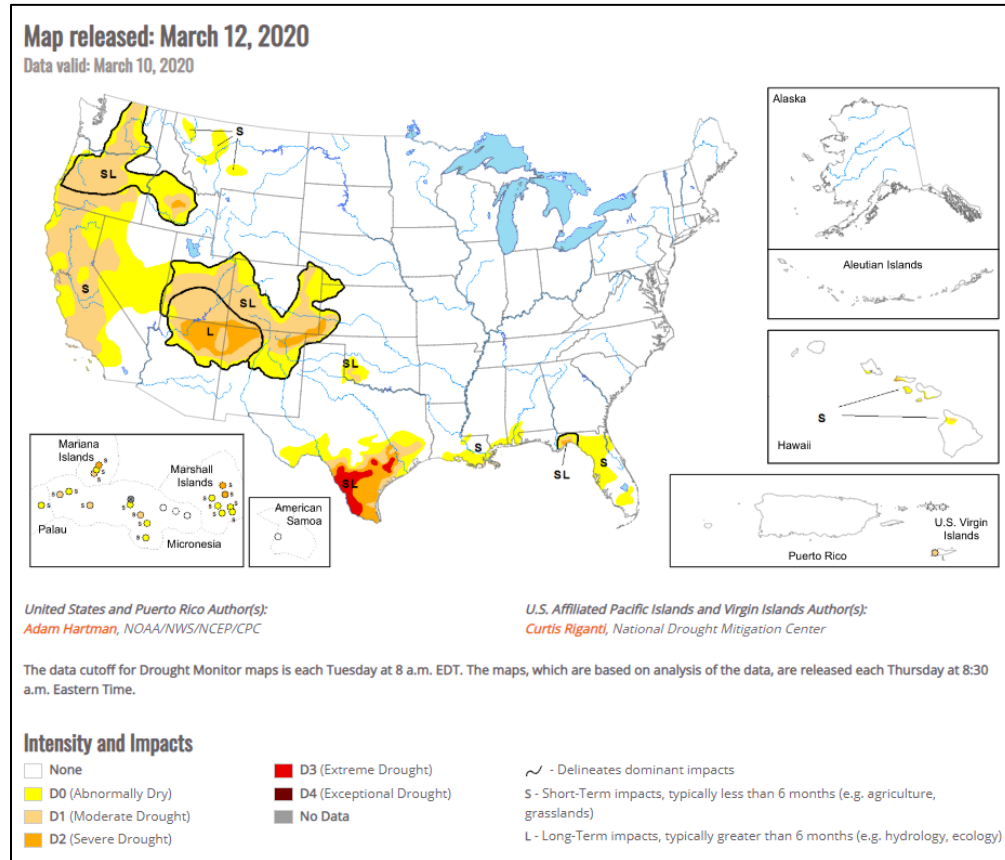
## Drought

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

Source: National Drought Mitigation Center

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

Source: NOAA



### Current [National Drought Summary](#), March 12, 2020

Source: National Drought Mitigation Center

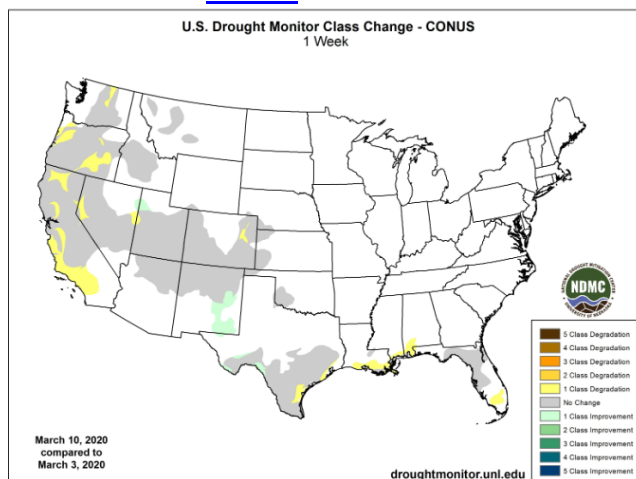
"A low pressure system propagated eastward across much of the southern tier states early in the period (March 4-6) and merged with a short-wave trough dropping southeastward from the Midwest before moving off the Mid-Atlantic coast on March 7. This system dropped more than 2 inches of rainfall over large areas from extreme southeastern New Mexico eastward to South Carolina. Some areas of central Alabama and Georgia saw more than 5 inches of rainfall, which fell over saturated soil. However, much of the heavier rainfall remained north of the I-10 corridor from southern Texas to northern Florida, while areas south of I-10 received only modest amounts, which were not nearly enough to reduce deficits. The Pacific Northwest and California also saw some precipitation over the past week, but amounts were not enough to reduce any deficits. Some recent dryness over southern Iowa and northern Missouri was mitigated a bit with near- to above-normal precipitation falling last week as well. Deficits increased in the Mid-Atlantic and New England over the past 30 days, but were kept at bay, as these areas saw 0.1 to 1 inch and 0.1 to 0.5 inches of rainfall, respectively. The active storm track continued last week for Alaska, with the southeastern Panhandle receiving 2 to 6 inches of precipitation over many areas. This precipitation, along with near- to below-normal temperatures, has finally produced above-normal snowpack in the Alaska Panhandle for the first time in 7 to 8 years, warranting D0 removal. Hawaii remained dry on the leeward slopes last week due to persistent trade winds, leading to some D0 expansion and development on the Big Island and Oahu, respectively. Puerto Rico saw D0 removal, as northern portions of the island saw much above-normal precipitation, eliminating short-term deficits."



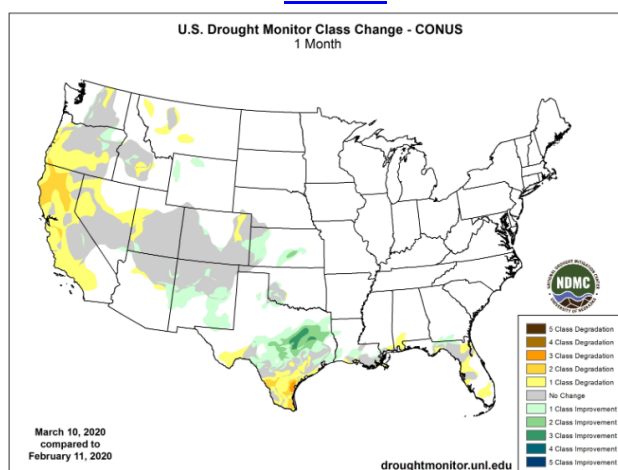
## Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

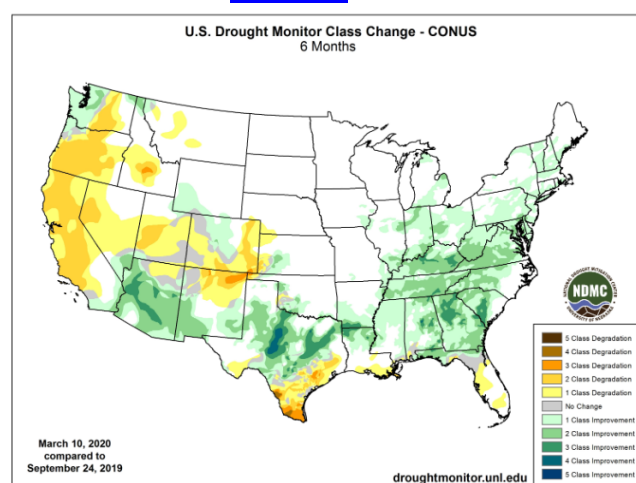
### 1 Week



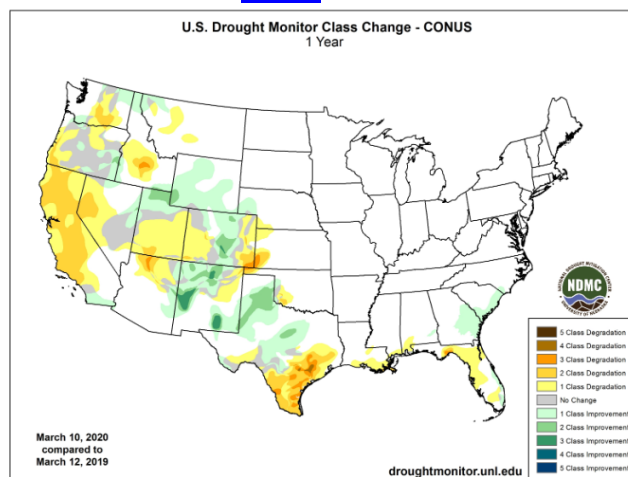
### 1 Month



### 6 Months



### 1 Year



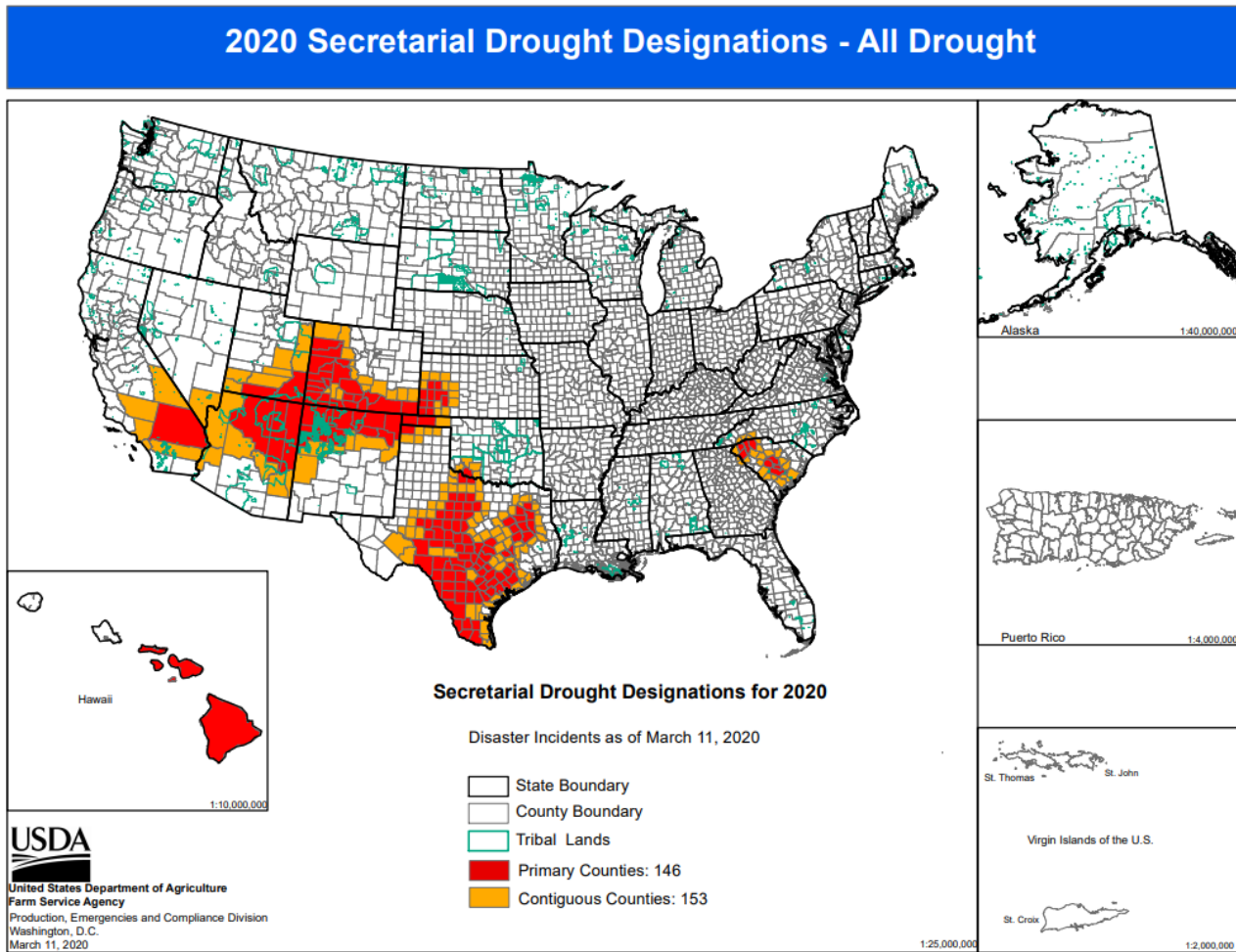
[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

## 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

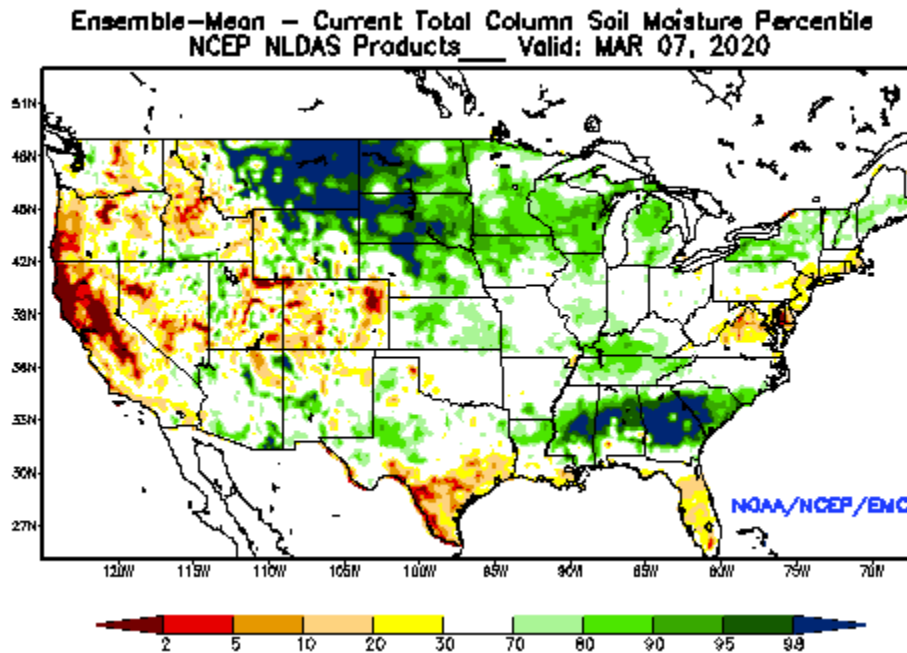




## Other Climatic and Water Supply Indicators

### Soil Moisture

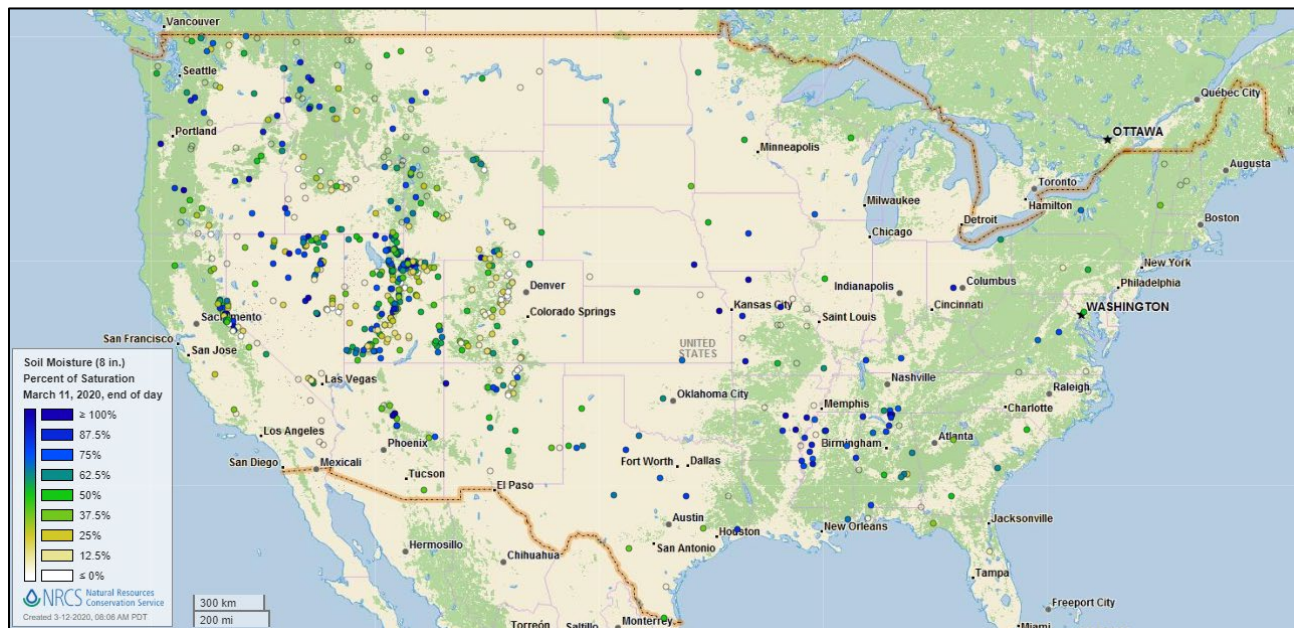
Source: NOAA National Centers for Environmental Prediction



[Modeled soil moisture percentiles](#) as of March 7, 2020

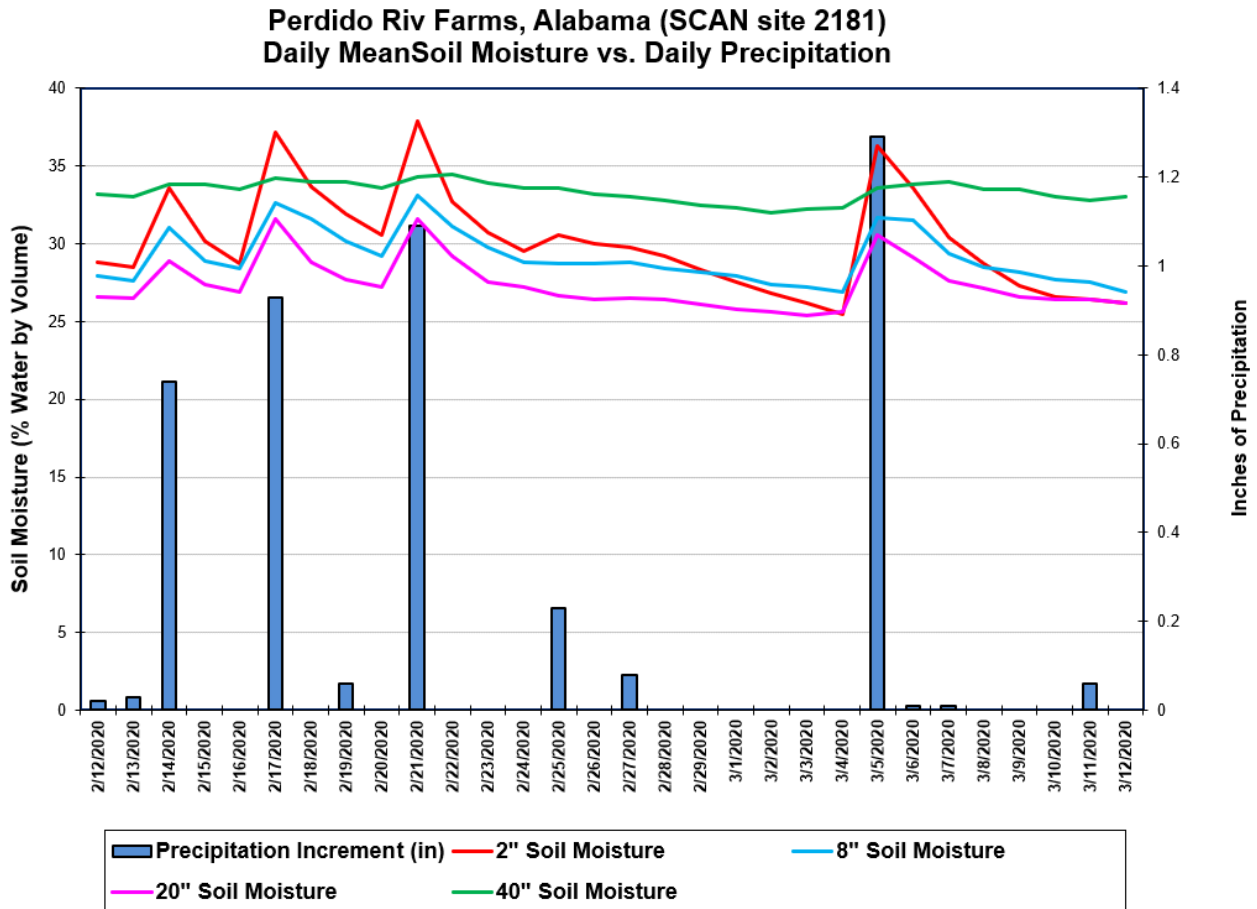
### Soil Moisture Percent of Saturation

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 at the [Perdido River Farms](#) SCAN site in Alabama. This site has experienced several precipitation events in the last 30 days, resulting in increased soil moisture at all sensor depths. Accumulated precipitation for the period totaled 4.56 inches.

## Soil Moisture Data Portals

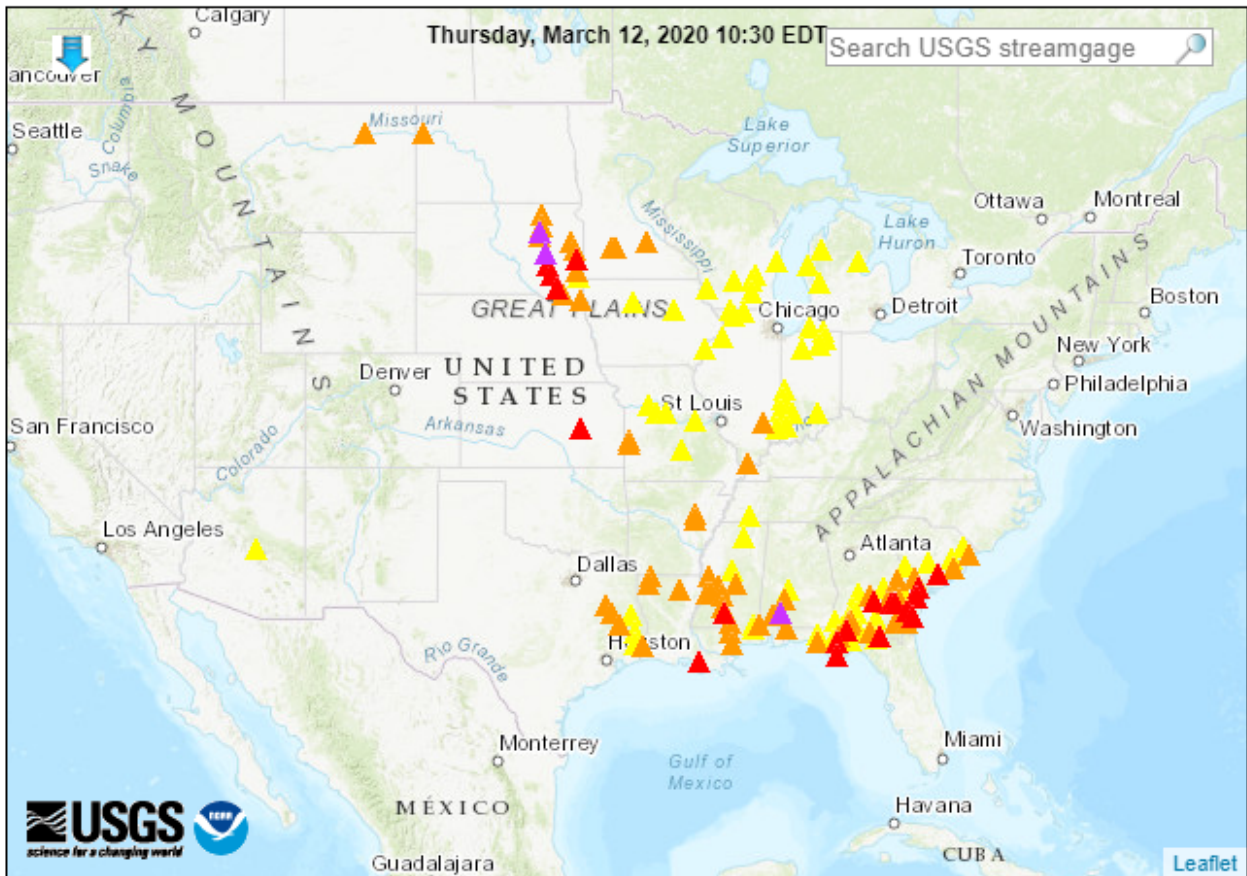
- [CRN Soil Moisture](#)
- [Texas A&M University North American Soil Moisture Database](#)
- [University of Washington Experimental Modeled Soil Moisture](#)



## Streamflow, Drought, Flood, and Runoff

Source: U.S. Geological Survey

### Map of flood and high flow conditions (80 in floods [major: 3, moderate: 18, minor: 59], 64 in near-flood)



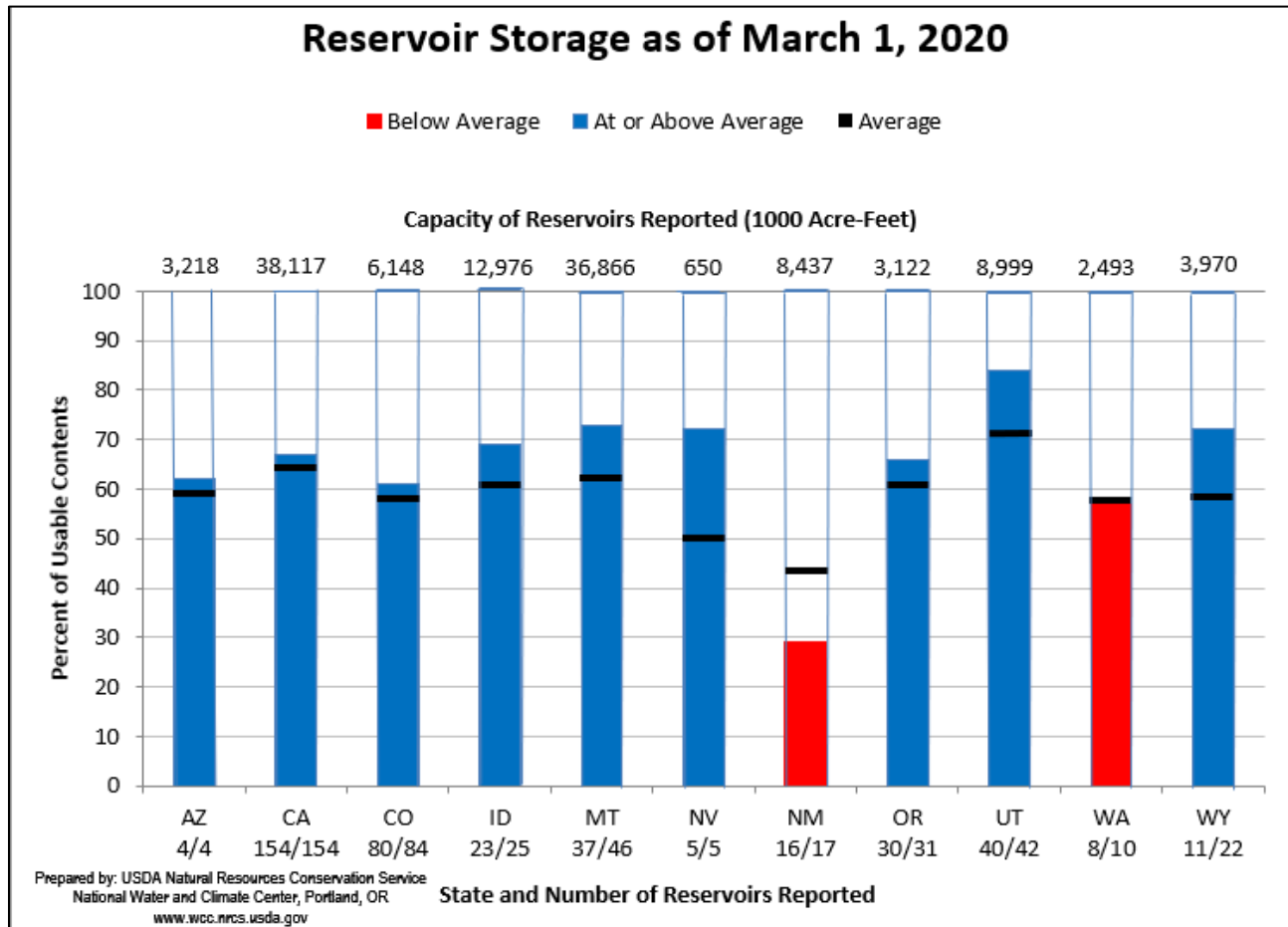
Explanation - Percentile classes						
<95	95-98	>= 99	Above action stage	Above flood stage	Above moderate flood stage	Above major flood stage
△ Streamgage with flood stage    ○ Streamgage without flood stage						

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

## Reservoir Storage

### Western States Reservoir Storage

Source: NRCS National Water and Climate Center



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

### Hydromet Teacup Reservoir Depictions

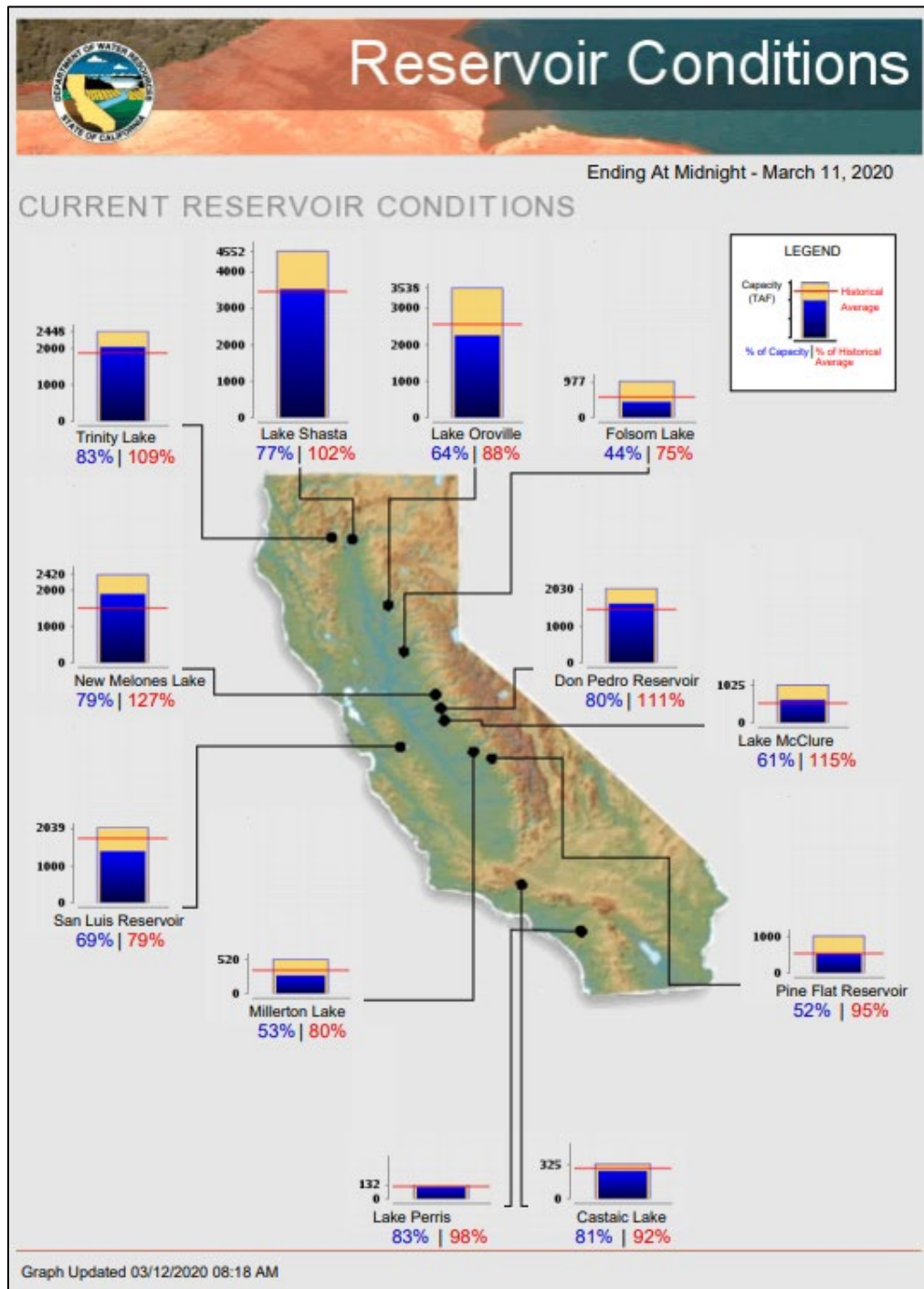
Source: U.S. Bureau of Reclamation

- [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

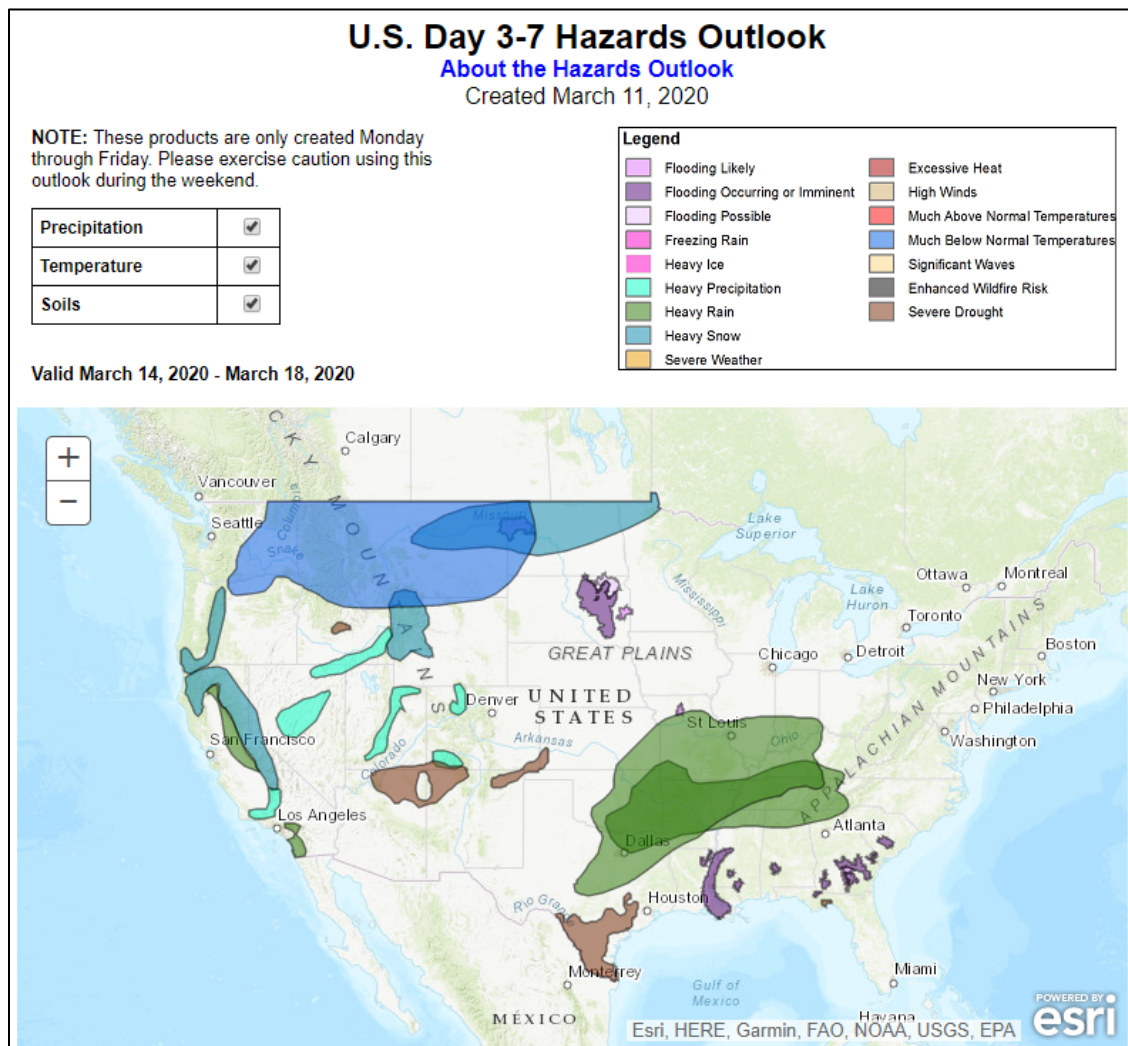
### Agricultural Weather Highlights

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

**National Outlook, Thursday, March 12, 2020:** “Frigid air will continue to surge southward across western North America, with the core of the cold outbreak reaching the northern Plains and Northwest during the weekend. Sub-zero temperatures can be expected across the northern Rockies and northern High Plains into early next week, preceded by wind-driven snow. As cold air continues to spread southward next week, significantly below-normal temperatures will arrive in California and parts of the Southwest. In conjunction with the cold outbreak, parts of northern and central California may receive meaningful precipitation for the first time in 2 months. Most other areas of the West will also receive some precipitation, while 5-day rainfall totals could reach 2 to 4 inches or more from the southeastern Plains to the southern Appalachians. In contrast, dry weather will persist across the Deep South, from southern Texas to Florida. The NWS 6- to 10-day outlook for March 17 – 21 calls for the likelihood of below-normal temperatures along and west of a line from New Mexico to Minnesota, while warmer-than-normal weather will prevail across the South, East, and lower Midwest. Meanwhile, below-normal precipitation across Florida’s peninsula and the Pacific Northwest should contrast with wetter-than-normal conditions in all other areas of the country.”

### Weather Hazards Outlook: [March 14 – 18, 2020](#)

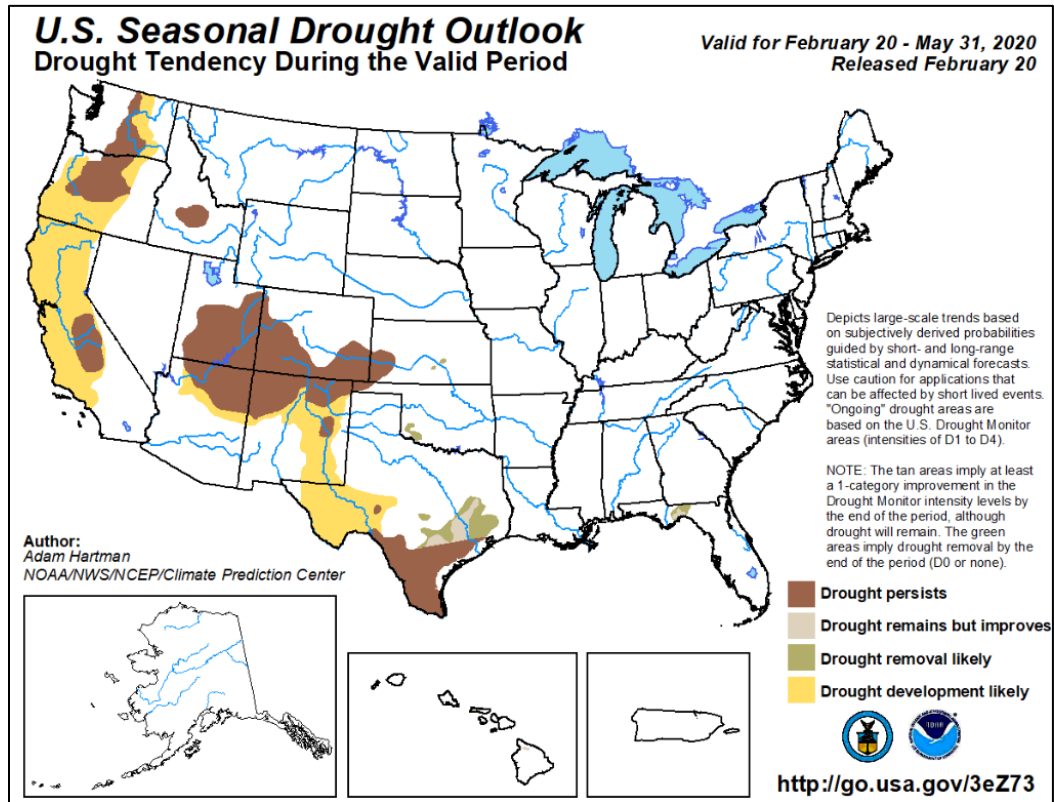
Source: NOAA Weather Prediction Center





**Seasonal Drought Outlook: [February 20 – May 31, 2020](#)**

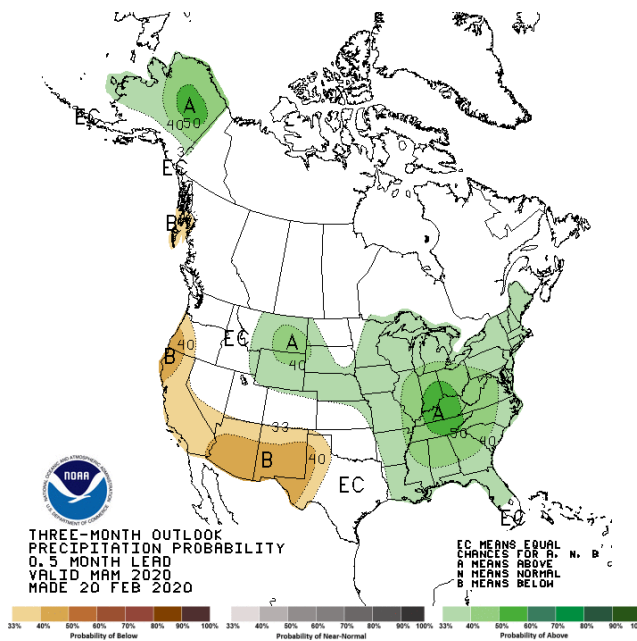
Source: National Weather Service



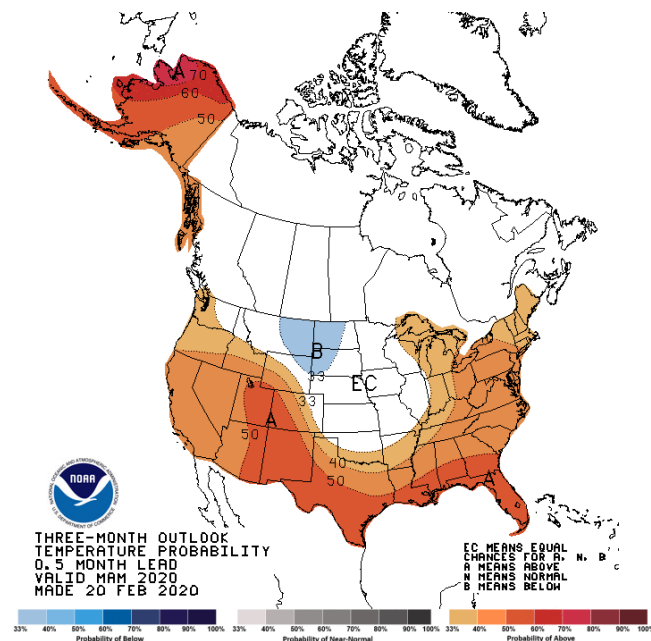
**Climate Prediction Center 3-Month Outlook**

Source: National Weather Service

Precipitation



Temperature



[March-April-May \(MAM\) 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](#).