

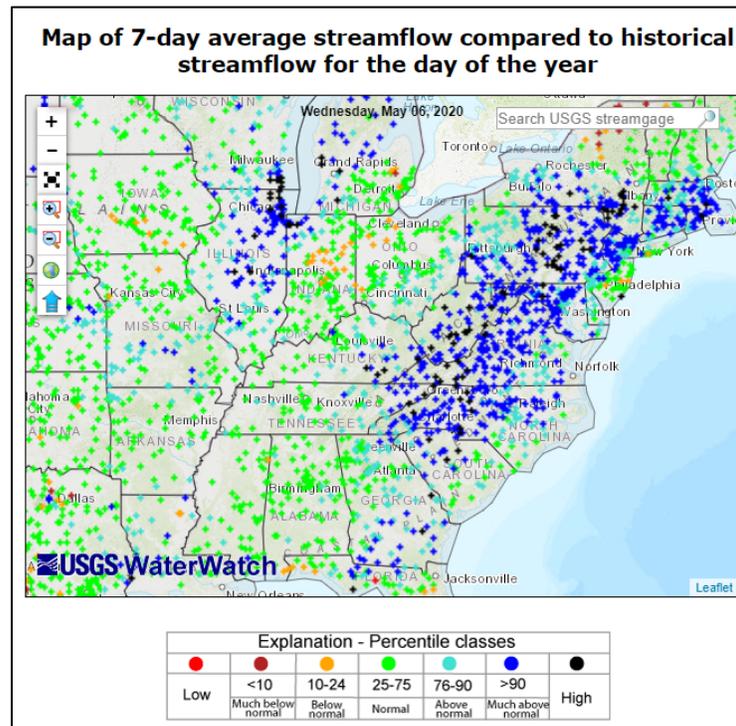
Water and Climate Update

May 7, 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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High to near record streamflow in the East

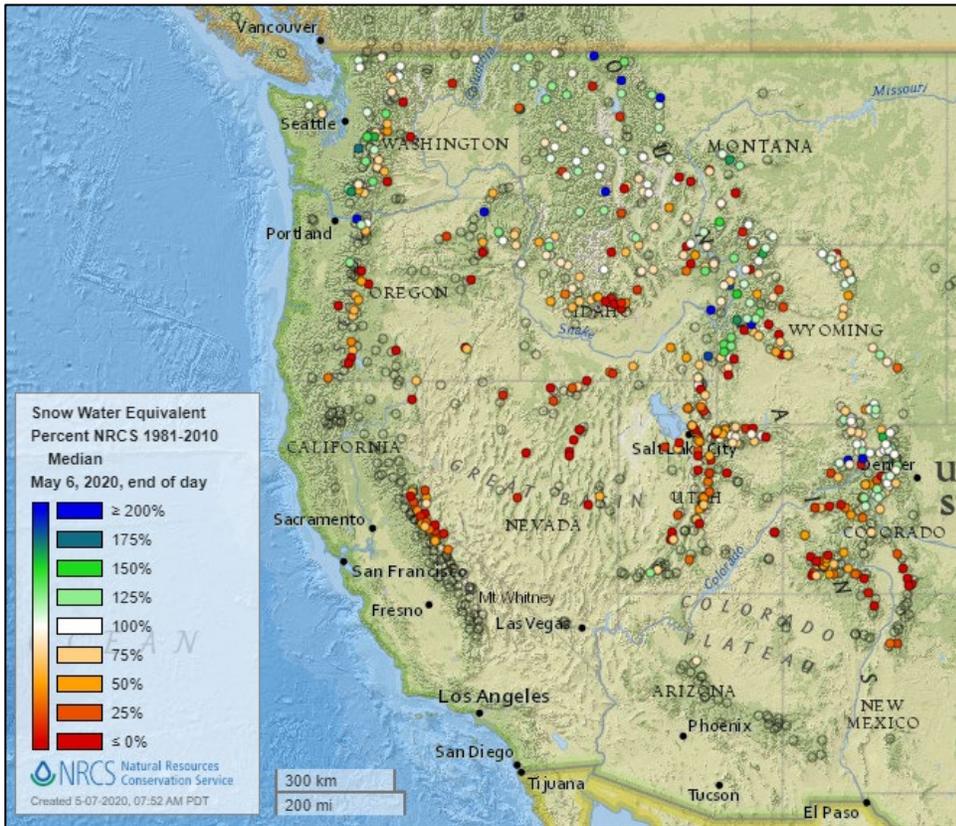


Severe storms with strong winds and heavy rainfall swept through much of the eastern U.S. this past week. Much of the region received rainfall of over three inches which caused flooding in many areas with some streams experiencing flash flooding conditions. The U.S. Geological Survey reported that streamflow across the East was well above normal to record levels for this time of year. High flows were reported from the Carolinas to New England. The East was not alone, as heavy rain and high streamflow were also reported in the upper Midwest.

Related:

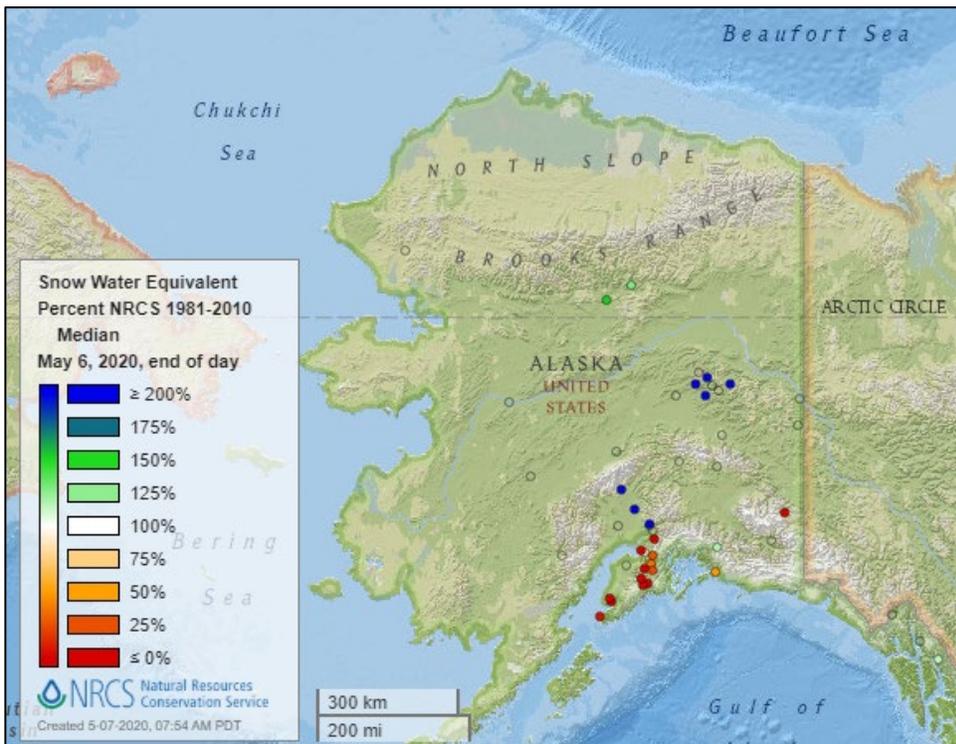
- [Flooding and damaging winds along East Coast as record heat moves into Texas Friday](#) – ABC
- [Updated forecast: After a soaking of 1 to 1.5 inches, rain to exit this evening](#) – Washington Post
- [100,000 without power in Tennessee after severe storm](#) UPI.com
- [Locally severe thunderstorms to ignite in southern US](#) - Yahoo
- [Heavy rains cause flooding across Charlotte area](#) – WCNC (NC)

Snow



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

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

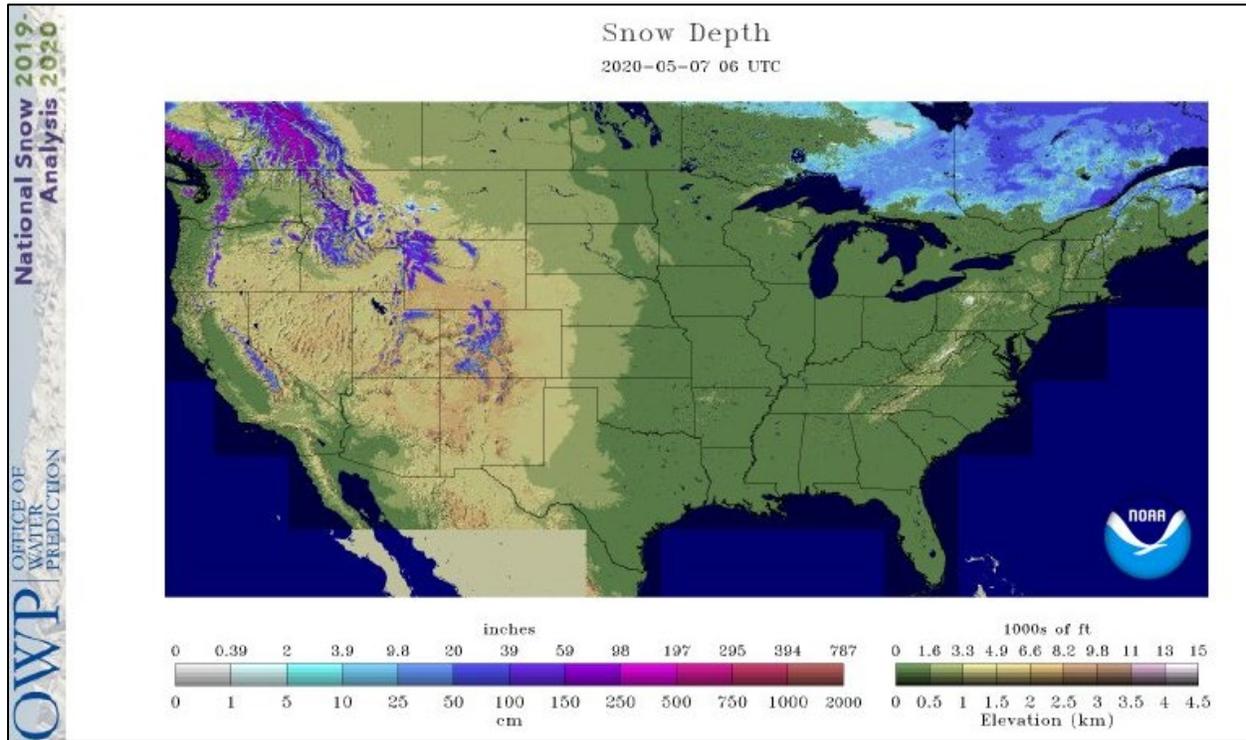


[Alaska snow water equivalent percent of median map](#)

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

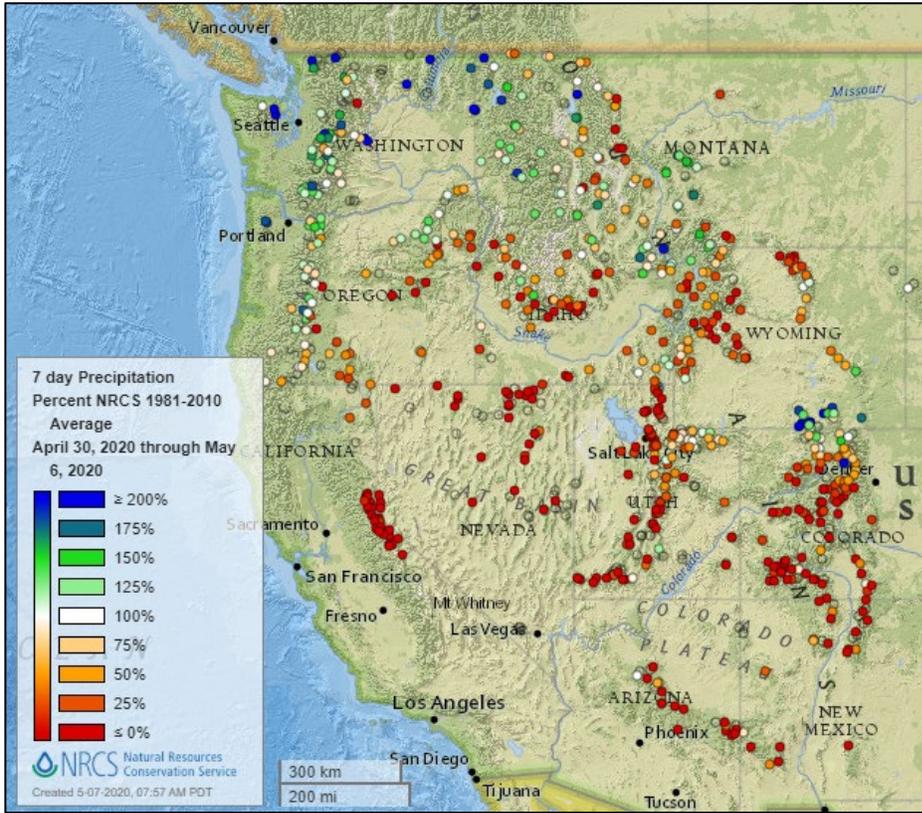
Current Snow Depth, National Weather Service Snow Analysis

Source: NOAA Office of Water Prediction



Precipitation

Last 7 Days, NRCS SNOTEL Network

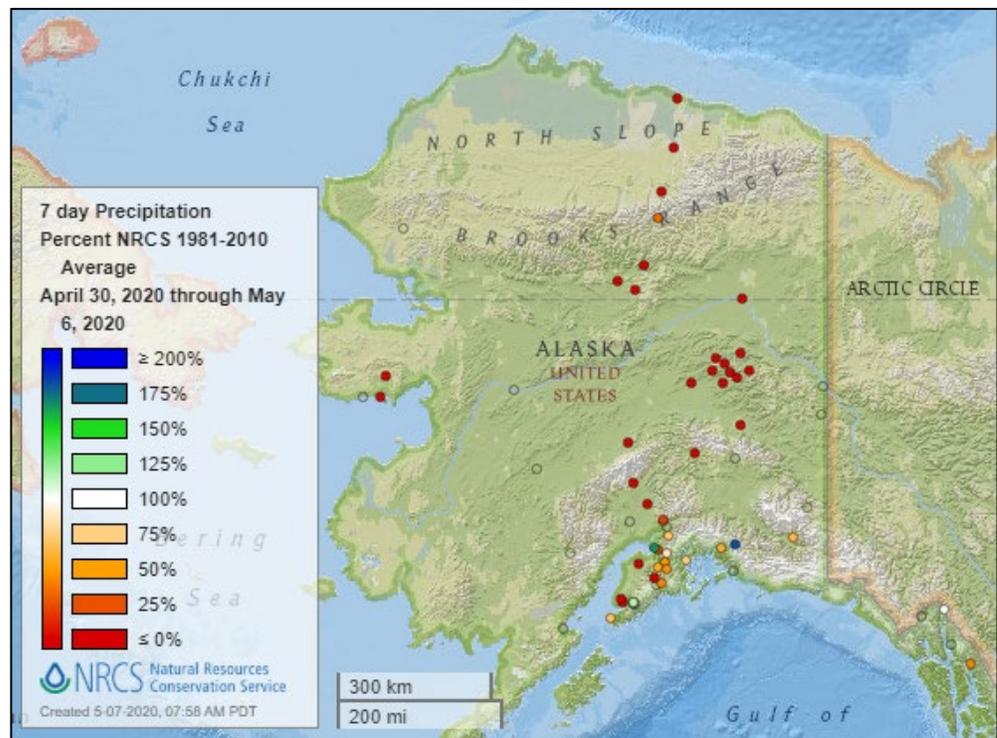


[7-day precipitation percent of average map](#)

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](#)



Water and Climate Update

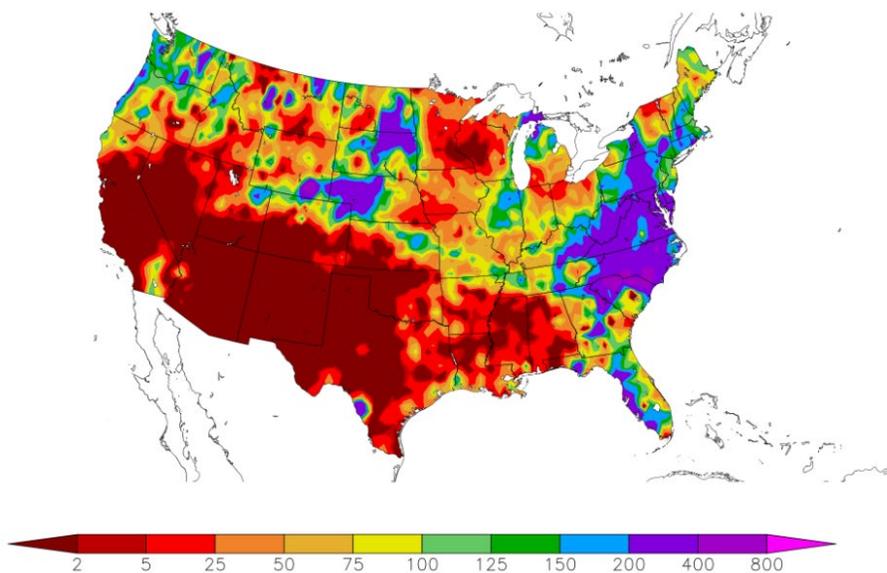
Last 7 Days, National Weather Service (NWS) Networks

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 (%)
4/30/2020 – 5/6/2020



Generated 5/7/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

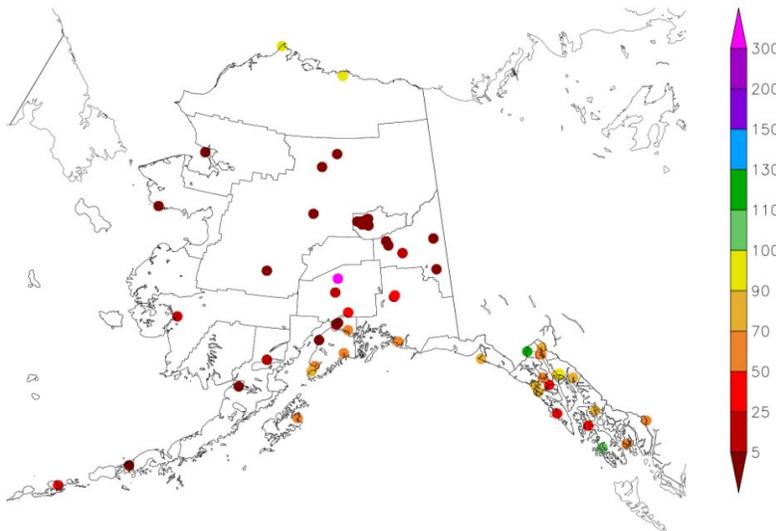
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Percent of Normal Precipitation (%)
4/30/2020 – 5/6/2020



Generated 5/7/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

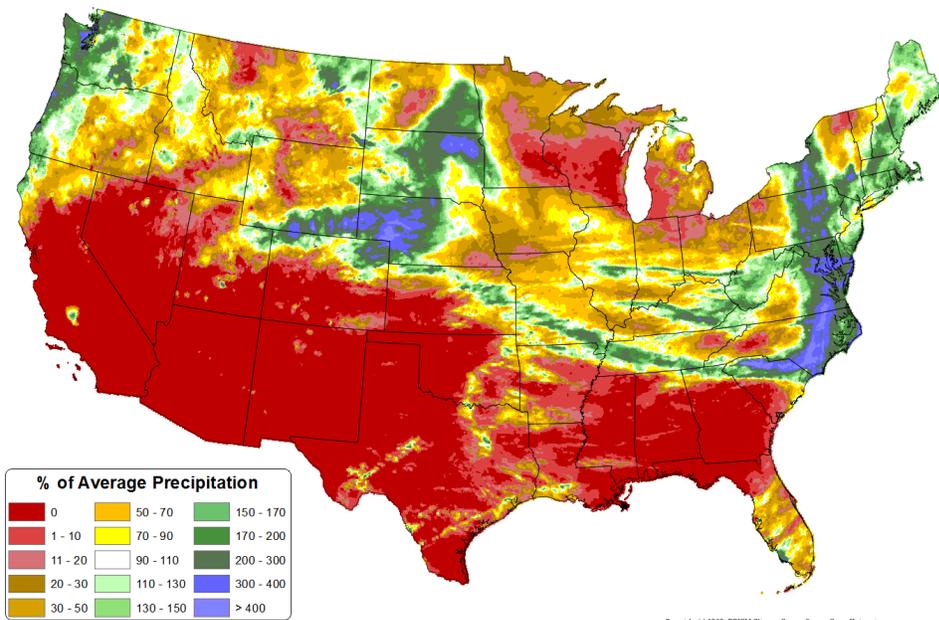
Water and Climate Update

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

Source: PRISM

Total Precipitation Anomaly: 01 May 2020 - 06 May 2020
Period ending 7 AM EST 06 May 2020
Base period: 1981-2010
(Map created 07 May 2020)

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

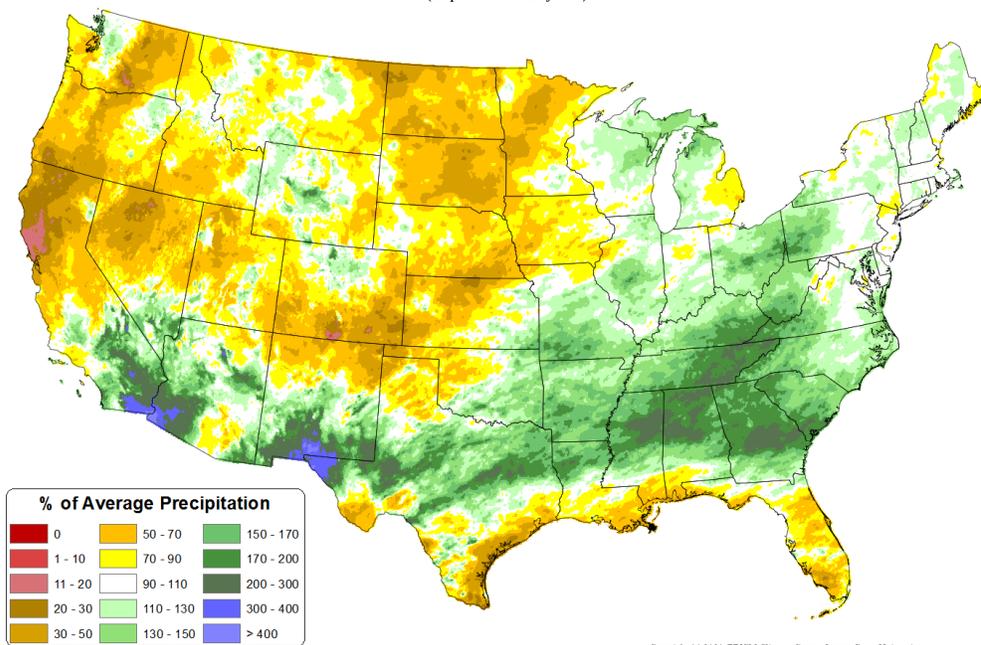


Last 3 Months, All Available Data Including SNOTEL and NWS Networks

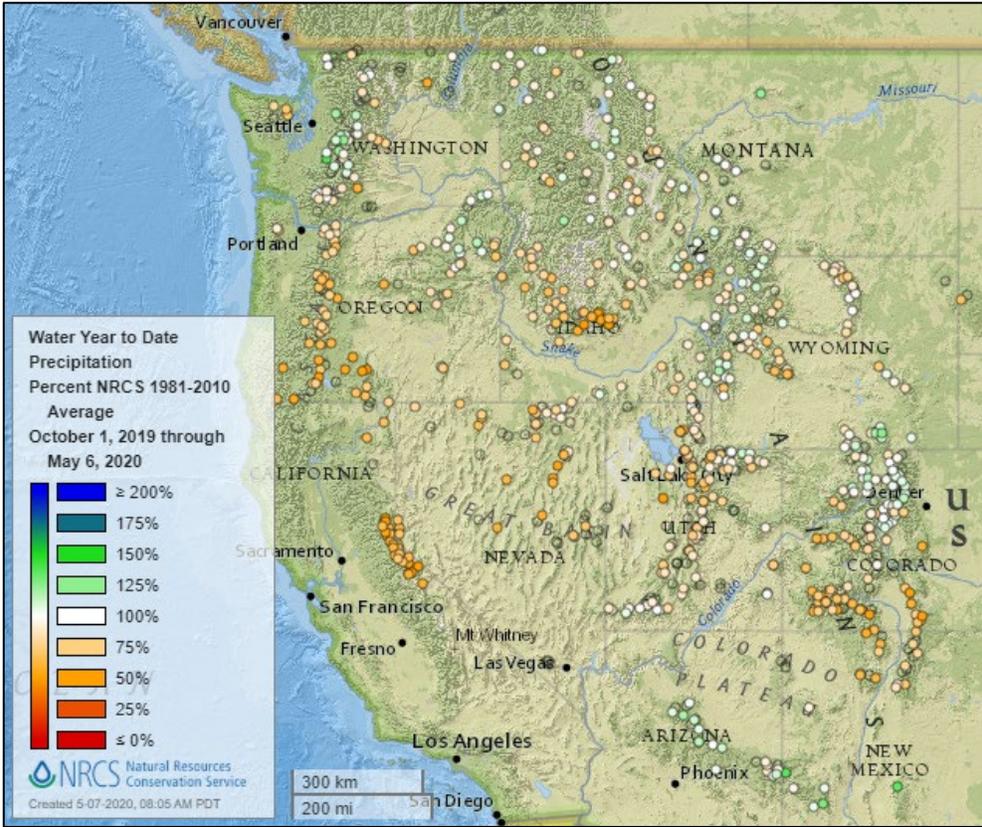
Source: PRISM

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

Total Precipitation Anomaly: Feb 2020 - Apr 2020
Period ending 7 AM EST 30 Apr 2020
Base period: 1981-2010
(Map created 02 May 2020)

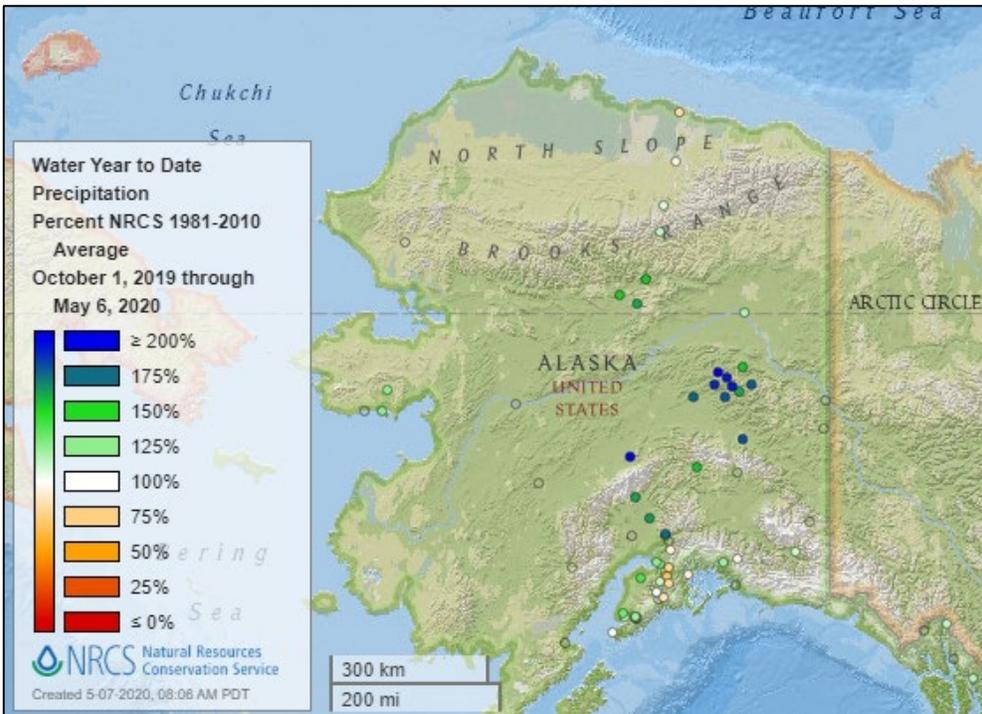


Water Year-to-Date, NRCS SNOTEL Network



[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

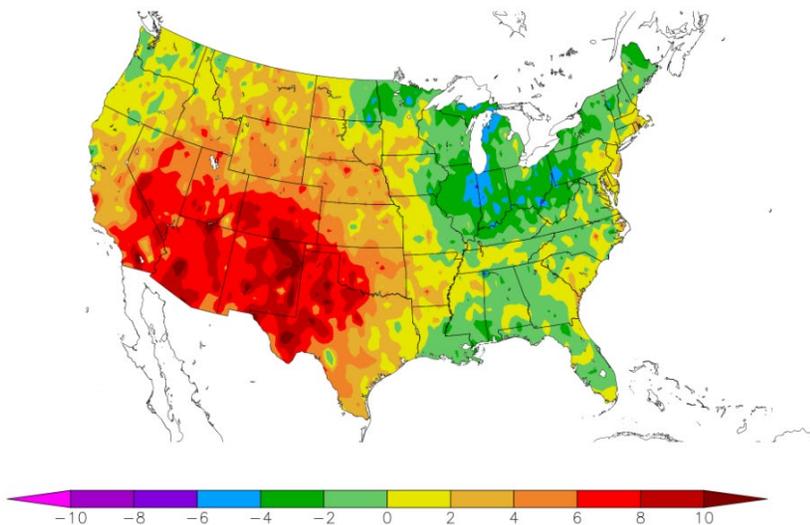
Last 7 Days, National Weather Service (NWS) Networks

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)
4/30/2020 – 5/6/2020



Generated 5/7/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

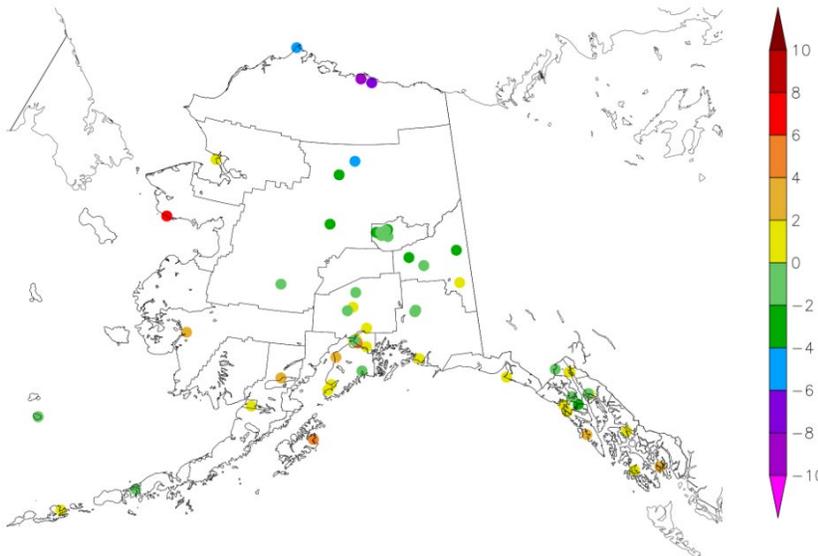
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)
4/30/2020 – 5/6/2020



Generated 5/7/2020 at HPRCC using provisional data.

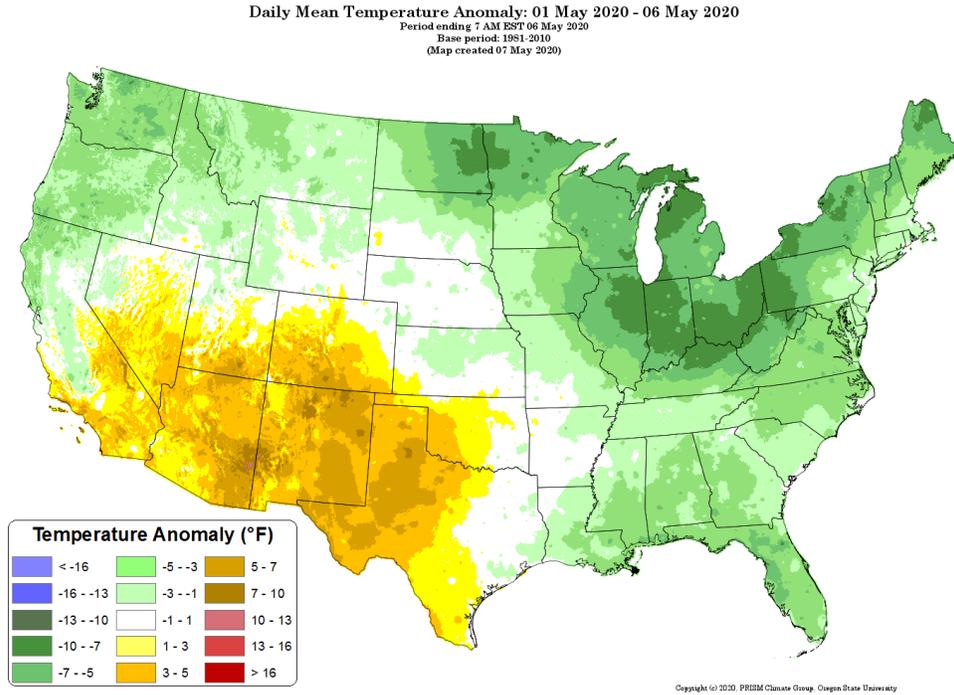
NOAA Regional Climate Centers

Water and Climate Update

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

Source: PRISM

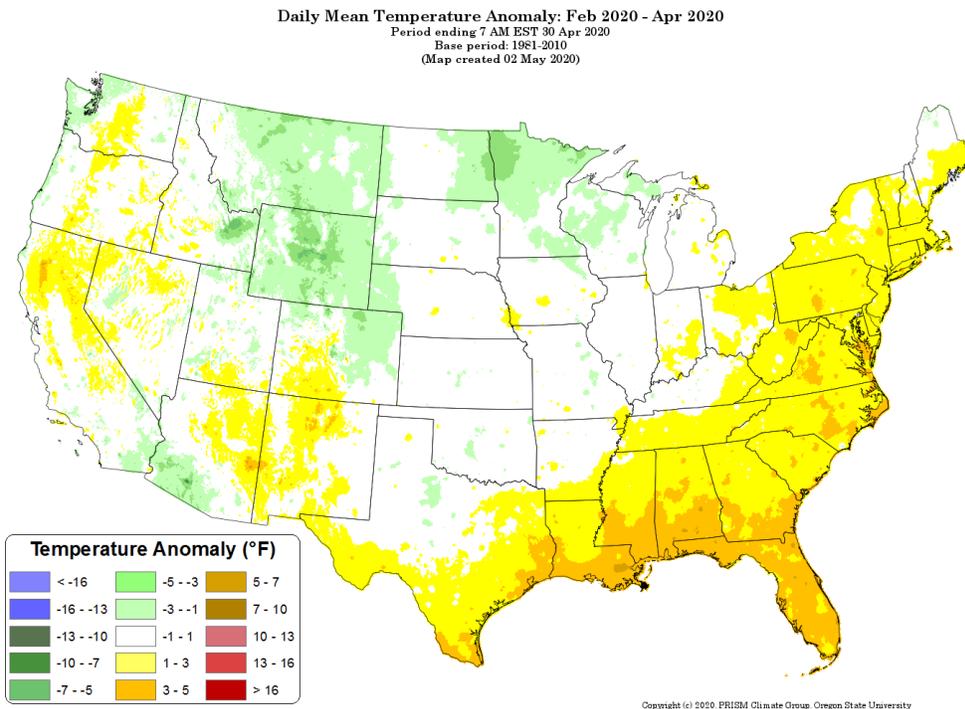
[Month-to-date national daily mean temperature anomaly map](#)



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

Source: PRISM

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



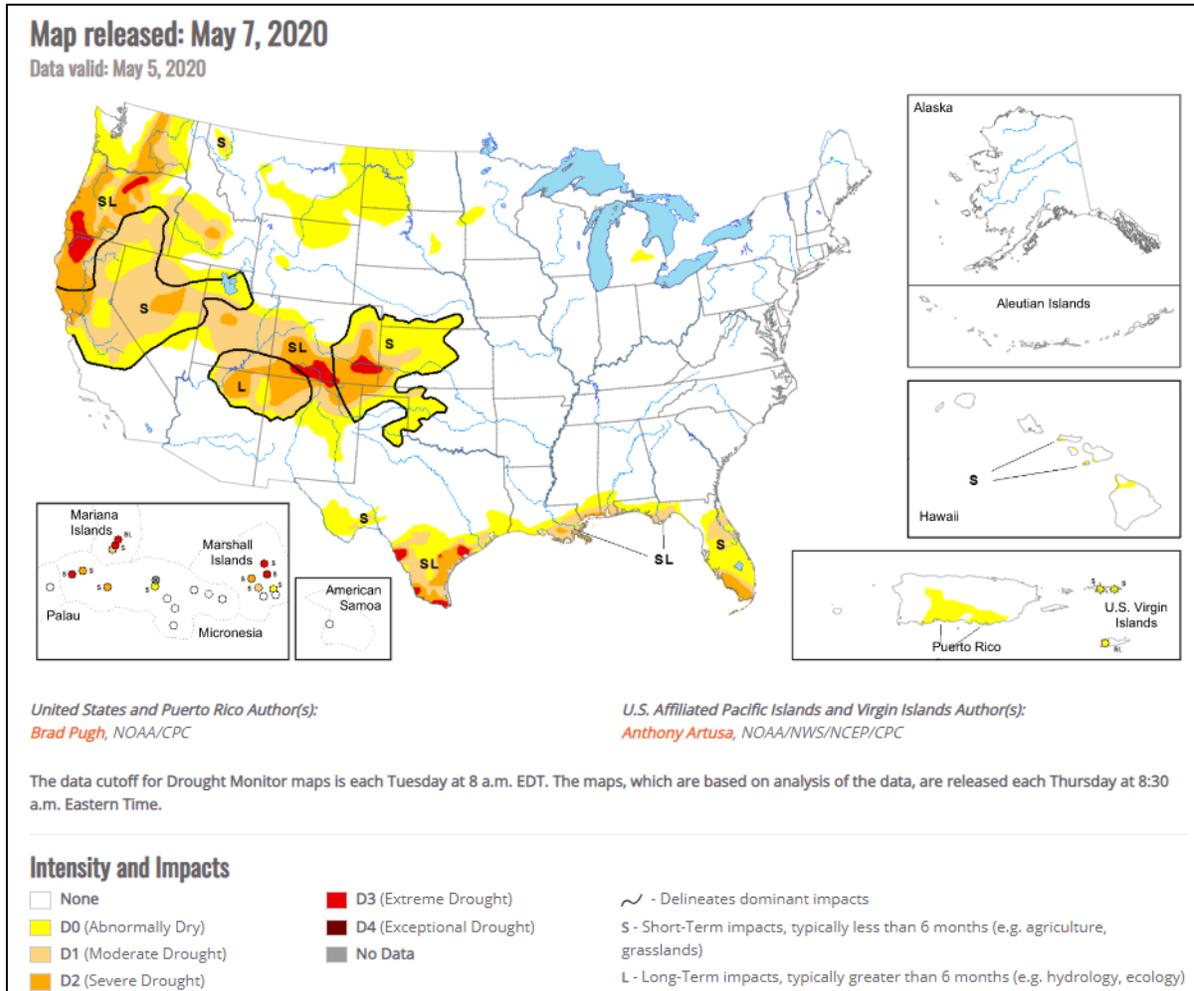
Drought

[U.S. Drought Monitor](#)

Source: National Drought Mitigation Center

[U.S. Drought Portal](#)

Source: NOAA



Current [National Drought Summary](#), May 7, 2020

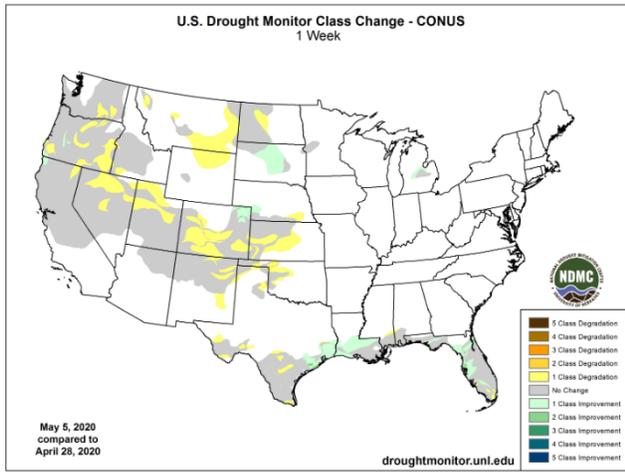
Source: National Drought Mitigation Center

“A strong cold front progressed southeast across the Great Plains, Mississippi Valley, and Southeast on April 28 and 29. This cold front was a focus for a severe weather outbreak from Oklahoma and eastern Texas east to the middle and lower Mississippi Valley. As this front shifted south, heavy rain (more than 2 inches) fell from the western Gulf Coast east to the Florida Big Bend and Florida Gulf Coast. A summer-like ridge of high pressure aloft led to an early and persistent heat wave across southern California and the Desert Southwest during late April into early May. Much above normal temperatures also affected the southern Rockies and southern Great Plains. To the north of this upper-level ridge, multiple low pressure systems along a nearly stationary front resulted in occasional thunderstorms with locally heavy rain (1 inch or more) to the central Great Plains, middle Mississippi Valley, and Ohio Valley. Onshore flow led to a wet start to May across the coastal Pacific Northwest, but little to no precipitation was observed across the Great Basin. Surface low pressure, centered across the Gulf of Alaska, resulted in light to moderate precipitation amounts to the Kenai Peninsula, southeast mainland Alaska, and the Alaska Panhandle. Rainfall was generally suppressed across the tropical central and eastern Pacific, including Hawaii, during late April into the beginning of May. This dry pattern over the tropics extended east to Puerto Rico.”

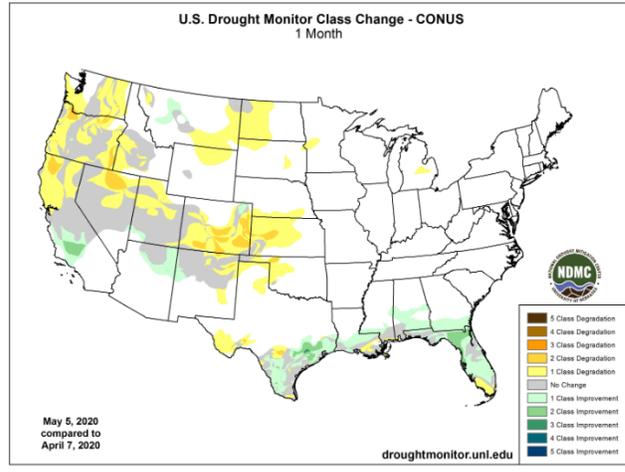
Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

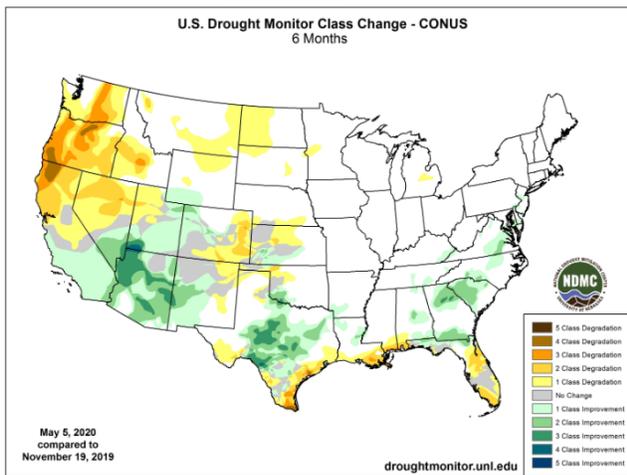
1 Week



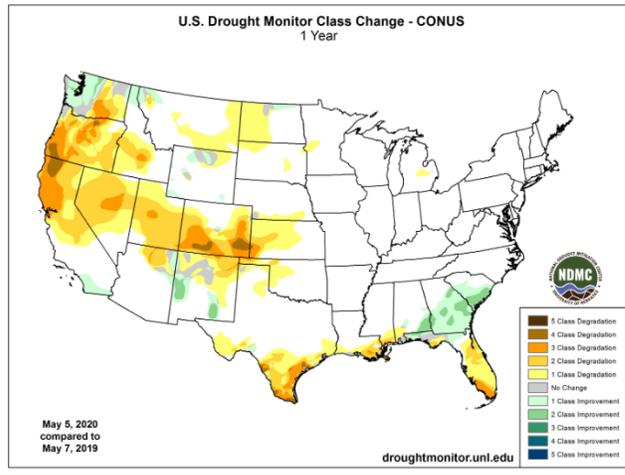
1 Month



6 Months



1 Year



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

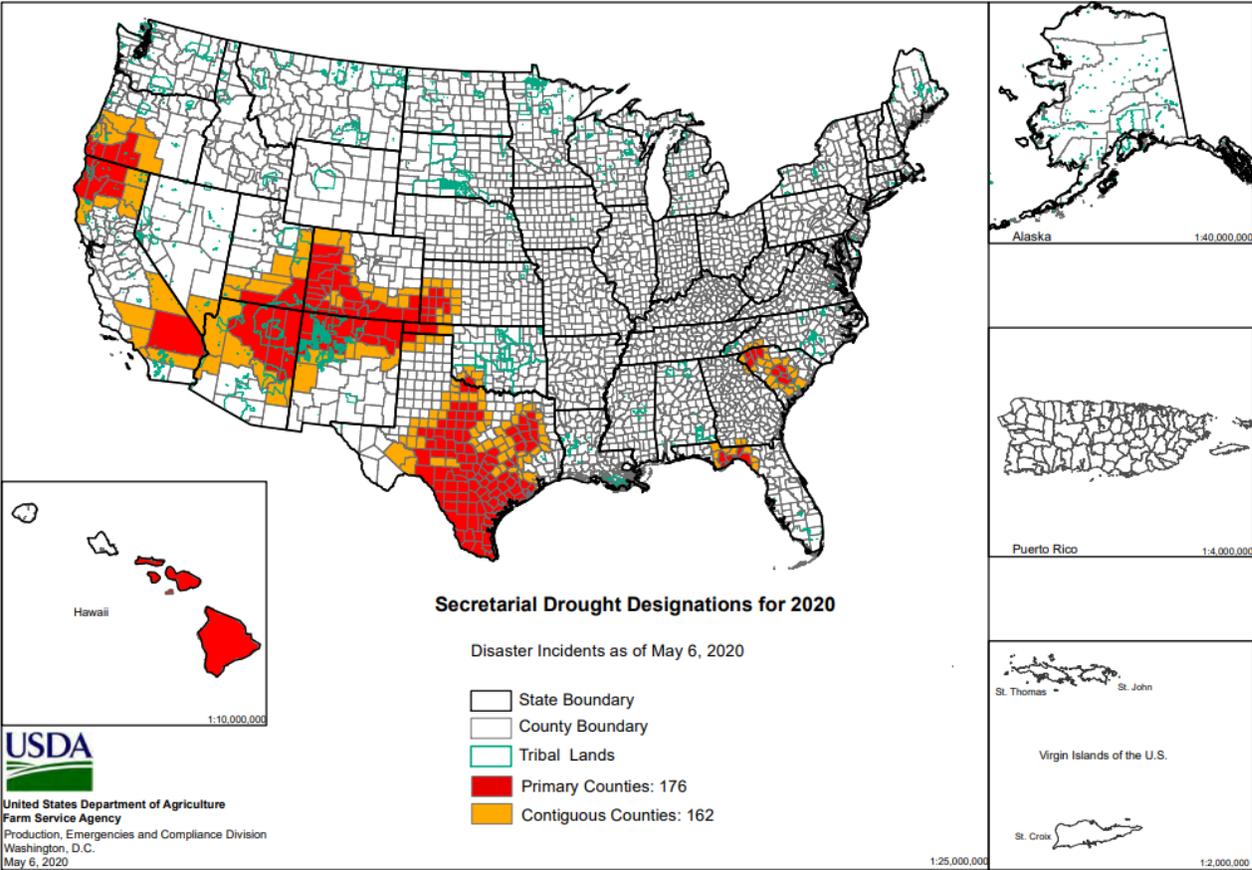
Highlighted Drought Resources

- [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

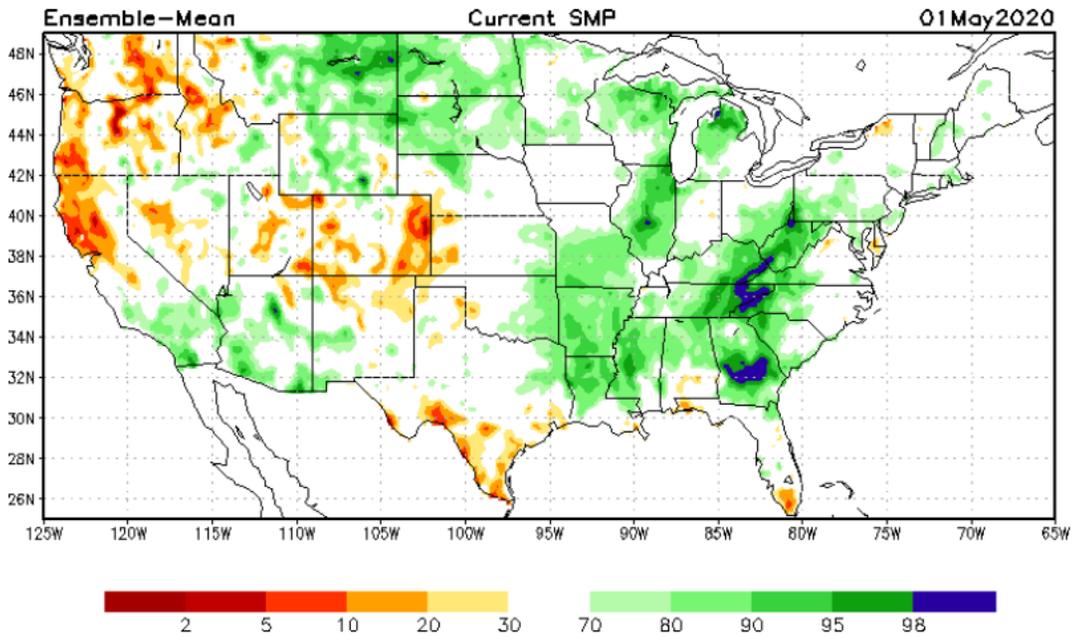
2020 Secretarial Drought Designations - All Drought



Other Climatic and Water Supply Indicators

Soil Moisture

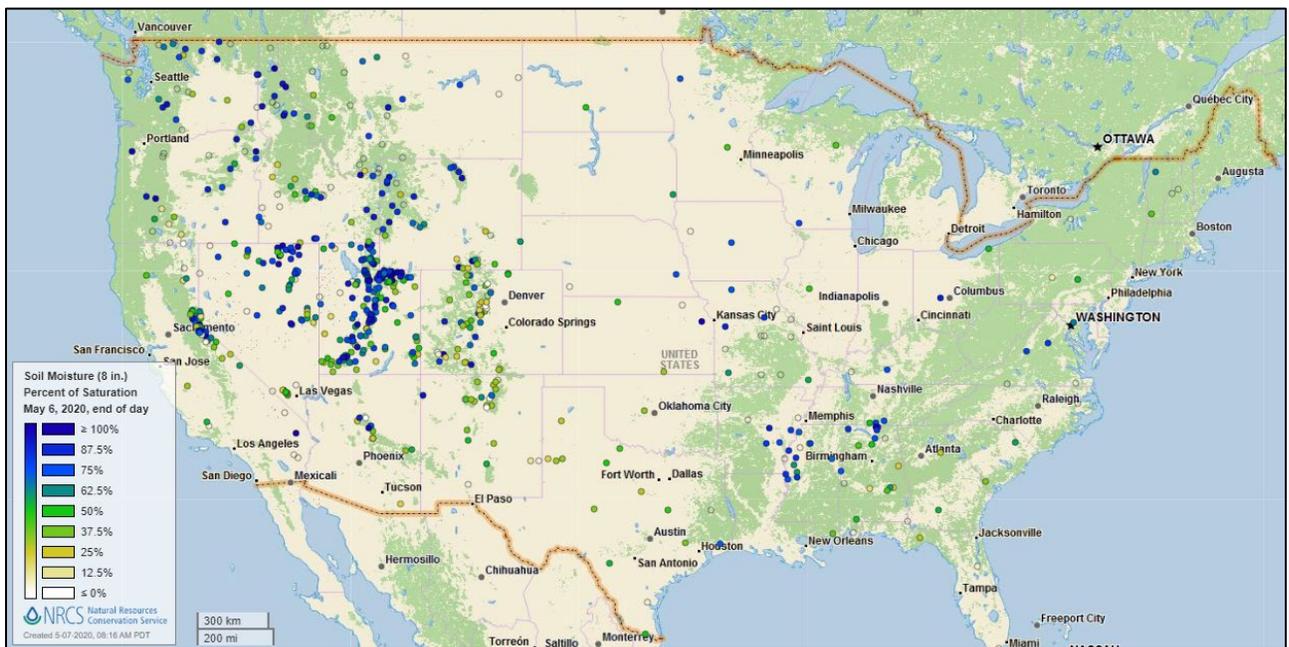
Source: NOAA National Centers for Environmental Prediction



[Modeled soil moisture percentiles](#) as of May 1, 2020

Soil Moisture Percent of Saturation

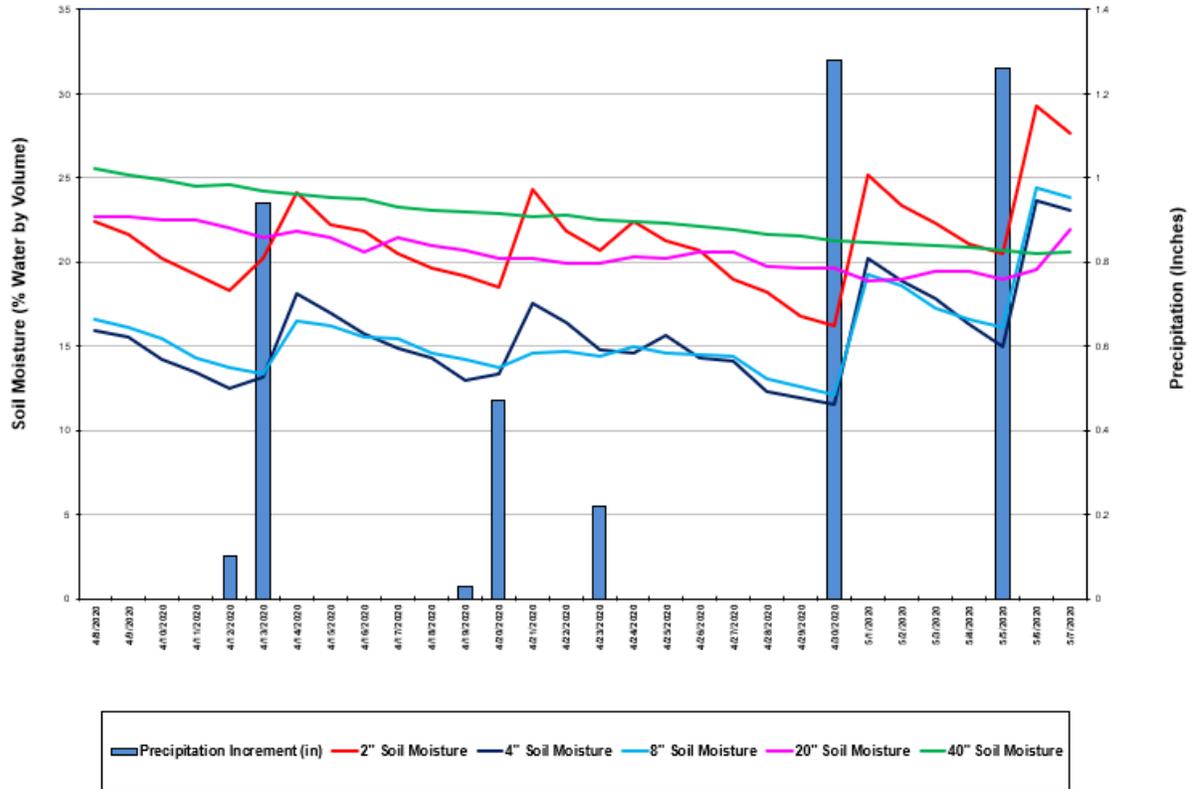
Source: NRCS SNOTEL and [Soil Climate Analysis Network](#) (SCAN)



Soil Moisture Data

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

Pee Dee, South Carolina (SCAN site 2037)
Daily Mean Soil Moisture vs. Daily Precipitation



This chart shows the soil moisture and precipitation for the last 30 days at the [Pee Dee](#) SCAN site in South Carolina. Several precipitation events throughout the month increased soil moisture at the -2", -4", and -8" sensors. Accumulated precipitation for the 30-day period totaled 4.3 inches.

Soil Moisture Data Portals

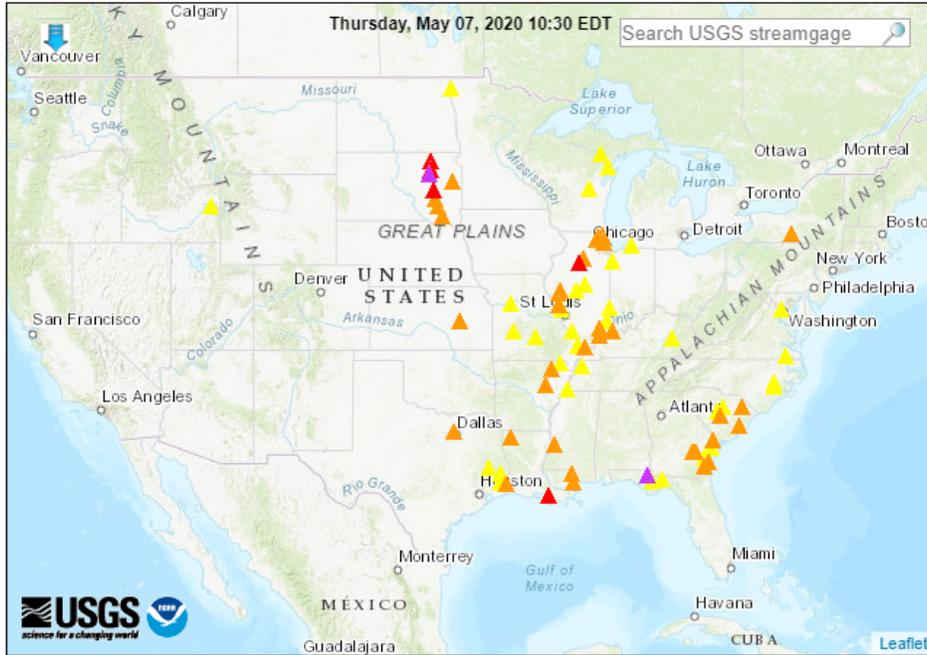
- [CRN Soil Moisture](#)
- [Texas A&M University North American Soil Moisture Database](#)
- [University of Washington Experimental Modeled Soil Moisture](#)

Streamflow, Drought, Flood, and Runoff

Source: U.S. Geological Survey

Map of flood and high flow conditions

(42 in floods [major: 2, moderate: 5, minor: 35], 33 in near-flood)



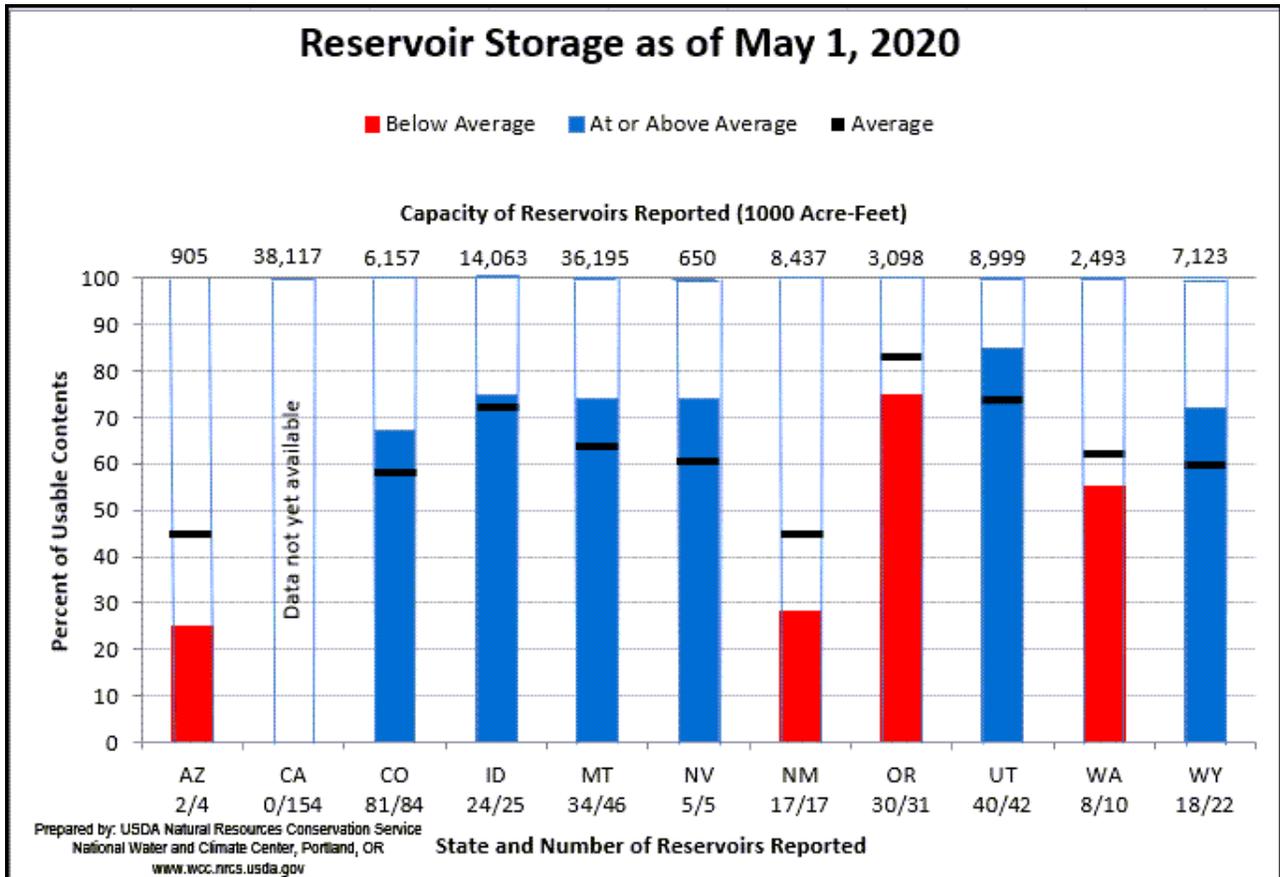
Explanation - Percentile classes						
<95	95-98	>= 99	Above action stage	Above flood stage	Above moderate flood stage	Above major flood stage
▲ Streamgage with flood stage ○ Streamgage without flood stage						

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

Reservoir Storage

Western States Reservoir Storage

Source: NRCS National Water and Climate Center



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

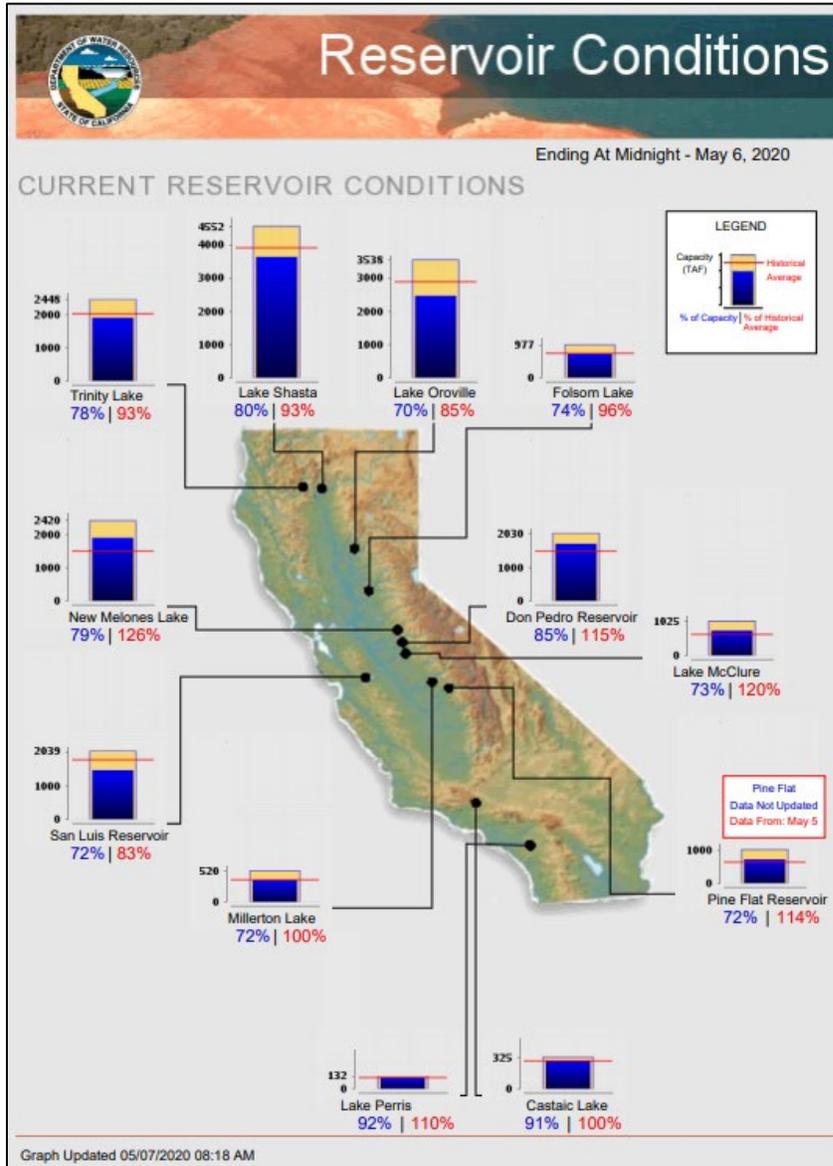
Hydromet Teacup Reservoir Depictions

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

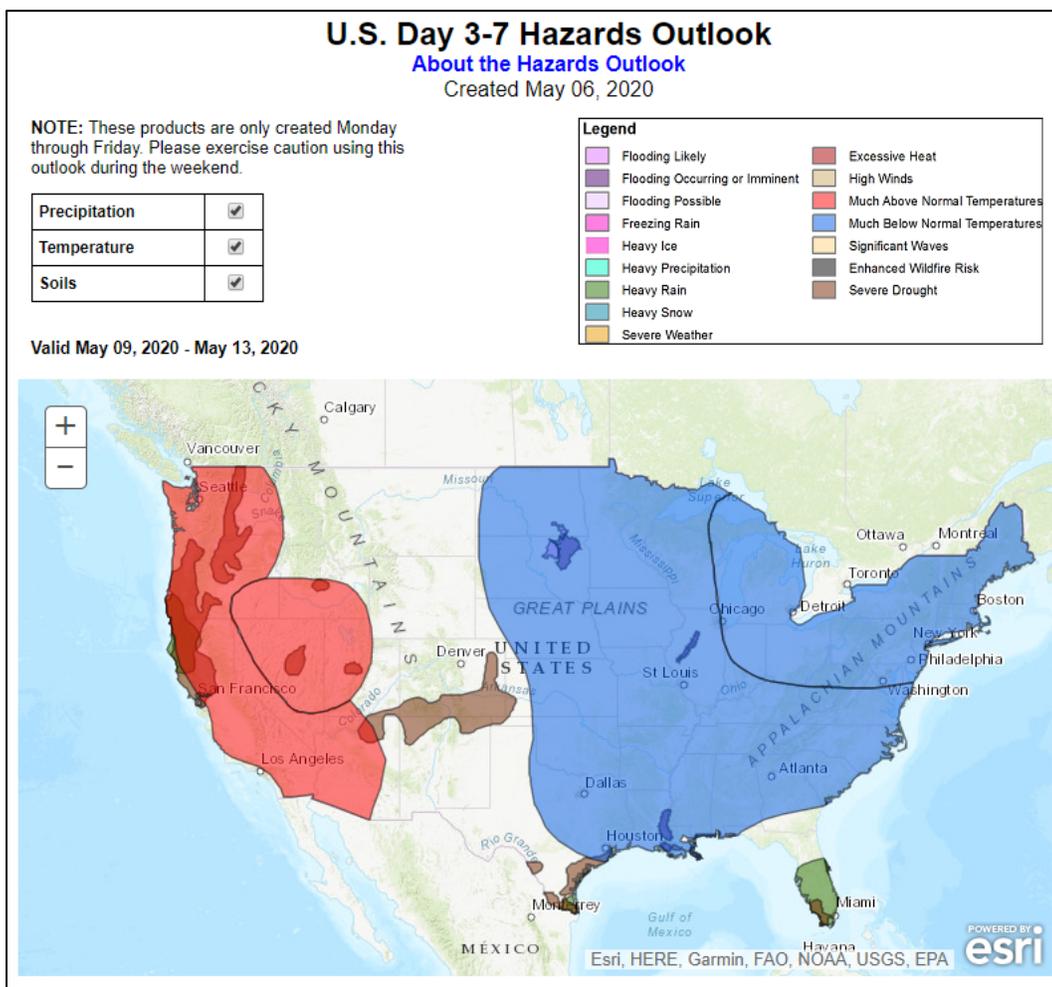
Agricultural Weather Highlights

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

National Outlook, Thursday, May 7, 2020: “From the Plains to the Atlantic Seaboard, a late-season cool spell will persist into next week. Across the Midwest and East, the unusually cold conditions will reach peak intensity during the weekend, when widespread freezes can be expected as far south as the Ohio Valley and the Appalachians. The cold weather may pose a significant threat to fruits, as well as ornamental and nursery crops. Slow emergence and development of recently planted summer crops, including Midwestern corn and soybeans, should help to limit exposure to potential freeze injury. In advance of the weekend cold wave, a storm system could produce as much as 1 to 2 inches of rain across the southeastern Plains, mid-South, Ohio Valley, and Northeast. Heavier rain may fall in Deep South Texas and across Florida’s peninsula. In contrast, little or no precipitation will fall during the next 5 days west of the Rockies. The NWS 6- to 10-day outlook for May 12 – 16 calls for near- or below-normal temperatures nationwide, except for warmer-than-normal weather in the Pacific Northwest, southern Florida, and southern sections of the Rockies and Plains. Meanwhile, near- or above-normal rainfall across most of the country should contrast with drier-than-normal conditions in the middle Atlantic region and parts of the Southwest.”

Weather Hazards Outlook: [May 9 – 13, 2020](#)

Source: NOAA Weather Prediction Center

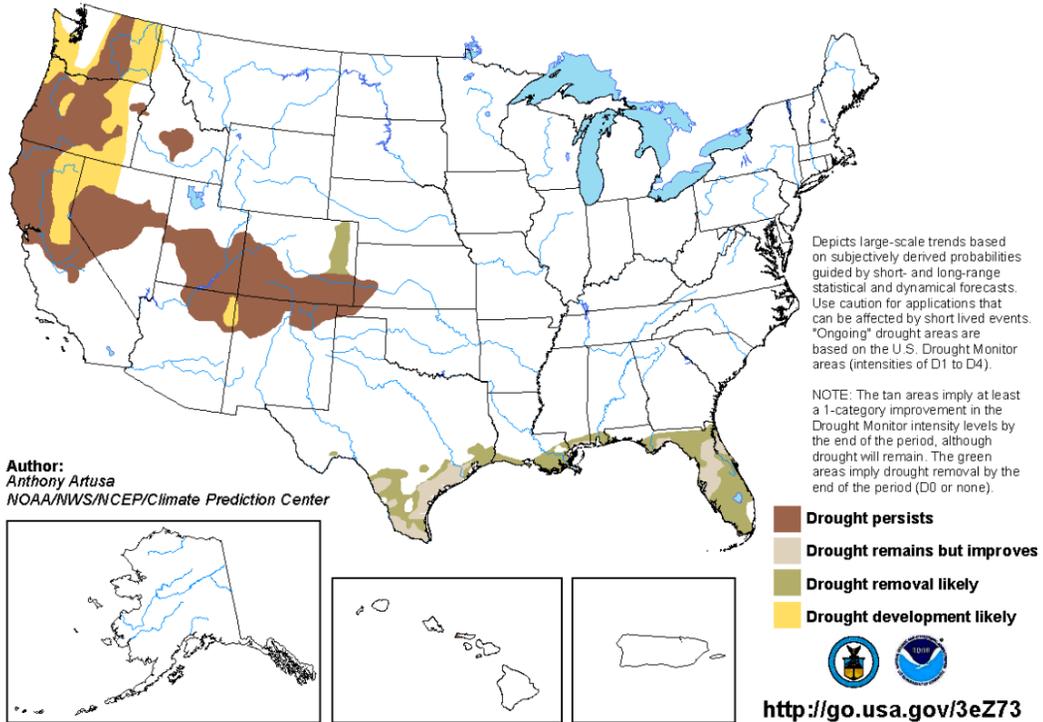


Seasonal Drought Outlook: [April 16 – July 31, 2020](#)

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

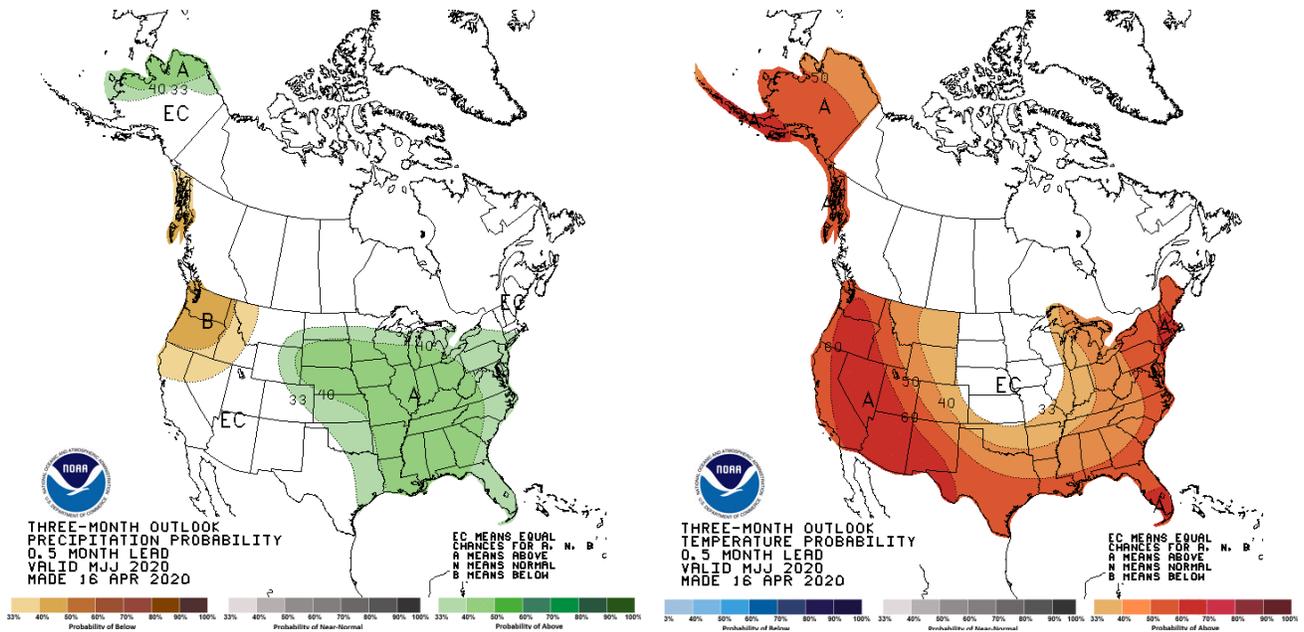


Climate Prediction Center 3-Month Outlook

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](#).