

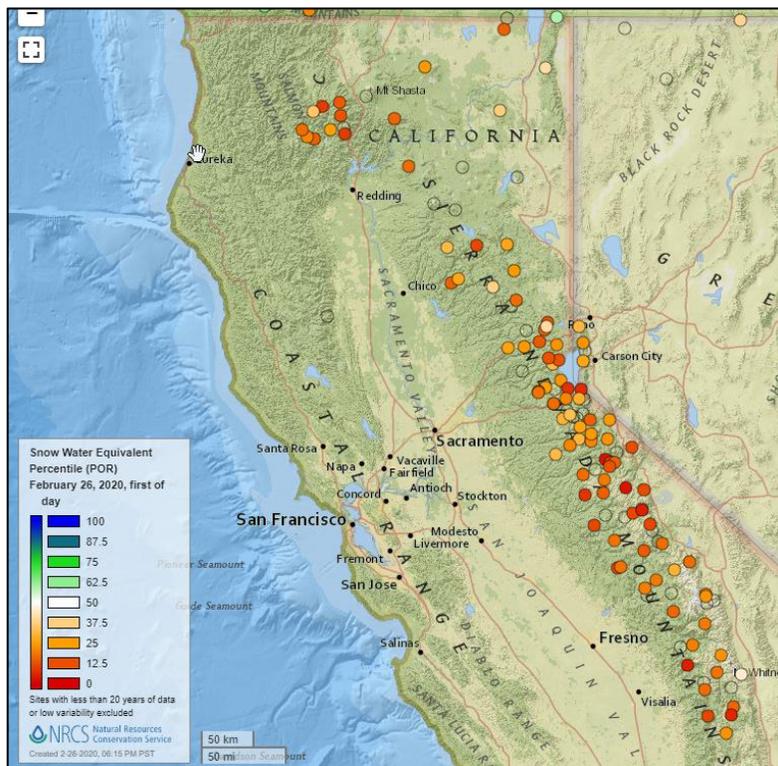
Water and Climate Update

February 27, 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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Dry February leaves Sierra Nevada snowpack much below average

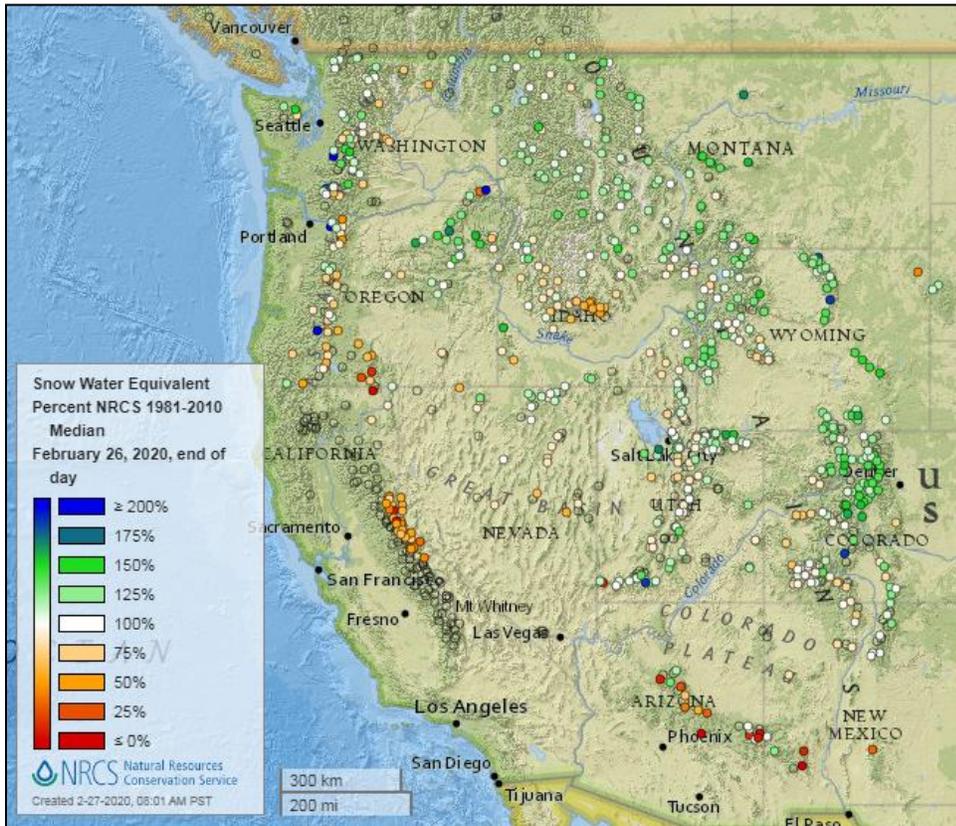


February-to-date in the Sierra Nevada of California and Nevada has been extremely dry with little to no additional snow since mid-January. The snowpack across the area is much below normal, with the period of record percentile in the lowest 25% for almost all SNOTEL and California Department of Water Resources automated stations. The lack of moisture in this normally wet time of year has caused drought designation expansion in the Drought Monitor map (see page 11). Although the snowpack is low in the Sierra Nevada, much of the northern Cascades and Rockies are currently near or above normal.

Related:

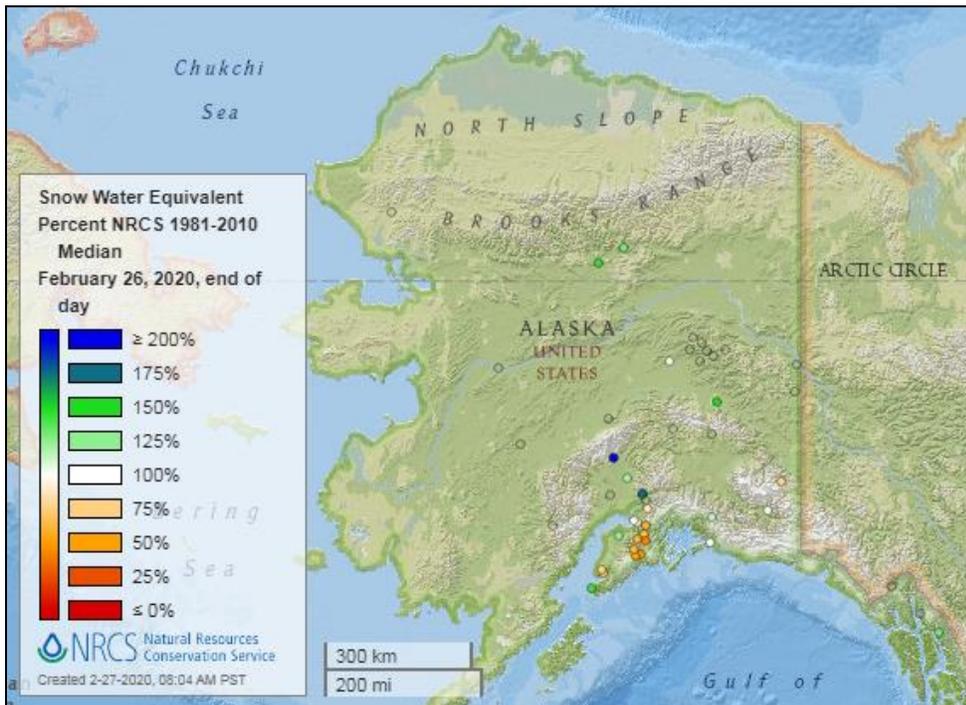
- [California Drought: Nearly a quarter of California now in drought, feds say](#) – East Bay Times (CA)
- [After a Dry February, Here’s Where Drought Conditions Expanded in California](#) – NBC Los Angeles (CA)
- [Nearly 25 percent of California in ‘moderate drought’ status, federal monitor says](#) Sacramento Bee (CA)
- [Low snowpack, dry weather spark wildfire concerns, experts say](#) – Calaveras Enterprise (CA)
- [Amid dry winter, California worries about drought, fires](#) – The Fresno Bee (CA)
- [Sparse Sierra Snow Pack Could Mean Early Start to Fire Season](#) – Sierra News Online (CA)

Snow



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

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

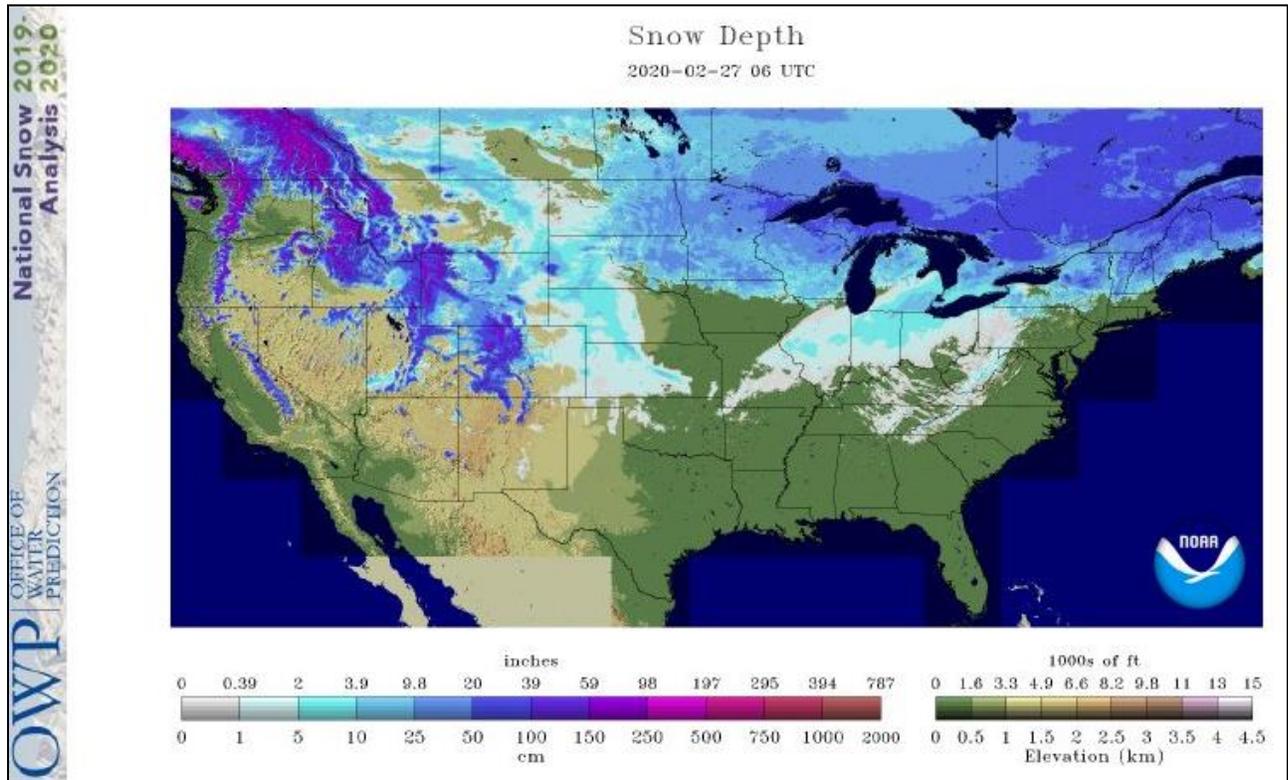


[Alaska snow water equivalent percent of median map](#)

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

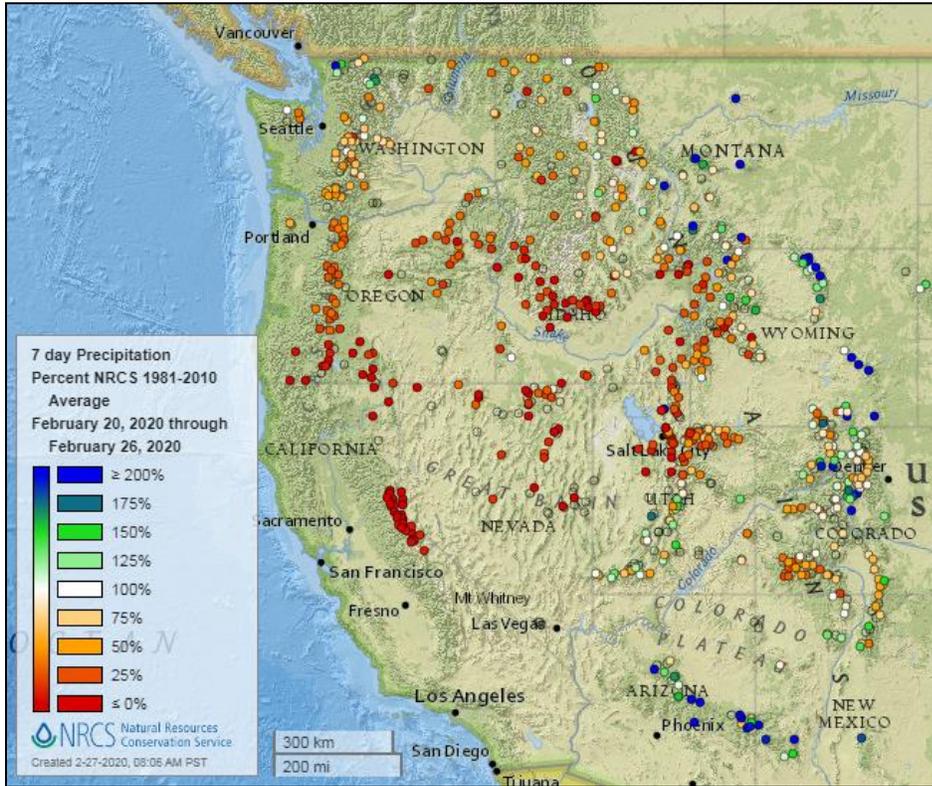
Current Snow Depth, National Weather Service Snow Analysis

Source: NOAA Office of Water Prediction



Precipitation

Last 7 Days, NRCS SNOTEL Network

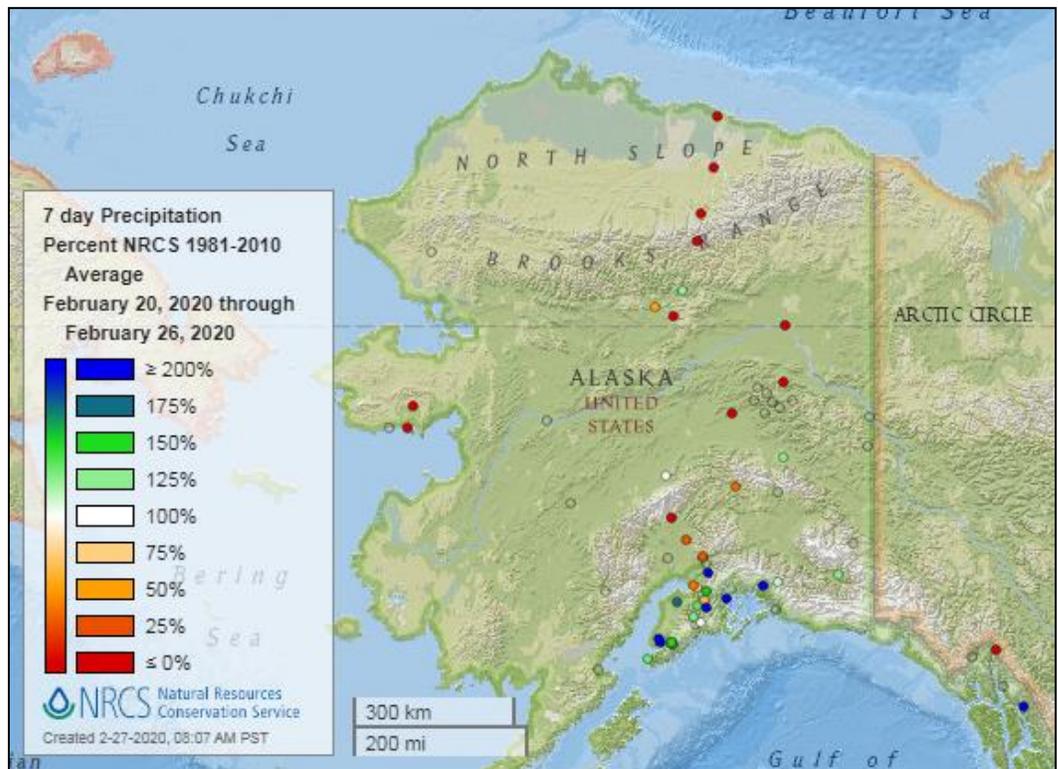


[7-day precipitation percent of average map](#)

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](#)



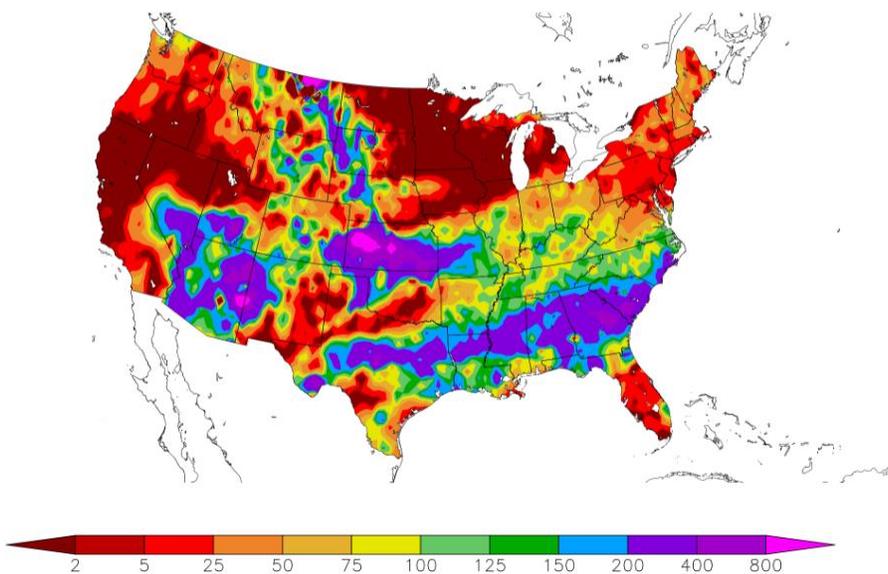
Last 7 Days, National Weather Service (NWS) Networks

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 (%)
2/19/2020 – 2/25/2020



Generated 2/26/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

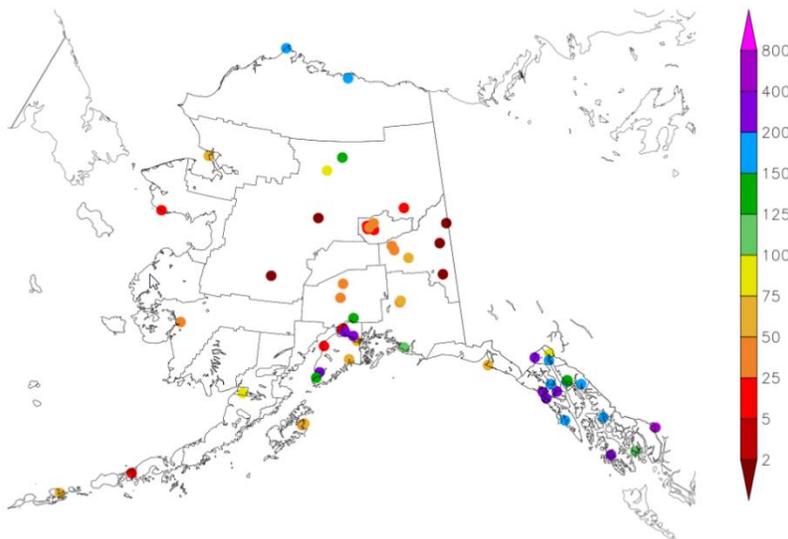
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Percent of Normal Precipitation (%)
2/19/2020 – 2/25/2020



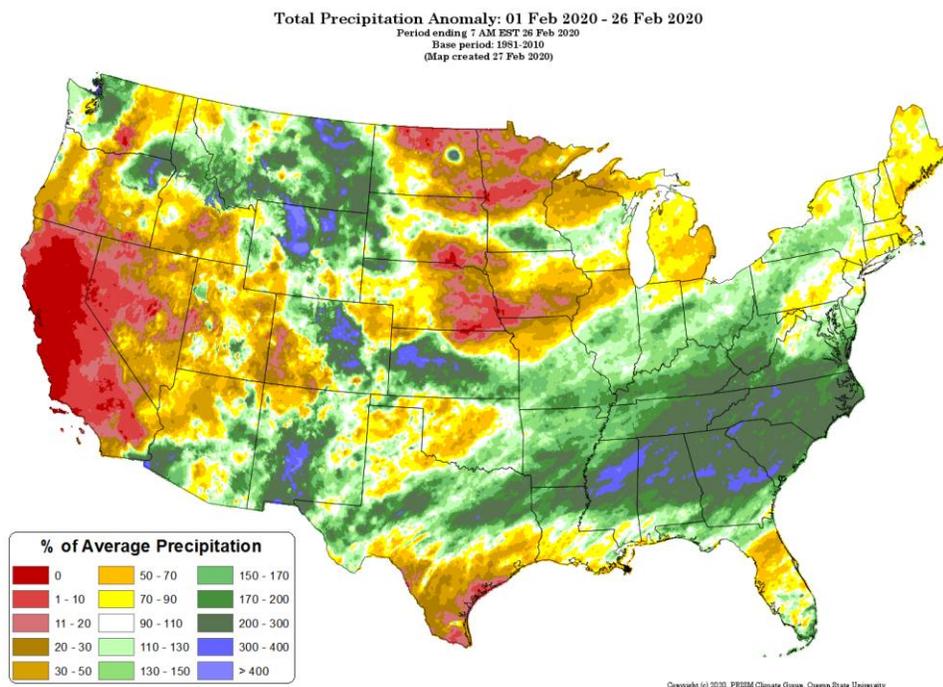
Generated 2/26/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

Water and Climate Update

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

Source: PRISM

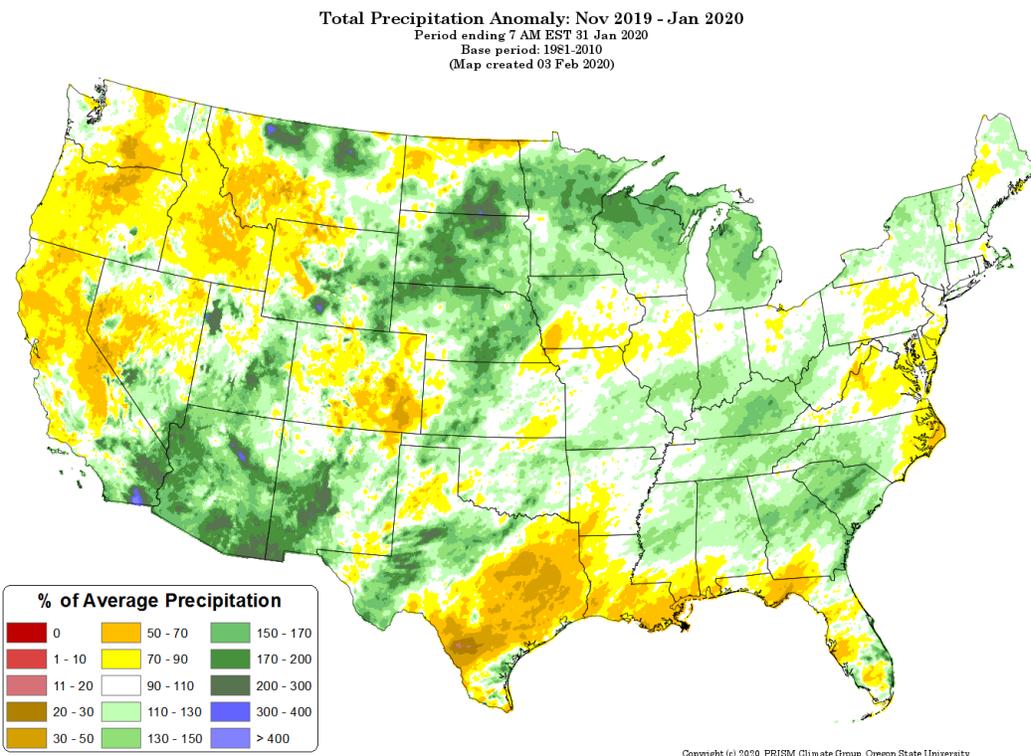


[Month-to-date national total precipitation percent of average map](#)

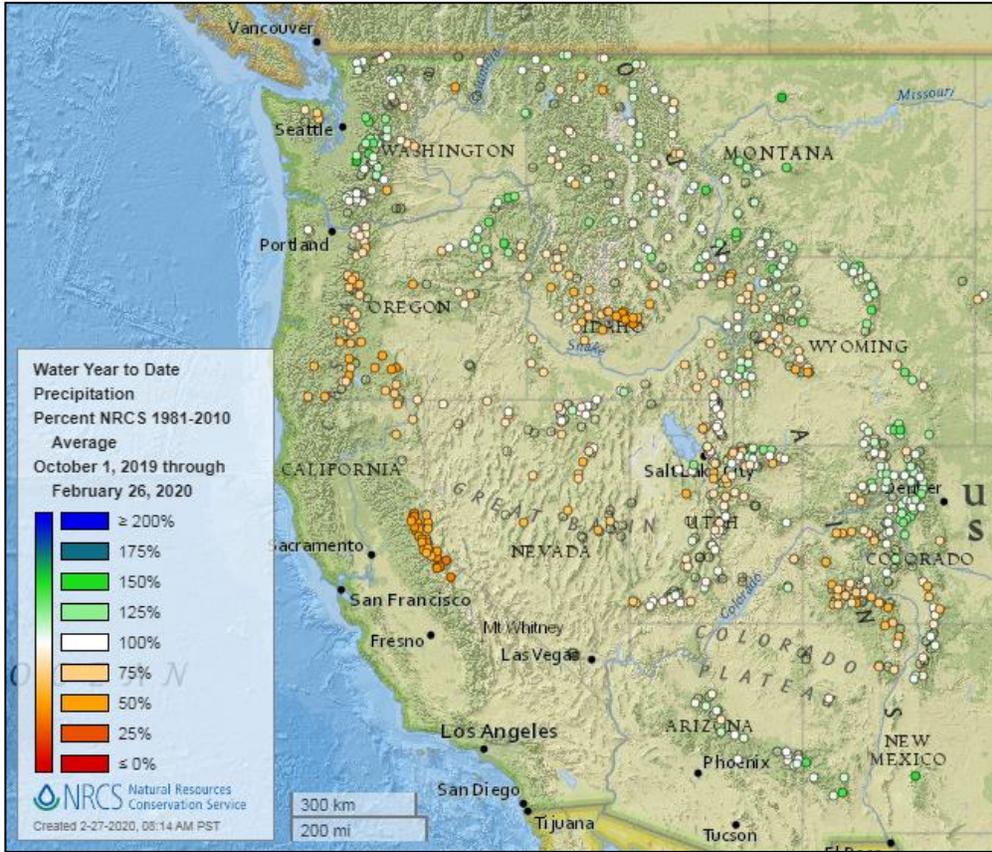
Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

[November 2019 through January 2020 total precipitation percent of average map](#)



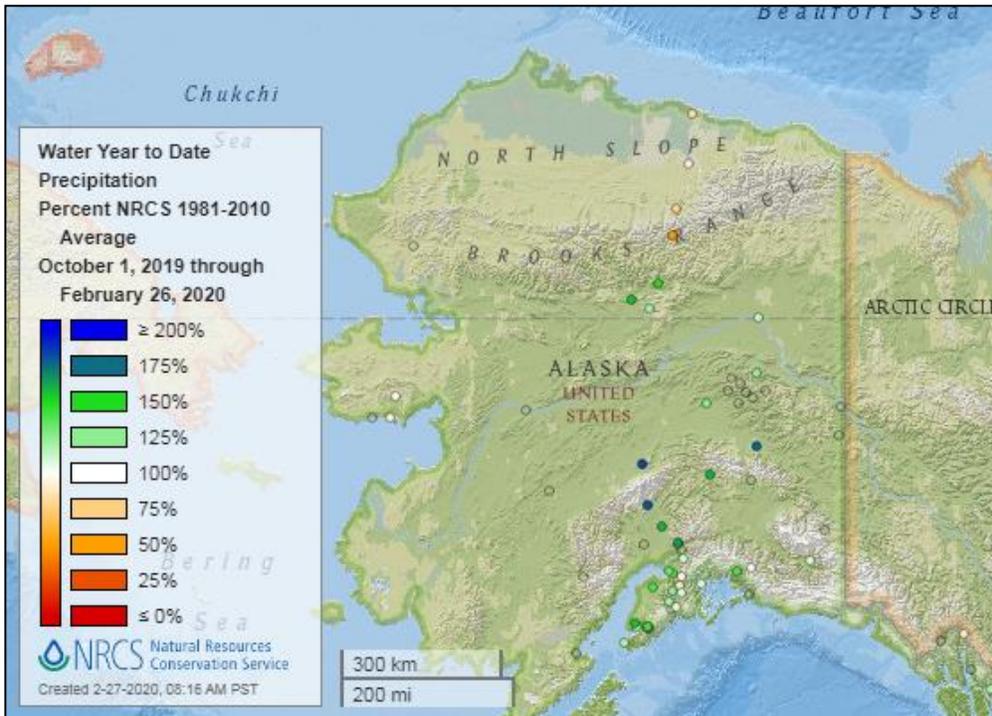
Water Year-to-Date, NRCS SNOTEL Network



[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

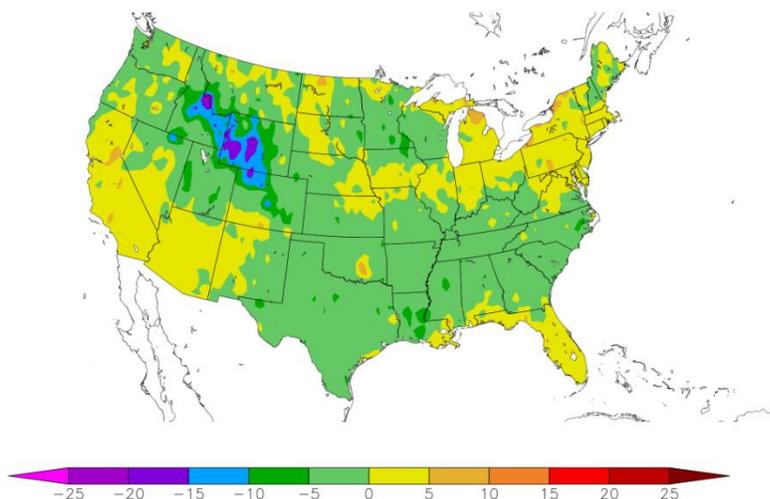
Last 7 Days, National Weather Service (NWS) Networks

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)
2/19/2020 – 2/25/2020



Generated 2/26/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

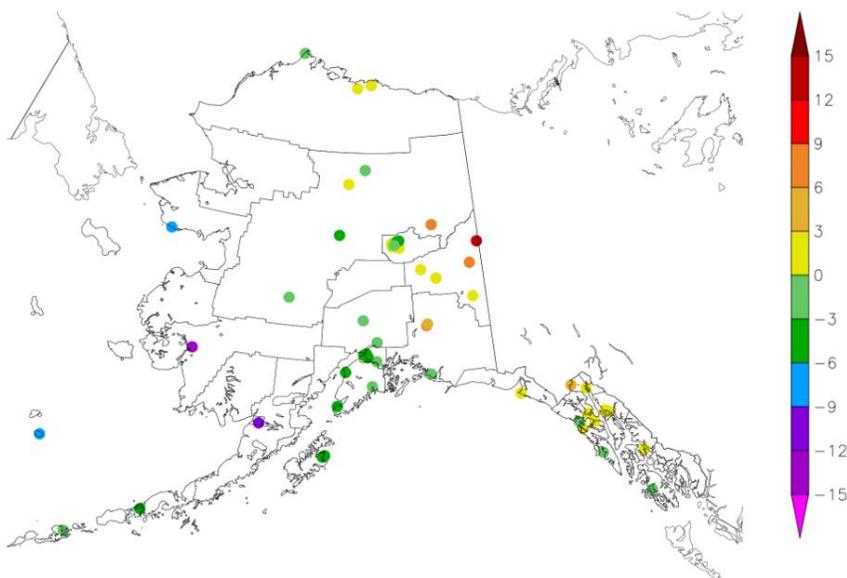
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)
2/19/2020 – 2/25/2020



Generated 2/26/2020 at HPRCC using provisional data.

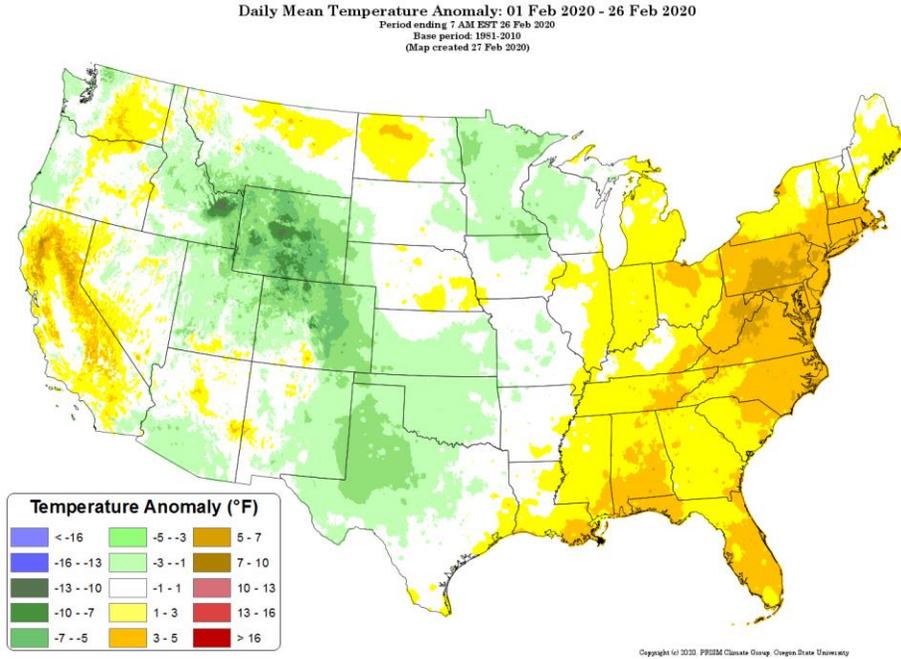
NOAA Regional Climate Centers

Water and Climate Update

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

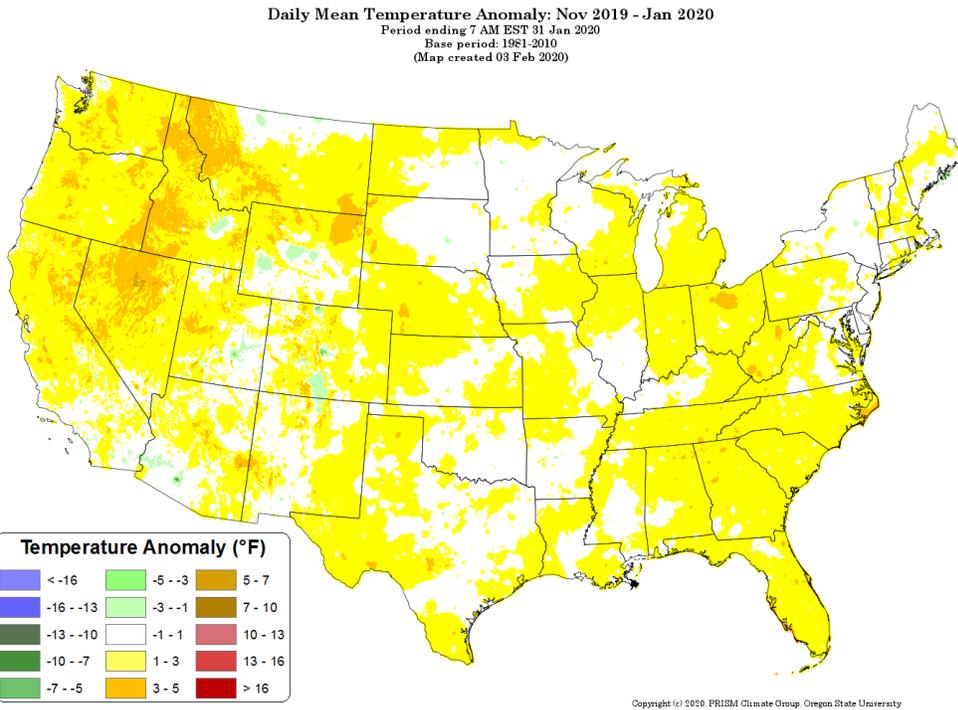
Source: PRISM

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



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

Source: PRISM



[November 2019 through January 2020 daily mean temperature anomaly map](#)

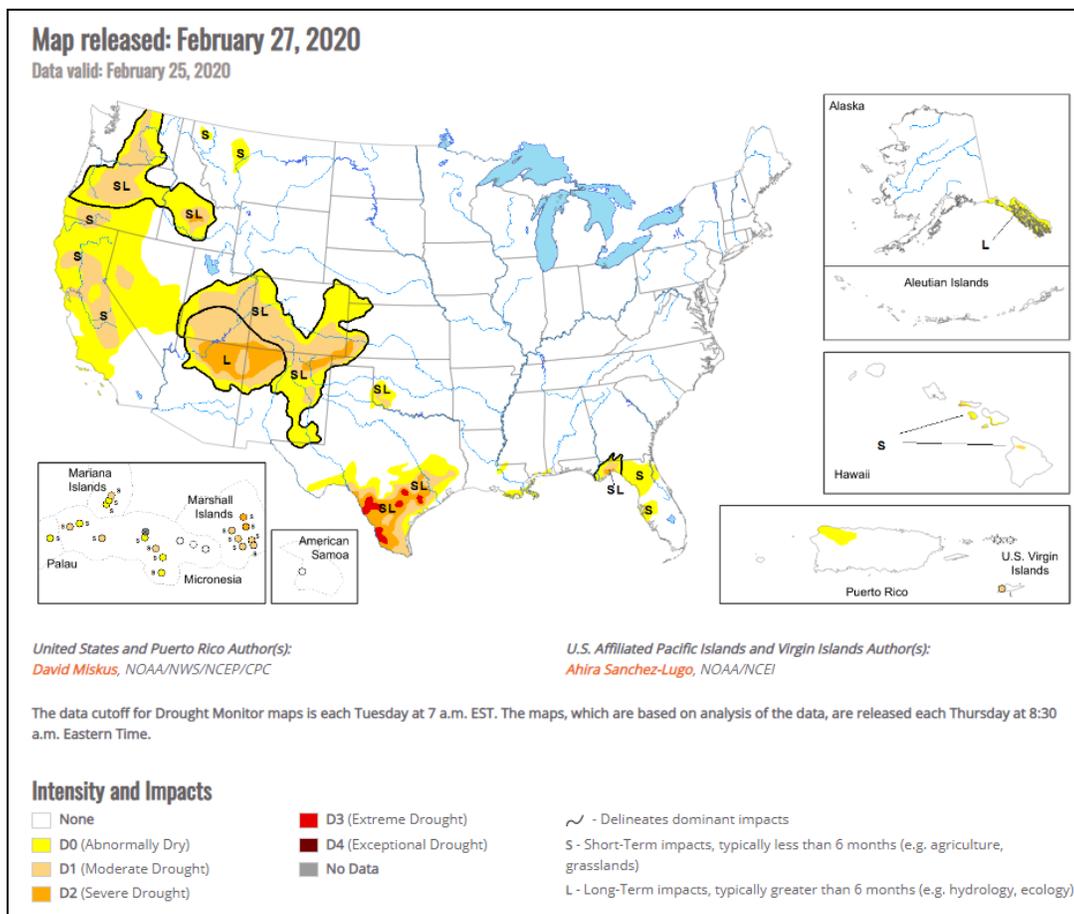
Drought

[U.S. Drought Monitor](#)

Source: National Drought Mitigation Center

[U.S. Drought Portal](#)

Source: NOAA



Current [National Drought Summary](#), February 27, 2020

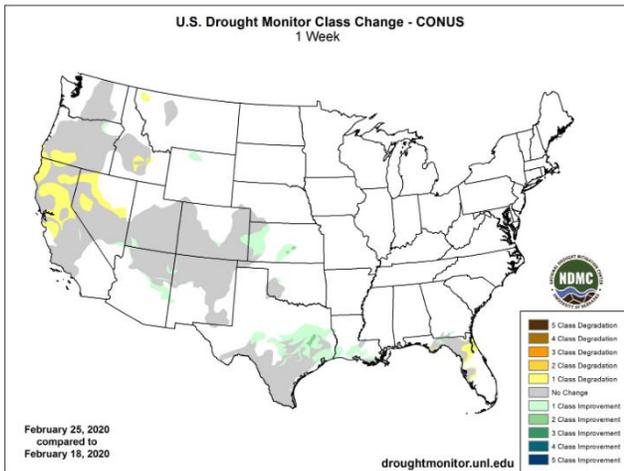
Source: National Drought Mitigation Center

“High pressure continued to persist over the eastern Pacific Ocean, forcing a split in the normal west to east upper-air flow for Pacific storm systems. As a result, storms bypassed the central West (e.g. California and the Great Basin), instead tracking northward into the Pacific Northwest and British Columbia, and southward across Baja California and the Southwest. This pattern has produced a very dry January and February in California, normally the two wettest months of the year, resulting in an expansion of short-term D0 and D1 that are impacting non-irrigated land and non-managed rivers. Fortunately, the statewide reservoir storage stood at 104% of average for this time of year. Farther to the east, once these systems reached the Plains, Gulf moisture was entrained into them, generating widespread precipitation across the South and Southeast and mixed or frozen precipitation in more northern locations. The week’s greatest precipitation (1-4 inches) fell on the northern Cascades, parts of the Southwest (mostly Arizona), the central Plains (mainly Kansas), and from central Texas eastward across the lower Mississippi, Tennessee, and Ohio Valleys, the Southeast, and southern Appalachians. Little or no precipitation, however, fell on most of California, the Great Basin, and Intermountain West, northern Plains and upper Midwest, parts of the southern Plains, most of Florida, and the mid-Atlantic. Weekly temperatures averaged below normal in southwestern Alaska, the Northwest, Rockies, Plains, upper Midwest, Southeast, and New England. In contrast, above-normal readings were observed in eastern and southern Alaska, the Southwest, eastern Great Lakes region, mid-Atlantic, and along the eastern Gulf and southern Atlantic Coasts.”

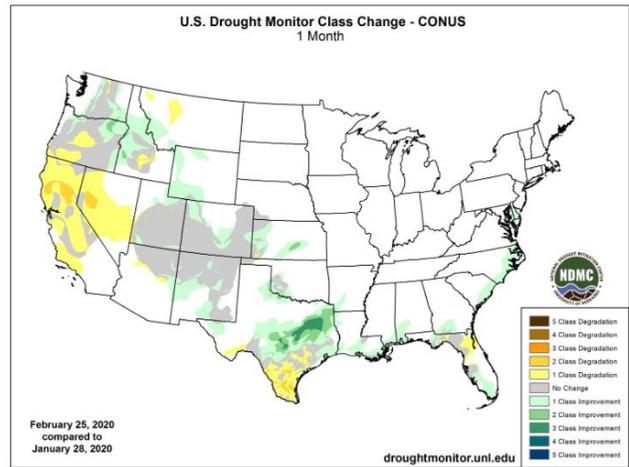
Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

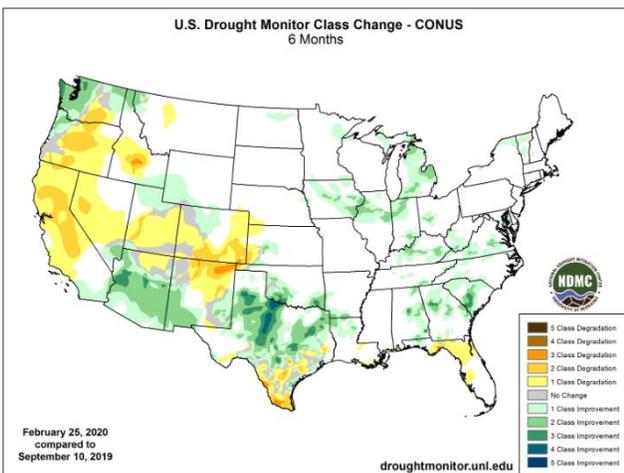
1 Week



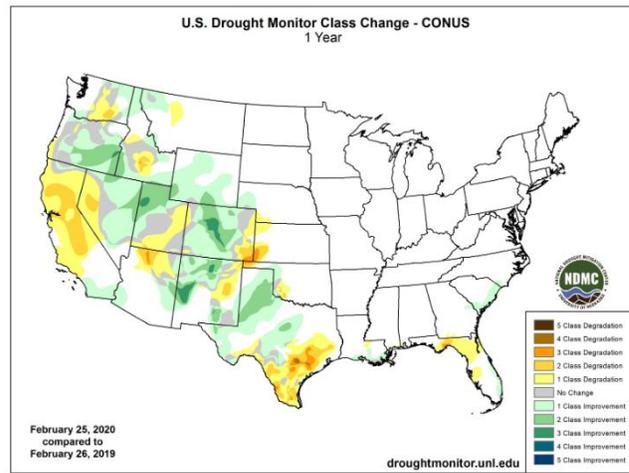
1 Month



6 Months



1 Year



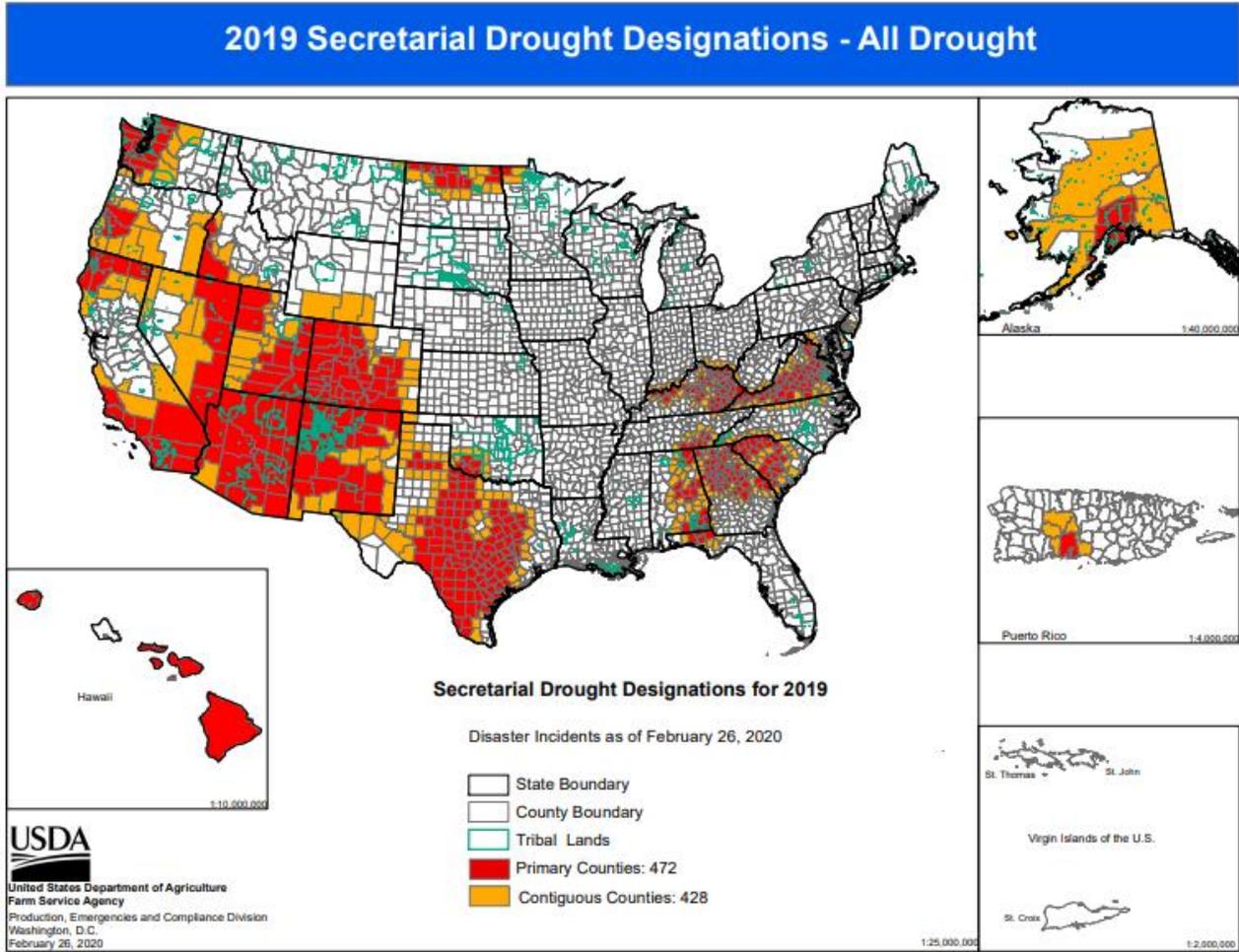
[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

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

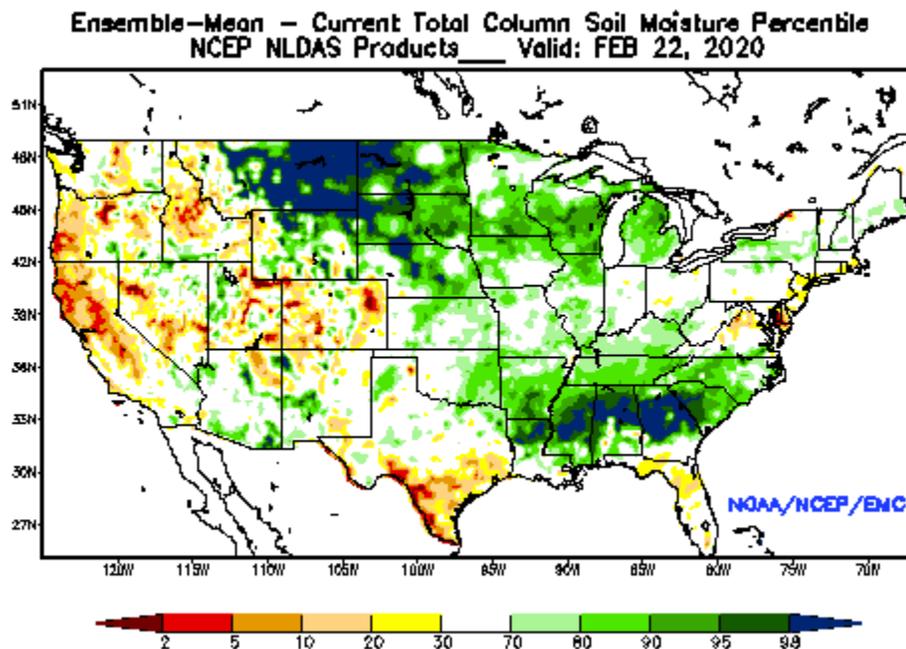
Source: USDA Farm Service Agency



Other Climatic and Water Supply Indicators

Soil Moisture

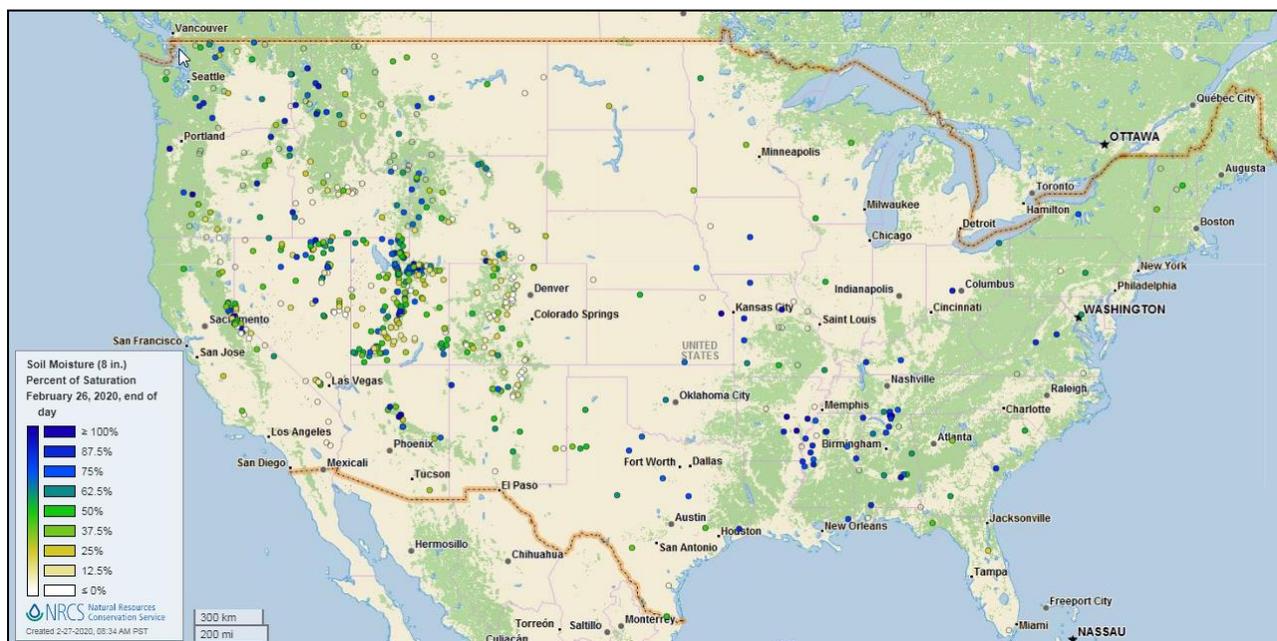
Source: NOAA National Centers for Environmental Prediction



[Modeled soil moisture percentiles](#) as of February 22, 2020

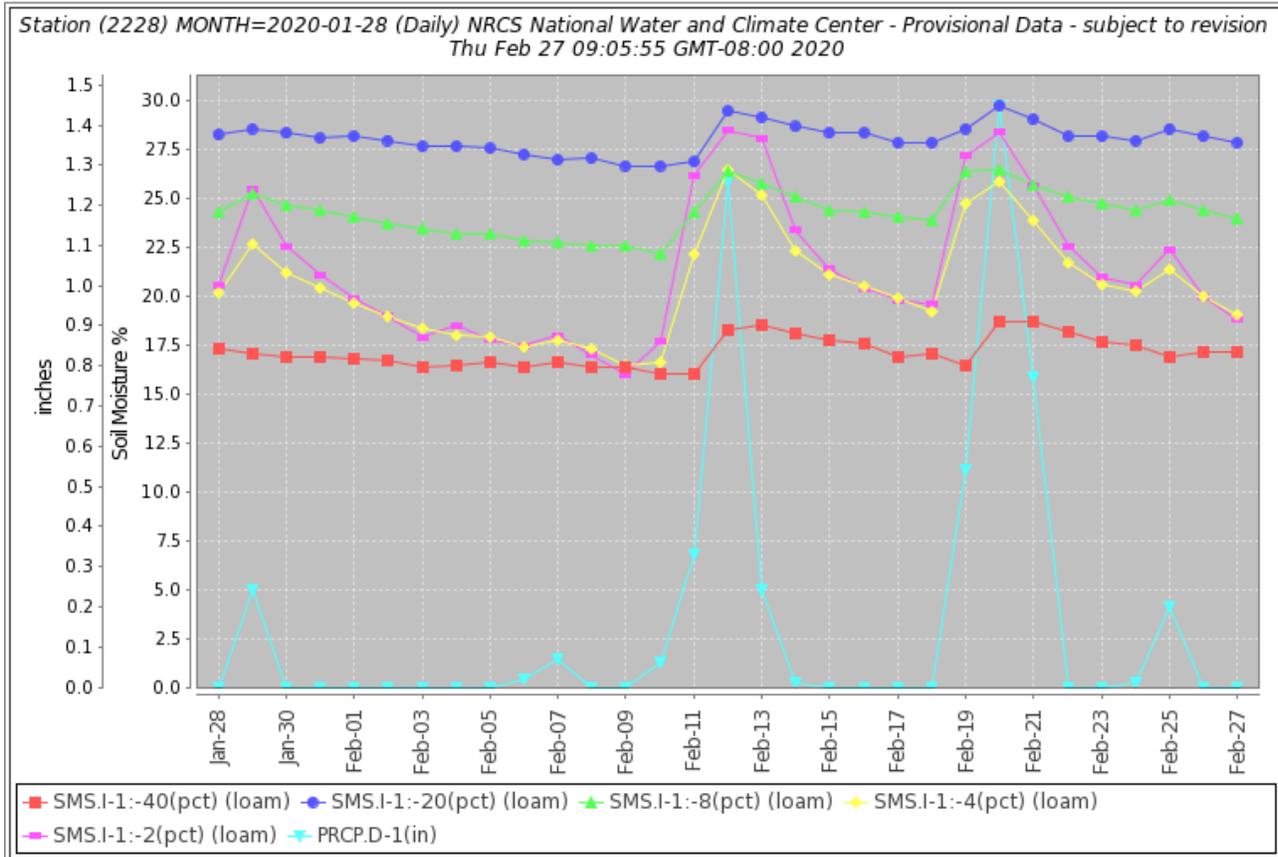
Soil Moisture Percent of Saturation

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 [Nacogdoches](#) SCAN site in Texas. 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 5.2 inches.

Soil Moisture Data Portals

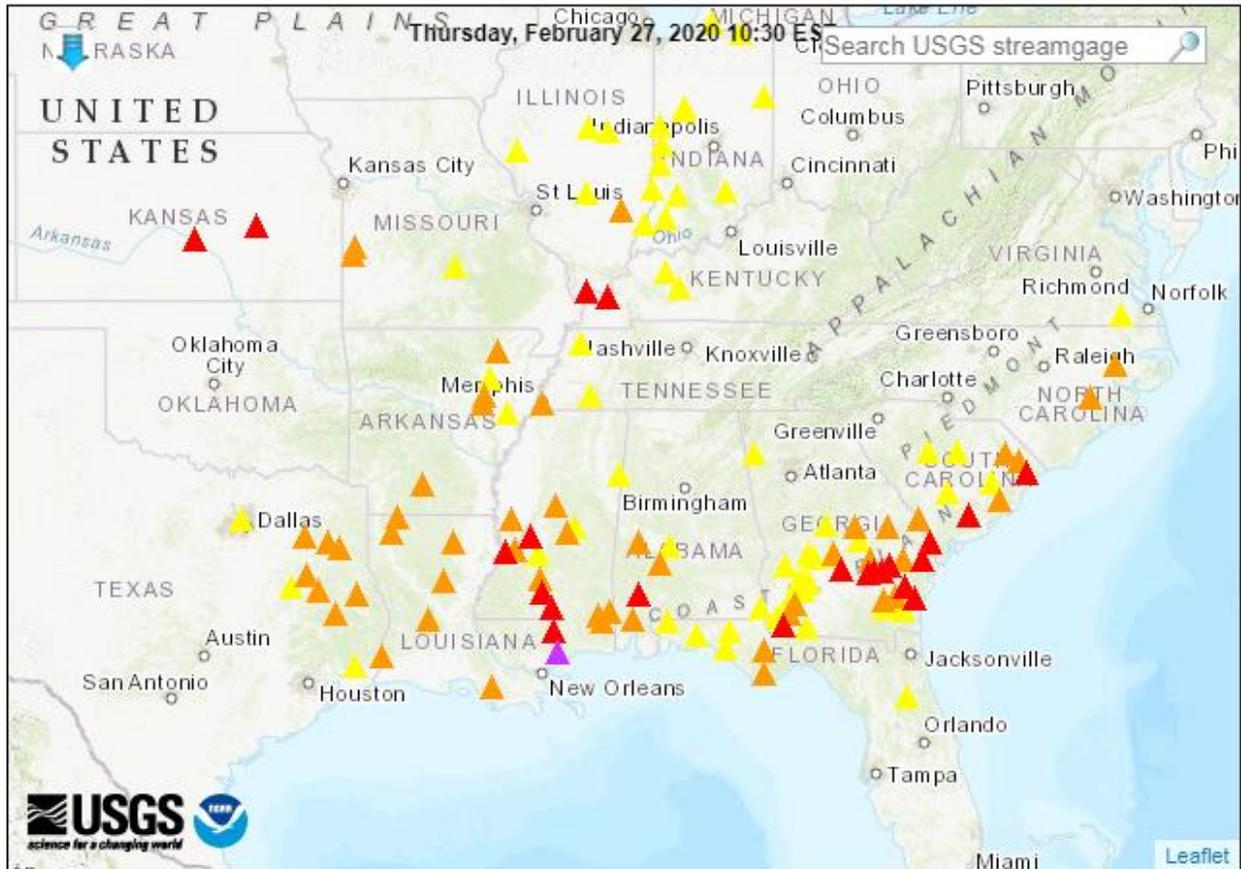
- [CRN Soil Moisture](#)
- [Texas A&M University North American Soil Moisture Database](#)
- [University of Washington Experimental Modeled Soil Moisture](#)

Streamflow, Drought, Flood, and Runoff

Source: U.S. Geological Survey

Map of flood and high flow conditions

(76 in floods [major: 1, moderate: 22, minor: 53], 61 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			

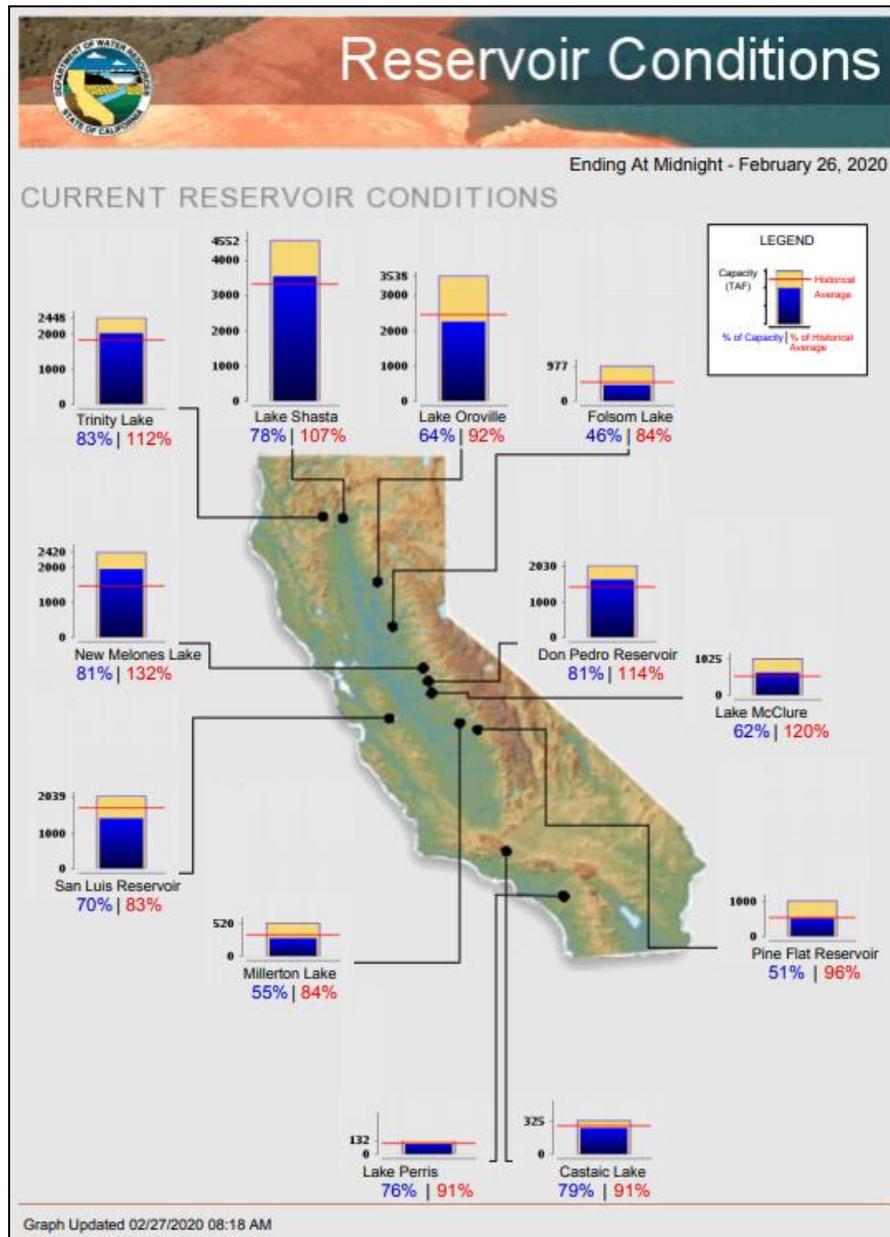
<https://waterwatch.usgs.gov/new/?id=flood-gmap>

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

Reservoir Storage

Current California Reservoir Conditions

Source: California Department of Water Resources



[Current California Reservoir Conditions](#)

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](#)

Short- and Long-Range Outlooks

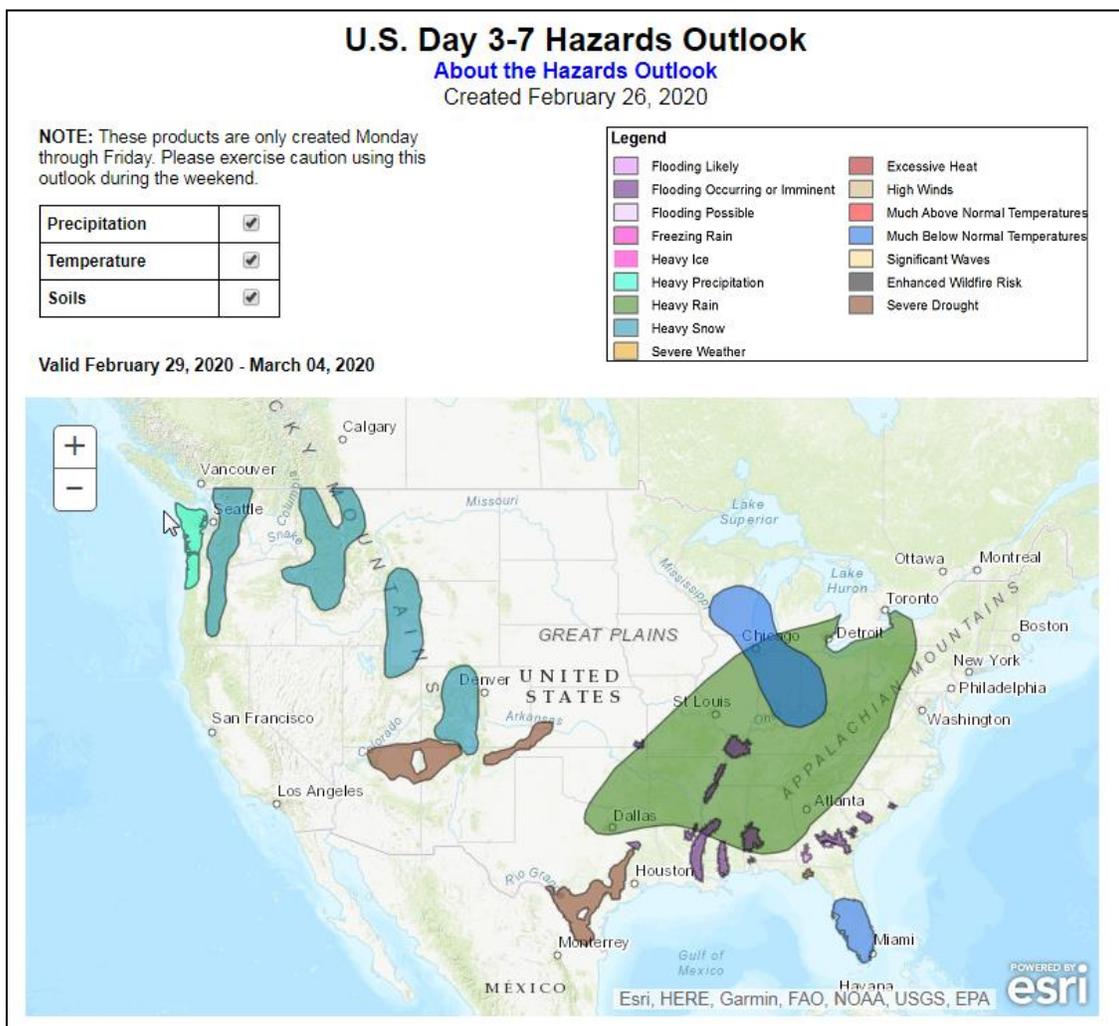
Agricultural Weather Highlights

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

National Outlook, Thursday, February 27, 2020: “An intense storm system currently centered over northern New York will maintain stormy Northeastern conditions for the remainder of today. Heavy rain will fall in coastal New England, while snow will blanket northern sections of New Hampshire and Maine. Blizzard warnings are in effect downwind of Lakes Erie and Ontario. Meanwhile, Western warmth will further expand, reaching the nation’s mid-section during the weekend. By early next week, warm weather will also return across the East, while colder air will settle across the West. Scattered rain and snow showers will accompany the Western cooling trend, although precipitation will be mostly light. Early next week, heavy rain may develop in an area stretching from the southeastern Plains into the Ohio Valley. The NWS 6- to 10-day outlook for March 3 – 7 calls for the likelihood of near or above-normal temperatures and precipitation across most of the country. Colder-than-normal conditions will be confined to central and southern sections of the Rockies and High Plains, while drier-than-normal weather should be limited to southern Texas and from Oregon and California into the Great Basin.”

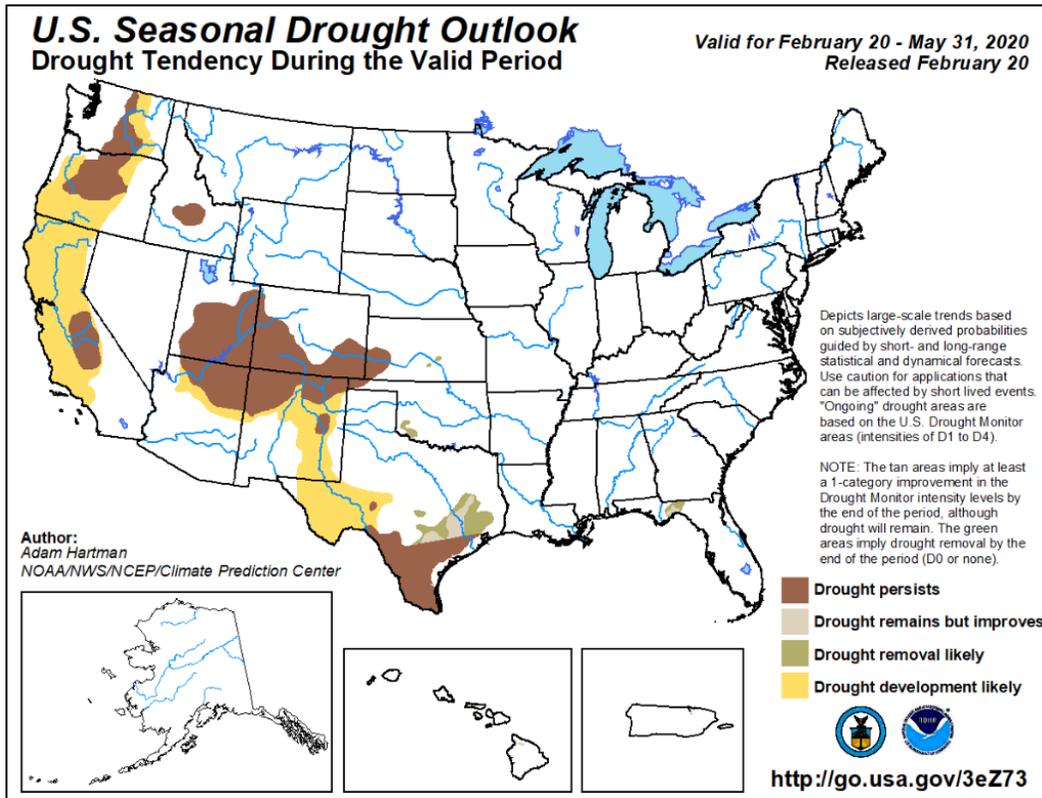
Weather Hazards Outlook: [February 29 – March 4, 2020](#)

Source: NOAA Weather Prediction Center



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

Source: National Weather Service

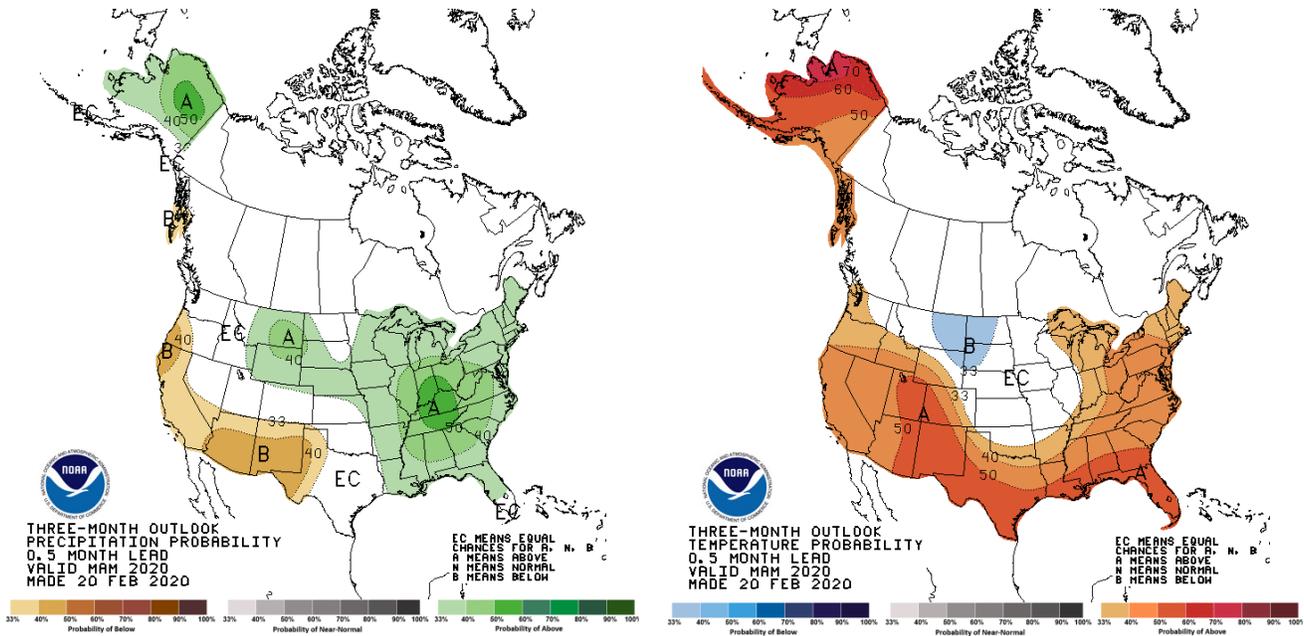


Climate Prediction Center 3-Month Outlook

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](#).