

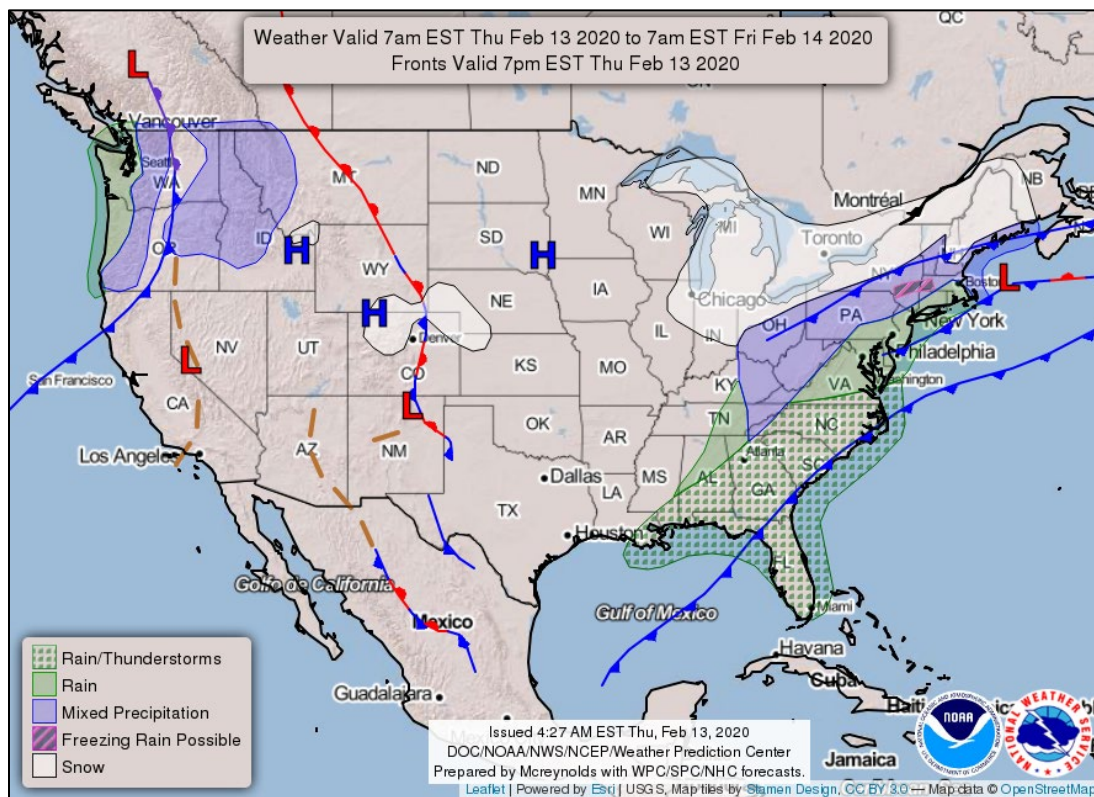
Water and Climate Update

February 13, 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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Precipitation	4	Short- and Long-Range Outlooks.....	18
Temperature.....	8	More Information	20
Drought	10		

Strong storm in the East brings heavy rain, flood threats

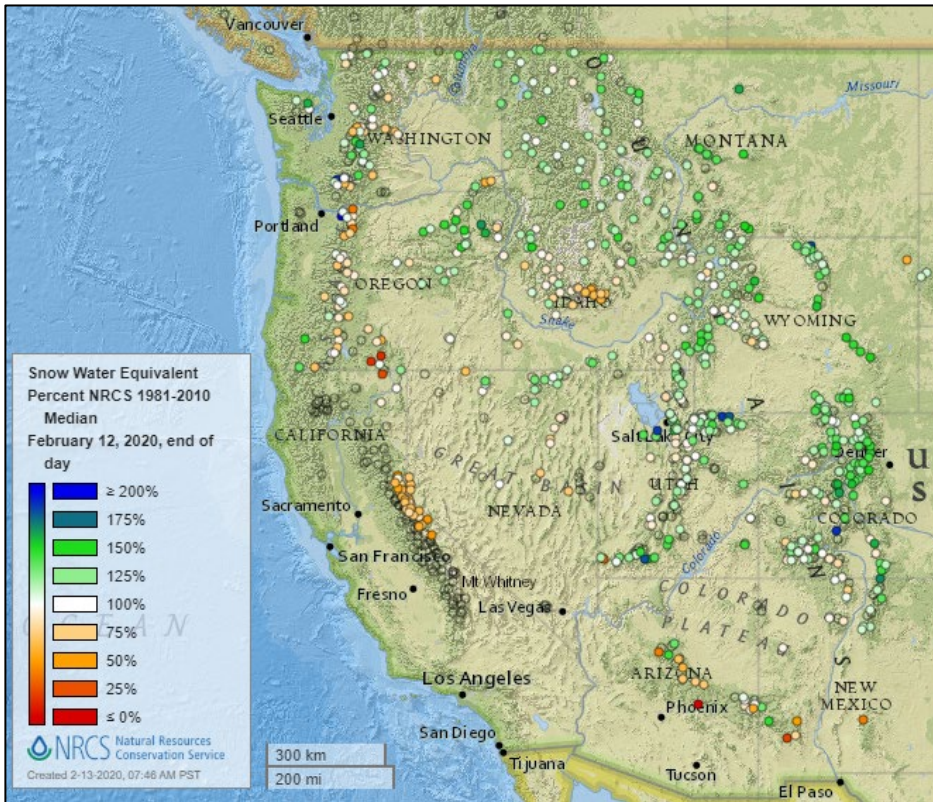


A series of strong storms are moving across the eastern U.S. bringing heavy rainfall, thunderstorms, and the threat of flash floods to the region. Flood watches have been issued from Texas to Pennsylvania. The National Weather Service Weather Prediction Center map shows rain and thunderstorms in the Southeast, transitioning to a rain/snow mix in the Northeast. A winter weather advisory is in effect from Pennsylvania to Maine, with up to six inches of snow forecast for the region. Behind this storm, a high pressure system will bring much colder temperatures to the Northeast by Friday, where wind chills will be below zero in parts of New England. [Map: Flooding and High Streamflow Conditions](#)

Related:

- [Torrential rain hits Southeast as forecast warns of major spring flooding](#) CBS News
- [Flood threat continues from the Deep South through the Ohio Valley](#) CNN
- [Storm bringing snow, flooding, tornado threat, with Arctic chill to follow](#) ABC News

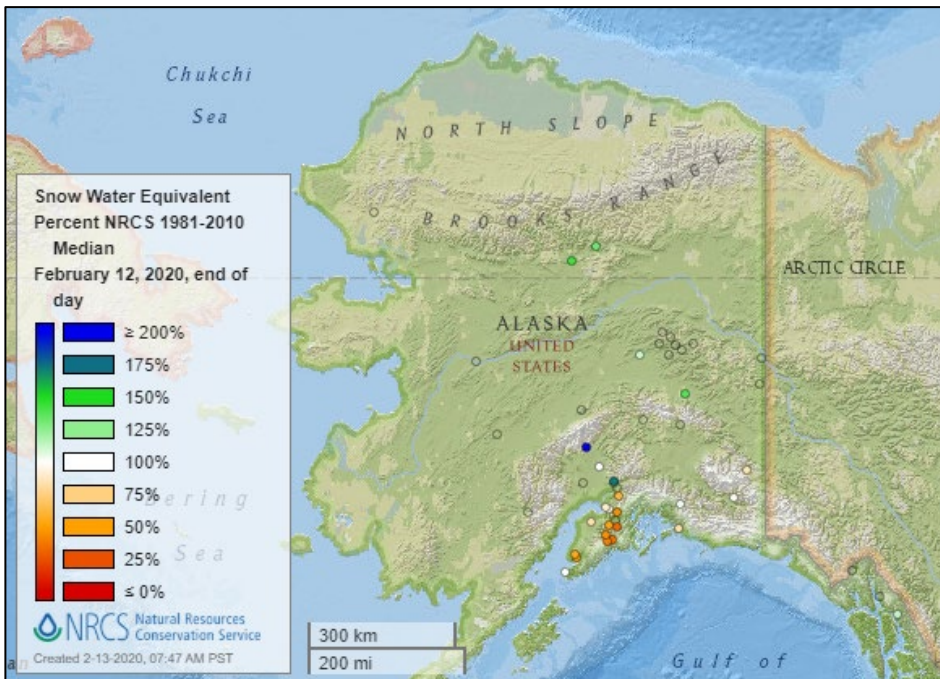
Snow



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

See also:

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



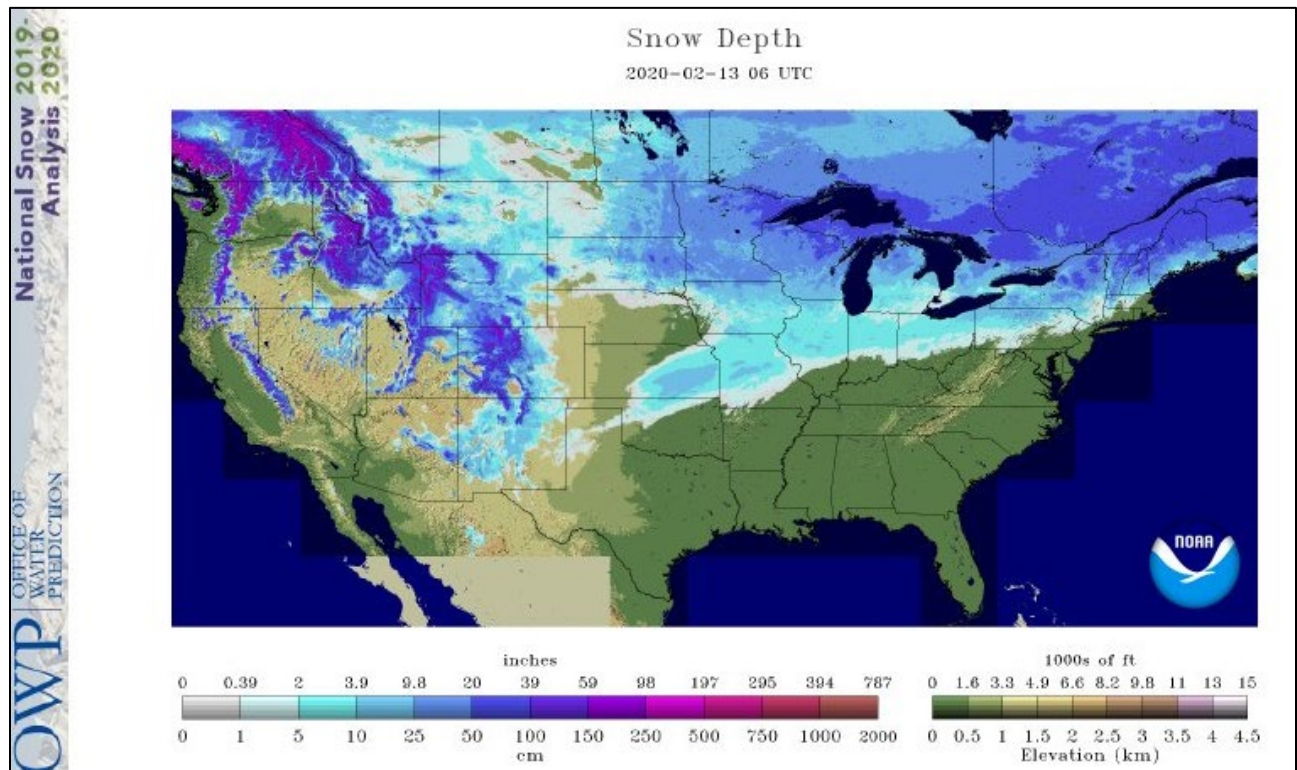
[Alaska snow water equivalent percent of median map](#)

See also:

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

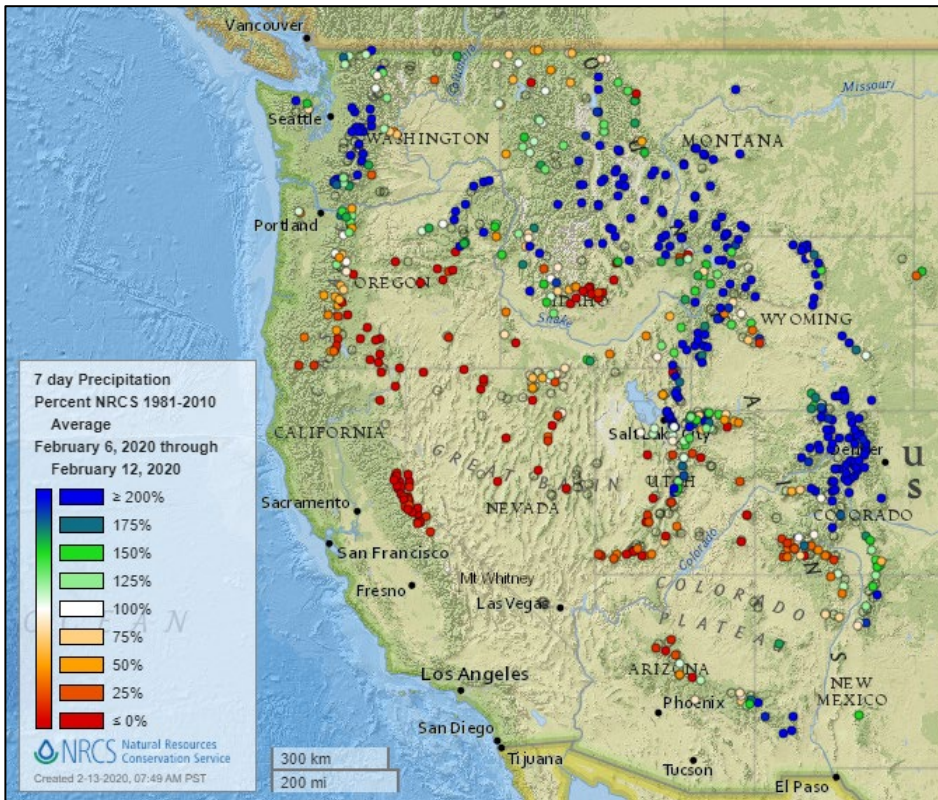
[Current Snow Depth](#), National Weather Service Snow Analysis

Source: NOAA Office of Water Prediction



Precipitation

Last 7 Days, NRCS SNOTEL Network

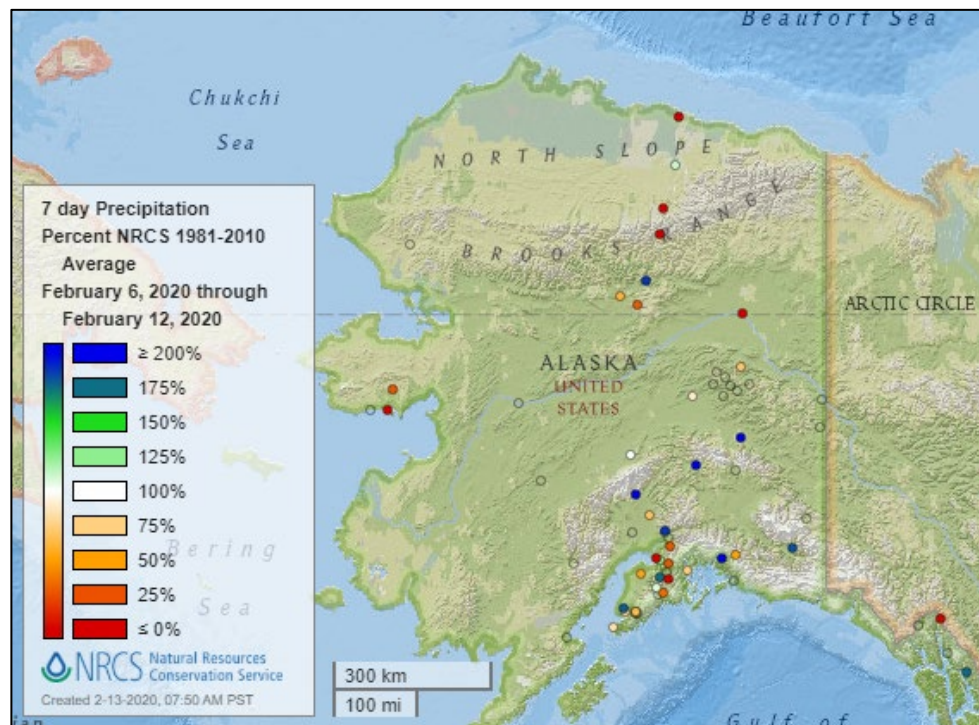


[7-day precipitation percent of average map](#)

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](#)



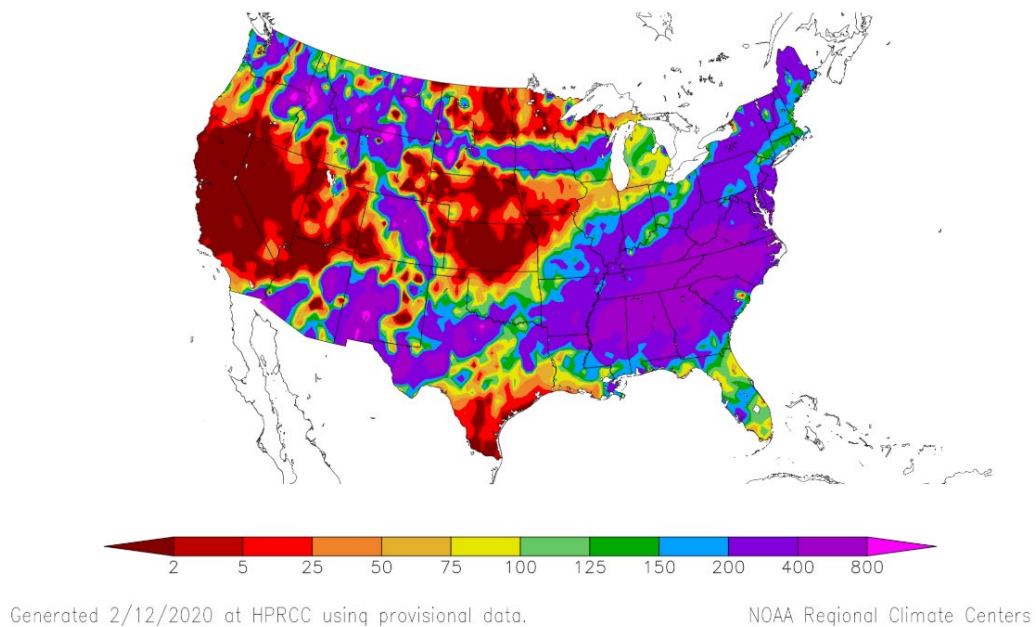
Last 7 Days, National Weather Service (NWS) Networks

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 (%)
2/5/2020 – 2/11/2020



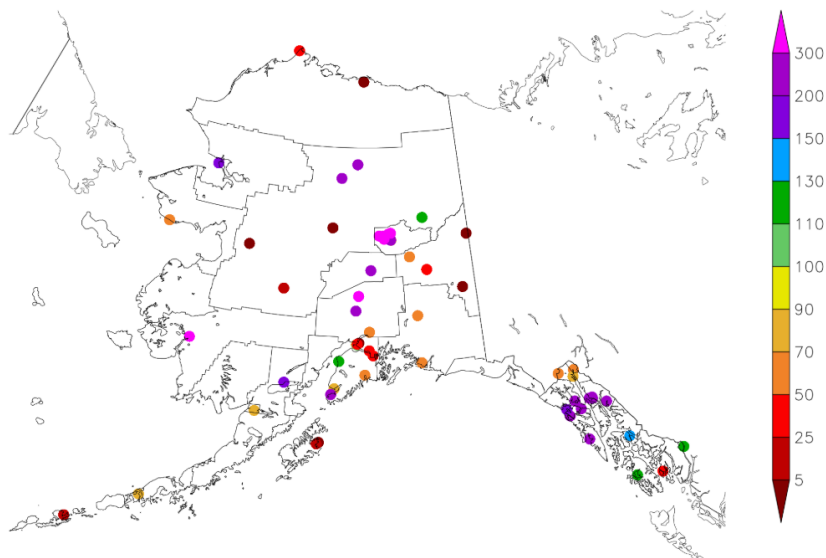
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

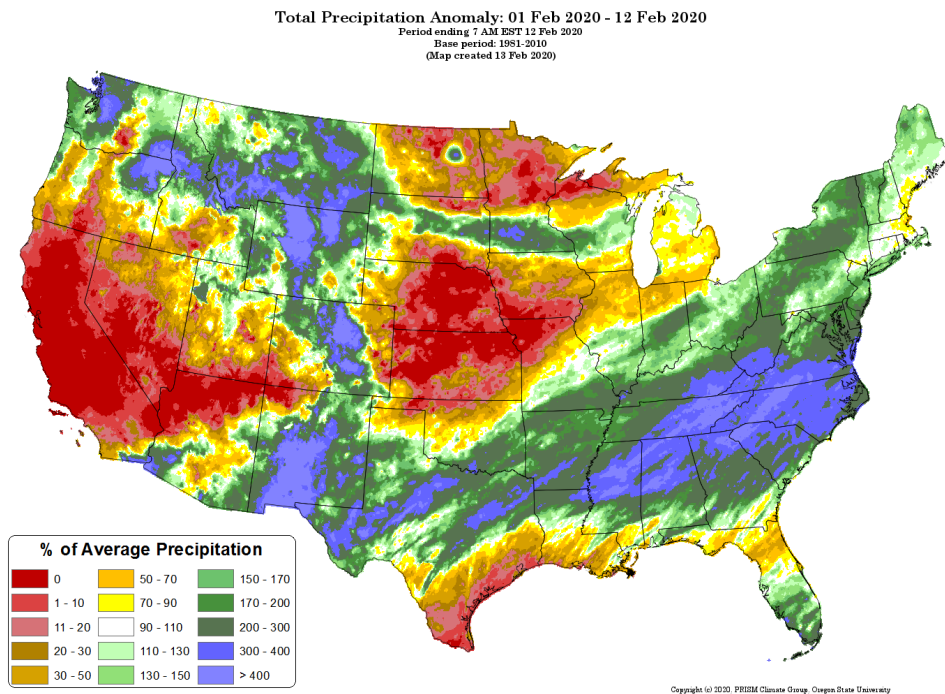
Percent of Normal Precipitation (%)
2/5/2020 – 2/11/2020



Water and Climate Update

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

Source: PRISM

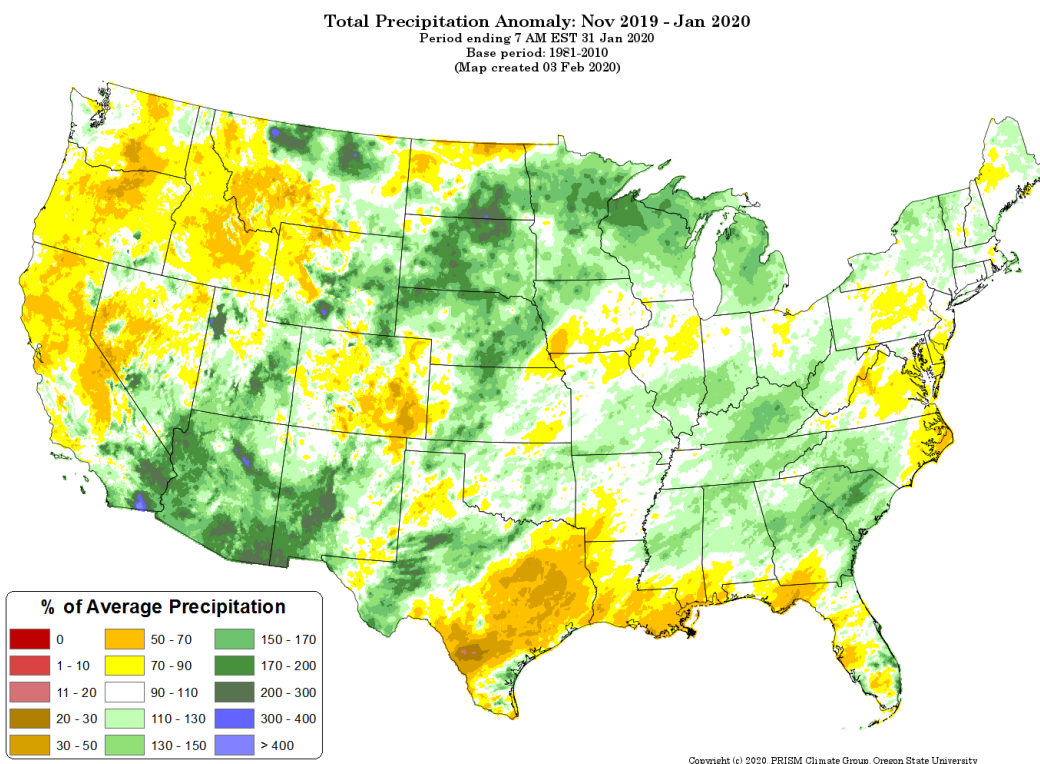


[Month-to-date national total precipitation percent of average map](#)

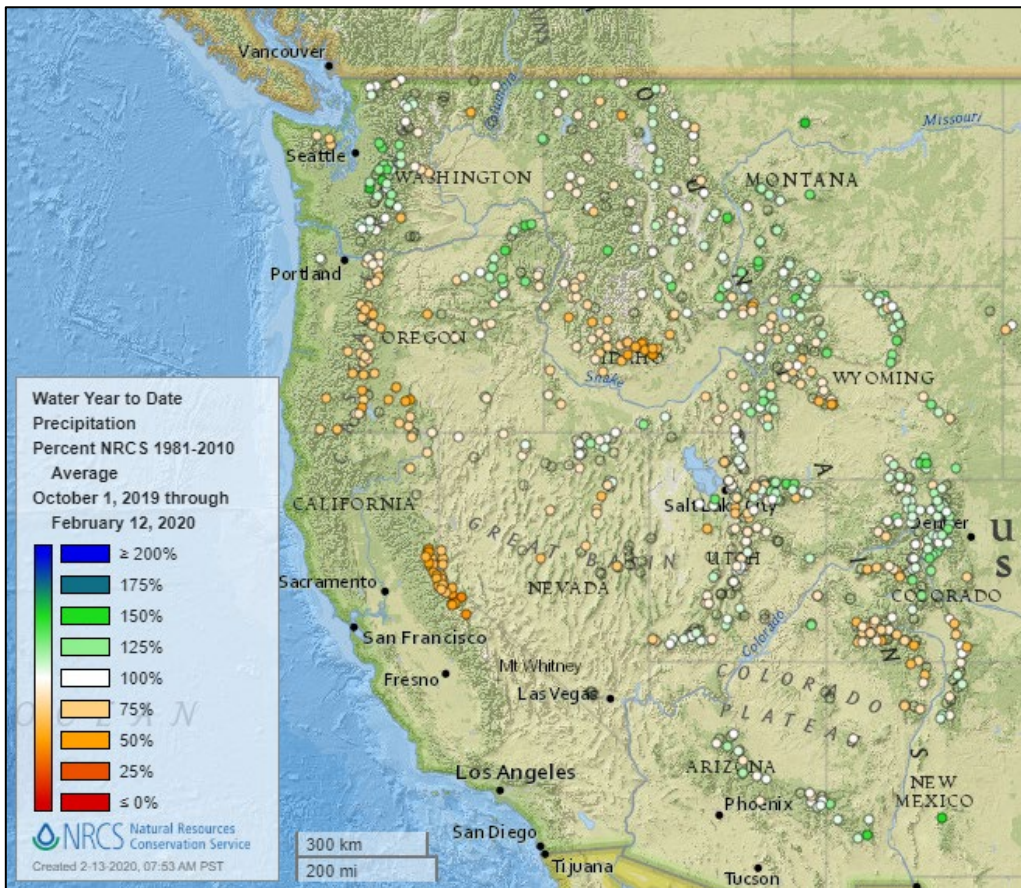
Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

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

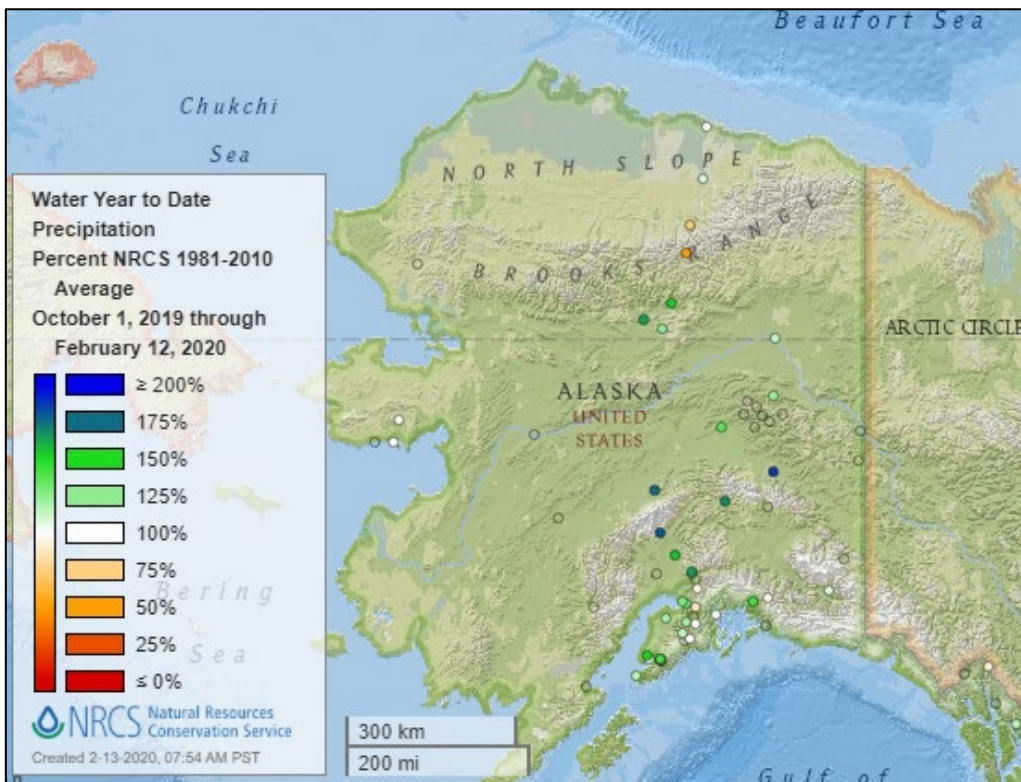


Water Year-to-Date, NRCS SNOTEL Network



[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

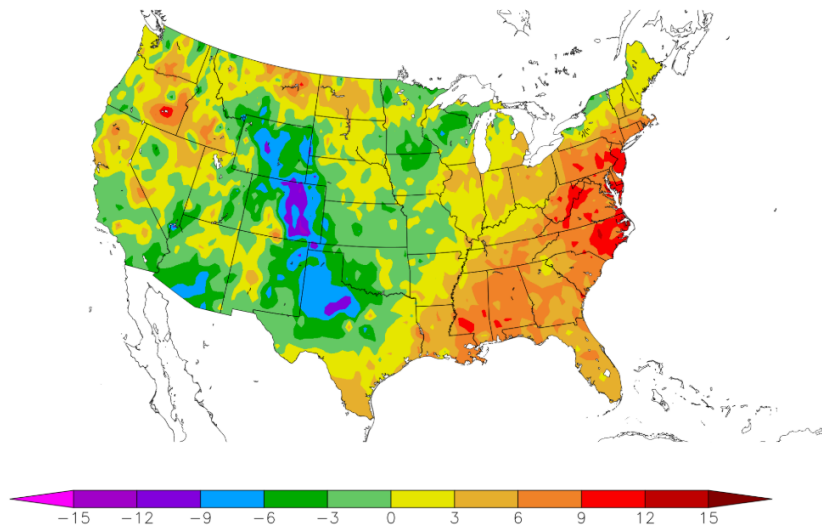
Last 7 Days, National Weather Service (NWS) Networks

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)
2/5/2020 – 2/11/2020



Generated 2/12/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

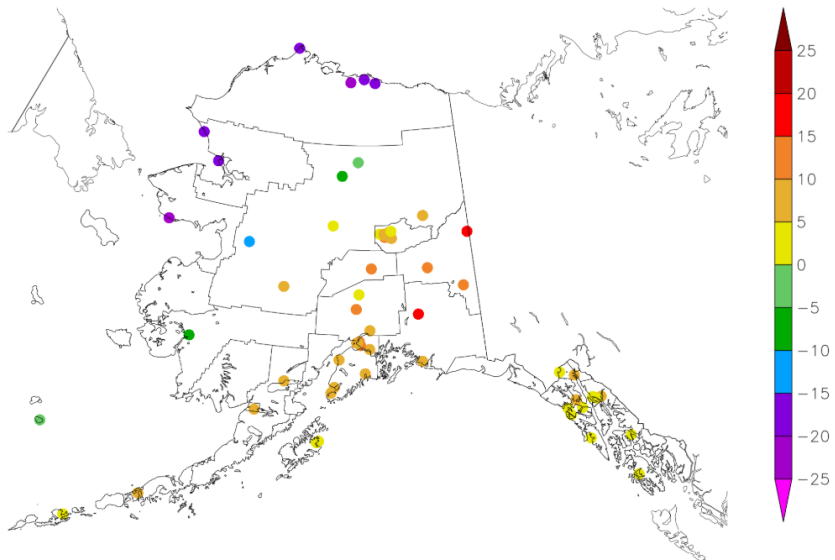
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)
2/5/2020 – 2/11/2020



Generated 2/12/2020 at HPRCC using provisional data.

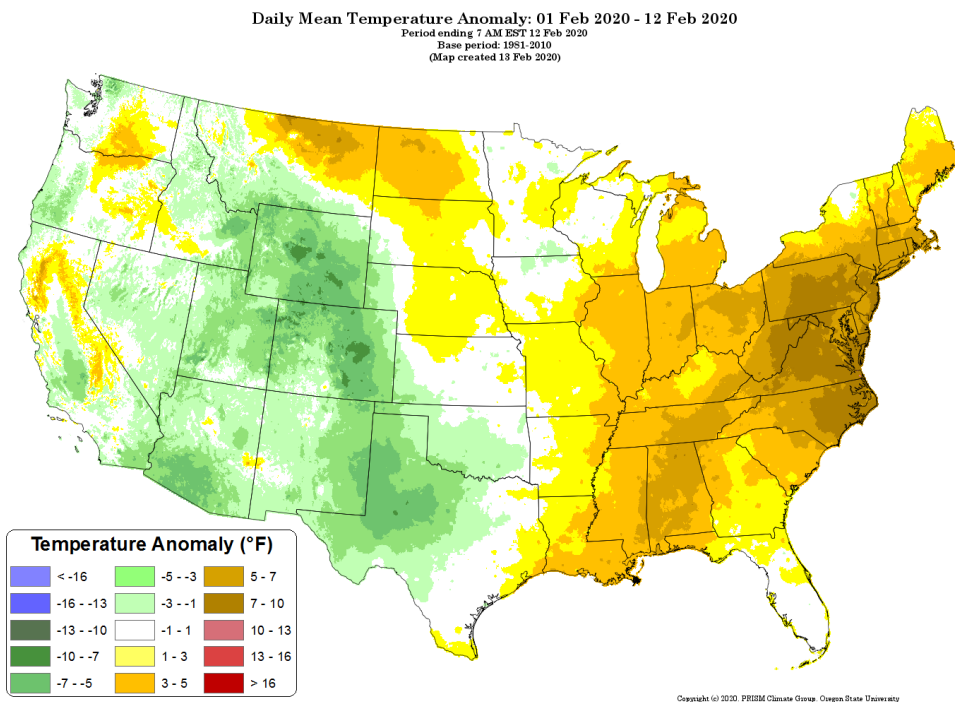
NOAA Regional Climate Centers

Water and Climate Update

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

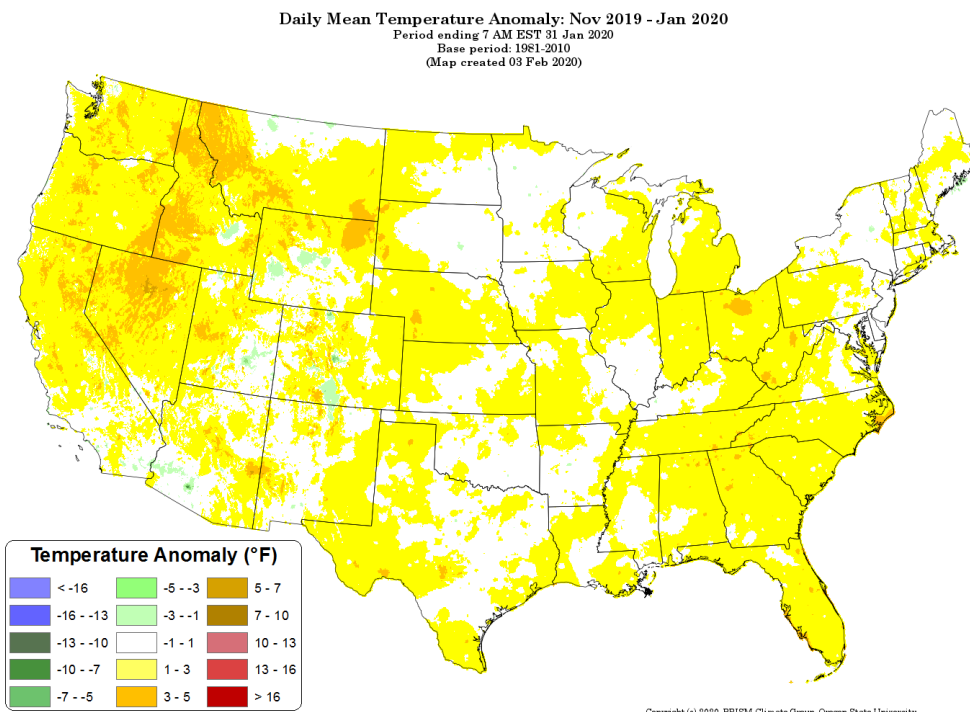
Source: PRISM

[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](#)

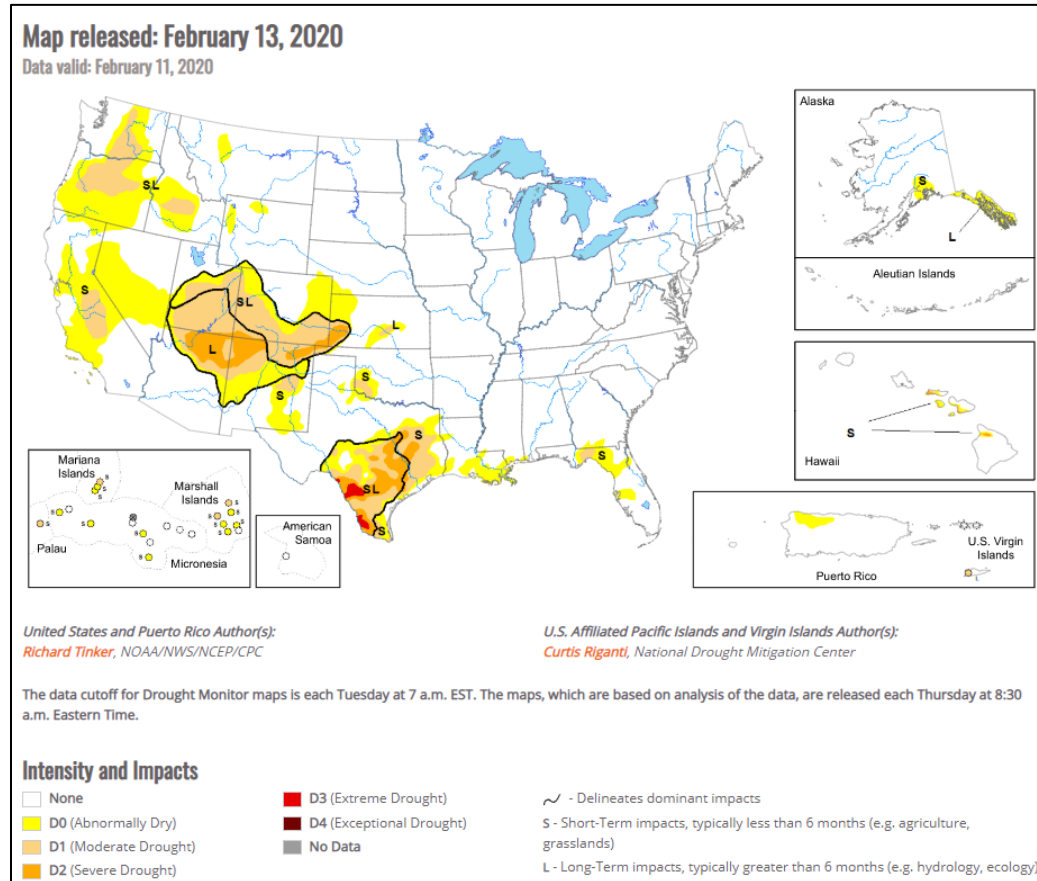
Drought

[U.S. Drought Monitor](#)

Source: National Drought Mitigation Center

[U.S. Drought Portal](#)

Source: NOAA



Current [National Drought Summary](#), February 13, 2020

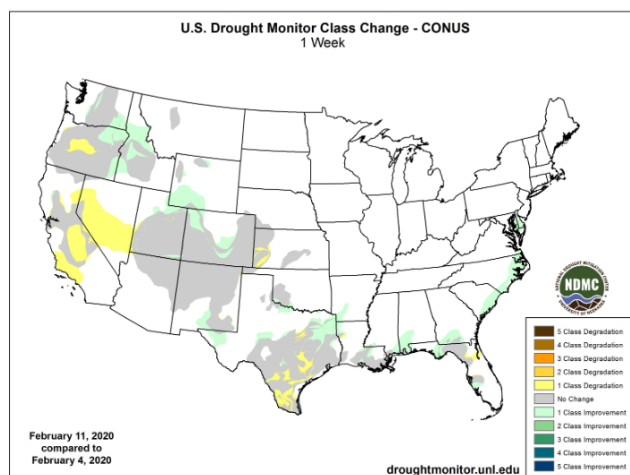
Source: National Drought Mitigation Center

“Heavy precipitation affected large parts of the Nation last week, with heavy snow in the central Rockies bringing some relief to the dry areas there. The broadest area of heavy precipitation stretched from the Middle Atlantic States southwestward into the Lower Mississippi Valley and the Southeast. At least 2 inches fell from the Ohio River to near the Gulf and southern Atlantic Coasts, with 7 to 10 inches measured across much of the interior Southeast. On the other side of the 48 states, heavy precipitation covered parts of the Northwest. Near the coast in Washington and northern Oregon, most locations recorded at least 4 inches of precipitation, with isolated amounts to 10 inches in higher elevations. Just to the east, along the Cascade Range from central Oregon northward, a broad swath received at least 5 inches of precipitation, and most of a strip through central Washington reported 10 to locally 15 inches. Well inland, in the central and northern Rockies, precipitation was largely elevation-dependent. The more elevated regions observed 2 to 5 inches, with lesser amounts in adjacent areas of lower elevation. Heavier amounts more broadly covered central Idaho and adjacent areas in Washington and Oregon, with totals of 4 to locally 8 inches common. It was another week of above-normal temperatures in the East and part of the interior Northwest, while subnormal readings were recorded in the central Rockies where the heavy snowfall dominated the week. Temperatures were 10 to 15 degrees F warmer than normal in the east-central States and part of the interior Southeast, and most sites east of the Mississippi River were at least 4 degrees F above normal. Many locations across the Country averaged 2 to as much as 5 degrees F above normal since mid-November 2019, especially east of the Mississippi River and the interior Rockies and Far West.”

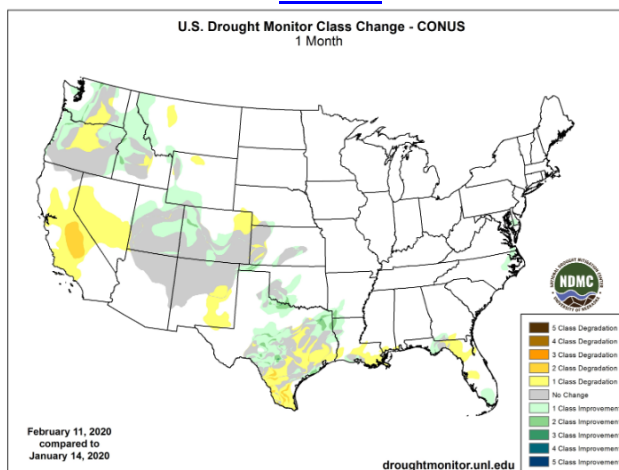
Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

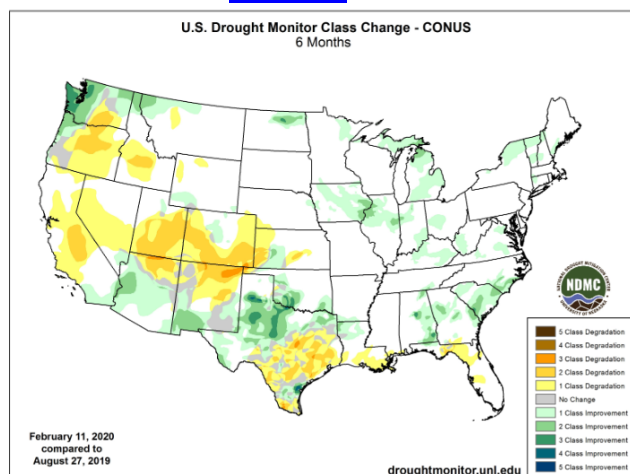
1 Week



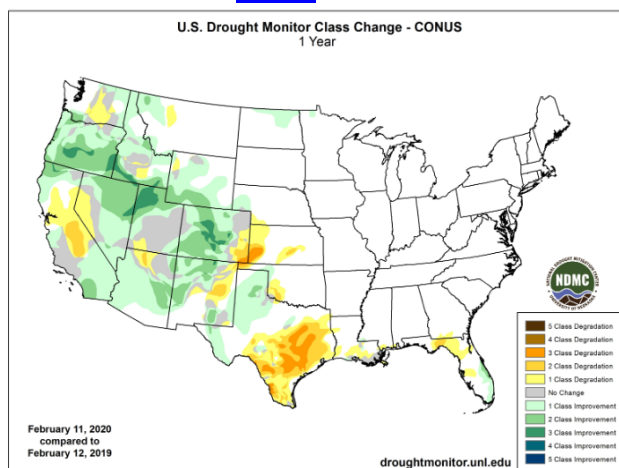
1 Month



6 Months



1 Year



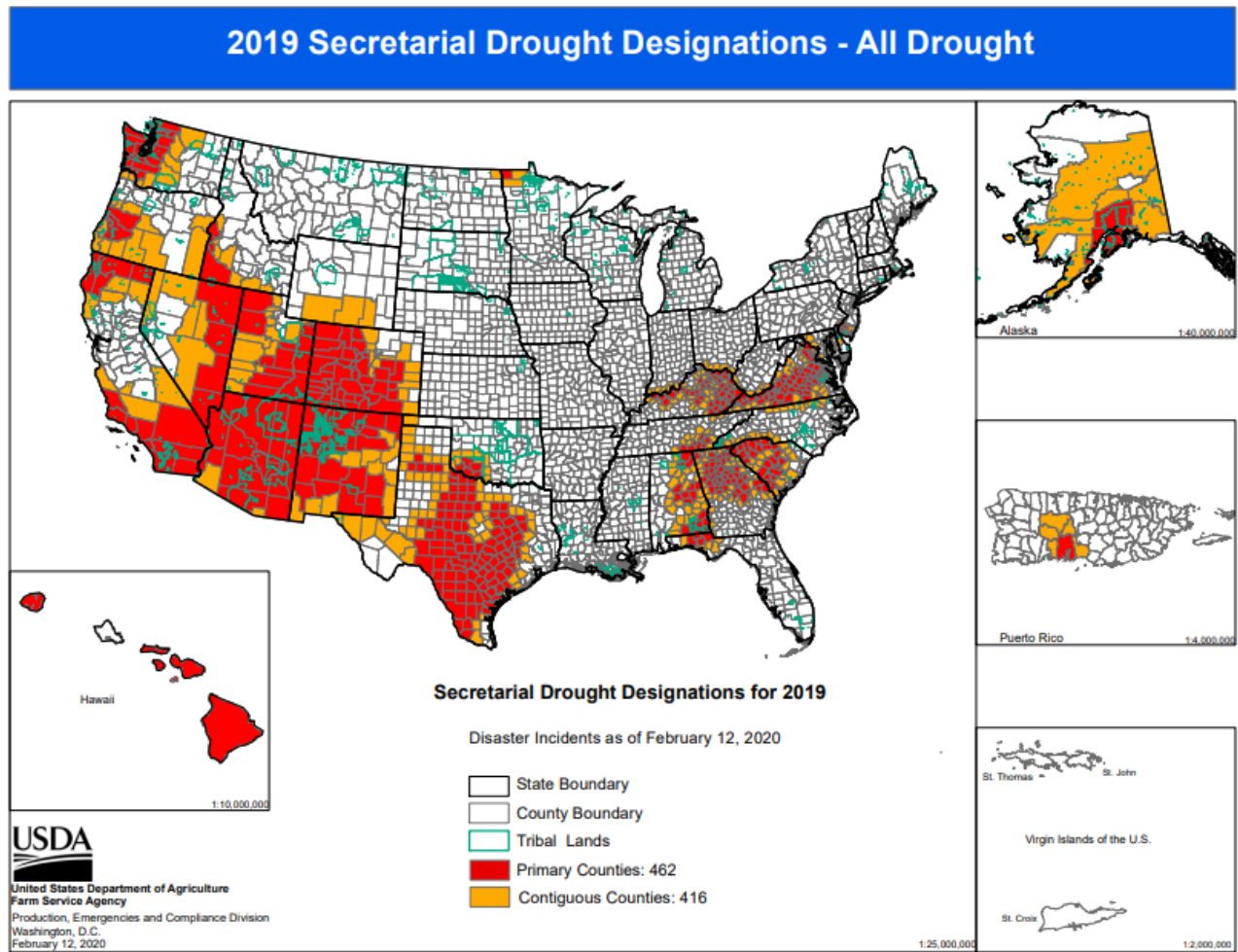
[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

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](#)

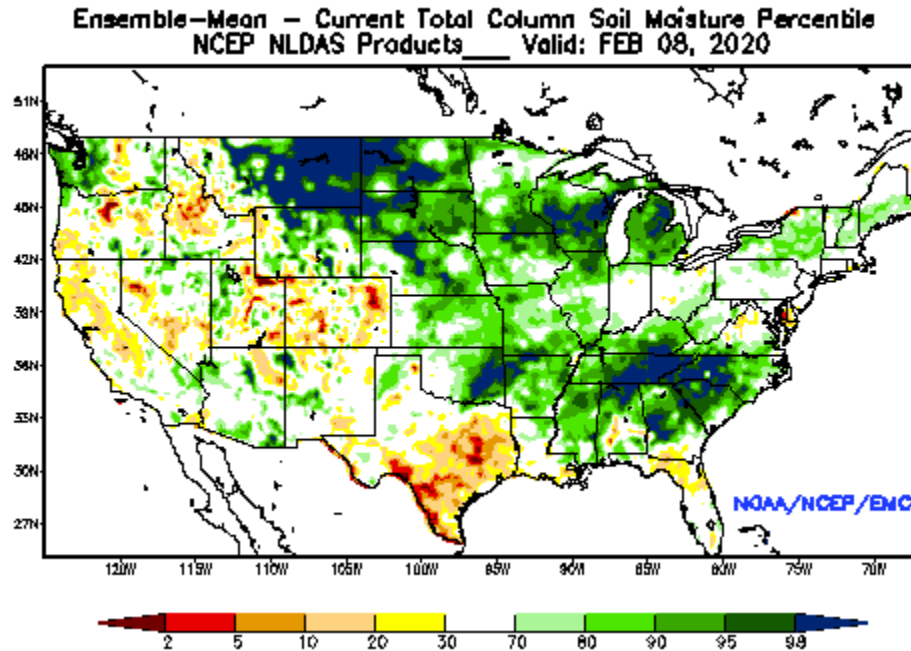
Source: USDA Farm Service Agency



Other Climatic and Water Supply Indicators

Soil Moisture

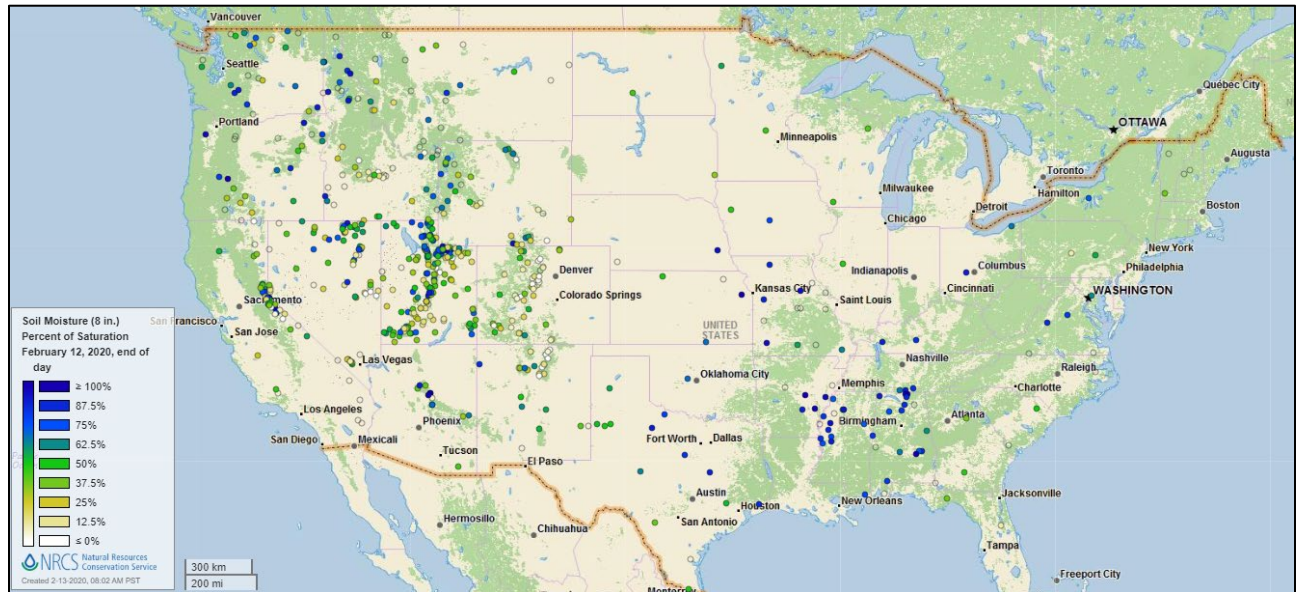
Source: NOAA National Centers for Environmental Prediction



[Modeled soil moisture percentiles](#) as of February 8, 2020

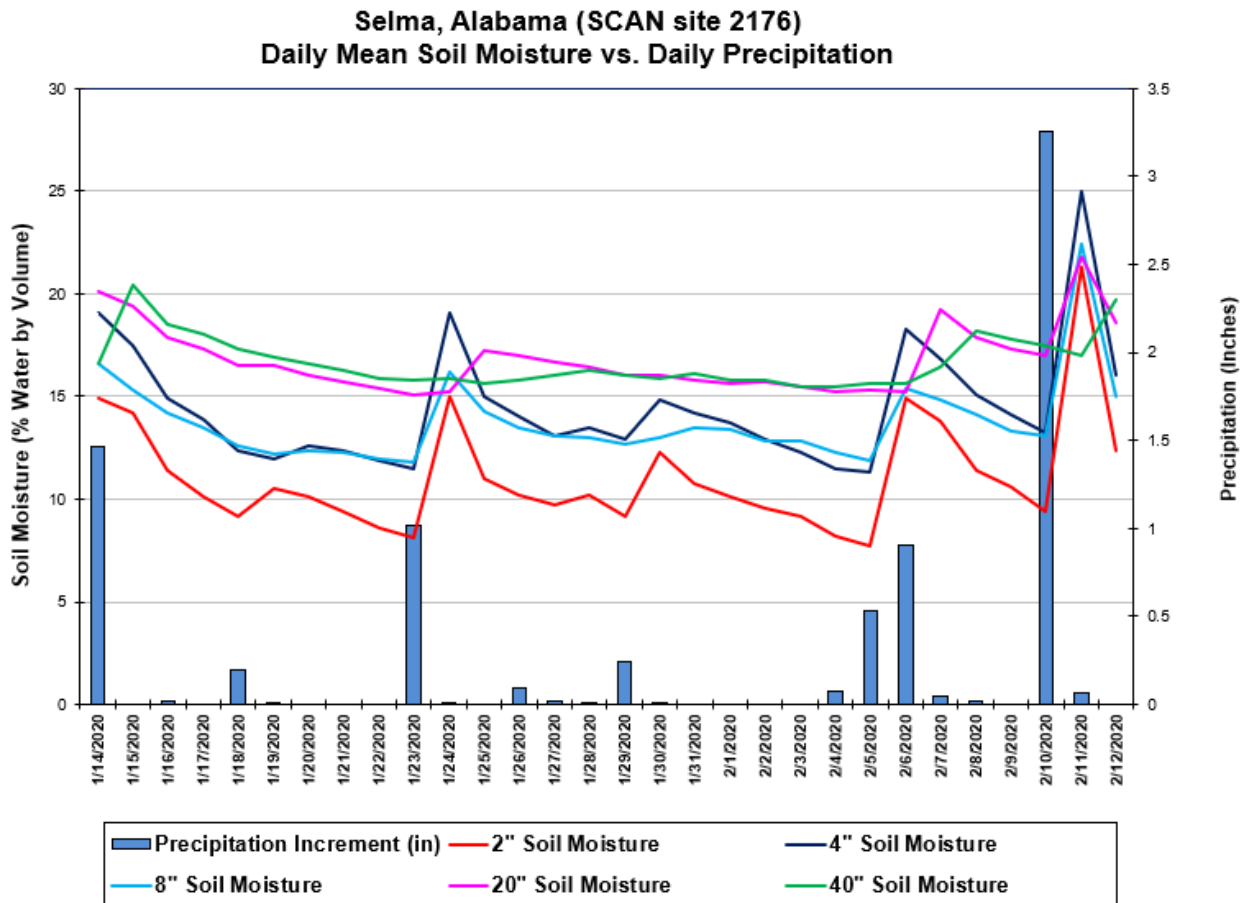
Soil Moisture Percent of Saturation

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 [Selma](#) SCAN site in Alabama. This site has experienced several precipitation events in the last 30 days, resulting in increased soil moisture at all five sensor depths. Accumulated precipitation for the period totaled 8.02 inches.

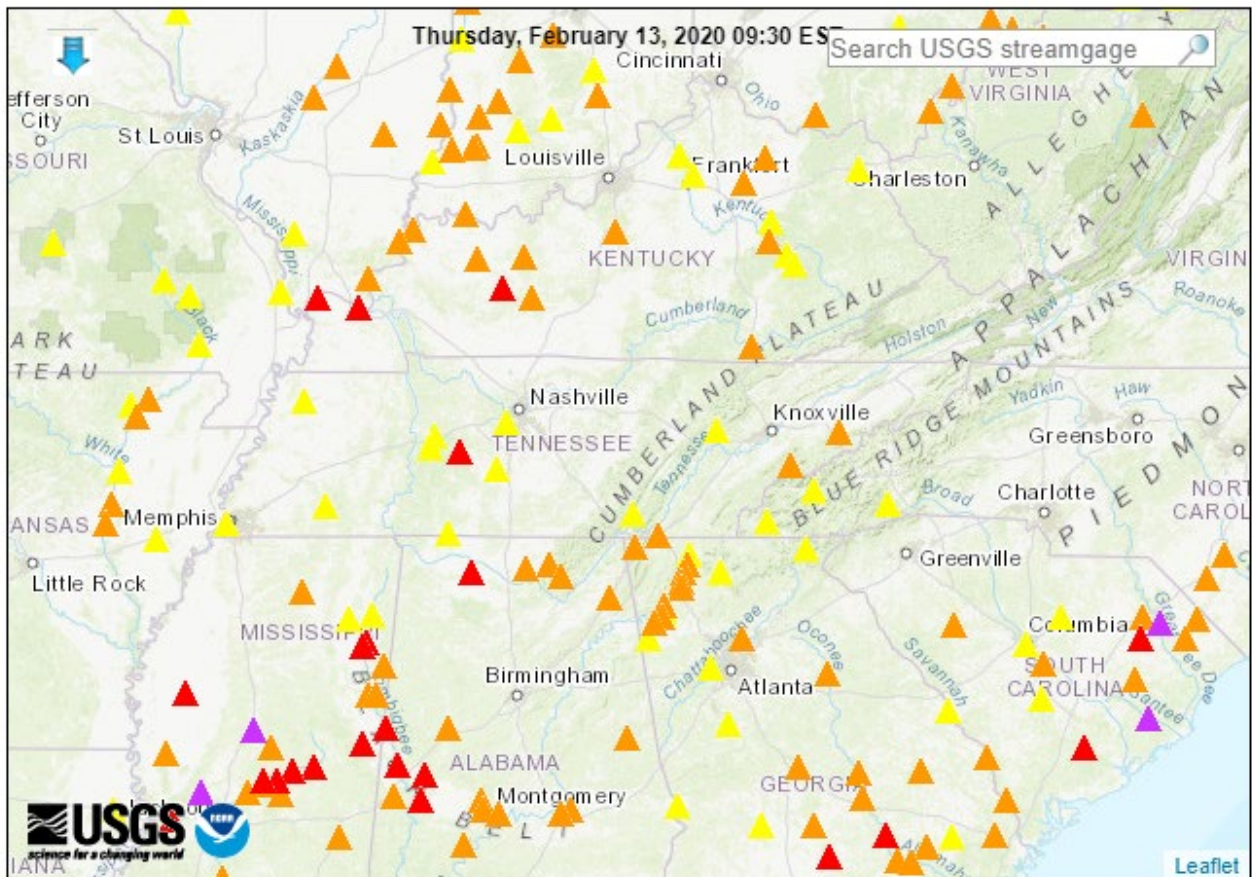
Soil Moisture Data Portals

- [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 (173 in floods [major: 5, moderate: 27, minor: 141], 94 in near-flood)



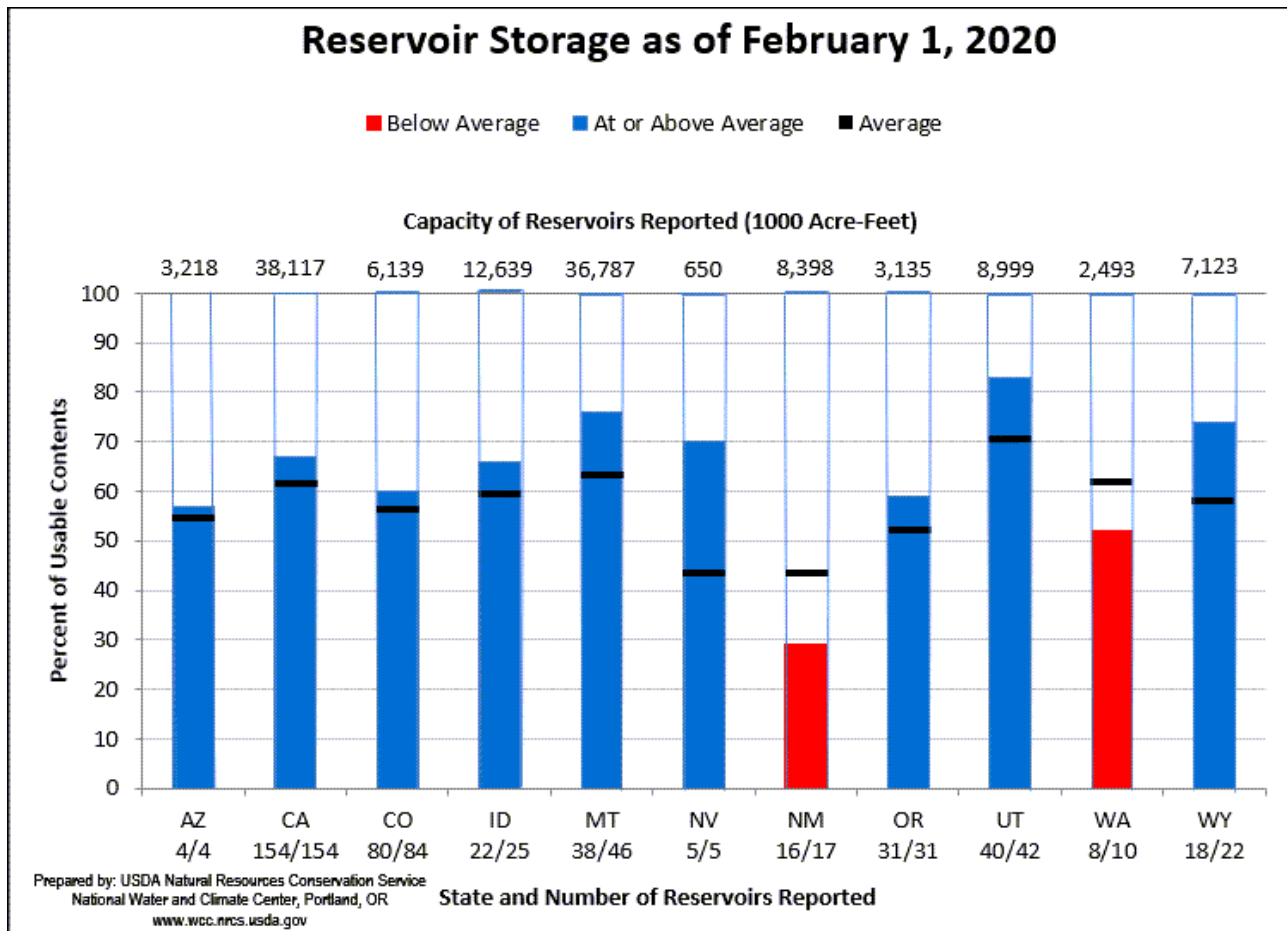
Explanation - Percentile classes						
<95	95-98	>= 99	Above action stage	Above flood stage	Above moderate flood stage	Above major flood stage
△ Streamgage with flood stage ○ Streamgage without flood stage						

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

Reservoir Storage

Western States Reservoir Storage

Source: NRCS National Water and Climate Center



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

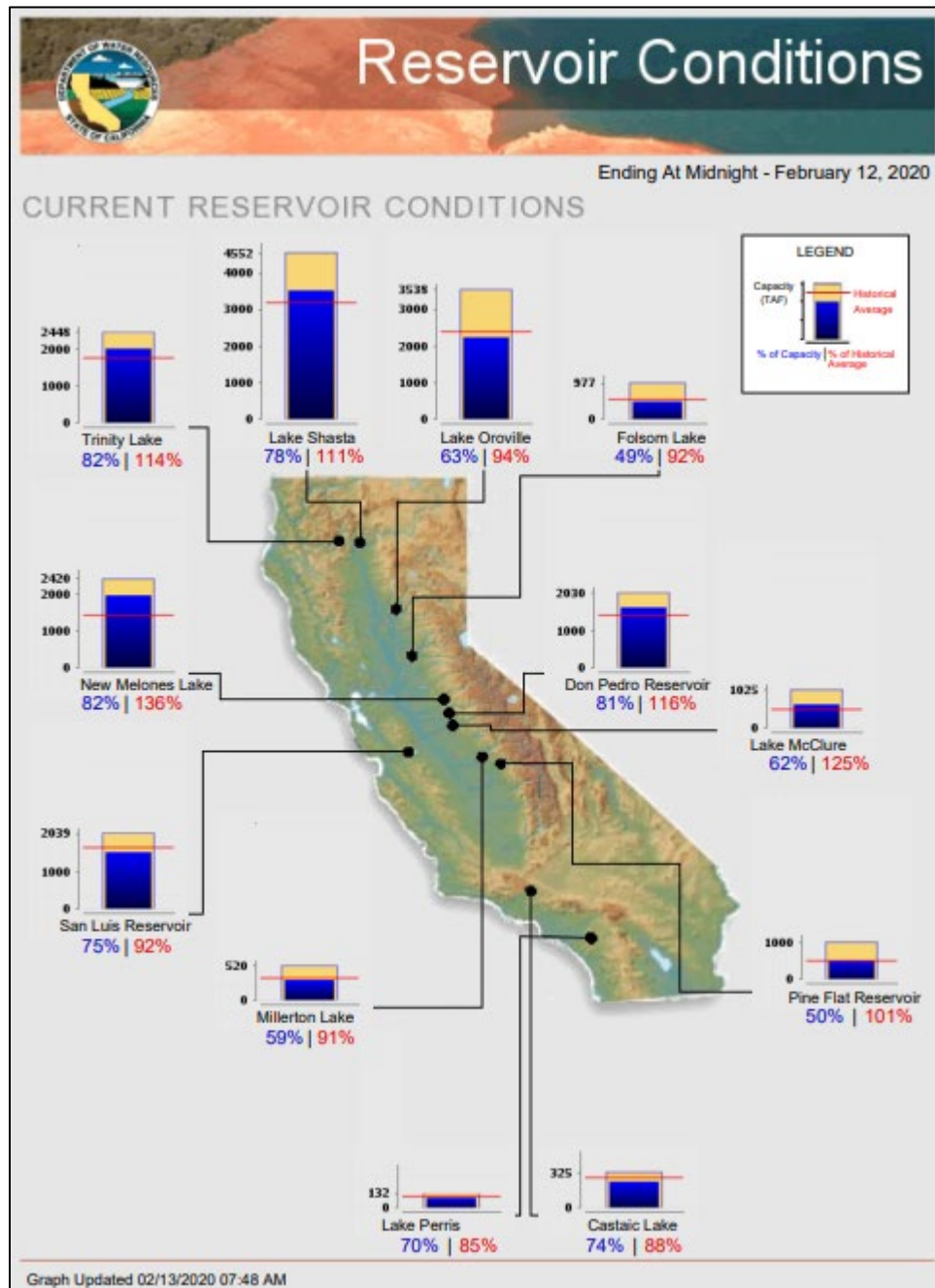
Hydromet Teacup Reservoir Depictions

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

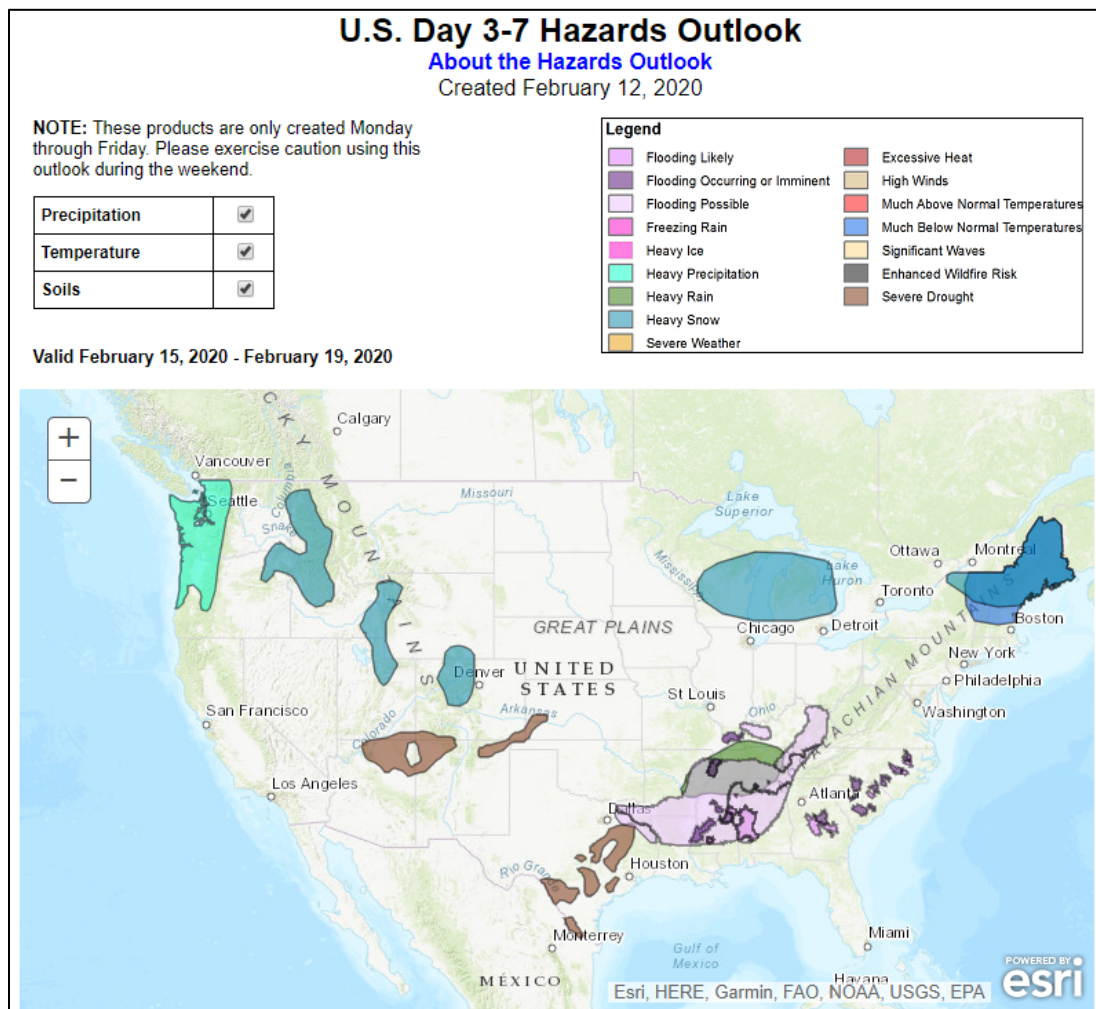
Agricultural Weather Highlights

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

National Outlook, Thursday, February 13, 2020: "Precipitation across the eastern one-third of the U.S. will largely end later today. However, lowland flooding and muddy conditions will persist for several days, especially across the South. Meanwhile, weekend temperatures across the Plains, Midwest, and Northeast will start to rebound, following a sharp but short-lived cold outbreak. Temperatures will be slower to recover across the nation's northern tier, where subsequent surges of cold air will arrive late in the weekend and early next week. Precipitation will return across the Northwest, starting later today, and continue through the weekend. In contrast, dry weather will prevail during the next 5 days from central and southern California to the southern Plains. Early next week, snow will develop across the northern Plains and spread eastward across the nation's northern tier. The NWS 6- to 10-day outlook for February 18 – 22 calls for the likelihood of near- or below-normal temperatures in northern New England and west of the Mississippi River, while warmer-than-normal weather will prevail in much of the East. Meanwhile, near- or below-normal precipitation across Florida, the northern half of the Plains, and much of the West should contrast with wetter-than-normal weather in the Pacific Northwest, southern sections of the Rockies and Plains, and most areas from the Mississippi Valley to the East Coast."

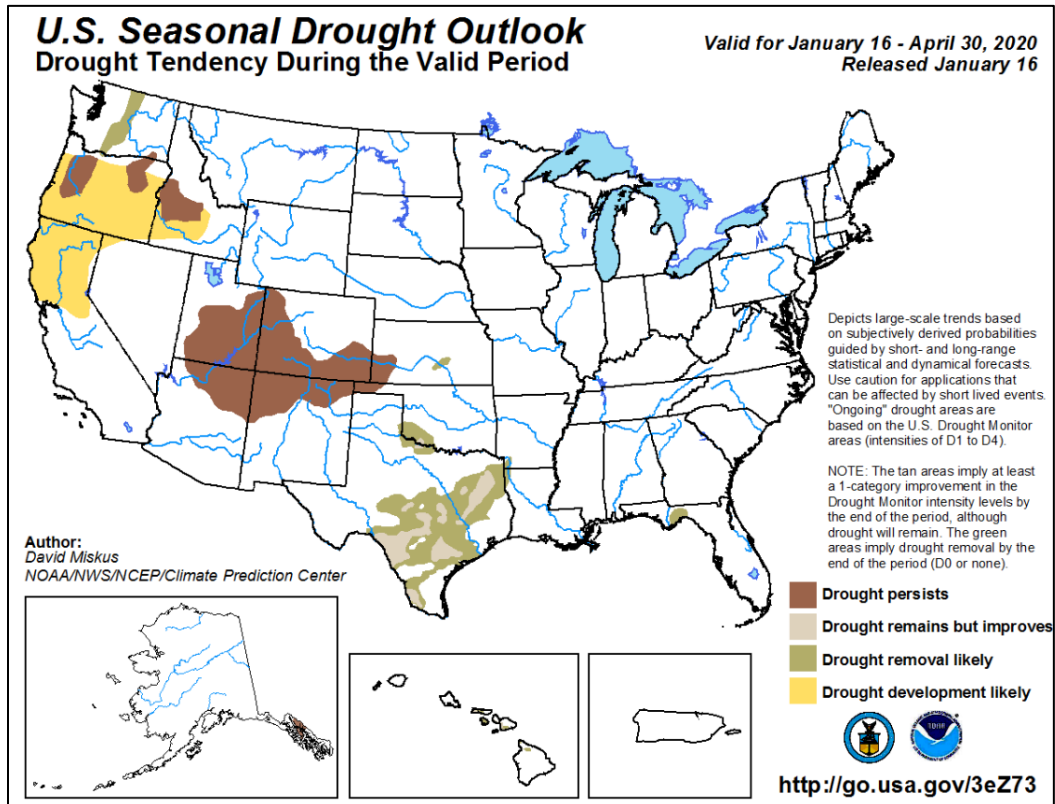
Weather Hazards Outlook: February 15 – 19, 2020

Source: NOAA Climate Prediction Center



Seasonal Drought Outlook: [January 16 – April 30, 2020](#)

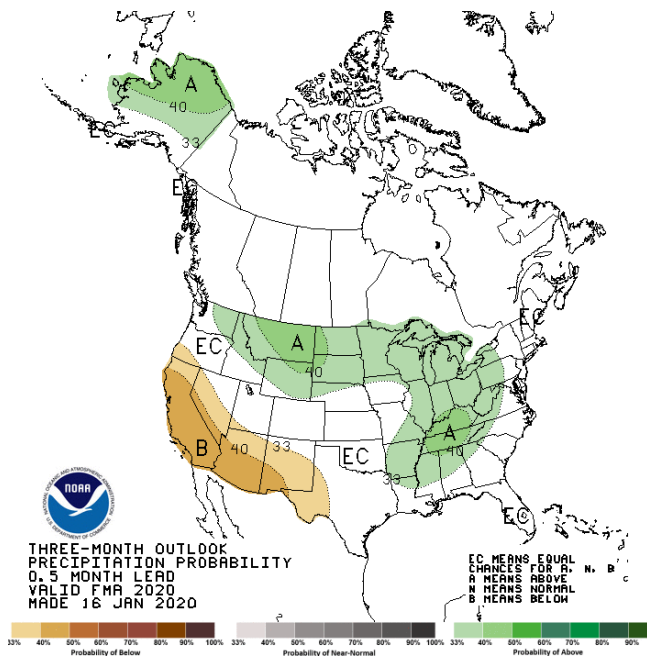
Source: National Weather Service



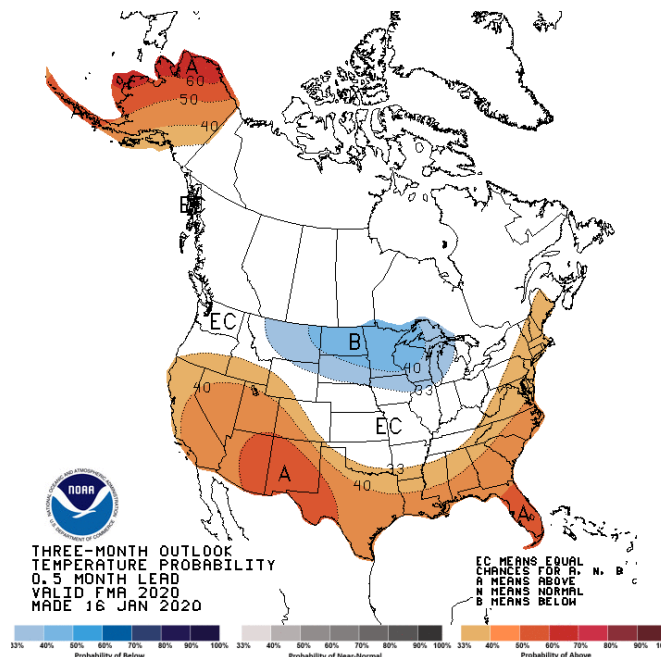
Climate Prediction Center 3-Month Outlook

Source: National Weather Service

Precipitation



Temperature



[February-March-April \(FMA\) 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](#).