

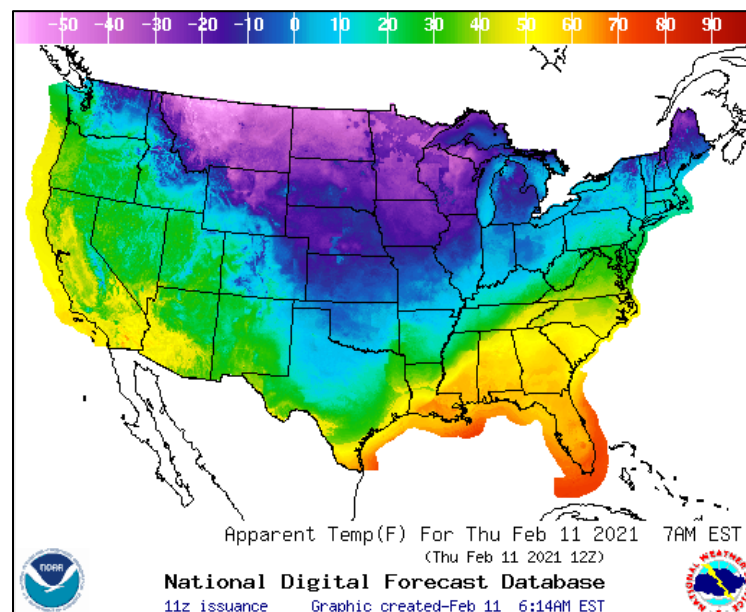
Water and Climate Update

February 11, 2021

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.

Snow	2	Drought	10
Precipitation	4	Other Climatic and Water Supply Indicators	13
Temperature.....	8	More Information	19

Temperatures plummet in the central U.S.

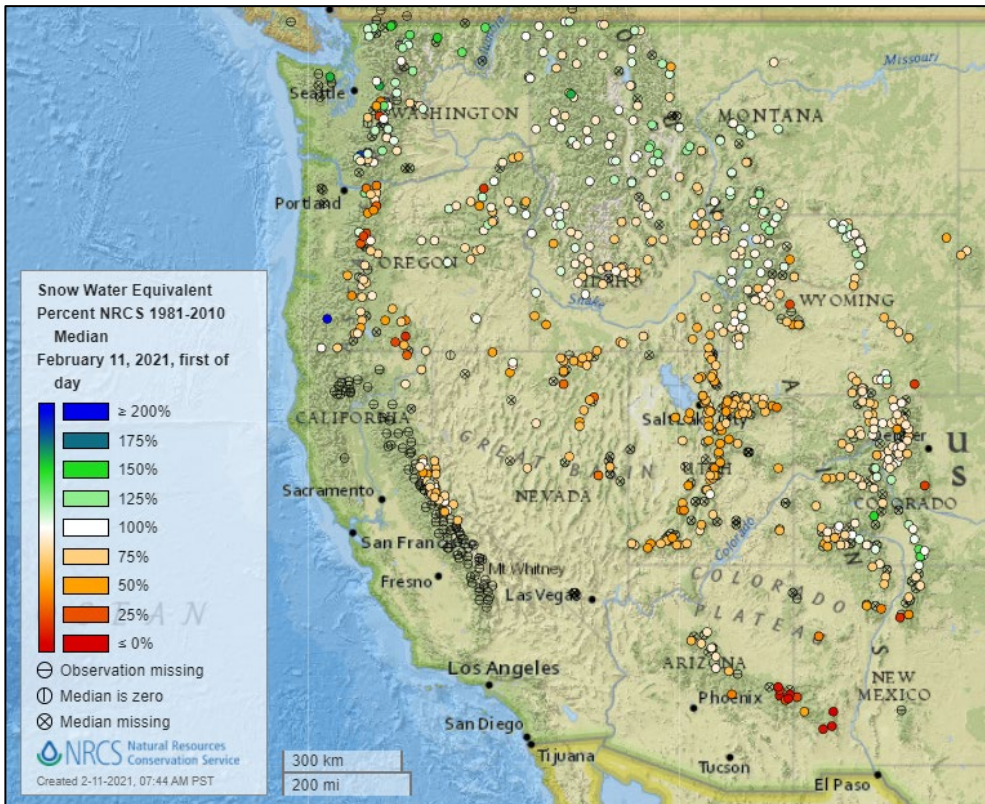


A polar vortex has begun to plunge into the Midwest this week. Frigid temperatures are covering much of the central U.S., with the coldest temperatures in the Northern Tier states from Montana to Michigan. The CONUS national low temperature was -39°F for February 11, 2021, reported five miles east of Seagull Lake, Minnesota. The polar airmass is expected to become more severe and will continue to dip arctic air into the Midwest next week. Several storms along the eastern and western edges of the cold airmass are forecasted to generate freezing rain and snow.

Related:

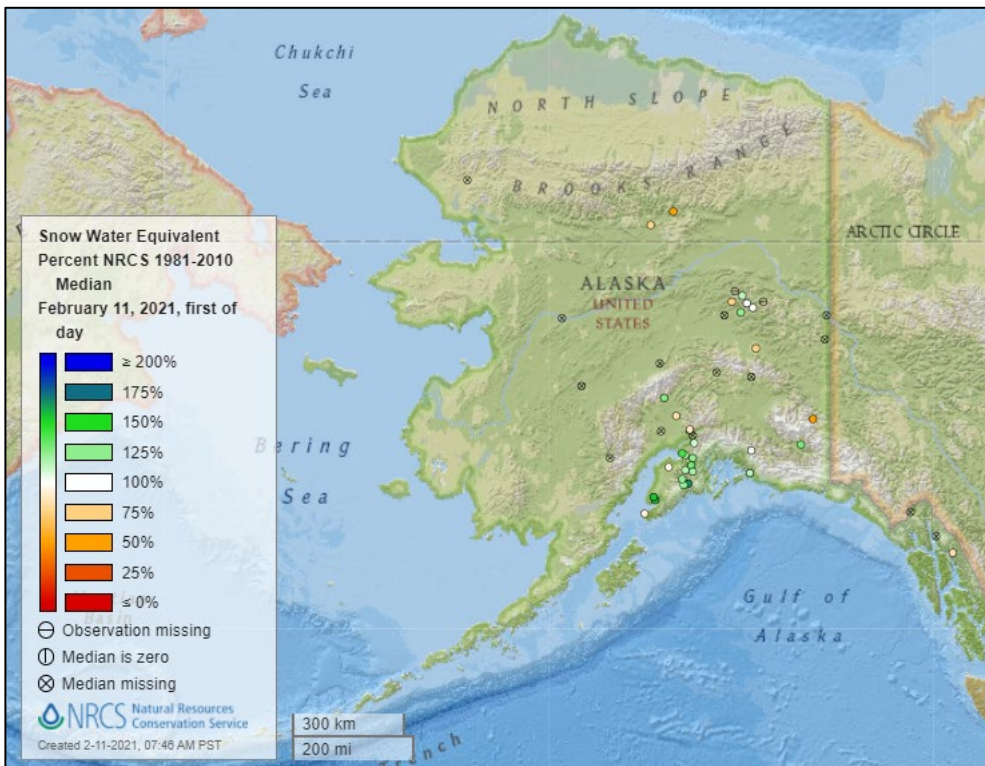
- [Five storms in 10 days loom amid bitter cold in north United States](#) - Reuters
- [Very cold temperatures forecast, new storm set to drop snow and ice](#) – USA Today
- [Extreme cold straight from the Arctic to plunge south to Gulf of Mexico](#) – Washington Post
- [Cold weather drags on for Twin Cities, with frigid temperatures to last into the weekend](#) – TwinCities.com (MN)
- [Polar vortex could bring frigid temperatures as far south as Texas](#) – CBS News
- [Polar vortex sends temperatures plummeting across U.S.](#) – CBS News
- [Polar vortex to bring frigid cold, snow to Plains, Upper Midwest this week](#) – UPI.com
- [Some Iowa cities breaking cold records, but not Des Moines ... yet](#) – Des Moines Register (IA)
- [Bitter cold expected to continue through the week in Omaha; record could fall Saturday](#) – Omaha.com (NE)

Snow



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

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

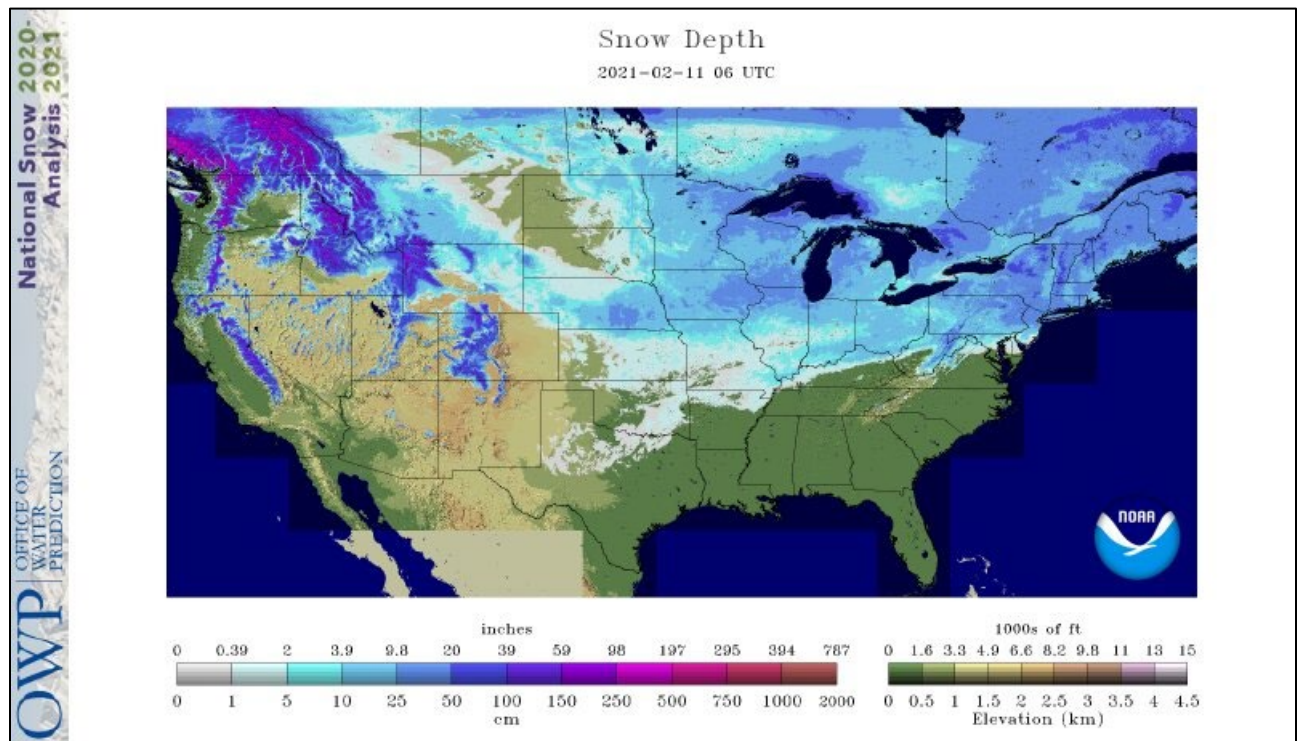


[Alaska snow water equivalent percent of median map](#)

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

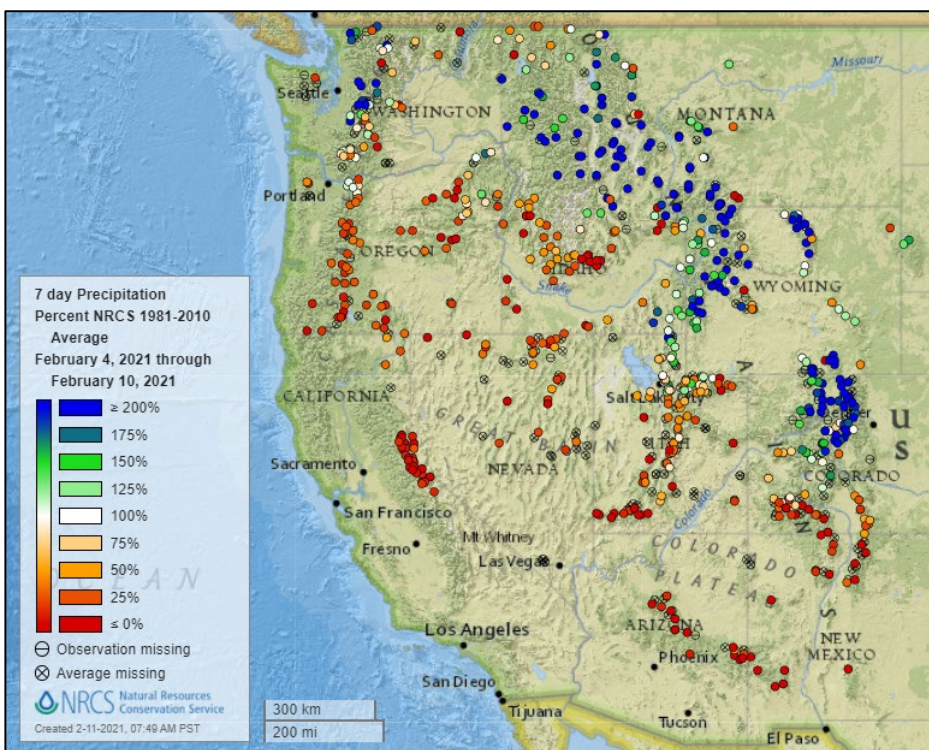
Current Snow Depth, National Weather Service Snow Analysis

Source: NOAA Office of Water Prediction



Precipitation

Last 7 Days, NRCS SNOTEL Network

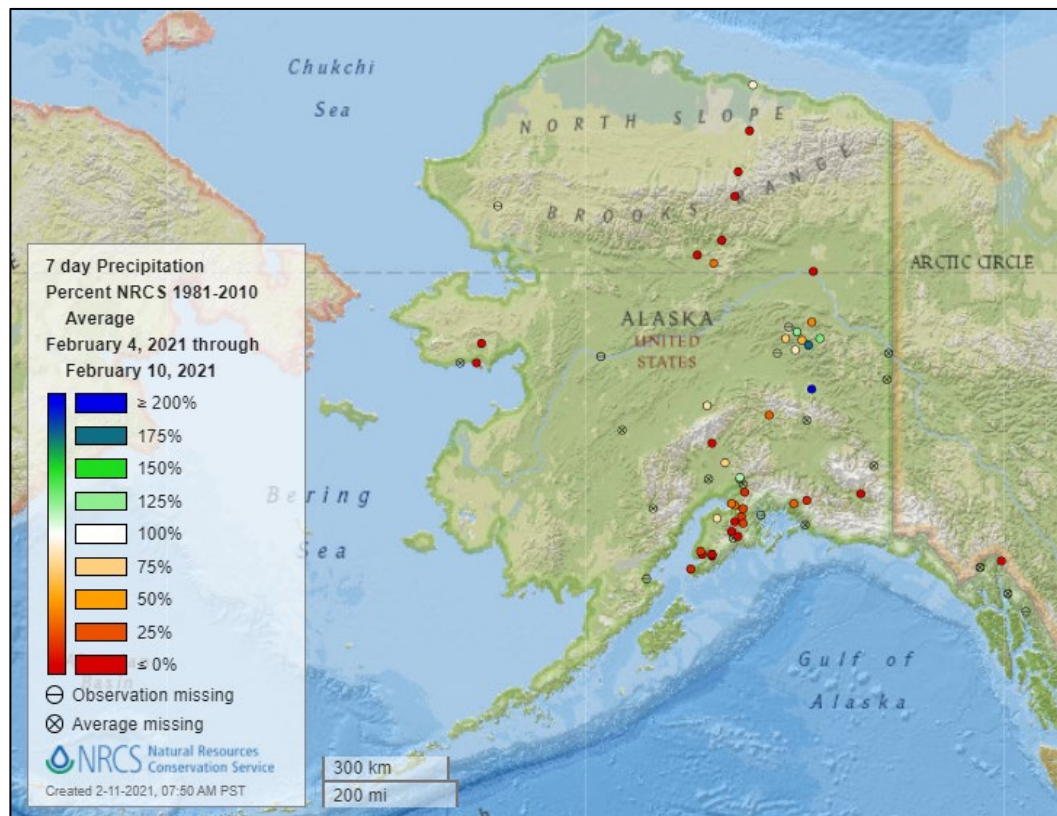


[7-day precipitation percent of average map](#)

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](#)



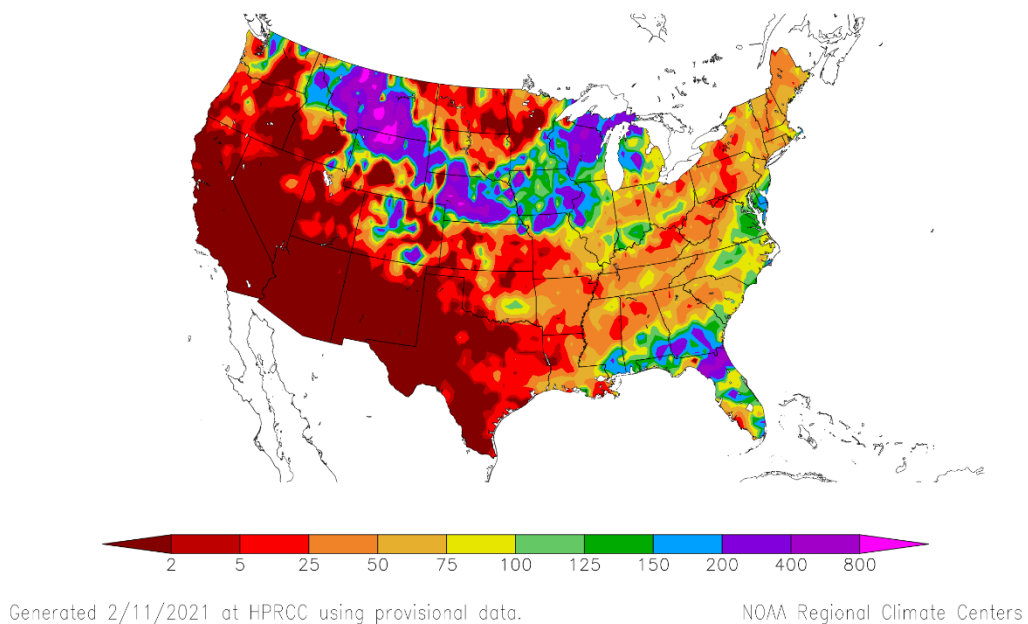
Last 7 Days, National Weather Service (NWS) Networks

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 (%)
2/4/2021 – 2/10/2021



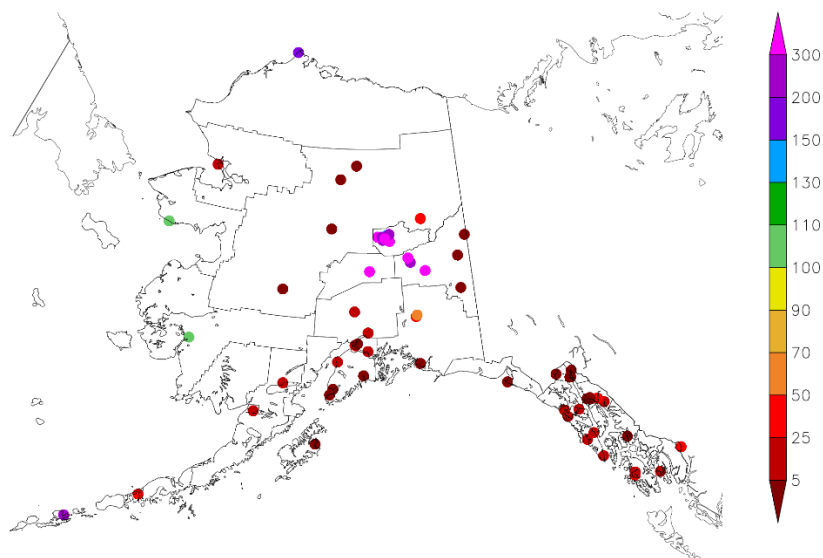
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

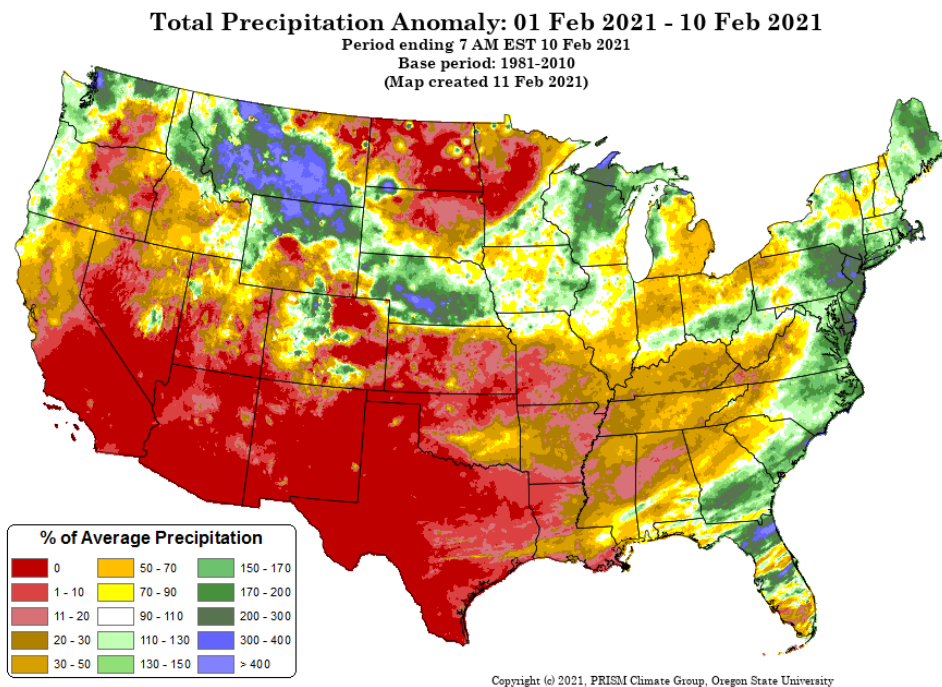
See also: [7-day total precipitation values \(inches\) map](#)

Percent of Normal Precipitation (%)
2/4/2021 – 2/10/2021



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

Source: PRISM

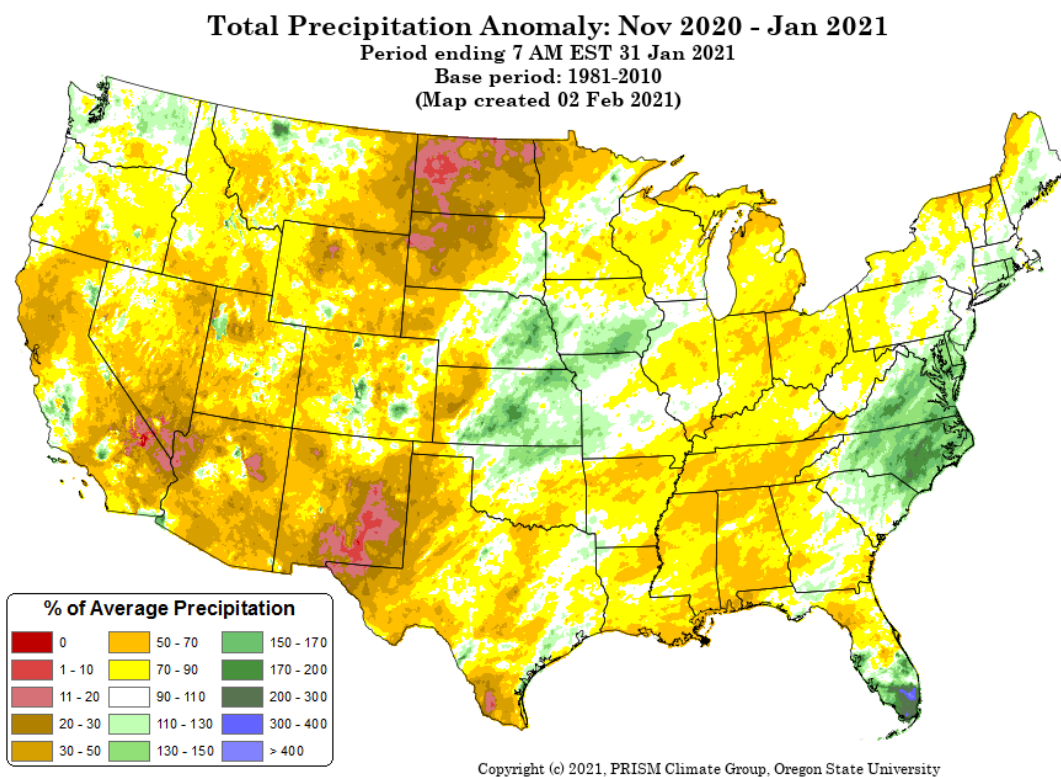


[Month-to-date national total precipitation percent of average map](#)

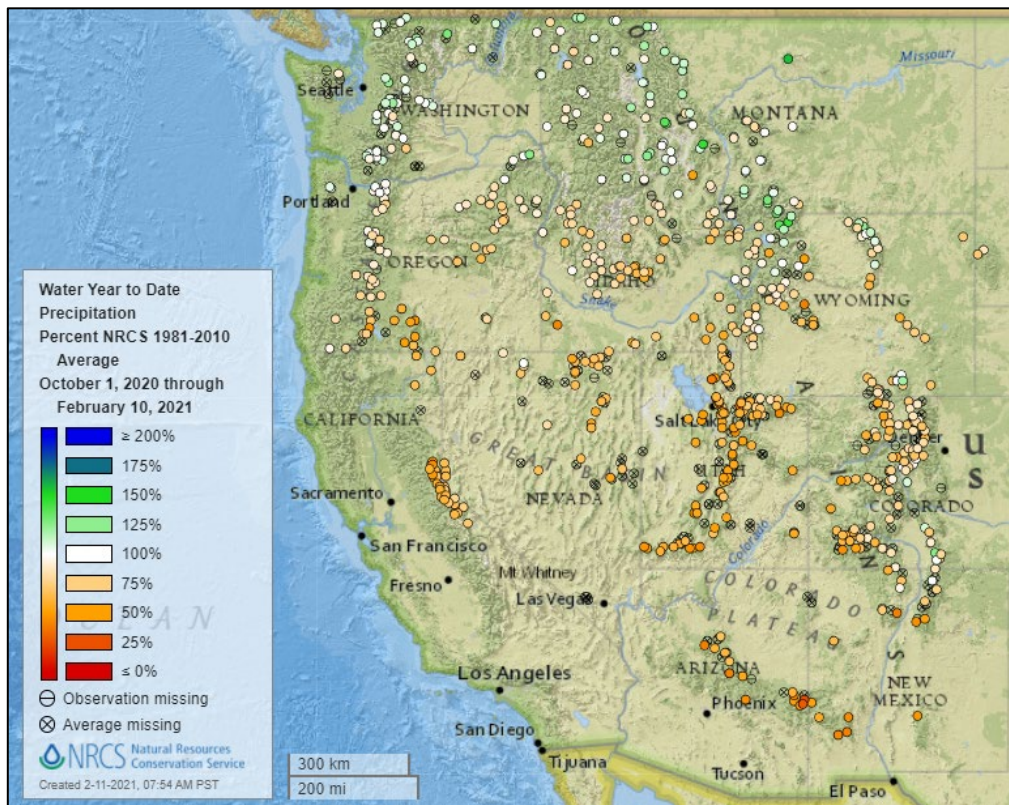
Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

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

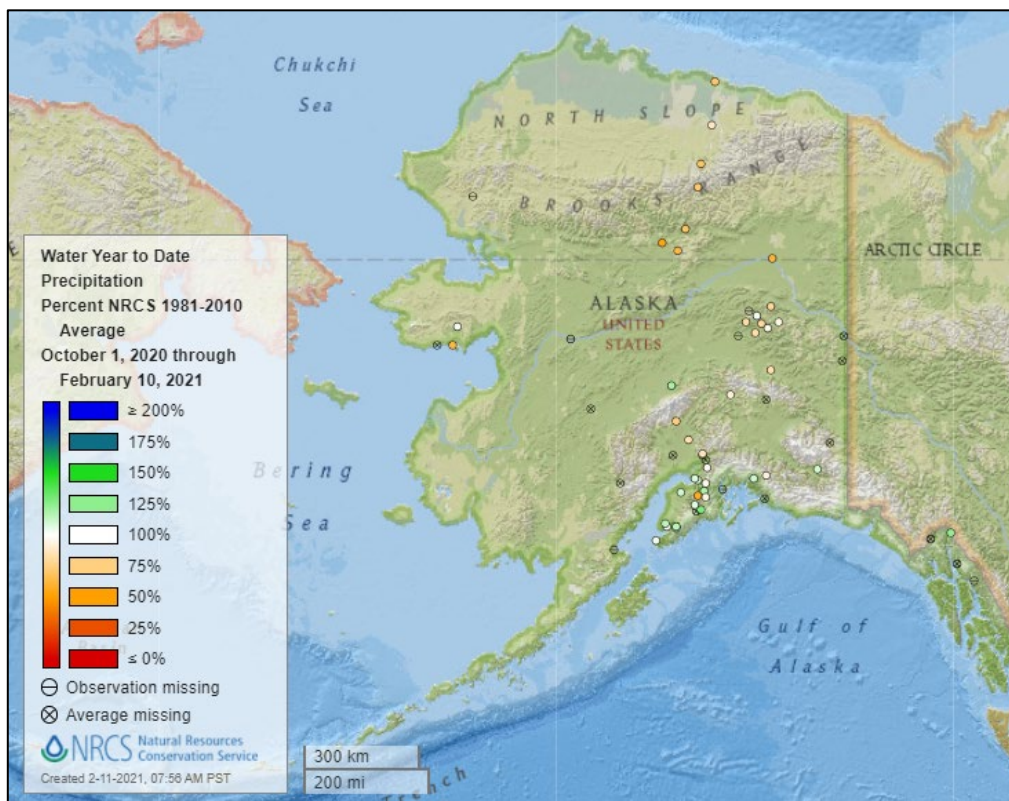


Water Year-to-Date, NRCS SNOTEL Network



[2021 water year-to-date precipitation percent of average map](#)

See also:
[2021 water year-to-date precipitation values \(inches\) map](#)



[Alaska 2021 water year-to-date precipitation percent of average map](#)

See also:
[Alaska 2021 water year-to-date precipitation values \(inches\) map](#)

Temperature

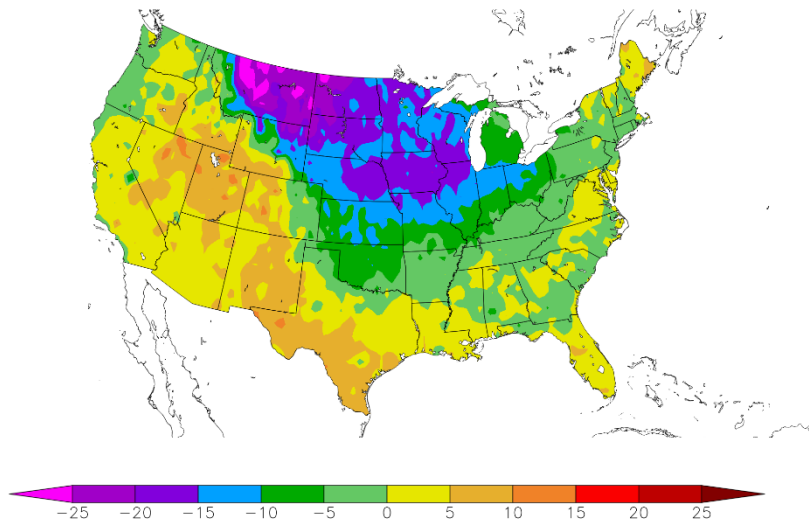
Last 7 Days, National Weather Service (NWS) Networks

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)
2/4/2021 – 2/10/2021



Generated 2/11/2021 at HPRCC using provisional data.

NOAA Regional Climate Centers

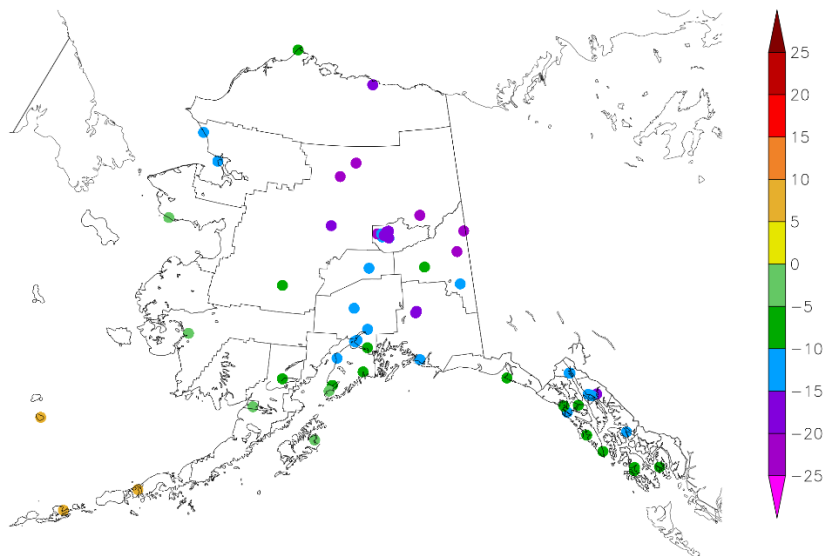
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)
2/4/2021 – 2/10/2021



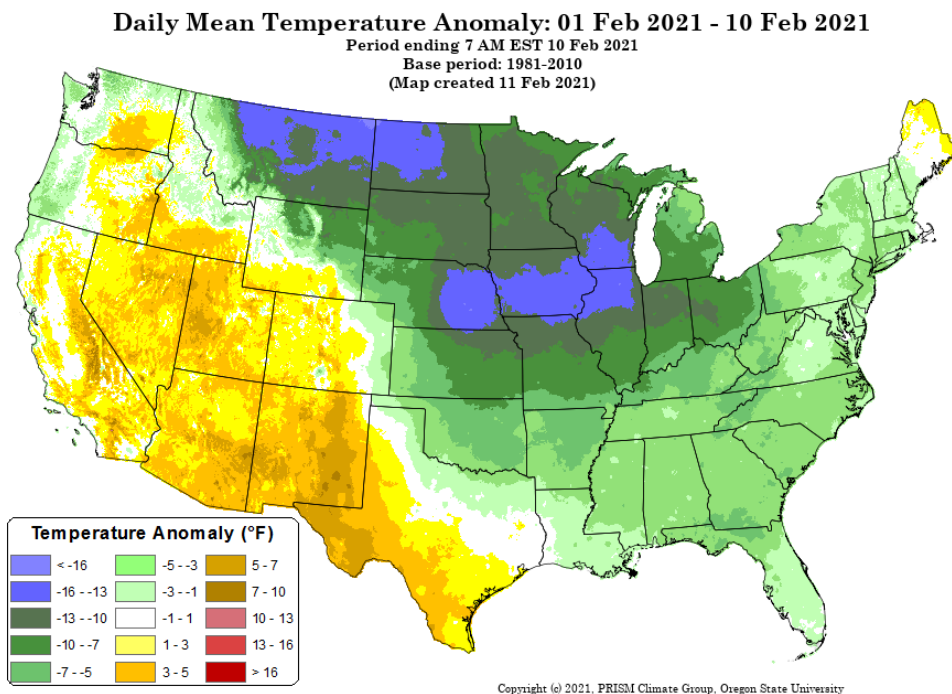
Generated 2/11/2021 at HPRCC using provisional data.

NOAA Regional Climate Centers

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

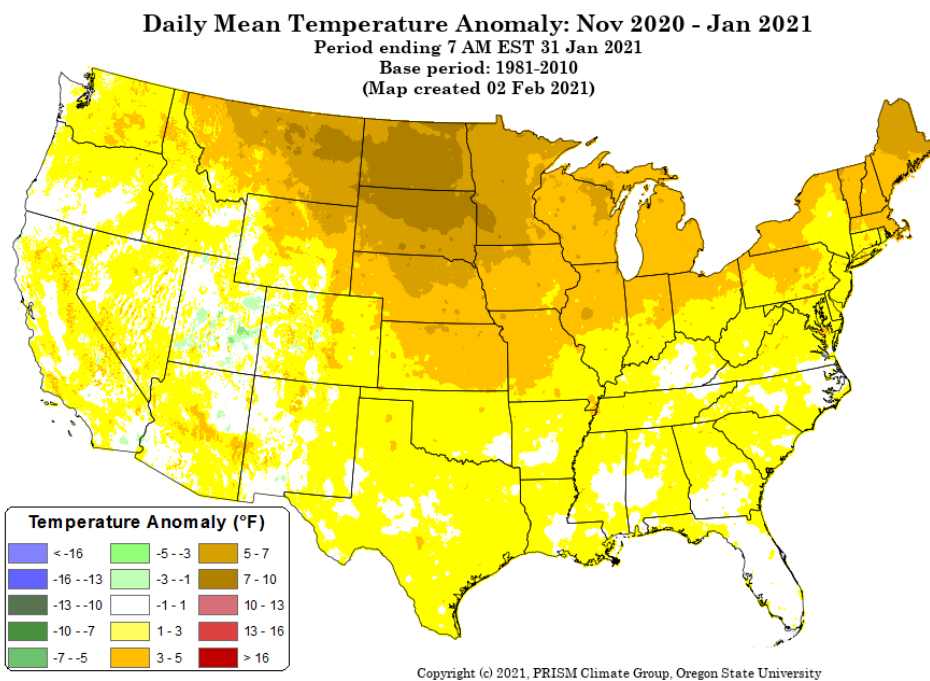
Source: PRISM

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



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

Source: PRISM



[November 2020
through January 2021
daily mean
temperature anomaly
map](#)

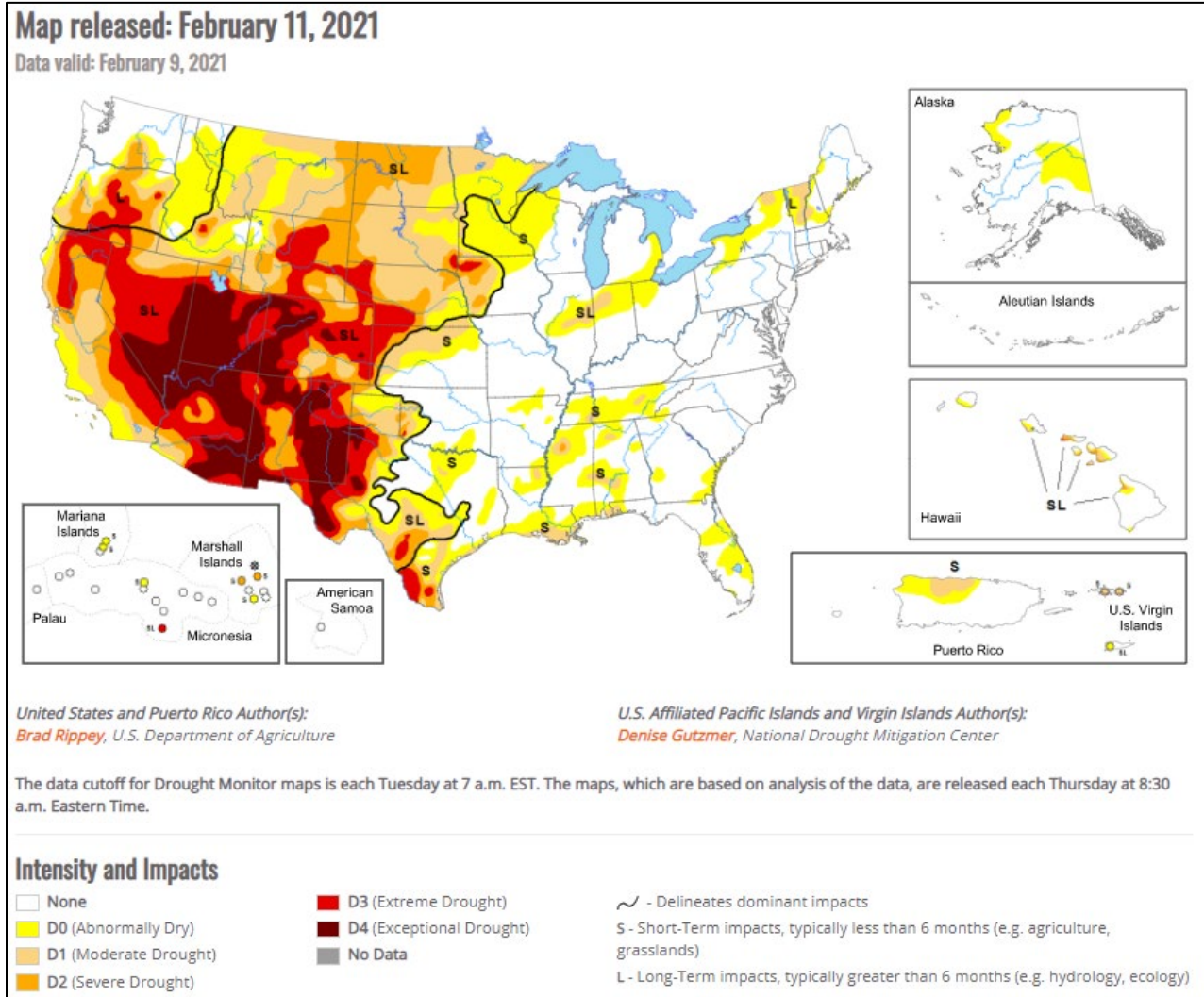
Drought

[U.S. Drought Monitor](#)

Source: National Drought Mitigation Center

[U.S. Drought Portal](#)

Source: NOAA



Current [National Drought Summary](#), February 11, 2021

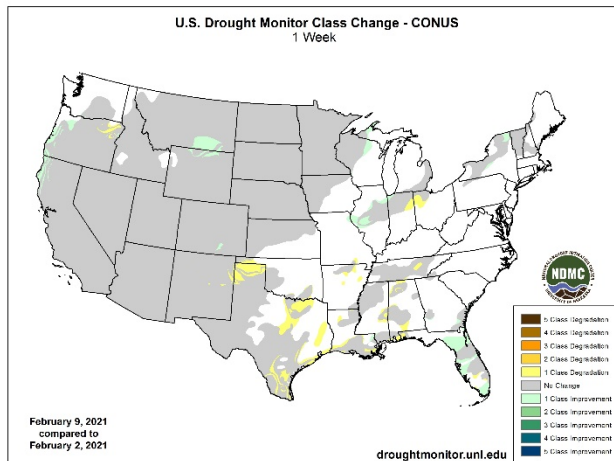
Source: National Drought Mitigation Center

“A slow-moving coastal storm delivered heavy precipitation in parts of the Northeast on January 31 – February 1, with impacts (windy weather and snow showers) lingering for several days. Later, the focus for stormy weather briefly returned to the western U.S., although significant precipitation was confined to the northern Rockies and Pacific Northwest. By February 4, wintry weather shifted into the upper Midwest, where blowing snow and gusty winds briefly resulted in blizzard conditions. The same weather system produced generally light rain across the South. Later, additional patchy precipitation fell in the central and eastern U.S., although dry weather prevailed during the drought-monitoring period across much of the nation’s southwestern quadrant. At the height of the early-February cold outbreak, temperatures plunged below -20°F across portions of the northern Plains and upper Midwest. Sub-zero readings occurred across a much larger area, extending southward across the central Plains and into the middle Mississippi Valley.”

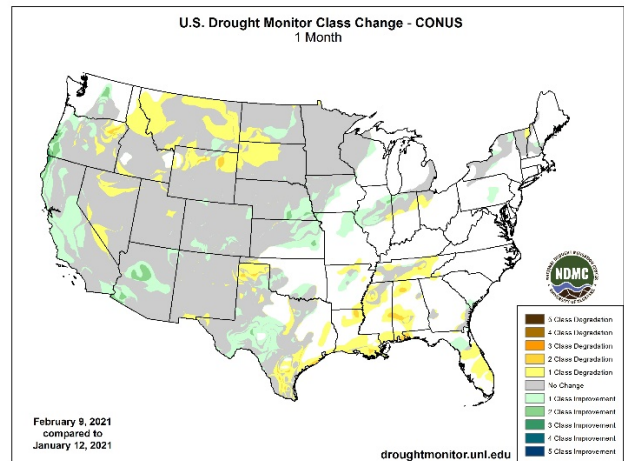
Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

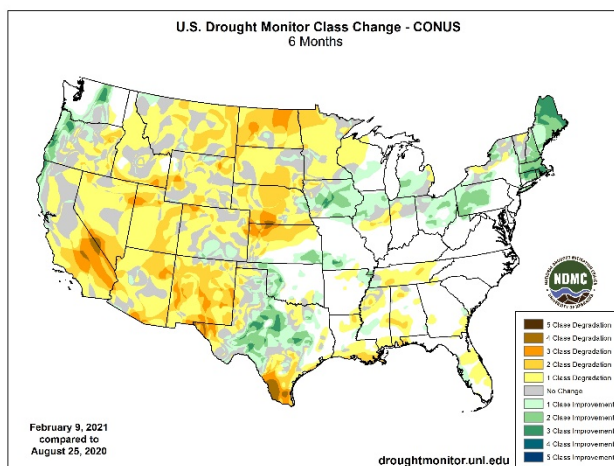
1 Week



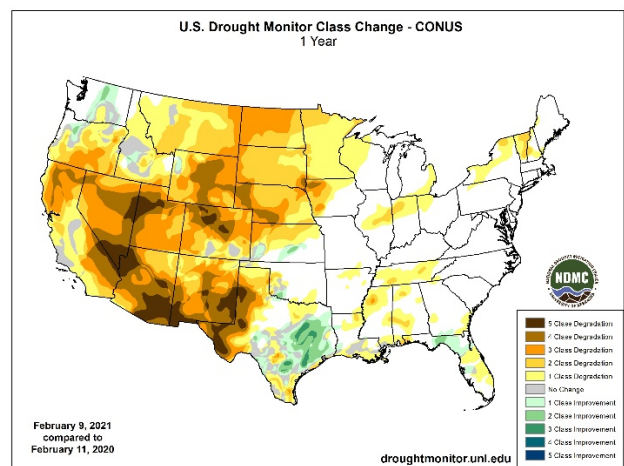
1 Month



6 Months



1 Year



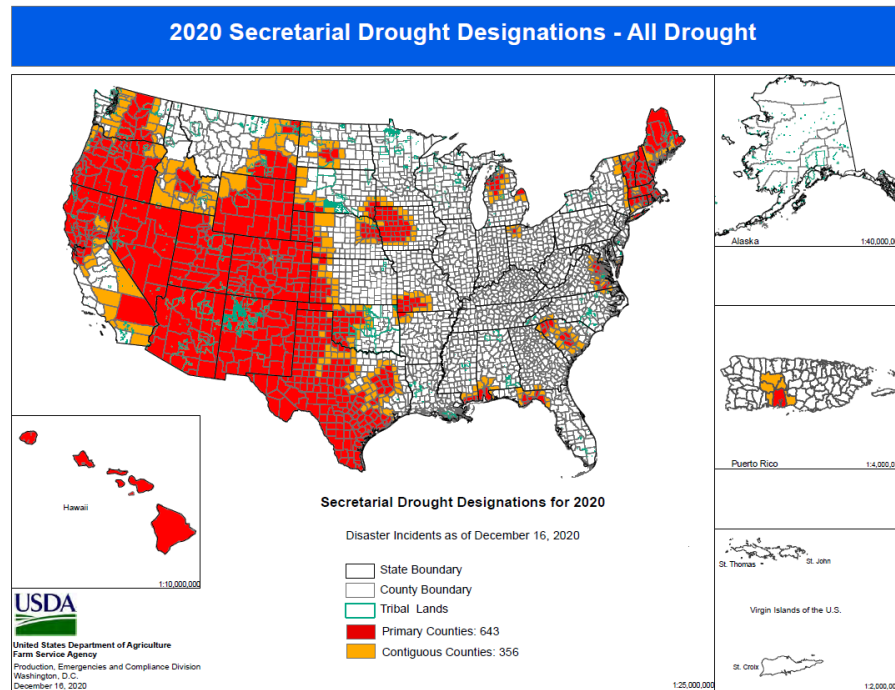
[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

Highlighted Drought Resources

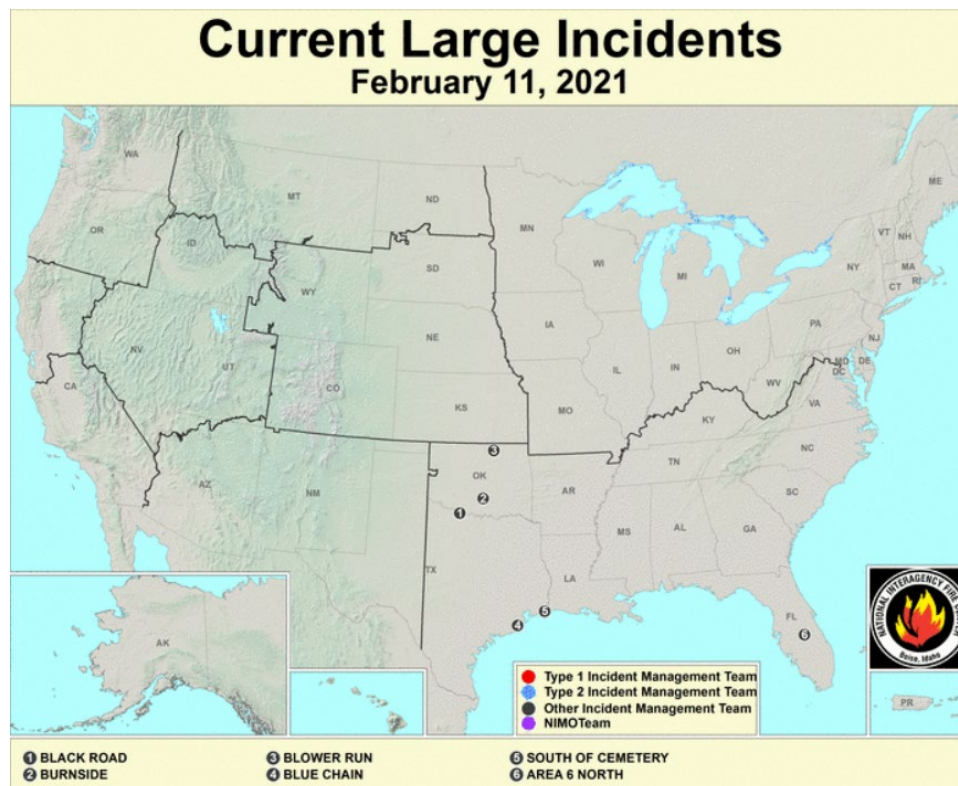
- [Drought Impact Reporter](#)
- [Quarterly Regional Climate Impacts and Outlook](#)
- [U.S. Drought Portal Indicators and Monitoring](#)
- [U.S. Population in Drought, Weekly Comparison](#)
- [USDA Disaster and Drought Information](#)

Secretarial Drought Designations

Source: USDA Farm Service Agency



Wildfires: USDA Forest Service Active Fire Mapping



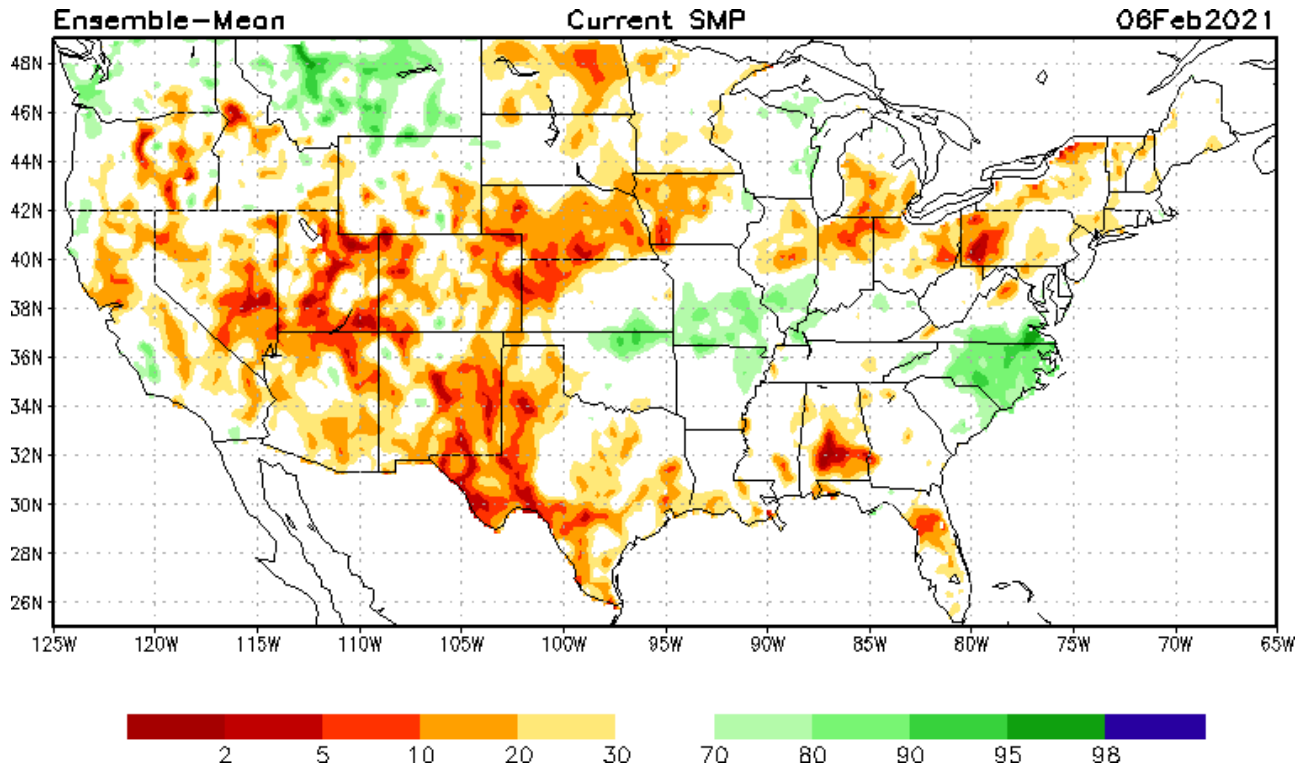
Highlighted Wildfire Resources

- [National Interagency Fire Center](#)
- [InciWeb Incident Information System](#)
- [Significant Wildland Fire Potential Outlook](#)

Other Climatic and Water Supply Indicators

Soil Moisture

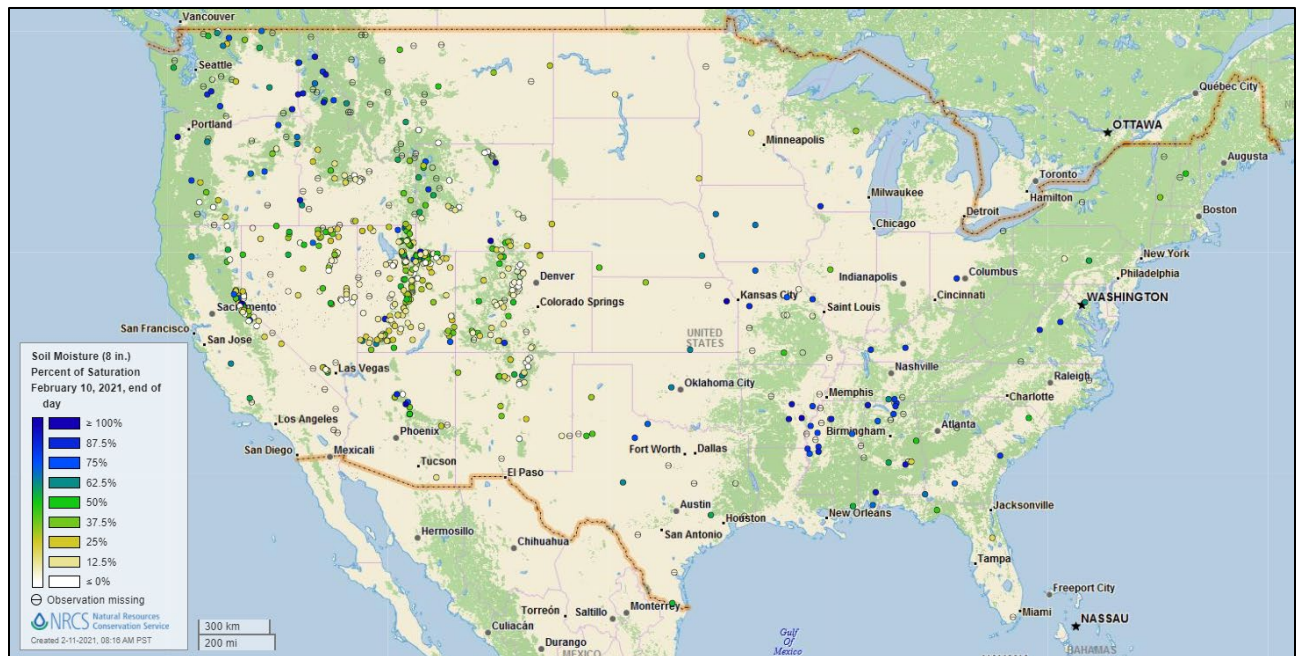
Source: NOAA National Centers for Environmental Prediction



[Modeled soil moisture percentiles](#) as of February 06, 2021

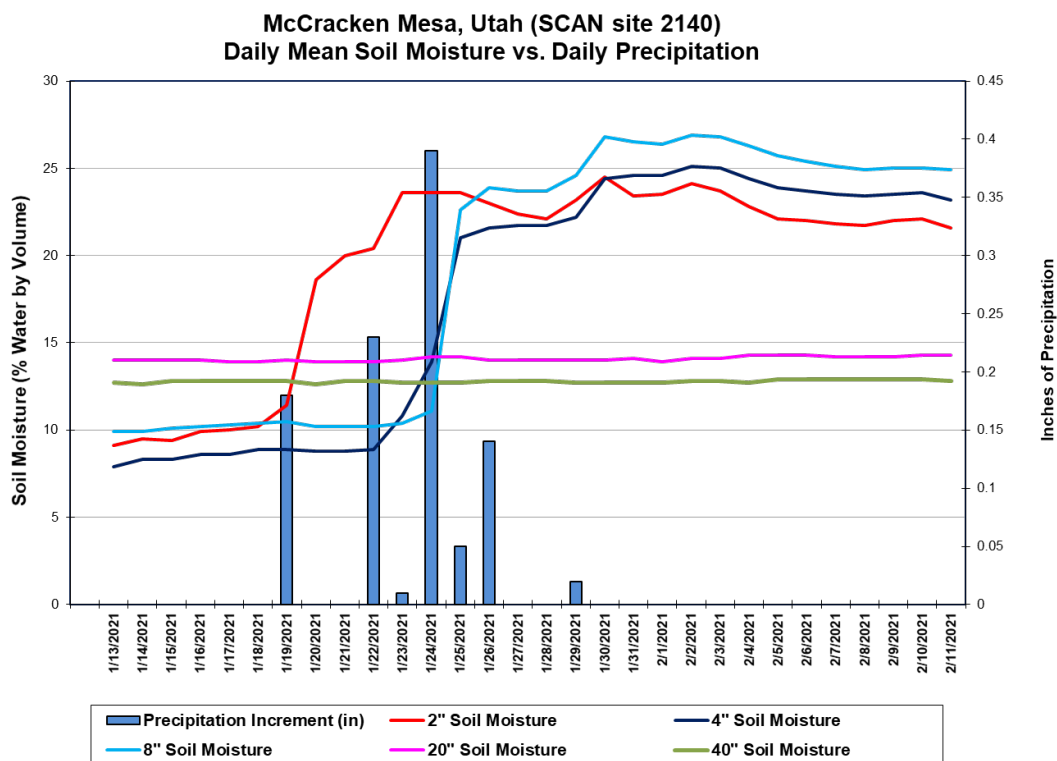
Soil Moisture Percent of Saturation

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



Soil Moisture

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



This chart shows the precipitation and soil moisture for the last 30 days at the [McCracken Mesa](#) SCAN site in southeast Utah. The precipitation from January 22-26 increased the soil moisture at the -2, -4, and -8-inch sensor depths. Accumulated precipitation for the 30-day period was 1.02 inches.

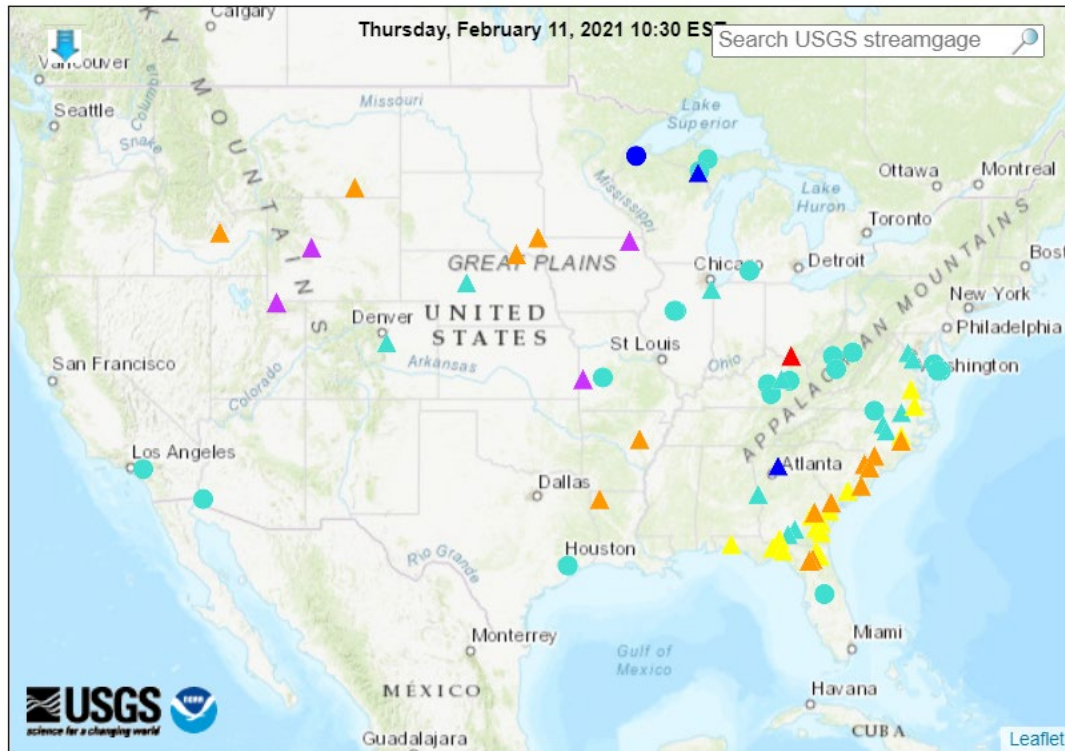
Soil Moisture Data Portals

- [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 (21 in floods [major: 4, moderate: 2, minor: 15], 15 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

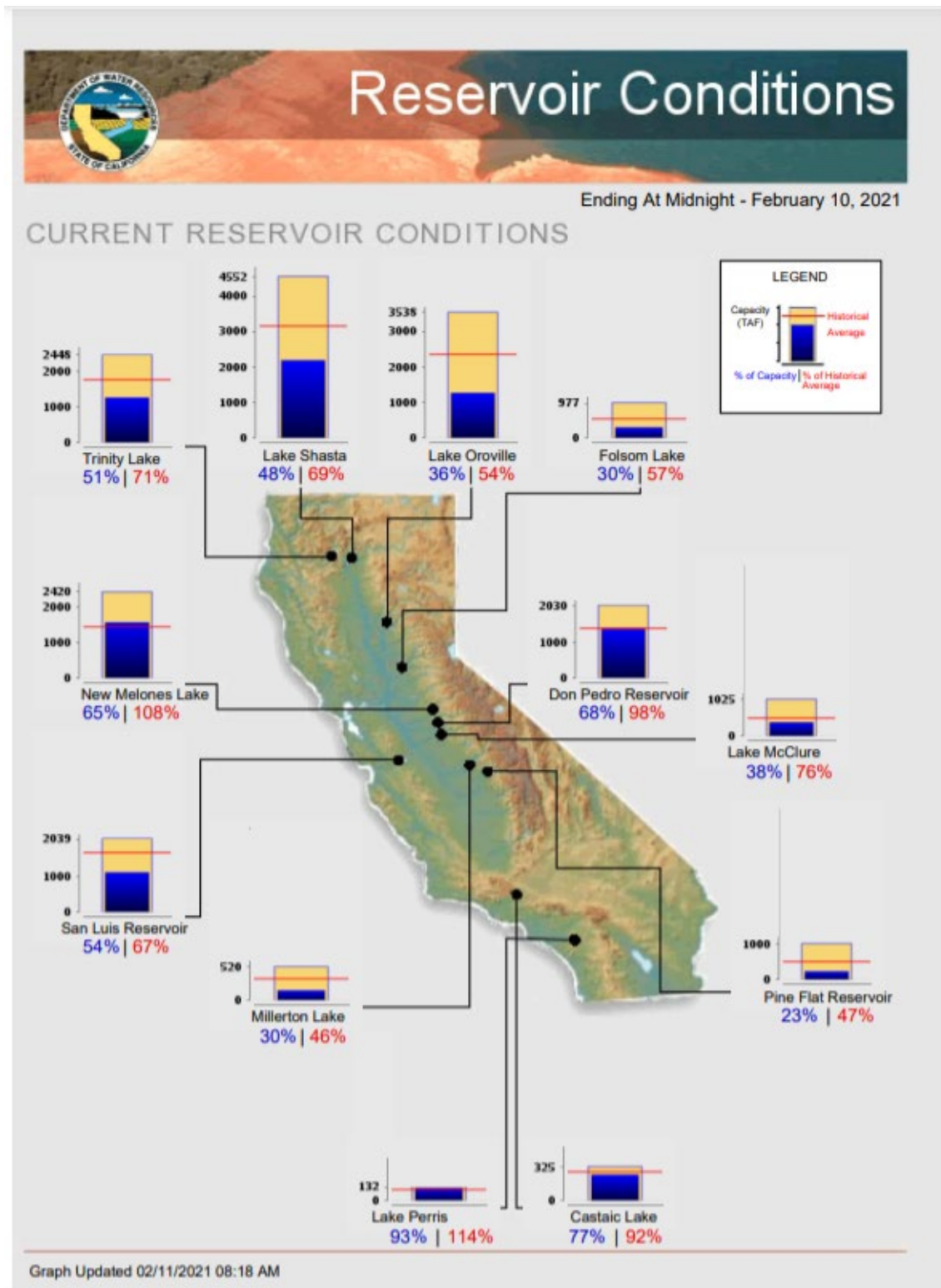
Hydromet Teacup Reservoir Depictions

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](#)

Agricultural Weather Highlights

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

National Outlook, Thursday, February 11, 2021: “During the next 5 days, a parade of storms will cross the country, delivering widespread wintry precipitation across the West and from the central and southern Plains into the mid-South, lower Midwest, and Northeast. Much of the Southeast will receive rain, with 1- to 4-inch totals common, except across southern Florida. In contrast, precipitation will mostly bypass the Desert Southwest and the north-central U.S. Unusually cold weather will accompany the stormy weather, aside from lingering warmth in the Southwest and lower Southeast. Weekend temperatures could plunge to 0°F or below as far south as west-central Texas, although fresh snow should help to insulate winter wheat across the southern High Plains. Early next week, sub-freezing temperatures may threaten sensitive crops in Deep South Texas, but winter agricultural areas in California, Florida, and the Desert Southwest should not experience a freeze. The NWS 6- to 10-day outlook for February 16 – 20 calls for the likelihood of colder-than-normal conditions nationwide, except for near-normal temperatures in southern California and above-normal temperatures along the southern Atlantic Coast. Meanwhile, near- or above-normal precipitation will occur in most areas of the country, with drier-than-normal weather limited to southern California, the Desert Southwest, and the northcentral U.S.”

Weather Hazards Outlook: February 13 – 17, 2021

Source: NOAA Weather Prediction Center

















U.S. Day 3-7 Hazards Outlook

About the Hazards Outlook

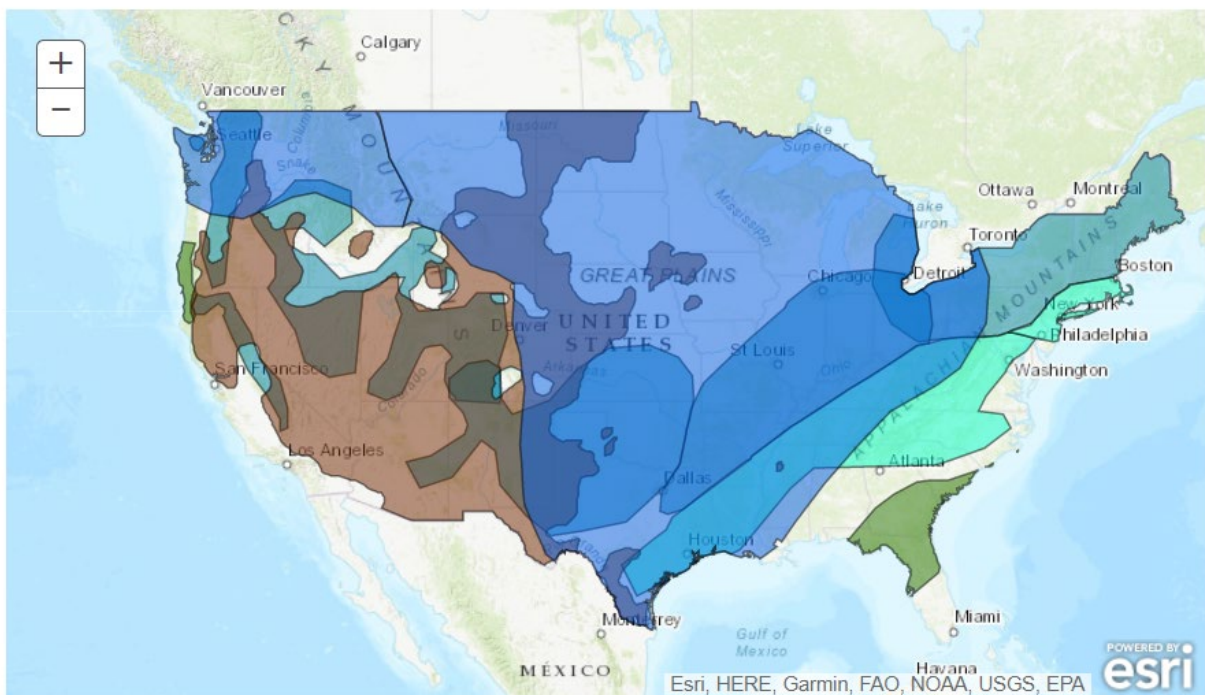
Created February 10, 2021

NOTE: These products are only created Monday through Friday. Please exercise caution using this outlook during the weekend.

Precipitation	<input checked="" type="checkbox"/>
Temperature	<input checked="" type="checkbox"/>
Soils	<input checked="" type="checkbox"/>

Legend	
	Flooding Likely
	Flooding Occurring or Imminent
	Flooding Possible
	Freezing Rain
	Heavy Ice
	Heavy Precipitation
	Heavy Rain
	Heavy Snow
	Severe Weather
	Excessive Heat
	High Winds
	Much Above Normal Temperatures
	Much Below Normal Temperatures
	Significant Waves
	Enhanced Wildfire Risk
	Severe Drought

Valid February 13, 2021 - February 17, 2021

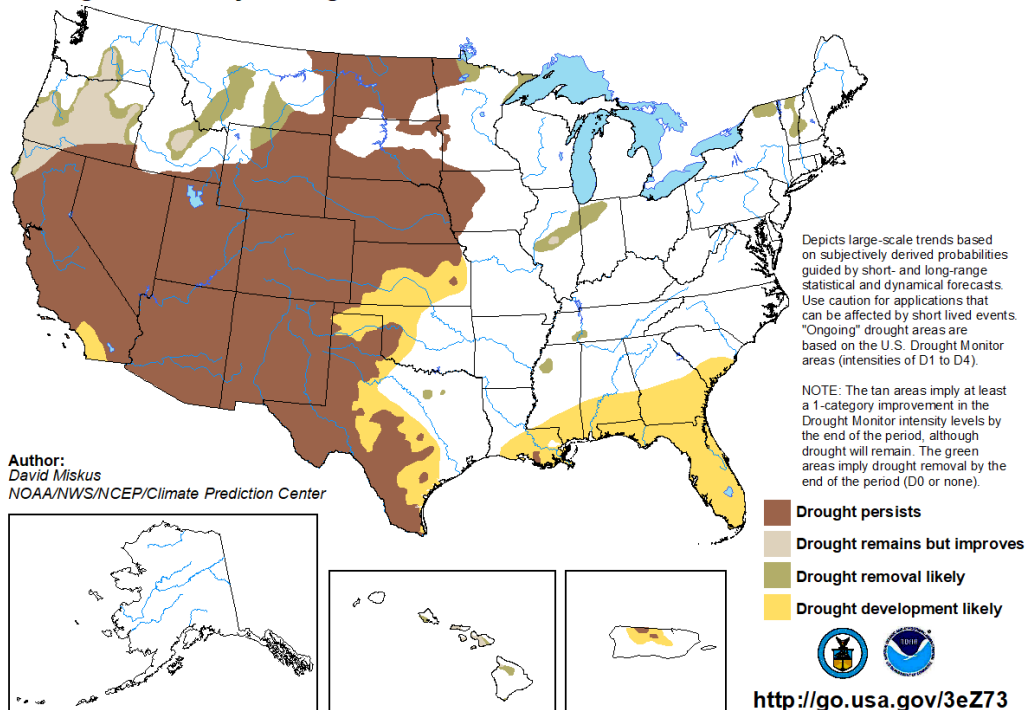


Seasonal Drought Outlook: [January 21 – April 30, 2021](#)

Source: National Weather Service

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

Valid for January 21 - April 30, 2021
Released January 21

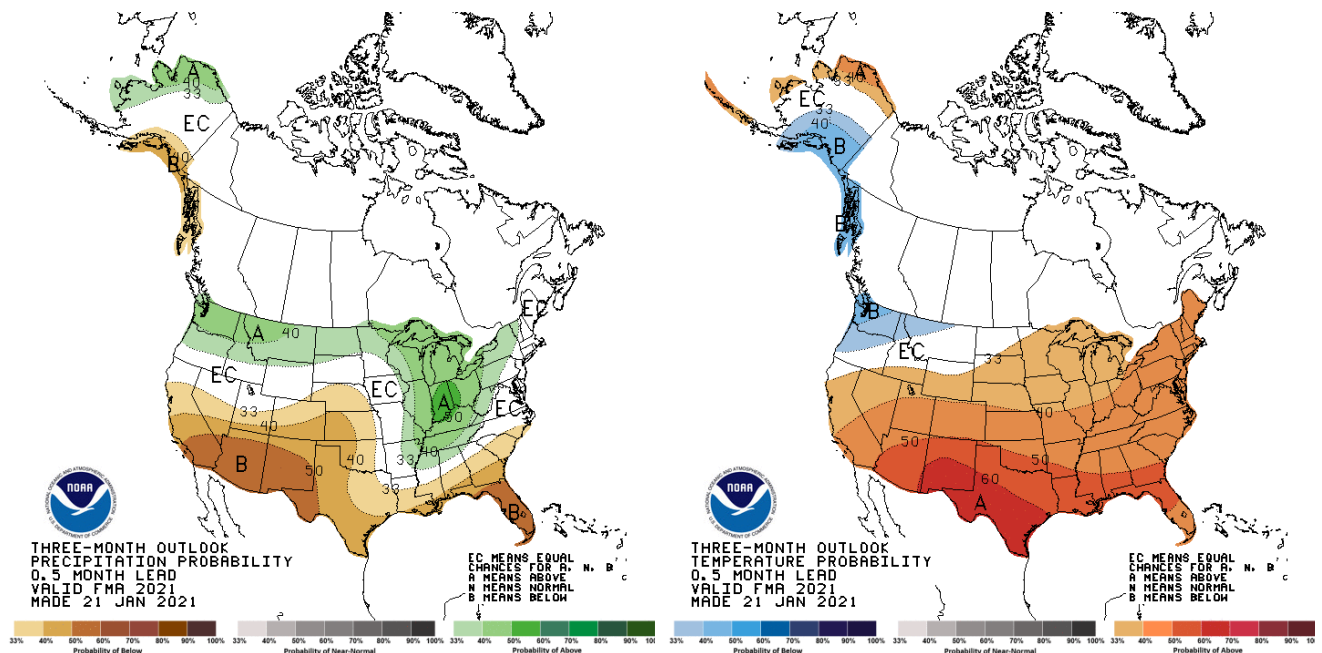


Climate Prediction Center 3-Month Outlook

Source: National Weather Service

[Precipitation](#)

[Temperature](#)



[February-March-April \(FMA\) 2021 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](#).