

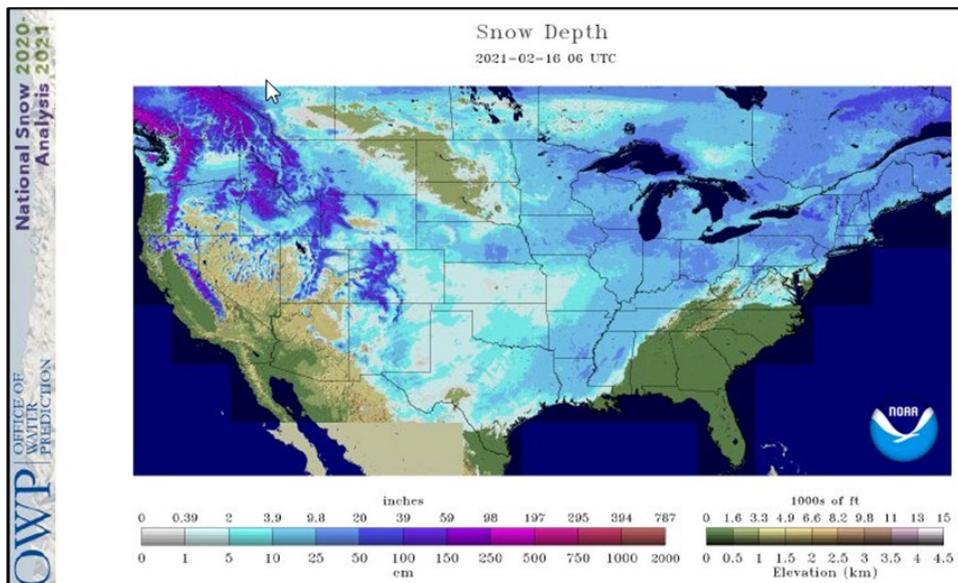
Water and Climate Update

February 18, 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
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Record cold and snow reaches the Gulf Coast

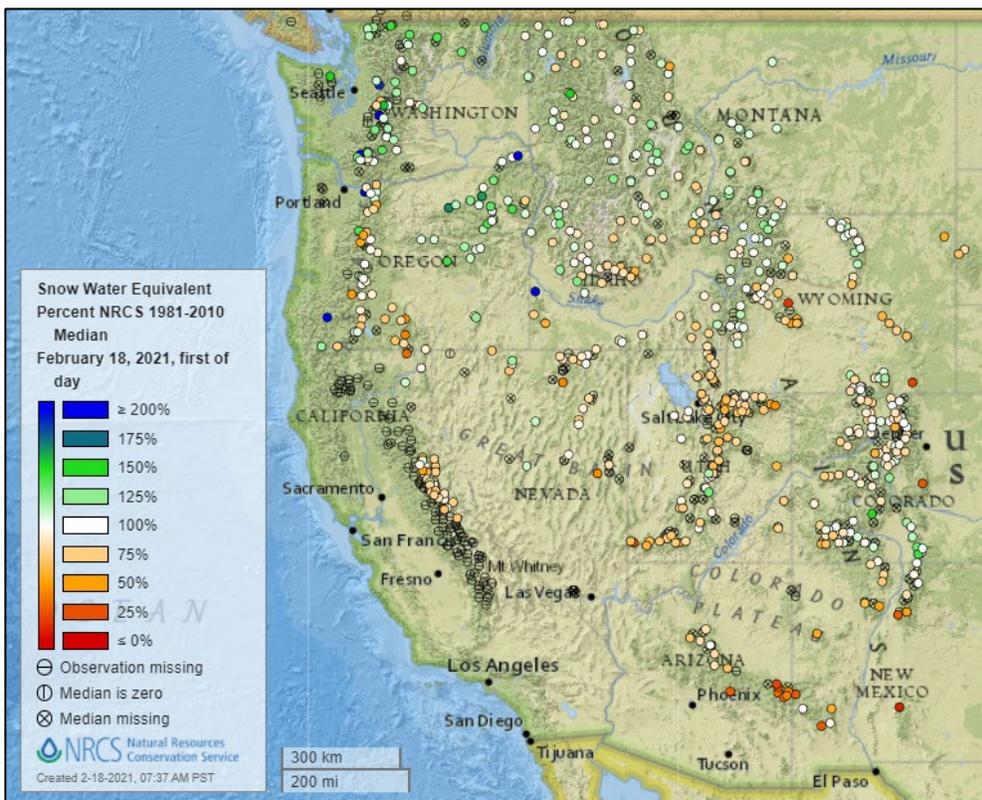


Record cold temperatures from the polar vortex span most of the U.S. Snow and ice cover 73.2% of the country, from the Pacific Northwest to the Gulf Coast, and continuing to the mid-Atlantic. Widespread damage from the cold, ice, and snow have caused power outages, water shortages, downed trees, and damage to buildings and infrastructure in Oregon and throughout the South. Texas has been hit especially hard, with the entire state contending with record cold and snow. Frigid temperatures are expected to persist for most of the country, with the Plains and Mississippi Valley forecasted to continue with double-digit temperature anomalies from 20-to-30 degrees below normal. Another storm system is predicted to provide additional snow and ice to the eastern U.S. through the weekend. [Click here to learn more about how the USDA can provide disaster assistance to agricultural producers.](#)

Related:

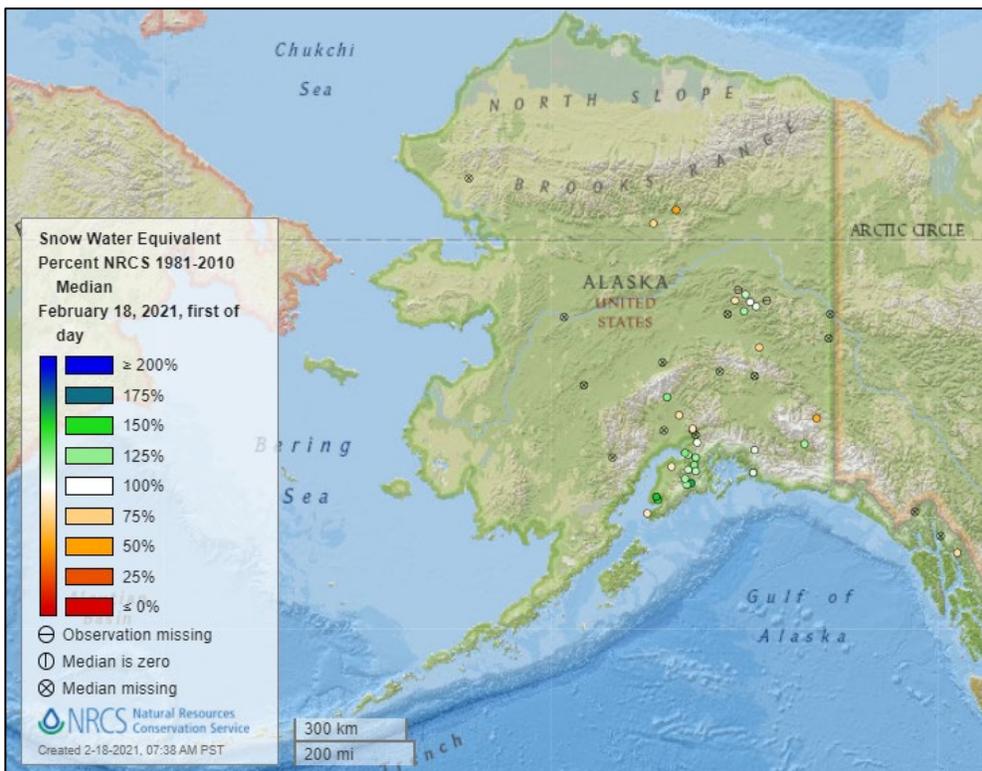
- ['Just a real mess': 100M from the South to the East Coast in path of a new winter storm; 3.4M in US without power](#) – USA Today
- [Frigid, icy weather plague central and eastern U.S. while millions in Texas remain in the dark](#) – Washington Post
- [Record-breaking deep freeze engulfing Texas, other parts of U.S., isn't over yet](#) - KVIA (TX)
- [Cold snap leaves one dead, over 4 million without power in Texas](#) – Reuters
- [More than 150,000 without power in Portland, Oregon, area](#) – AP on MSN.com
- [Power repair efforts in Oregon stretch into 6th day](#) – KOIN (OR)

Snow



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

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

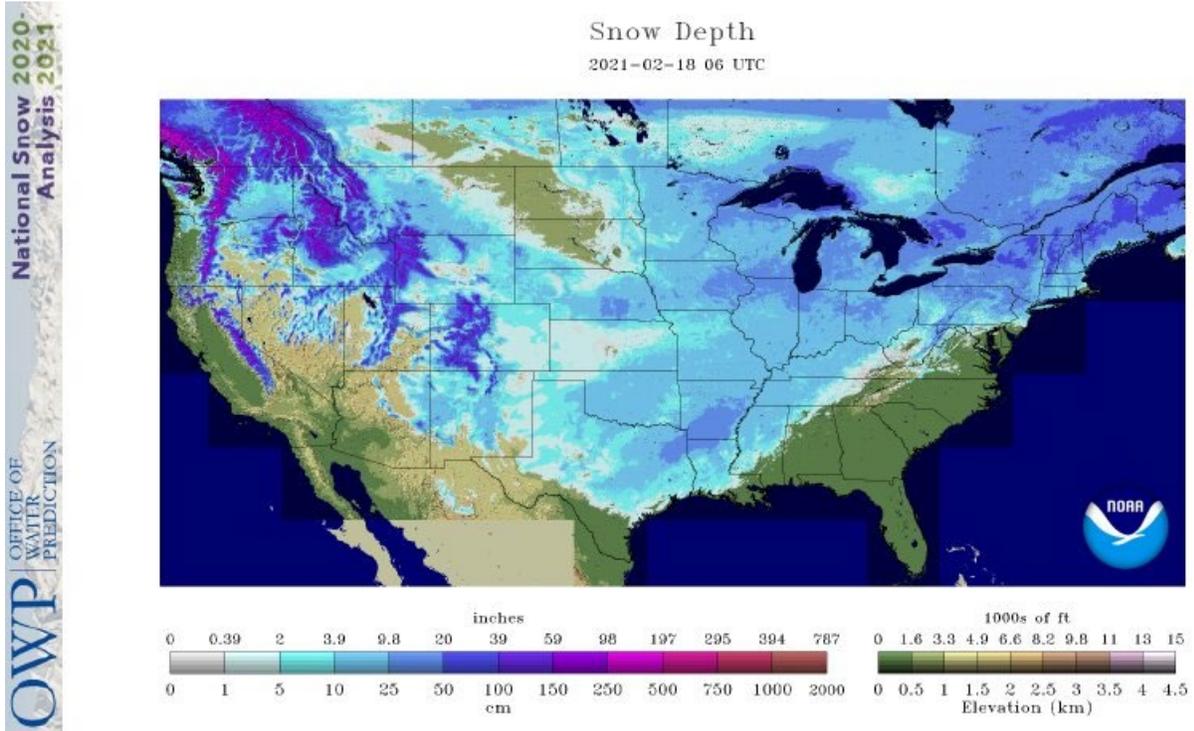


[Alaska snow water equivalent percent of median map](#)

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

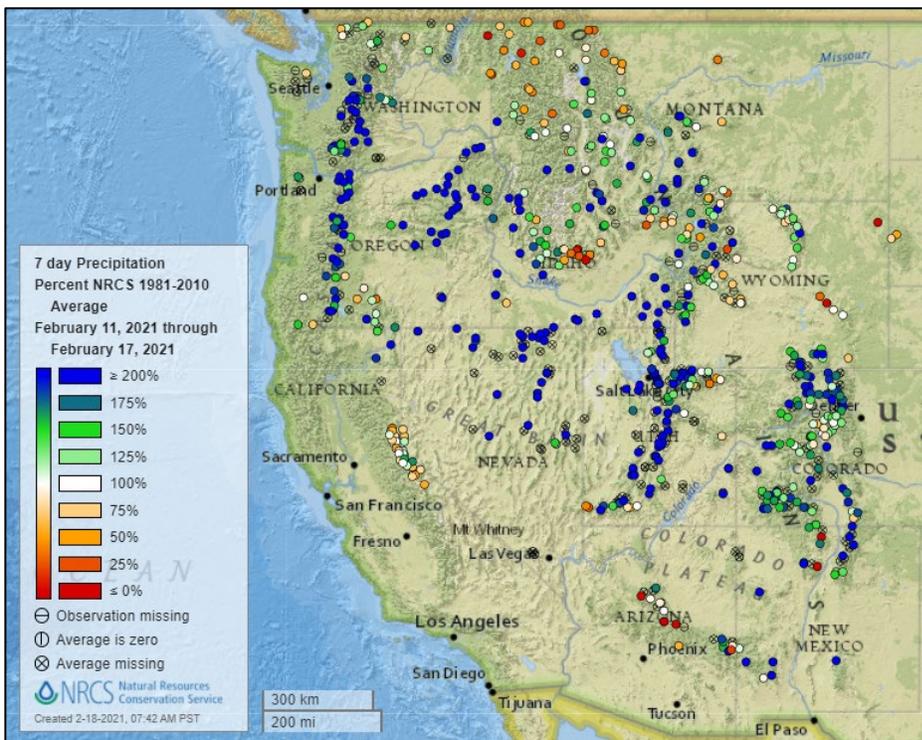
Current Snow Depth, National Weather Service Snow Analysis

Source: NOAA Office of Water Prediction



Precipitation

Last 7 Days, NRCS SNOTEL Network

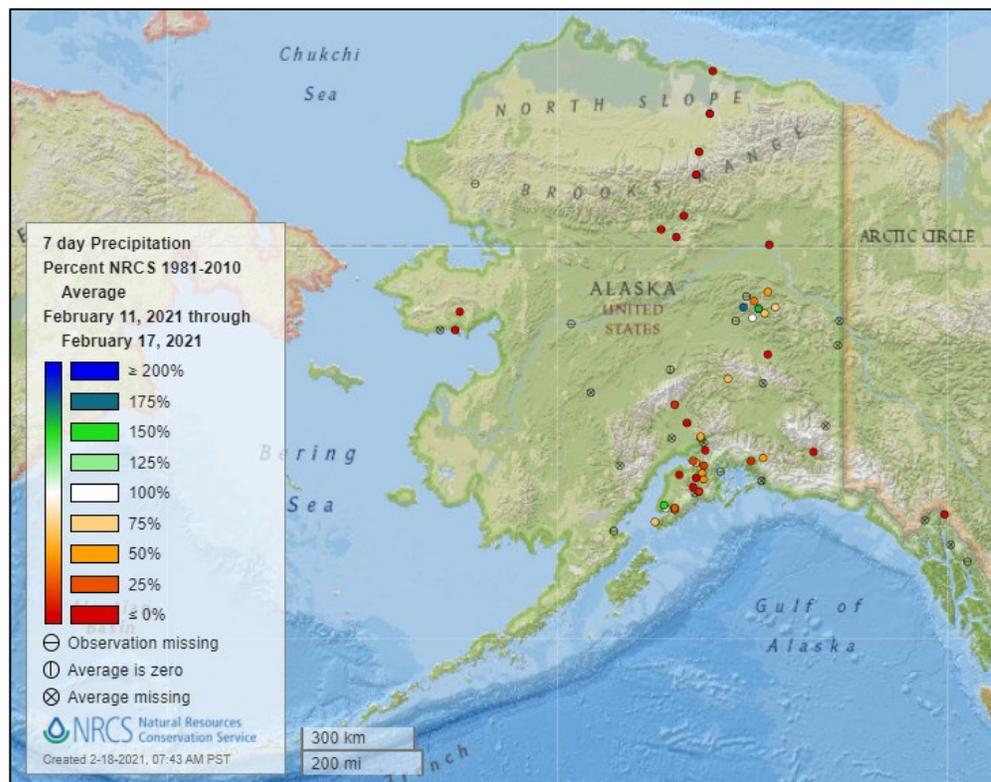


[7-day precipitation percent of average map](#)

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](#)



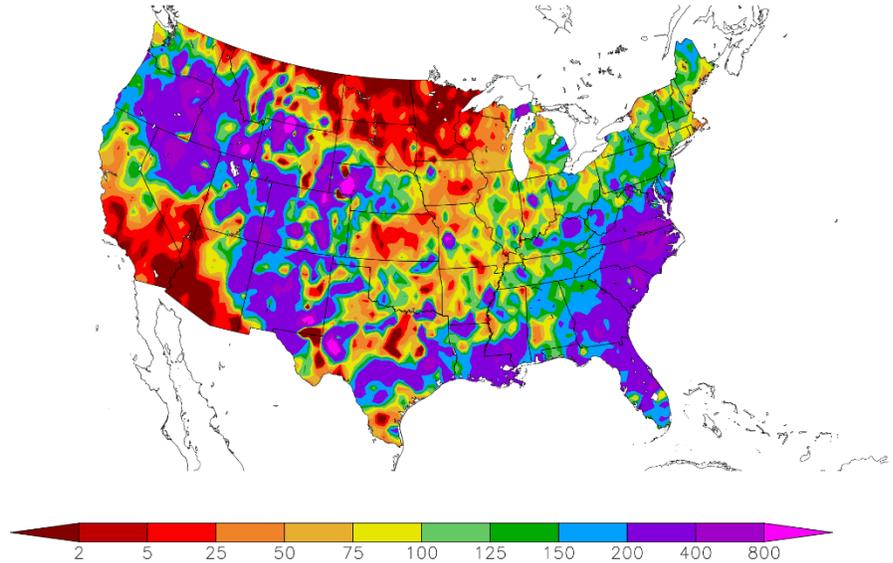
Last 7 Days, National Weather Service (NWS) Networks

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 (%)
2/11/2021 – 2/17/2021



Generated 2/18/2021 at HPRCC using provisional data.

NOAA Regional Climate Centers

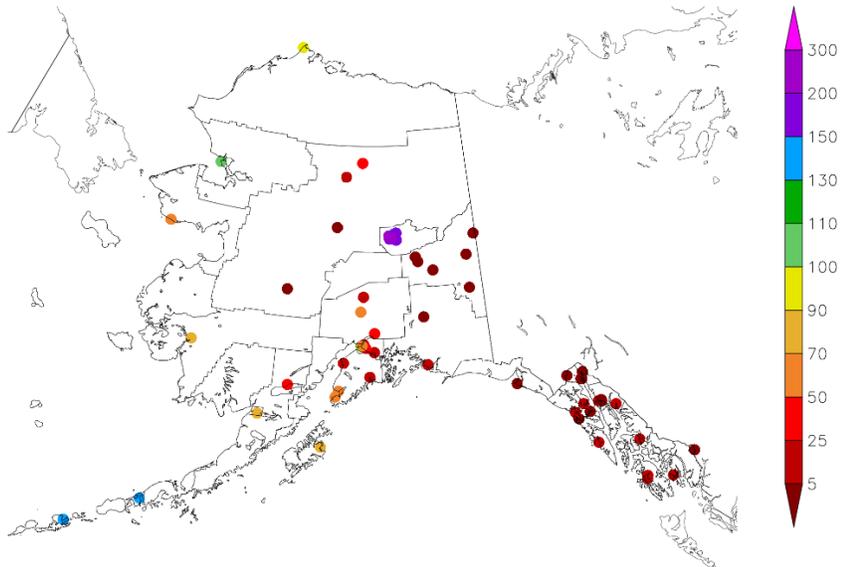
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Percent of Normal Precipitation (%)
2/11/2021 – 2/17/2021



Generated 2/18/2021 at HPRCC using provisional data.

NOAA Regional Climate Centers

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

Source: PRISM

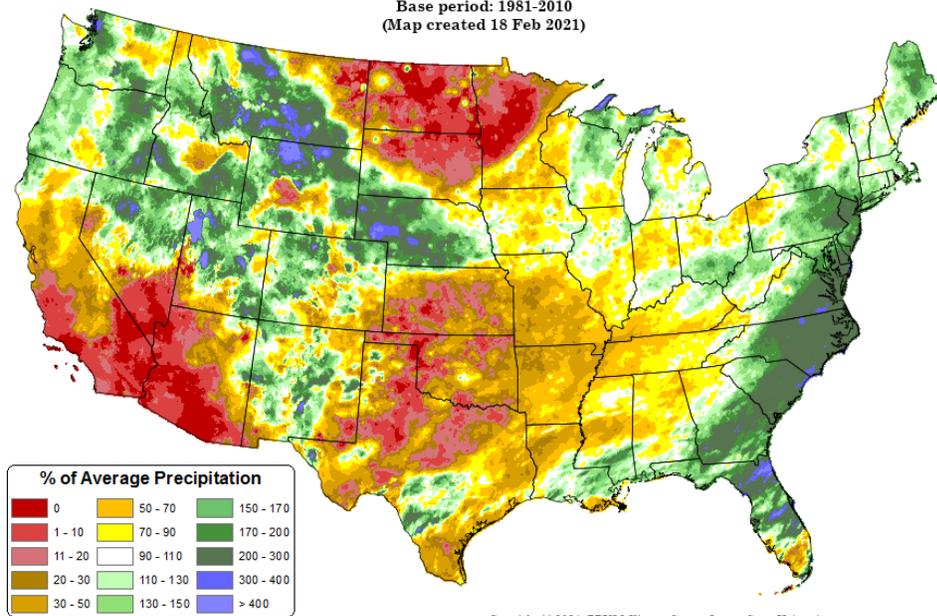
Total Precipitation Anomaly: 01 Feb 2021 - 17 Feb 2021

Period ending 7 AM EST 17 Feb 2021

Base period: 1981-2010

(Map created 18 Feb 2021)

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



Copyright (c) 2021, PRISM Climate Group, Oregon State University

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

Source: PRISM

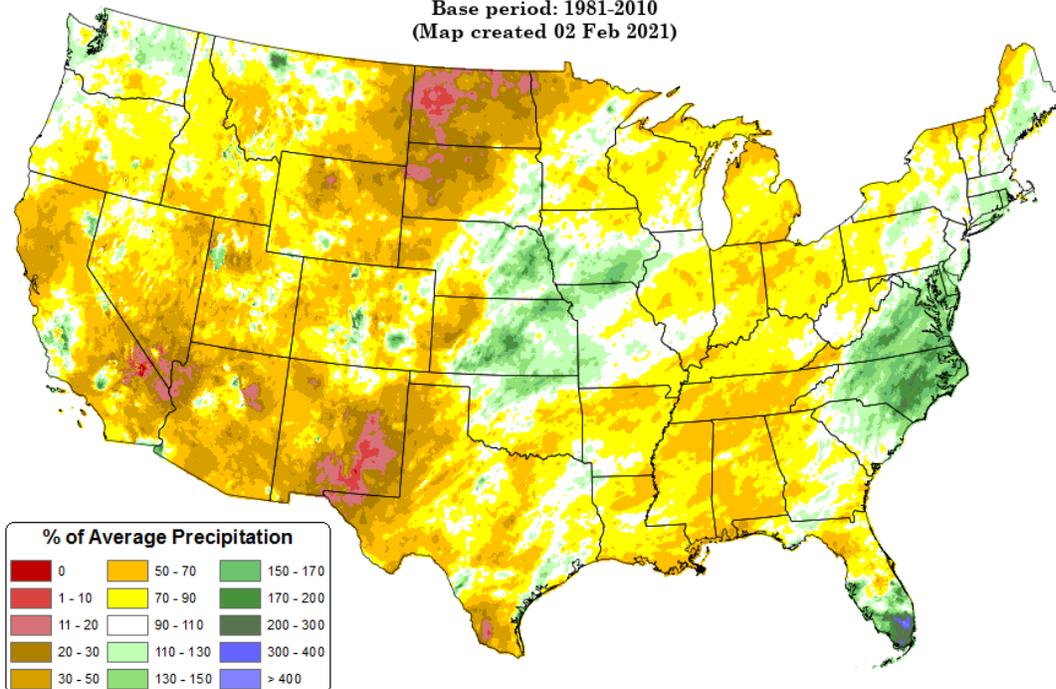
[November through January precipitation percent of average map](#)

Total Precipitation Anomaly: Nov 2020 - Jan 2021

Period ending 7 AM EST 31 Jan 2021

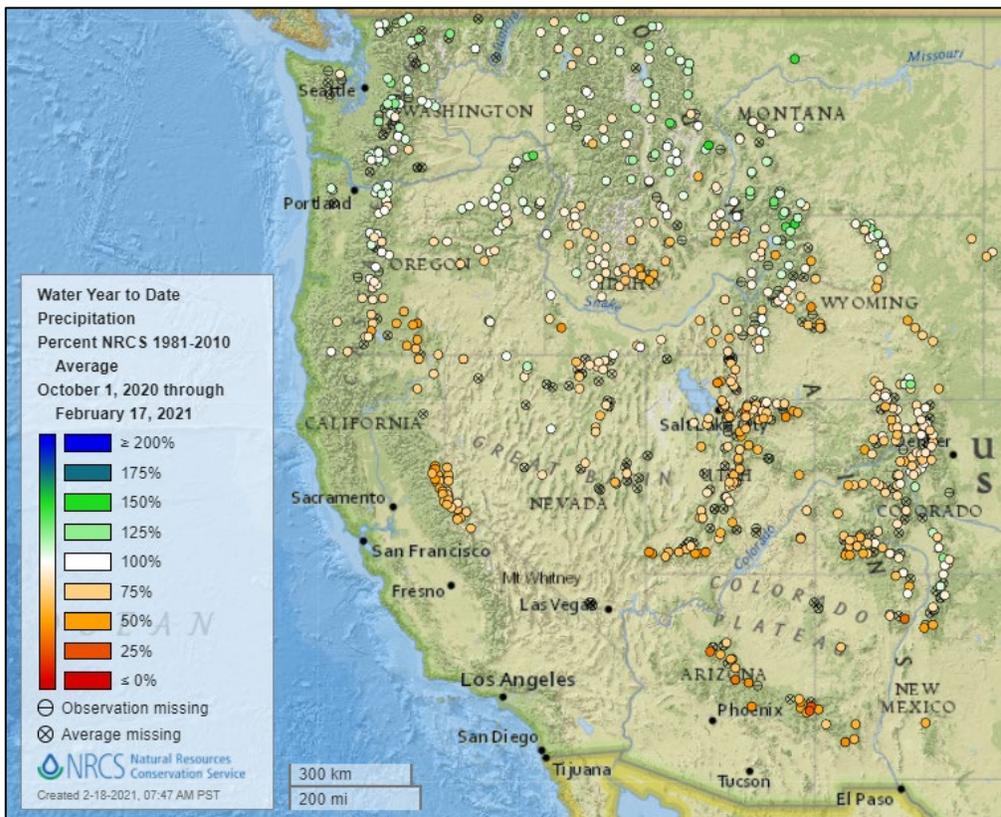
Base period: 1981-2010

(Map created 02 Feb 2021)



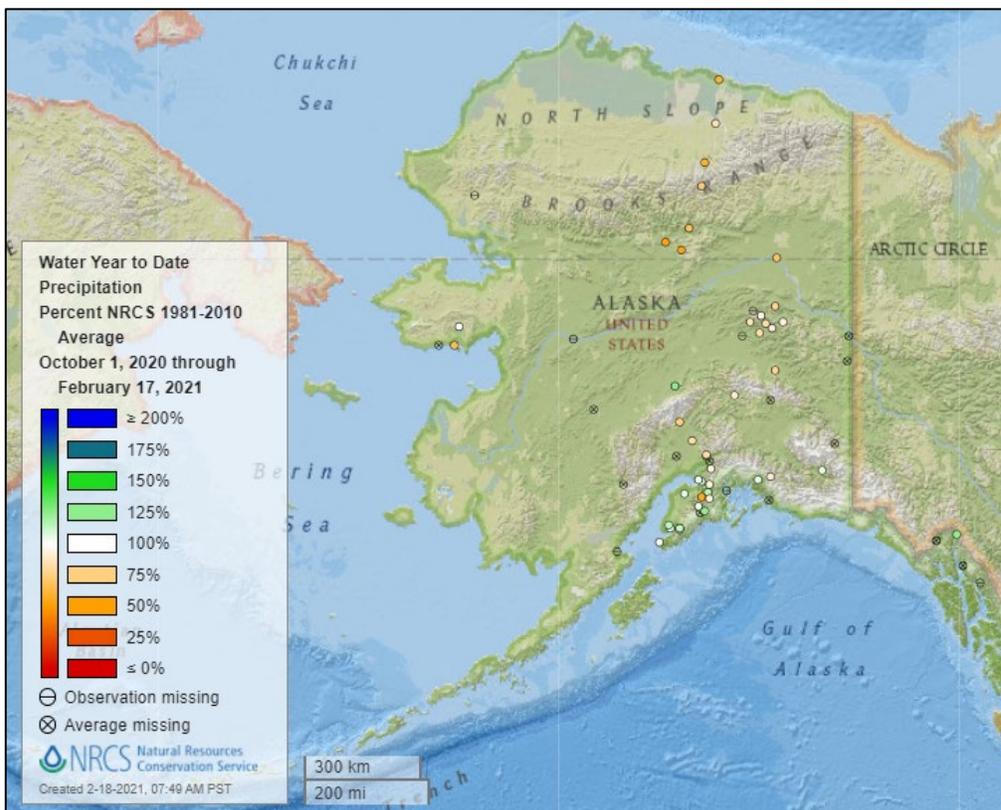
Copyright (c) 2021, PRISM Climate Group, Oregon State University

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

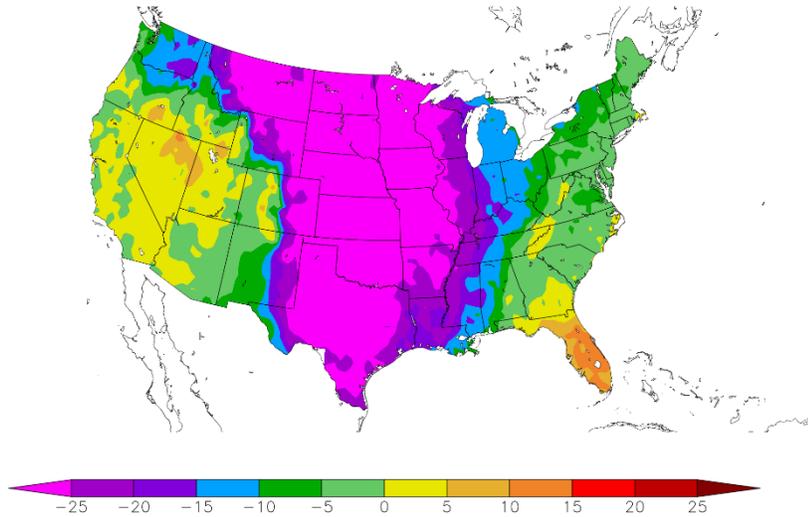
Last 7 Days, National Weather Service (NWS) Networks

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)
2/11/2021 – 2/17/2021



Generated 2/18/2021 at HPRCC using provisional data.

NOAA Regional Climate Centers

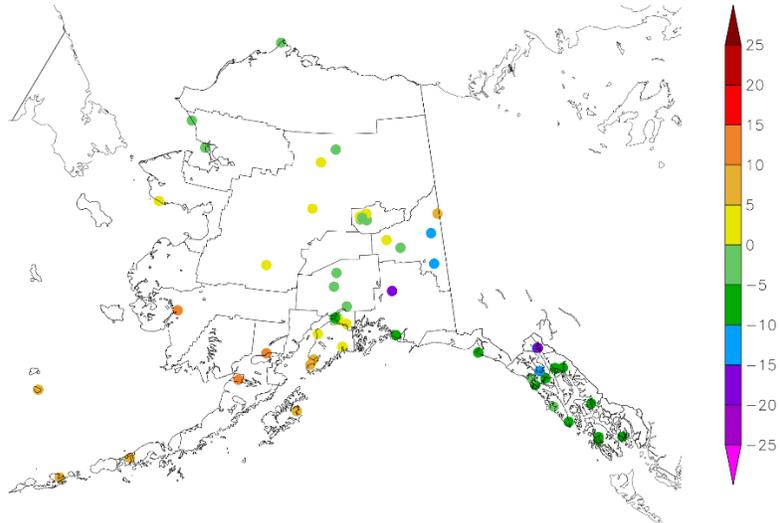
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)
2/11/2021 – 2/17/2021



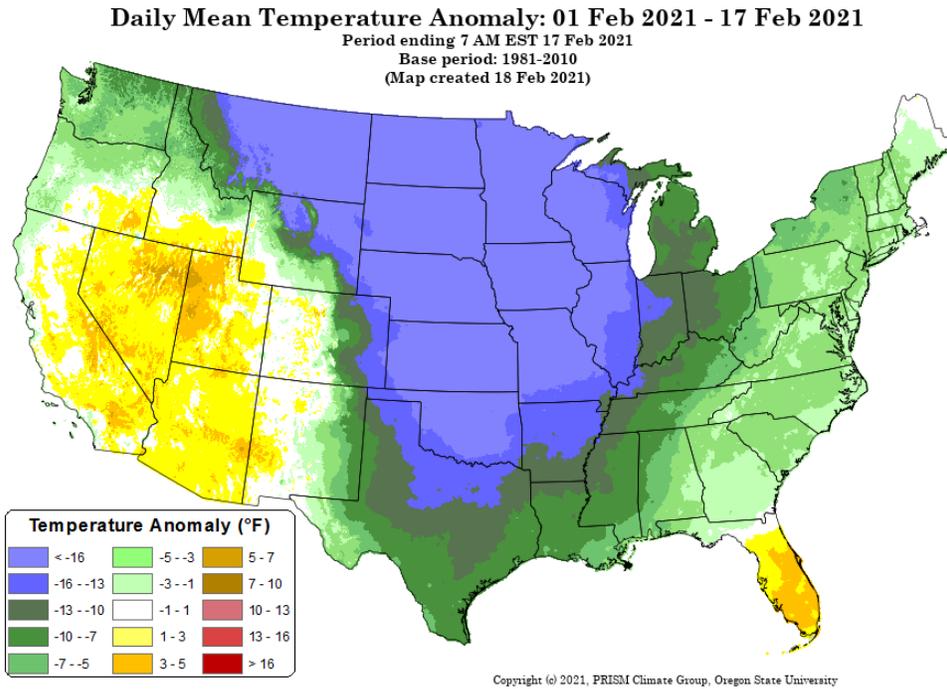
Generated 2/18/2021 at HPRCC using provisional data.

NOAA Regional Climate Centers

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

Source: PRISM

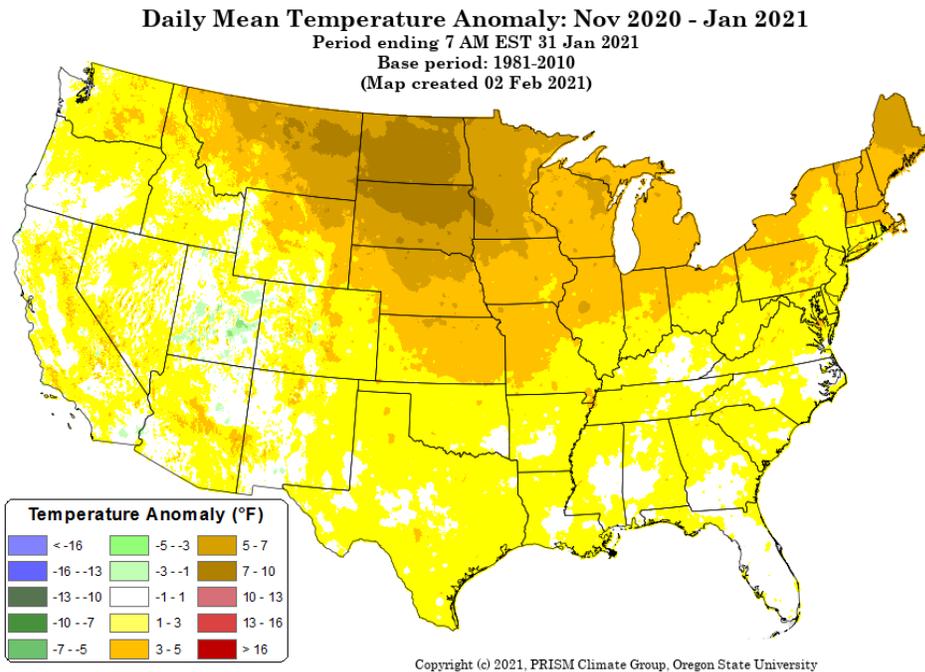
[Month-to-date national daily mean temperature anomaly map](#)



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

Source: PRISM

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



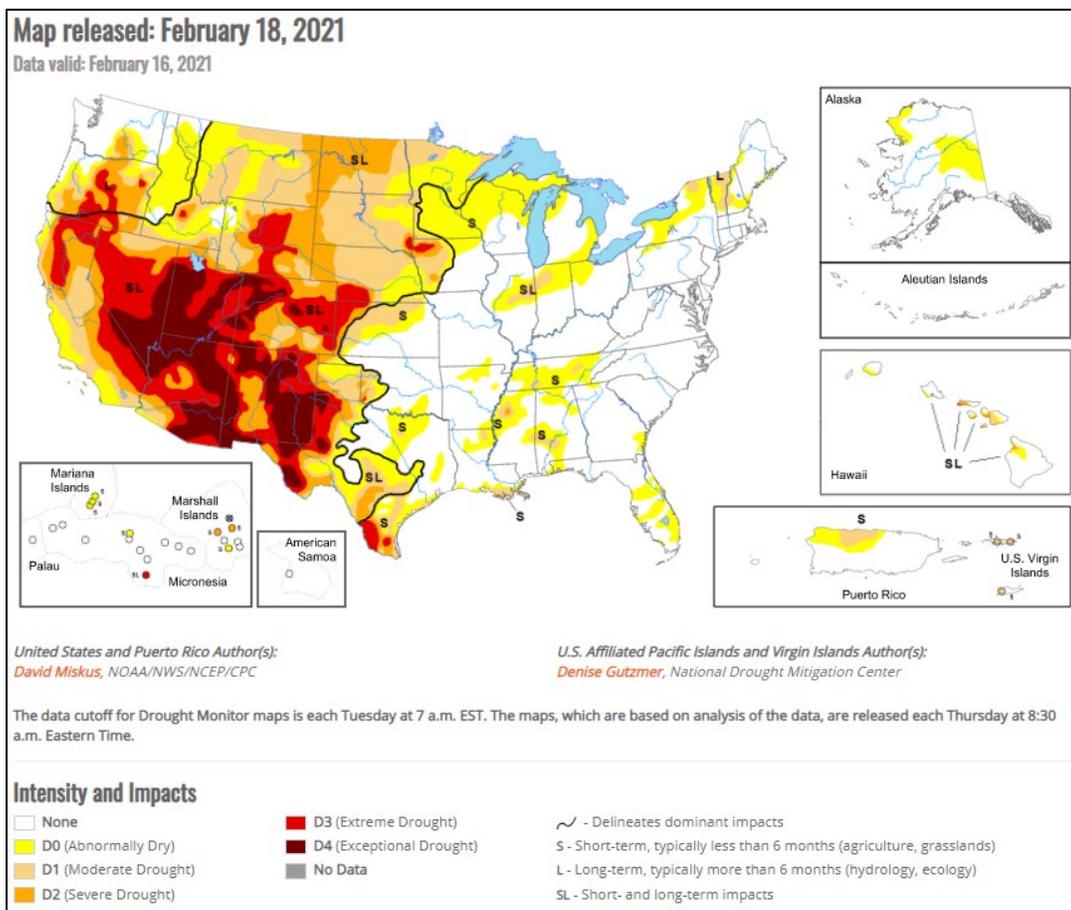
Drought

[U.S. Drought Monitor](#)

Source: National Drought Mitigation Center

[U.S. Drought Portal](#)

Source: NOAA



[Current National Drought Summary, February 18, 2021](#)

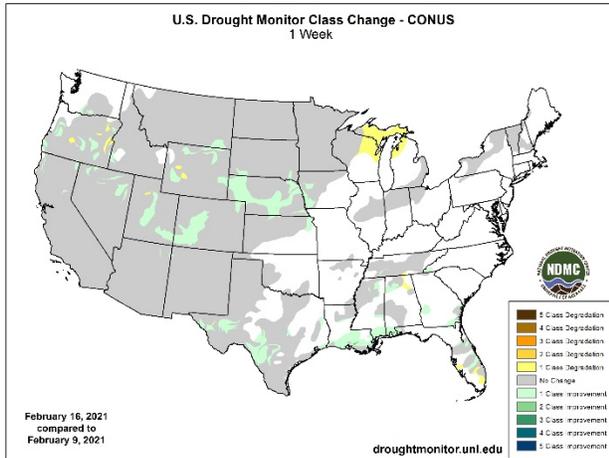
Source: National Drought Mitigation Center

“Arctic air spilled into the Nation’s midsection and persisted throughout the week, producing weekly departures of more than 25 deg F below normal from the northern Plains and upper Midwest southward into Texas. Numerous daily record lows were broken, with minimums plunging to -50 deg F in the northern Plains, and sub-zero readings southward into the Texas Panhandle. In contrast, high pressure over the Southwest and Southeast kept temperatures above-normal for the week. With several storm systems traversing along the boundary of the cold vs mild air, ample precipitation, much in the frozen form, fell on most of the West Coast, Intermountain West, Rockies, southern and central Plains, and much of the eastern third of the U.S. The combination of extreme cold and frozen precipitation across the South and Southeast taxed the power grid, made transportation hazardous, and brought down trees. The snows, however, were welcomed in the West as snow packs and basin snow water equivalents (SWE) increased throughout the West, although many basins were still below normal as of Feb. 16, especially in the southern Rockies. Frigid conditions also enveloped Alaska, with precipitation limited to western and southwestern sections. Shower activity continued across Puerto Rico, especially along the northern and eastern portions, but rain was lacking in the northwest. Across Hawaii, a weak cold front brought some showers early in the period, with trade wind conditions and windward showers later in the week.”

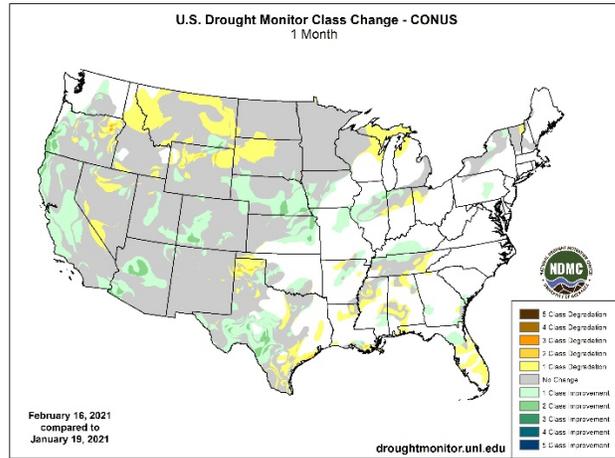
Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

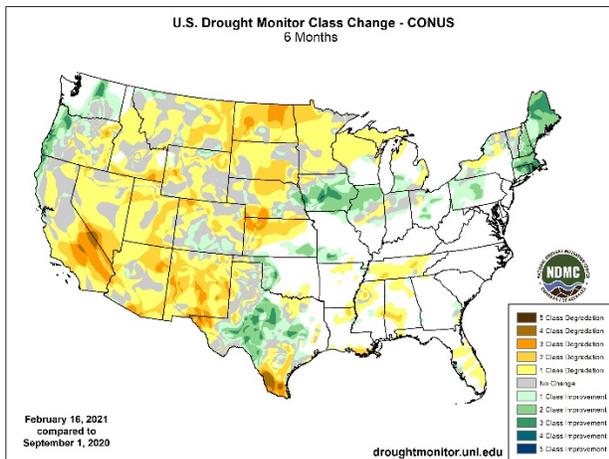
1 Week



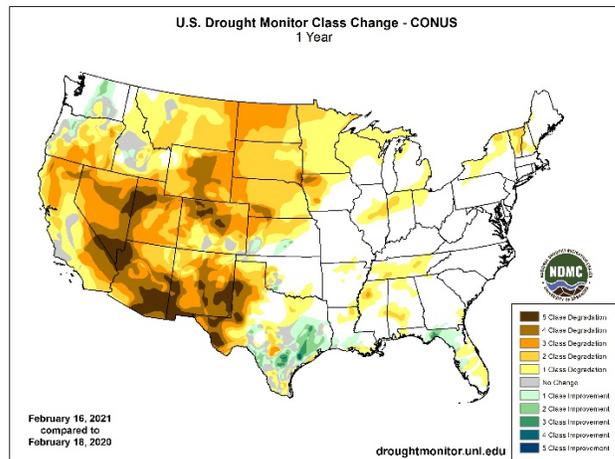
1 Month



6 Months



1 Year



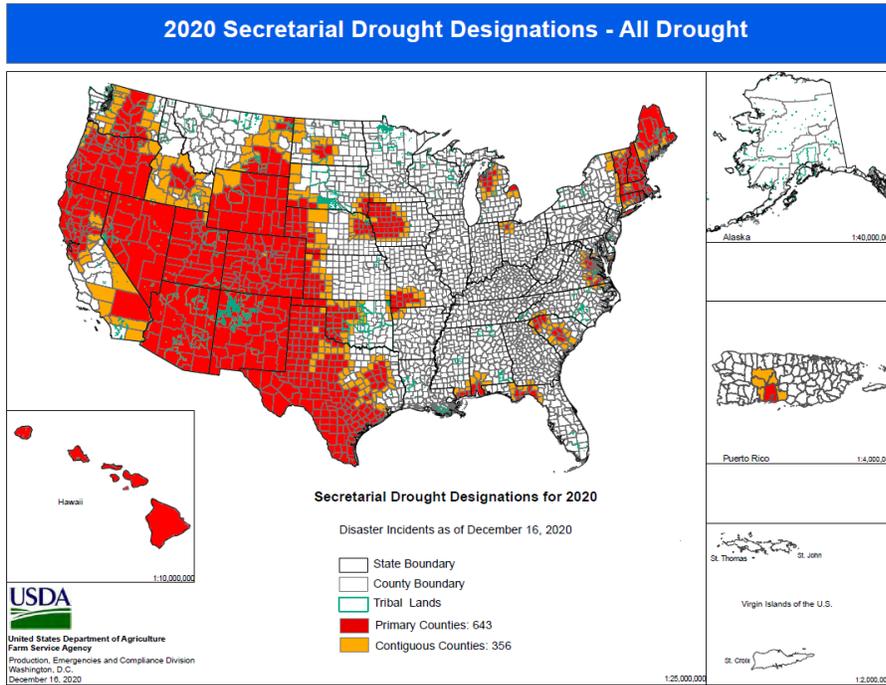
[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

Highlighted Drought Resources

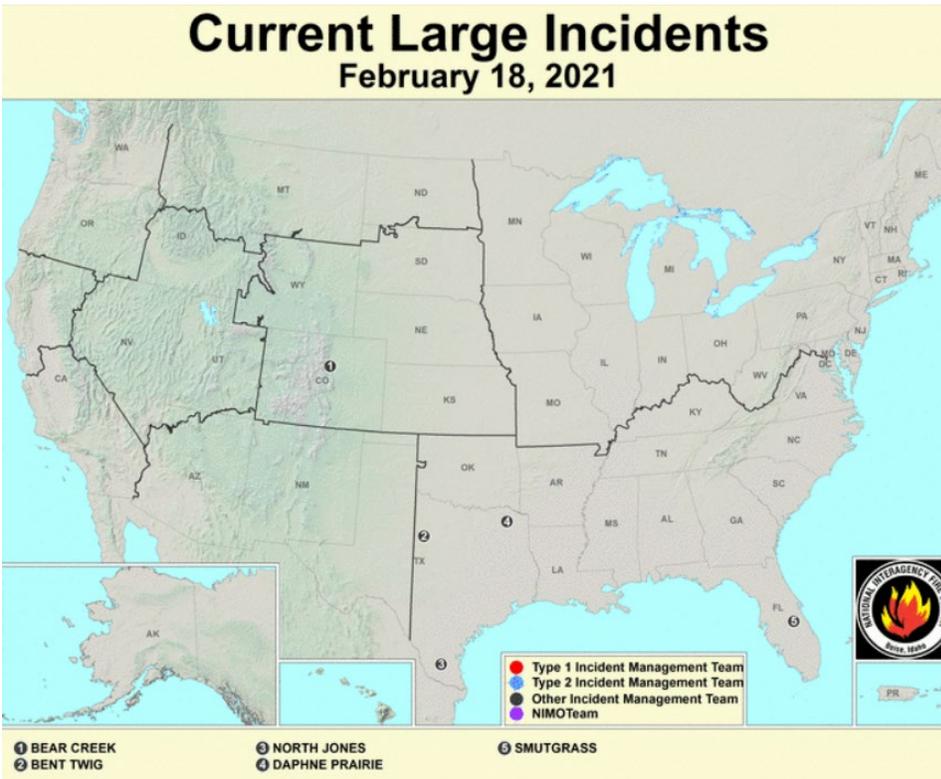
- [Drought Impact Reporter](#)
- [Quarterly Regional Climate Impacts and Outlook](#)
- [U.S. Drought Portal Indicators and Monitoring](#)
- [U.S. Population in Drought, Weekly Comparison](#)
- [USDA Disaster and Drought Information](#)

Secretarial Drought Designations

Source: USDA Farm Service Agency



Wildfires: USDA Forest Service Active Fire Mapping



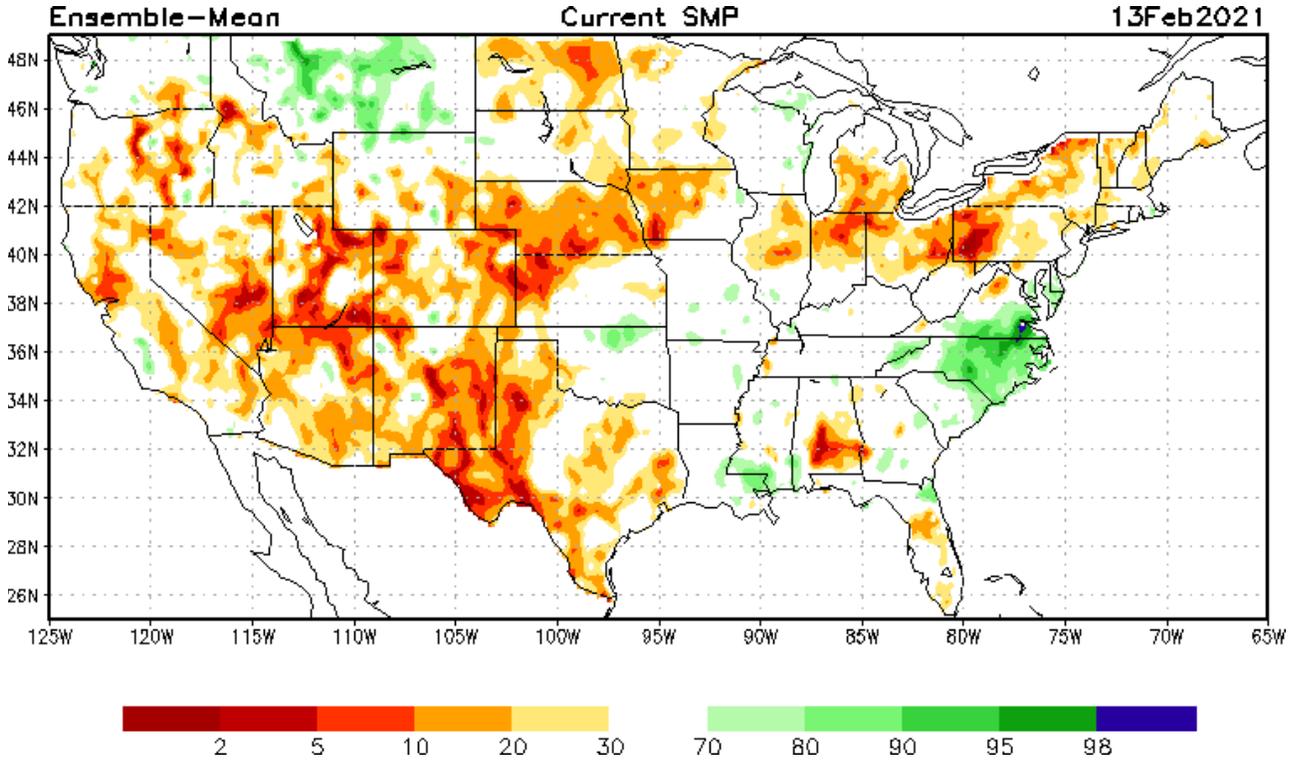
Highlighted Wildfire Resources

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

Other Climatic and Water Supply Indicators

Soil Moisture

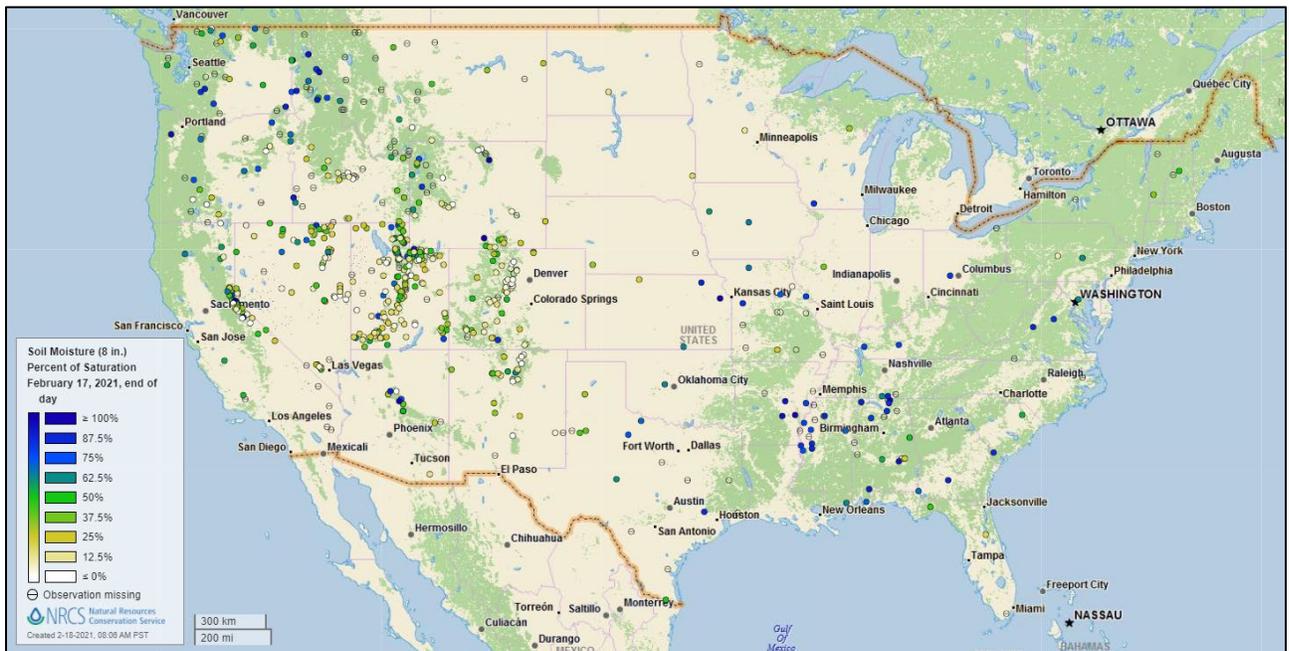
Source: NOAA National Centers for Environmental Prediction



[Modeled soil moisture percentiles](#) as of February 13, 2021

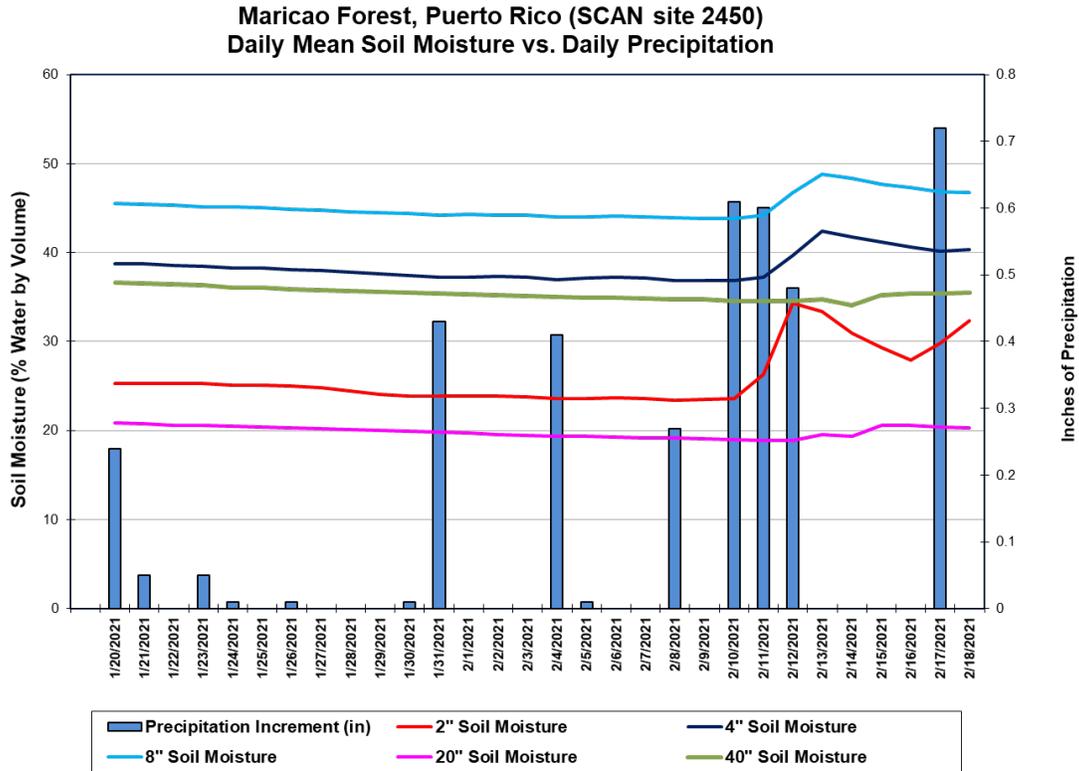
Soil Moisture Percent of Saturation

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 [Maricao Forest](#) SCAN site in Puerto Rico. The precipitation total of 1.69 inches from February 10-12 increased the soil moisture at all sensor depths. Accumulated precipitation for the 30-day period was 3.90 inches.

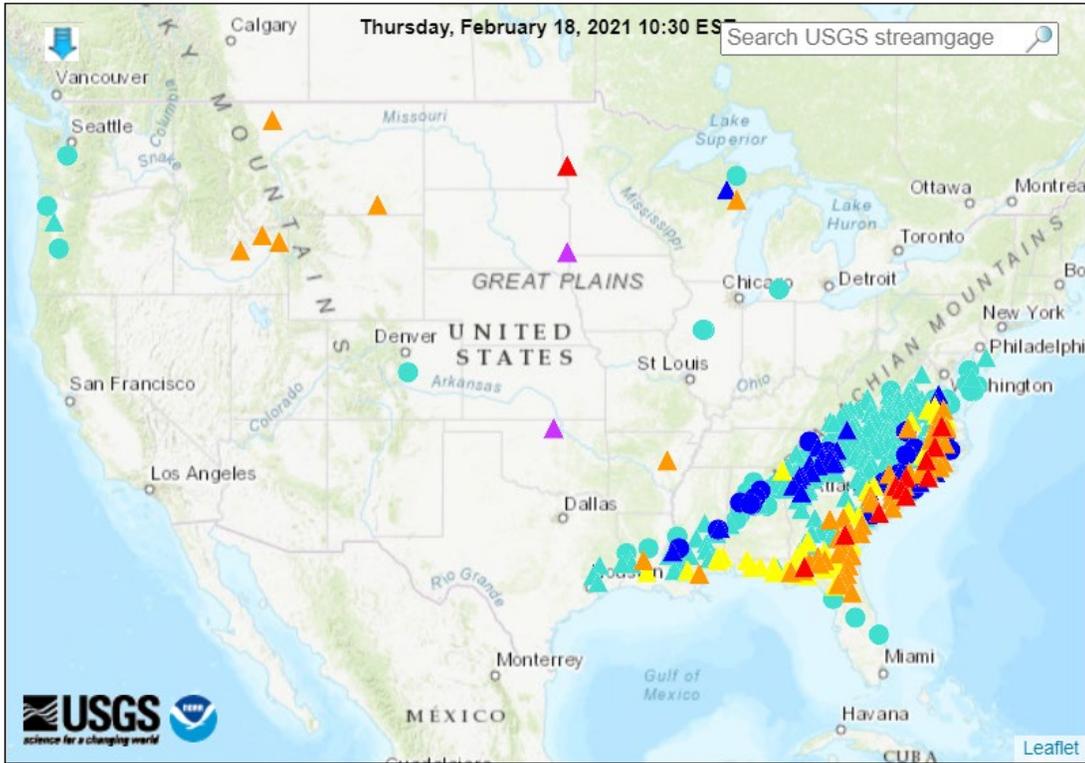
Soil Moisture Data Portals

- [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
 (71 in floods [major: 2, moderate: 12, minor: 57], 40 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

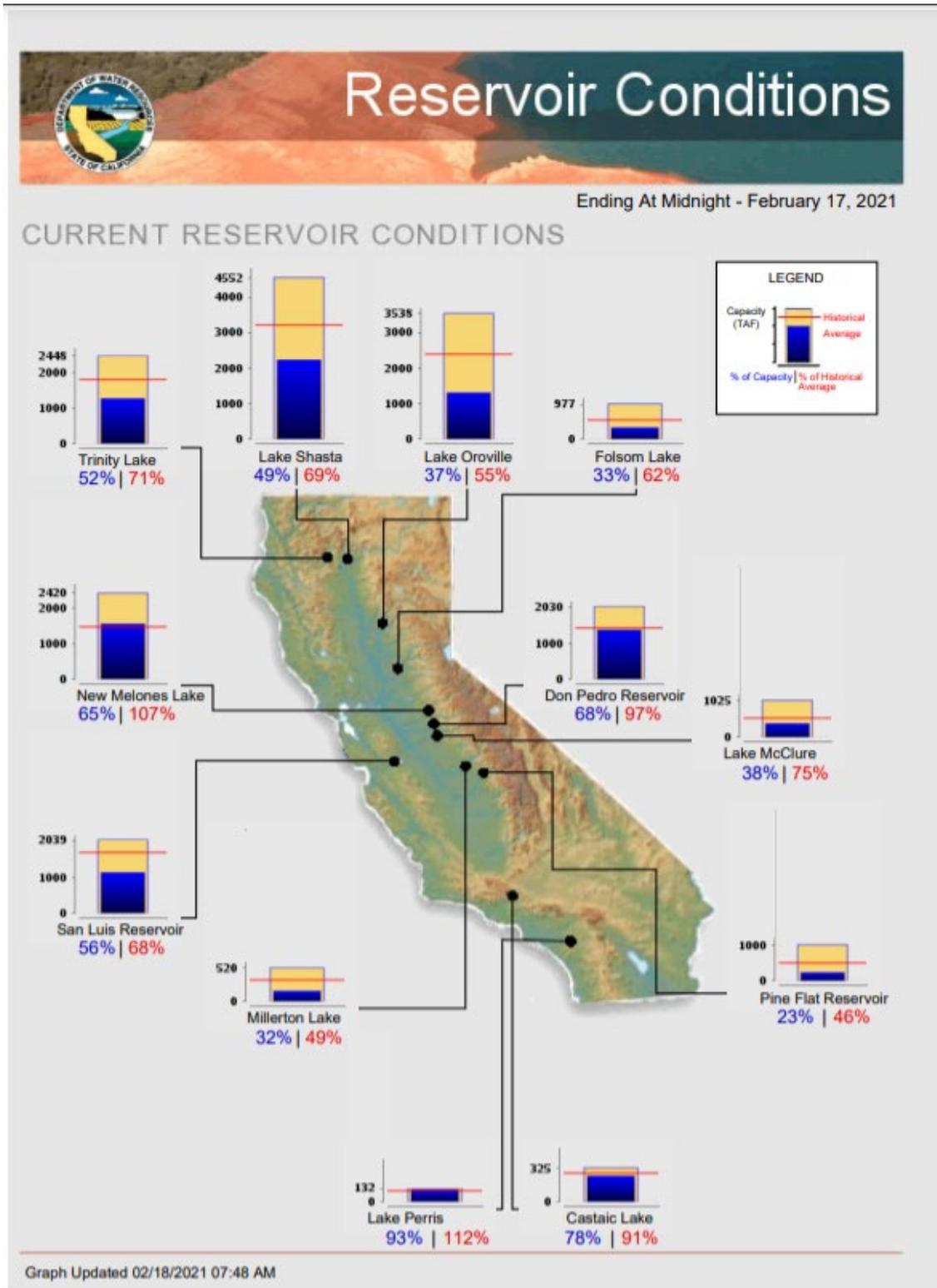
Hydromet Teacup Reservoir Depictions

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 18, 2021: “Another major winter storm will traverse the South and East into Friday, delivering more snow, sleet, and freezing rain to areas that in some cases have not recovered from the Presidents’ Day weekend system. However, unlike the earlier storm, this event will feature wintry weather in East Coast cities such as New York, Philadelphia, and Washington, D.C. Across the lower Southeast, among the weather threats on Thursday into early Friday will be heavy rain, flash flooding, and severe thunderstorms, including isolated tornadoes. In the storm’s wake, cold weather will linger through the weekend across the eastern U.S. However, mild weather will soon return across the nation’s mid-section, with temperatures early next week possibly reaching 50°F as far north as Montana and the Dakotas. During the weekend and early next week, a much more typical weather disturbance will race eastward across the country, delivering some light precipitation across the northern half of the western U.S. and—on February 21-22—some snow from the Midwest into the Northeast. Dry weather will prevail during the next 5 days across large sections of the Plains and Southwest. The NWS 6- to 10-day outlook for February 23 – 27 calls for the likelihood of near- or above-normal temperatures nationwide, except for colder-than-normal conditions in the Northwest. Meanwhile, below-normal precipitation in the southern one-half of the country should contrast with wetter-than-normal weather across the northern U.S. from the Pacific Northwest to the Great Lakes”

Weather Hazards Outlook: [February 20 – 24, 2021](#)

Source: NOAA Weather Prediction Center

U.S. Day 3-7 Hazards Outlook

[About the Hazards Outlook](#)

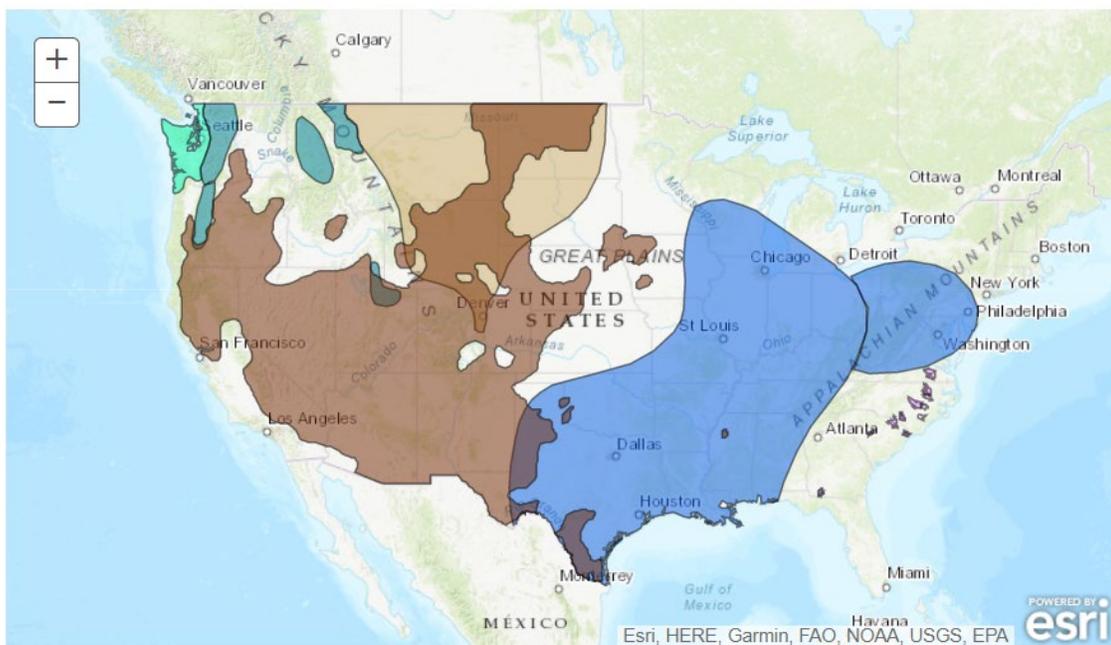
Created February 17, 2021

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

Valid February 20, 2021 - February 24, 2021

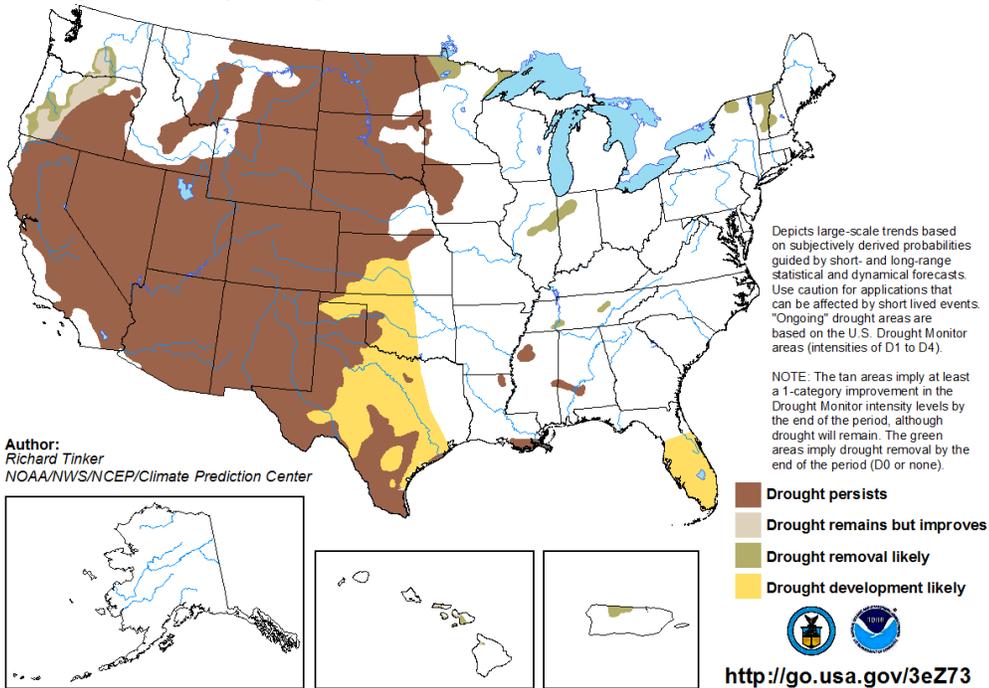


Seasonal Drought Outlook: [February 18 – May 31, 2021](#)

Source: National Weather Service

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

Valid for February 18 - May 31, 2021
Released February 18

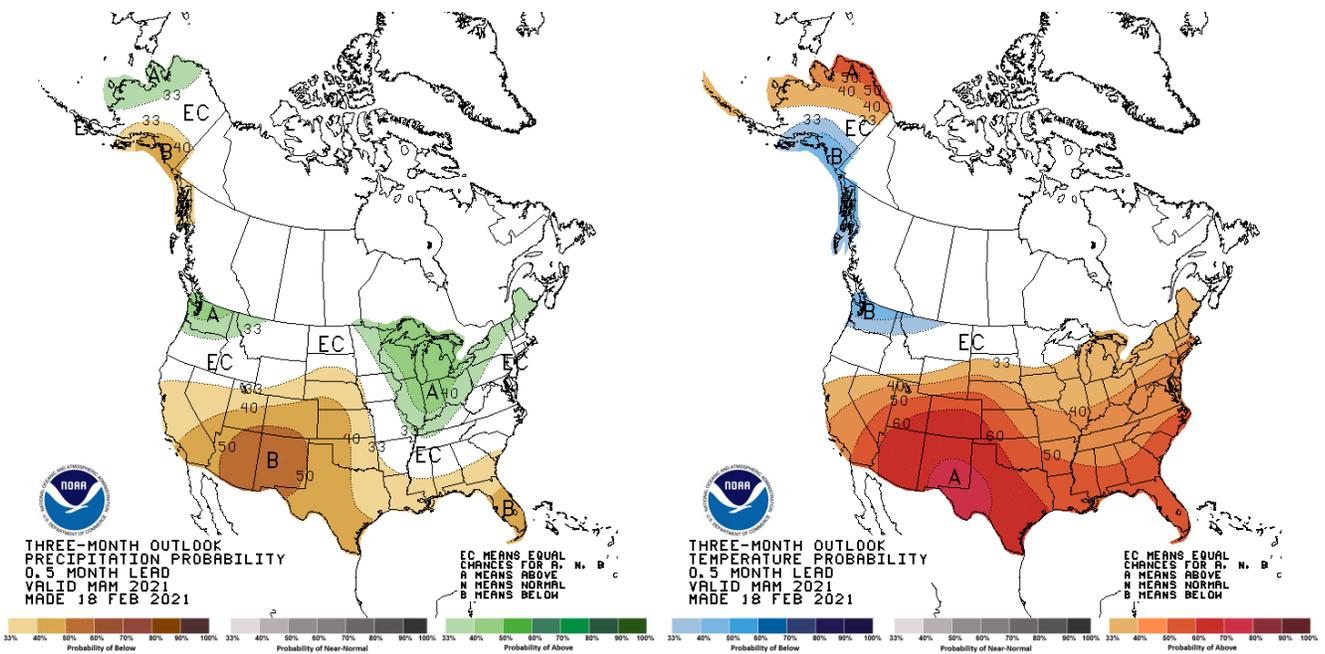


Climate Prediction Center 3-Month Outlook

Source: National Weather Service

Precipitation

Temperature



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