

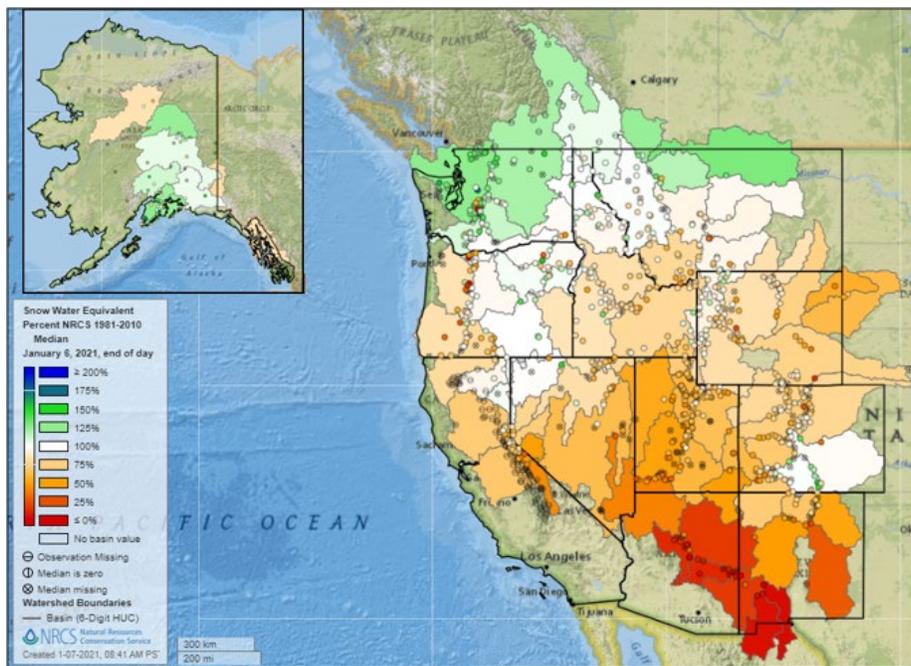
Water and Climate Update

January 07, 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

January 2021 snowpack conditions in the West

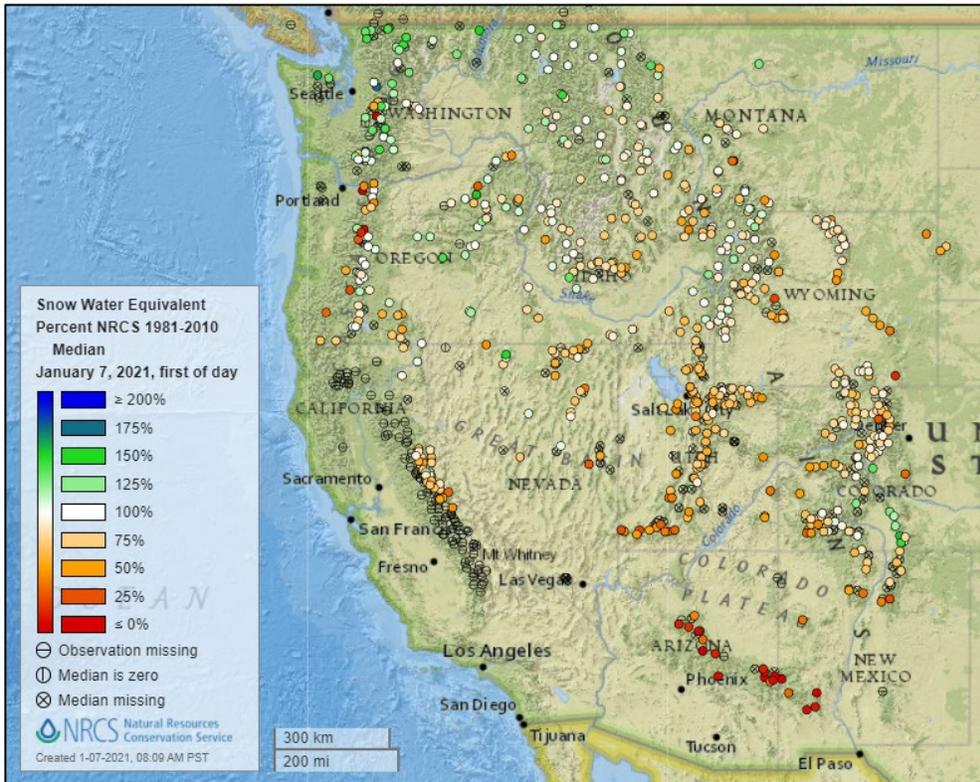


2021 begins with snowpack conditions in the West showing a gradient of much below median in the South to near-and-above median conditions in the North. The basins with the lowest snowpack water content are in southern Arizona and New Mexico, which report dry conditions of three to five percent of median. The highest snowpack is along the Canadian border ranging from 104 to 129 percent of median. In Alaska, the Southeast, White-Yukon River, and Koyukuk basins report 82-85% of median snowpack, while the southern and central basins in the state are all above median.

Related:

- [Water content of California’s early winter snowpack lagging](#) – Mercury News (CA)
- [With low snowpack, region could be headed into second drought year](#) – Reno Gazette-Journal on MSN.com (NV)
- [‘There Is A Lot Of Winter Still Ahead’: California’s Early Winter Snowpack Lagging](#) – CBS Local (CA)
- [Colorado snowpack mostly below average as drought persists statewide](#) – The Denver Post (CO)
- [Mountain snow prompts avalanche control on Washington passes](#) – King5 (WA)
- [A stormy pattern is bombarding Pacific Northwest with heavy rain, mountain snow](#) – Washington Post
- [Utah’s snowpack below average to begin 2021, but more snow on the way Monday evening](#) – KSL (UT)

Snow



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

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

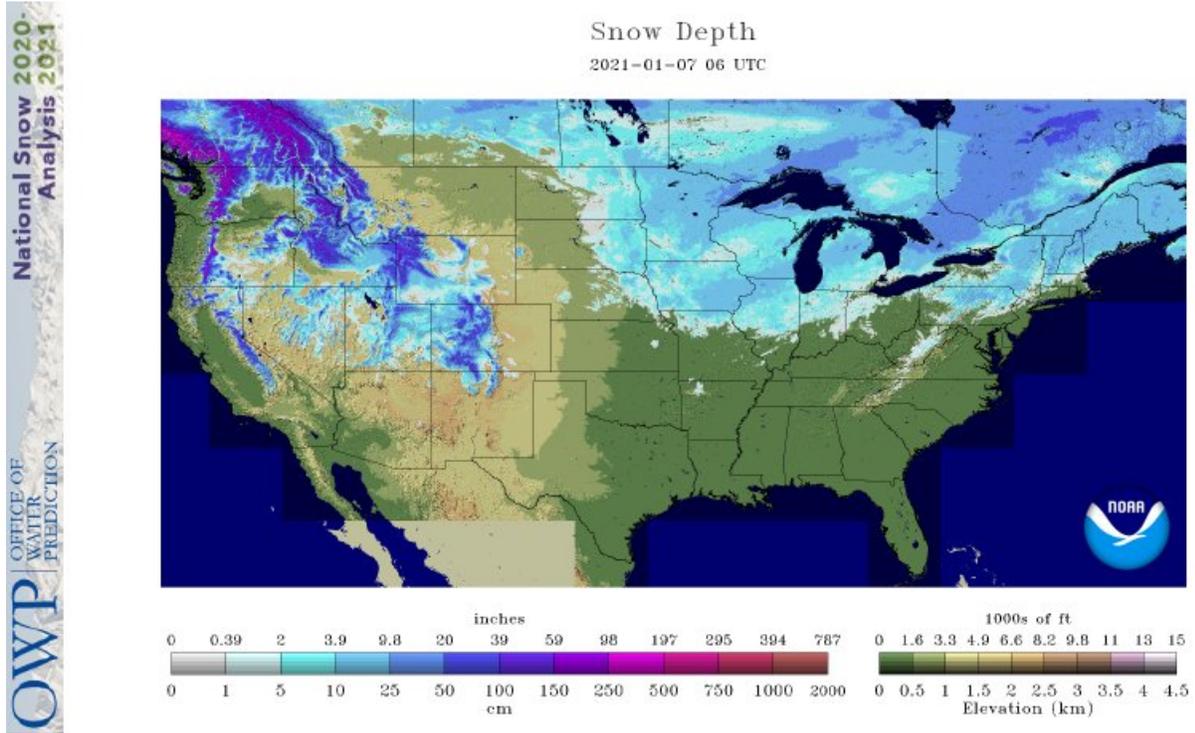


[Alaska snow water equivalent percent of median map](#)

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

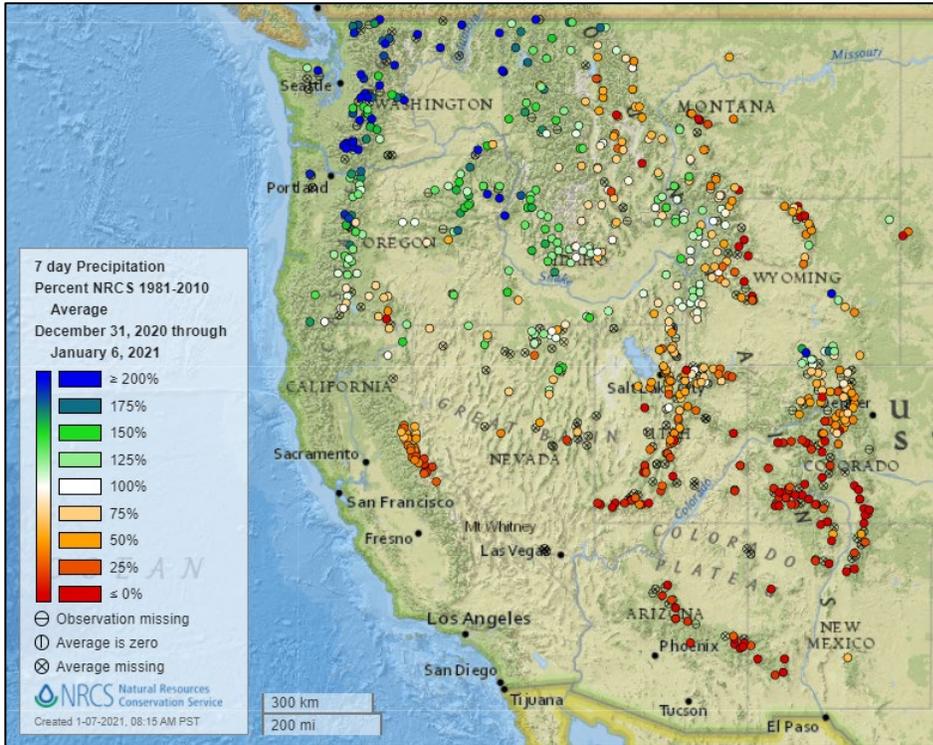
Current Snow Depth, National Weather Service Snow Analysis

Source: NOAA Office of Water Prediction



Precipitation

Last 7 Days, NRCS SNOTEL Network

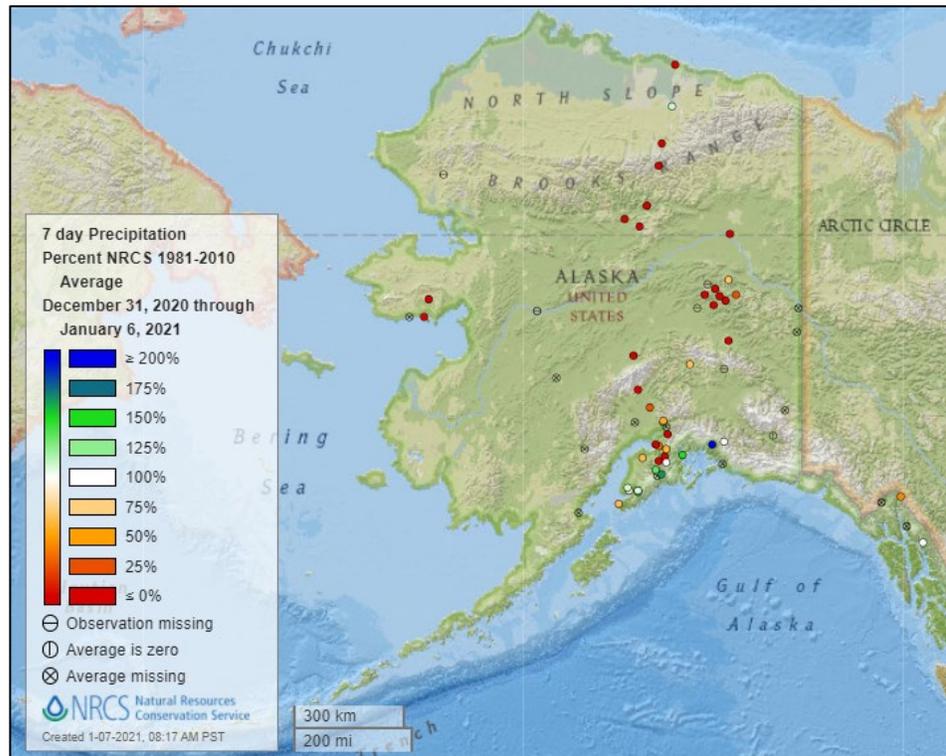


[7-day precipitation percent of average map](#)

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](#)



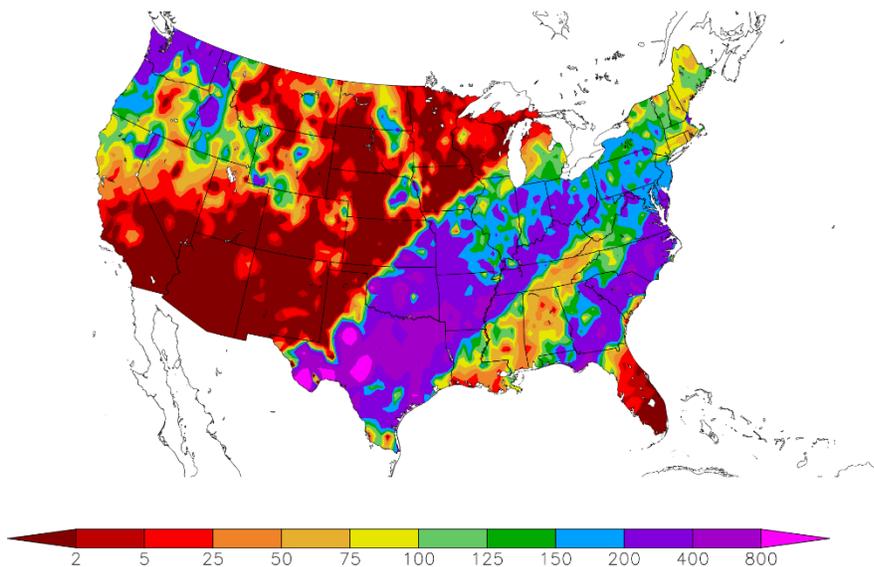
Last 7 Days, National Weather Service (NWS) Networks

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 (%)
12/31/2020 – 1/6/2021



Generated 1/7/2021 at HPRCC using provisional data.

NOAA Regional Climate Centers

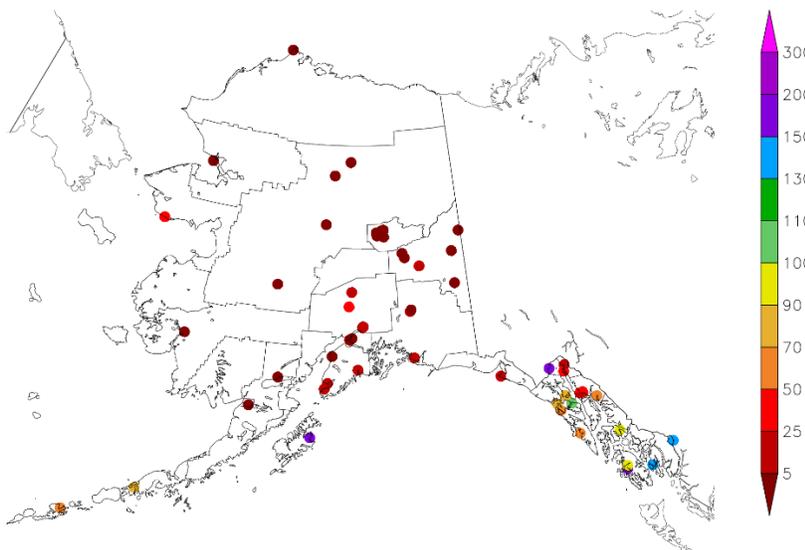
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Percent of Normal Precipitation (%)
12/31/2020 – 1/6/2021



Generated 1/7/2021 at HPRCC using provisional data.

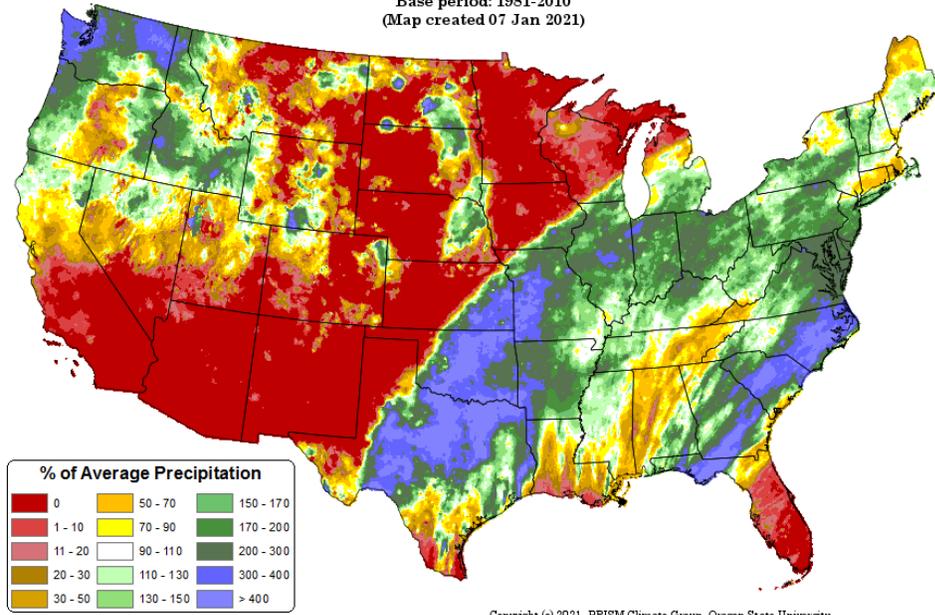
NOAA Regional Climate Centers

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

Source: PRISM

Total Precipitation Anomaly: 01 Jan 2021 - 06 Jan 2021
Period ending 7 AM EST 06 Jan 2021
Base period: 1981-2010
(Map created 07 Jan 2021)

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



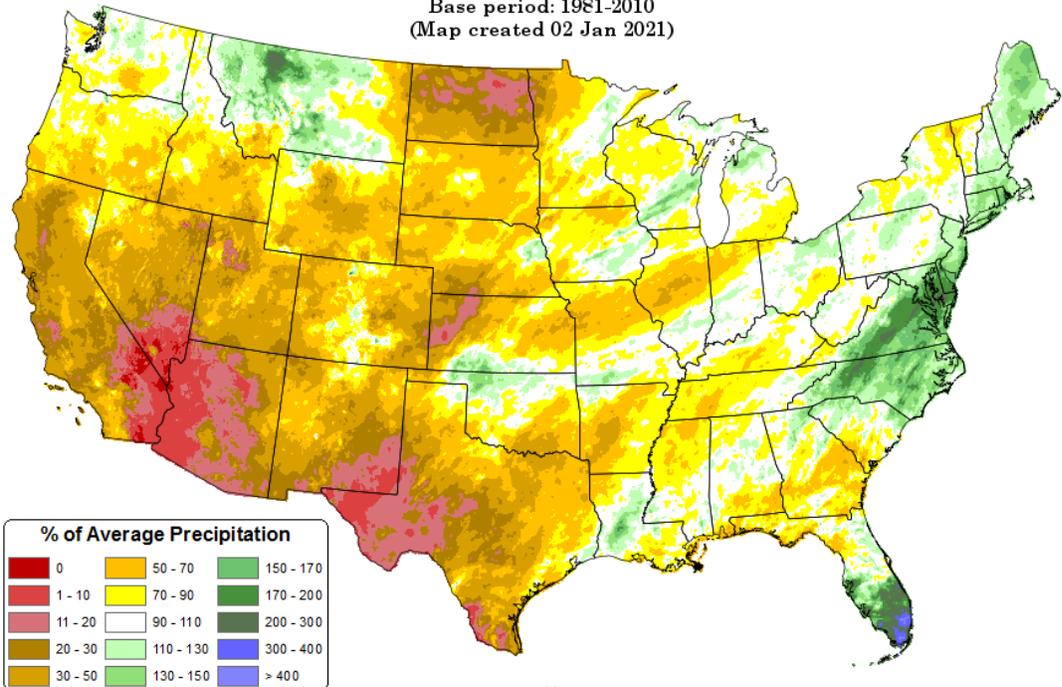
Copyright (c) 2021, PRISM Climate Group, Oregon State University

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

Source: PRISM

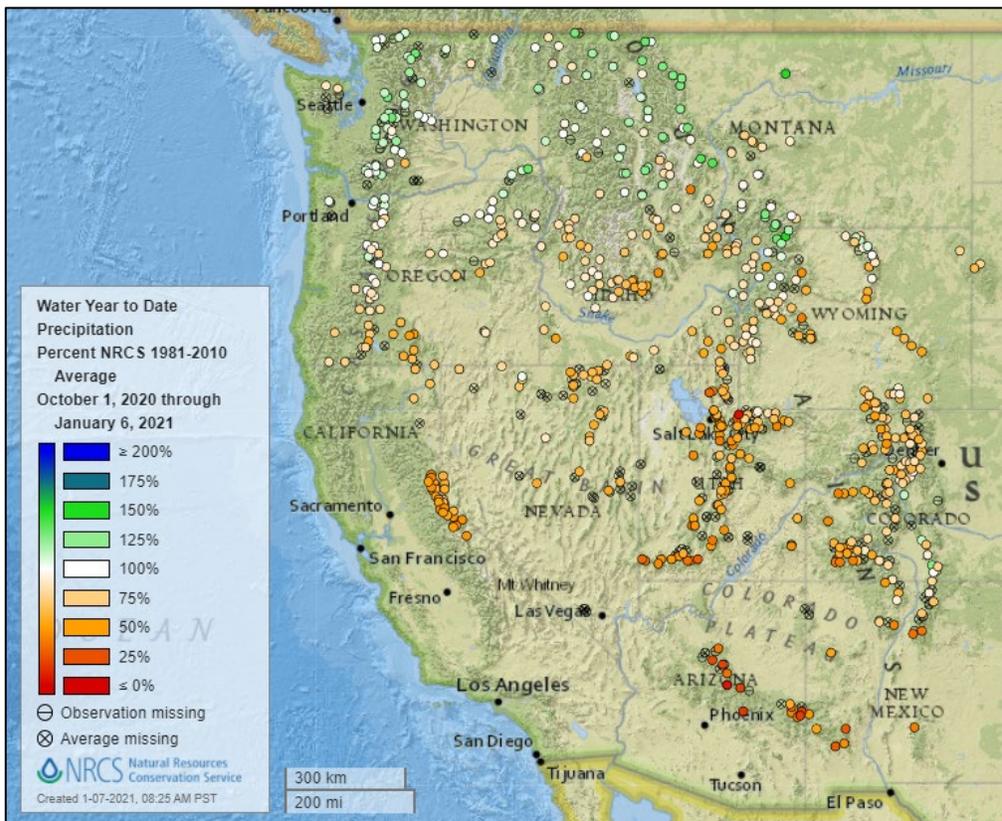
[October through December precipitation percent of average map](#)

Total Precipitation Anomaly: Oct 2020 - Dec 2020
Period ending 7 AM EST 31 Dec 2020
Base period: 1981-2010
(Map created 02 Jan 2021)



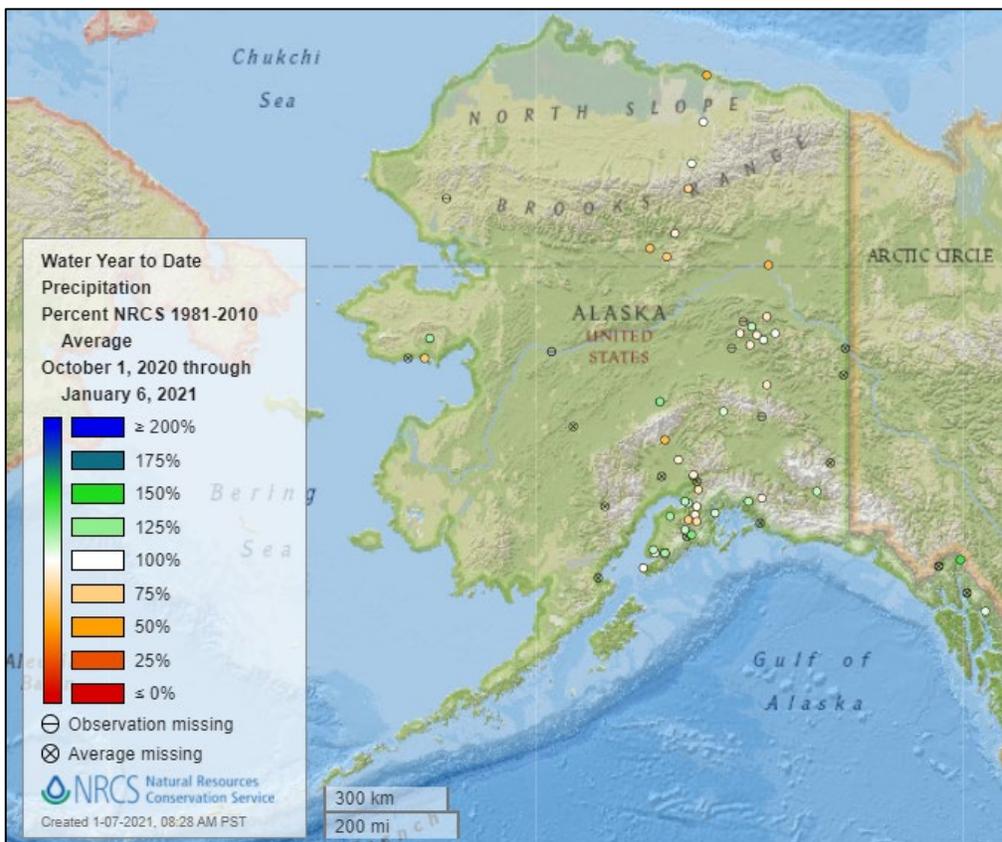
Copyright (c) 2021, PRISM Climate Group, Oregon State University

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

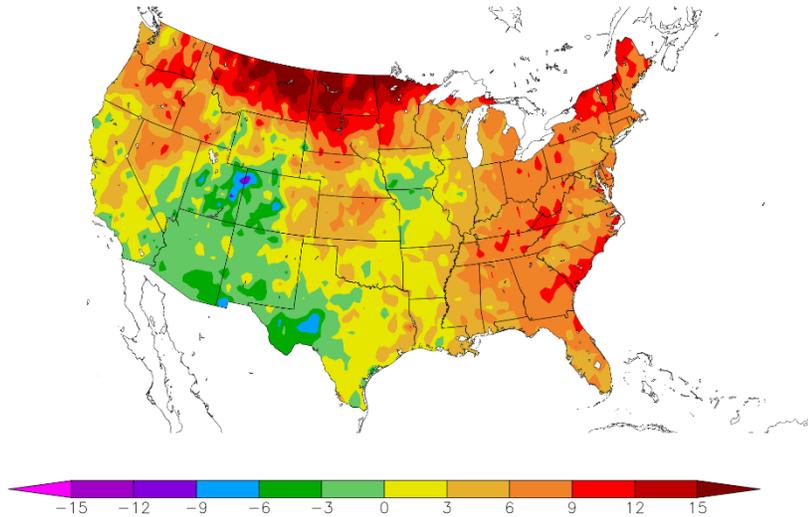
Last 7 Days, National Weather Service (NWS) Networks

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)
12/31/2020 – 1/6/2021



Generated 1/7/2021 at HPRCC using provisional data.

NOAA Regional Climate Centers

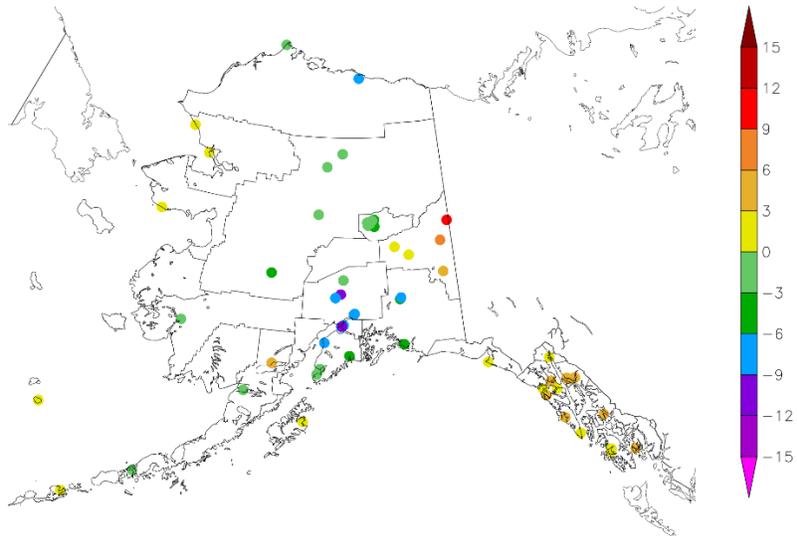
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)
12/31/2020 – 1/6/2021



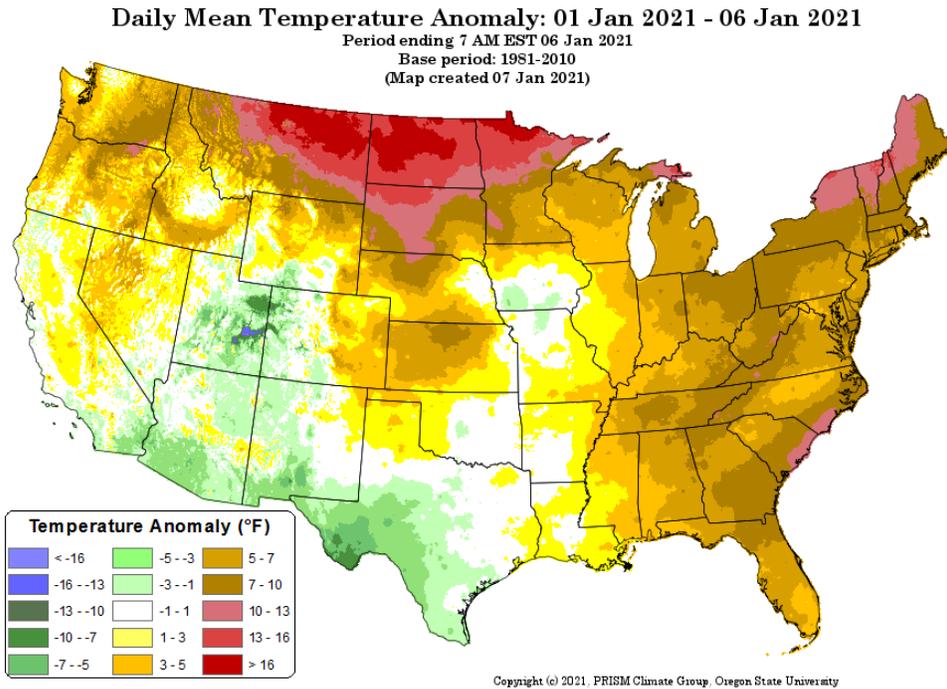
Generated 1/7/2021 at HPRCC using provisional data.

NOAA Regional Climate Centers

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

Source: PRISM

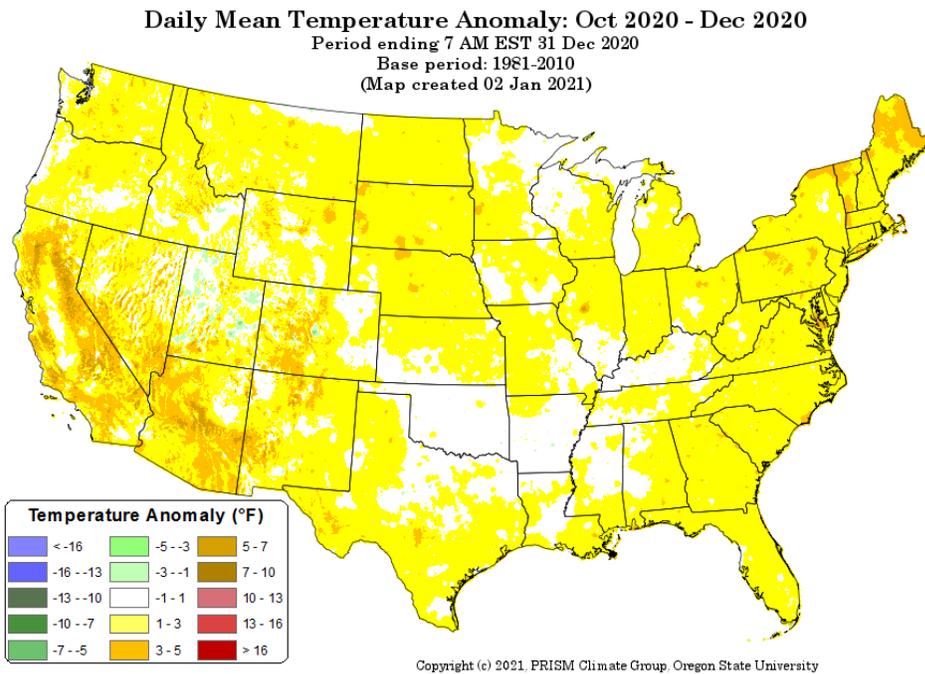
[Month-to-date national daily mean temperature anomaly map](#)



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

Source: PRISM

[October through December 2020 daily mean temperature anomaly map](#)



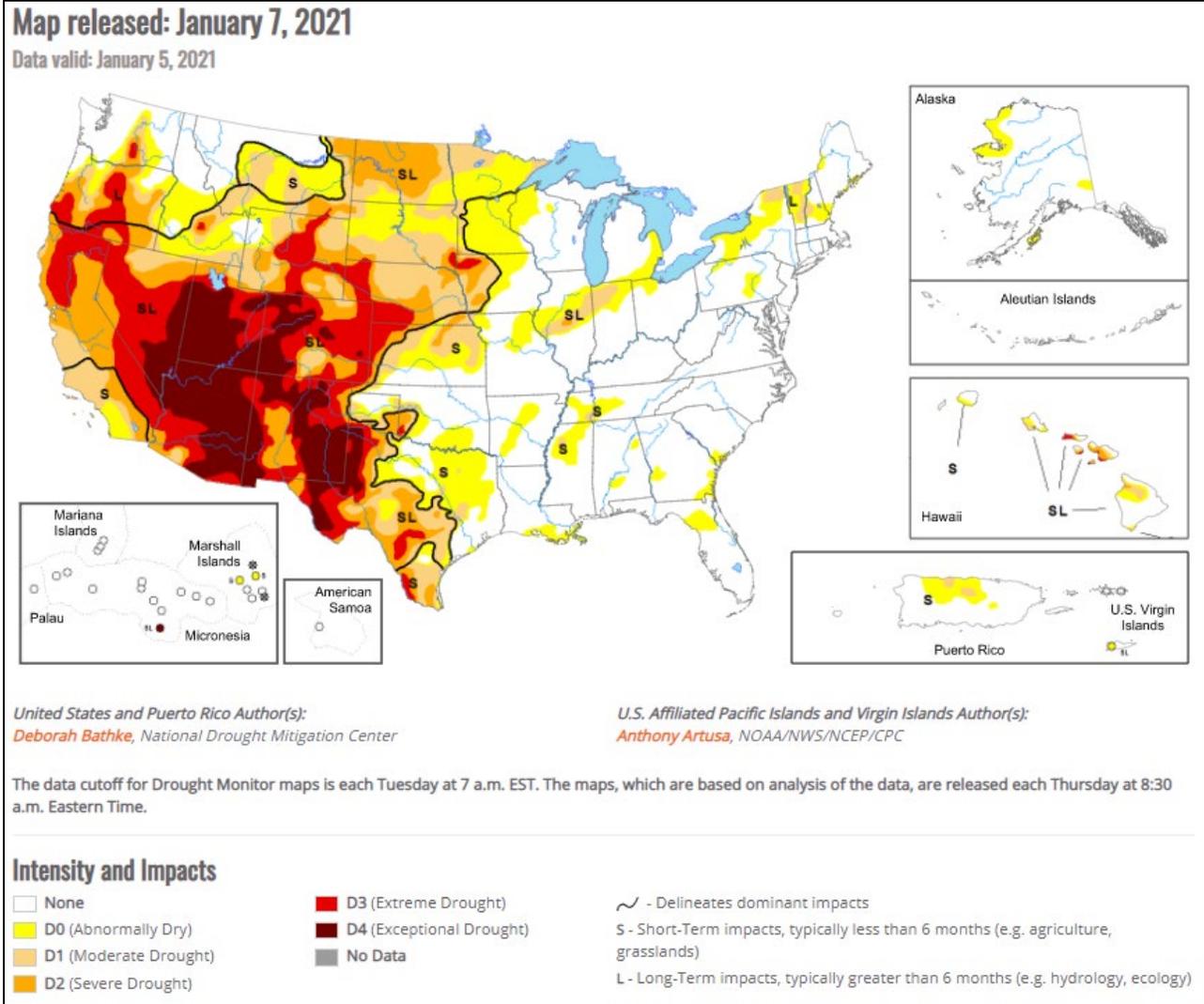
Drought

[U.S. Drought Monitor](#)

Source: National Drought Mitigation Center

[U.S. Drought Portal](#)

Source: NOAA



Current [National Drought Summary](#), January 07, 2021

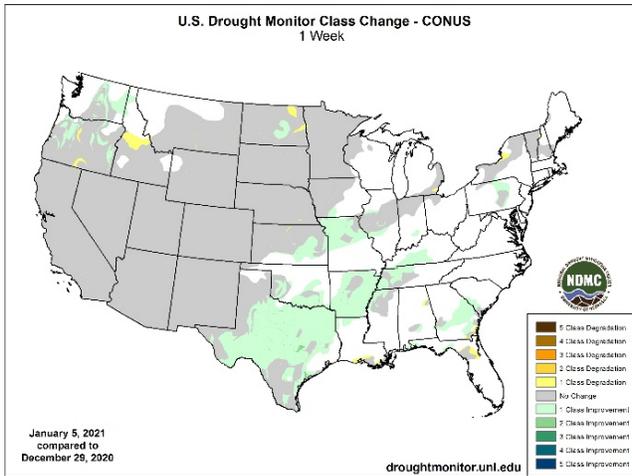
Source: National Drought Mitigation Center

“Since the release of last week’s map, several storm systems impacted the Lower 48. The first spread snowfall across the Rockies and into the Plains and Midwest. The second spread snow and ice from Texas across the central U.S. and into the Northeast. Meanwhile the Pacific Northwest was battered with a series of strong Pacific storms that brought heavy rain and mountain snow. The overall effect generally brought improvements in drought conditions to the Northwest and across an area extending from Texas to Pennsylvania. Deteriorating conditions were minimal and limited to areas such as the Pacific Northwest, North Dakota and Hawaii, where moisture deficits continued to increase. In all, the percent area of the U.S. experiencing moderate drought or worse stands at 45.76%, down from 48.99% last week.”

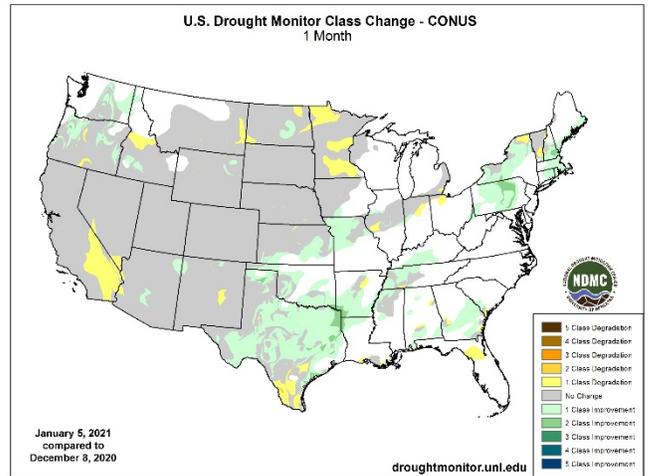
Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

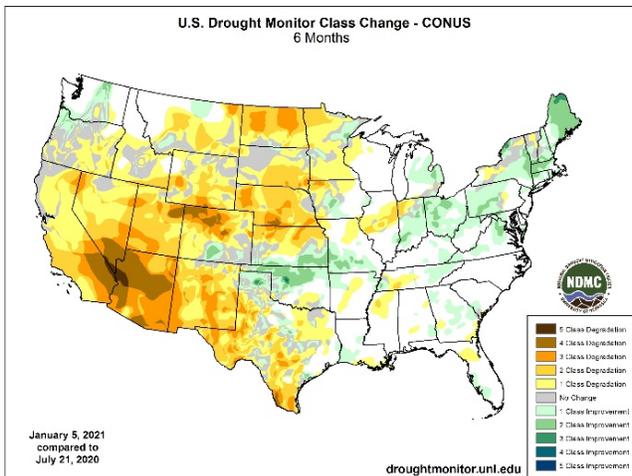
1 Week



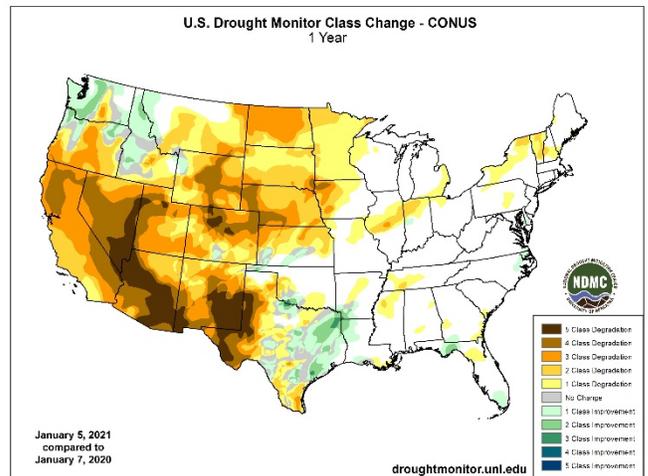
1 Month



6 Months



1 Year



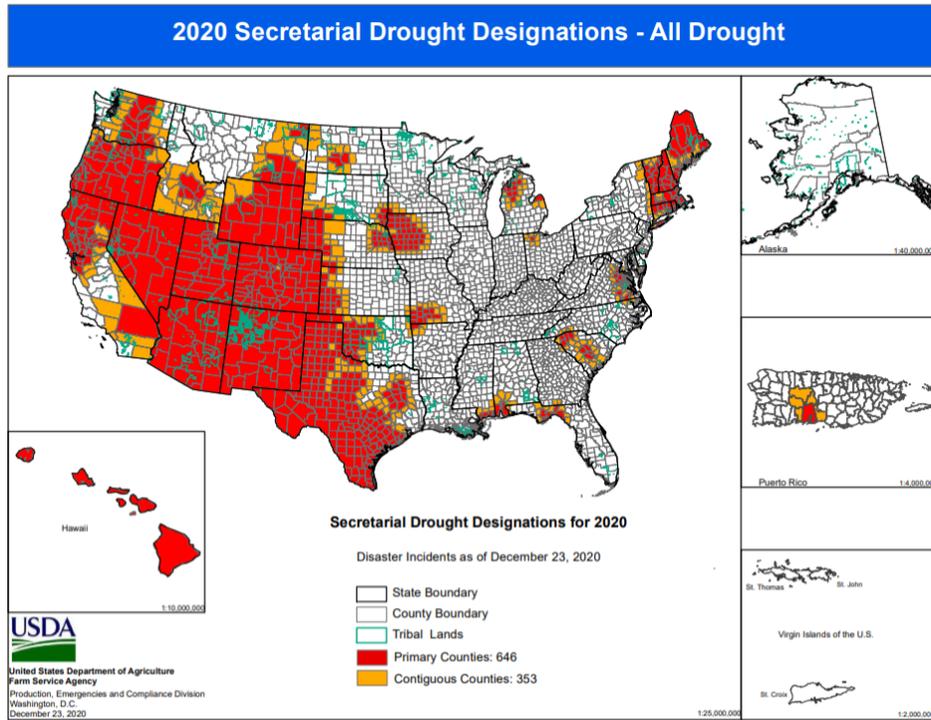
[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

Highlighted Drought Resources

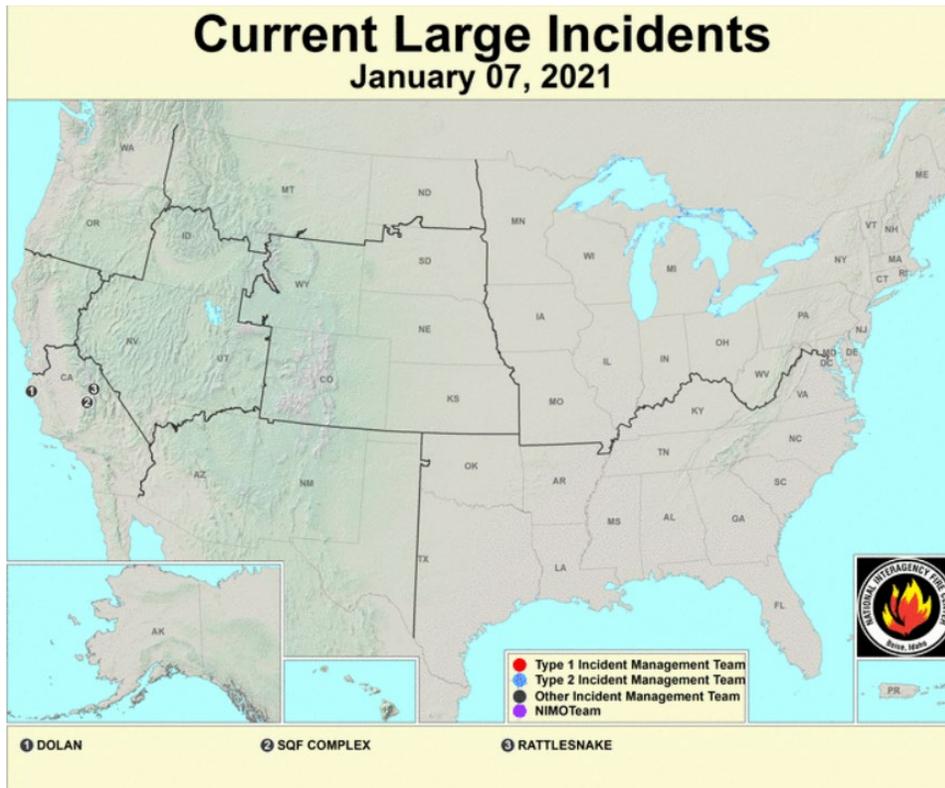
- [Drought Impact Reporter](#)
- [Quarterly Regional Climate Impacts and Outlook](#)
- [U.S. Drought Portal Indicators and Monitoring](#)
- [U.S. Population in Drought, Weekly Comparison](#)
- [USDA Disaster and Drought Information](#)

Secretarial [Drought Designations](#)

Source: USDA Farm Service Agency



Wildfires: [USDA Forest Service Active Fire Mapping](#)



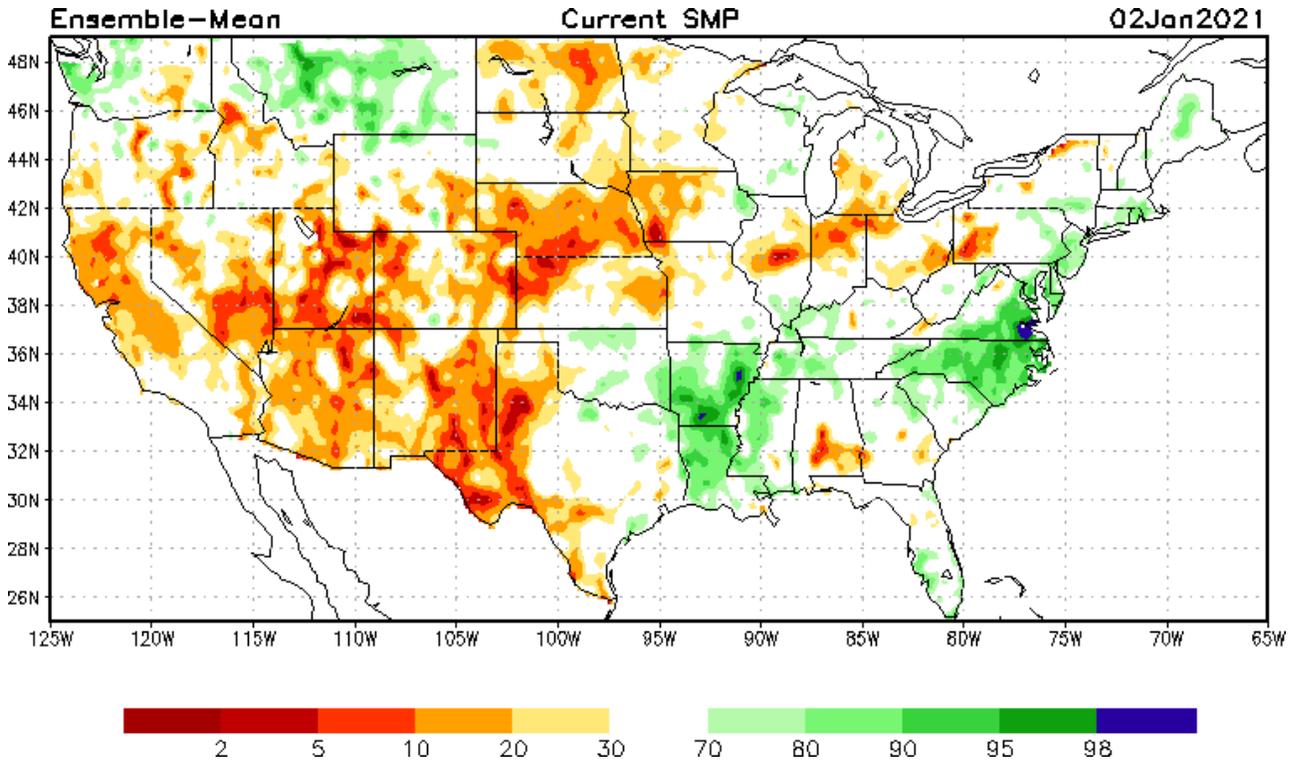
Highlighted Wildfire Resources

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

Other Climatic and Water Supply Indicators

Soil Moisture

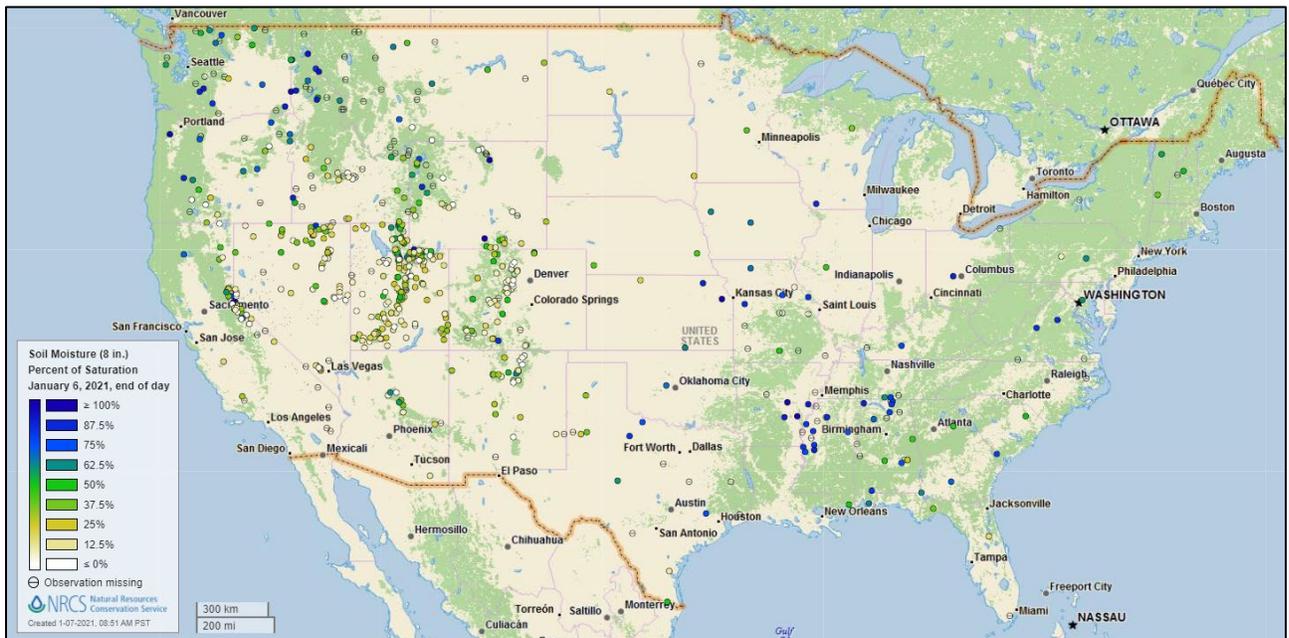
Source: NOAA National Centers for Environmental Prediction



[Modeled soil moisture percentiles](#) as of January 02, 2021

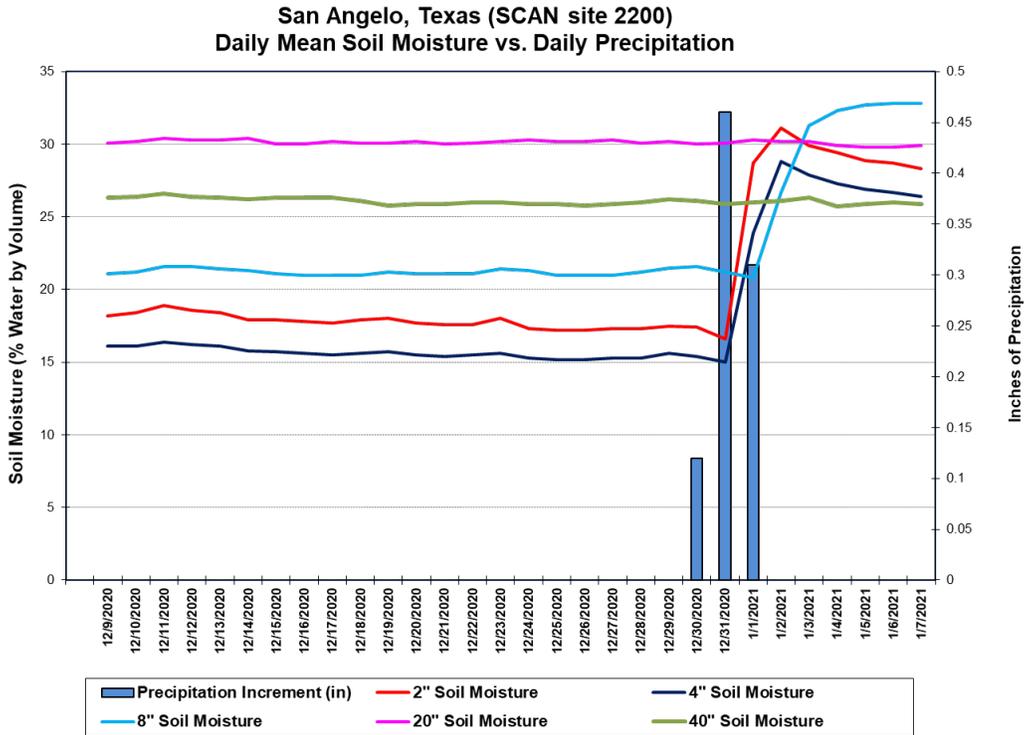
Soil Moisture Percent of Saturation

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 [San Angelo](#) SCAN site in Texas. Several days of precipitation from December 31 to January 1, totaling 0.89 inches, increased the soil moisture at the -2, -4, and -8-inch depth sensors.

Soil Moisture Data Portals

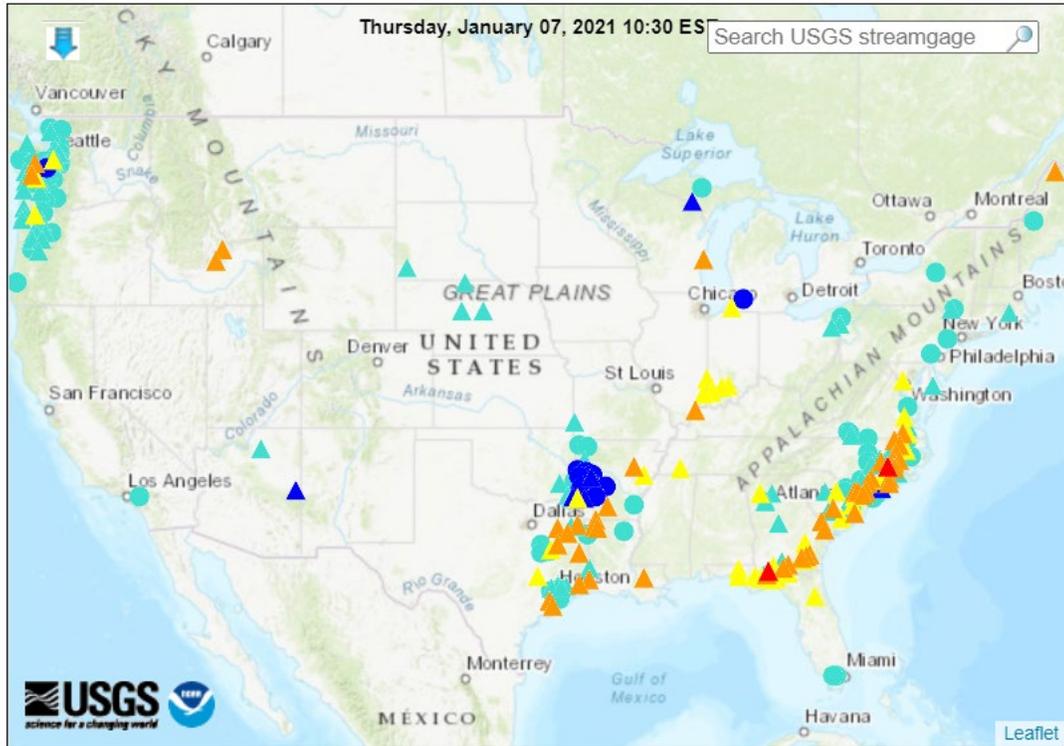
- [CRN Soil Moisture](#)
- [Texas A&M University North American Soil Moisture Database](#)
- [University of Washington Experimental Modeled Soil Moisture](#)

Streamflow, Drought, Flood, and Runoff

Source: U.S. Geological Survey

Map of flood and high flow conditions

(50 in floods [moderate: 2, minor: 48], 35 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

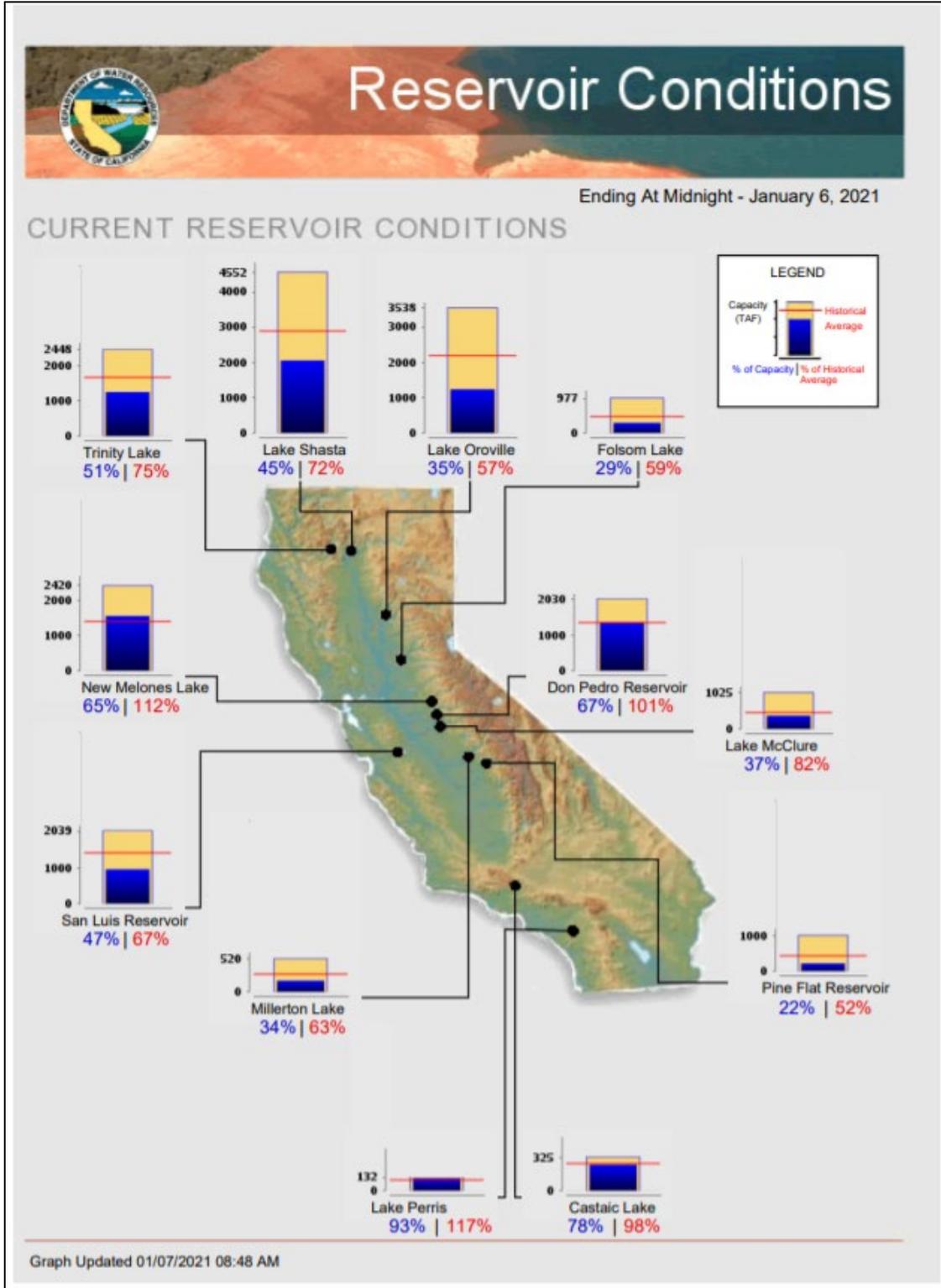
Hydromet Teacup Reservoir Depictions

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, January 07, 2021: “During the next 5 days, three cold fronts will move ashore along the northern Pacific Coast. However, heavy precipitation will be confined to areas from the Cascades westward. In contrast, dry weather will prevail into early next week in southern California and the Desert Southwest. Meanwhile, a pair of winter storms will traverse the South, starting with the system currently affecting the region. Five-day rainfall totals could reach 1 to 2 inches or more from eastern Texas to Georgia and the Carolinas. The Southern storms will also produce wet snow in some areas, including the Ozark Plateau (today), the southern Appalachians (tonight and Friday, and again early next week), and the southern Plains (during the weekend). Little or no precipitation will fall, however, in the Midwest and Northeast. The entire country will continue to experience an absence of extreme cold weather. The NWS 6- to 10-day outlook for January 12 – 16 calls for the likelihood of near- or above-normal temperatures nationwide, except for cooler-than-normal conditions across the South. Meanwhile, near- or below-normal precipitation in most areas of the country should contrast with wetter-than-normal weather across the Pacific Northwest and the northwestern half of the Plains.”

Weather Hazards Outlook: [January 09 – 13, 2021](#)

Source: NOAA Weather Prediction Center

U.S. Day 3-7 Hazards Outlook

[About the Hazards Outlook](#)

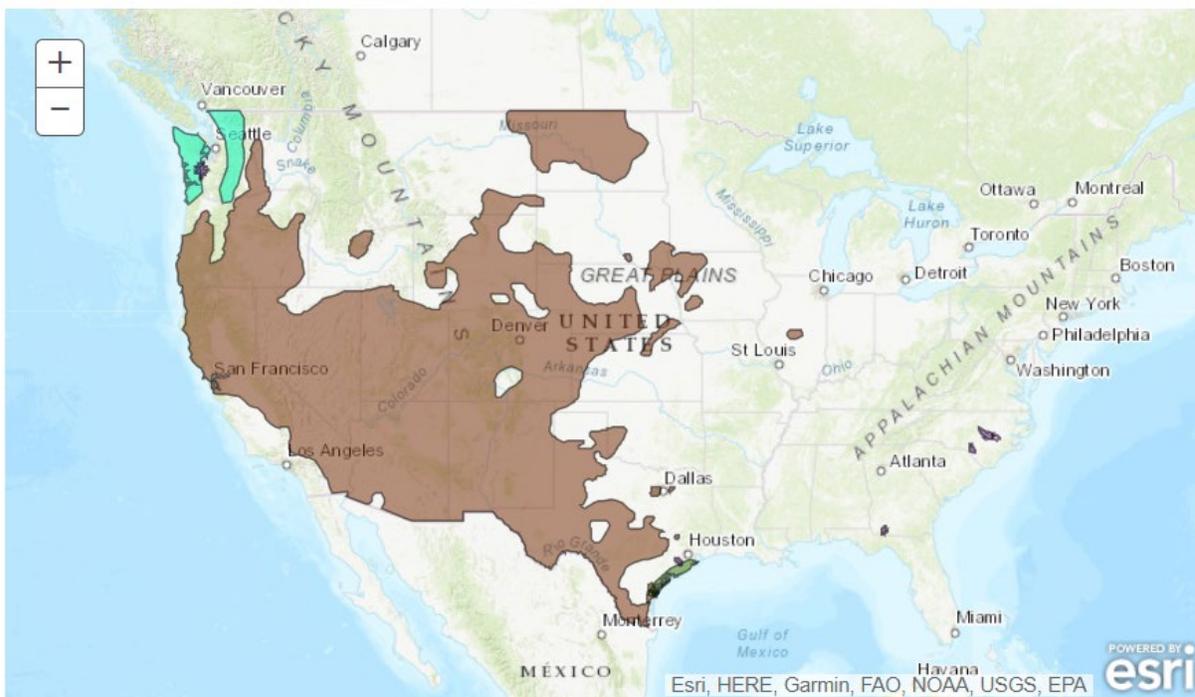
Created January 06, 2021

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 January 09, 2021 - January 13, 2021

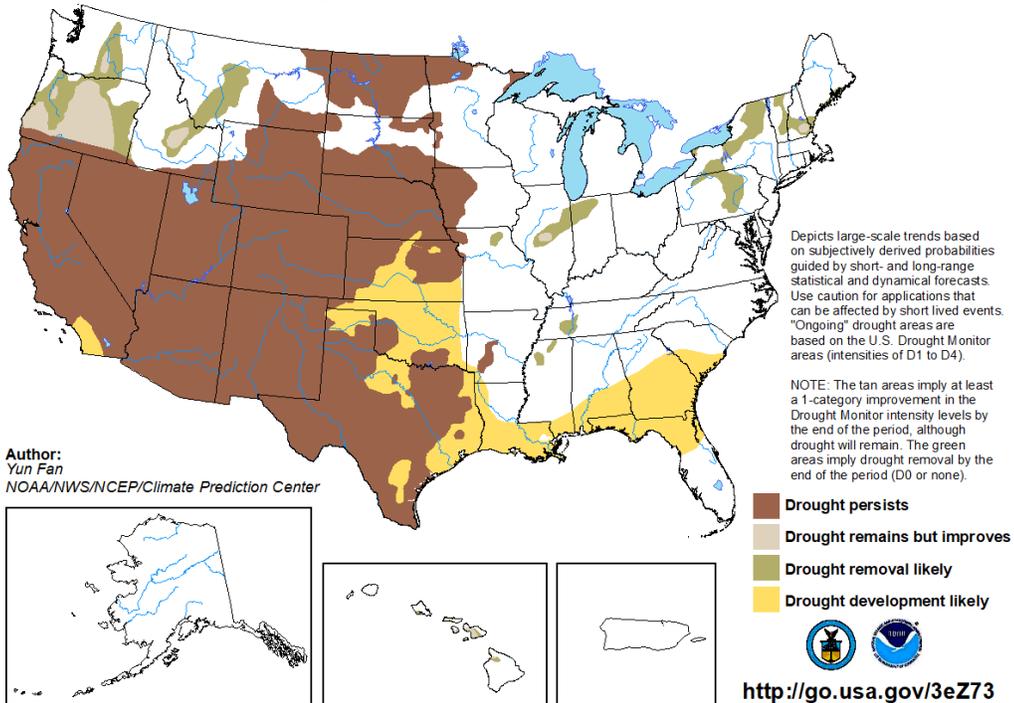


Seasonal Drought Outlook: [December 17, 2020 – March 31, 2021](#)

Source: National Weather Service

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

Valid for December 17, 2020 - March 31, 2021
Released December 17, 2020

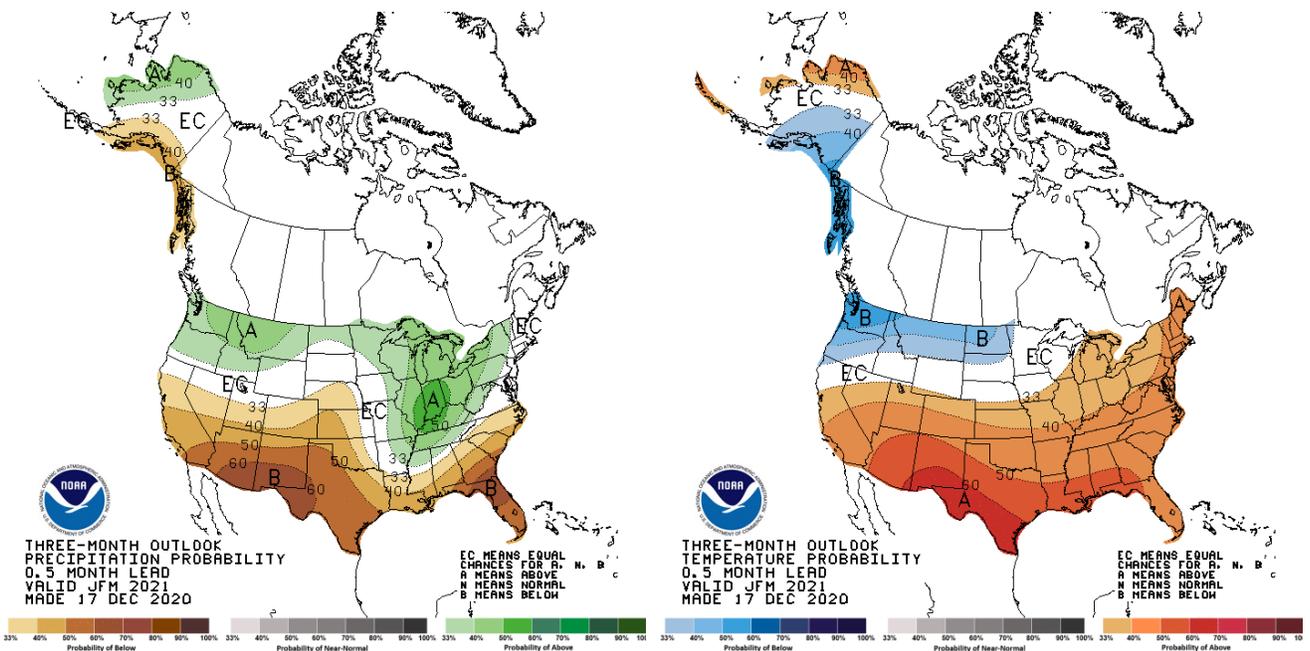


Climate Prediction Center 3-Month Outlook

Source: National Weather Service

Precipitation

Temperature



[January-February-March \(JFM\) 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](#).