

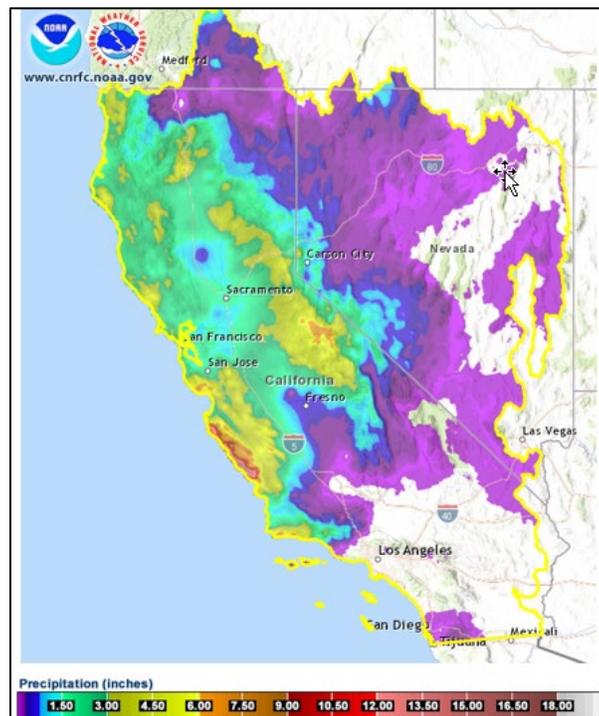
Water and Climate Update

January 28, 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	14
Temperature.....	8	More Information	20

Atmospheric river sweeps across California

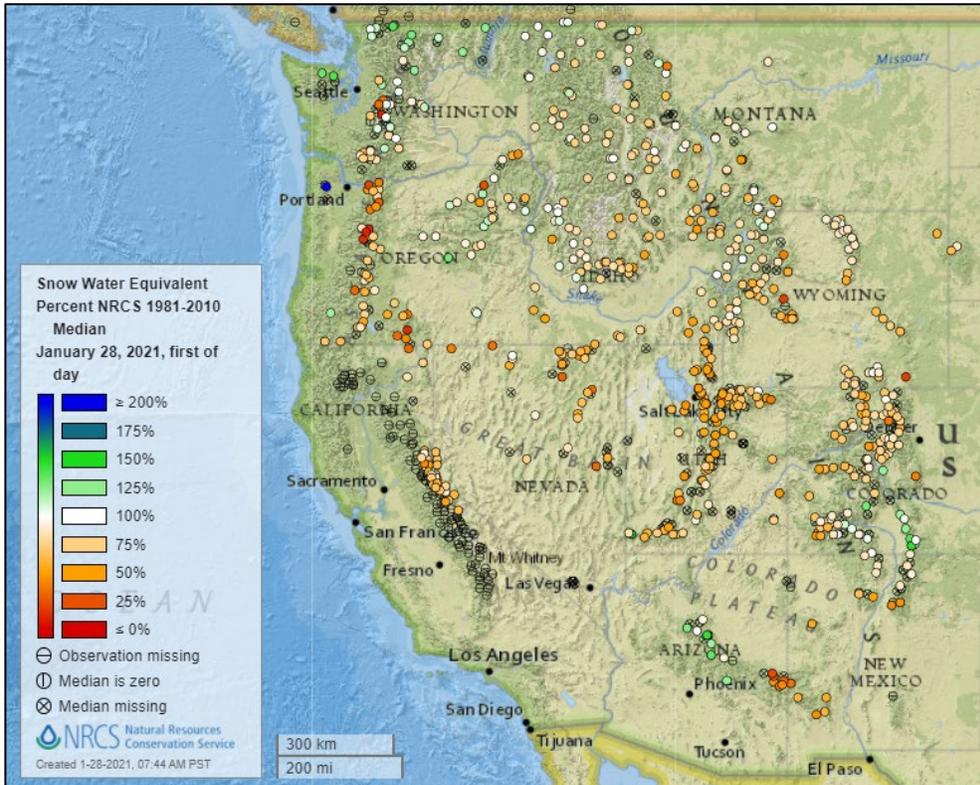


An atmospheric river is pounding California with heavy rain and wind. The central coast received over a foot of rain since the morning of January 26, 2021. Downpours have caused flooding, downed trees, evacuations, and over 500,000 power outages. Several landslides have occurred in areas left vulnerable by recent fires and drought. In addition, the Sierra Nevada have received many feet of snow, with dangerous blizzard conditions, road closures, and severe avalanche warnings.

Related:

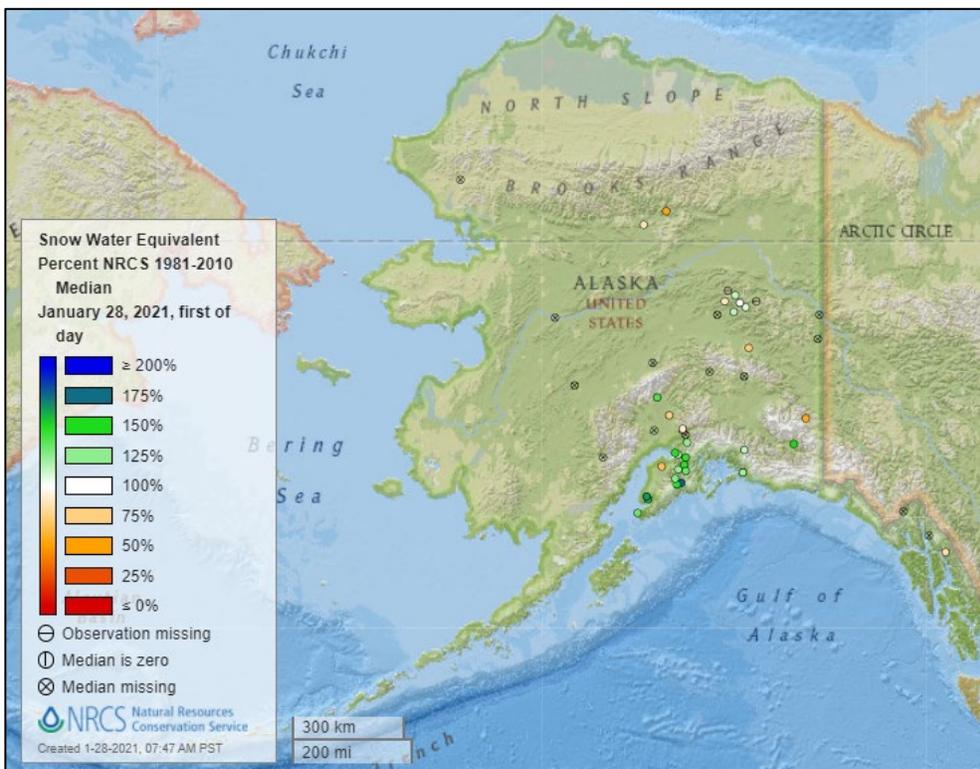
- [Atmospheric river stalls over Monterey, triggers mudslides and is set to hit L.A. – Los Angeles Times \(CA\)](#)
- [Major storm pounding Northern California heads south – CBS News](#)
- [Atmospheric River: Intense Rainstorm Batters Santa Cruz Mountains; Thousands Remain Evacuated – CBS Local \(CA\)](#)
- [California remains under flood, blizzard watches from storm – AP](#)
- [Storm pounds California, Nevada with rain, wind and snow – SFGate \(CA\)](#)
- [Winter storm crashes into California with heavy rain, snow – Las Vegas Review-Journal \(NV\)](#)

Snow



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

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

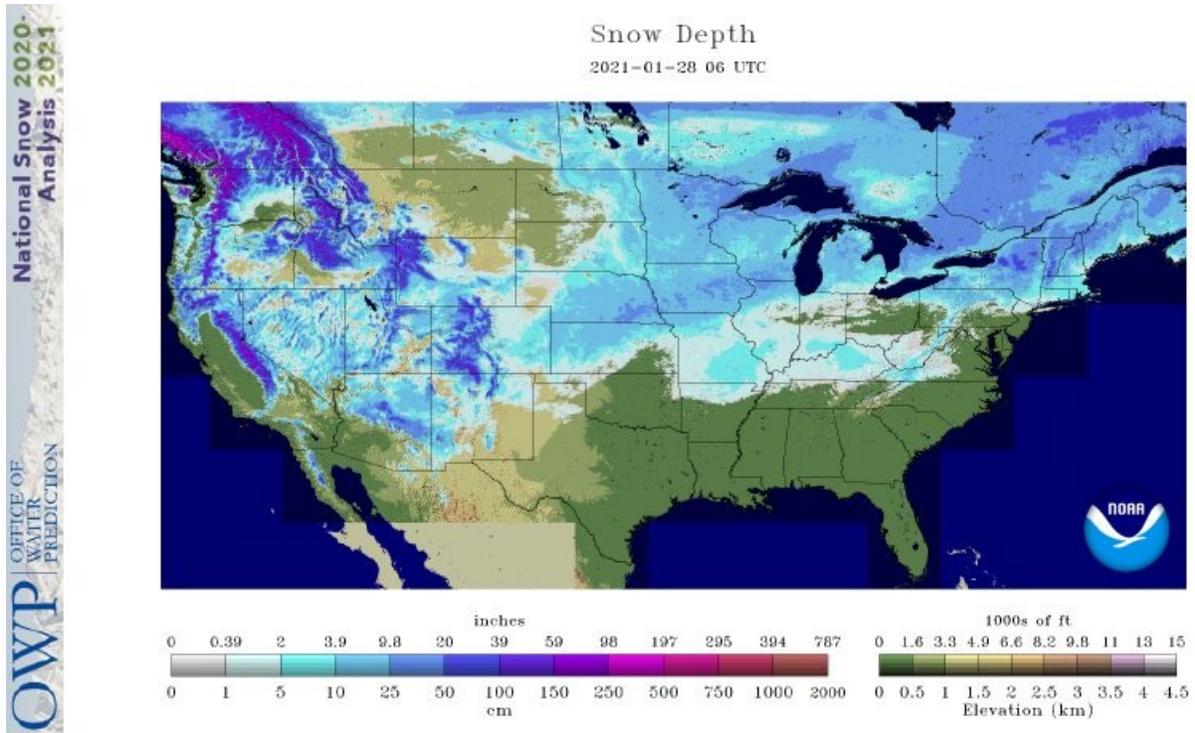


[Alaska snow water equivalent percent of median map](#)

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

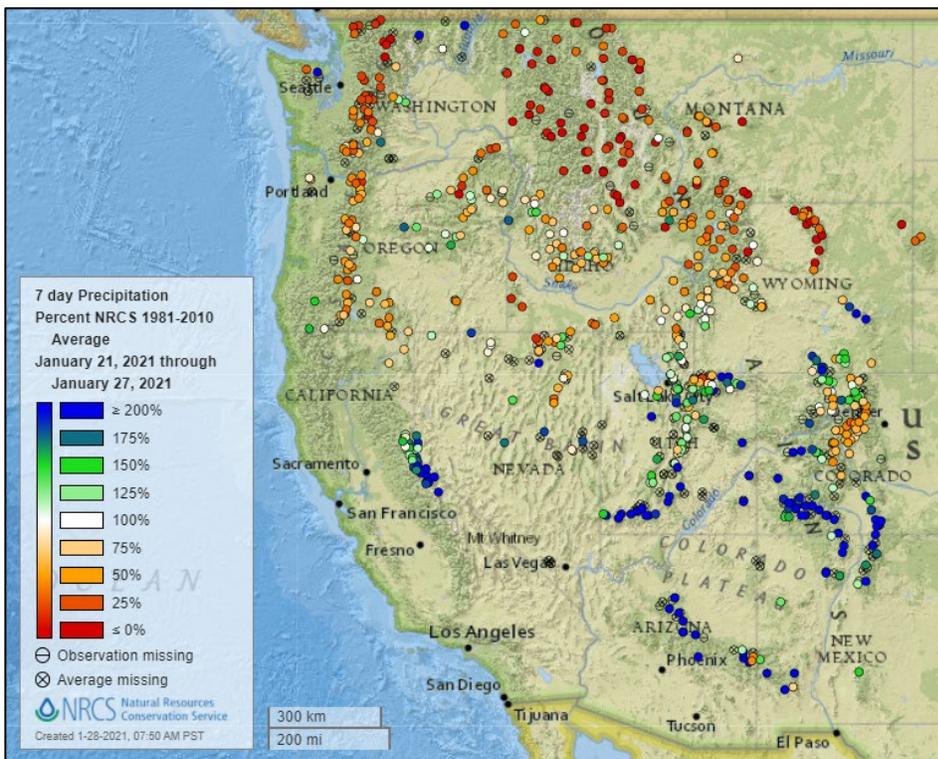
Current Snow Depth, National Weather Service Snow Analysis

Source: NOAA Office of Water Prediction



Precipitation

Last 7 Days, NRCS SNOTEL Network

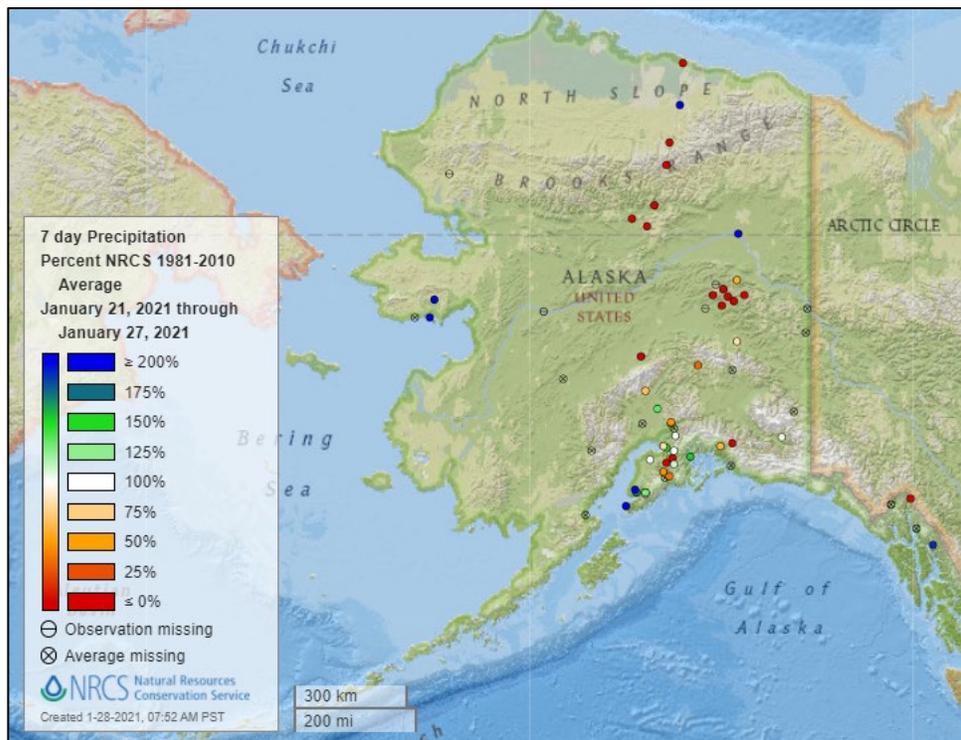


[7-day precipitation percent of average map](#)

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](#)



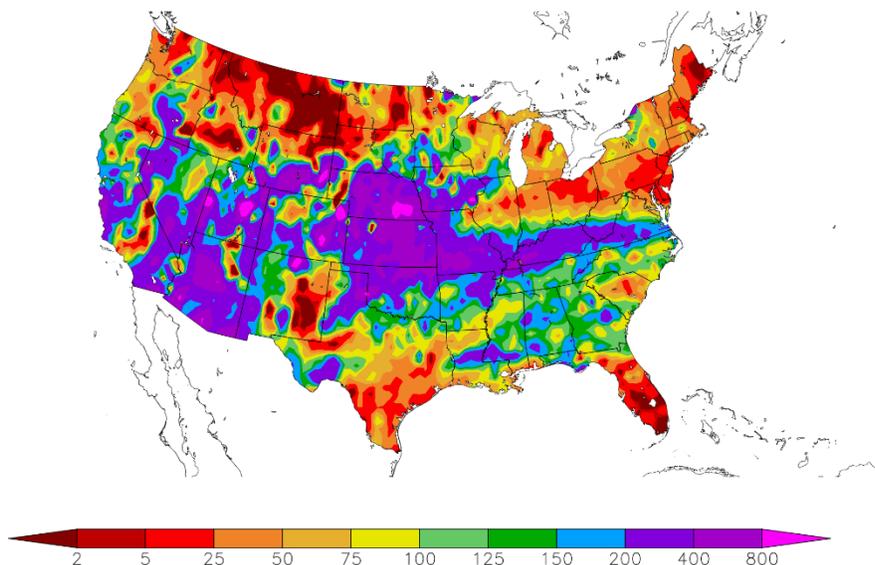
Last 7 Days, National Weather Service (NWS) Networks

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 (%)
1/21/2021 – 1/27/2021



Generated 1/28/2021 at HPRCC using provisional data.

NOAA Regional Climate Centers

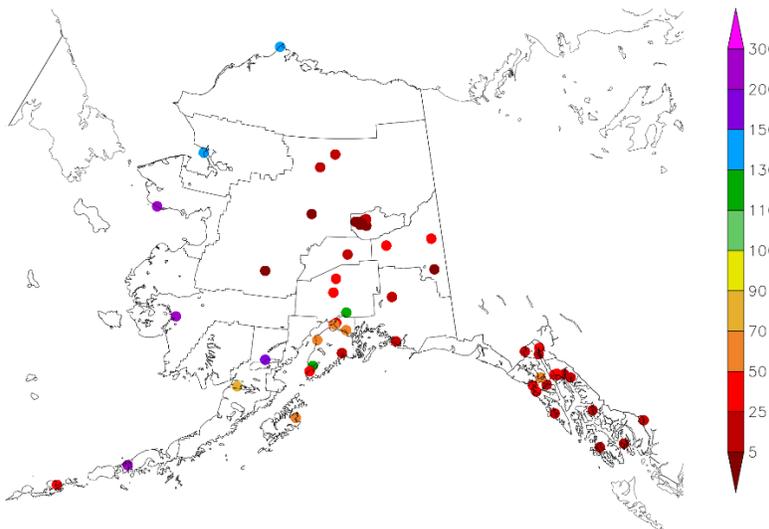
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Percent of Normal Precipitation (%)
1/21/2021 – 1/27/2021



Generated 1/28/2021 at HPRCC using provisional data.

NOAA Regional Climate Centers

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

Source: PRISM

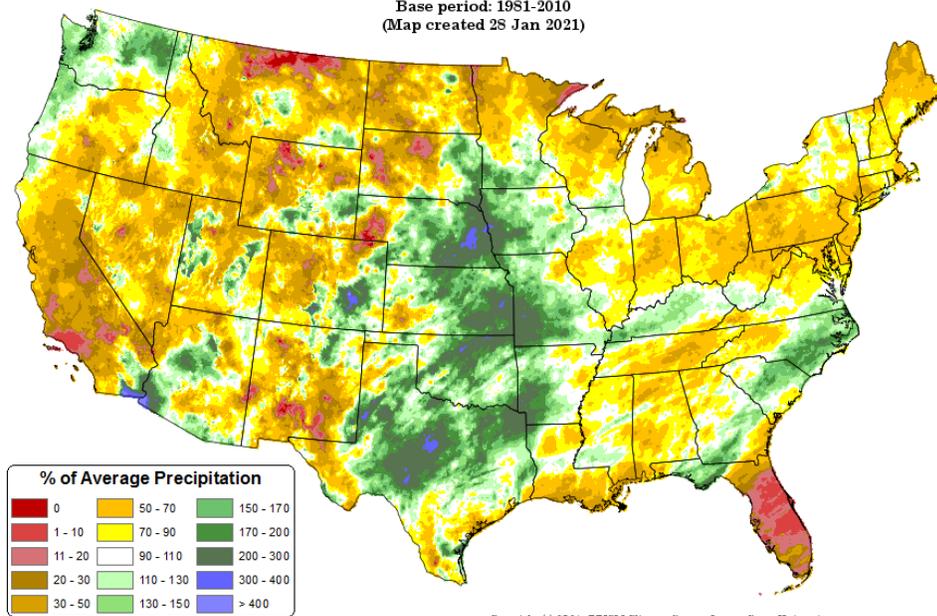
Total Precipitation Anomaly: 01 Jan 2021 - 27 Jan 2021

Period ending 7 AM EST 27 Jan 2021

Base period: 1981-2010

(Map created 28 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

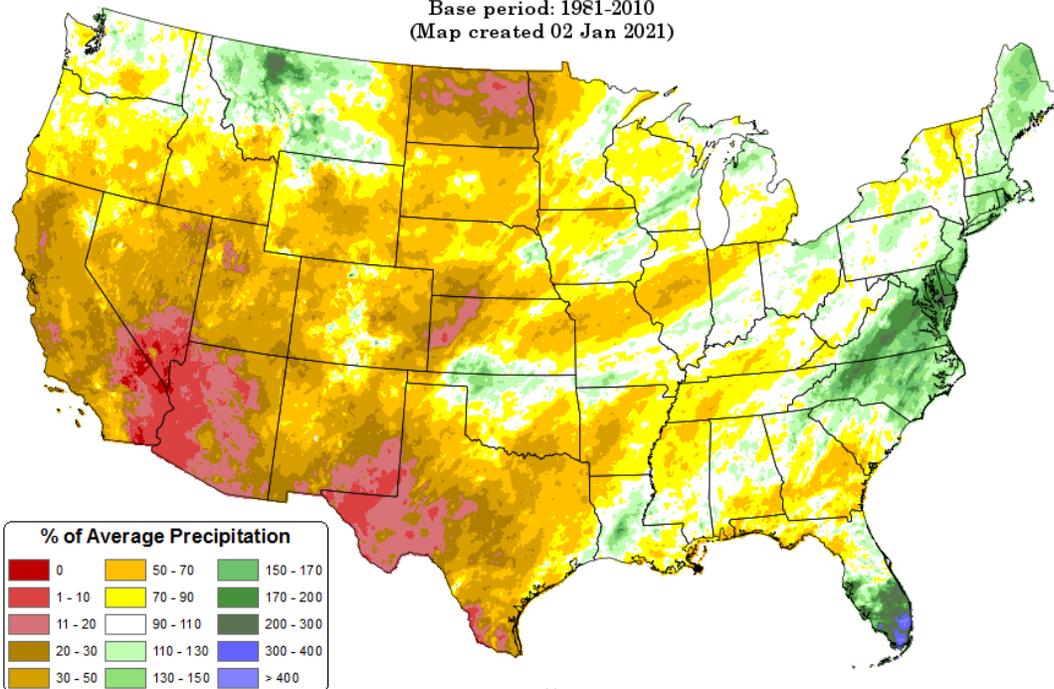
[October through December precipitation percent of average map](#)

Total Precipitation Anomaly: Oct 2020 - Dec 2020

Period ending 7 AM EST 31 Dec 2020

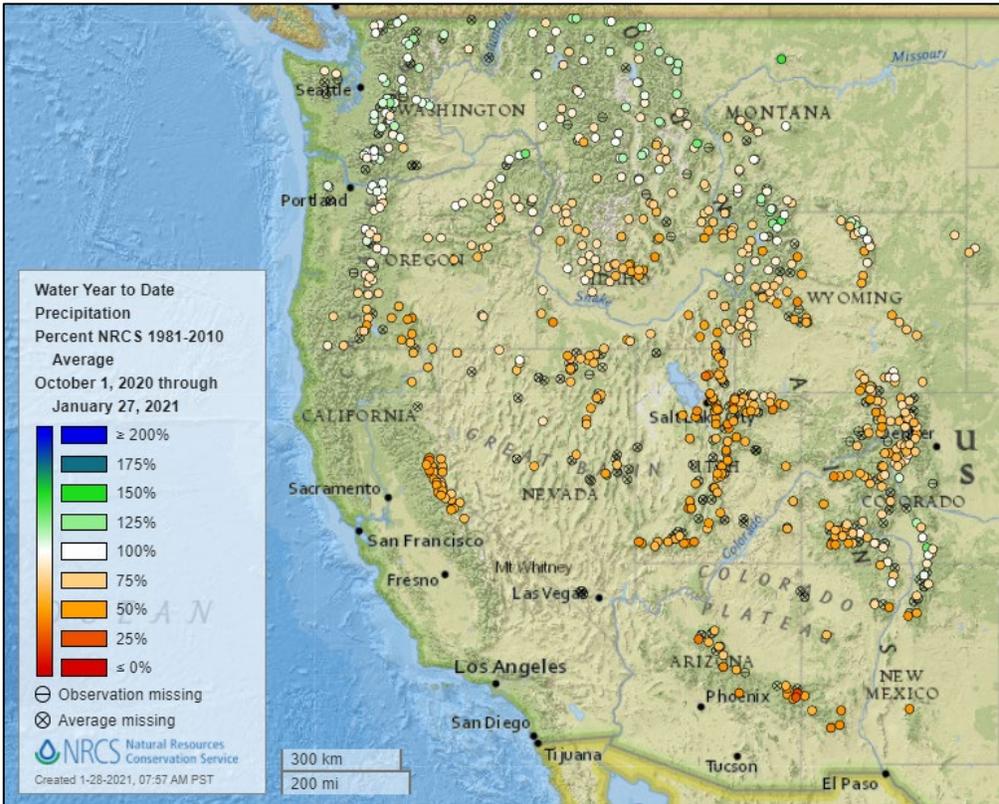
Base period: 1981-2010

(Map created 02 Jan 2021)



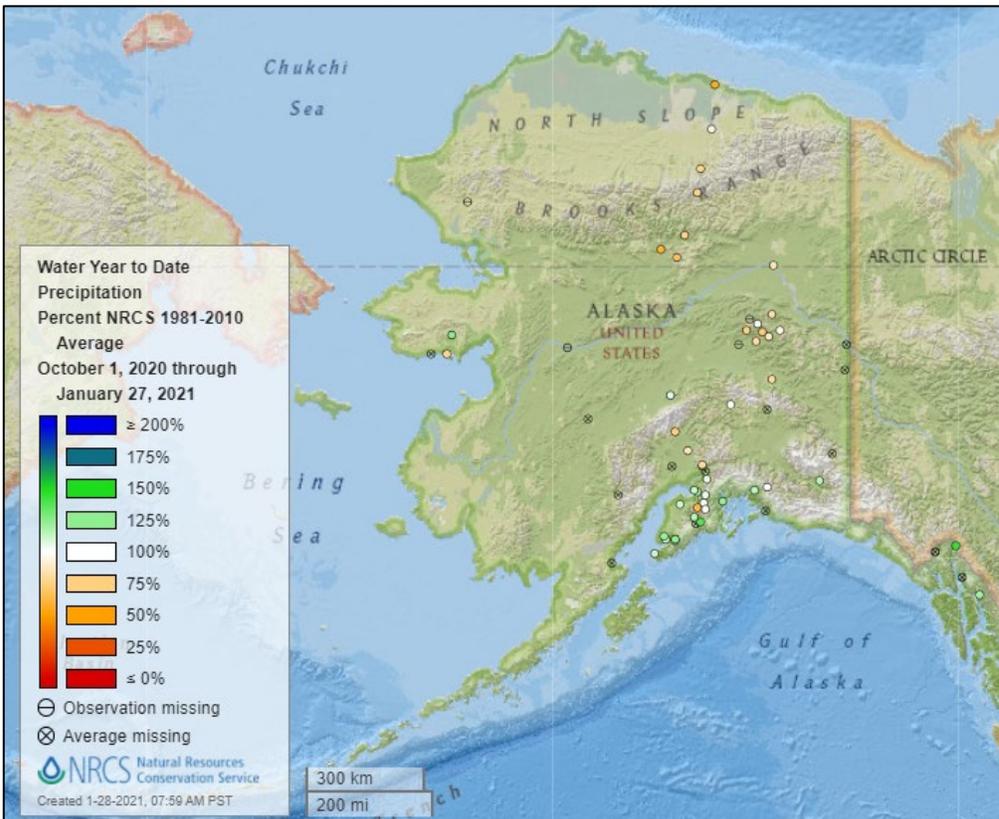
Copyright (c) 2021, PRISM Climate Group, Oregon State University

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

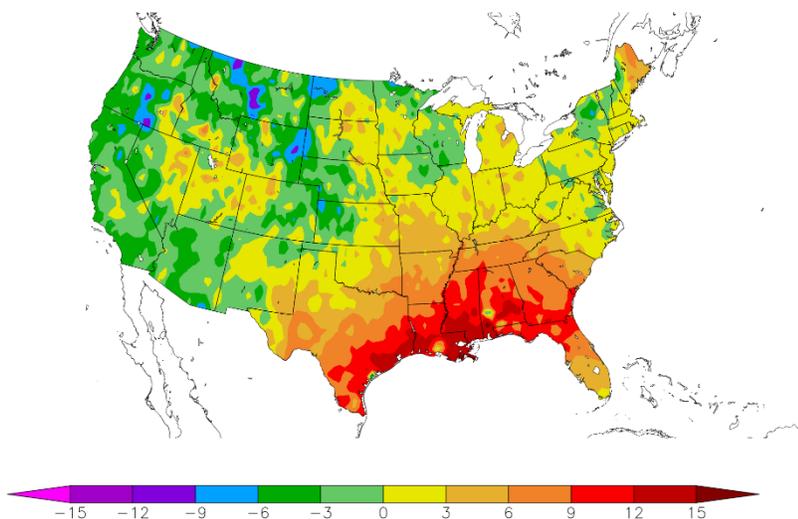
Last 7 Days, National Weather Service (NWS) Networks

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)
1/21/2021 - 1/27/2021



Generated 1/28/2021 at HPRCC using provisional data.

NOAA Regional Climate Centers

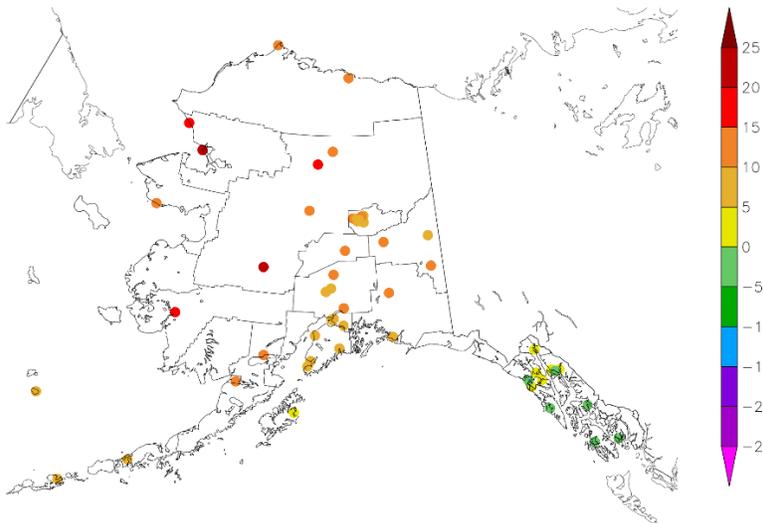
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)
1/21/2021 - 1/27/2021



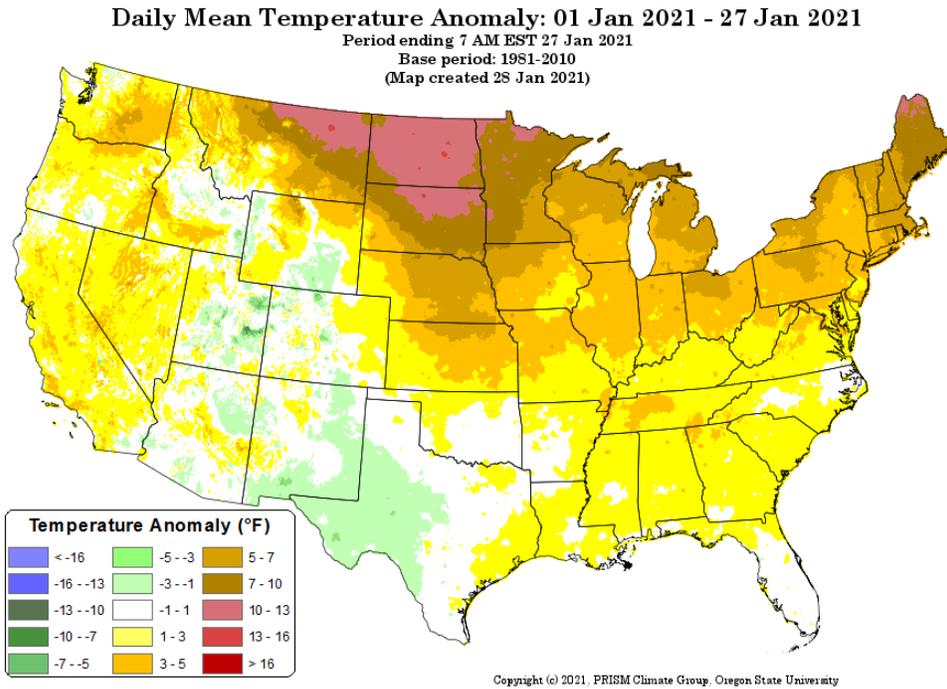
Generated 1/28/2021 at HPRCC using provisional data.

NOAA Regional Climate Centers

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

Source: PRISM

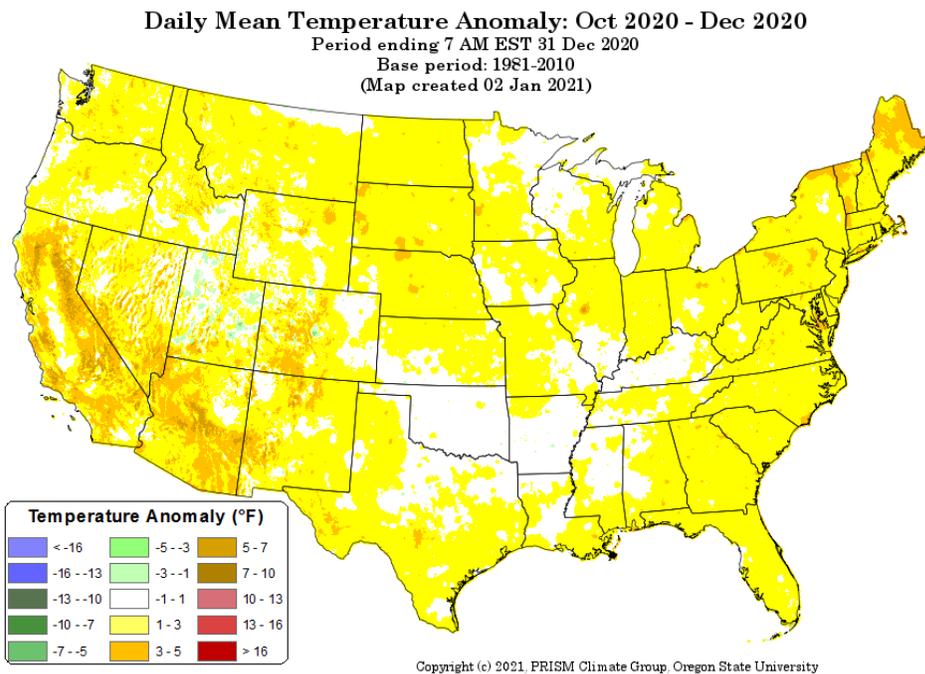
[Month-to-date national daily mean temperature anomaly map](#)



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

Source: PRISM

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



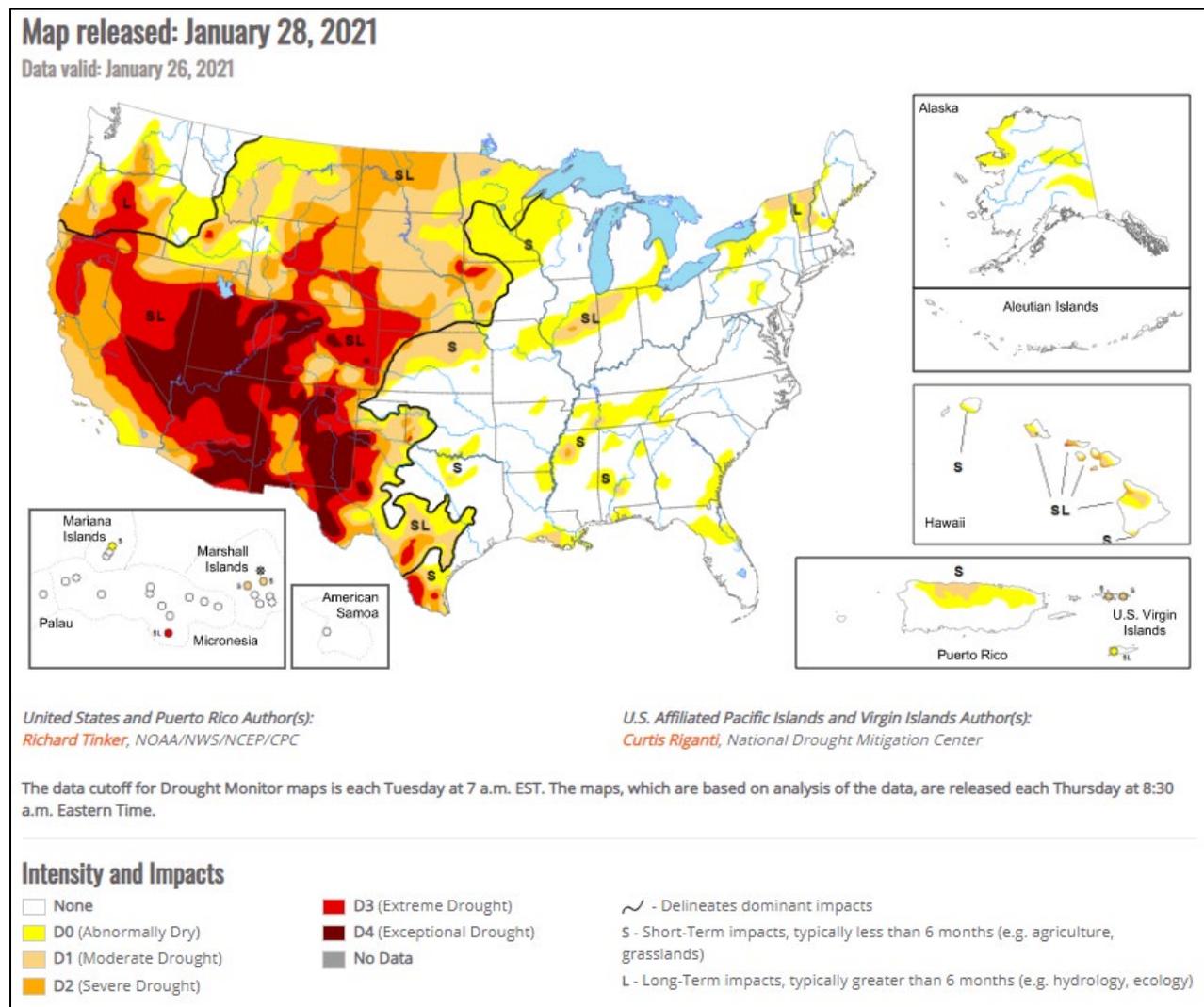
Drought

[U.S. Drought Monitor](#)

Source: National Drought Mitigation Center

[U.S. Drought Portal](#)

Source: NOAA



[Current National Drought Summary, January 28, 2021](#)

Source: National Drought Mitigation Center

“The heaviest precipitation this week fell on a swath across southwestern Kentucky and immediately adjacent locales (3.0 to 4.5 inches), and the higher elevations of Arizona (3.5 to locally over 6 inches). Moderate to heavy amounts of 1.5 to locally 4.0 inches pelted the rest of Kentucky, southern Missouri, northeastern Arkansas, just north of the central Gulf Coast, and patchy areas across southern Virginia and the interior Southeast. Similar amounts dotted southern California and the higher elevations of the southern Sierra Nevada and the Four Corners region, especially across Arizona. Light to moderate precipitation extended across the remainder of the interior Southeast, from central Texas northward through the upper Midwest, across some lower elevations of the Four Corners region, in parts of the southern Great Basin, through most of the Sierra Nevada, and along much of the immediate West Coast. Much of the precipitation fell as heavy snow late in the period from Kansas and Nebraska to the lower Great Lakes. Amounts topped one foot at scattered spots across southwestern Iowa and southeastern Nebraska, with Omaha, NE

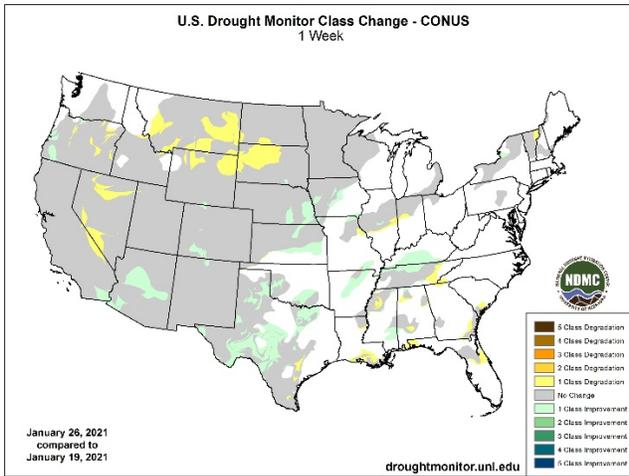
Water and Climate Update

reporting just under a foot. Small areas of moderate precipitation were observed in some areas to the lee of Lakes Erie and Ontario, but otherwise, the driest areas this week – reporting little or no precipitation – stretched along the northern tier of states from the Cascades through New England, most of the Intermountain West, the High Plains, southern Texas, Florida, the southern Atlantic Coast, the northern Ohio Valley, and the middle Atlantic States. No large, broad-scale changes were appropriate as a result, but numerous smaller-scale adjustments were introduced.”

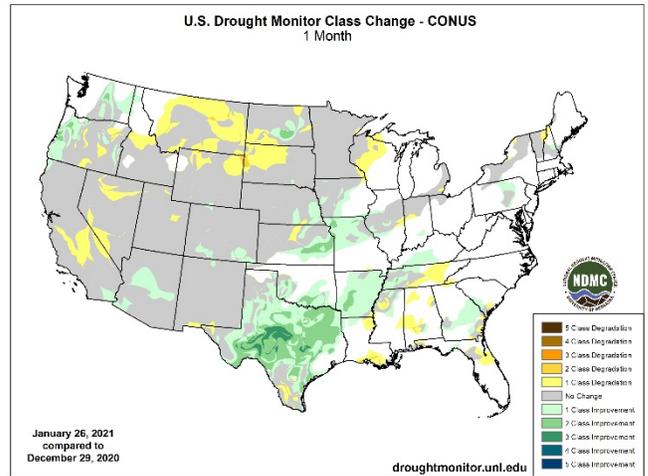
Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

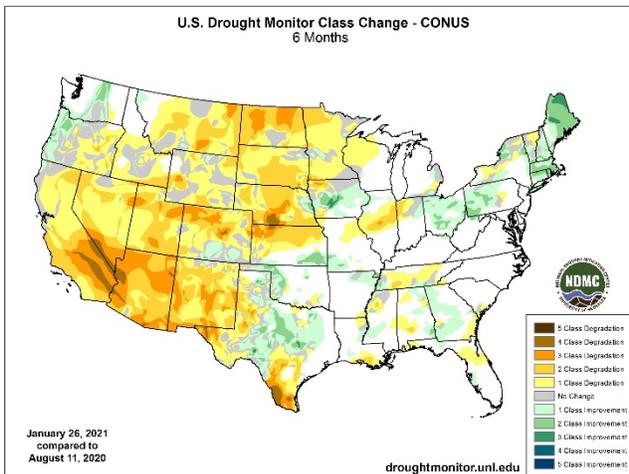
1 Week



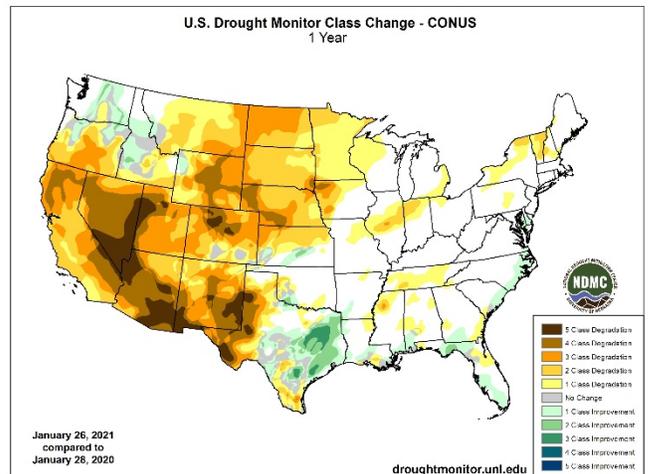
1 Month



6 Months



1 Year



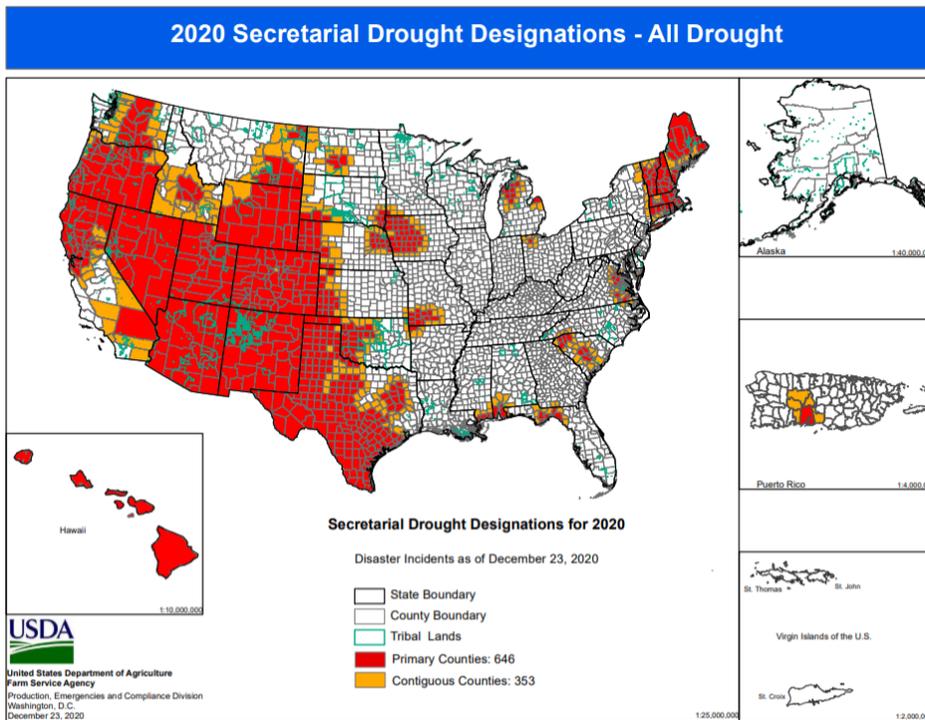
[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

Highlighted Drought Resources

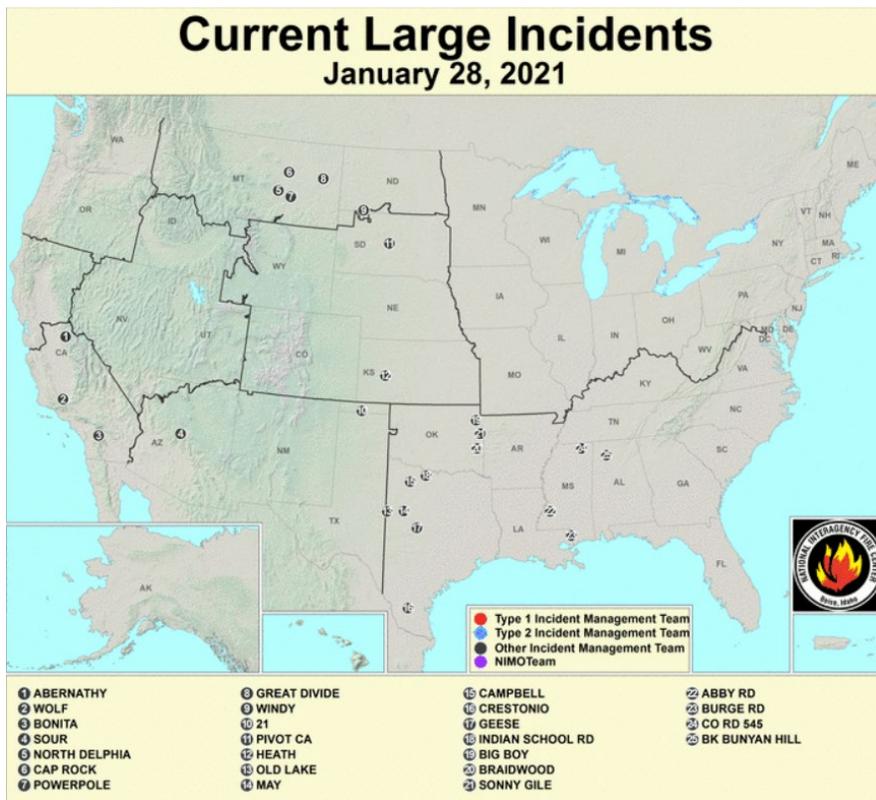
- [Drought Impact Reporter](#)
- [Quarterly Regional Climate Impacts and Outlook](#)
- [U.S. Drought Portal Indicators and Monitoring](#)
- [U.S. Population in Drought, Weekly Comparison](#)
- [USDA Disaster and Drought Information](#)

Secretarial Drought Designations

Source: USDA Farm Service Agency



Wildfires: USDA Forest Service Active Fire Mapping



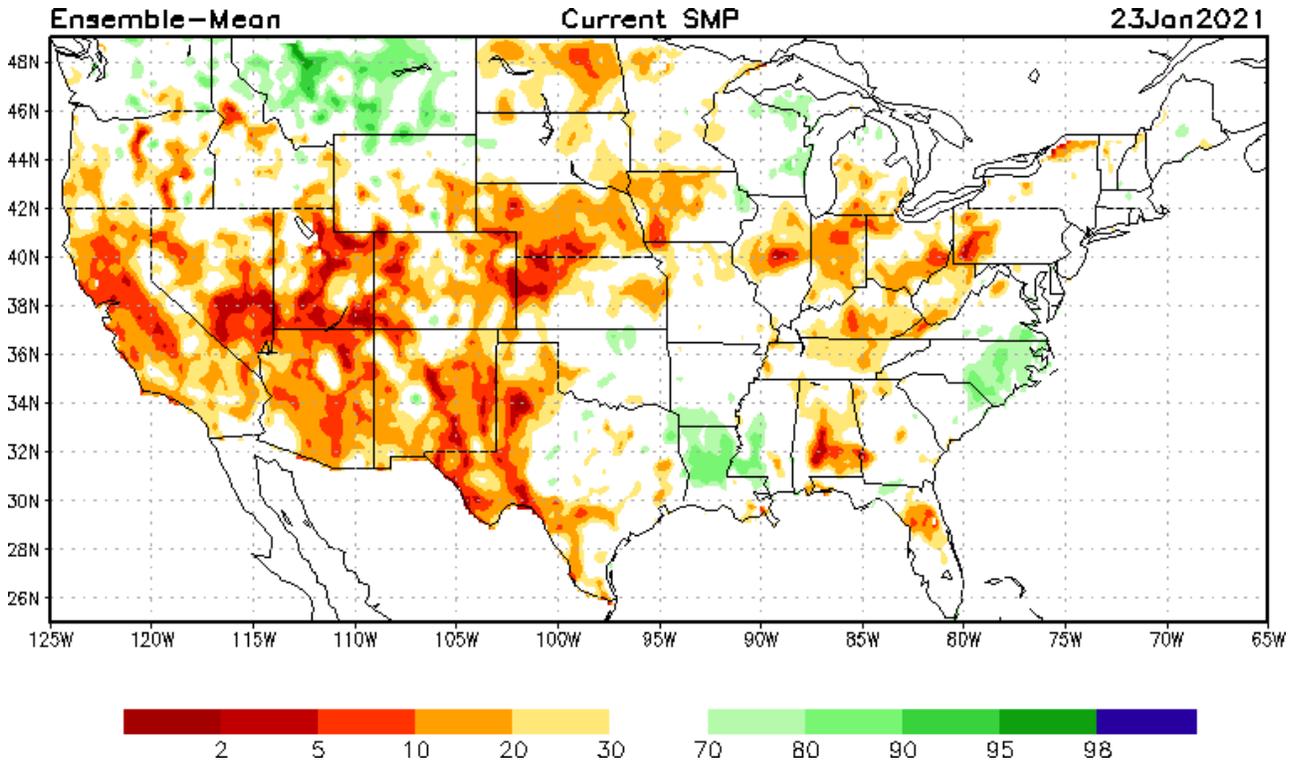
Highlighted Wildfire Resources

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

Other Climatic and Water Supply Indicators

Soil Moisture

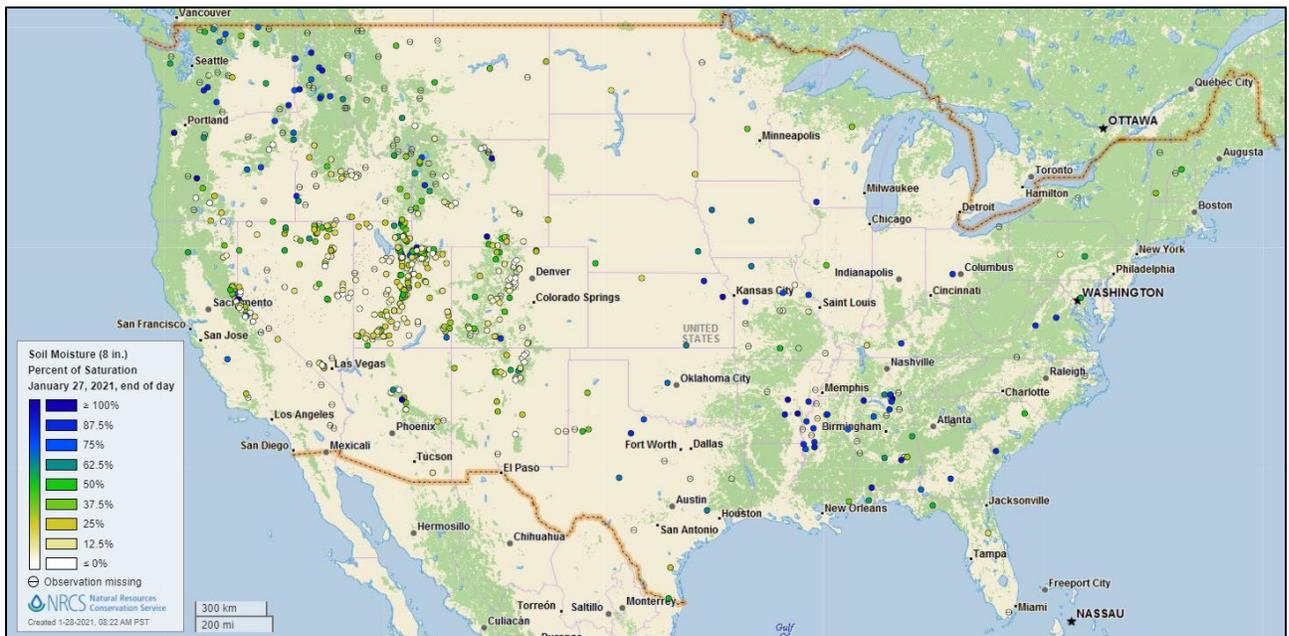
Source: NOAA National Centers for Environmental Prediction



[Modeled soil moisture percentiles](#) as of January 23, 2021

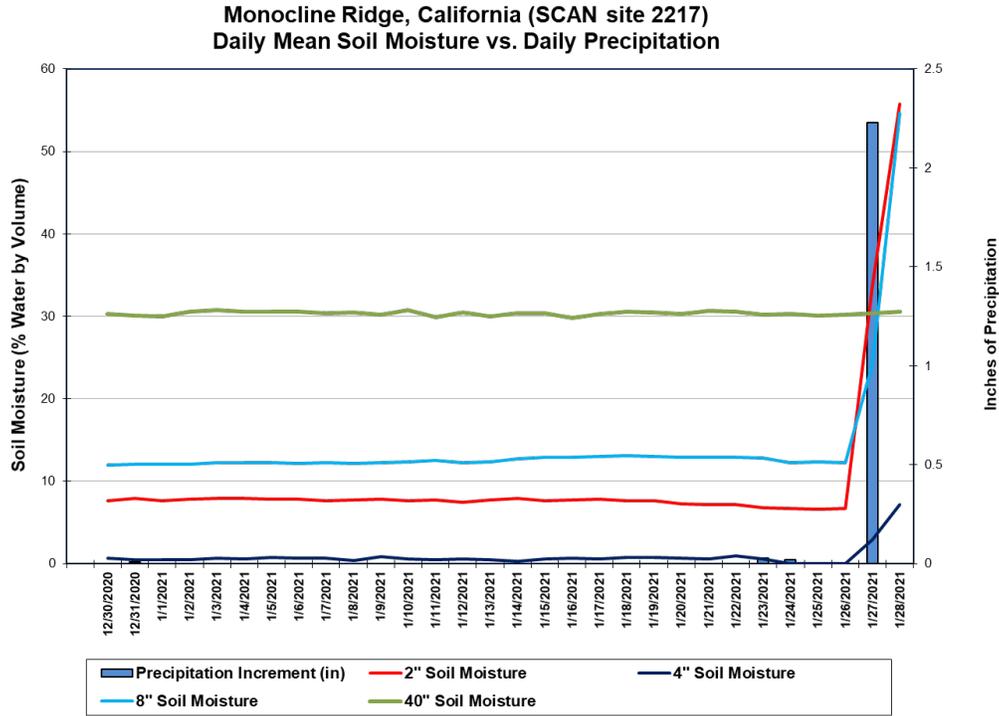
Soil Moisture Percent of Saturation

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 [Monocline Ridge](#) SCAN site in California. Dry soil conditions were reported with only 0.05 inches of precipitation received up to January 26, 2021. Precipitation of 2.23 inches collected on January 27, 2021 increased the soil moisture dramatically at the -2, -4, and -8-inch depth sensors.

Soil Moisture Data Portals

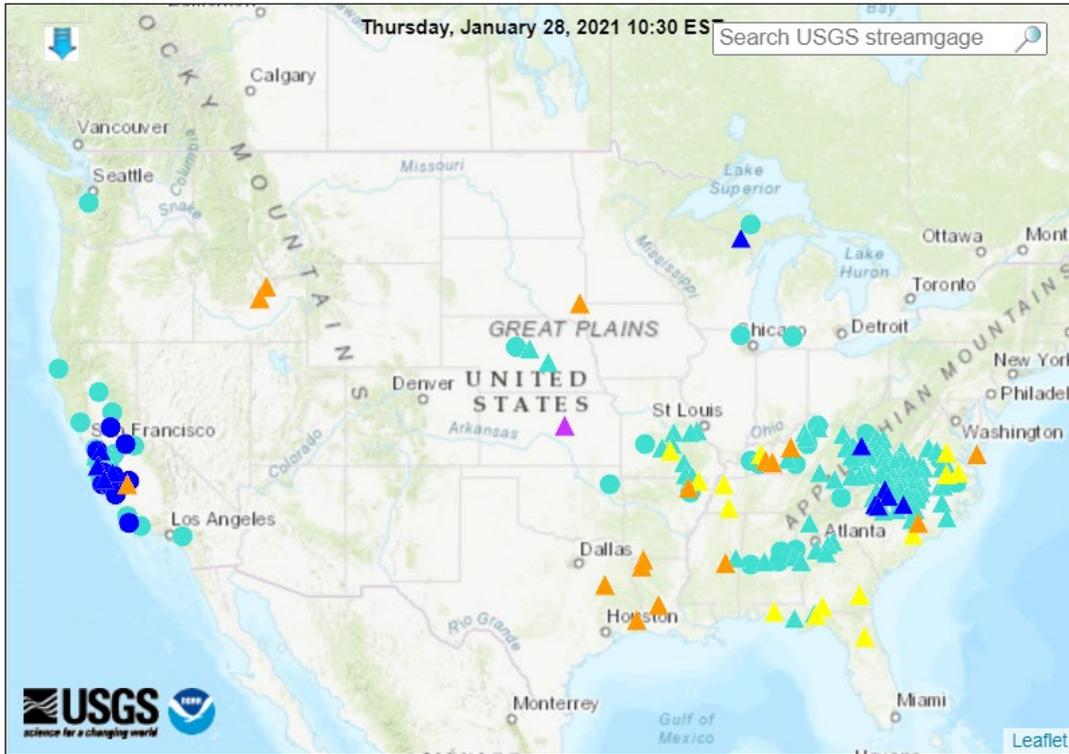
- [CRN Soil Moisture](#)
- [Texas A&M University North American Soil Moisture Database](#)
- [University of Washington Experimental Modeled Soil Moisture](#)

Streamflow, Drought, Flood, and Runoff

Source: U.S. Geological Survey

Map of flood and high flow conditions

(16 in floods [major: 1, 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](#)

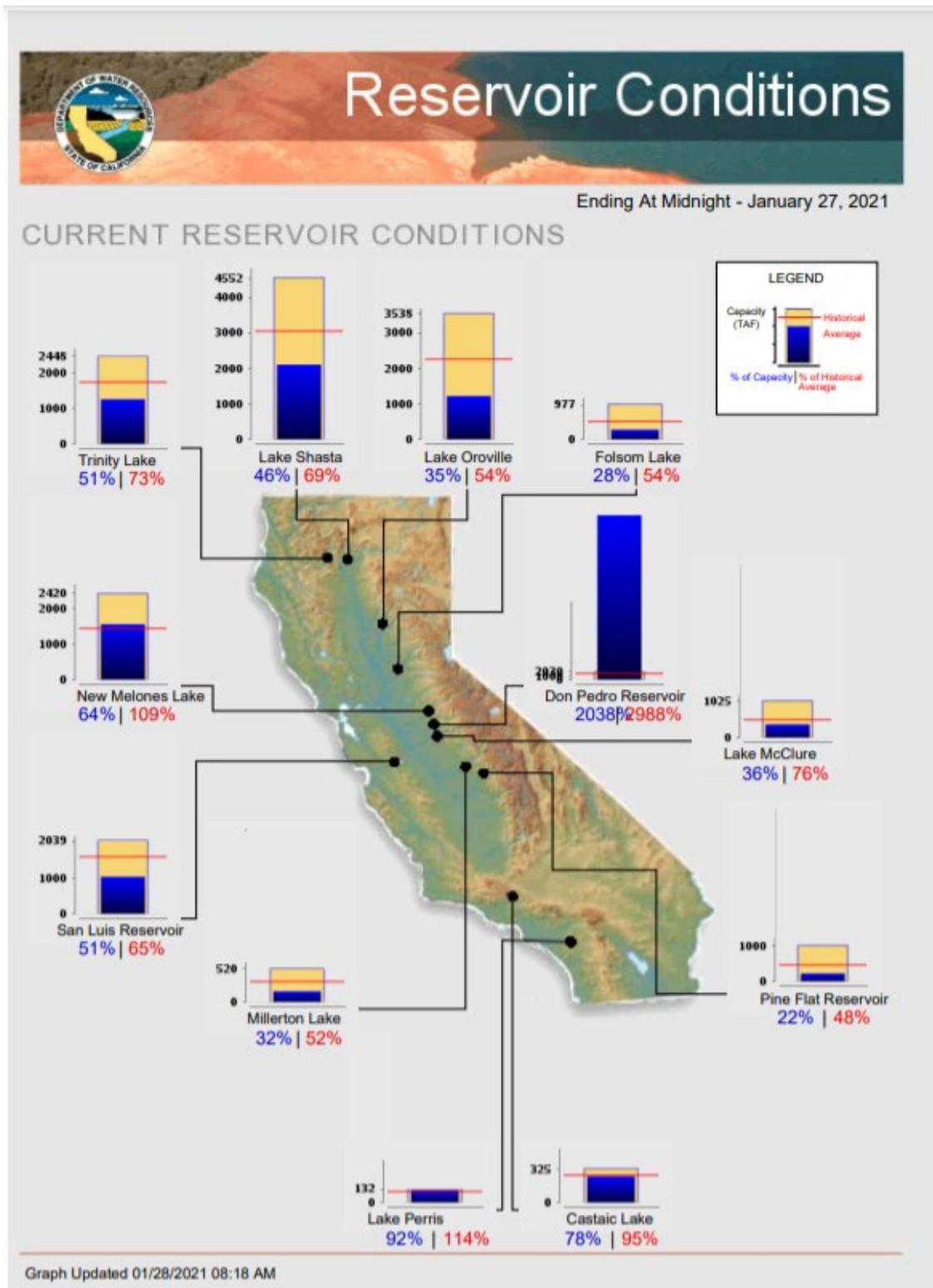
Reservoir Storage

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, January 28, 2021: “A major winter storm near the Pacific Coast will move inland across the Great Basin and Intermountain West by Friday. Subsequently, the storm will traverse the Plains on Saturday and affect the eastern half of the U.S. from Sunday into early next week. As a result, California will experience the return of cool, dry weather during the weekend, while storm impacts—including possible heavy snow—will shift into the Midwest and mid-Atlantic. In addition, locally heavy weekend rain may soak the Southeast. Meanwhile, a new Pacific storm—the last in a series—will arrive by Monday in northern California and the Pacific Northwest. That system will take a slightly more northerly track early next week across the Plains and Midwest. The NWS 6- to 10-day outlook for February 2 – 6 calls for the likelihood of above-normal temperatures in most areas east of the Mississippi River, while colder-than-normal conditions will cover areas from the Pacific Coast to the High Plains. Meanwhile, below-normal precipitation in the Pacific Northwest and southern sections of Texas and Florida should contrast with wetter-than-normal weather in most other parts of the U.S., especially from the central Plains into the Midwest.”

Weather Hazards Outlook: [January 30 – February 03, 2021](#)

Source: NOAA Weather Prediction Center

U.S. Day 3-7 Hazards Outlook

[About the Hazards Outlook](#)

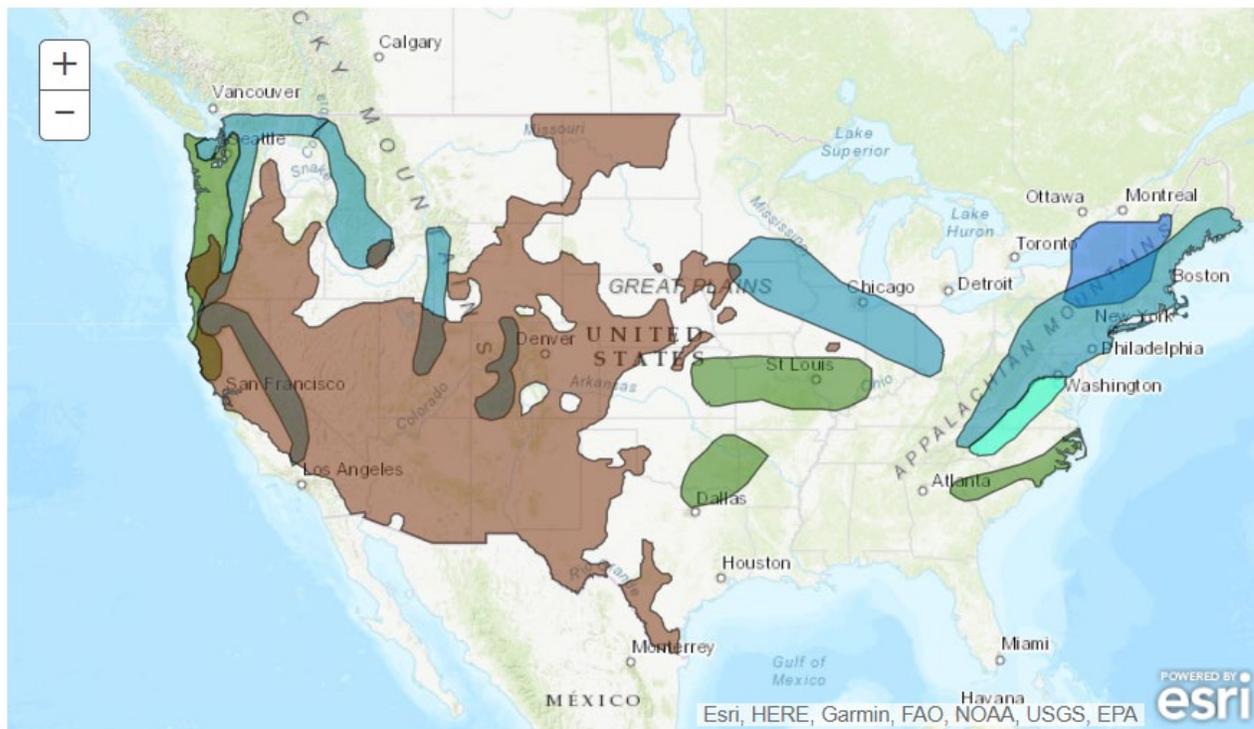
Created January 27, 2021

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 30, 2021 - February 03, 2021

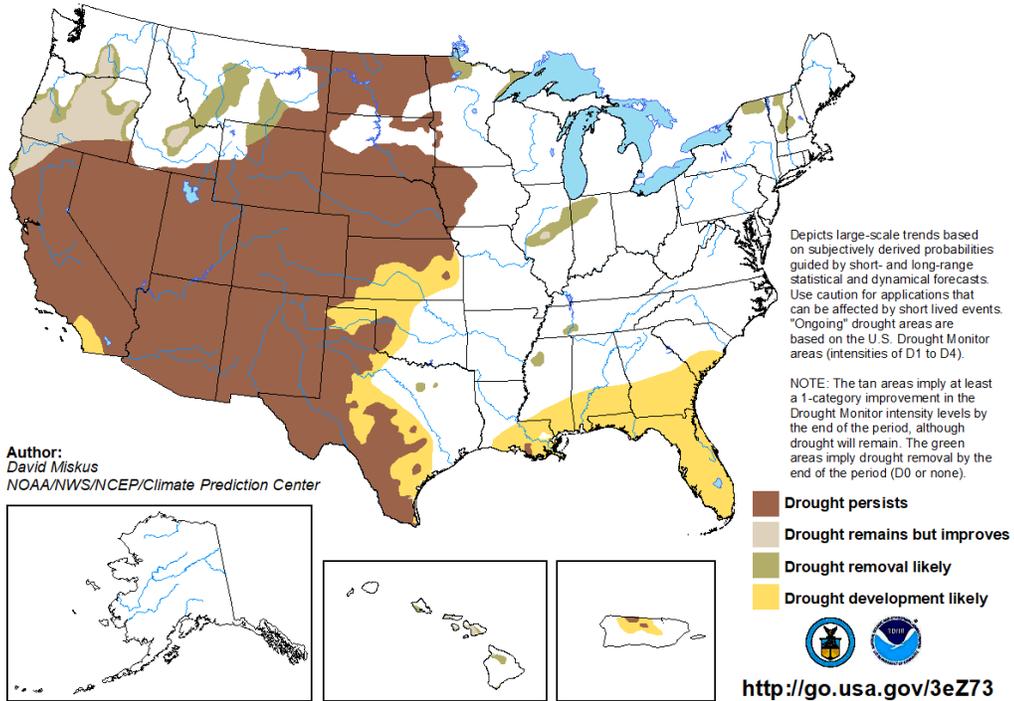


Seasonal Drought Outlook: [January 21 – April 30, 2021](#)

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

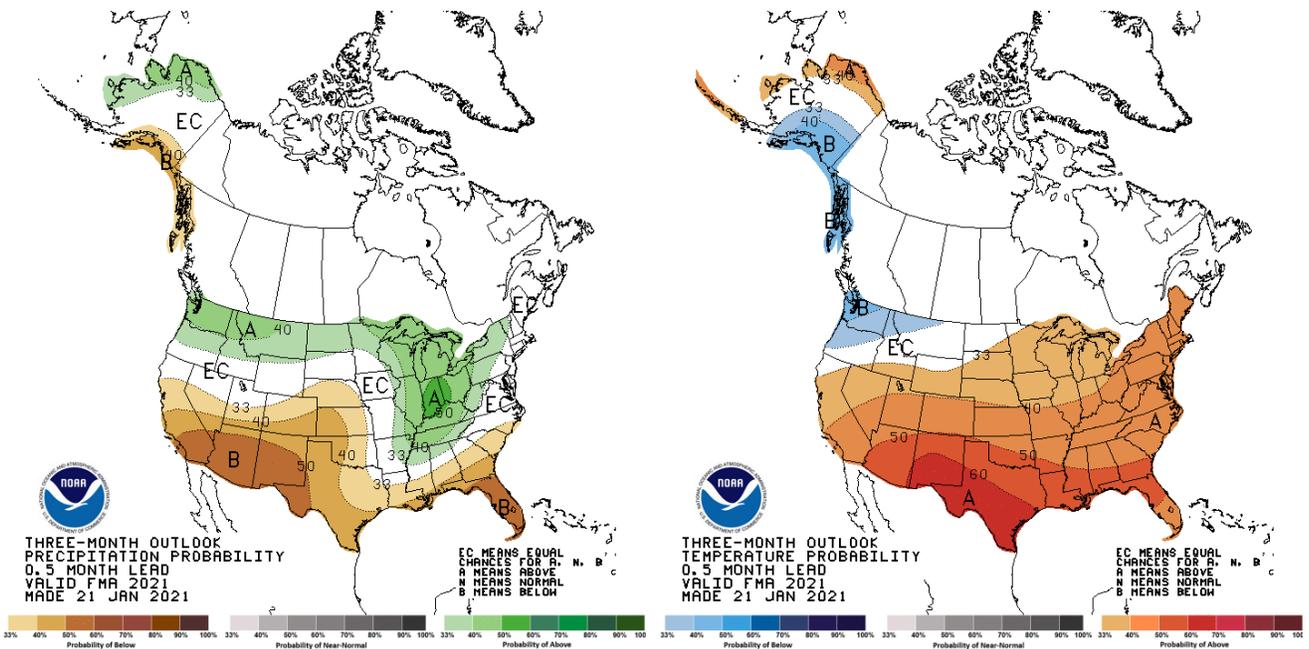


Climate Prediction Center 3-Month Outlook

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](#).