



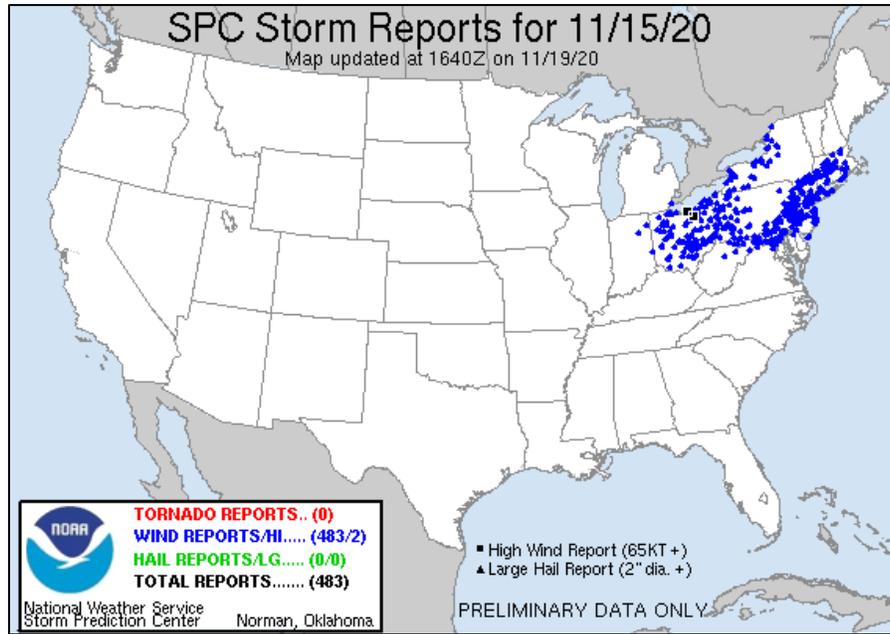
Water and Climate Update

November 19, 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.

Snow	2	Drought	10
Precipitation	4	Other Climatic and Water Supply Indicators	13
Temperature.....	8	More Information	20

Severe windstorms cross the upper Midwest and Northeast

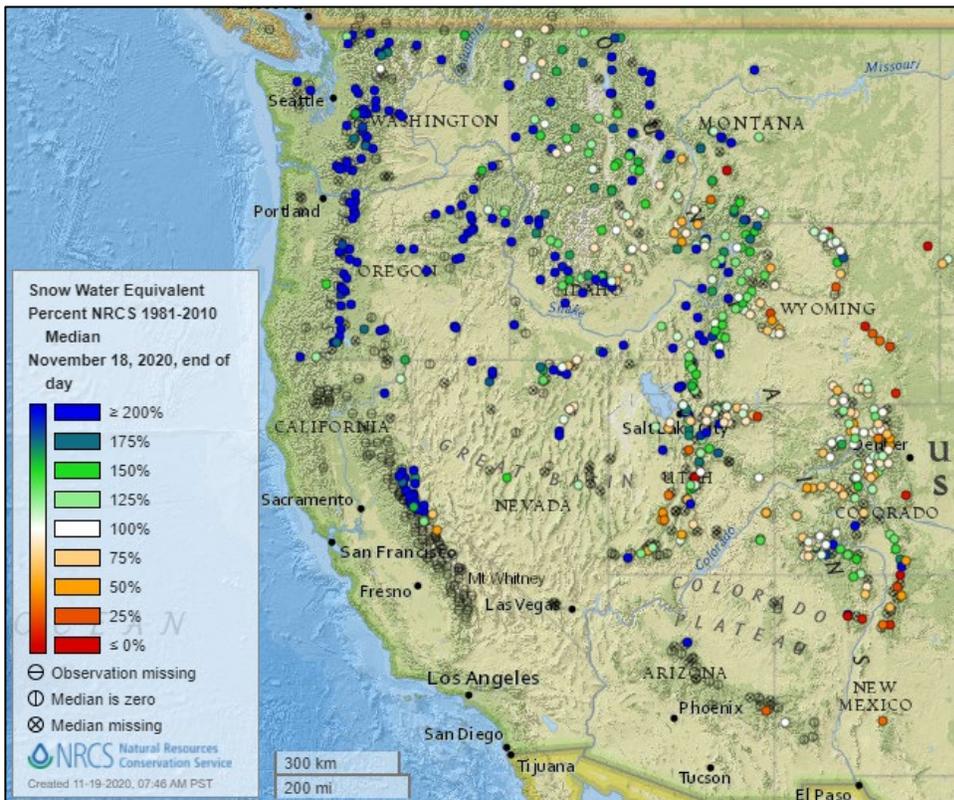


Strong storms with damaging winds swept through the Midwest and Northeast over the weekend. The highest peak wind gust of 79 mph was reported at Lorain, Ohio. Other gusts over 60 mph were recorded in Pennsylvania, New York, Maryland, West Virginia, New Jersey, Connecticut, Rhode Island, and Massachusetts. The winds caused flooding along the shoreline of the Great Lakes. Wind damage was widespread with overturned trucks, building damage, and many downed trees and powerlines. At the peak of the outages Sunday evening, 800,000 homes and businesses were without power.

Related:

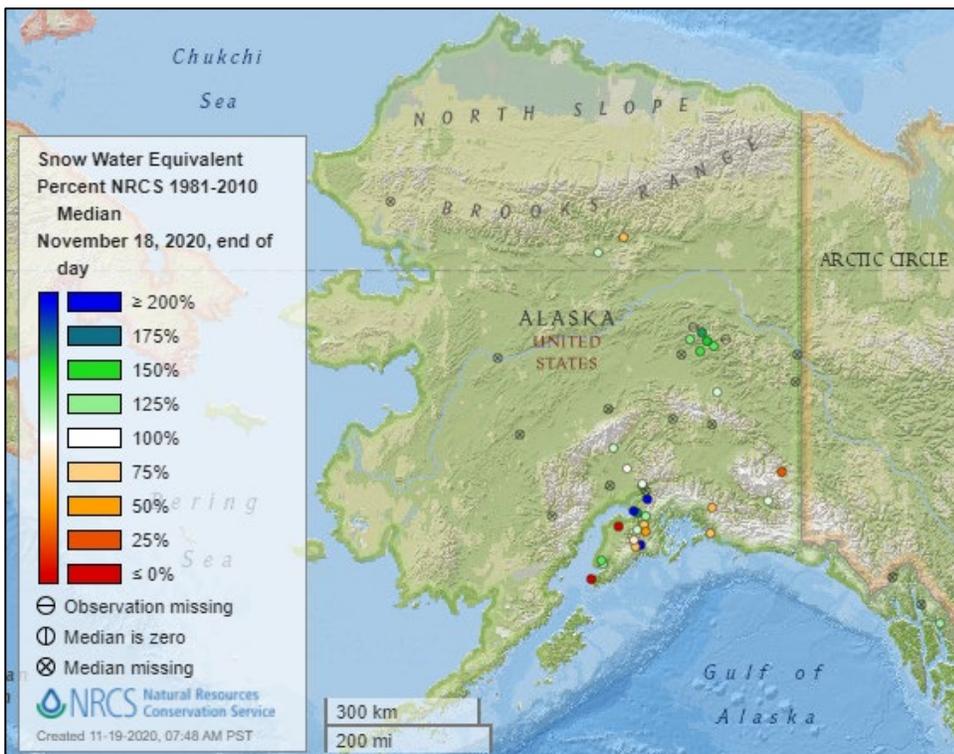
- [Power outages mount as fierce storm sweeps through Midwest, Northeast – UPI.com](#)
- [Michigan, Ohio, Pennsylvania and Maine Power Outages Map, Updates as Thousands Left Without Power – Newsweek](#)
- [Tens of thousands lose power after severe storms sweep through Connecticut; final customers will be reconnected Tuesday evening – Hartford Courant \(CT\)](#)
- [‘We never experienced anything like this’: Roof torn from barn, church steeple toppled in severe Lehigh Valley weather outbreak – Morning Call PA \(PA\)](#)
- [Heavy winds leave more than 30K without power in New York – AP](#)

Snow



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

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

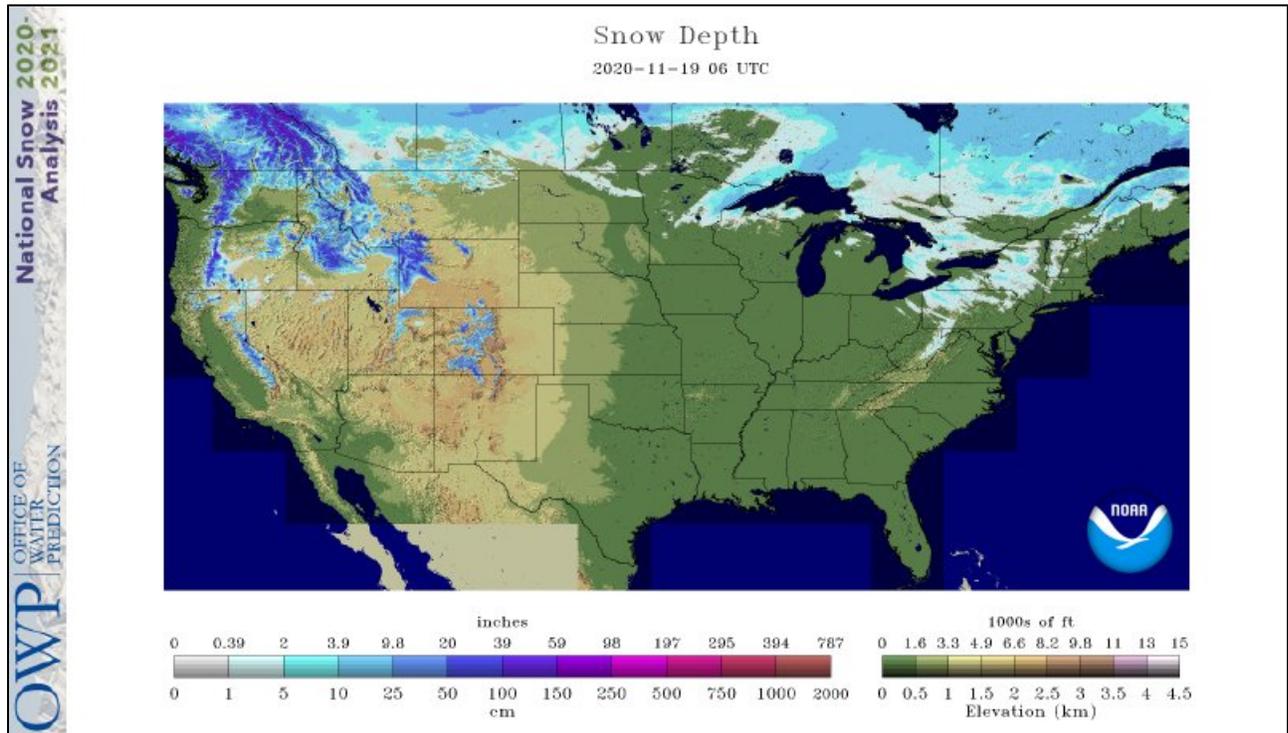


[Alaska snow water equivalent percent of median map](#)

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

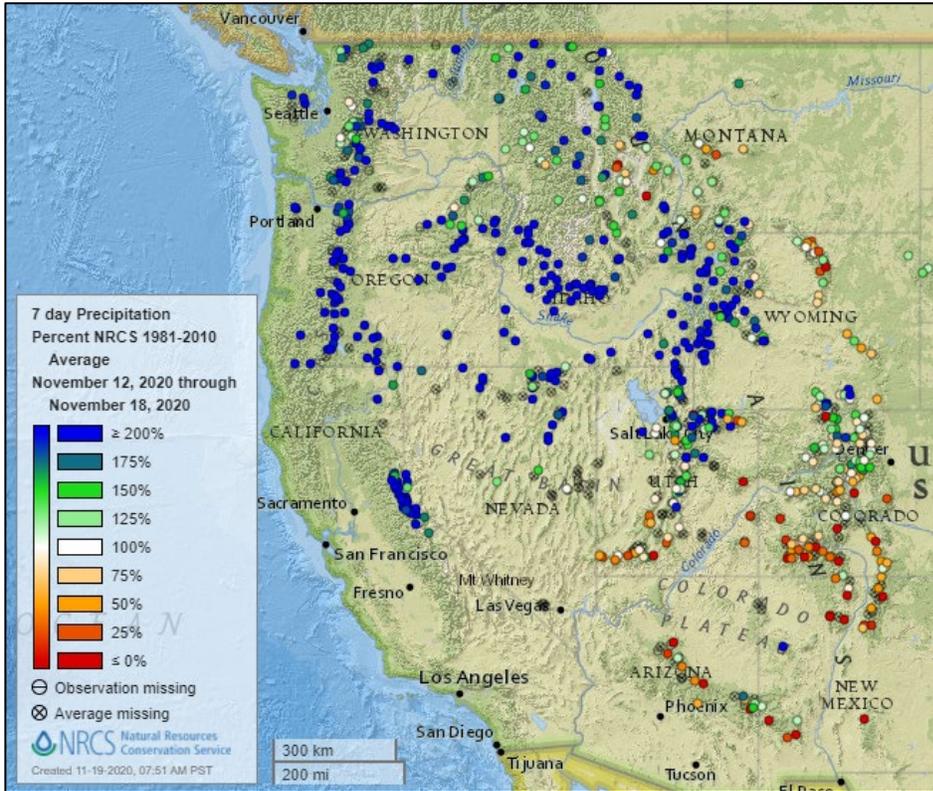
Current Snow Depth, National Weather Service Snow Analysis

Source: NOAA Office of Water Prediction



Precipitation

Last 7 Days, NRCS SNOTEL Network

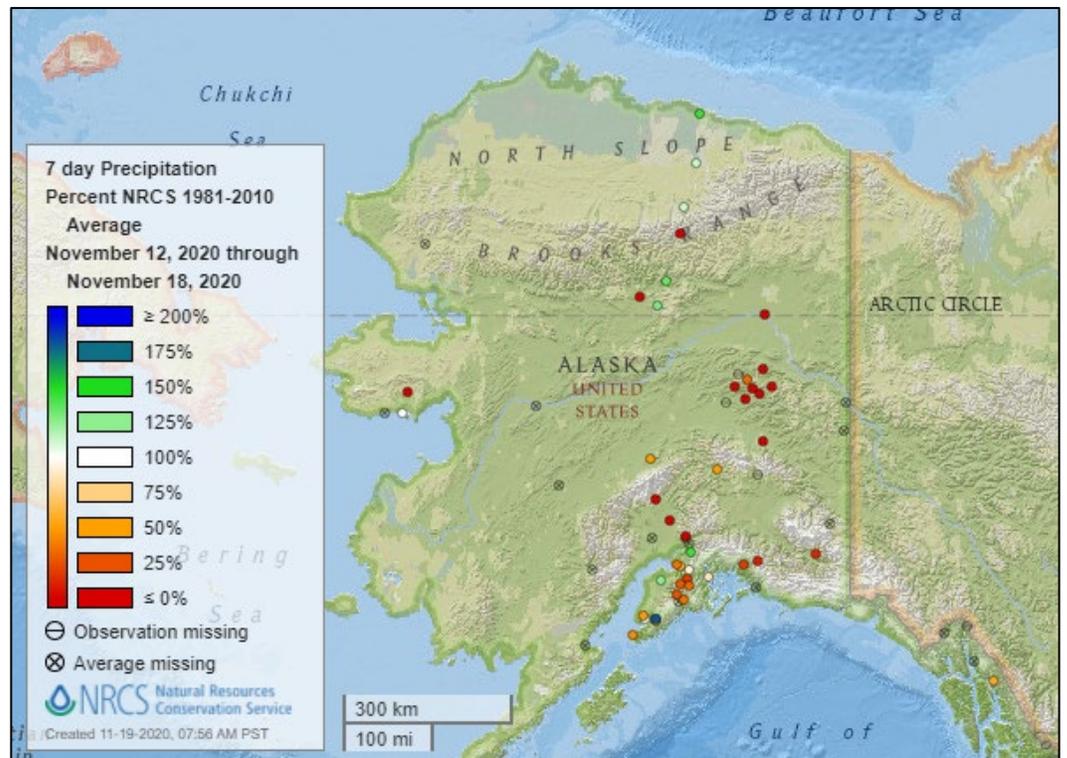


[7-day precipitation percent of average map](#)

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](#)



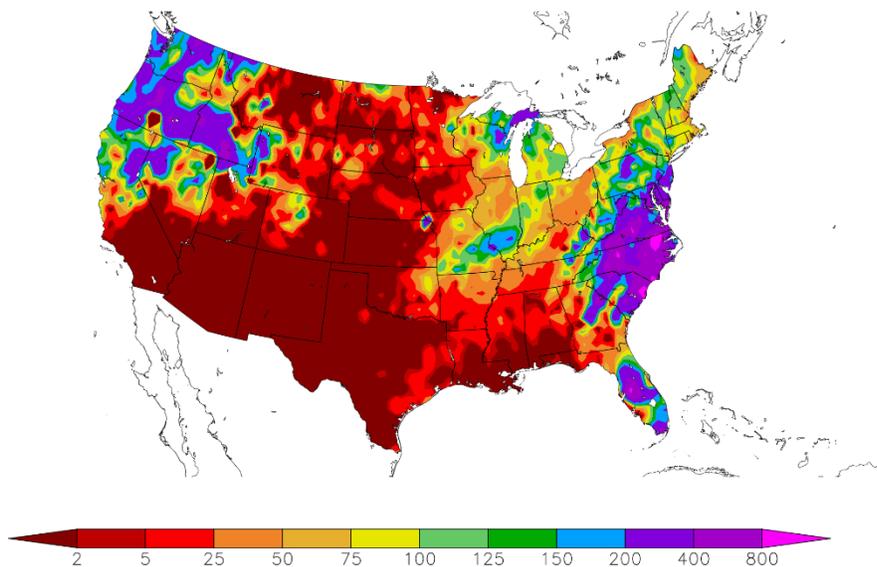
Last 7 Days, National Weather Service (NWS) Networks

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 (%)
11/12/2020 – 11/18/2020



Generated 11/19/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

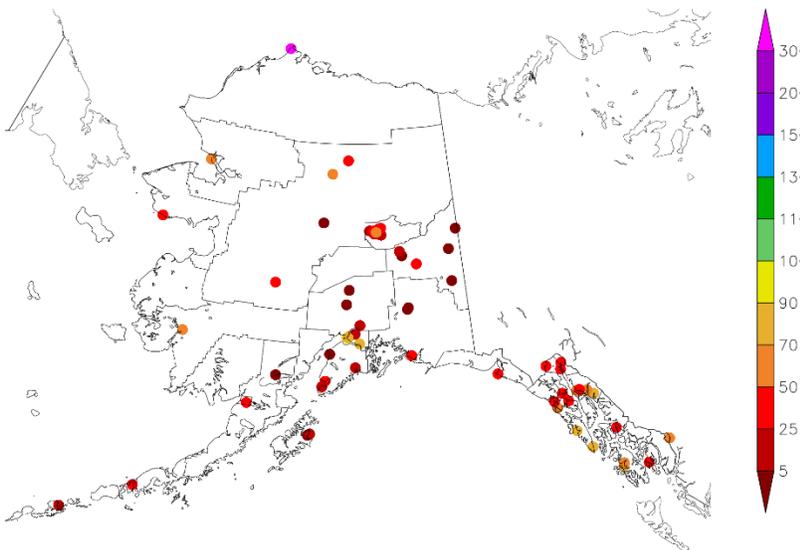
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Percent of Normal Precipitation (%)
11/12/2020 – 11/18/2020



Generated 11/19/2020 at HPRCC using provisional data.

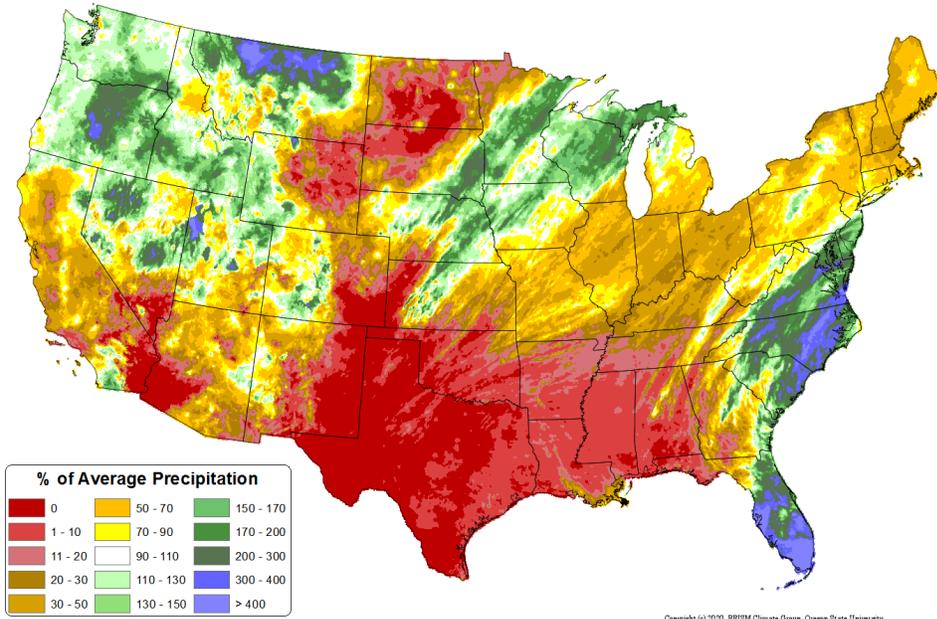
NOAA Regional Climate Centers

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

Source: PRISM

Total Precipitation Anomaly: 01 Nov 2020 - 18 Nov 2020
Period ending 7 AM EST 18 Nov 2020
Base period: 1981-2010
(Map created 19 Nov 2020)

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



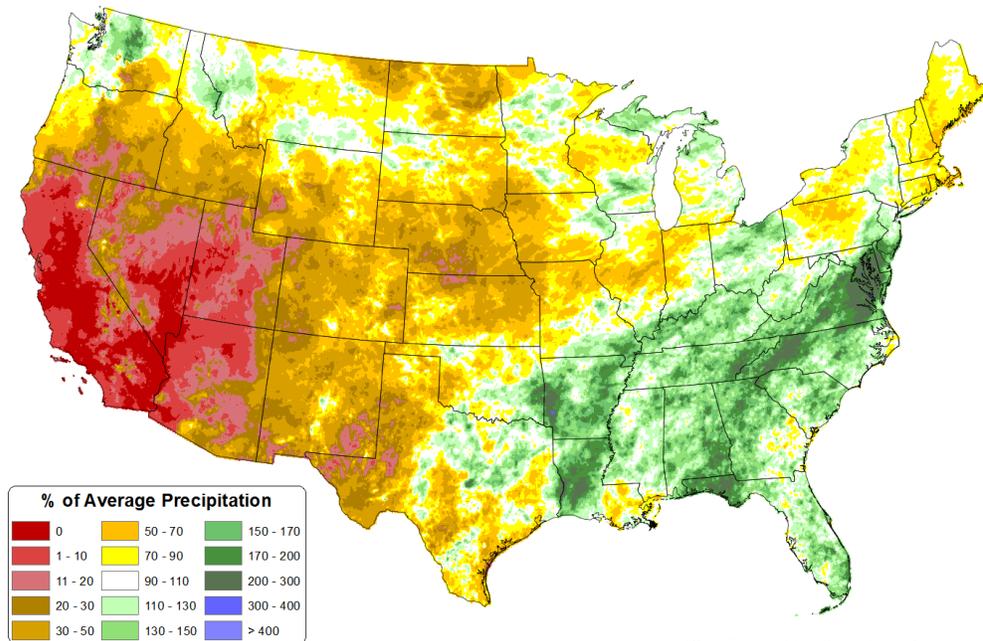
Copyright (c) 2020 PRISM Climate Group, Oregon State University

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

Source: PRISM

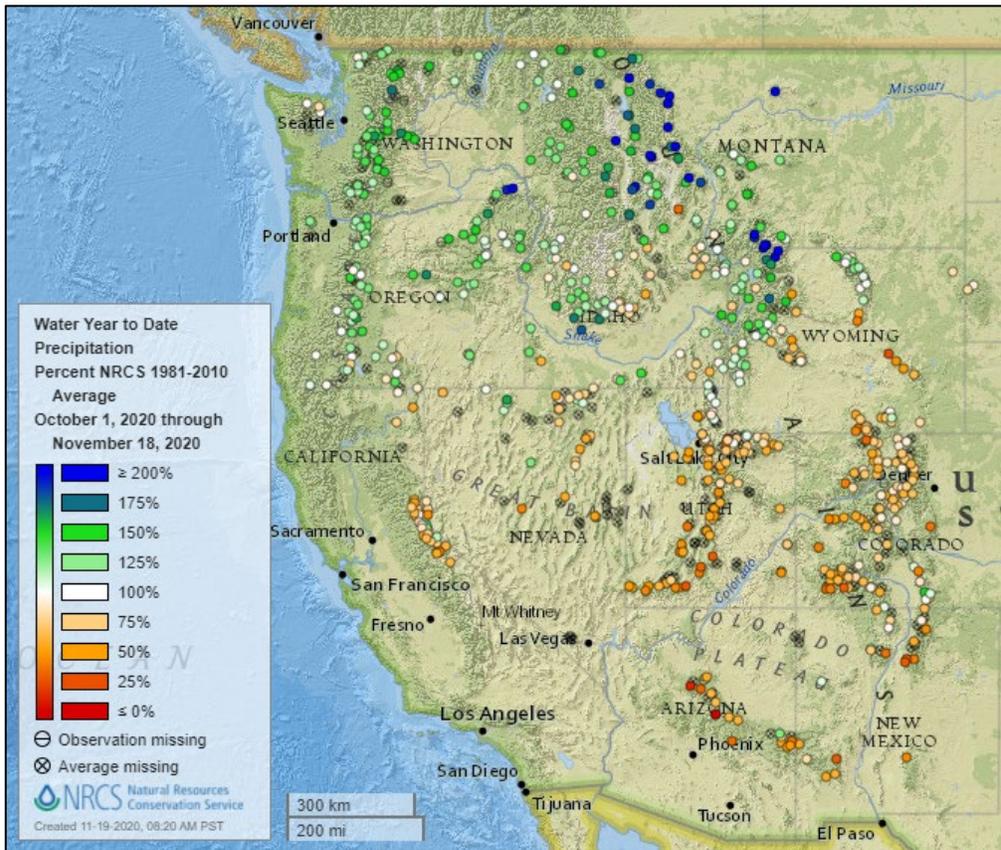
[August through October precipitation percent of average map](#)

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



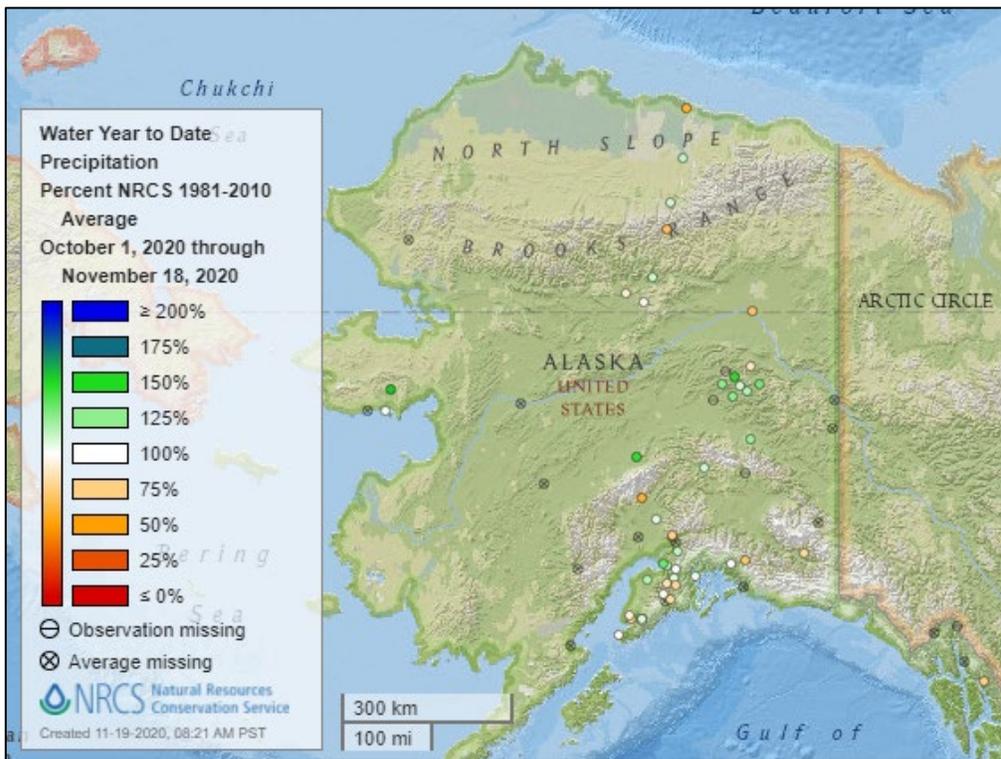
Copyright (c) 2020 PRISM Climate Group, Oregon State University

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

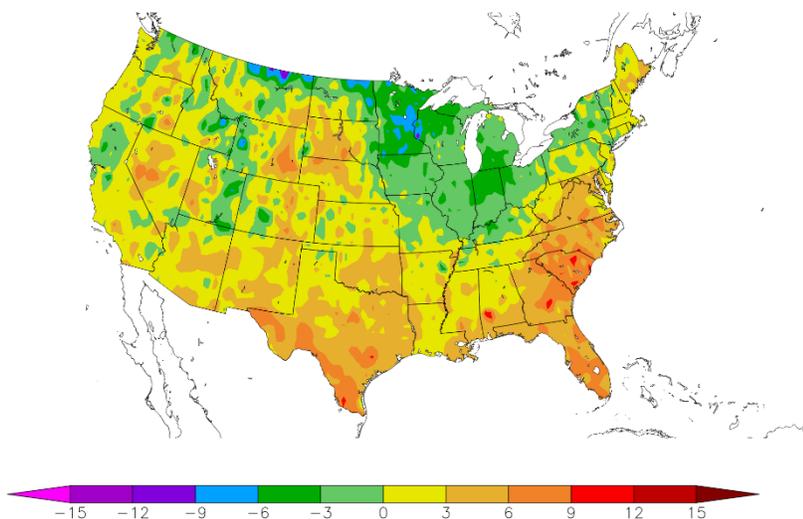
Last 7 Days, National Weather Service (NWS) Networks

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)
11/12/2020 – 11/18/2020



Generated 11/19/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

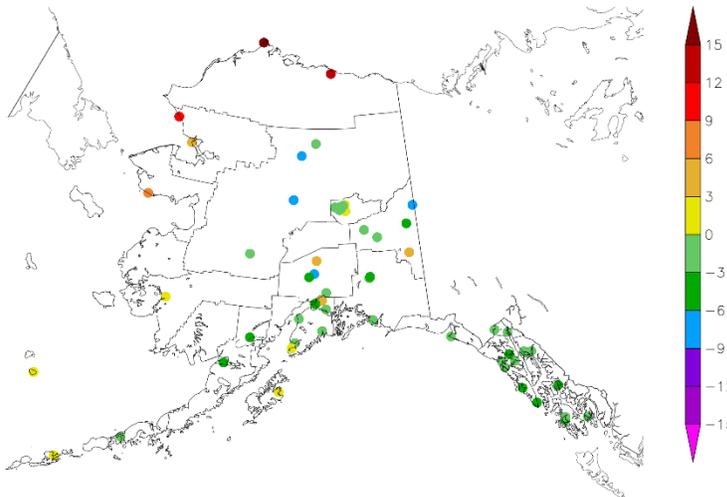
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)
11/12/2020 – 11/18/2020



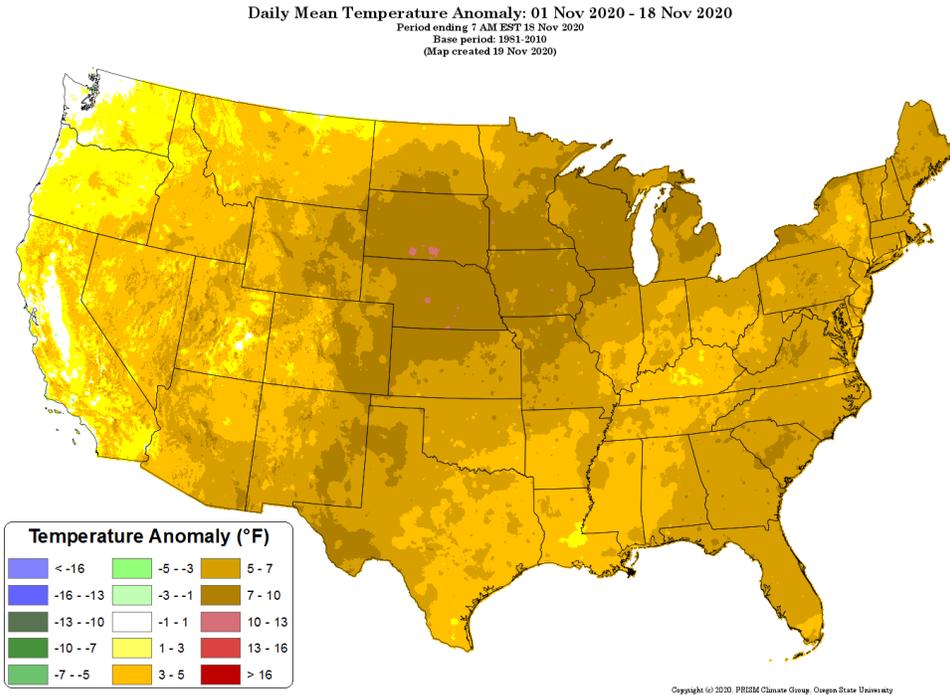
Generated 11/19/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

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

Source: PRISM

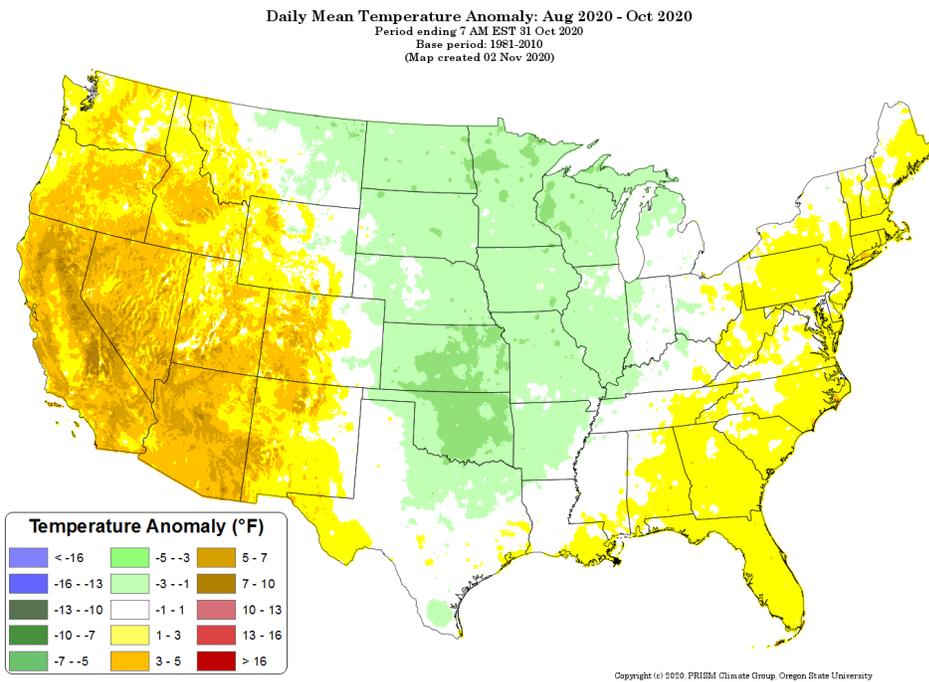
[Month-to-date national daily mean temperature anomaly map](#)



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

Source: PRISM

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



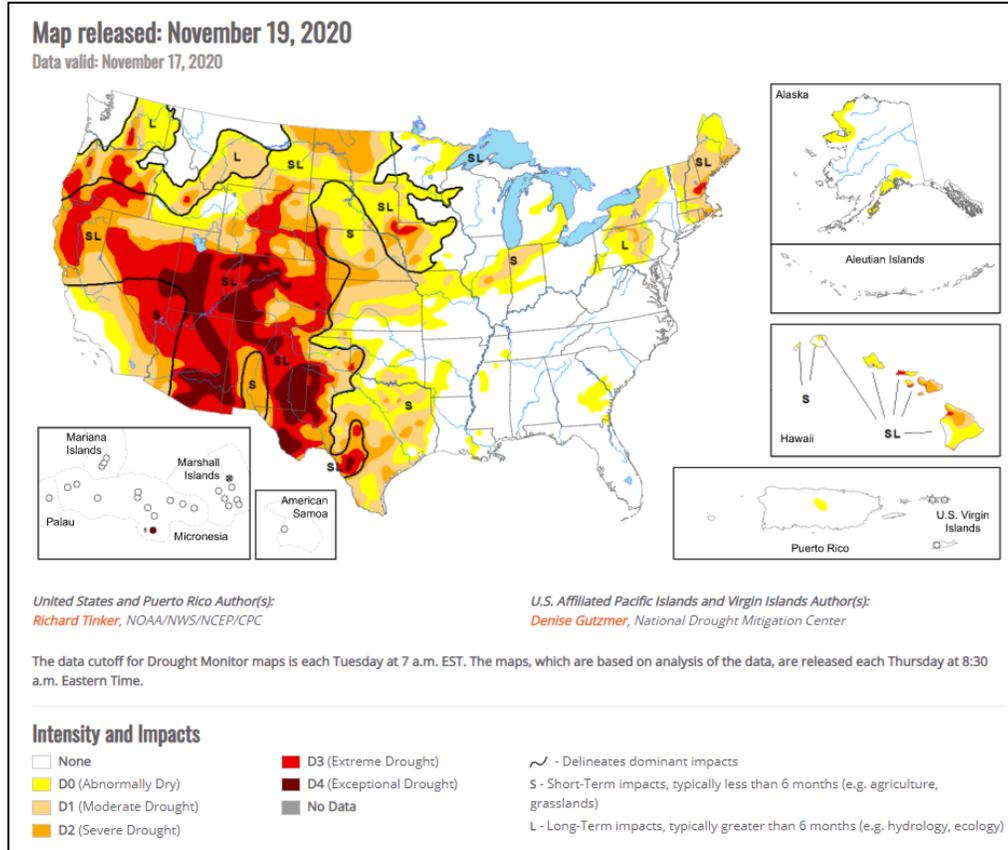
Drought

[U.S. Drought Monitor](#)

Source: National Drought Mitigation Center

[U.S. Drought Portal](#)

Source: NOAA



Current [National Drought Summary](#), November 19, 2020

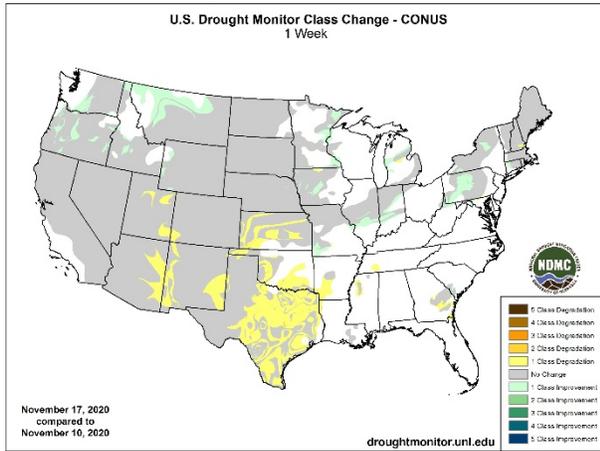
Source: National Drought Mitigation Center

“Heavy precipitation – from 2 to locally near 8 inches – pelted the Carolinas, southern Appalachians, mid-Atlantic region, Pacific Northwest from the Cascades westward, higher elevations of the northern Intermountain West and western Wyoming, northeastern Wisconsin, and Michigan’s Upper Peninsula. Lesser amounts of 0.5 to locally over 2 inches dampened most of a large area from eastern sections of the central and northern Great Plains eastward through the middle and upper Mississippi Valley, Great Lakes Region, Appalachians, and Atlantic Coast States. Similar amounts fell on lower elevations of the northern Intermountain West and Pacific Northwest. Meanwhile, light precipitation at best fell on the central and western Gulf Coast States, most of the Plains, and the Southwest. Meanwhile, temperatures were generally cool in the West and warm in the East. Temperatures average 12 to 15 degrees F above normal from the Carolinas through Alabama. above normal from the High Plains of subnormal temperatures. In contrast, it was 8 to 12 degrees F cooler than normal from Montana southward through Utah, Arizona, the Southwest and the Great Basin. This pattern brought areas of improvement to parts of the Northeast the western Ohio Valley, the northern half of the Mississippi Valley, and northern sections of the Rockies, Intermountain West, and Pacific Northwest. In stark contrast, conditions deteriorated through most of central and eastern Texas, parts of the central Great Plains, the southern High Plains, and the central tier of the Four Corners States. As the period ended, dryness had persisted or worsened throughout the large area of entrenched drought from the Rockies westward, and dry conditions were intensifying quickly across Texas and the central Plains.”

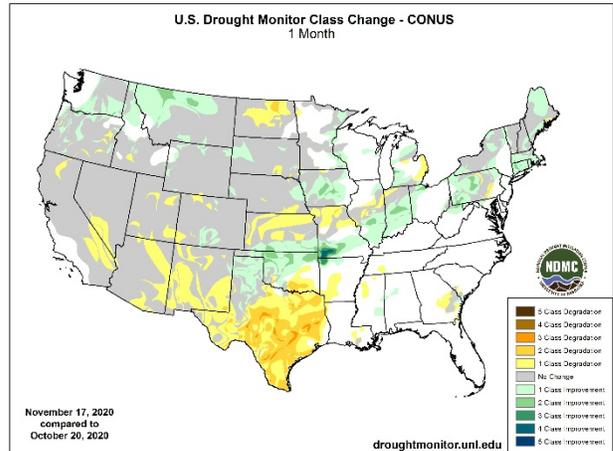
Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

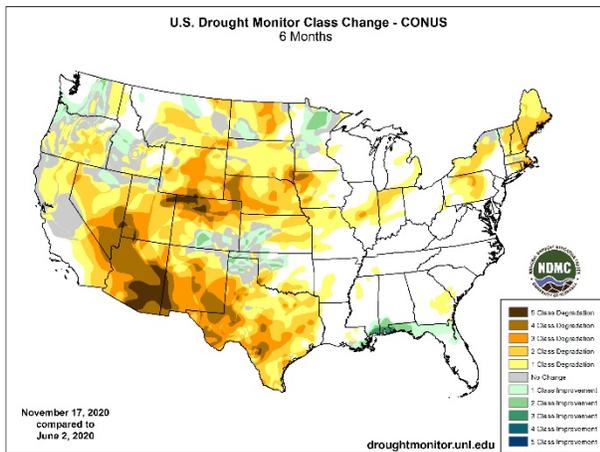
1 Week



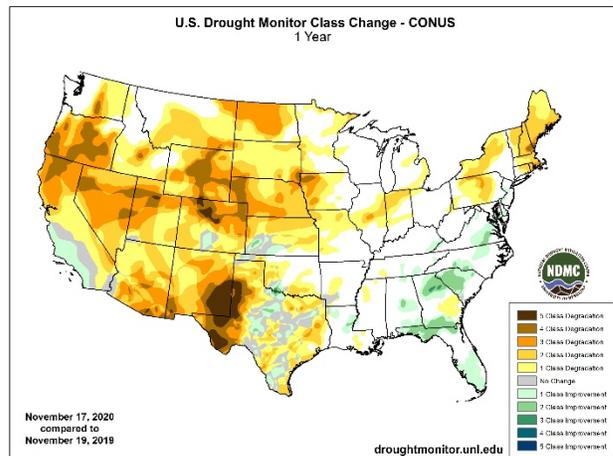
1 Month



6 Months



1 Year



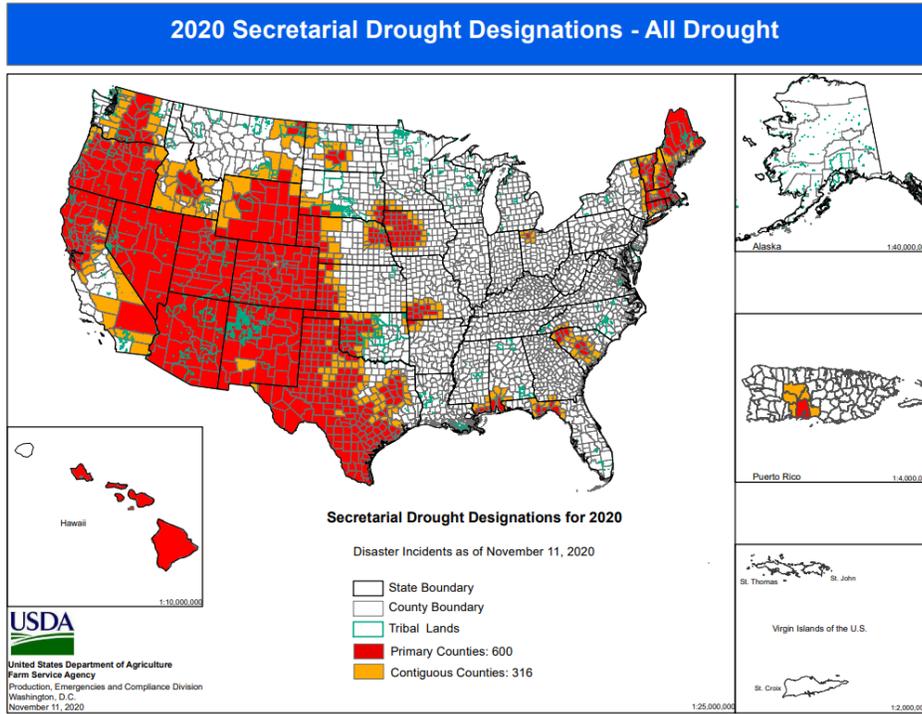
[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

Highlighted Drought Resources

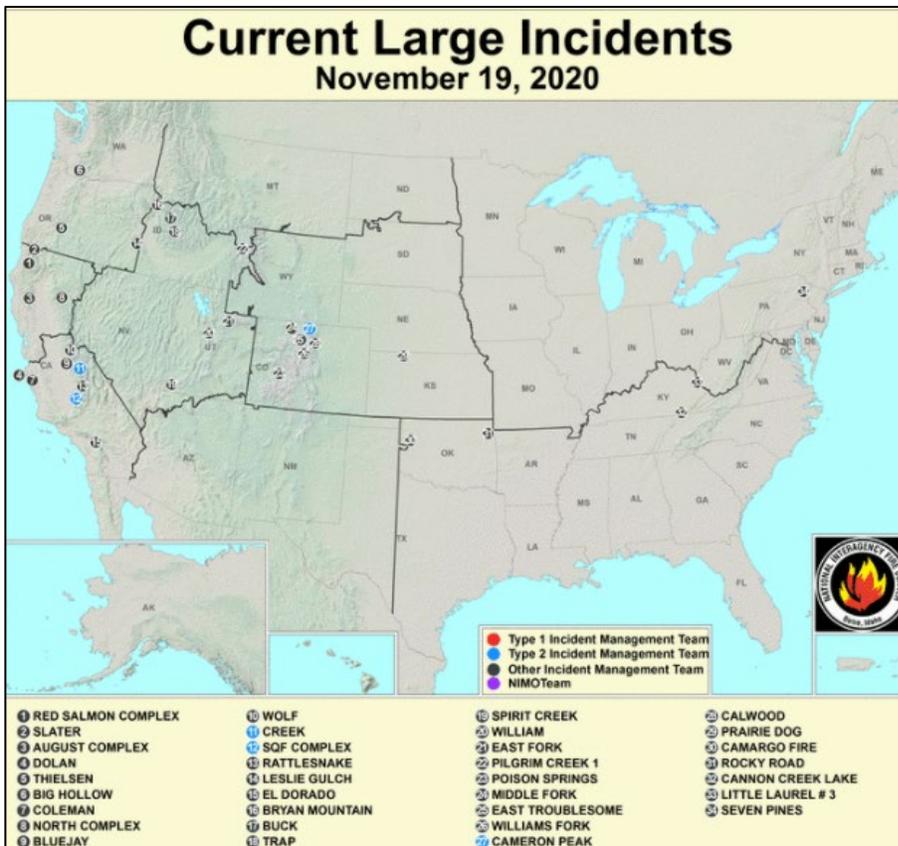
- [Drought Impact Reporter](#)
- [Quarterly Regional Climate Impacts and Outlook](#)
- [U.S. Drought Portal Indicators and Monitoring](#)
- [U.S. Population in Drought, Weekly Comparison](#)
- [USDA Disaster and Drought Information](#)

Secretarial Drought Designations

Source: USDA Farm Service Agency



Wildfires: USDA Forest Service Active Fire Mapping



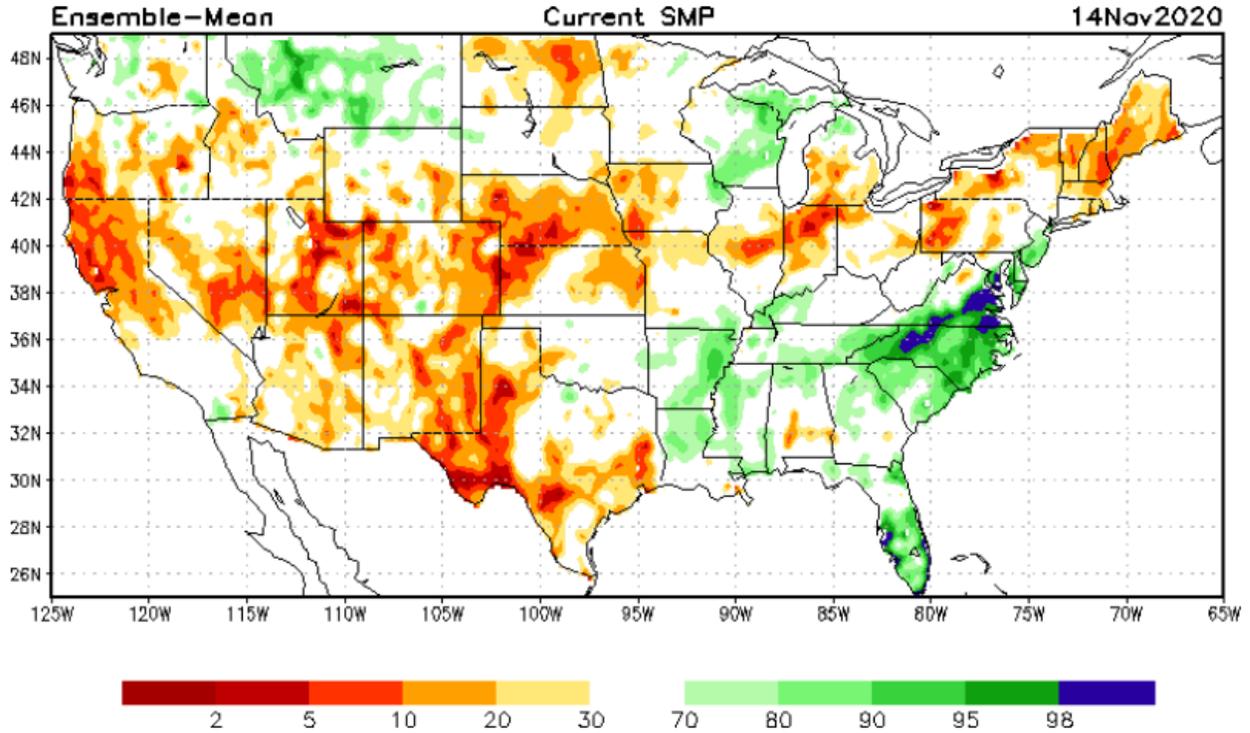
**Highlighted
Wildfire
Resources**

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

Other Climatic and Water Supply Indicators

Soil Moisture

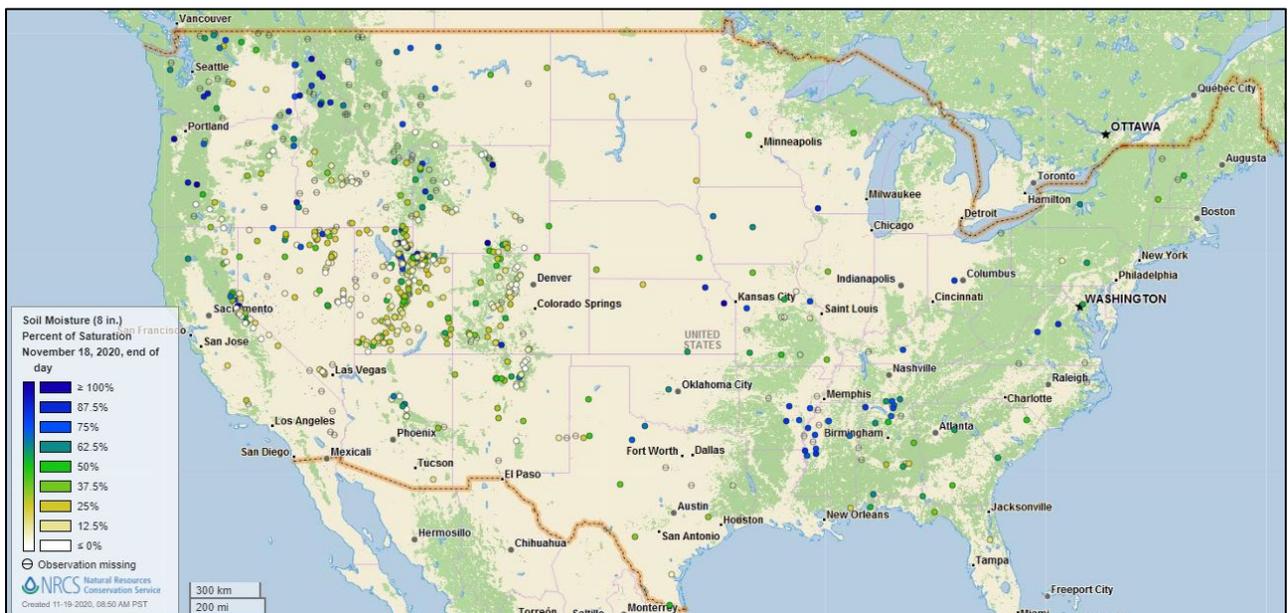
Source: NOAA National Centers for Environmental Prediction



[Modeled soil moisture percentiles](#) as of November 14, 2020

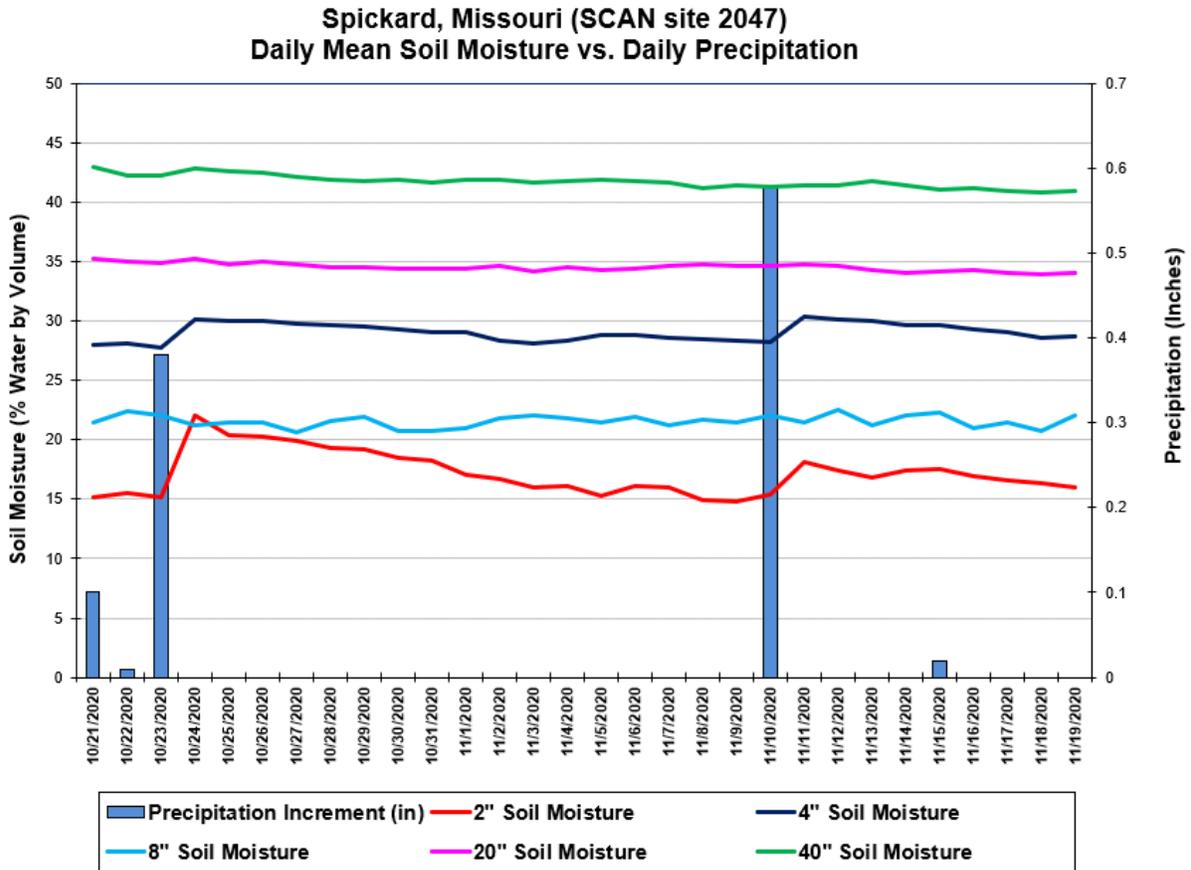
Soil Moisture Percent of Saturation

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 [Spickard](#) SCAN site in Missouri. Precipitation on October 23 and November 10 increased soil moisture at the -2” and -4” sensors. Accumulated precipitation for the 30-day period was 1.09 inches.

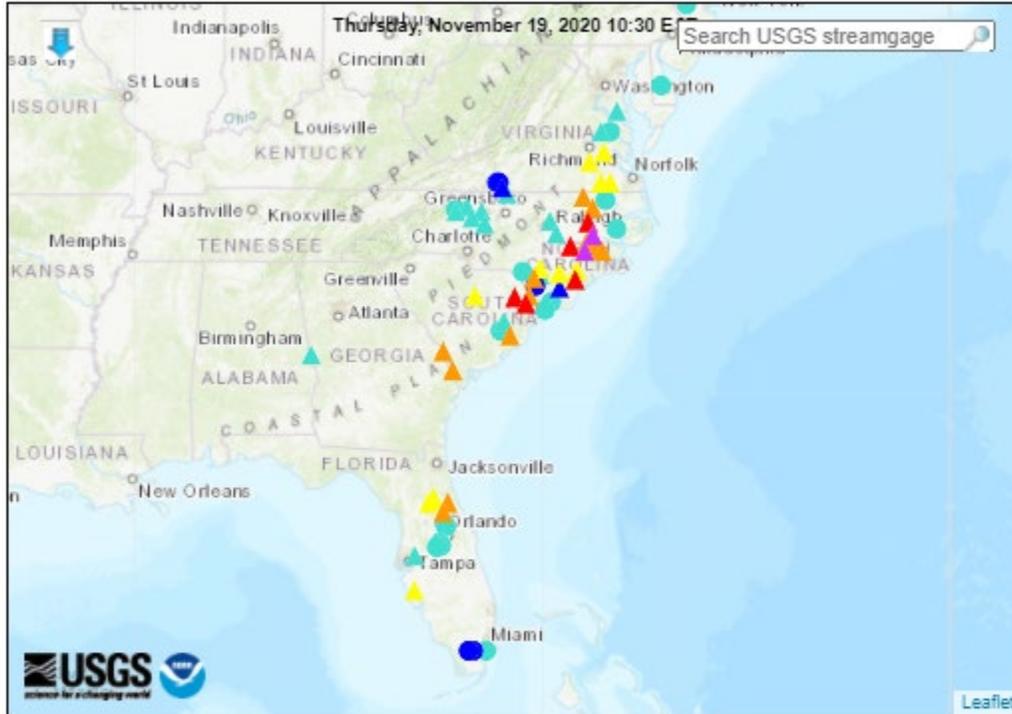
Soil Moisture Data Portals

- [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
 (22 in floods [major: 2, moderate: 6, minor: 14], 14 in near-flood)



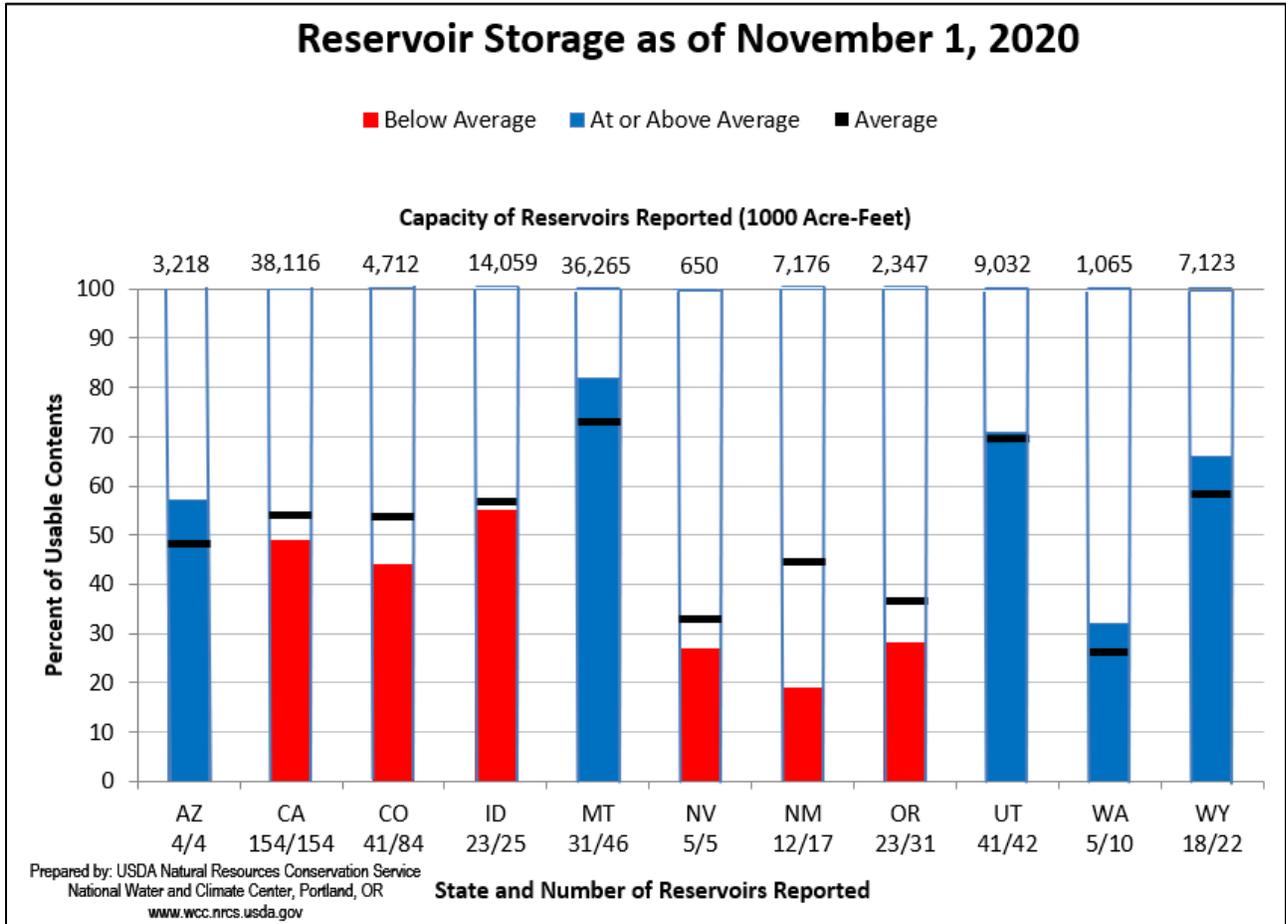
Explanation - Percentile classes						
<95	95-98	>= 99	Above action stage	Above flood stage	Above moderate flood stage	Above major flood stage
			▲ Streamgage with flood stage ○ Streamgage without flood stage			

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

Reservoir Storage

Western States Reservoir Storage

Source: NRCS National Water and Climate Center



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

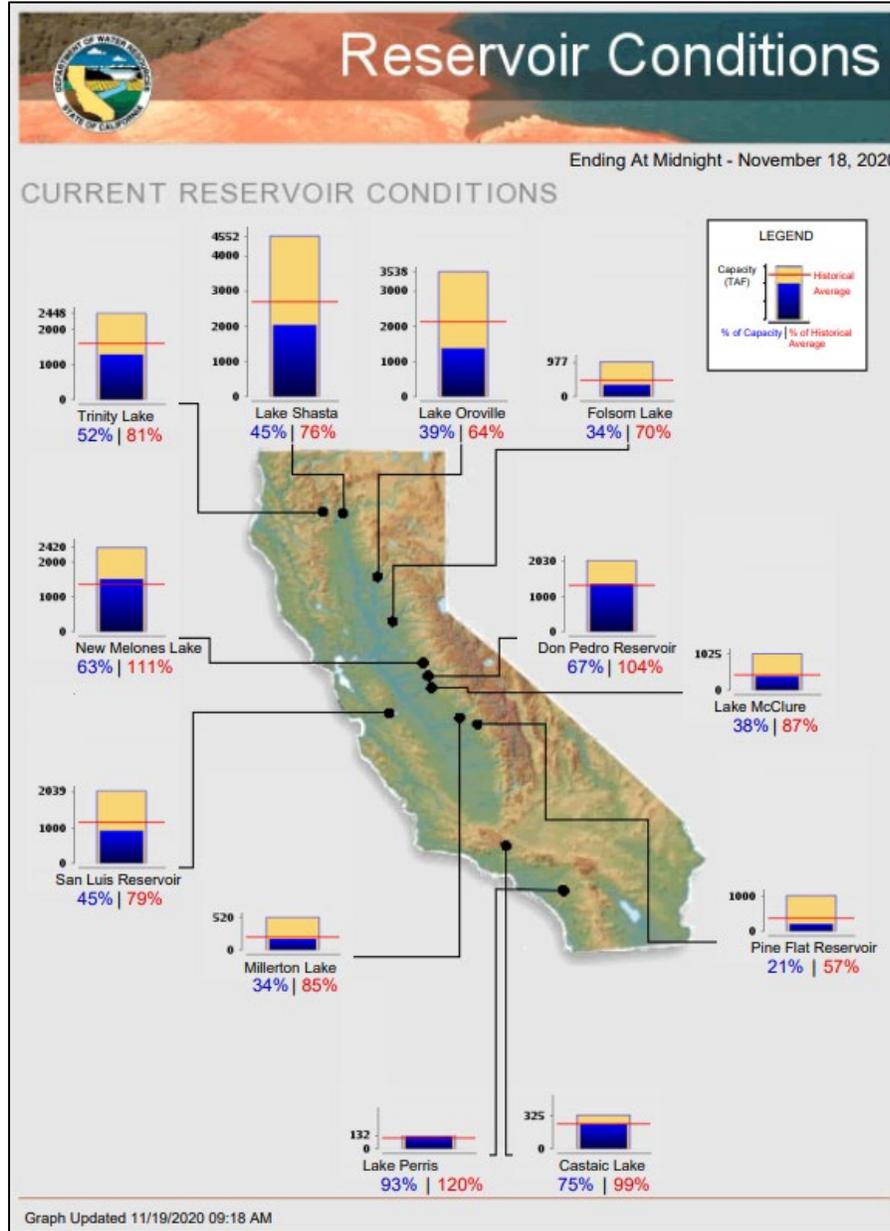
Hydromet Teacup Reservoir Depictions

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](#)

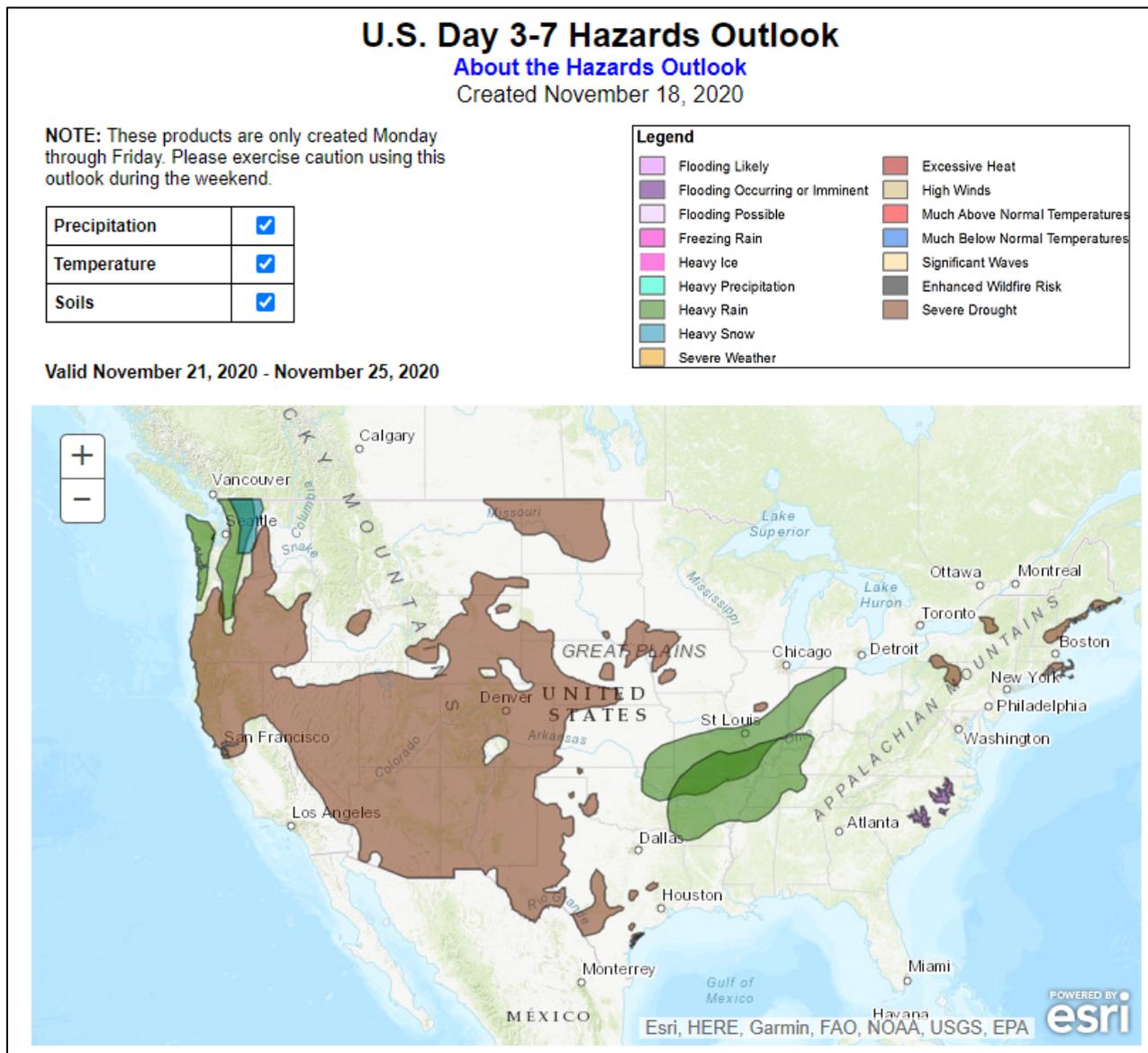
Agricultural Weather Highlights

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

National Outlook, Thursday, November 19, 2020: “During the several days, a pair of fast-moving storms will cross the Northwest before affecting portions of the central and southern Plains, mid-South, Midwest, and Northeast. Five-day precipitation totals could reach 2 to 4 inches or more in portions of the Pacific Northwest and 1 to 2 inches from the southeastern Plains into the lower Ohio Valley. Meanwhile, mostly dry weather will prevail across California and the Great Basin, as well as the northern Plains, Southwest, and Southeast. Well into next week, cold conditions will be scarce and mostly limited to portions of the northern and western U.S. At the same time, record-setting warmth will largely disappear, with weekend temperatures above 80°F confined to the Desert Southwest, southern Texas, and peninsular Florida. The NWS 6- to 10-day outlook for November 24 – 28 calls for near- or above-normal temperatures nationwide. The Deep South and upper Midwest will experience the greatest likelihood of warm weather. Meanwhile, above-normal precipitation in the Pacific Northwest and most areas from the lower and middle Mississippi Valley to the East Coast should contrast with drier-than-normal conditions in a broad area covering much of California and the Great Basin, along with the Southwest, Plains, and upper Midwest.”

Weather Hazards Outlook: [November 21 - 25, 2020](#)

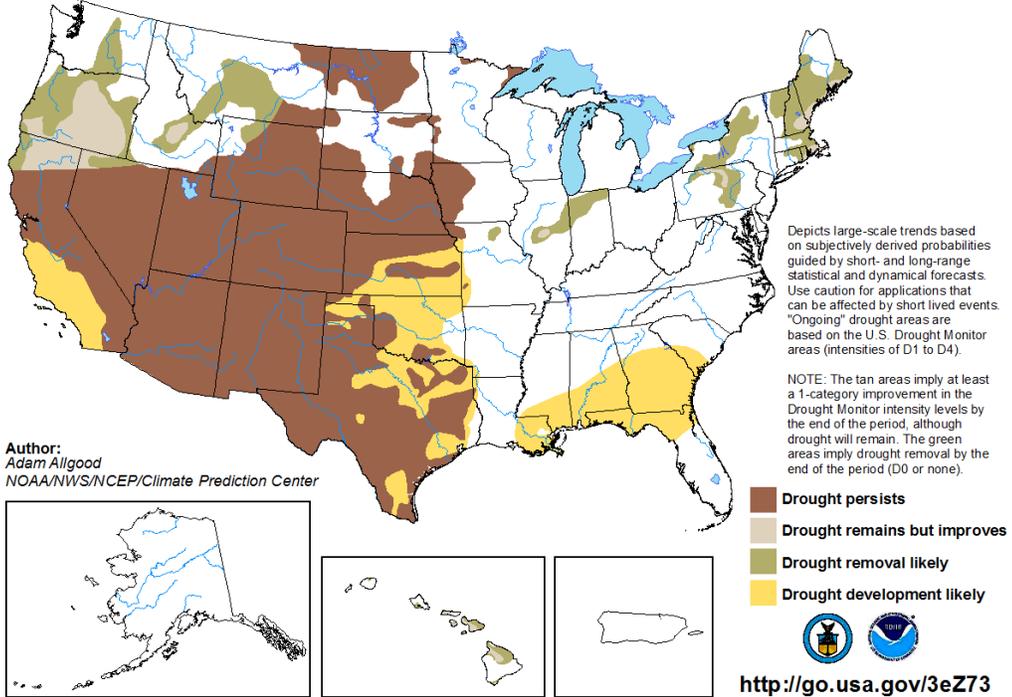
Source: NOAA Weather Prediction Center



Seasonal Drought Outlook: [November 19, 2020 – February 28, 2021](#)

Source: National Weather Service

U.S. Seasonal Drought Outlook *Valid for November 19, 2020 - February 28, 2021*
Drought Tendency During the Valid Period *Released November 19, 2020*

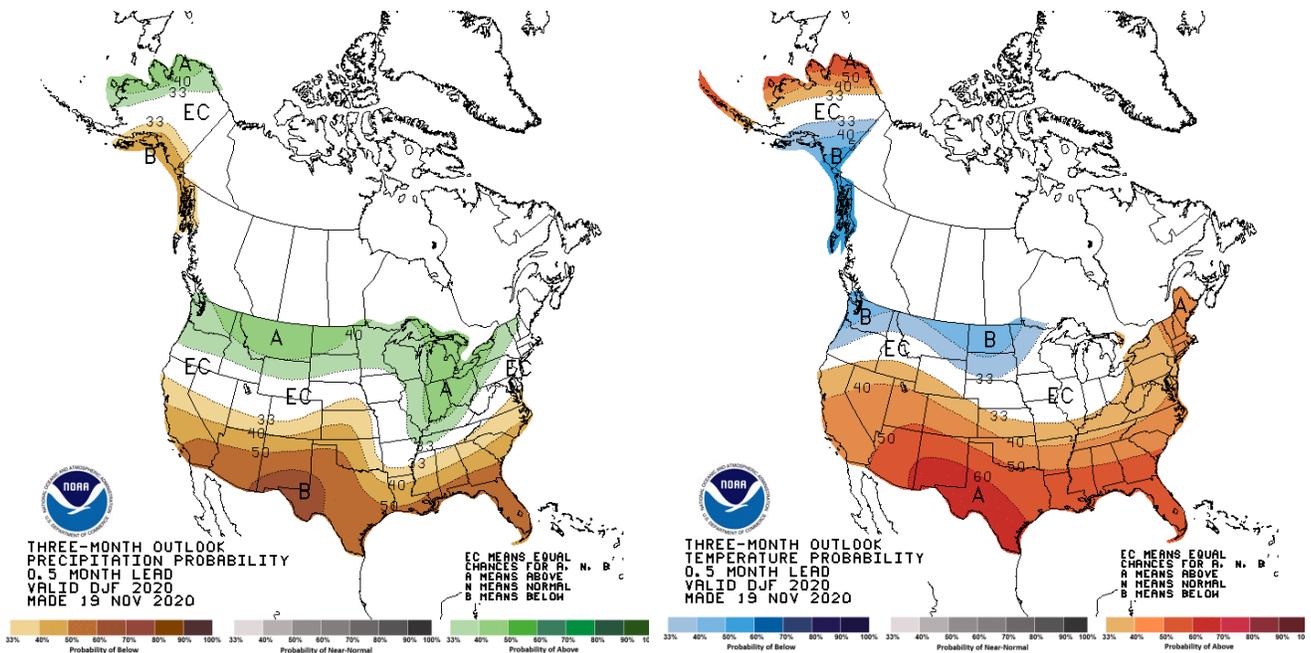


Climate Prediction Center 3-Month Outlook

Source: National Weather Service

Precipitation

Temperature



[December-January-February \(DJF\) 2020-2021 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](#).