

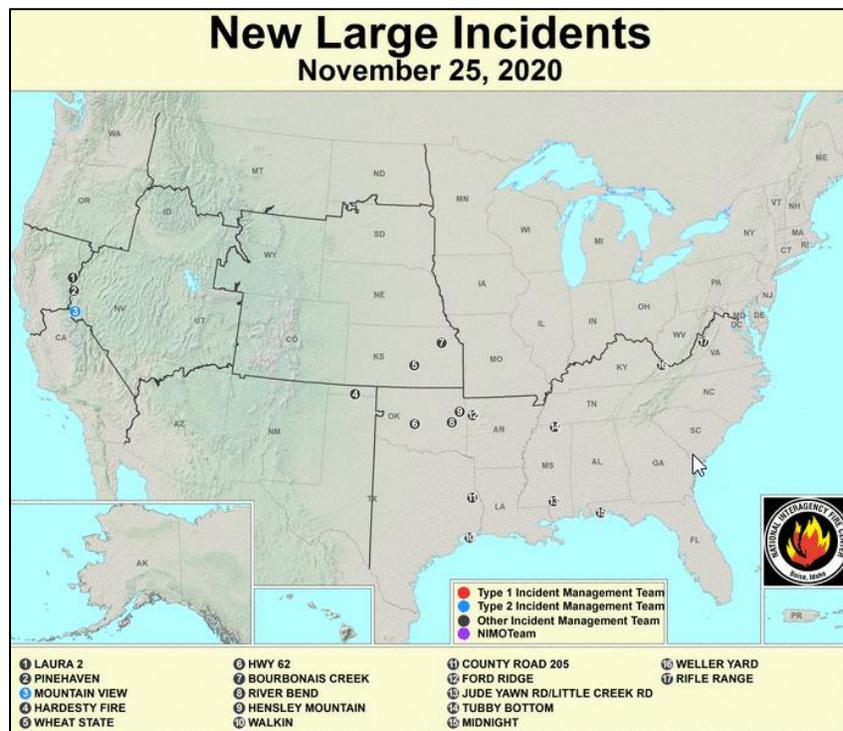
Water and Climate Update

November 25, 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	14
Temperature	8	More Information	21

Strong winds spark new wildfires in the West

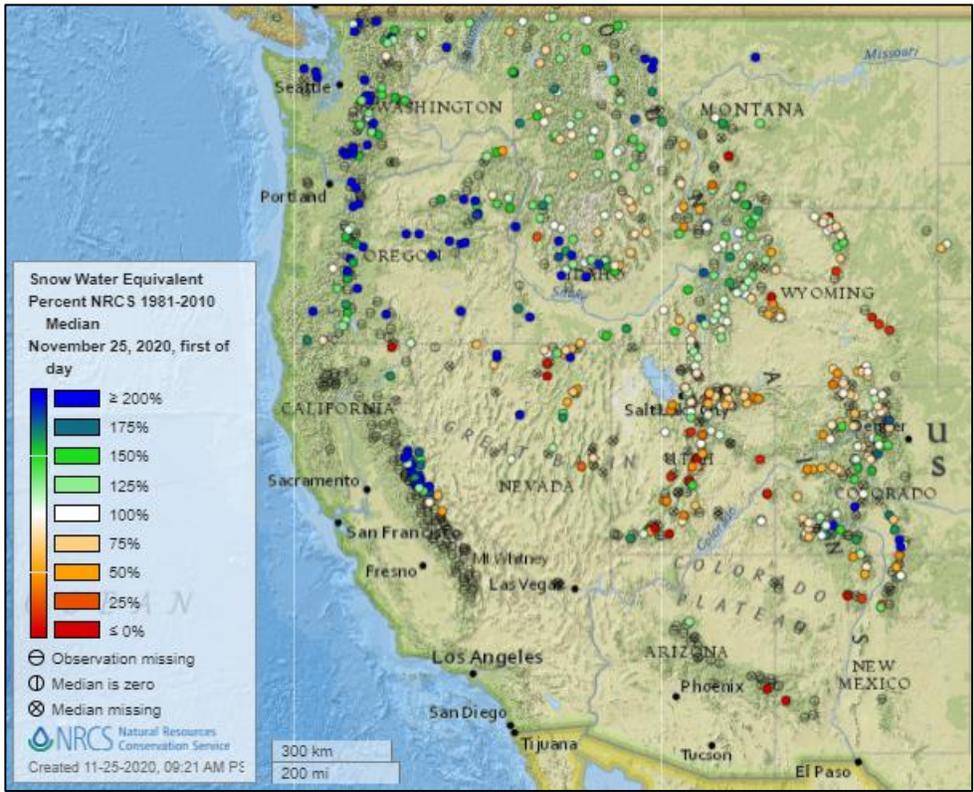


Wildfires continue cause damage. The latest wind-whipped fires occurred in Reno, Nevada and Walker, California. Winds gusted up to 60 mph. As of the last update, the Pinehaven fire, on the edge of Reno, has burned an estimated 512 acres, and the Mountain View fire, in Walker, has burned over 20,000 acres. The two wildfires caused hundreds of people to evacuate, many homes have burned, and one person lost their life. Total wildfire acreage burned nationally this year has topped 8.8 million acres.

Related:

- [Crews battle 2 wildfires along California-Nevada border; 1 dead](#) – UPI.com
- [Fast-moving Reno wildfire wipes out homes, forces hundreds to evacuate](#) - USA Today
- [Nevada fire map: Track the Pinehaven Fire and other Western wildfires](#) – Reno Gazette Journal (NV)
- [Reno wildfire destroys multiple homes; hundreds evacuated as Gov. Sisolak declares state of emergency](#) – Fox News
- [1 dead after wildfires erupt in California, Nevada](#) - ABC

Snow



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

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

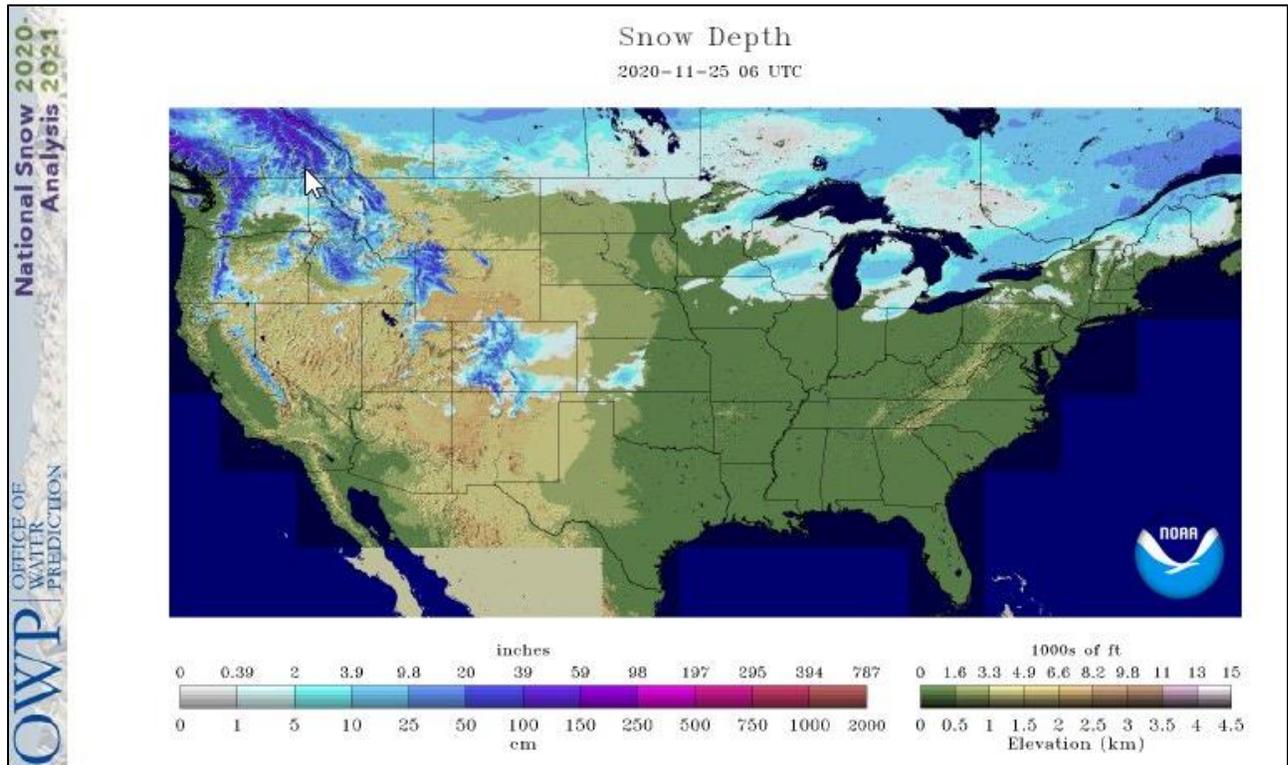


[Alaska snow water equivalent percent of median map](#)

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

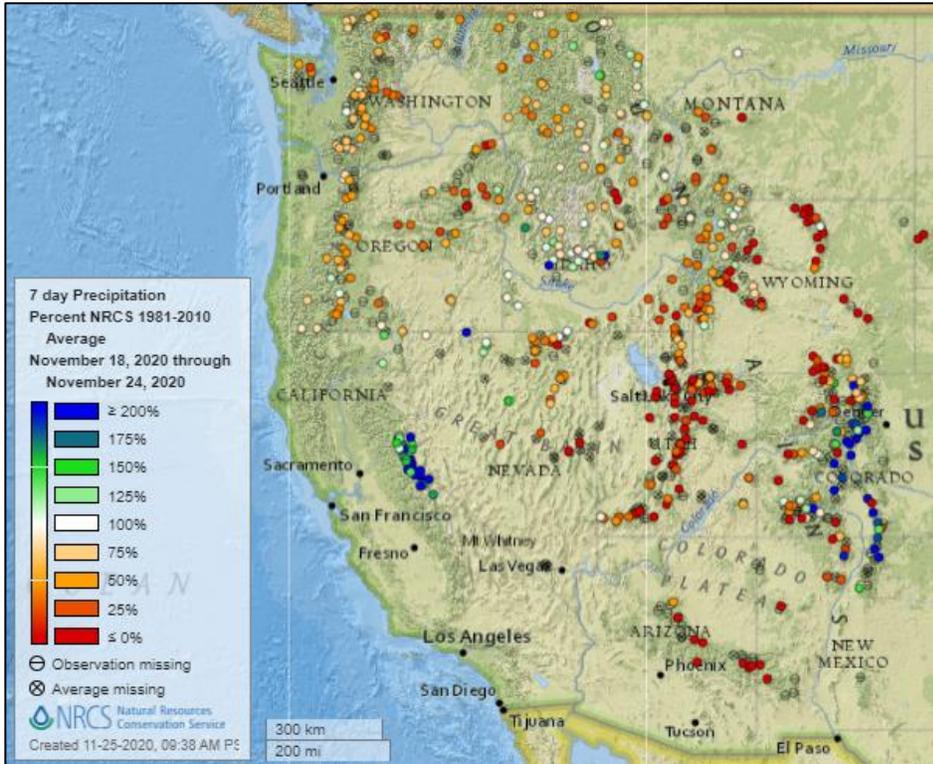
[Current Snow Depth](#), National Weather Service Snow Analysis

Source: NOAA Office of Water Prediction



Precipitation

Last 7 Days, NRCS SNOTEL Network

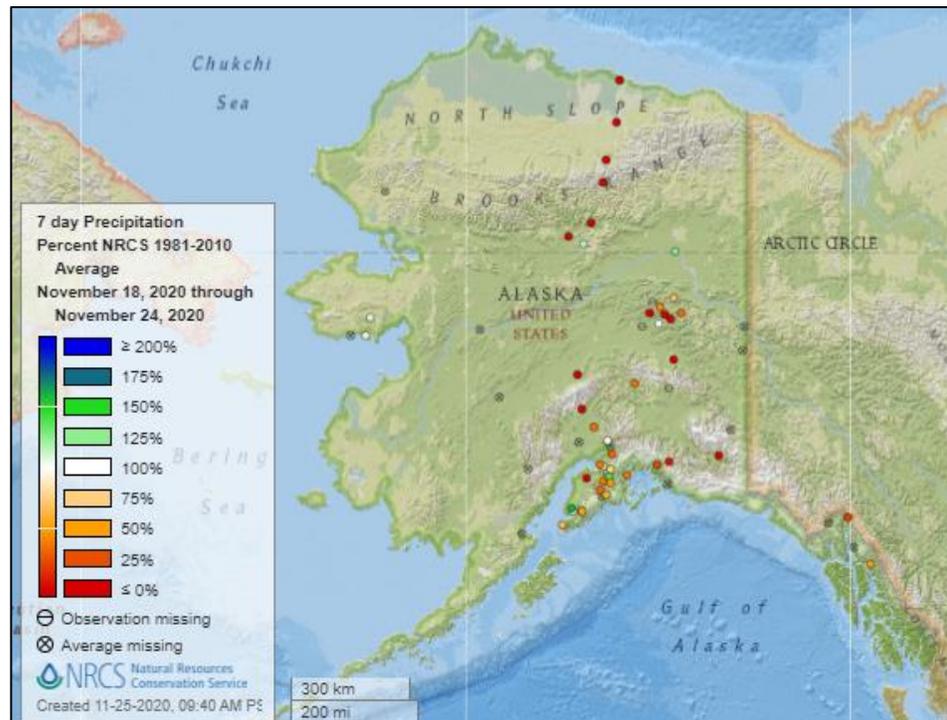


[7-day precipitation percent of average map](#)

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](#)



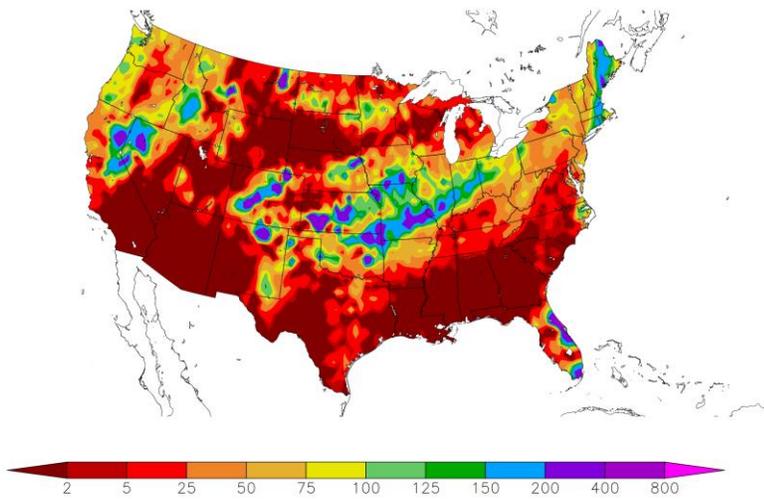
Last 7 Days, National Weather Service (NWS) Networks

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 (%)
11/18/2020 – 11/24/2020



Generated 11/25/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

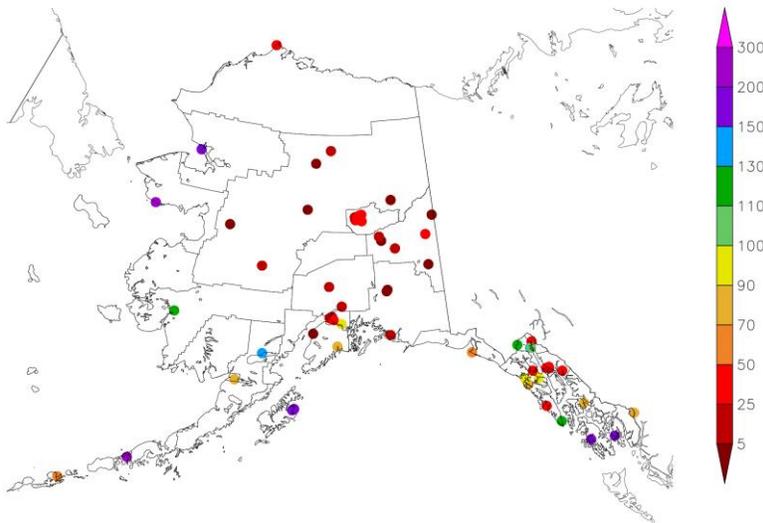
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Percent of Normal Precipitation (%)
11/18/2020 – 11/24/2020

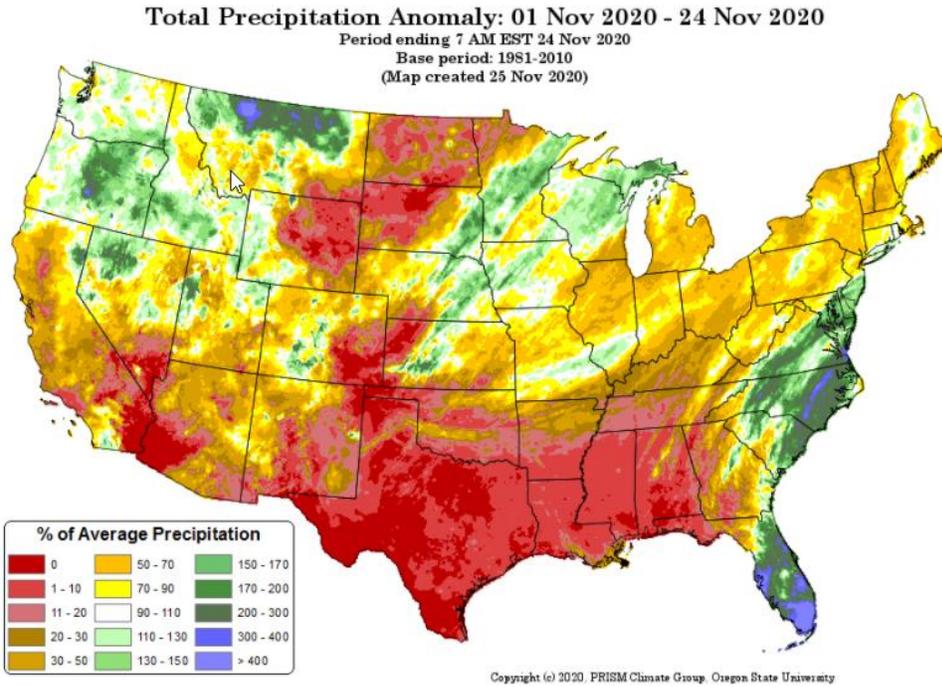


Generated 11/25/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

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

Source: PRISM

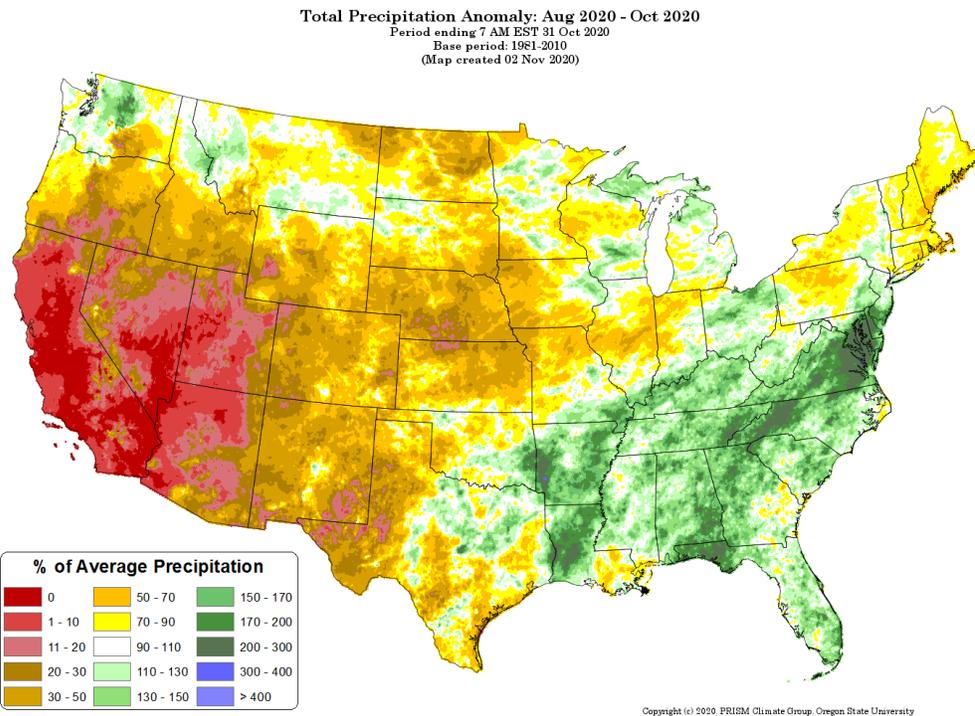


[Month-to-date national total precipitation percent of average map](#)

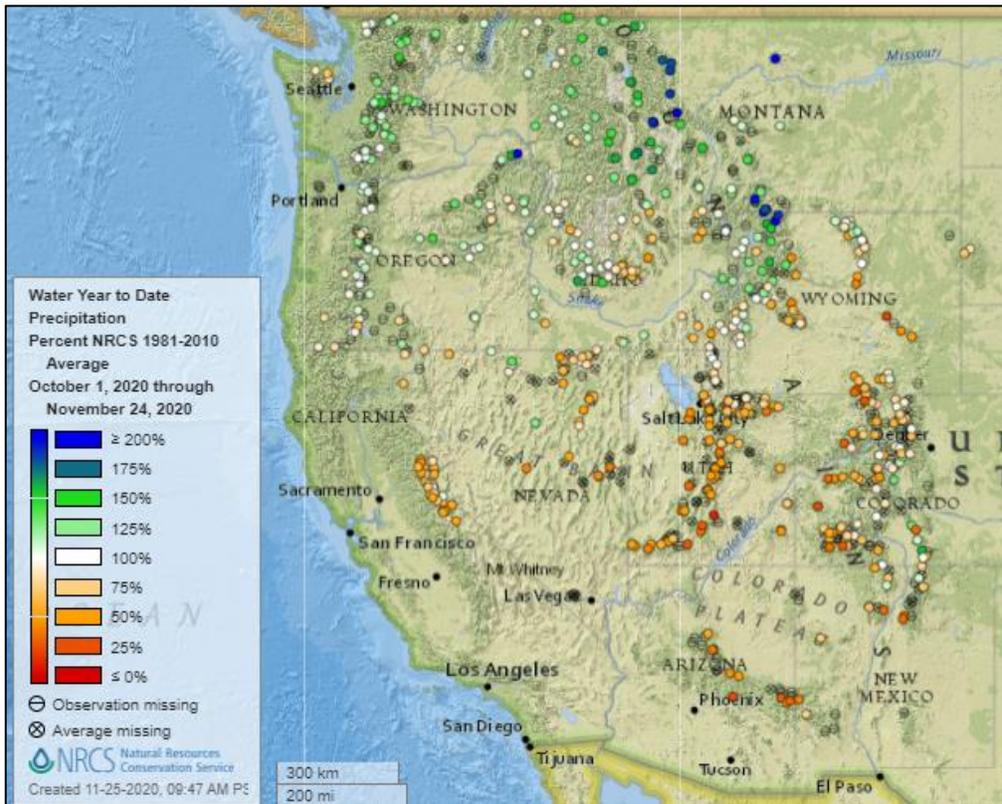
Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

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

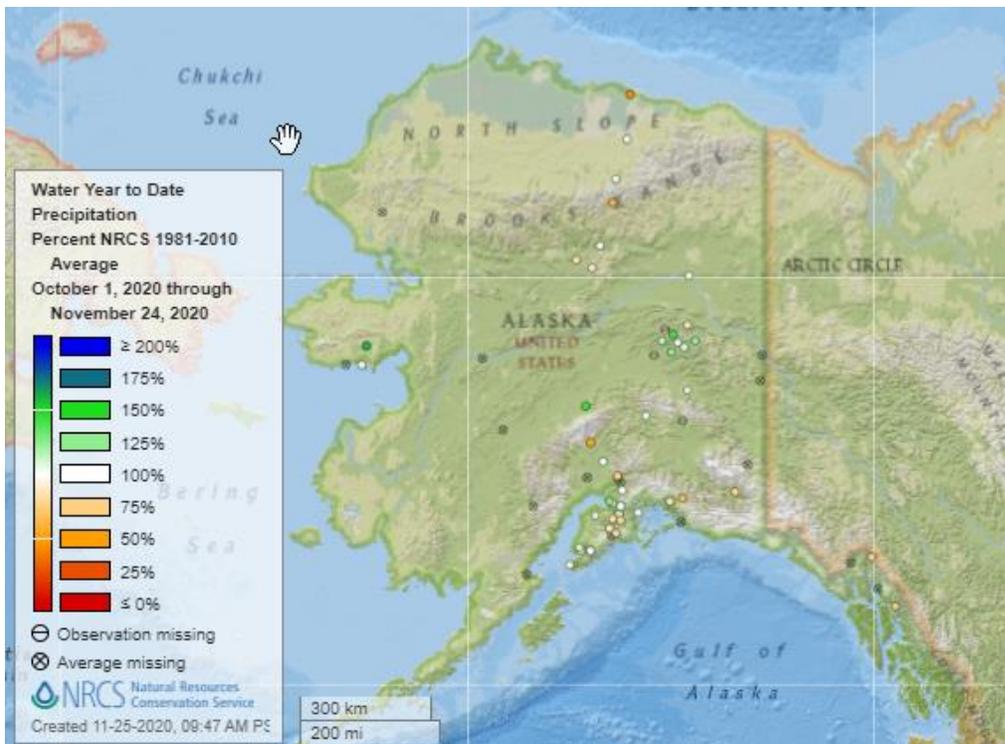


Water Year-to-Date, NRCS SNOTEL Network



[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

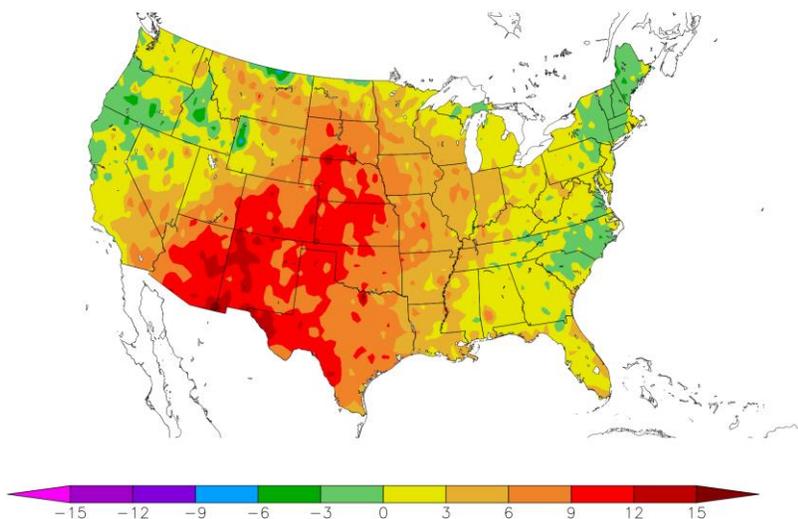
Last 7 Days, National Weather Service (NWS) Networks

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)
11/18/2020 – 11/24/2020



Generated 11/25/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

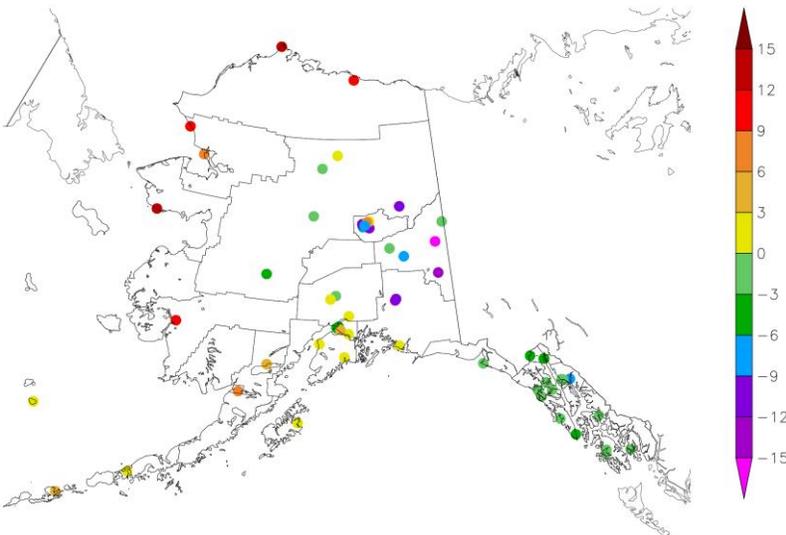
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)
11/18/2020 – 11/24/2020



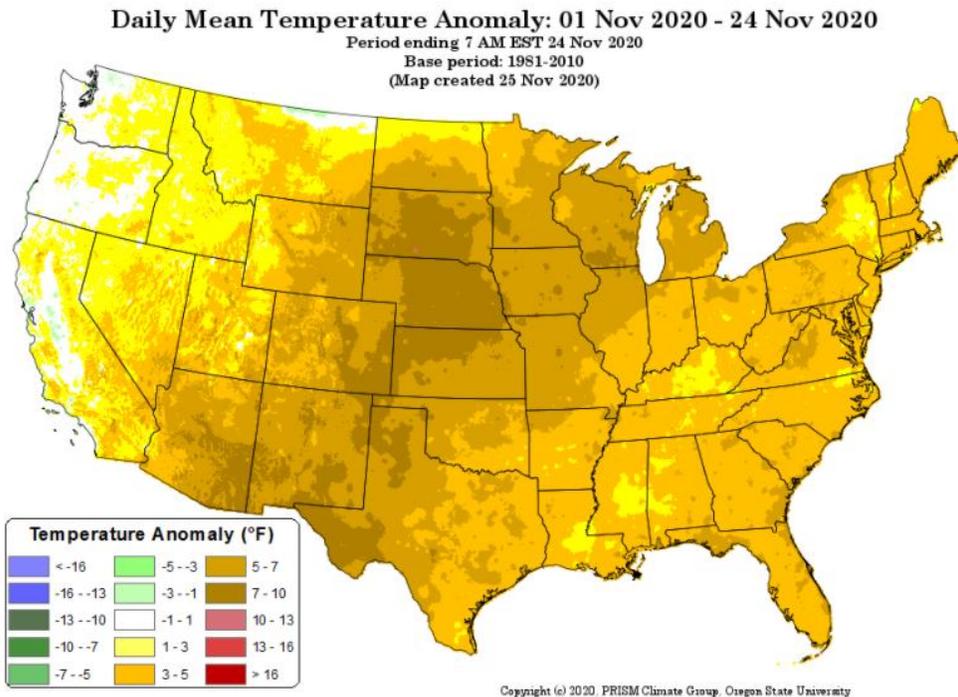
Generated 11/25/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

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

Source: PRISM

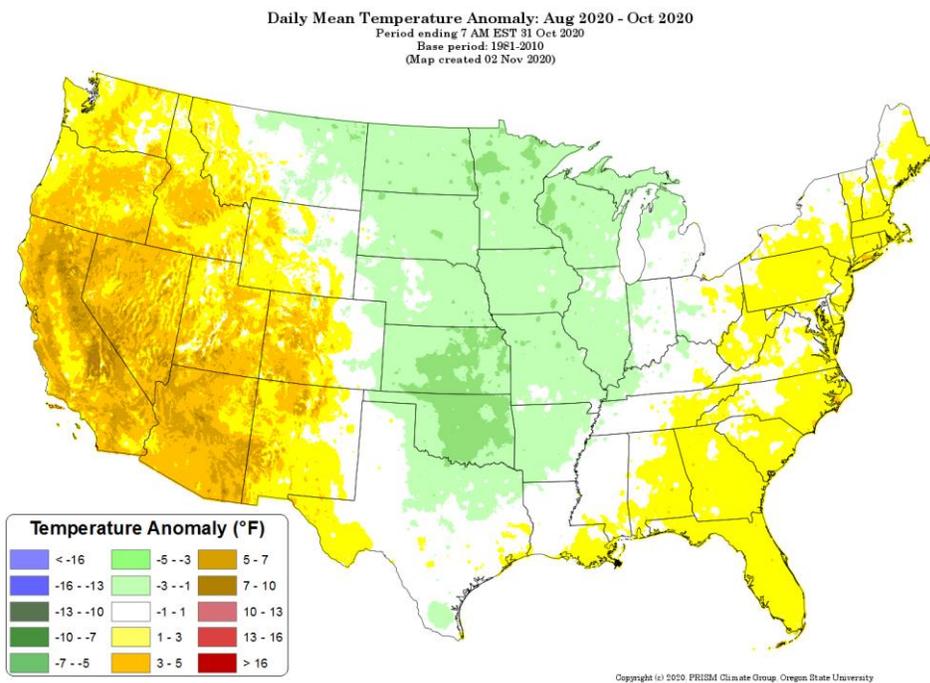
[Month-to-date national daily mean temperature anomaly map](#)



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](#)

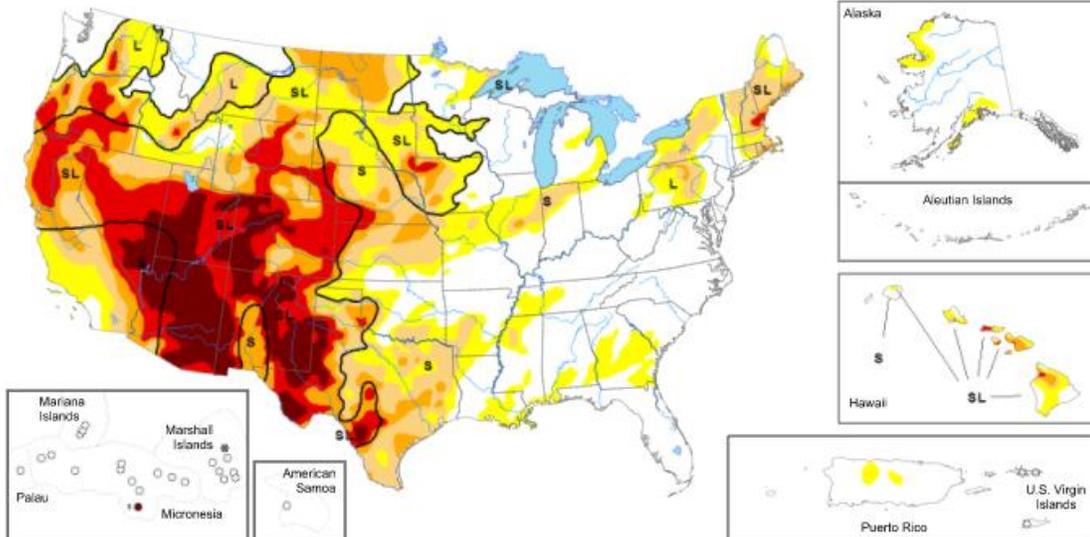
Source: National Drought Mitigation Center

[U.S. Drought Portal](#)

Source: NOAA

Map released: November 25, 2020

Data valid: November 24, 2020



United States and Puerto Rico Author(s):
Richard Heim, NOAA/NCEI

U.S. Affiliated Pacific Islands and Virgin Islands Author(s):
Denise Gutzmer, National Drought Mitigation Center

The data cutoff for Drought Monitor maps is each Tuesday at 7 a.m. EST. The maps, which are based on analysis of the data, are released each Thursday at 8:30 a.m. Eastern Time.

Intensity and Impacts

- None
- D0 (Abnormally Dry)
- D1 (Moderate Drought)
- D2 (Severe Drought)
- D3 (Extreme Drought)
- D4 (Exceptional Drought)
- No Data
- Delineates dominant impacts
- S - Short-Term impacts, typically less than 6 months (e.g. agriculture, grasslands)
- L - Long-Term impacts, typically greater than 6 months (e.g. hydrology, ecology)

Current [National Drought Summary](#), November 25, 2020

Source: National Drought Mitigation Center

“Several Pacific weather systems, in the form of shortwave troughs, moved in the jet stream flow across the contiguous U.S. (CONUS) during this U.S. Drought Monitor (USDM) week. The weather systems brought rain or snow to parts of northern California and the Pacific Northwest, western Colorado, the northern Plains to Mid-Mississippi Valley, and Tennessee Valley to Northeast. Rain also fell across parts of Florida. The rest of the CONUS had little to no precipitation. Even where the precipitation fell, it was mostly below normal for the week. Areas receiving above-normal precipitation included parts of the Sierra Nevada, southern Idaho, other scattered parts of the Pacific Northwest, strips across the central Palms to Ohio Valley and across New England, and parts of Hawaii. Improvement in drought conditions occurred where precipitation was above normal, while drought expanded or intensified in some areas where dryness continued. Temperatures were largely warmer than normal across the CONUS, with anomalies 9 degrees F or warmer from the Southwest to northern Plains. Parts of the Pacific Northwest and East Coast were near to cooler than normal. SNOTEL observations of mountain snowpack showed increases in snow depth in the Sierra Nevada and parts of Oregon and Washington, and snow water equivalent (SWE) values were in the high percentiles in the Sierra Nevada, and Pacific Northwest, but this is early in the snow season when the snowpack is just getting established. SWE values were in the low percentiles from Nevada eastward. Western reservoirs continued

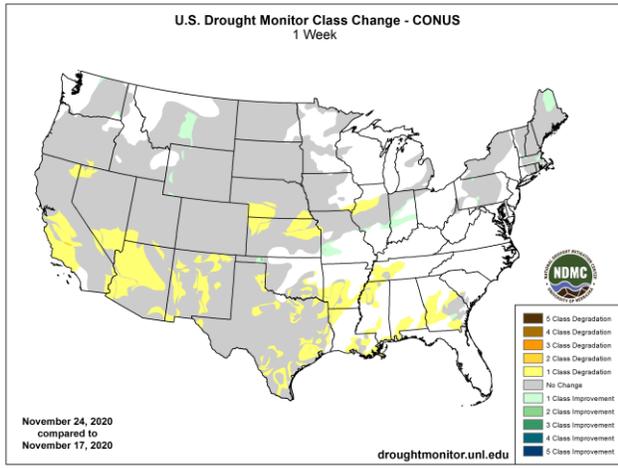
Water and Climate Update

quite low, especially in Oregon, California, Nevada, Utah, Colorado, Wyoming, and New Mexico. Mounting dryness was indicated in several drought indicators and indices. Maps of 7-day, 14-day, and 28-day USGS streamflow measurements were consistent in showing below-normal streamflow from northern California, Nevada, and southern Idaho, across the Southwest, to the central and southern High Plains; across southern Texas; across western Puerto Rico; and in parts of Hawaii, Iowa, Illinois, Indiana, and the Northeast. The satellite-based Vegetation Health Index shows stressed vegetation across the California valleys and southern California, the Southwest, parts of the central Plains and Ohio Valley, and especially in southeastern New Mexico to western Texas. Where VegDRI is still in season, it shows drought across much of the West (especially the Southwest and west Texas) and parts of the Northeast. Where QuickDRI is still in season, it shows very dry conditions across the West (except for a very small part of coastal southern California) to southern and central Plains; much of Texas, and parts of the Midwest and Northeast. The KBDI shows significantly dry conditions in California, Nevada, Utah, Arizona, New Mexico, and Texas. Evapotranspiration (EDDI) for the last week has been high in the southern to central Plains, southern Alabama, and the Midwest to Northeast; at the 2- to 3-week timescales, across much of the CONUS from the Southwest to Northeast; and at longer time scales (1-3 months), in the Southwest to central Plains, and from the Ohio Valley and southern Great Lakes to Northeast. NIFC wildfire maps show large wildfires still burning in California and Colorado, several across Oklahoma, and some in other parts of the West, Kansas, Texas, Mississippi, the Florida panhandle, and central Appalachians. USGS real-time groundwater level data show low groundwater at points across the West, in northern Indiana, southern Georgia, and parts of the Northeast. NASA GRACE satellite-based groundwater estimates show low groundwater across most of the West to central and southern High Plains, most of New York to New England, much of Texas, and parts of North Dakota, Pennsylvania, Virginia, Alabama, and Florida. Soil moisture is dry across the West from California to the southern and central Rockies, in the southern and central High Plains, in North Dakota, across Nebraska and Iowa, across central Illinois to northern Indiana, parts of Pennsylvania and New York, and (for some indicators) most of New England and southern Alabama (CPC, NLDAS, and UCLA/VIC models; satellite-based AAFC/SMOS, GRACE, and NASA/SPoRT analyses). The Standardized Precipitation Index (SPI) shows dry conditions in various places at different time scales. These include North Dakota to Minnesota, Wyoming, New England, and southern Texas to the Lower Mississippi Valley (at the 1-month time scale); California to the central and southern Rockies, much of the Great Plains, Iowa and Missouri to Indiana, parts of the Northeast, and southern AL (2 to 4 months); California to the central and southern Rockies, much of the Great Plains, Iowa, Indiana to Ohio and Michigan, most of Northeast (6 to 12 months); parts of Pacific Northwest (9 to 12 months); and the Southwest to southern and central High Plains, and parts of Pacific Northwest, Texas, Iowa, Indiana, and the Northeast (24 months). When the desiccating effects of hot temperatures are included, the Standardized Precipitation Evapotranspiration Index (SPEI) shows more intense drought conditions over the SPI dry areas than indicated by the SPI.”

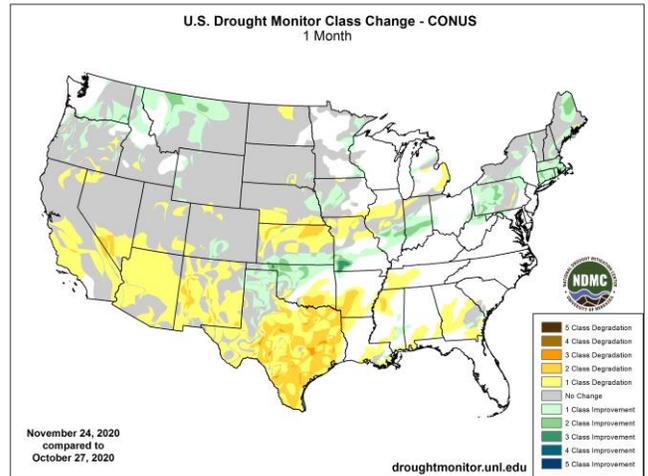
Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

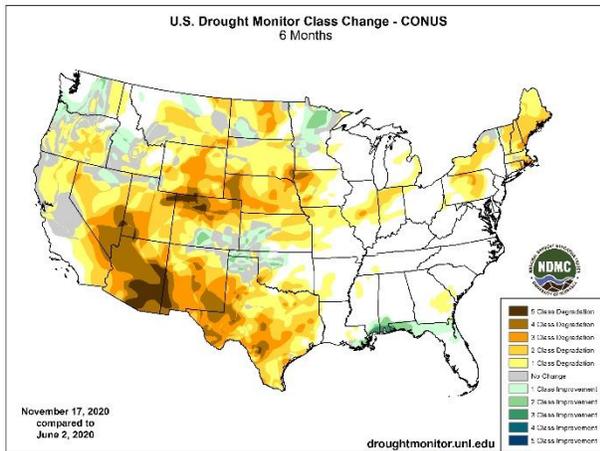
1 Week



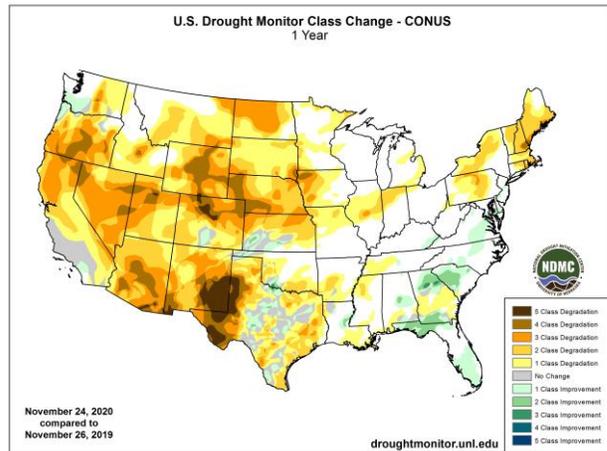
1 Month



6 Months



1 Year



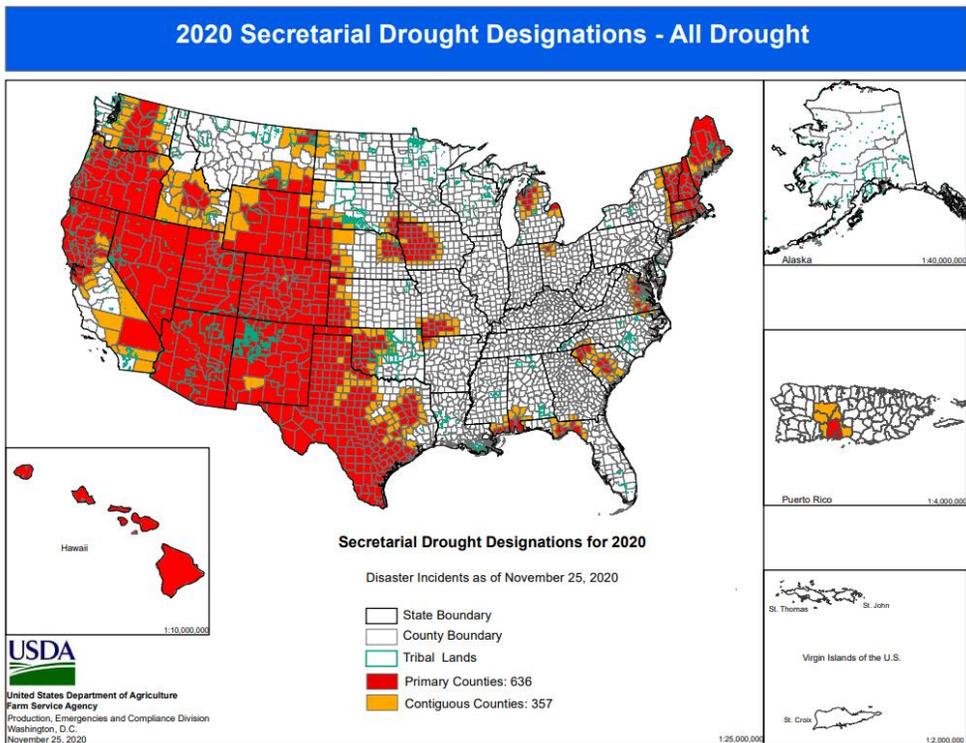
[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

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](#)

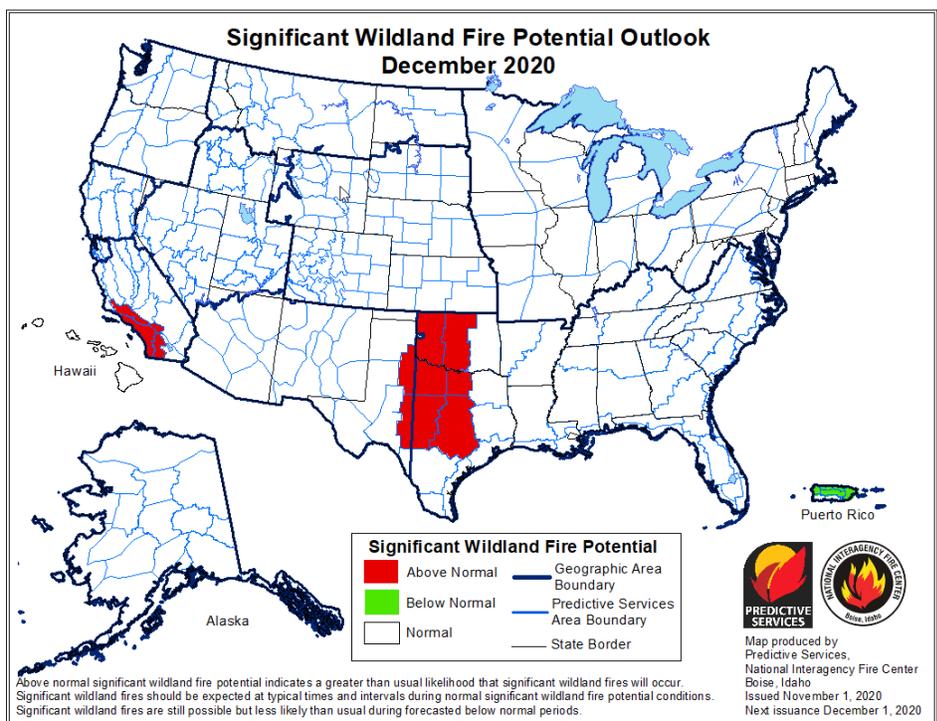
Secretarial Drought Designations

Source: USDA Farm Service Agency



Wildfires: USDA Forest Service Active Fire Mapping

Significant Wildland Fire Potential Outlook:



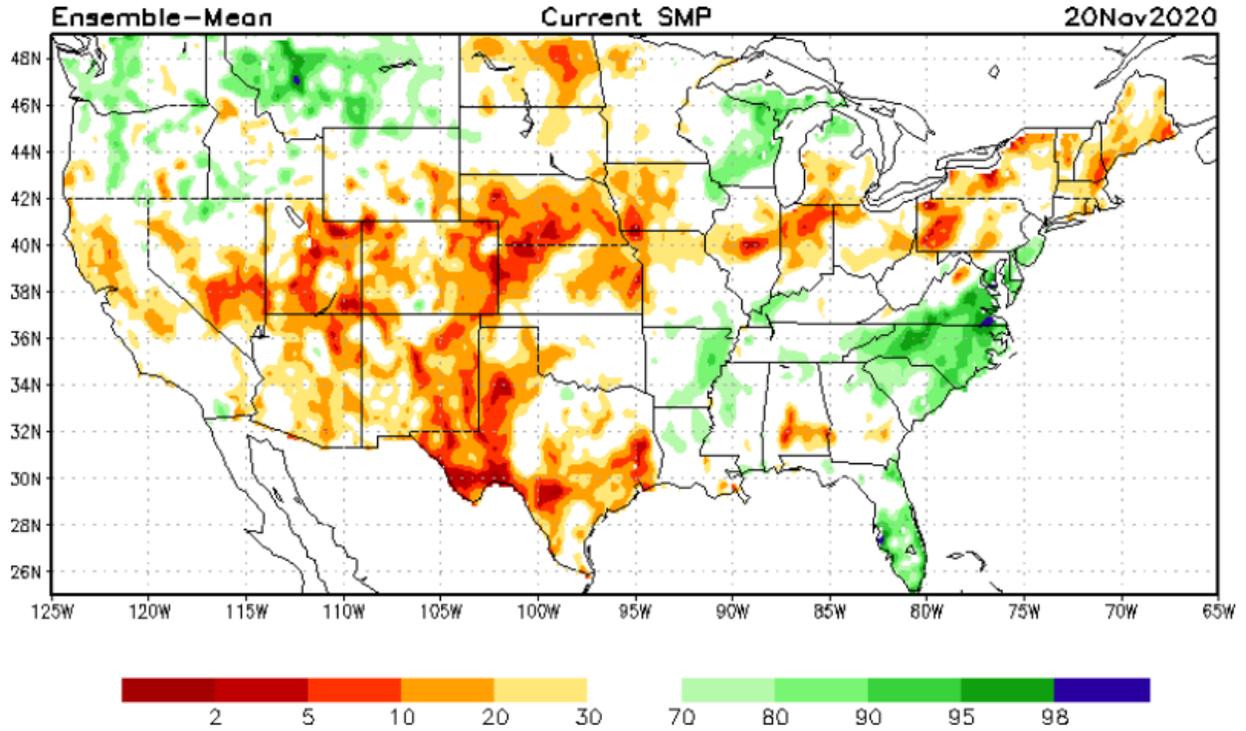
Highlighted Wildfire Resources

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

Other Climatic and Water Supply Indicators

Soil Moisture

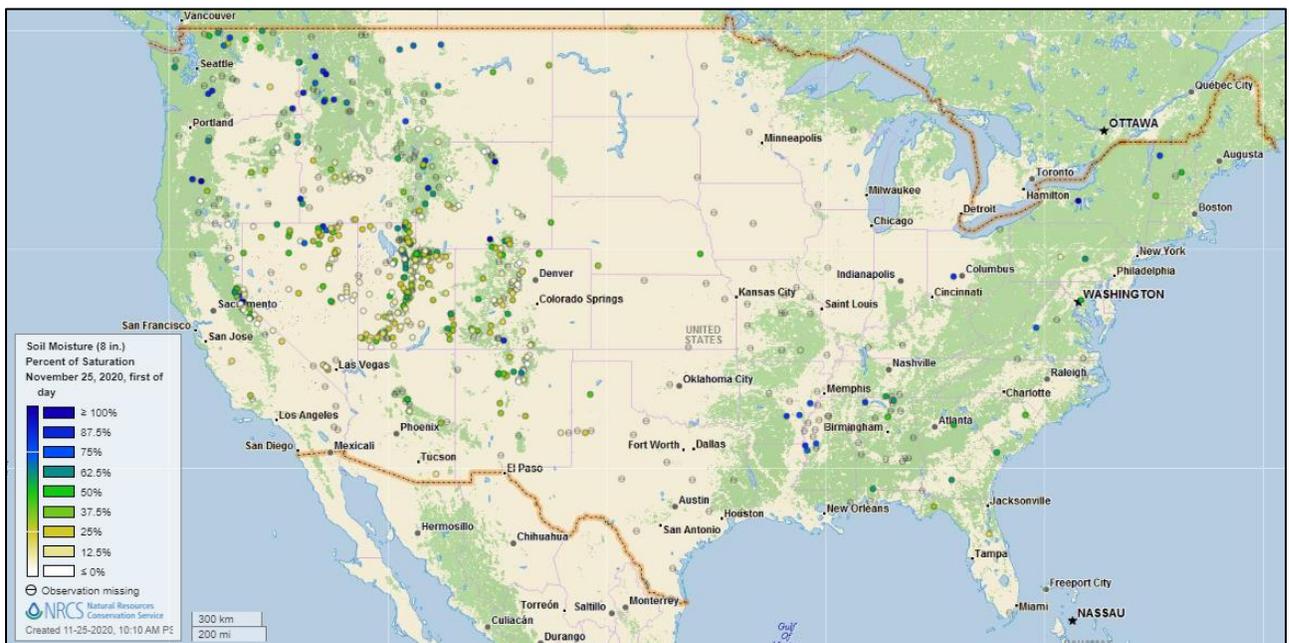
Source: NOAA National Centers for Environmental Prediction



[Modeled soil moisture percentiles](#) as of November 20, 2020

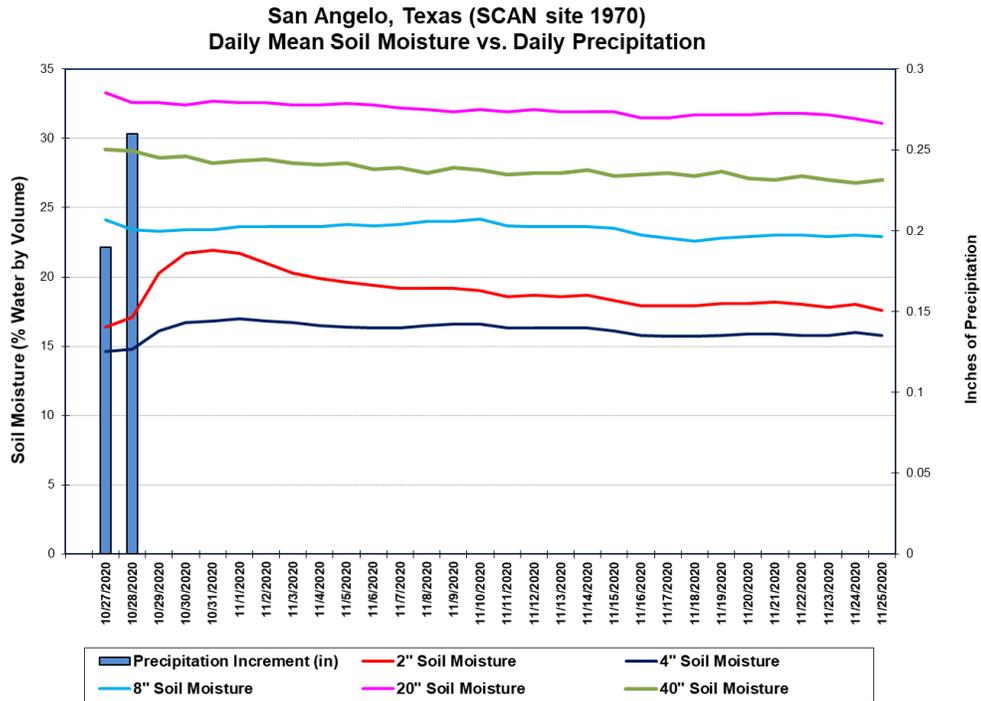
Soil Moisture Percent of Saturation

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 [San Angelo](#) SCAN site in Texas. Precipitation has only been observed on October 27 and 28 in the last 30 days and it increased soil moisture at the -2" and -4" sensors. Accumulated precipitation for the 30-day period was 0.45 inches.

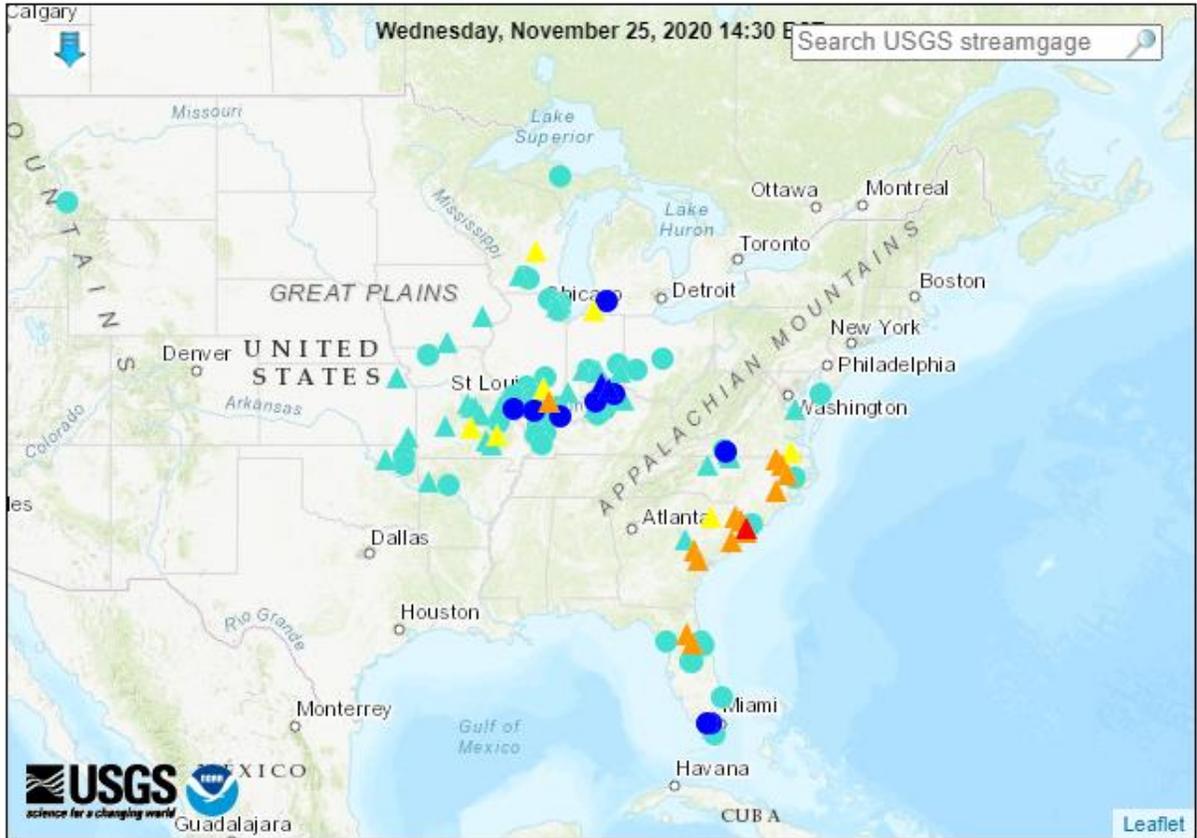
Soil Moisture Data Portals

- [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
 (16 in floods [moderate: 1, minor: 15], 7 in near-flood)



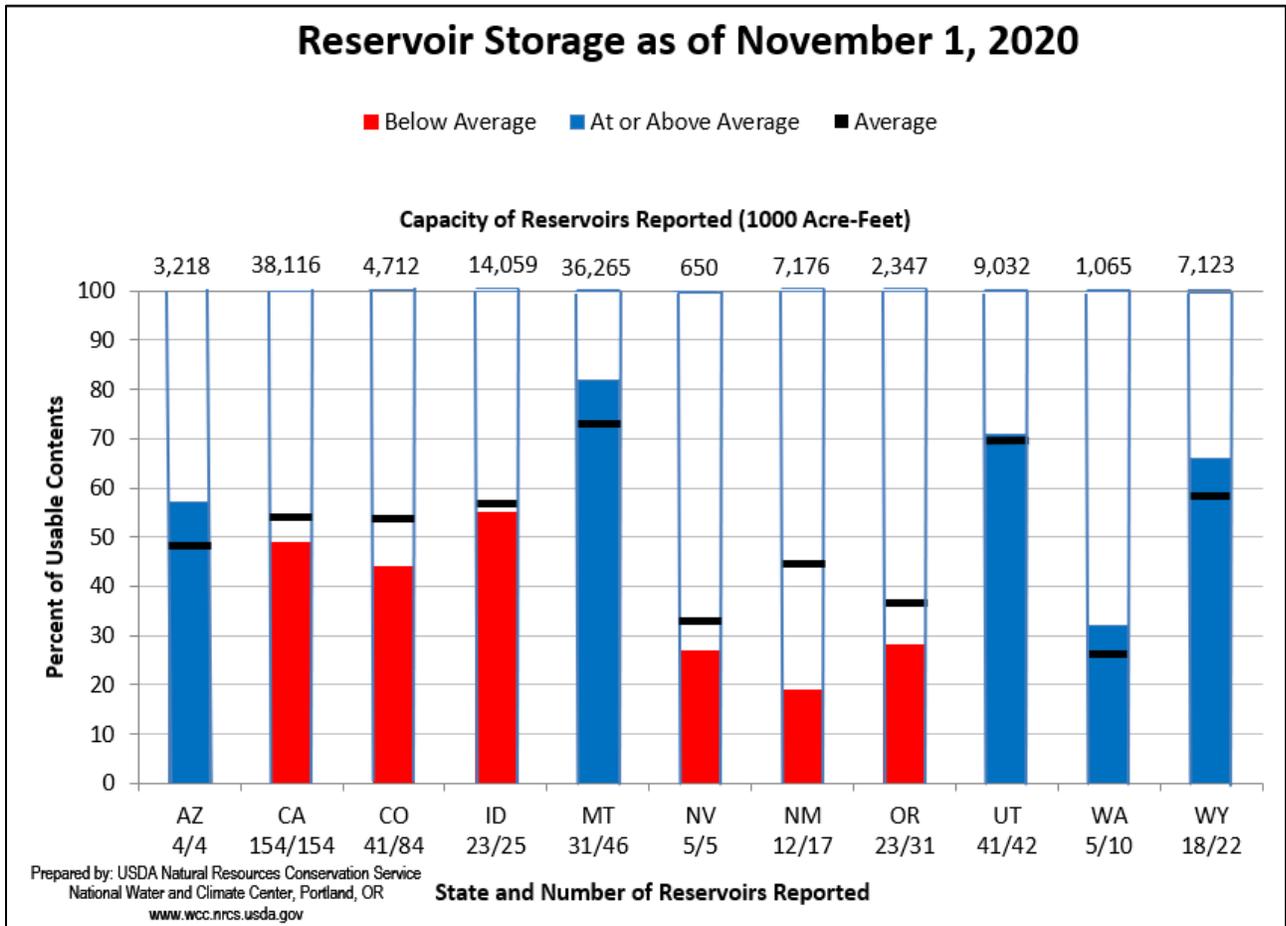
Explanation - Percentile classes						
<95	95-98	>= 99	Above action stage	Above flood stage	Above moderate flood stage	Above major flood stage
△ Streamgage with flood stage			○ Streamgage without flood stage			

[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](#)

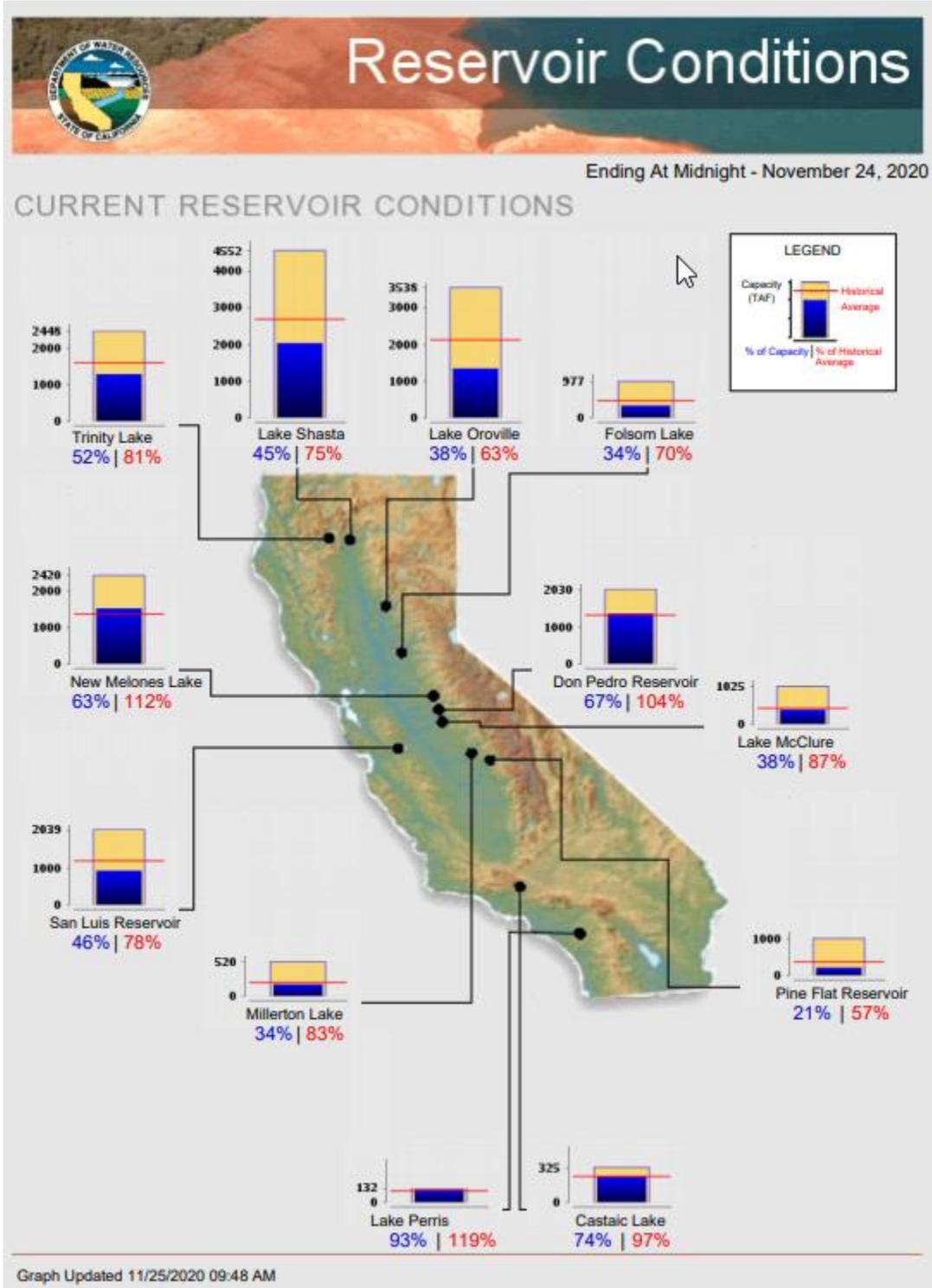
Hydromet Teacup Reservoir Depictions

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 25, 2020:](#) "Text."

Weather Hazards Outlook: [November 26 – December 1, 2020](#)

Source: NOAA Weather Prediction Center

U.S. Day 3-7 Hazards Outlook

[About the Hazards Outlook](#)

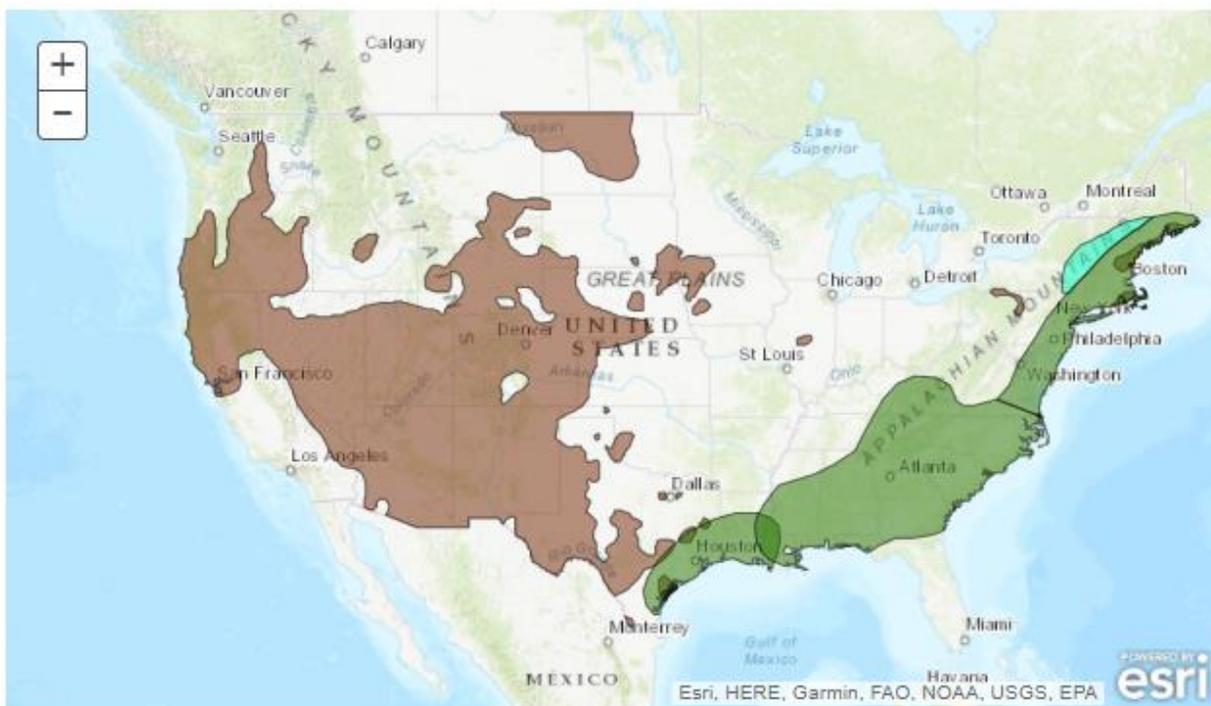
Created November 24, 2020

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		

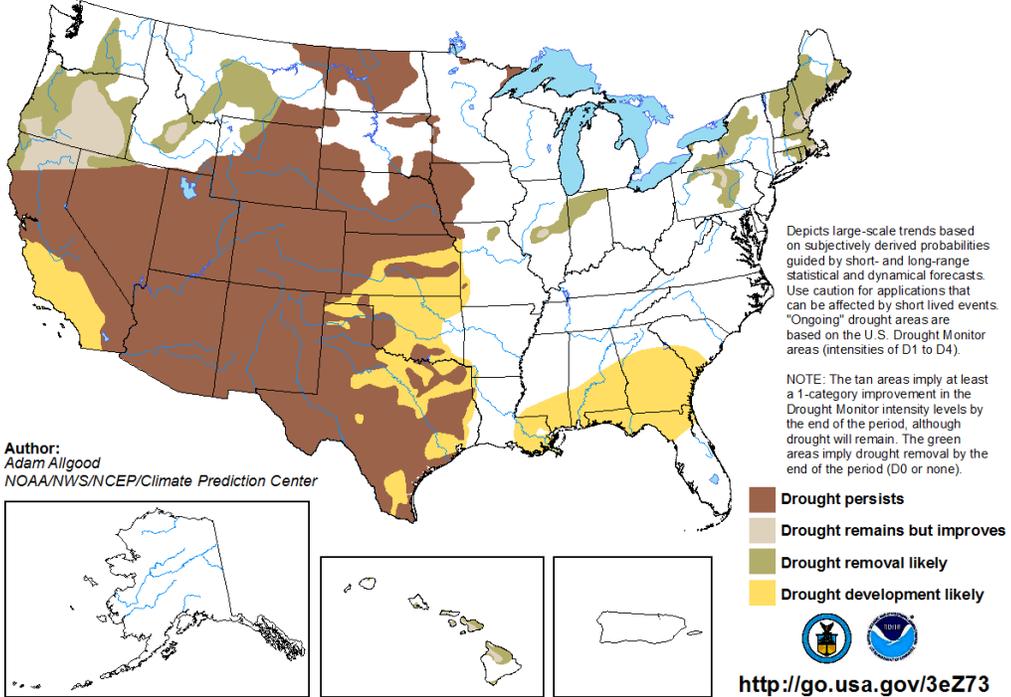
Valid November 27, 2020 - December 01, 2020



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*

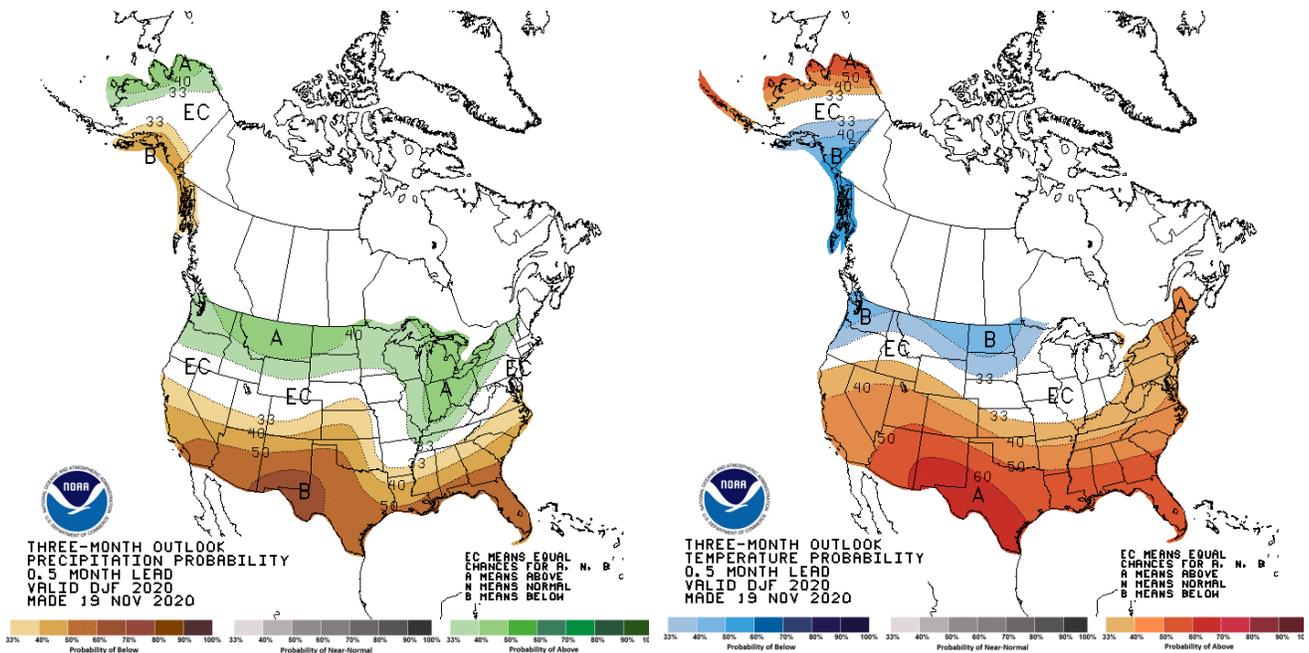


Climate Prediction Center 3-Month Outlook

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](#).