



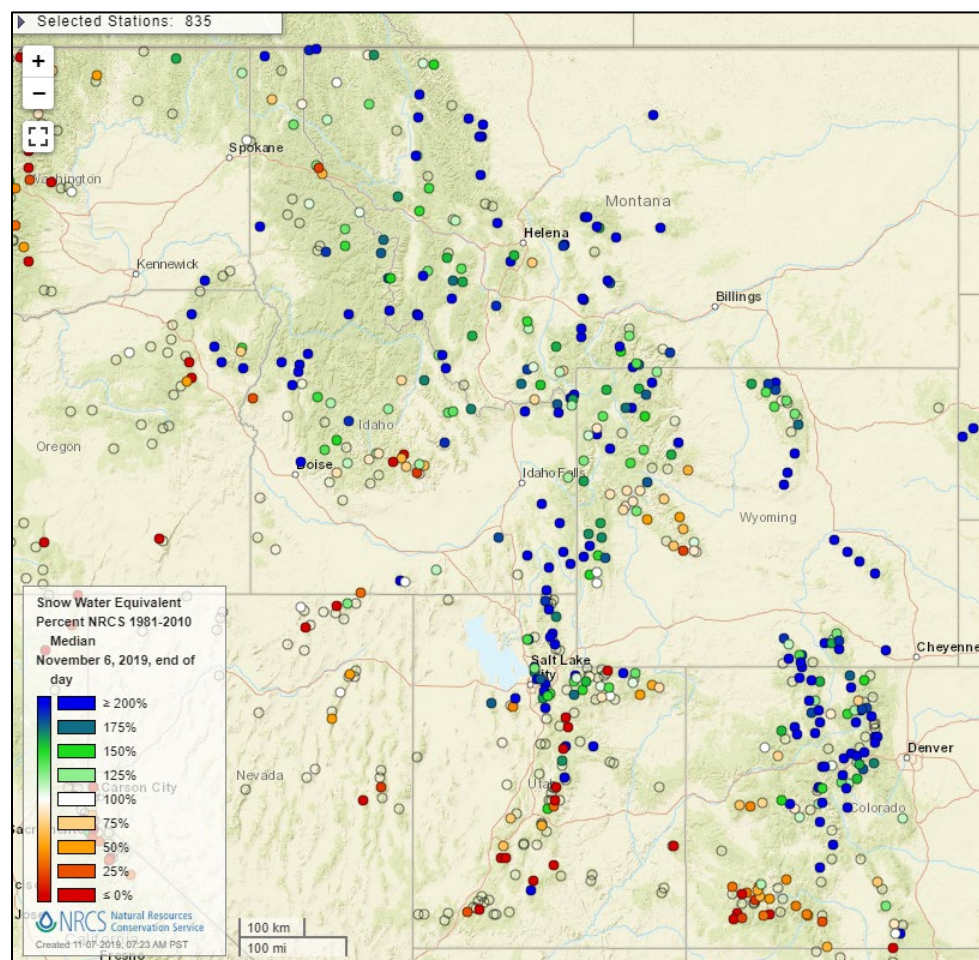
Water and Climate Update

November 7, 2019

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.

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Snowpack well above average in northern Rockies



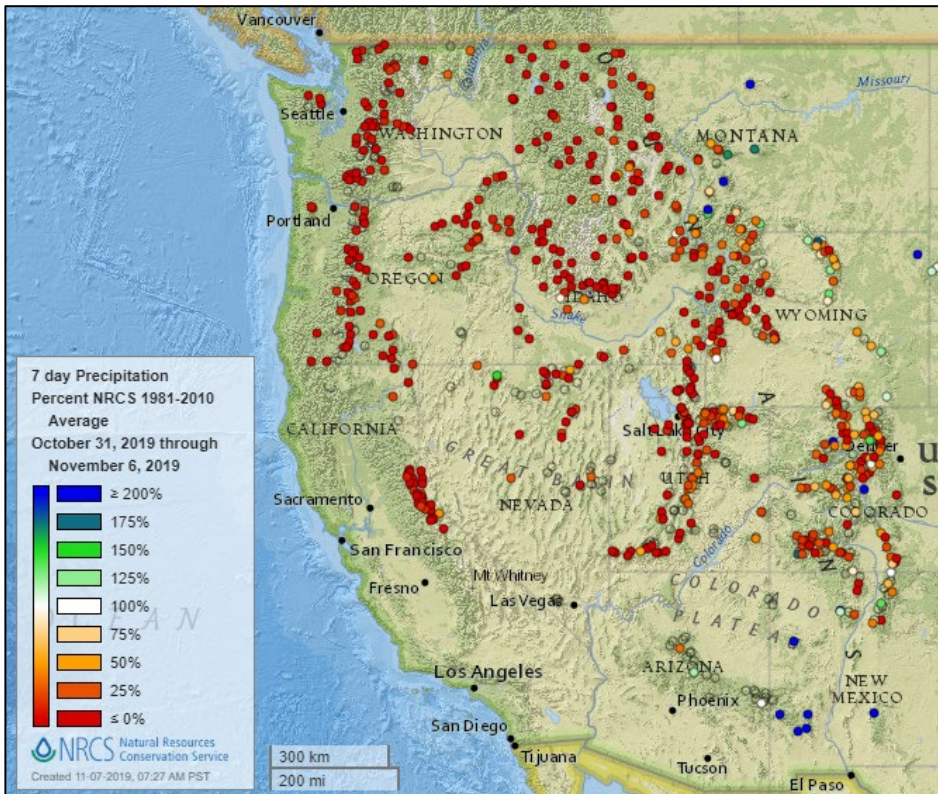
After an exceptionally snowy October, the snowpack in Colorado is more than twice its typical level. The highest snowpack is in northern Colorado, where some areas are reporting more than three times the normal snowpack for early November. In Montana, record-setting cold conditions in October have combined with well above average snowfall to create an early start to the state's snow season.

Related:

- [Colorado statewide snowpack is at 212% of average](#) Denver Post
- [Fall weather providing chills and twists](#) Bozeman Daily Chronicle

Precipitation

Last 7 Days, NRCS SNOTEL Network



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

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

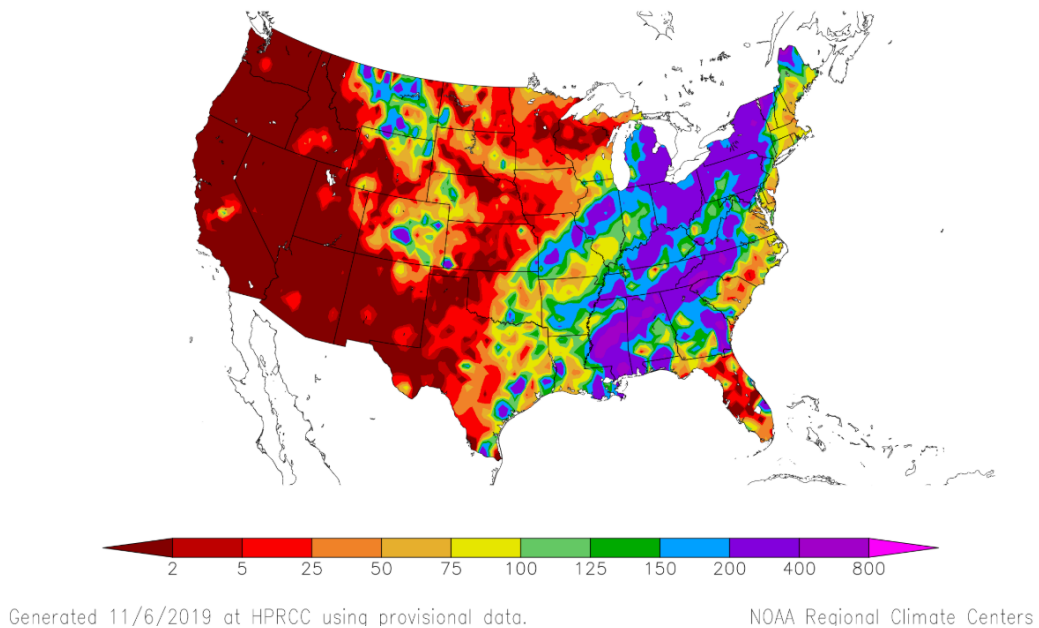
Last 7 Days, National Weather Service (NWS) Networks

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 (%)
10/30/2019 – 11/5/2019



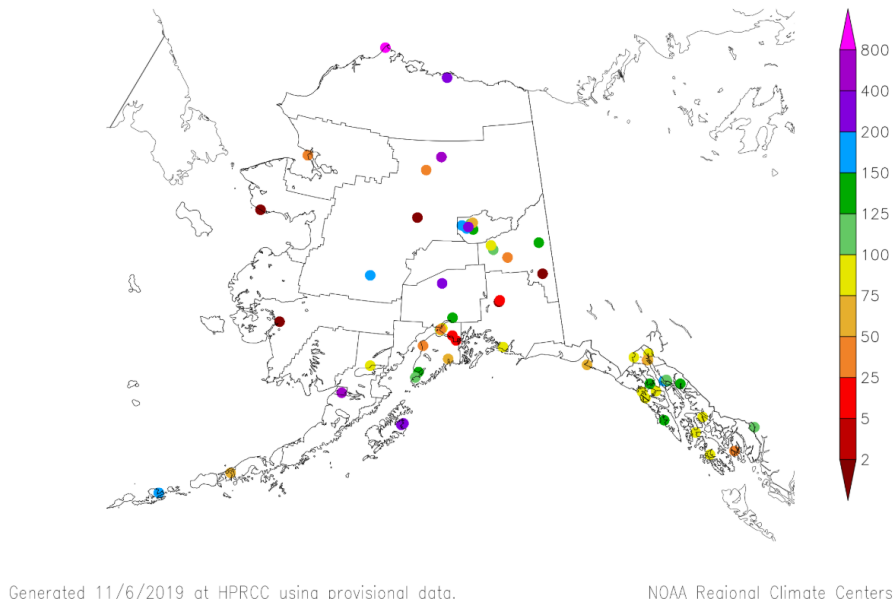
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

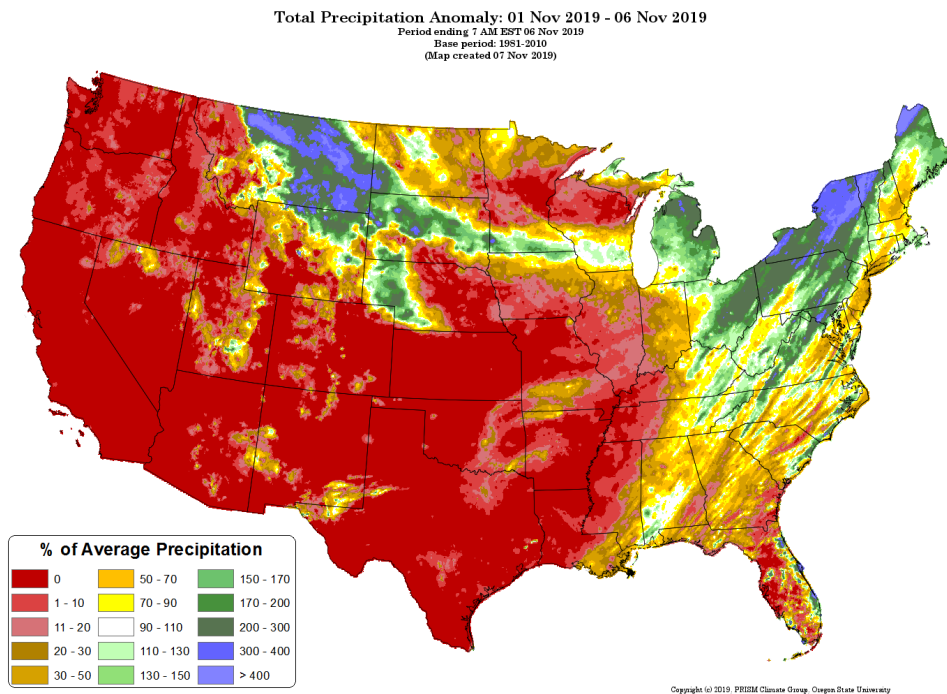
See also: [7-day total precipitation values \(inches\) map](#)

Percent of Normal Precipitation (%)
10/30/2019 – 11/5/2019



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

Source: PRISM

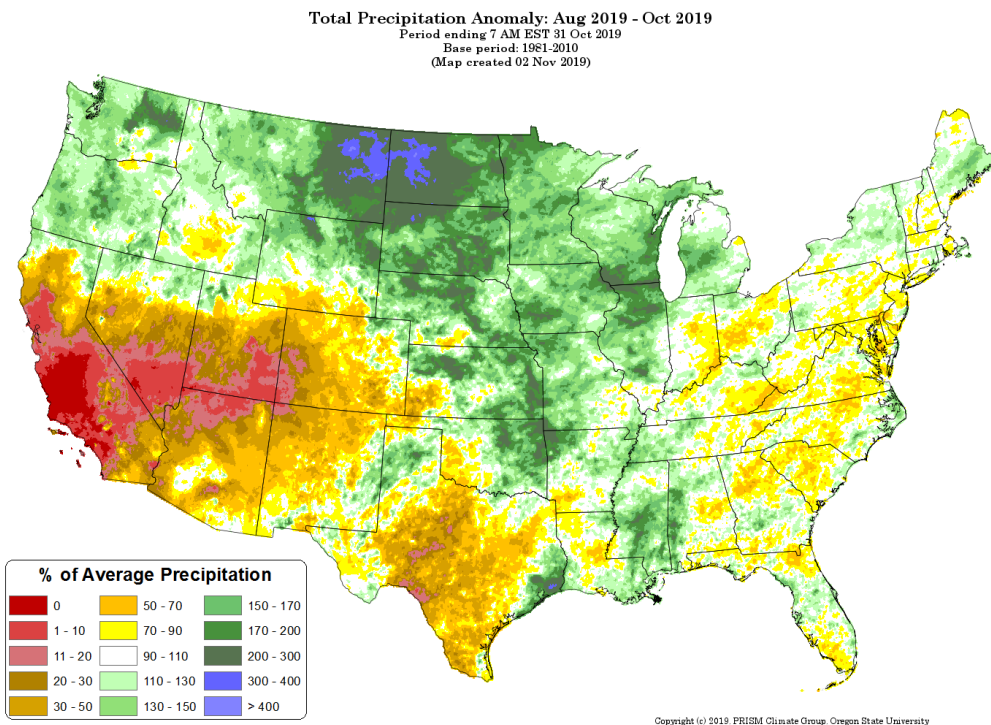


[Month-to-date national total precipitation percent of average map](#)

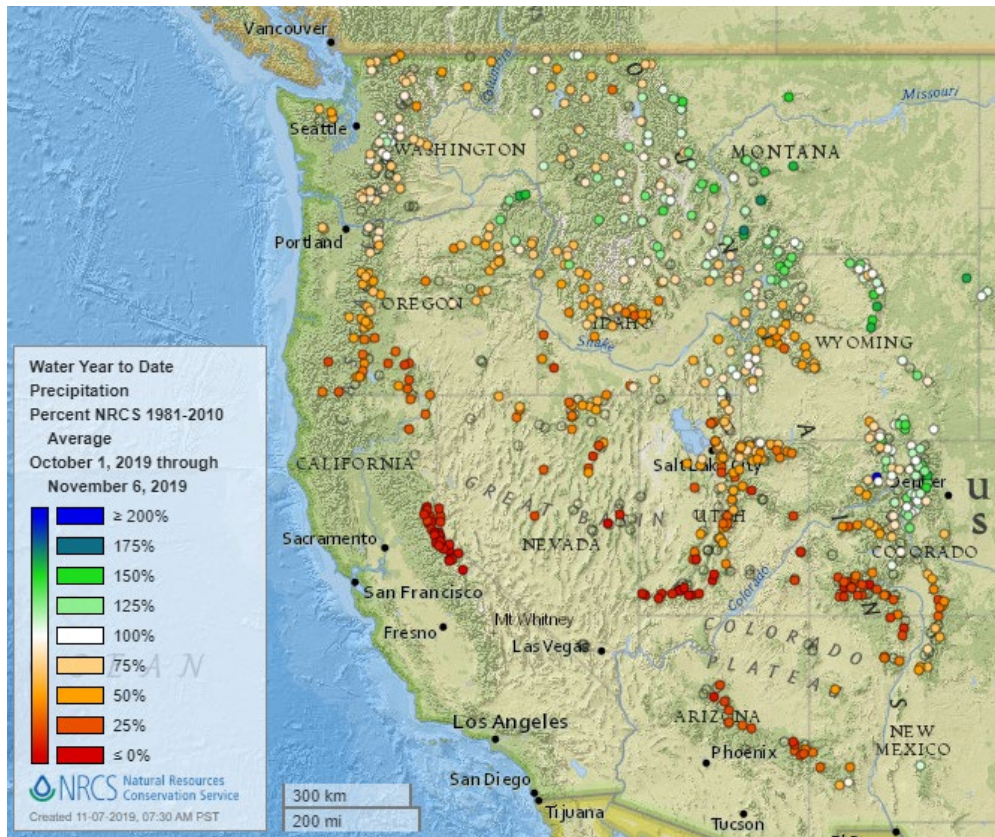
Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

[August through October 2019 total precipitation percent of average map](#)



Water Year-to-Date, NRCS SNOTEL Network



[2020 water year-to-date precipitation percent of average map](#)

See also:

[2020 water year-to-date precipitation values \(inches\) map](#)

Temperature

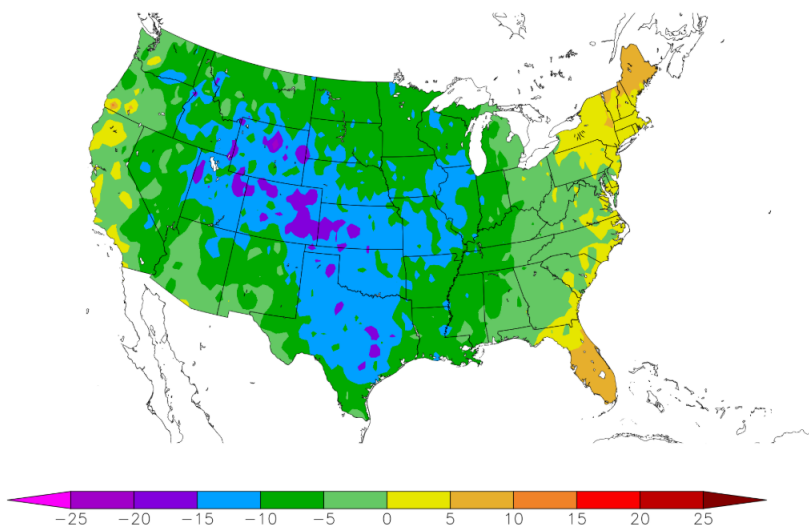
Last 7 Days, National Weather Service (NWS) Networks

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)
10/30/2019 – 11/5/2019



Generated 11/6/2019 at HPRCC using provisional data.

NOAA Regional Climate Centers

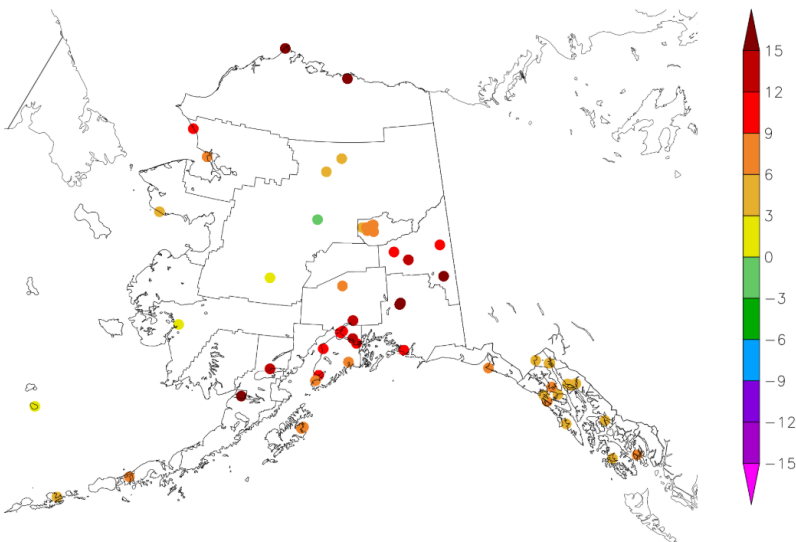
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)
10/30/2019 – 11/5/2019



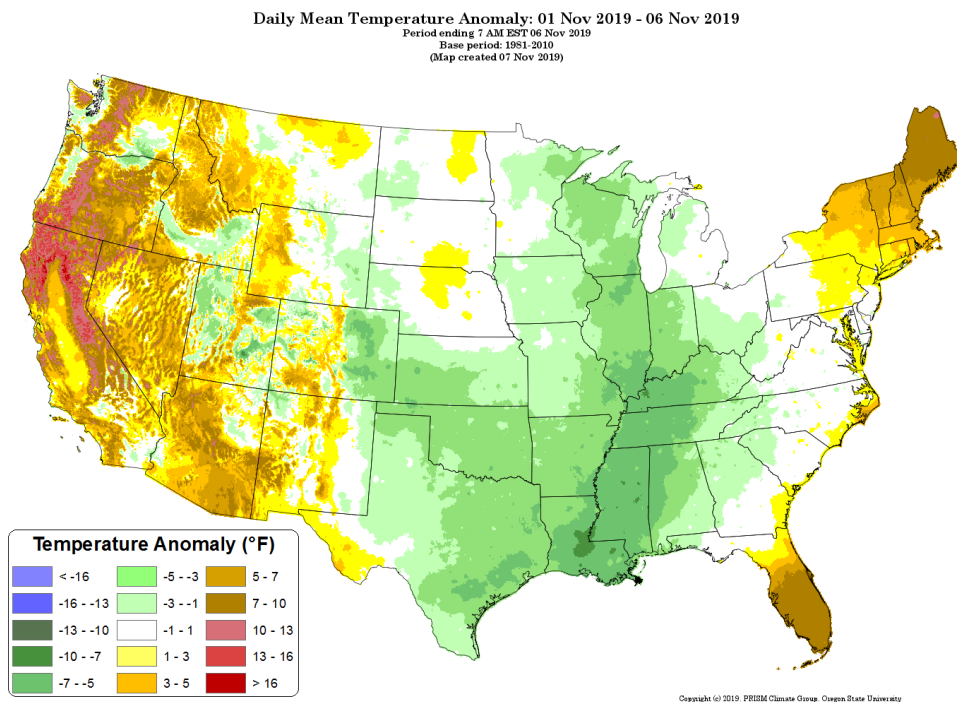
Generated 11/6/2019 at HPRCC using provisional data.

NOAA Regional Climate Centers

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

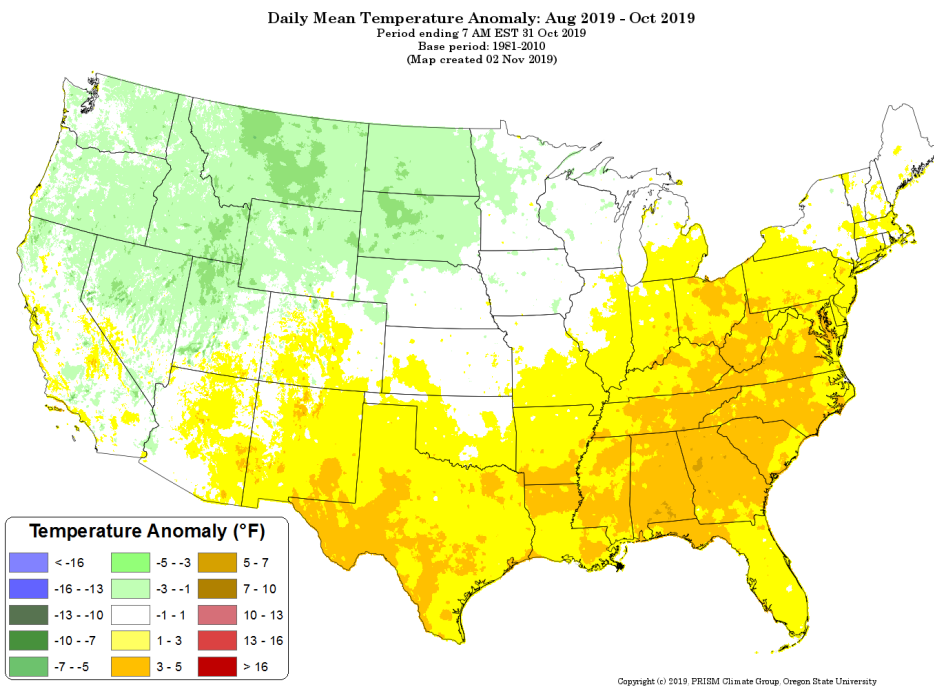
Source: PRISM

[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
2019 daily mean
temperature anomaly map](#)

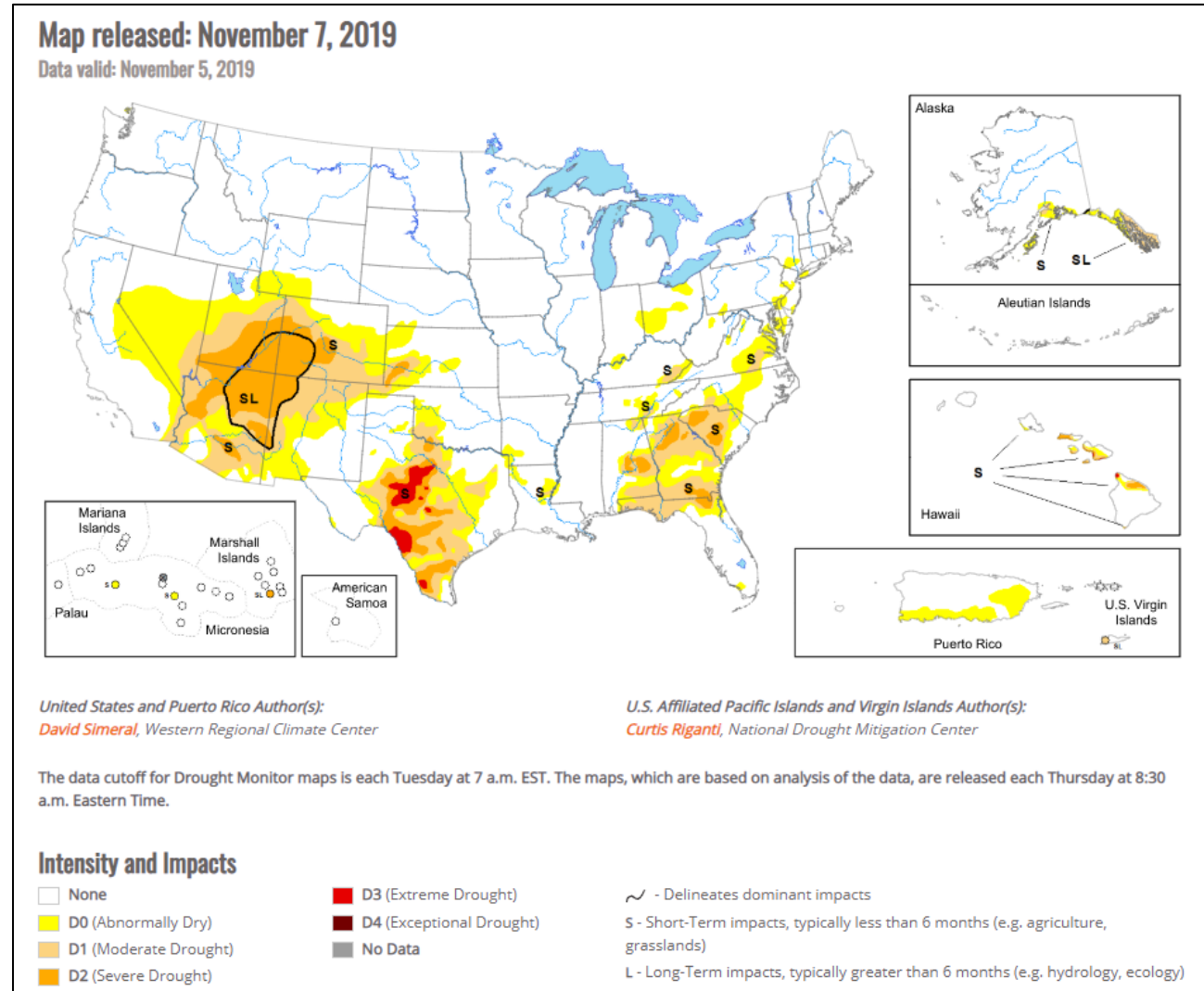
Drought

[U.S. Drought Monitor](#)

Source: National Drought Mitigation Center

[U.S. Drought Portal](#)

Source: NOAA



Current [National Drought Summary](#), November 7, 2019

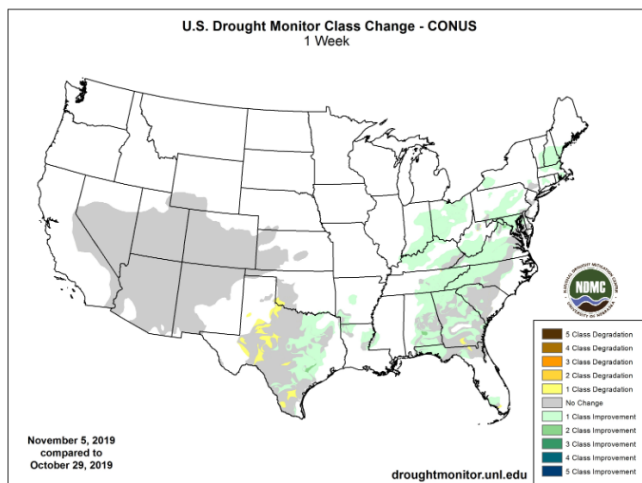
Source: National Drought Mitigation Center

"This U.S. Drought Monitor week saw continued improvements in drought conditions as a large-scale, low-pressure system last week delivered moderate-to-heavy precipitation accumulations ranging from 2 to 7 inches leading to widespread improvements across portions of the South, Southeast, Mid-Atlantic, and the lower Midwest. For October, these regions saw well-above-normal precipitation that has helped alleviate drought conditions, especially in the Southeast. Out West, generally dry conditions prevailed with the exception of some mountain snow showers in the central and northern Rockies of Montana, Wyoming, and Colorado. In California, fire-weather conditions improved allowing firefighters in southern and northern California to help contain several large wildfires. According to the NOAA National Centers for Environmental Information (NCEI), the contiguous U.S. experienced its 21st coolest and 8th wettest October on record."

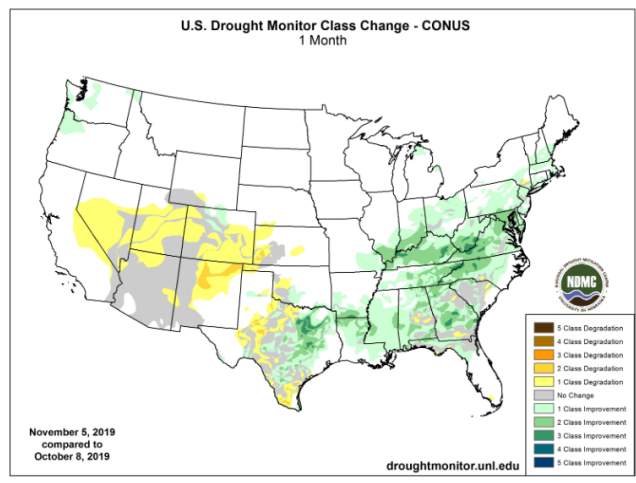
Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

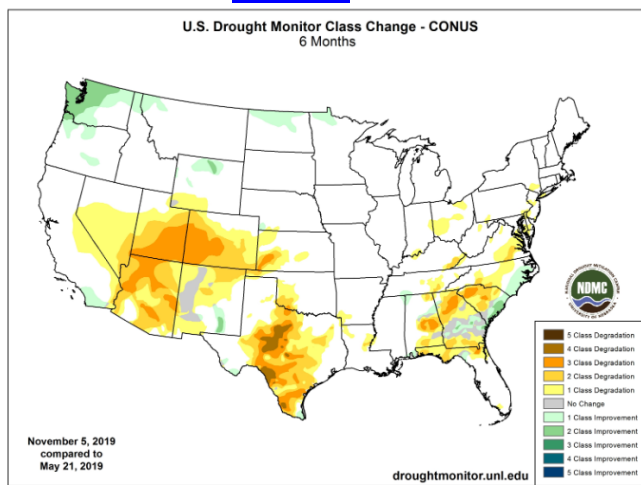
1 Week



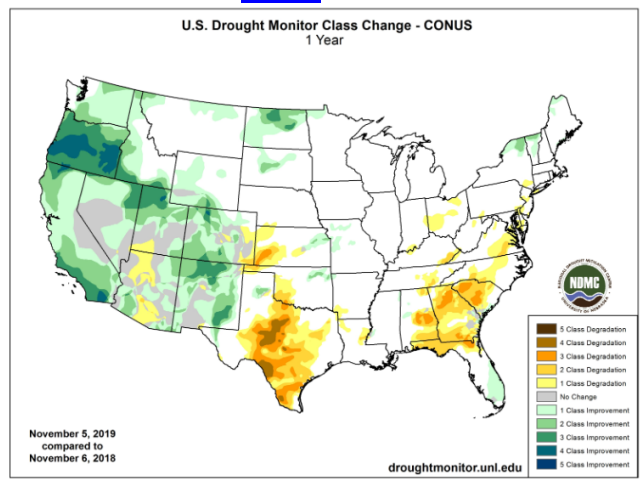
1 Month



6 Months



1 Year



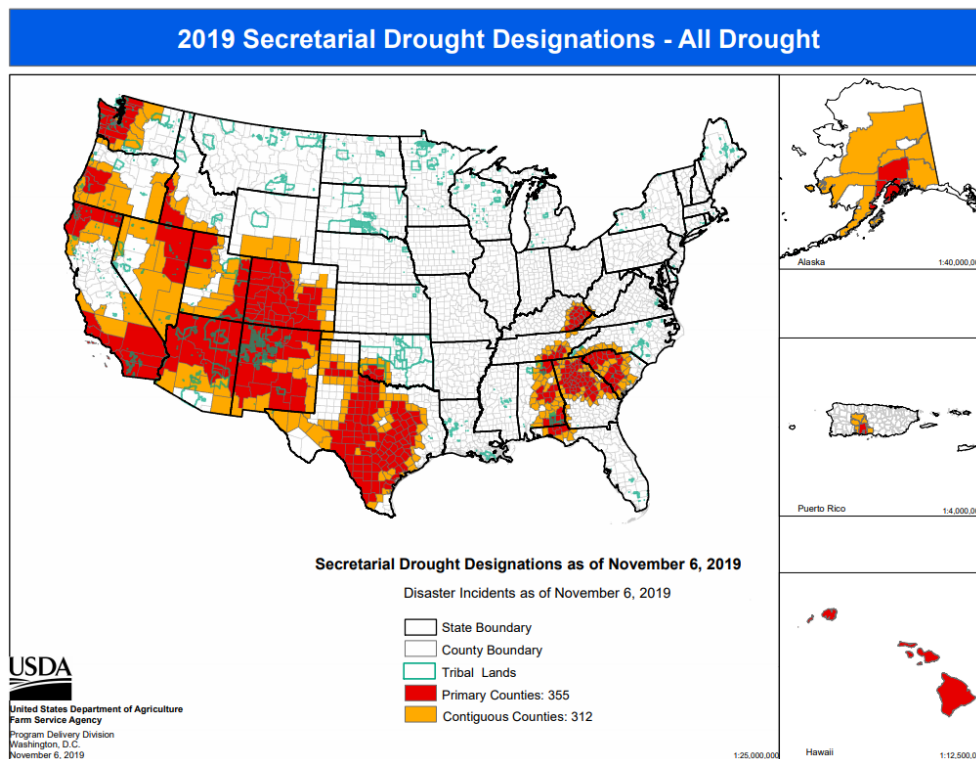
[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

Highlighted Drought Resources

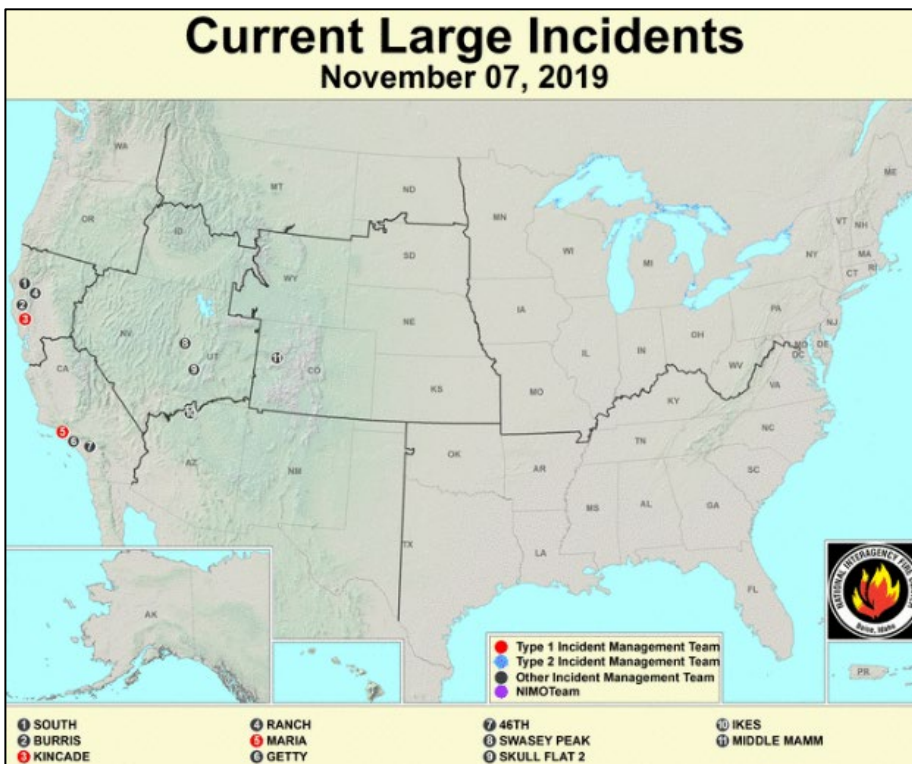
- [Drought Impact Reporter](#)
- [Quarterly Regional Climate Impacts and Outlook](#)
- [U.S. Drought Portal Indicators and Monitoring](#)
- [U.S. Population in Drought, Weekly Comparison](#)
- [USDA Disaster and Drought Information](#)

Secretarial [Drought Designations](#)

Source: USDA Farm Service Agency



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



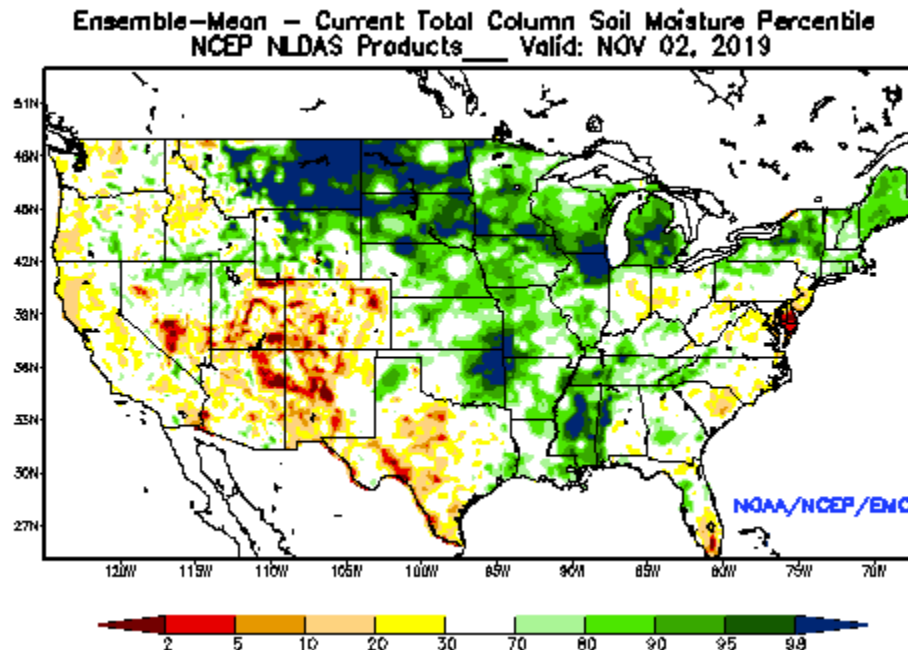
Highlighted Wildfire Resources

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

Other Climatic and Water Supply Indicators

Soil Moisture

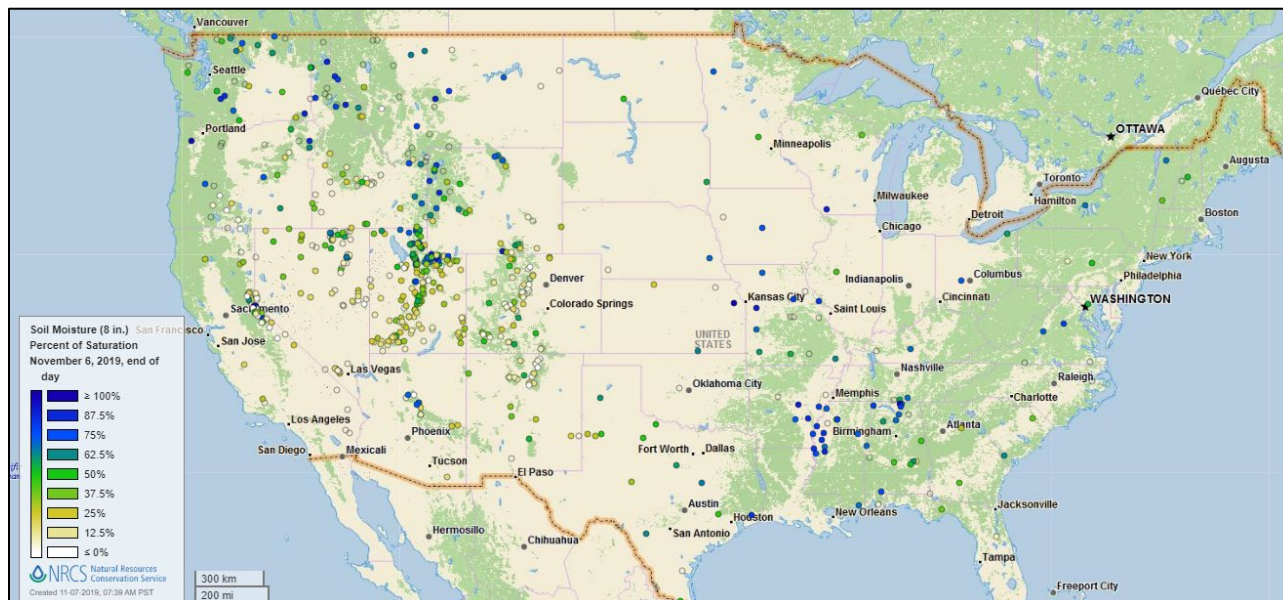
Source: NOAA National Centers for Environmental Prediction



[Modeled soil moisture percentiles](#) as of November 2, 2019

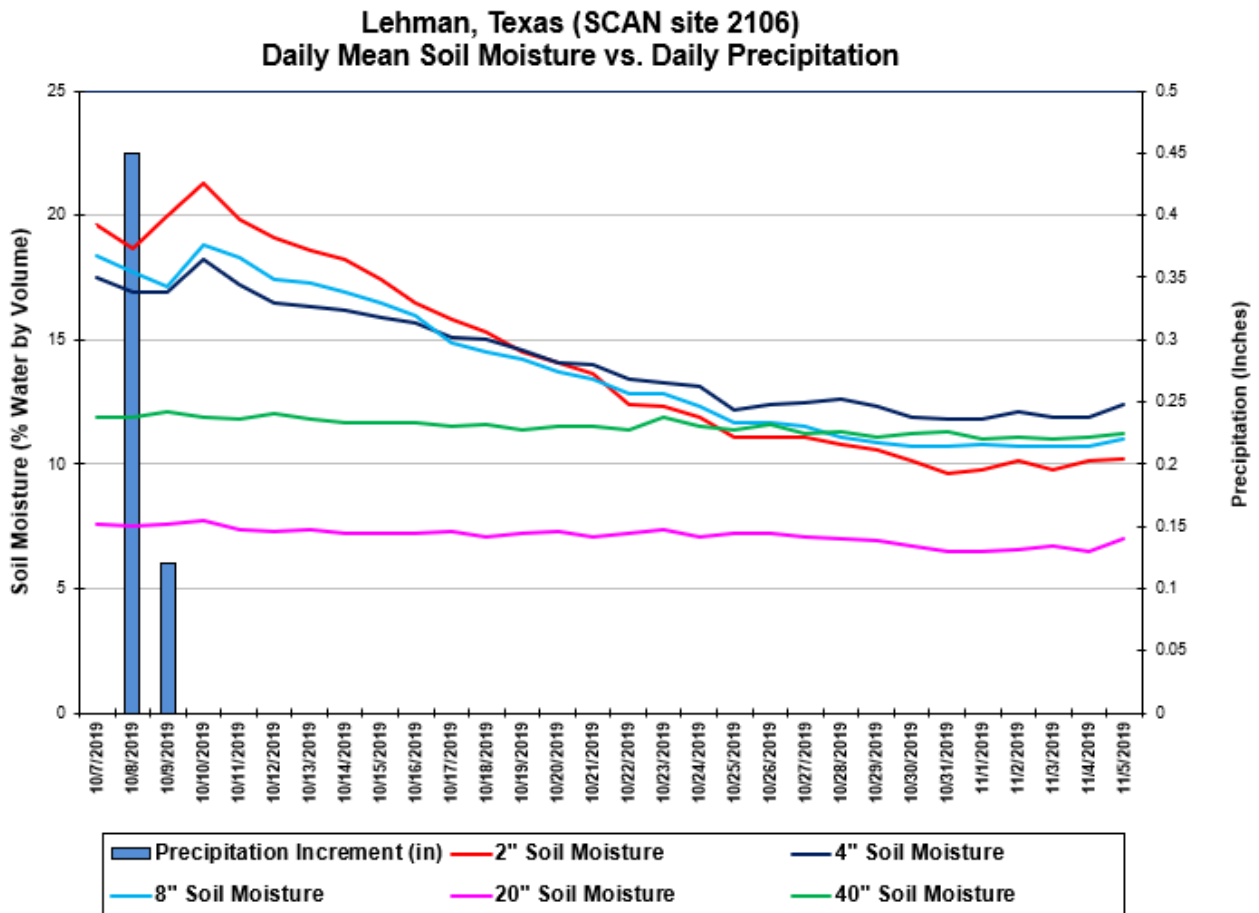
Soil Moisture Percent of Saturation

Source: NRCS SNOTEL and [Soil Climate Analysis Network](#) (SCAN)



Soil Moisture Data

Source: NRCS [Soil Climate Analysis Network](#) (SCAN)



This chart shows the soil moisture and precipitation for the last 30 days at the [Lehman SCAN site](#) in Texas. Rainfall on October 8 and 9 resulted in increased soil moisture at the -2", -4", and -8" sensor depths followed by a gradual decline in soil moisture. The -20" and -40" sensors showed little response to the event.

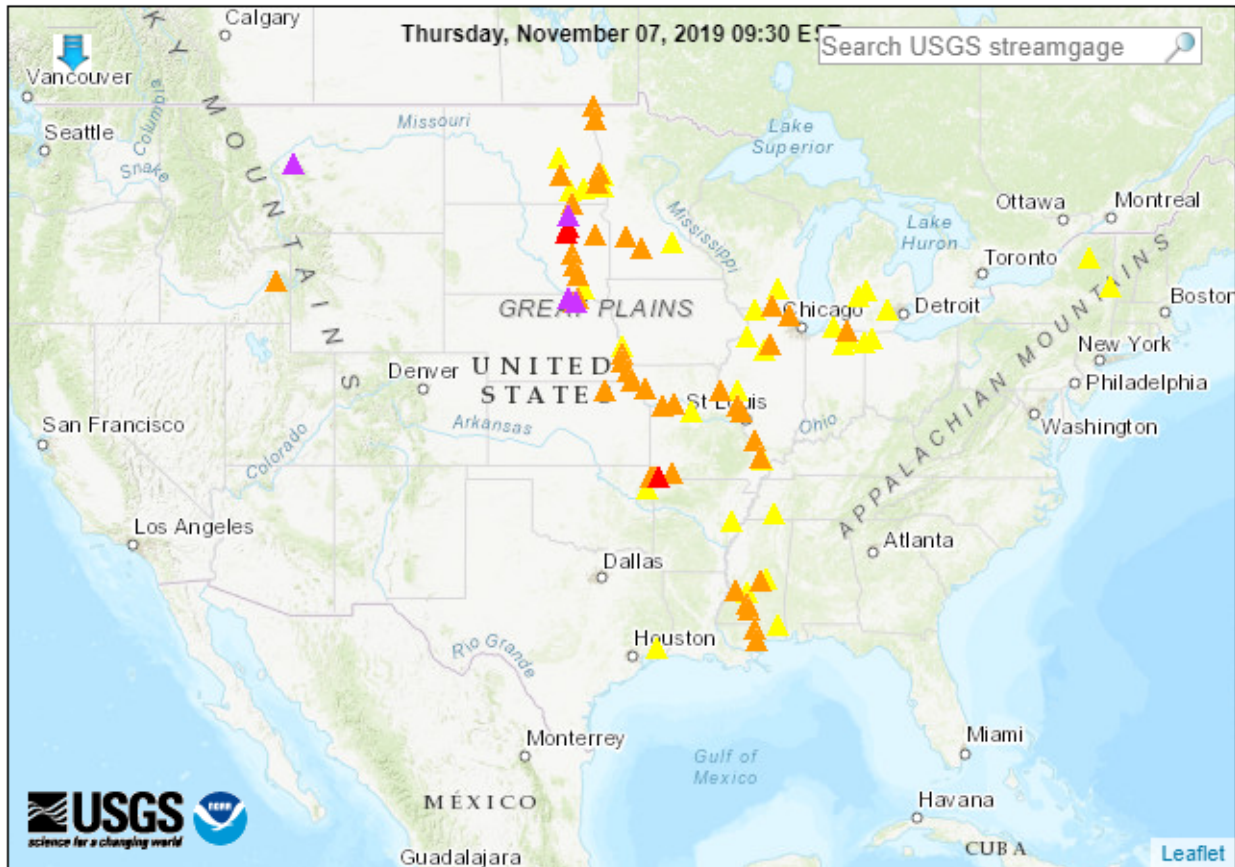
Soil Moisture Data Portals

- [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 (48 in floods [major: 4, moderate: 3, minor: 41], 33 in near-flood)



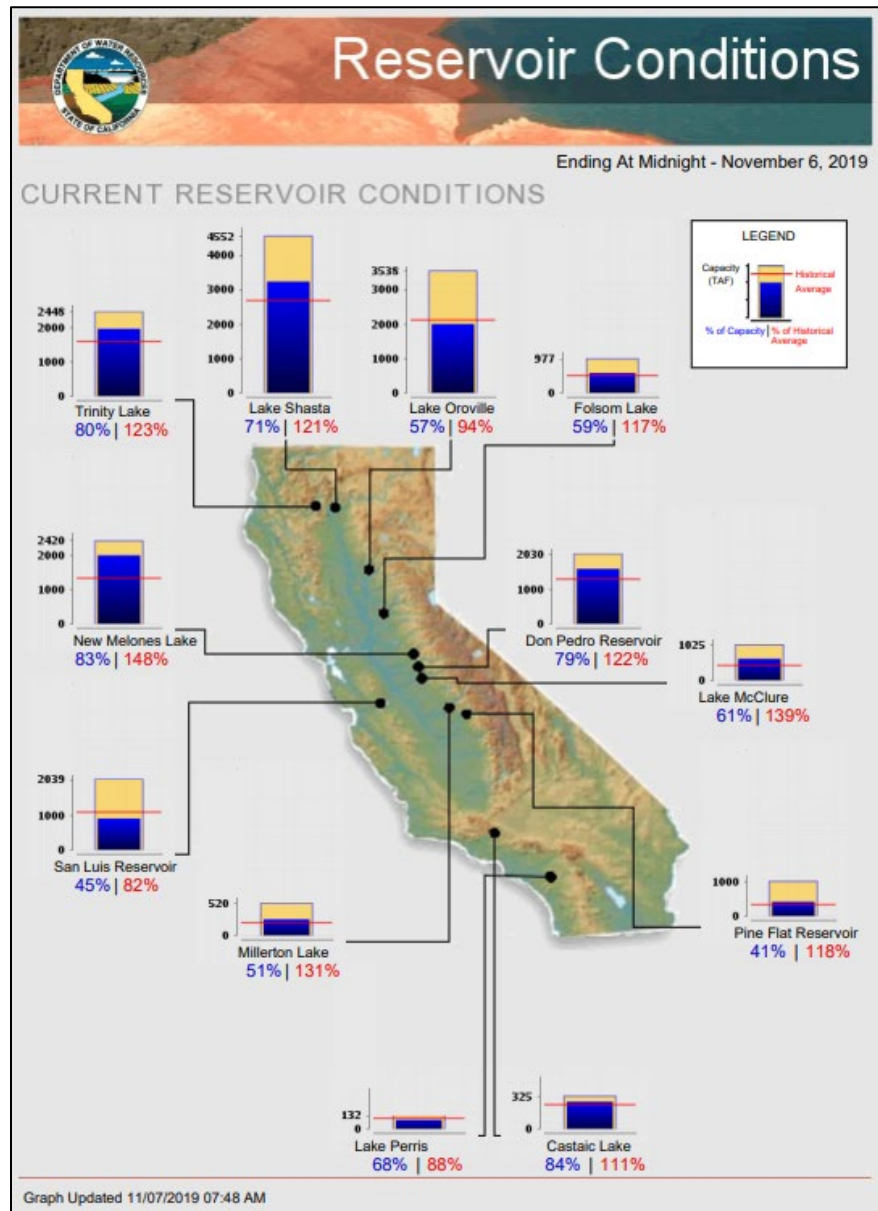
Explanation - Percentile classes						
<95	95-98	>= 99	Above action stage	Above flood stage	Above moderate flood stage	Above major flood stage
△ Streamgage with flood stage ○ Streamgage without flood stage						

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

Reservoir Storage

Current California Reservoir Conditions

Source: California Department of Water Resources



[Current California Reservoir Conditions](#)

Hydromet Tea Cup Reservoir Depictions

Source: U.S. Bureau of Reclamation

- [Upper Colorado](#)
- [Pacific Northwest/Snake/Columbia](#)
- [Sevier River Water, Utah](#)
- [Upper Missouri, Kansas, Oklahoma, Texas](#)

Short- and Long-Range Outlooks

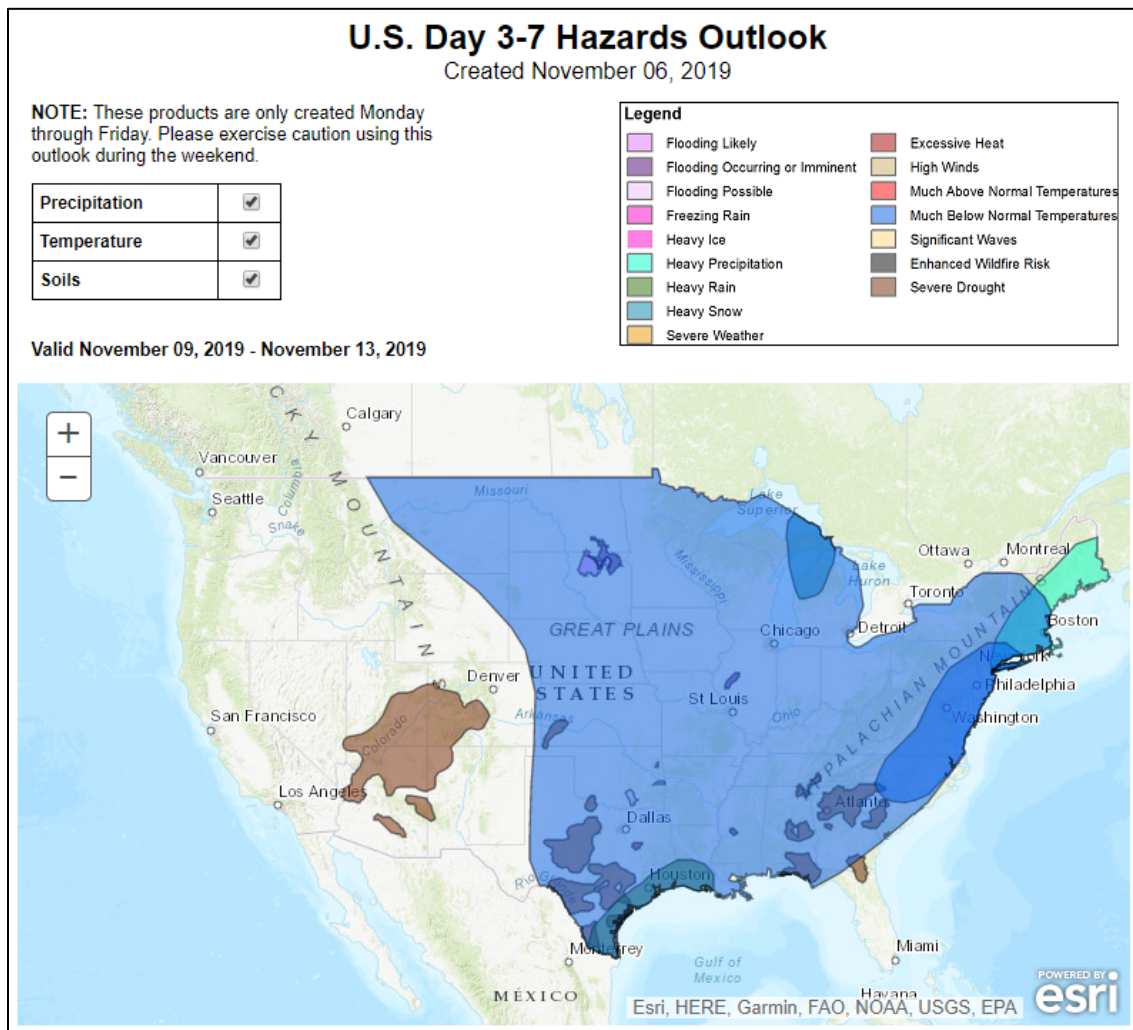
Agricultural Weather Highlights

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

National Outlook, Thursday, November 7, 2019: “During the next 5 days, a pair of cold blasts will affect areas from the Rockies to the East Coast, while late-season warmth will prevail in the Far West. Widespread precipitation will precede each of the cold waves, with 5-day rainfall totals expected to reach 1 to 3 inches or more from the western Gulf Coast region to the southern Appalachians. Farther north, snow squalls will affect areas downwind of the Great Lakes. Snow will also blanket northern sections of the Rockies and Plains, mainly late in the weekend and early next week. In contrast, mostly dry weather will prevail west of the Rockies and across the upper Midwest. The NWS 6- to 10-day outlook for November 12 – 16 calls for below-normal temperatures from the Rockies to the East Coast, while warmer-than-normal weather will prevail in the Far West. Meanwhile, near- or below-normal precipitation across much of the western and central U.S. should contrast with wetter-than-normal conditions across parts of the northern Plains and along the Gulf and Atlantic Coasts.”

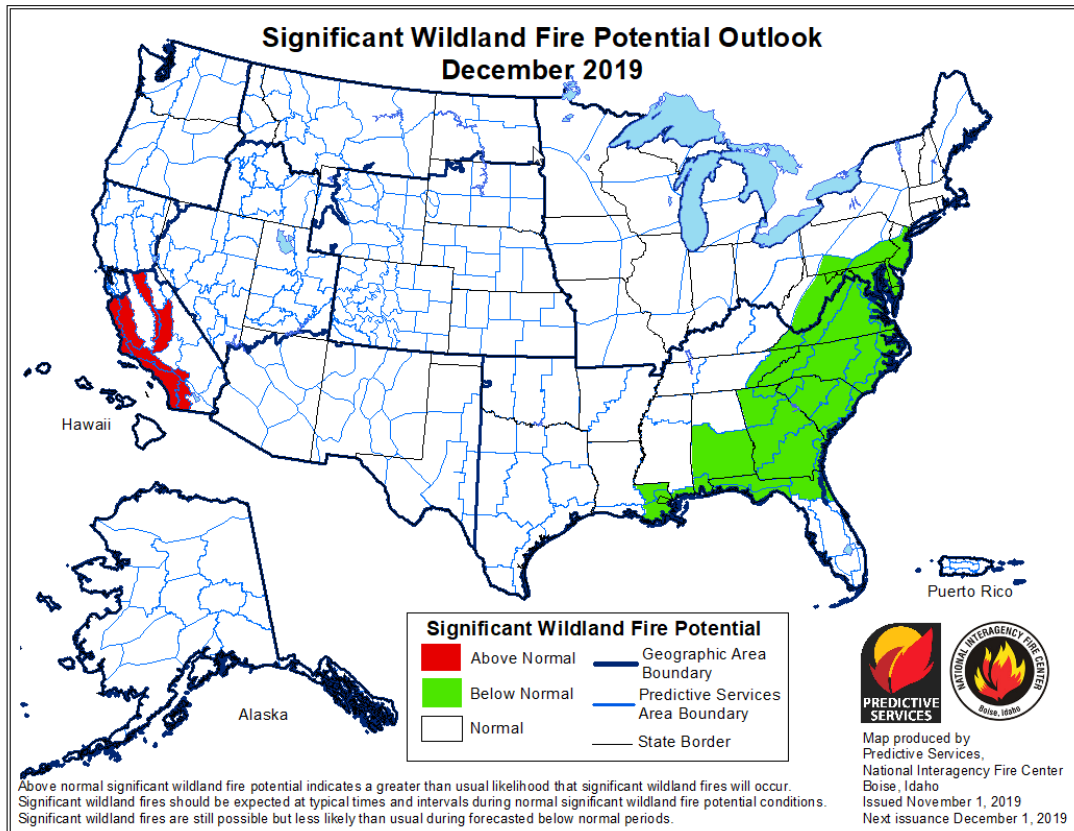
Weather Hazards Outlook: [November 9 - 13, 2019](#)

Source: NOAA Climate Prediction Center



Significant Wildland [Fire Potential Outlook](#)

Source: National Interagency Fire Center

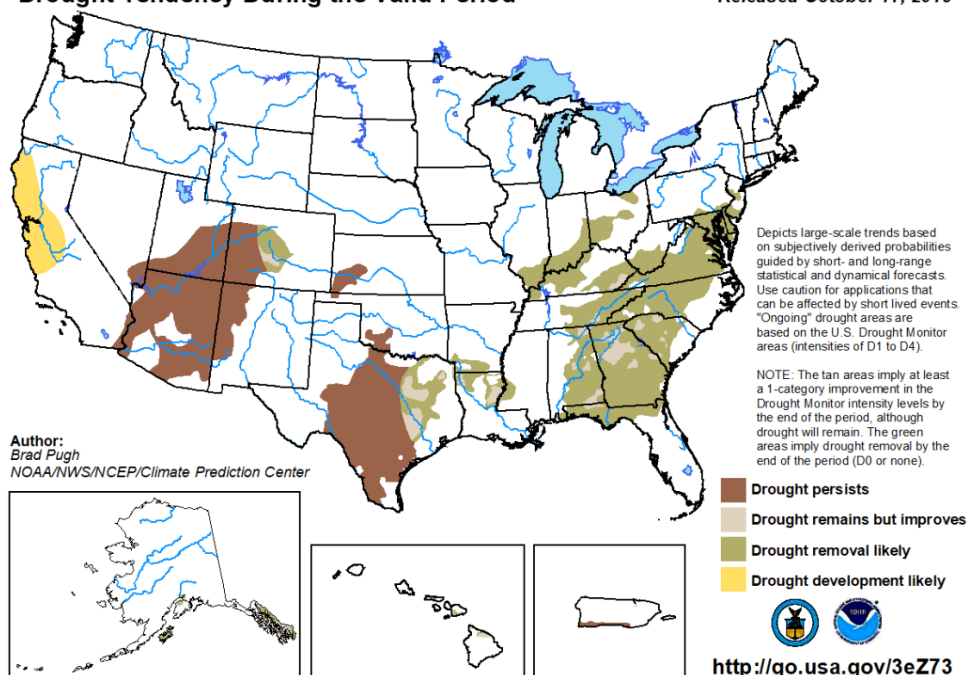


Seasonal Drought Outlook: [October 17, 2019 – January 31, 2020](#)

Source: National Weather Service

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

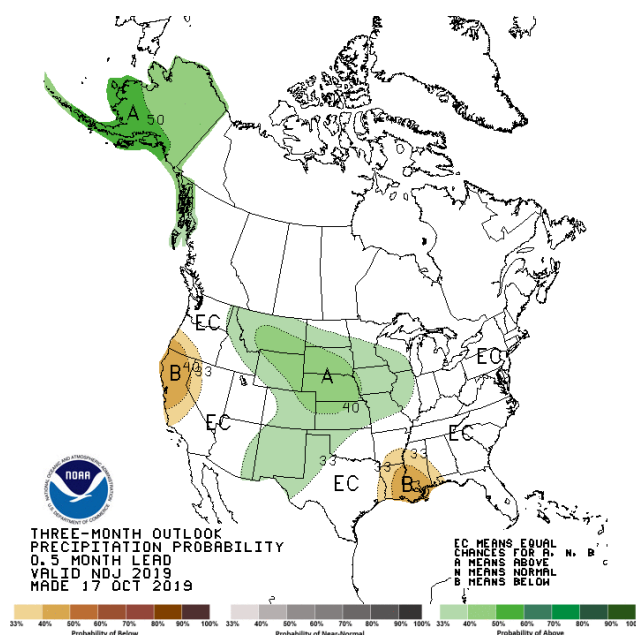
Valid for October 17, 2019 - January 31, 2020
Released October 17, 2019



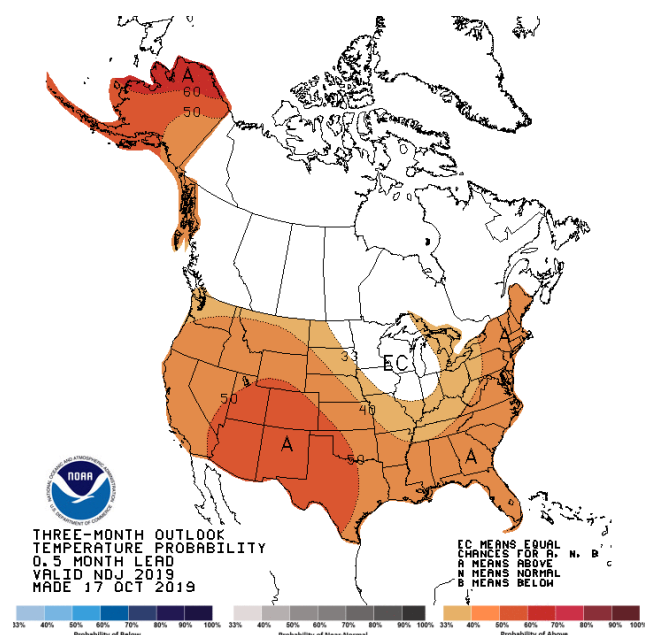
Climate Prediction Center 3-Month Outlook

Source: National Weather Service

Precipitation



Temperature



[November-December-January \(NDJ\) 2019/2020 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](#).