

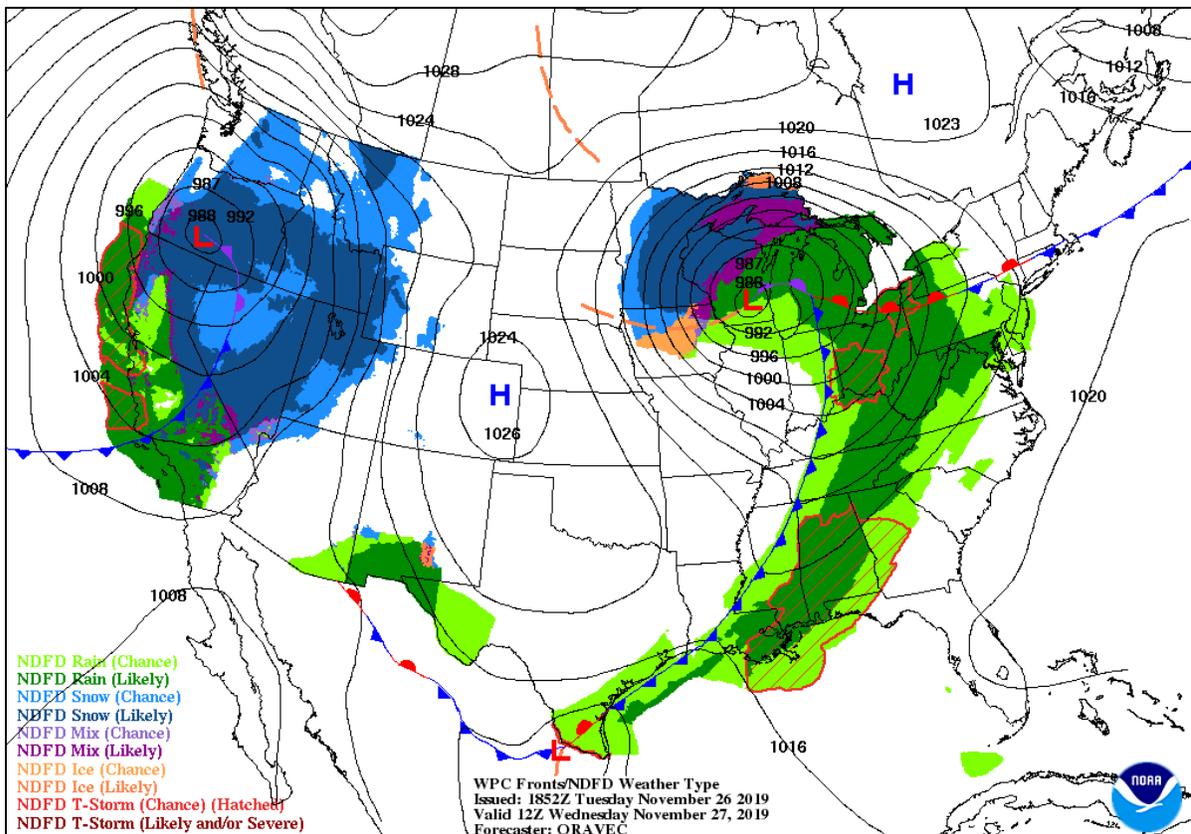
# Water and Climate Update

November 27, 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.

Snow .....	2	Other Climatic and Water Supply Indicators .....	11
Precipitation .....	3	Short- and Long-Range Outlooks.....	16
Temperature.....	6	More Information .....	18
Drought .....	8		

## Major winter storms hinder Thanksgiving travel



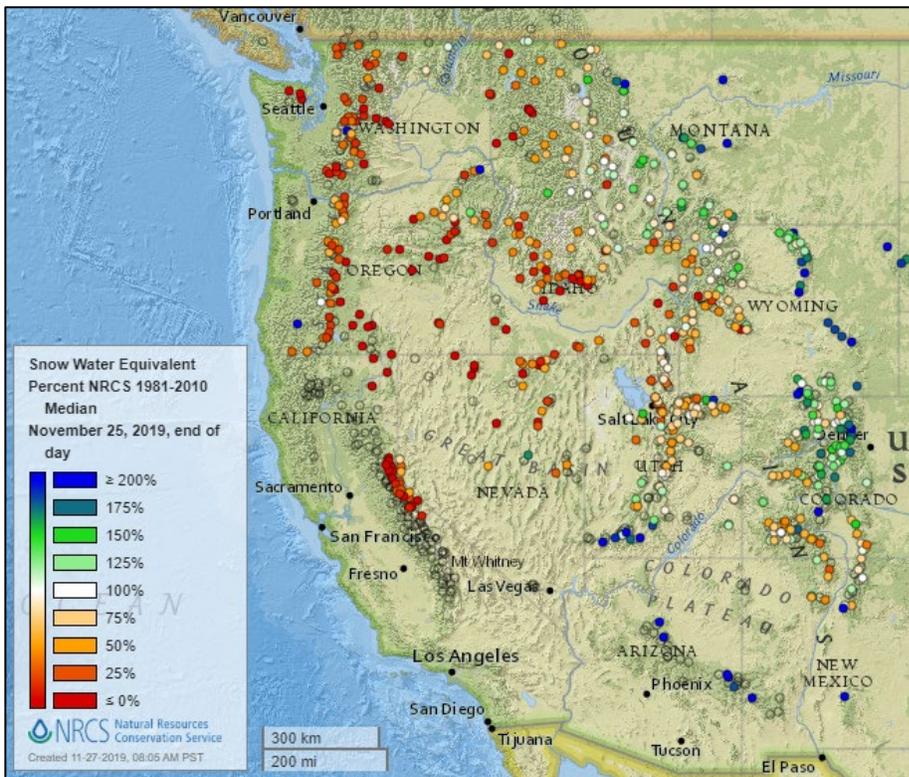
As reported by the National Weather Service, a powerful storm will shift from the Central Plains into the upper Midwest today bringing heavy snow and damaging winds to the region. The strong winds will move to the Northeast on Thanksgiving Day. In the West, a second powerful storm will deliver heavy mountain snow and strong winds to California and Oregon, with up to four feet of snow forecast for portions of the Sierra Nevada.

**Related:**

- [‘Stay Put,’ officials warn: Twin winter storms slam the US as 55 million travelers hit the road](#) USA Today
- [Heavy snow and wind could slam the brakes on Thanksgiving travel](#) NBC News
- [Thanksgiving Weather Updates: Minnesota is Hit Hard by Snow](#) The New York Times

**Snow**

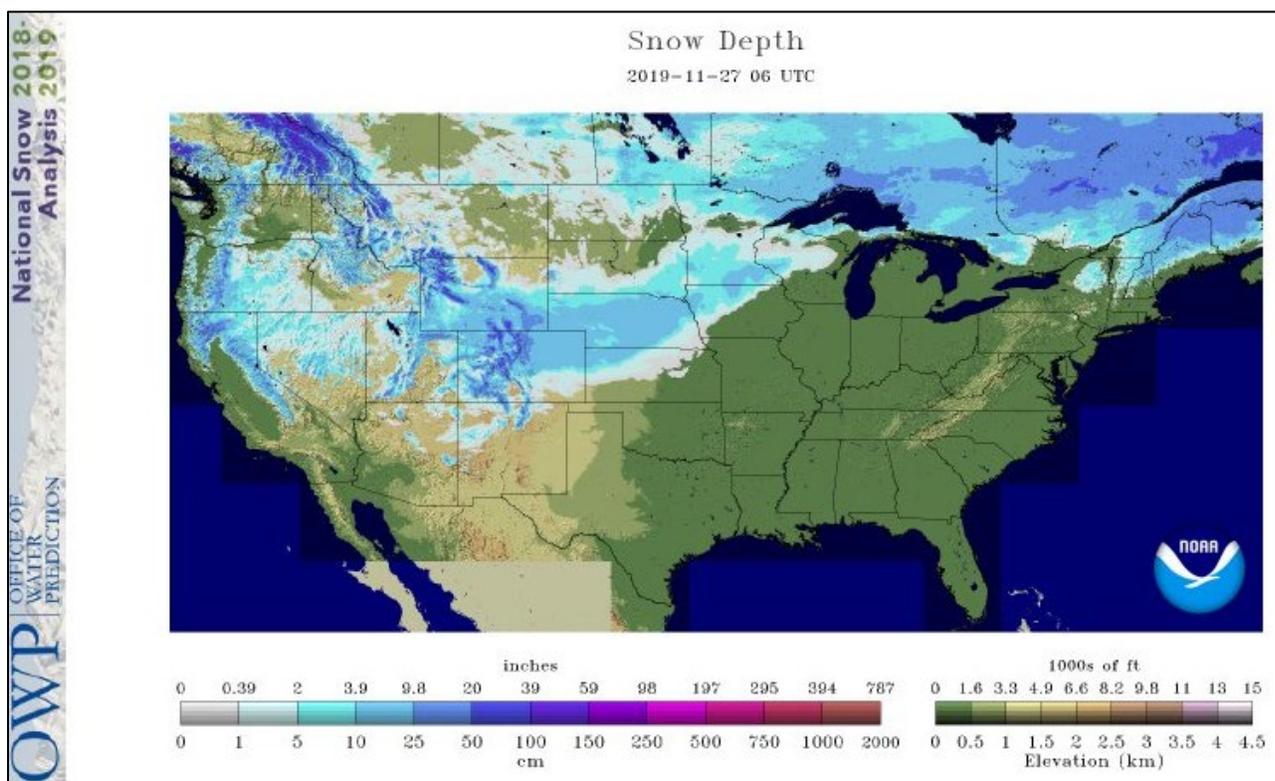
**Current Snow Water Equivalent, NRCS SNOTEL Network**



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

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

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

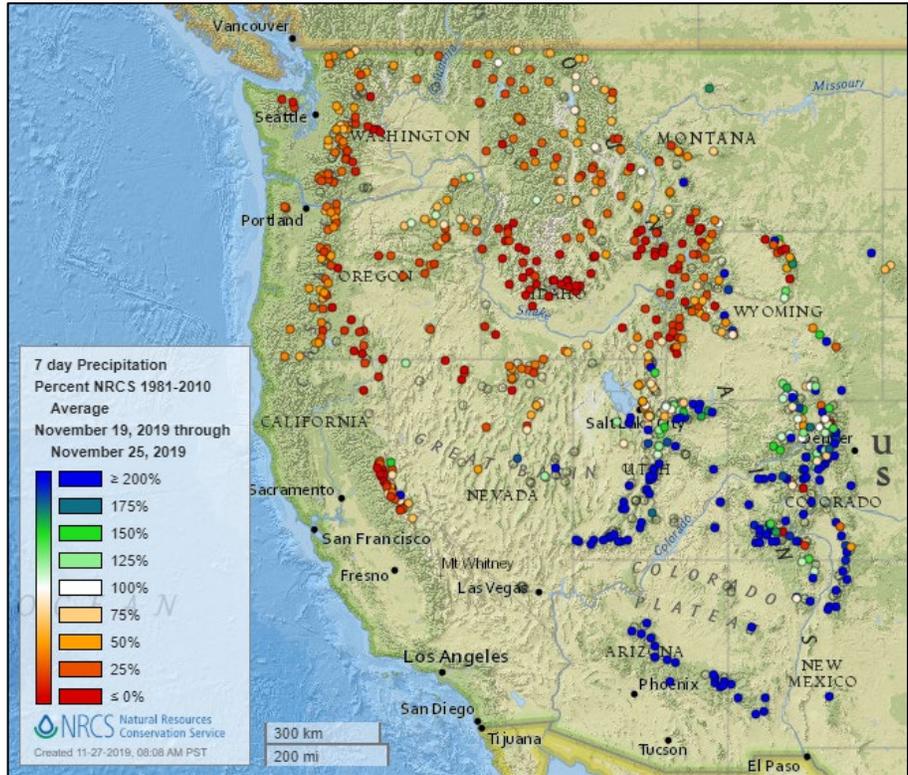


## Precipitation

### Last 7 Days, NRCS SNOTEL Network

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

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



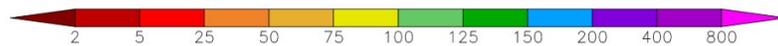
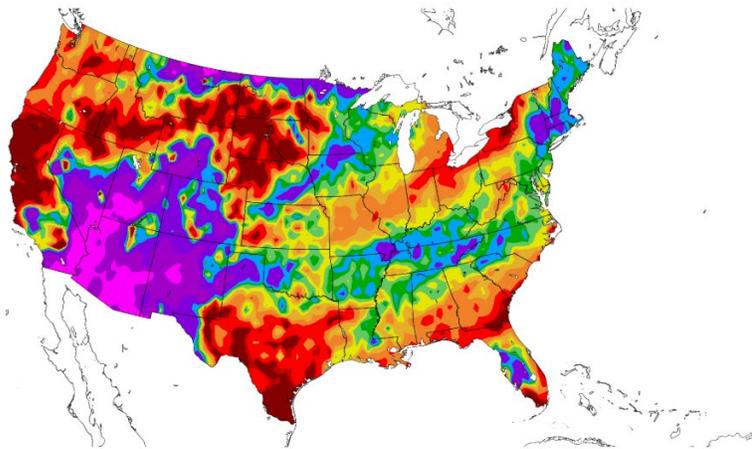
### Last 7 Days, National Weather Service (NWS) Networks

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 (%)  
11/19/2019 – 11/25/2019



Generated 11/26/2019 at HPRCC using provisional data.

NOAA Regional Climate Centers

# Water and Climate Update

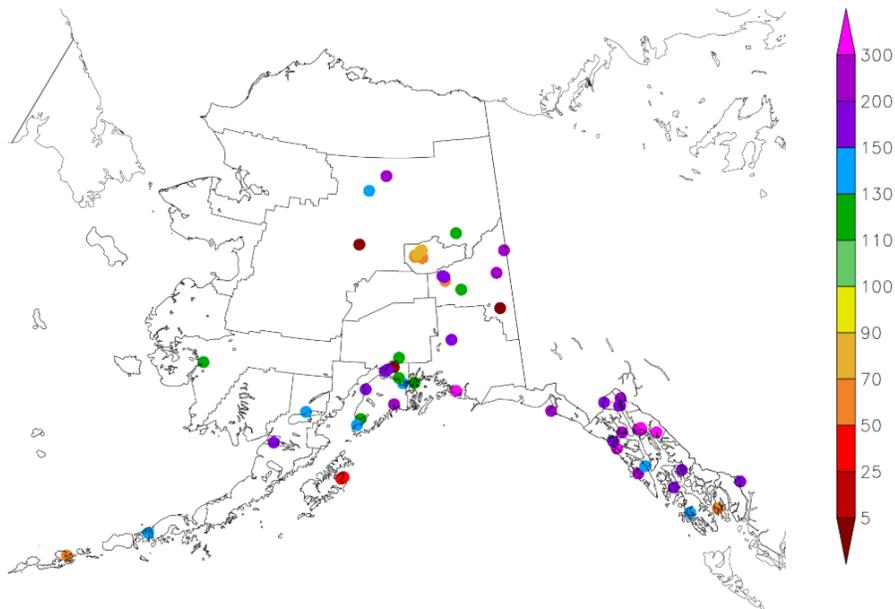
## Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

### Percent of Normal Precipitation (%) 11/19/2019 – 11/25/2019



Generated 11/26/2019 at HPRCC using provisional data.

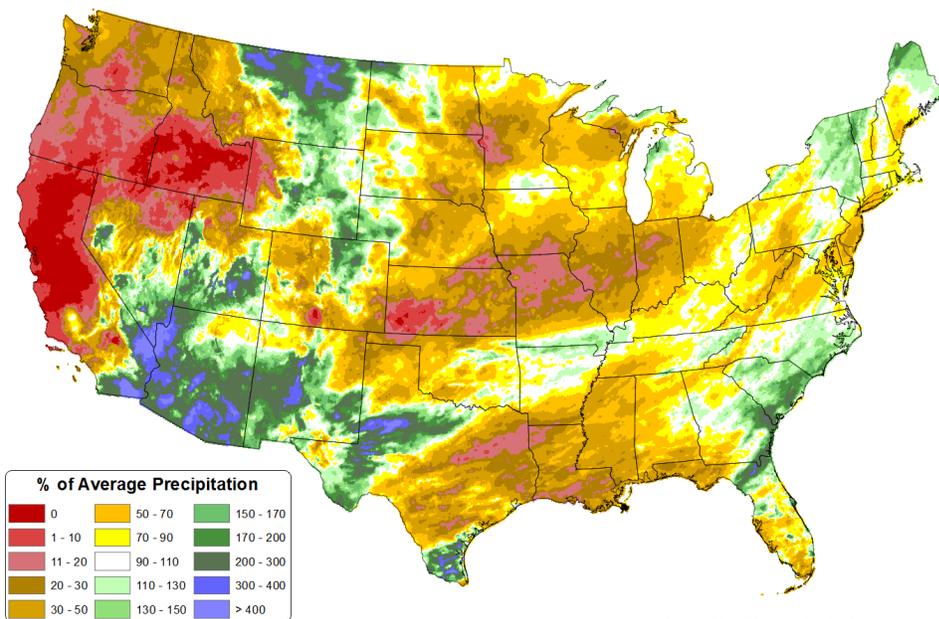
NOAA Regional Climate Centers

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

Source: PRISM

Total Precipitation Anomaly: 01 Nov 2019 - 26 Nov 2019  
Period ending 7 AM EST 26 Nov 2019  
Base period: 1981-2010  
(Map created 27 Nov 2019)

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



Copyright (c) 2019, PRISM Climate Group, Oregon State University

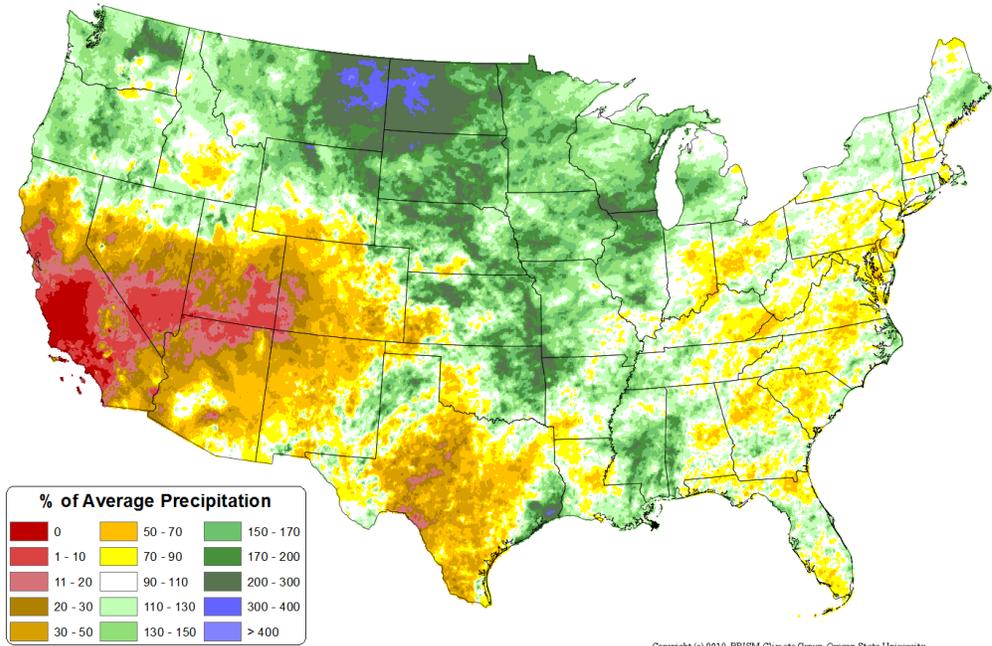
# Water and Climate Update

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

Source: PRISM

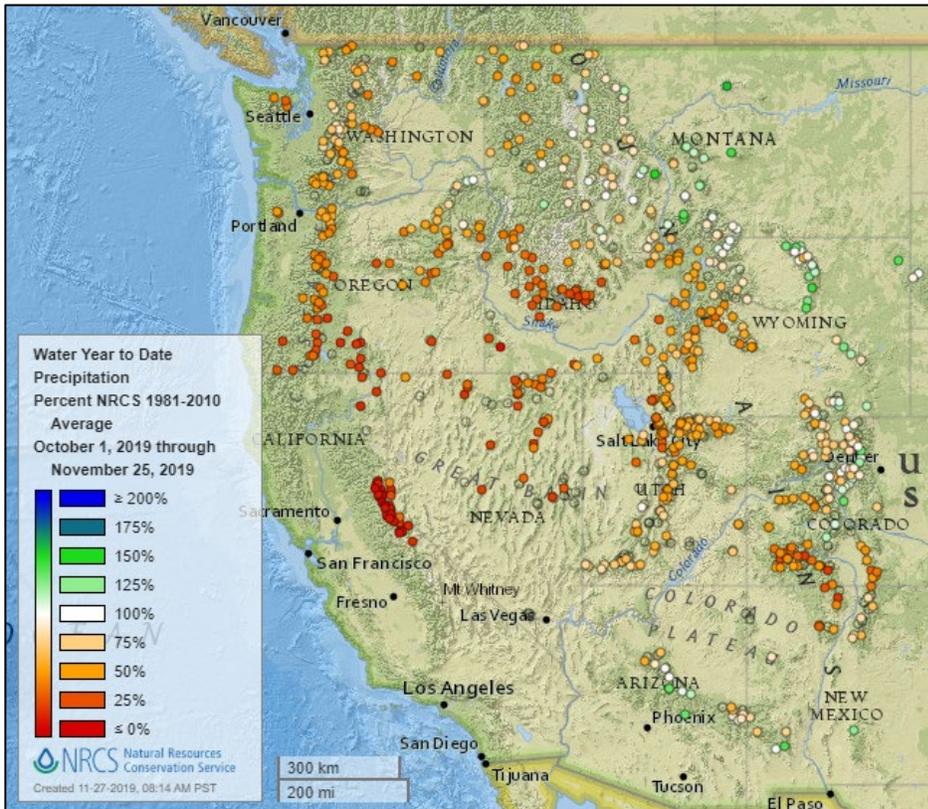
[August through October 2019 total precipitation percent of average map](#)

Total Precipitation Anomaly: Aug 2019 - Oct 2019  
Period ending 7 AM EST 31 Oct 2019  
Base period: 1981-2010  
(Map created 02 Nov 2019)



Copyright (c) 2019, PRISM Climate Group, Oregon State University

## 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

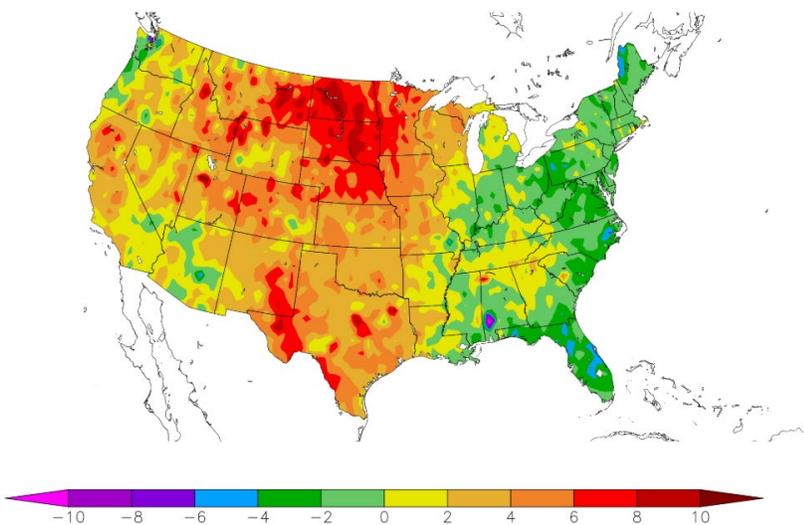
### Last 7 Days, National Weather Service (NWS) Networks

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)  
11/19/2019 – 11/25/2019



Generated 11/26/2019 at HPRCC using provisional data.

NOAA Regional Climate Centers

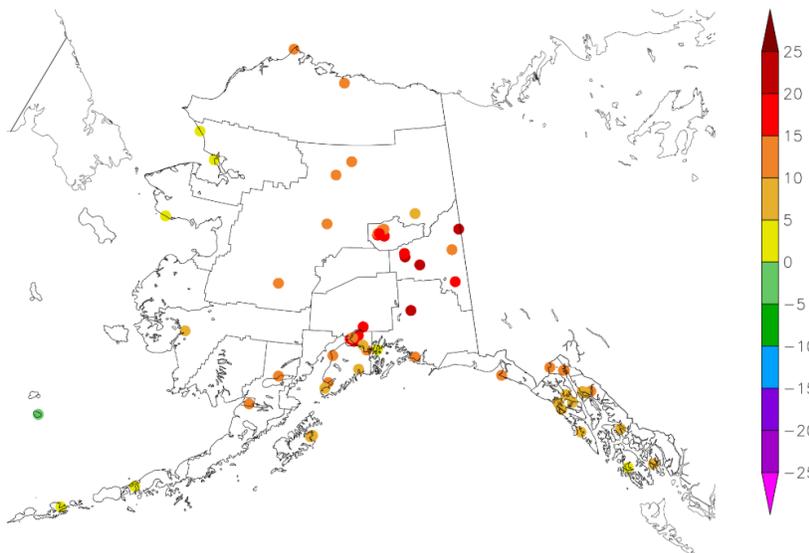
### Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)  
11/19/2019 – 11/25/2019



Generated 11/26/2019 at HPRCC using provisional data.

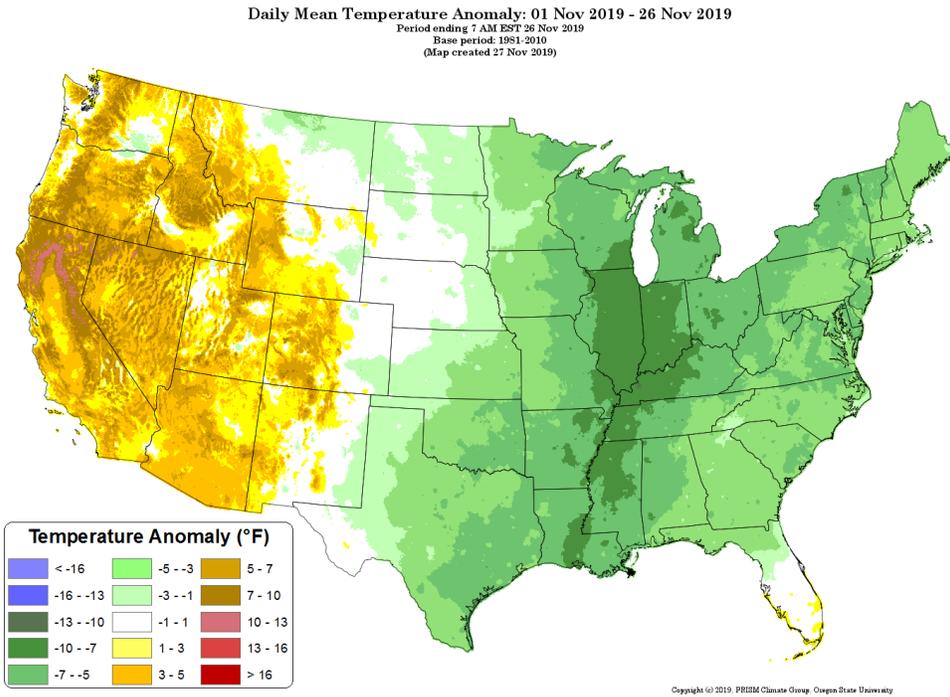
NOAA Regional Climate Centers

# Water and Climate Update

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

Source: PRISM

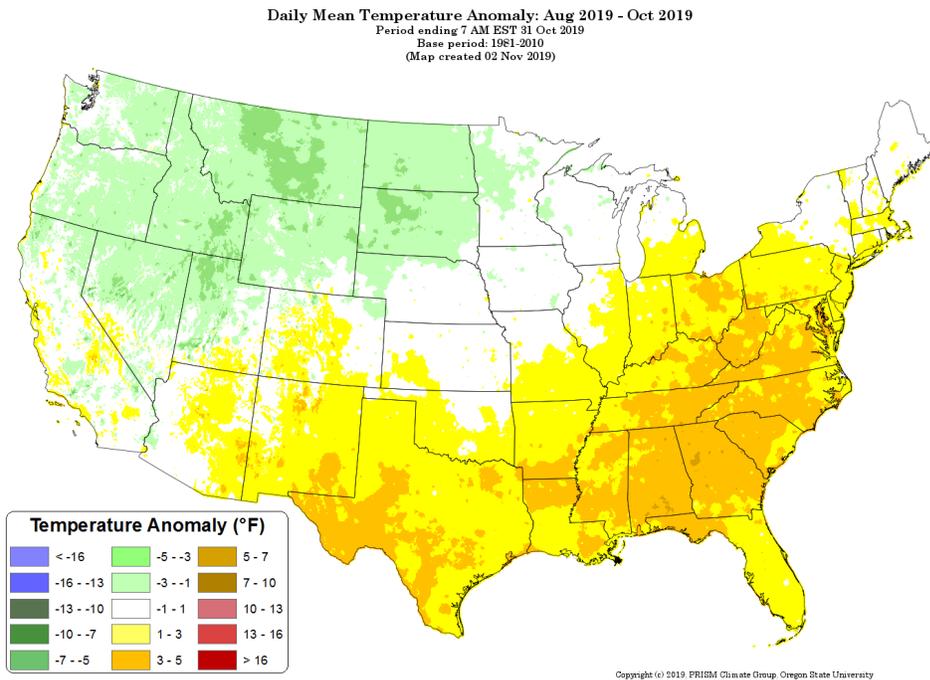
[Month-to-date national daily mean temperature anomaly map](#)



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

Source: PRISM

[August through October 2019 daily mean temperature anomaly map](#)



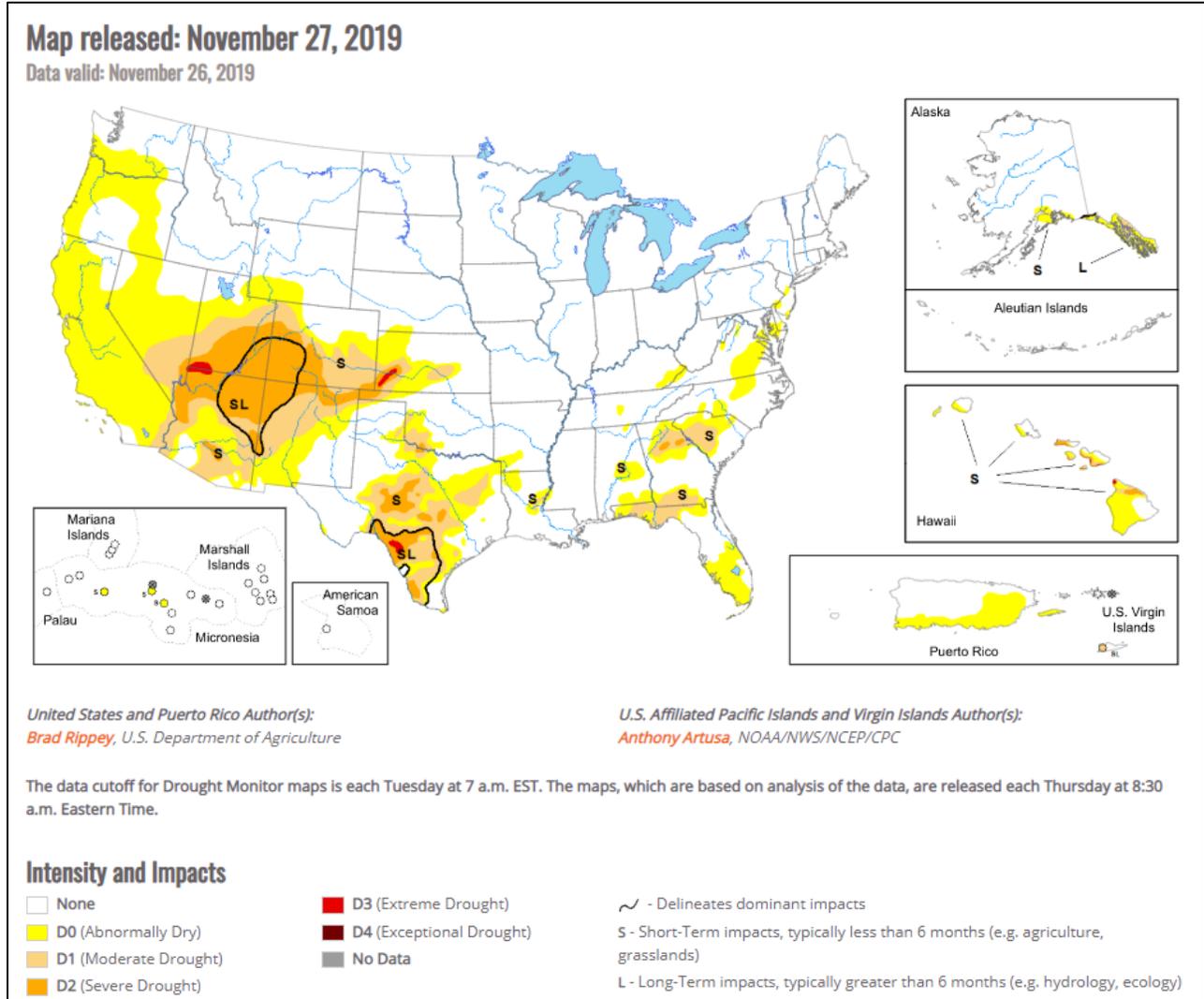
## Drought

### [U.S. Drought Monitor](#)

Source: National Drought Mitigation Center

### [U.S. Drought Portal](#)

Source: NOAA



### Current [National Drought Summary](#), November 27, 2019

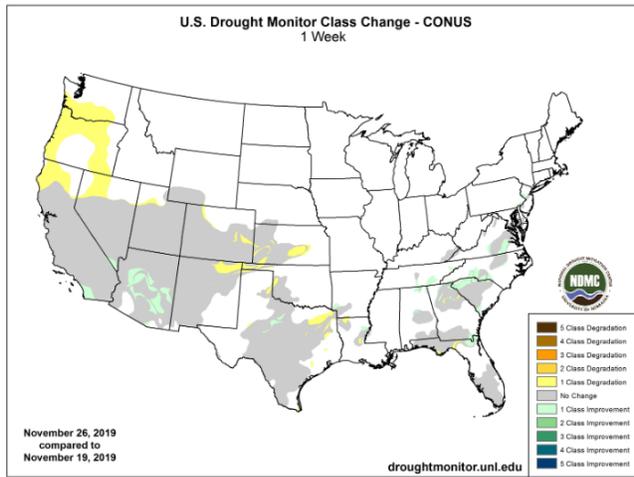
Source: National Drought Mitigation Center

“Mild weather returned across much of the country for several days, following a mid-November cold blast in the central and eastern United States. Meanwhile, significant precipitation fell during the drought-monitoring period in several areas, including the Southwest and interior Southeast. The Southwestern precipitation, which reversed a drying trend that began with a sub-par monsoon season, provided much-needed moisture and limited drought relief. In contrast, little precipitation fell in the Northwest, which continued to experience an increase in dryness-related impacts (e.g. poor snowpack, low streamflow, and dry soils). Farther east, rain further chipped away at lingering dryness across the South and East. Patchy drought persisted, however, across portions of the central and southern Plains, leading to adverse effects on some rangeland, pastures, and winter grains. As the drought-monitoring period ended on November 26, a pair of major storm systems—one emerging from the central Rockies and the other approaching the Pacific Coast—brought the promise of widespread precipitation that will be evaluated for next week’s U.S. Drought Monitor.”

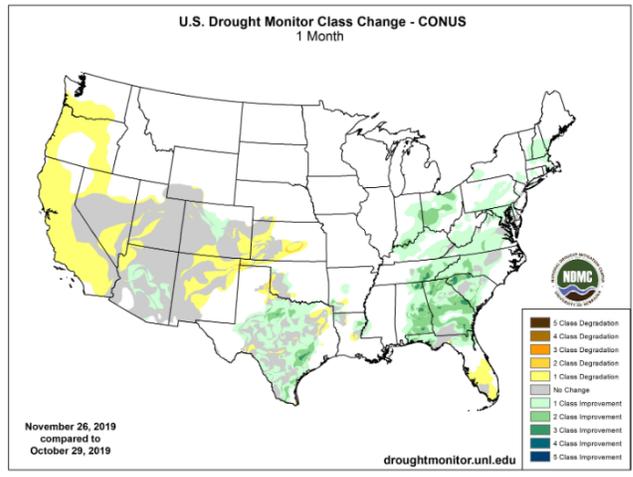
## Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

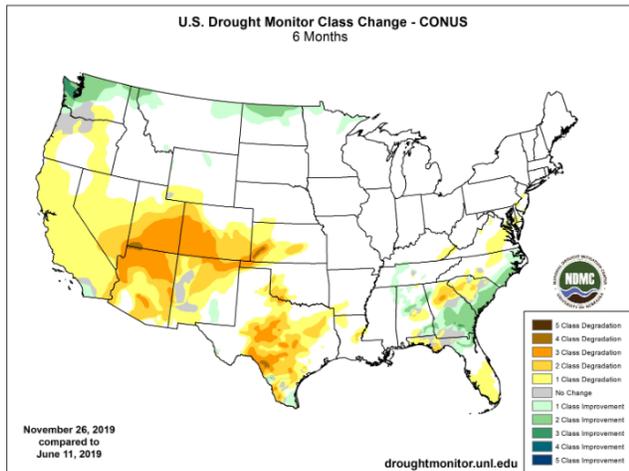
### 1 Week



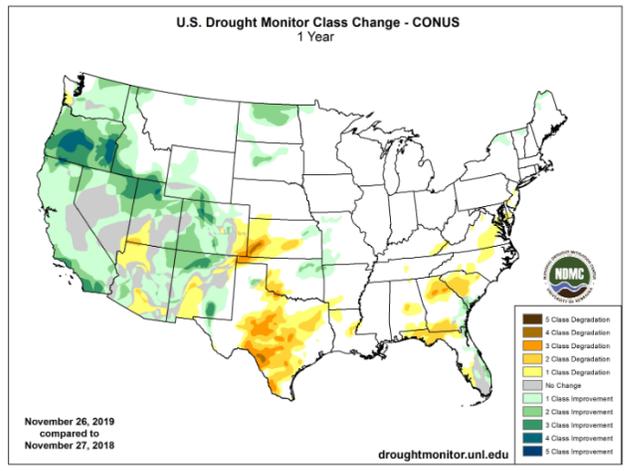
### 1 Month



### 6 Months



### 1 Year



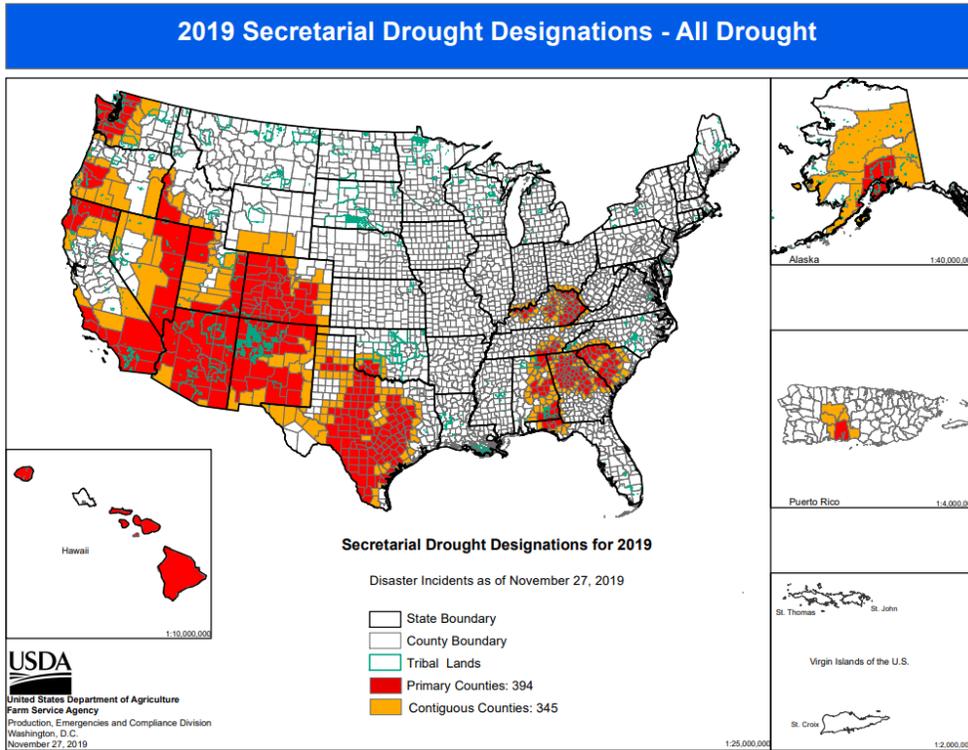
[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

## Highlighted Drought Resources

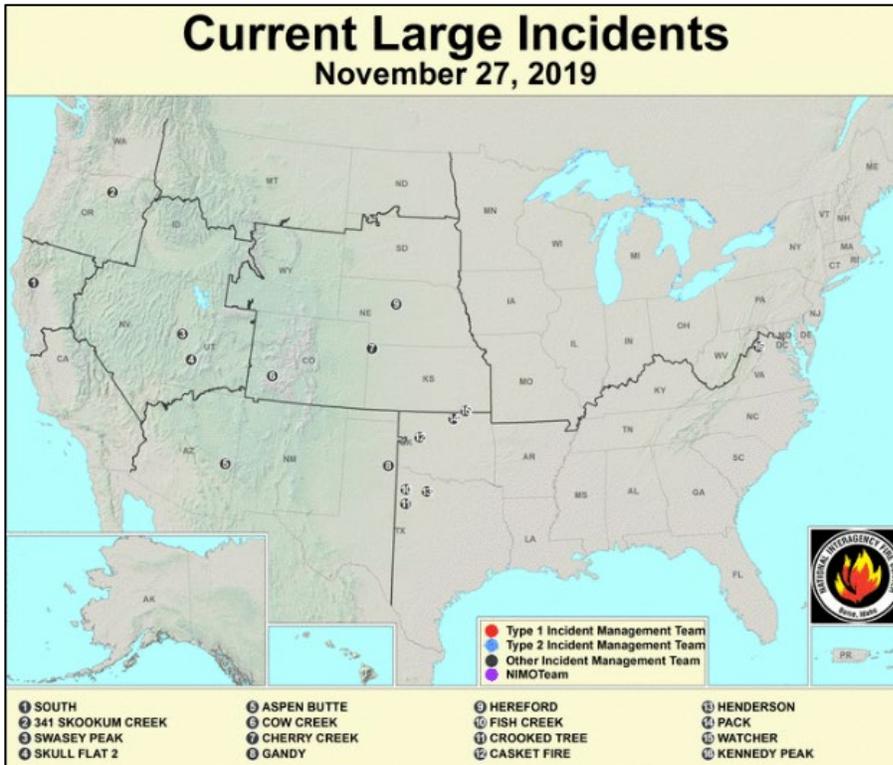
- [Drought Impact Reporter](#)
- [Quarterly Regional Climate Impacts and Outlook](#)
- [U.S. Drought Portal Indicators and Monitoring](#)
- [U.S. Population in Drought, Weekly Comparison](#)
- [USDA Disaster and Drought Information](#)

**Secretarial Drought Designations**

Source: USDA Farm Service Agency



**Wildfires: USDA Forest Service Active Fire Mapping**



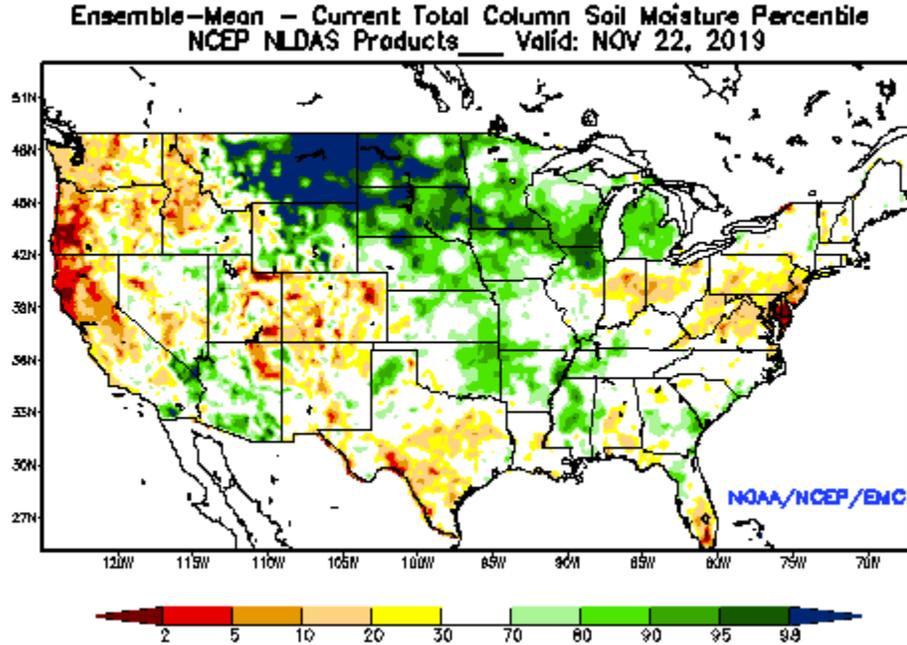
**Highlighted Wildfire Resources**

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

## Other Climatic and Water Supply Indicators

### Soil Moisture

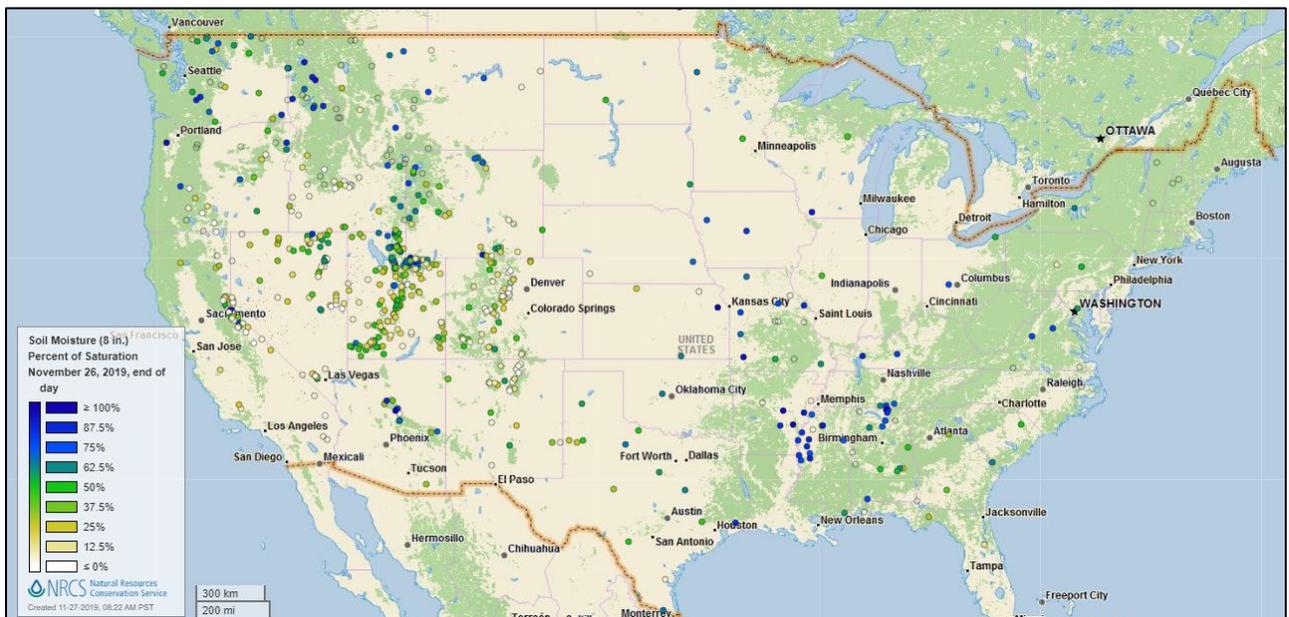
Source: NOAA National Centers for Environmental Prediction



[Modeled soil moisture percentiles](#) as of November 22, 2019

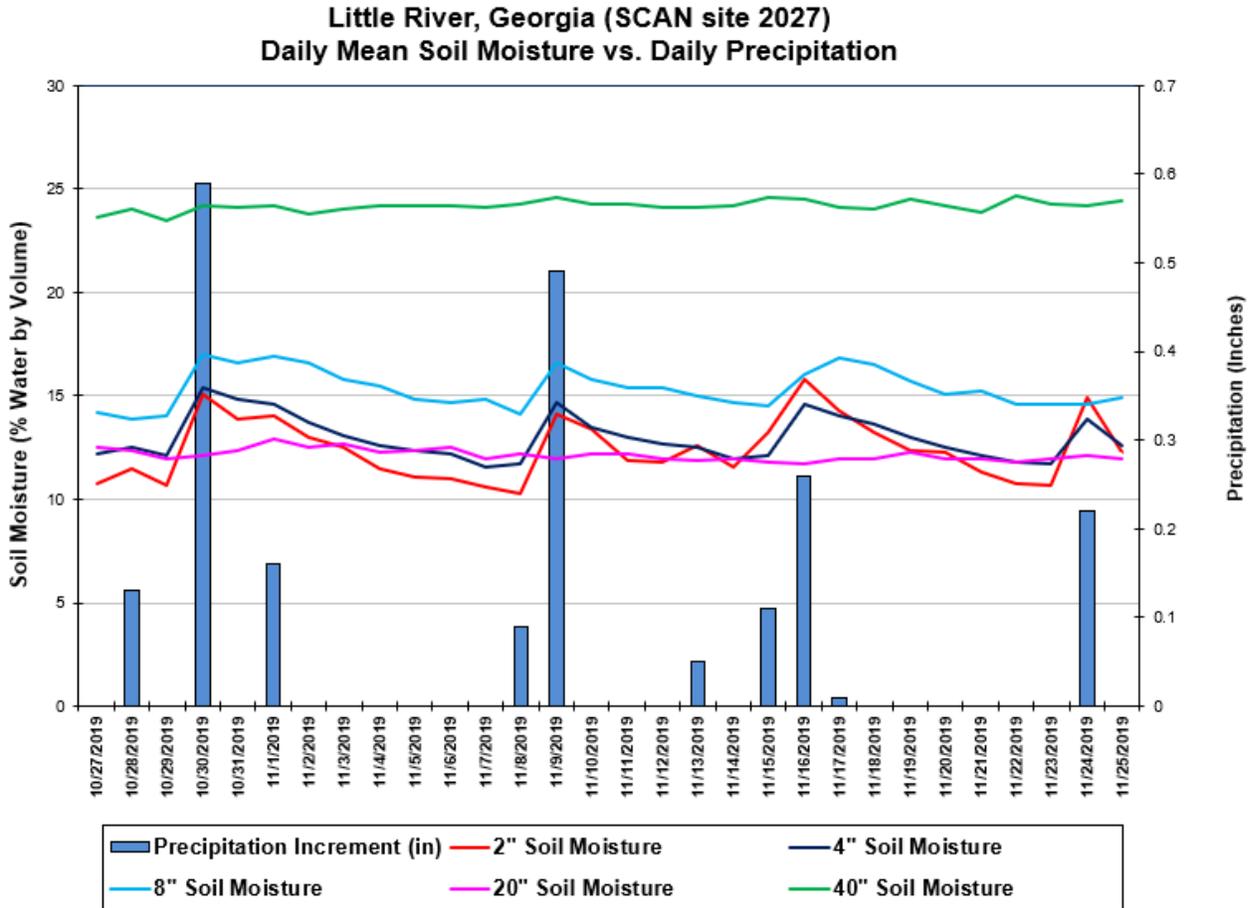
### Soil Moisture Percent of Saturation

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 [Little River SCAN site](#) in Georgia. Several precipitation events during the month resulted in an increase in soil moisture at the -2", -4", and -8" sensor depths. The -20" and -40" sensors responded slightly to the events.

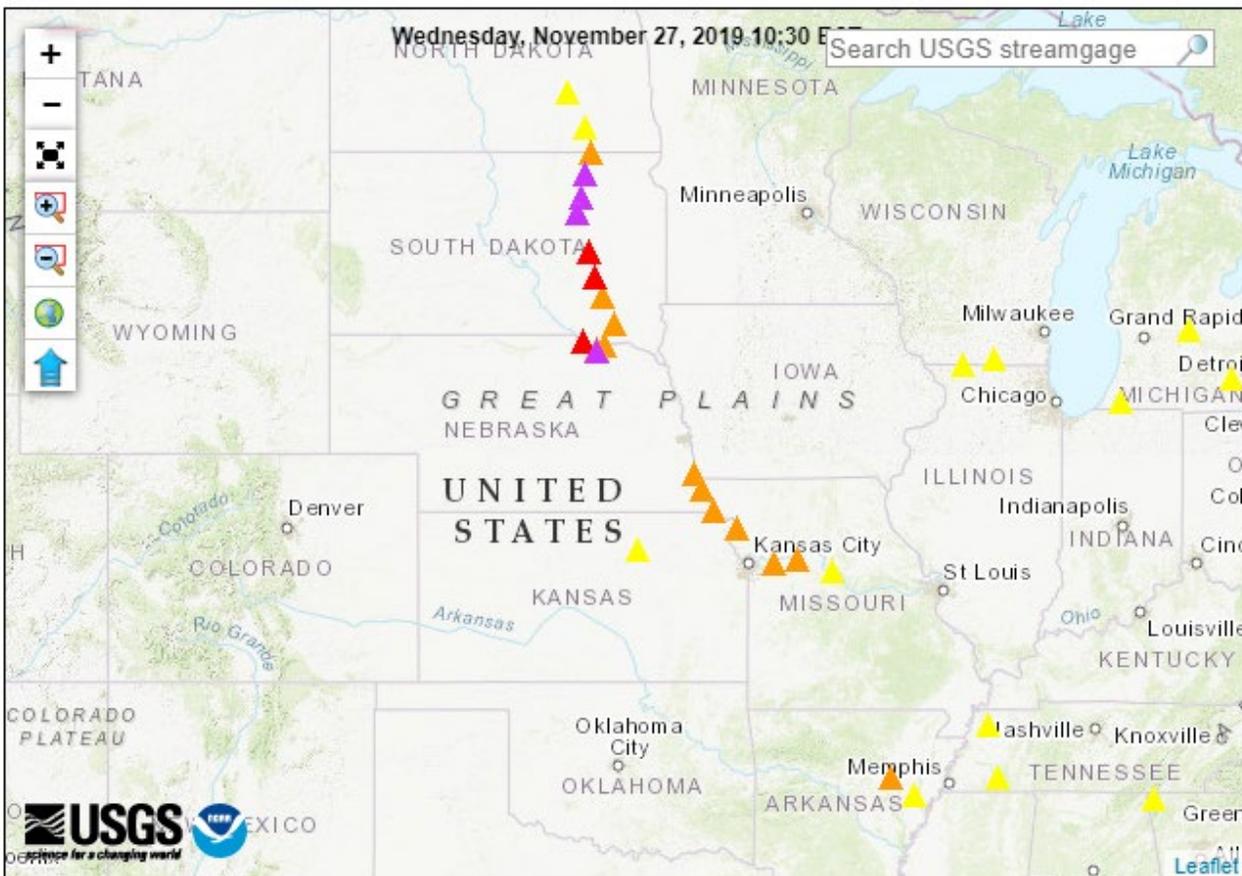
**Soil Moisture Data Portals**

- [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**  
 (20 in floods [major: 5, moderate: 3, minor: 12], 13 in near-flood)



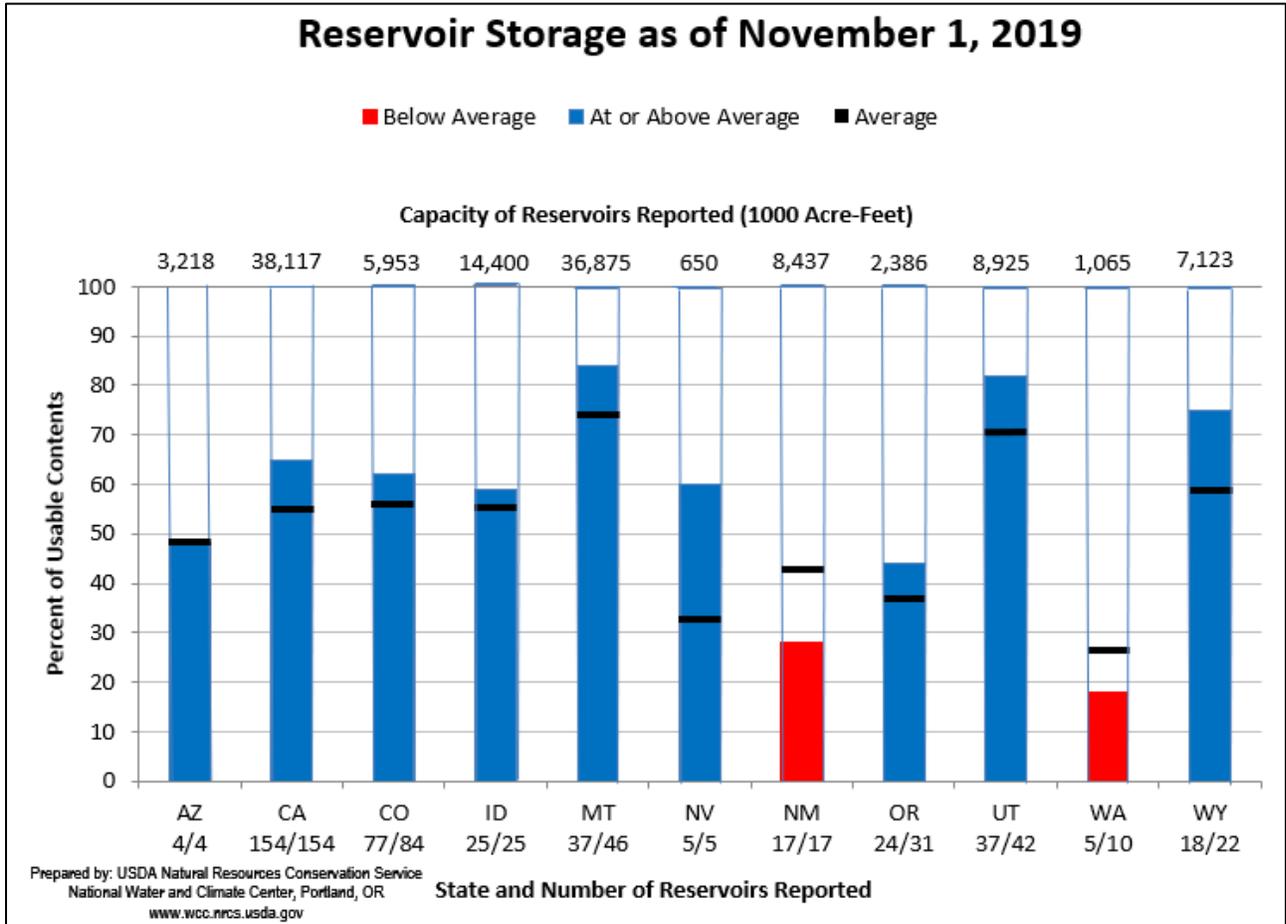
Explanation - Percentile classes						
<95	95-98	>= 99	Above action stage	Above flood stage	Above moderate flood stage	Above major flood stage
			△ Streamgage with flood stage	○ Streamgage without flood stage		

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

## Reservoir Storage

### Western States Reservoir Storage

Source: NRCS National Water and Climate Center



November 1, 2019 Reservoir Storage: [Chart](#) | [Dataset](#)

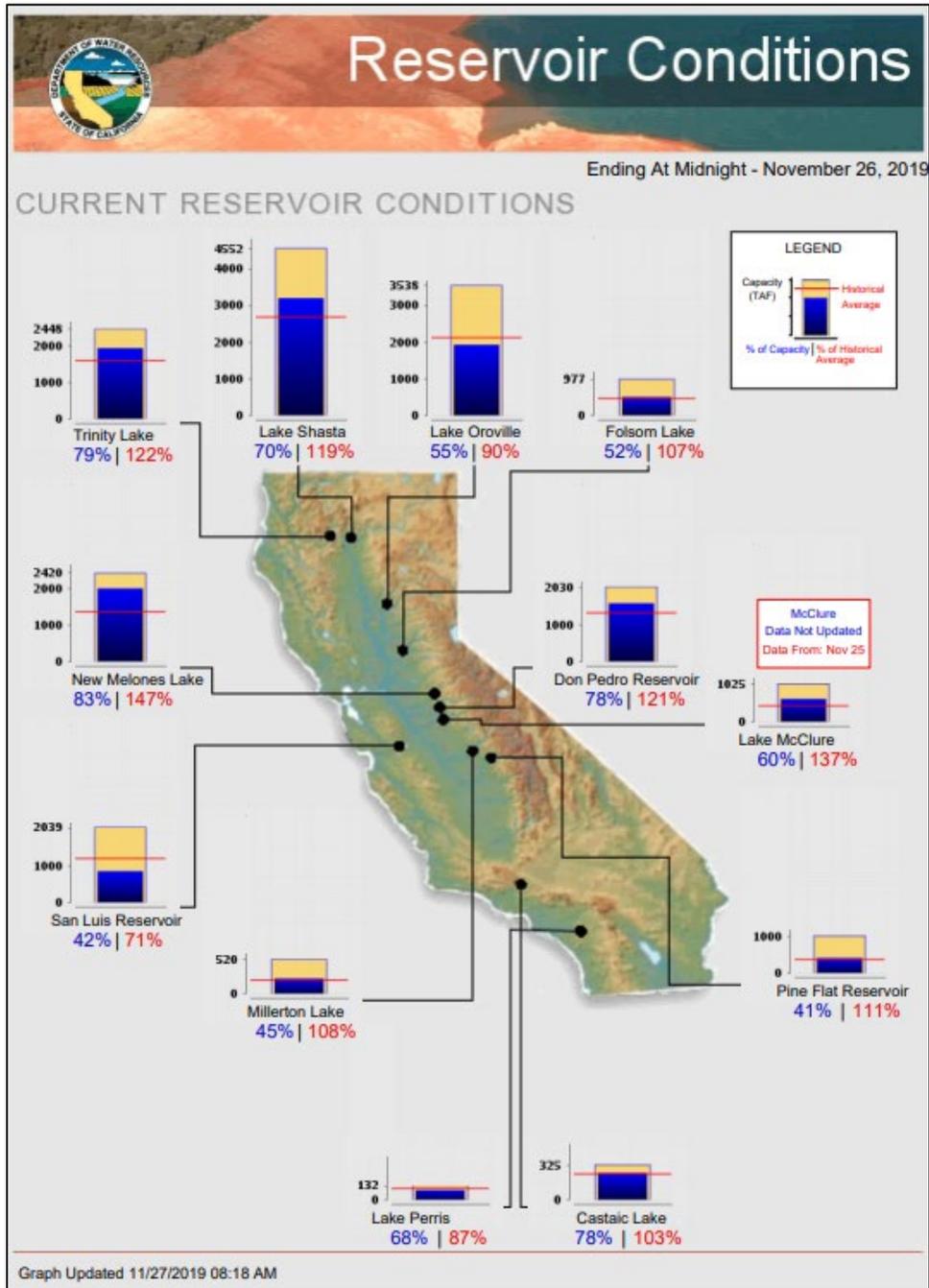
### Hydromet Tea Cup Reservoir Depictions

Source: U.S. Bureau of Reclamation

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

**Current California Reservoir Conditions**

Source: California Department of Water Resources



[Current California Reservoir Conditions](#)

## Short- and Long-Range Outlooks

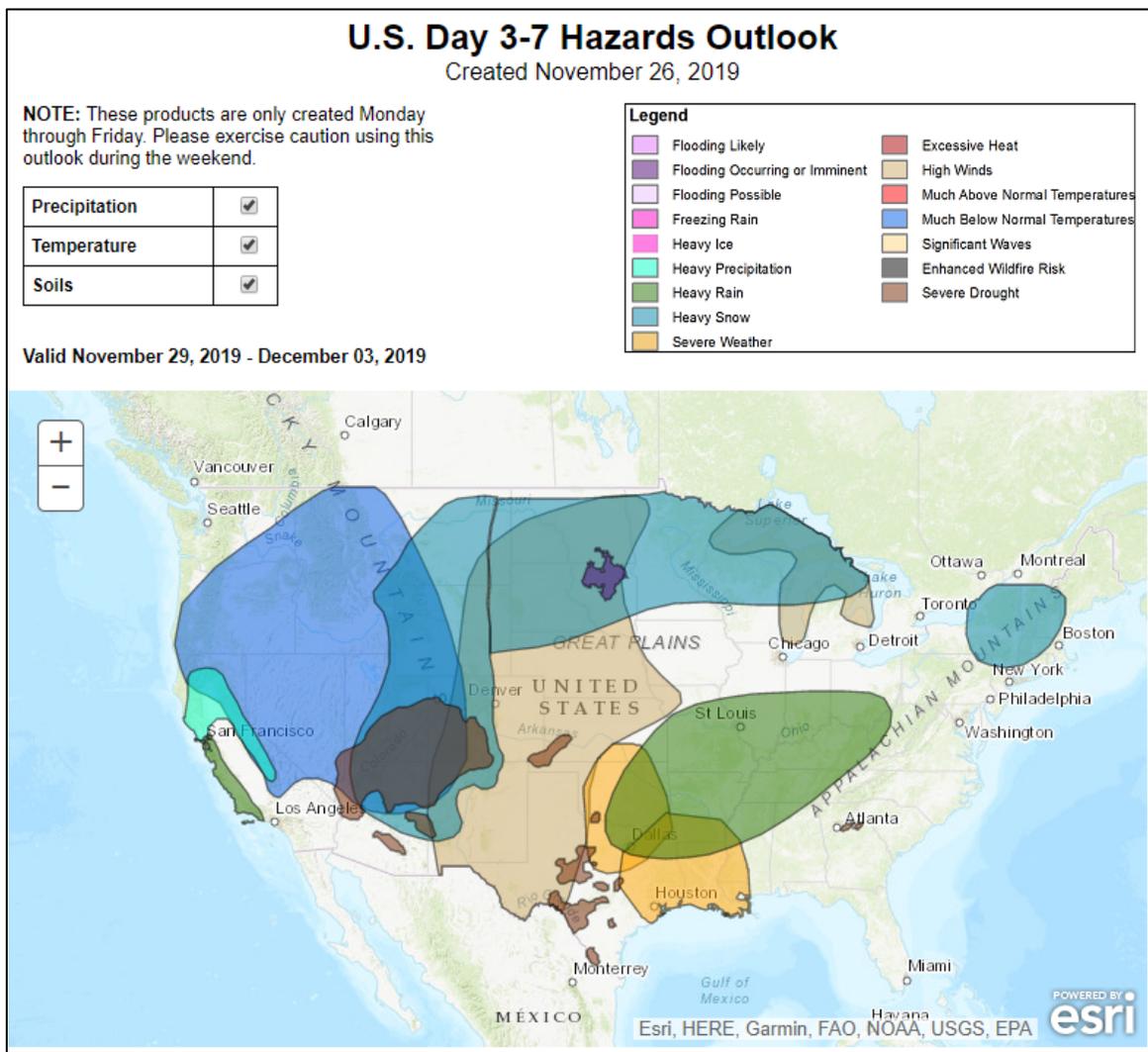
### Agricultural Weather Highlights

Author: Mark Brusberg, Chief Meteorologist, USDA/OCE/WAOB

**National Outlook, Wednesday, November 26, 2019:** “The storm system currently crossing the Great Lakes region will reach New England early Thanksgiving Day. After the storm departs, Midwestern weather conditions will temporarily improve. Meanwhile, the Western storm will drive southeastward on Thanksgiving Day before traversing the Four Corners States on Friday. Mountain snow, valley rain, and high winds will continue to affect large sections of the West into Saturday. During the weekend, the low-pressure system will drift eastward across the central Plains and Midwest, generating wind and snow across the northern U.S. and showers and thunderstorms in the South. Elsewhere, a new Pacific storm system will deliver another round of rain and snow showers to the West Coast States, starting on Saturday. The NWS 6- to 10-day outlook for December 2 – 6 calls for the likelihood of near- or below-normal temperatures nationwide, except for warmer-than-normal weather in coastal California and across portions of the southern High Plains and the Southwest. Meanwhile, near- or below-normal precipitation in the eastern half of the country should contrast with wetter-than-normal conditions from California to the Rockies and northern High Plains.”

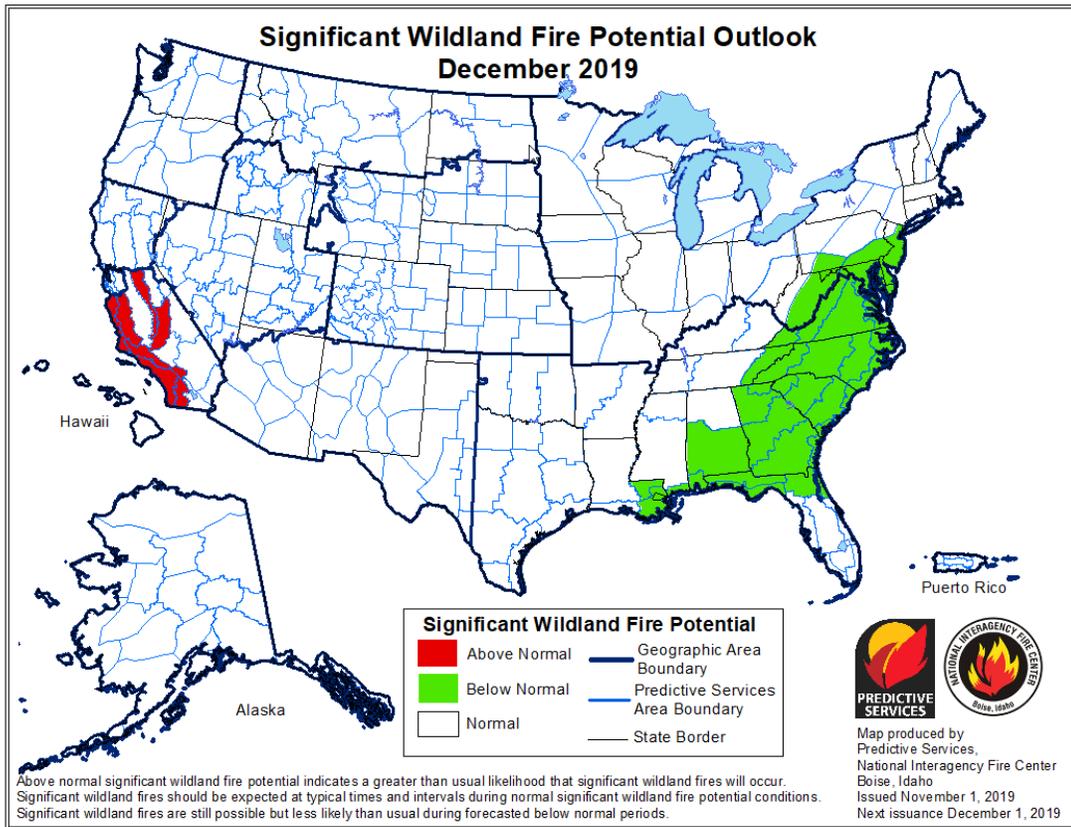
### Weather Hazards Outlook: [November 29 – December 3, 2019](#)

Source: NOAA Climate Prediction Center



**Significant Wildland [Fire Potential Outlook](#)**

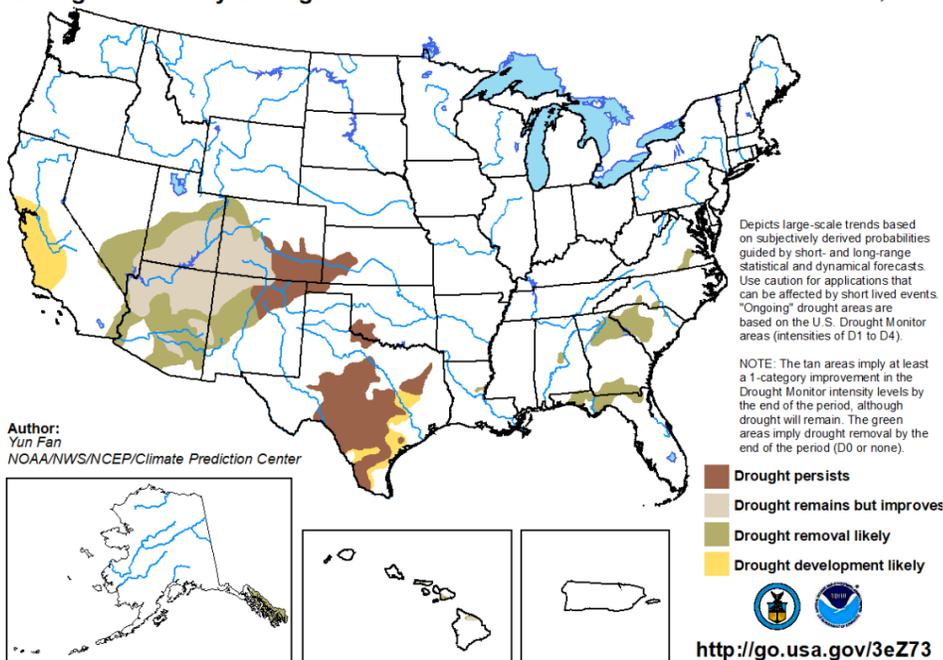
Source: National Interagency Fire Center



**Seasonal Drought Outlook: [November 21, 2019 – February 29, 2020](#)**

Source: National Weather Service

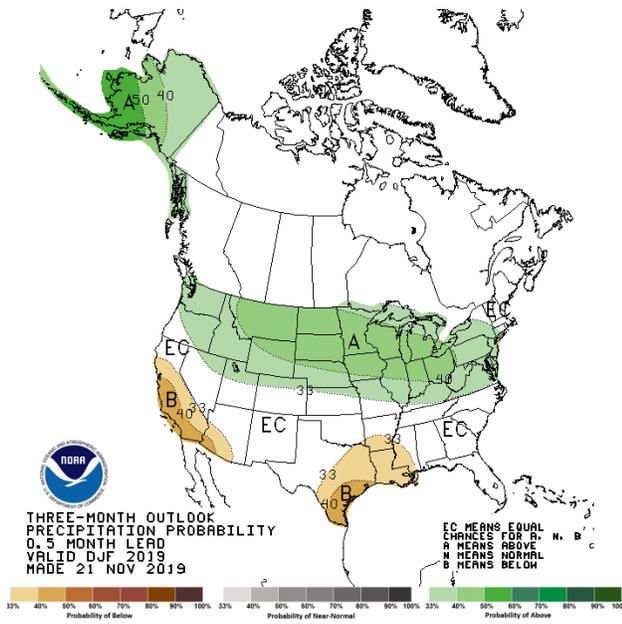
**U.S. Seasonal Drought Outlook** *Valid for November 21, 2019 - February 29, 2020*  
**Drought Tendency During the Valid Period** *Released November 21, 2019*



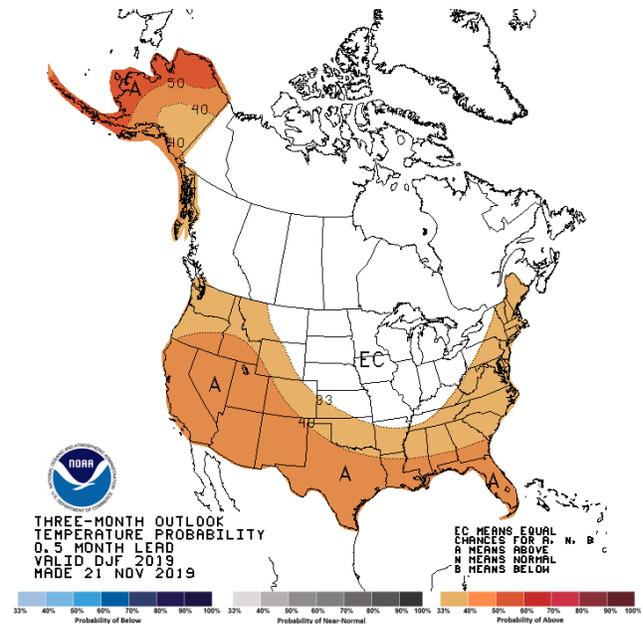
### Climate Prediction Center 3-Month Outlook

Source: National Weather Service

#### Precipitation



#### Temperature



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