

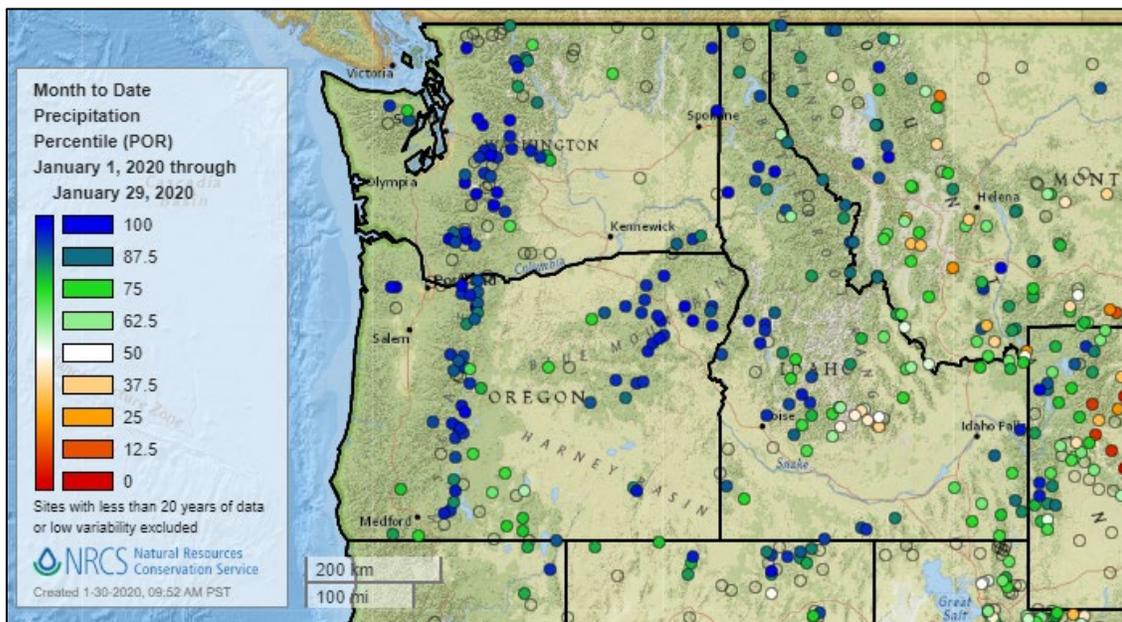
# Water and Climate Update

January 30, 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	Other Climatic and Water Supply Indicators .....	13
Precipitation .....	4	Short- and Long-Range Outlooks.....	18
Temperature.....	8	More Information .....	20
Drought .....	10		

## Heavy precipitation tops January records at SNOTEL sites in the Northwest

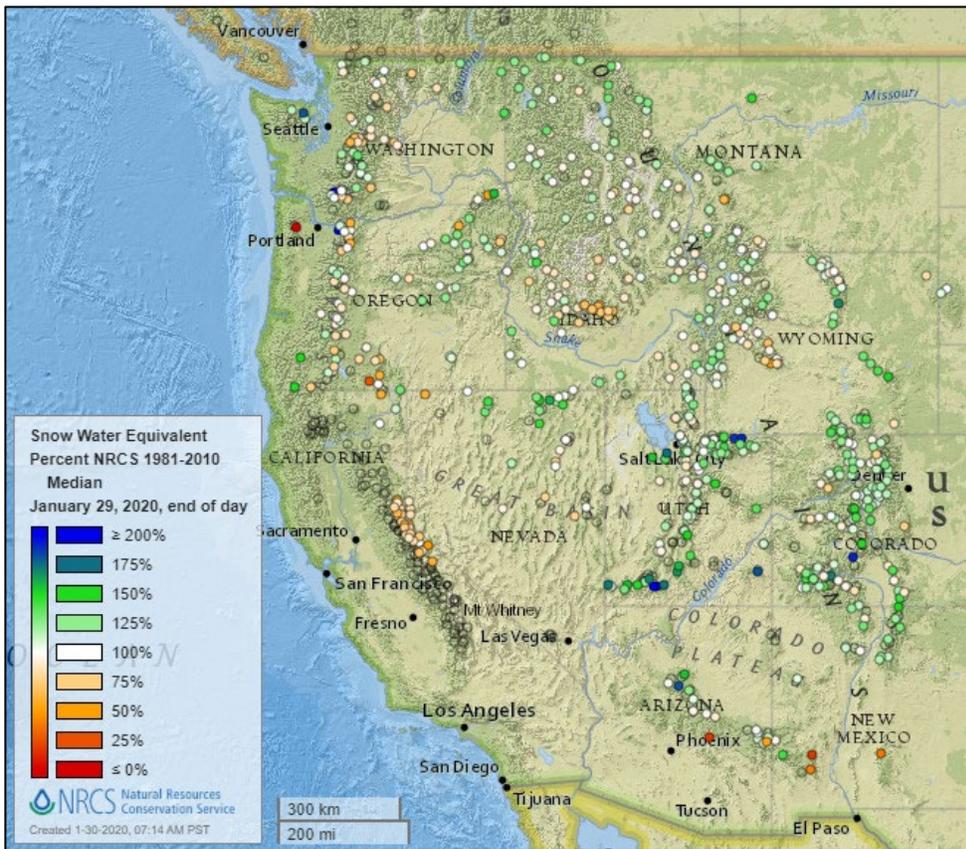


January storms have produced heavy amounts of precipitation in the Pacific Northwest. Most SNOTEL sites in the Cascades and northern Rocky Mountains reported January in the top 10 percentile on record for the month. Many additional sites west of the Cascades are at or near record amounts of rainfall. Saturated soils have caused landslides impacting roads in parts of the region. A series of warm, atmospheric rivers have kept the snowpack from building at the same near-record rate. Most SNOTEL sites in this region are at or below normal snow water equivalent (SWE), with the colder northern Rockies having a few more stations with slightly above normal SWE.

**Related:**

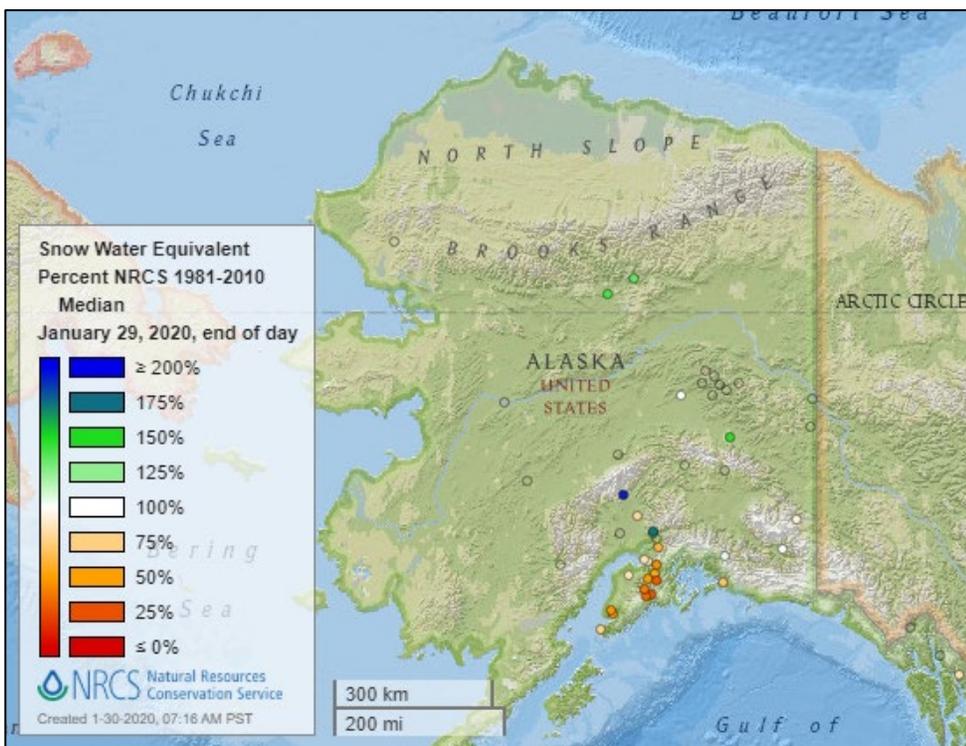
- [It's been one of the soggiest Januaries ever in Seattle — and more is on the way](#) – Seattle Times (WA)
- [Wet January leads to landslides across western Washington](#) – KING5 (WA)
- [January Rain Approaches Records With More Wet Weather On Tap](#) - Patch
- [Series of storms takes aim at Northwest, heavy rain and mountain snow expected](#) – ABC
- [Seattle status check: Still rainy, still haven't had a sunny day in nearly 2 months](#) – Seattlepi.com (WA)
- [Heavy rain, flooding and possibly more snow on the way for Whatcom residents](#) – The Bellingham Herald (WA)
- [It's rained nearly every day this month in Tacoma, and it's not over yet](#) – News Tribune (WA)

# Snow



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

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

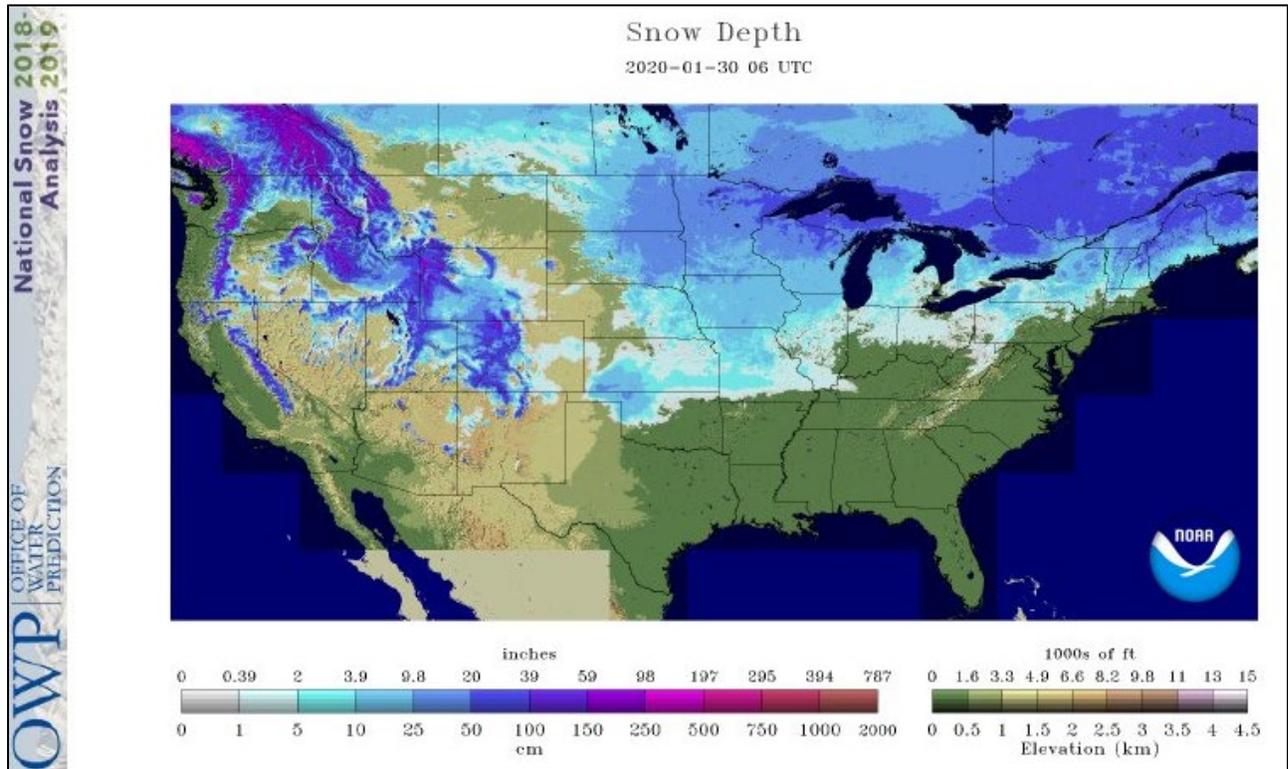


[Alaska snow water equivalent percent of median map](#)

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

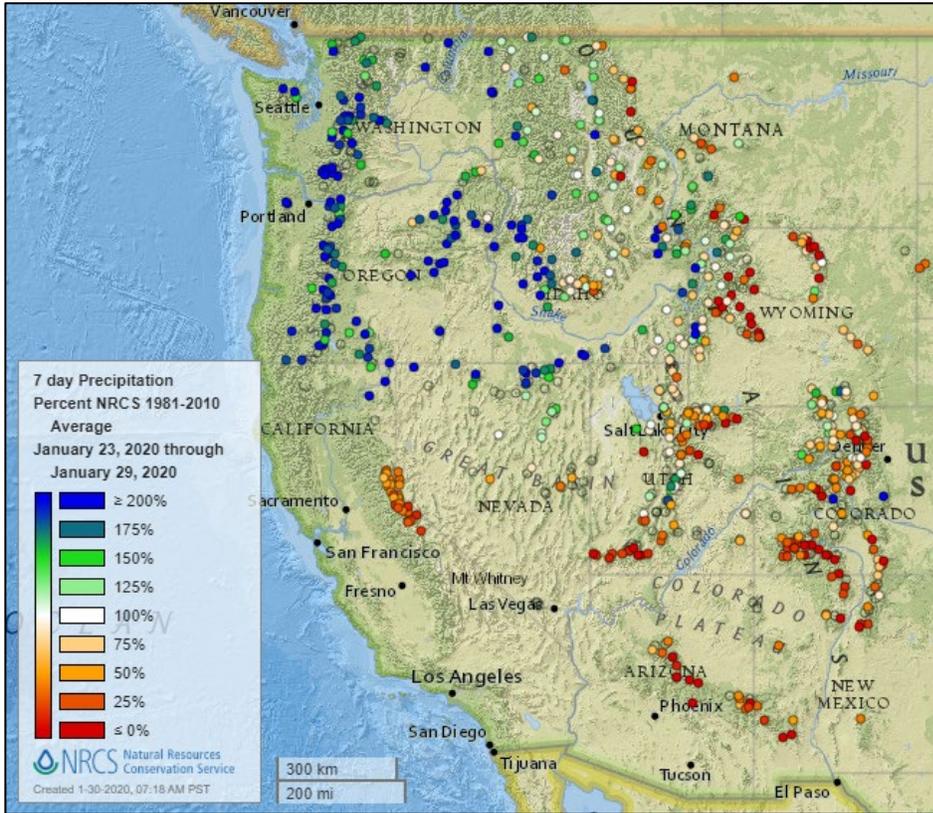
**Current Snow Depth, National Weather Service Snow Analysis**

Source: NOAA Office of Water Prediction



# Precipitation

## Last 7 Days, NRCS SNOTEL Network

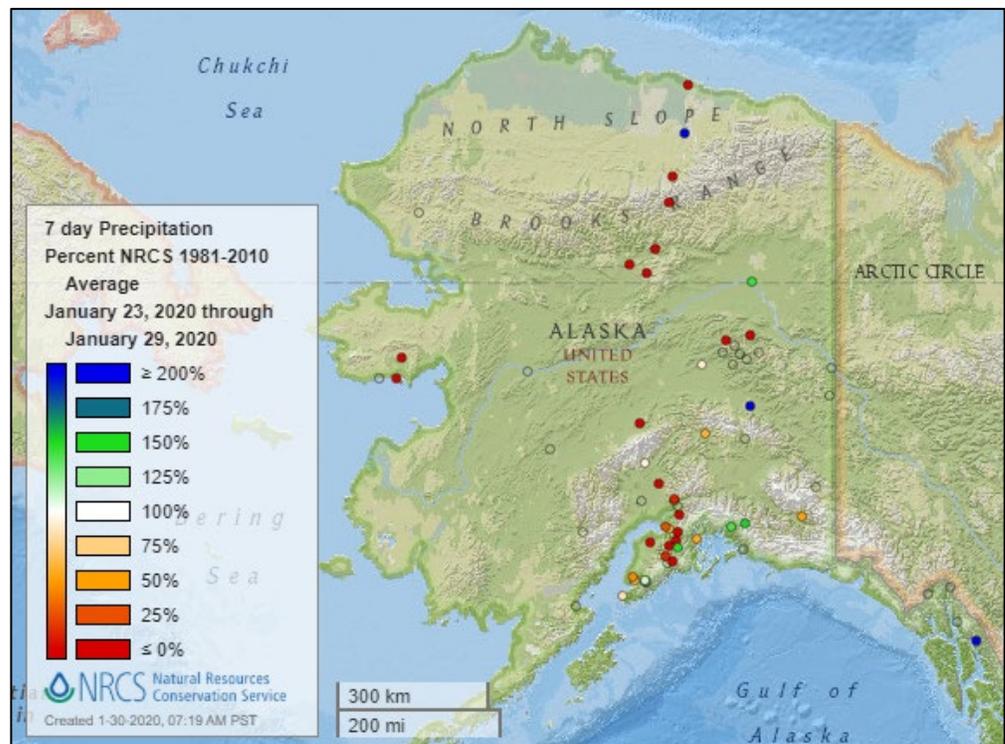


[7-day precipitation percent of average map](#)

**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](#)



# Water and Climate Update

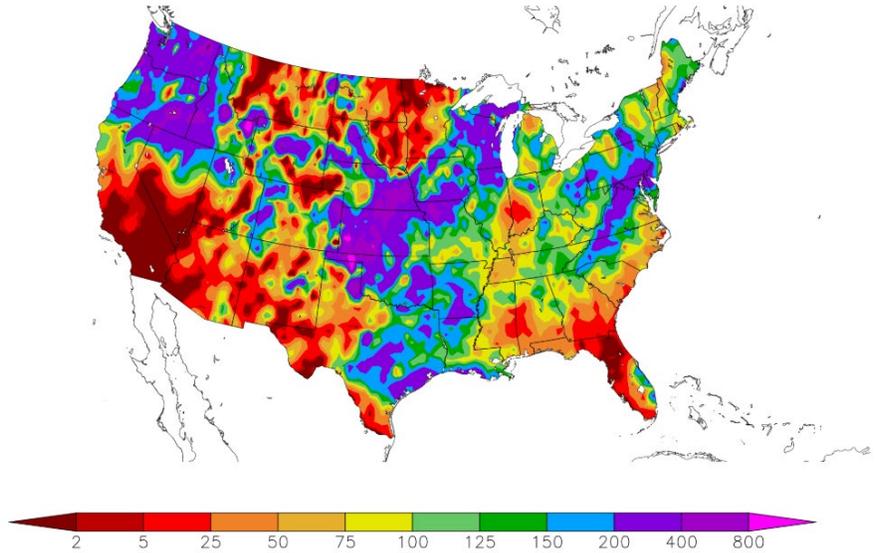
## Last 7 Days, National Weather Service (NWS) Networks

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 (%)  
1/22/2020 – 1/28/2020



Generated 1/29/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

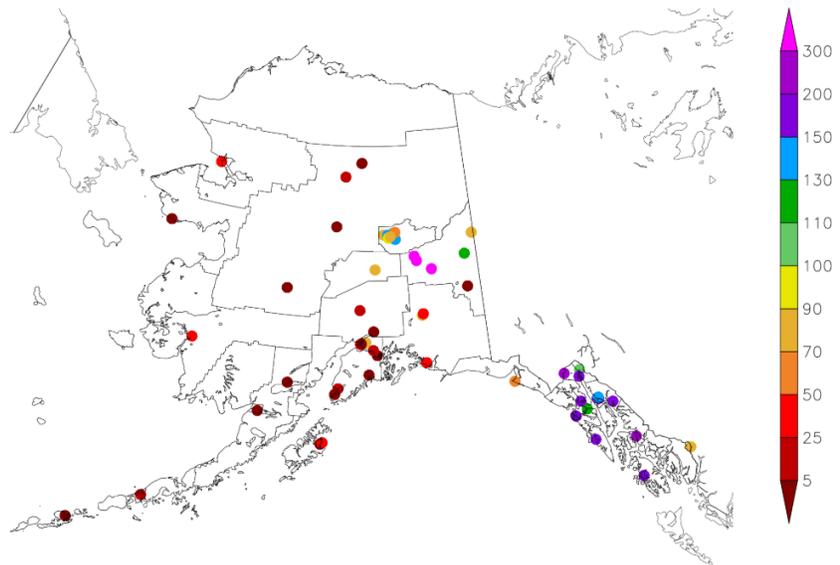
## Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Percent of Normal Precipitation (%)  
1/22/2020 – 1/28/2020



Generated 1/29/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

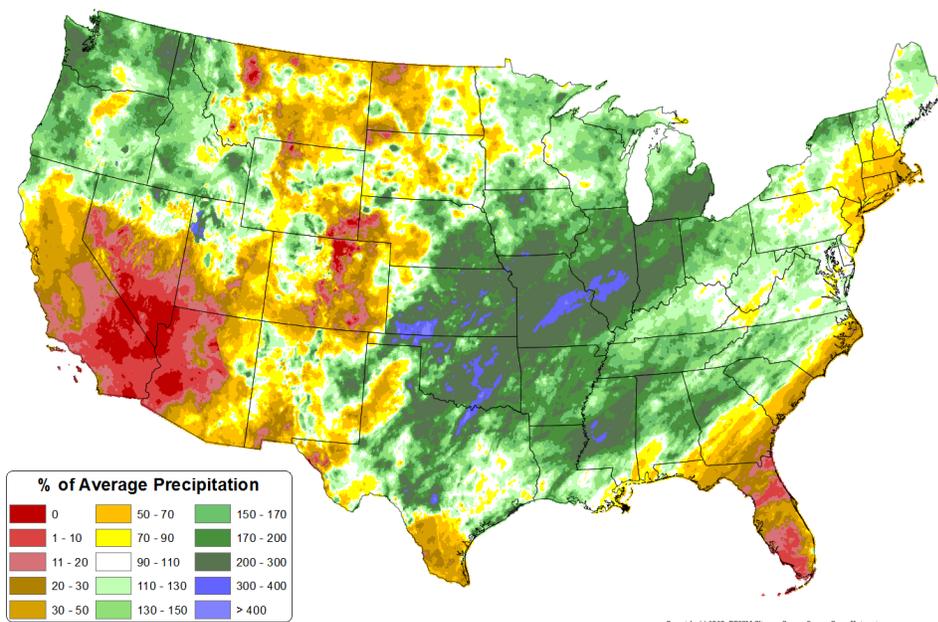
# Water and Climate Update

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

Source: PRISM

Total Precipitation Anomaly: 01 Jan 2020 - 29 Jan 2020  
Period ending 7 AM EST 29 Jan 2020  
Base period: 1981-2010  
(Map created 30 Jan 2020)

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

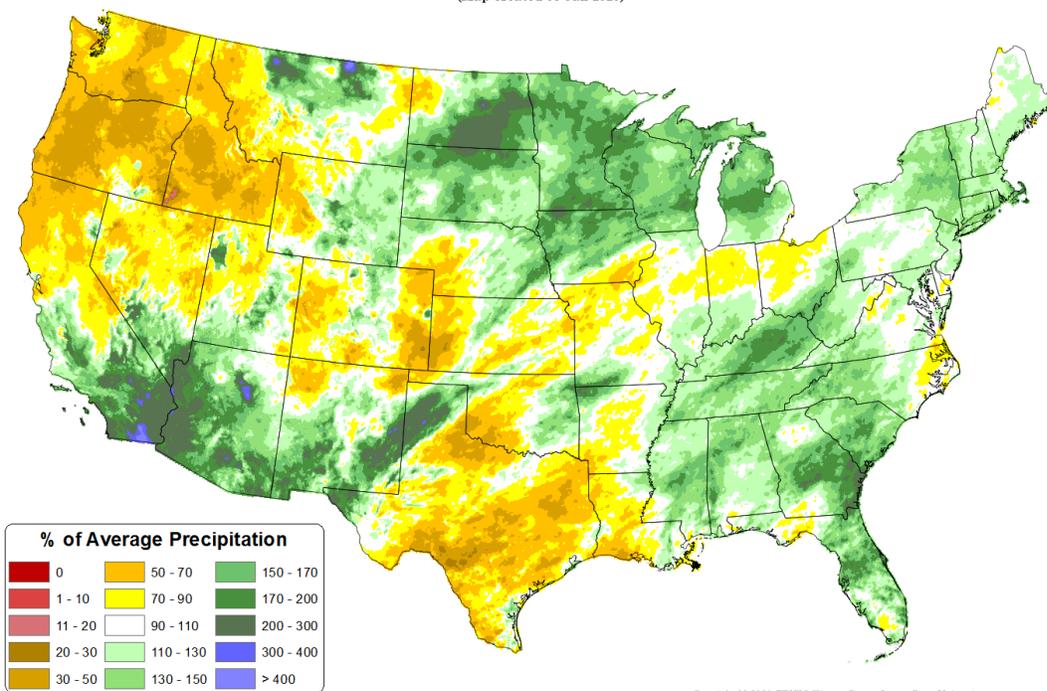


## Last 3 Months, All Available Data Including SNOTEL and NWS Networks

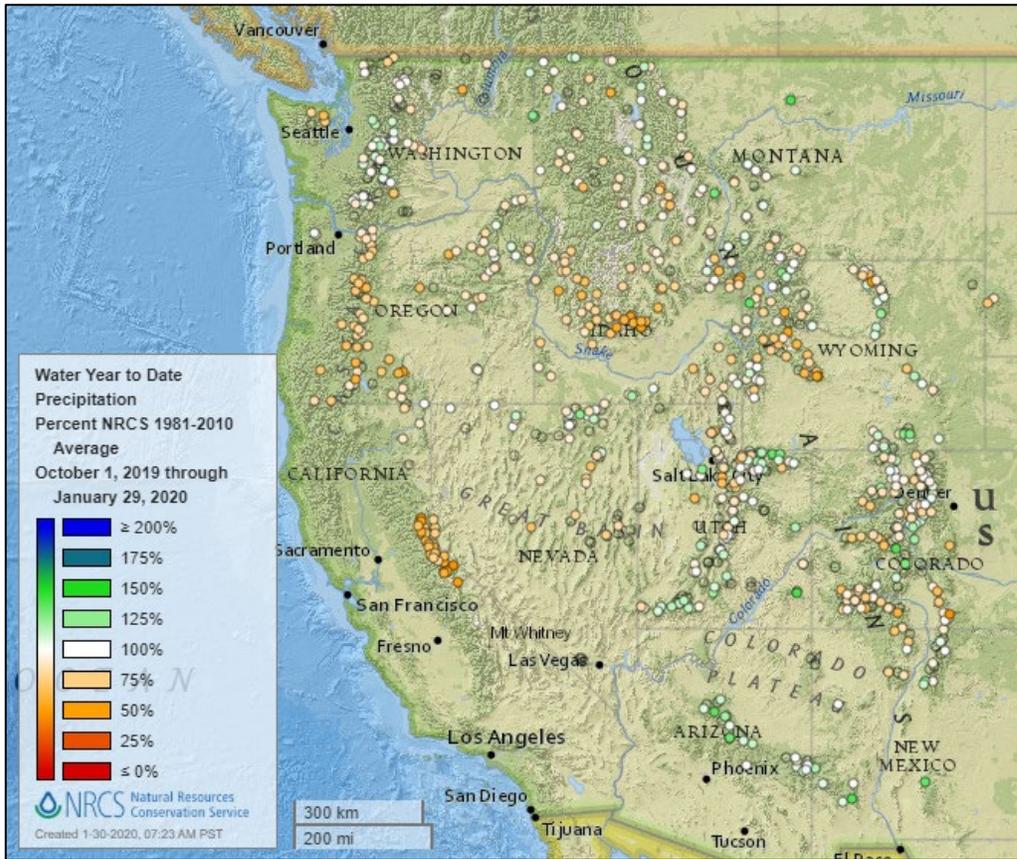
Source: PRISM

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

Total Precipitation Anomaly: Oct 2019 - Dec 2019  
Period ending 7 AM EST 31 Dec 2019  
Base period: 1981-2010  
(Map created 06 Jan 2020)

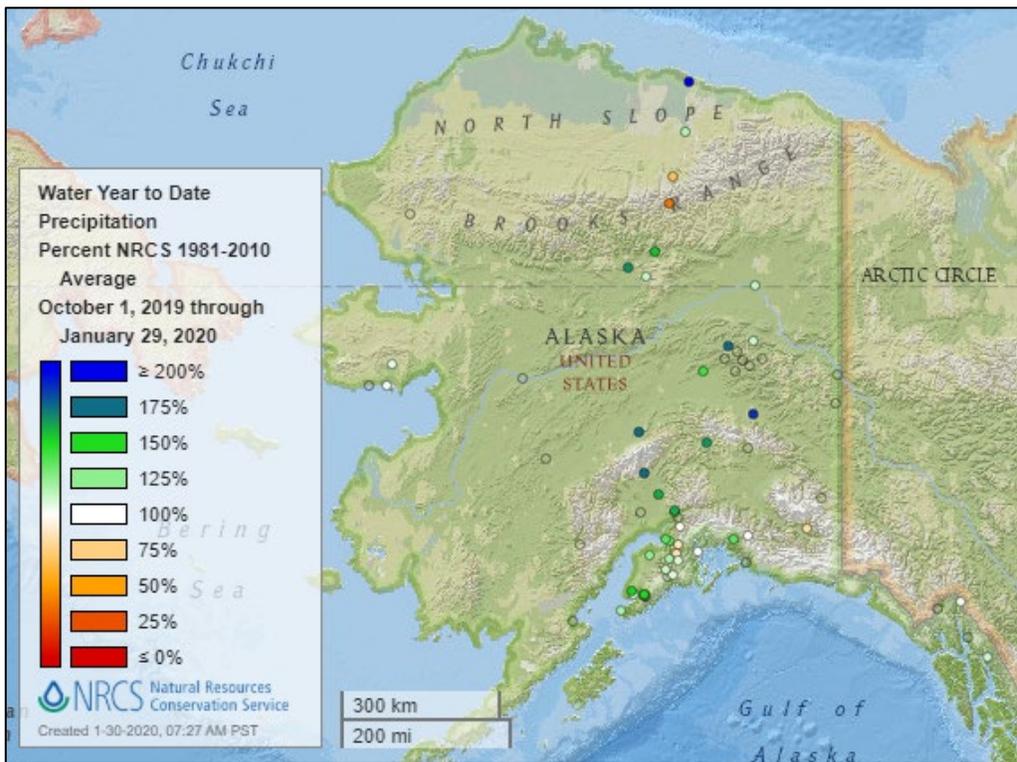


Water Year-to-Date, NRCS SNOTEL Network



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

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



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

**See also:**  
[Alaska 2020 water year-to-date precipitation values \(inches\) map](#)

## Temperature

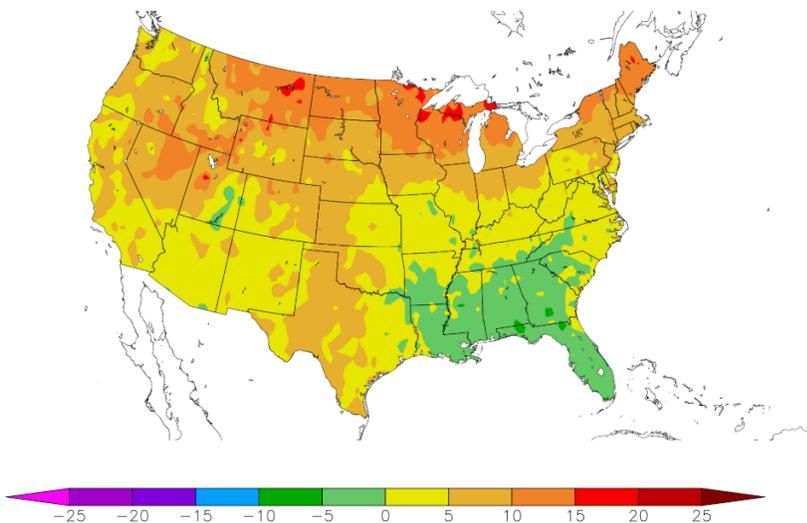
### Last 7 Days, National Weather Service (NWS) Networks

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)  
1/22/2020 – 1/28/2020



Generated 1/29/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

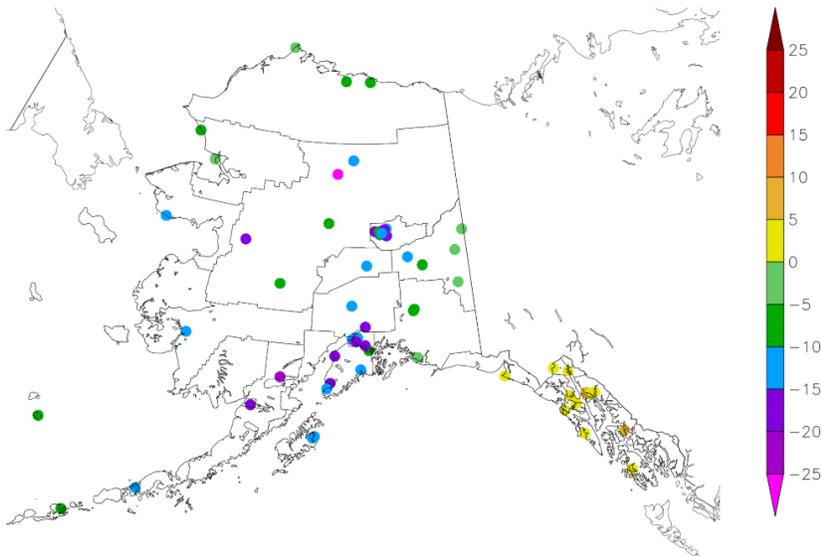
### Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)  
1/22/2020 – 1/28/2020



Generated 1/29/2020 at HPRCC using provisional data.

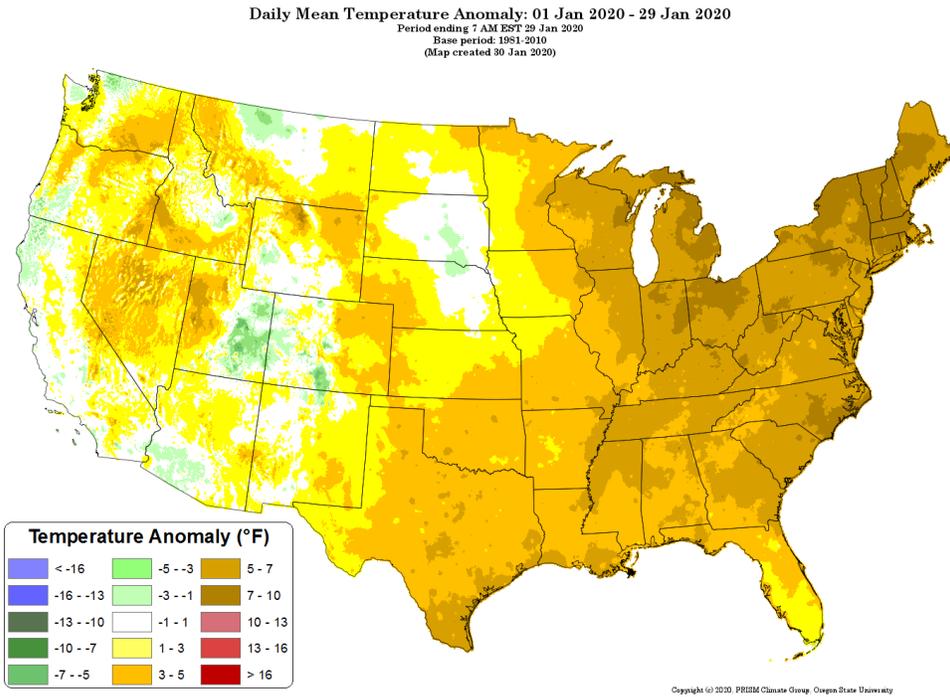
NOAA Regional Climate Centers

# Water and Climate Update

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

Source: PRISM

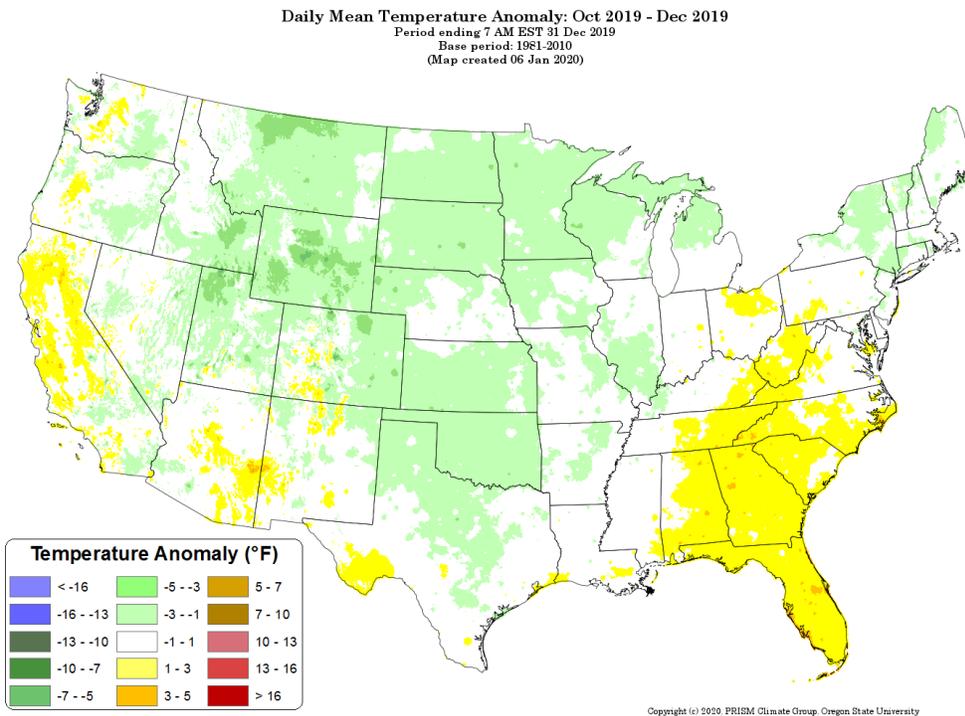
[Month-to-date national daily mean temperature anomaly map](#)



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

Source: PRISM

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



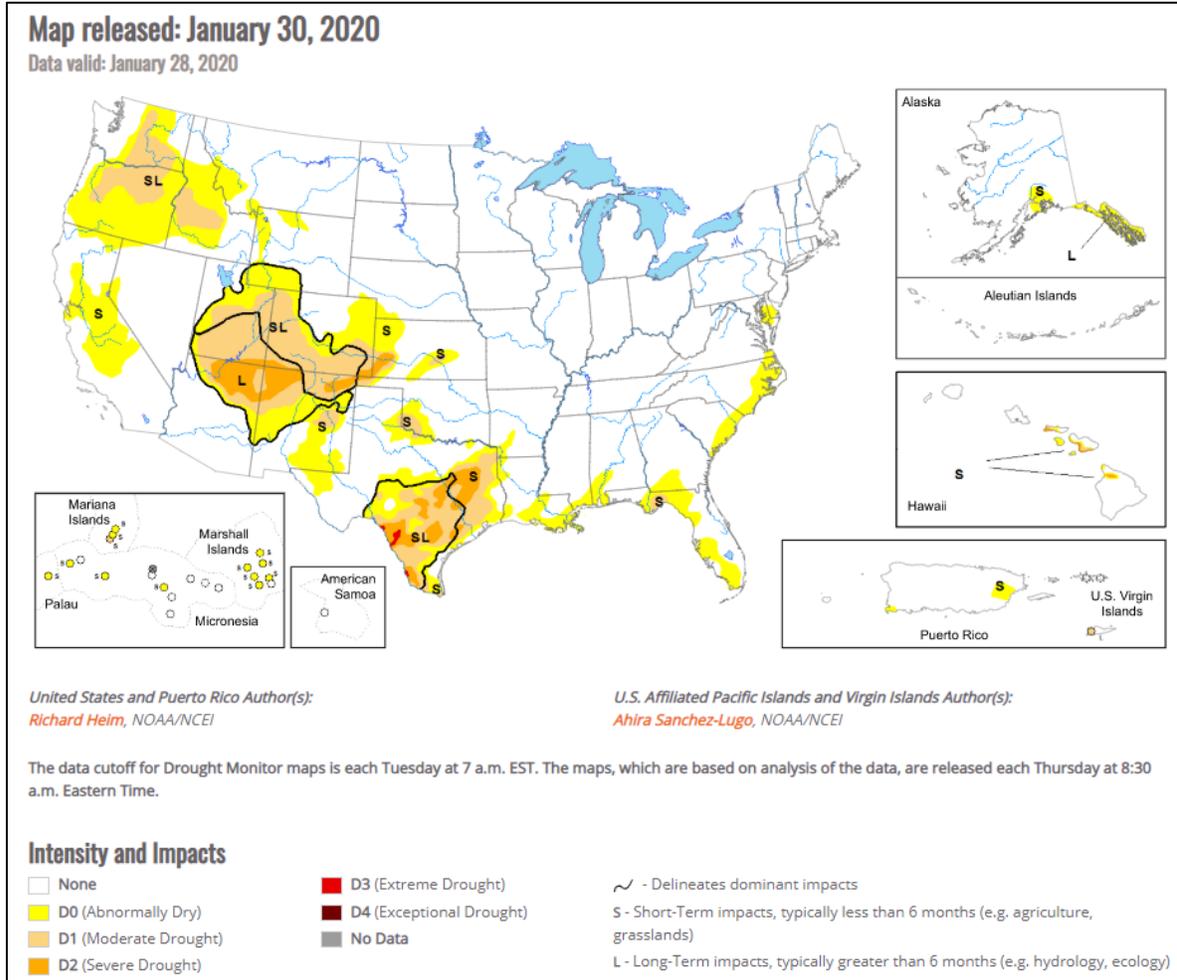
# Drought

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

Source: National Drought Mitigation Center

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

Source: NOAA



## [Current National Drought Summary, January 30, 2020](#)

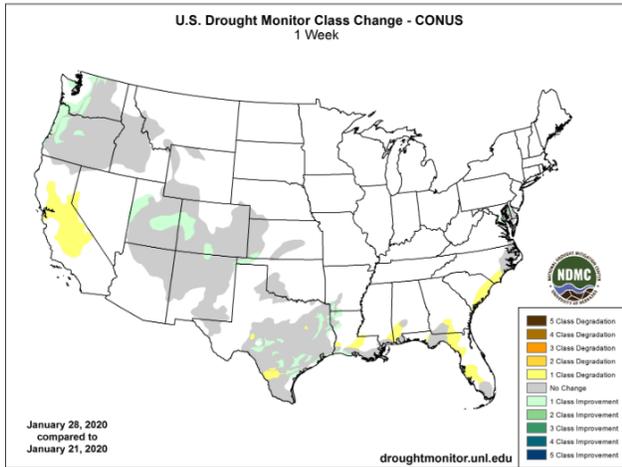
Source: National Drought Mitigation Center

“A series of Pacific weather systems continued to move across the contiguous U.S. (CONUS) in a fairly westerly jet stream flow during this U.S. Drought Monitor (USDM) week. The systems dropped copious amounts of precipitation along the Coastal and Cascade mountain ranges of Northern California and the Pacific Northwest, with above-normal precipitation continuing across most of the Pacific Northwest to the Rockies. The Pacific systems were dried out once they crossed the Rockies, but some picked up Gulf of Mexico moisture to provide above-normal precipitation from parts of New Mexico northeastward to the Great Lakes. Surface lows were generated by the upper-level Pacific systems, with some tracking to the Northeast and others moving along the Gulf Coast. The Gulf lows gave Texas to the Lower Mississippi Valley above-normal precipitation, while the others generated above-normal precipitation in the Middle Appalachian to Mid-Atlantic states. It was drier than normal from California to the Rio Grande Valley, across most of the northern Plains and Southeast, and parts of the central High Plains and Ohio Valley. With a westerly flow, most of the CONUS was warmer than normal, with only the Southeast having near to cooler-than-normal temperatures.”

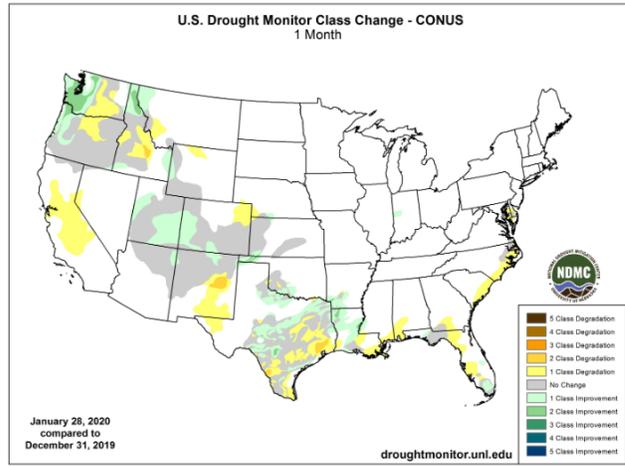
## Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

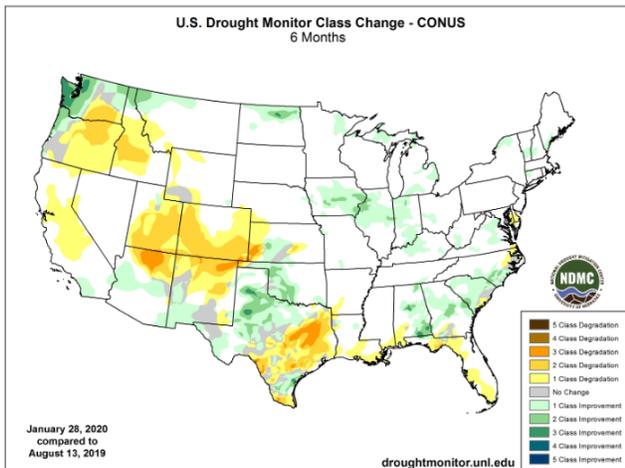
### 1 Week



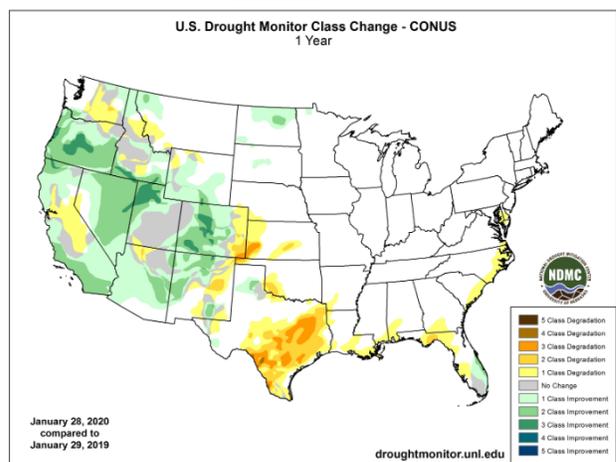
### 1 Month



### 6 Months



### 1 Year



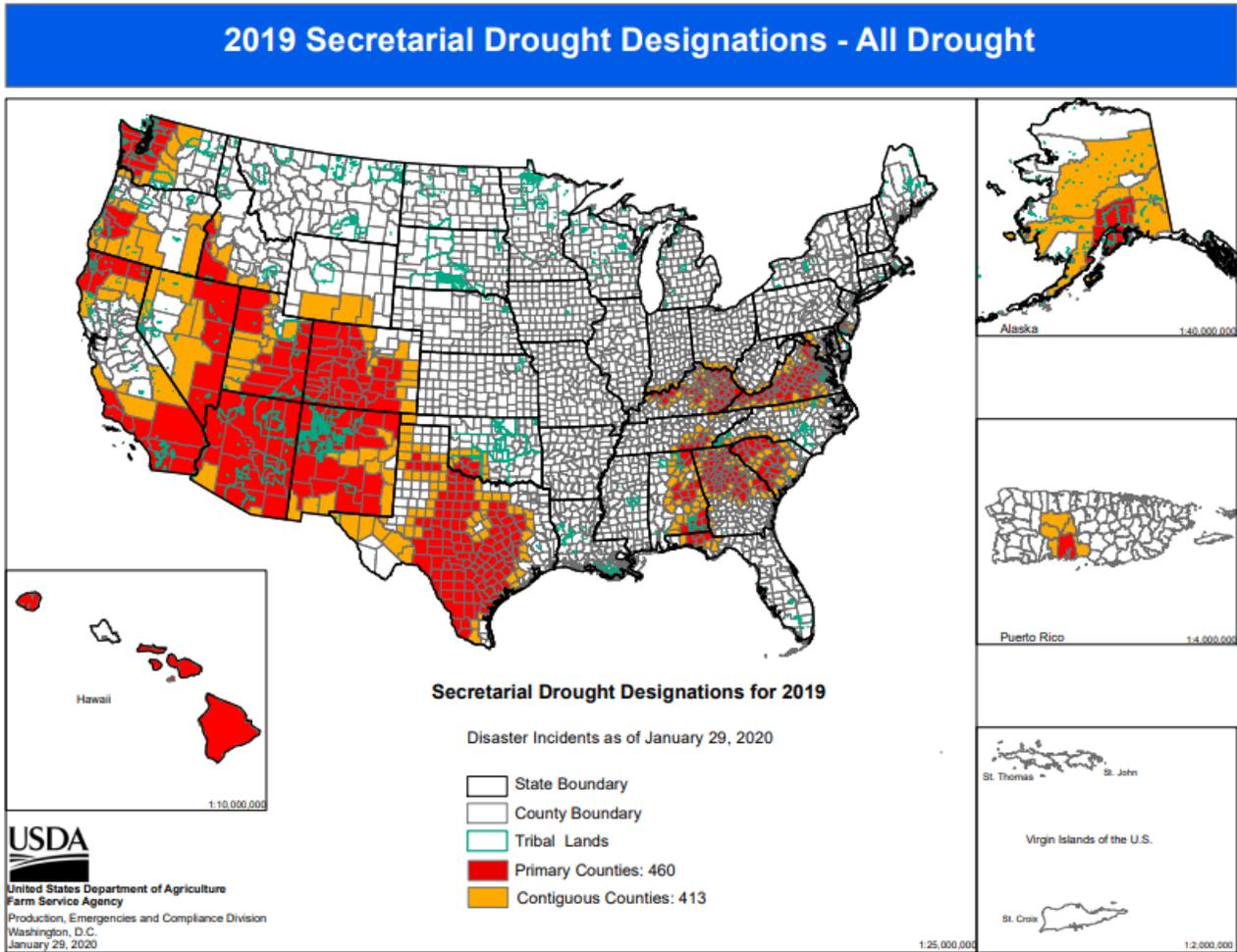
[Changes in drought conditions over the last 12 months for the contiguous U.S.](#)

## 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**

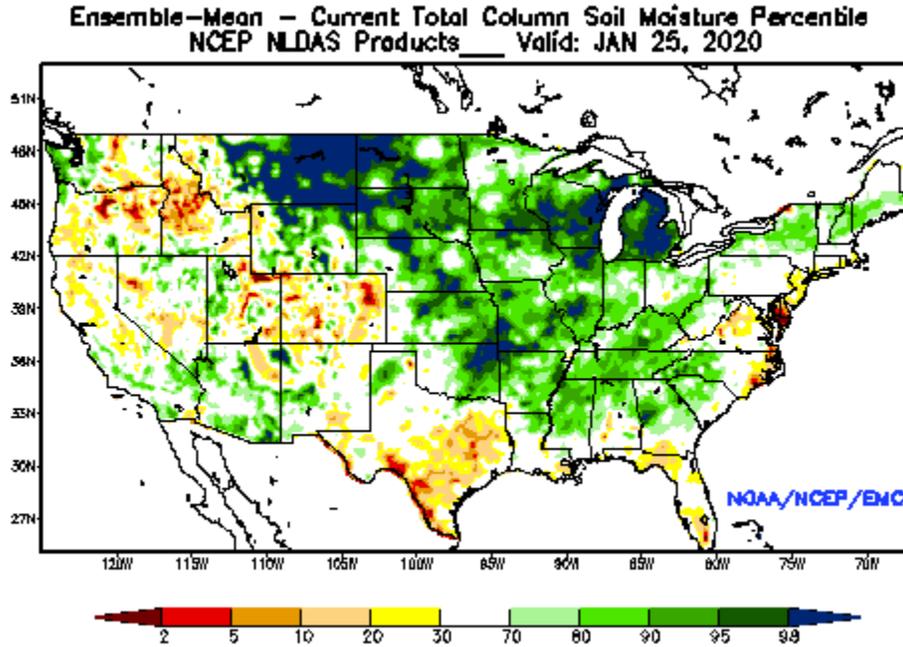
Source: USDA Farm Service Agency



## Other Climatic and Water Supply Indicators

### Soil Moisture

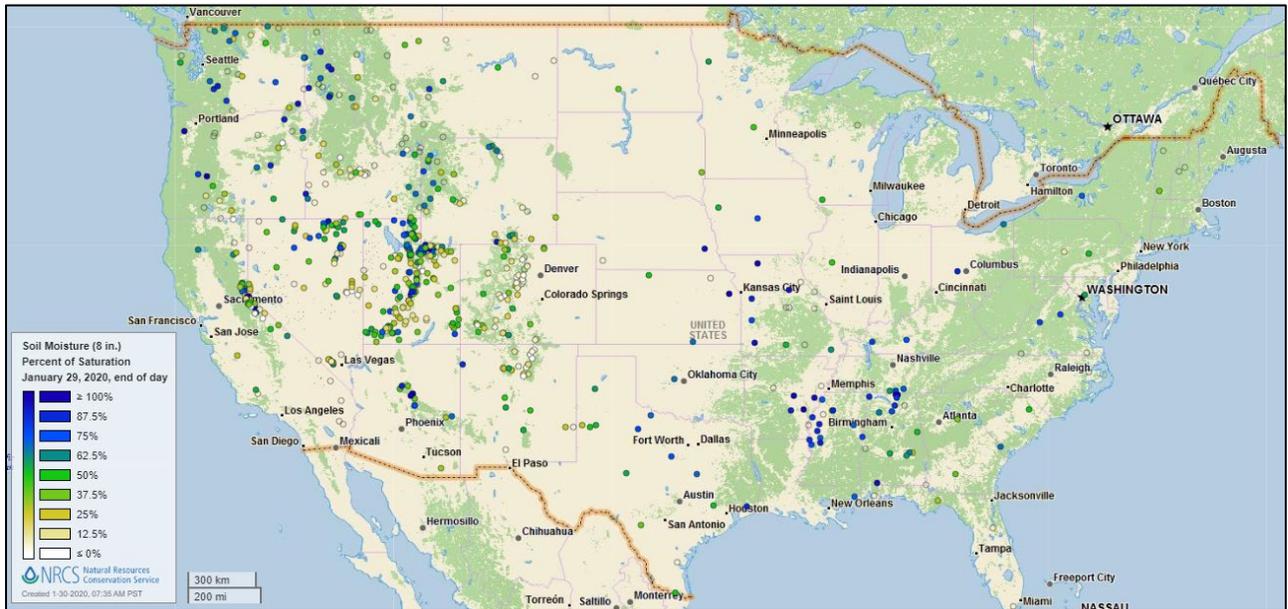
Source: NOAA National Centers for Environmental Prediction



[Modeled soil moisture percentiles](#) as of January 25, 2020

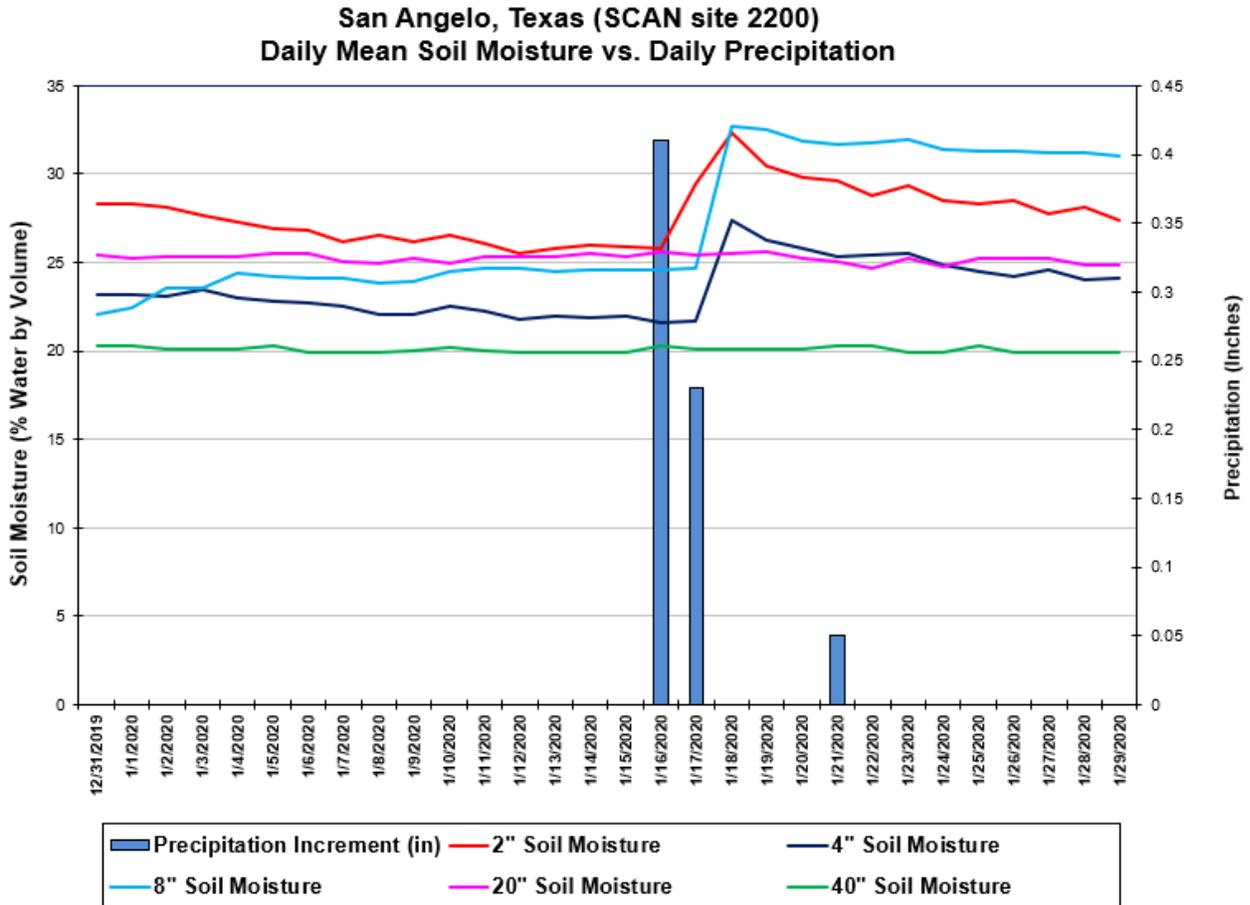
### Soil Moisture Percent of Saturation

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 [San Angelo](#) SCAN site in Texas. Accumulated precipitation of 0.64" on January 16-17 resulted in increased soil moisture at the -2", -4", and -8" sensor depths.

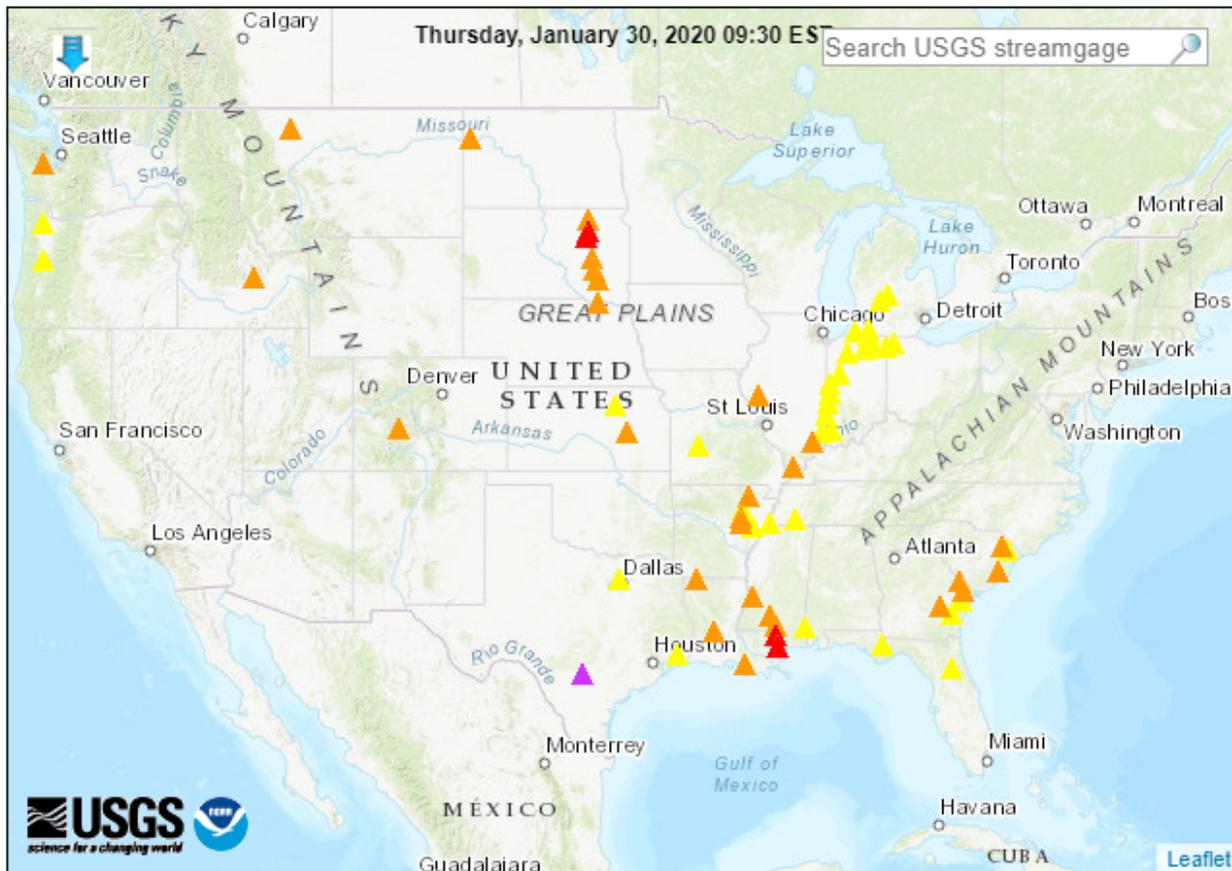
### Soil Moisture Data Portals

- [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**  
 (34 in floods [major: 1, moderate: 4, minor: 29], 33 in near-flood)



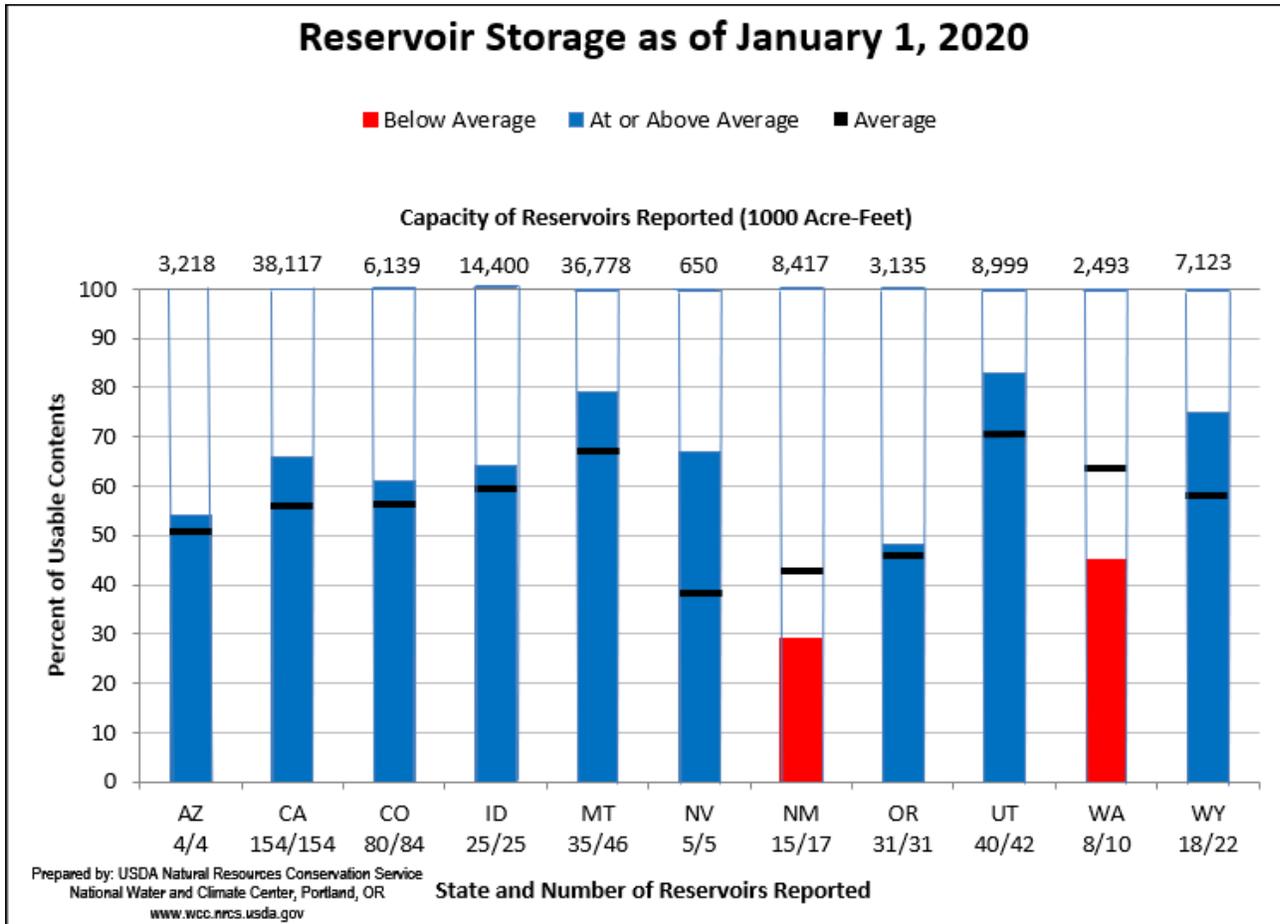
Explanation - Percentile classes						
<95	95-98	>= 99	Above action stage	Above moderate flood stage	Above major flood stage	Above major flood stage
Streamgage with flood stage			Streamgage without flood stage			

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

## Reservoir Storage

### Western States Reservoir Storage

Source: NRCS National Water and Climate Center



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

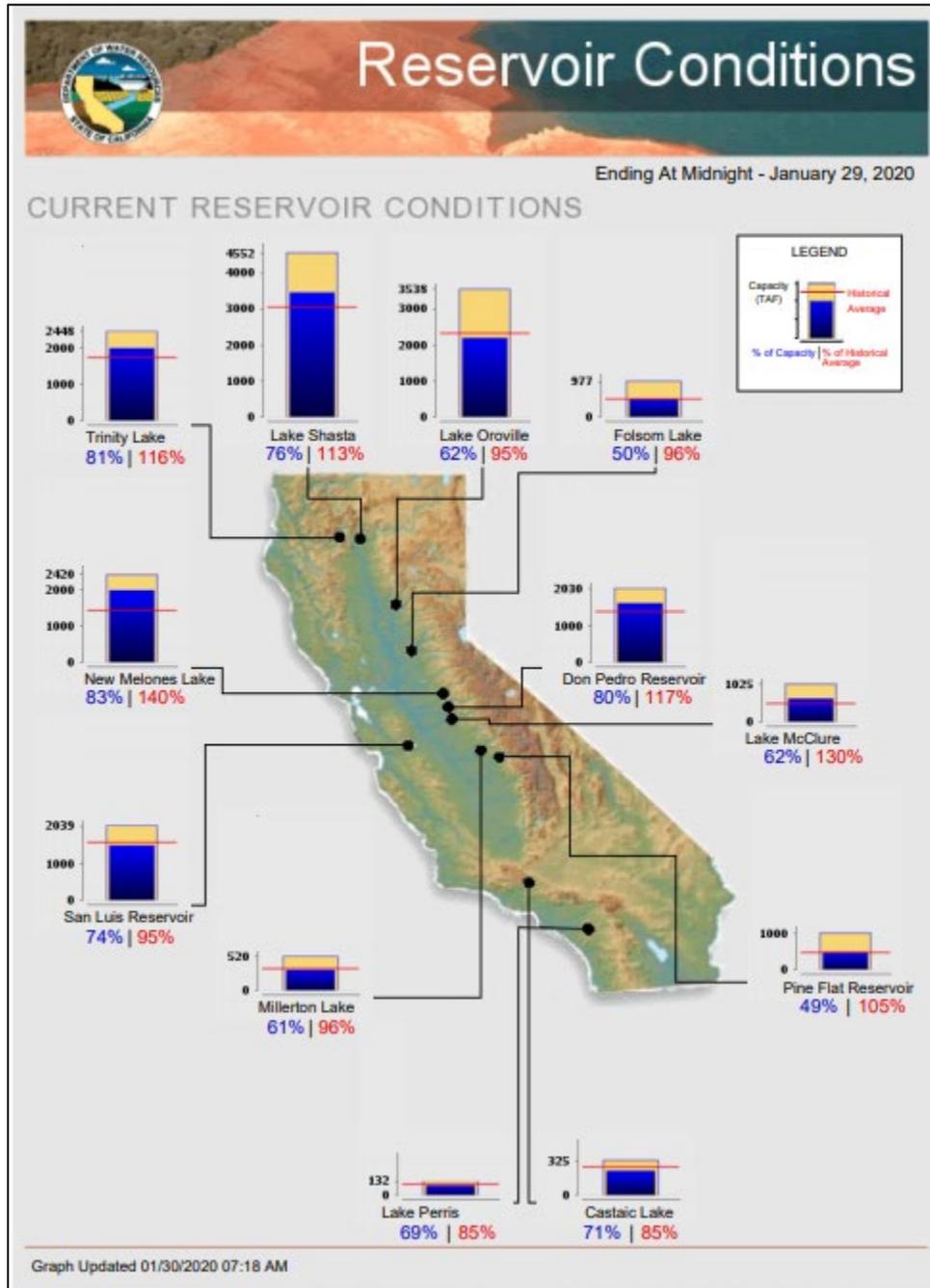
### Hydromet Tea Cup Reservoir Depictions

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

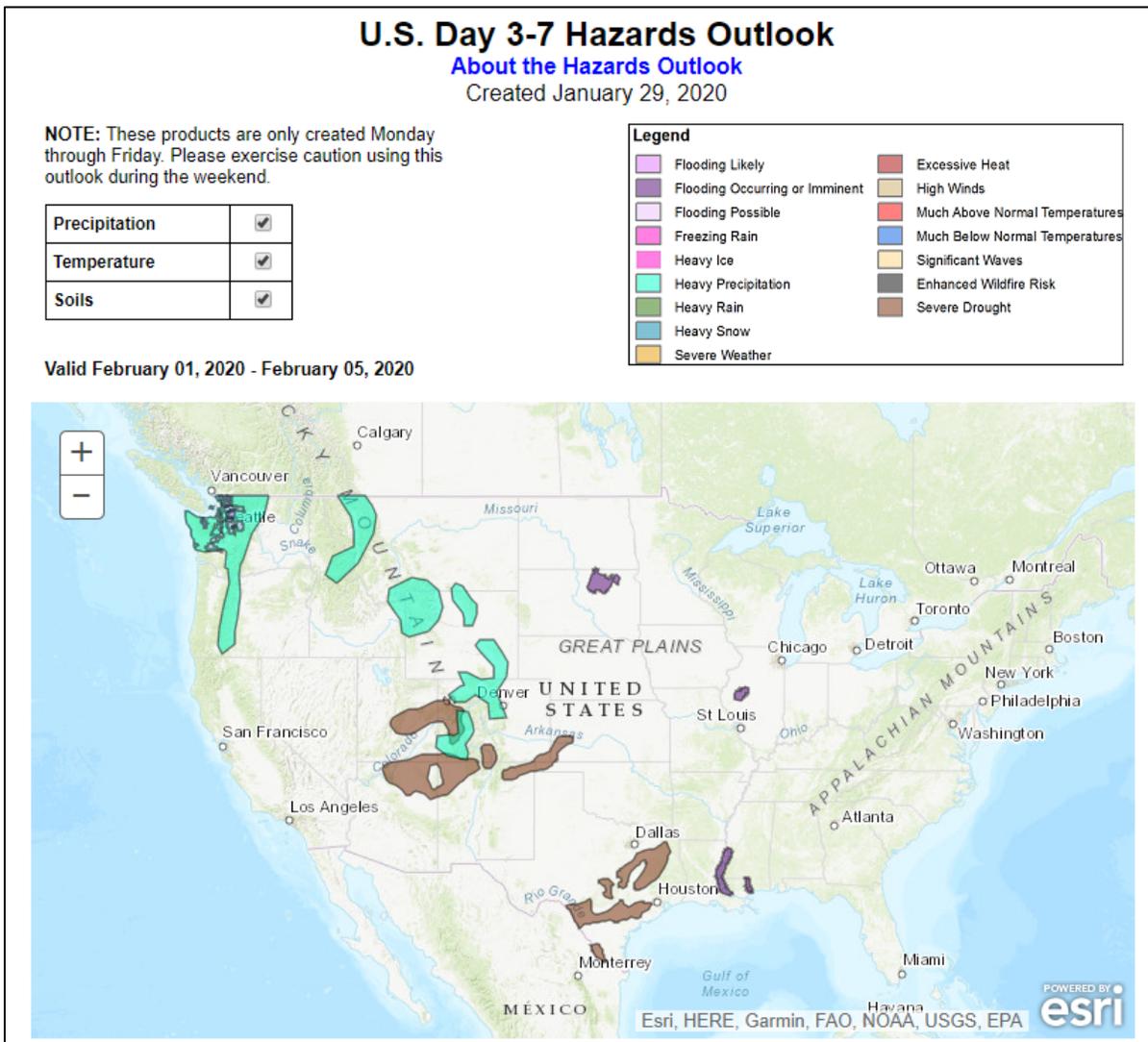
### Agricultural Weather Highlights

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

**National Outlook, Thursday, January 30, 2020:** “During the next 5 days, fast-moving storm systems will produce varying amounts of precipitation, mainly across the Southeast and Northwest. In fact, a weekend storm may result in more than an inch of rain in the southern Atlantic region, with lighter precipitation expected from the Midwest southward to the Gulf Coast. Late in the weekend, a new system will begin to develop across the West, with heavy snow possible in the central Rockies and environs. During the first half of the week, a low-pressure system will cross the southern Plains, mid-South, and Midwest, delivering wintry precipitation north of its track and rain to the south. A surge of sharply colder air trailing the storm system will reach the Far West by Sunday and expand across the Plains and upper Midwest early next week. The NWS 6- to 10-day outlook for February 4 – 8 calls for the likelihood of warmer- and wetter-than-normal weather in most areas east of the Mississippi River. Elsewhere, near- or below-normal temperatures will dominate the western half of the U.S., while above-normal precipitation in the Rockies and across the nation’s northern tier should contrast with drier-than-normal conditions in California, the Great Basin, and the southern Plains.”

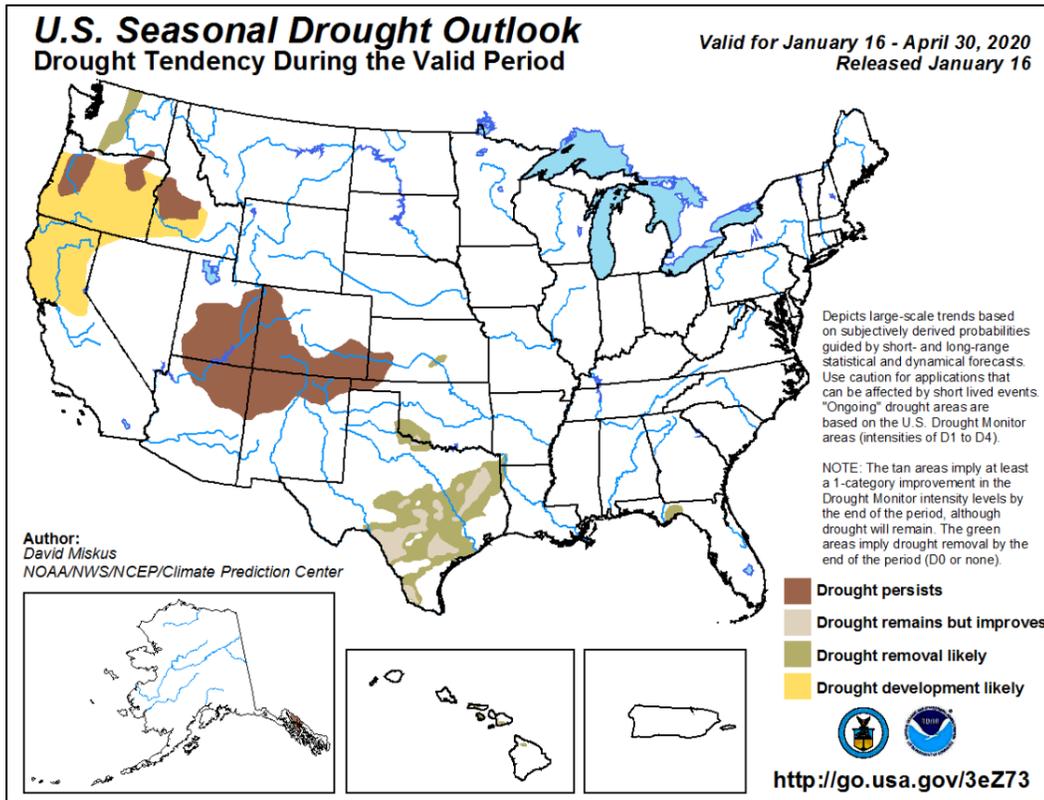
### Weather Hazards Outlook: [February 1 – 5, 2020](#)

Source: NOAA Climate Prediction Center



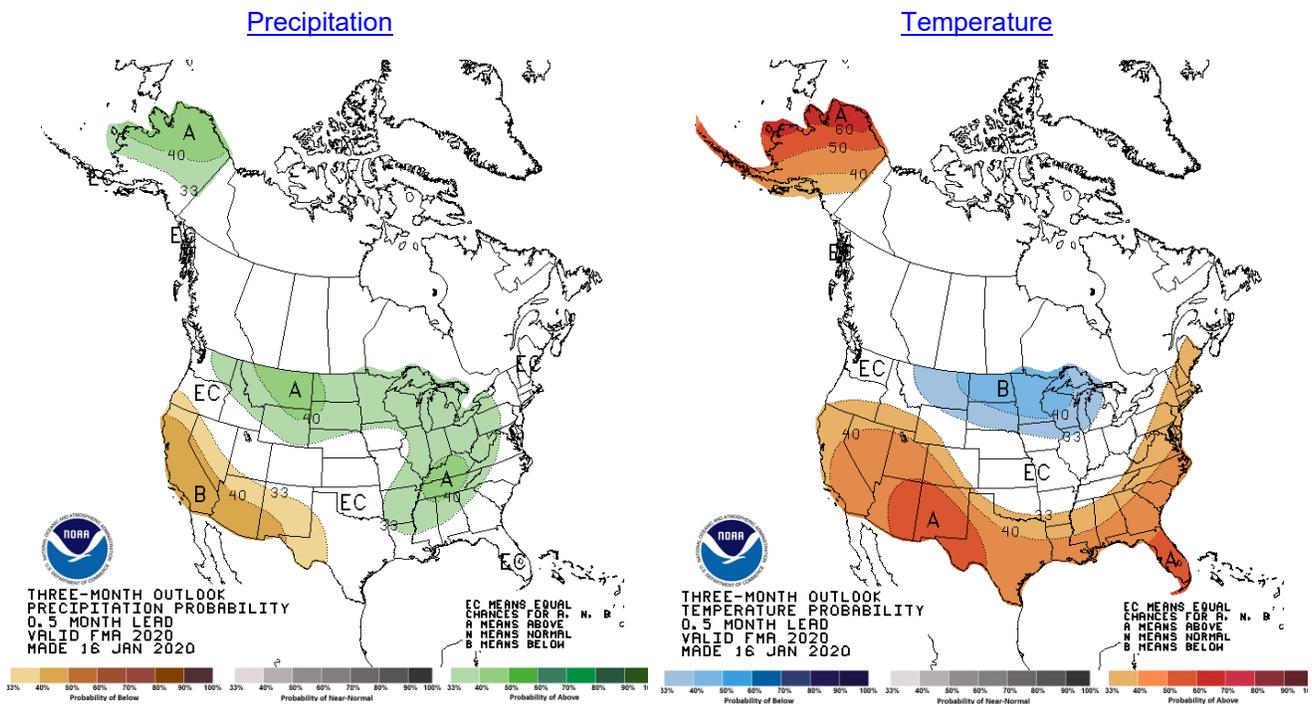
Seasonal Drought Outlook: [January 16 – April 30, 2020](#)

Source: National Weather Service



Climate Prediction Center 3-Month Outlook

Source: National Weather Service



[February-March-April \(FMA\) 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](#).