

Water and Climate Update

December 8, 2016

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.

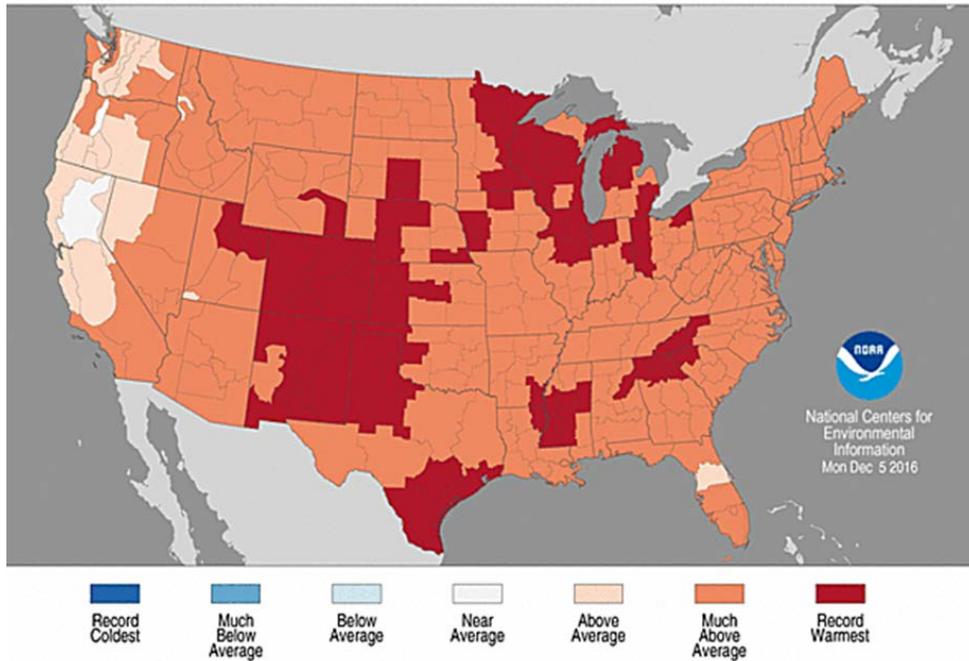
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Most of U.S. records very warm fall temperatures

Divisional Average Temperature Ranks

September–November 2016

Period: 1895–2016



According to NOAA's National Centers for Environmental Information, the September through November fall temperatures were above average for almost all of the contiguous U.S. The Great Lakes region, southern Rockies, and Texas had areas of record warmth, including several areas in drought conditions. The record warm area in the Southeast coincides with the areas where large fires are currently burning.

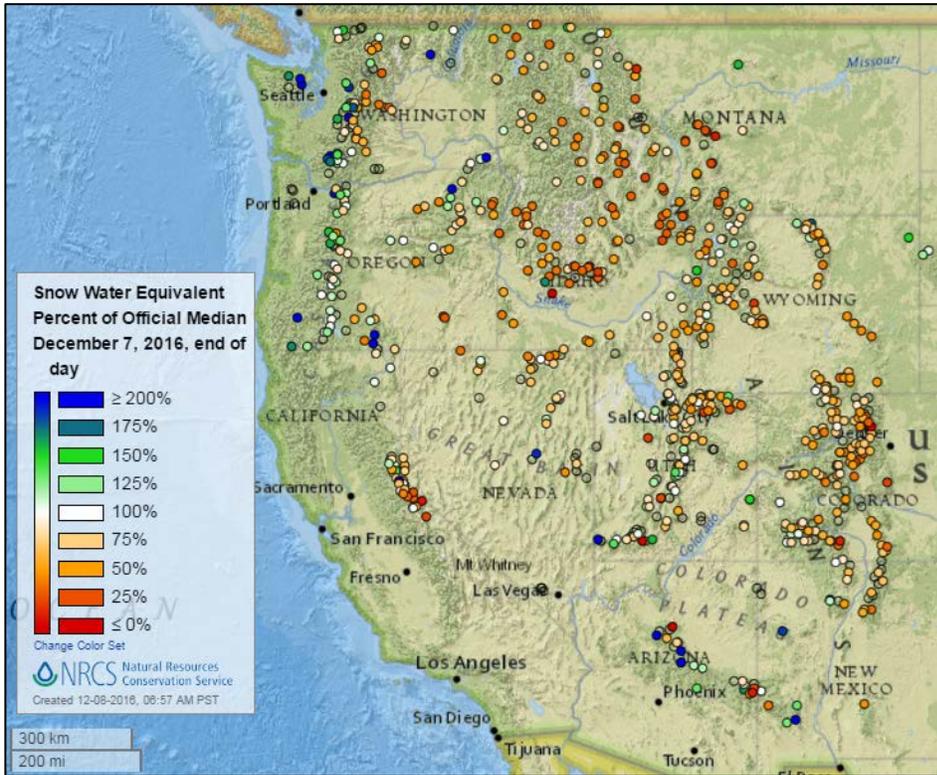
More news:

[Fiery fall: U.S. just experienced warmest autumn on record](#)

[This fall was the warmest on record, 2016 will be at least second-warmest year](#)

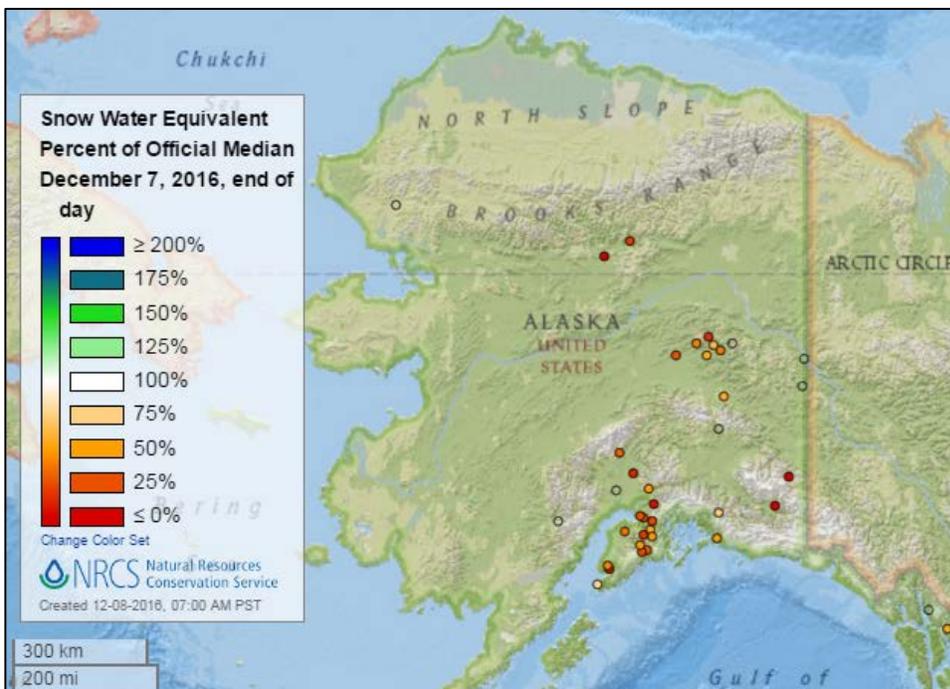
Snow

Current Snow Water Equivalent, NRCS SNOTEL Network



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

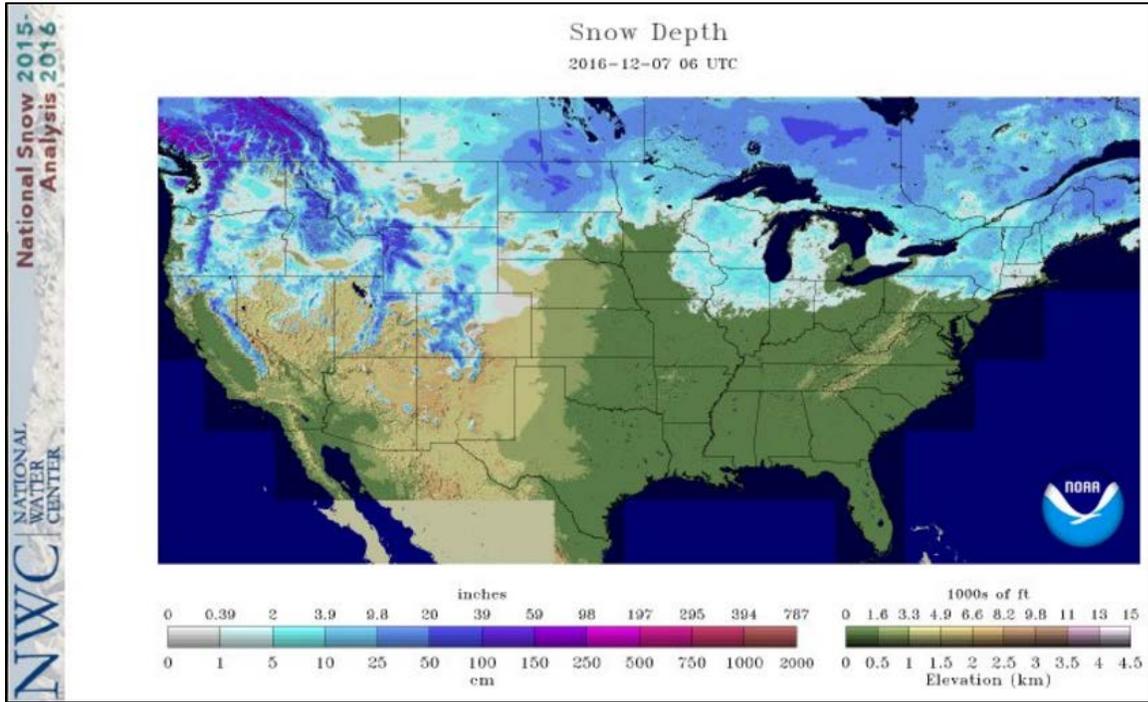
See also:
[Snow water equivalent values \(inches\) map](#)



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

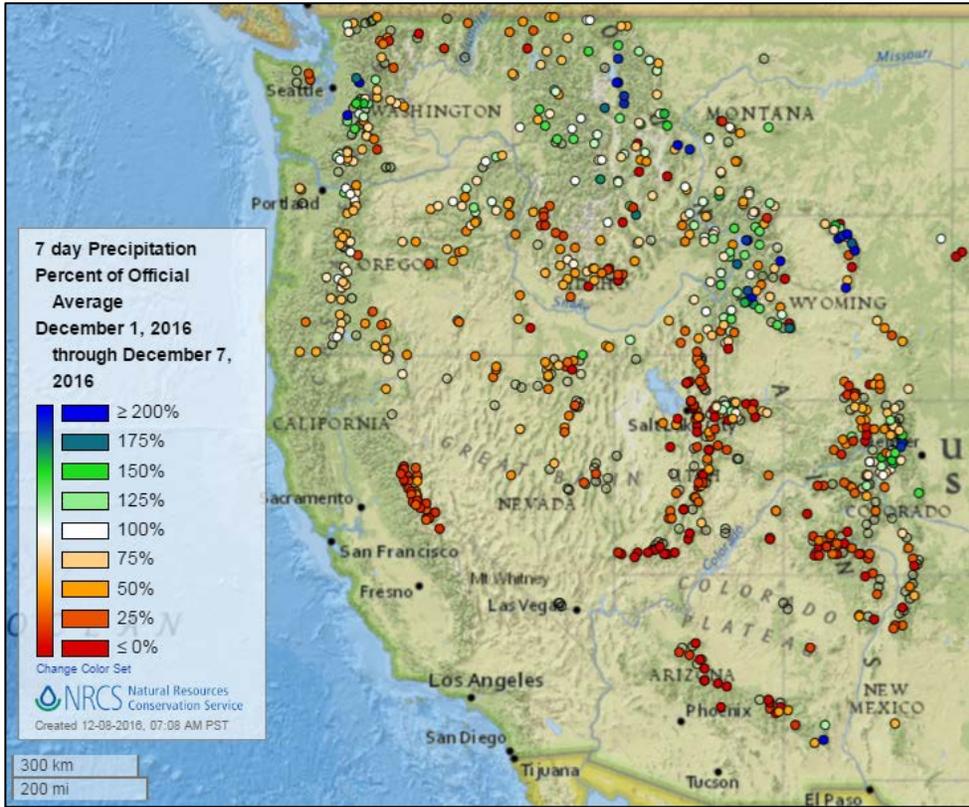
See also:
[Alaska snow water equivalent values \(inches\) map](#)

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



Precipitation

Last 7 Days, Western Mountain Sites (NRCS SNOTEL Network)

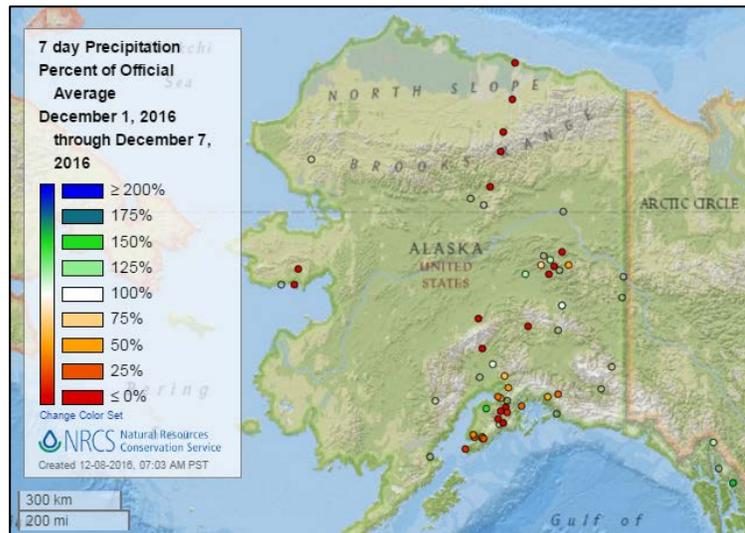


[7-day precipitation percent of average map](#)

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

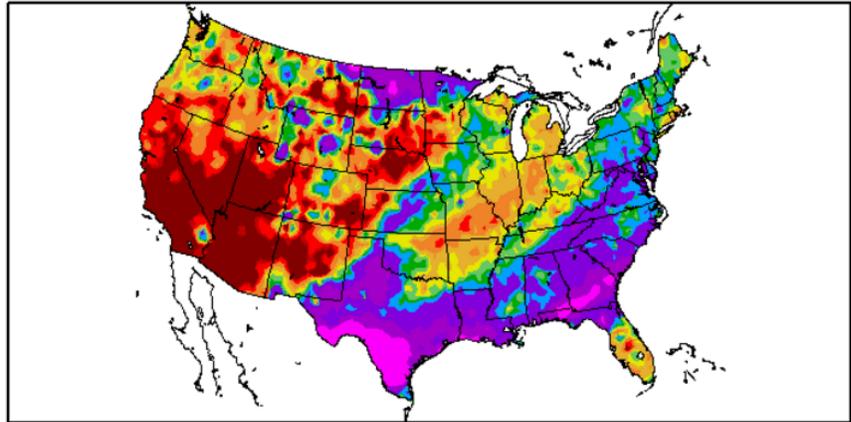
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

[7-day precipitation percent of normal map](#) for the continental U.S.

Percent of Normal Precipitation (%)
12/1/2016 – 12/7/2016

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



Generated 12/8/2016 at HPRCC using provisional data.

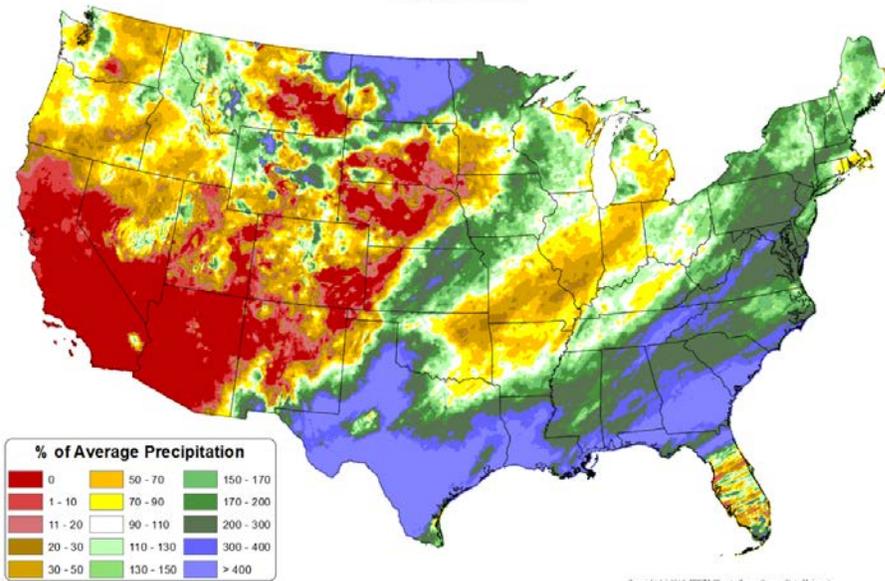
Regional Climate Centers

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

Source: PRISM

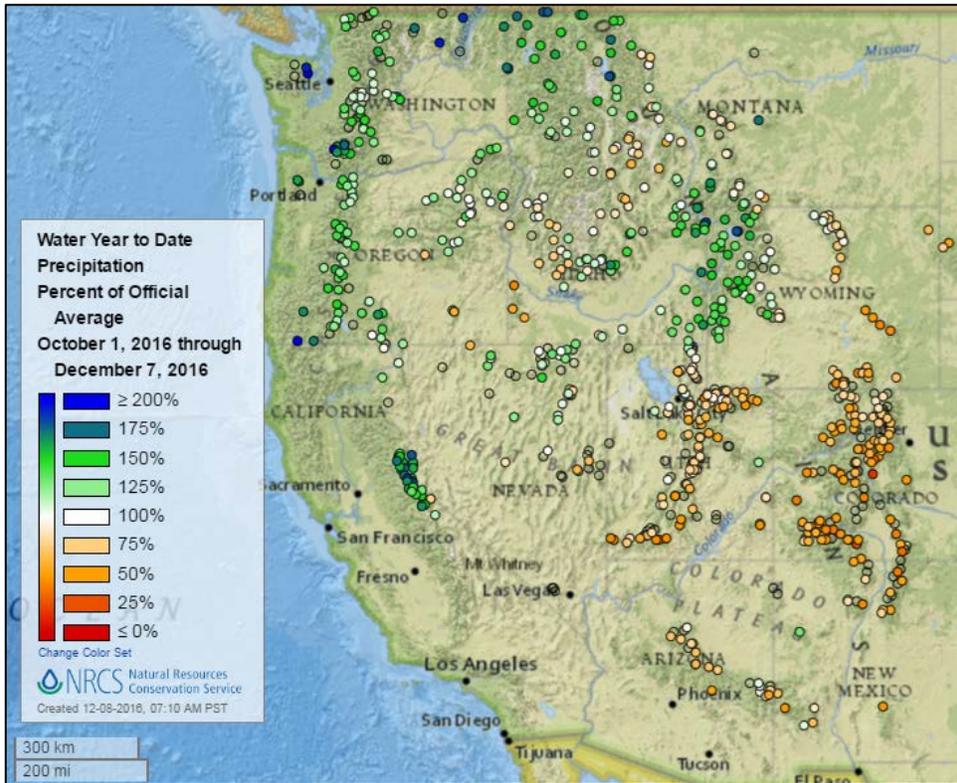
Total Precipitation Anomaly: 01 December 2016 - 07 December 2016
Period ending 7 AM EST 07 Dec 2016
Base period: 1981-2010
(Map created 08 Dec 2016)

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



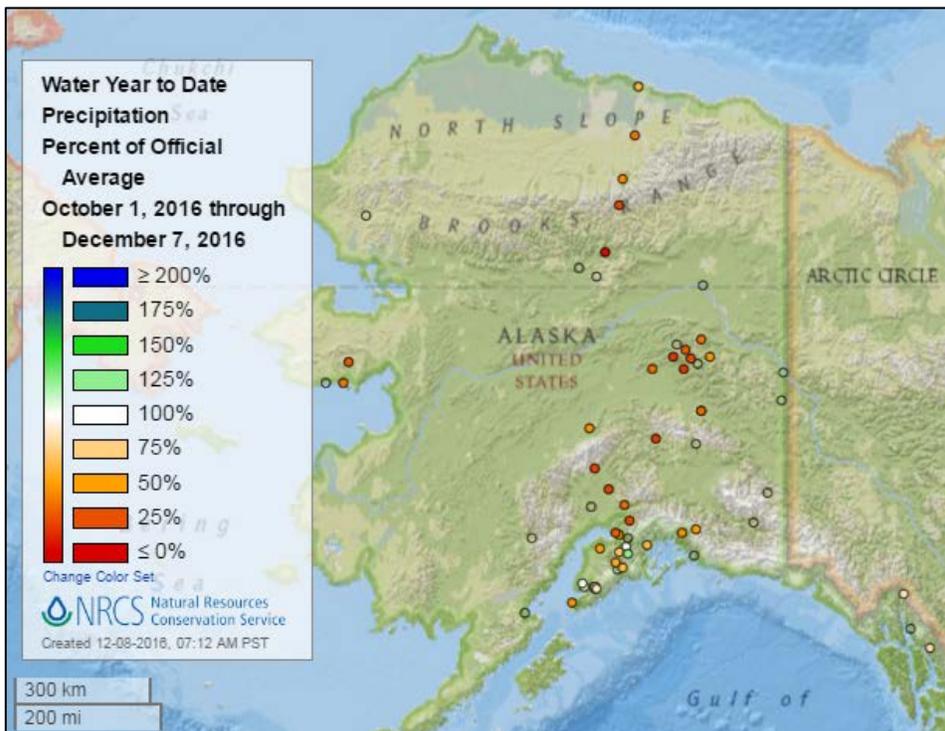
Copyright © 2016, PRISM Climate Group, Oregon State University

Water Year-to-Date, Western Mountain Sites (NRCS SNOTEL Network)



[2017 water year-to-date precipitation percent of average map](#)

See also: [2017 water year-to-date precipitation values \(inches\)](#)



[Alaska 2017 water year-to-date precipitation percent of average map](#)

See also: [Alaska 2017 water year-to-date precipitation values \(inches\) map](#)

Temperature

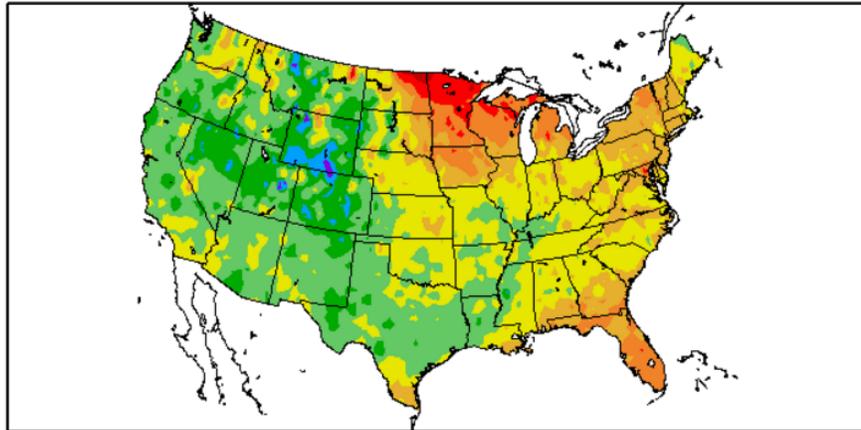
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

[7-day temperature anomaly map](#) for the continental U.S.

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

Departure from Normal Temperature (F)
12/1/2016 – 12/7/2016



Generated 12/8/2016 at HPRCC using provisional data.

Regional Climate Centers

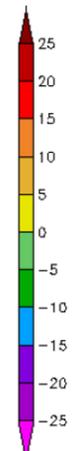
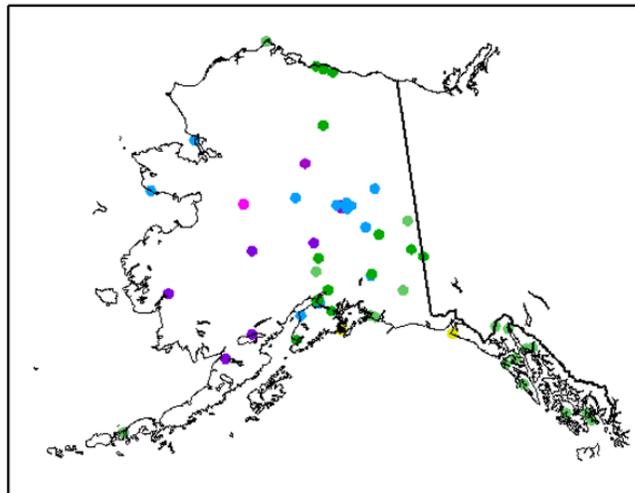
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)
12/1/2016 – 12/7/2016



Generated 12/8/2016 at HPRCC using provisional data.

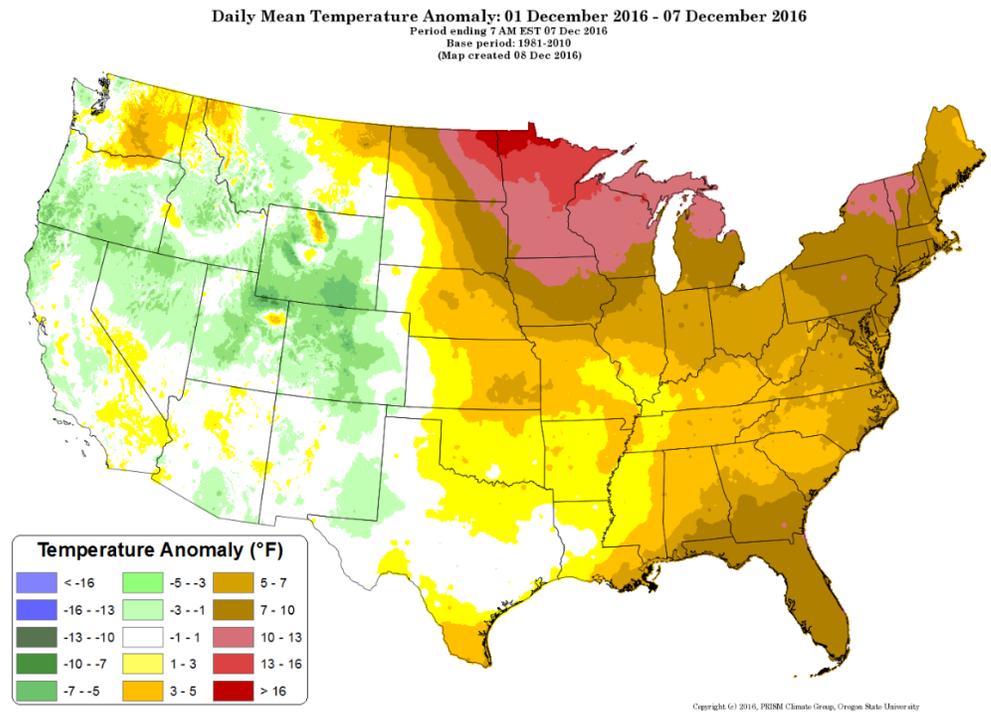
Regional Climate Centers

Water and Climate Update

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

Source: PRISM

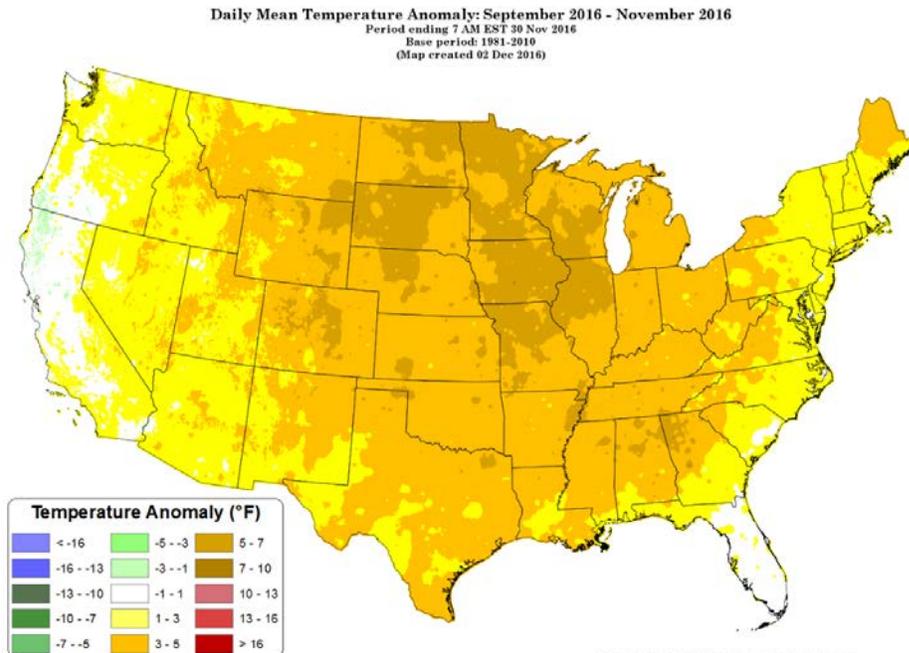
[Month-to-Date national daily mean temperature anomaly map](#)



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

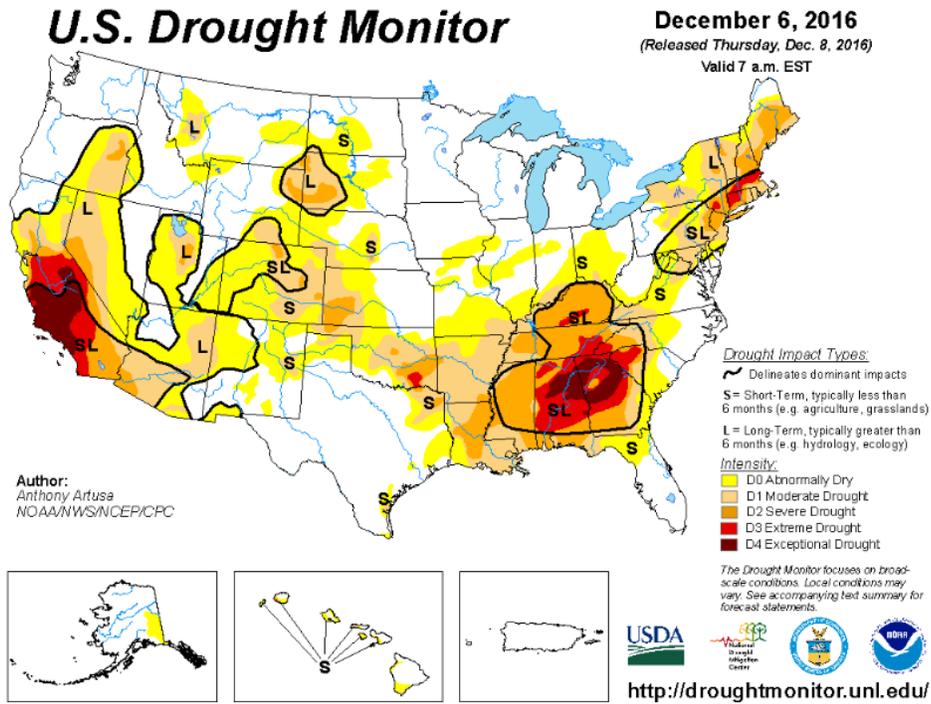
Source: PRISM

[September through November daily mean temperature anomaly map](#)



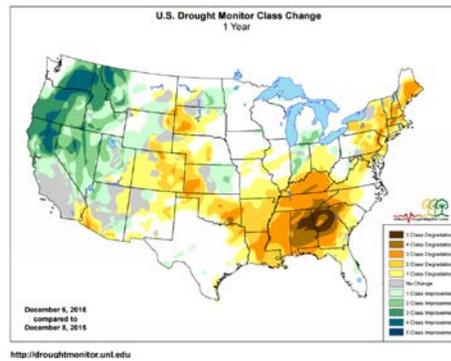
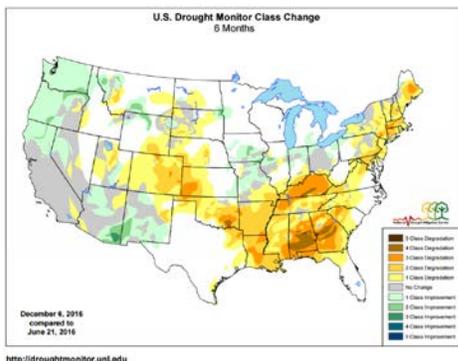
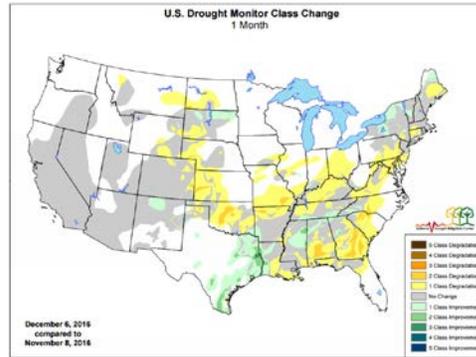
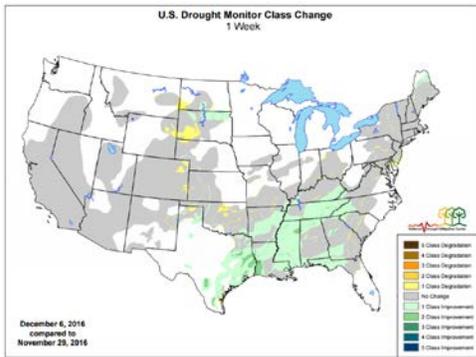
Drought

[U.S. Drought Monitor](#) See map below. [U.S. Drought Portal](#) Comprehensive drought resource.



Changes in Drought Monitor Categories over Time

Click any map to enlarge



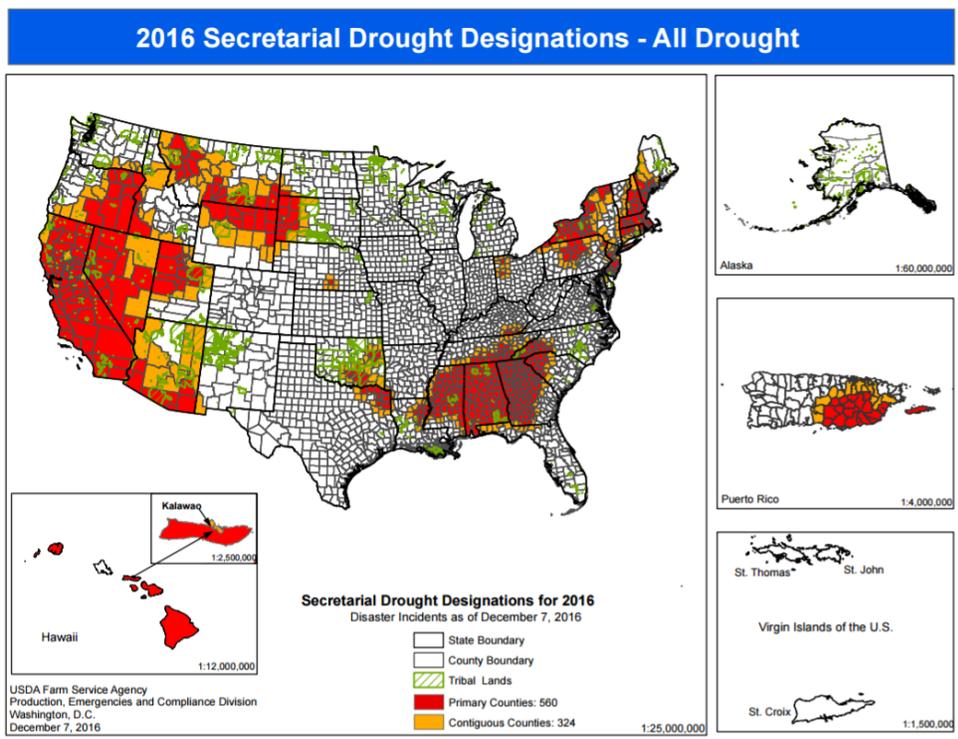
[Changes in drought conditions over the last 12 months](#)

Current National [Drought Summary](#), December 6, 2016

Author: Anthony Artusa, NOAA/NWS/NCEP/CPC

“During the past 7-days, several frontal systems moved across the contiguous United States. Heavy precipitation (generally 2-6 inches, locally 10 inches or more) fell from southern Texas east-northeast across the Gulf Coast states and the Tennessee Valley. Two inches of precipitation (liquid equivalent) or more was also reported across portions of the Northeast and the Pacific Northwest. Within the first 48 hours of the new drought week (which started at 7am EST Tuesday, Nov 29), there were approximately 215 preliminary, filtered reports of severe weather across this region, as indicated by the Storm Prediction Center in Oklahoma. Most of the remainder of the Lower 48 states reported light to moderate precipitation (less than 2 inches).”

USDA 2016 Secretarial [Drought Designations](#)

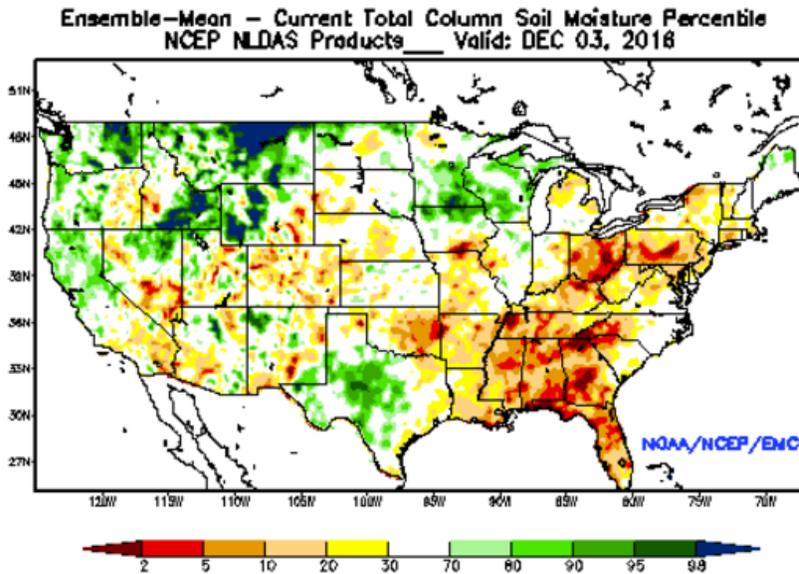


Highlighted Drought Resources

- [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](#)

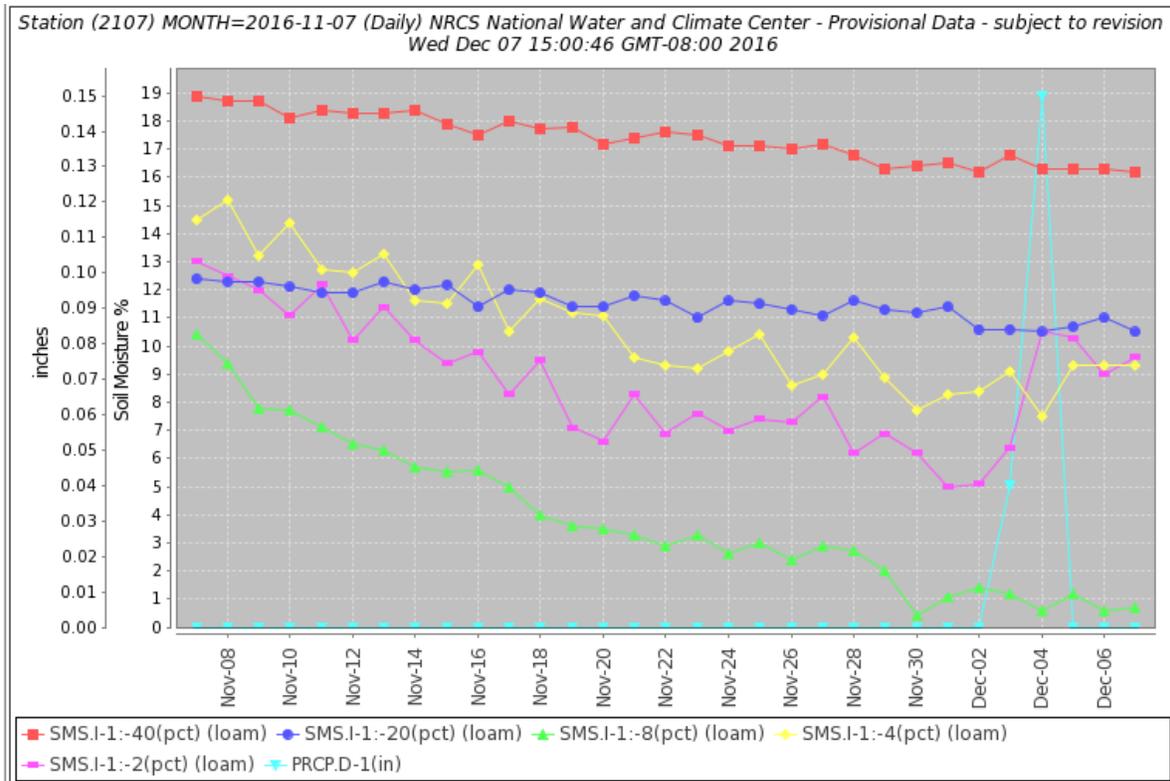
Other Climatic and Water Supply Indicators

Soil Moisture



[Modeled soil moisture percentiles](#) as of December 3, 2016.

Soil Moisture Data: NRCS [Soil Climate Analysis Network \(SCAN\)](#)



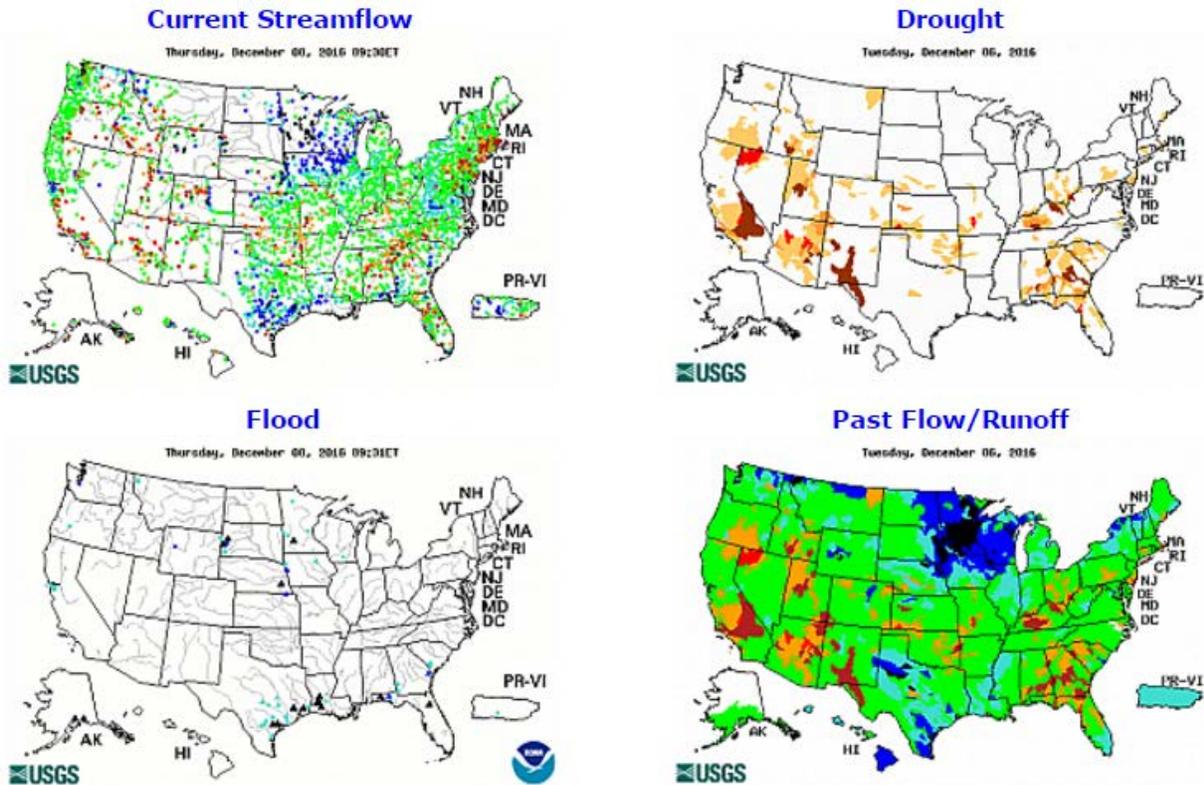
Soil moisture (at 2-, 4-, 8-, 20-, and 40-inch depths) and precipitation for the last 30 days at the [Crossroads SCAN site 2107](#) in New Mexico. The precipitation on December 3 and 4 resulted in an increase in soil moisture at the 2- and 4- inch sensor depths, and little to no change at the other depths.

Soil Moisture Data Portals

- [CRN Soil Moisture](#)
- [Texas A&M University North American Soil Moisture Database](#)
- [University of Washington Experimental Modeled Soil Moisture](#)

Streamflow

Source: USGS



Click to enlarge and display legends

[Current streamflow maps](#)

Current Reservoir Storage

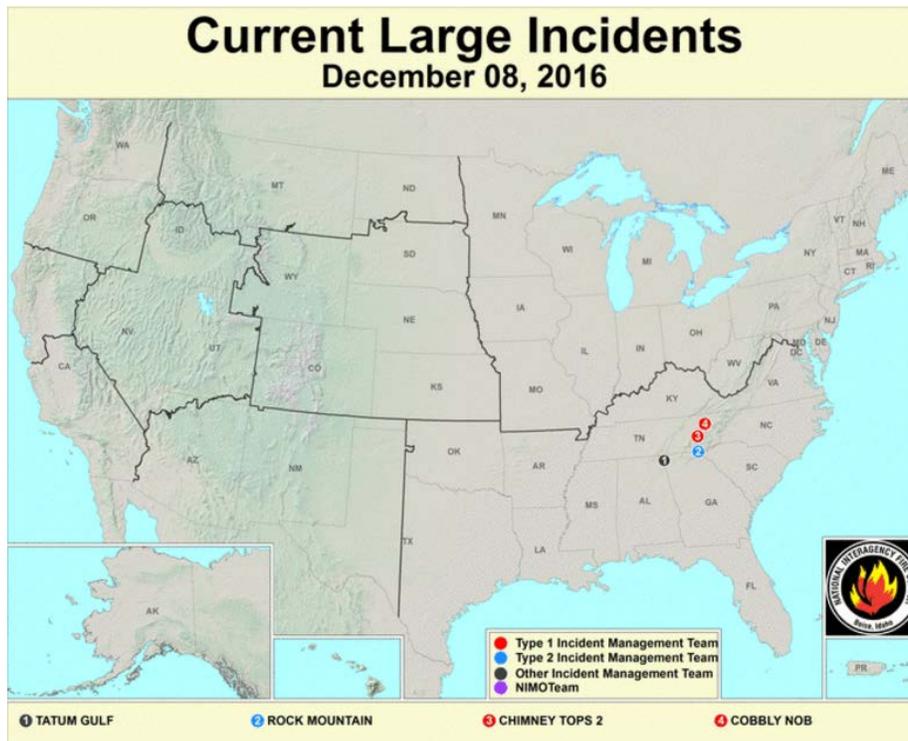
[National Water and Climate Center Reservoir Data](#)

U.S. Bureau of Reclamation Hydromet Tea Cup Reservoir Depictions:

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

[California Reservoir Conditions](#)

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



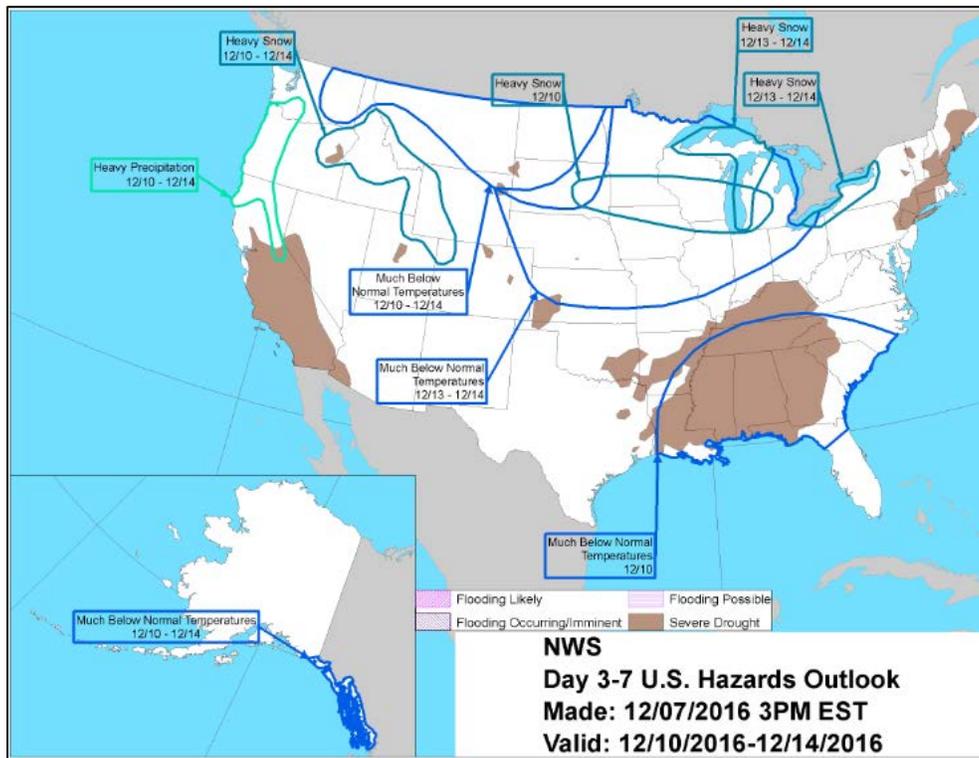
Short- and Long-Range Outlooks

Agricultural Weather Highlights

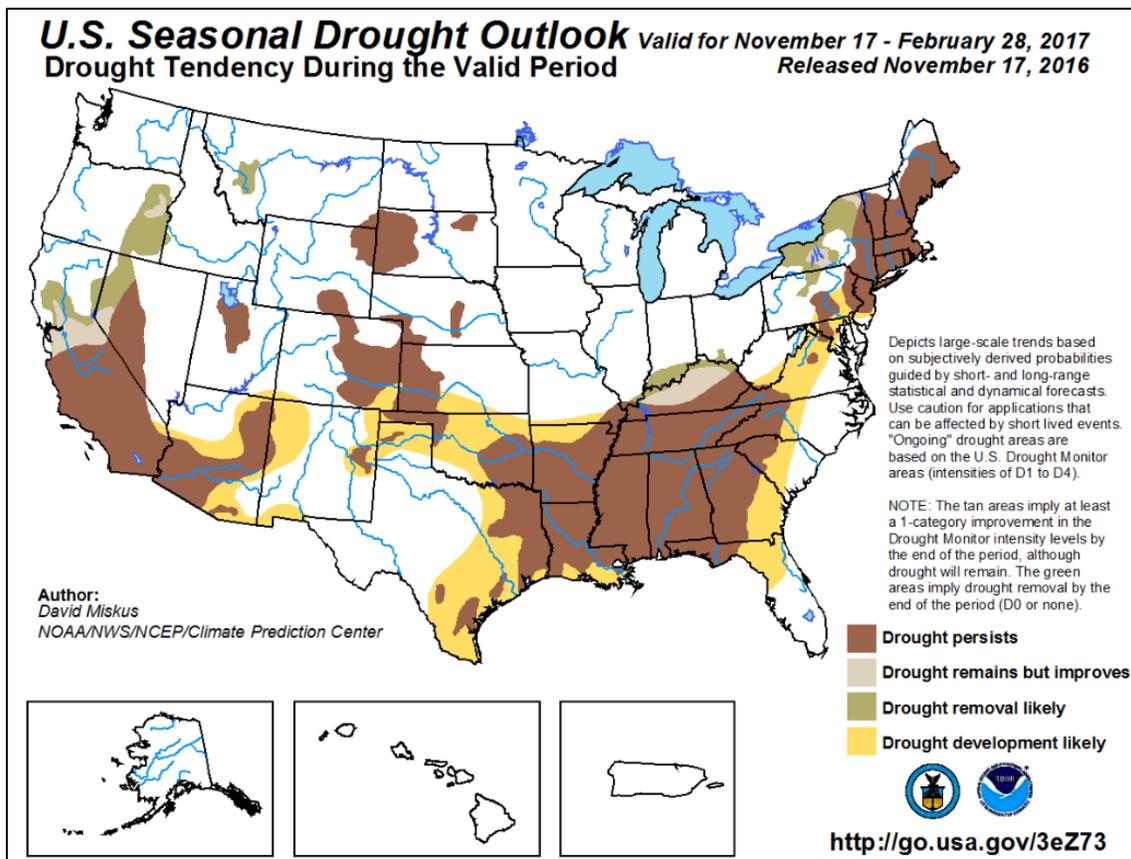
Author: Brad Rippey, Agricultural Meteorologist, USDA/OCE/WAOB

[National Outlook, December 8, 2016](#): “A cold weather pattern will remain in place through week’s end across much of the country. Early next week, however, markedly warmer air will overspread the southern U.S. in advance of Pacific storminess and another strong Canadian cold front. During the next 5 days, the heaviest precipitation will fall across northern California and the Northwest, with some locations receiving as much as 2 to 8 inches. Farther east, snow squalls will continue for several days downwind of the Great Lakes. Later, a series of fast-moving storms will produce periods of snow, mainly across the northern half of the U.S. By early next week, rain showers may return to the Southeast. The NWS 6- to 10-day outlook for December 13 – 17 calls for the likelihood of near- to below-normal temperatures nationwide, except for warmer-than-normal weather across Florida’s peninsula and from California into the Southwest. Meanwhile, below-normal precipitation in the south-central U.S. will contrast with wetter-than normal weather throughout the northern and eastern U.S.”

NWS Climate Prediction Center [Weather Hazard Outlook: December 10-14, 2016](#)

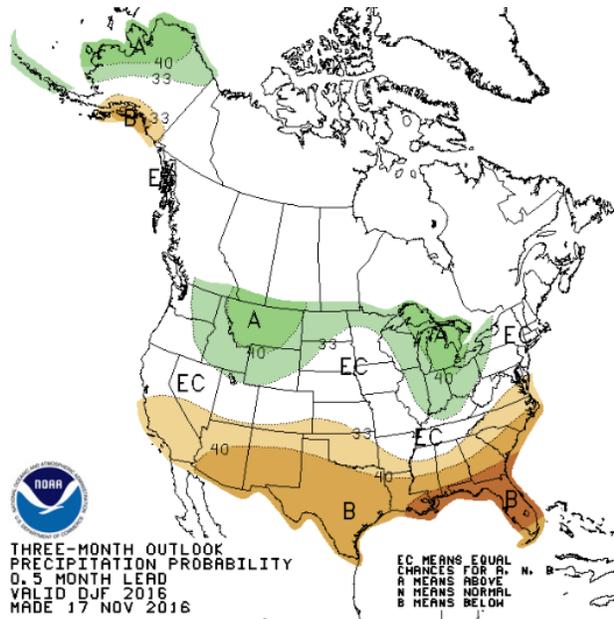


Seasonal Drought Outlook: [November 17, 2016 – February 28, 2017](#)



NWS Climate Prediction Center 3-Month Outlook

[Precipitation](#)

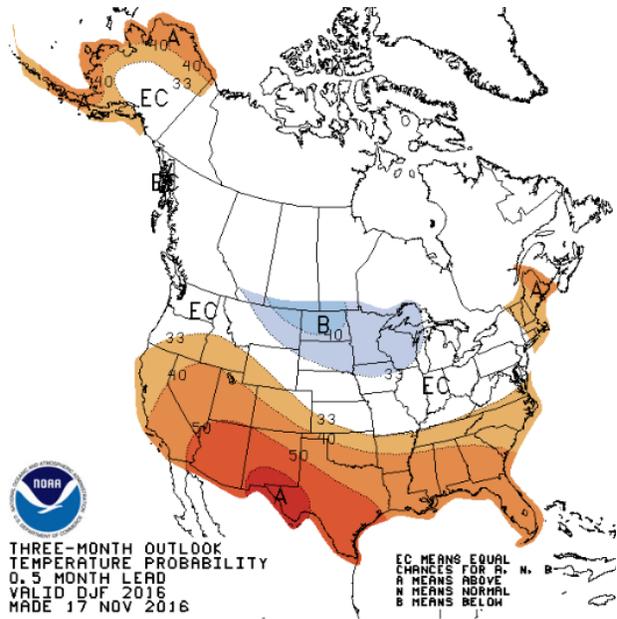


THREE-MONTH OUTLOOK
PRECIPITATION PROBABILITY
0.5 MONTH LEAD
VALID DJF 2016
MADE 17 NOV 2016

EC MEANS EQUAL
CHANCES FOR A, N, B
A MEANS ABOVE
N MEANS NORMAL
B MEANS BELOW

[December-January-February \(DJF\) 2016/2017
precipitation outlook summary](#)

[Temperature](#)



THREE-MONTH OUTLOOK
TEMPERATURE PROBABILITY
0.5 MONTH LEAD
VALID DJF 2016
MADE 17 NOV 2016

EC MEANS EQUAL
CHANCES FOR A, N, B
A MEANS ABOVE
N MEANS NORMAL
B MEANS BELOW

[December-January-February \(DJF\) 2016/2017
temperature outlook summary](#)

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](#).