

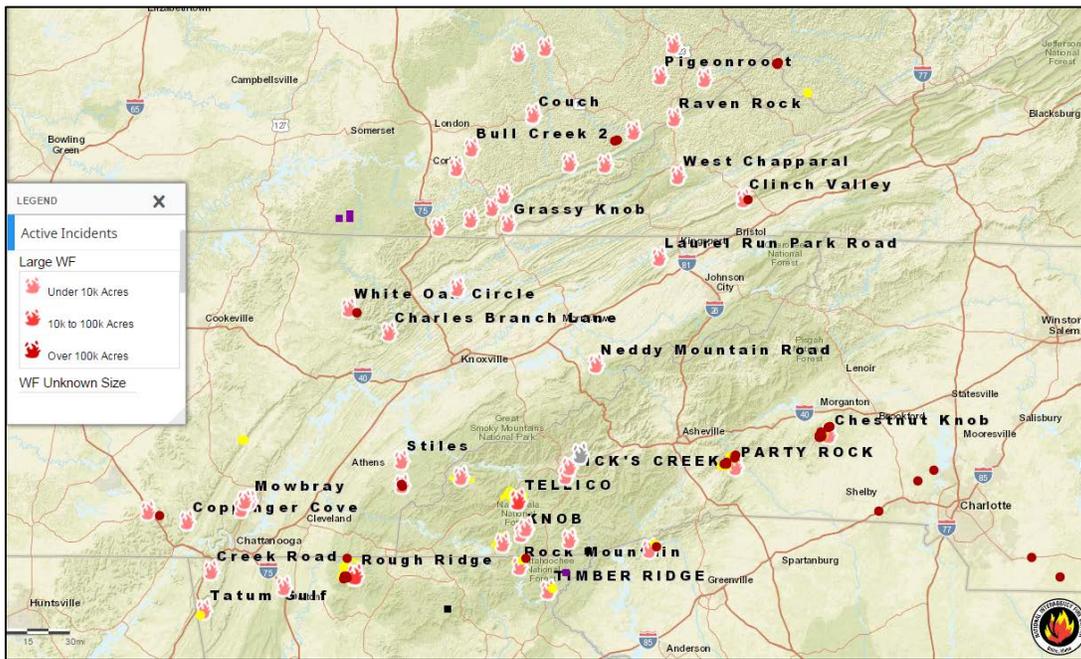
Water and Climate Update

November 17, 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.

Snow	2	Other Climatic and Water Supply Indicators	11
Precipitation	3	Short- and Long-Range Outlooks.....	13
Temperature	6	More Information	16
Drought	9		

Southeast U.S. drought impacts increasing in severity

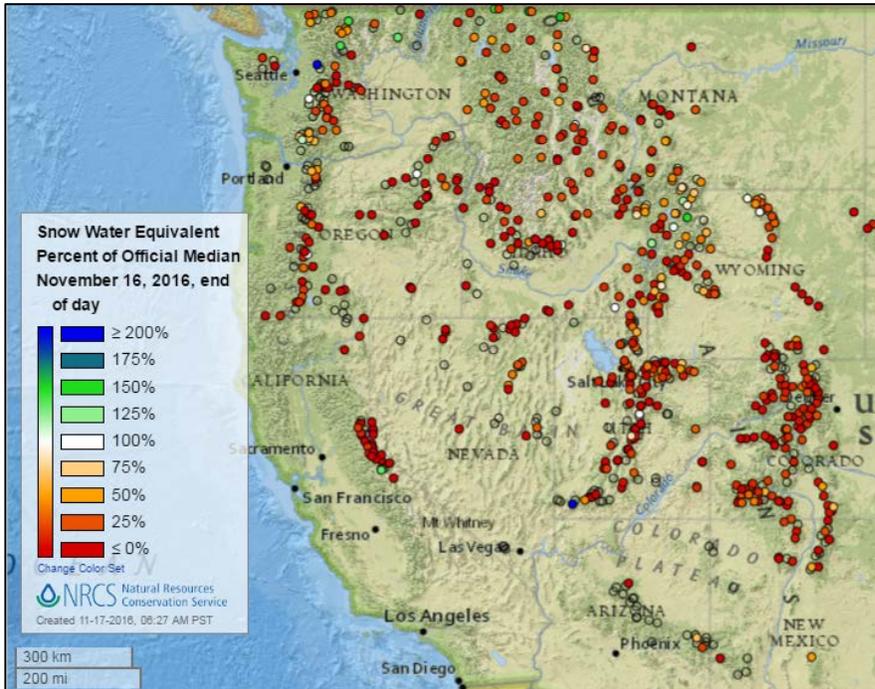


The current fire incident map from the National Interagency Fire Center Enterprise Geospatial Portal shows increasing active fires across the southeast U.S. State drought and emergency managers throughout the Southeast are providing information and measures to counteract impacts of drought, including fires, smoke affecting public health, agriculture drought and crop losses, critical water supplies, and other effects. Widespread emergency measures for fire and drought are in place across the region.

- More news:** [Triple Threat Strikes South: Drought, Fire, Smoke](#)
[Wildfires spread across seven southern states](#)
[State officials say sharing information vital during statewide drought](#)
[Gov. Deal expands drought declaration, bans fireworks in much of parched Georgia](#)
[West Coast crews mobilize to battle Southeast fires](#)
[EPA reports 'unhealthy' air quality for Atlanta](#)
[Hundreds hospitalized in Southeast fires](#)
[Georgia imposes mandatory water restrictions as drought worsens](#)

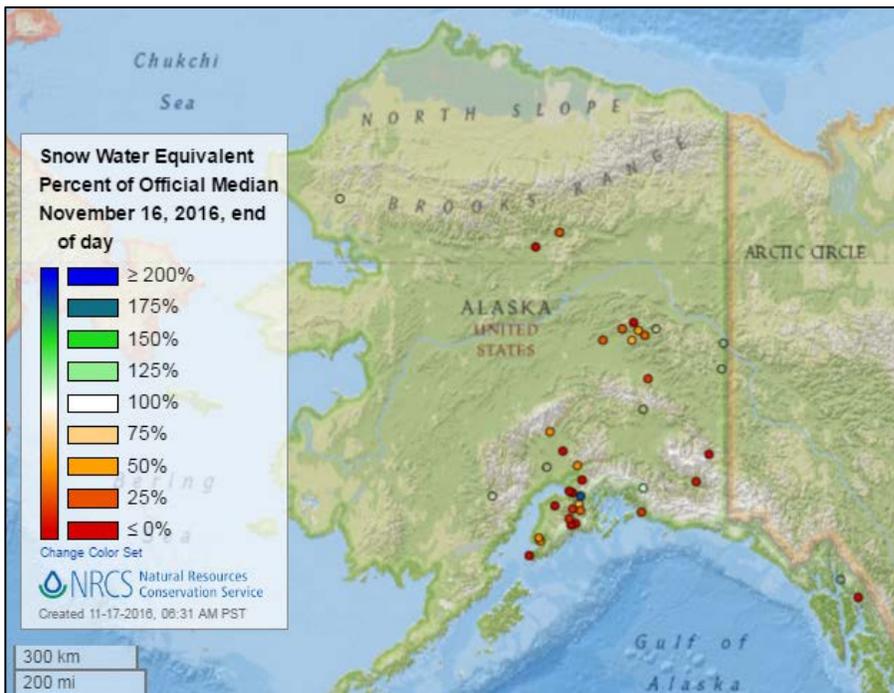
Snow

Current Snow Water Equivalent, NRCS SNOTEL Network



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

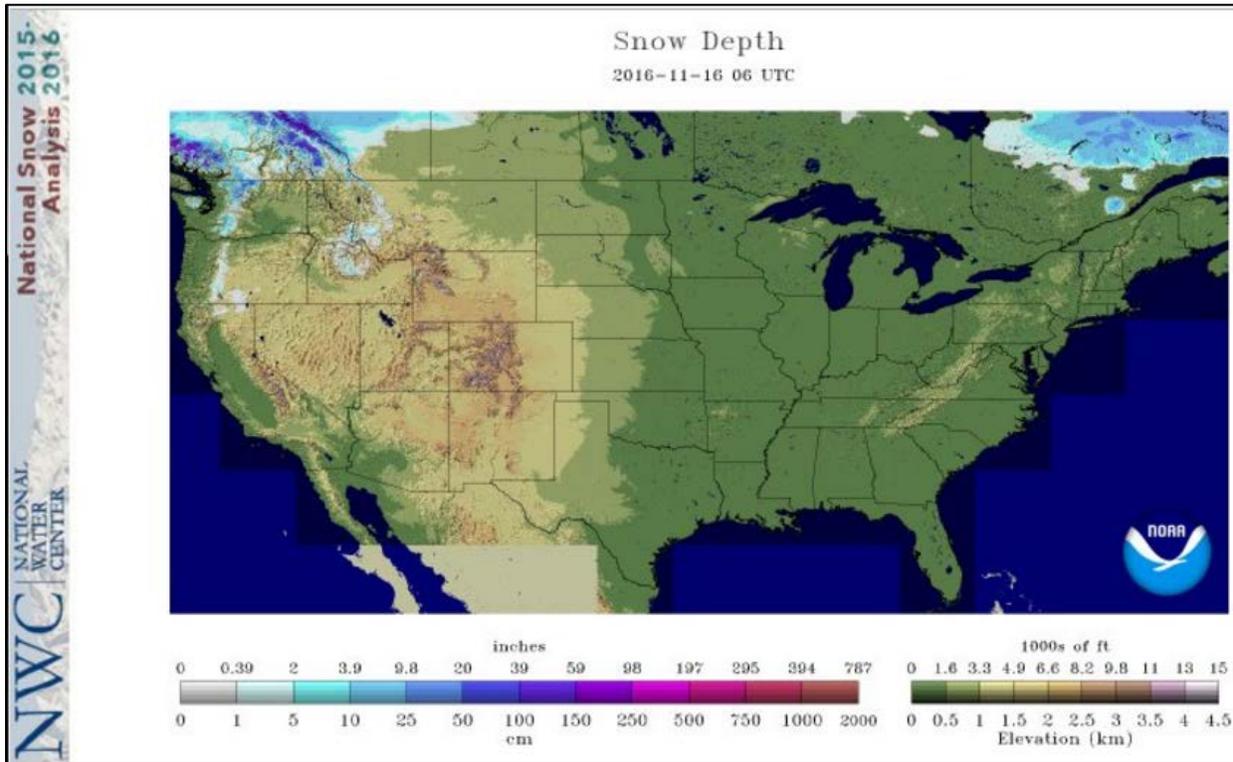
See also:
[Snow water equivalent values \(inches\) map](#)



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

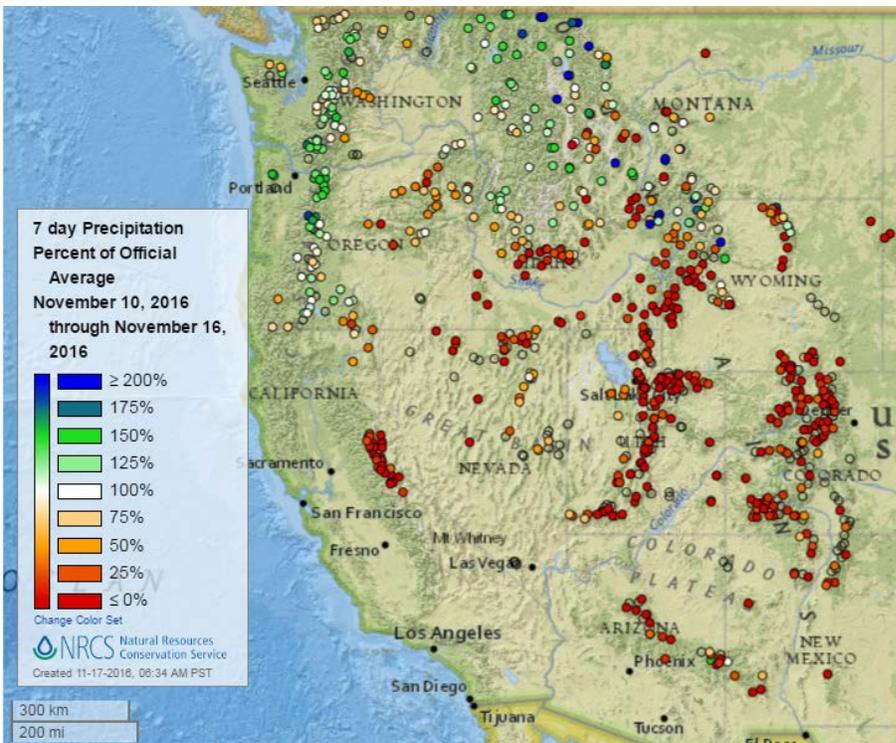
See also:
[Alaska snow water equivalent values \(inches\) map](#)

Current Snow Depth, National Weather Service (NWS) Networks



Precipitation

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



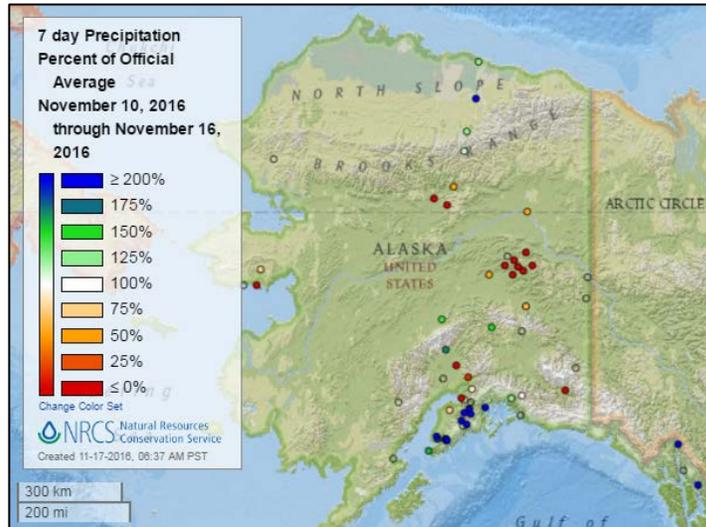
[7-day precipitation percent of average map](#)

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

Water and Climate Update

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

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



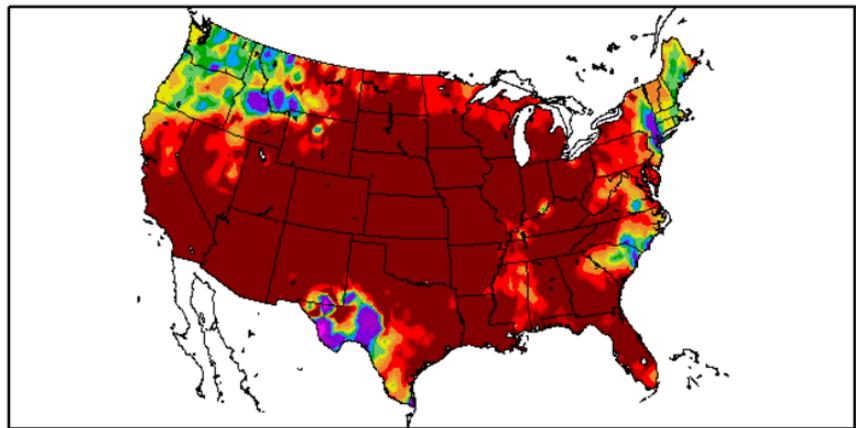
Last 7 Days, National Weather Service (NWS) Networks

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 (%)
11/10/2016 – 11/16/2016



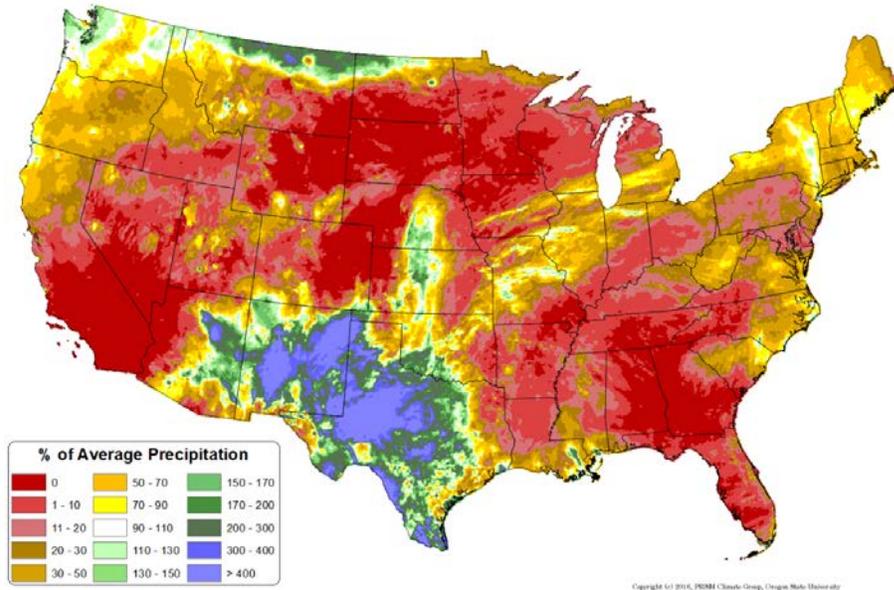
Generated 11/17/2016 at HPRCC using provisional data.

Regional Climate Centers

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

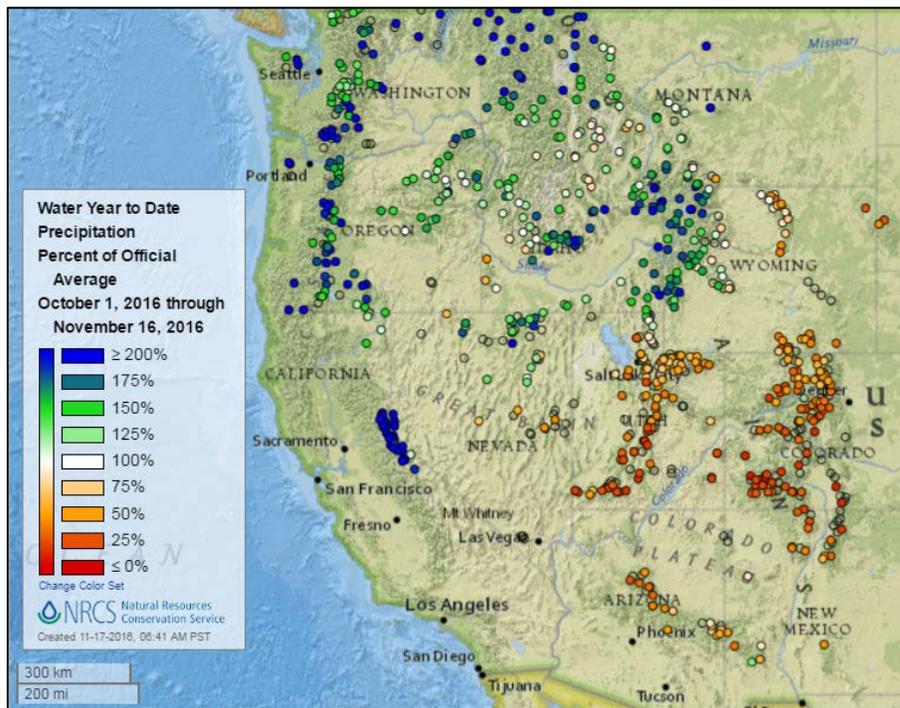
Source: PRISM

Total Precipitation Anomaly: 01 November 2016 - 16 November 2016
Period ending 7 AM EST 16 Nov 2016
Base period: 1981-2010
(Map created 17 Nov 2016)



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

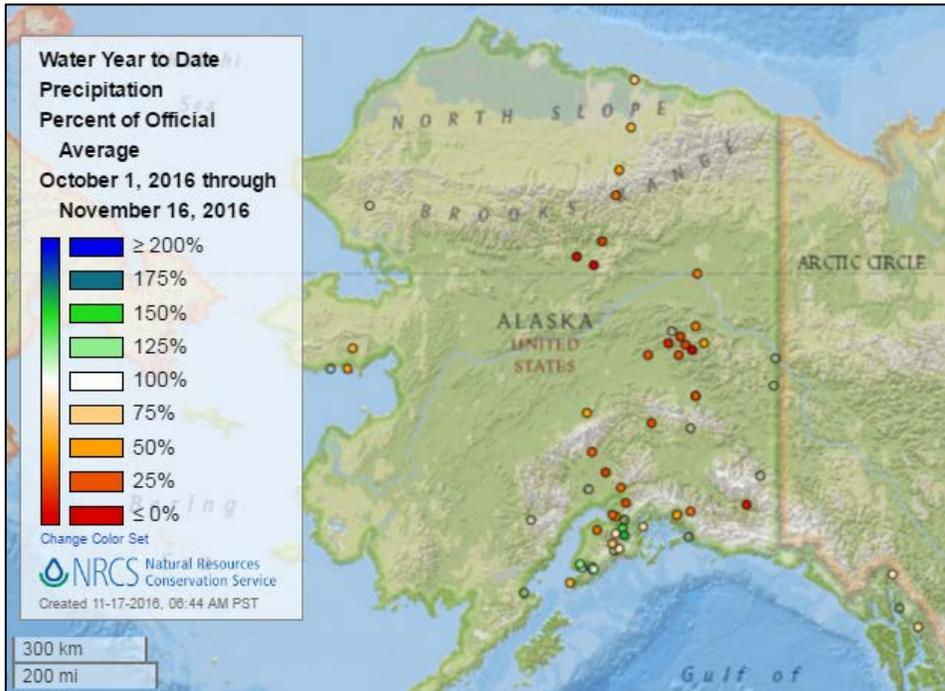
Water Year-to-Date, Western Mountain Sites (NRCS SNOTEL Network)



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

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

Water and Climate Update



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

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

Temperature

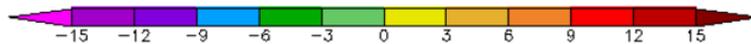
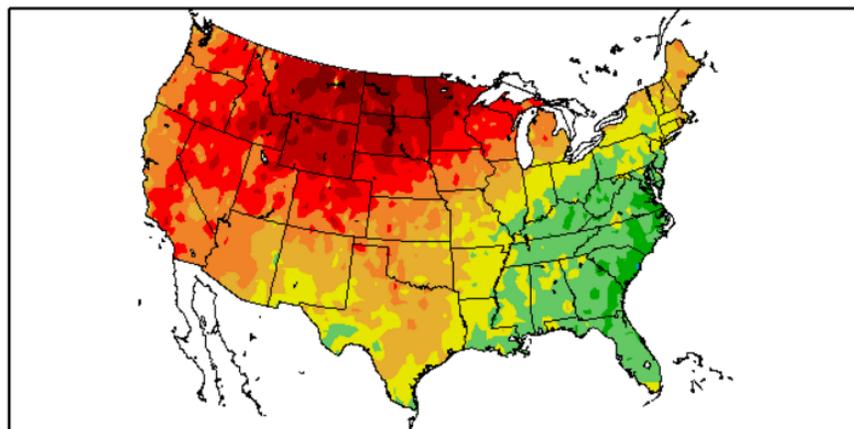
Last 7 Days, National Weather Service (NWS) Networks

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)
11/10/2016 – 11/16/2016



Generated 11/17/2016 at HPRCC using provisional data.

Regional Climate Centers

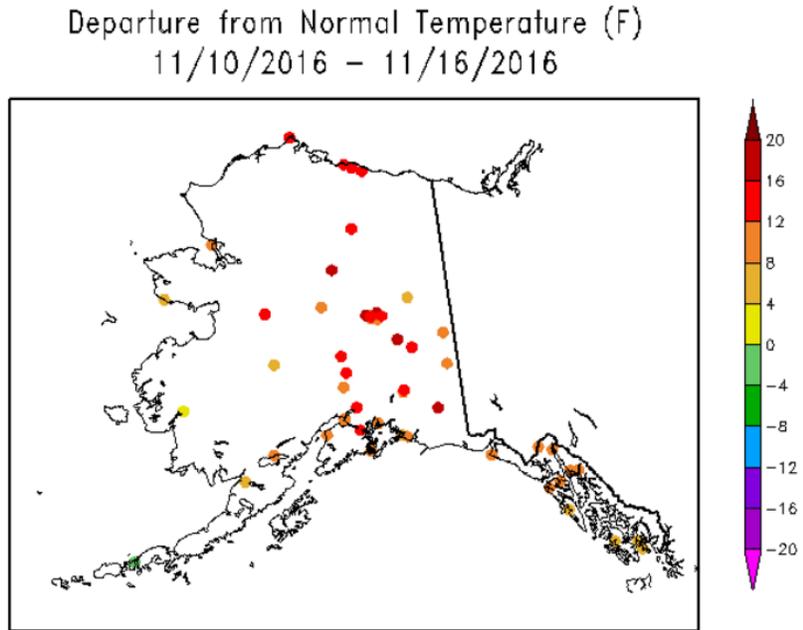
Water and Climate Update

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](#)



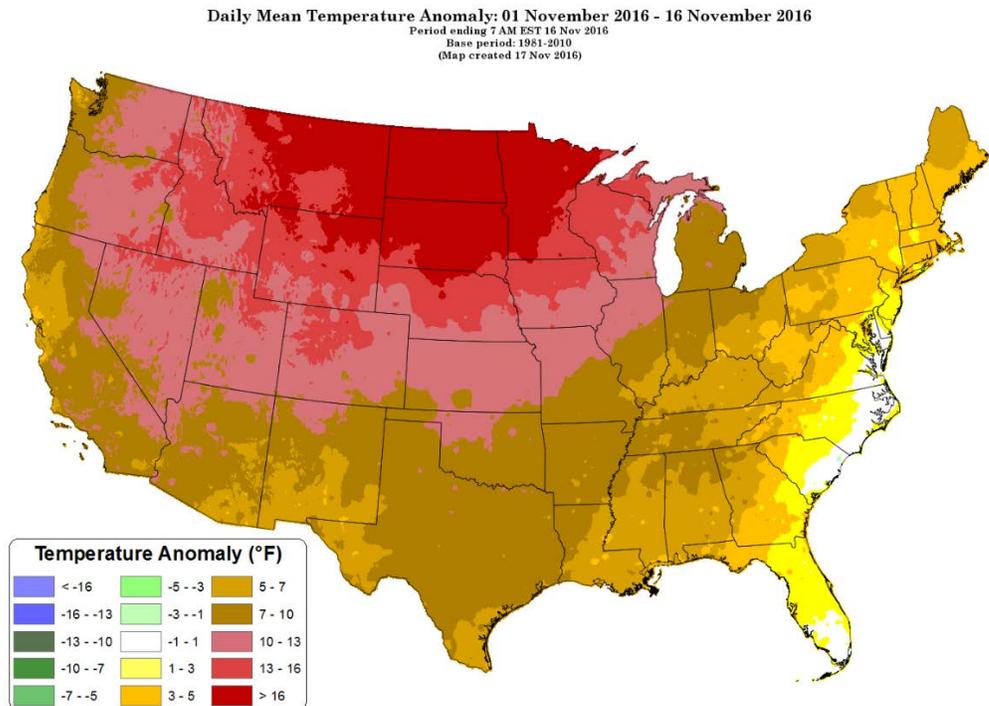
Generated 11/17/2016 at HPRCC using provisional data.

Regional Climate Centers

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

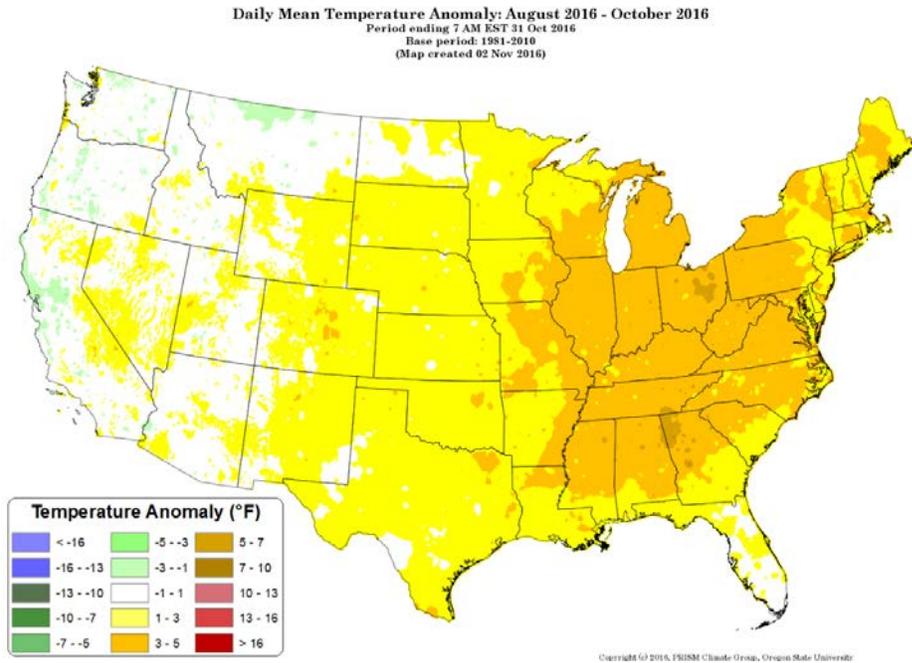
Source: PRISM

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



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

Source: PRISM

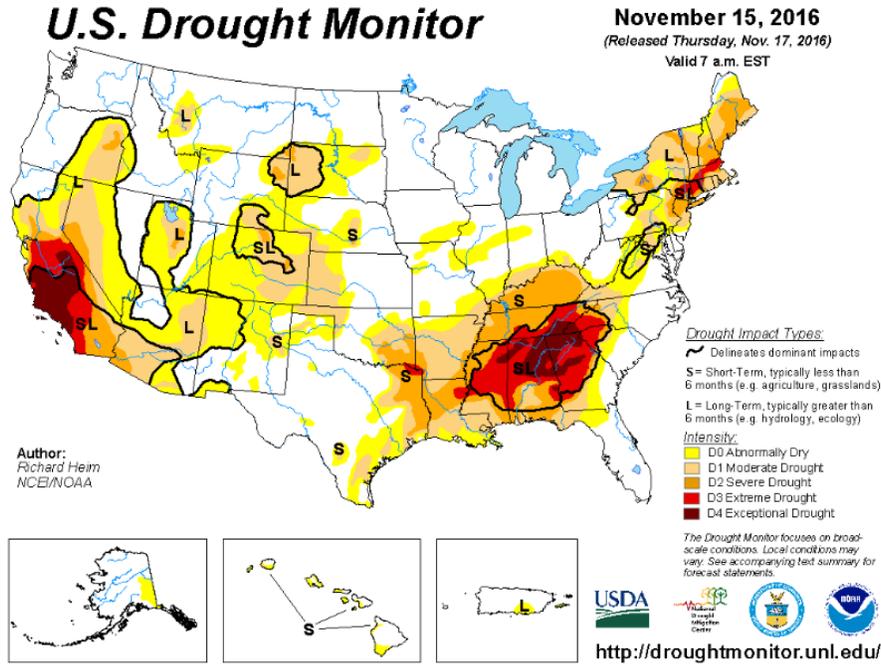


[August through October daily mean temperature anomaly map](#)

Drought

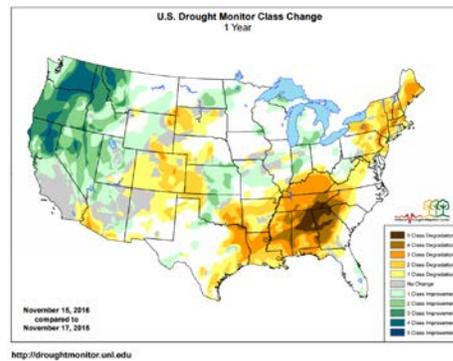
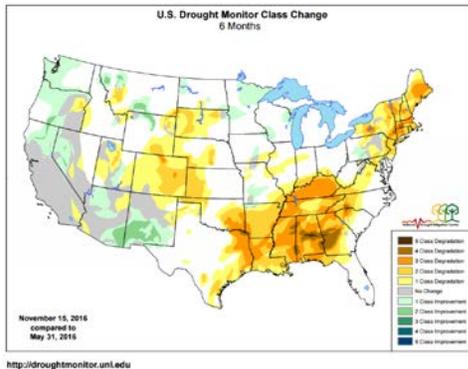
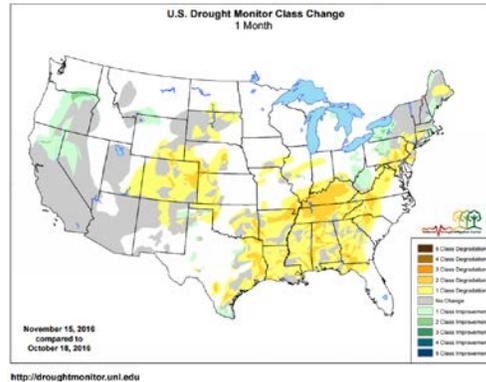
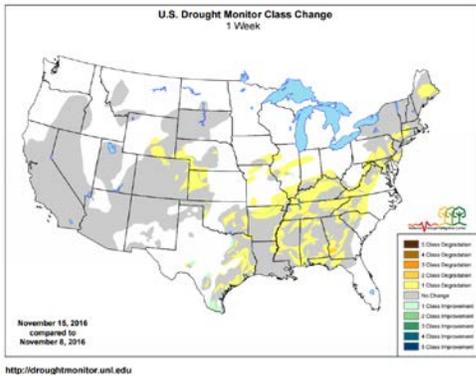
[U.S. Drought Monitor](#) See map below.

[U.S. Drought Portal](#) Comprehensive drought resource.



Changes in Drought Monitor Categories over Time

Click any map to enlarge



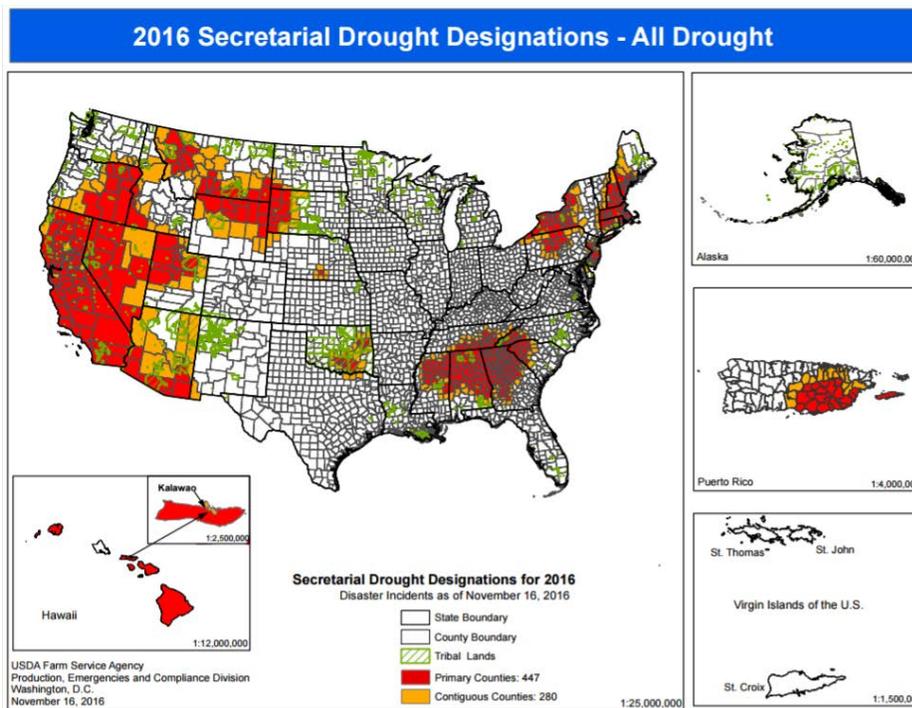
[Changes in drought conditions over the last 12 months](#)

Current National [Drought Summary](#), November 15, 2016

Author: Richard Heim, NOAA/NCEI

“A large upper-level ridge of high pressure dominated the Lower 48 States (CONUS) this USDM week, keeping much of the country warmer and drier than normal. Low pressure troughs moving in the jet stream flow brought precipitation to the Pacific Northwest, northwest California, and the Northern Rockies; parts of Texas and the Gulf of Mexico coast; and the coastal Southeast to Mid-Atlantic States and eastern Great Lakes. But, except for Texas and a few areas in the coastal Carolinas, even with the precipitation the week was drier than normal. The continued and prolonged dryness in many areas resulted in expanding and intensifying drought, especially in the Central to Southern Plains, Lower Mississippi Valley to Ohio Valley, and Southeast to Northeast.”

USDA 2016 Secretarial [Drought Designations](#)

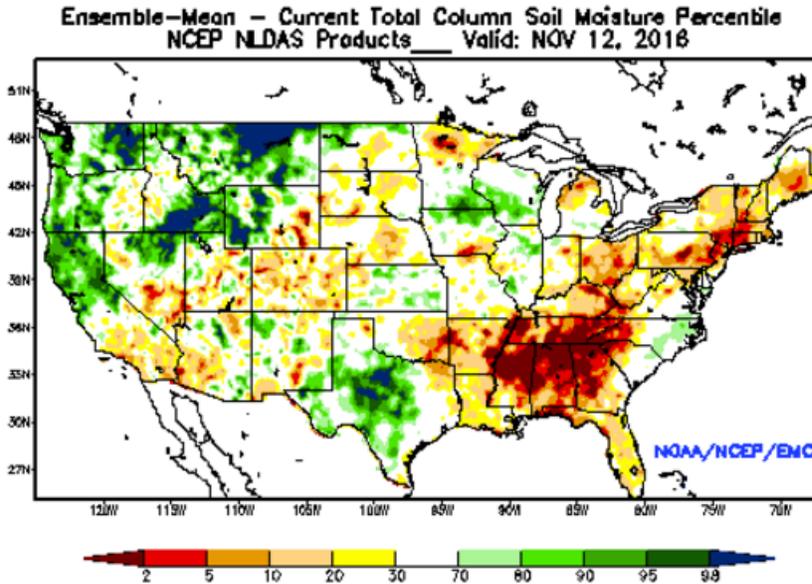


Highlighted Drought Resources

- [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](#)

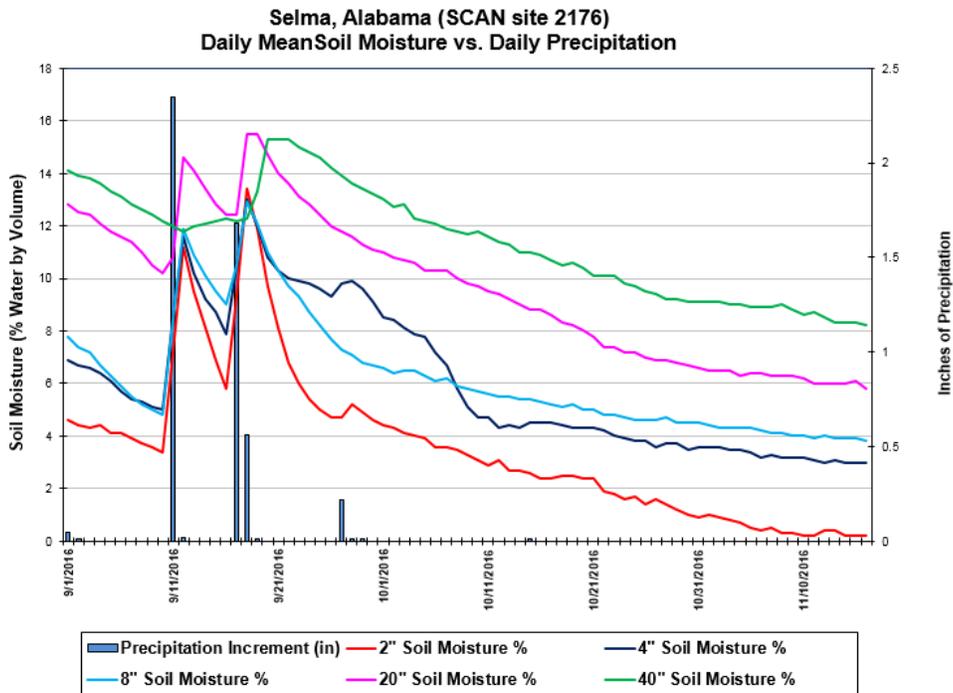
Other Climatic and Water Supply Indicators

Soil Moisture



[Modeled soil moisture percentiles](#) as of November 12, 2016.

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



Soil moisture (at 2-, 4-, 8-, 20-, and 40-inch depths) and precipitation since September 1 at the [Selma SCAN site 2176](#) in northern Alabama. The precipitation in early September resulted in an increase in soil moisture at all sensor depths. However, since this time, there has been little to no rain and soil moisture trends continue to decline to very dry conditions.

Soil Moisture Data Portals

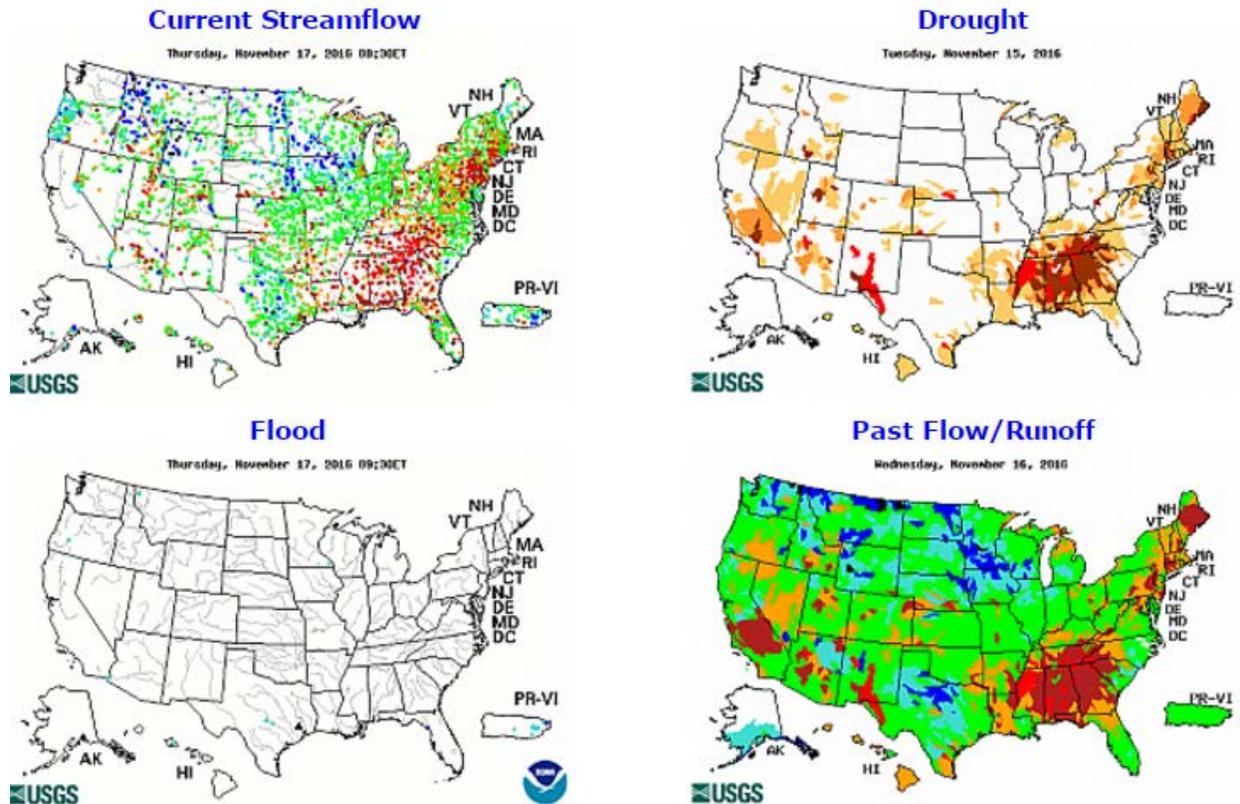
[CRN Soil Moisture](#)

[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](#)

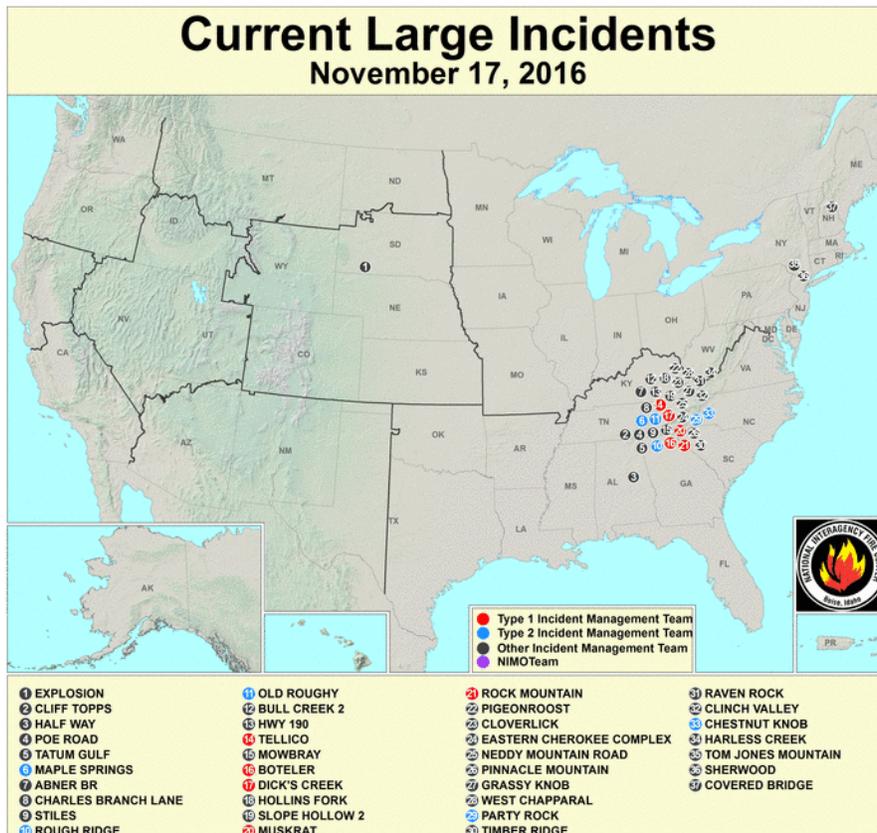
[Pacific Northwest/Snake/Columbia](#)

[Sevier River Water, Utah](#)

[Upper Missouri, Kansas, Oklahoma, Texas](#)

[California Reservoir Conditions](#)

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



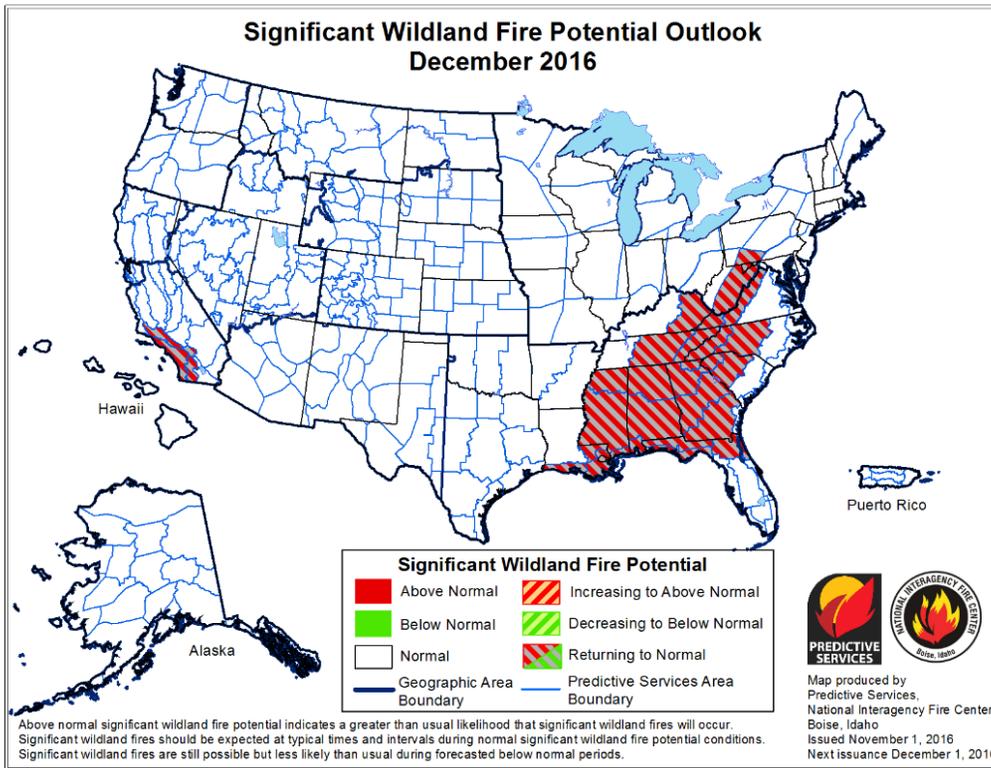
Short- and Long-Range Outlooks

Agricultural Weather Highlights

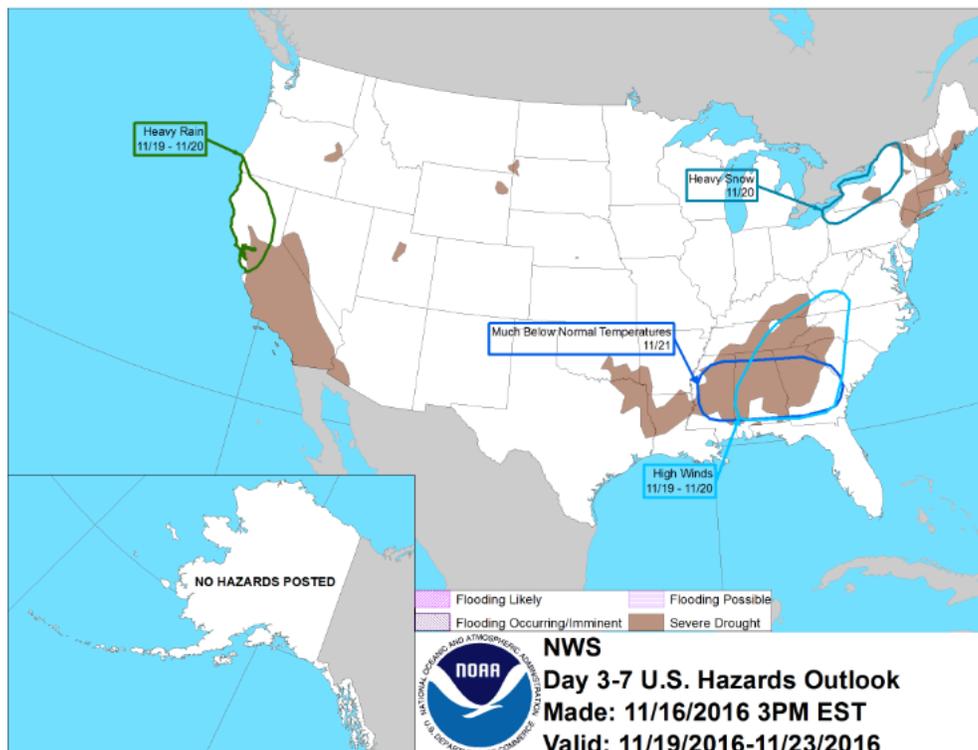
Author: Brad Rippey, Agricultural Meteorologist, USDA/OCE/WAOB

[National Outlook, November 17, 2016](#): “A storm system over the central Rockies will drift northeastward, reaching the upper Great Lakes region by late Friday. The storm’s trailing cold front will cross the eastern U.S. during the weekend. Wind-driven snow will fall across the north-central U.S., northwest of the track of the low-pressure system. Blizzard or winter storm warnings are in effect for parts of Minnesota, Nebraska, and South Dakota. Cold, windy weather, along with rain and snow, will arrive in the Northeast during the weekend. Meanwhile, windy weather will spread from the southwestern and south-central U.S. into the Southeast, with no rain expected during the next 5 days across the southern Plains and southern Atlantic region. Briefly colder weather will trail the storm system, but temperatures will rebound to above-normal levels during the weekend across the western half of the U.S. In addition, showery weather will overspread much of the western U.S. late in the weekend or early next week, with 1 to 2 inches possible in the Southwest and 2 to 4 inches in the Pacific Northwest. The NWS 6- to 10-day outlook for November 22 – 26 calls for the likelihood of near- to above-normal temperatures nationwide, except for cooler-than-normal conditions in the Atlantic Coast States. Meanwhile, near- to above-normal precipitation across most of the country will contrast with drier-than-normal weather across the northern Plains, much of Texas, and the lower Southeast.”

Fire Potential Outlook: [December 2016](#)



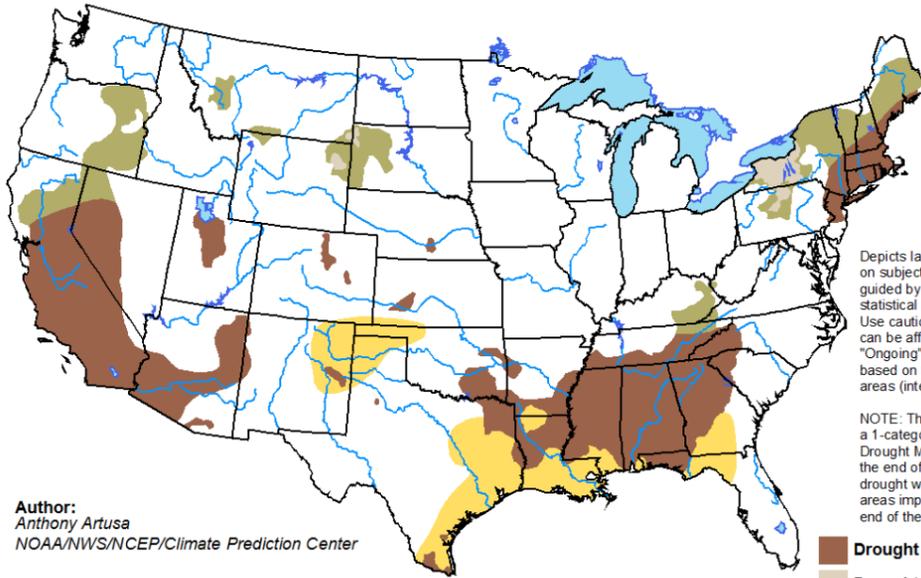
NWS Climate Prediction Center [Weather Hazard Outlook: November 19-23, 2016](#)



Seasonal Drought Outlook: [October 20, 2016 – January 31, 2017](#)

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

Valid for October 20 - January 31, 2017
Released October 20, 2016



Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

Author:
Anthony Artusa
NOAA/NWS/NCEP/Climate Prediction Center

- Drought persists
- Drought remains but improves
- Drought removal likely
- Drought development likely

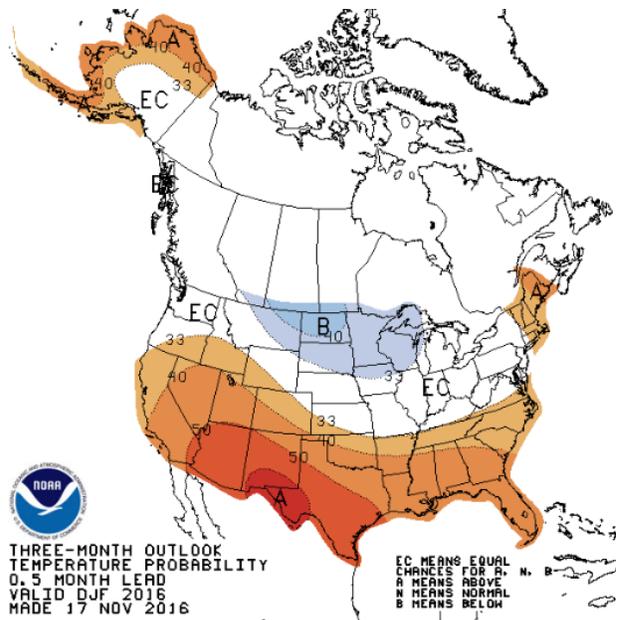
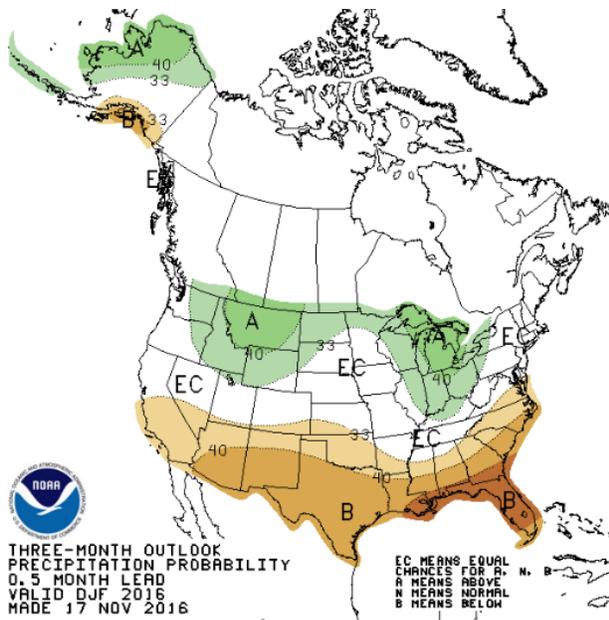


<http://go.usa.gov/3eZ73>

NWS Climate Prediction Center 3-Month Outlook

[Precipitation](#)

[Temperature](#)



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

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 precipitation outlook summary](#)

[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](#).