

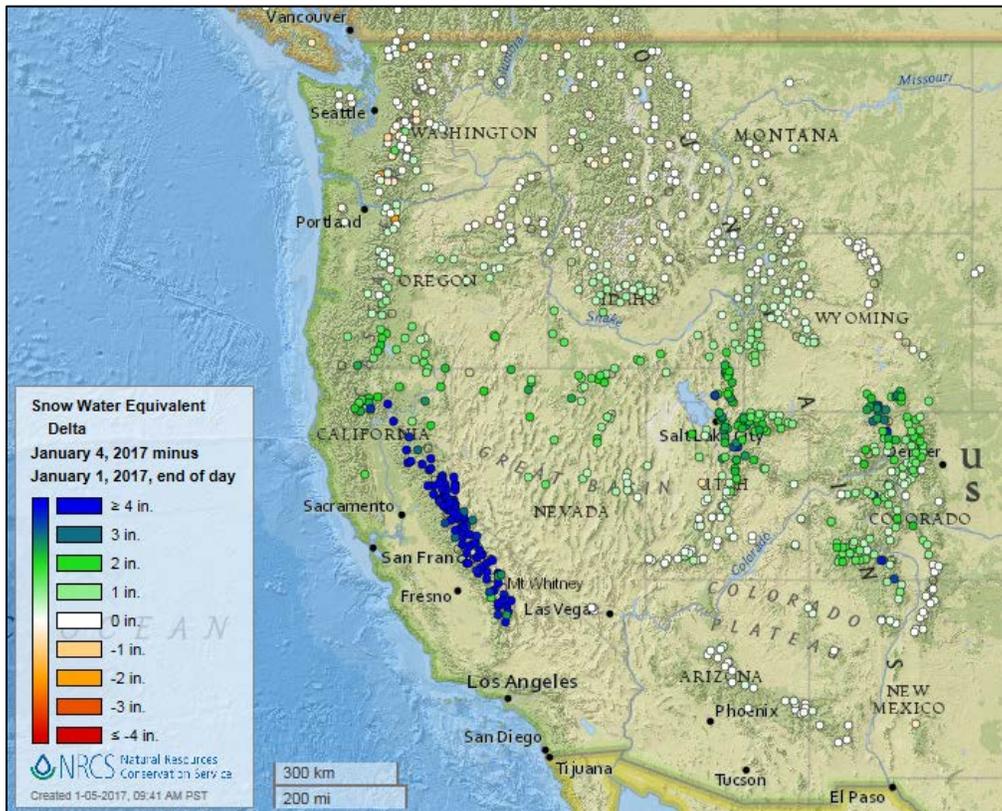
Water and Climate Update

January 5, 2017

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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Winter storms bring heavy snow to the Sierra Nevada



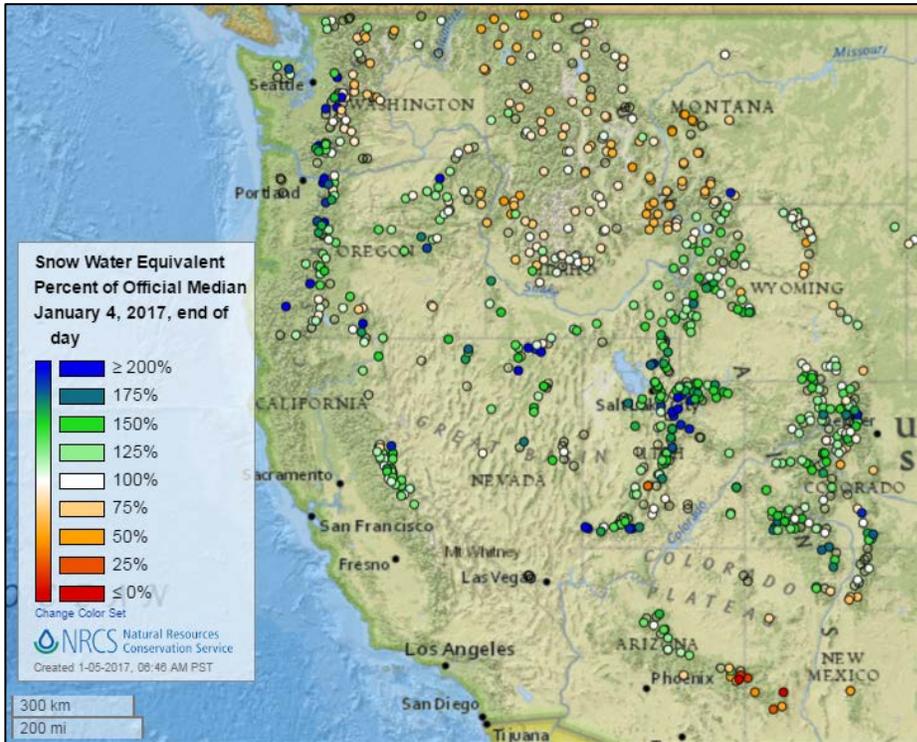
Heavy winter storms during the past three days have increased the snowpack across the Sierra Nevada with over four inches of Snow Water Equivalent (SWE) blanketing the mountain range. The Great Basin, Wasatch Range, and the central Rocky Mountains also had from one to four inches of SWE increase during this time. Additional storms are expected to affect this same region in the coming week.

In the news:

- [Massive Winter Weather System Brings 'Epic' Snowfall to Sierra Nevada](#)
- [10-15 feet of snow to bury California; wintry weather also targets South](#)
- [Winter weather whips up a whirlwind of warnings](#)
- [Seven feet of snow in seven days, and the California ski resorts are rejoicing](#)
- [Despite recent storms, California's 'snow drought' continues](#)

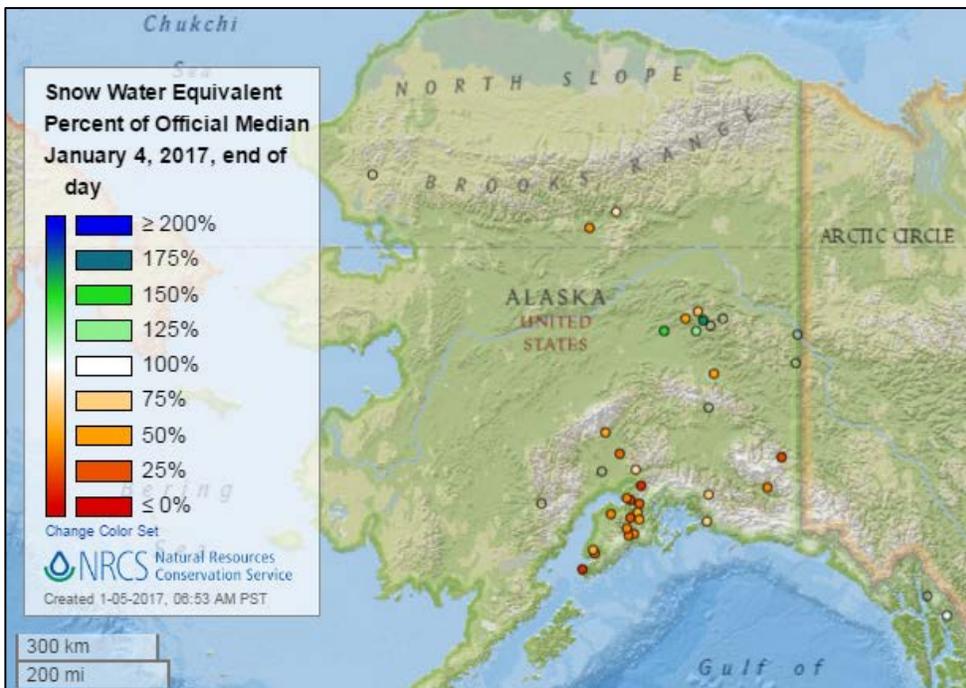
Snow

Current Snow Water Equivalent, NRCS SNOTEL Network



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

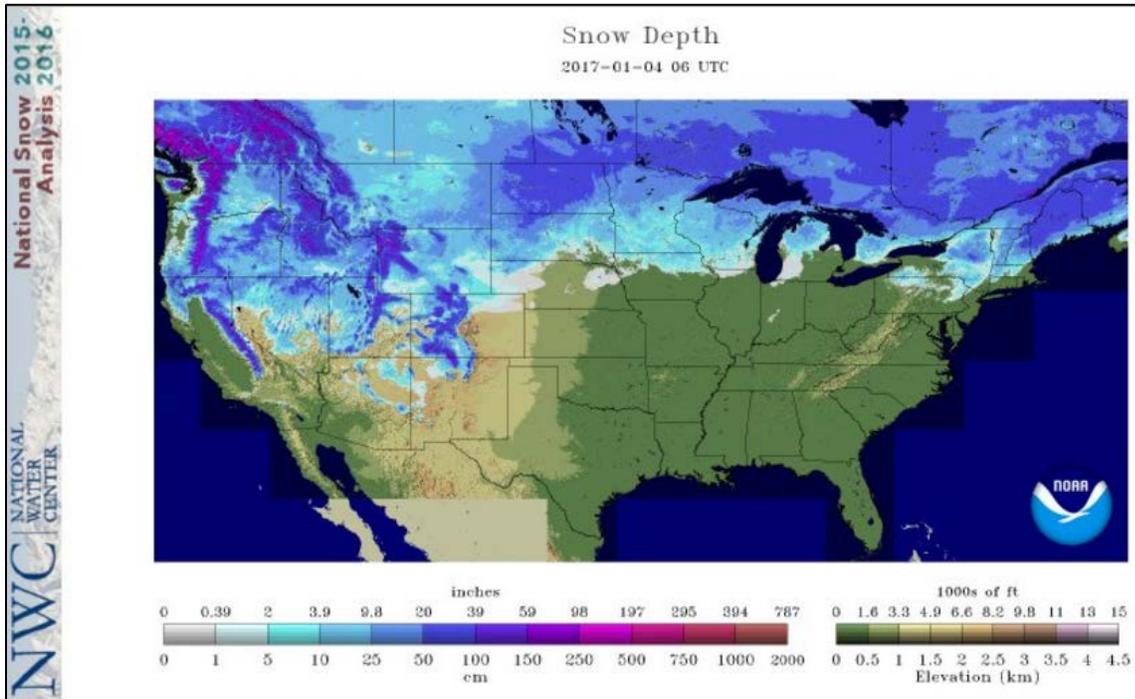
See also:
[Snow water equivalent values \(inches\) map](#)



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

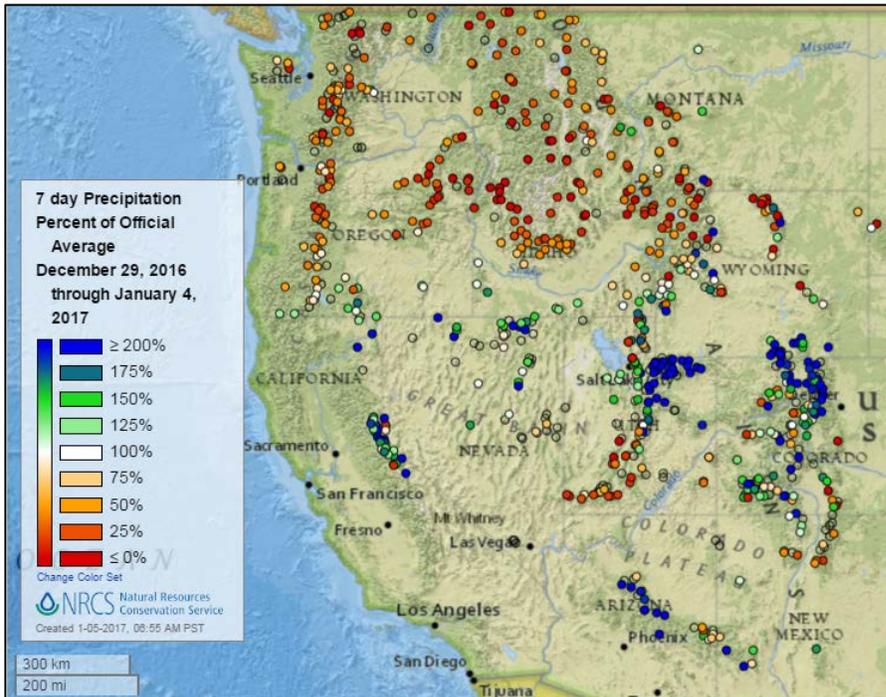
See also:
[Alaska snow water equivalent values \(inches\) map](#)

Current Snow Depth, National Weather Service (NWS) Networks



Precipitation

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



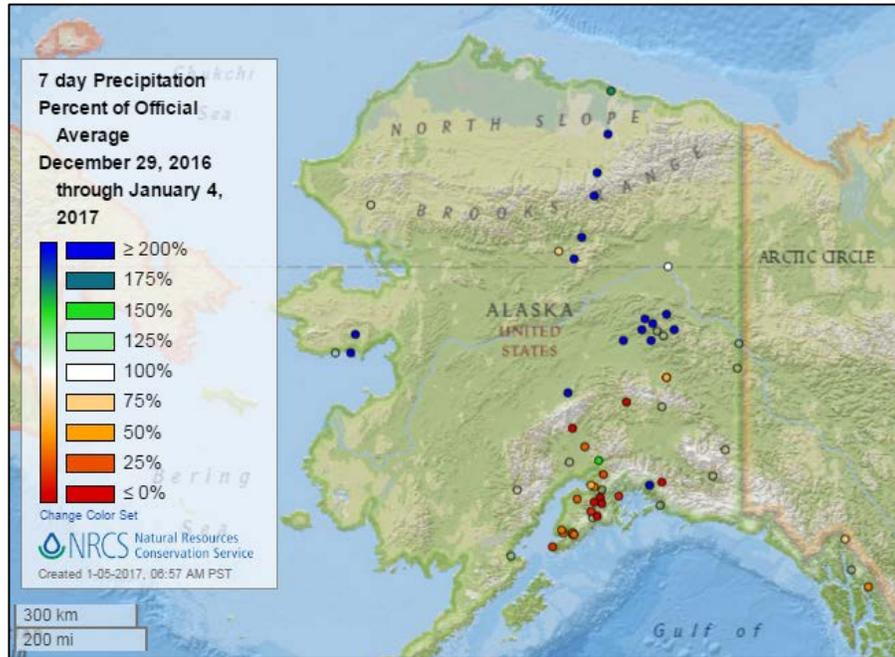
[7-day precipitation percent of average map](#)

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

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

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



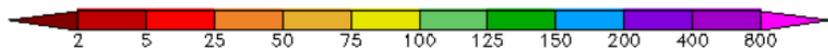
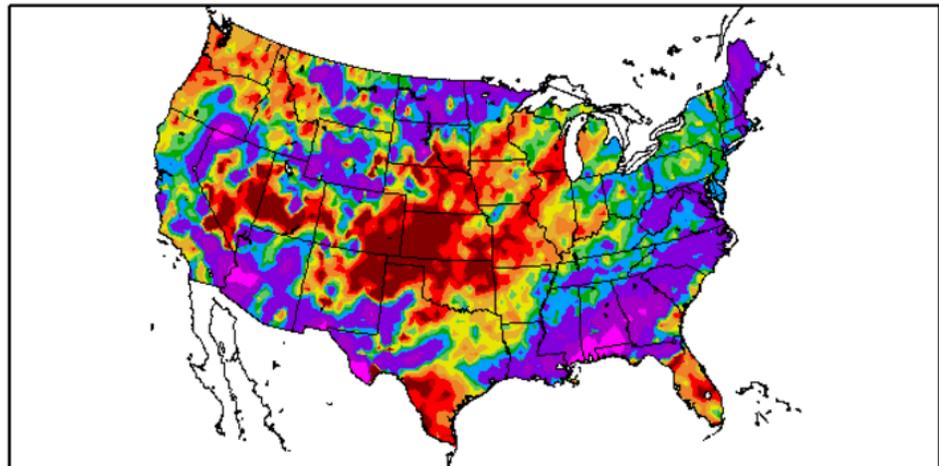
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

Percent of Normal Precipitation (%)
12/29/2016 – 1/4/2017

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

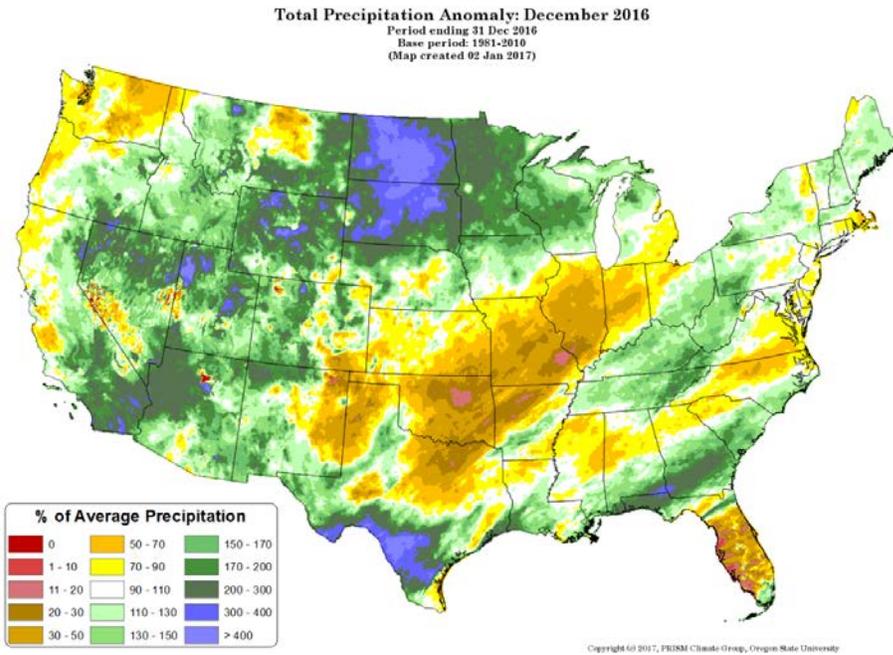


Generated 1/5/2017 at HPRCC using provisional data.

Regional Climate Centers

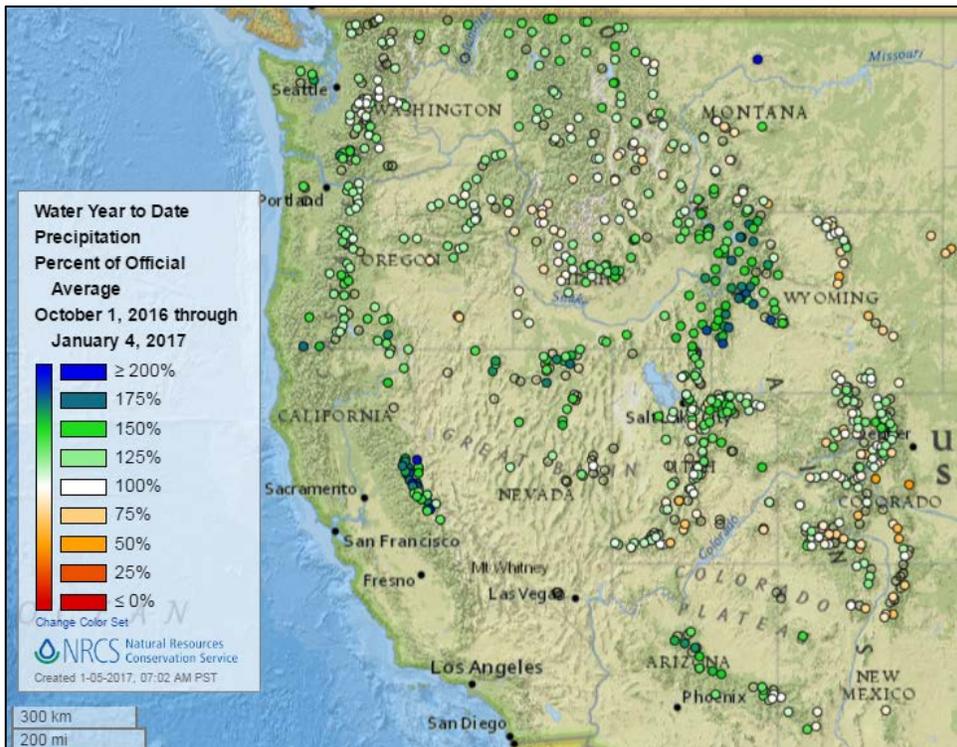
Previous Month, All Available Data Including SNOTEL and NWS Networks

Source: PRISM



[Previous month national precipitation percent of average map](#)

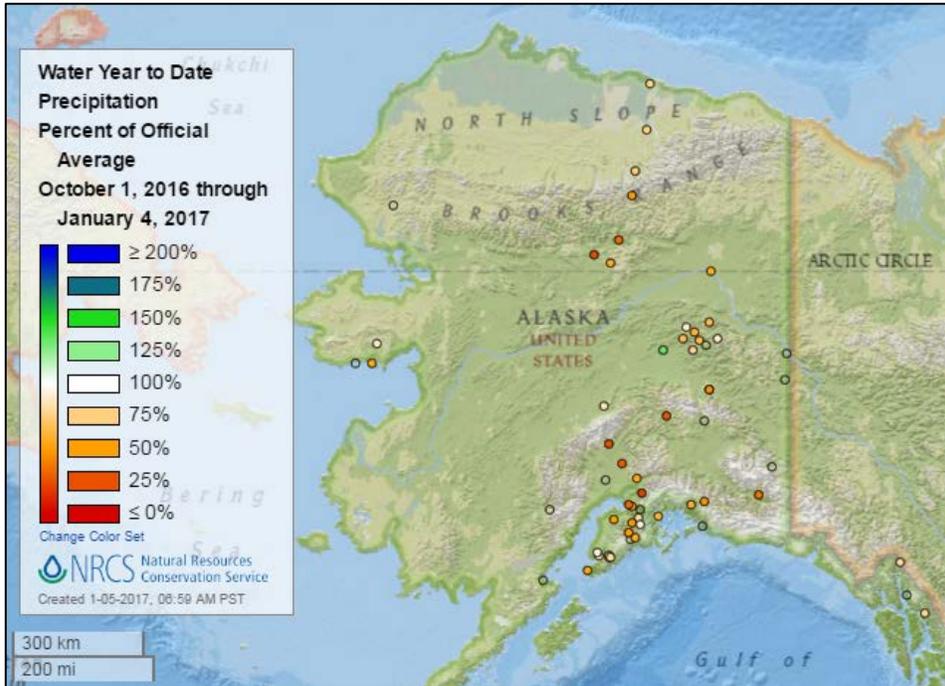
Water Year-to-Date, Western Mountain Sites (NRCS SNOTEL Network)



[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

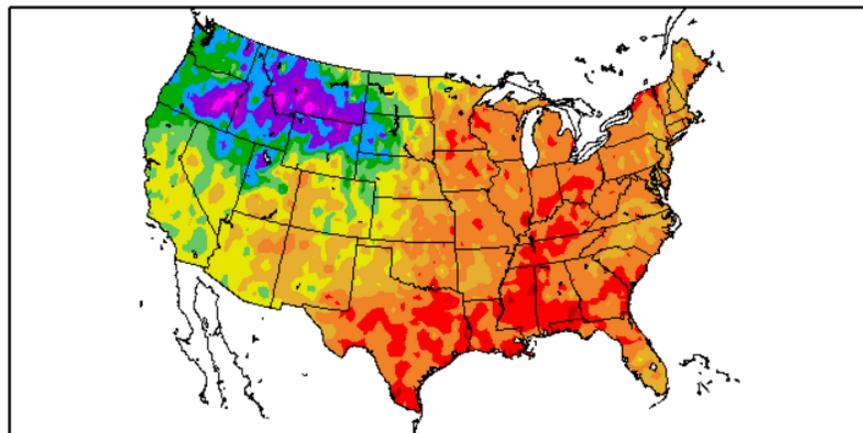
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

Departure from Normal Temperature (F)
12/29/2016 - 1/4/2017

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



Generated 1/5/2017 at HPRCC using provisional data.

Regional Climate Centers

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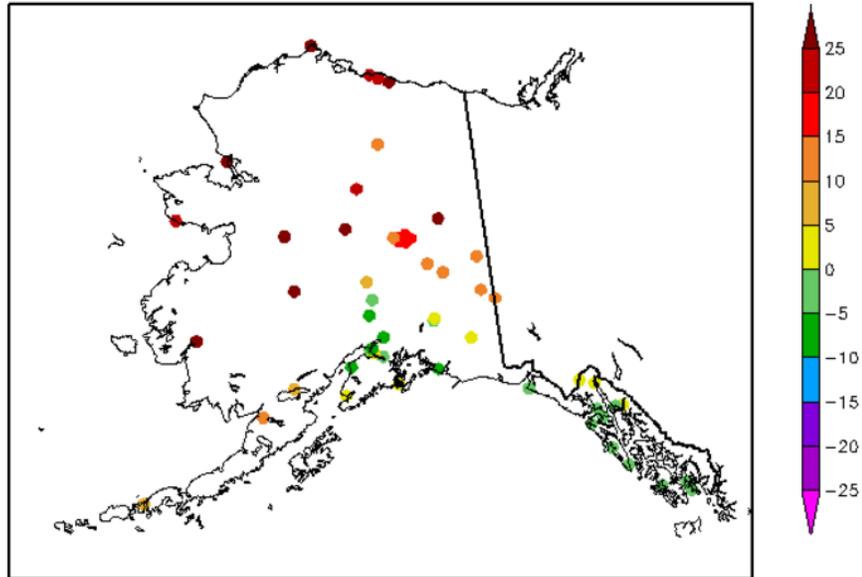
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F) 12/29/2016 - 1/4/2017



Generated 1/5/2017 at HPRCC using provisional data.

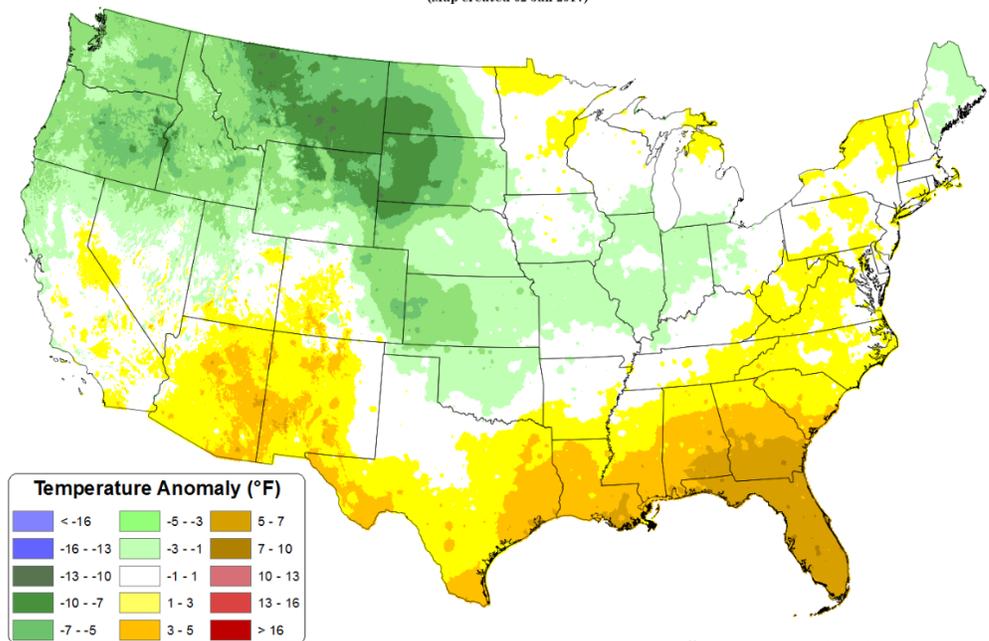
Regional Climate Centers

Previous Month, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

[Previous month national daily mean temperature anomaly map](#)

Daily Mean Temperature Anomaly: December 2016 Period ending 7 AM EST 31 Dec 2016 Base period: 1981-2010 (Map created 02 Jan 2017)

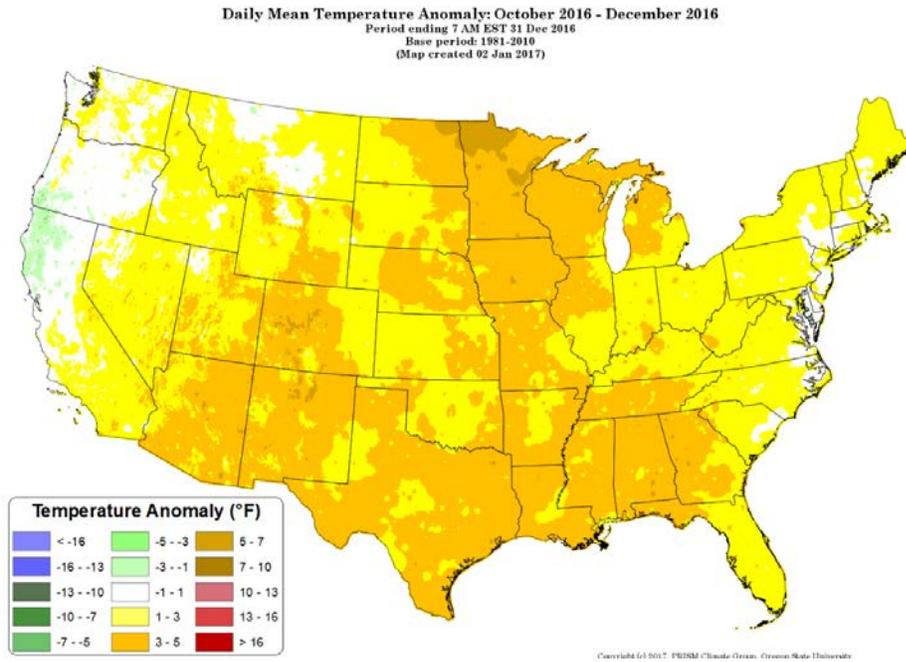


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Water and Climate Update

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

Source: PRISM

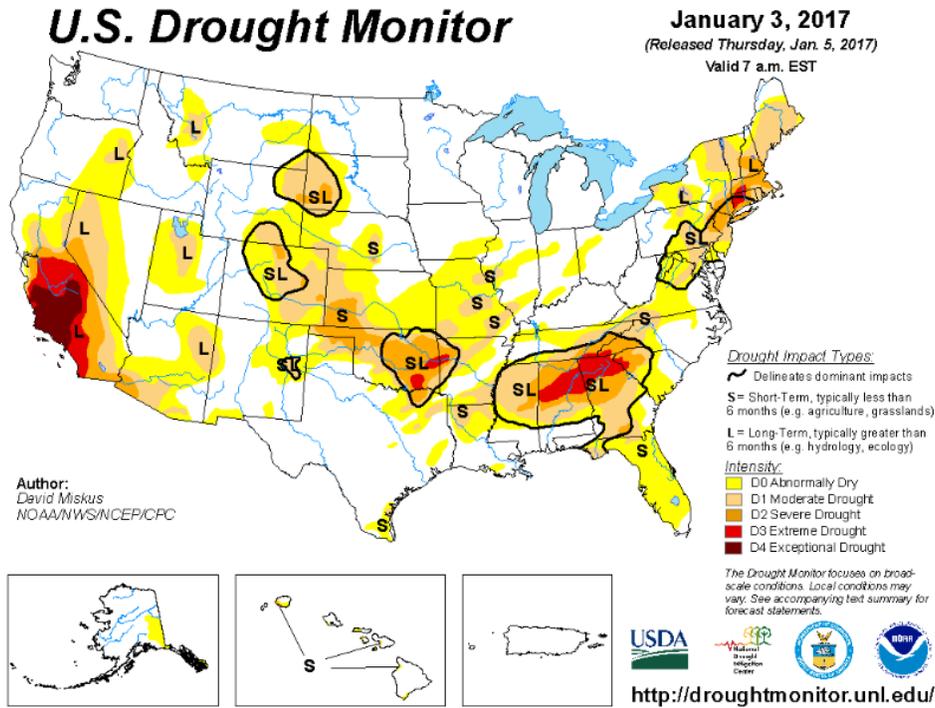


[October through December daily mean temperature anomaly map](#)

Drought

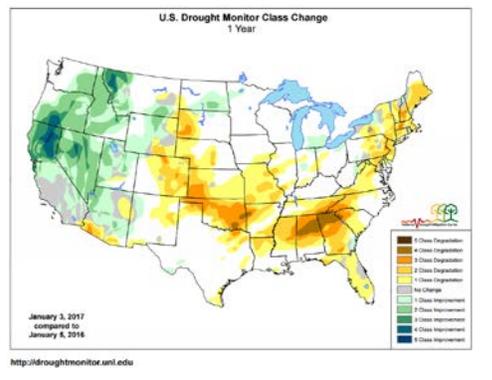
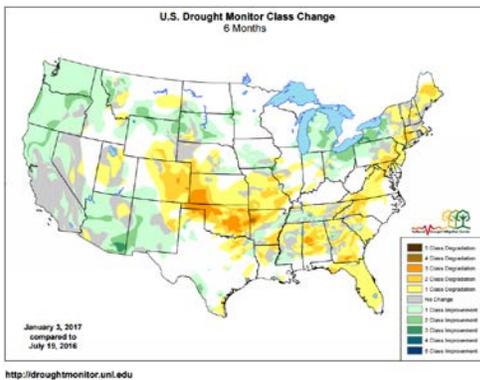
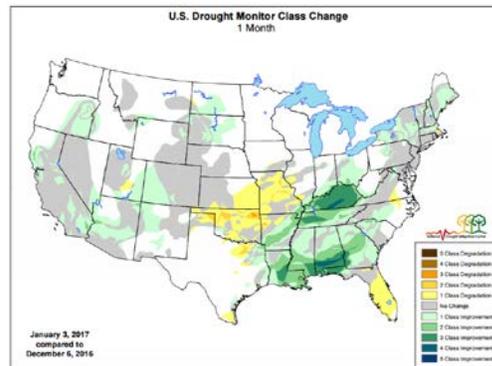
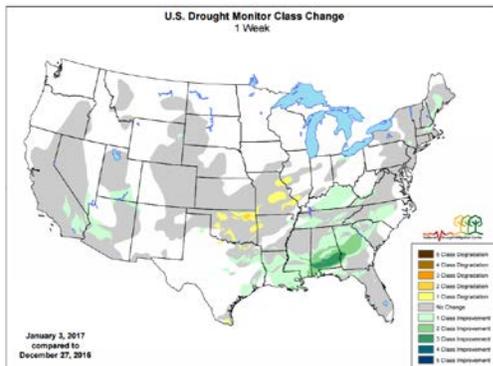
[U.S. Drought Monitor](#) See map below.

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



Changes in Drought Monitor Categories over Time

Click any map to enlarge



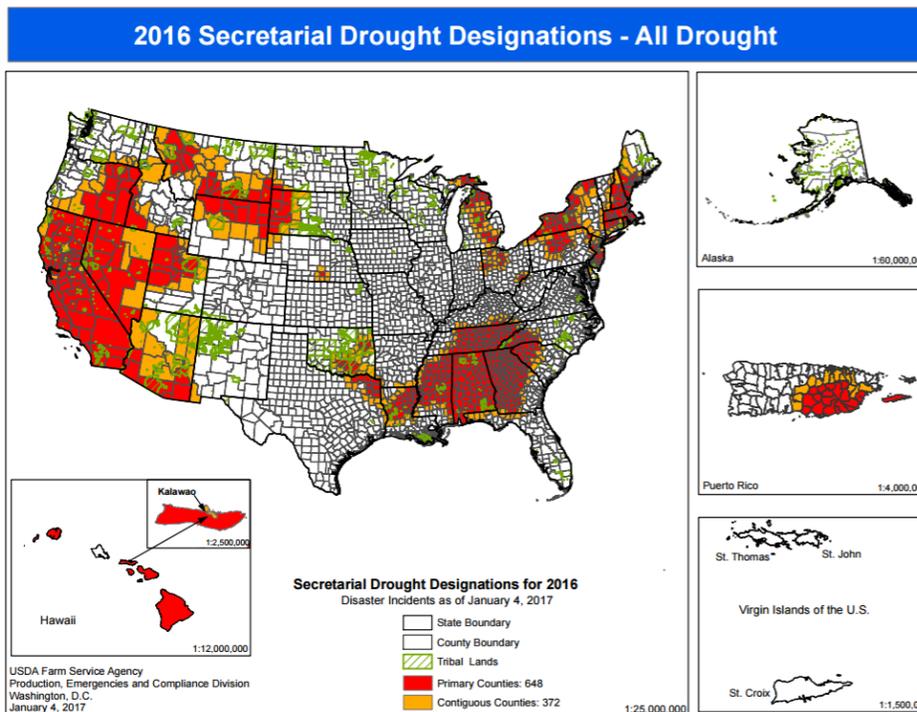
Changes in drought conditions over the last 12 months

Current National [Drought Summary](#), January 3, 2017

Author: David Miskus, NOAA/NWS/NCEP/CPC

“A series of fast-moving Pacific storm systems raced eastward across the lower 48 States this week, bringing light to moderate precipitation to the Northwest, California, and along the southern tier of states. Once the systems reached the Southeast, they tapped moisture from the Gulf of Mexico and produced widespread and numerous heavy showers and thunderstorms, some severe, from southeastern Texas northeastward into the Carolinas. Copious rains fell across much of the Southeast, with more than 4 inches measured from extreme southeastern Texas northeastward into south-central South Carolina. Locally, 7-12 inches of rain was dumped on southern Mississippi northeastward into west-central Georgia. These rains fell on much of the Southeast drought area and provided welcome relief, especially in southern sections. Lighter precipitation (0.5-2 inches) also fell on most of the Northeast and Ohio Valley, including heavy snow (up to 2 feet in Maine) that blanketed parts of northern New England. Unfortunately, little or no precipitation fell on the Nation’s mid-section, particularly the south-central Plains and lower Missouri Valley, where above-normal temperatures and lingering dryness dating back to the fall has generated impacts in Oklahoma that were worse than what the data indicated. Weekly temperatures averaged below-normal in the West (anomalies -10 to -15 deg F in the Interior Northwest and Great Basin) and much above-normal in the eastern half of the Nation (anomalies 10-15 deg F in the southern Great Plains and along the western half of the Gulf Coast).”

USDA 2016 Secretarial [Drought Designations](#)

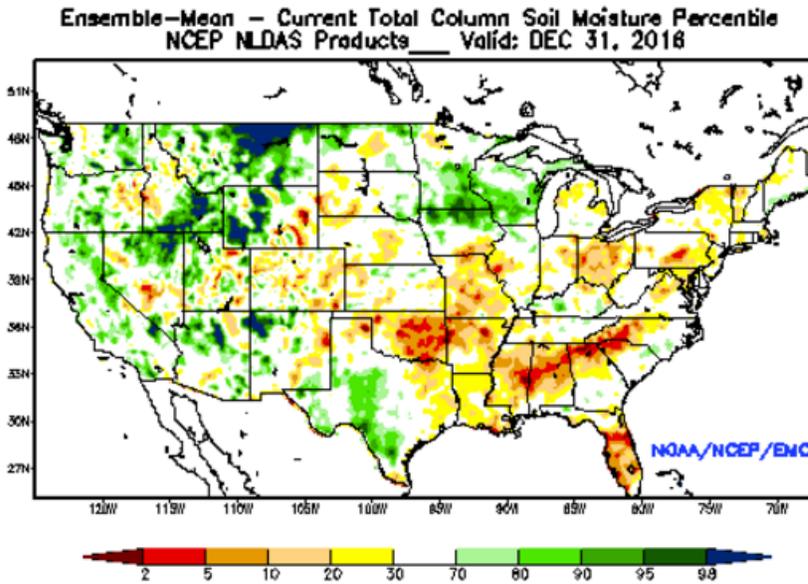


Highlighted Drought Resources

- [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](#)

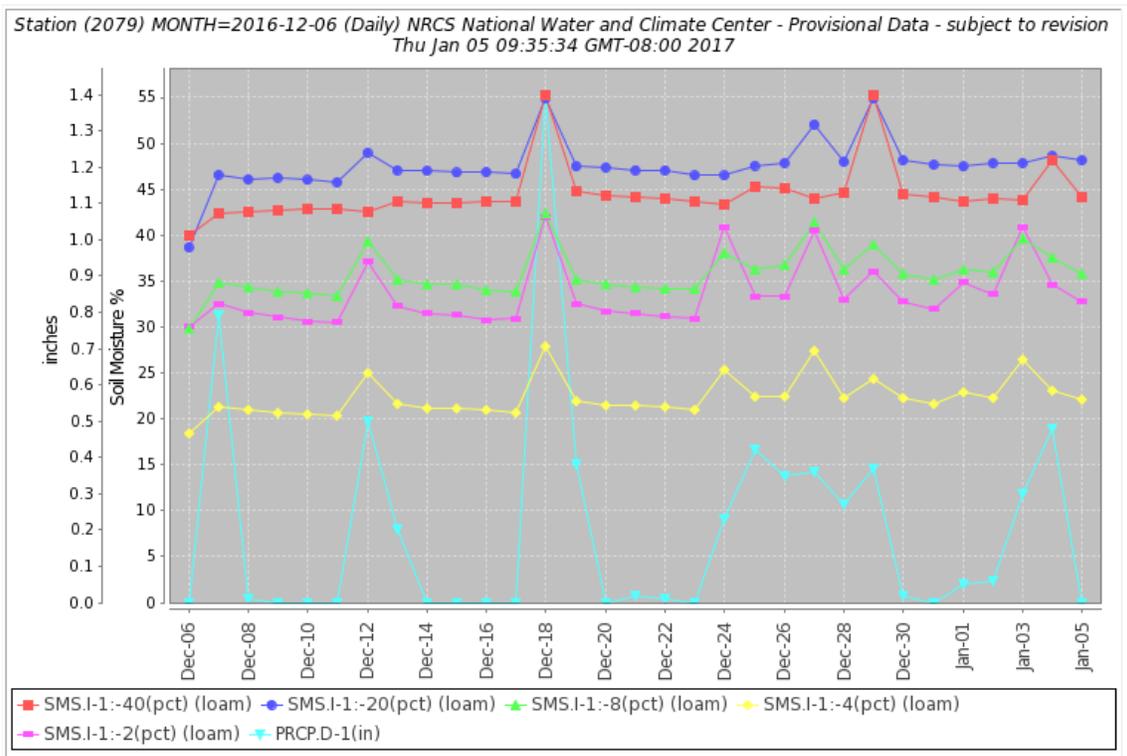
Other Climatic and Water Supply Indicators

Soil Moisture



[Modeled soil moisture percentiles](#) as of December 31, 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 [Mammoth Cave SCAN site 2079](#) in Kentucky. Multiple precipitation events resulted in an increase in soil moisture at all depth sensors.

Soil Moisture Data Portals

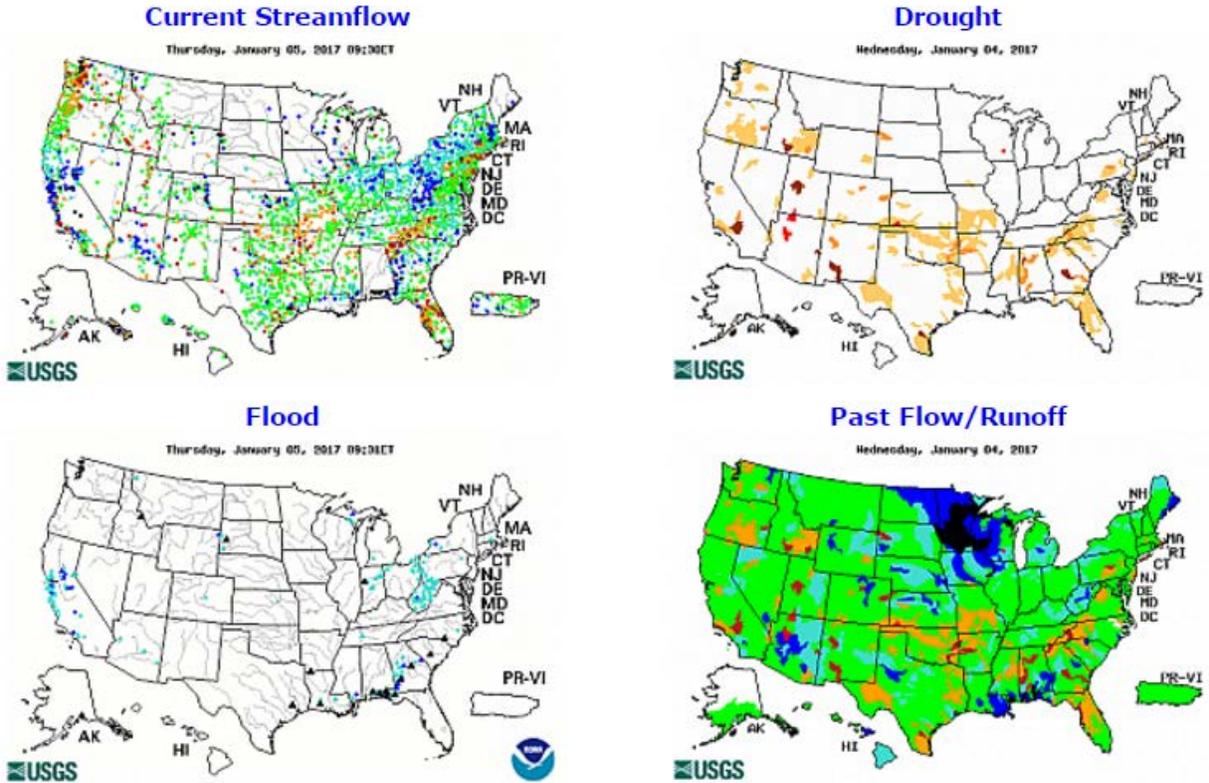
[CRN Soil Moisture](#)

[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](#)

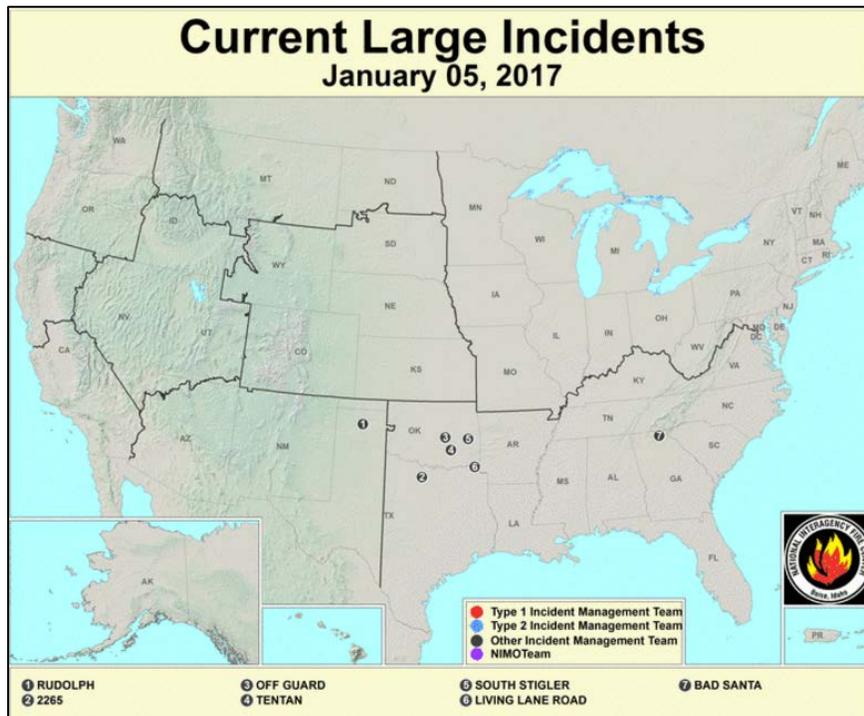
[Pacific Northwest/Snake/Columbia](#)

[Sevier River Water, Utah](#)

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

[California Reservoir Conditions](#)

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



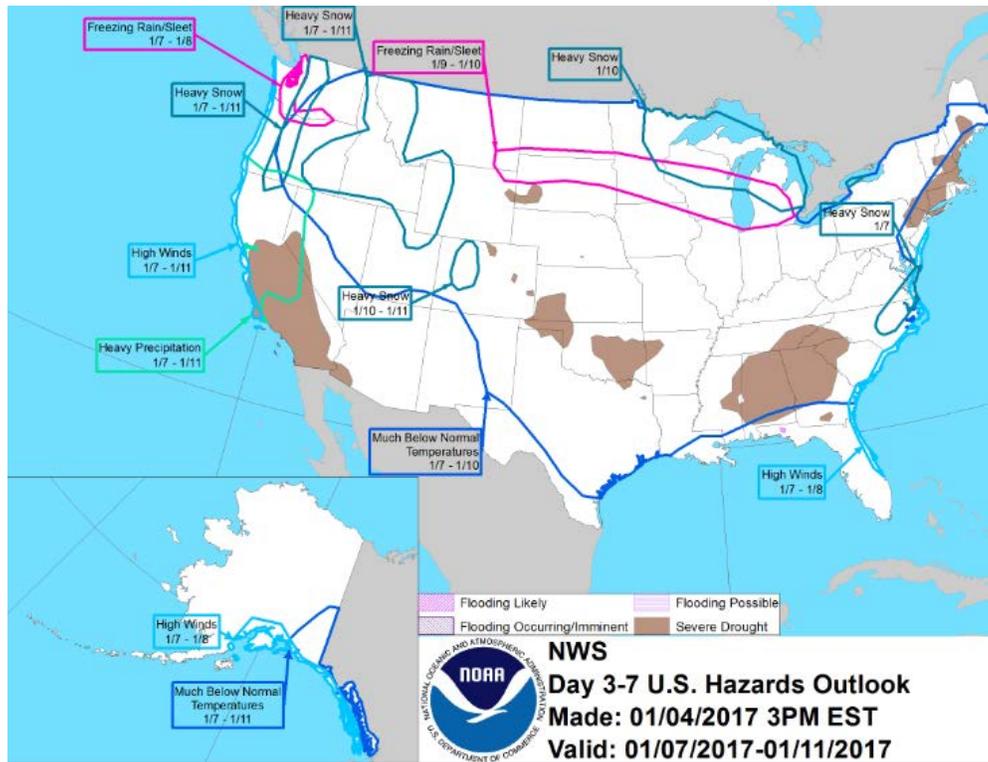
Short- and Long-Range Outlooks

Agricultural Weather Highlights

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

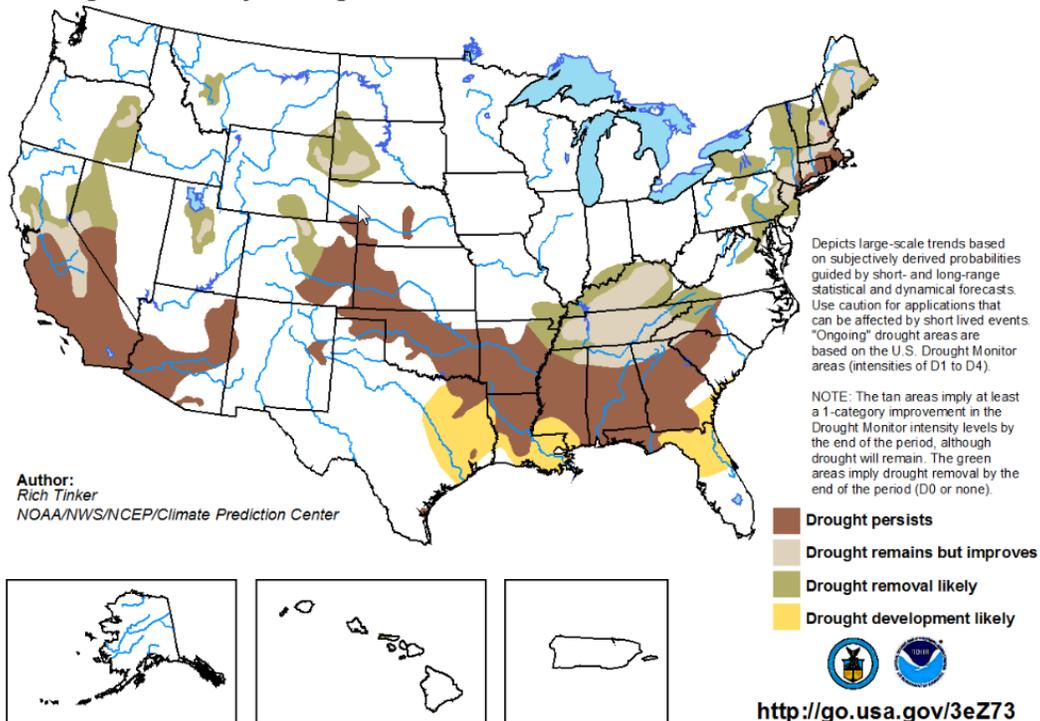
[National Outlook, January 5, 2017](#): “Northern and central California and environs face the prospect of a major precipitation and flood event, starting January 7. Soils in the region have already been moistened by recent storms, and heavy rain at lower and middle elevations could result in significant runoff that in part may be contained by reservoirs that are still rebounding from a multi-year drought. Nevertheless, flooding could be a consequence of precipitation totals that may reach 4 to 16 inches in the Sierra Nevada foothills during the next 5 days. Other areas of the West will also experience stormy weather, with locally heavy precipitation (and high-elevation snow) expected in the Great Basin, Intermountain West, and Rockies. Other areas of the country will also experience high-impact weather, with light snow forecast to fall today and early Friday from the central Plains into the Mid-Atlantic States, and heavy snow possible on January 6-7 from the southern Appalachians into the southern Mid-Atlantic region. Elsewhere, cold weather will dominate the U.S. into the weekend, but abruptly warmer weather will overspread much of the country early next week. The NWS 6- to 10-day outlook for January 10 – 14 calls for the likelihood of near- to above normal temperatures nationwide, except for colder-than-normal conditions from the Pacific Northwest into the upper Midwest. Meanwhile, near- to above-normal precipitation across most of the country will contrast with drier than-normal weather from southern sections of the Rockies and Plains to the southern Atlantic Coast.”

NWS Climate Prediction Center [Weather Hazard Outlook: 1/7/2017-1/11/2017](#)



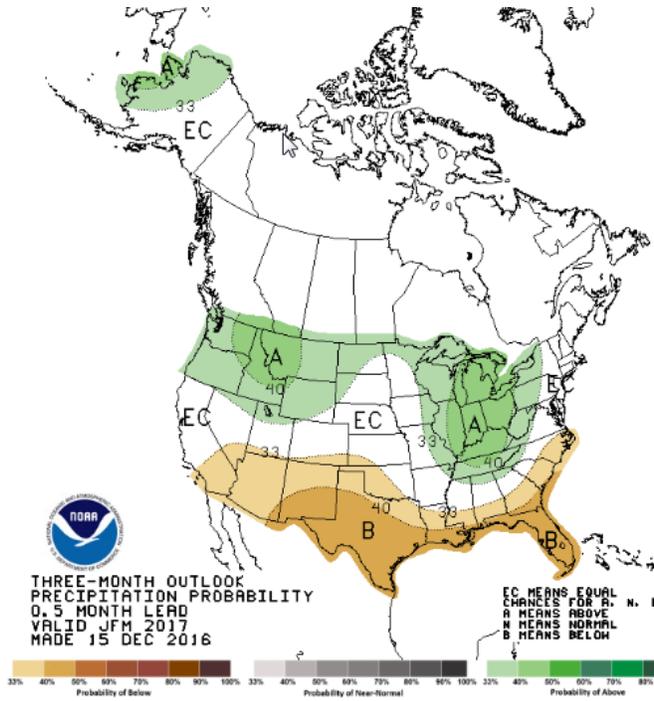
Seasonal Drought Outlook: [December 15, 2016 – March 31, 2017](#)

U.S. Seasonal Drought Outlook *Valid for December 15 - March 31, 2017*
 Drought Tendency During the Valid Period *Released December 15, 2016*



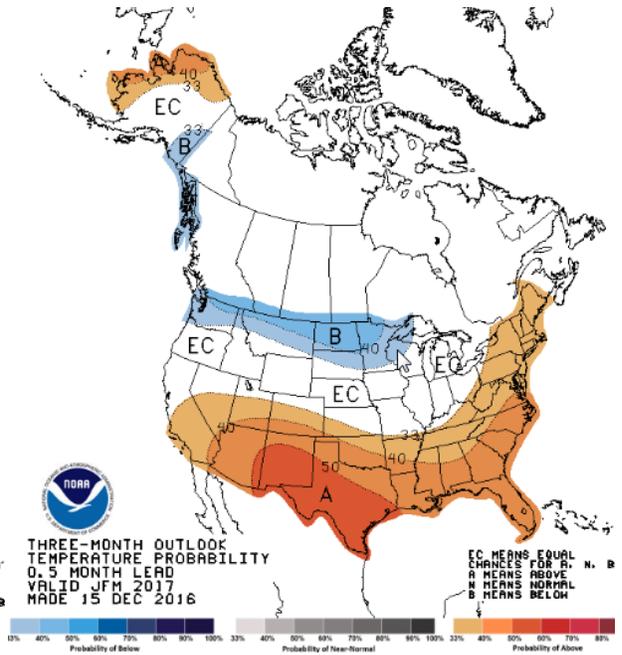
NWS Climate Prediction Center 3-Month Outlook

[Precipitation](#)



[January-February-March \(JFM\) 2017 precipitation outlook summary](#)

[Temperature](#)



[January-February-March \(JFM\) 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](#).