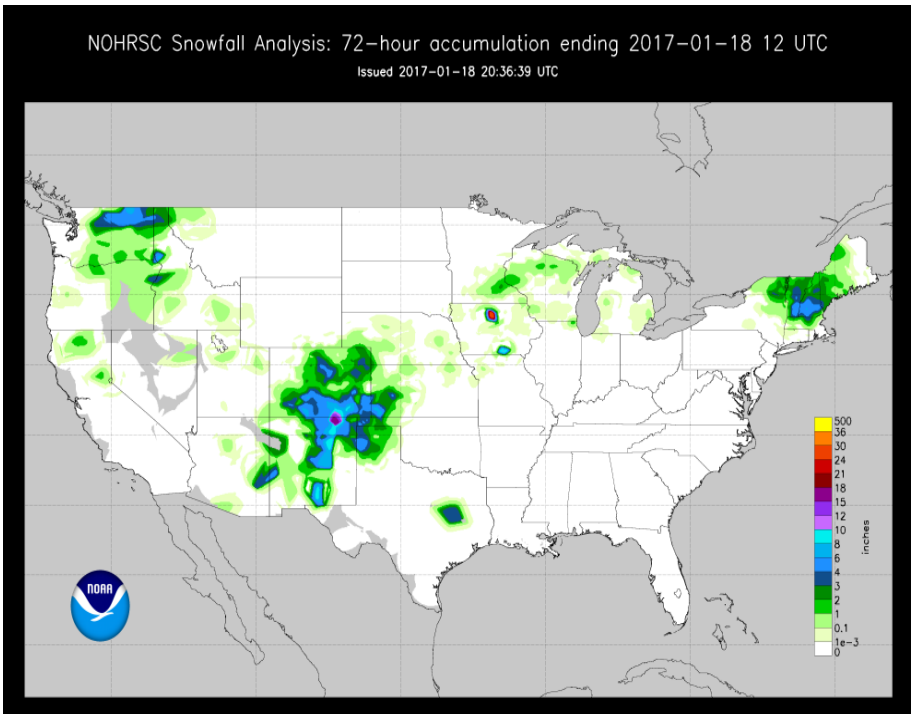
United States Department of Agriculture

Water and Climate Update

January 19, 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.

Winter storms roll across the U.S. over the last three days



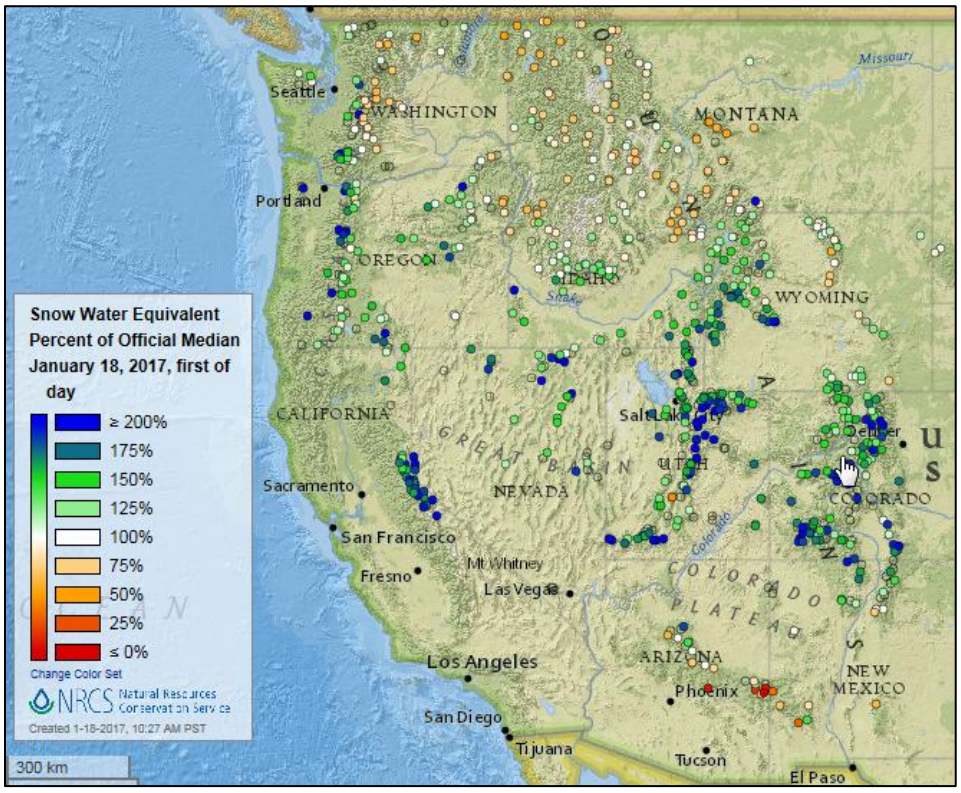
A stormy last three days has produced snowfall across the U.S. as depicted by the NOAA National Weather Service National Operational Hydrologic Remote Sensing Center (NOHRSC). The largest accumulations were in the Southwest, New England, and the Pacific Northwest. Record-breaking snow blankets the Sierra Nevada. The central and northern Midwest also saw snow and ice during this time.

In the news:

The Latest: Staggering snow totals at Tahoe
California's January Storms Boost Snowpack, Swell Reservoirs
Dozens of avalanches in Colorado high country amid high winds and more snow
NM: Weekend rain, snow break records
IA: 1 ice storm, many cancellations and crashes, lots of fretting
Fast coastal storm clips parts of Maine, New Hampshire

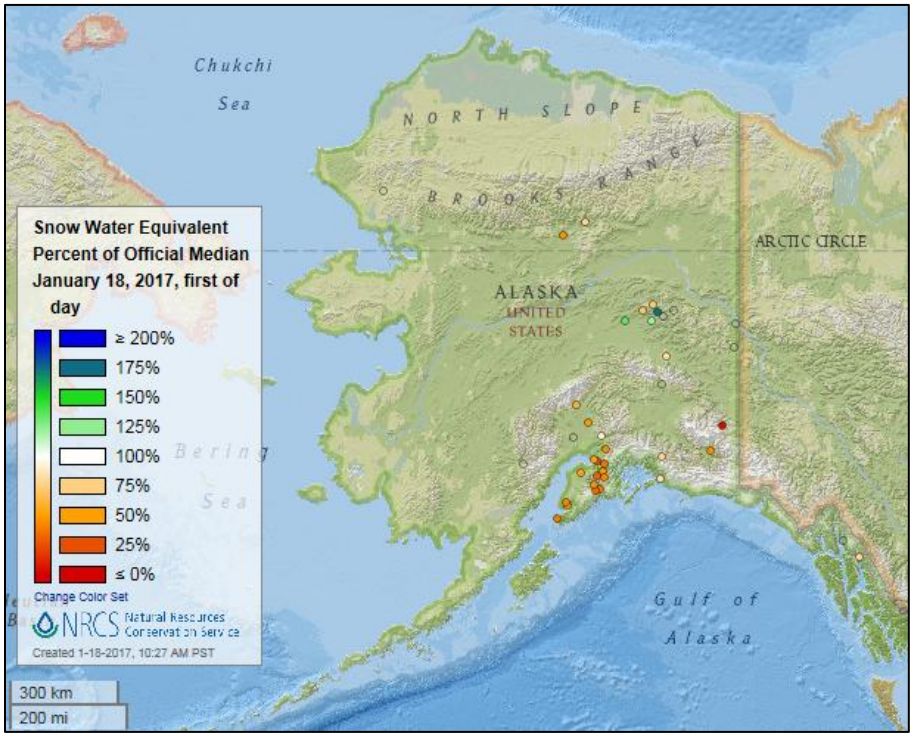
Snow

Current Snow Water Equivalent, NRCS SNOTEL Network



[Snow water equivalent percent of median map]

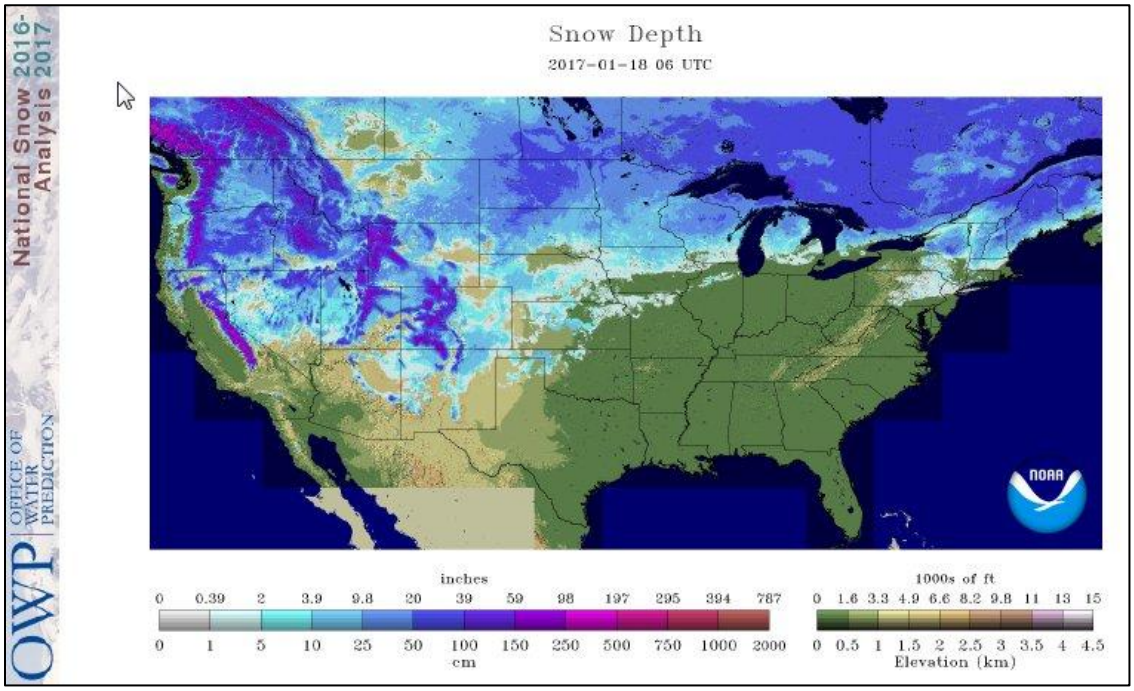
See also:
[Snow water equivalent values (inches) map]



[Alaska snow water equivalent percent of median map]

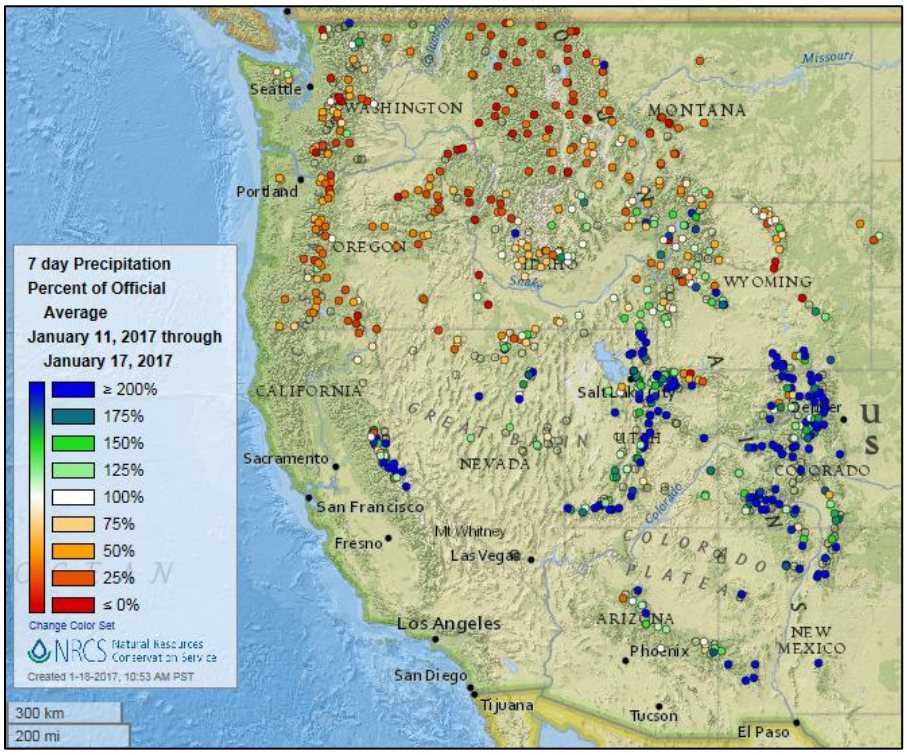
See also:
[Alaska snow water equivalent values (inches) map]

Current Snow Depth, National Weather Service (NWS) Networks



Precipitation

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

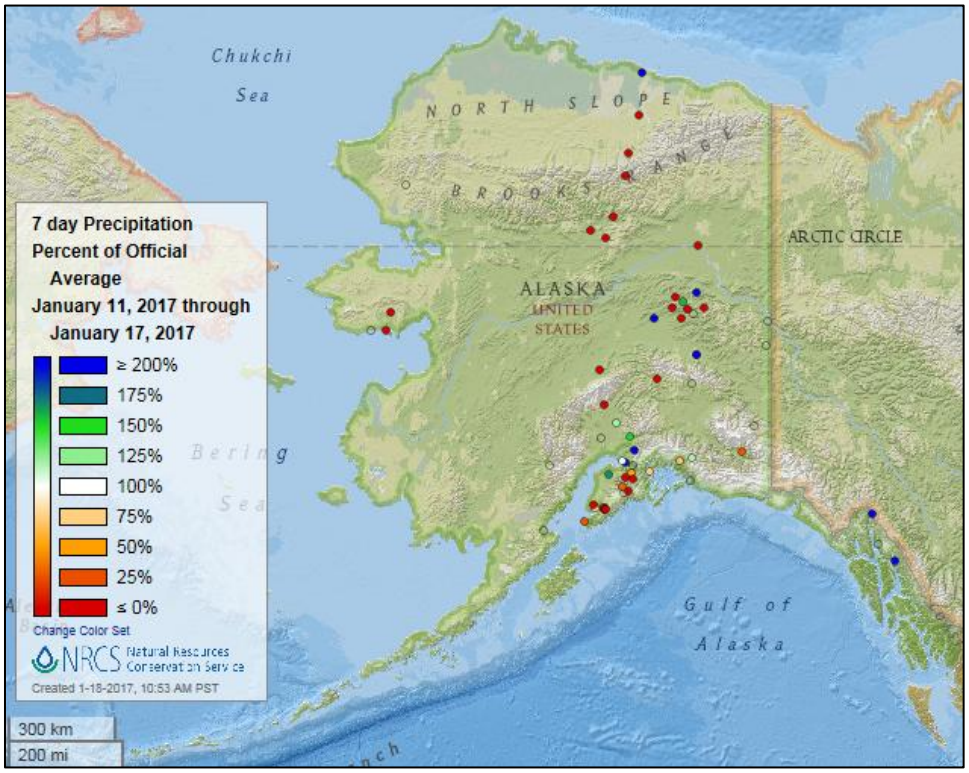


[7-day precipitation percent of average map]

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

Alaska 7-day precipitation percent of average map

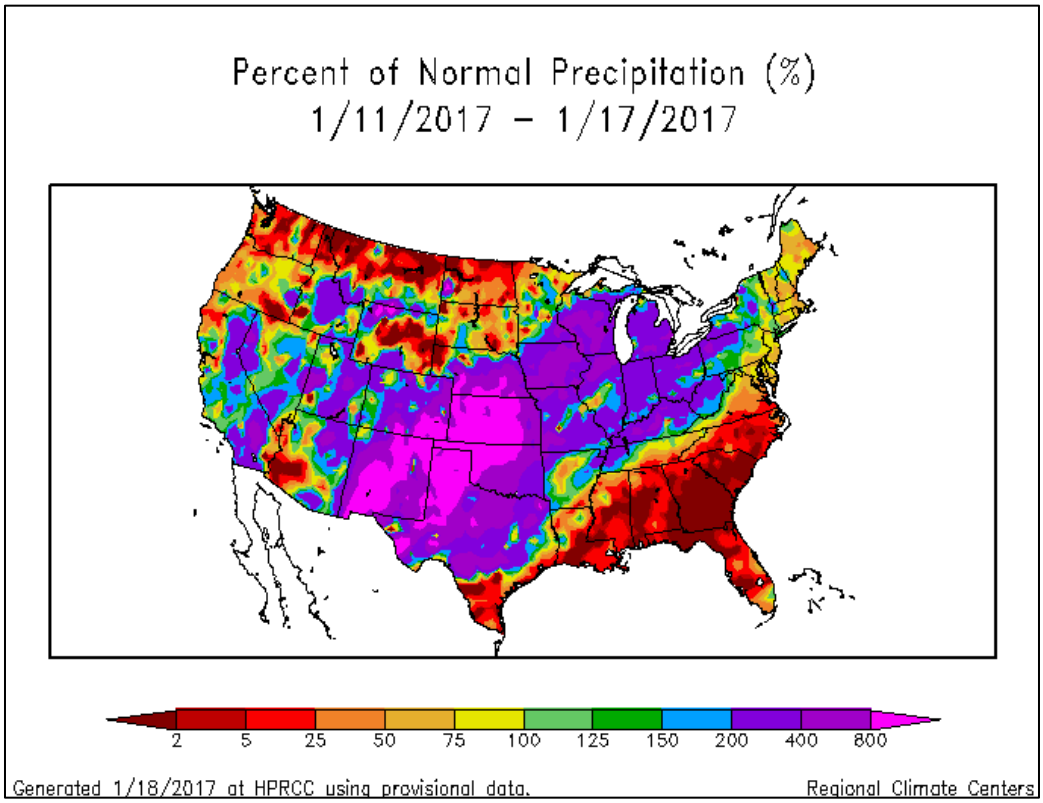
See also: Alaska 7-day total precipitation values (inches) map



Last 7 Days, National Weather Service (NWS) Networks Source: Regional Climate Centers

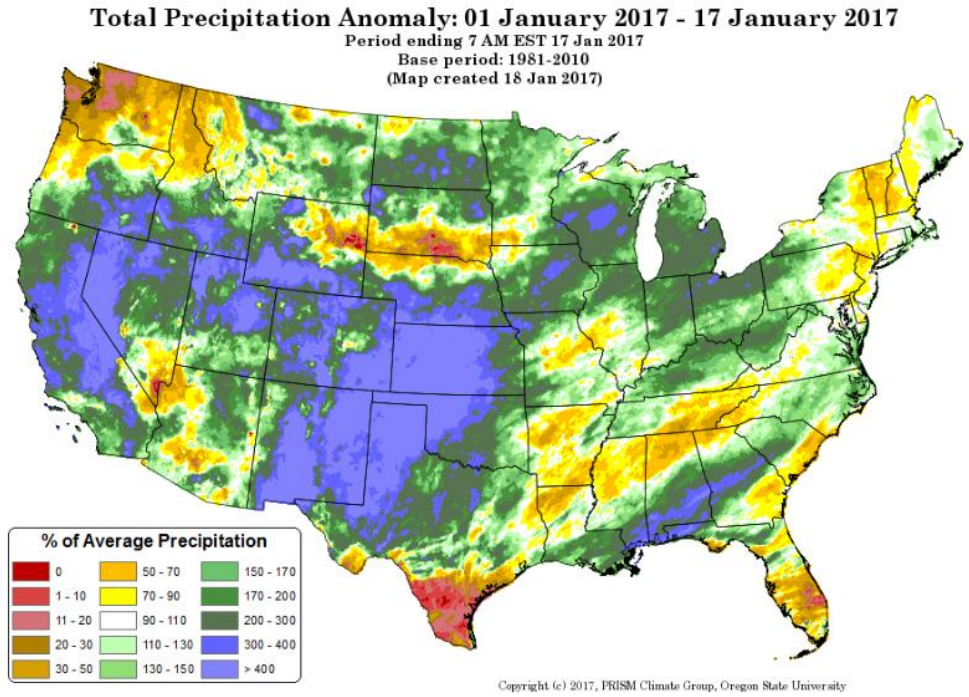
7-day precipitation percent of normal map for the continental U.S.

See also: 7-day total precipitation values (inches) map



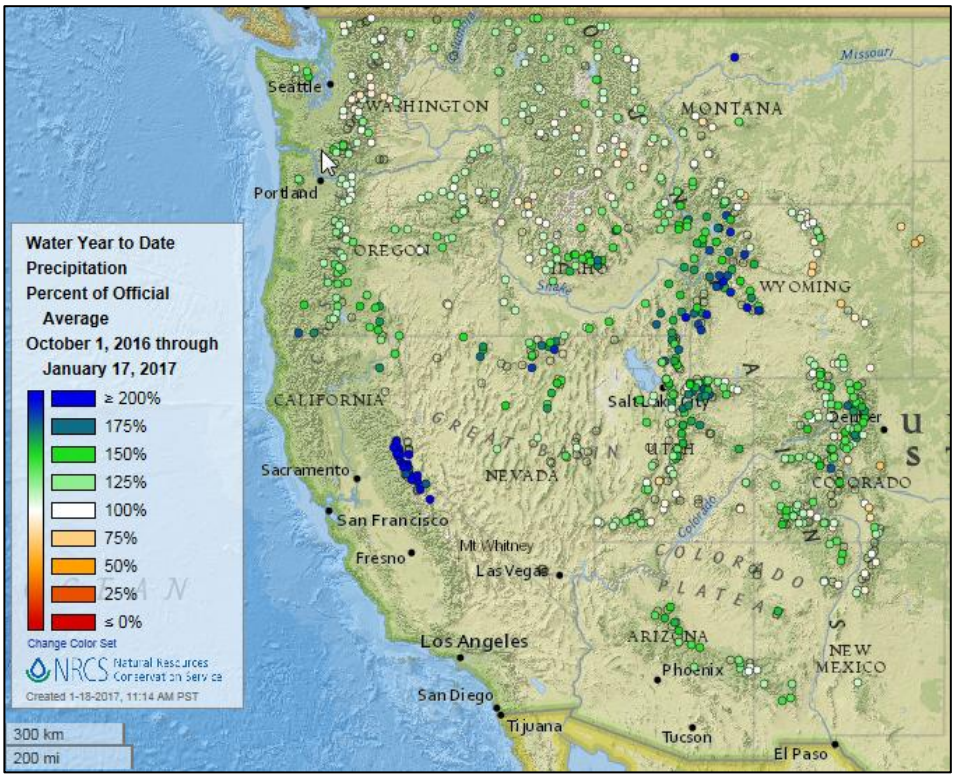
Month-to-Date, All Available Data Including SNOTEL and NWS Networks

Source: PRISM



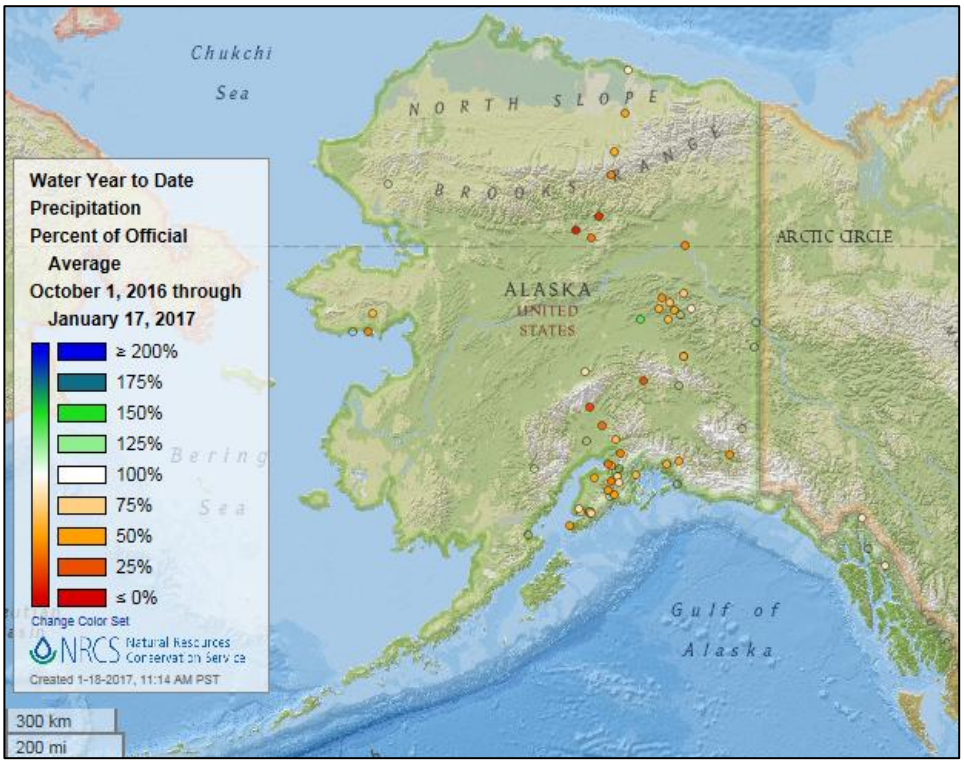
[Month-to-date national precipitation percent of average map]

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)]



Alaska 2017 water year-to-date precipitation percent of average map

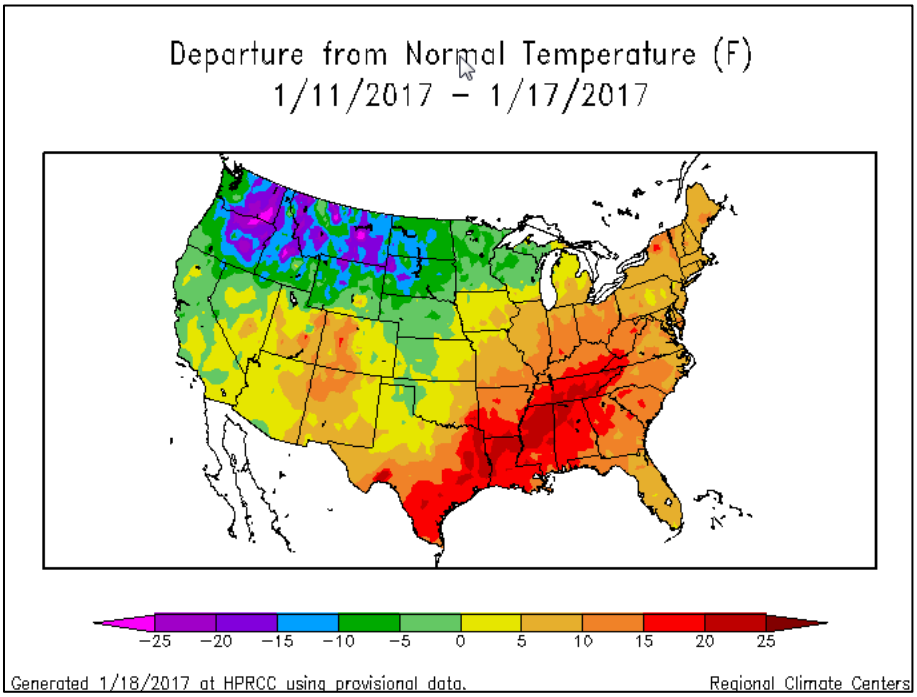
See also: Alaska 2017 water year-to-date precipitation values (inches) map

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

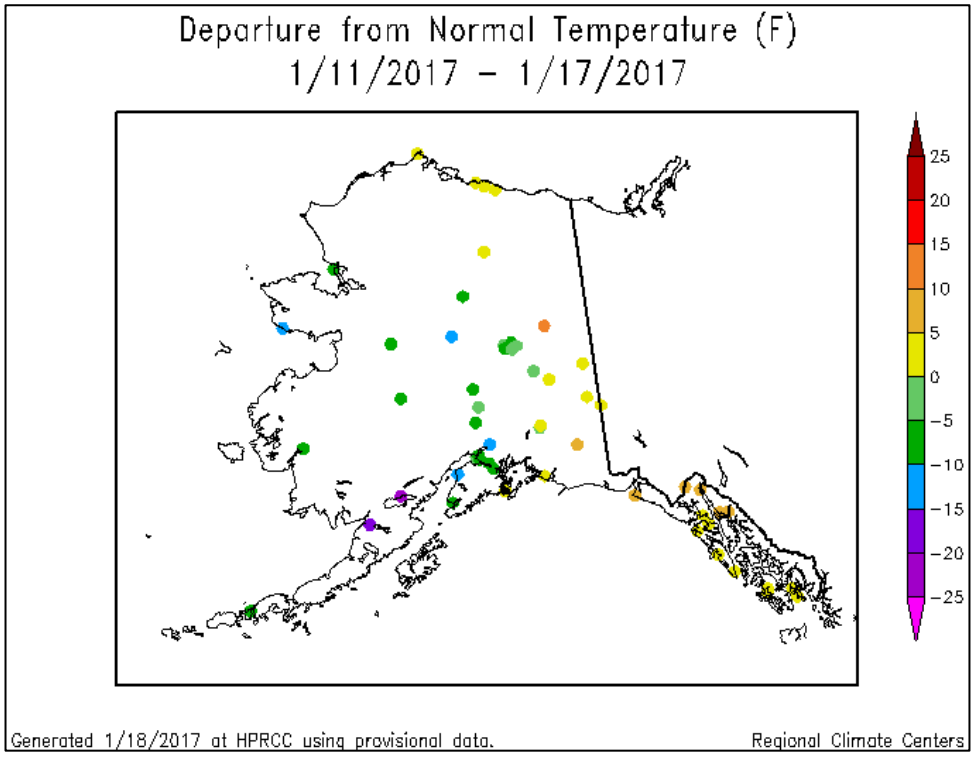


Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

7-day temperature anomaly map for Alaska.

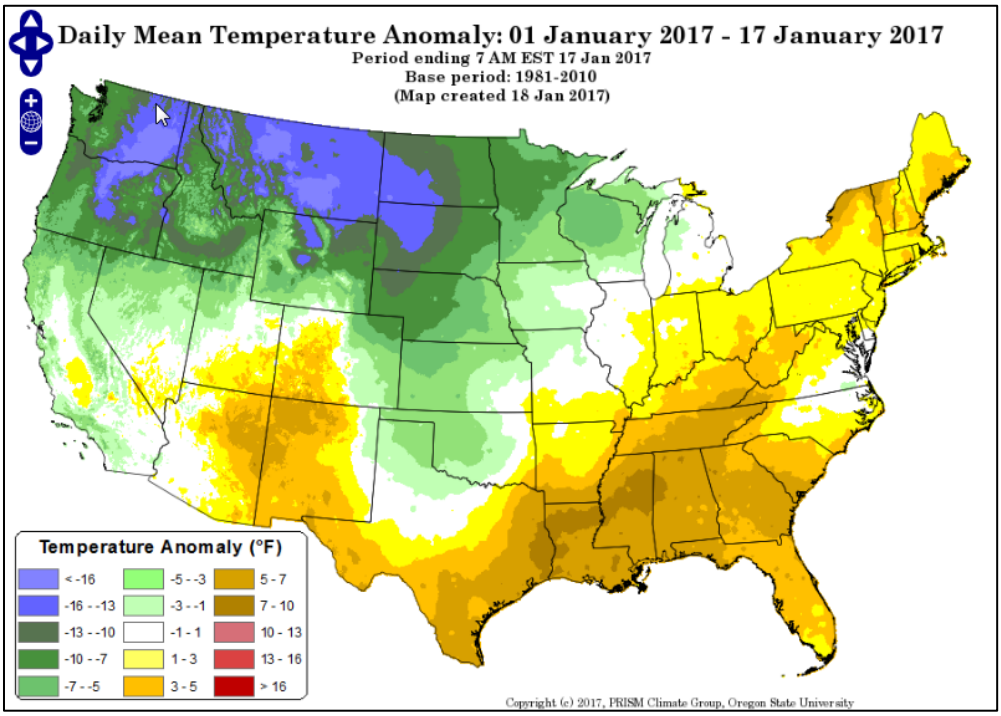
See also: 7-day temperature (° F) map



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

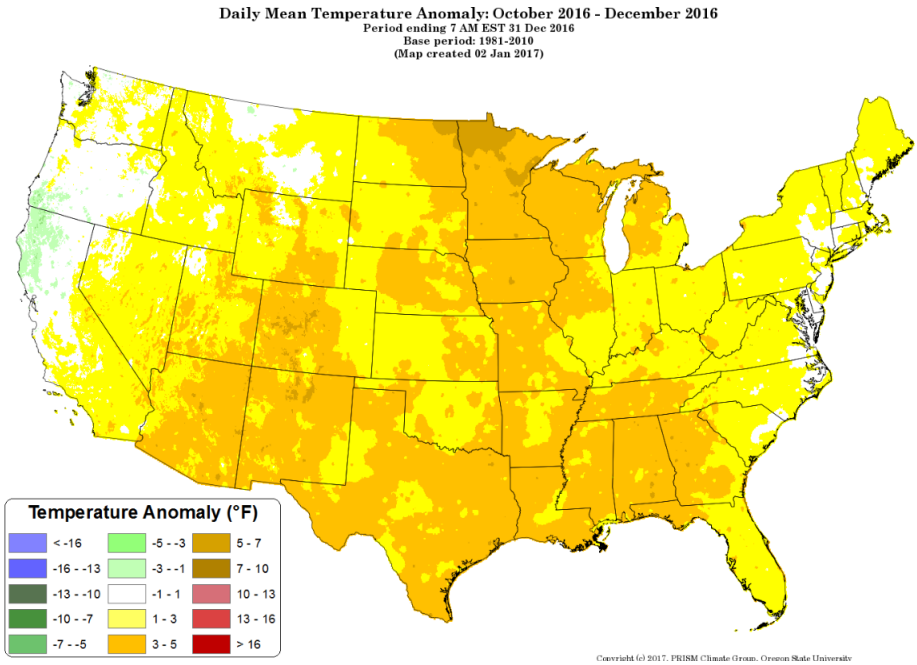
Source: PRISM

Month-to-date national daily mean temperature anomaly map



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

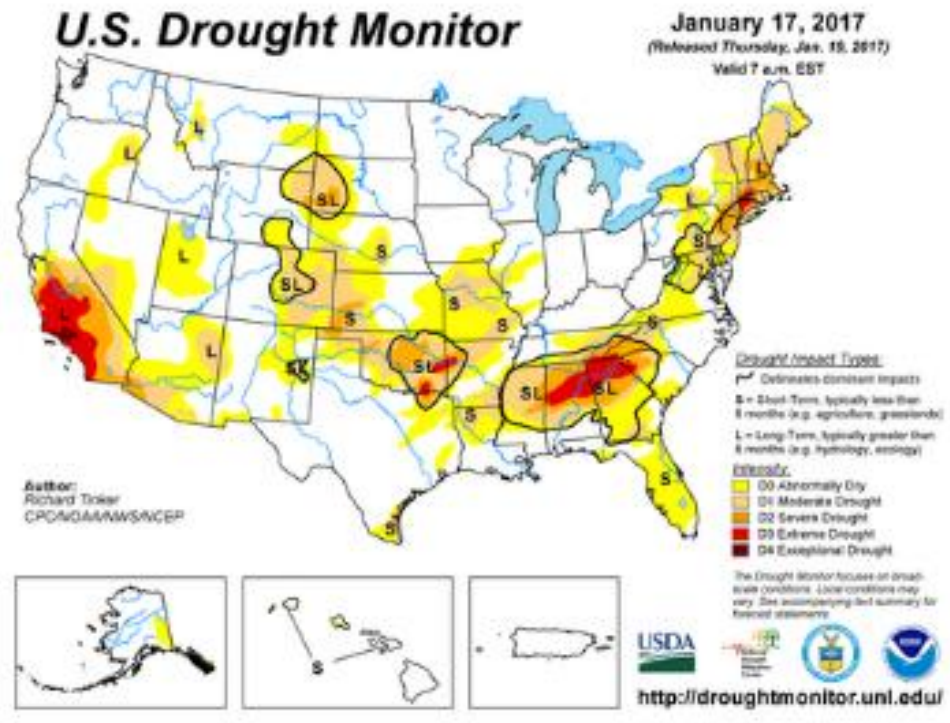
Source: PRISM



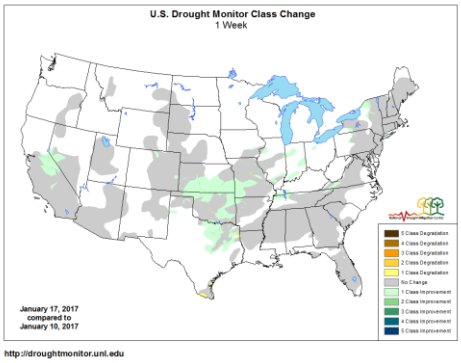
[October through December daily mean temperature anomaly map]

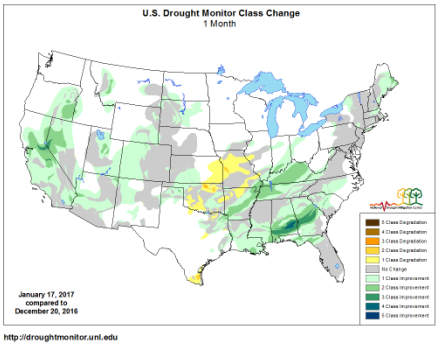
Drought

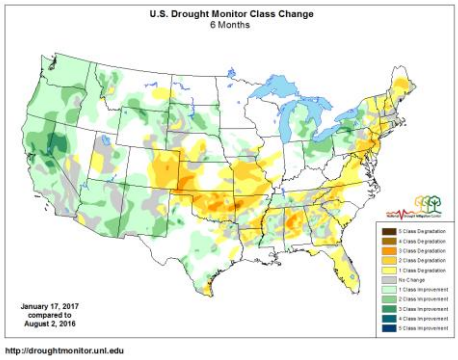
U.S. Drought Monitor See map below. U.S. Drought Portal Comprehensive drought resource.

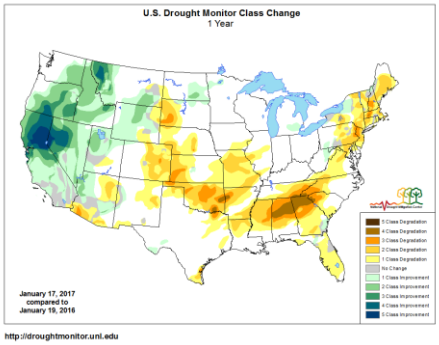


Changes in Drought Monitor Categories over Time









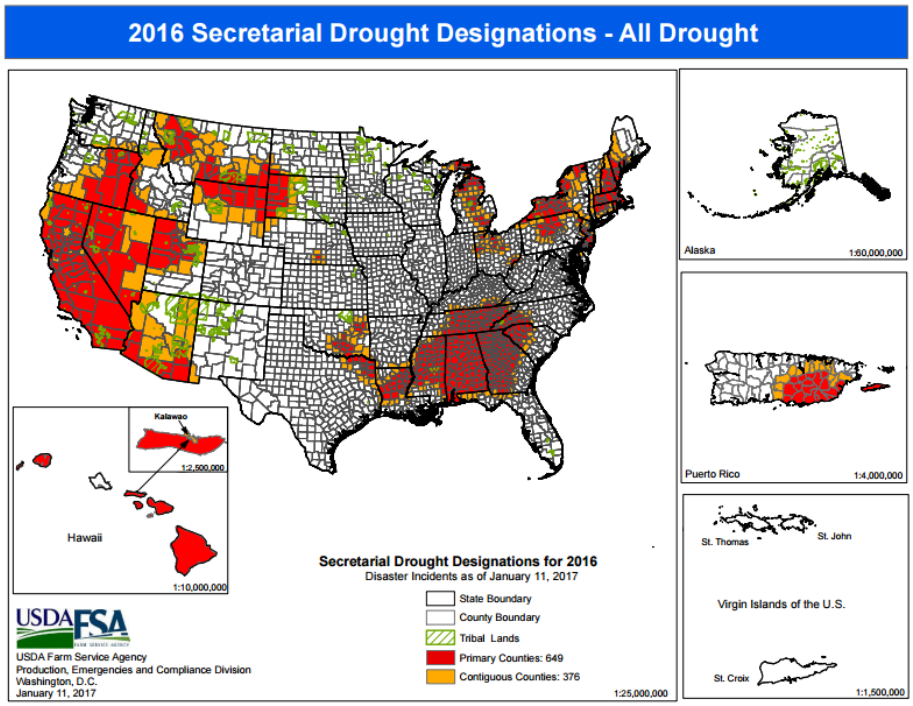
Changes in drought conditions over the last 12 months

Current National Drought Summary, January 17, 2017

Authors: Richard Tinker and Anthony Artusa, NOAA/NWS/NCEP/CPC

"Several areas of heavy precipitation brought drought improvement to parts of the Northeast, Midwest, Plains, and Far West while drought conditions were essentially unchanged elsewhere. Nowhere in the country did dryness intensify enough to worsen the Drought Monitor depiction from last week.

USDA 2016 Secretarial Drought Designations

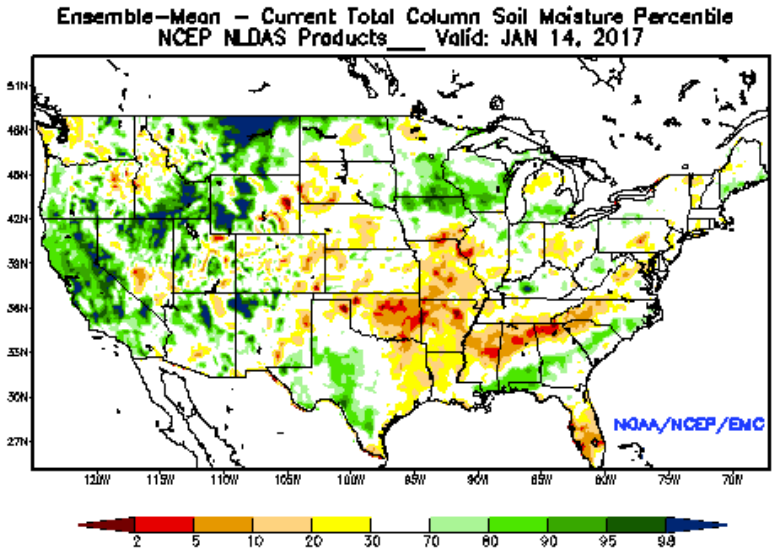


Highlighted Drought Resources

- 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

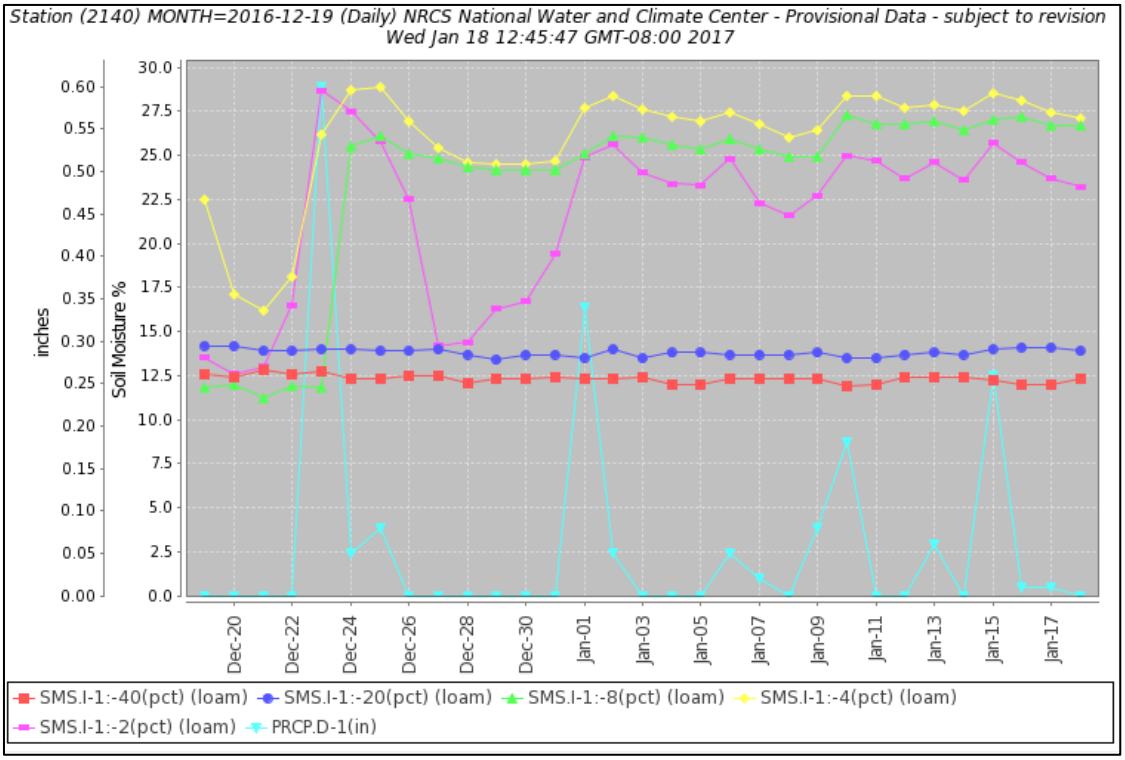
Other Climatic and Water Supply Indicators

Soil Moisture



Modeled soil moisture percentiles as of January 14, 2017.

Soil Moisture Data: NRCS Soil Climate Analysis Network (SCAN)



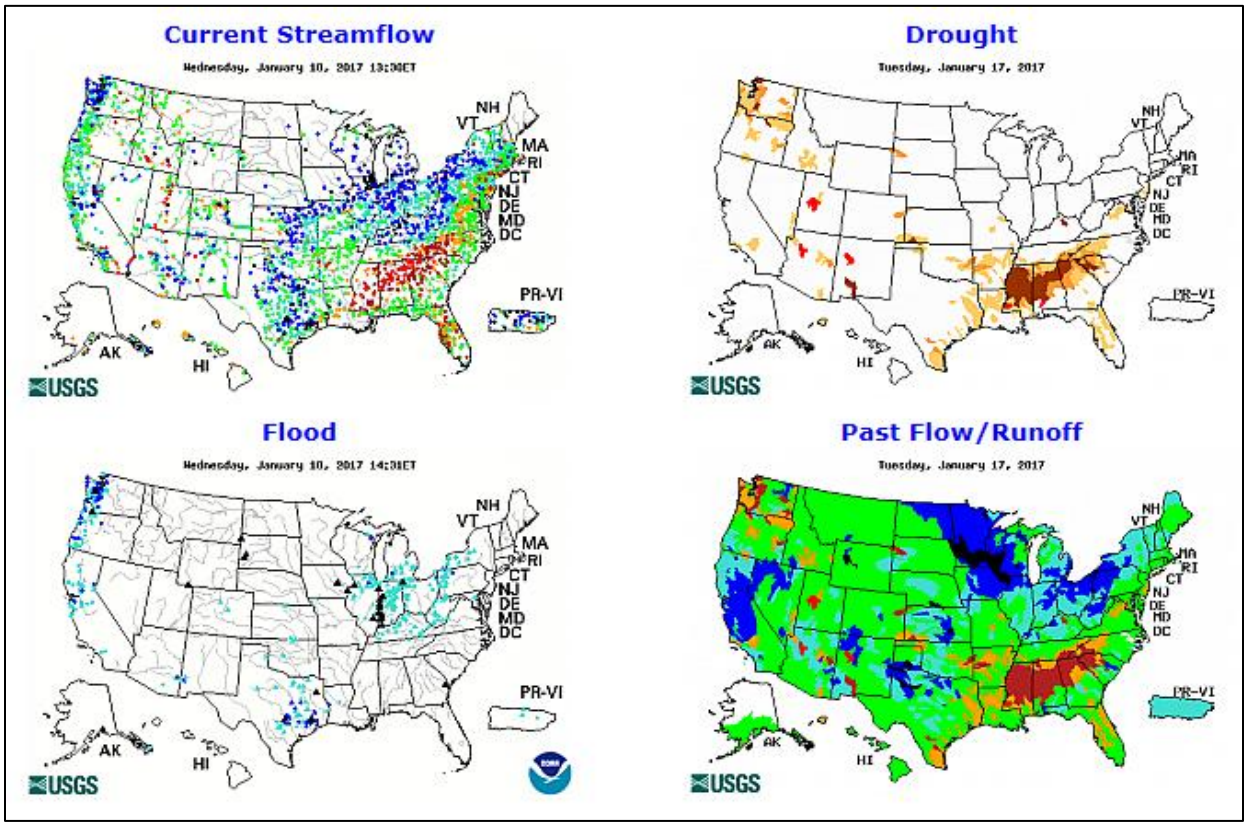
Soil moisture (at 2-, 4-, 8-, 20-, and 40-inch depths) and precipitation for the last 30 days at the Mccracken Mesa SCAN site 2140 in Utah. Precipitation events resulted in an increase in soil moisture at the 2-, 4-, and 8-inch depth sensors.

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

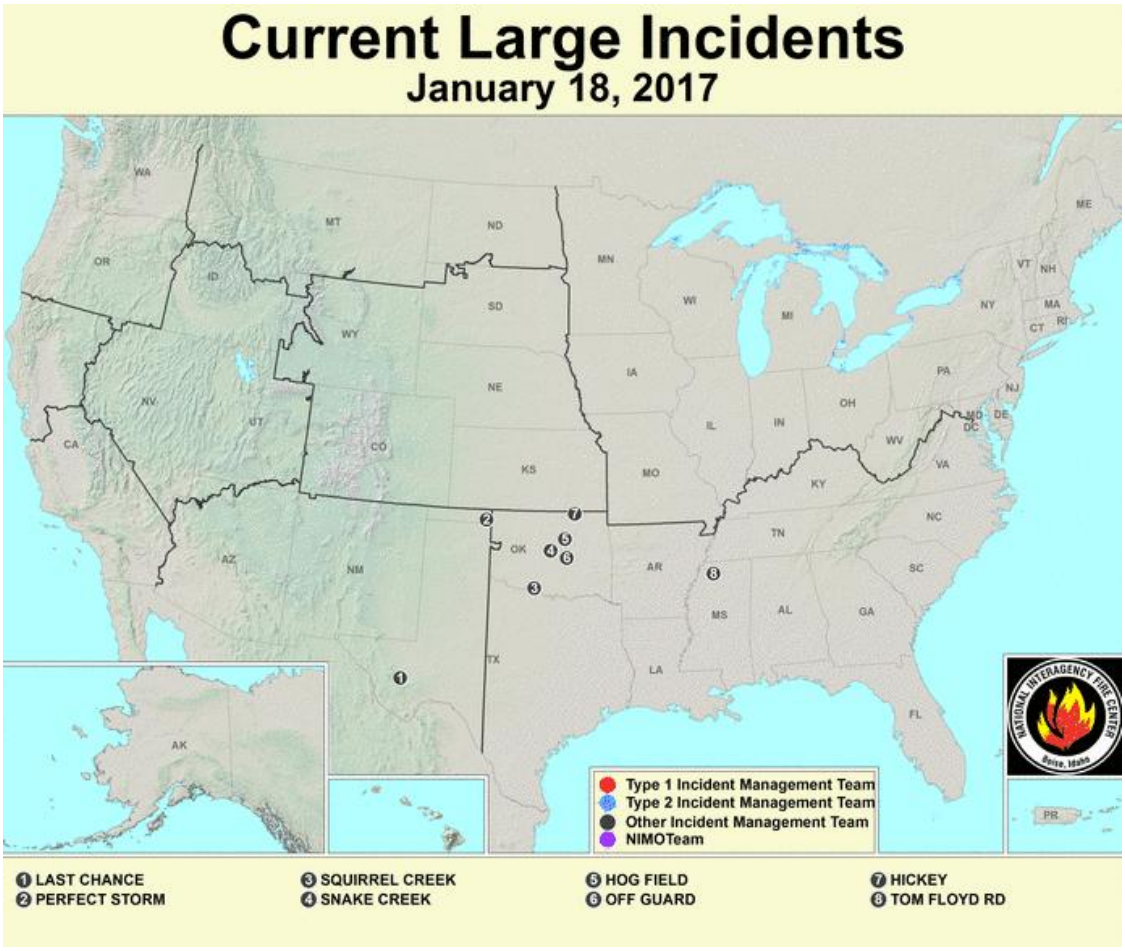
National Water and Climate Center Reservoir Data

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]



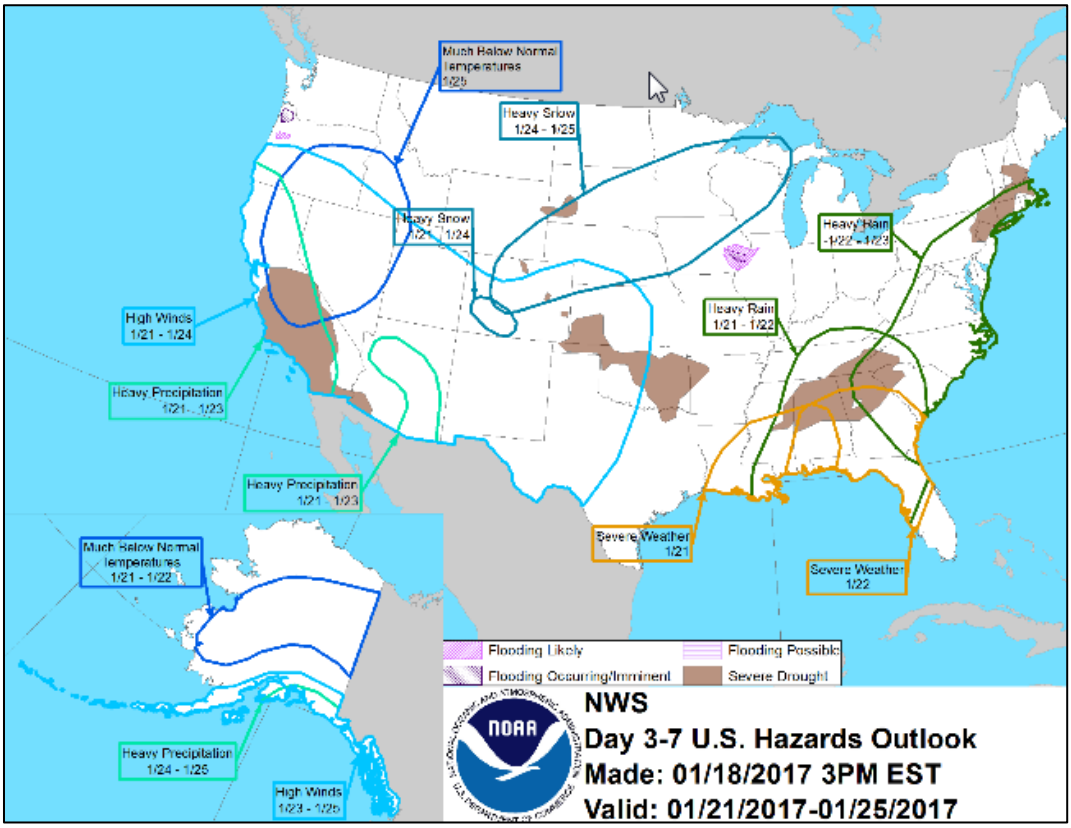
Short- and Long-Range Outlooks

Agricultural Weather Highlights

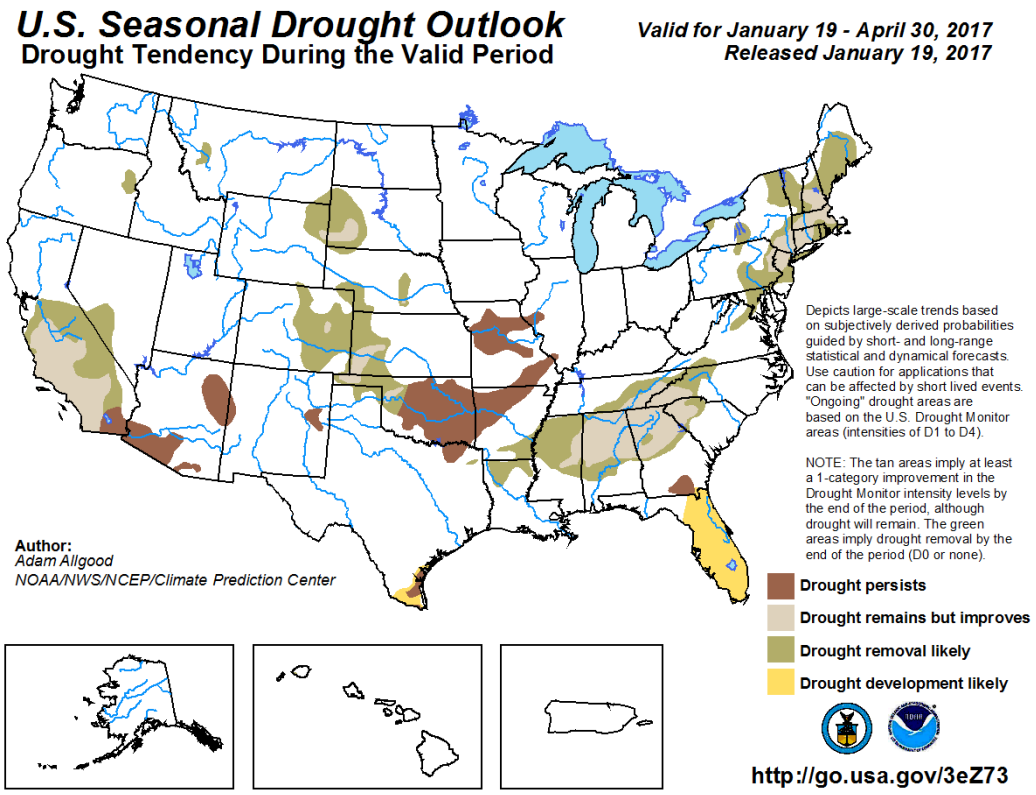
Author: Brad Rippey, Agricultural Meteorologist, USDA/OCE/WAOB

National Outlook, January 18, 2017**:** "Multiple rounds of heavy precipitation will continue to overspread the West and the Southeast. The Western precipitation will fall in three primary waves, with 5-day totals in California reaching 4 to 12 inches in coastal and mountain areas as far east as the Sierra Nevada. Other areas west of the Rockies could receive 1 to 4 inches, with significant high-elevation snowfall expected. Farther east, Southern rainfall could reach 2 to 5 inches across a broad area, with some of the heaviest precipitation occurring late in the weekend. In contrast, mostly dry weather will prevail during the next 5 days across the High Plains, while only light precipitation will reach the Northeast. Elsewhere, generally cold weather will accompany multiple Pacific storms across the West, helping to maximize high-elevation snow accumulations, while mild conditions will dominate the central and eastern U.S. The NWS 6- to 10-day outlook for January 23 – 27 calls for the likelihood of above-normal temperatures across the eastern half of the U.S., while colder-than-normal conditions will cover the West. Meanwhile, wetter-than-normal weather across the majority of the country will contrast with below-normal precipitation in the south-central U.S. and along the Canadian border from Washington to Montana."

NWS Climate Prediction Center [Weather Hazard Outlook]

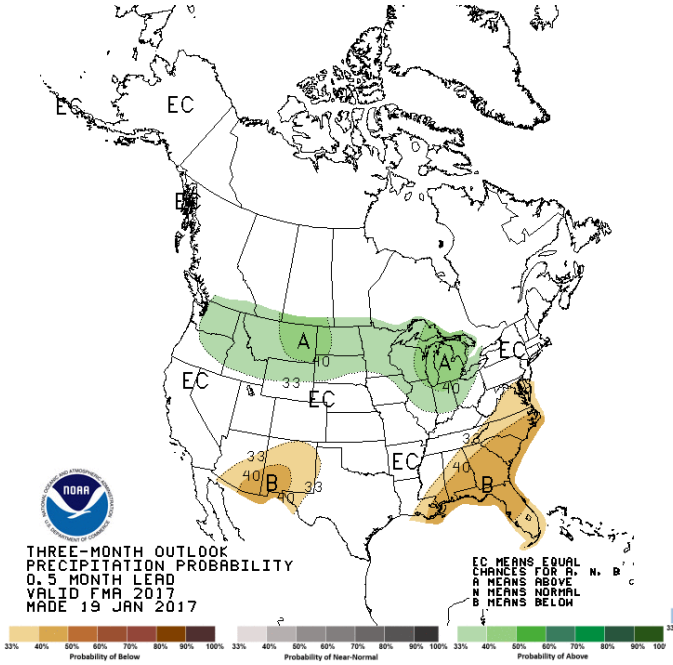


Seasonal Drought Outlook: [January 19, 2017 – April 30, 2017]



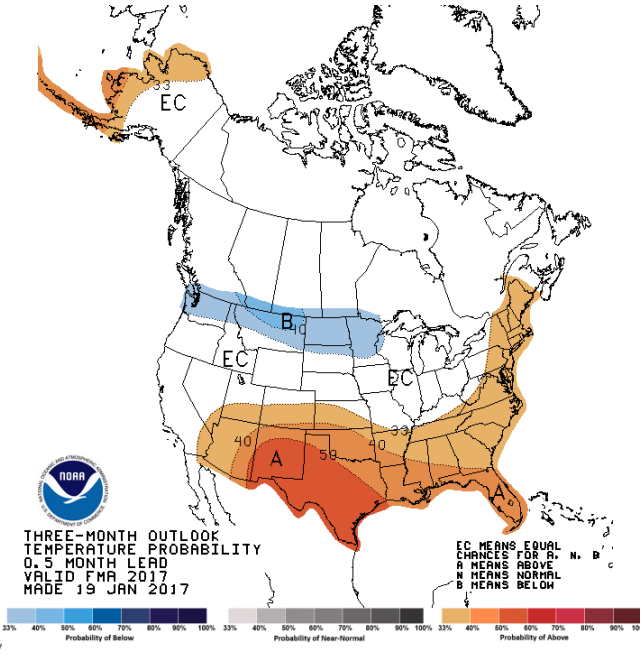
NWS Climate Prediction Center 3-Month Outlook

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.