United States Department of Agriculture

Water and Climate Update

February 8, 2018

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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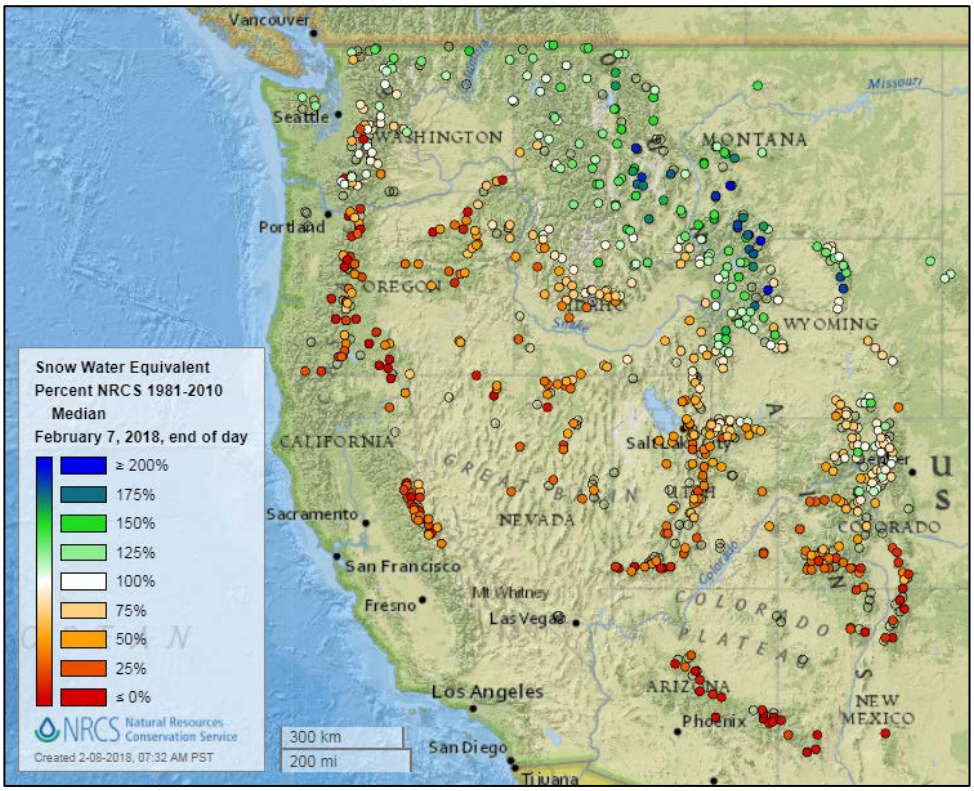
Southwest snow supply paltry

The map shows low snow records as of February 1 for sites with a minimum of 30 years of observations. Ten sites shown above in Colorado, New Mexico, and Arizona have over 70 years of measurements. The forecasts for the spring and summer water supply in the Southwest are calling for extremely dry conditions with some median forecasts below the lowest recorded historic streamflows.

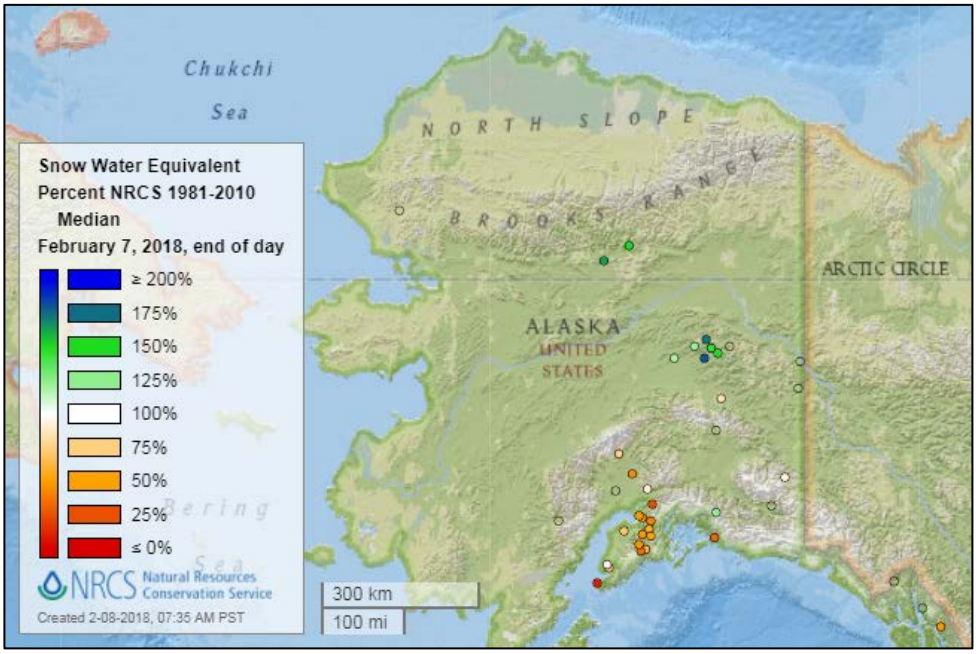
Snow

Current Snow Water Equivalent, NRCS SNOTEL Network



[Snow water equivalent percent of median map]

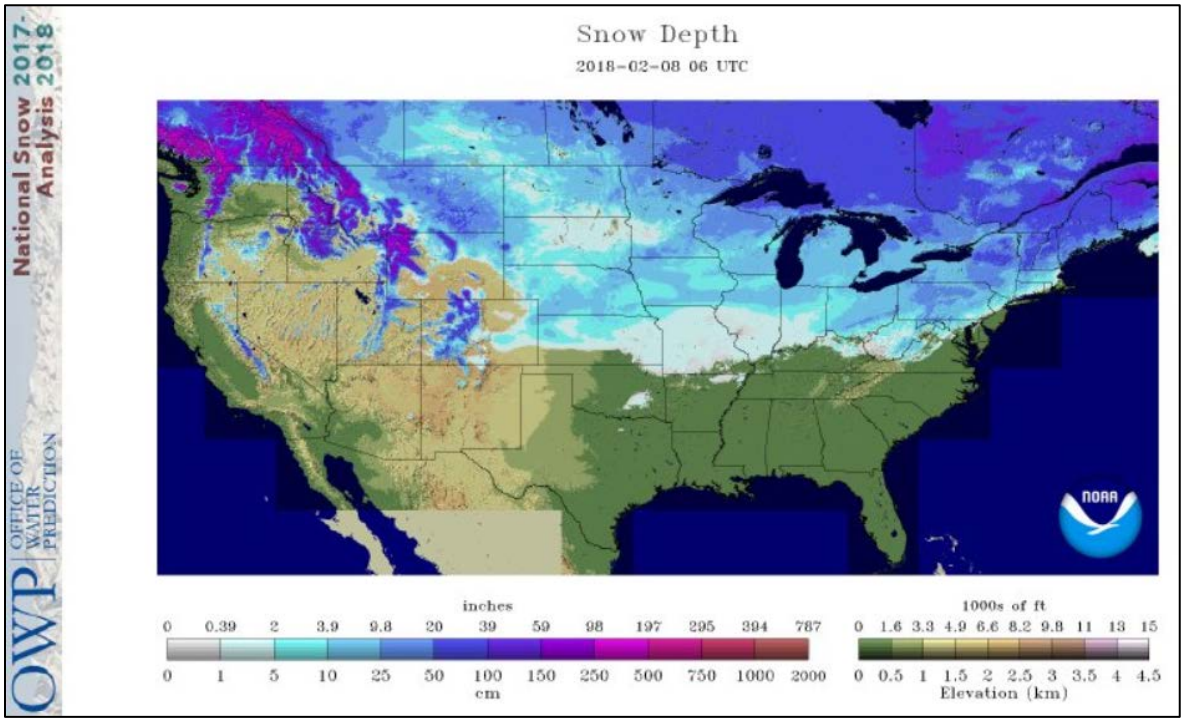
See also:
[Snow water equivalent values (inches) map]



[Alaska snow water equivalent percent of median map]

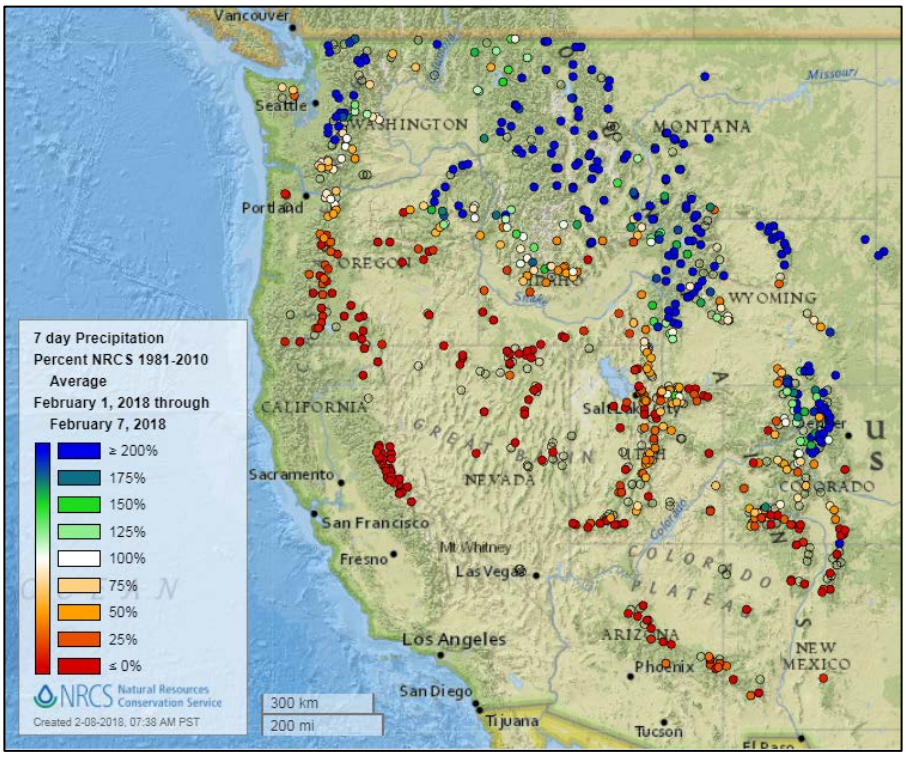
See also:
[Alaska snow water equivalent values (inches) map]

Current Snow Depth, National Weather Service Snow Analysis



Precipitation

Last 7 Days, NRCS SNOTEL Network

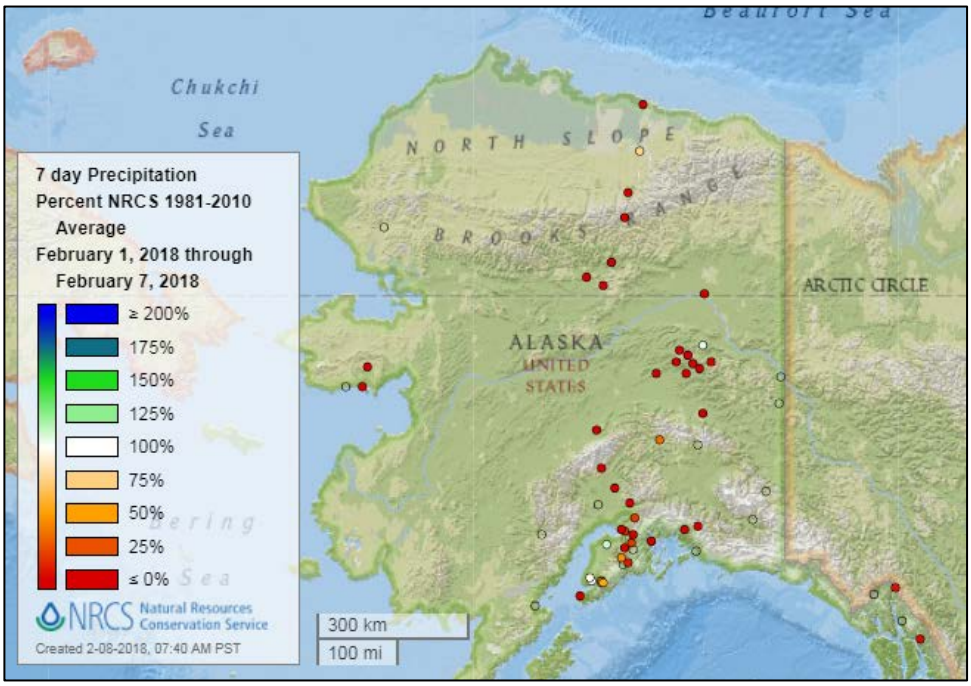


[7-day precipitation percent of average map]

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]

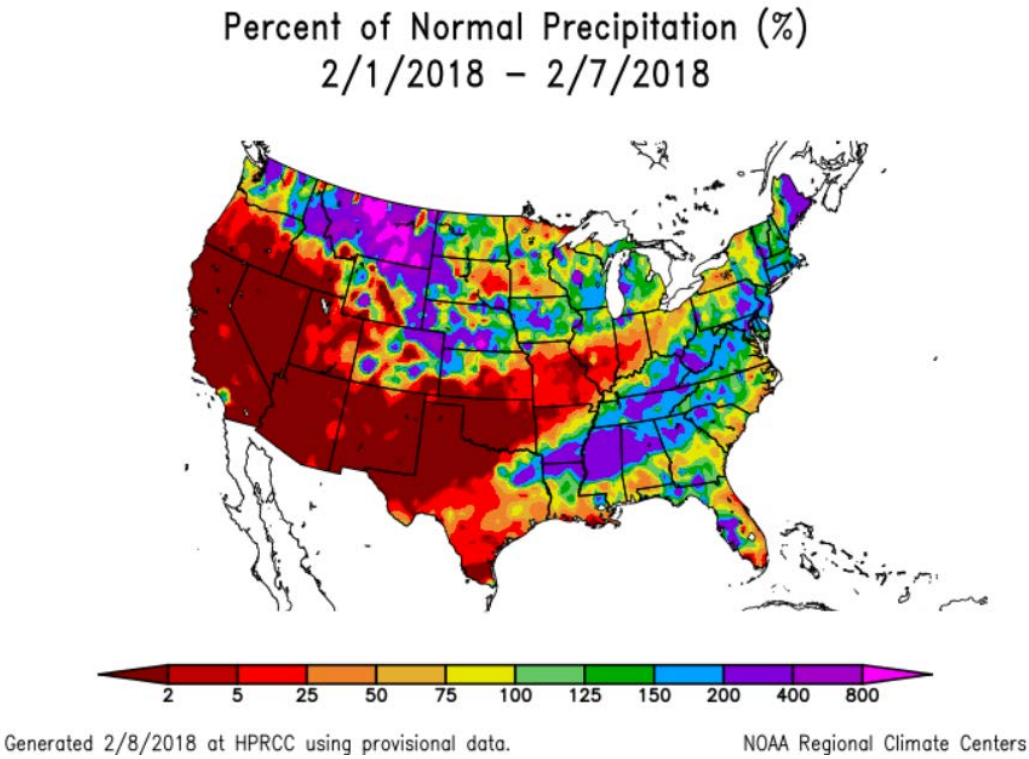


Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

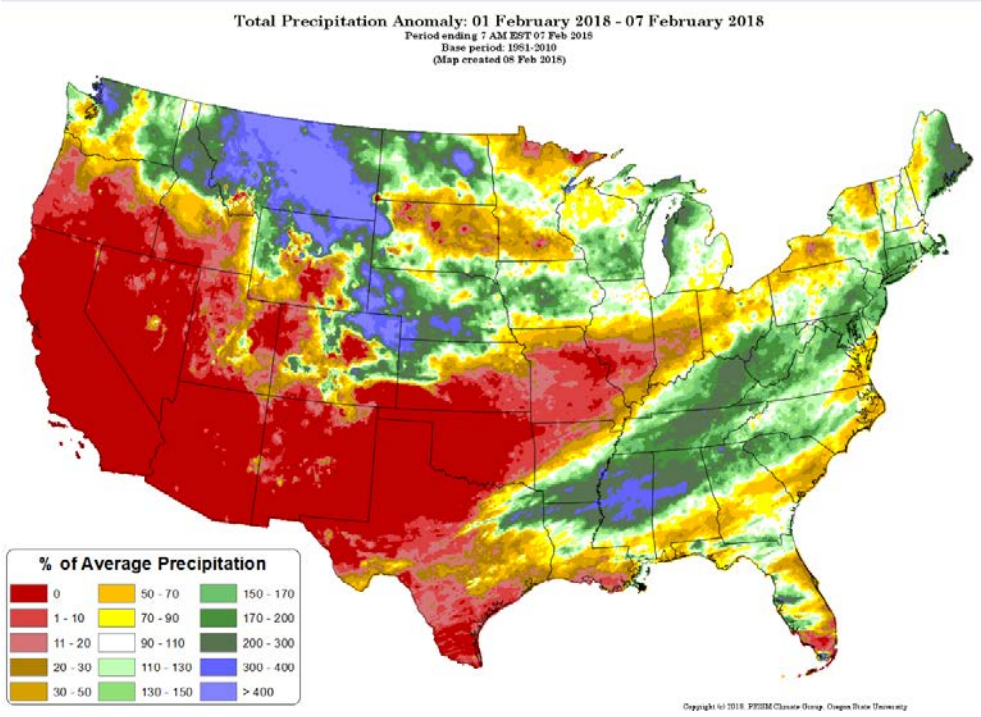
[7-day precipitation percent of normal map] for the continental U.S.

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



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

Source: PRISM

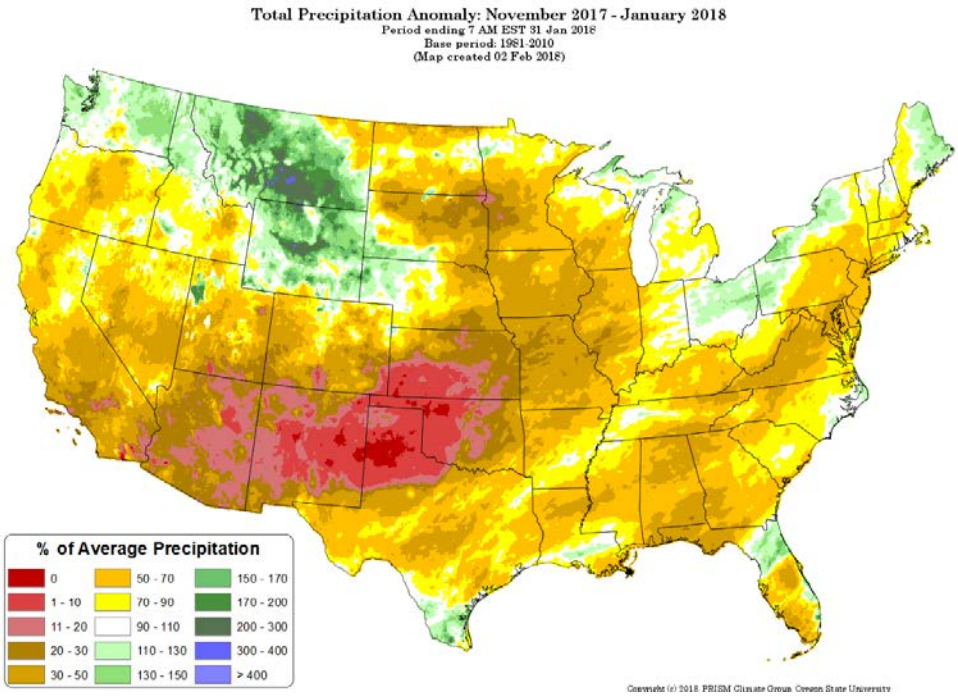


[Month-to-date national total precipitation percent of average map]

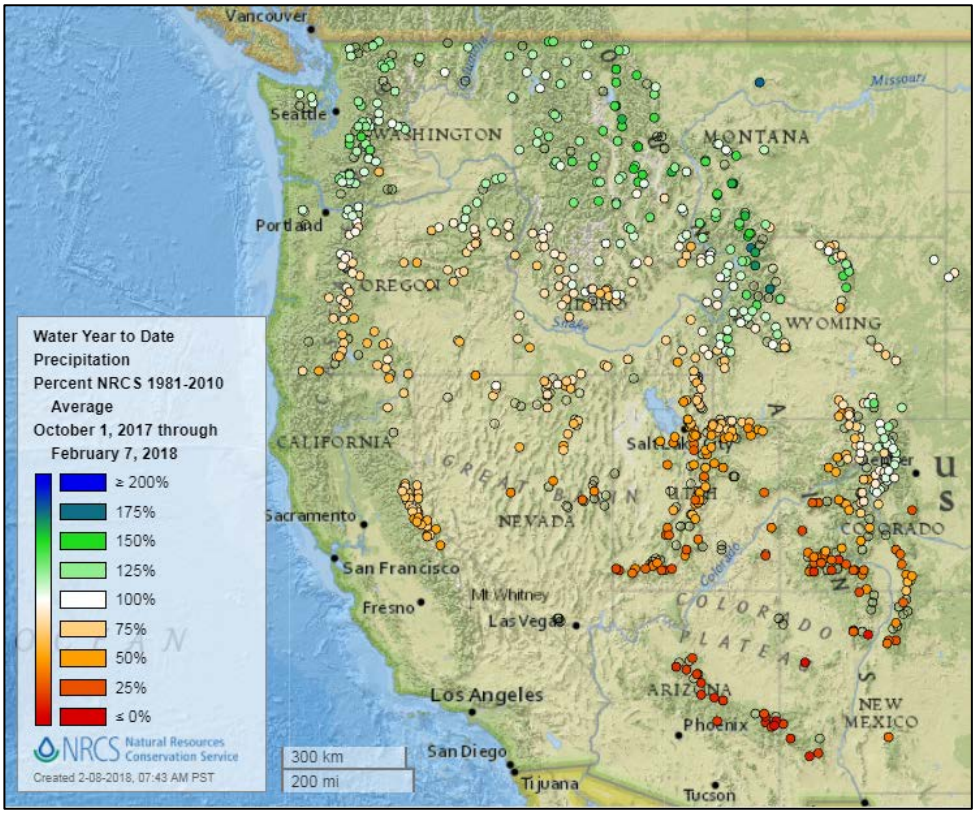
Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

[November 2017 through January 2018 total precipitation percent of average map]

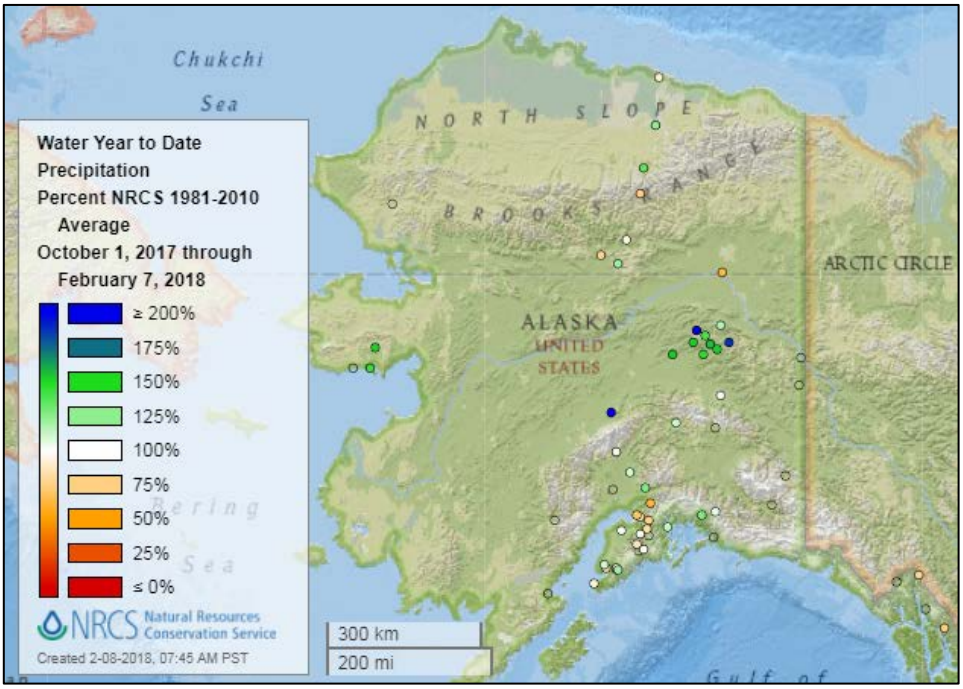


Water Year-to-Date, NRCS SNOTEL Network



[2018 water year-to-date precipitation percent of average map]

See also: [2018 water year-to-date precipitation values (inches)]



[Alaska 2018 water year-to-date precipitation percent of average map]

See also: [Alaska 2018 water year-to-date precipitation values (inches) map]

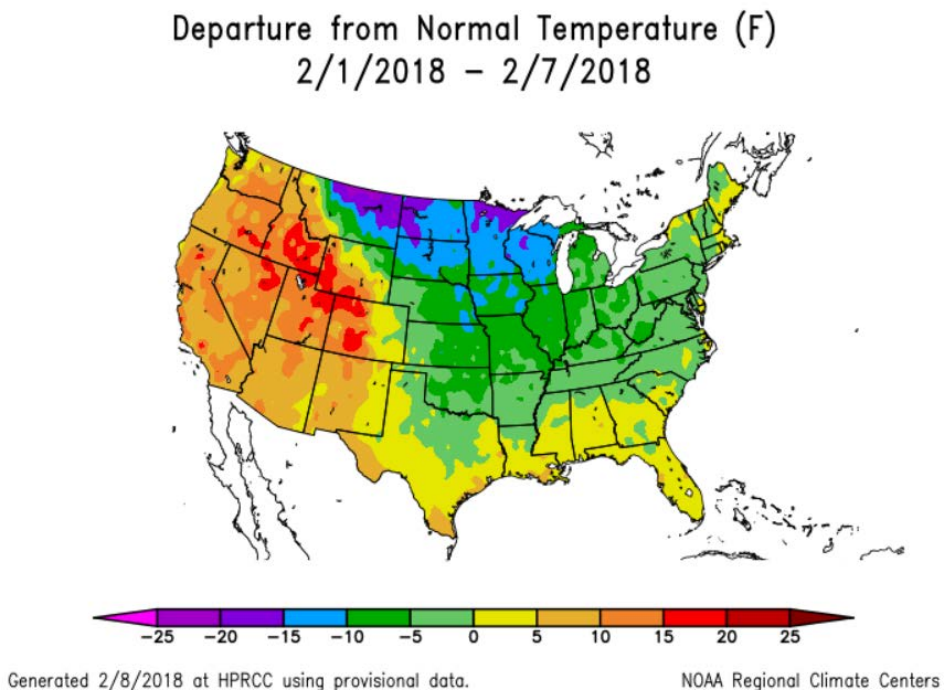
Temperature

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

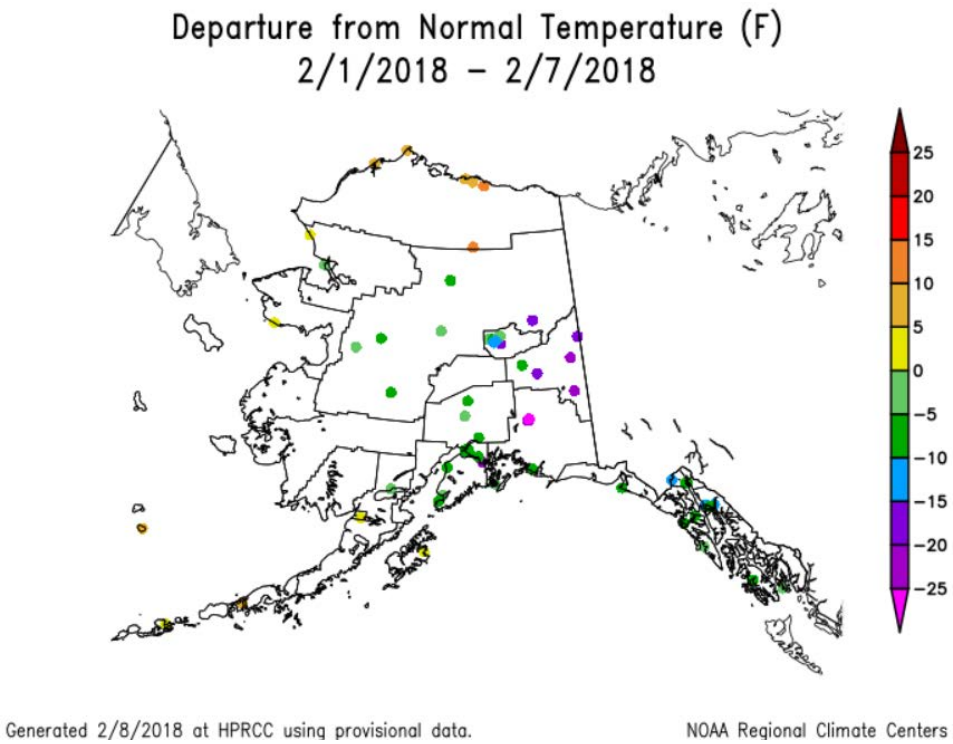


Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

7-day temperature anomaly map for Alaska.

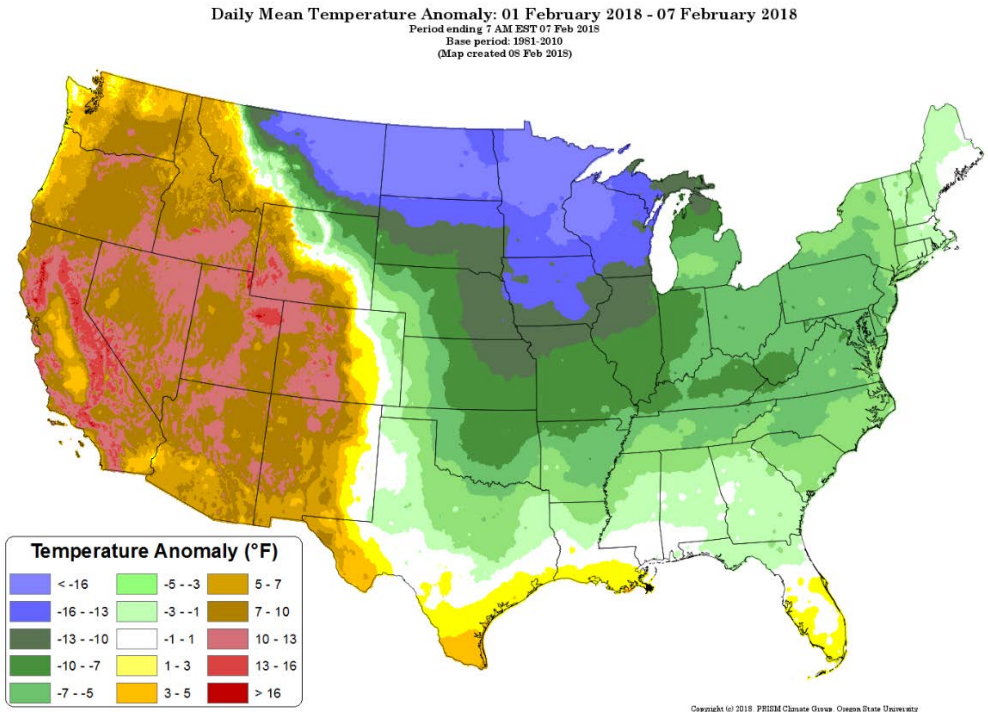
See also: 7-day temperature (° F) map



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

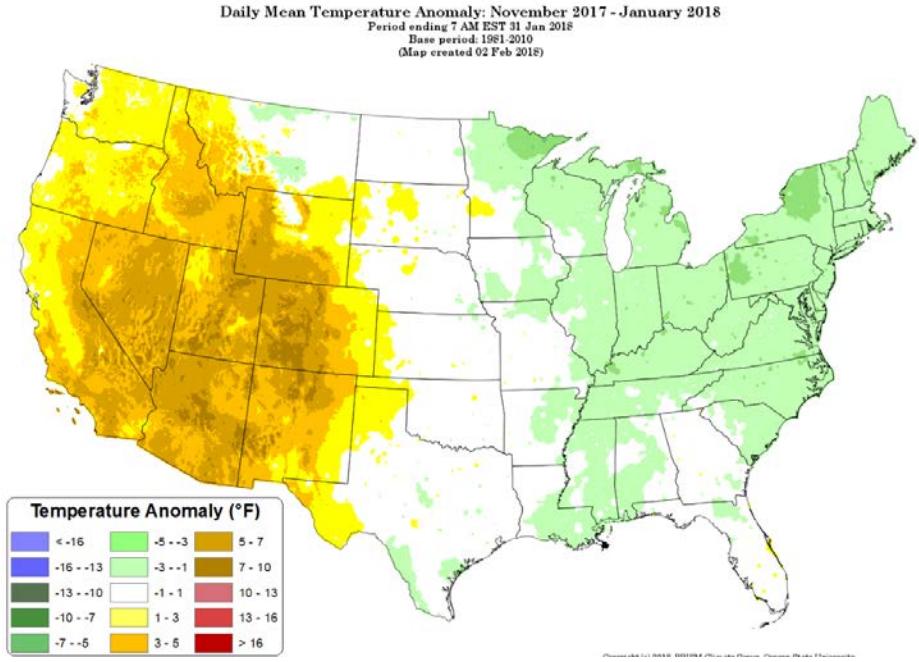
Source: PRISM

Month-to-date national daily mean temperature anomaly map



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

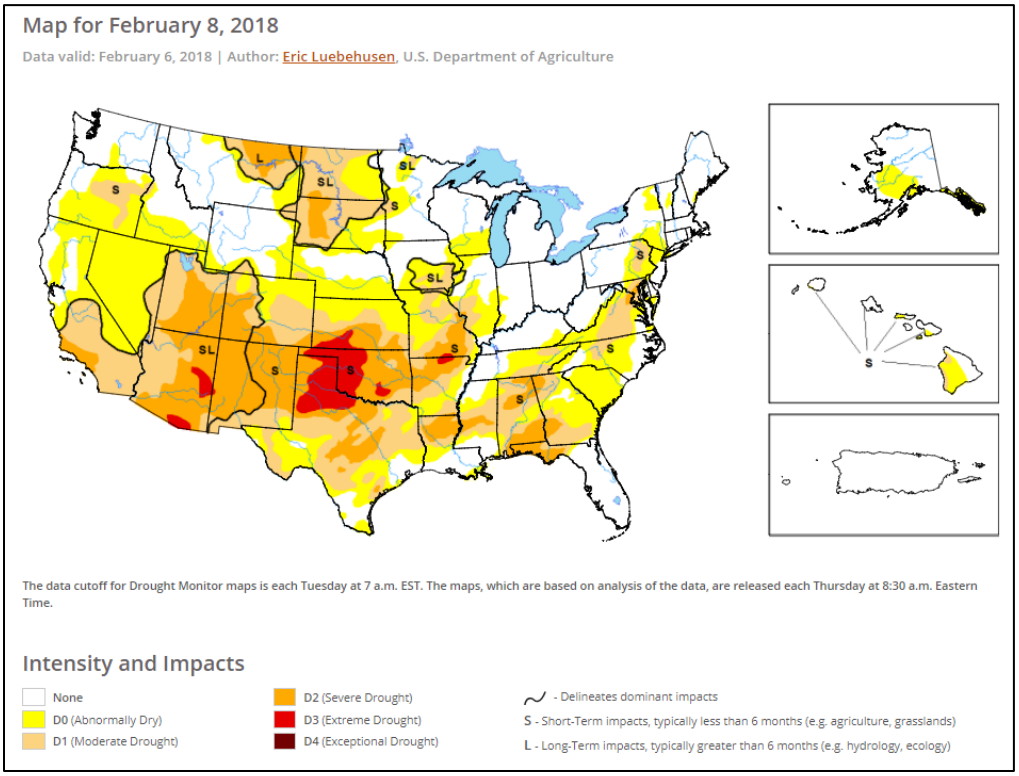
Source: PRISM



November 2017 through January 2018 daily mean temperature anomaly map

Drought

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



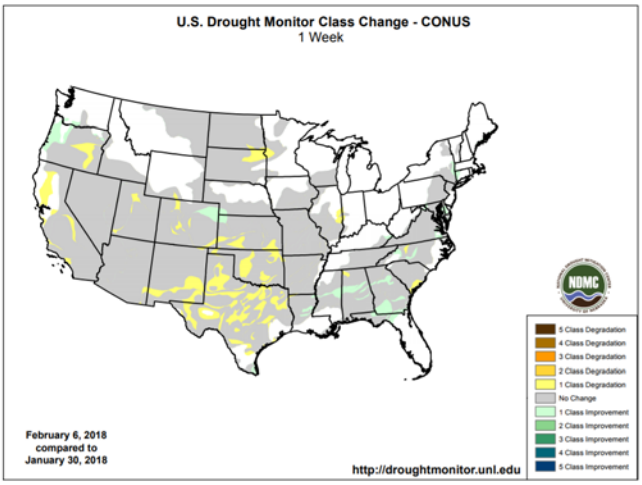
Current National Drought Summary, February 8, 2018

Author: Eric Luebehusen, U.S. Department of Agriculture

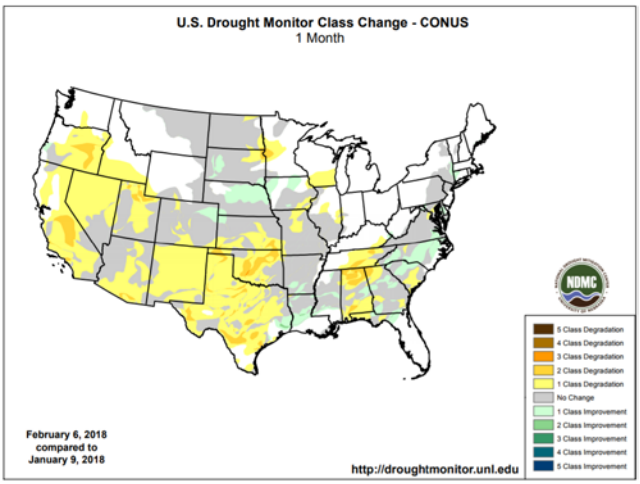
"During the 7-day period (ending Tuesday morning), near- to above-normal precipitation was observed from the interior Southeast into New England, while dryness intensified across the southern half of the Plains and much of the southwestern quarter of the nation. Drought continued to expand on the southern Plans, while a reduction in drought intensity and coverage was noted in parts of the south and east where rain and snow were heaviest. The situation across the western U.S. presented sharply diverging scenarios, with good season-to-date moisture supplies across the northern Rockies and Pacific Northwest in sharp contrast to intensifying drought and a lack of vital snowpacks across central and southern portions of the Rockies and Sierra Nevada."

Changes in Drought Monitor Categories over Time

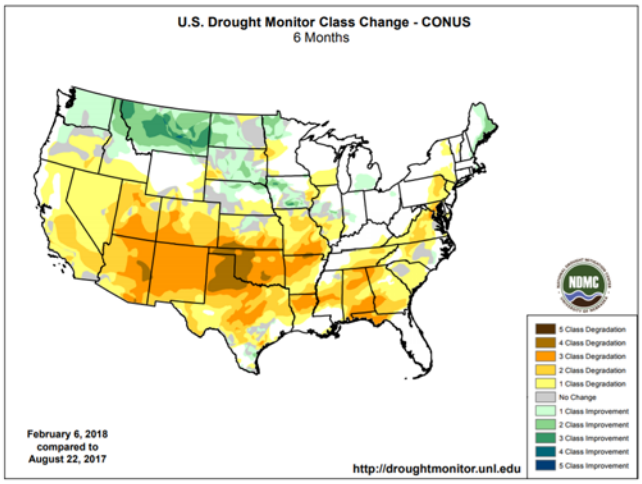
1 Week



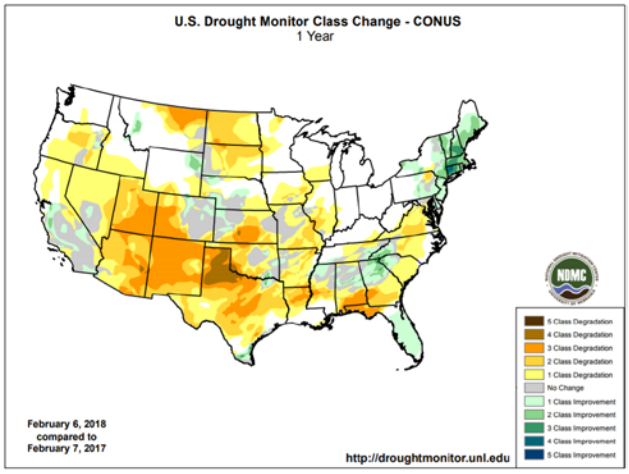
1 Month



6 Months



1 Year

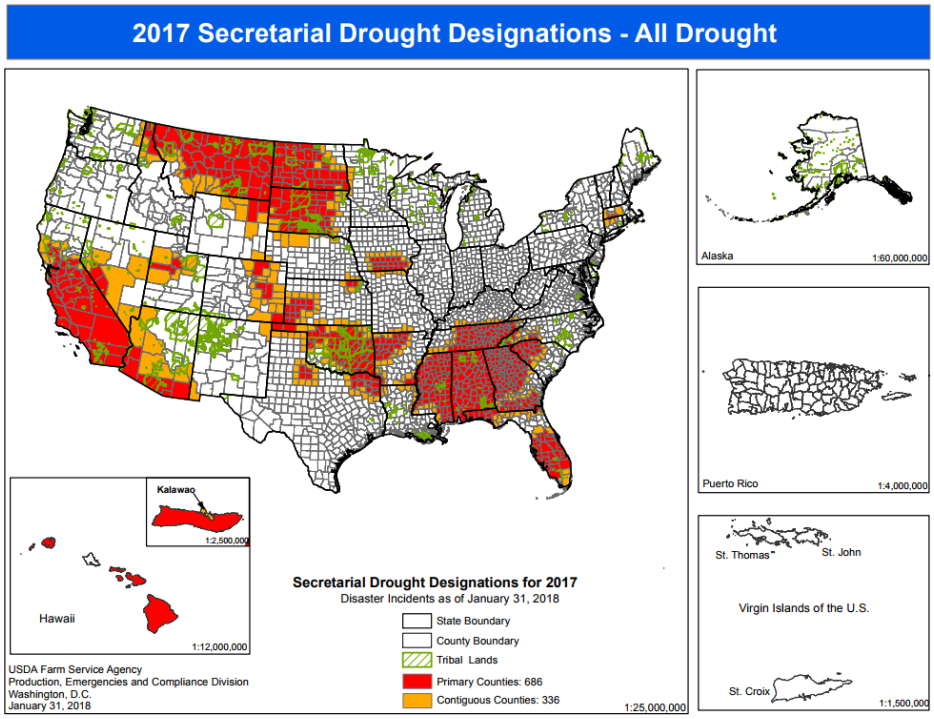


Changes in drought conditions over the last 12 months

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

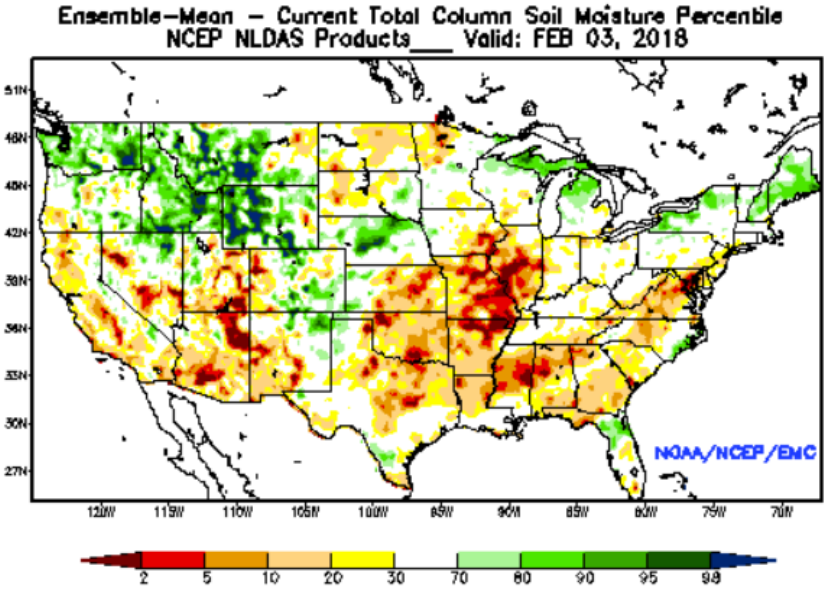
USDA 2017 Secretarial Drought Designations



Other Climatic and Water Supply Indicators

Soil Moisture

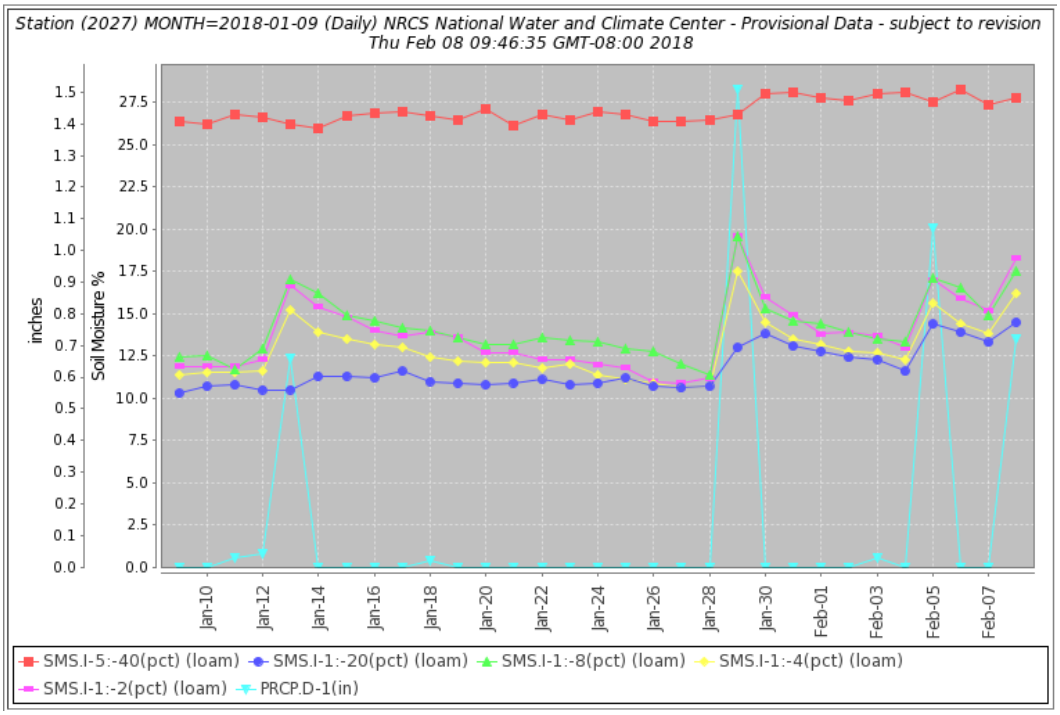
Source: NOAA National Centers for Environmental Prediction



Modeled soil moisture percentiles as of February 3, 2018.

Soil Moisture Data

Source: NRCS Soil Climate Analysis Network (SCAN)



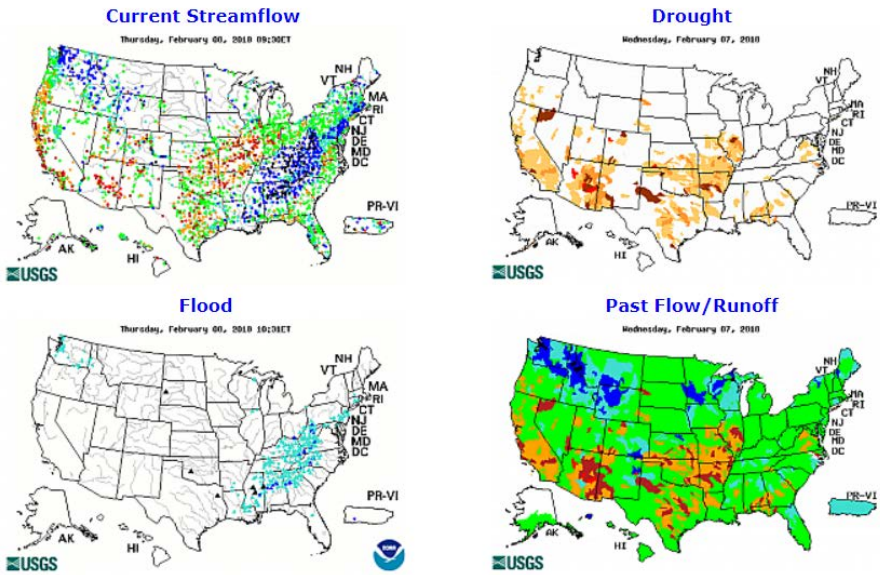
The chart shows precipitation and soil moisture for the last 30 days at the Little River SCAN site 2027, in Georgia. The past 30 days show several precipitation events causing the soil moisture to increase at the 2-, 4-, 8-, and 20-inch sensor depths. There was an overall increase in soil moisture at all sensor depths over the period.

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

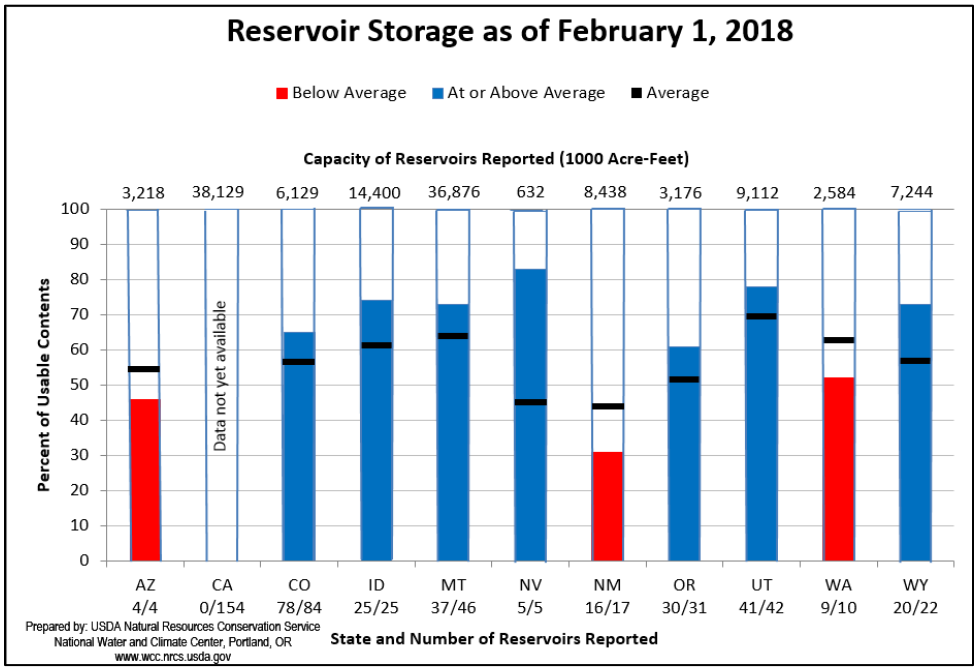


WaterWatch: Streamflow, drought, flood, and runoff conditions

Reservoir Storage

Western States Reservoir Storage

Source: NRCS National Water and Climate Center

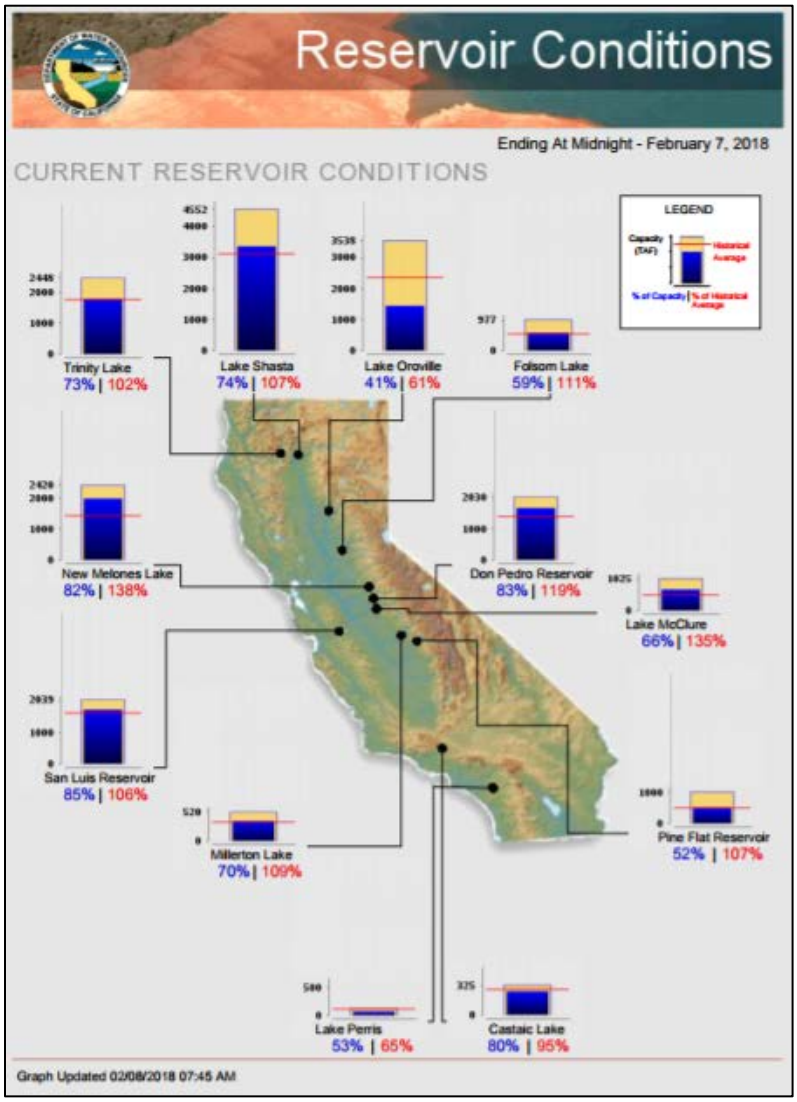


February 1 Reservoir Storage: Chart | Dataset

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

Current California Reservoir Conditions Source: California Department of Water Resources



Current California Reservoir Conditions

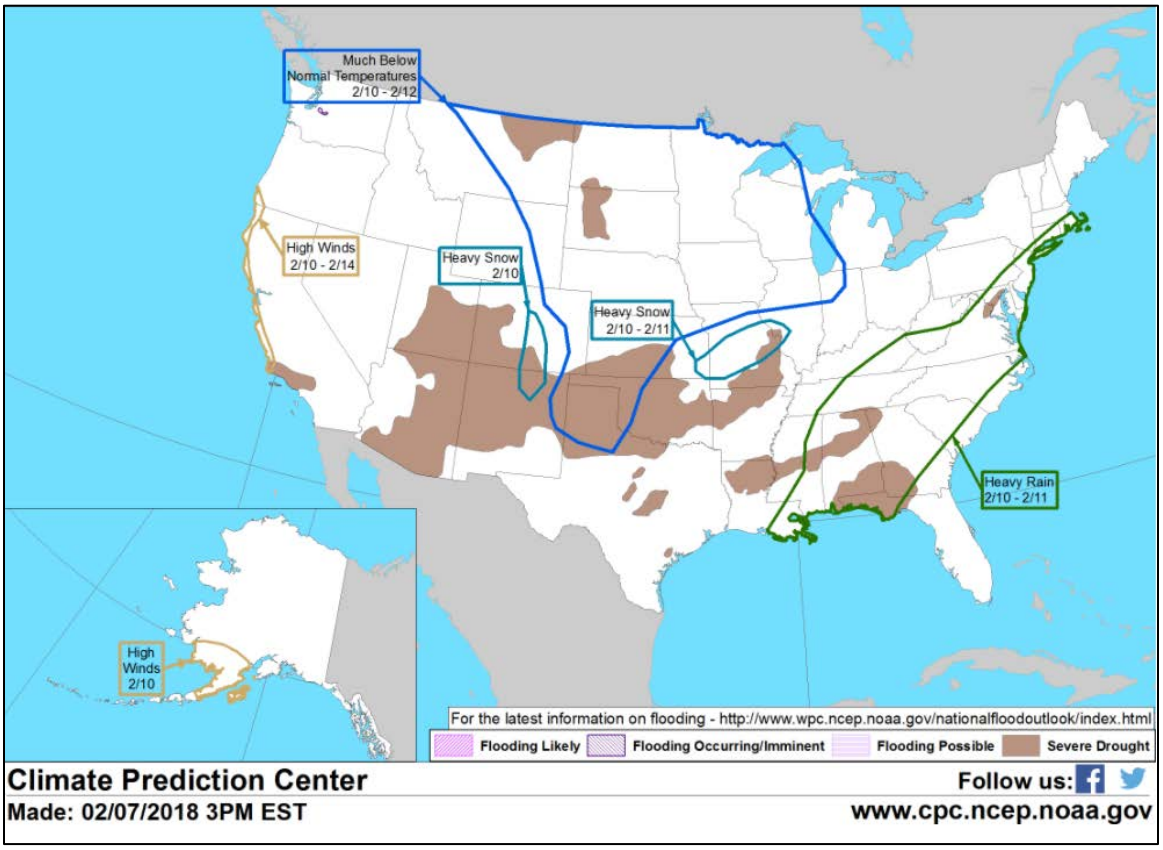
Short- and Long-Range Outlooks

Agricultural Weather Highlights

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

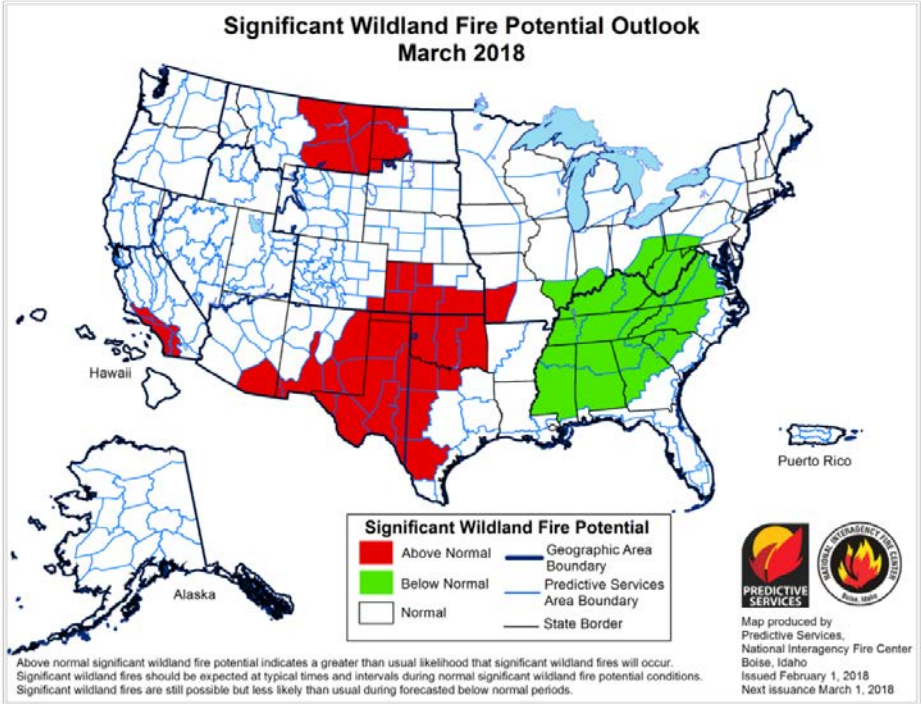
National Outlook, Thursday, February 8**:** "The West's mid-winter warm spell will temporarily end by early next week. Meanwhile, frigid weather across the northern Plains and upper Midwest will contrast with warmth in the Southeast. With a fairly sharp temperature gradient in place, periods of precipitation will continue across the South, East, and lower Midwest. In fact, 5-day precipitation totals could reach 2 to 4 inches across the interior Southeast, and 1 to 2 inches along the middle and northern Atlantic Coast. Farther west, however, dry weather will persist from California to the southern Plains. The NWS 6- to 10-day outlook for February 12 – 16 calls for the likelihood of near- to above normal temperatures and precipitation across most of the country. Colder-than-normal conditions will be confined to northern sections of the Rockies and High Plains, while drier-than-normal weather should be limited to Florida's peninsula, parts of the north-central U.S., and the far West, including California."

Weather Hazard Outlook February 10 - 14, 2018 Source: Climate Prediction Center

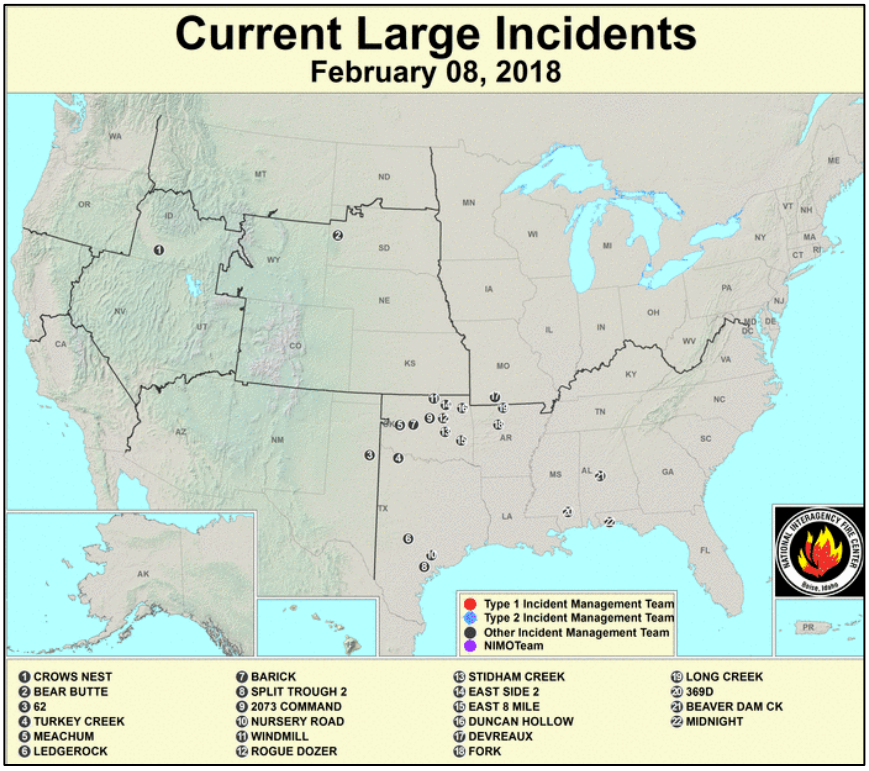


Significant Wildland Fire Potential Outlook

Source: National Interagency Fire Center



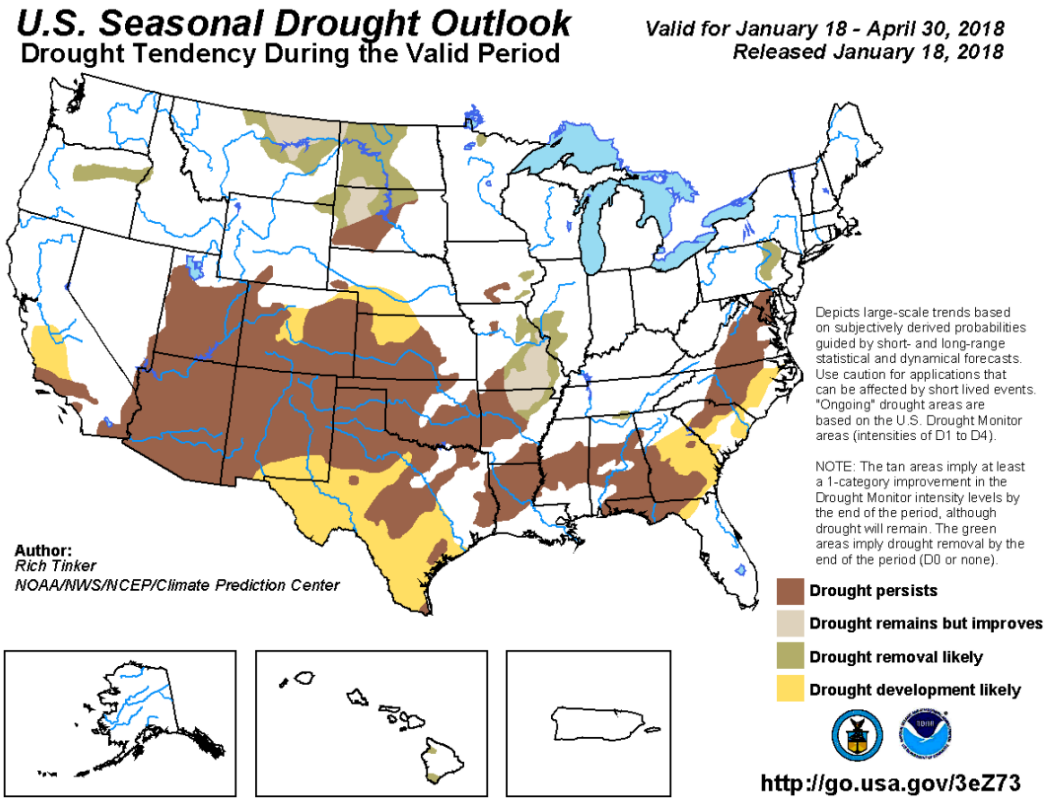
Wildfires: USDA Forest Service Active Fire Mapping



Highlighted Wildfire Resources

- National Interagency Fire Center
- InciWeb Incident Information System
- Significant Wildland Fire Potential Outlook

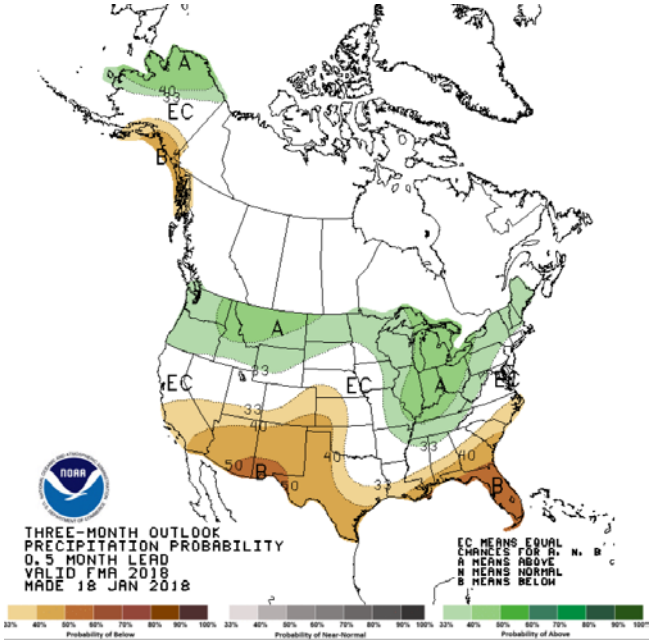
Seasonal Drought Outlook: January 18 – April 30, 2018 Source: National Weather Service



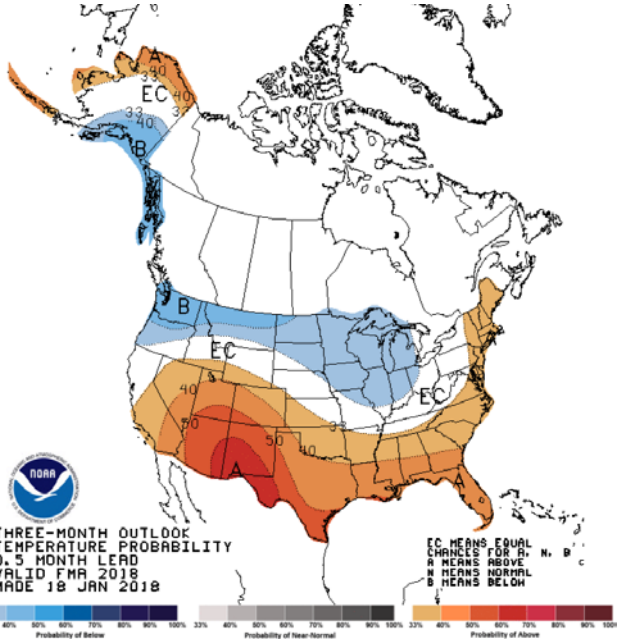
Climate Prediction Center 3-Month Outlook

Source: National Weather Service

Precipitation



Temperature



Feb-Mar-Apr (FMA) 2018 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.