



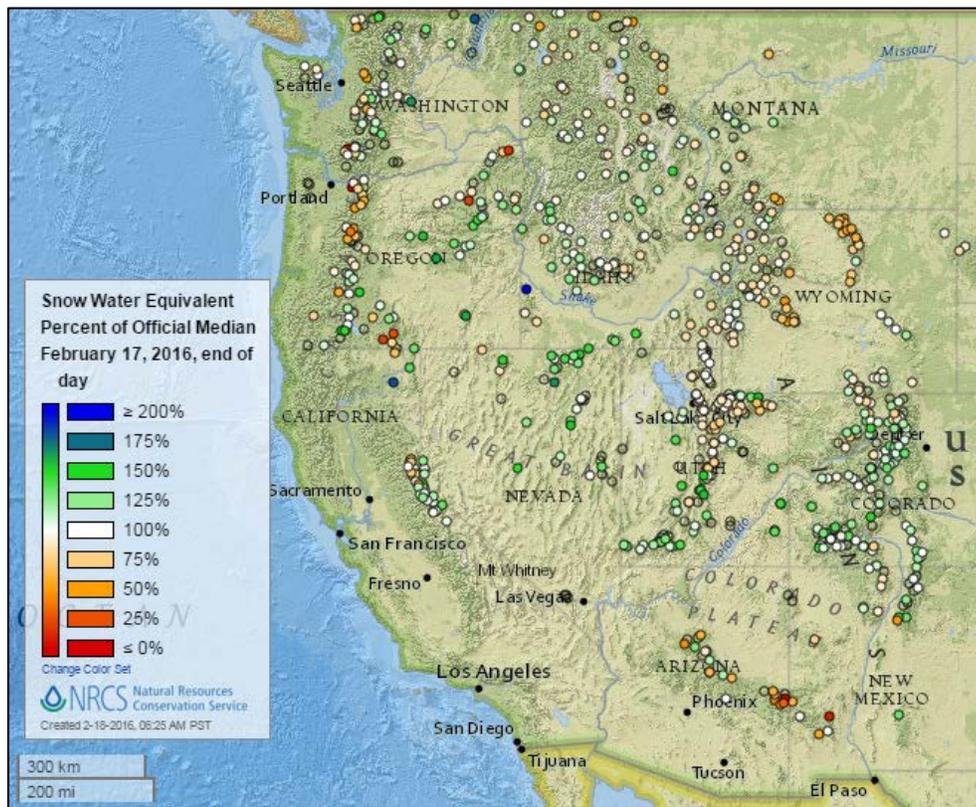
Water and Climate Update

February 18, 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	Drought	7
Precipitation	3	Other Climatic and Water Supply Indicators	9
Temperature	6	Short- and Long-Range Outlooks.....	12

Weekly Highlight: Warm temperatures and rainfall reduce snowpack across the West this week

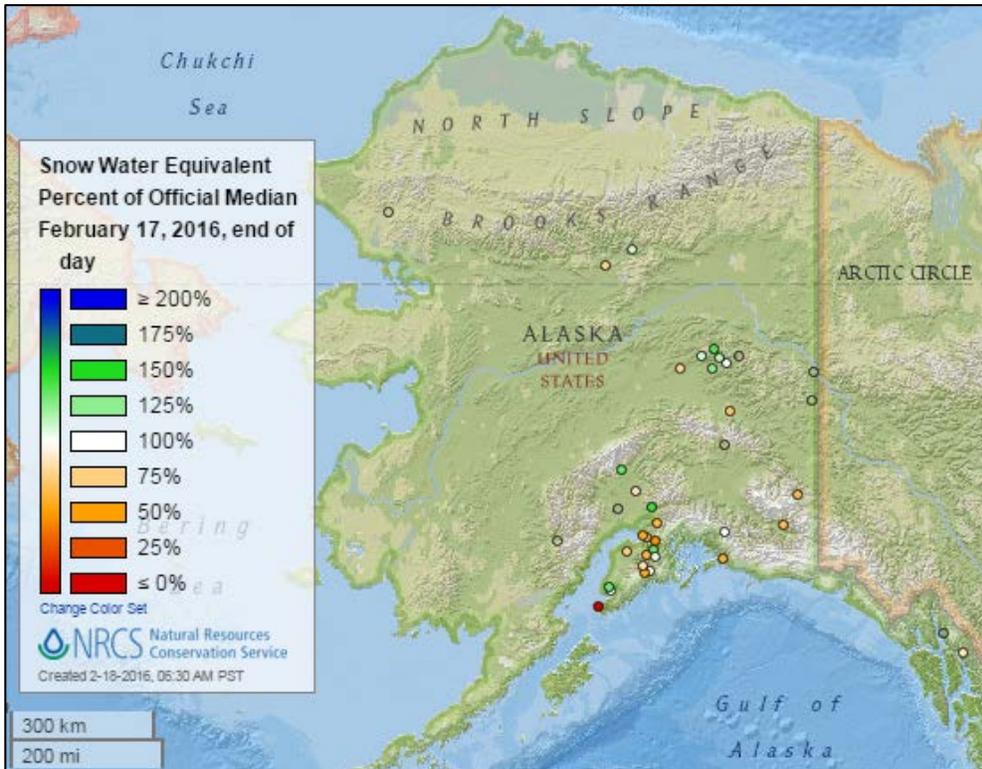


The current [snow water equivalent percent of median](#) map shows a reduction in percent of median at many stations in the West from a week ago. Many stations in the northern area of the West are near or below median. The highest percent of median continues to be across southeast Oregon, northern California, Nevada, southern Utah, and Colorado.

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

Snow

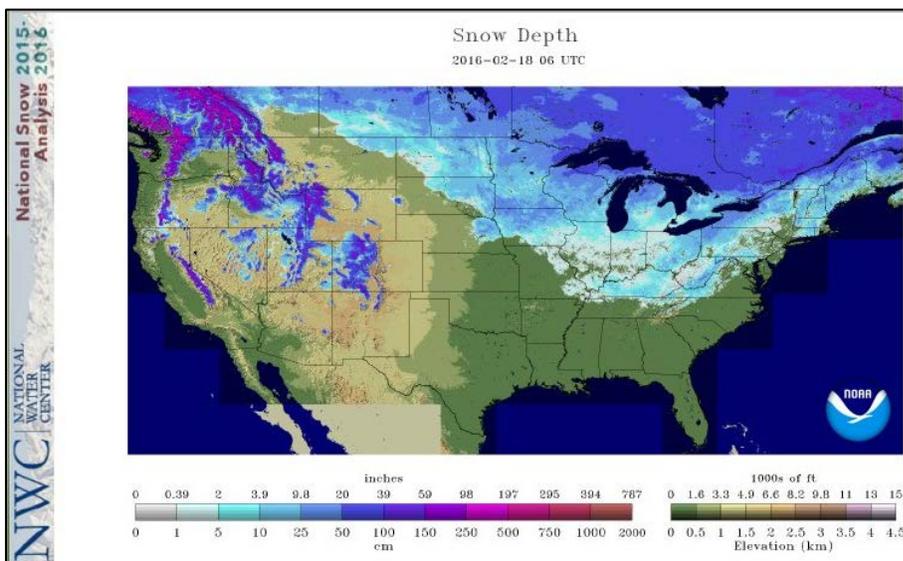
Current Snow Water Equivalent, NRCS SNOTEL Network



The Alaska current [snow water equivalent percent of median](#) map shows a slight reduction in the snowpack from a week ago. The snowpacks in all regions are mixed from slightly above to below median across the state.

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

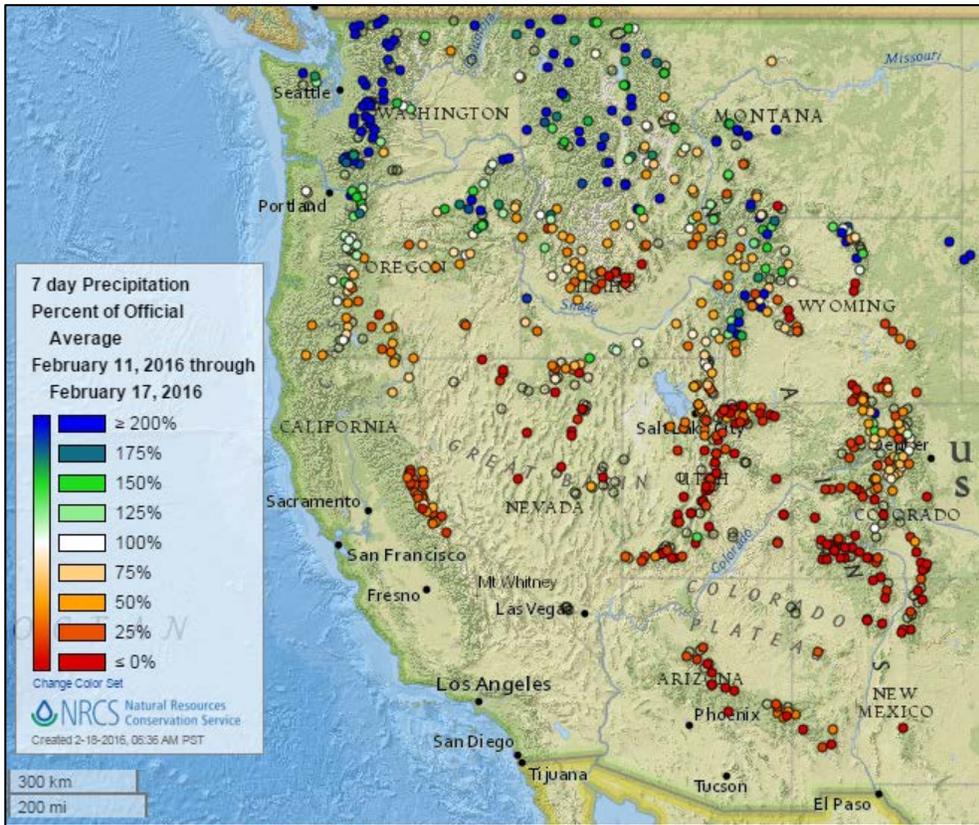
Current Snow Depth, National Weather Service (NWS) Networks



The NOAA National Operational Hydrologic Remote Sensing Center's current [snow depth](#) map shows an increase in snow accumulation across much of the northern Plains, upper Midwest, and northern New England from a week ago. There was snowpack melt across the western U.S. valleys and low elevation mountains, the Midwest, and the central and northern Plains. Heavy snowpack continues across the mountainous West and the northern U.S., from northern North Dakota through the Great Lakes to New England.

Precipitation

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

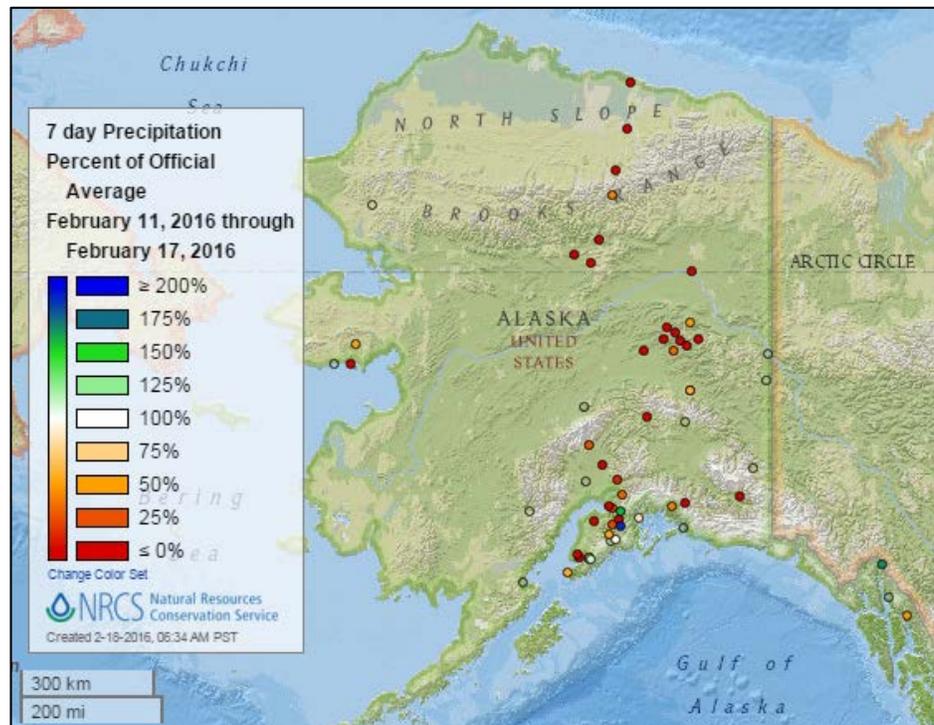


The [7-day precipitation percent of average](#) map shows much of the northern region of the West had a wet week in contrast to the previous week. The remainder of the West was dry to below average again this week.

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

The [Alaska 7-day precipitation percent of average](#) map shows another primarily dry week across the state. In contrast, a few stations along the coast had average, above average, to over 200% of average for the week.

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

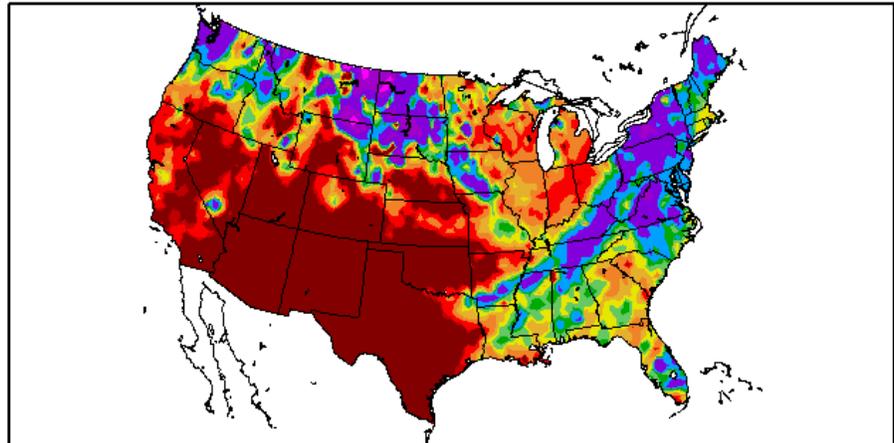


Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

The [7-day percent of normal precipitation](#) map for the continental U.S. shows well above average precipitation in the northern tier states, northern Plains, along the Appalachians, and much of the East. A majority of the West and south-central U.S. had a dry week.

Percent of Normal Precipitation (%)
2/11/2016 – 2/17/2016



Generated 2/18/2016 at HPRCC using provisional data.

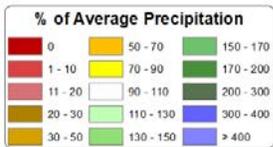
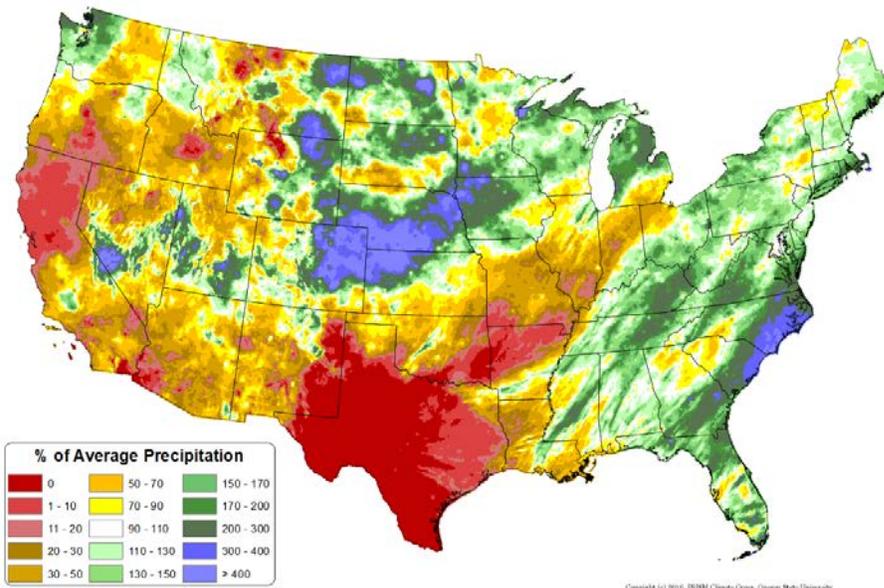
Regional Climate Centers

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

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

Source: PRISM

Total Precipitation Anomaly: 01 February 2016 - 16 February 2016
Period ending 7 AM EST 16 Feb 2016
Base period: 1961-2010
(Map created 17 Feb 2016)

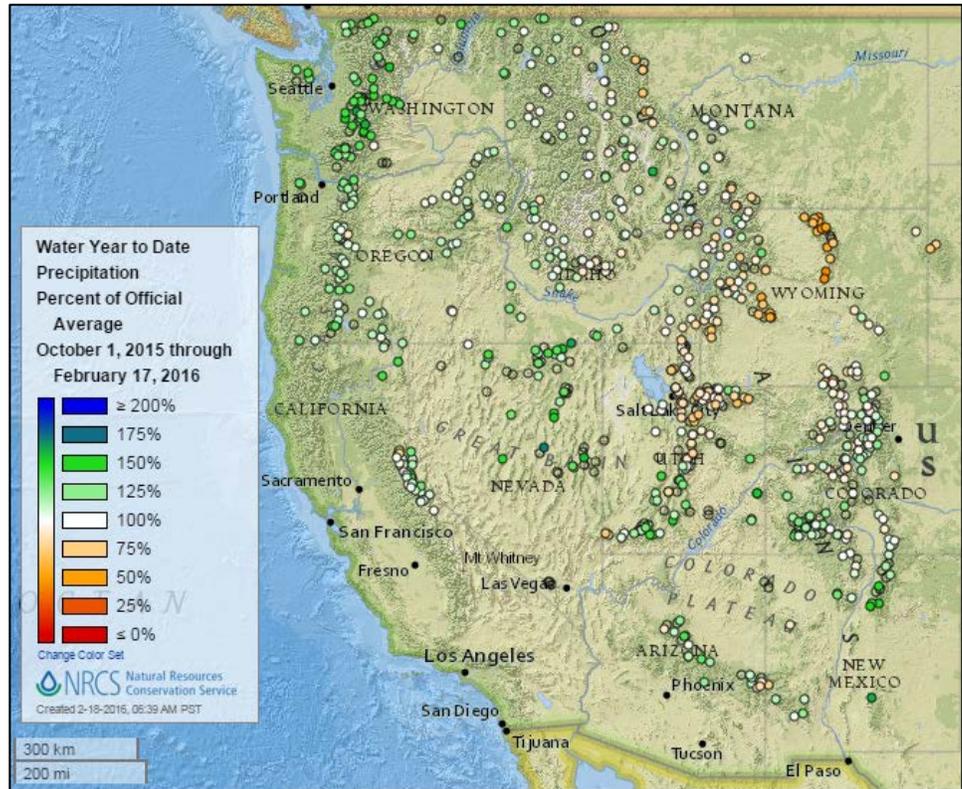


The February national [month-to-date precipitation percent of average](#) map shows much of the central and eastern U.S. had well above normal precipitation. The south-central U.S. and much of the West have been drier than normal for the month. Parts of the Pacific Northwest and northern Plains had a large increase in percent of average this week.

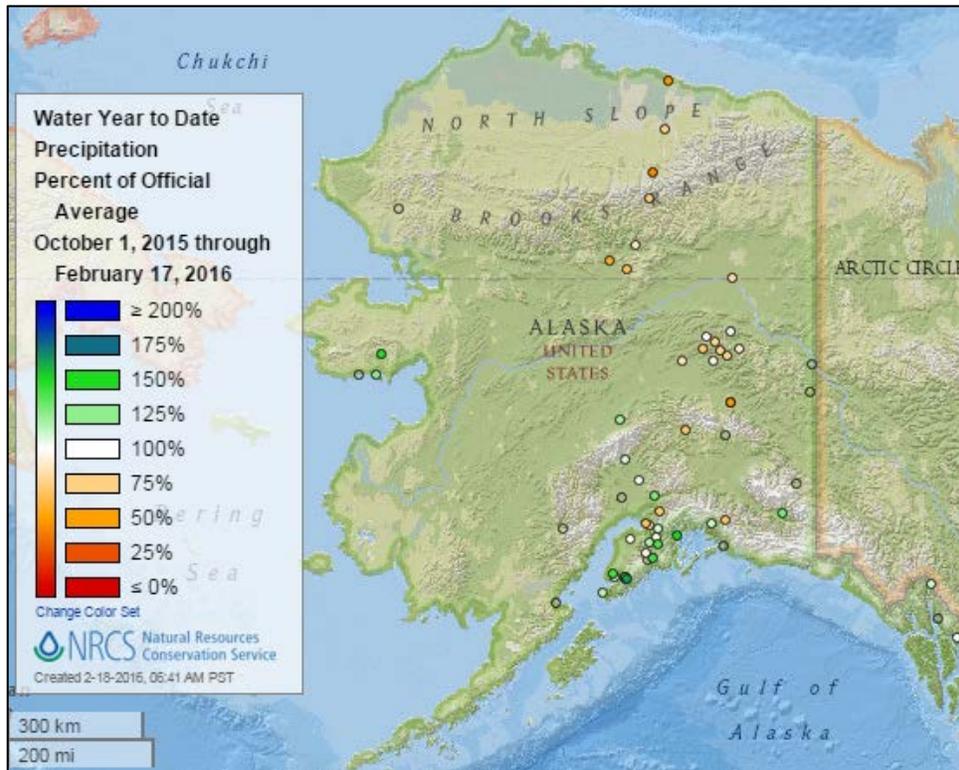
See also: [Month-to-date total precipitation values \(inches\) map](#)

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

The [2016 water year-to-date precipitation percent of average](#) map shows a slight increase in the northern Cascades this week, with average to above average precipitation in the Cascades, Sierra Nevada, Great Basin, and southern Rockies. Many stations are now reporting near average conditions. Areas of below average precipitation are in the central and northern Rocky Mountains and Big Horn Mountains of Wyoming.



See also: [2016 water year-to-date total precipitation values \(inches\) map](#)



The [Alaska 2016 water year-to-date precipitation percent of average](#) map shows a gradation of dry to average from the north to much of the Interior, and near normal or above normal along the coast.

See also: [Alaska 2016 water year-to-date total precipitation values \(inches\) map](#)

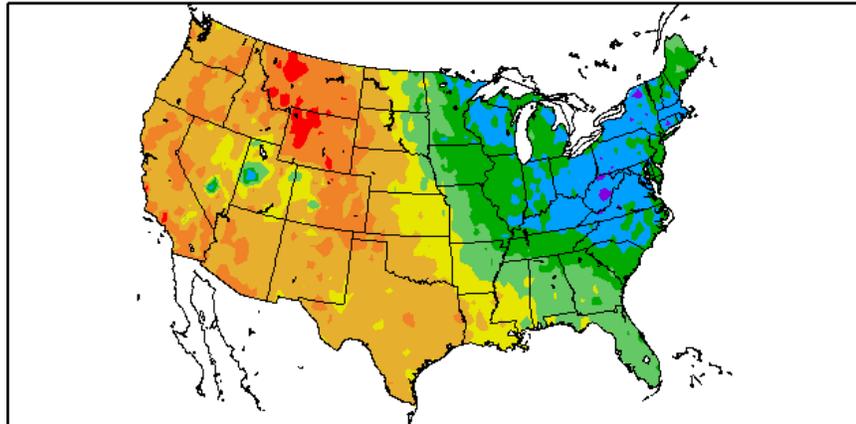
Temperature

Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

The [7-day temperature anomalies](#) map shows very cool temperatures across the East. There were warmer than normal temperatures in the northern Rockies and northern Plains. There was a small area of cooler than normal temperatures in the central West.

Departure from Normal Temperature (F)
2/11/2016 – 2/17/2016



Generated 2/18/2016 at HPRCC using provisional data.

Regional Climate Centers

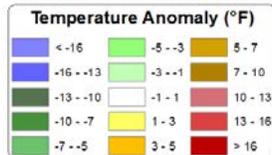
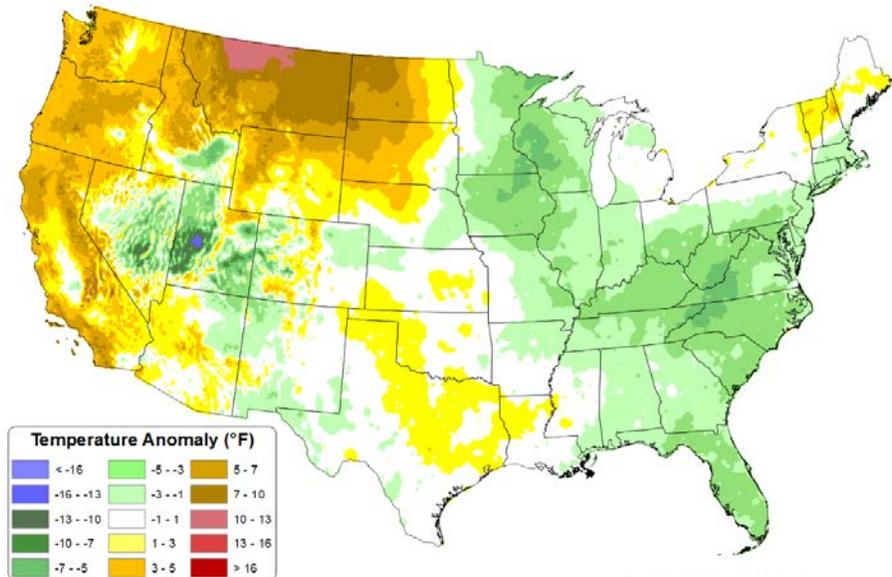
See also: [7-day temperature \(° F\) map](#)

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

Source: PRISM

The [month-to-date daily mean temperature anomaly](#) map for the continental U.S. shows warm temperatures across the West Coast, the northern Rocky Mountains and northern Plains, similar to a week ago. Cooler than normal temperatures were reported from the Great Lakes to the Gulf Coast and across much of the East Coast. The coolest temperatures were centered in Nevada and Utah, but covered much of the central West.

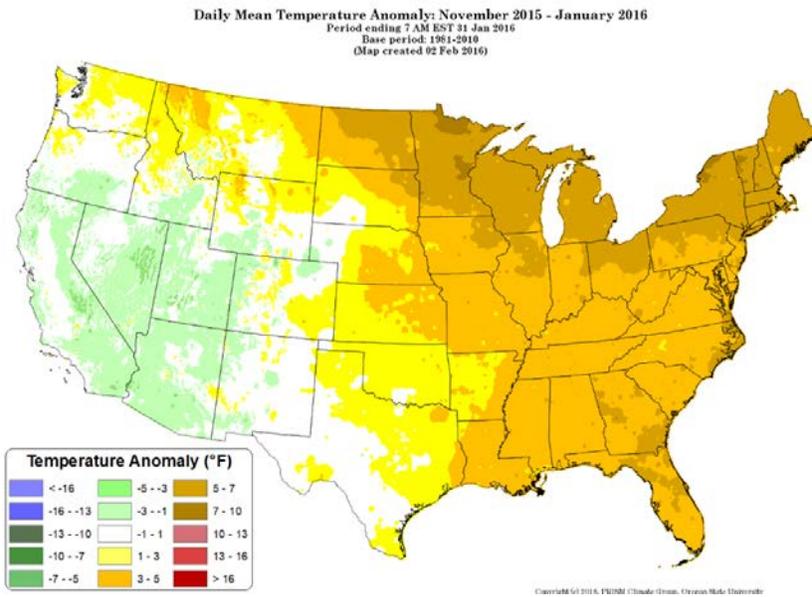
Daily Mean Temperature Anomaly: 01 February 2016 - 16 February 2016
Period ending 7 AM EST 16 Feb 2016
Base period: 1981-2010
(Map created 17 Feb 2016)



See also: [Month-to-date daily mean temperature \(° F\) map](#)

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

Source: PRISM

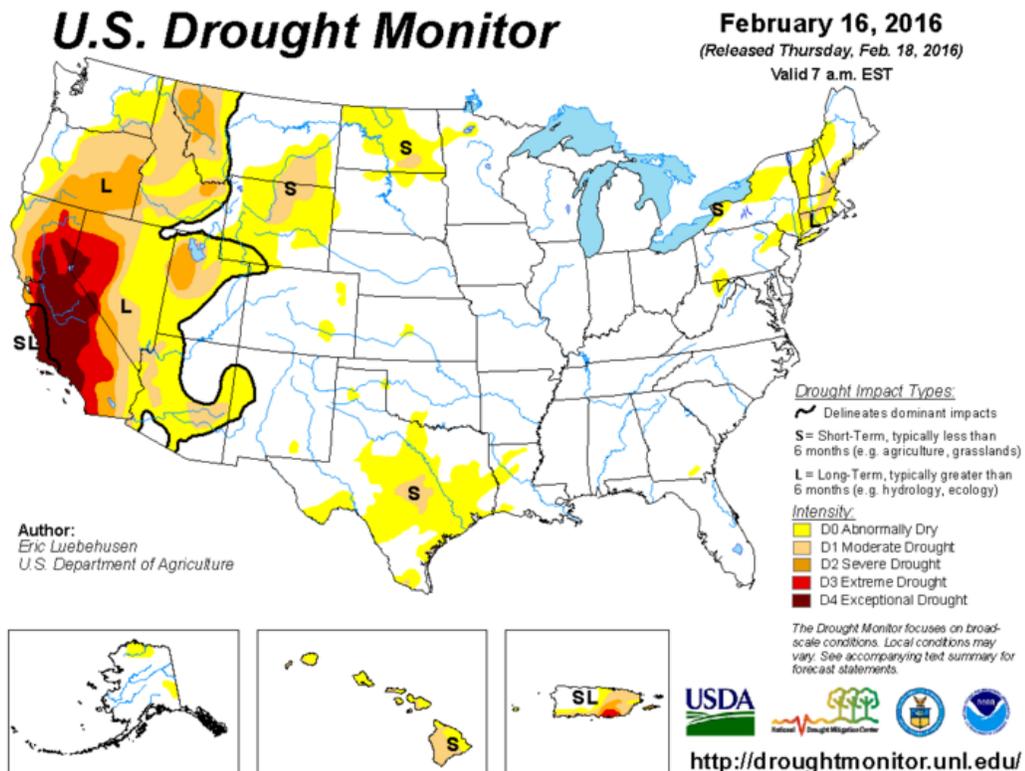


The November through January national **daily mean temperature anomaly** map shows most of the country was warmer than normal. The warmest areas were across the northern tier states from North Dakota to New England. The West was near normal to slightly cooler than normal. The largest negative departures from normal occurred in California and Nevada, though this was just slightly cooler than normal.

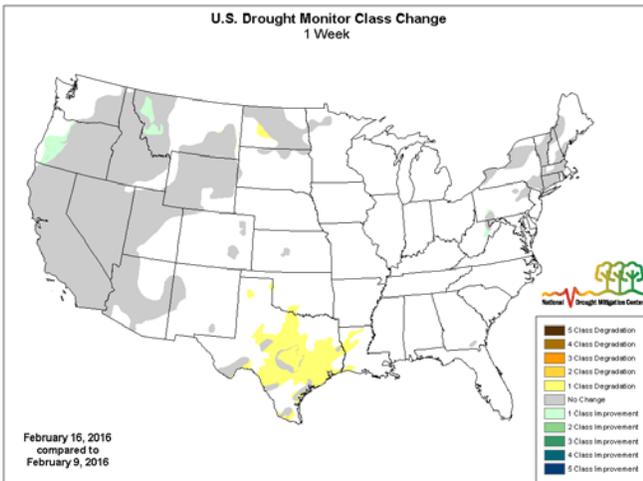
Drought

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

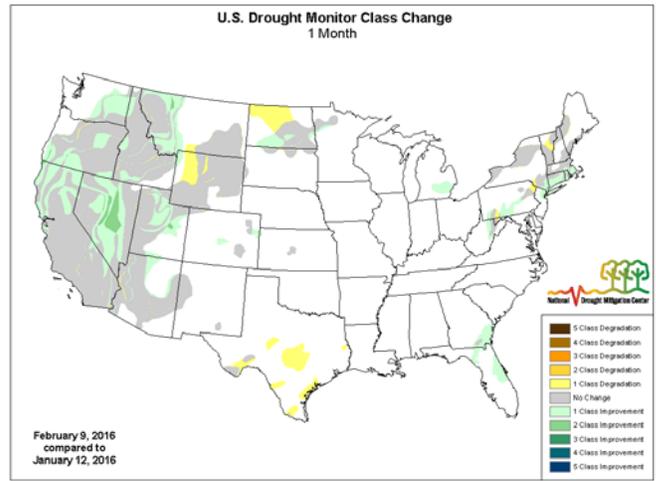
[U.S. Drought Monitor](#) See map below. Drought conditions continue in the western states, including the exceptional drought in California and Nevada.



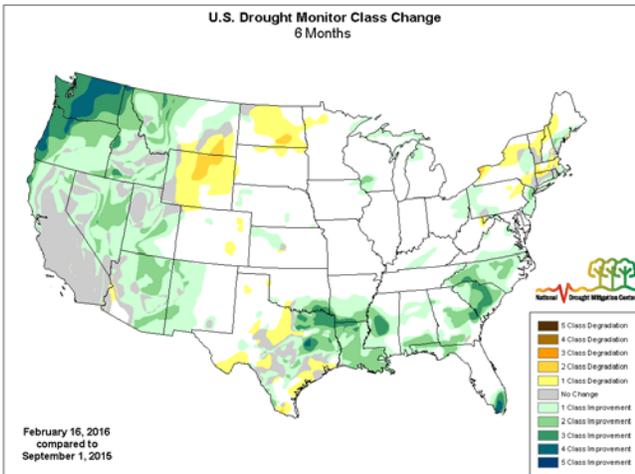
Changes in Drought Monitor Categories over Time



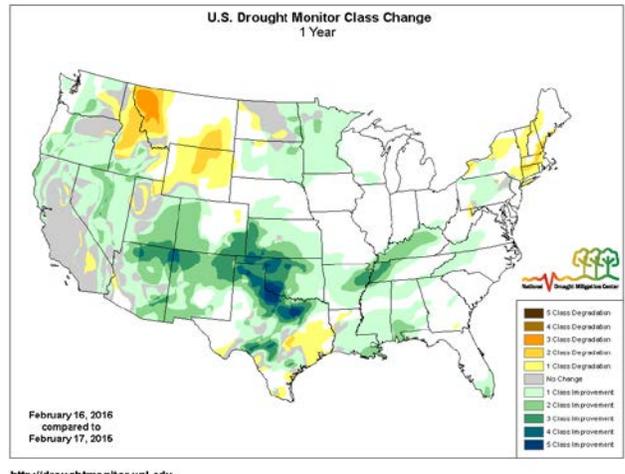
<http://droughtmonitor.unl.edu>



<http://droughtmonitor.unl.edu>



<http://droughtmonitor.unl.edu>



<http://droughtmonitor.unl.edu>

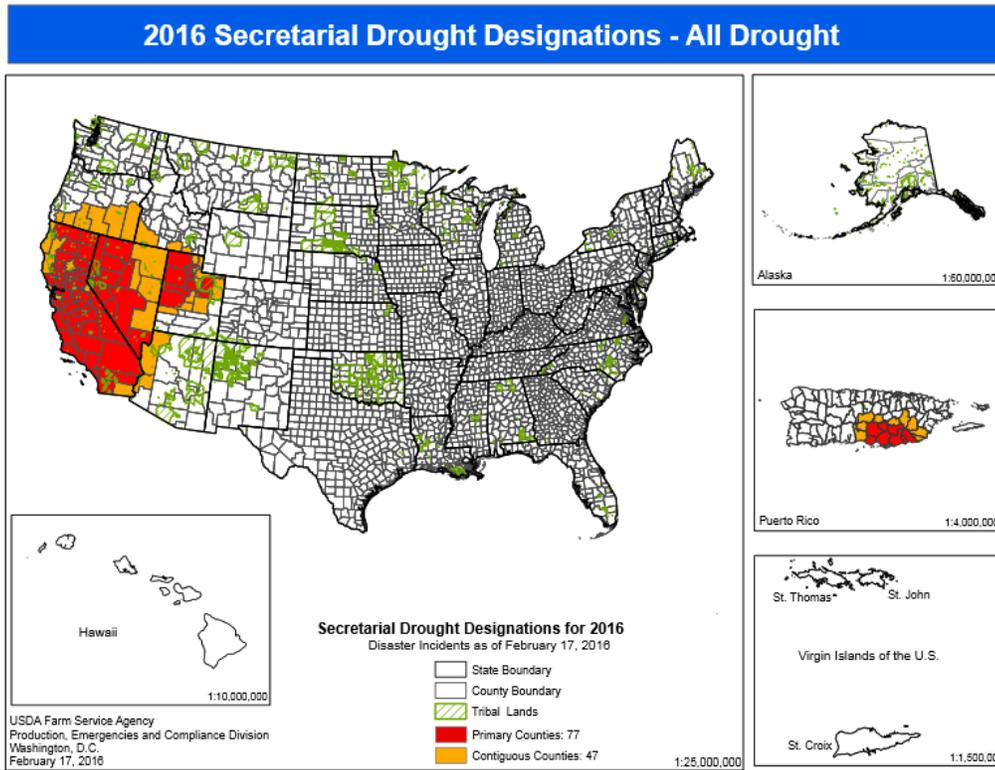
Drought conditions remain essentially the same as last week. Over the past 6-12 months, conditions have improved in much of the country, especially in the south-central U.S. and the Pacific Northwest. The remainder of the West has shown improvement, but long-term drought persists in California and Nevada.

Current National [Drought Summary](#), February 16, 2016

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

“Unsettled, cold weather across the eastern half of the country contrasted with mostly dry, warm weather from the Great Plains to the Pacific Coast. Rain and northern snow fell from the central Gulf Coast into New England, though the heaviest precipitation fell outside of the driest areas. Meanwhile, unseasonably warm, locally hot conditions across Texas renewed concerns over dryness and rapidly-developing drought. Likewise, warm, dry weather returned to the West's core drought areas following recent beneficial rain and mountain snow. However, locally heavy precipitation continued in parts of the Pacific Northwest and northern Rockies.”

USDA Secretarial [Drought Designations](#)

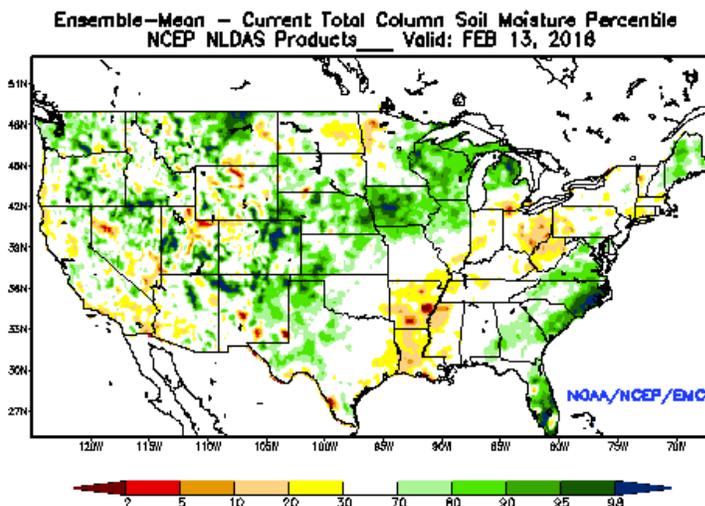


Highlighted Drought Resources

- [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

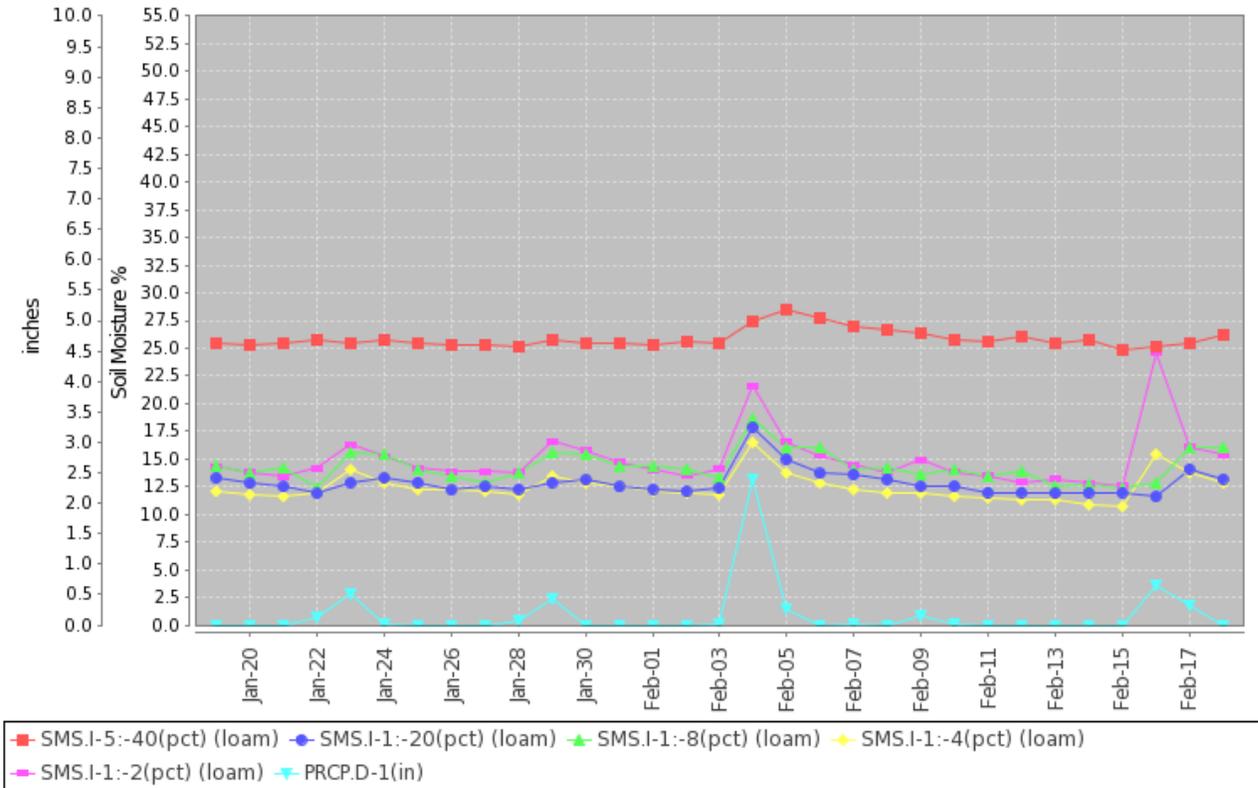


The modeled [soil moisture percentiles](#) as of February 13, 2016 show primarily average to above average conditions throughout the country. The Southeast has the largest contiguous area of wet soil conditions. There are only a few scattered areas of dryness, primarily in parts of the West, the northern Great Plains, Ohio Valley, and the lower Mississippi Valley.

[University of Washington Experimental Modeled Soil Moisture](#)

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

Station (2027) MONTH=2016-01-19 (Daily) NRCS National Water and Climate Center - Provisional Data - subject to revision
Thu Feb 18 06:57:58 GMT-08:00 2016



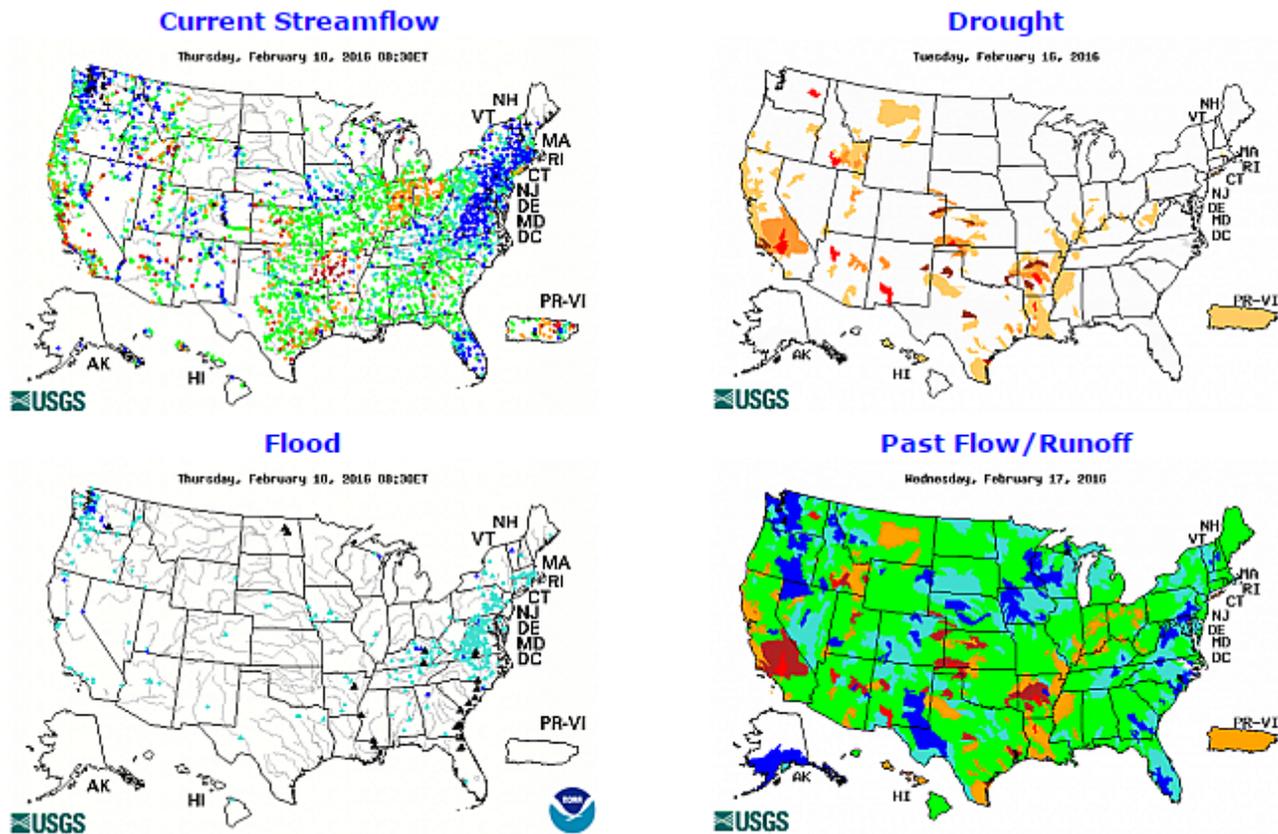
This graph shows soil moisture (at 2-, 4-, 8-, 20-, and 40-inch depths) and precipitation for the past 30 days at the [Little River SCAN Site #2027](#) in Georgia. The series of precipitation events in the past 30 days shows soil moisture increases at the 2-, 4-, 8-, and 20-inch depths, with the 40-inch depth sensor having a slightly delayed response to the larger precipitation event on February 4.

Soil Moisture Data Portals

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

Streamflow

Source: USGS



[Streamflow](#) map shows a decline in the number of stations reporting above flood stage conditions in the Southeast from a week ago. Many gages in the East, Pacific Northwest, and a few other locations are reporting above normal streamflow at this time.

Select any individual map to enlarge and display a legend.

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](#)

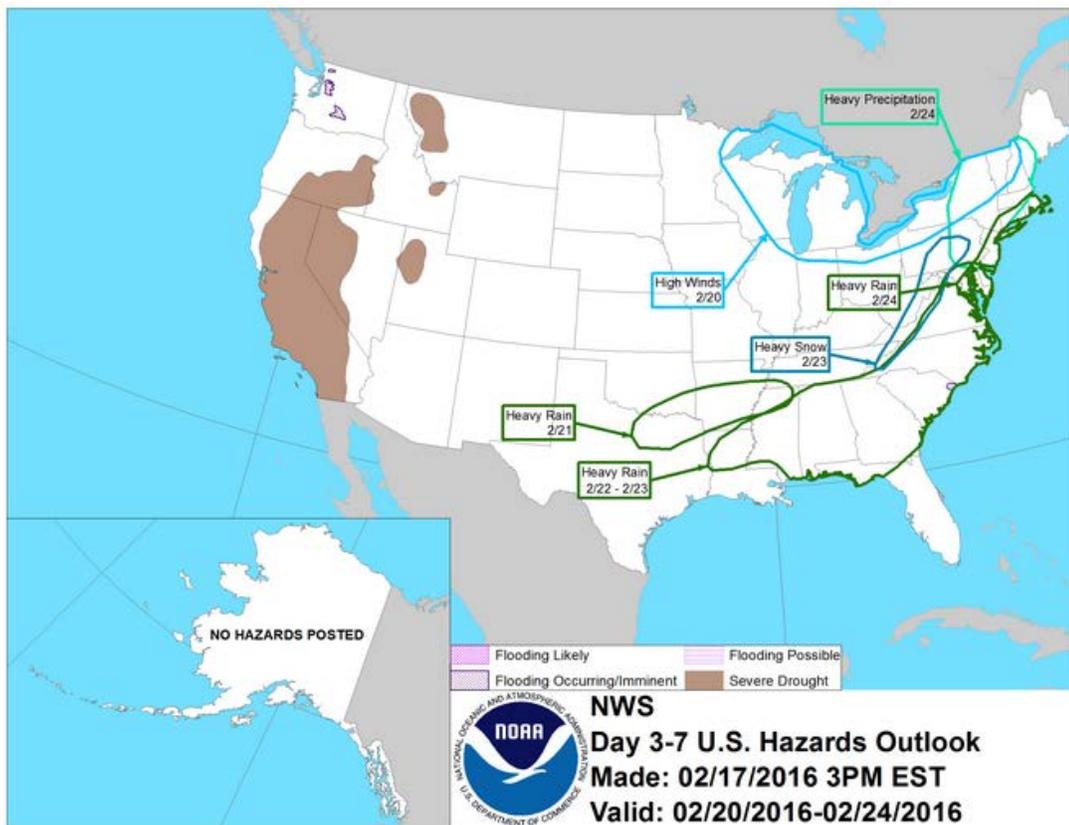
Short- and Long-Range Outlooks

Agricultural Weather Highlights

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

National Outlook, February 18, 2016: “Across the southern half of the Plains, an extremely critical wildfire situation will persist through Friday in advance of Pacific storminess. During the weekend, however, unusual warmth will temporarily shift into the Midwest and East. Farther west, California’s brief round of beneficial precipitation will end on Friday, followed by a return to mild, dry weather. Precipitation will continue in the Pacific Northwest, where 5-day precipitation totals could reach 2 to 4 inches. Late-week precipitation (rain and snow) will also fall across the nation’s northern tier, with the highest amounts (locally an inch or more) expected from the upper Great Lakes region into northern New England. Late in the weekend, rain (locally 1 to 2 inches) will develop across the South, possibly extending as far west as Oklahoma and Texas. The NWS 6- to 10-day outlook for February 23 – 27 calls for the likelihood of above normal temperatures in the western and central U.S., while cooler-than-normal conditions can be expected in the Southeastern and Mid-Atlantic States. Meanwhile, drier-than-normal weather across the majority of the nation will contrast with wetter-than-normal weather in the Pacific Northwest and Atlantic Coast States.”

National Weather Hazards



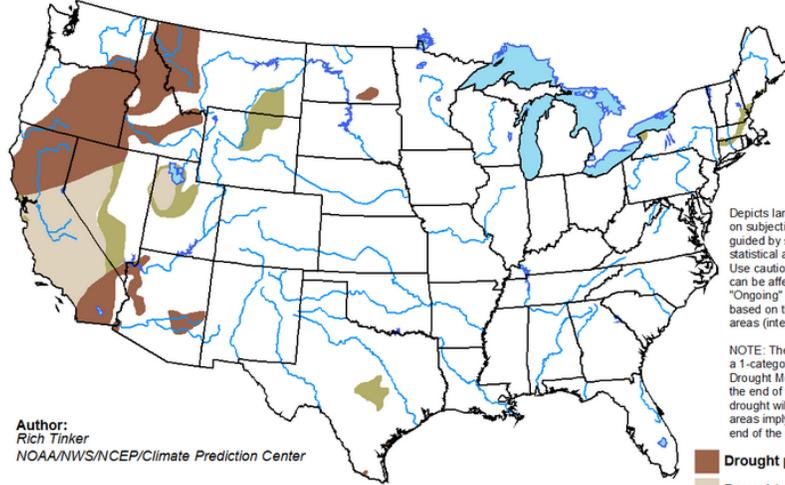
The NWS Climate Prediction Center’s outlook for [weather hazards](#) over the next week shows heavy precipitation over the Northeast, with high winds covering the Great Lakes into northern New England. Heavy rain will cover much of the East from Texas to Massachusetts. Heavy snow is forecast for the Appalachian Mountains. Flooding is likely or occurring in Washington. The severe drought continues in parts of the West.

Seasonal Drought Outlook

During the next three months, [drought](#) will persist in Puerto Rico, the Northwest, and southern California. Drought may develop in Hawaii. Elsewhere, most drought designations are expected to improve or be removed.

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

Valid for February 18 - May 31, 2016
Released February 18, 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:
Rich Tinker
NOAA/NWS/NCEP/Climate Prediction Center

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



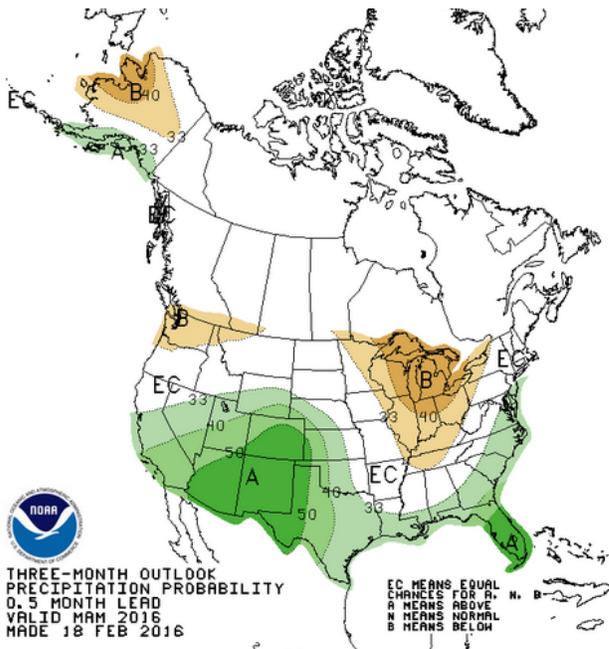
<http://go.usa.gov/3eZ73>



NWS Climate Prediction Center 3-Month Outlook

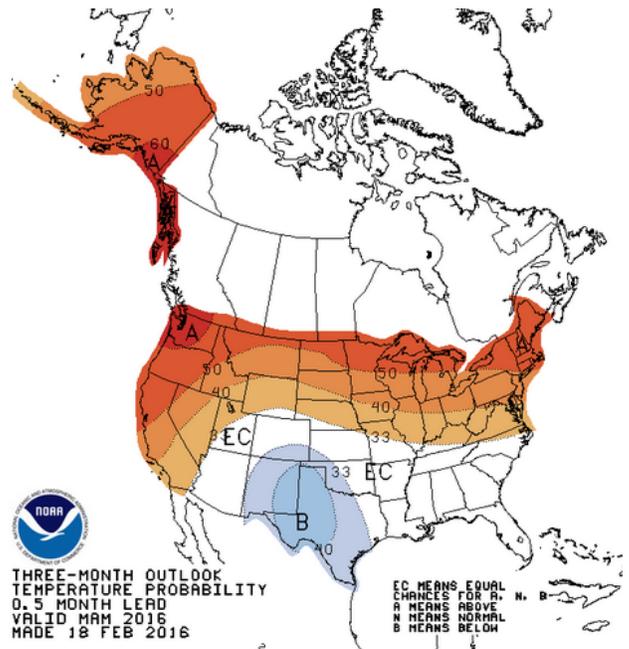
Precipitation

Temperature



THREE-MONTH OUTLOOK
PRECIPITATION PROBABILITY
0.5 MONTH LEAD
VALID MAM 2016
MADE 18 FEB 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 MAM 2016
MADE 18 FEB 2016

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

Outlook Summary

NWS Climate Prediction Center:

[The March-April-May \(MAM\) 2016 precipitation outlook](#): “The March-April-May (MAM) 2016 temperature outlook favors above-normal temperatures across much of the continental U.S., Hawaii, and all of Alaska. Above-normal temperature are favored for the West Coast states, Nevada, and from the northern Rockies across the Great Plains to the Mid-Atlantic and New England. The odds of above-normal temperatures are highest across the Pacific Northwest and from the upper Great Lakes to North Dakota. Below-normal temperatures are favored for a small area of the southern Rockies and Texas.”

[The March-April-May \(MAM\) 2016 temperature outlook](#): “The MAM 2016 precipitation outlook is changed minimally from the prior outlook for that period. Above-median precipitation is forecast from California to the central and southern Great Plains, and from the Gulf Coast to the Mid-Atlantic and southern New England. Above-median precipitation is also forecast for southern Alaska. Below-median precipitation is favored for the Pacific Northwest, portions of the northern Rockies, and from the Great Lakes to the Tennessee Valley. Western and interior Alaska are also likely to experience below-median precipitation.”

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](#).