

Water and Climate Update

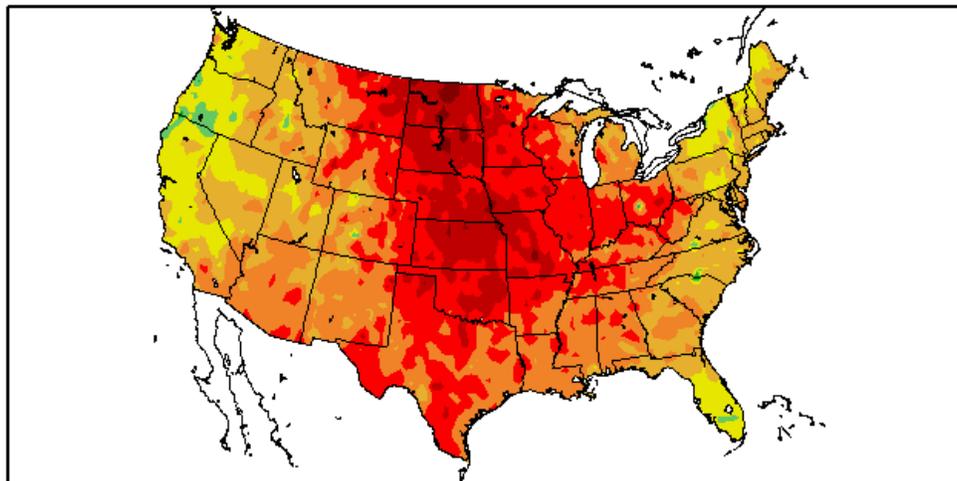
February 25, 2016

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.

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Weekly Highlight: Above normal temperatures blanket most of the U.S. this week

Departure from Normal Temperature (F)
2/18/2016 – 2/24/2016



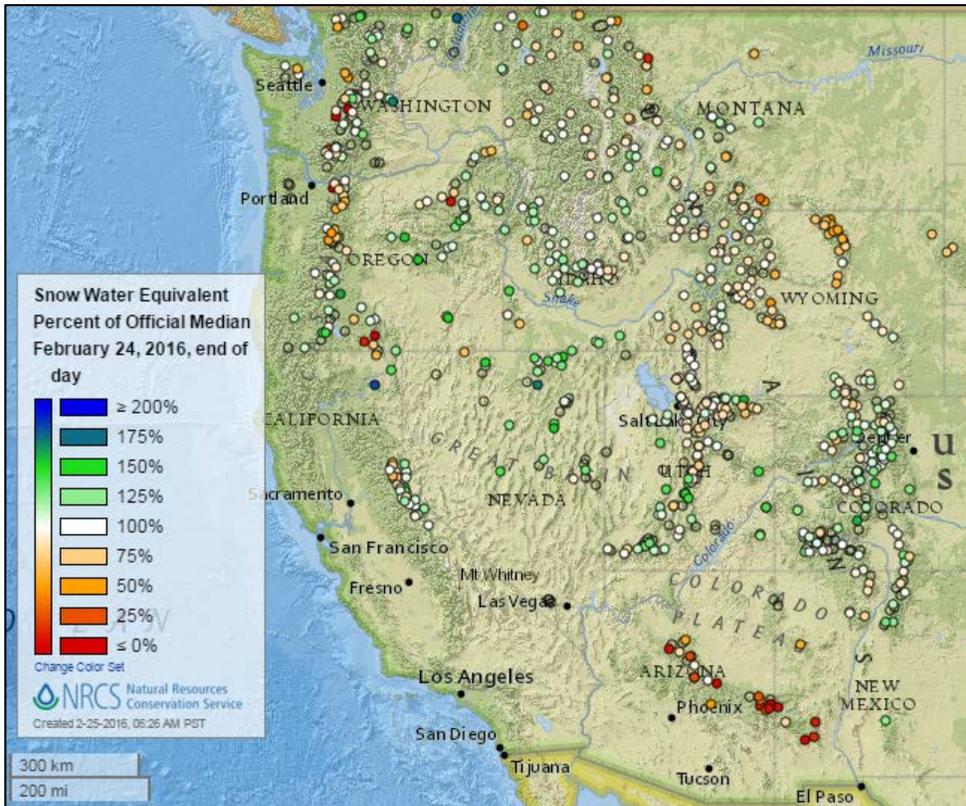
Generated 2/25/2016 at HPRCC using provisional data.

Regional Climate Centers

The [7-day temperature anomalies](#) map shows the U.S. was very warm compared to a week ago. Much above normal temperatures covered the central U.S. from Canada to Mexico.

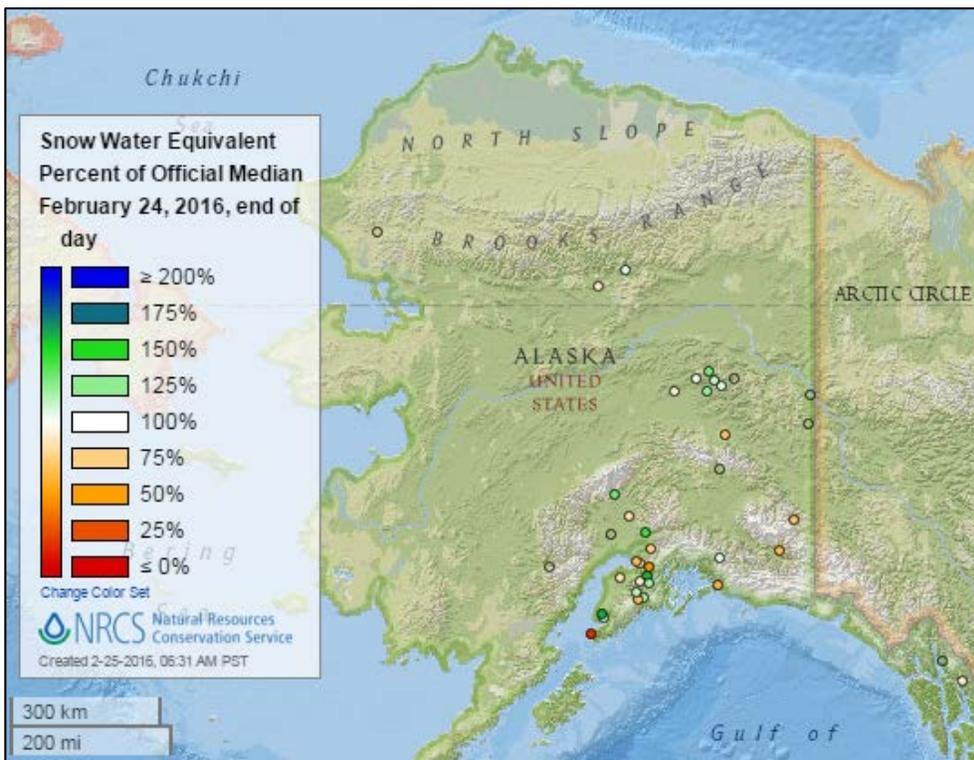
Snow

Current Snow Water Equivalent, NRCS SNOTEL Network



The current [snow water equivalent percent of median](#) map shows most of the West is near average, but overall shows slight declines this week. Warm weather has snow water equivalent at stations in the Southwest dropping to well below average from a week ago. Some stations in the central West report values still above normal.

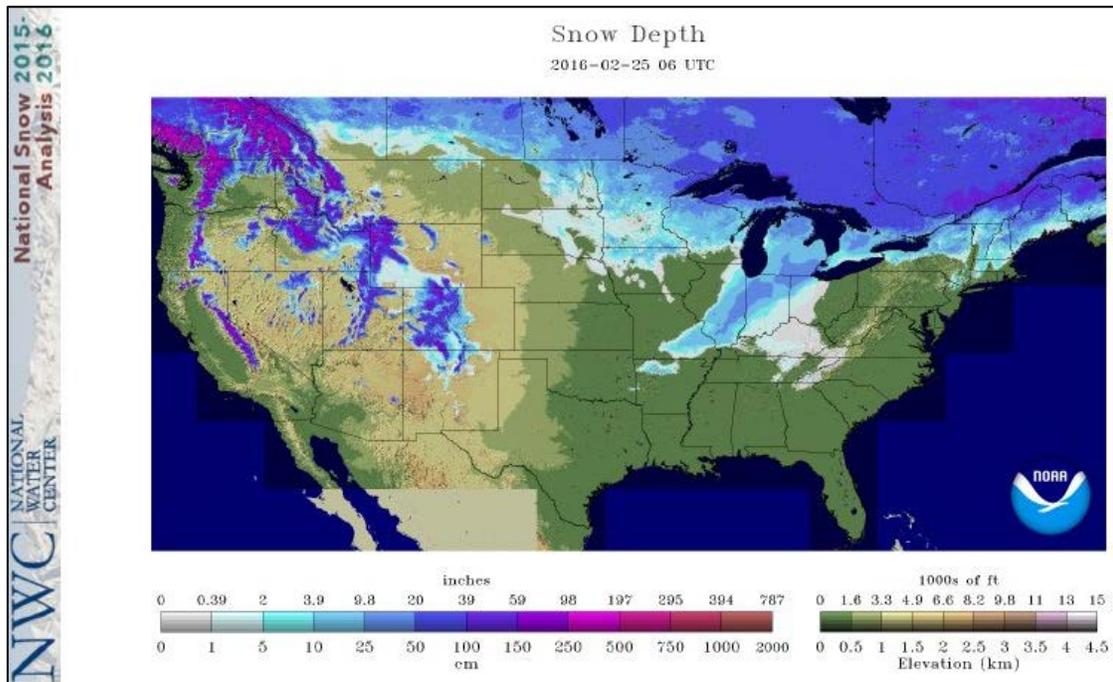
See also: [Current snow water equivalent values \(inches\) map](#)



The Alaska current [snow water equivalent percent of median](#) map shows another week of slight reduction in snow water equivalent. 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](#)

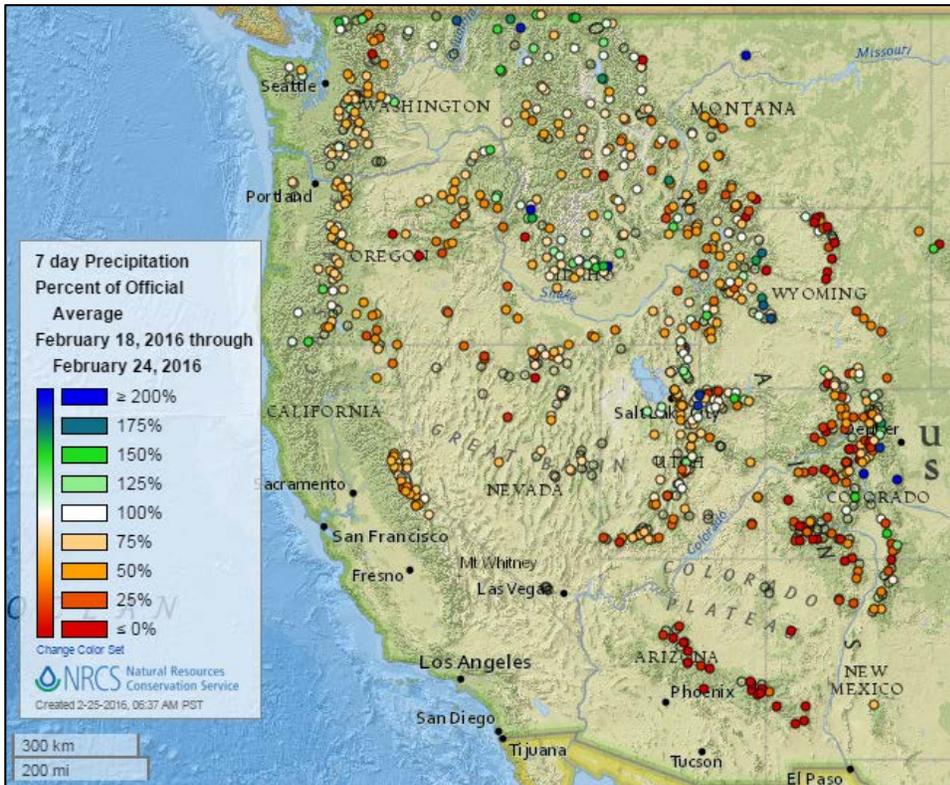
Current Snow Depth, National Weather Service (NWS) Networks



The NOAA National Operational Hydrologic Remote Sensing Center's current [snow depth](#) map shows a snow reduction across much of the U.S. this week, specifically in the northern Plains, upper Midwest, and northern New England related to drier conditions and warmer temperatures. New snow has fallen this week in the central Midwest, from northern Arkansas northeast to southern Michigan. There is still a deep snowpack in the mountains of the West, with some new snow in the valleys of southwest Wyoming and in the southern Rockies.

Precipitation

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

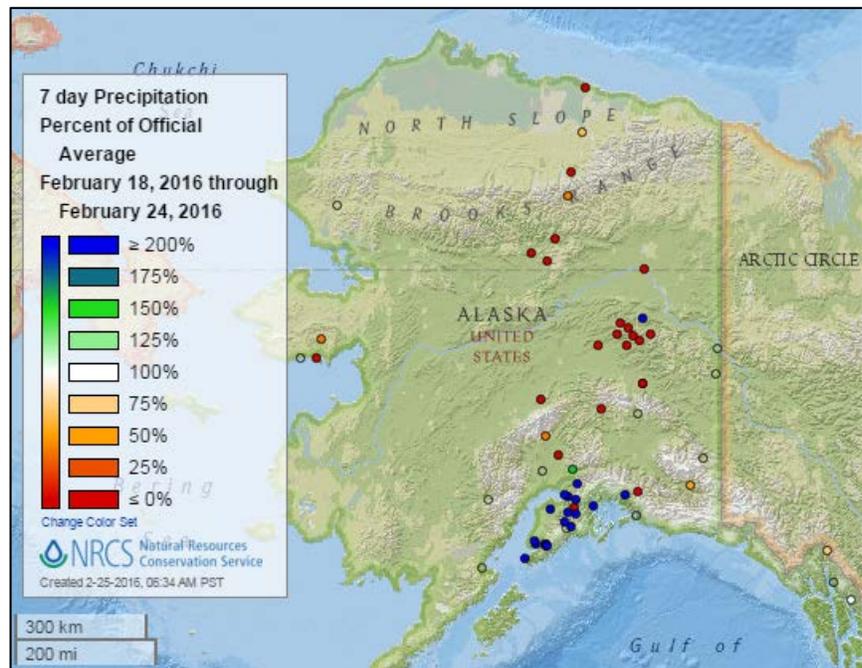


The [7-day precipitation percent of average](#) map shows much of the West had a dry to drier than normal week. There were a few widely scattered areas of above normal precipitation along the Canadian border, along the northern and central Rocky mountains.

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

The [Alaska 7-day precipitation percent of average](#) map shows a very different condition this week, where the Kenai Peninsula had over 200 percent of normal precipitation. Elsewhere the state remained primarily dry. There were a few near normal stations along the southern and southeast parts of the state.

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

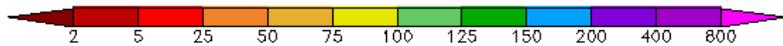
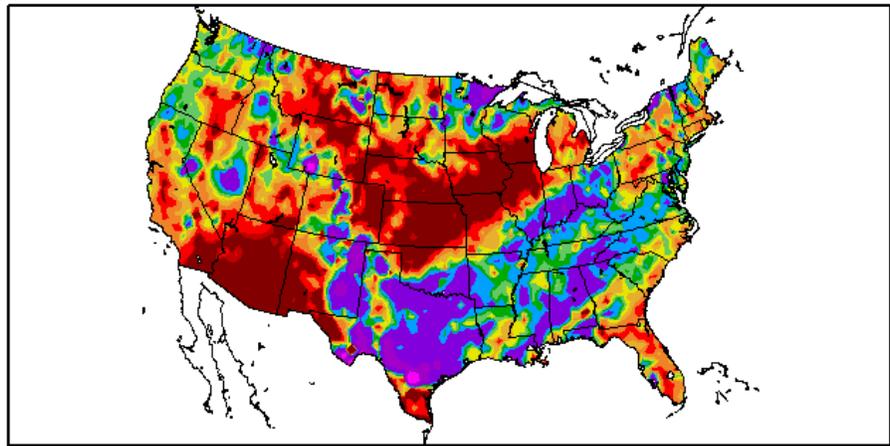


Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

Percent of Normal Precipitation (%)
2/18/2016 – 2/24/2016

The [7-day percent of normal precipitation](#) map for the continental U.S. shows well above average precipitation from eastern New Mexico across Texas, much of the South, and the Midwest. There were spots of above normal precipitation in the West and upper Midwest. Parts of the West, central Plains, Southeast, and Northeast had a dry week



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

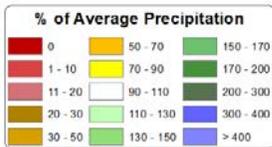
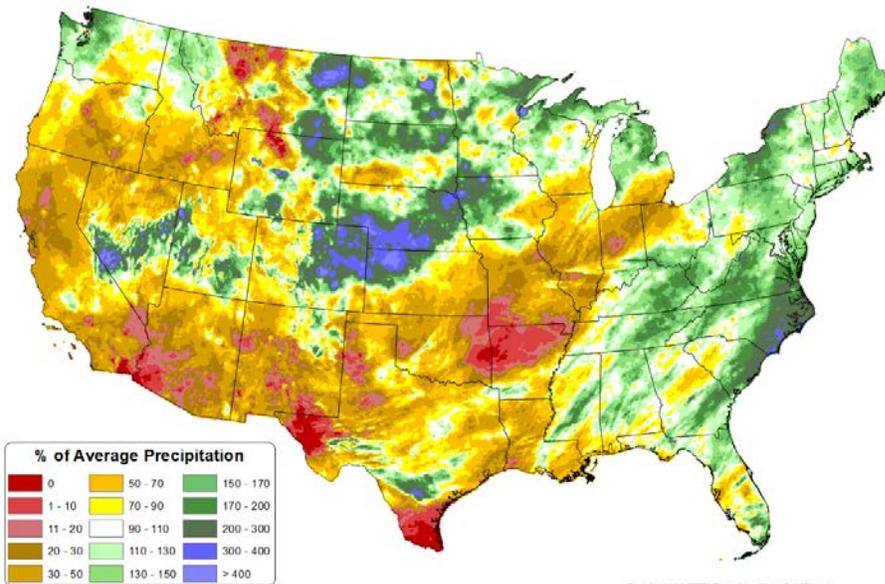
Generated 2/25/2016 at HPRCC using provisional data.

Regional Climate Centers

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

Source: PRISM

Total Precipitation Anomaly: 01 February 2016 - 23 February 2016
Period ending 7 AM EST 23 Feb 2016
Base period: 1961-2010
(Map created 24 Feb 2016)



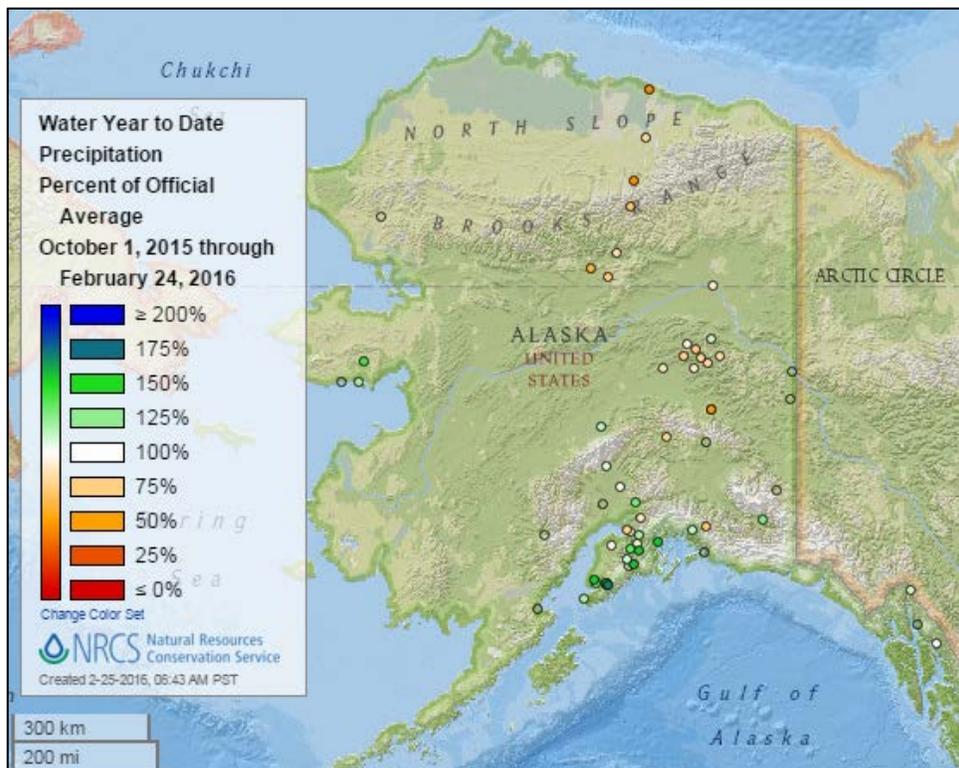
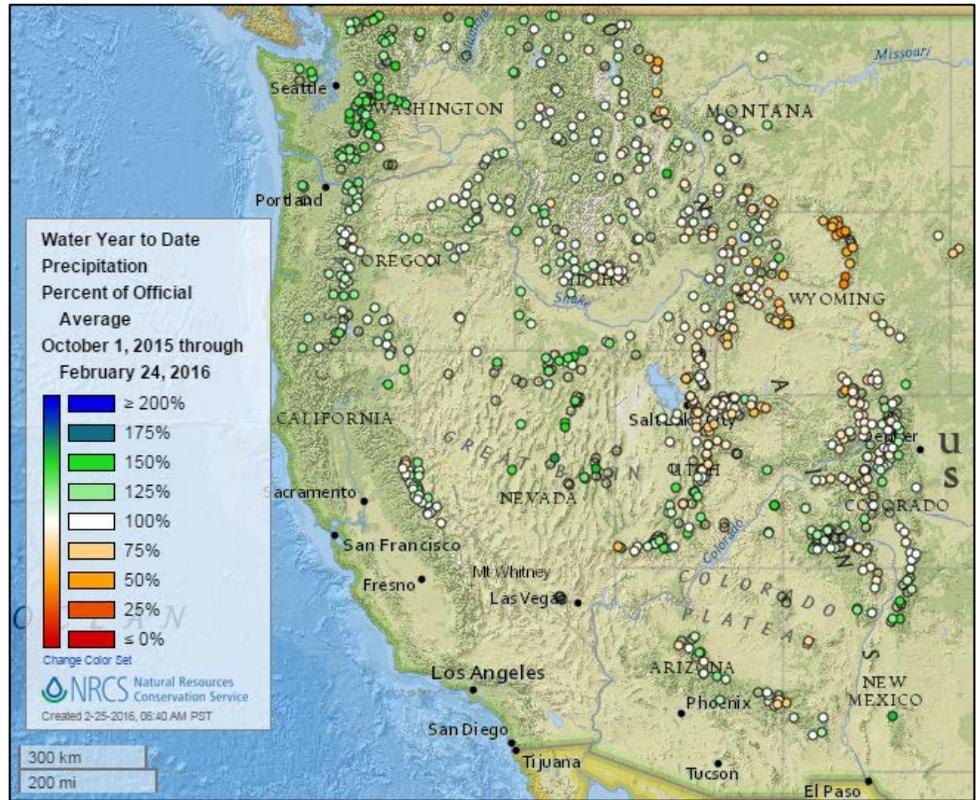
The February national [month-to-date precipitation percent of average](#) map shows much of the central and eastern U.S. had well above normal precipitation. The south-central U.S. and much of the West have been drier than normal for the month. Much of Texas and parts of the surrounding states saw their first rain of the month 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 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 precipitation 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](#)

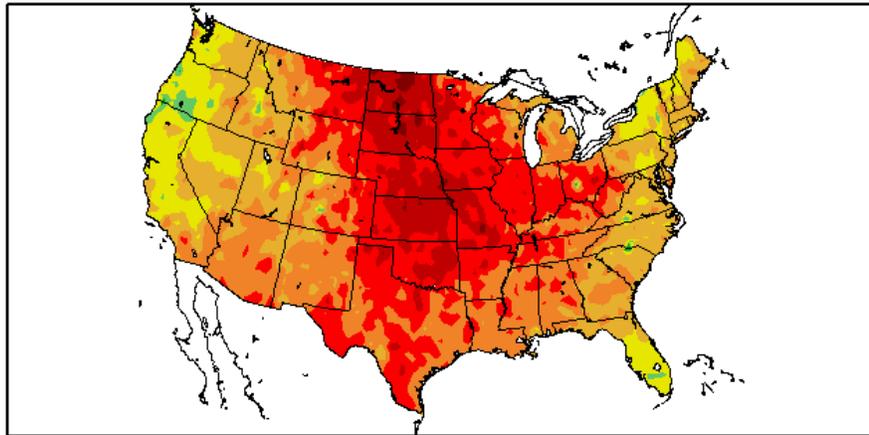
Temperature

Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

The [7-day temperature anomalies](#) map shows the U.S. was very warm compared to a week ago. Much above normal temperatures covered the central U.S. from Canada to Mexico. Near normal temperatures were limited to areas along the West and East Coasts.

Departure from Normal Temperature (F)
2/18/2016 – 2/24/2016



Generated 2/25/2016 at HPRCC using provisional data.

Regional Climate Centers

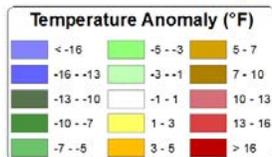
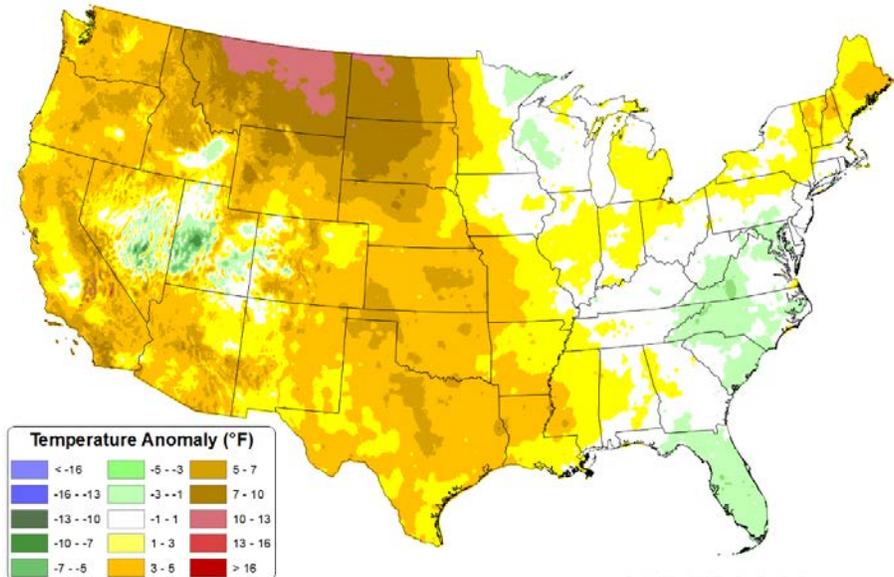
See also: [7-day temperature \(°F\) map](#)

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 above normal temperatures have expanded across the central U.S. this week. Much of the East and central West have moderated to near normal or slightly cooler than normal temperatures for the month.

Daily Mean Temperature Anomaly: 01 February 2016 - 23 February 2016
Period ending 7 AM EST 23 Feb 2016
Base period: 1981-2010
(Map created 24 Feb 2016)

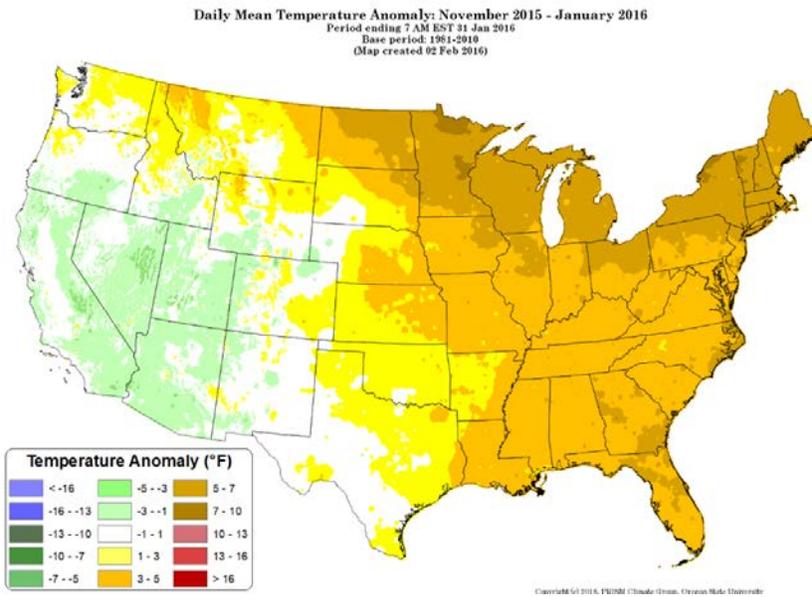


Copyright © 2016, PRISM Climate Group, Oregon State University

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

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

Source: PRISM

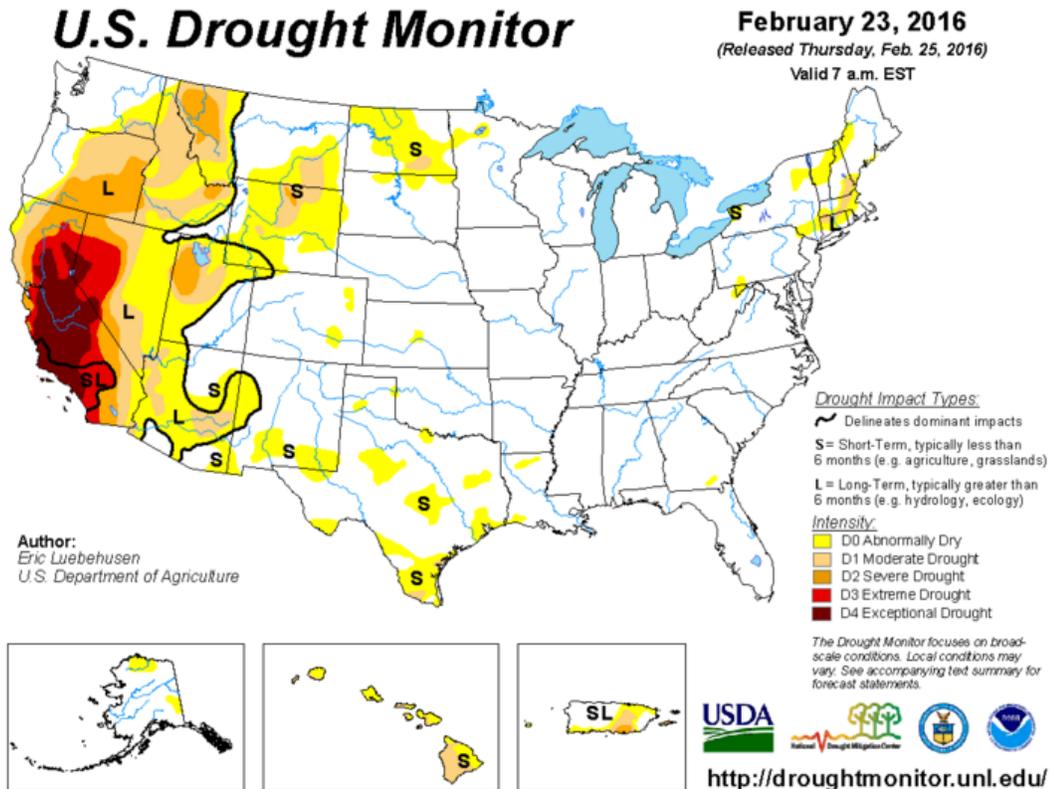


The November through January national [daily mean temperature anomaly](#) map shows most of the country was warmer than normal. The warmest areas were across the northern tier states from North Dakota to New England. The West was near normal to slightly cooler than normal. The largest negative departures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

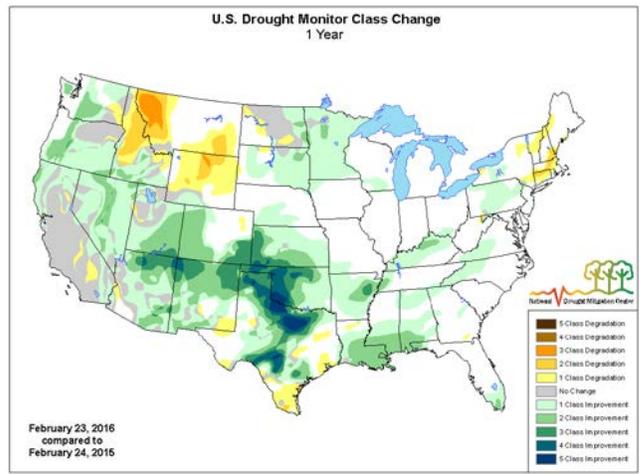
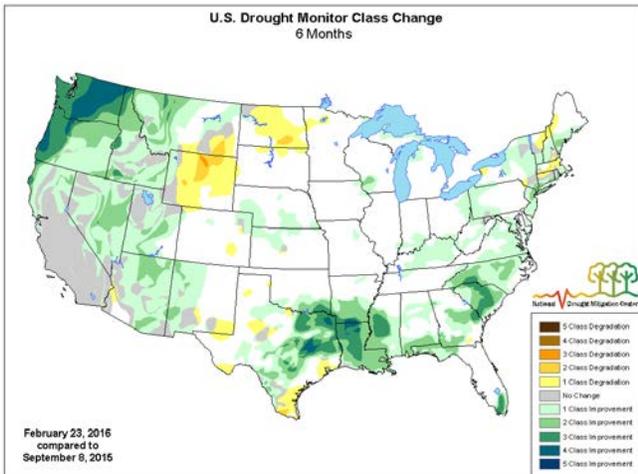
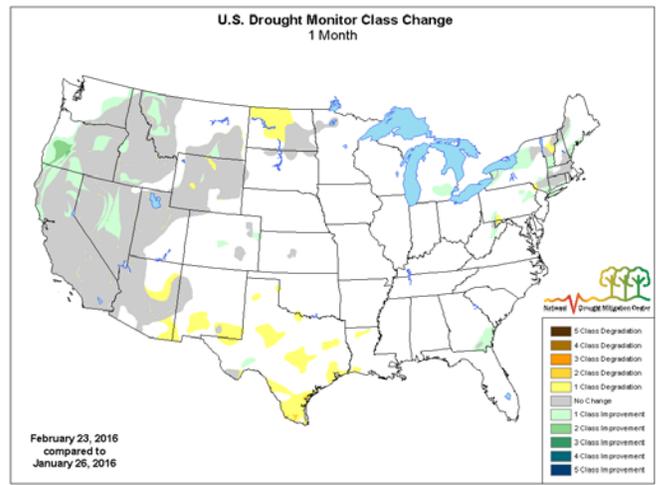
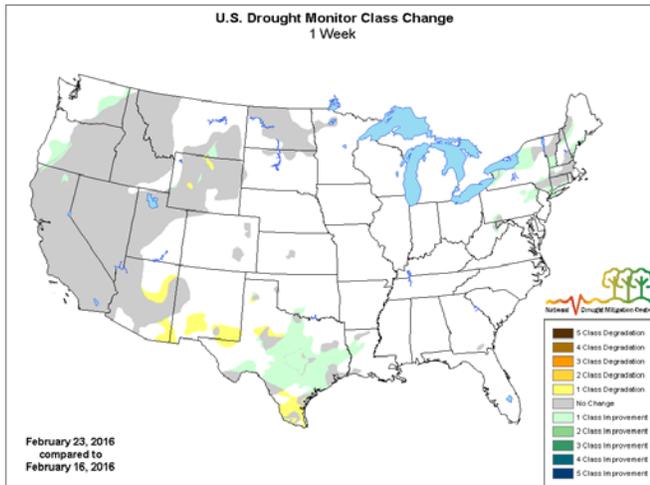
Drought

[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



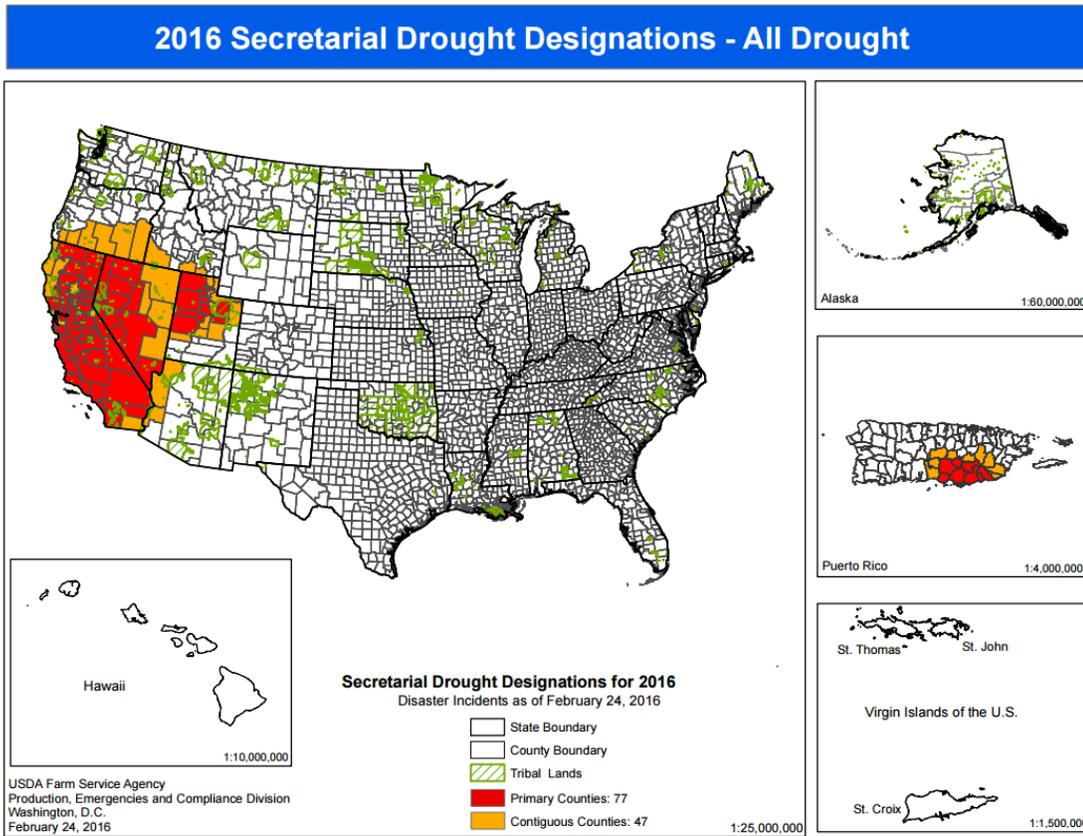
Drought conditions remain essentially the same as last week. Over the past 6-12 months, conditions have improved in much of the country, especially in the south-central U.S. and the Pacific Northwest. The remainder of the West has shown improvement, but long-term drought persists in California and Nevada.

Current National [Drought Summary](#), February 23, 2016

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

“Increasingly warm weather prevailed across much of the nation, with beneficial rain observed from Texas to the central and northern Atlantic Coast. Seasonable dryness over the Great Plains accompanied temperatures averaging 10 to 15°F above normal, with numerous daily record highs noted over southern portions of the region. Out west, progressively warmer weather heightened concerns of early snow melt, with early-week rain and mountain snow falling short of weekly normals and doing little to ease long-term drought.”

USDA Secretarial [Drought Designations](#)

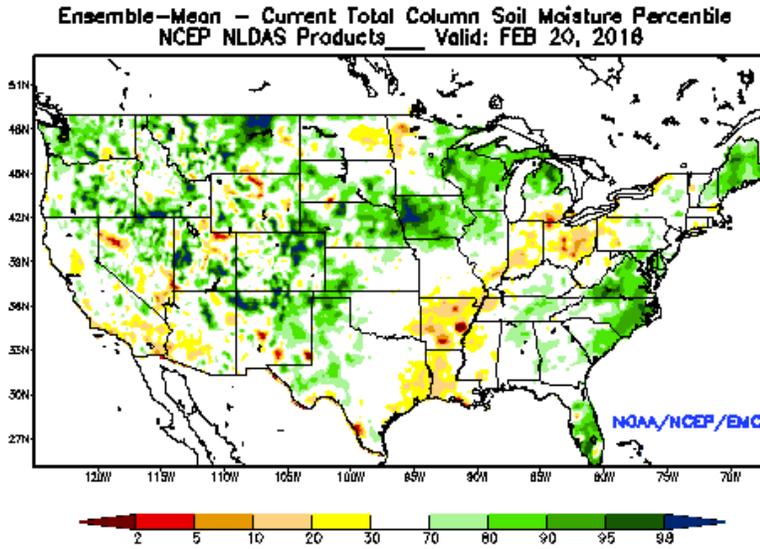


Highlighted Drought Resources

- [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

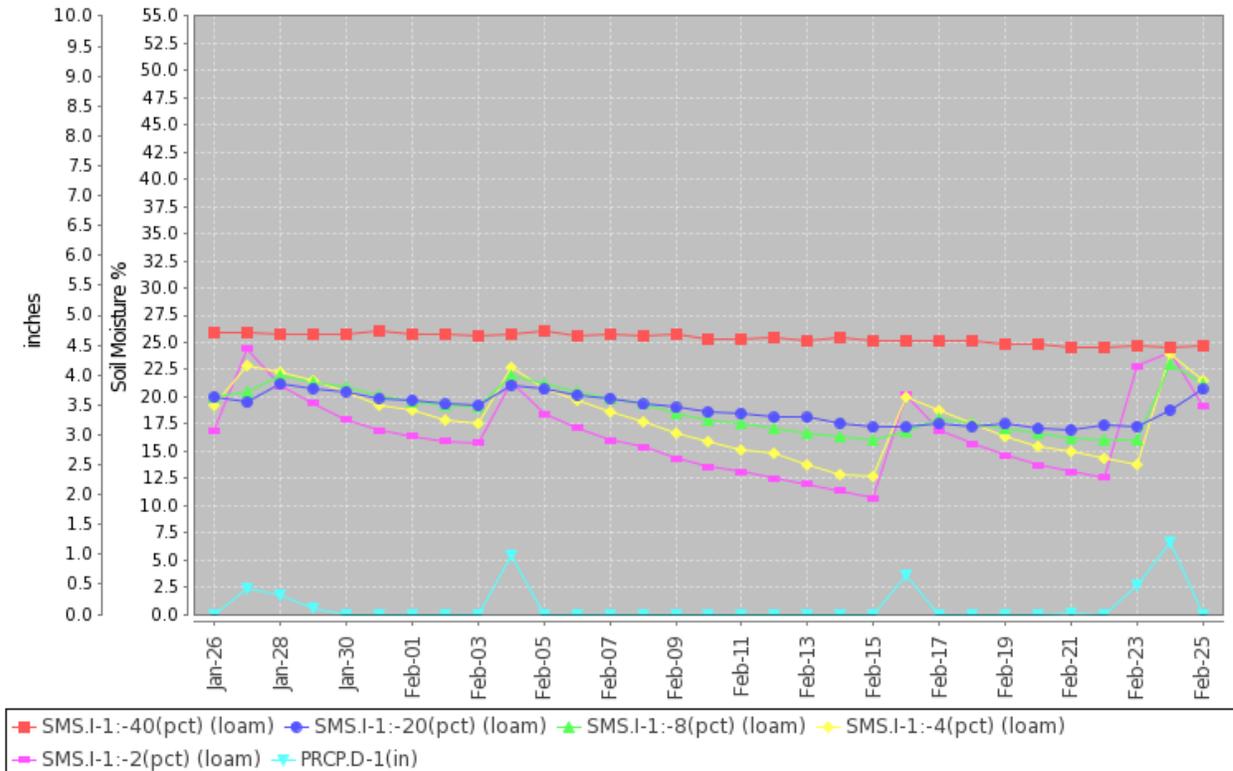
Soil Moisture



The modeled [soil moisture percentiles](#) as of February 20, 2016 show primarily average to above average conditions throughout the country. The Southeast, upper Midwest, and central Montana have the largest areas 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.

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

Station (2180) MONTH=2016-01-26 (Daily) NRCS National Water and Climate Center - Provisional Data - subject to revision
Thu Feb 25 06:55:38 GMT-08:00 2016



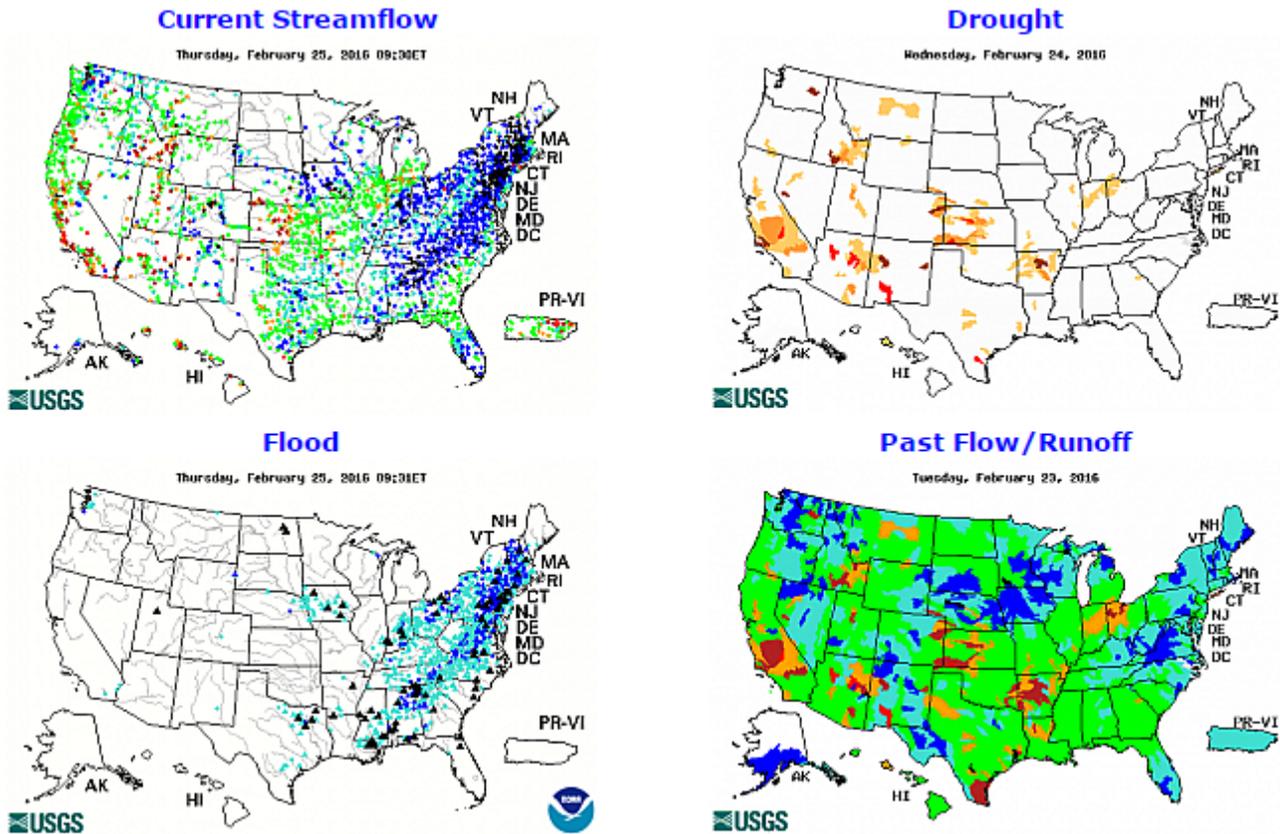
This graph shows soil moisture (at 2-, 4-, 8-, 20-, and 40-inch depths) and precipitation for the past 30 days at the [Koptis Farms SCAN Site #2180](#) in southern Alabama. The series of precipitation events in the past 30 days shows soil moisture increases at the 2-, 4-, 8-, and 20-inch depths, with the 40-inch depth sensor having little to no response to the precipitation events

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



The [Streamflow](#) map shows an increase in the number of stations reporting above flood stage conditions in the East from a week ago. Many gages in the East, South, and Midwest 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](#)

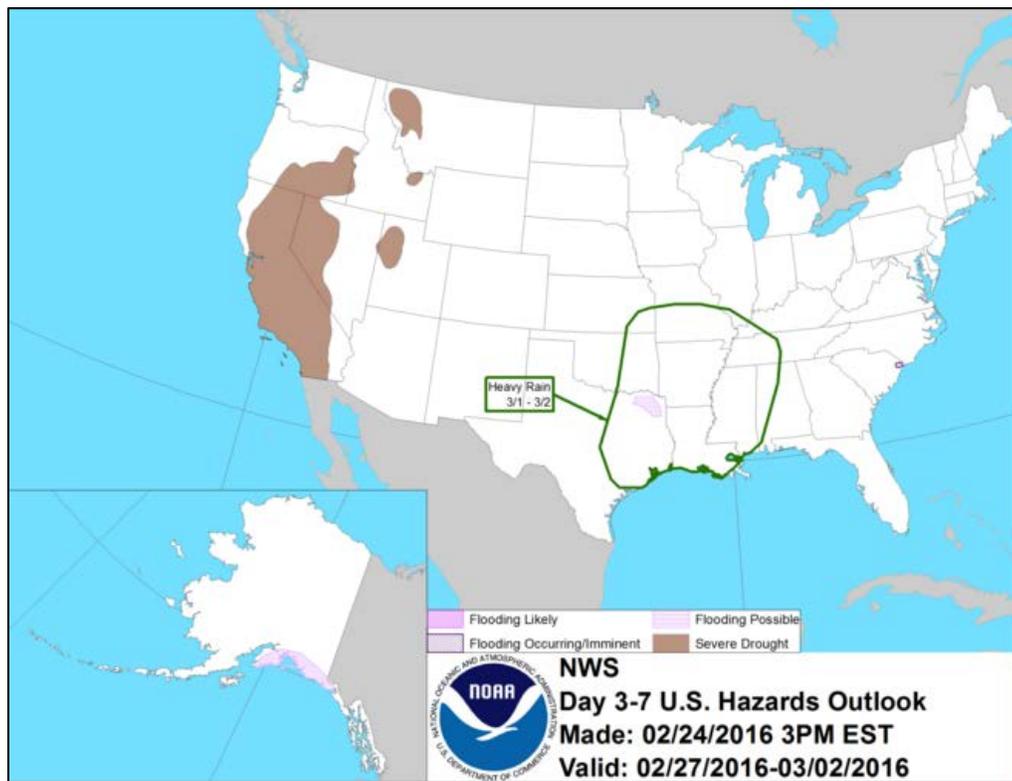
Short- and Long-Range Outlooks

Agricultural Weather Highlights

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

National Outlook, February 25, 2016: “In the wake of a departing storm, tranquil weather will cover much of the country during the next several days. During the weekend and early next week, however, periods of wet weather will return to the Northwest. Five day precipitation totals could reach 1 to 3 inches in the Pacific Northwest. Above-normal temperatures will encompass the western and central U.S. in advance of the Northwestern showers, with record-setting warmth expected across the Plains during the weekend. On February 27, high temperatures near 80°F can be expected as far north as western Nebraska. By early next week, above-normal temperatures will cover most of the U.S., although snow and cold air will be lurking in the upper Great Lakes region and across parts of Canada. The NWS 6- to 10- day outlook for March 1 – 5 calls for the likelihood of near- to above-normal temperatures nationwide, except for cooler-than-normal conditions in the upper Great Lakes region. The greatest likelihood of warmth will stretch from the Pacific Coast to the High Plains. Meanwhile, below-normal precipitation across the north-central U.S. and much of the West will contrast with wetter-than-normal weather across the South, East, and lower Midwest.”

National Weather Hazards



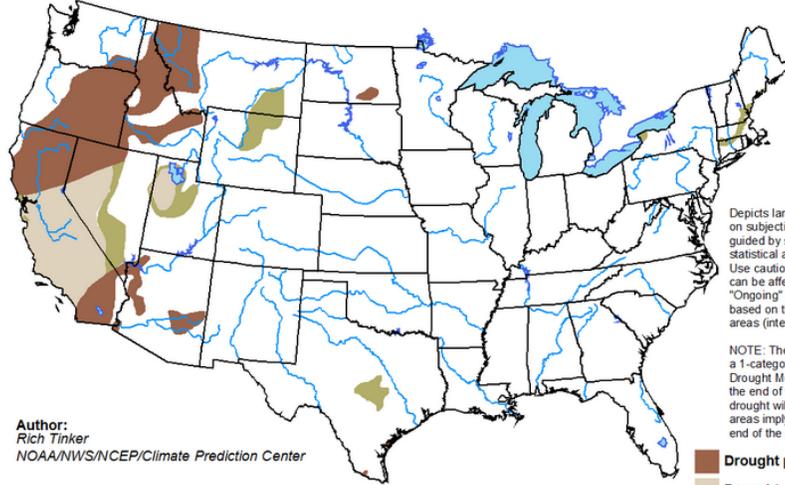
The NWS Climate Prediction Center’s outlook for [weather hazards](#) over the next week shows heavy rain over the southern Mississippi River valley. Flooding is occurring or likely in northeast Texas and eastern South Carolina. Flooding is also likely along much of southern Alaska, including the Kenai Peninsula. 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



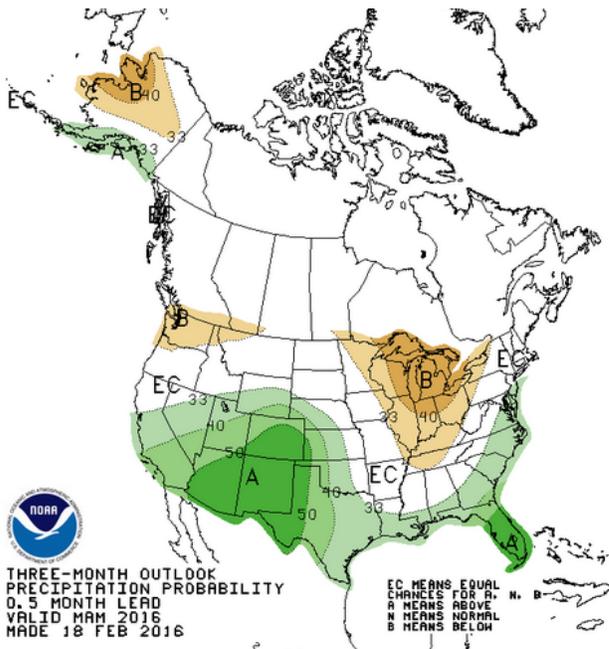
<http://go.usa.gov/3eZ73>



NWS Climate Prediction Center 3-Month Outlook

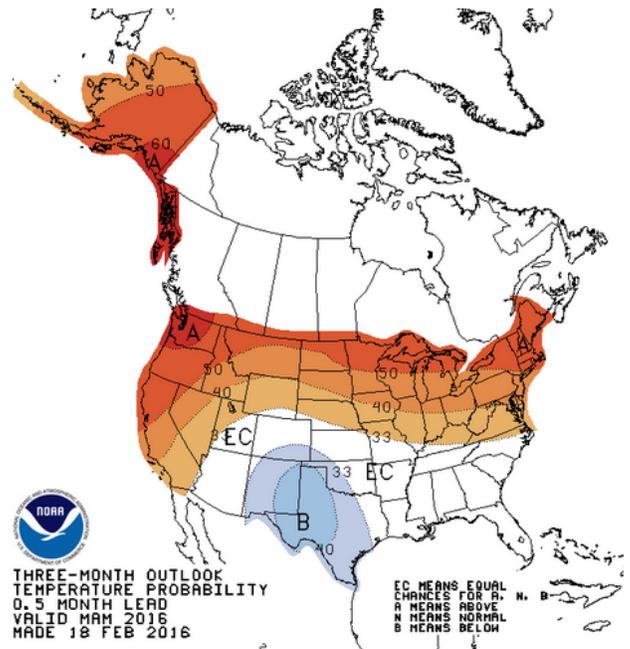
Precipitation

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](#).