United States Department of Agriculture

Water and Climate Update

March 30, 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.

Spring snowfall boosts snowpack in Alaska

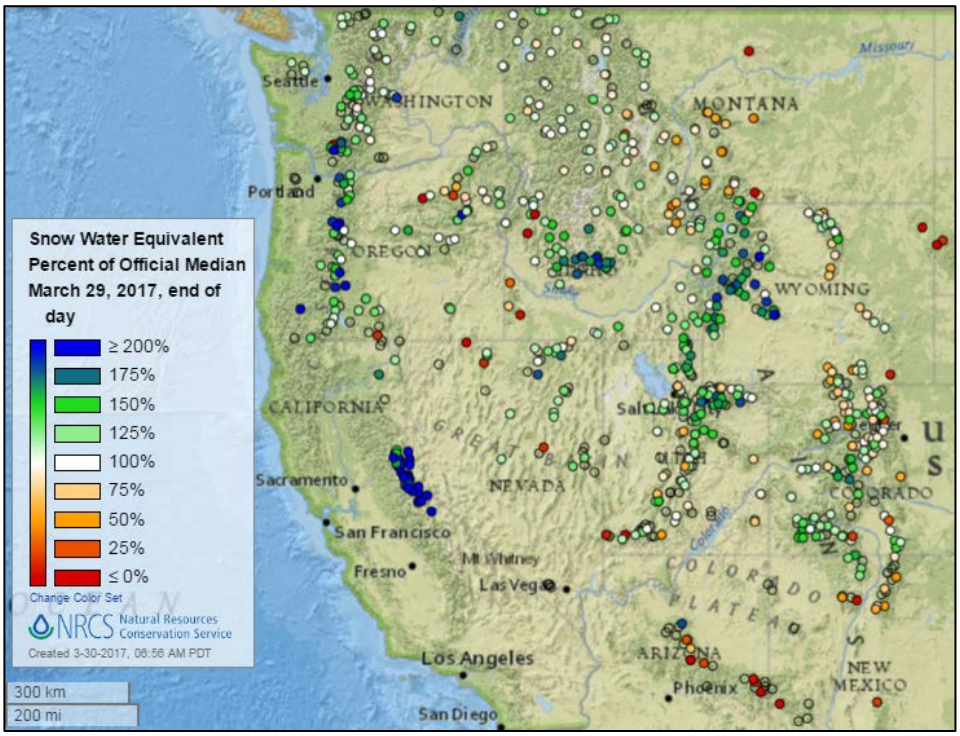
The last seven days of snowfall in Alaska equates to at or above 200% of normal for the week at many SNOTEL stations in the state. Stations in the northern Kenai Peninsula and near Anchorage reported some of the highest percentages for the week. Earlier in the month the Iditarod sled dog race had to be rerouted for lack of snow on parts of the route.

More News:

Heavy spring snowfall closes schools, snarls traffic around Anchorage
Avalanche danger spikes after heavy snowfall in Southcentral Alaska
45th Iditarod: Route altered for 3rd time in event's history due to meager snow in Alaska Range
Iditarod dog race start line moved again in Alaska due to lack of snow

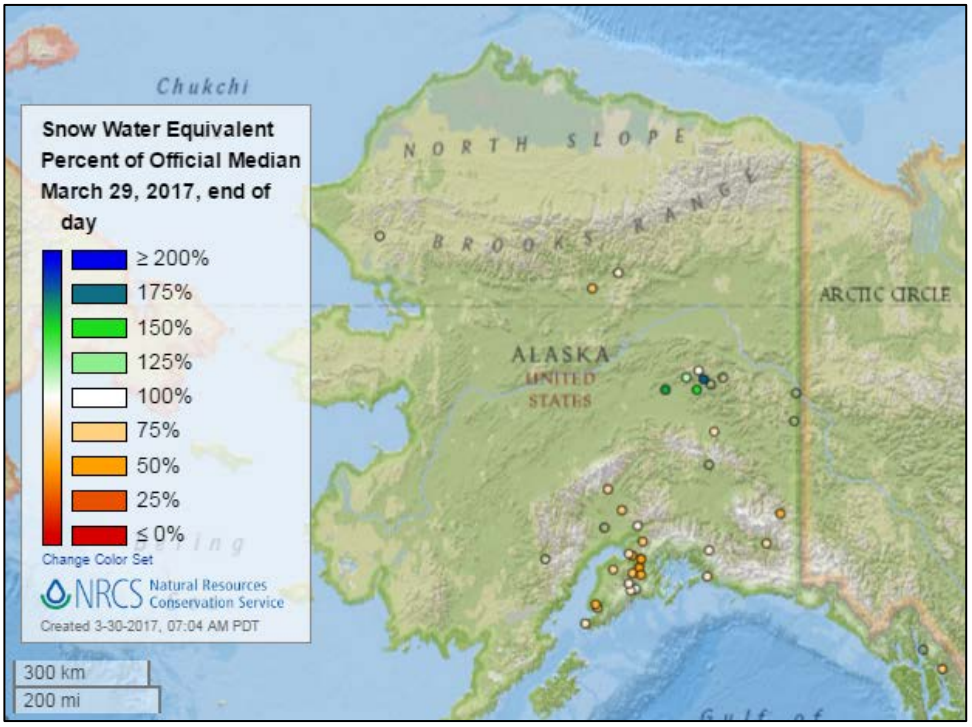
Snow

Current Snow Water Equivalent, NRCS SNOTEL Network



[Snow water equivalent percent of median map]

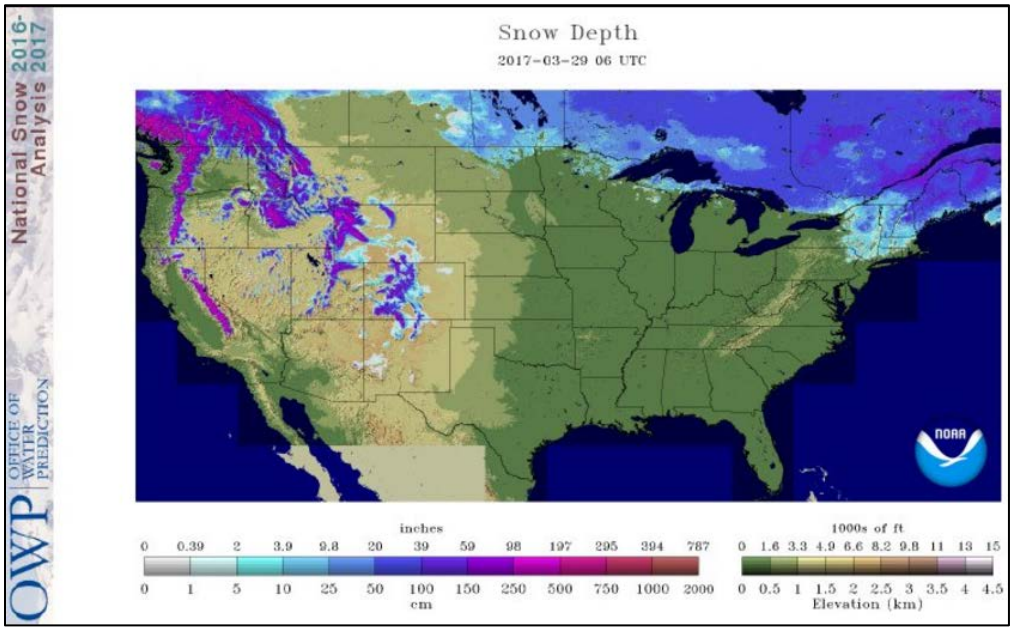
See also:
[Snow water equivalent values (inches) map]



[Alaska snow water equivalent percent of median map]

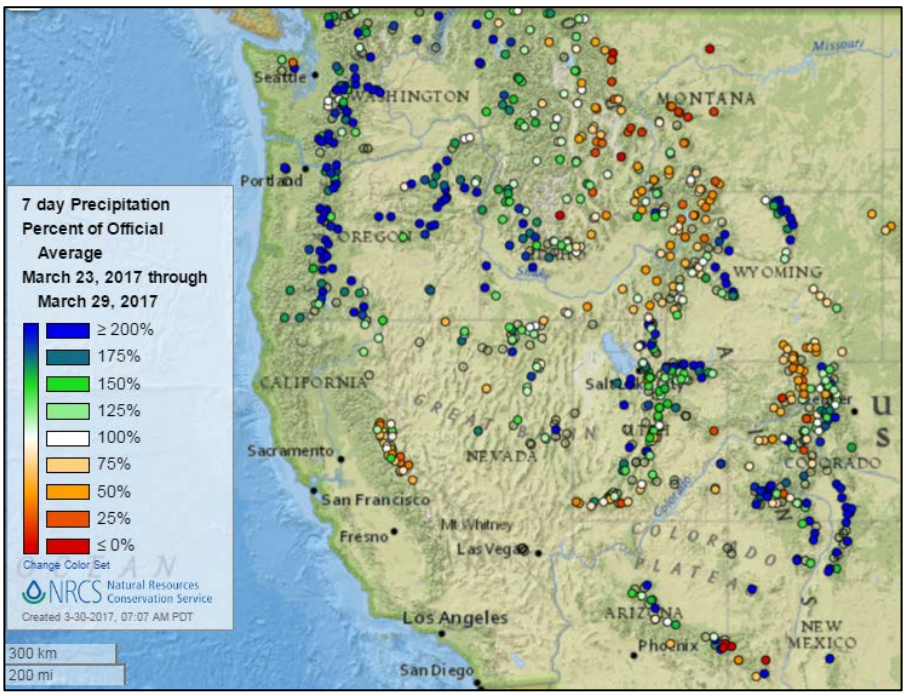
See also:
[Alaska snow water equivalent values (inches) map]

Current Snow Depth, National Weather Service (NWS) Networks



Precipitation

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

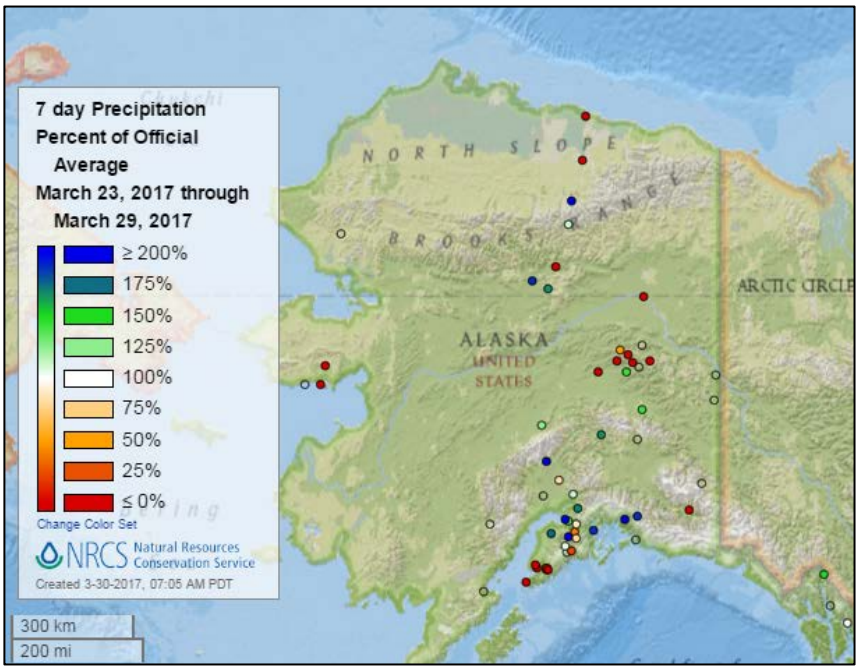


[7-day precipitation percent of average map]

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](#)

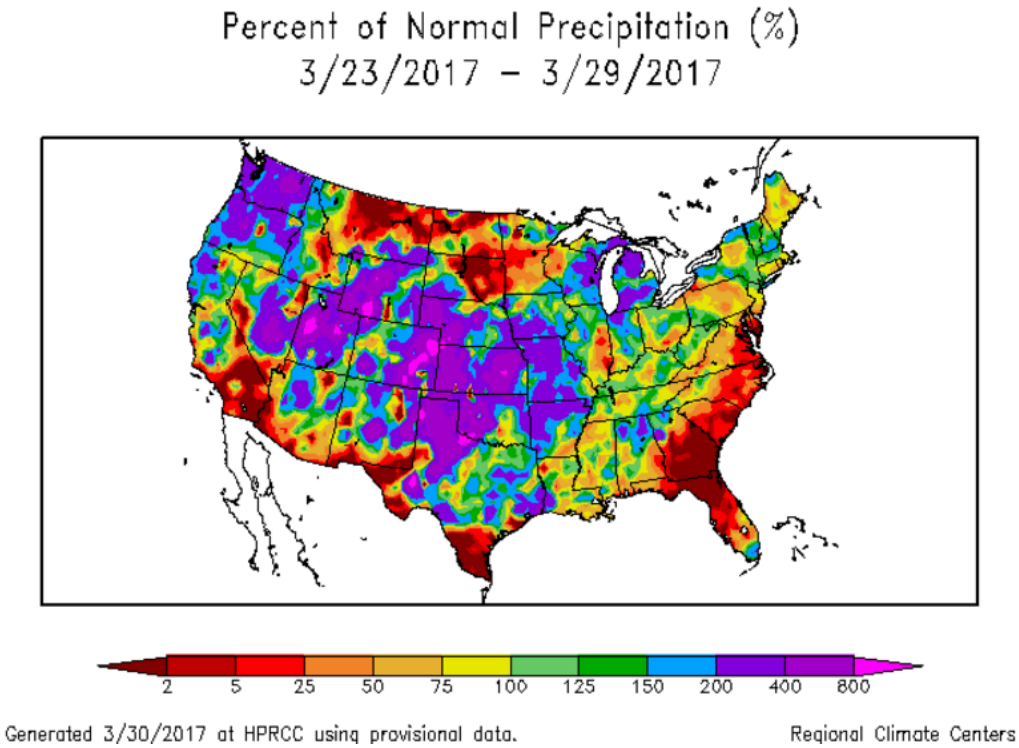


Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

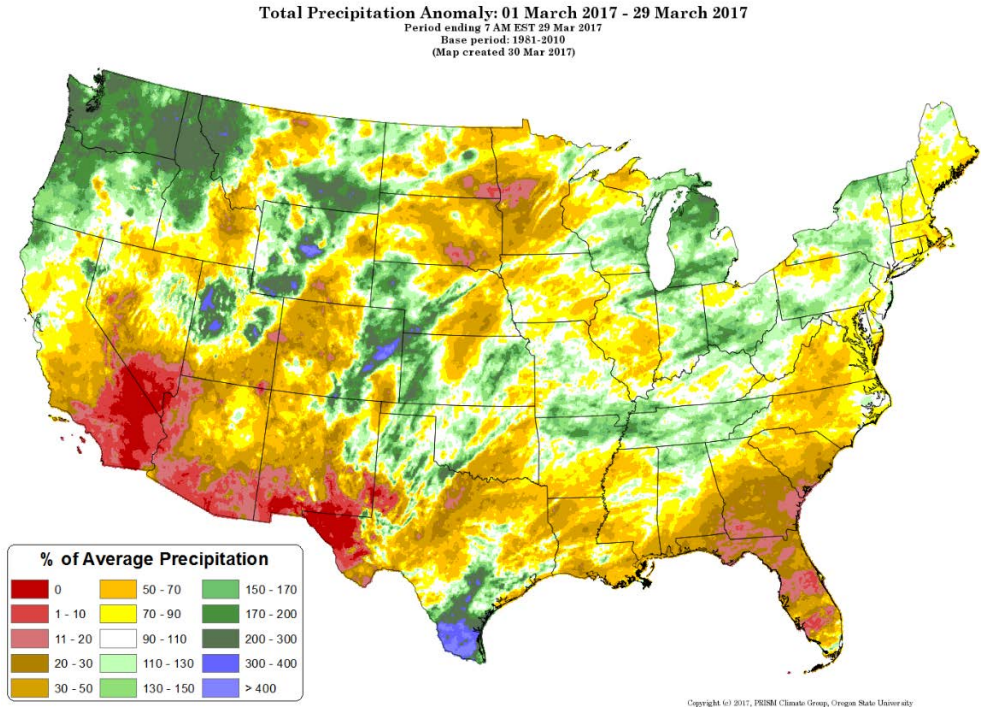
[7-day precipitation percent of normal map](#) for the continental U.S.

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



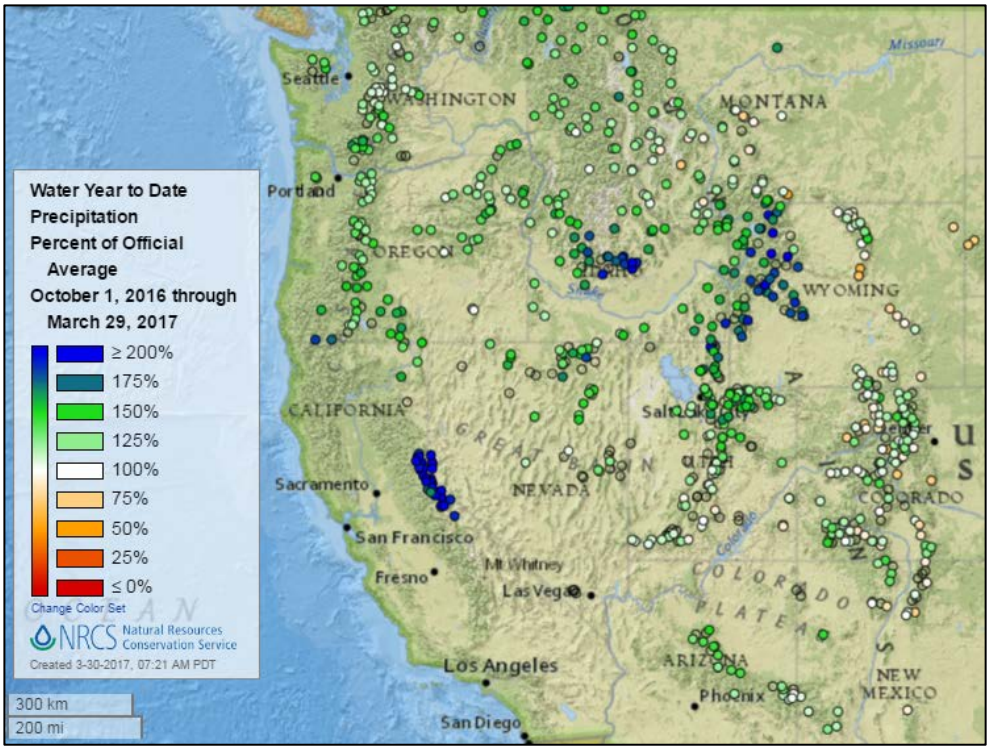
Month-to-Date, All Available Data Including SNOTEL and NWS Networks

Source: PRISM



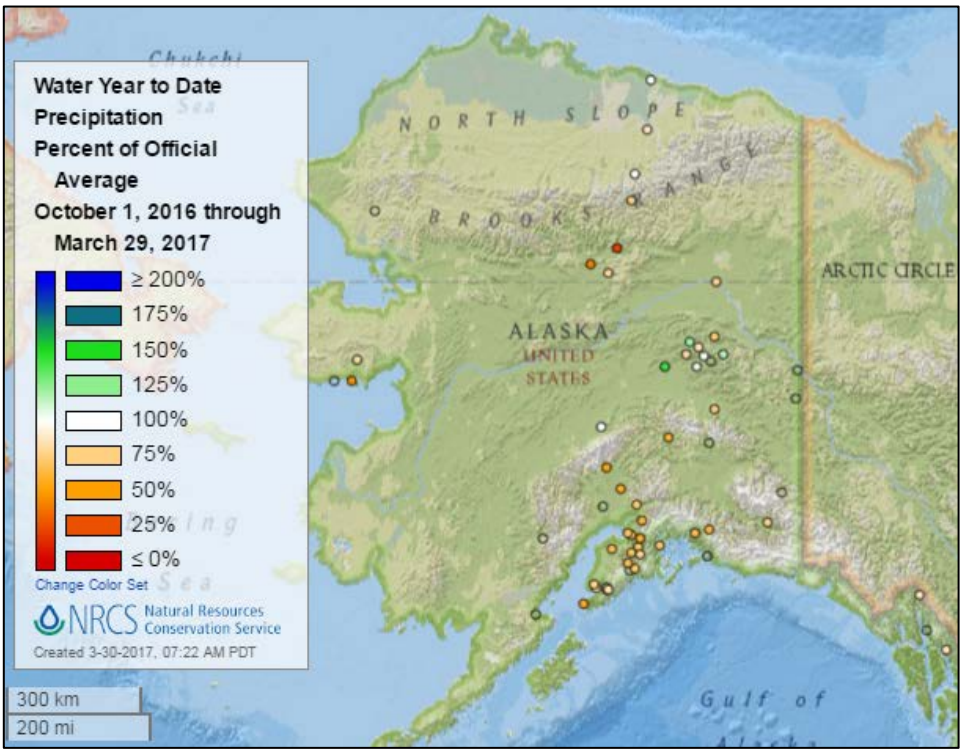
[Month-to-date national precipitation percent of average map]

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]

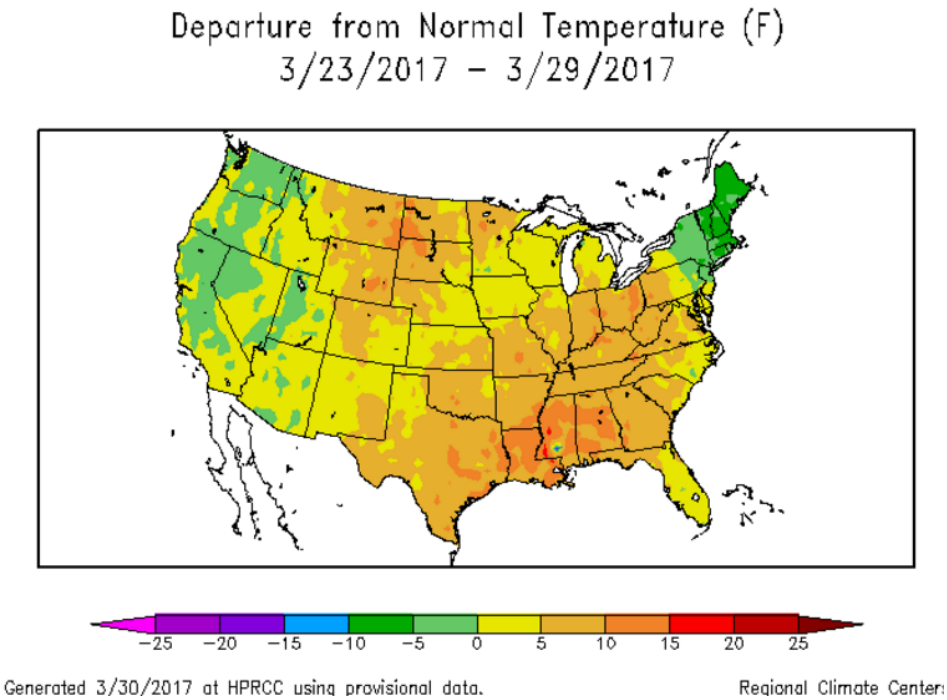
See also: [Alaska 2017 water year-to-date precipitation values (inches) map]

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]

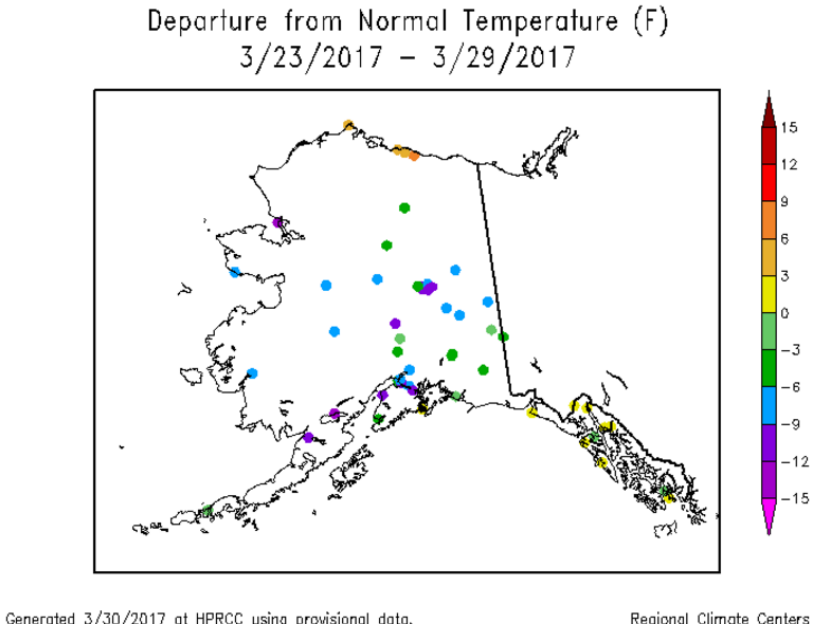


Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

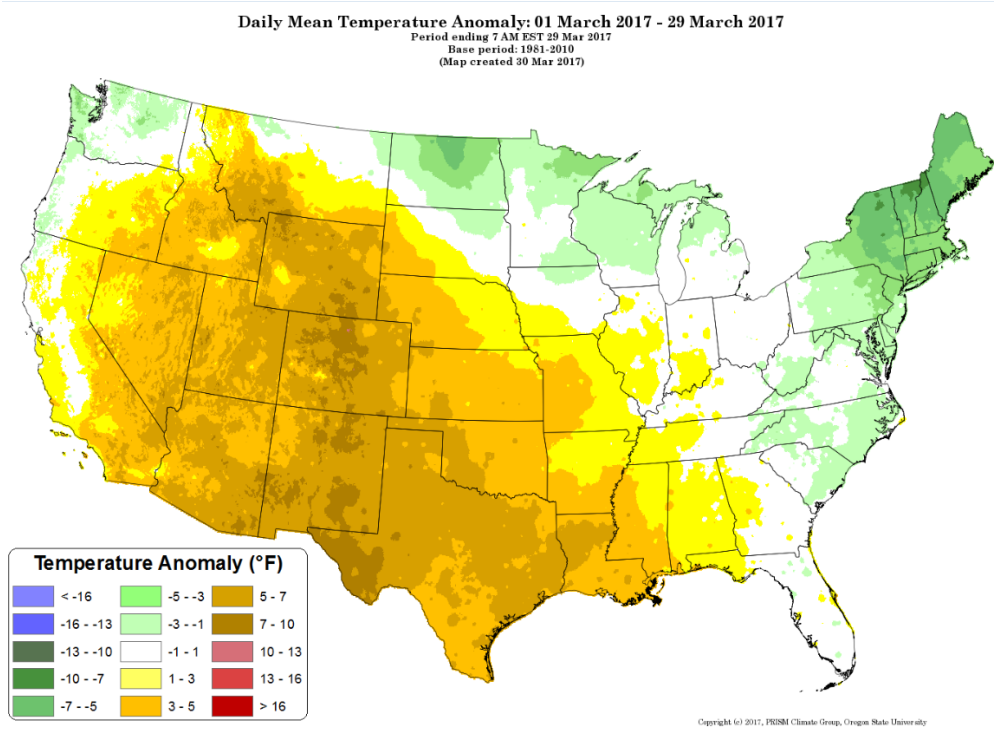
See also: [7-day temperature (° F) map](#)



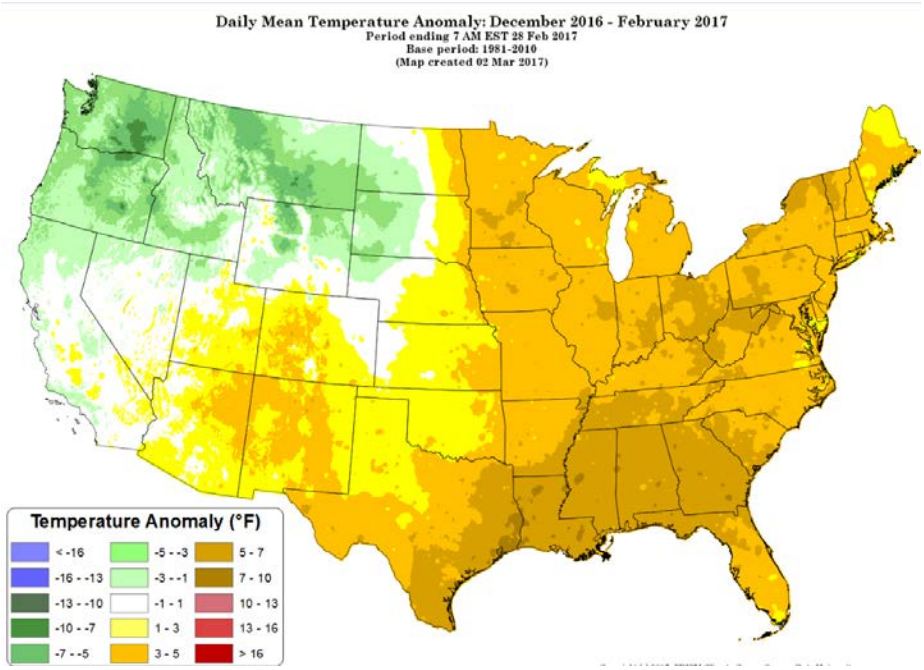
Month-to-Date, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

[Month-to-date national daily mean temperature anomaly map](#)



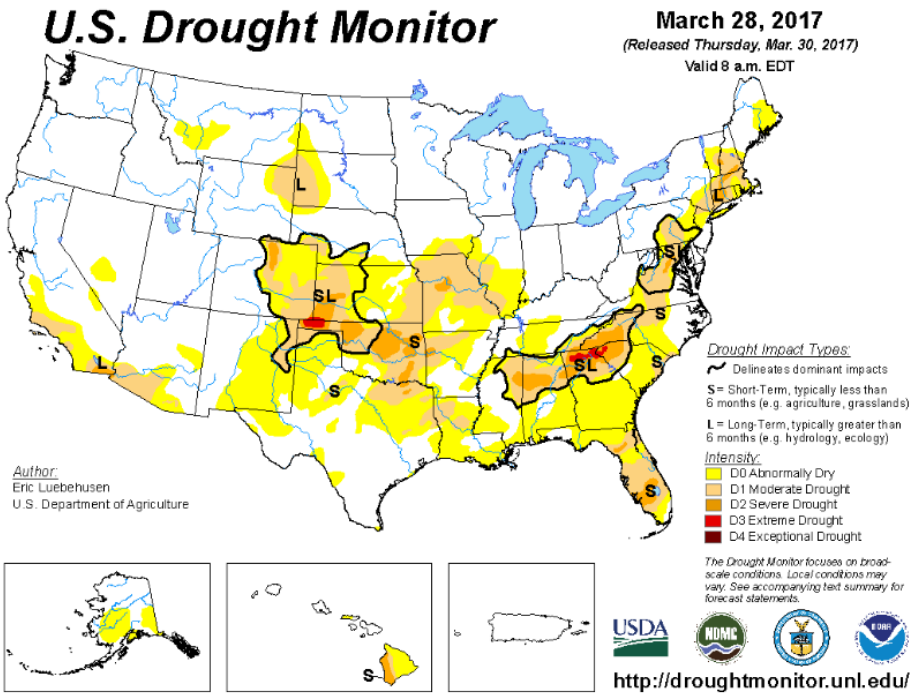
Last 3 Months, All Available Data Including SNOTEL and NWS Networks Source: PRISM



December 2016 through February 2017 daily mean temperature anomaly map

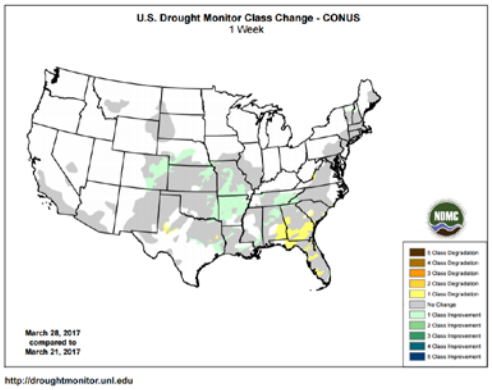
Drought

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

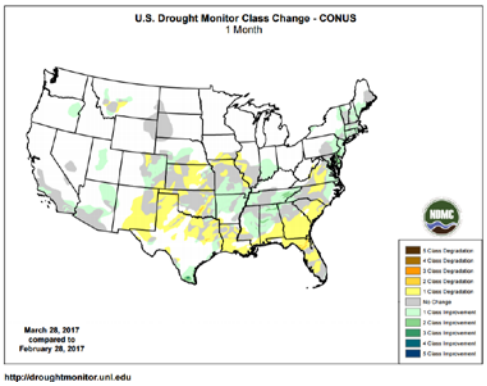


Changes in Drought Monitor Categories over Time

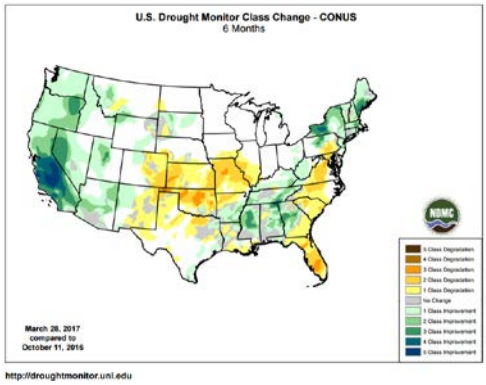
1 Week



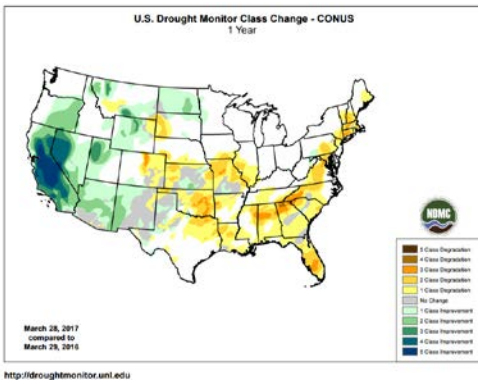
1 Month



6 Months



1 Year



Changes in drought conditions over the last 12 months

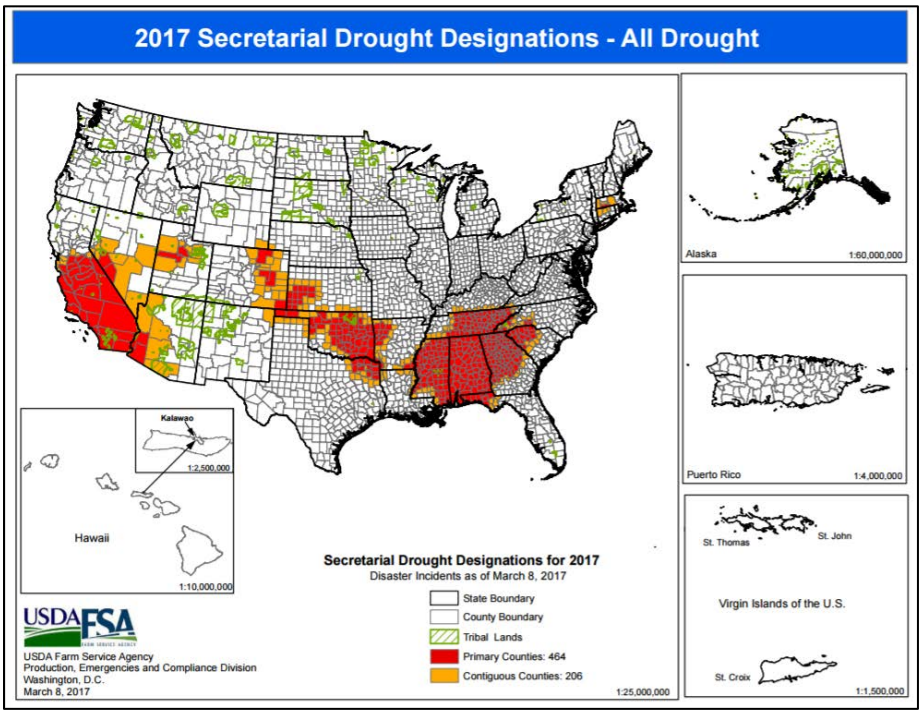
Current National Drought Summary, March 28, 2017

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

"PLEASE NOTE – The Drought Monitor reflects observed precipitation through Tuesday, 1200 UTC (8 am, EDT); any rain that has fallen after the Tuesday 1200 UTC cutoff will be reflected in next week's map (in particular, Tuesday's and Wednesday's heavy rain on the central and southern Plains).

During the 7-day period (ending Tuesday morning), renewed Pacific storminess brought increasingly wet, mild weather to a large swath of the country. Precipitation was heaviest from the central and northern Pacific Coast into the central and northern Rockies, while a secondary area of locally heavy rain and wet snow developed over the central High Plains and environs. Farther east, an influx of Gulf moisture led to widespread moderate to heavy rain from the lower and middle Mississippi Valley into the interior Southeast, while somewhat lighter precipitation was observed across the Midwest (mostly rain) and New England (wintry mix). As a result, widespread reductions in drought intensity and coverage were made where the heaviest precipitation fell, although the lower Southeast (including Florida) remained unfavorably dry."

USDA 2017 Secretarial Drought Designations

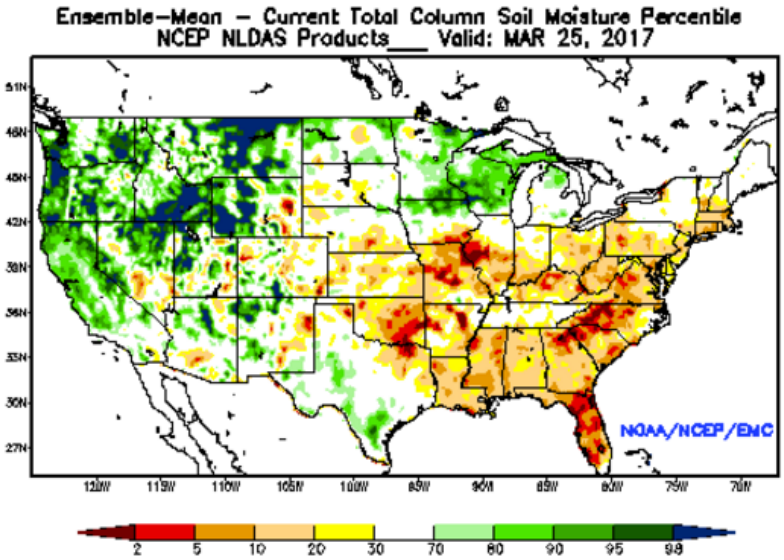


Highlighted Drought Resources

- 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

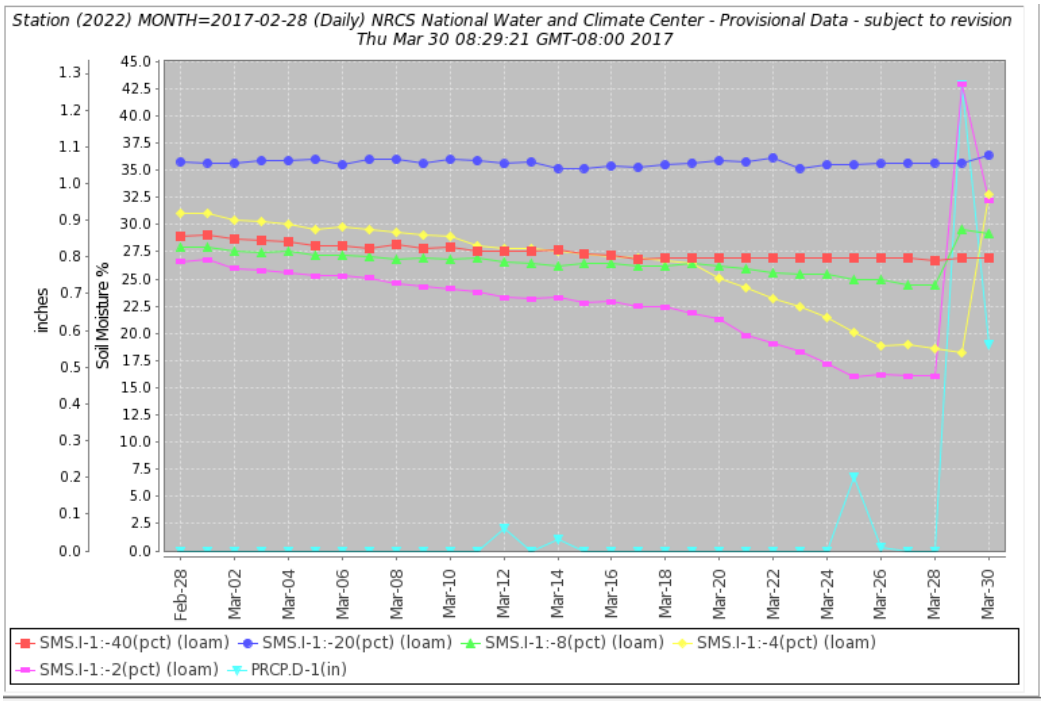
Other Climatic and Water Supply Indicators

Soil Moisture



Modeled soil moisture percentiles as of March 25, 2017.

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



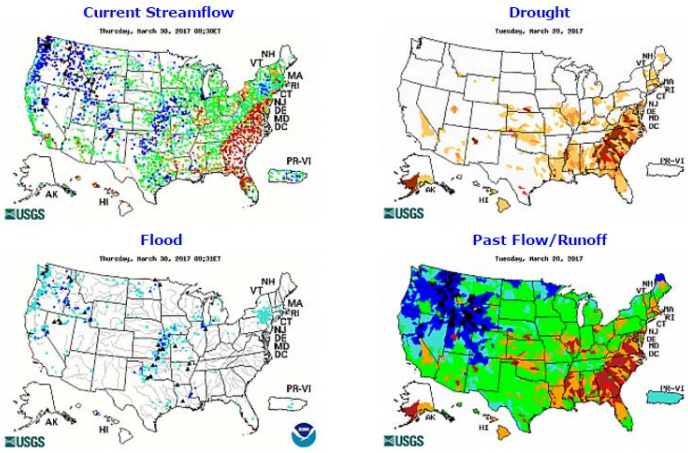
Soil moisture (at 2-, 4-, 8-, 20-, and 40-inch depths) and precipitation for the last 30 days at the Fort Reno #1 SCAN station 2022 in Oklahoma. Precipitation at this site in the last few days helped to arrest a steady decline in soil moisture seen during the previous few weeks. The over 1.2 inches of precipitation yesterday increased the soil moisture at the 2-, 4-, and 8-inch sensors, and slightly at the 20-inch sensor.

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



Current streamflow maps Click graphic to enlarge and display legends

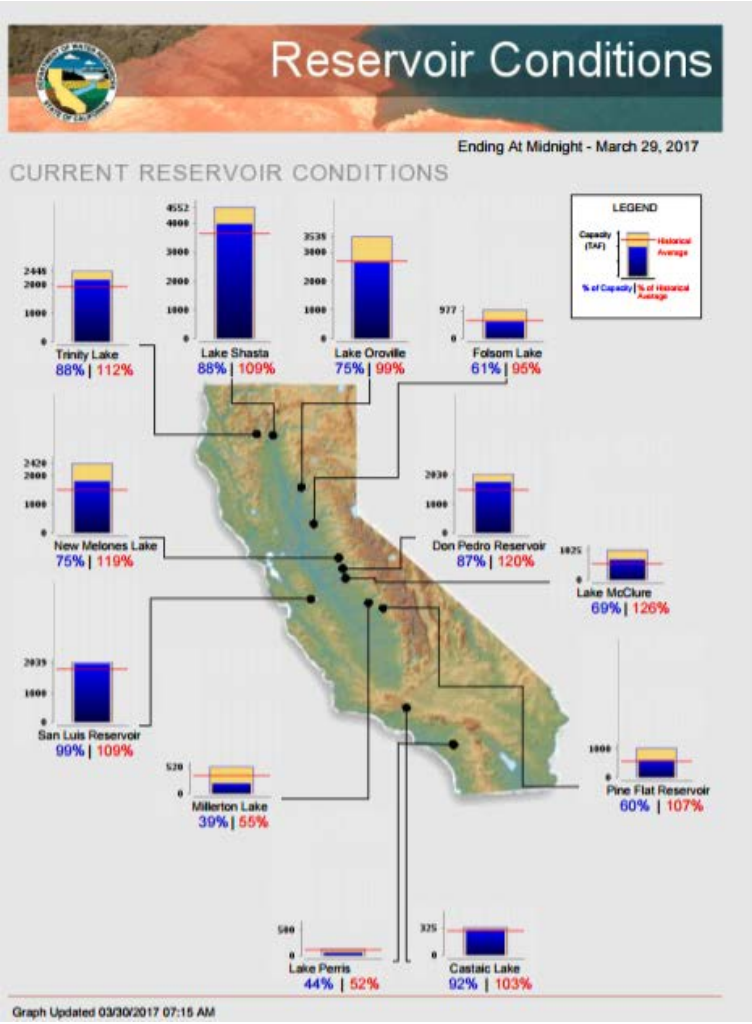
Reservoir Storage

National Water and Climate Center Reservoir Data

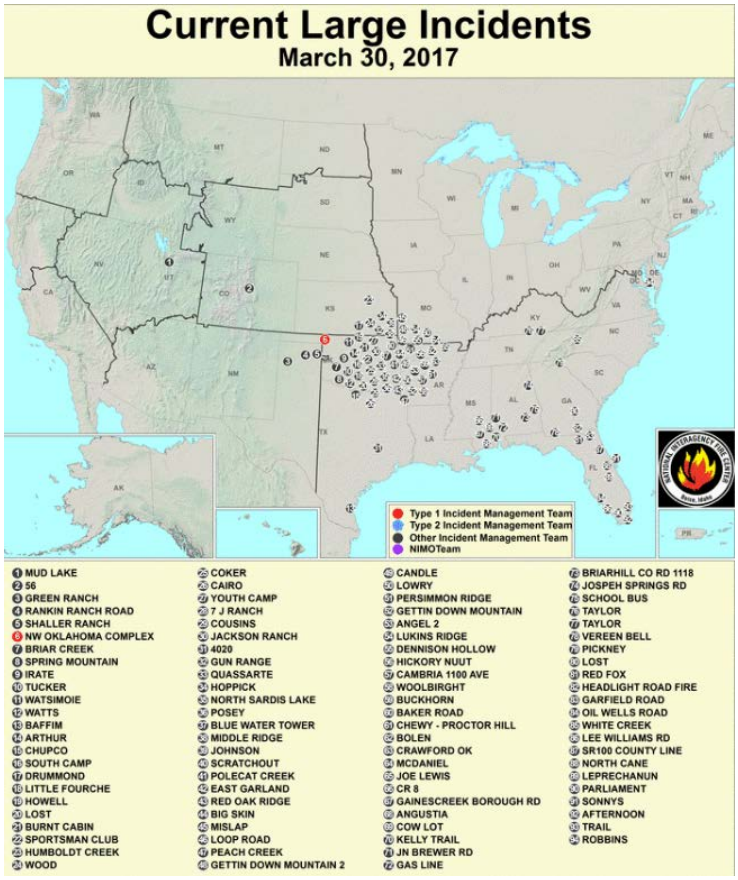
U.S. Bureau of Reclamation Hydromet Tea Cup Reservoir Depictions:

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]



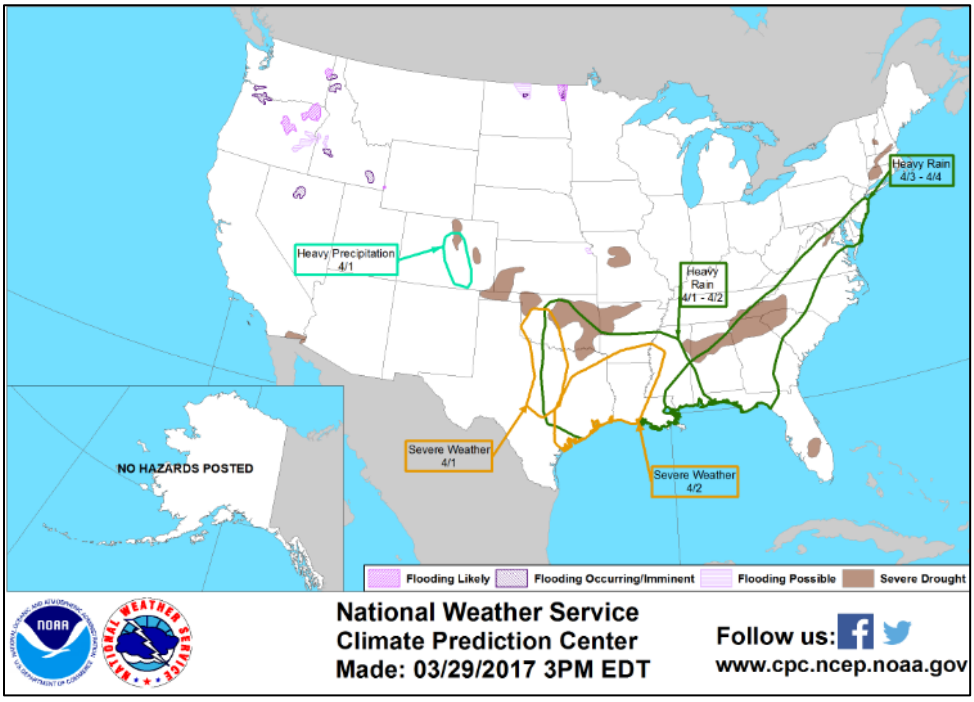
Short- and Long-Range Outlooks

Agricultural Weather Highlights

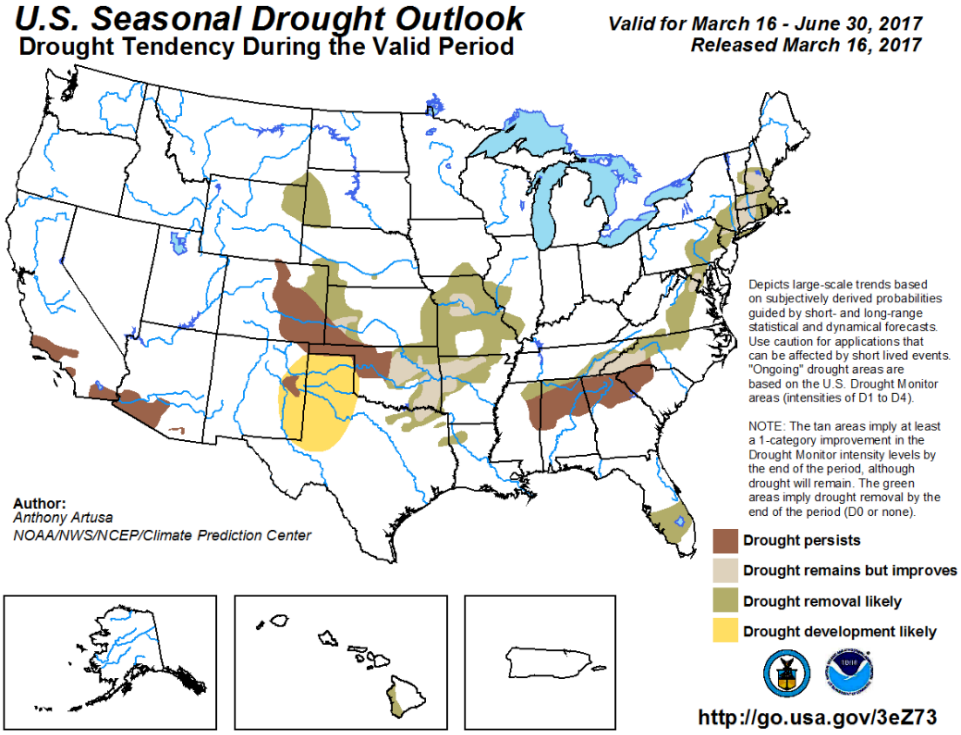
Author: Brad Rippey, Agricultural Meteorologist, USDA/OCE/WAOB

National Outlook, March 30, 2017**:** "Slow-moving storms will continue to spark widespread precipitation. Each storm will have a trailing cold front capable of producing heavy showers and locally severe thunderstorms. As a result, 5-day rainfall totals could reach 2 to 6 inches across the South, except in southern Florida. Totals of 1 to 3 inches can be expected across the central and eastern Corn Belt; the Mid-Atlantic States; and southern New England. The Intermountain West and portions of the northern and central Rockies can also expect heavy precipitation (locally 1 to 4 inches), including high-elevation snow. Only a few areas, such as the upper Midwest and Desert Southwest, will remain mostly dry. Parts of southern New Mexico and western Texas will be at risk of high winds, blowing dust, and wildfires. The NWS 6- to 10-day outlook for April 4 – 8 calls for above-normal temperatures nearly nationwide, with the greatest likelihood of warmth occurring in the north-central U.S. and across the nation's southern tier. Meanwhile, near- to above-normal precipitation across most of the country will contrast with drier-than-normal weather in the southcentral U.S., including Texas."

NWS Climate Prediction Center Weather Hazard Outlook: April 1 – 5, 2017

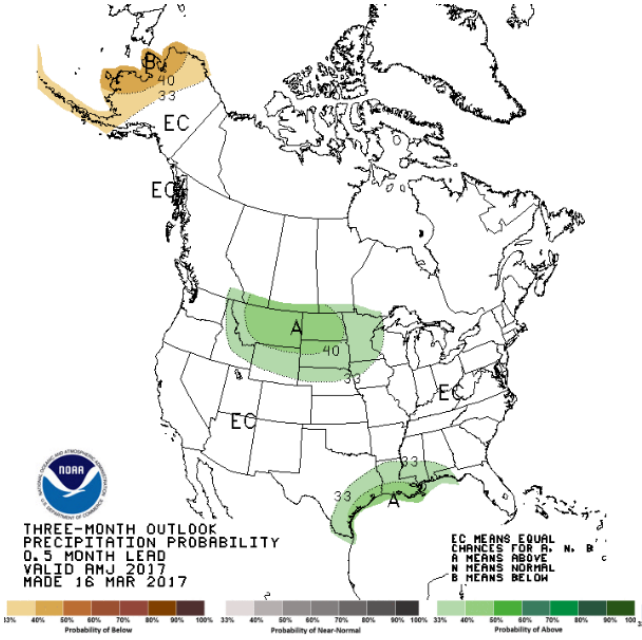


NWS Seasonal Drought Outlook: March 16 - June 30, 2017



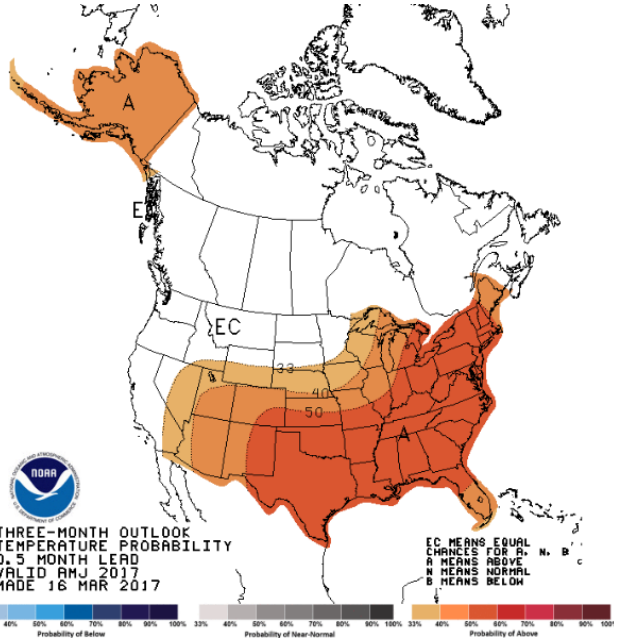
NWS Climate Prediction Center 3-Month Outlook

Precipitation



April-May-June (AMJ) 2017 precipitation outlook summary

Temperature



April-May-June (AMJ) 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.