



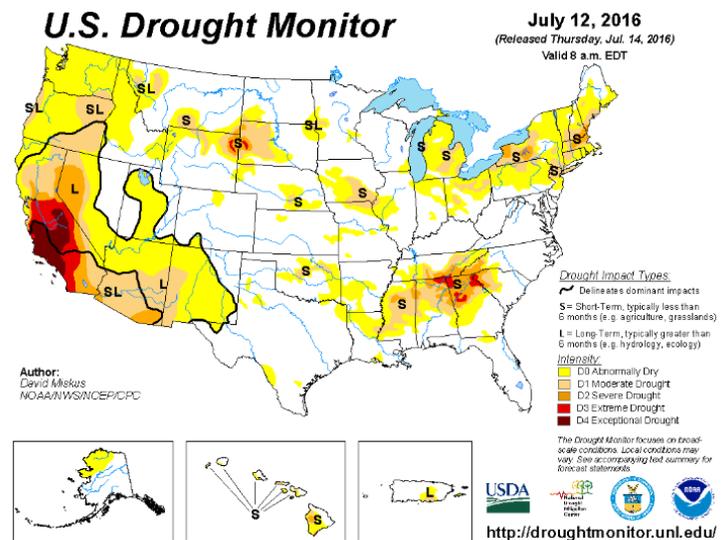
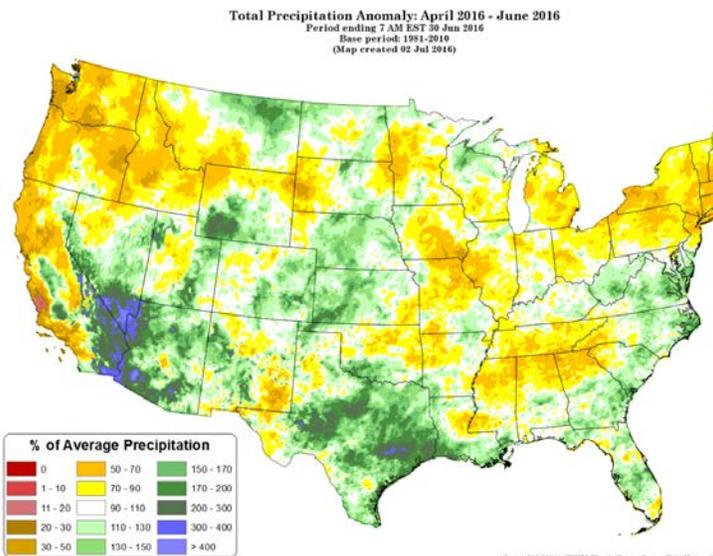
Water and Climate Update

July 14, 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.

Precipitation	2	Other Climatic and Water Supply Indicators	9
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Drought conditions emerge in several regions of the U.S.

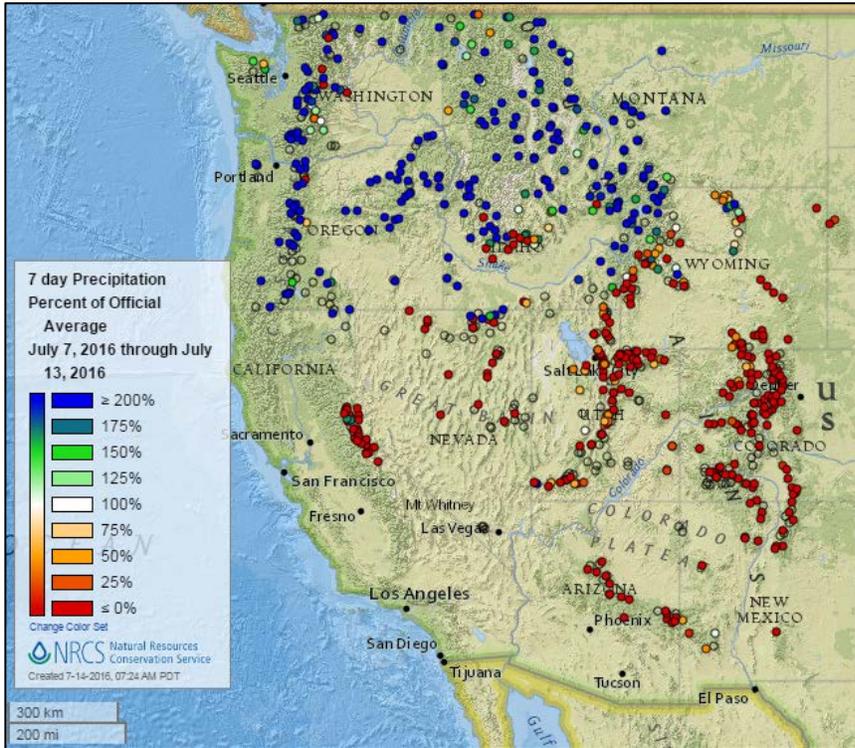


In addition to the long-term exceptional drought in the Southwest, drought conditions are emerging in several other parts of the country. Portions of the Northwest, Southeast, upper Great Plains, and Northeast are experiencing recent drought impacts as illustrated in the U.S. Drought Monitor map this week. Dryness is also evident at NRCS SCAN sites in these areas. A SCAN site in the Northeast with emerging drought is illustrated on page 9 of this report.

- [Oregon's drought is spreading](#)
- [Drought disaster declared for 6 Alabama counties](#)
- [Much of Louisiana, Much of Mississippi in Severe Drought](#)
- [US Drought Monitor shows about half of South Dakota is too dry](#)
- [Drought area increasing in southeastern Iowa](#)
- [Massachusetts drought watch issued; water conservation urged](#)
- [Drought conditions expand across western New York](#)

Precipitation

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

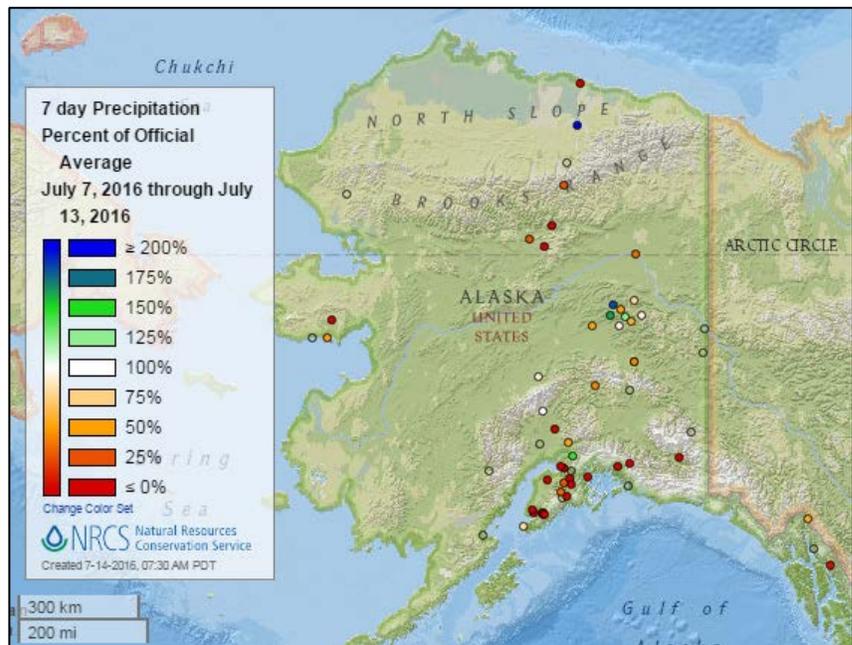


[7-day precipitation percent of average map](#)

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](#)



Water and Climate Update

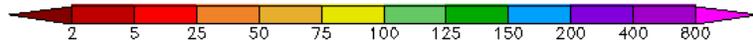
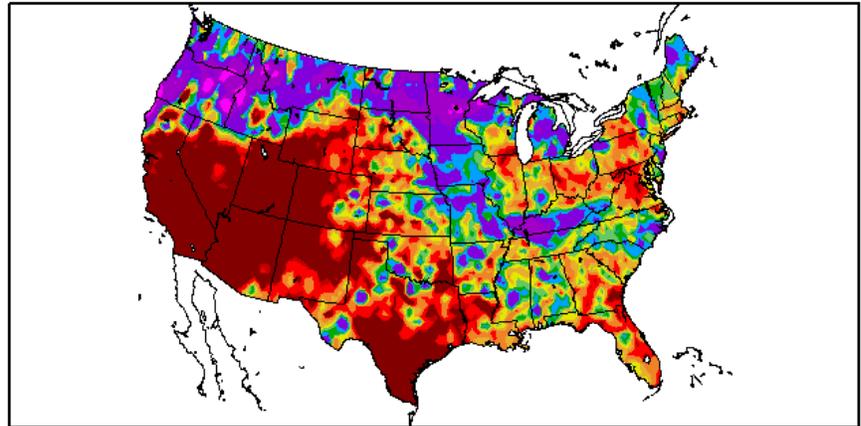
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

Percent of Normal Precipitation (%)
7/7/2016 – 7/13/2016

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



Generated 7/14/2016 at HPRCC using provisional data.

Regional Climate Centers

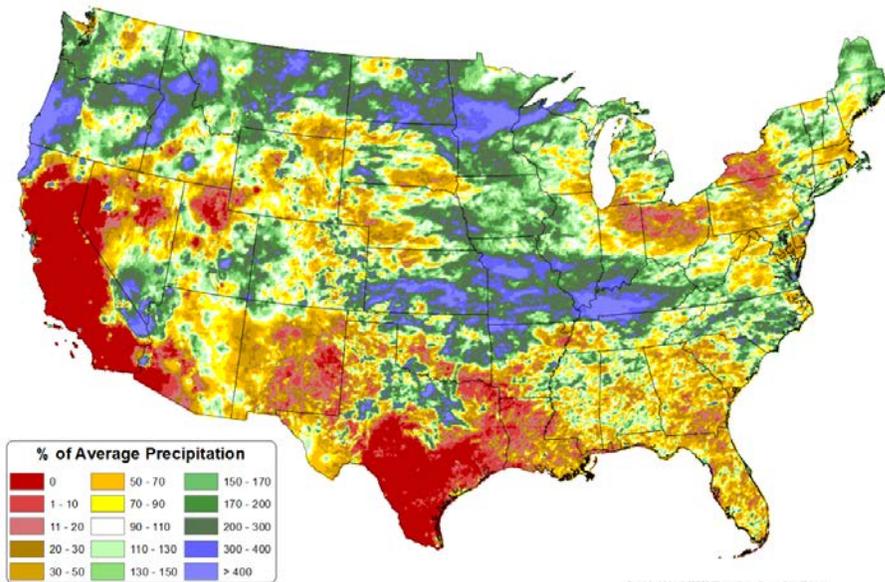
Month-to-Date, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

Total Precipitation Anomaly: 01 July 2016 - 12 July 2016
Period ending 7 AM EST 12 Jul 2016
Base period: 1981-2010
(Map created 12 Jul 2016)

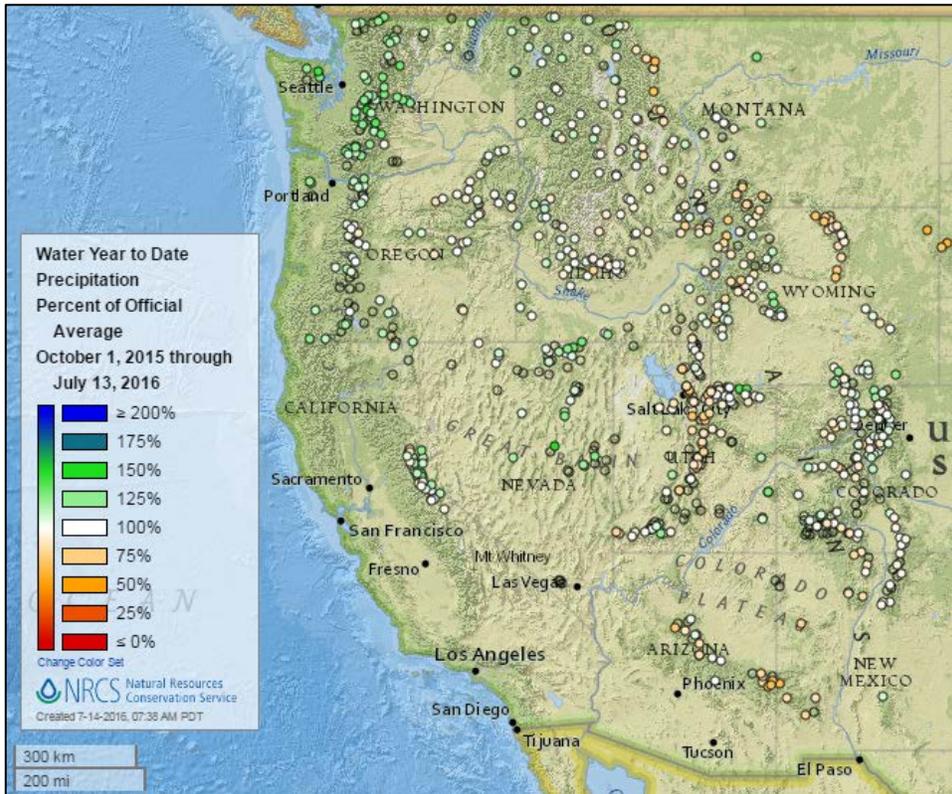
[Month-to-date national precipitation percent of average map](#)

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



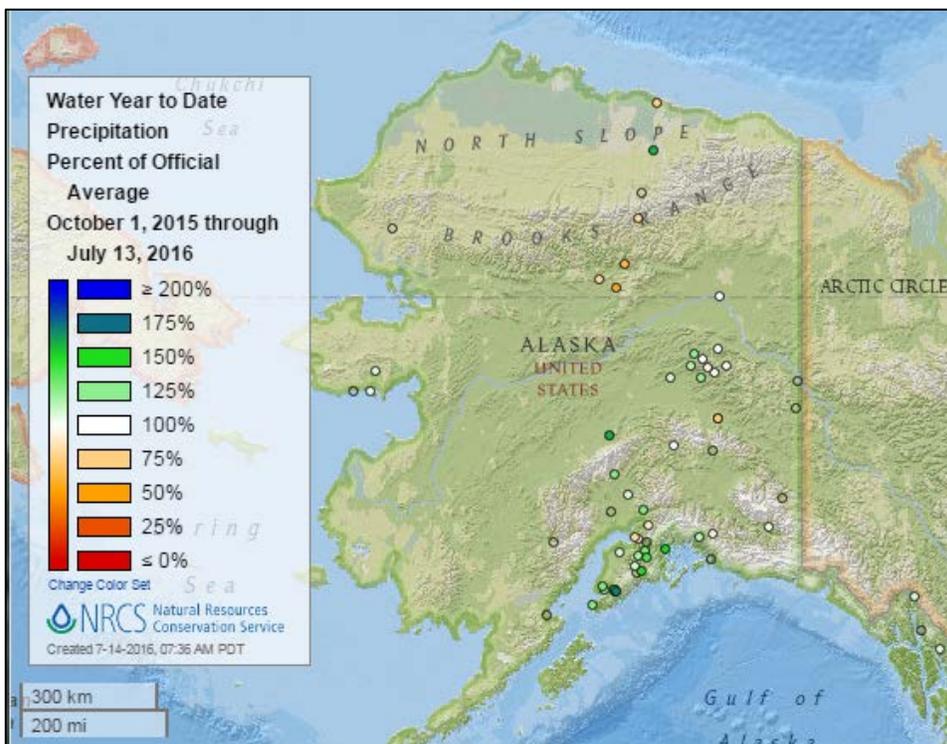
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Water Year-to-Date, Western Mountain Sites (NRCS SNOTEL Network)



[2016 water year-to-date precipitation percent of average map](#)

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



[Alaska 2016 water year-to-date precipitation percent of average map](#)

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

Temperature

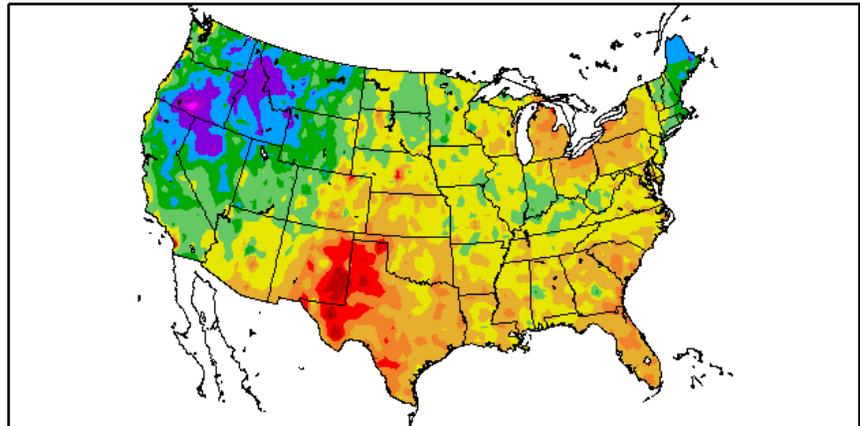
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

[7-day temperature anomaly map](#)

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

Departure from Normal Temperature (F)
7/7/2016 – 7/13/2016



Generated 7/14/2016 at HPRCC using provisional data.

Regional Climate Centers

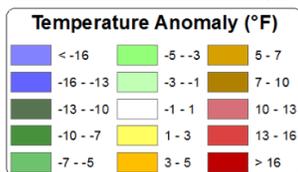
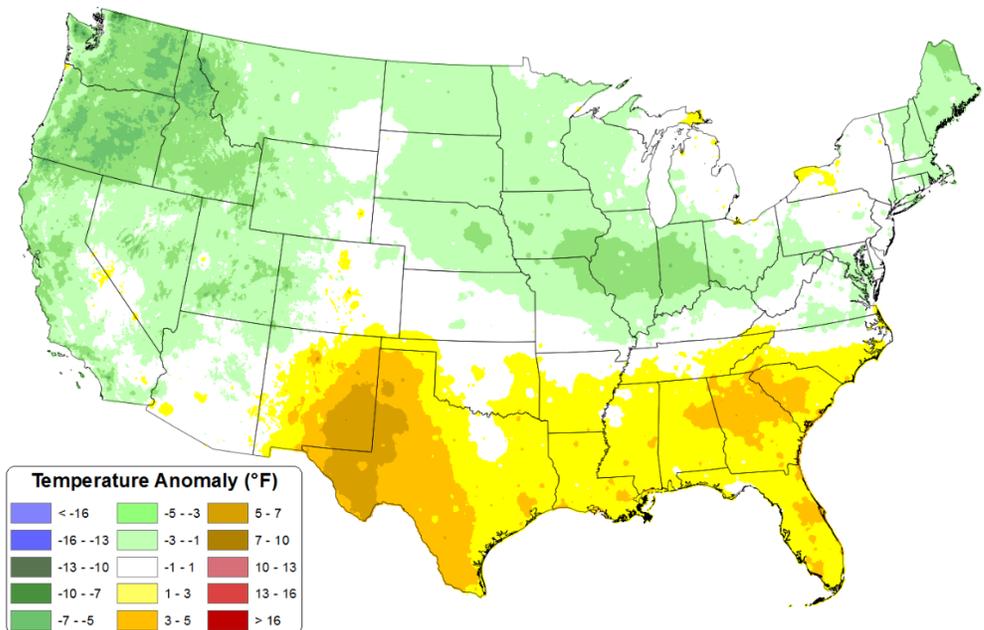
Month-to-Date, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

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

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

Daily Mean Temperature Anomaly: 01 July 2016 - 12 July 2016
Period ending 7 AM EST 12 Jul 2016
Base period: 1981-2010
(Map created 13 Jul 2016)



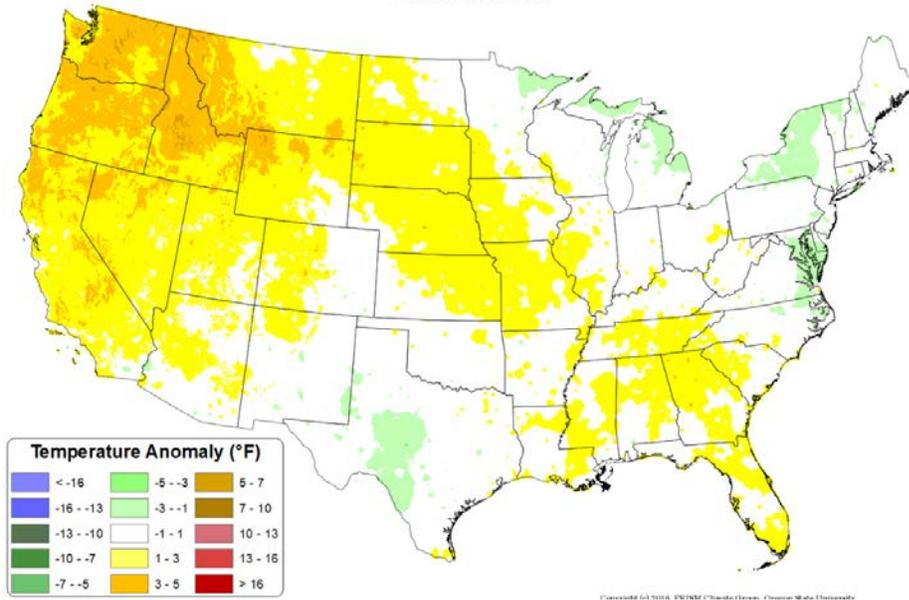
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Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

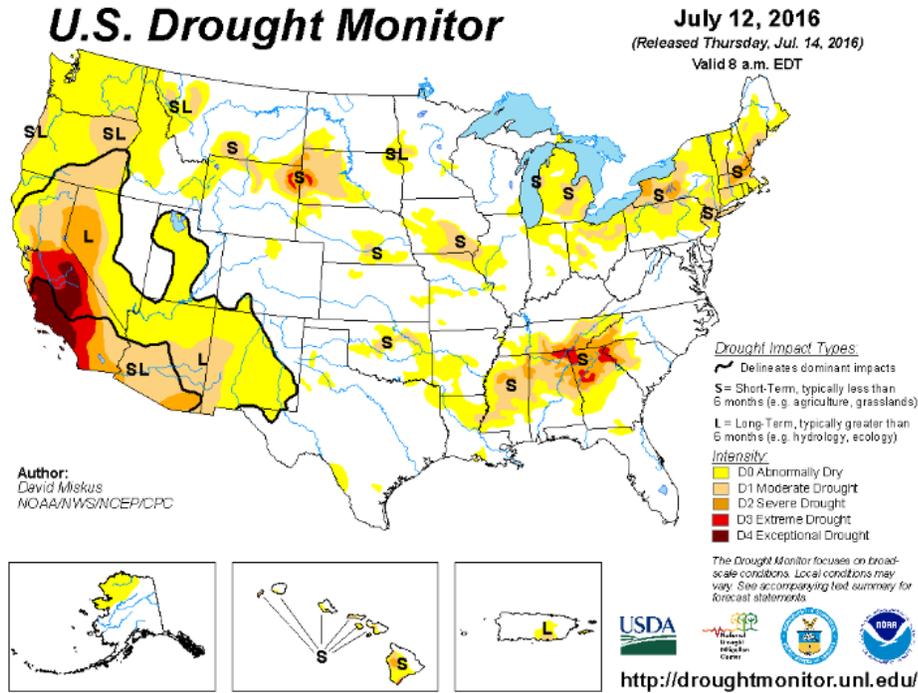
Daily Mean Temperature Anomaly: April 2016 - June 2016
Period ending 7 AM EST 30 Jun 2016
Base period: 1981-2010
(Map created 02 Jul 2016)

[April through June daily mean temperature anomaly map](#)



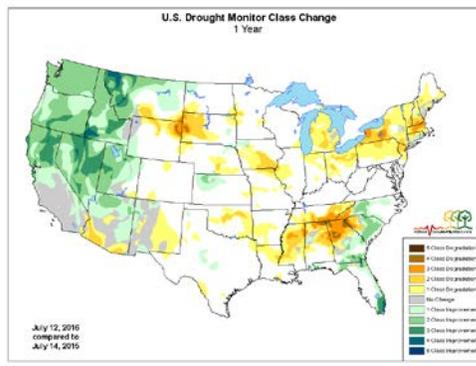
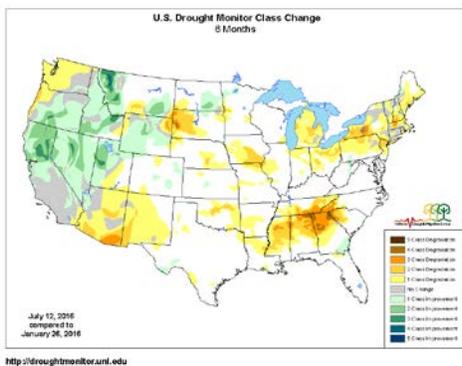
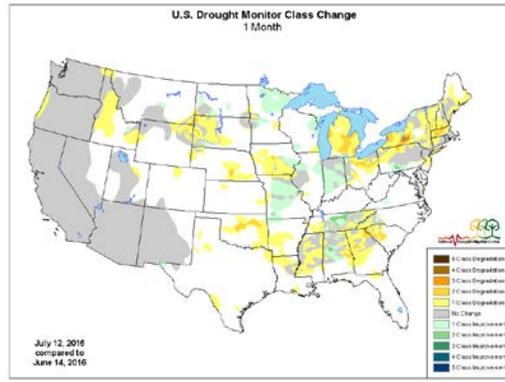
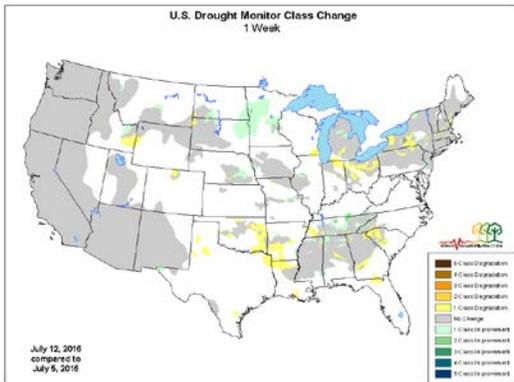
Drought

[U.S. Drought Monitor](#) See map below. [U.S. Drought Portal](#) Comprehensive drought resource.



Changes in Drought Monitor Categories over Time

Click any map to enlarge



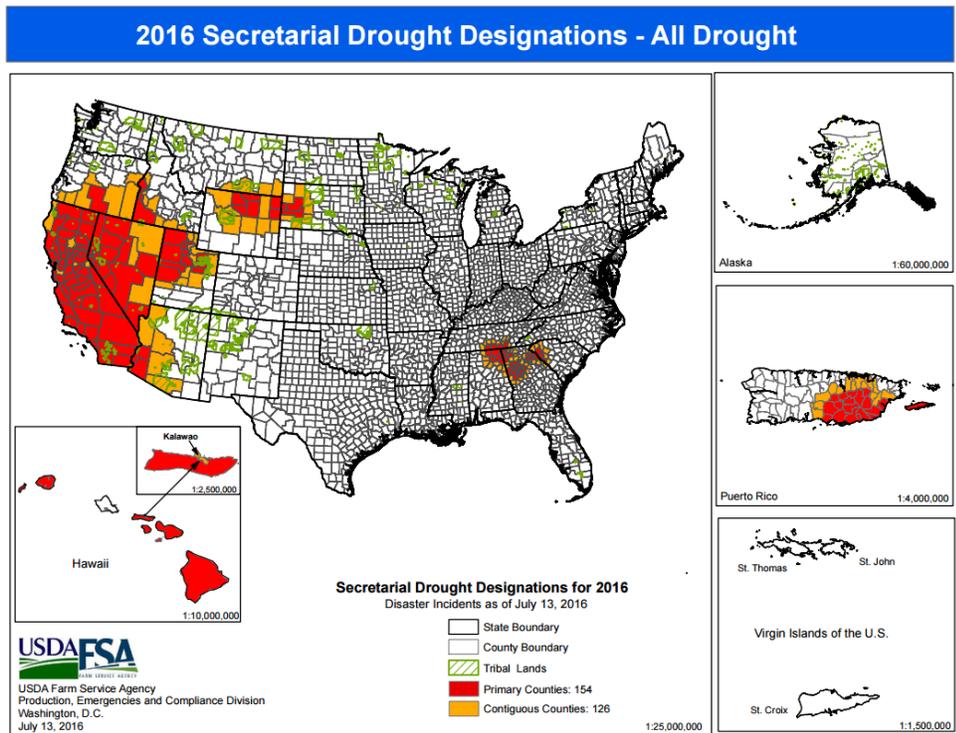
Changes in drought conditions over the last 12 months

Current National [Drought Summary](#), July 12, 2016

Author: David Miskus, NOAA/NWS/NCEP/CPC

“A ridge of high pressure across the South and a trough of low pressure over the Northwest combined for an active storm track along the northern tier of the U.S. into the Midwest and southeastward into the Tennessee Valley. As numerous cold fronts tracked from the Northwest and southwestern Canada into the Nation’s mid-section and encountered the Southern ridge, they would stall and generate bands of heavy showers and thunderstorms. The week’s greatest totals fell on western and southern Kentucky, south-central North Dakota, central Minnesota, and northwestern Wisconsin where 4-8 inches (locally over 10 inches) was measured. Elsewhere, light to moderate rains occurred in the northwestern quarter of the U.S., most of the northern two-thirds of the Great Plains, upper Midwest, western Corn Belt, Tennessee Valley, portions of the Southeast, most of the Carolinas, and sections of the Northeast. Mostly dry weather enveloped the southwestern quarter of the Nation, the southern Plains, most of Florida, the Ohio Valley and eastern Great Lakes region, and mid-Atlantic. Weekly temperatures averaged below normal in the West, northern Plains, parts of the Midwest, and in New England. Positive temperature anomalies were found in the southern half of the Plains, across the Southeast, mid-Atlantic, and eastern Great Lakes region, with excessive heat (anomalies more than +6 degs F and triple-digit highs) in the southern High Plains. Precipitation decreased in Alaska as compared to last week (except in east-central sections), windward showers continued across Hawaii, and most of Puerto Rico saw light to moderate showers except for drier weather in south-central and southwestern sections of the island.”

USDA 2016 Secretarial [Drought Designations](#)

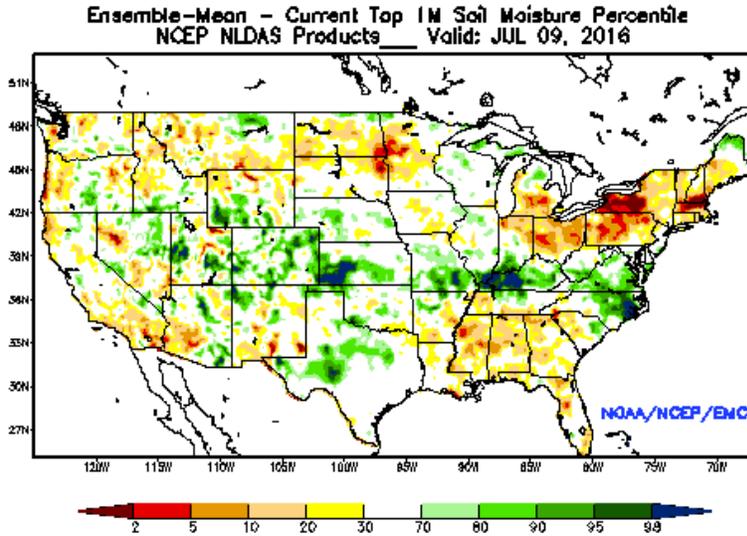


Highlighted Drought Resources

- [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](#)

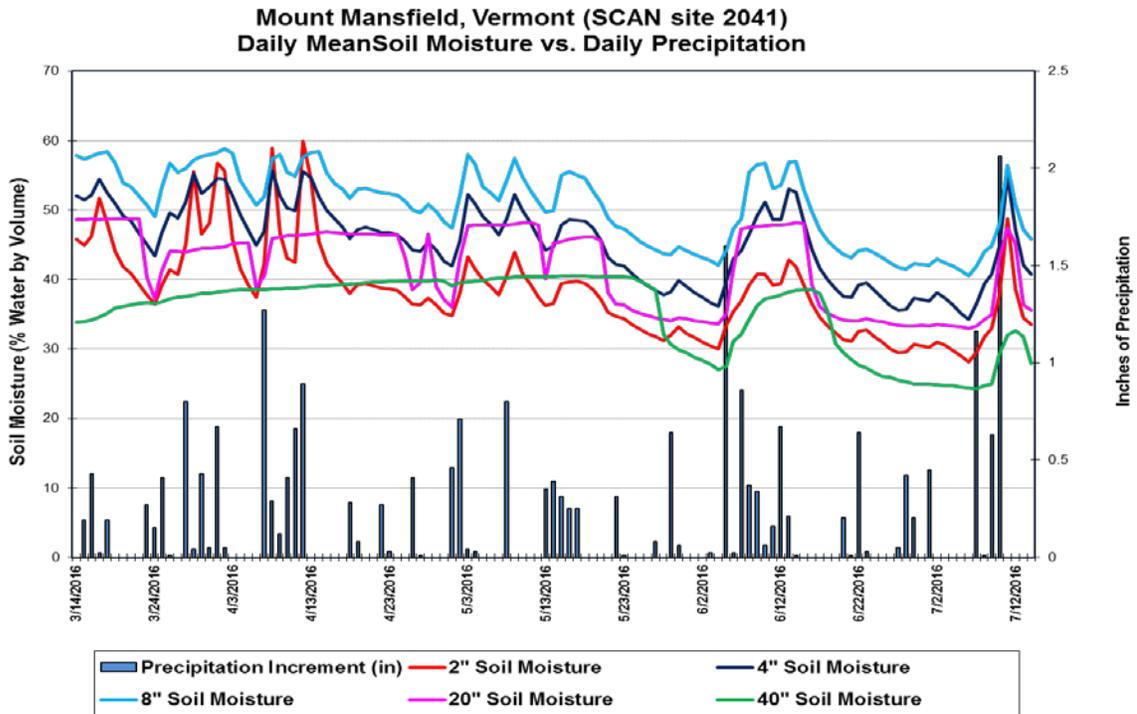
Other Climatic and Water Supply Indicators

Soil Moisture



[Modeled soil moisture percentiles](#) as of July 9, 2016.

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



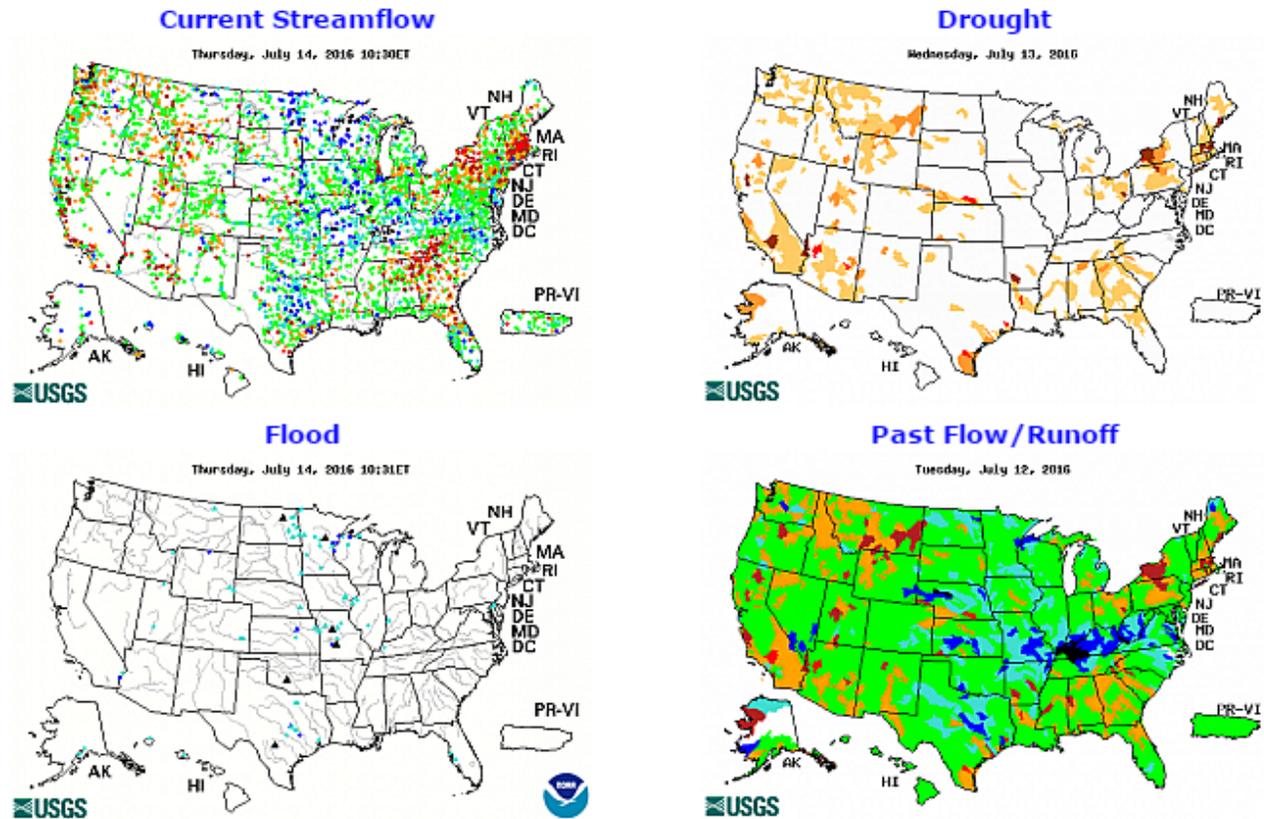
Soil moisture (at 2-, 4-, 8-, 20-, and 40-inch depths) and precipitation for the past four months at the [Mount Mansfield SCAN site 2041](#) in Vermont. The precipitation events over the last 4 months have shown an overall drying trend at all soil sensor depths. The precipitation events in the last month have provided some short-term relief in this trend, but soil moisture is continuing to decrease.

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

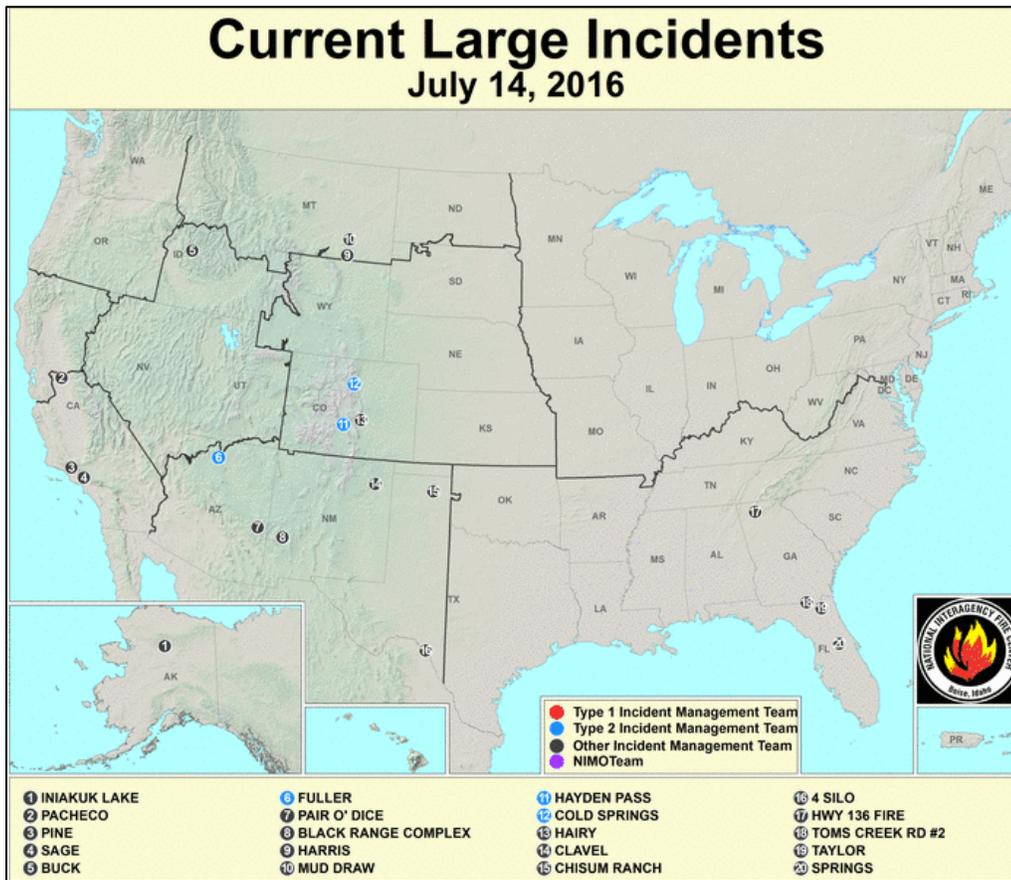
[National Water and Climate Center Reservoir Data](#)

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](#)



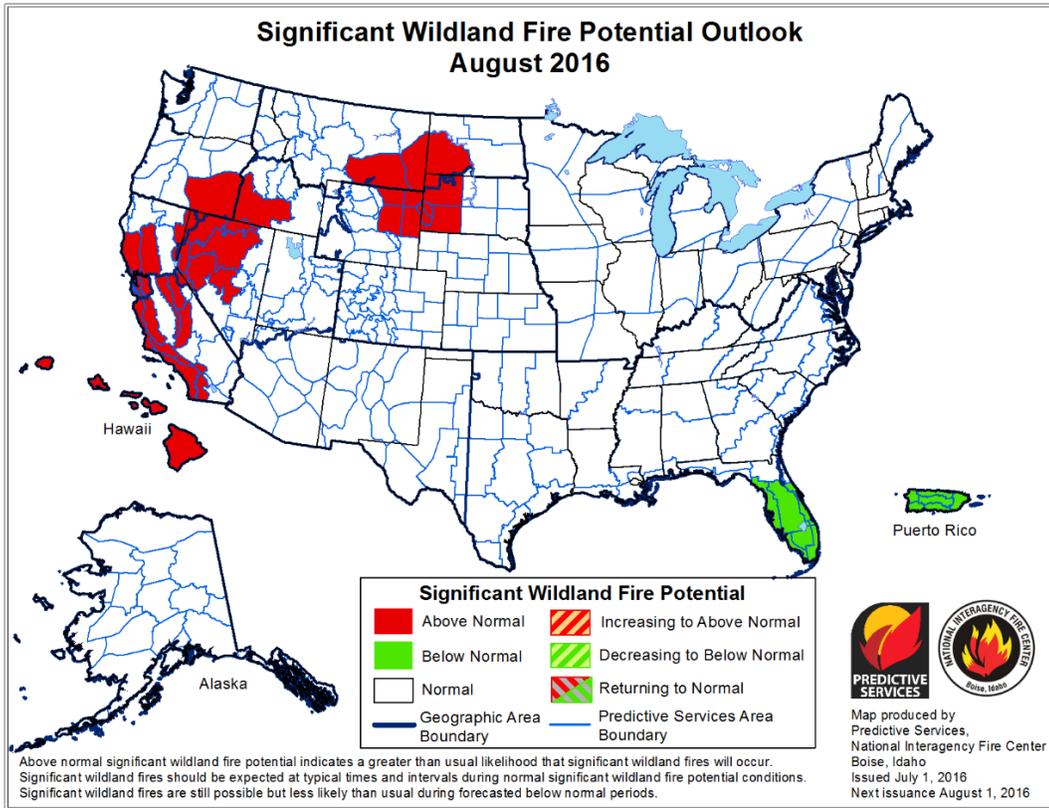
Short- and Long-Range Outlooks

Agricultural Weather Highlights

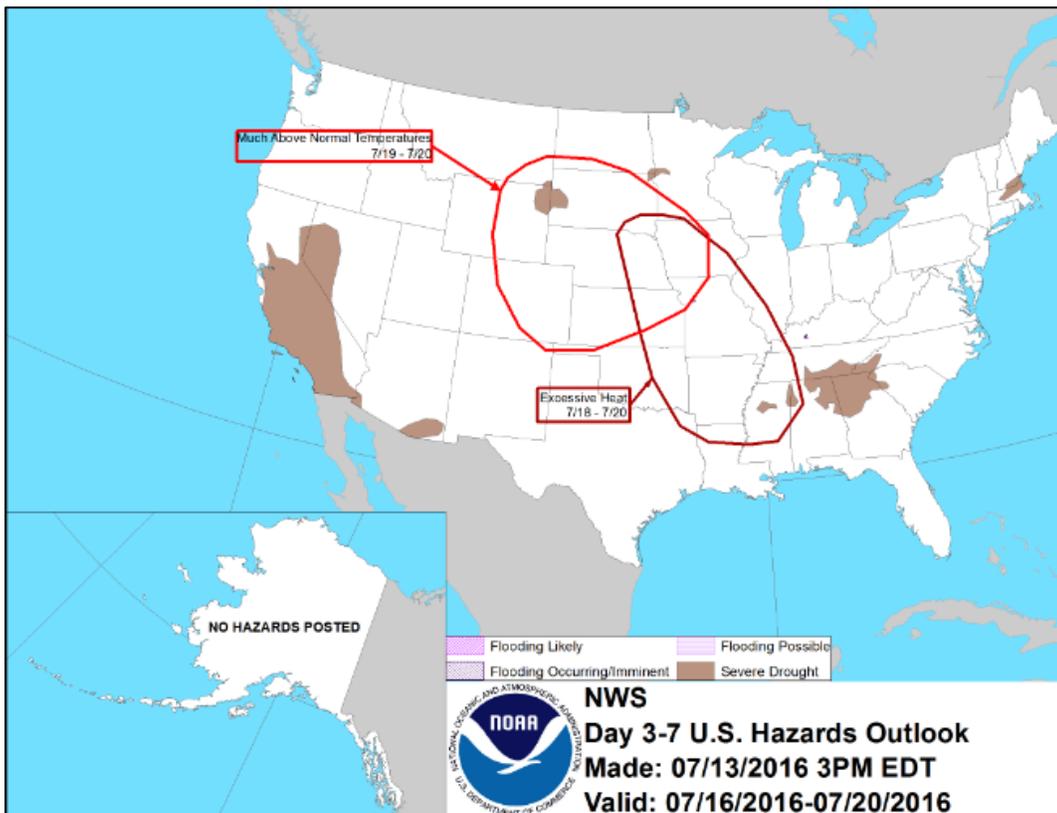
Author: Brad Rippey, Agricultural Meteorologist, USDA/OCE/WAOB

[National Outlook, July 14, 2016](#): “During the next few days, a cold front will move across the southern and eastern U.S., generating as much as 1 to 3 inches of rain. The tail of the front will stall across the central Plains before lifting northward as a warm front, as a new low-pressure system starts to develop across the north-central U.S. The late-week storm could result in 1- to 2-inch rainfall totals across the northern Plains and the Midwest. In contrast, mostly dry weather should persist from California to Texas, accompanied by hot conditions. By early next week, heat will begin to build northward across the Plains and the southern and western Corn Belt. The NWS 6- to 10-day outlook for July 19 – 23 calls for above-normal temperatures nationwide, except for cooler-than-normal conditions in the Northwest. Meanwhile, near- to below-normal rainfall in much of the country will contrast with wetter-than-normal weather in western Washington, the southern Mid-Atlantic coastal plain, southernmost sections of Florida and Texas, and portions of the Southwest.”

Fire Potential Outlook: [August 2016](#)



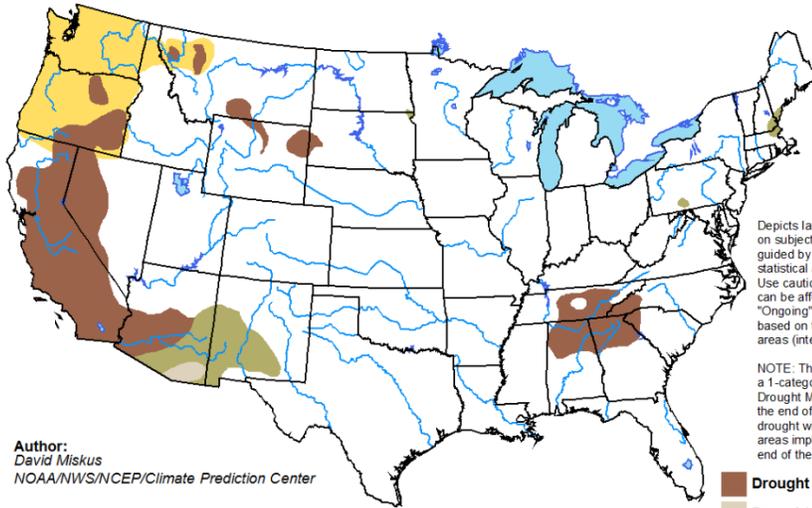
NWS Climate Prediction Center [Weather Hazard Outlook: July 16 - 20, 2016](#)



Seasonal Drought Outlook: [June 16 – September 30, 2016](#)

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

Valid for June 16 - September 30, 2016
Released June 16, 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:
David Miskus
NOAA/NWS/NCEP/Climate Prediction Center

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

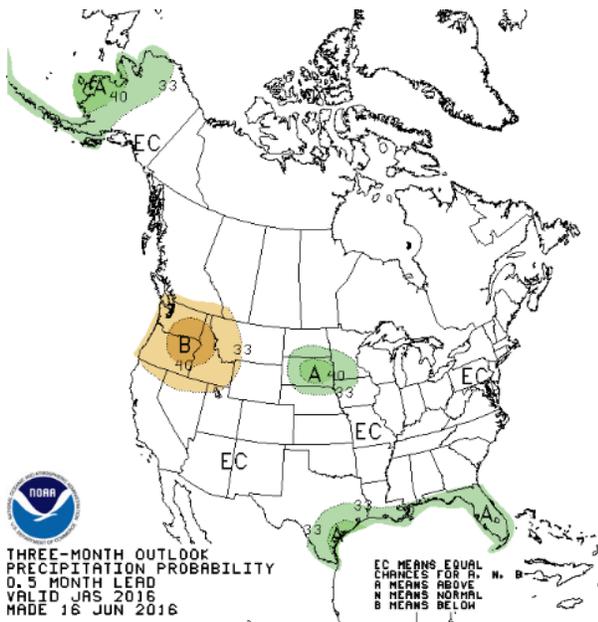


<http://go.usa.gov/3eZ73>



NWS Climate Prediction Center 3-Month Outlook

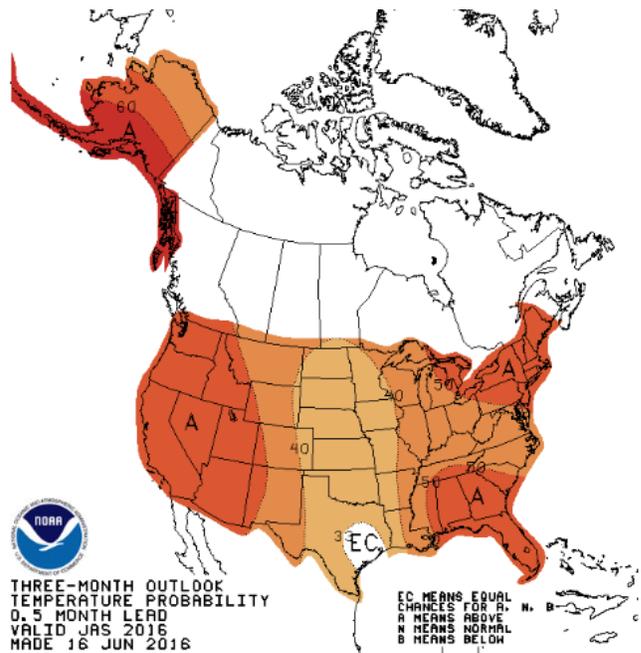
[Precipitation](#)



THREE-MONTH OUTLOOK
PRECIPITATION PROBABILITY
0.5 MONTH LEAD
VALID JAS 2016
MADE 16 JUN 2016

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

[Temperature](#)



THREE-MONTH OUTLOOK
TEMPERATURE PROBABILITY
0.5 MONTH LEAD
VALID JAS 2016
MADE 16 JUN 2016

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

[July-August-September \(JAS\) 2016 precipitation outlook summary](#)

[July-August-September \(JAS\) 2016 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](#).