

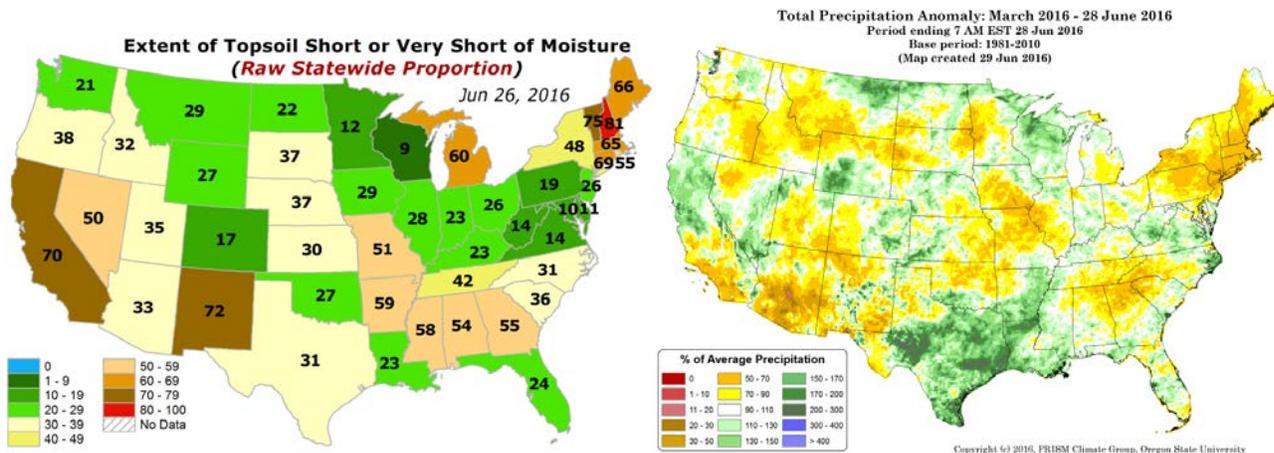
Water and Climate Update

June 30, 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	1	Other Climatic and Water Supply Indicators	9
Temperature	5	Short- and Long-Range Outlooks.....	11
Drought	7	More Information	14

Drought concerns continue in California and build in the Northeast



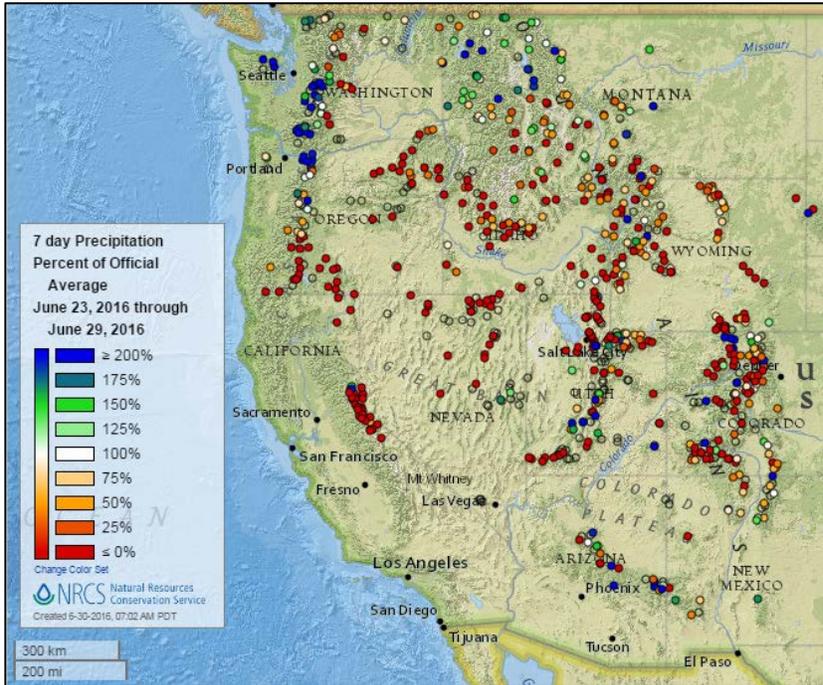
In California, historic drought conditions continue to affect forests. A new U.S. Forest Service survey counted 66 million dead and dying trees since 2005 from years of drought and beetle kill. In New England, Connecticut has issued a drought advisory and other eastern states are also expressing concern.

CA: [State, county grapple with historic tree die-off](#)

ME: [Will June's dry, sunny weather last into July?](#)

Precipitation

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

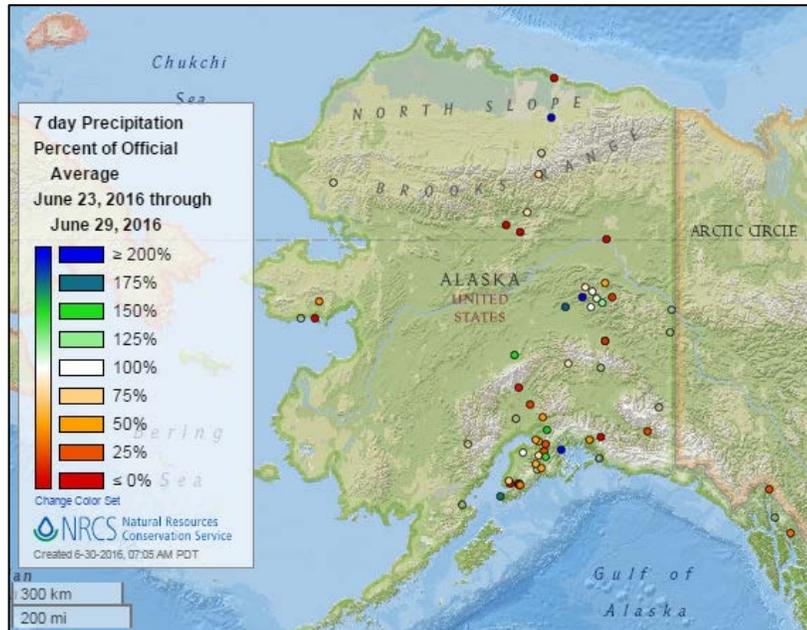


[7-day precipitation percent of average map](#)

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

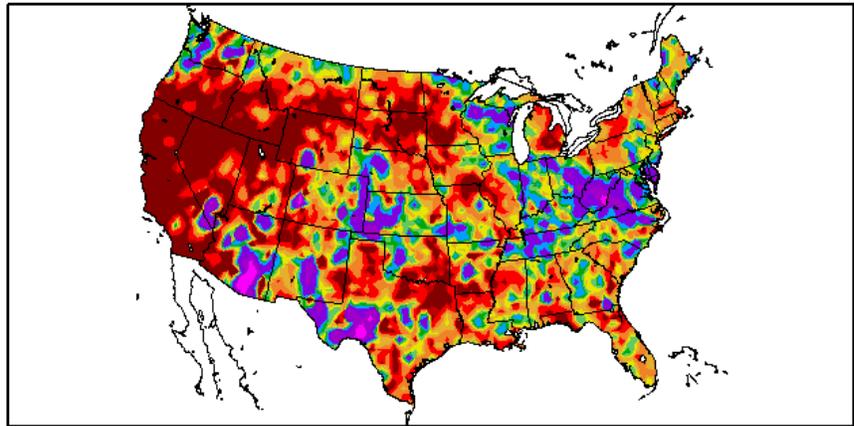
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

Percent of Normal Precipitation (%)
6/23/2016 – 6/29/2016

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



Generated 6/30/2016 at HPRCC using provisional data.

Regional Climate Centers

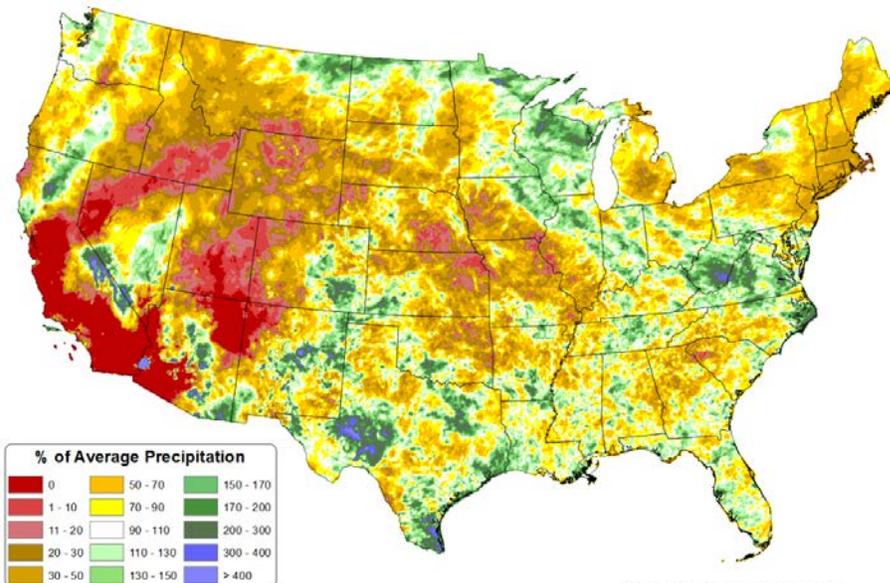
Month-to-Date, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

Total Precipitation Anomaly: 01 June 2016 - 28 June 2016
Period ending 7 AM EST 29 Jun 2016
Base period: 1981-2010
Map created 29 Jun 2016

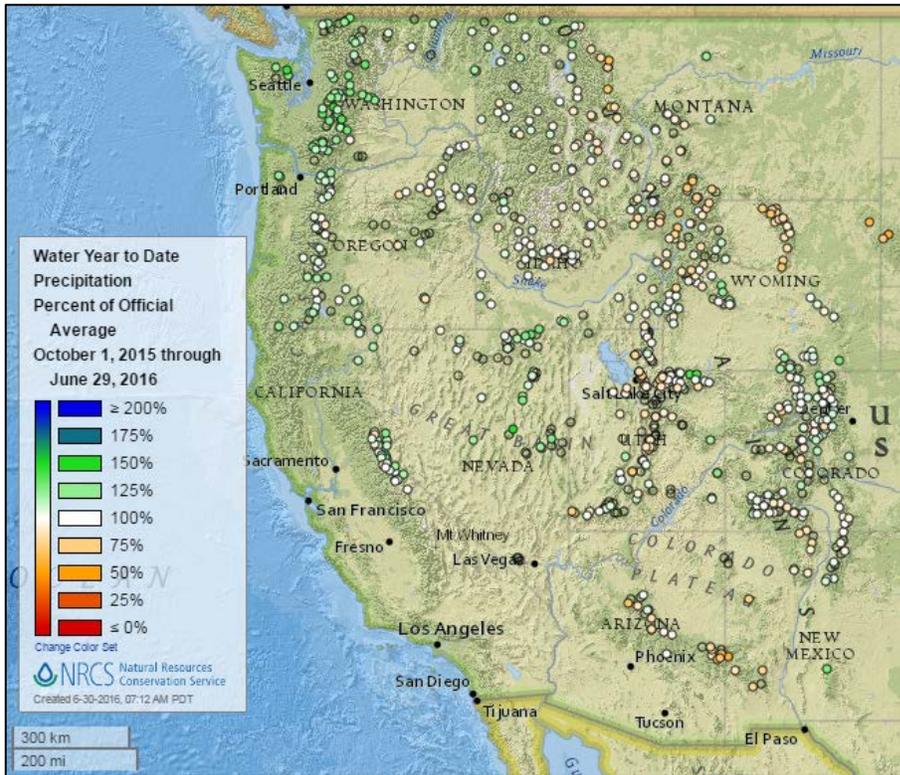
[Month-to-date national precipitation percent of average map](#)

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



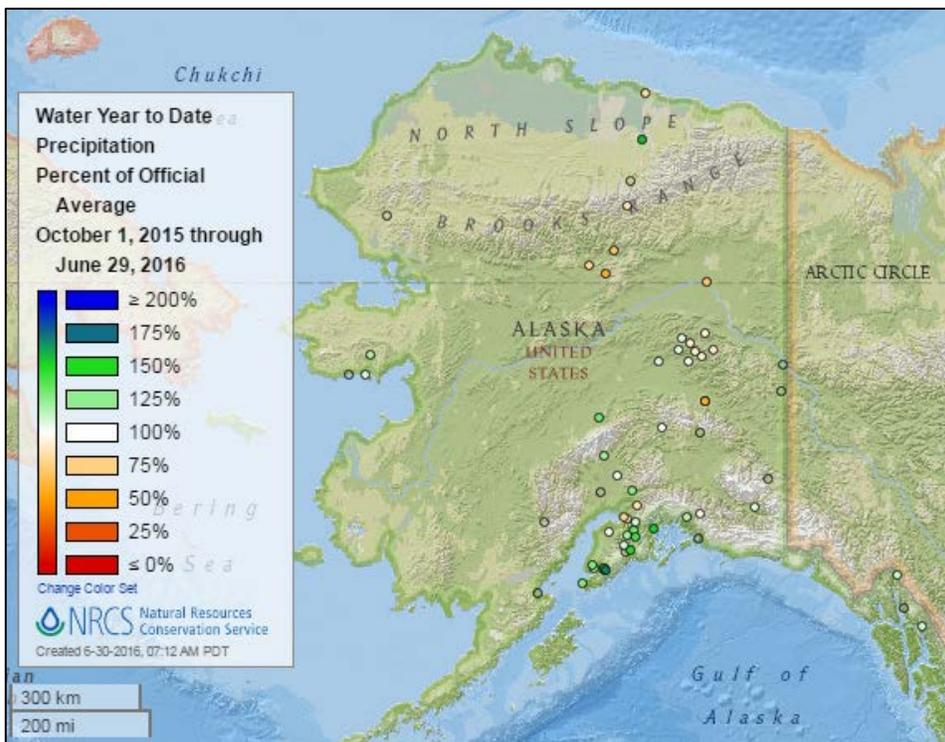
Copyright © 2016, PRISM Climate Group, Oregon State University

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

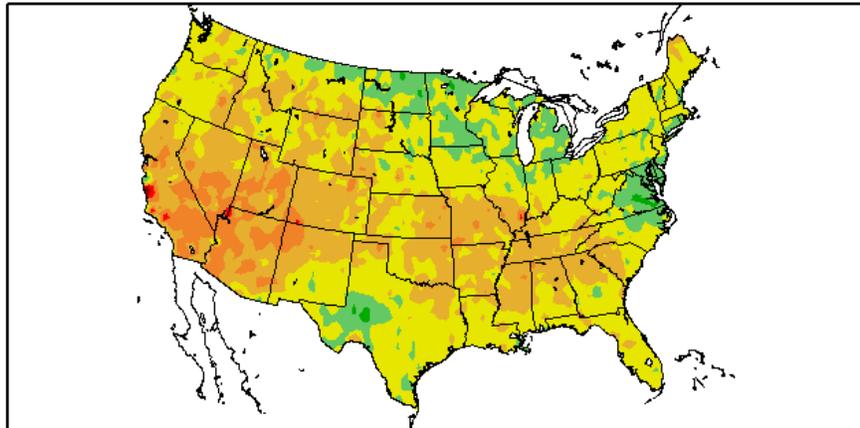
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

[7-day temperature anomaly map](#)

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

Departure from Normal Temperature (F)
6/23/2016 – 6/29/2016



Generated 6/30/2016 at HPRCC using provisional data.

Regional Climate Centers

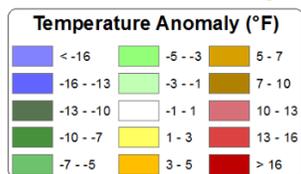
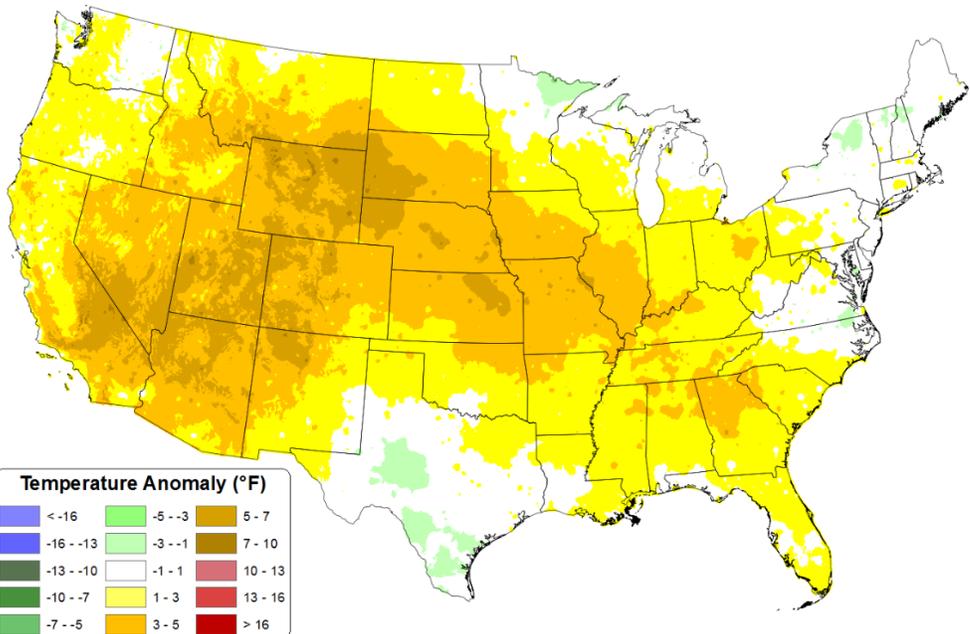
Month-to-Date, All Available Data Including SNOTEL and NWS Networks

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 June 2016 - 28 June 2016
Period ending 7 AM EST 28 Jun 2016
Base period: 1981-2010
(Map created 29 Jun 2016)



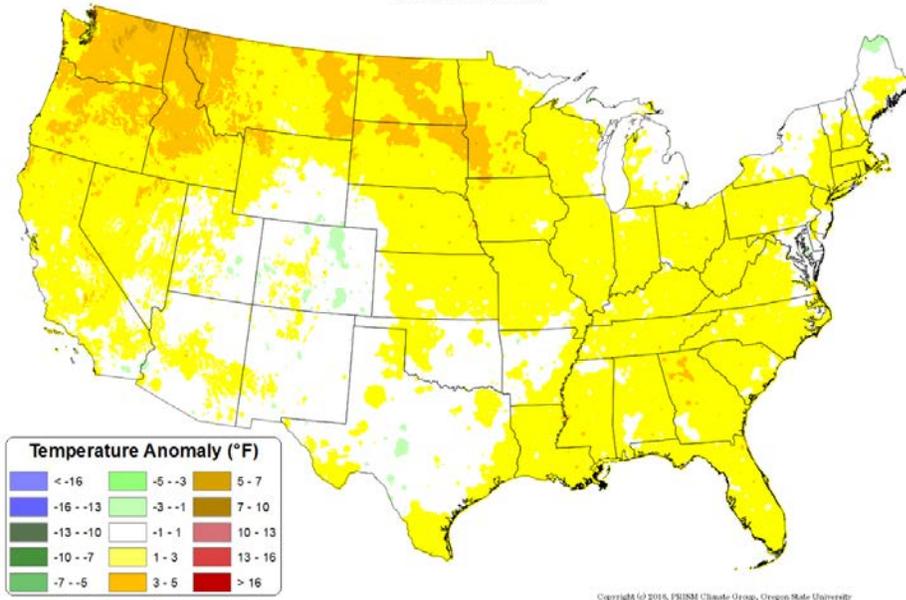
Copyright © 2016, PRISM Climate Group, Oregon State University

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

Source: PRISM

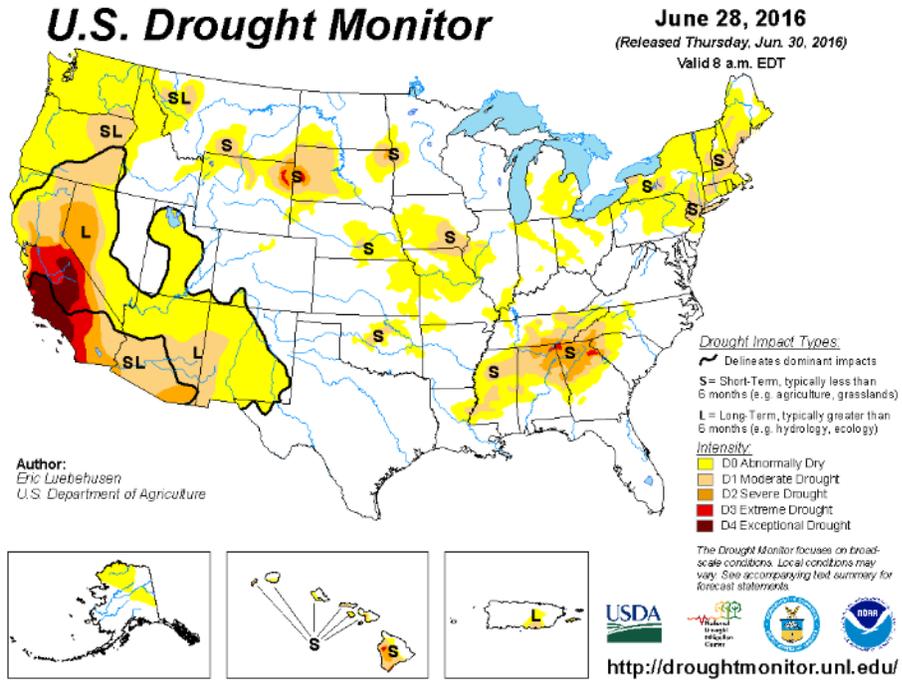
Daily Mean Temperature Anomaly: March 2016 - May 2016
Period ending 7 AM EST 31 May 2016
Base period: 1981-2010
(Map created 12 Jun 2016)

[March through May daily mean temperature anomaly map](#)



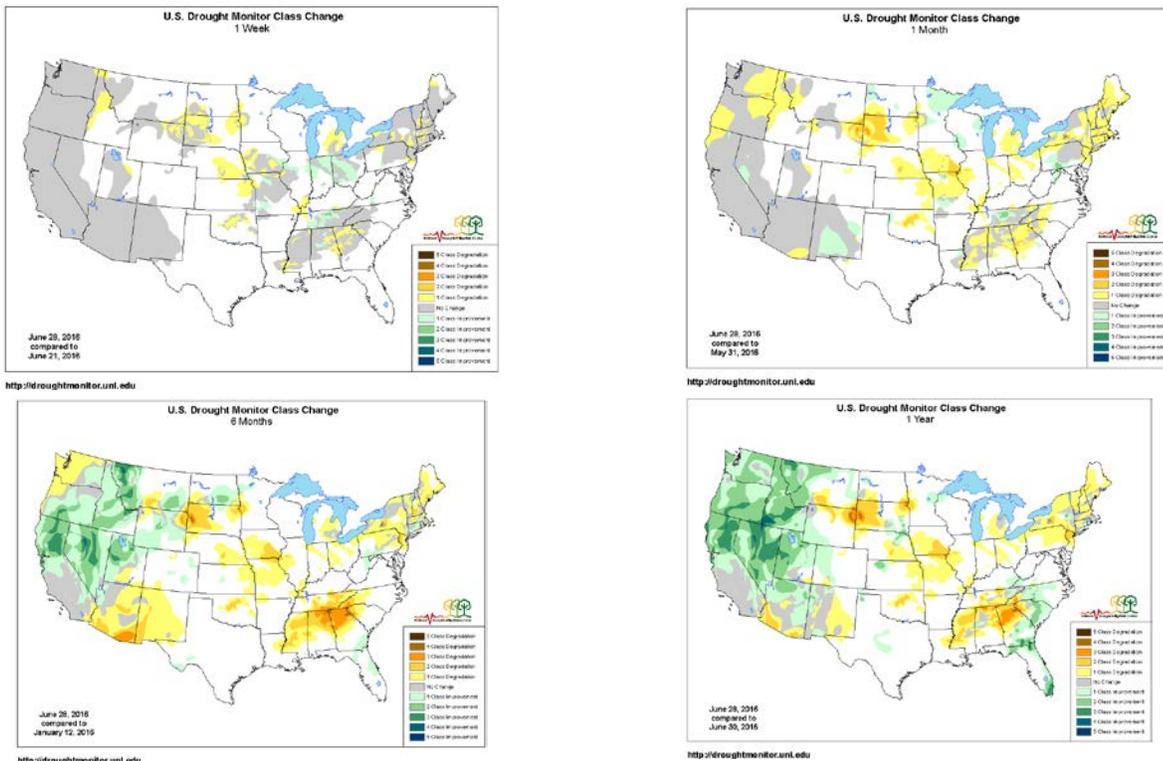
Drought

[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



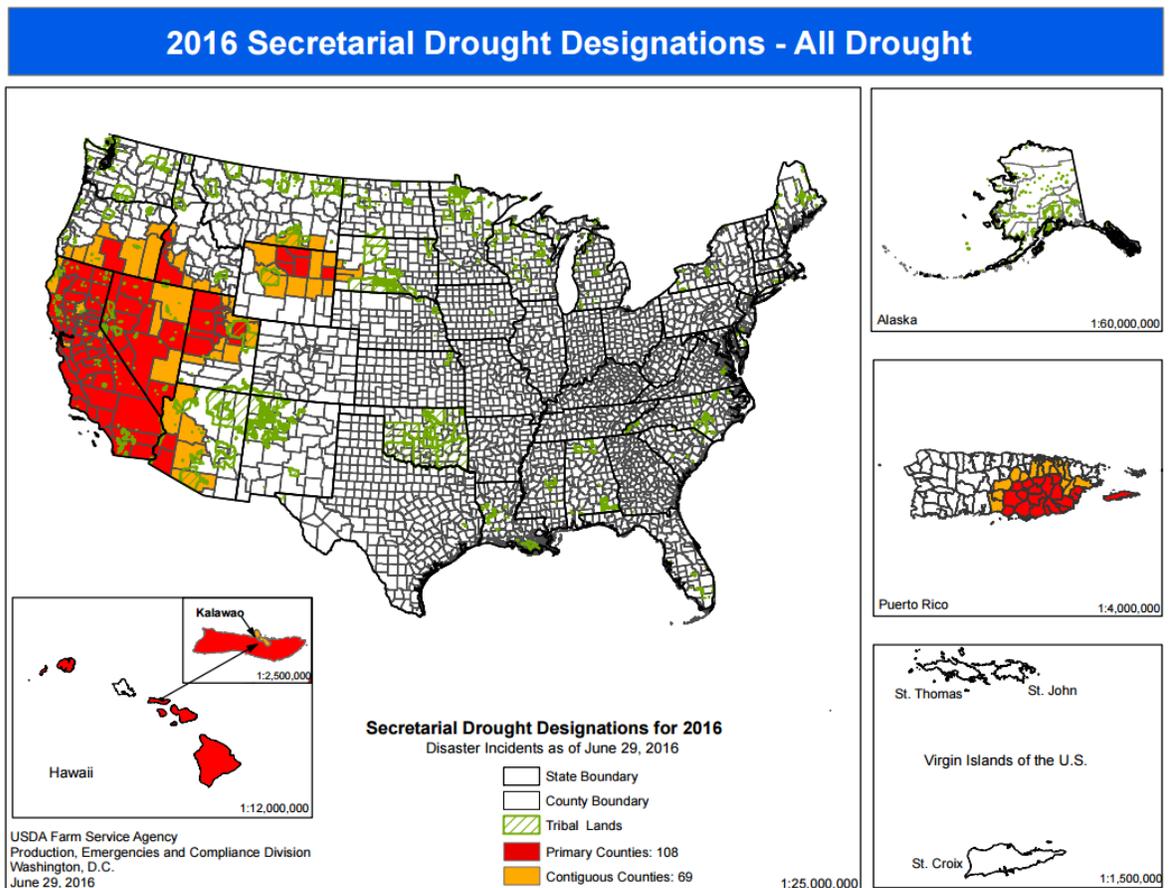
[Changes in drought conditions over the last 12 months](#)

Current National [Drought Summary](#), June 28, 2016

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

“Please note the Drought Monitor depicts conditions valid through Tuesday morning, 8 a.m., EDT (12 UTC); any of the recent locally heavy rain which fell after Tuesday morning (June 28) will be incorporated into next week’s drought assessment. For the 7-day period ending June 28, despite pockets of locally heavy rain (which led to catastrophic flooding in parts of West Virginia), above-normal temperatures and below-normal rainfall caused dryness and drought to expand or intensify across portions of the central and eastern U.S. Nationally, the percent of soil moisture rated poor to very poor climbed 5 points over last week to 31 percent (as of June 26, according to USDA-NASS), which was 14 percentage points higher than last year at the same time.”

USDA 2016 Secretarial [Drought Designations](#)

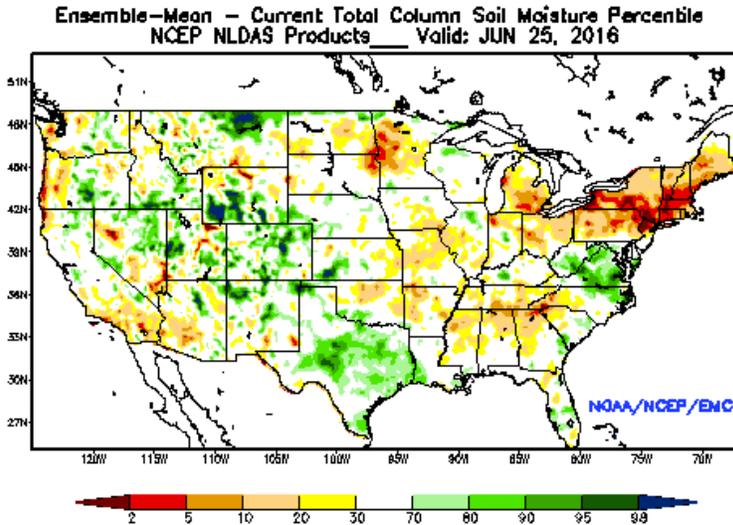


Highlighted Drought Resources

- [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](#)

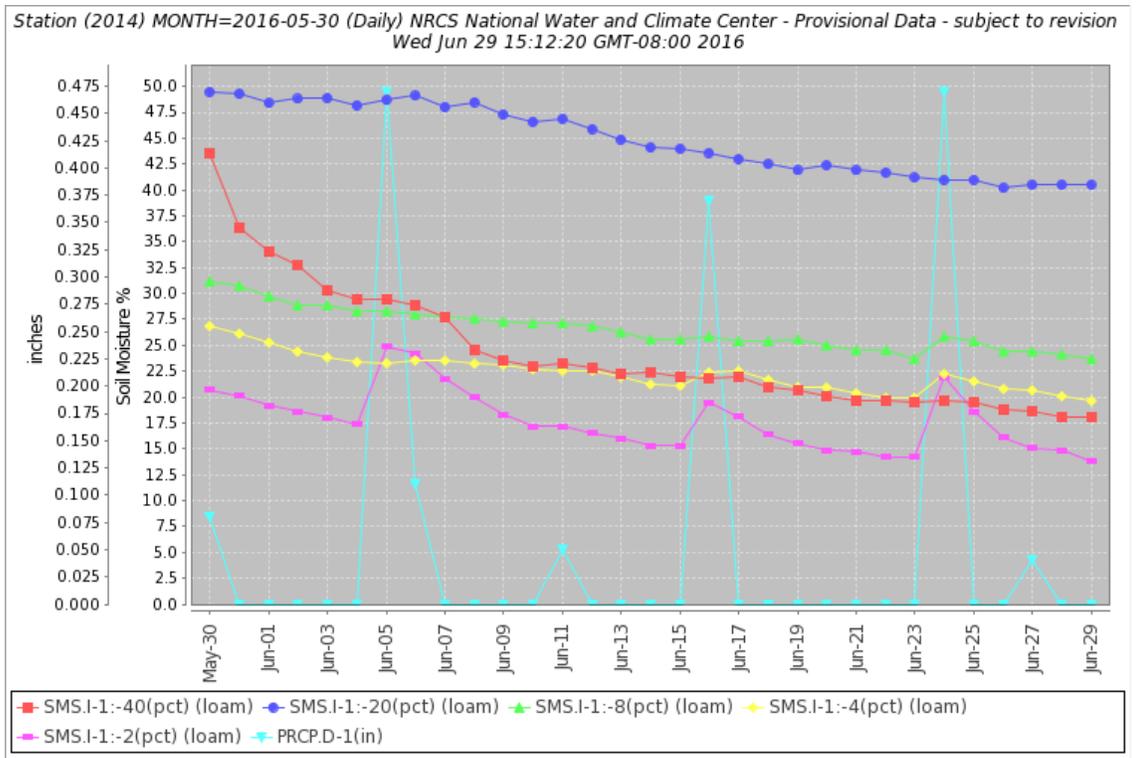
Other Climatic and Water Supply Indicators

Soil Moisture



[Modeled soil moisture percentiles](#) as of June 25, 2016.

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



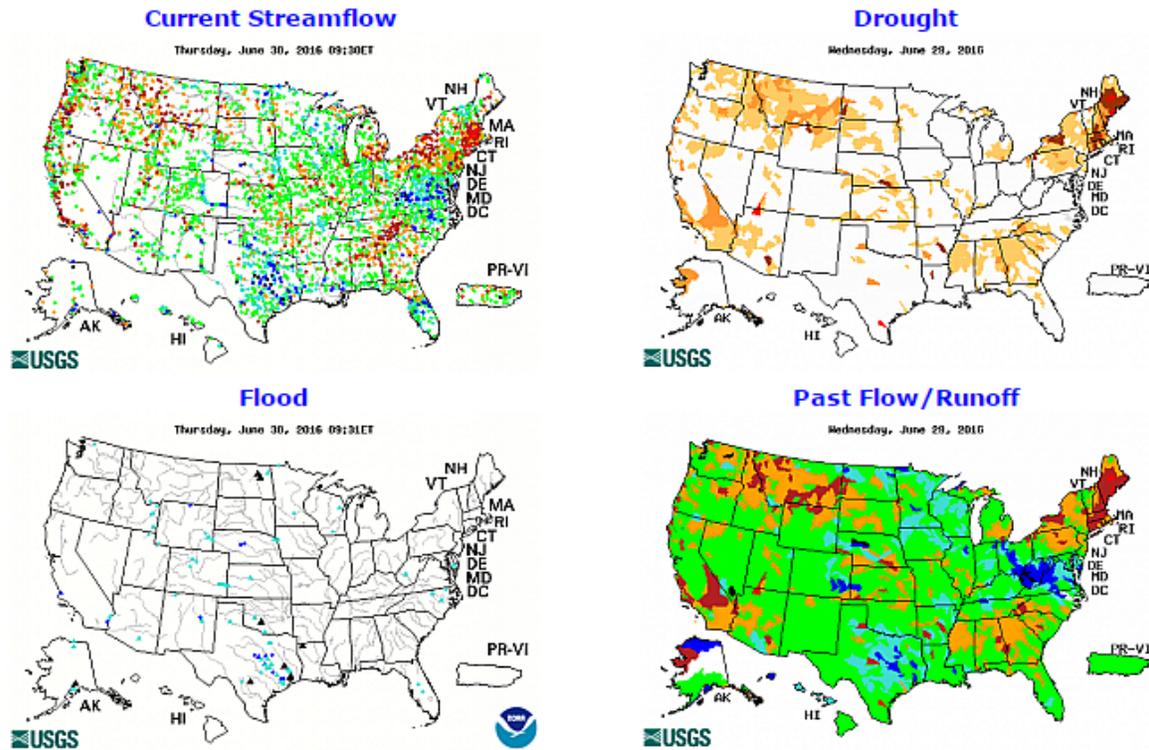
Soil moisture (at 2-, 4-, 8-, 20-, and 40-inch depths) and precipitation for the past 30 days at the [Molly Caren #1 SCAN station 2014](#) in Ohio. The three largest precipitation events have increased the soil moisture at this site at the 2-, 4-, and 8-inch sensor depths. The 20- and 40-inch sensors showed no increase, but had a slight pause in drying from the precipitation events as they trended down for 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



Click to enlarge and display legends

[Current streamflow maps](#)

Current Reservoir Storage

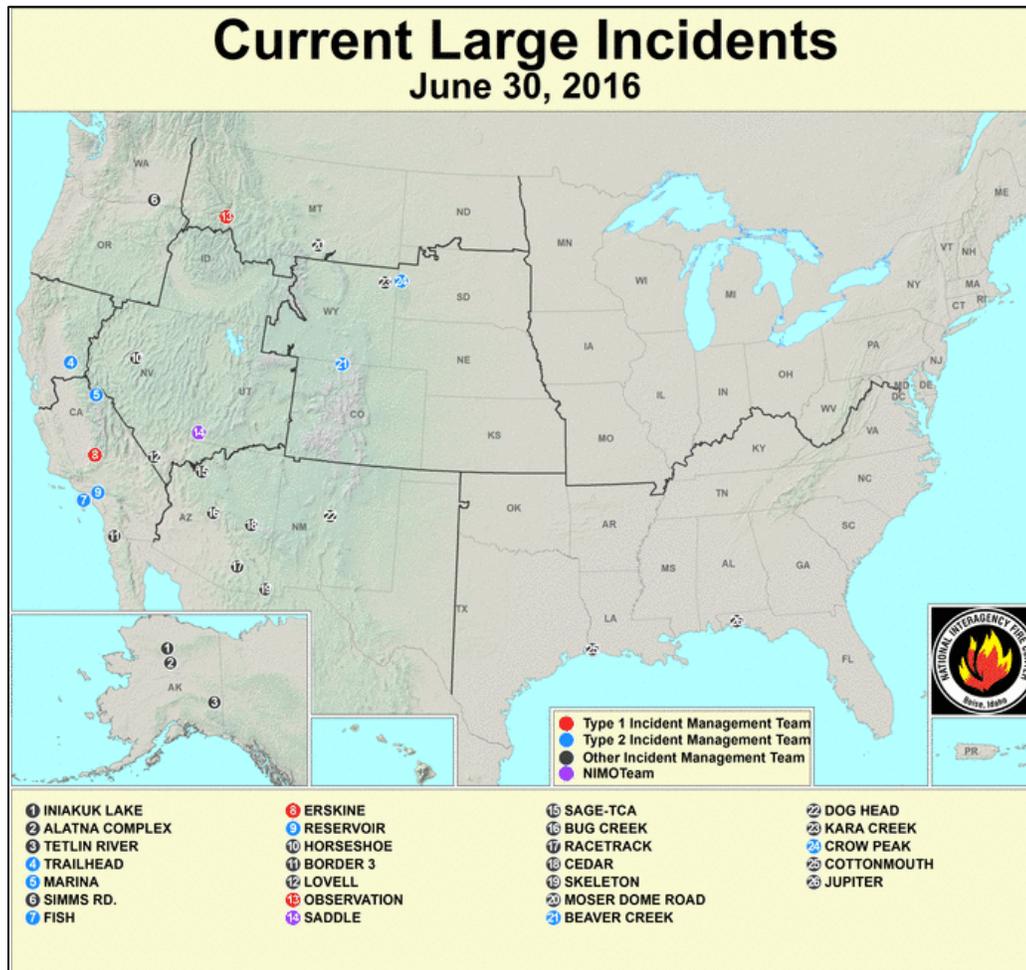
[National Water and Climate Center Reservoir Data](#)

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](#)



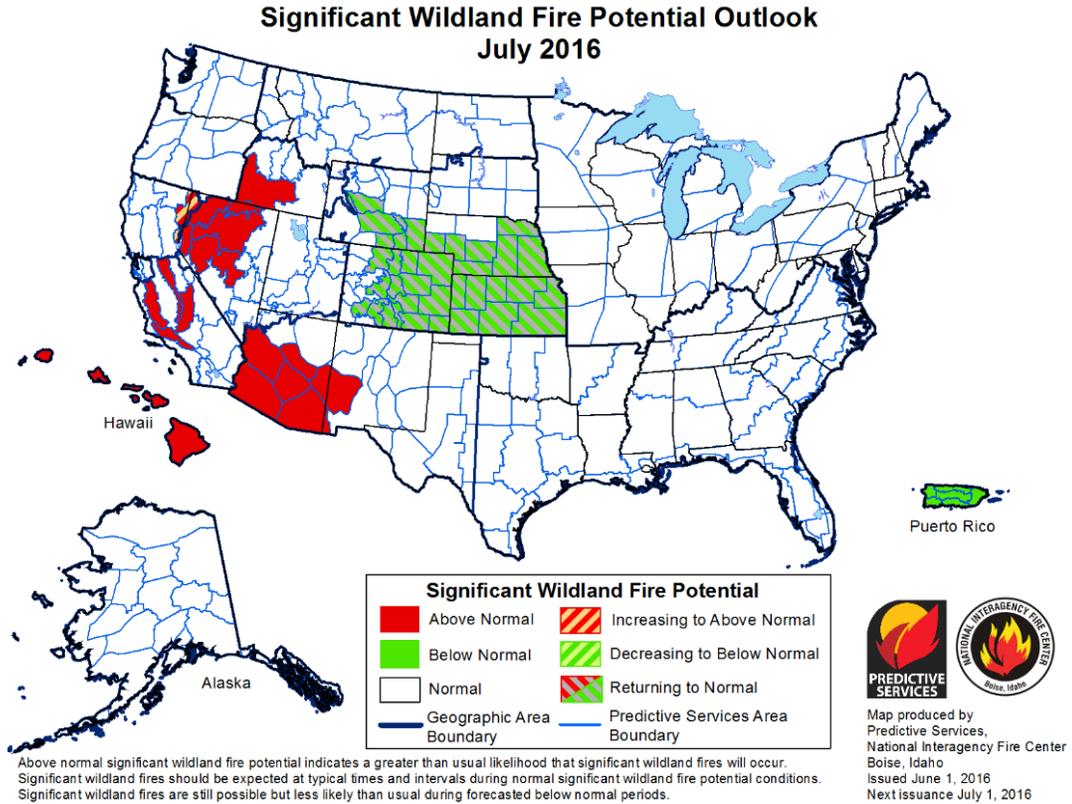
Short- and Long-Range Outlooks

Agricultural Weather Highlights

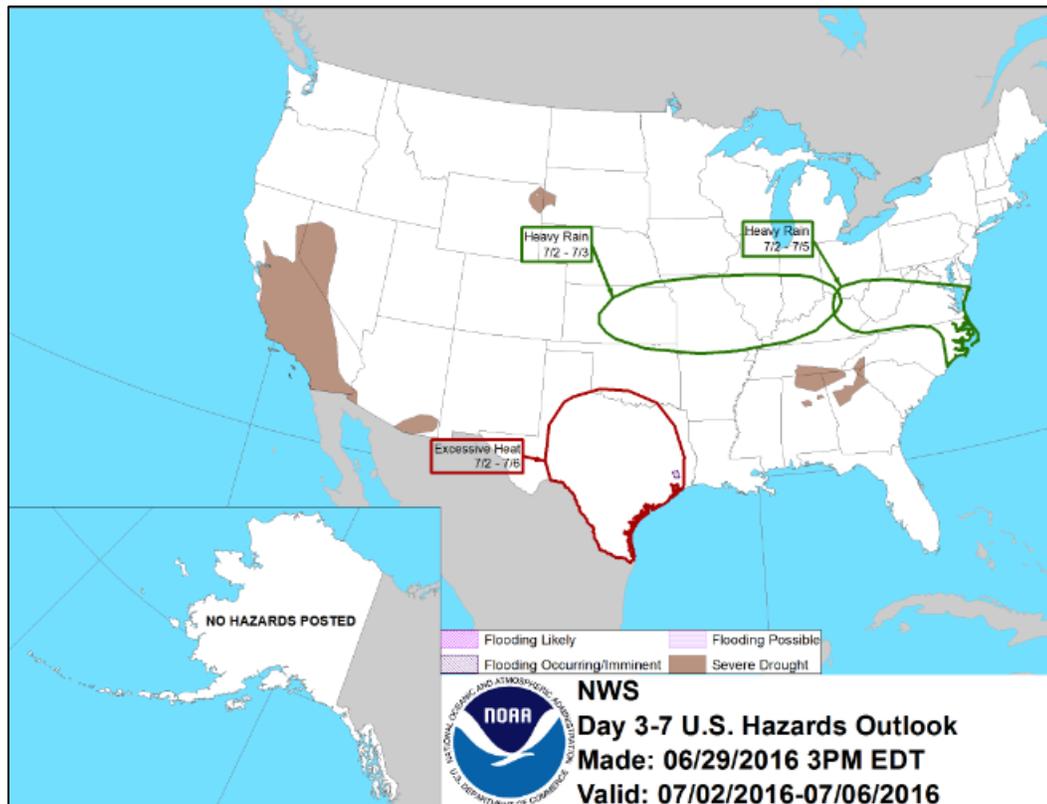
Author: Eric Luebehusen, Agricultural Meteorologist, USDA/OCE/WAOB

[National Outlook, June 29, 2016](#): “For the remainder of the workweek, high pressure will maintain sunny skies across most of the eastern and southern U.S., with cooler-than-normal weather from the Corn Belt into the Northeast contrasting with lingering warmth over the Gulf Coast States. Showers will persist, however, in the western Corn Belt and central Plains, where rain could be locally heavy. During the upcoming holiday weekend, an area of low pressure will develop over the central High Plains and track eastward, producing a swath of increasingly heavy rain from the central Plains to the southern Corn Belt, reaching the southern Mid-Atlantic Region by early next week. Five-day rainfall totals are expected to top 5 inches in parts of Kansas, northern Oklahoma, and western Missouri. Farther west, monsoon showers will continue over the Four Corners and Southwest, with lighter showers spreading as far north as the central and northern Rockies. Hot, seasonably dry weather is expected over the Pacific Coast States. The NWS 6- to 10-day outlook for July 4 – 8 calls for near- to above-normal temperatures across the contiguous U.S., with the greatest likelihood of abnormal warmth over the Great Plains, western Corn Belt, and Gulf Coast Region. Meanwhile, above-normal precipitation from the Upper Midwest into the Southeast will contrast with drier-than-normal weather in the Northwest, western Gulf Coast, and Northeast.”

Fire Potential Outlook: [July 2016](#)



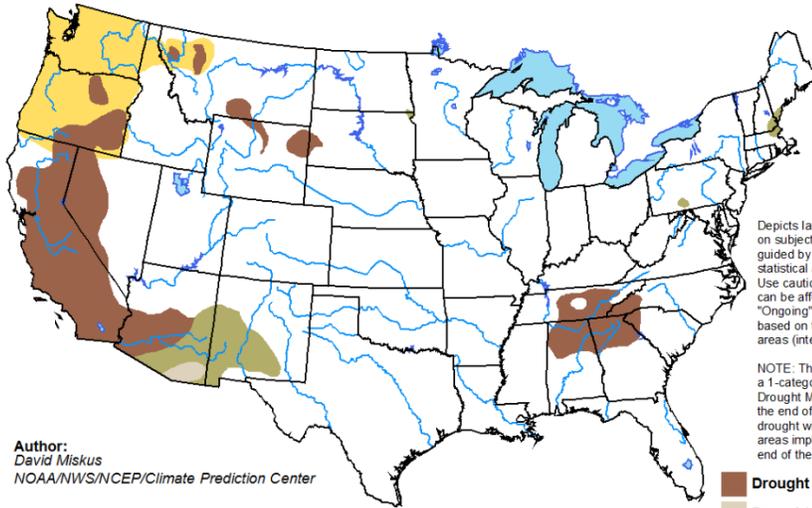
NWS Climate Prediction Center [Weather Hazard Outlook: July 2 - 6, 2016](#)



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



Author:
David Miskus
NOAA/NWS/NCEP/Climate Prediction Center

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).

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

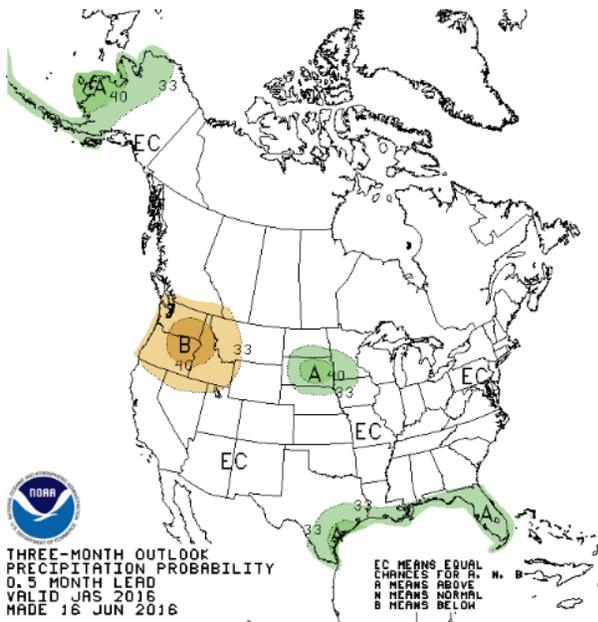


<http://go.usa.gov/3eZ73>



NWS Climate Prediction Center 3-Month Outlook

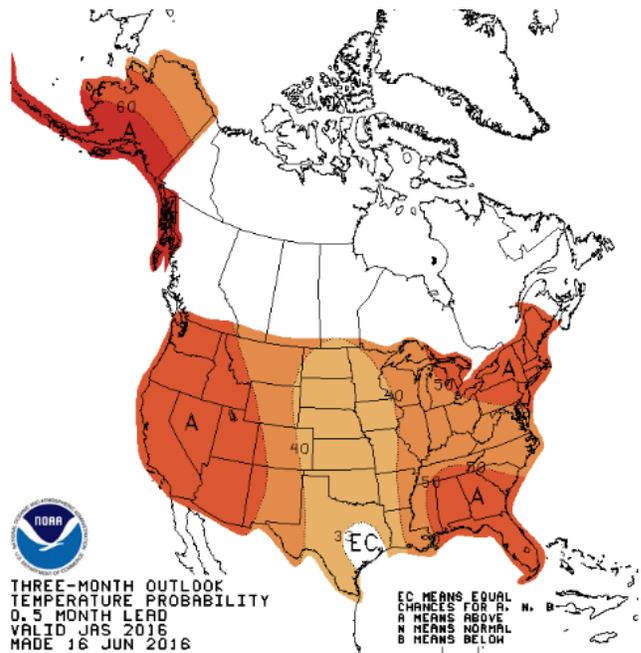
[Precipitation](#)



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](#).