

# Water and Climate Update

June 23, 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.

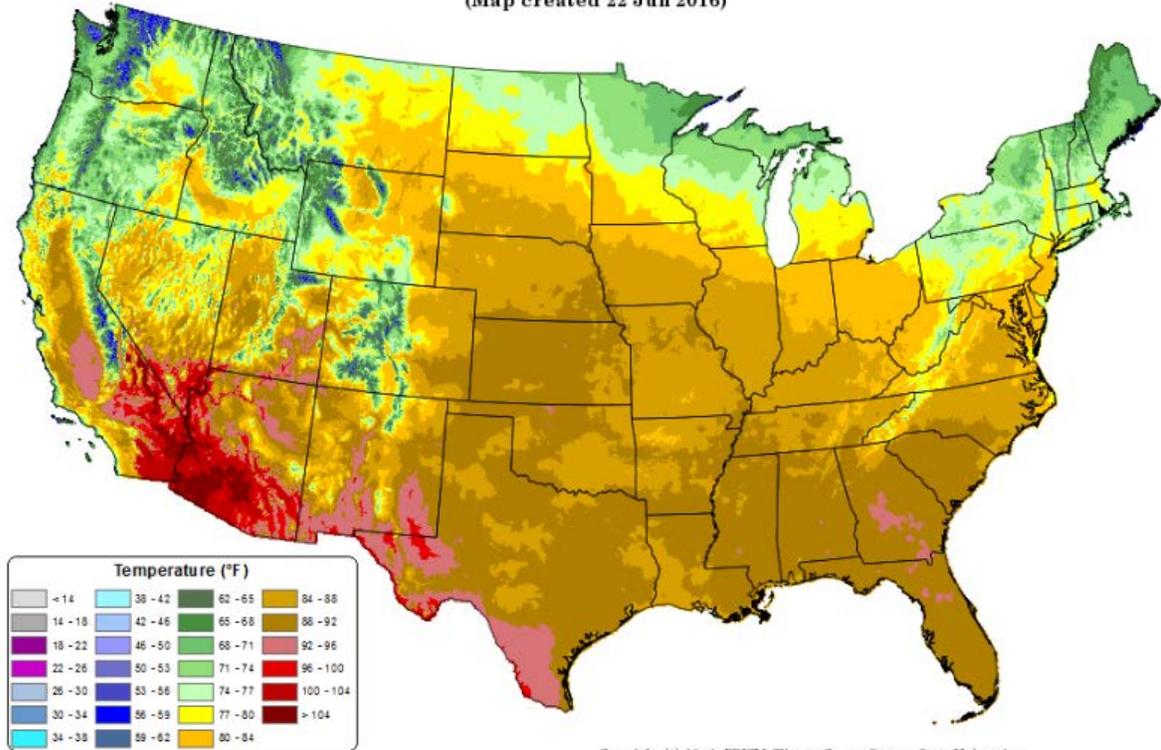
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Temperature .....	5	Short- and Long-Range Outlooks.....	11
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## Extreme heat in the Southwest feeds western wildfires

**Average Daily Maximum Temperature: 01 June 2016 - 21 June 2016**

Period ending 7 AM EST 21 Jun 2016

(Map created 22 Jun 2016)



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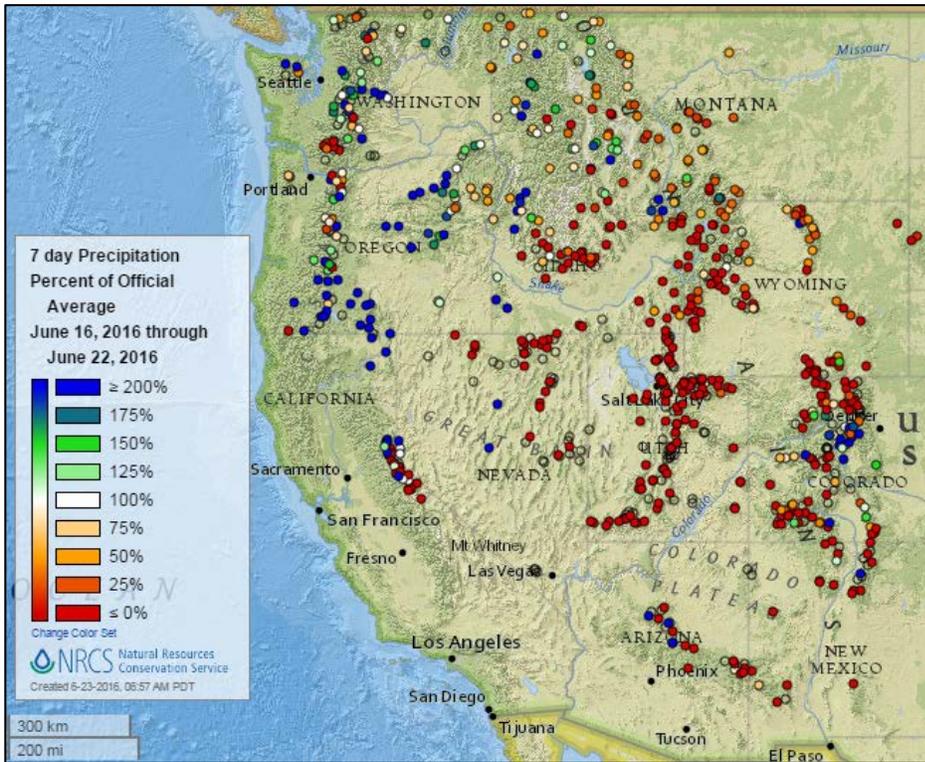
This past week, a heat wave across the Southwest created difficult conditions for firefighters and was related to several deaths in Arizona. Excessive heat warnings were issued for southern California and Arizona, where the brunt of the near-record heat affected millions. Thousands of firefighters battled serious fires in the region.

[Intense Heatwave Kills Four, Feeds Southwest Wildfires](#), NBC News

[Heat Wave News](#), ABC News

## Precipitation

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

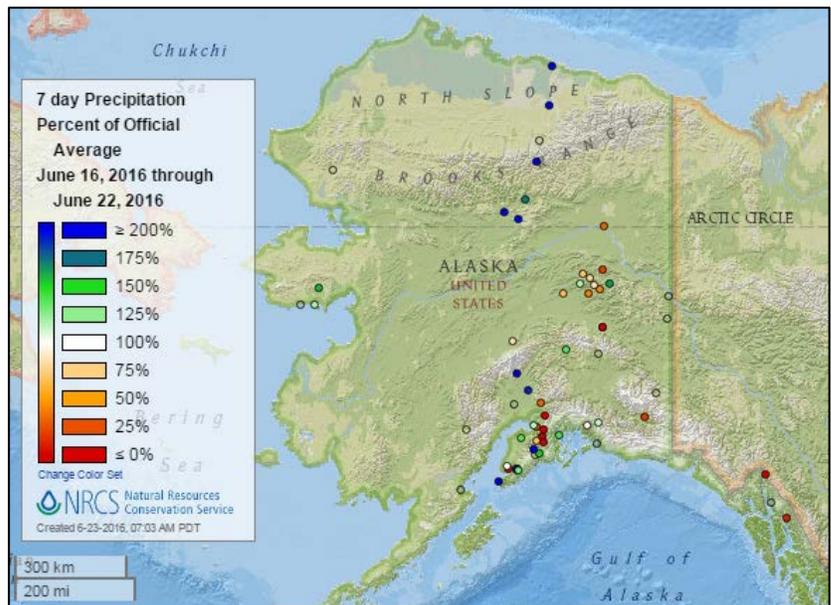


[7-day precipitation percent of average map](#)

**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](#)



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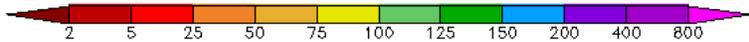
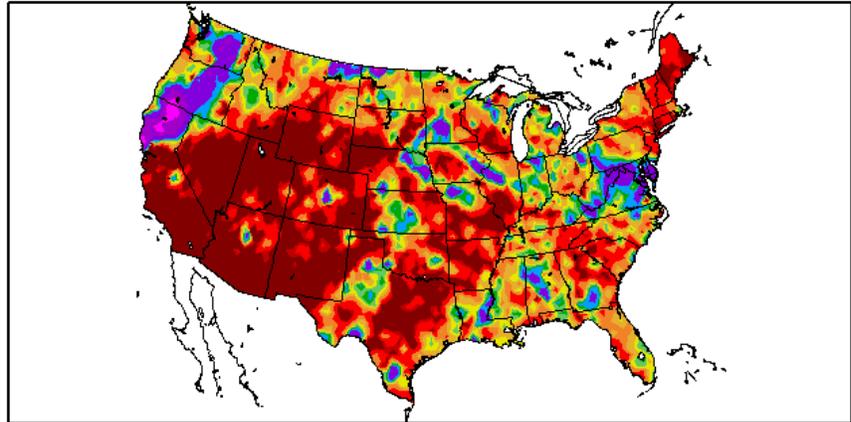
## Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

Percent of Normal Precipitation (%)  
6/16/2016 – 6/22/2016

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



Generated 6/23/2016 at HPRCC using provisional data.

Regional Climate Centers

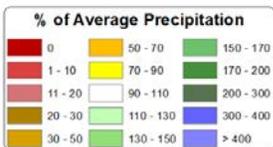
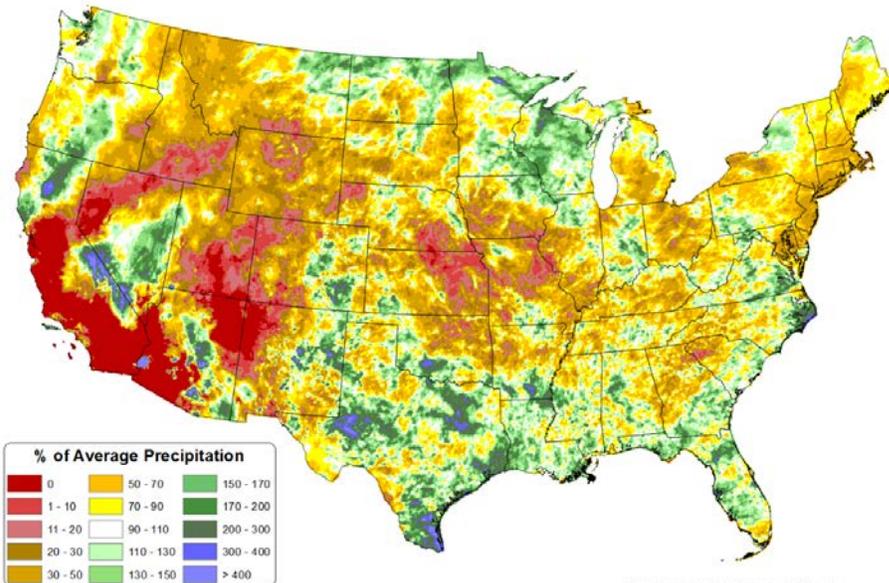
## Month-to-Date, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

Total Precipitation Anomaly: 01 June 2016 - 21 June 2016  
Period ending 7 AM EST 21 Jun 2016  
Base period: 1961-2010  
Map created 22 Jun 2016

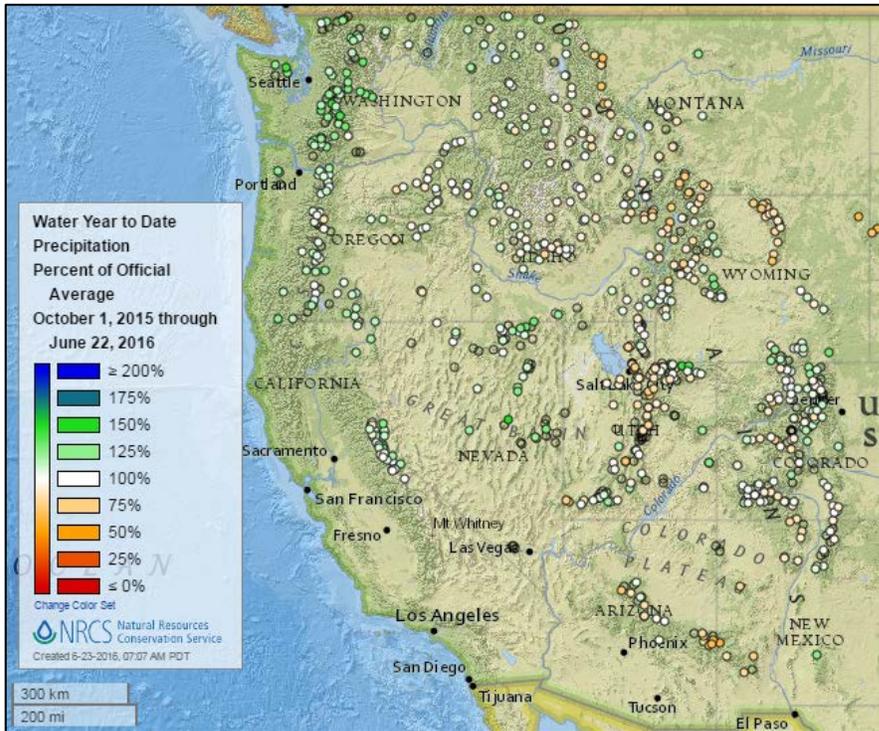
[Month-to-date national precipitation percent of average map](#)

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



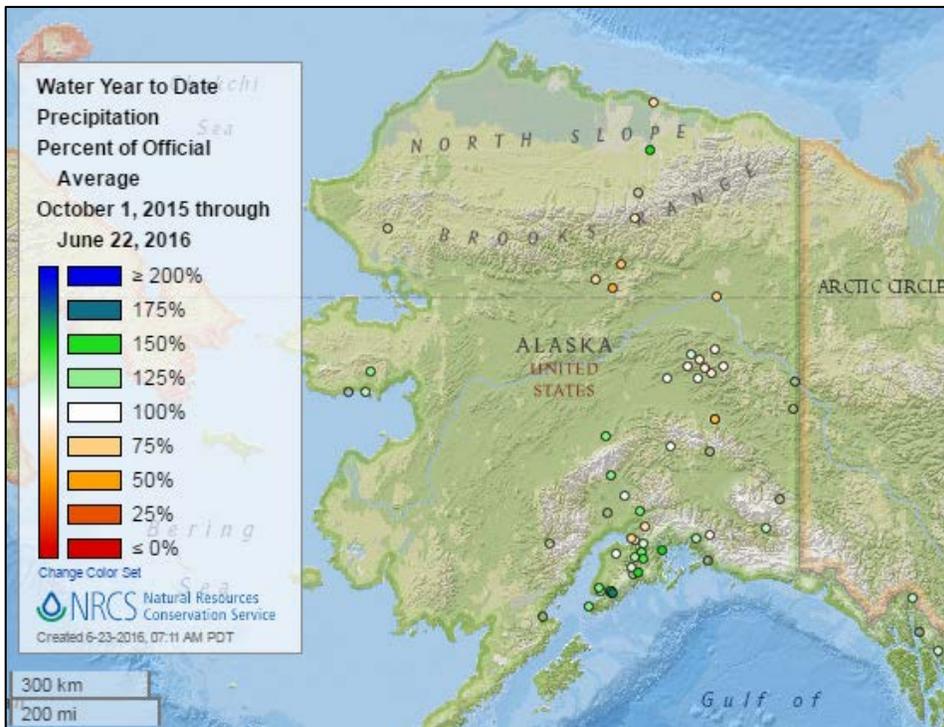
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Water Year-to-Date, Western Mountain Sites (NRCS SNOTEL Network)



[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

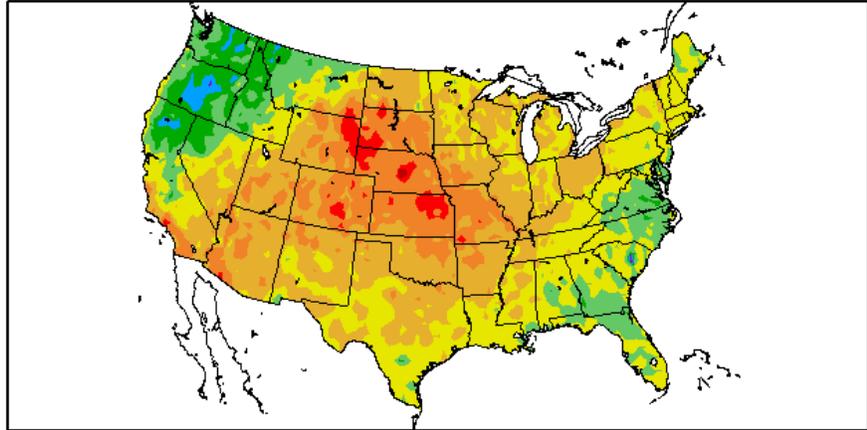
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

[7-day temperature anomaly map](#)

Departure from Normal Temperature (F)  
6/16/2016 – 6/22/2016

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



Generated 6/23/2016 at HPRCC using provisional data.

Regional Climate Centers

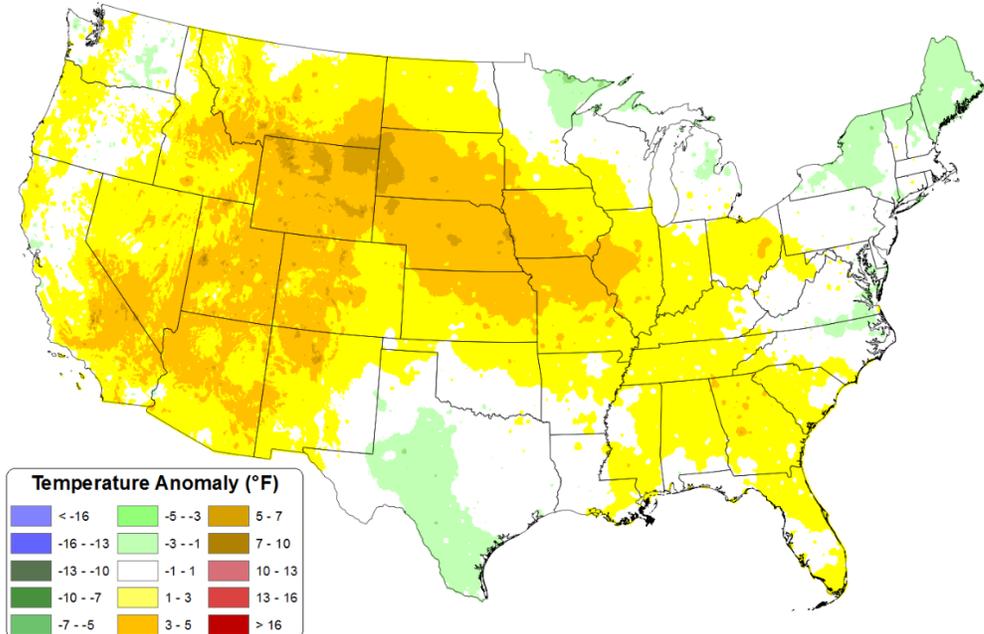
Month-to-Date, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

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

Daily Mean Temperature Anomaly: 01 June 2016 - 21 June 2016  
Period ending 7 AM EST 21 Jun 2016  
Base period: 1981-2010  
(Map created 22 Jun 2016)

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

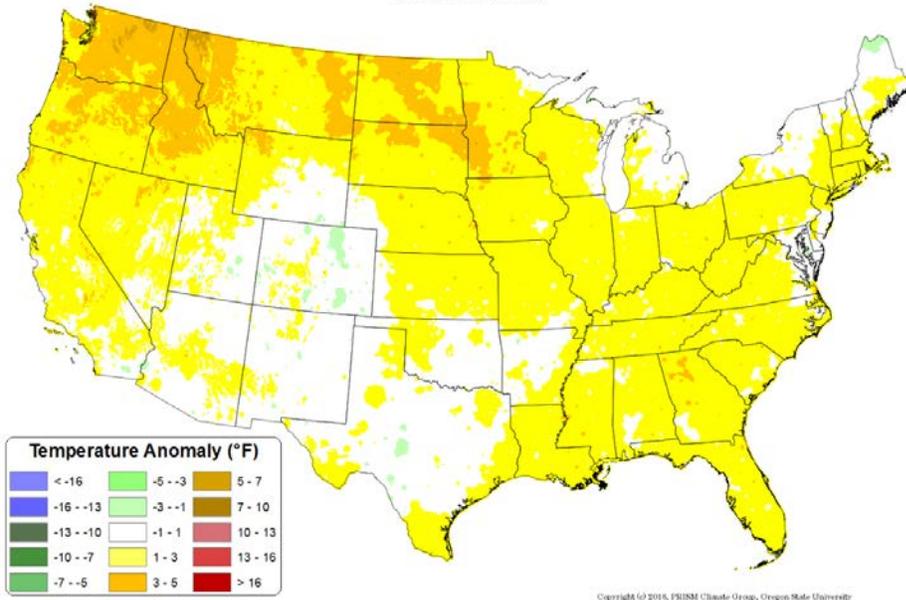


Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

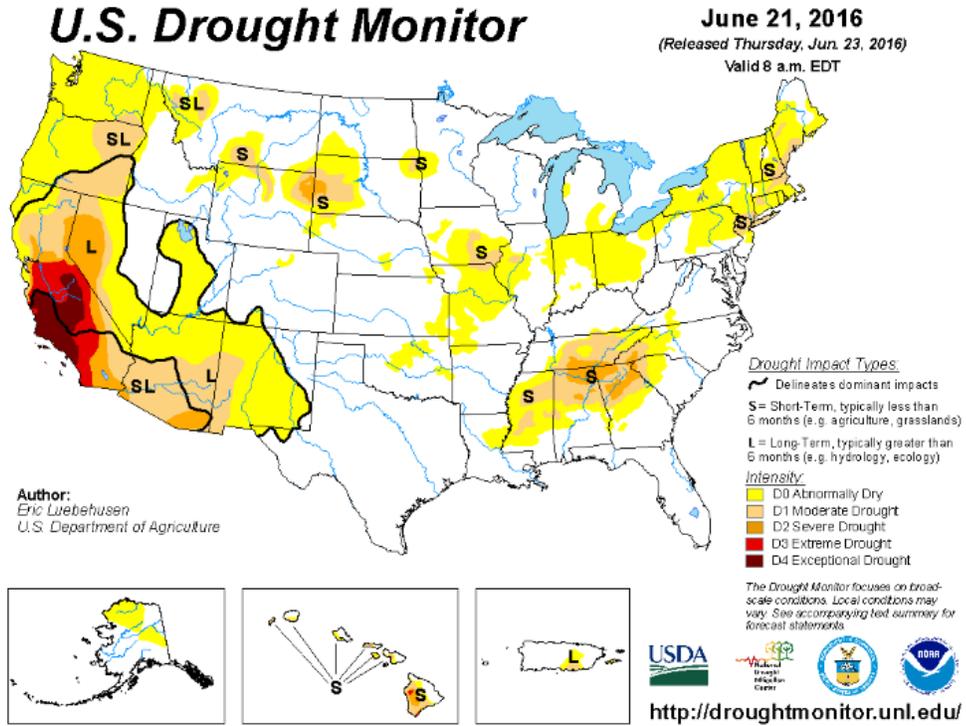
Daily Mean Temperature Anomaly: March 2016 - May 2016  
Period ending 7 AM EST 31 May 2016  
Base period: 1981-2010  
(Map created 12 Jun 2016)

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



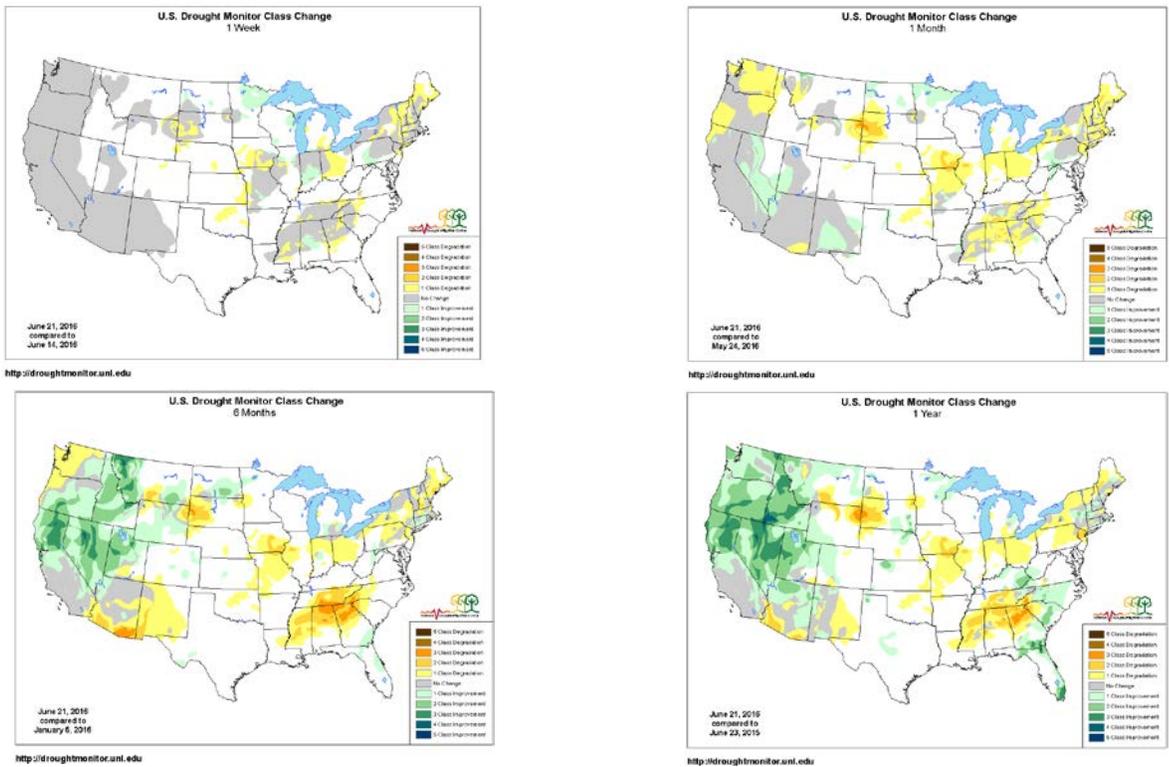
Drought

[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



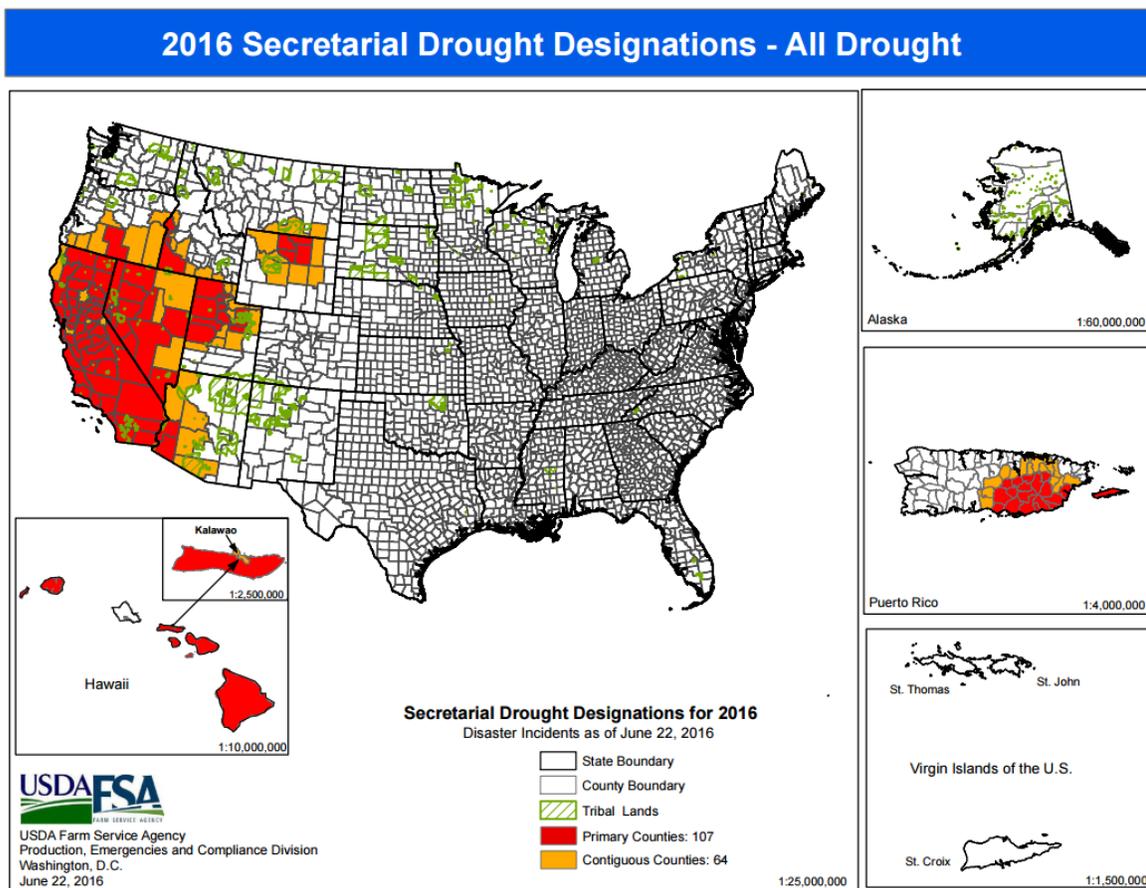
[Changes in drought conditions over the last 12 months](#)

**Current National [Drought Summary](#), June 21, 2016**

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

“Please note any rain which fell after Tuesday morning, 8 a.m. EDT, will be incorporated into next week’s drought assessment. For the 7-day period ending June 21, hot weather intensified or expanded from southern California and the Southwest across the Plains and interior Southeast. Cooler-than-normal conditions for the week were confined mostly to the Northwest. Rain was intermittent, albeit locally heavy, from the Upper Midwest to the Mid-Atlantic and Southeastern States. Despite the locally heavy showers and thunderstorms, the overall trend toward drought persistence or expansion prevailed across many areas east of the Rockies.”

**USDA 2016 Secretarial [Drought Designations](#)**

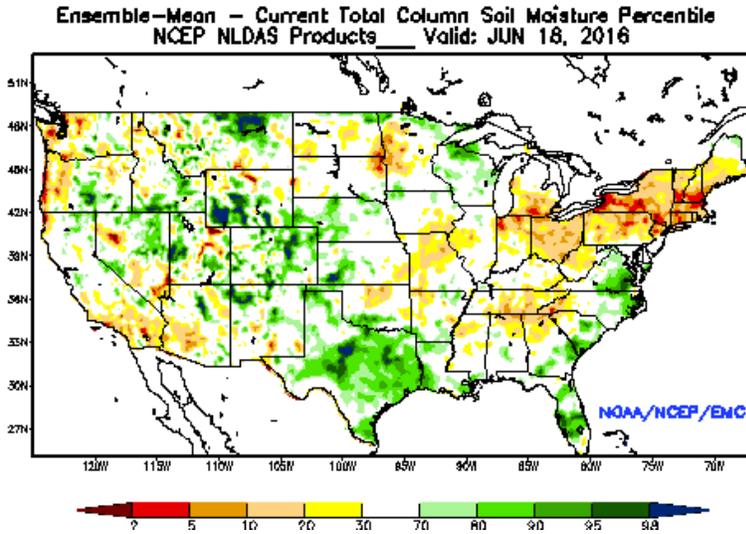


**Highlighted Drought Resources**

- [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](#)

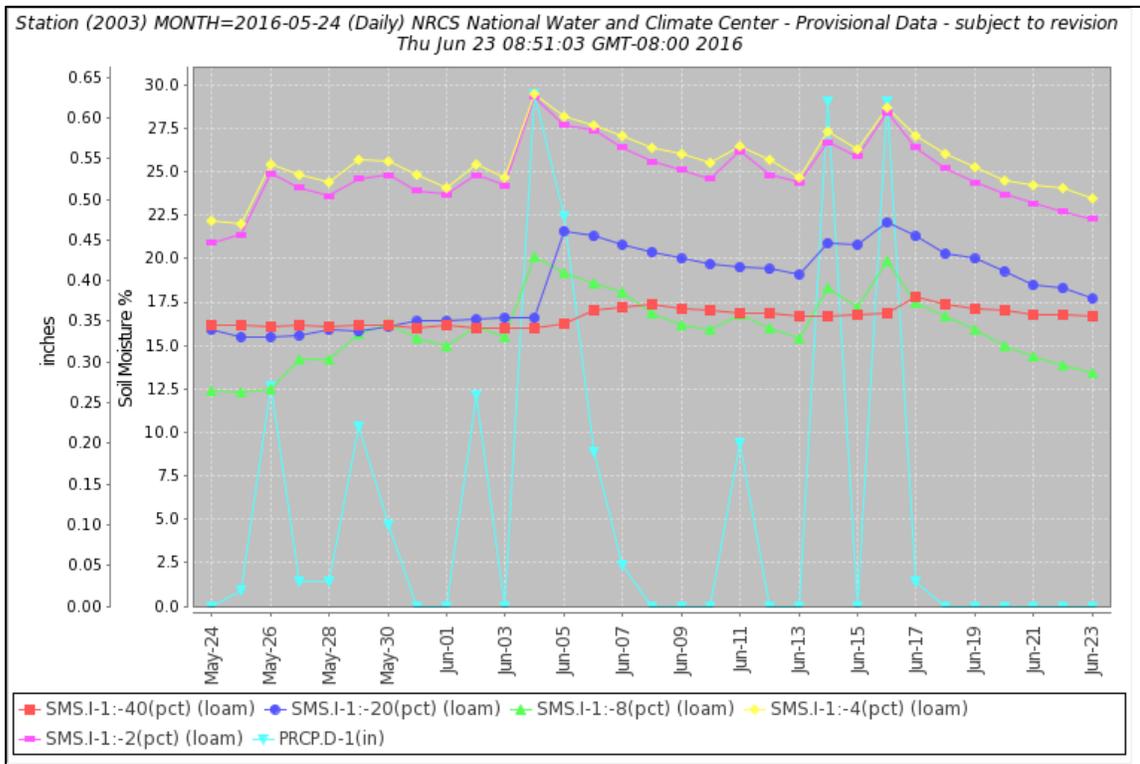
## Other Climatic and Water Supply Indicators

### Soil Moisture



[Modeled soil moisture percentiles](#) as of June 18, 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 [Wabeno #1 site number 2003](#) in Wisconsin. The 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 only increased from the heaviest precipitation events.

### Soil Moisture Data Portals

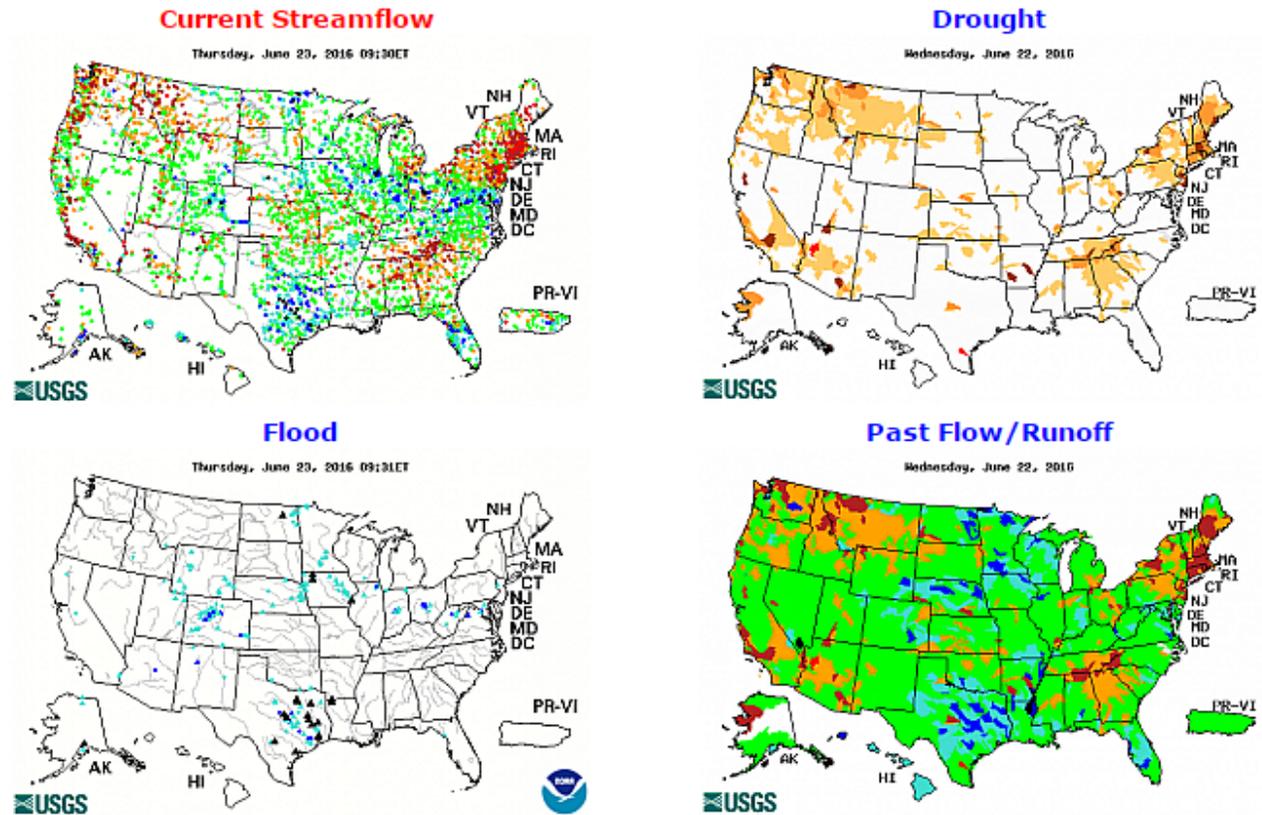
[CRN Soil Moisture](#)

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

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

### Streamflow

Source: USGS



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](#)

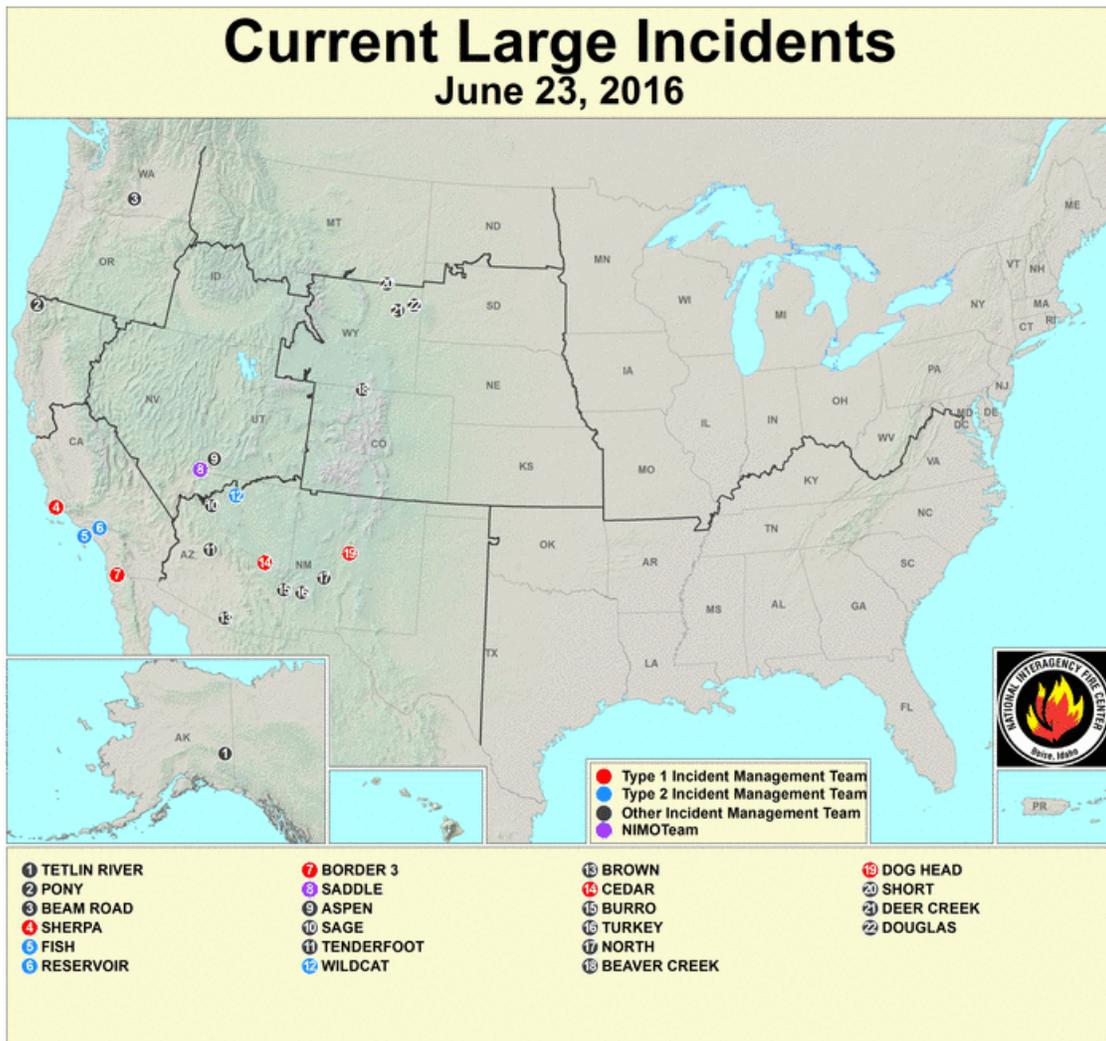
[Pacific Northwest/Snake/Columbia](#)

[Sevier River Water, Utah](#)

[Upper Missouri, Kansas, Oklahoma, Texas](#)

[California Reservoir Conditions](#)

Wildfires: [USDA Forest Service Active Fire Mapping](#)



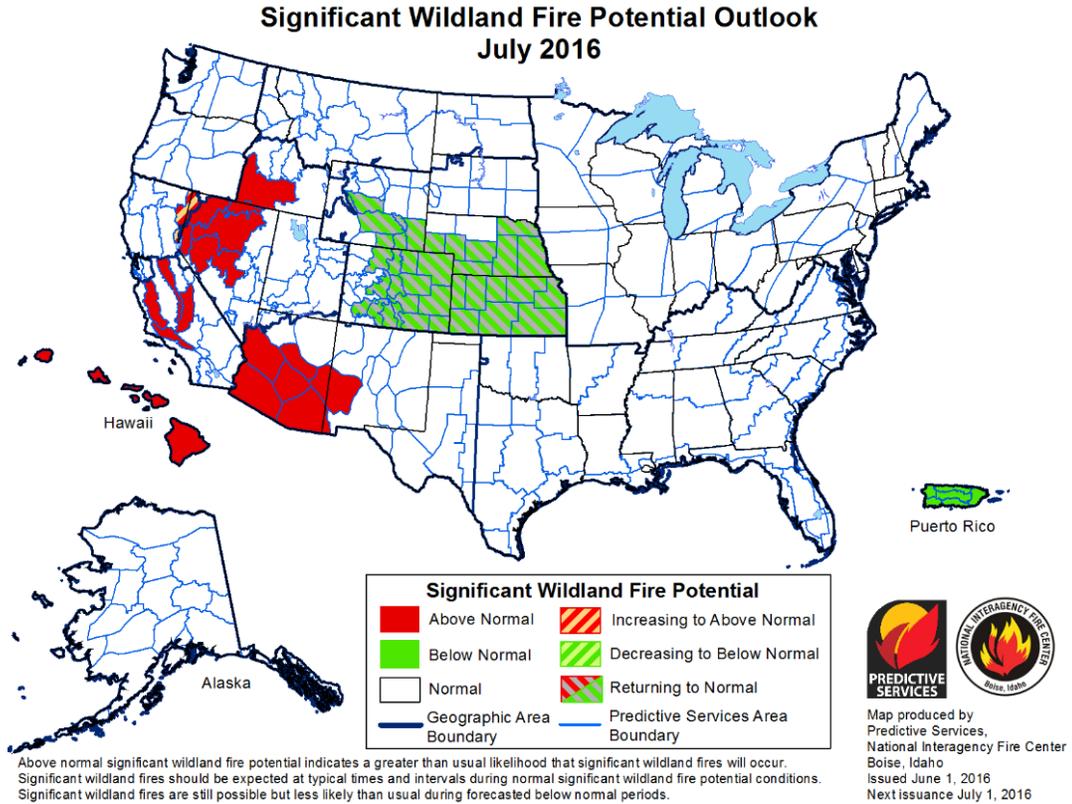
## Short- and Long-Range Outlooks

### Agricultural Weather Highlights

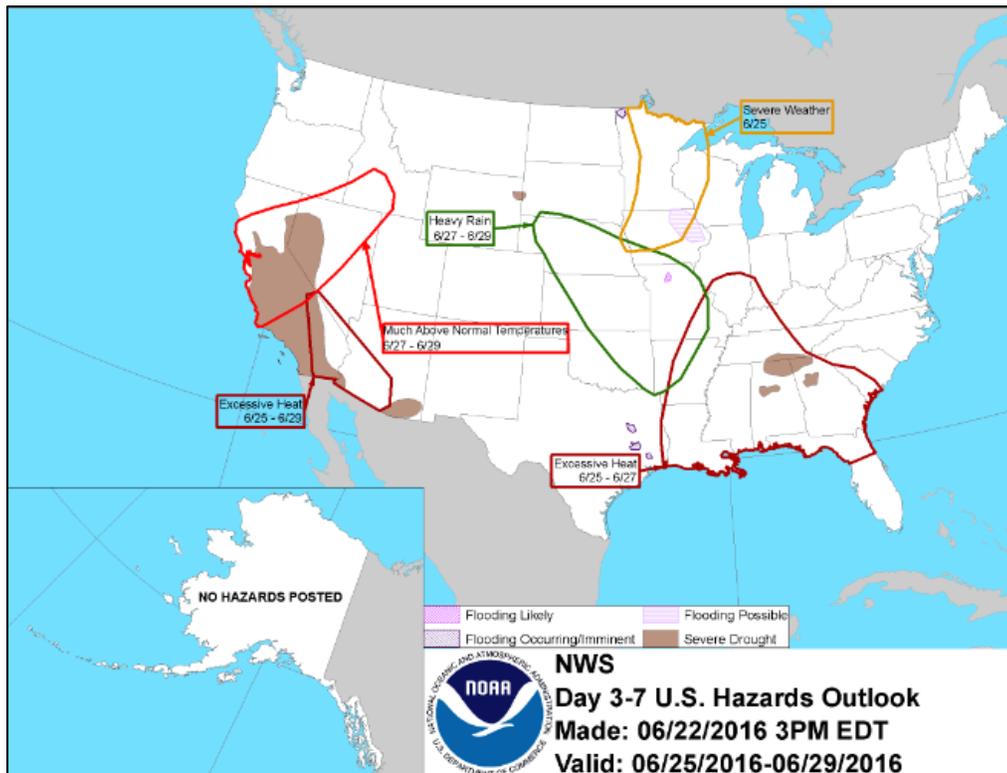
Author: Brad Rippey, Agricultural Meteorologist, USDA/OCE/WAOB

[National Outlook, June 16, 2016](#): “A low-pressure system currently crossing Michigan will reach the Mid-Atlantic coast on Friday. Rainfall along the storm’s path could reach 1 to 3 inches. Showers will also linger across the lower Southeast, including Florida, where totals of 1 to 2 inches can be expected. During the weekend and early next week, showers associated with a cold front will sweep across the northern Plains and the Midwest, trailed by cooler weather. Farther south, however, heat will persist across the central and southern Plains and develop across the Southwest. Starting during the weekend, temperatures could reach or exceed 120°F in parts of the Desert Southwest. The NWS 6- to 10-day outlook for June 21 – 25 calls for the likelihood of near- to below-normal temperatures in much of the eastern half of the U.S., while hotter-than-normal conditions will prevail across the West and lower Southeast. Meanwhile, near to below-normal rainfall across most of the country will contrast with wetter-than-normal weather along the Atlantic Seaboard, in the western Gulf Coast region, and from the central Plains into the Great Lakes and Northeastern States.”

Fire Potential Outlook: [July 2016](#)



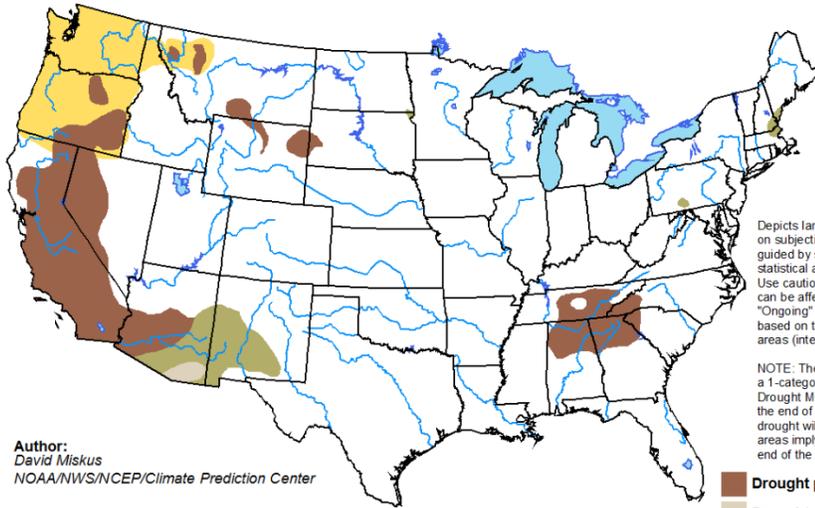
NWS Climate Prediction Center [Weather Hazard Outlook: June 25-29, 2016](#)



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

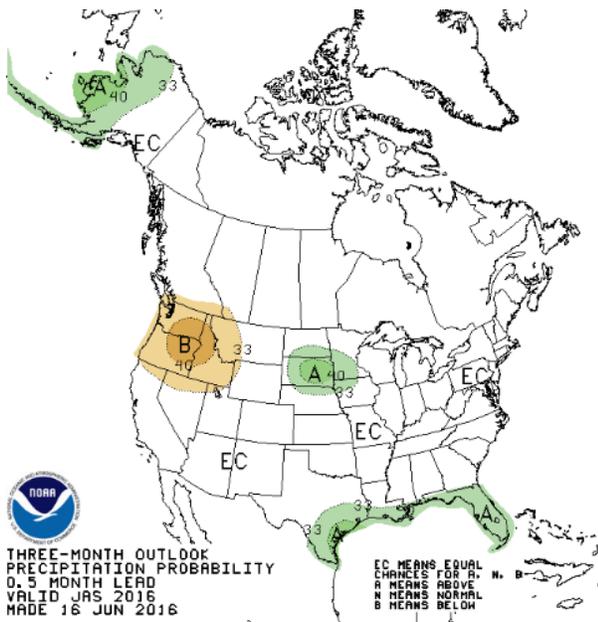


<http://go.usa.gov/3eZ73>



NWS Climate Prediction Center 3-Month Outlook

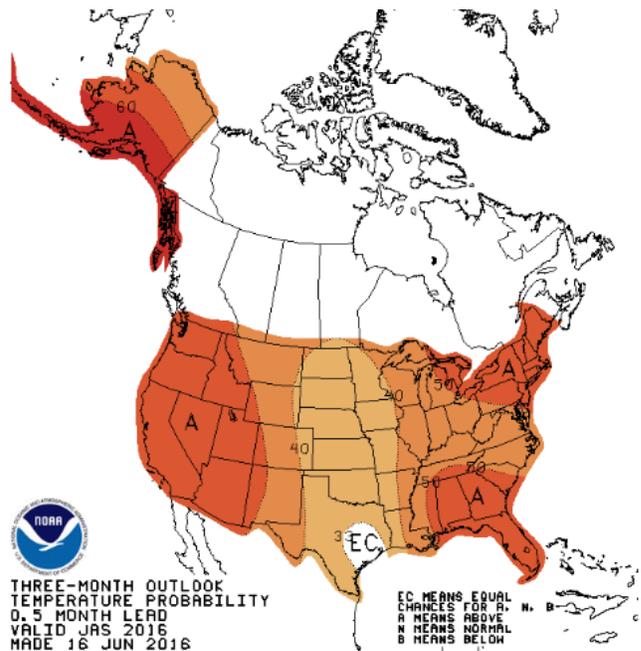
[Precipitation](#)



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](#).