United States Department of Agriculture

Water and Climate Update

June 14, 2018

The Natural Resources Conservation Service produces this weekly report using data and products from the <u>National Water and Climate Center</u> and other agencies. The report focuses on seasonal snowpack, precipitation, temperature, and drought conditions in the U.S.

| Precipitation2 | Other Climatic and Water Supply Indicators11 |
|----------------|--|
| Temperature6 | Short- and Long-Range Outlooks14 |
| Drought8 | More Information17 |

Wildfires ignite across the Southwest



The 416 Fire burns down Hermosa Cliffs above U.S. Highway 550 on the southeast side of the fire near Hermosa, Colo., June 6, 2018. Jerry McBride/Durango Herald via AP



Today's map from the InciWeb Interagency Incident Information Management System. <u>Latest 416 Fire Information</u>.

Eleven large wildfires are currently burning in the U.S., with most of them centered in the Southwest. The largest, the 416 Fire near Durango, Colorado, has grown to over 27,000 acres with 15% containment. Hot and dry weather is helping to fuel these fires, and mandatory evacuations have been ordered from southern California to Colorado.

Related:

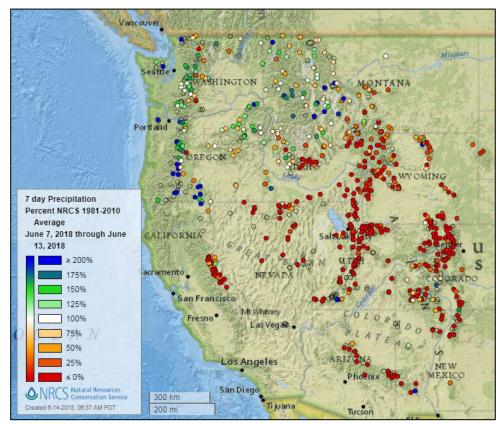
<u>Durango Wildfire 416 Latest Update: Colorado Blaze Still Growing with Ski Reports Now Under Threat</u> Newsweek

Wildfires explode in Southwest; severe weather possible in Northeast ABC News

416 Fire becomes 5th-largest wildfire in Colorado history as blaze expands to 25,900 acres AccuWeather Wildfires continue to burn as West hit with near-record heat ABC News

Precipitation

Last 7 Days, NRCS SNOTEL Network



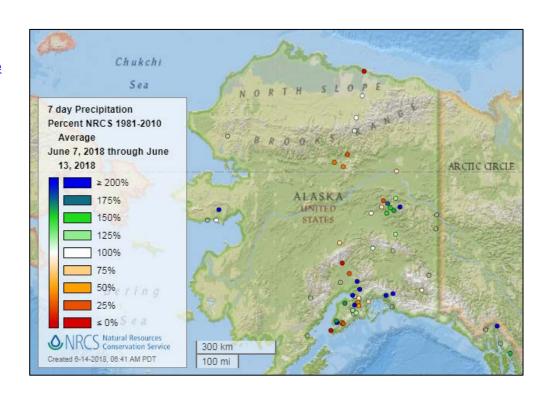
7-day precipitation percent of average map

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



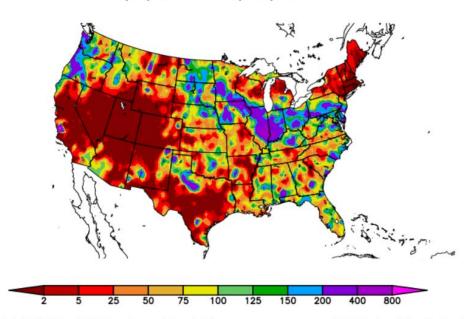
Last 7 Days, National Weather Service (NWS) Networks

7-day precipitation percent of normal map for the continental U.S.

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

Percent of Normal Precipitation (%) 6/7/2018 - 6/13/2018

Source: Regional Climate Centers



Generated 6/14/2018 at HPRCC using provisional data.

NOAA Regional Climate Centers

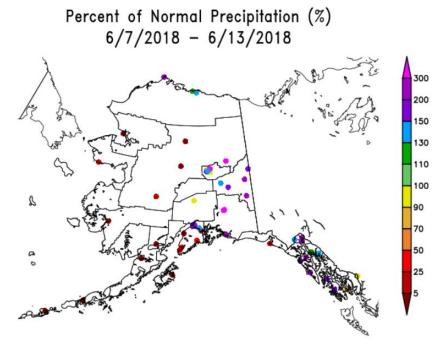
Last 7 Days, National Weather Service (NWS) Networks

7-day precipitation anomaly map for Alaska.

See also:

7-day total precipitation values (inches) map

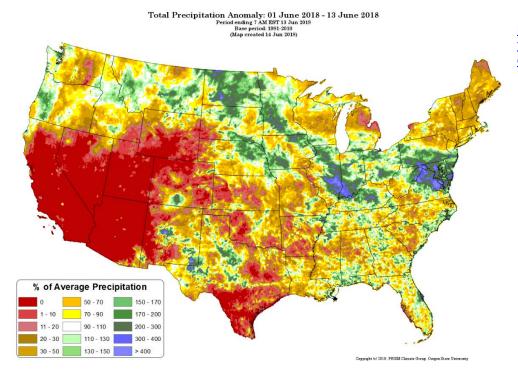
e (NWS) Networks Source: Regional Climate Centers



Generated 6/14/2018 at HPRCC using provisional data.

NOAA Regional Climate Centers

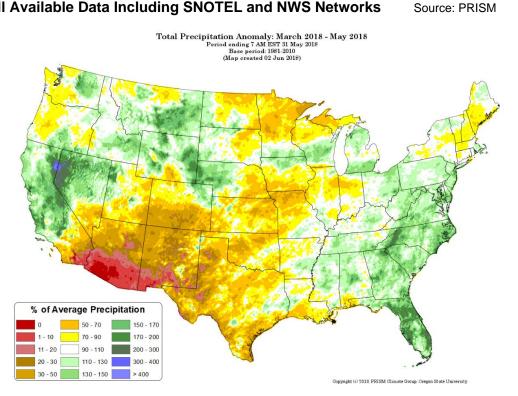
Month-to-Date, All Available Data Including SNOTEL and NWS Networks Source: PRISM



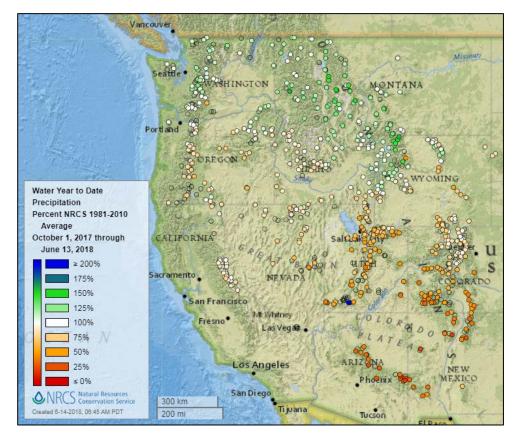
Month-to-date national total precipitation percent of average map

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

March through May 2018 total precipitation percent of average map

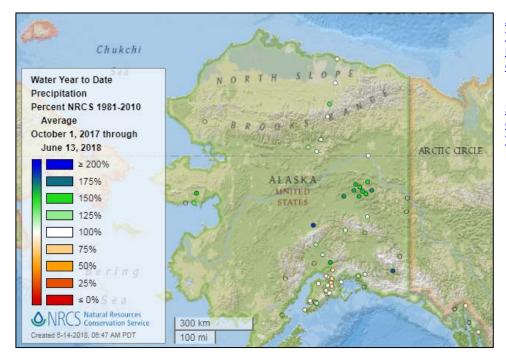


Water Year-to-Date, NRCS SNOTEL Network



2018 water yearto-date precipitation percent of average map

See also: 2018 water year-to-date precipitation values (inches) map



Alaska 2018
water year-to-date
precipitation percent
of average map

See also: Alaska 2018 water year-todate precipitation values (inches) map

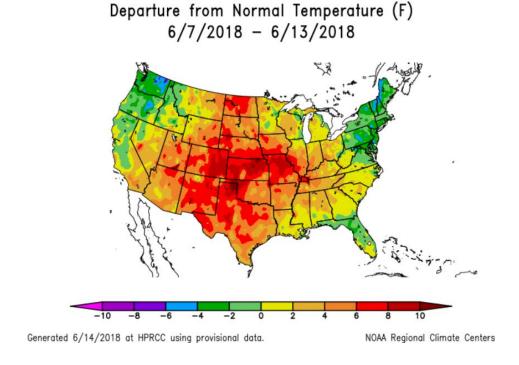
Temperature

Last 7 Days, National Weather Service (NWS) Networks

VS) Networks Source: Regional Climate Centers

7-day temperature anomaly map for the continental U.S.

See also: 7-day temperature (° F) map



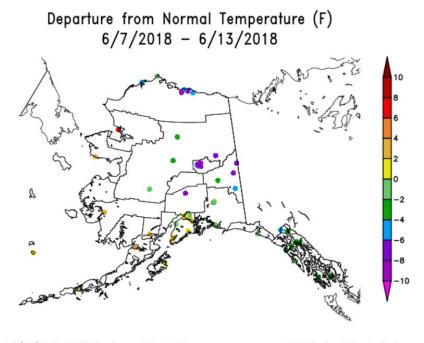
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

7-day temperature anomaly map for Alaska.

See also:

7-day temperature (° F) map

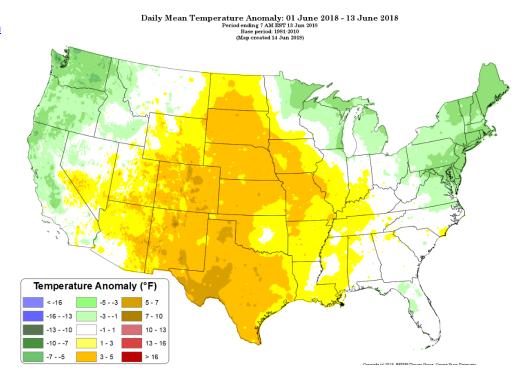


Generated 6/14/2018 at HPRCC using provisional data.

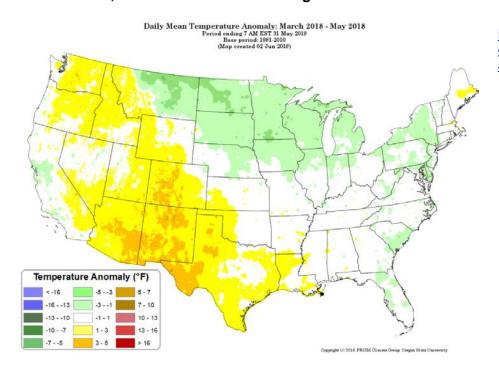
NOAA Regional Climate Centers

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

Month-to-date national daily mean temperature anomaly map



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

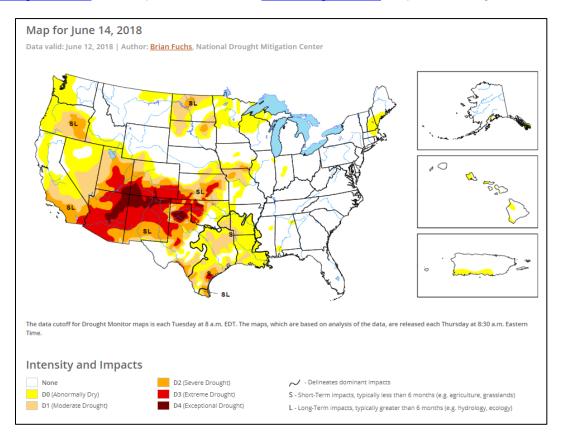


March through May 2018 daily mean temperature anomaly map

Drought

U.S. Drought Monitor Select map below.

U.S. Drought Portal Comprehensive drought resource.

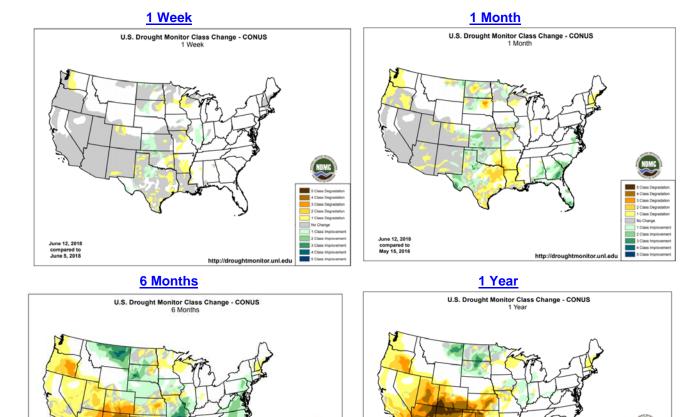


Current National Drought Summary, June 14, 2018

Author: Brian Fuchs, National Drought Mitigation Center

"Over the last week, dry conditions continued in the Desert Southwest and in parts of the Central Rockies, leading to drought persistence and degradation in these areas. Farther east across the Great Plains, scattered thunderstorms led to some areas improving or staying out of drought, while some areas that missed the rain were degraded. In the Upper Midwest and Northern Plains, precipitation patterns also dictated areas which experienced degrading and improving conditions. Near normal or wetter than normal conditions occurred over most of the eastern United States, where few changes to the USDM depiction were made."

Changes in Drought Monitor Categories over Time



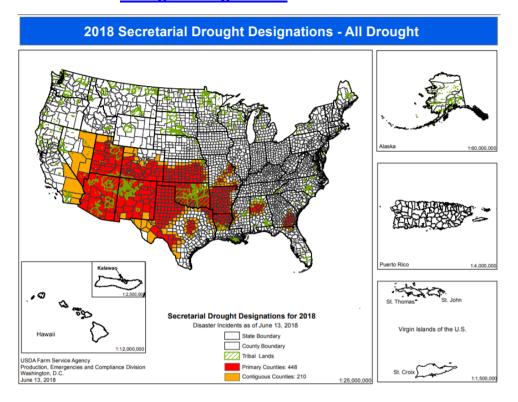
Changes in drought conditions over the last 12 months

June 12, 2018 compared to June 13, 2017

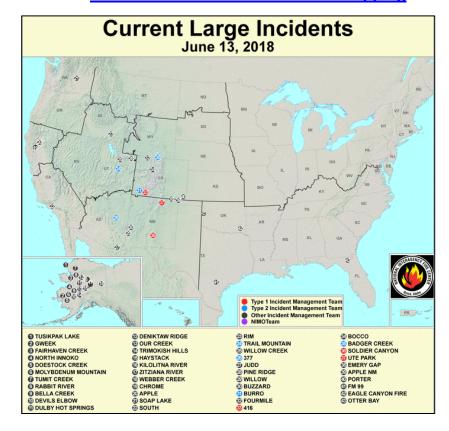
Highlighted Drought Resources

- 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

USDA 2018 Secretarial <u>Drought Designations</u>



Wildfires: USDA Forest Service Active Fire Mapping



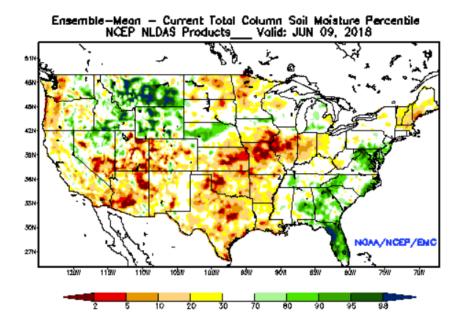
Highlighted Wildfire Resources

- National Interagency Fire Center
- InciWeb Incident
 Information System
- <u>Significant Wildland</u>
 <u>Fire Potential Outlook</u>

Other Climatic and Water Supply Indicators

Soil Moisture

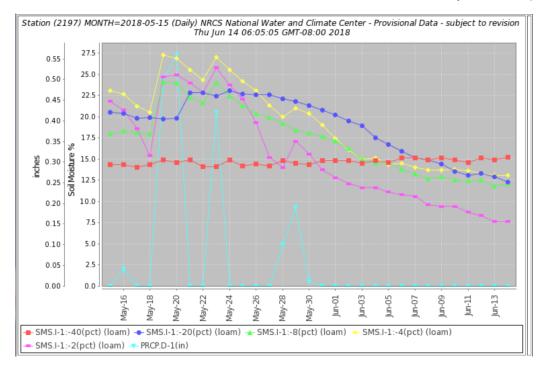
Source: NOAA National Centers for Environmental Prediction



Modeled soil moisture percentiles as of June 9, 2018.

Soil Moisture Data

Source: NRCS Soil Climate Analysis Network (SCAN)

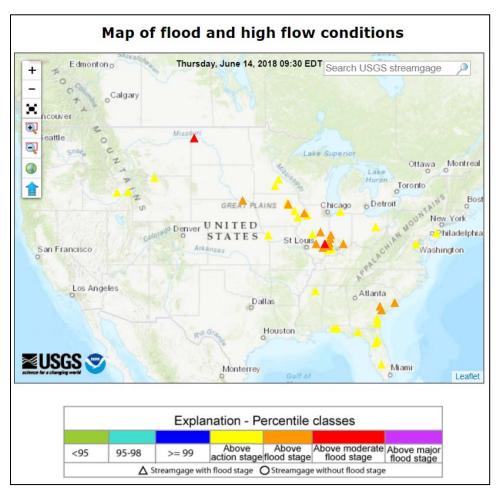


This chart illustrates precipitation events over the last 30 days at the <u>CPER SCAN site 2197</u> in northeast Colorado. The larger events on May 19-20 and May 23 increased soil moisture at the 2", 4", 8", and 20" sensor depths, followed by a gradual decrease in soil moisture. The 40" sensor showed little response to the precipitation during this period.

Soil Moisture Data Portals

- CRN Soil Moisture
- Texas A&M University North American Soil Moisture Database
- <u>University of Washington Experimental Modeled Soil Moisture</u>

Streamflow Source: USGS



WaterWatch: Streamflow, drought, flood, and runoff conditions

Source: NRCS National Water and Climate Center

Reservoir Storage

Western States Reservoir Storage

Reservoir Storage as of June 1, 2018 ■ Below Average At or Above Average Capacity of Reservoirs Reported (1000 Acre-Feet) 38,129 14,400 36,915 632 8,442 1,089 6,271 3,218 6,154 3,149 9,100 100 90 Percent of Usable Contents Data not yet available 70 60 50 40 30 20 10

June 1 Reservoir Storage: Chart | Dataset

State and Number of Reservoirs Reported

NV

5/5

NM

17/17

OR

30/31

UT

39/42

WA

7/10

WY

16/22

MΤ

40/46

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

CO

80/84

ID

25/25

Upper Colorado

0

ΑZ

4/4

Prepared by: USDA Natural Resources Conservation Service

National Water and Climate Center, Portland, OR www.wcc.nrcs.usda.gov

• Pacific Northwest/Snake/Columbia

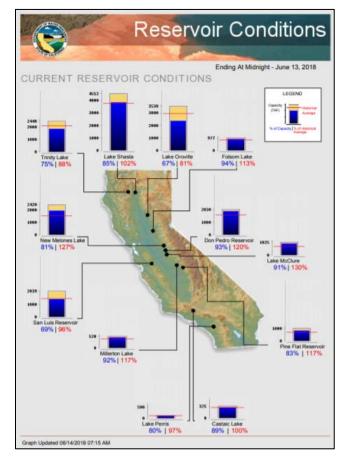
CA

0/154

- Sevier River Water, Utah
- Upper Missouri, Kansas, Oklahoma, Texas

Current California Reservoir Conditions

Source: California Department of Water Resources



Current California Reservoir Conditions

Short- and Long-Range Outlooks

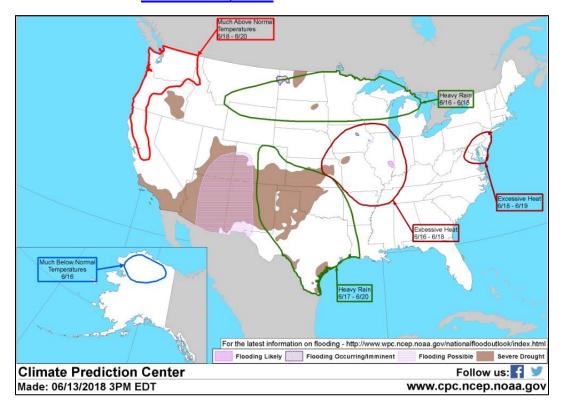
Agricultural Weather Highlights

Author: Mark Brusberg, Chief Meteorologist, USDA/OCE/WAOB

National Outlook, Thursday, June 14: "During the remainder of the week, heat will continue to spread eastward across the Plains and Midwest. Later today, triple-digit heat can be expected on the Plains as far north as South Dakota, and weekend temperatures will broadly approach or reach 95°F in in large sections of the Corn Belt. In contrast, markedly cooler air will arrive in the West, accompanied by showers associated with the remnants of former eastern Pacific Hurricane Bud. Weekend rainfall could total 1 to 2 inches in parts of the Four Corners States. Elsewhere, 5-day rainfall may reach 1 to 3 inches, with locally higher amounts, across the northern U.S. and from the western Gulf Coast region to the southern Atlantic Coast. The NWS 6- to 10-day outlook for June 19 – 23 calls for the likelihood of near- to above-normal temperatures and rainfall across most of the country. Cooler-than-normal conditions will be limited to the southern Rockies, while drier-than-normal weather should be limited to Florida's peninsula and the nation's northern tier from the Pacific Northwest to northern Minnesota."

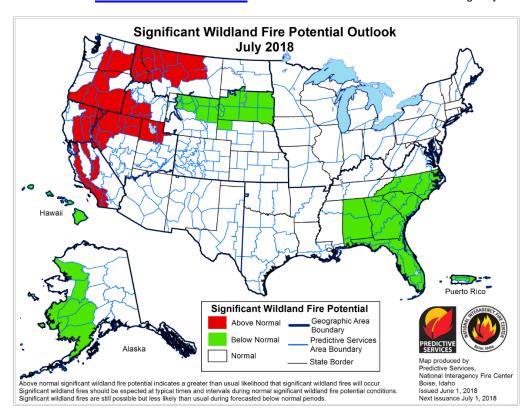
Weather Hazard Outlook June 16 - 20, 2018

Source: Climate Prediction Center

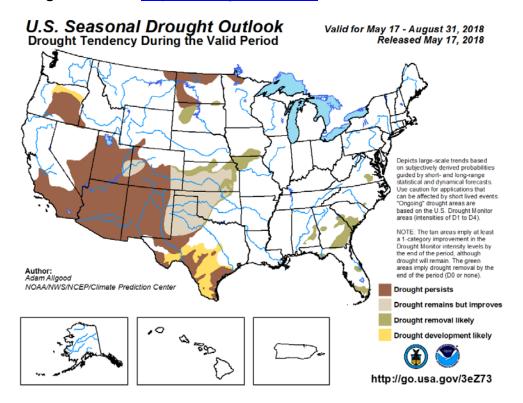


Significant Wildland Fire Potential Outlook

Source: National Interagency Fire Center



Seasonal Drought Outlook: May 17 – August 31, 2018 Source: National Weather Service



Climate Prediction Center 3-Month Outlook

Precipitation Temperature

Source: National Weather Service

June-July-August (JJA) 2018 precipitation and temperature outlook summaries

Water and Climate Update

More Information

The NRCS <u>National Water and Climate Center</u> publishes this weekly report. We welcome your feedback. If you have questions or comments, please <u>contact us</u>.