

Water and Climate Update

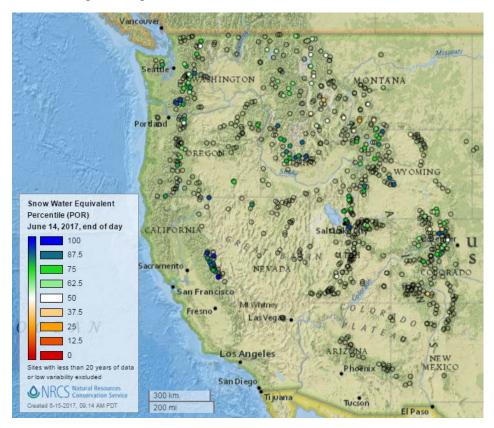
June 15, 2017

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

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2017 snowpack persists in the mountains of the West

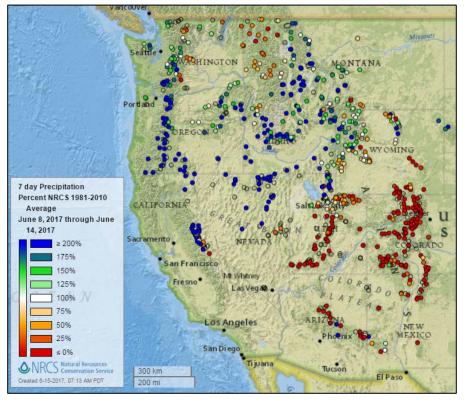


A combination of widespread June snowstorms and cool temperatures has slowed snowmelt at high-elevation Snow Telemetry (SNOTEL) sites in June.

More information:

- Storm churns waves up to 6 feet on Lake Tahoe, drops foot of snow in Sierra
- <u>California's endless winter: 8 feet of snow still on the ground in June</u>
- June storm brings measurable snow to parts of the West
- Big Sky Resort welcomes several inches of snow
- <u>'Highly unusual' winter storm in June exiting region but waterways could remain</u>
 <u>dangerous</u>

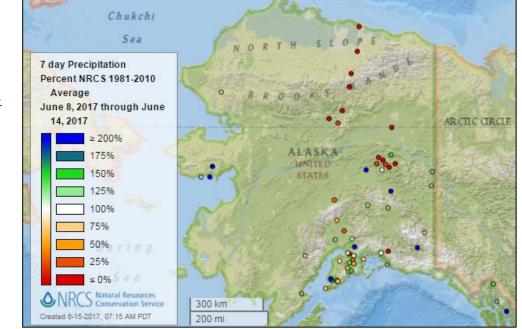
Precipitation



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



<u>Alaska 7-day</u> <u>precipitation</u> <u>percent of average</u> <u>map</u>

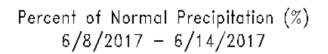
See also: <u>Alaska 7-</u> <u>day total</u> <u>precipitation values</u> (inches) map

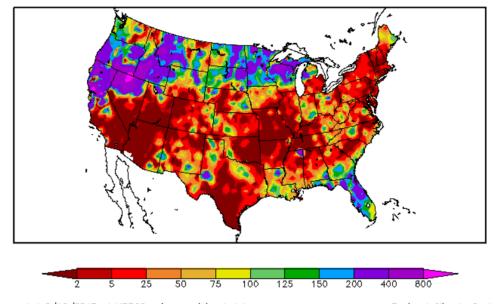
Last 7 Days, National Weather Service (NWS) Networks

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

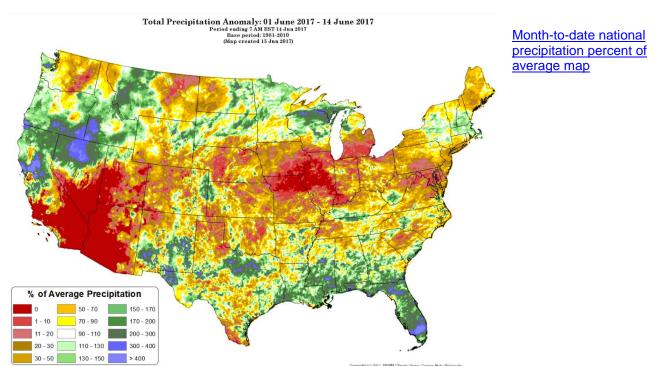


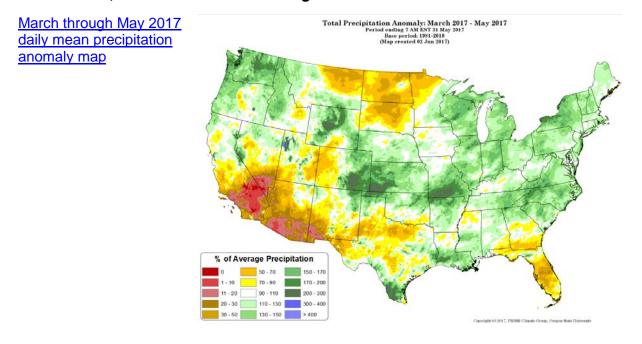


Generated 6/15/2017 at HPRCC using provisional data.

Regional Climate Centers

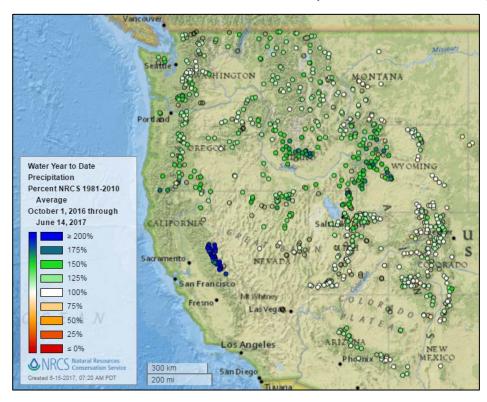
Month-to-Date, All Available Data Including SNOTEL and NWS Networks Source: PRISM





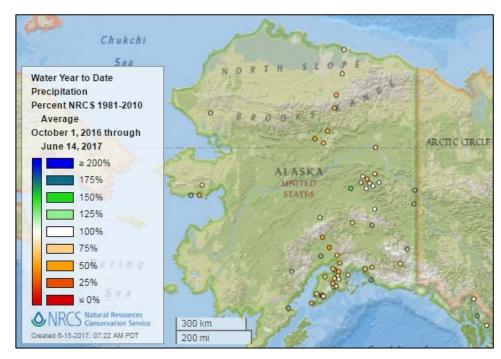
Last 3 Months, All Available Data Including SNOTEL and NWS Networks Source: PRISM

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



2017 water year-todate 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: <u>Alaska</u> 2017 water year-todate precipitation values (inches) map

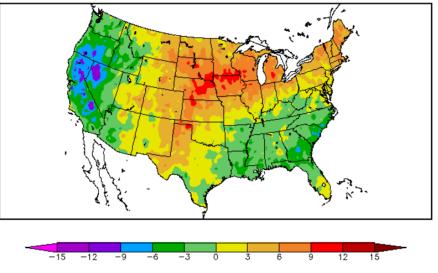
Temperature

Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

<u>7-day temperature</u> <u>anomaly map</u> for the continental U.S.

See also: <u>7-day</u> temperature (° F) map Departure from Normal Temperature (F) 6/8/2017 - 6/14/2017

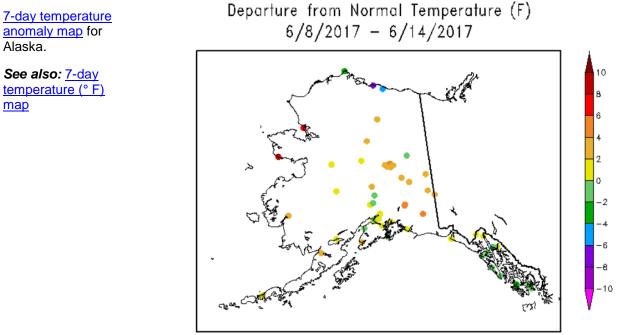


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Regional Climate Centers

Last 7 Days, National Weather Service (NWS) Networks

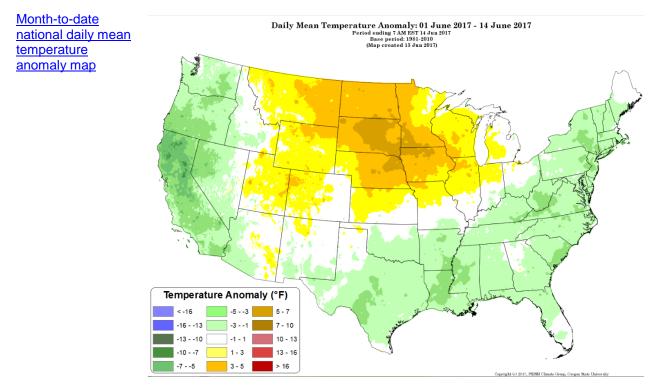
Source: Regional Climate Centers



Generated 6/15/2017 at HPRCC using provisional data.

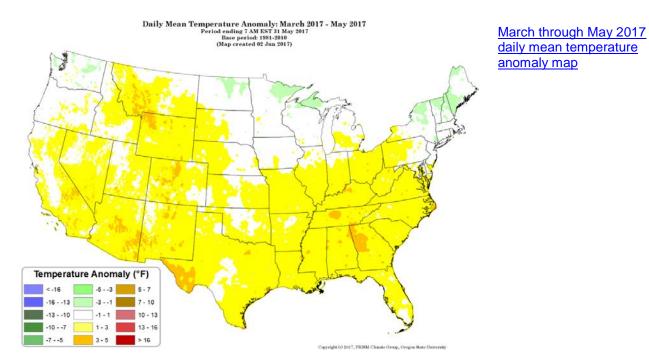
Regional Climate Centers

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



anomaly map for Alaska.

See also: 7-day temperature (° F) map

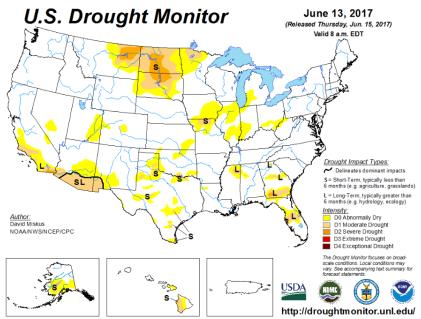


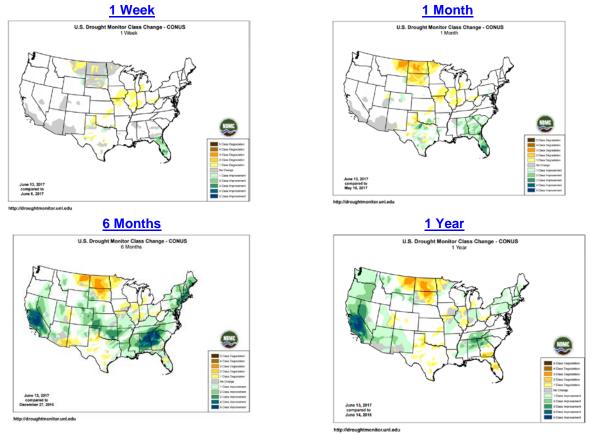
Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

Drought

<u>U.S. Drought Monitor</u> See map below. <u>U.S. Drought Portal</u> Comprehensive drought resource.





Changes in Drought Monitor Categories over Time

Changes in drought conditions over the last 12 months

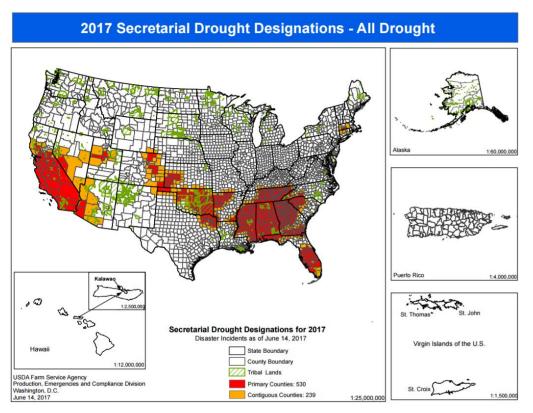
Current National Drought Summary, June 13, 2017

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

"After a rather wet May with near- to slightly below normal temperatures and generally favorable growing conditions, the central Plains and Midwest have abruptly become dry and warm during the past several weeks, raising concerns of rapid top soil moisture loss and declining crop conditions. In contrast, slow-moving Pacific systems crept across the Northwest and into the northern Plains, bringing unsettled weather to the region including measurable snow to higher elevations of the Sierras while also producing scattered thunderstorms to parts of the drought-stricken Dakotas late in the period. In the Southeast, a stalled front combined with the start of Florida's rainy season, dumped moderate to heavy rainfall (2-8 inches, locally over a foot) along the coastal areas of the eastern Gulf and southern Atlantic coasts, especially in Florida. In Hawaii, recent drier weather on windward sides of Maui and the Big Island led to D0 expansion, while wetter weather in Alaska eased wild fire conditions."

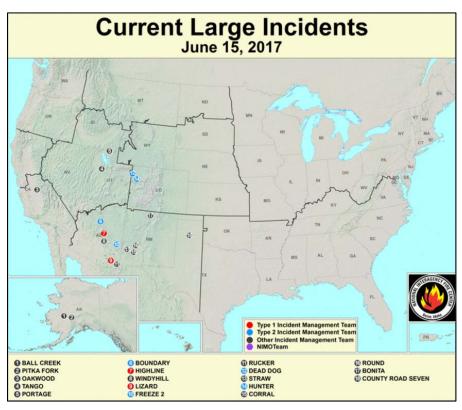
Highlighted Drought Resources

- 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



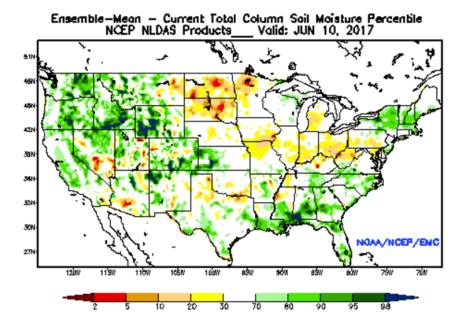
USDA 2017 Secretarial Drought Designations

Wildfires: USDA Forest Service Active Fire Mapping



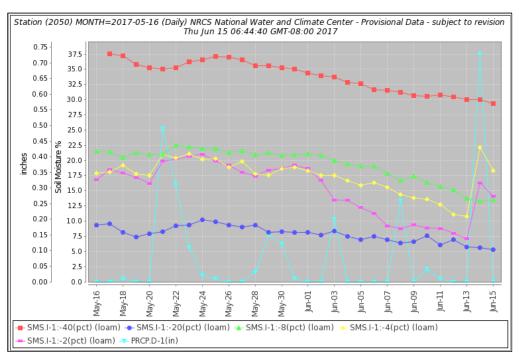
Other Climatic and Water Supply Indicators

Soil Moisture



Modeled soil moisture percentiles as of June 3, 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 past 30 days at the <u>Glacial</u> <u>Ridge SCAN site 2050</u> in Minnesota. The two, larger precipitation events increased soil moisture at the 2-, 4-, and 8- inch sensors within a day. The 20- and 40- inch depth sensors had a delayed reaction to the event on May 21-24, and haven't responded to the most recent event. The smaller precipitation events occurring between the large events created short-term increases in soil moisture, but didn't stop the overall downward trend.

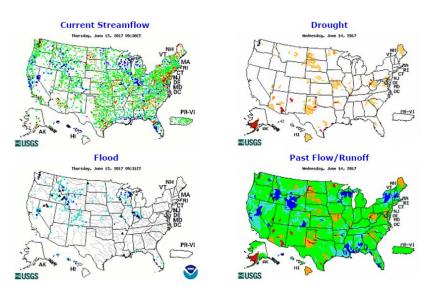
6/15/2017

Soil Moisture Data Portals

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

Streamflow

Source: USGS



Current streamflow maps Click image to enlarge and display legends

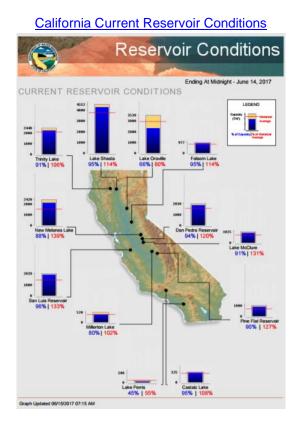
Reservoir Storage

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

Water and Climate Update

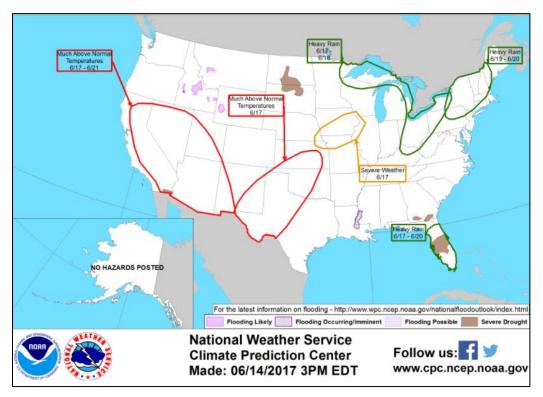


Short- and Long-Range Outlooks

Agricultural Weather Highlights

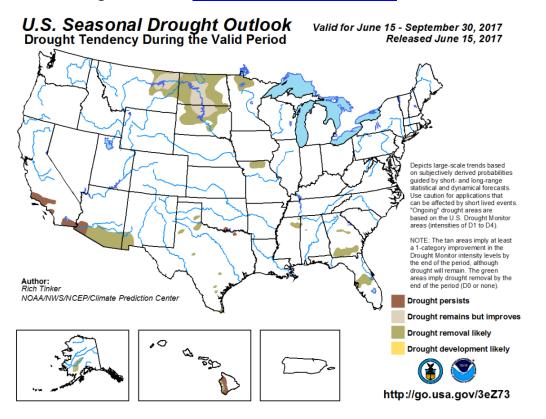
Authors: Brad Rippey and Seth Cohen, Meteorologists, USDA/OCE/WAOB

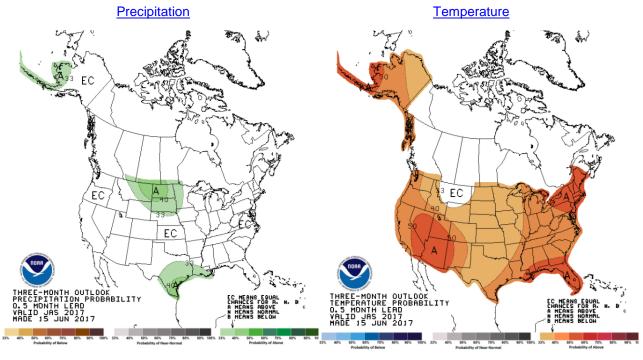
National Outlook, Thursday, June 15, 2017: "Over the next 5 days, additional rain is expected to fall in the Corn Belt and along the Eastern Seaboard. One to 3 inches of rainfall are likely to fall in these regions, with local totals up to 5 inches. Elsewhere, dry weather will persist in the Four Corners States, as well as Nevada and California. Meanwhile, warmer-than-average weather will continue throughout much of the country over the next few days, especially in the Desert Southwest. Cooler-than-average weather is expected, however, from the Pacific Northwest to the northern High Plains. The NWS 6- to 10-day outlook for June 20 – 24 indicates that above-average rainfall will occur in the East, while mostly dry weather will prevail across the central and northern Plains and the Northwest. Meanwhile, much warmer-than normal conditions are likely in the western U.S., especially in the Desert Southwest. Additionally, warmth is expected as far east as the High Plains and along the southern Atlantic Coast, while cooler-than-normal weather should be limited to the Midwestern and Great Lakes States."



NWS Climate Prediction Center Weather Hazard Outlook: June 17 - 21, 2017

NWS Seasonal Drought Outlook: June 15 - September 30, 2017





NWS Climate Prediction Center 3-Month Outlook

July-August-Sep (JAS) 2017 precipitation and temperature outlook summaries

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>.