Water and Climate Update
July 7, 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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Record glacial outburst flood near Juneau, Alaska

In Alaska, a glacial lake outburst filled to overflowing the Mendenhall Glacier Lake near Juneau in southeast Alaska. The lake rose to 11.99 feet on July 1, topping the previous glacial outburst flood in July 2014 of 11.85 feet. The Suicide Basin area of the Mendenhall Glacier dropped 57 feet in elevation rapidly as the ice dam holding the depression water failed.

http://www.wiscnews.com/travel/article_c2e58a13-4d21-5461-a981-8e73ae0e87f1.html
Precipitation

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

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.

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

Percent of Normal Precipitation (%) 6/30/2016 - 7/6/2016

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

Source: PRISM

See also: Month-to-Date national precipitation percent of average map

See also: Month-to-Date national total precipitation values (inches) map
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

7-day temperature anomaly map

See also: 7-day temperature (° F) map

Departure from Normal Temperature (°F)
6/30/2016 - 7/6/2016

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

Month-to-date national daily mean temperature anomaly map

See also: Month-to-date national daily mean temperature (° F) map
Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

April through June daily mean temperature anomaly map
Drought


Changes in Drought Monitor Categories over Time

U.S. Drought Monitor

July 5, 2016
(Released Thursday, Jul. 7, 2016)
Valid 8 a.m. EDT

Drought Impact Types:

- D1 - Moderate Drought
- D2 - Severe Drought
- D3 - Extreme Drought
- D4 - Exceptional Drought

Author:
David Mearns
NCEI/NOAA/NWS/CPC

http://droughtmonitor.unl.edu/

Changes in drought conditions over the last 12 months
Current National Drought Summary, July 5, 2016

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

“A stationary front located over the central U.S., along with several systems dropping southeastward out of the Canadian Prairies, triggered widespread moderate to heavy (2 to 6 inches, locally up to 10 inches) showers and thunderstorms from eastern Colorado eastward into Kentucky. The wet and cool weather quickly dashed any thoughts of a possible July flash drought in the central Plains and Midwest. Decent rains (1-3 inches) also fell on parts of the north-central and south-central Plains, along the Gulf and Atlantic Coasts, the central Appalachians, parts of northern New England, and in southeastern Arizona as the monsoon commenced. Temperatures averaged much below normal (4 to 10 degF) in the Midwest, and subnormal in most of the Northeast, northern half of the Plains, and the Four Corners region. In contrast, seasonably dry and warm conditions enveloped the Far West, while portions of the southern Plains, Delta, and Southeast received little or no rain. Similarly, most of the upper Midwest, north-central Great Plains, Great Lakes region, and coastal New England saw minimal rainfall. Elsewhere, conditions were wet in interior Alaska, the windward sides of the Hawaiian Islands, and eastern Puerto Rico.”

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](#)
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 Sunleaf Nursery SCAN site 2073 in Ohio. The two largest precipitation events have increased the soil moisture at this site at all sensor depths. The 2-, 4-, and 8-inch sensors show a sharp increase in soil moisture percent, whereas the 20- and 40-inch sensors show a slight to moderate increase 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

Streamflow maps for various regions:
- Current Streamflow
- Drought
- Flood
- Past Flow/Runoff

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
Short- and Long-Range Outlooks

Agricultural Weather Highlights

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

National Outlook, July 7, 2016: “During the next several days, a series of disturbances will traverse the northern U.S. As a result, 5-day rainfall totals could reach 1 to 3 inches across the nation’s northern tier, with amounts approaching 5 inches in parts of northern New England. Significant rainfall (locally 1 to 3 inches) can also be expected across the upper Midwest, the interior Southeast, and the southern Mid-Atlantic region. In contrast, little or no rain will occur across the Deep South and from California to Texas. Meanwhile, a heat wave will continue across the southern High Plains, while unusually cool conditions will dominate the Northwest. Elsewhere, briefly cooler air will surge across the Midwest toward week’s end, followed by a warming trend. The NWS 6- to 10-day outlook for July 12 – 16 calls for the likelihood of above-normal temperatures along and east of a line from the southern Rockies to the upper Great Lakes region, while cooler-than-normal conditions can be expected from the Pacific Northwest to the northern Plains. Meanwhile, near-to below-normal rainfall across much of the U.S. will contrast with wetter-than normal weather in the Midwest and interior Southeast.”
Fire Potential Outlook: **August 2016**

**NWS Climate Prediction Center** Weather Hazard Outlook: **July 9 - 13, 2016**
Seasonal Drought Outlook: June 16 – September 30, 2016

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

Precipitation

Temperature

NWS Climate Prediction Center 3-Month Outlook

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.