The Natural Resources Conservation Service provides leadership in a partnership effort to help people conserve, maintain, and improve our natural resources and environment.

**Water and Climate Update**

*April 20, 2017*

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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**NASA: Sierra snowpack greater than last four years combined**

Snow water equivalent in the Tuolumne River Basin of California in 2015 and 2017. Lighter blue indicates less snow, deeper blue is more snow. The 2017 snow water equivalent was 21 times greater than 2015, which was the lowest snowpack on record. Credit: NASA, Jet Propulsion Laboratory.

[Full story>>](#)
Snow

Current Snow Water Equivalent, NRCS SNOTEL Network

Snow water equivalent percent of median map

See also:
Snow water equivalent values (inches) map

Alaska snow water equivalent percent of median map

See also:
Alaska snow water equivalent values (inches) map
Current Snow Depth, National Weather Service (NWS) Networks

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

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

Source: PRISM

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

See also:
- 2017 water year-to-date precipitation percent of average map
- 2017 water year-to-date precipitation values (inches)
Water and Climate Update

Alaska 2017 water year-to-date precipitation percent of average map

See also: Alaska 2017 water year-to-date precipitation values (inches) map

Temperature

Last 7 Days, National Weather Service (NWS) Networks

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

See also: 7-day temperature (° F) map

Departure from Normal Temperature (°F) 4/13/2017 - 4/19/2017

Generated 4/20/2017 at HPRCC using provisional data. Regional Climate Center.
**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

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**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

January through March 2017 daily mean temperature anomaly map

Drought


U.S. Drought Monitor

April 18, 2017
(Revised Thursday, Apr. 20, 2017)
Valid 8 a.m. EDT

http://droughtmonitor.unl.edu/
Changes in drought conditions over the last 12 months

Current National Drought Summary, April 18, 2017

Author: Chris Fenimore, NOAA/NESDIS/NCEI

“An active weather pattern provided above-normal precipitation during the USDM period (April 11-18) in much of the Southern Plains, West, Northwest, and parts of the Midwest. Below-normal precipitation dominated the Rockies, Southwest, Southeast and Northeast. Average daytime temperatures were generally above normal across much of the CONUS with the exception of the Northwest where temperatures were generally 3 degrees cooler than normal. Much of the Mid-Atlantic, Ohio Valley and Central Plains were 9-12 degrees above normal for the period. Drought conditions expanded and intensified for much of the Southeast where the lack of rains have begun to parch the soils. In the South, Texas continues to see above normal precipitation resulting in a continual decrease in overall area covered in drought (D1-D4). Meanwhile in the West, the onslaught of Pacific storms continue to bring copious amounts of moisture to the region, swelling the reservoirs, threatening snowpack records and padding the record high precipitation amounts. Additional information on the indices, impacts and changes in drought status can be found in the regional sections below.”
USDA 2017 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 April 15, 2017.
Soil Moisture Data: NRCS Soil Climate Analysis Network (SCAN)

Soil moisture (at 2-, 4-, 8-, 20-, and 40-inch depths) for the 2017 Water Year at the Monocline Ridge SCAN site in central California.

Soil Moisture Data Portals

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

Streamflow

Current streamflow maps  Click image to enlarge and display legends

Source: USGS
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 Current Reservoir Conditions
Wildfires: USDA Forest Service Active Fire Mapping

Current Large Incidents
April 20, 2017

Short- and Long-Range Outlooks

Agricultural Weather Highlights

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

**National Outlook, April 20, 2017:** "A procession of disturbances will maintain unsettled, showery conditions across large parts of the U.S. For the remainder of today, significant rain will spread from the Great Lakes region into the Northeast, while showers and locally severe thunderstorms will stretch from the lower Great Lakes States to the southern Plains. Late in the week, a storm system emerging from the West will produce heavy showers from the southern Plains into the Southeast. Cool air in the storm's wake should result in weekend freezes as far south as the central High Plains. Five-day rainfall totals could reach 2 to 4 inches or more from the mid-South into the southern Mid-Atlantic States. In contrast, dry weather will prevail from southern California to the Rio Grande Valley. The NWS 6- to 10-day outlook for April 25 – 29 calls for the likelihood of near- to above-normal temperatures and precipitation across large sections of the country. Cooler-than-normal conditions should be confined to the northern Plains, Northwest, and Intermountain West, while drier-than-normal weather will be limited to the Rio Grande Valley and the eastern U.S."
NWS Climate Prediction Center Weather Hazard Outlook: April 22 - 26, 2017

NWS Seasonal Drought Outlook: March 16 - June 30, 2017

U.S. Seasonal Drought Outlook
Drought Tendency During the Valid Period
Valid for March 16 - June 30, 2017
Released March 16, 2017

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. "On-going" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 or D2).

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 still remains. The green areas imply drought removal by the end of the period (D0 or none).
NWS Climate Prediction Center 3-Month Outlook

Precipitation

Temperature

May-June-July (MJJ) 2017 precipitation and temperature outlook summaries

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.