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
January 06, 2022

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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Snow blankets the Mid-Atlantic

Temperatures plummeted in the eastern U.S. this week as a cold winter storm dumped snow across a wide stretch of the Mid-Atlantic region. Snow flurries were reported as far south as the Florida panhandle, with accumulating snow reported from Alabama to New Jersey. Heavy snow and strong winds accompanied the storm, causing road closures which stranded some motorists, and left thousands of homes and businesses without power. Elsewhere in the country, extreme cold and snow are reported in the upper Midwest and northern Plains, while the mountains in the West received additional feet of snow.

Related:
Winter weather blankets D.C. region in snow – Washington Post
More wintry weather expected this week as DC recovers from snowstorm – WTOP News (DC)
Sneak attack storm bringing heavy snow, severe weather to Eastern U.S. – Washington Post
5 dead, nearly 850K without power as fierce storm lashes South, mid-Atlantic with heavy snow – USA Today
Winter Storm Dumps Snow on U.S. Southeast, Mid-Atlantic States – U.S. News & World Report
N.J. weather: Updated snow totals across South Jersey, including record-breaker in Atlantic City – NJ.com (NJ)
Snow in Alabama one day after record high temperatures – WVTM (AL)
Snow in Florida: Flakes fall in Panhandle after temperature plunges 40 degrees – Sun Sentinel (FL)
Snow, wind create tricky driving conditions in Colorado mountains, along Interstate 25 – Fort Collins Coloradoan (CO)
Rain and snow pose extreme avalanche danger, close all of Washington’s cross-state passes – Seattle Times (WA)
Snow

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 Snow Analysis
Source: NOAA Office of Water Prediction
Precipitation

Last 7 Days, NRCS SNOTEL Network

See also:
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

Percent of Normal Precipitation (%)
12/30/2021 – 1/5/2022

Generated 1/6/2022 at HPRCC using provisional data. NOAA Regional Climate Centers

Last 7 Days, National Weather Service (NWS) Networks
Source: Regional Climate Centers

7-day precipitation anomaly map for Alaska.

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

Percent of Normal Precipitation (%)
12/30/2021 – 1/5/2022

Generated 1/6/2022 at HPRCC using provisional data. NOAA Regional Climate Centers
Month-to-Date, All Available Data Including SNOTEL and NWS Networks
Source: PRISM

Total Precipitation Anomaly: 01 Jan 2022 - 05 Jan 2022
Period ending 7 AM EST 05 Jan 2022
Base period: 1991-2020
(Map created 06 Jan 2022)

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

October through December 2021
Month-to-date national total precipitation anomaly map
Water Year-to-Date, NRCS SNOTEL Network

2022 water year-to-date precipitation percent of median map

See also:
2022 water year-to-date precipitation percent of average map

2022 water year-to-date precipitation values (inches) map

Alaska 2022 water year-to-date precipitation percent of median map

See also:
Alaska 2022 water year-to-date precipitation percent of average map
Alaska 2022 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 for the contiguous 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
Month-to-Date, All Available Data Including SNOTEL and NWS Networks
Source: PRISM

Daily Mean Temperature Anomaly: 01 Jan 2022 - 05 Jan 2022
Period ending 7 AM EST 05 Jan 2022
Base period: 1991-2020
(Map created 06 Jan 2022)

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

Daily Mean Temperature Anomaly: Oct 2021 - Dec 2021
Period ending 7 AM EST 31 Dec 2021
Base period: 1991-2020
(Map created 03 Jan 2022)
Drought

U.S. Drought Monitor
Source: National Drought Mitigation Center

U.S. Drought Portal
Source: NOAA

Map released: January 6, 2022
Data valid: January 4, 2022

The data cutoff for Drought Monitor maps is each Tuesday at 7 a.m. EST. The maps, which are based on analysis of the data, are released each Thursday at 8:30 a.m. Eastern Time.
In what has become a familiar pattern, heavy precipitation continued to improve drought and dryness across the northern half of the West Coast States, though it created its own set of significant impacts. Farther south, similar totals fell on a relatively small area in southwest California. Heavy precipitation – some falling as heavy snow – also covered areas from the Ohio Valley and Middle Atlantic States southward through the Tennessee Valley, the interior Southeast, and the Carolinas. Parts of the Rockies – primarily the higher elevations – also reported moderate to heavy precipitation. Meanwhile, only light precipitation fell on the Northeast, across much of the lower Midwest, and along most of the Gulf Coast and adjacent areas. Most of the Plains and upper Mississippi Valley reported little or no precipitation. The result was some significant areas of drought improvement across the Carolinas and interior Southeast, as well as parts of the West Coast States and Rockies. In contrast, unseasonably warm and dry weather for several weeks prompted fairly broad areas of deterioration along the immediate central Gulf Coast, the southwestern half of the lower Mississippi Valley, and the southern Plains.

USDA Secretarial Drought Designations

Source: USDA Farm Service Agency
Changes in Drought Monitor Categories over Time
Source: National Drought Mitigation Center

Changes in drought conditions over the last 12 months for the contiguous U.S.

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
Source: NOAA National Centers for Environmental Prediction

Modeled soil moisture percentiles as of January 1, 2022

Soil Moisture Percent of Saturation
Source: NRCS SNOTEL and Soil Climate Analysis Network (SCAN)
U.S. soil moisture map at 8 inch depth:
Soil Moisture
Source: NRCS Soil Climate Analysis Network (SCAN)

This chart shows the precipitation and soil moisture for the last 30 days at the Wedowee SCAN site in Alabama. Precipitation events throughout the period caused all sensors to report an increase in soil moisture. The highest single day total precipitation occurred on December 30, when 3.94 inches fell. Total precipitation for the last 30 days is 8.64 inches.

Soil Moisture Data Portals

- USCRN Soil Moisture
- National Soil Moisture Network
- NOAA Climate Prediction Center Soil Moisture
- NASA Grace
Streamflow, Drought, Flood, and Runoff
Source: U.S. Geological Survey WaterWatch Streamflow Map

Map of flood and high flow conditions
(30 in floods [moderate: 3, minor: 27], 33 in near-flood)

Reservoir Storage

Hydromet Teacup Reservoir Depictions
Source: U.S. Bureau of Reclamation

- Upper Colorado
- Pacific Northwest/Snake/Columbia
- Sevier River Water, Utah
- Upper Missouri, Kansas, Oklahoma, Texas
Current California Reservoir Conditions
Source: California Department of Water Resources
Agricultural Weather Highlights
Author: Brad Rippey, Agricultural Meteorologist, USDA/OCE/WAOB

**National Outlook, Thursday, January 06, 2022:** “The focus for stormy weather will temporarily shift southward, with a fast-moving storm crossing the interior Southeast today and the middle Atlantic Coast early Friday. A band of snow, with totals as high as 4 to 8 inches, will extend northeastward from the Tennessee Valley. Meanwhile, Northwestern storminess will continue through Friday before subsiding. As the Northwestern storm system moves eastward near the U.S.-Canadian border, snow—accompanied and trailed by windy, bitterly cold weather—will affect the northern Plains and upper Midwest. Weekend precipitation—including snow, freezing rain, and rain—should fall in the South, East, and lower Midwest, along the storm’s trailing cold front. Subsequently, much of the country will experience a period of tranquil weather, although frigid conditions will persist from the upper Midwest into the Northeast. The NWS 6- to 10-day outlook for January 11 – 15 calls for the likelihood of near- or above-normal temperatures nationwide, except for cooler-than-normal conditions in parts of the northern Intermountain West and along the Atlantic Coast from the Carolinas to Maine. Meanwhile, below-normal precipitation across much of the northern two-thirds of the country should contrast with wetter-than-normal weather in western Washington and across the nation’s southern tier.”

**Weather Hazards Outlook: January 09 – 13, 2022**
Source: NOAA Weather Prediction Center

**U.S. Day 3-7 Hazards Outlook**
*About the Hazards Outlook*
Created January 06, 2022

**NOTE:** These products are only created Monday through Friday. Please exercise caution using this outlook during the weekend.

| Precipitation | Temperature | Soils |

Valid January 09, 2022 - January 13, 2022

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Seasonal Drought Outlook: **January 01 – March 31, 2022**
Source: National Weather Service

Climate Prediction Center 3-Month Outlook
Source: National Weather Service

January-February-March 2022 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.