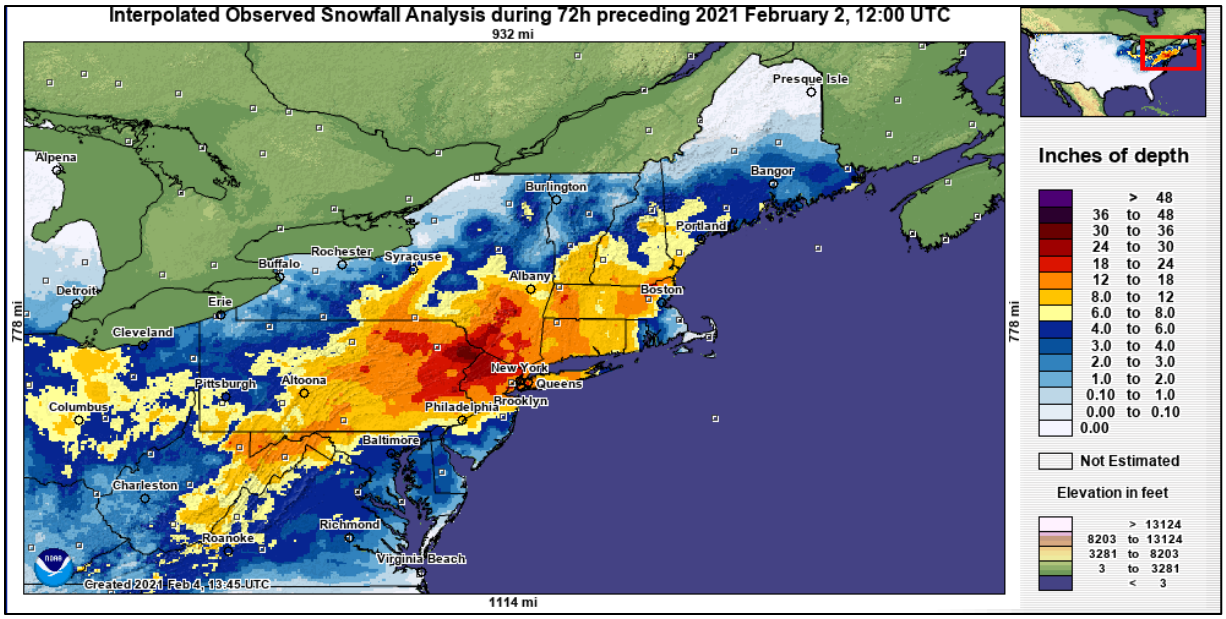
United States Department of Agriculture

Water and Climate Update

February 04, 2021

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.

Many feet of snow recorded in the Northeast from a major winter storm

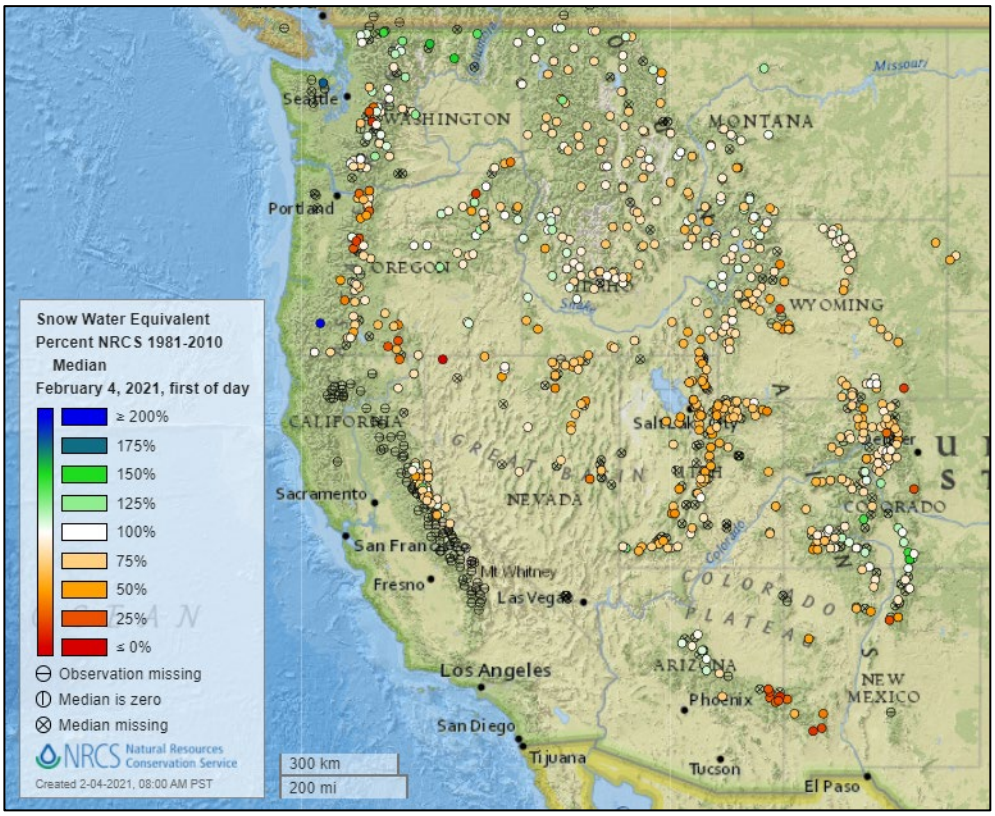


The Northeast was hit by a major winter storm this week, with strong winds, heavy snow, and blizzard-like conditions. More than 30 inches fell in parts of Pennsylvania and New Jersey. The thick blanket of snow caused power outages, traffic accidents and delays, and temporarily closed many businesses, including several COVID-19 vaccination centers. The National Weather Service reports the highest snowfall total was in Nazareth, Pennsylvania, which reported 36.1 inches from the storm.

Related:

Major winter storm dumps snow across the Northeast – CBS News
Winter storm wallops Mid-Atlantic, Northeast with more than two feet of snow – Washington Post
'A long two days': Major storm pummels Northeast with snow – AP
N.J. weather: New snowfall totals in every county, after epic winter storm finally tapers off - NJ.com
Major snowfall totals in wake of nor'easter – ABC News on MSN.com
Winter storm heads into New England after leaving up to 3 feet of snow in one Pennsylvania borough and blanketing New York City – USA Today on MSN.com
Deadly storm continues to dump snow on Northeast – NBC News on MSN.com

Snow



[Snow water equivalent percent of median map]

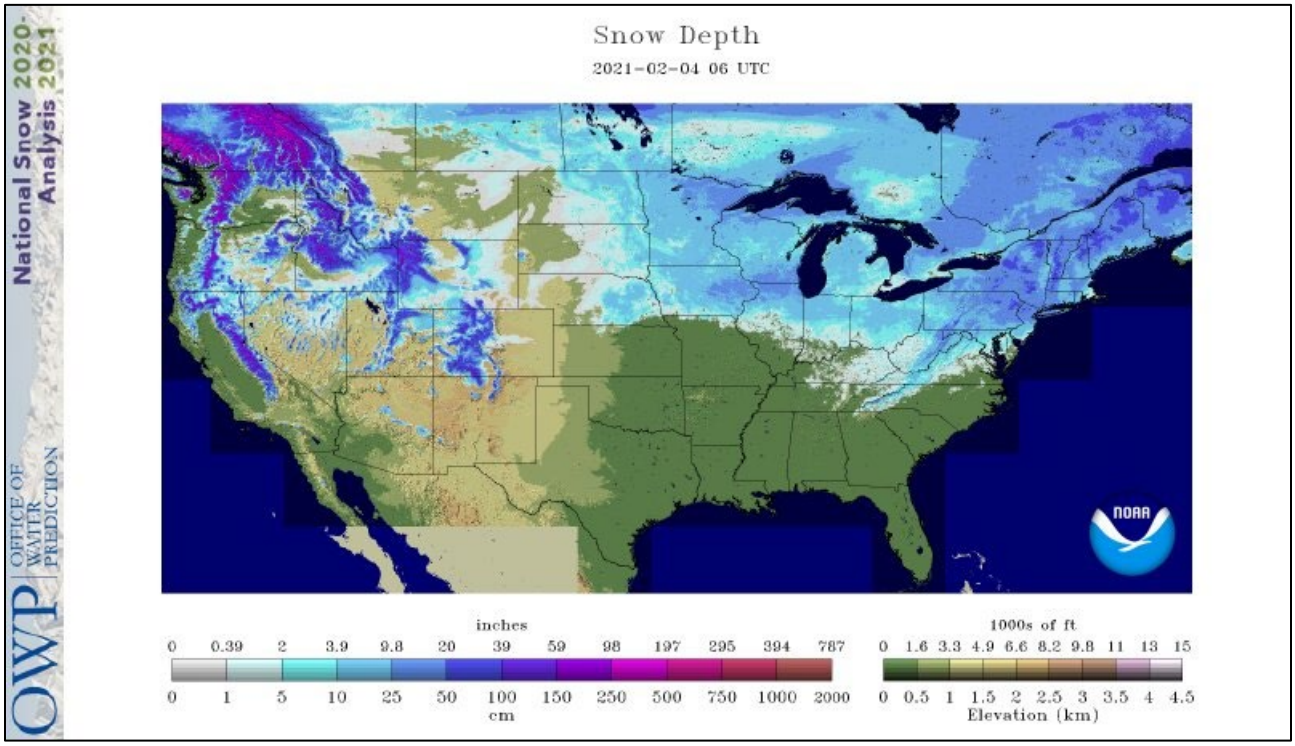
See also:
[Snow water equivalent values (inches) map]

[Alaska snow water equivalent percent of median map]

See also:
[Alaska snow water equivalent values (inches) map]

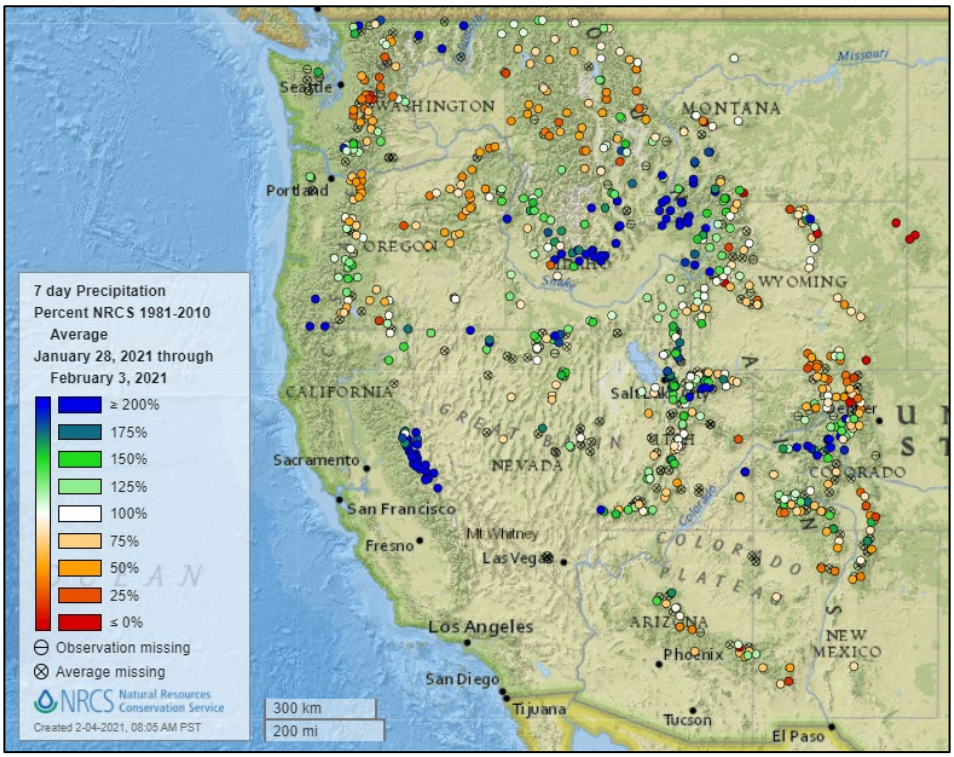
Current Snow Depth, National Weather Service Snow Analysis

Source: NOAA Office of Water Prediction



Precipitation

Last 7 Days, NRCS SNOTEL Network

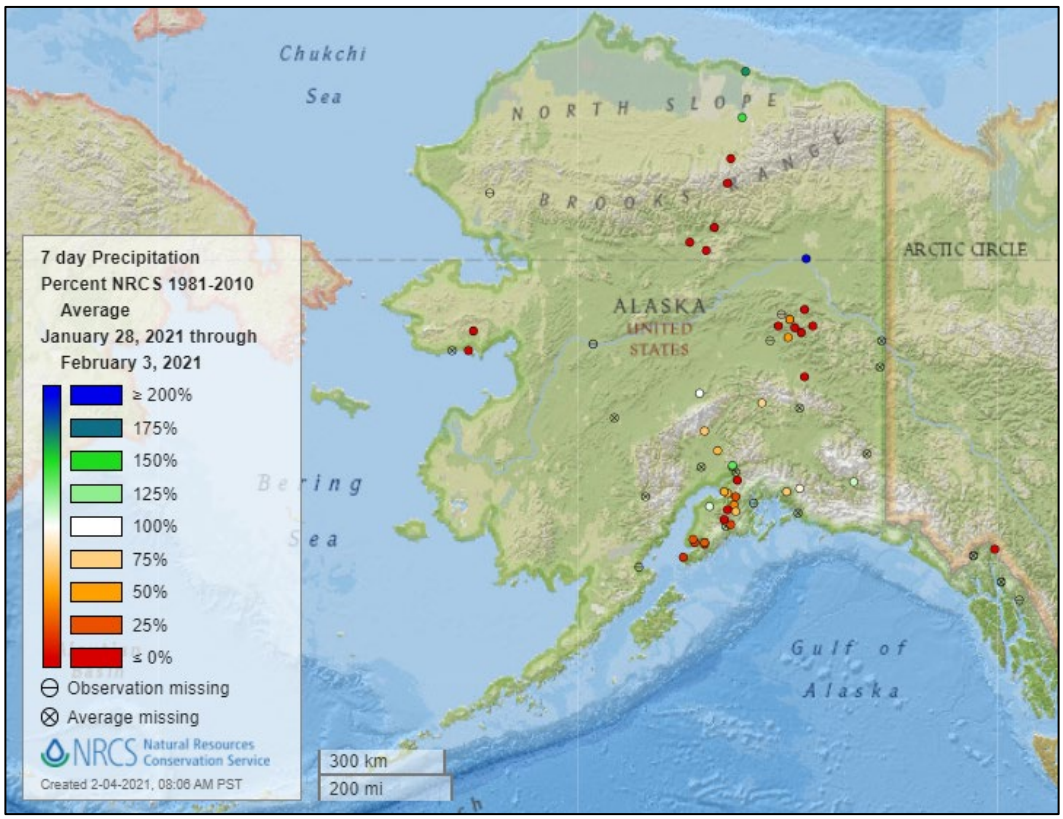


[7-day precipitation percent of average map]

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]

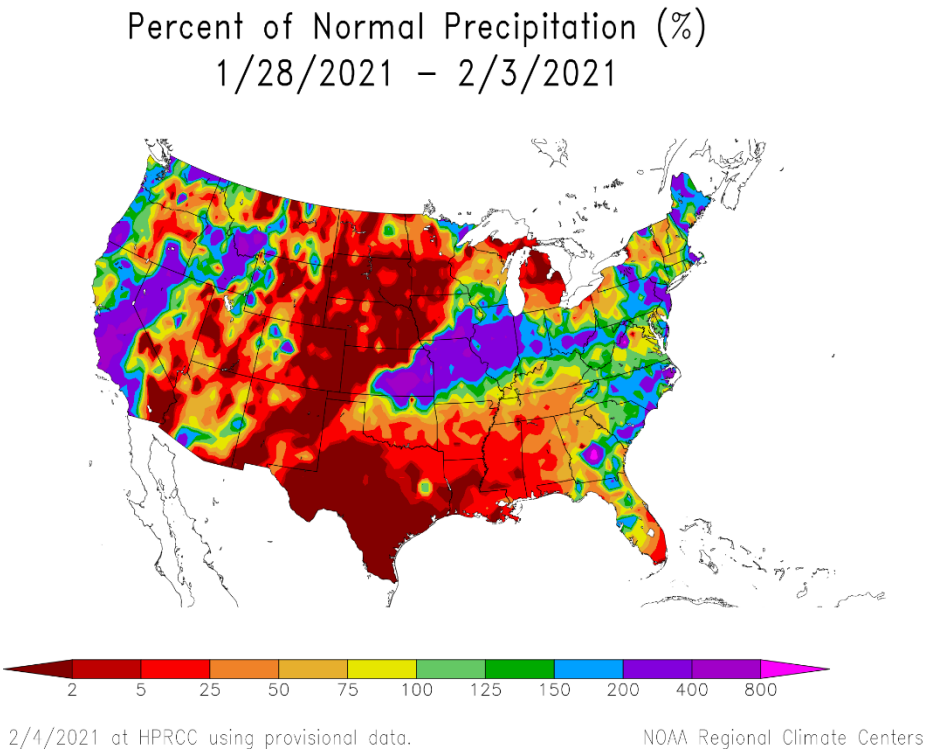


Last 7 Days, National Weather Service (NWS) Networks

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]

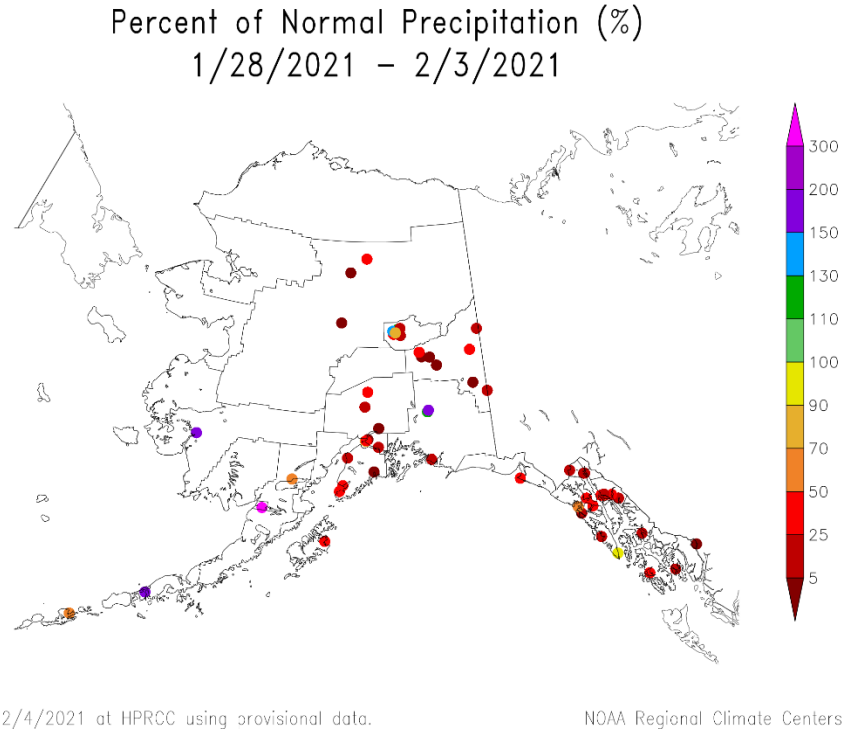


Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

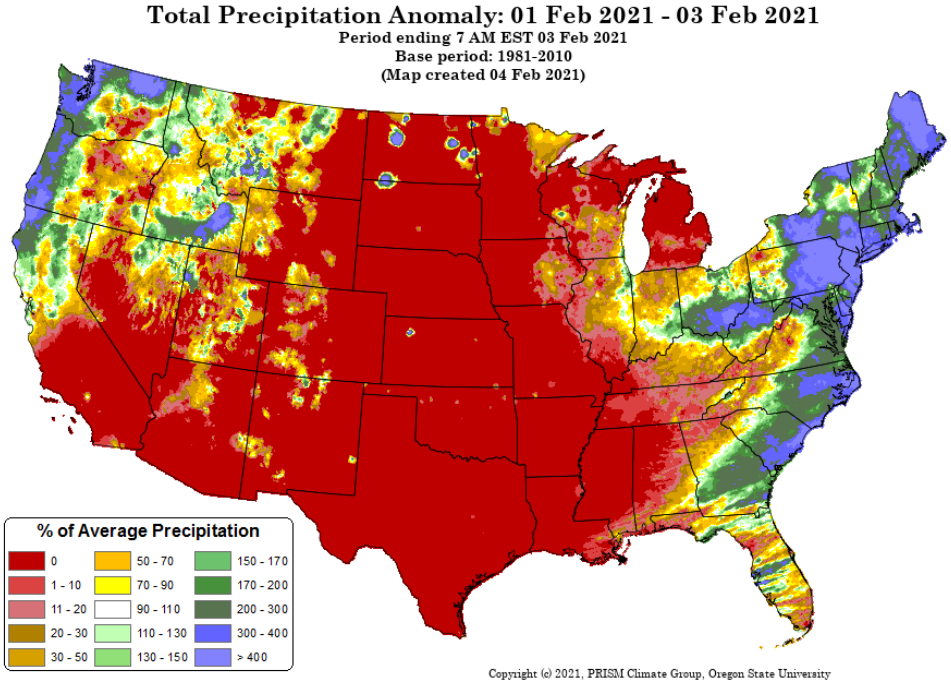
[7-day precipitation anomaly map] for Alaska.

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



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

Source: PRISM

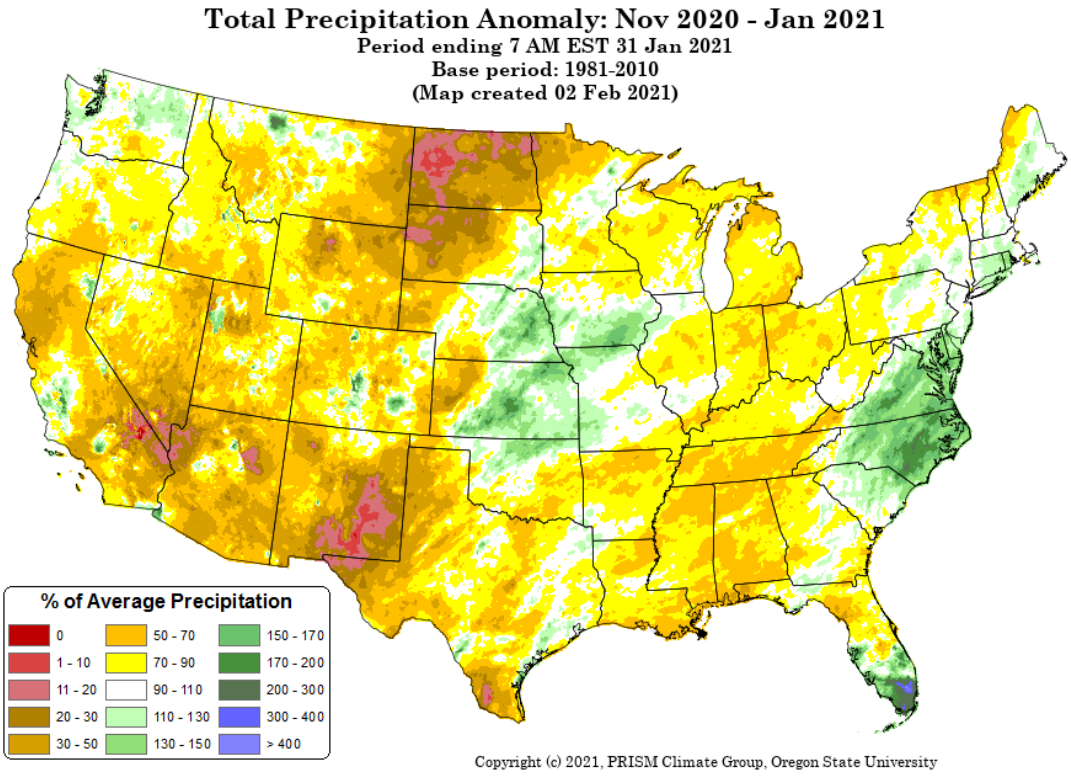


Month-to-date national total precipitation percent of average map

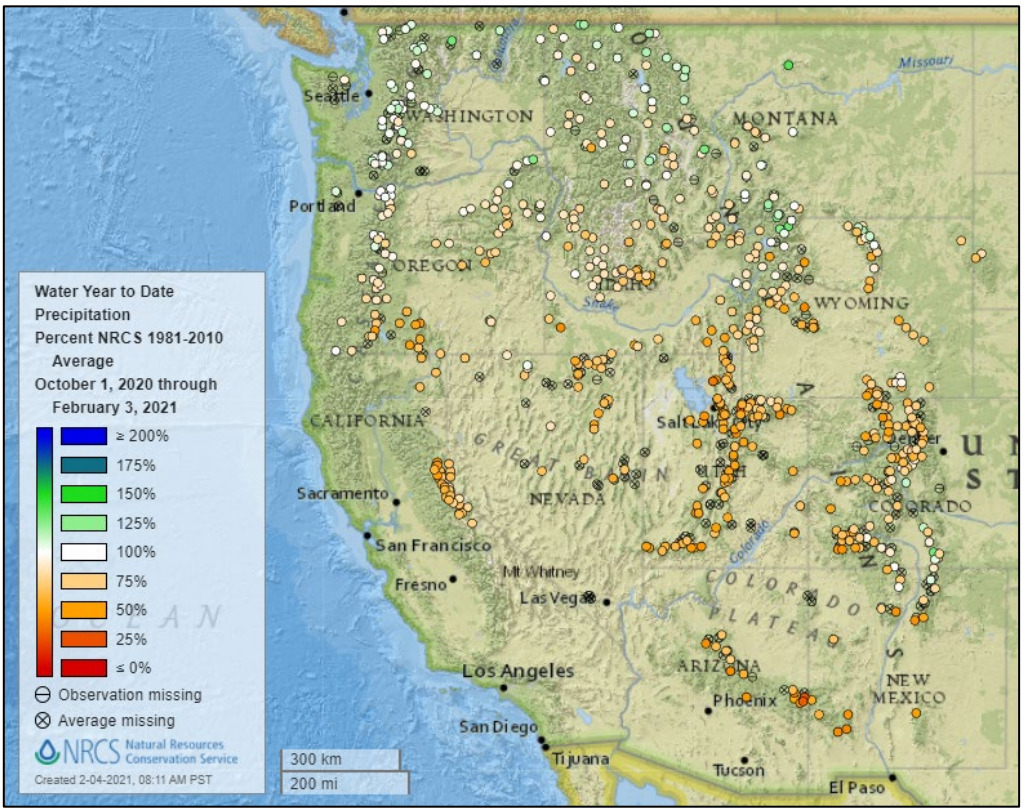
Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

November through January precipitation percent of average map

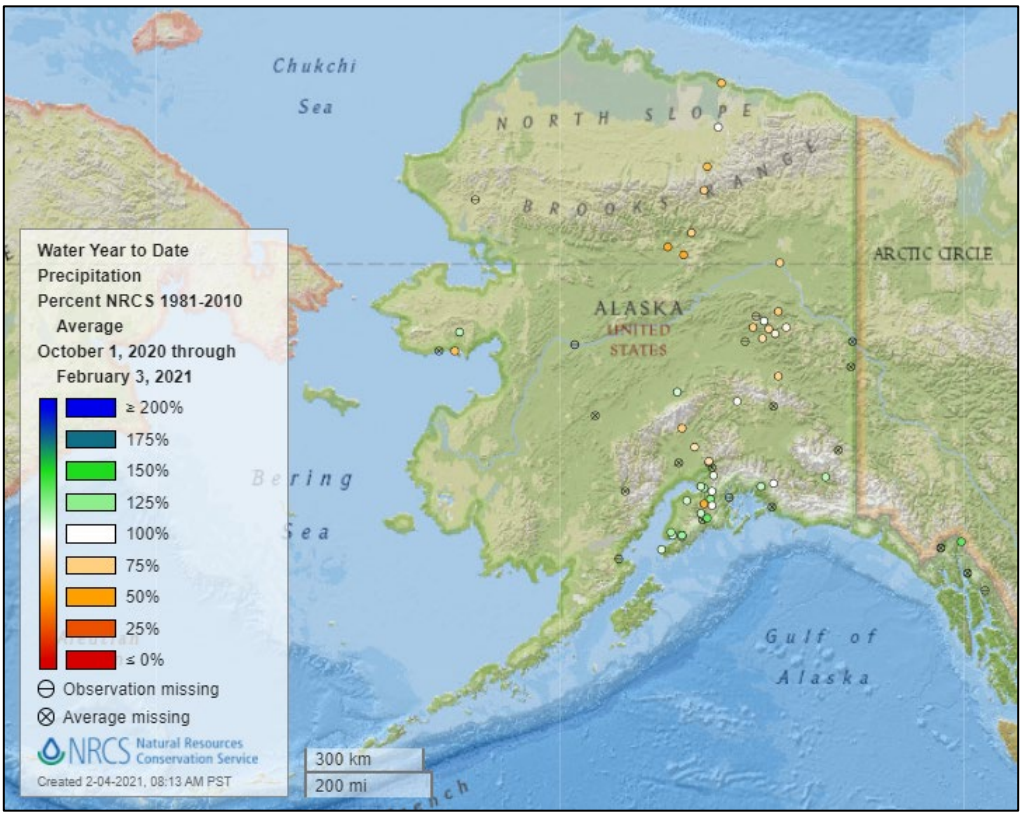


Water Year-to-Date, NRCS SNOTEL Network



2021 water year-to-date precipitation percent of average map

See also:
2021 water year-to-date precipitation values (inches) map



Alaska 2021 water year-to-date precipitation percent of average map

See also:
Alaska 2021 water year-to-date precipitation values (inches) map

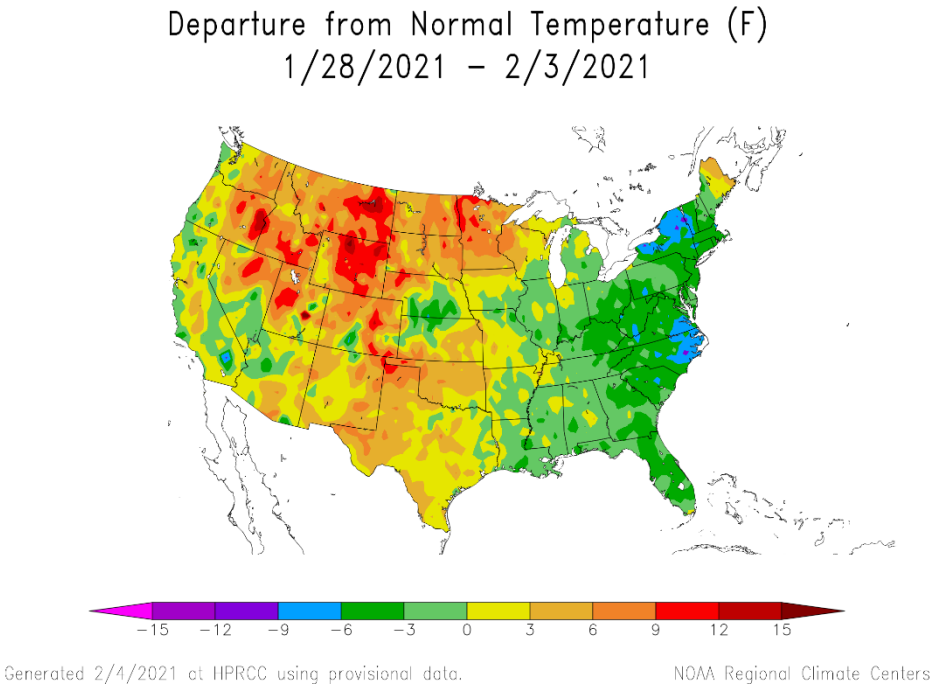
Temperature

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

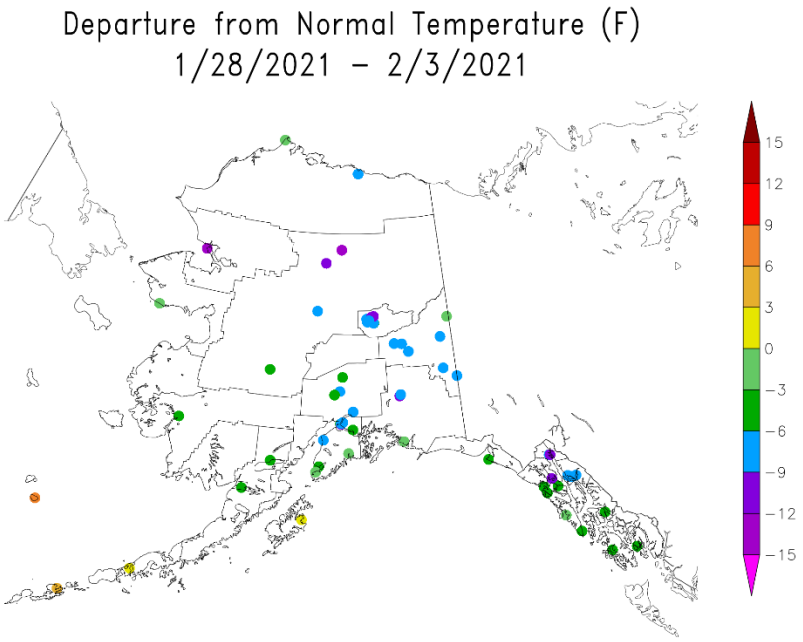


Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

7-day temperature anomaly map for Alaska.

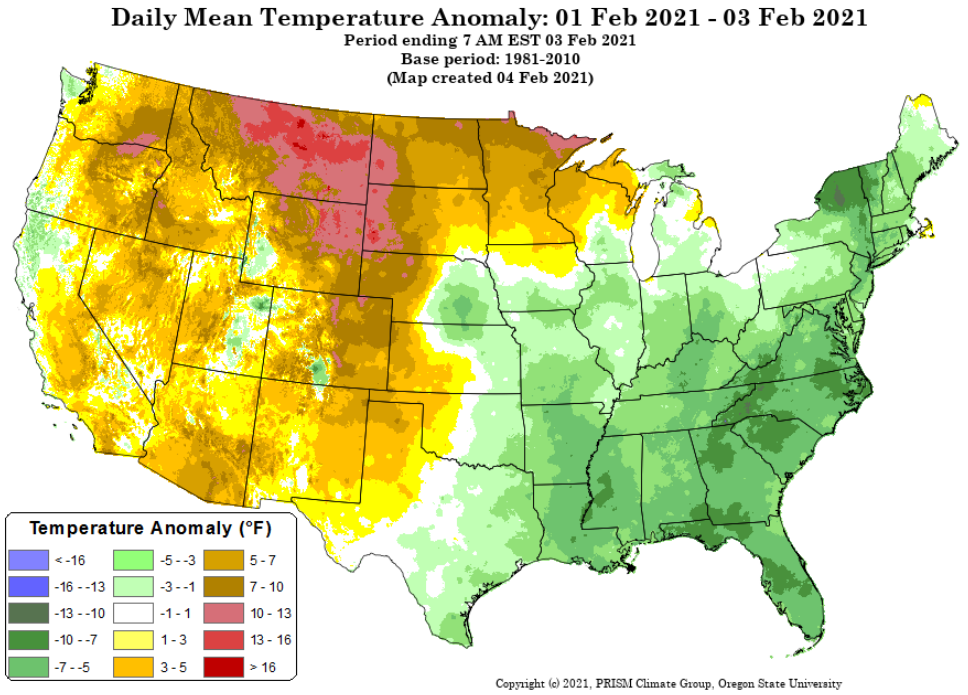
See also: 7-day temperature (° F) map



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

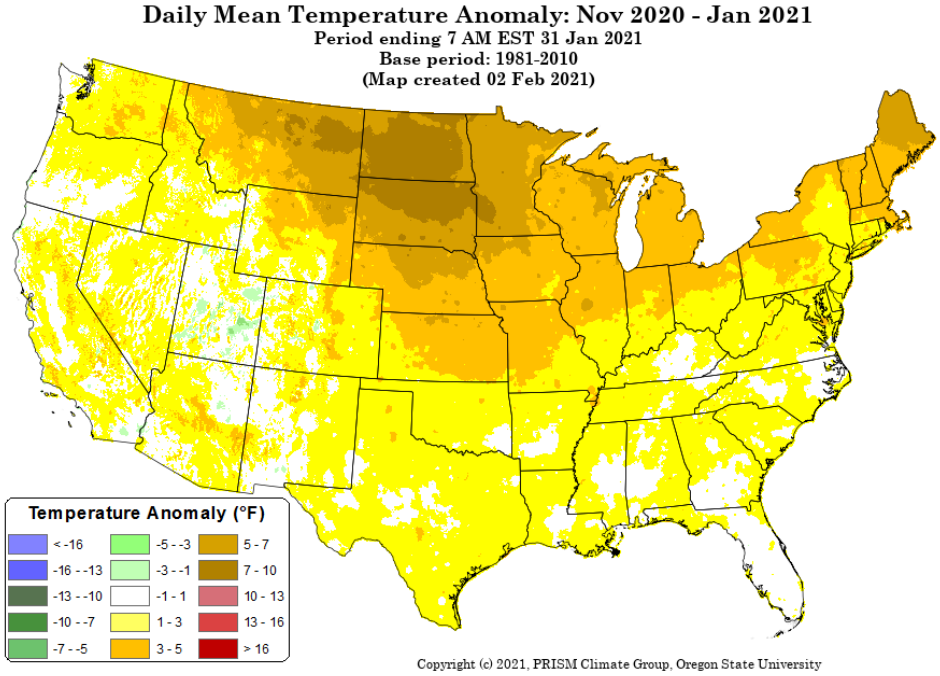
Source: PRISM

Month-to-date national daily mean temperature anomaly map



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

Source: PRISM

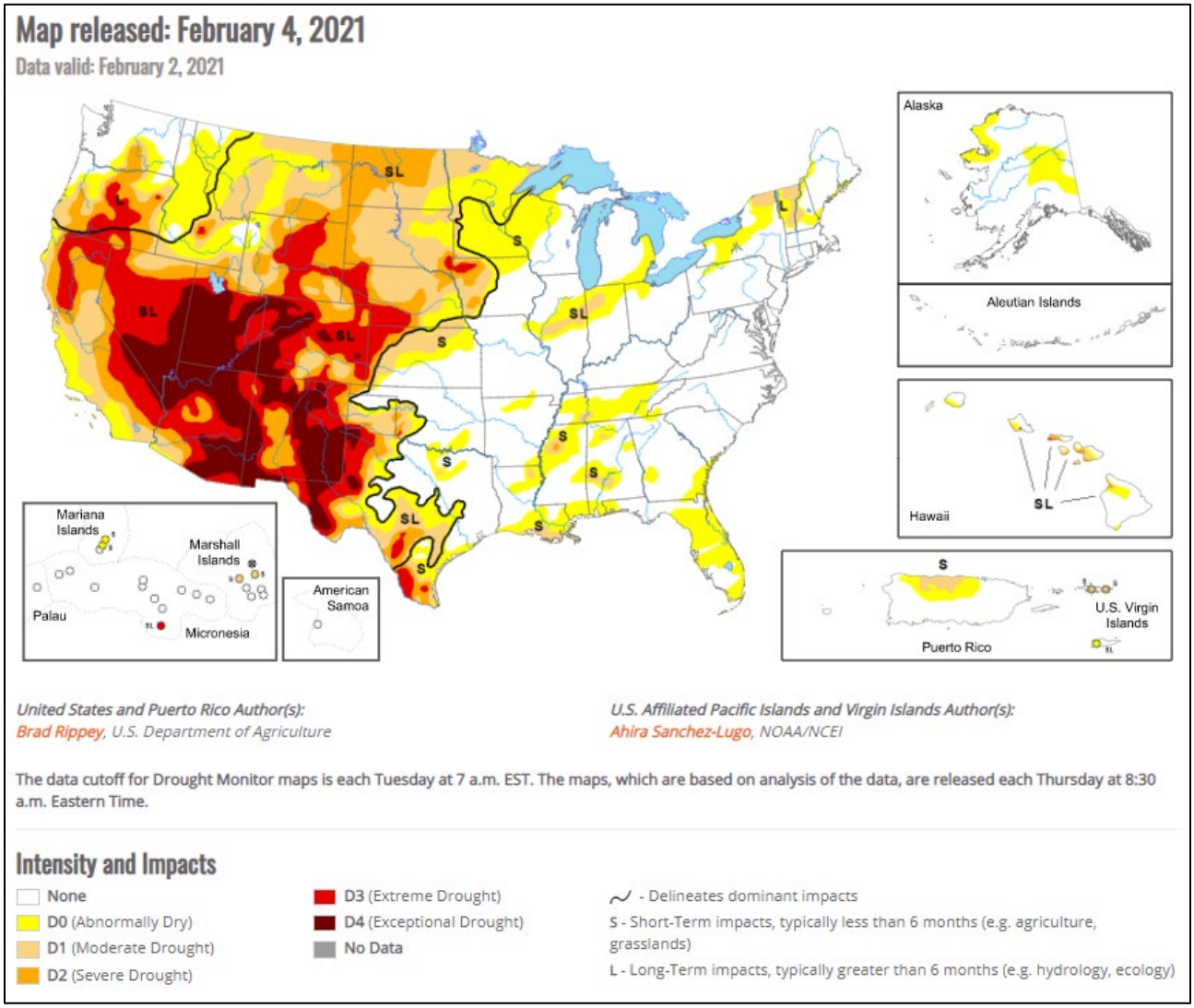


November 2020 through January 2021 daily mean temperature anomaly map

Drought

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

U.S. Drought Portal
Source: NOAA



Current National Drought Summary, February 04, 2021

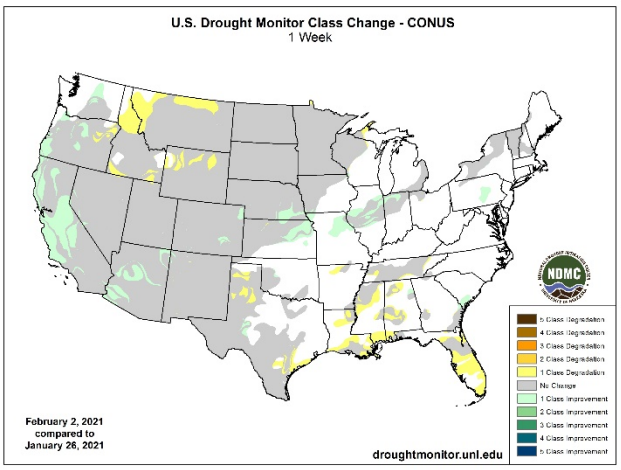
Source: National Drought Mitigation Center

“California’s most powerful storm of the season to date delivered drought-easing precipitation, including heavy mountain snow, but caused local flooding and landslides. Impacts from the multi-day storm system extended beyond California, adding to the benefit of other mid-winter weather systems in portions of the Western drought area. As the calendar turned from January to February, the Western storm finally turned eastward, producing wind and wintry precipitation in the Midwest and Northeast, as well as rain showers in the Southeast. As the drought-monitoring period ended, the former Western storm became a powerful low-pressure system along the middle and northern Atlantic Coast. In contrast, mostly dry weather prevailed throughout the 7-day period in several regions, including the northern Plains and the south-central U.S.”

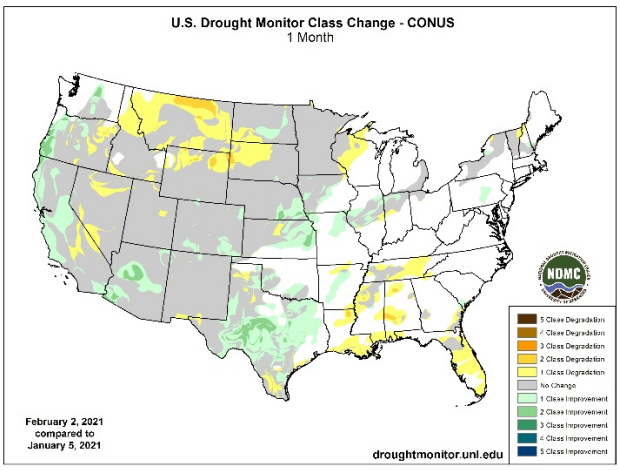
Changes in Drought Monitor Categories over Time

Source: National Drought Mitigation Center

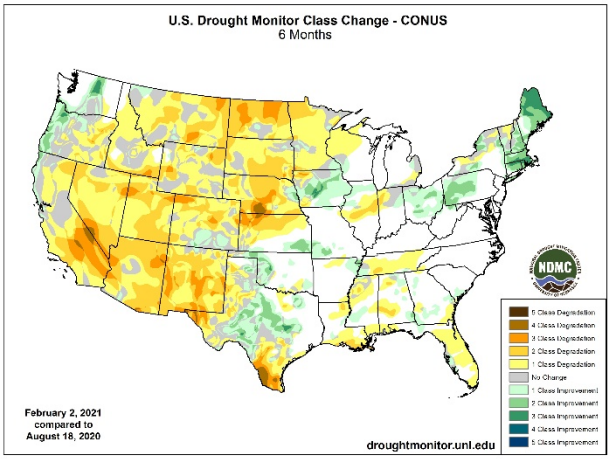
1 Week



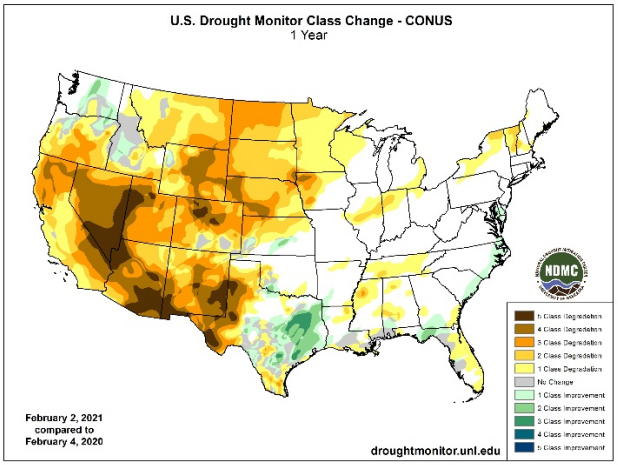
1 Month



6 Months



1 Year



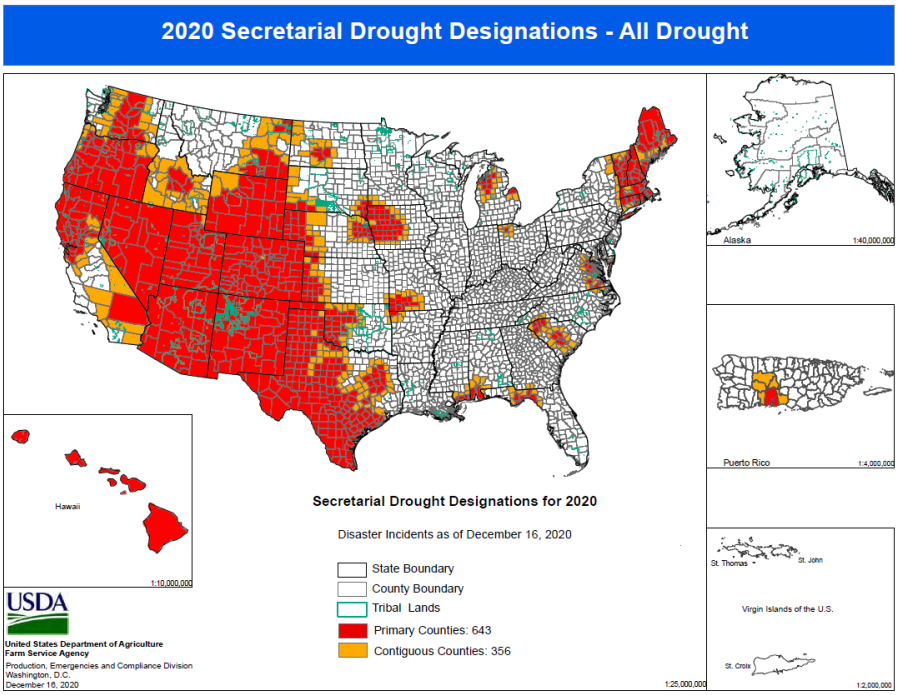
Changes in drought conditions over the last 12 months for the contiguous U.S.

Highlighted Drought Resources

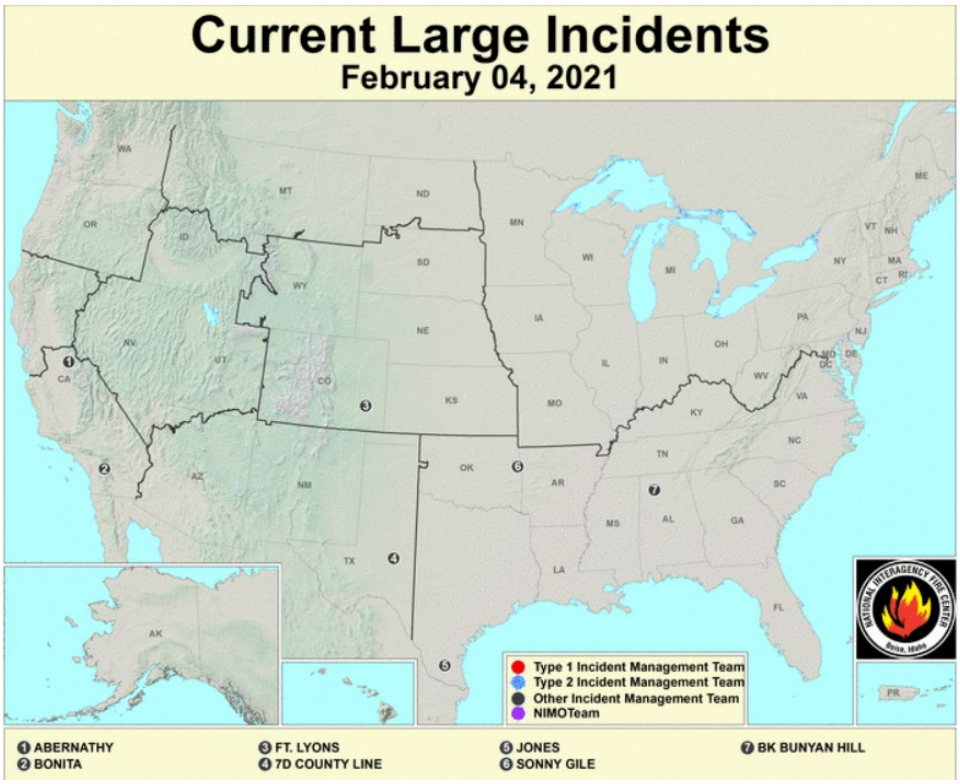
- Drought Impact Reporter
- Quarterly Regional Climate Impacts and Outlook
- U.S. Drought Portal Indicators and Monitoring
- U.S. Population in Drought, Weekly Comparison
- USDA Disaster and Drought Information

Secretarial Drought Designations

Source: USDA Farm Service Agency



Wildfires: USDA Forest Service Active Fire Mapping



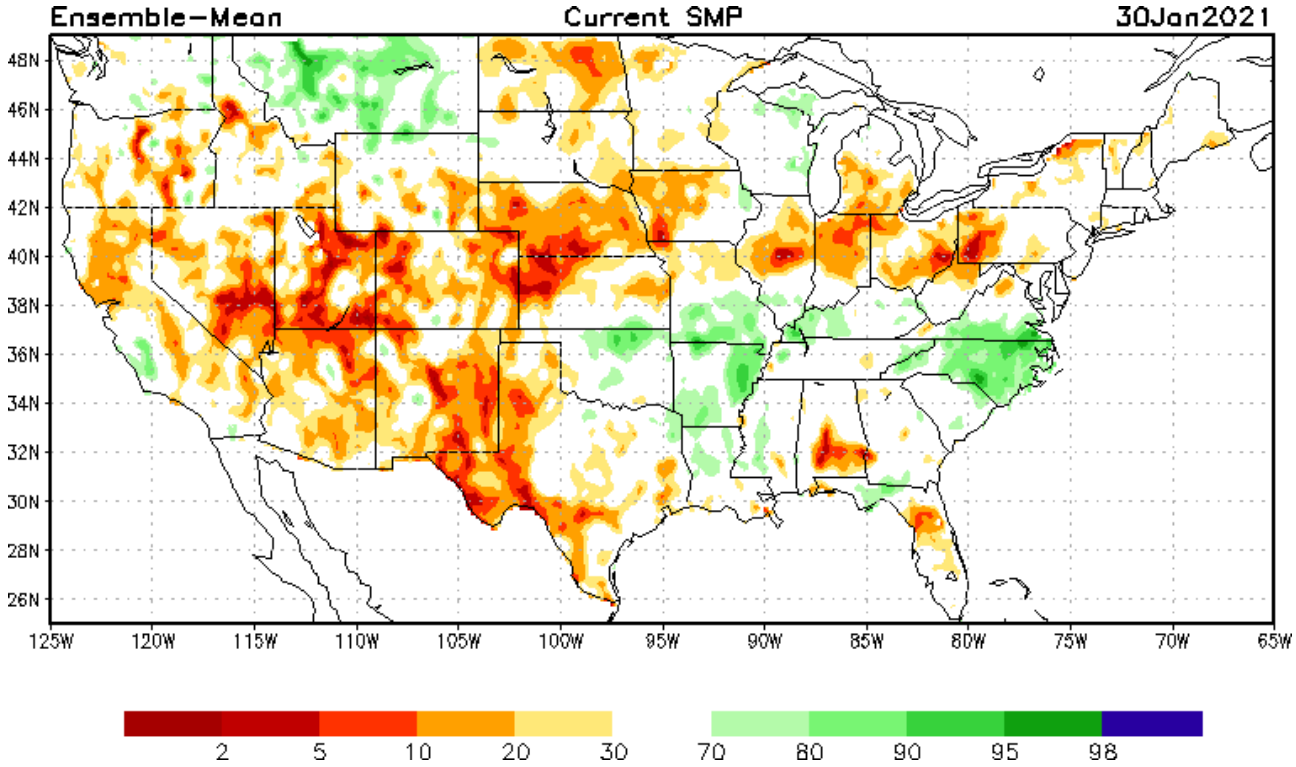
Highlighted Wildfire Resources

- National Interagency Fire Center
- InciWeb Incident Information System
- Significant Wildland Fire Potential Outlook

Other Climatic and Water Supply Indicators

Soil Moisture

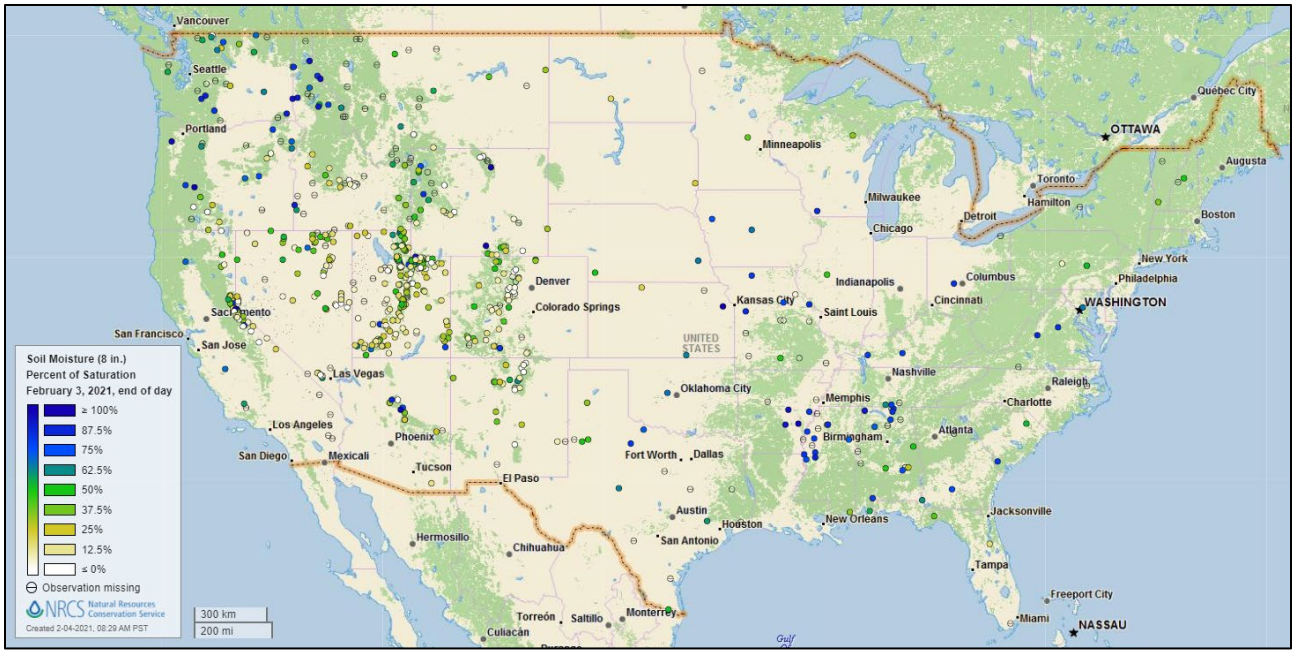
Source: NOAA National Centers for Environmental Prediction



Modeled soil moisture percentiles as of January 30, 2021

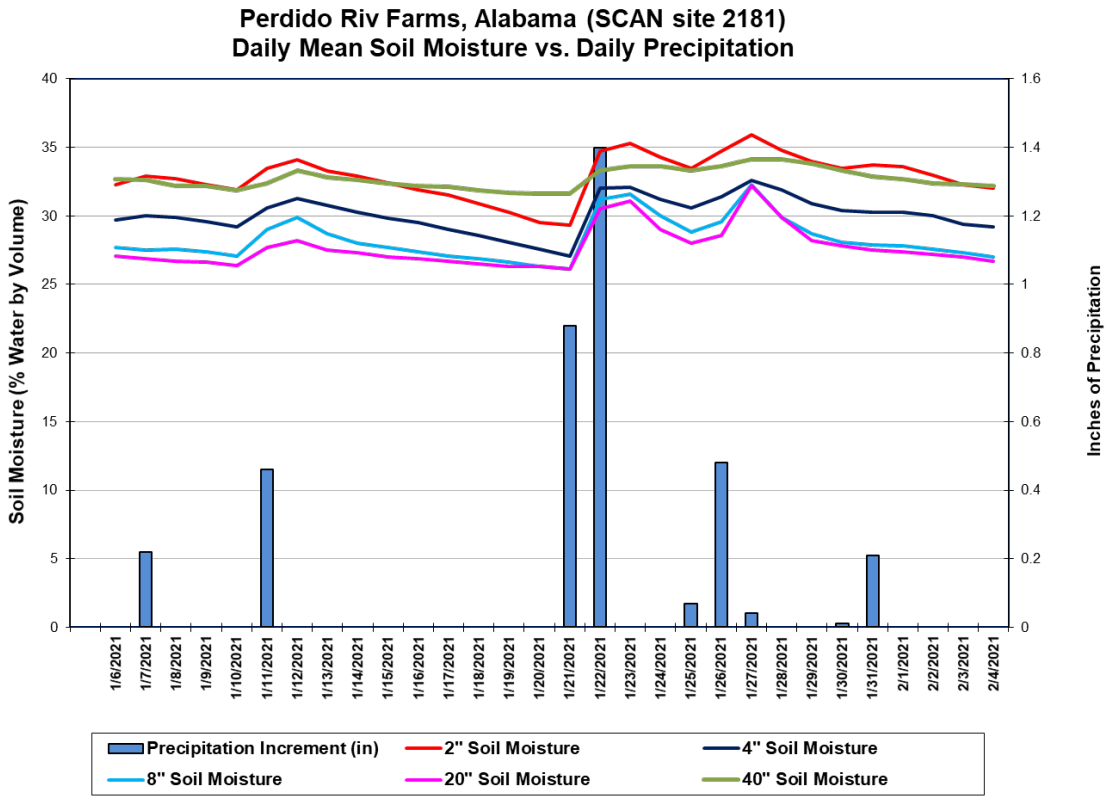
Soil Moisture Percent of Saturation

Source: NRCS SNOTEL and Soil Climate Analysis Network (SCAN)



Soil Moisture

Source: NRCS Soil Climate Analysis Network (SCAN)



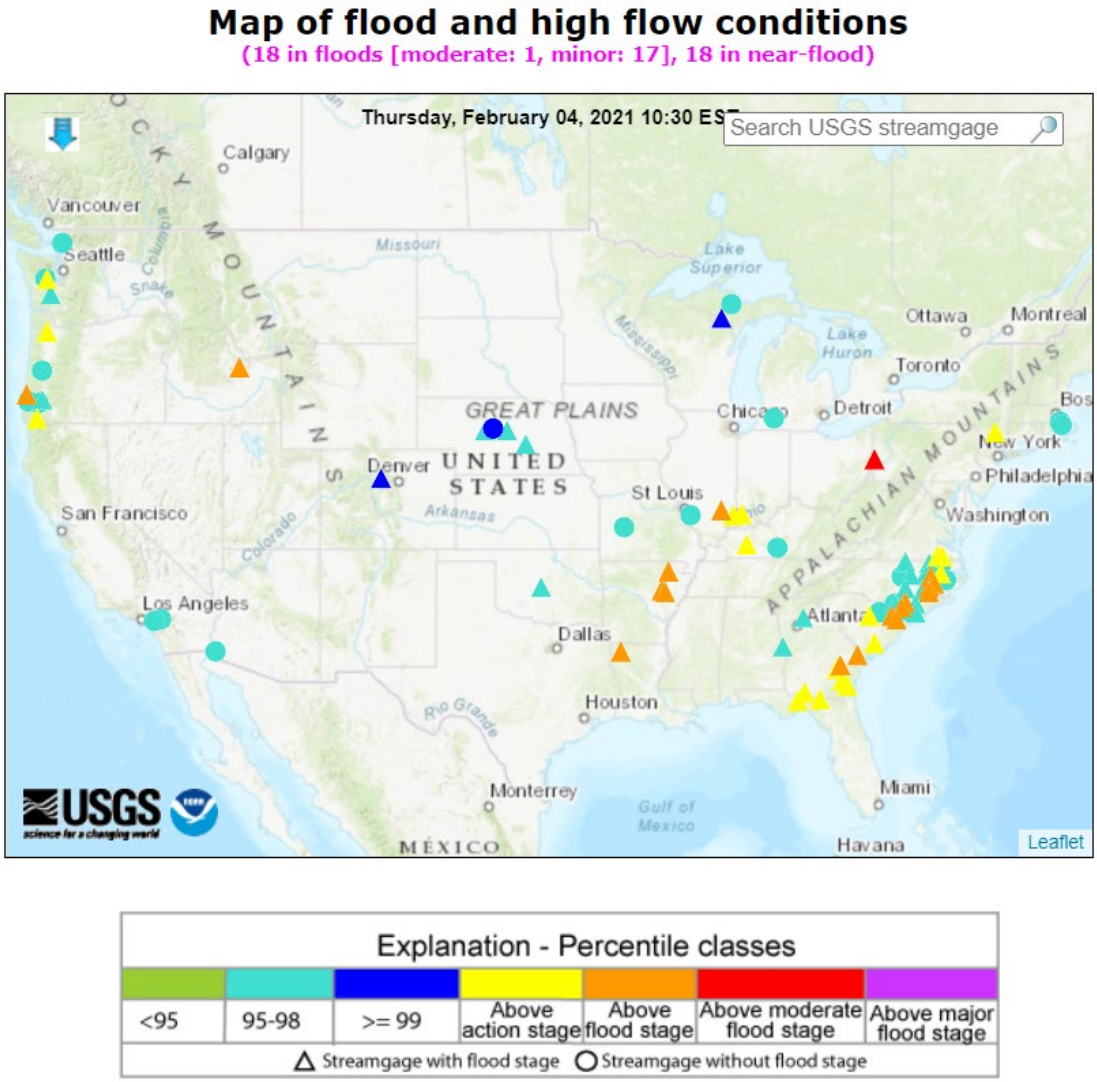
This chart shows the precipitation and soil moisture for the last 30 days at the Perdido Riv Farms SCAN site in Alabama. The largest precipitation event of 2.28 inches on January 21-22 increased the soil moisture at all depth sensors. Accumulated precipitation for the 30-day period was 3.77 inches.

Soil Moisture Data Portals

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

Streamflow, Drought, Flood, and Runoff

Source: U.S. Geological Survey



[WaterWatch: Streamflow, drought, flood, and runoff conditions]

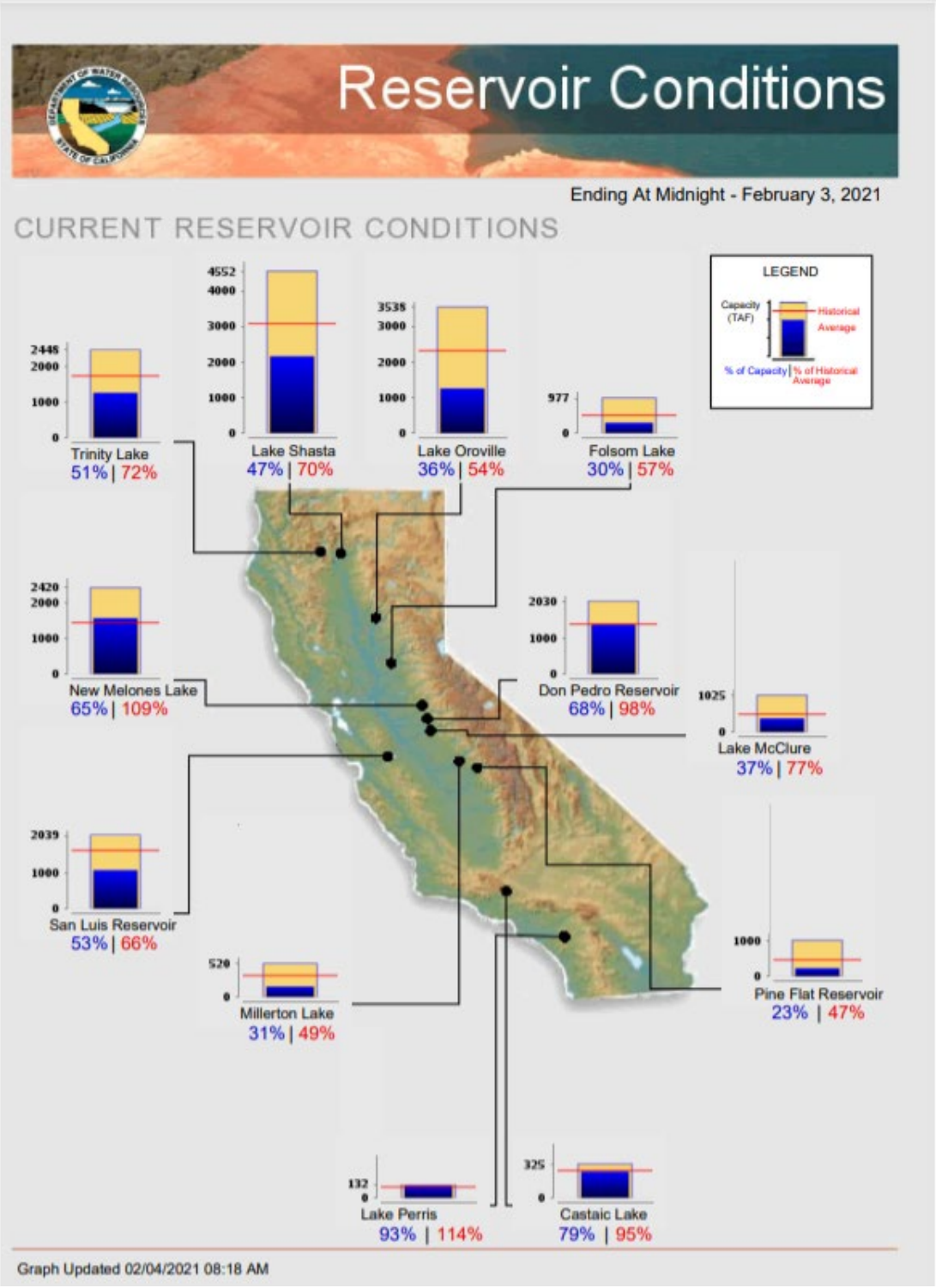
Reservoir Storage

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



Current California Reservoir Conditions

Agricultural Weather Highlights

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

National Outlook, Thursday, February 04, 2021: "For today into Friday, a storm system (and attendant cold front) crossing the nation's mid-section will result in potentially dangerous weather conditions—including gusty winds, blowing snow, and falling temperatures—especially from the upper Midwest into the Great Lakes region. In the front's wake, a protracted period of sub-zero temperatures will engulf the northern Plains and upper Midwest. Early next week, temperatures below -30°F could occur in parts of North Dakota and northern Minnesota. Although much of the country will experience several days with below-normal temperatures, mild weather should prevail in the Desert Southwest and across the Deep South. Following the transition to colder weather, most of the country will observe dry weather, or receive only light precipitation. Locally heavy weekend rainfall may occur, however, in the Southeast, with snow possible on the northern edge of the precipitation shield. Early next week, snow may blanket parts of the Midwest. The NWS 6- to 10-day outlook for February 9 – 13 calls for the likelihood of colder-than-normal weather nearly nationwide, except for above-normal temperatures across the southern tip of Florida and parts of the Southwest. Meanwhile, drier-than-normal weather west of the Rockies and in the Midwest and Northeast should contrast with near- or above-normal precipitation across the High Plains and Deep South."

Weather Hazards Outlook: February 06 – 10, 2021

Source: NOAA Weather Prediction Center

U.S. Day 3-7 Hazards Outlook

About the Hazards Outlook

Created February 03, 2021

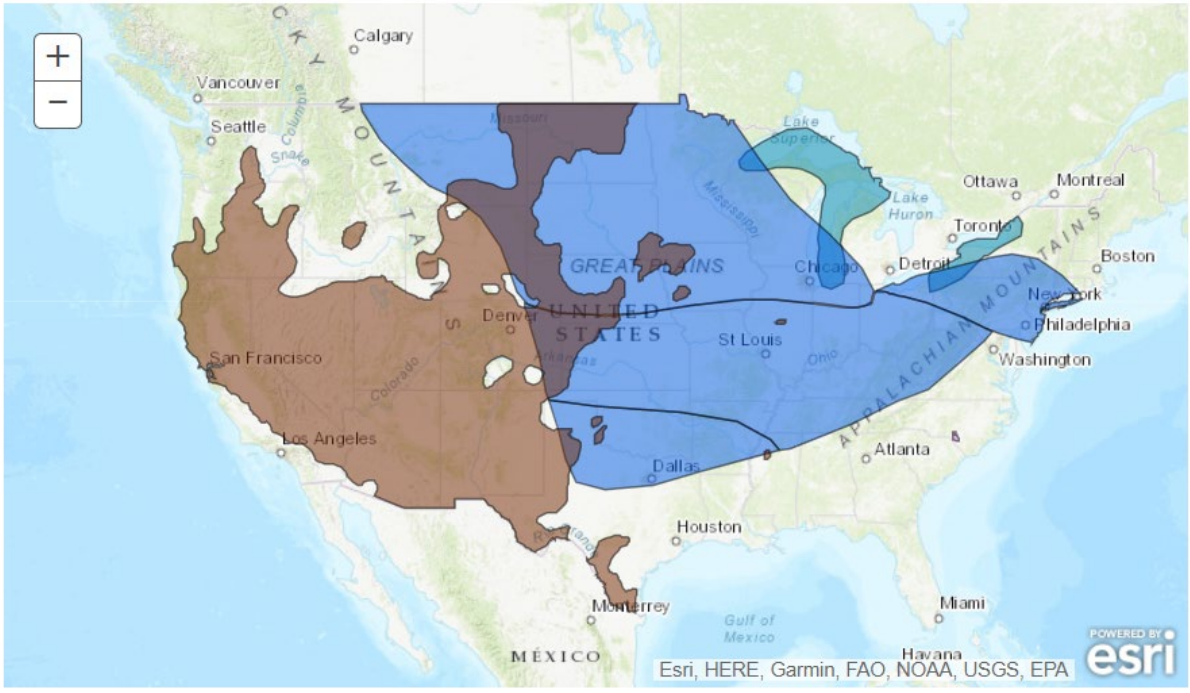
NOTE: These products are only created Monday through Friday. Please exercise caution using this outlook during the weekend.

Precipitation	☑
Temperature	☑
Soils	☑

Legend

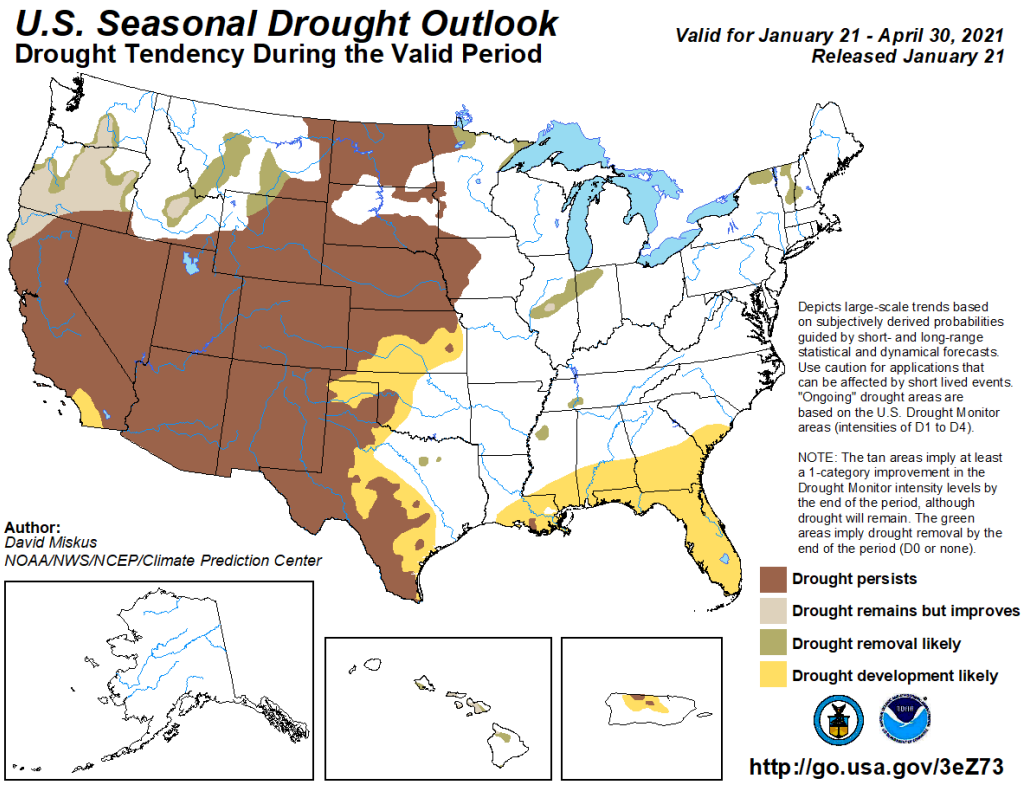
- Flooding Likely
- Flooding Occurring or Imminent
- Flooding Possible
- Freezing Rain
- Heavy Ice
- Heavy Precipitation
- Heavy Rain
- Heavy Snow
- Severe Weather
- Excessive Heat
- High Winds
- Much Above Normal Temperatures
- Much Below Normal Temperatures
- Significant Waves
- Enhanced Wildfire Risk
- Severe Drought

Valid February 06, 2021 - February 10, 2021



Seasonal Drought Outlook: January 21 – April 30, 2021

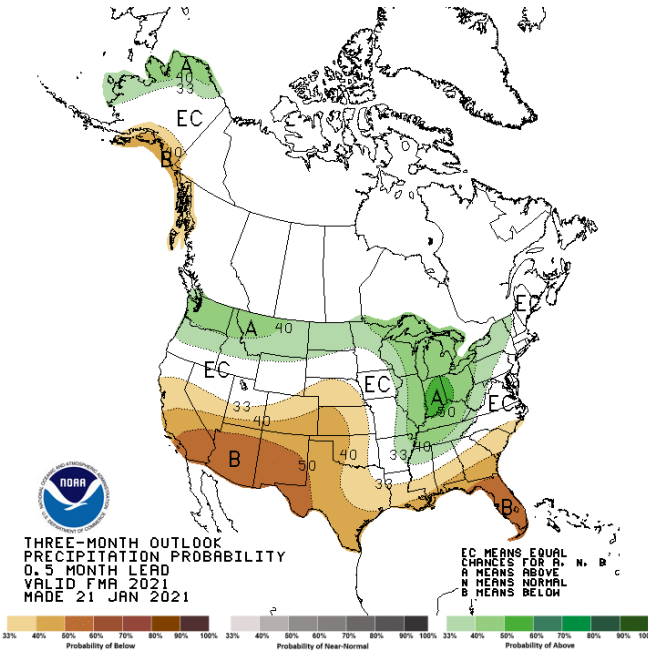
Source: National Weather Service



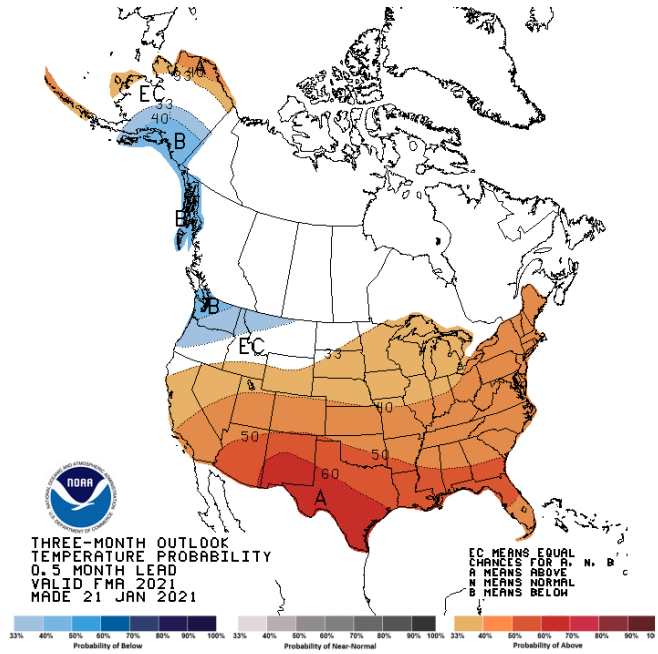
Climate Prediction Center 3-Month Outlook

Source: National Weather Service

Precipitation



Temperature



February-March-April (FMA) 2021 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.