

# Water and Climate Update

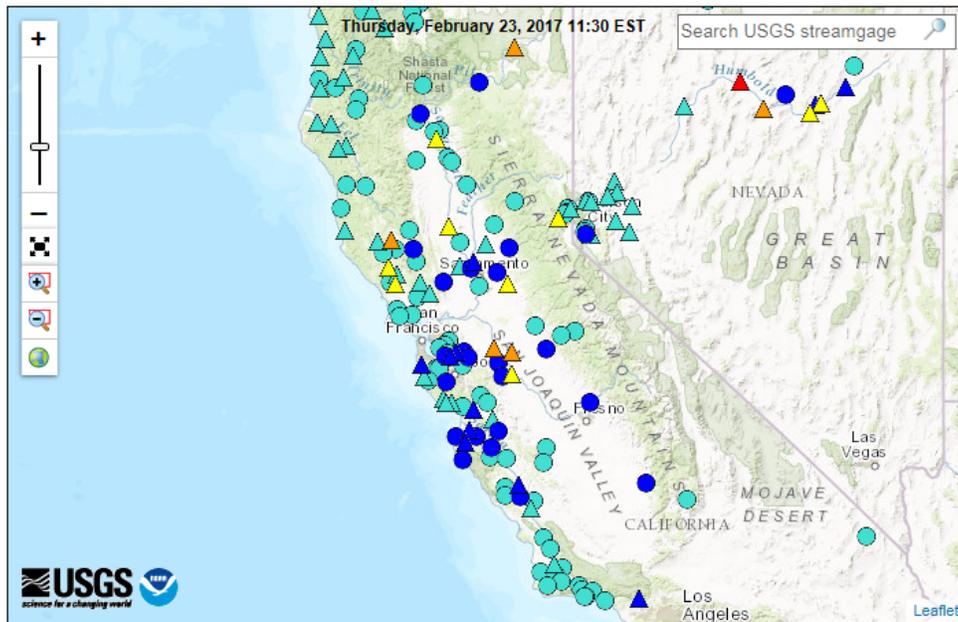
February 23, 2017

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.

Snow .....	2	Other Climatic and Water Supply Indicators .....	11
Precipitation .....	3	Short- and Long-Range Outlooks.....	14
Temperature .....	6	More Information.....	15
Drought .....	9		

## Heavy rain and flood evacuations in San Jose, California

Map of flood and high flow conditions



Explanation - Percentile classes							
<95	95-98	>= 99	Above action stage	Above flood stage	Above moderate flood stage	Above major flood stage	Not ranked
▲ Streamgage with flood stage    ○ Streamgage without flood stage							

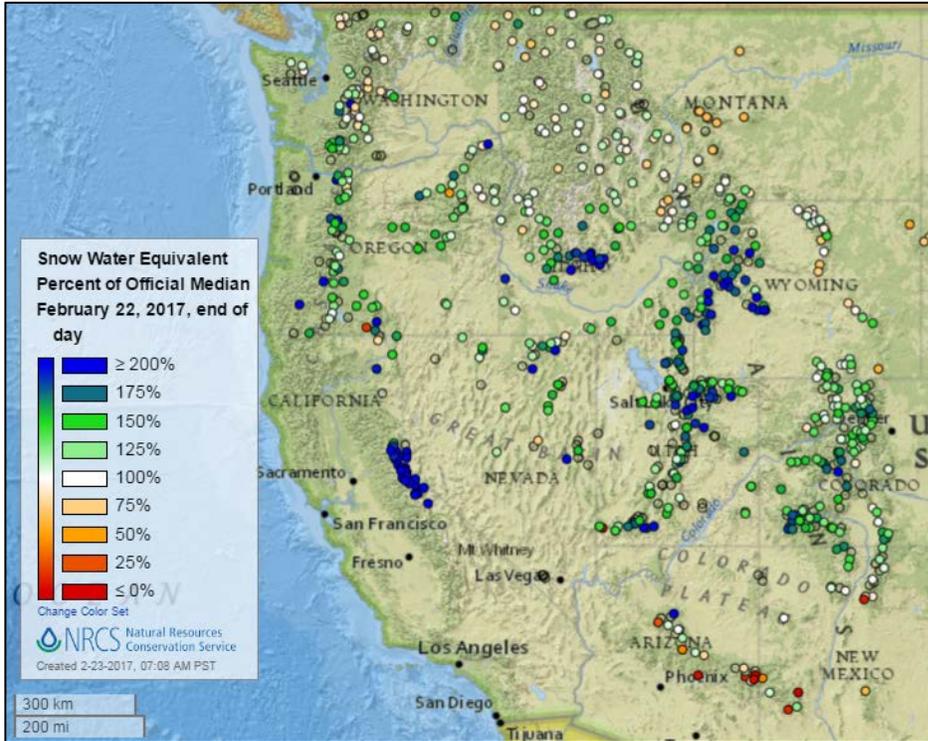
Storms with heavy precipitation continue to take aim at California. 14,000 people were evacuated in San Jose in northern California on Wednesday, with most being allowed to return home today. There were reports of several dramatic rescues in the quickly-rising floodwaters.

**More News:**

- [The Latest: Most California flood victims allowed home](#)
- [Thousands still forced from homes by flooding in California tech hub](#)
- [In San Jose, dramatic rescues as hundreds flee rising floodwaters](#)
- [Another California Dam Grapples With Flood Danger](#)
- [Historic California Floods in Photos](#)

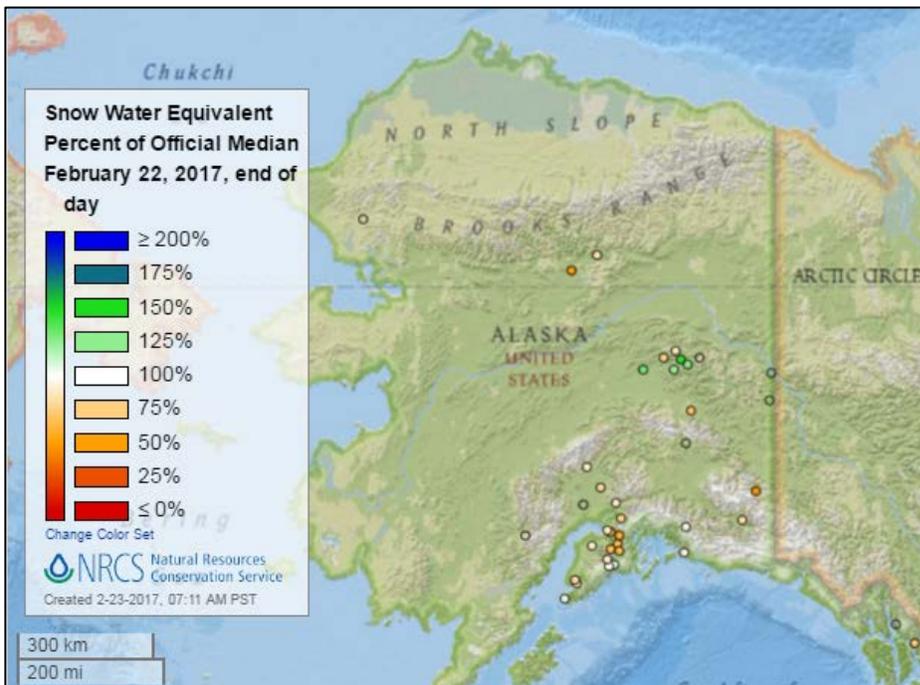
## Snow

### Current Snow Water Equivalent, NRCS SNOTEL Network



[Snow water equivalent percent of median map](#)

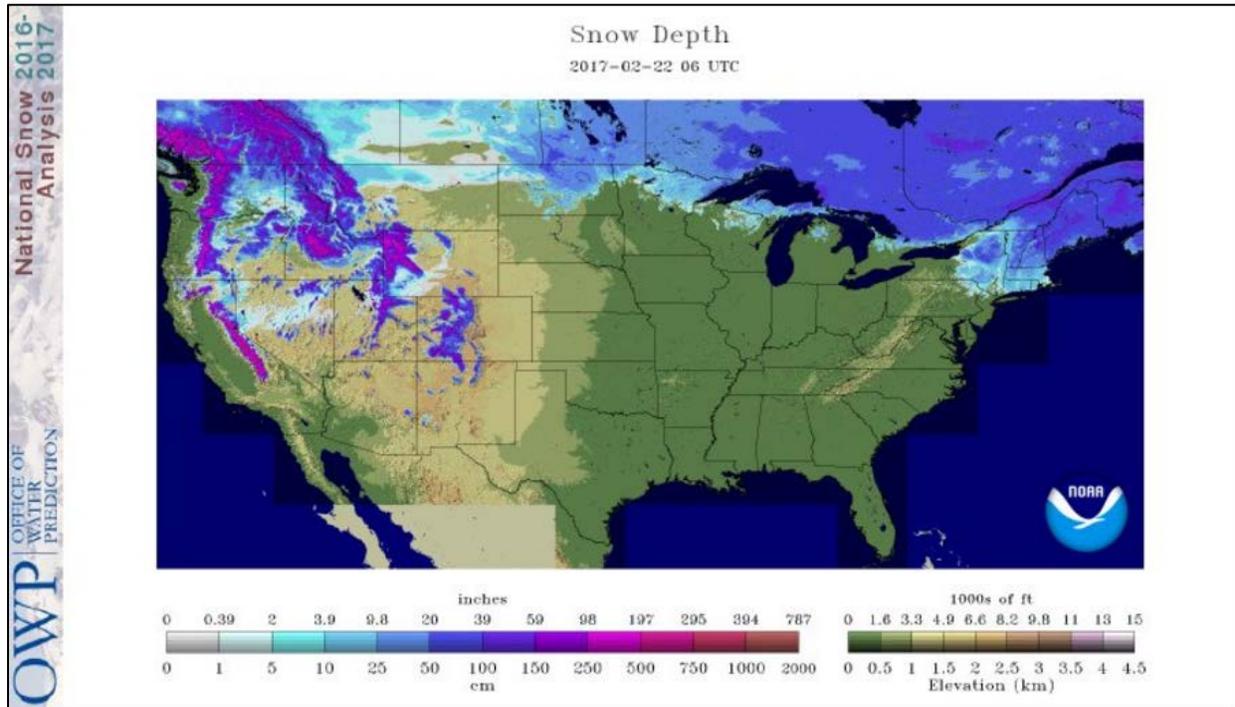
**See also:**  
[Snow water equivalent values \(inches\) map](#)



[Alaska snow water equivalent percent of median map](#)

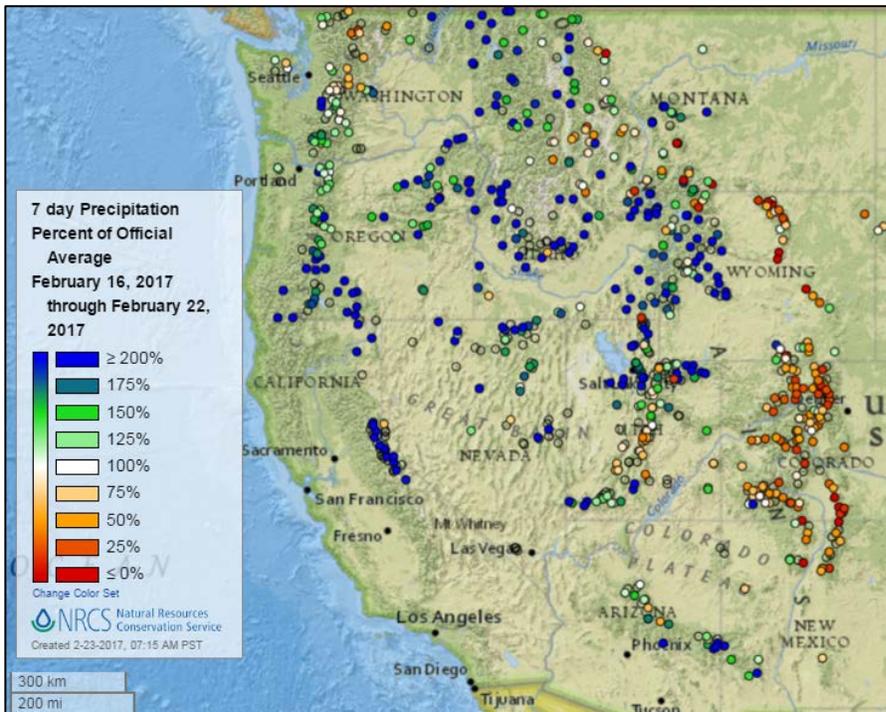
**See also:**  
[Alaska snow water equivalent values \(inches\) map](#)

Current Snow Depth, National Weather Service (NWS) Networks



## Precipitation

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



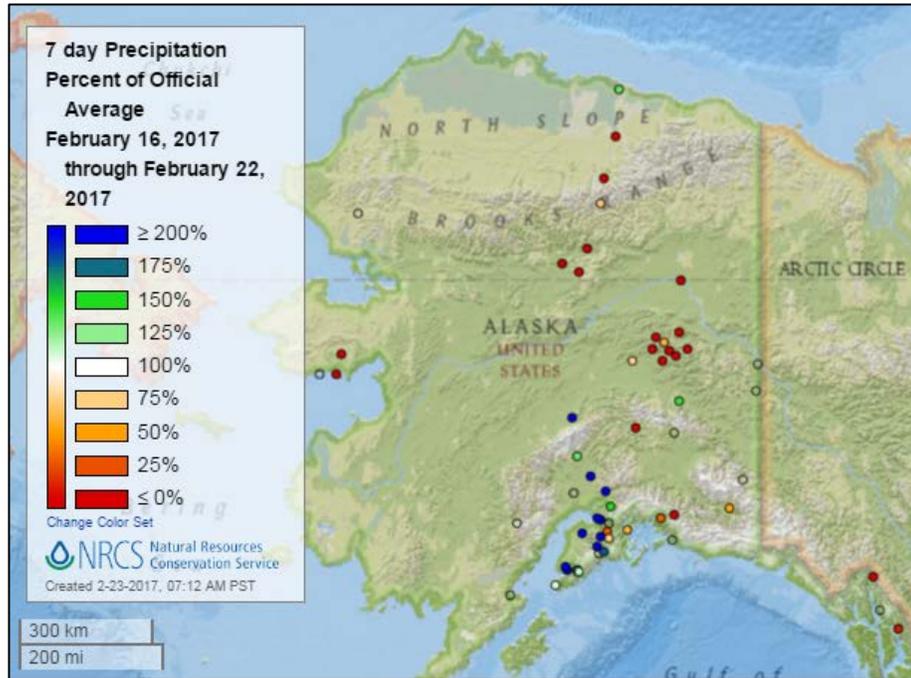
[7-day precipitation percent of average map](#)

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

# Water and Climate Update

[Alaska 7-day precipitation percent of average map](#)

**See also:** [Alaska 7-day total precipitation values \(inches\) map](#)



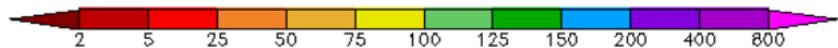
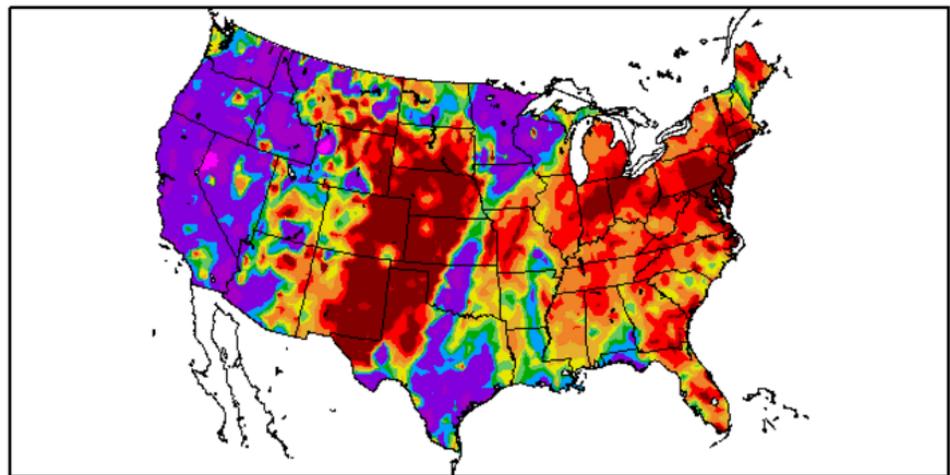
## Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

[7-day precipitation percent of normal map](#) for the continental U.S.

Percent of Normal Precipitation (%)  
2/16/2017 – 2/22/2017

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

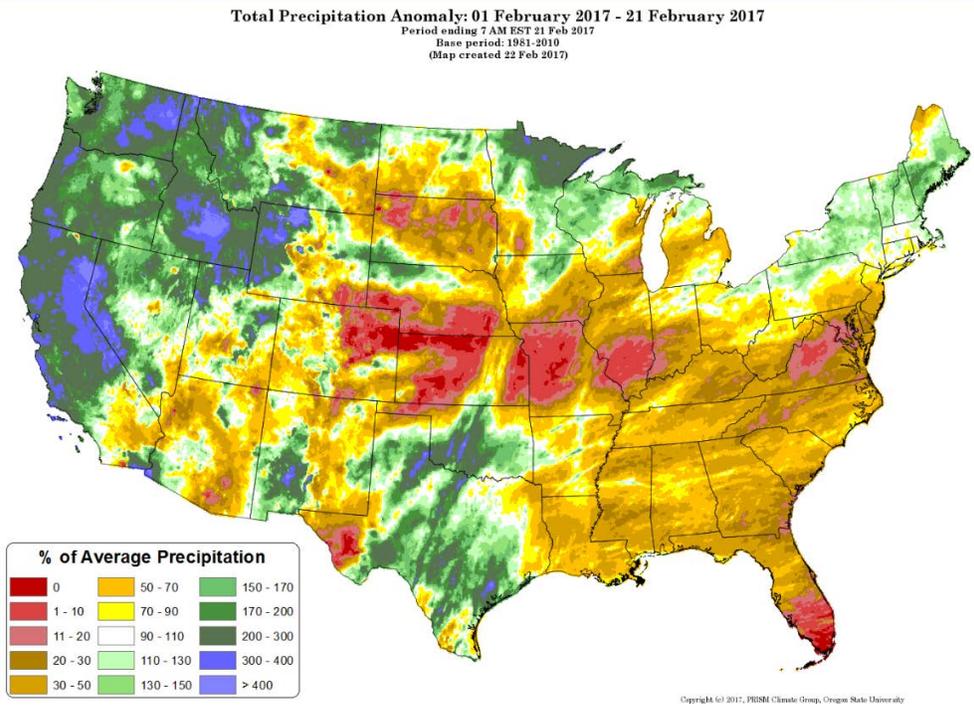


Generated 2/23/2017 at HPRCC using provisional data.

Regional Climate Centers

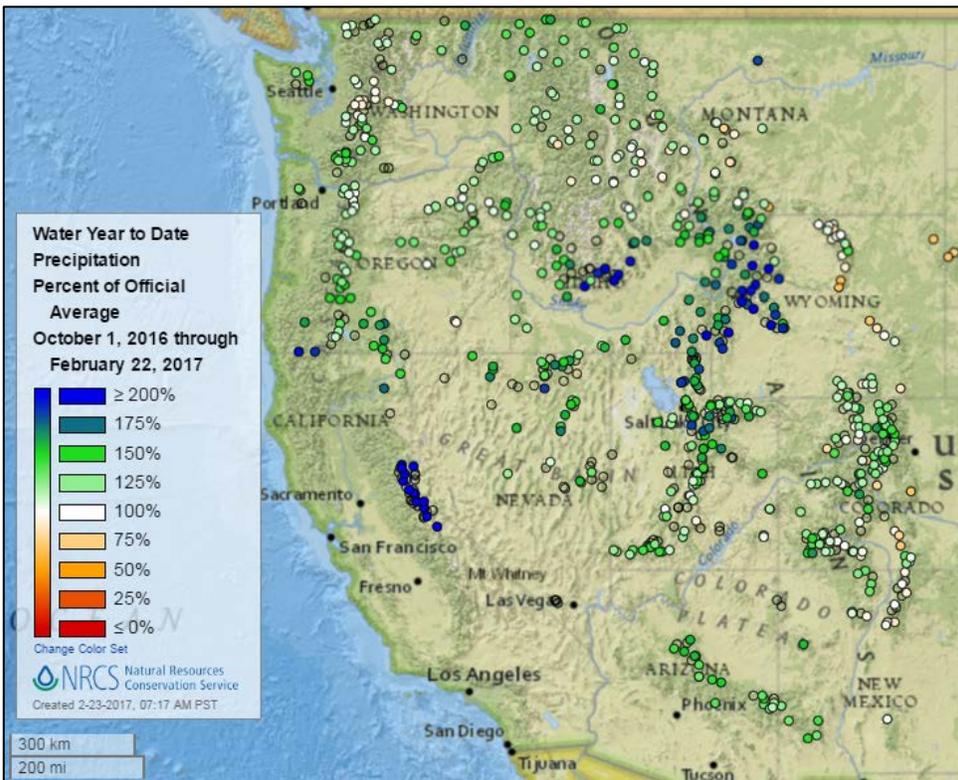
Month-to-Date, All Available Data Including SNOTEL and NWS Networks

Source: PRISM



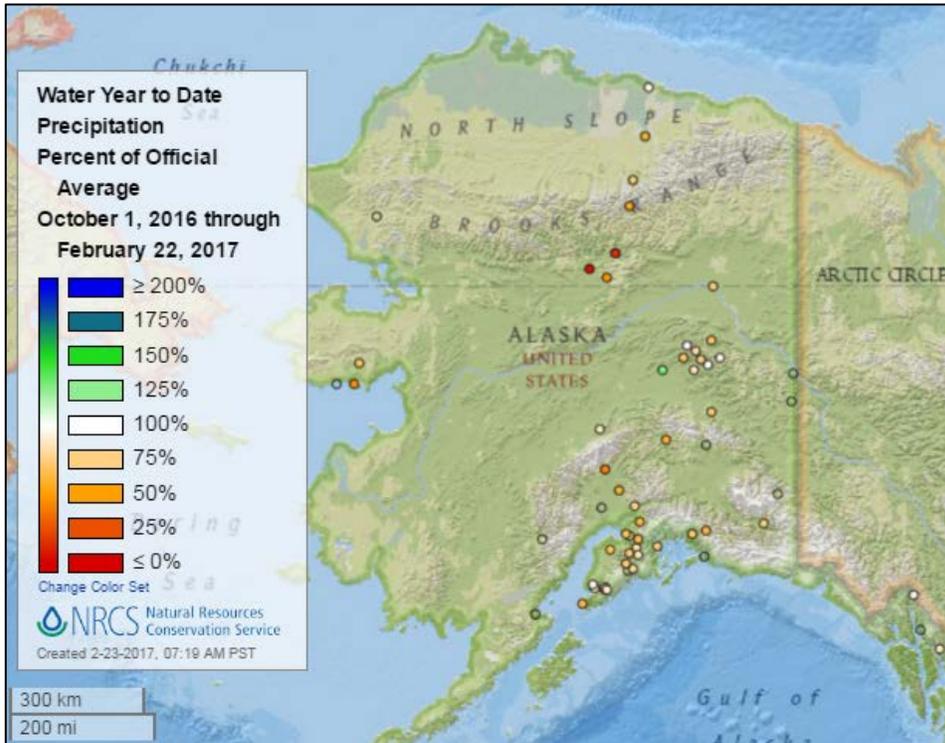
[Month-to-date national precipitation percent of average map](#)

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



[2017 water year-to-date 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:** [Alaska 2017 water year-to-date precipitation values \(inches\) map](#)

## Temperature

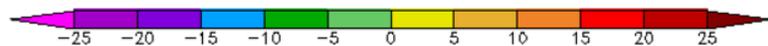
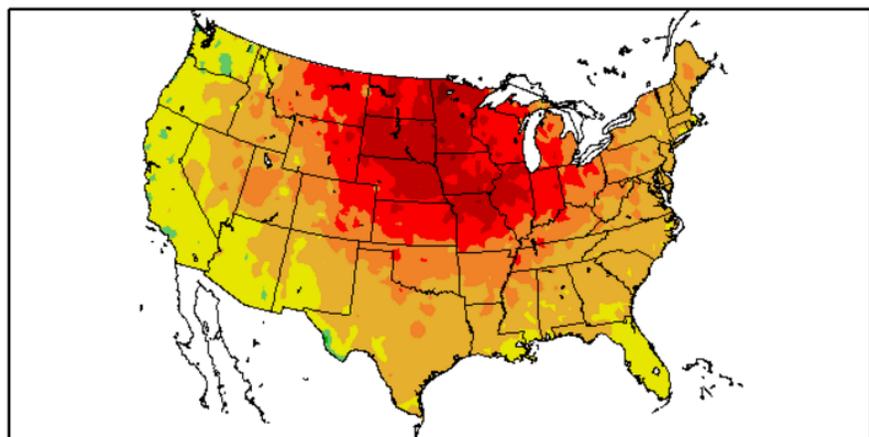
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

[7-day temperature anomaly map](#) for the continental U.S.

**See also:** [7-day temperature \(° F\) map](#)

Departure from Normal Temperature (F)  
2/16/2017 – 2/22/2017



Generated 2/23/2017 at HPRCC using provisional data.

Regional Climate Centers

# Water and Climate Update

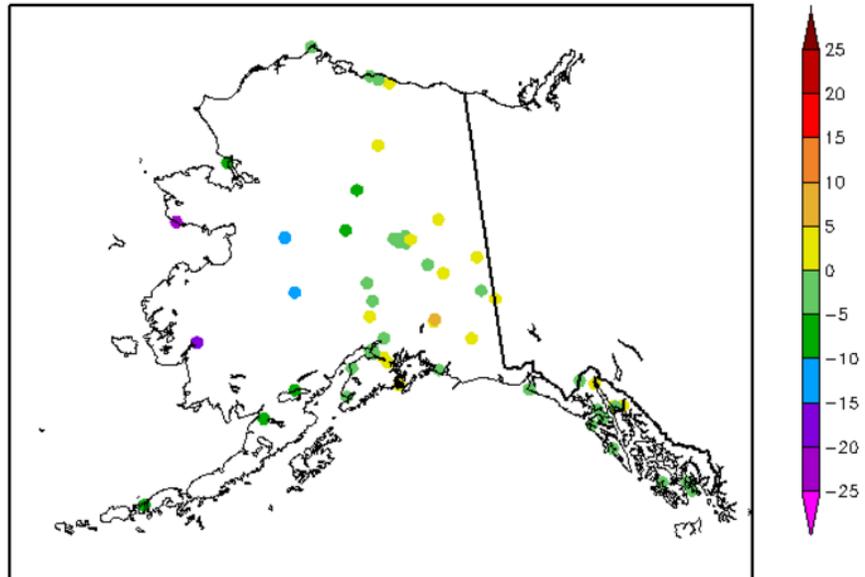
## Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

[7-day temperature anomaly map](#) for Alaska.

See also: [7-day temperature \(° F\) map](#)

### Departure from Normal Temperature (F) 2/16/2017 - 2/22/2017



Generated 2/23/2017 at HPRCC using provisional data.

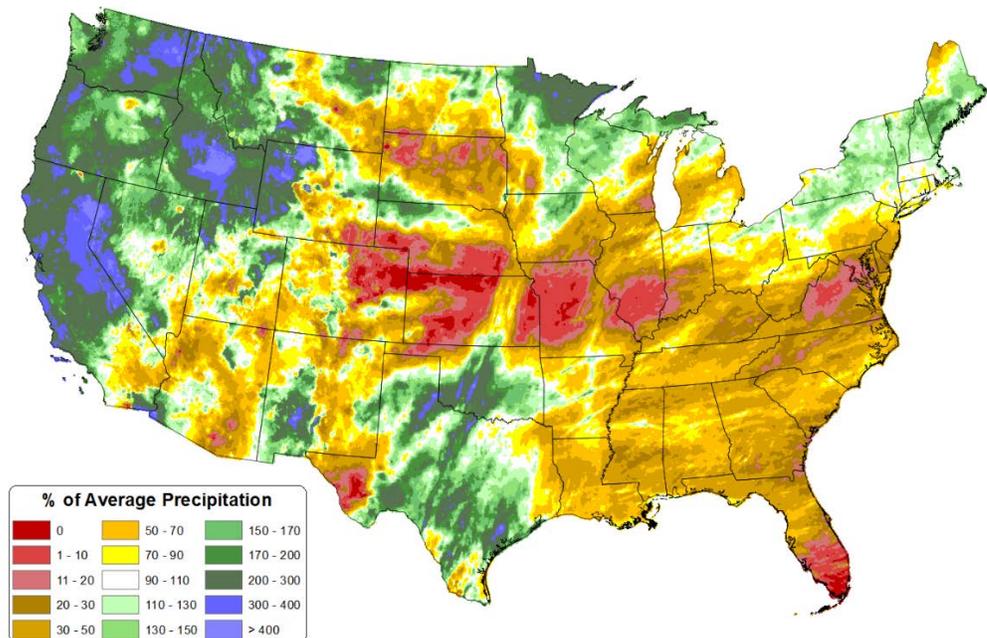
Regional Climate Centers

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

Source: PRISM

[Month-to-date national daily mean temperature anomaly map](#)

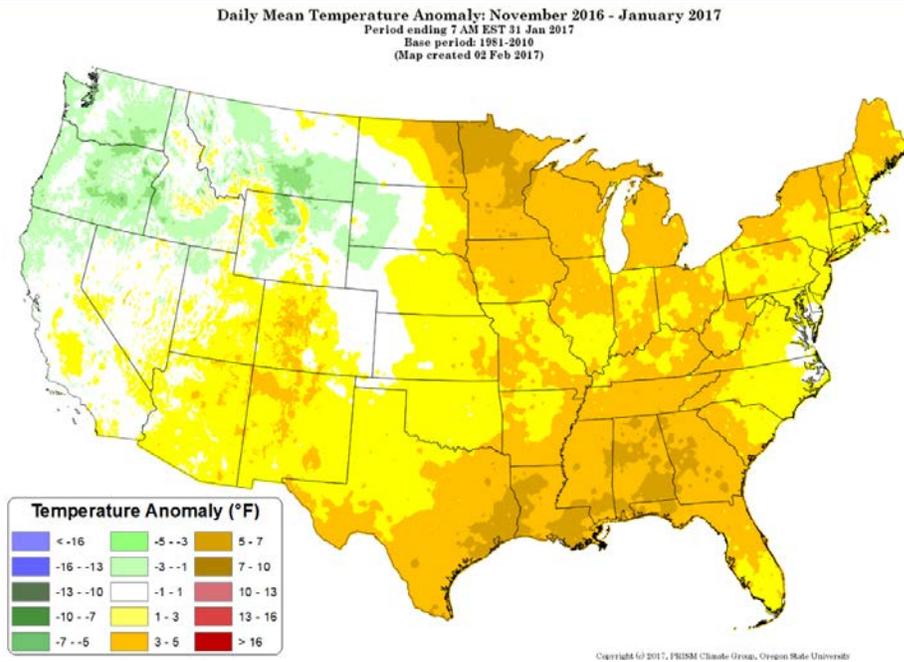
### Total Precipitation Anomaly: 01 February 2017 - 21 February 2017 Period ending 7 AM EST 21 Feb 2017 Base period: 1981-2010 (Map created 22 Feb 2017)



Copyright (c) 2017, PRISM Climate Group, Oregon State University

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

Source: PRISM

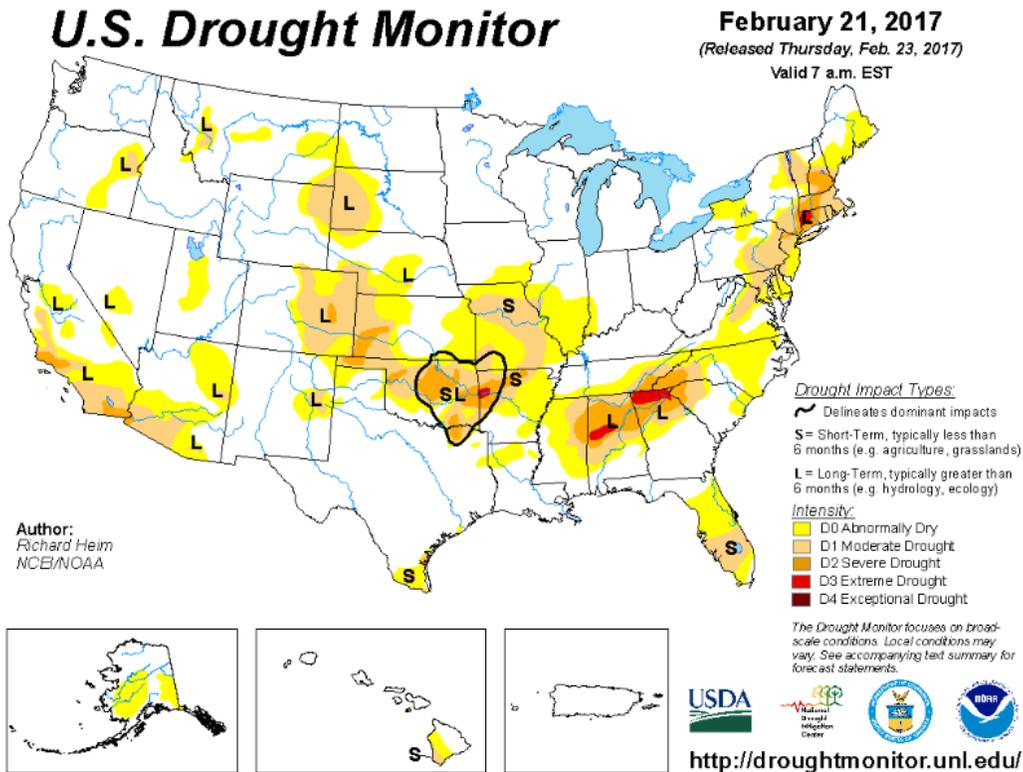


[November 2016 through January 2017 daily mean temperature anomaly map](#)

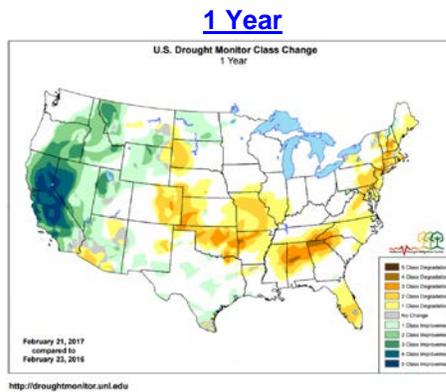
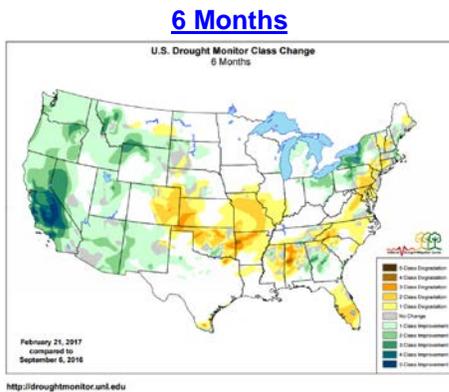
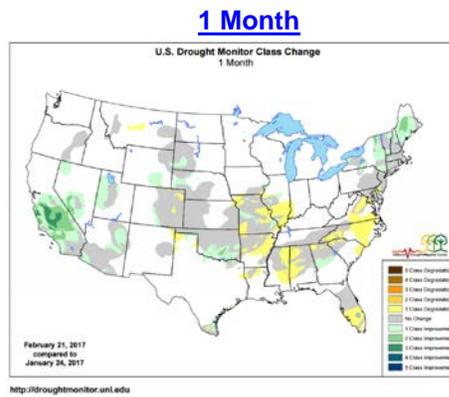
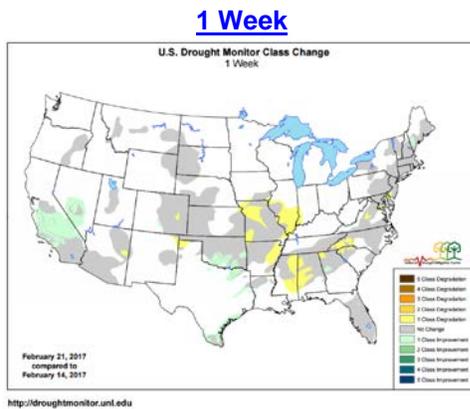
## Drought

[U.S. Drought Monitor](#) See map below.

[U.S. Drought Portal](#) Comprehensive drought resource.



Changes in Drought Monitor Categories over Time



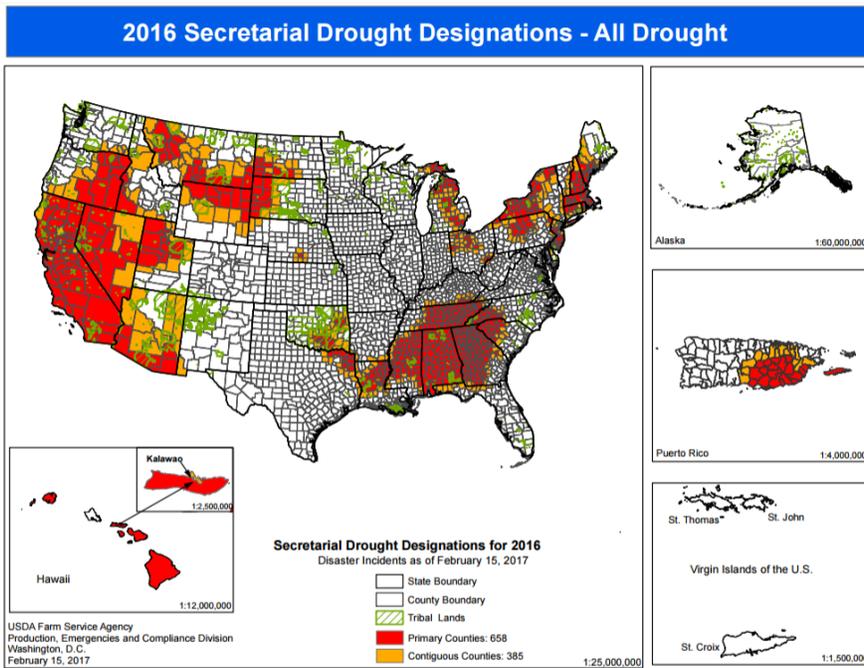
[Changes in drought conditions over the last 12 months](#)

**Current National [Drought Summary](#), February 21, 2017**

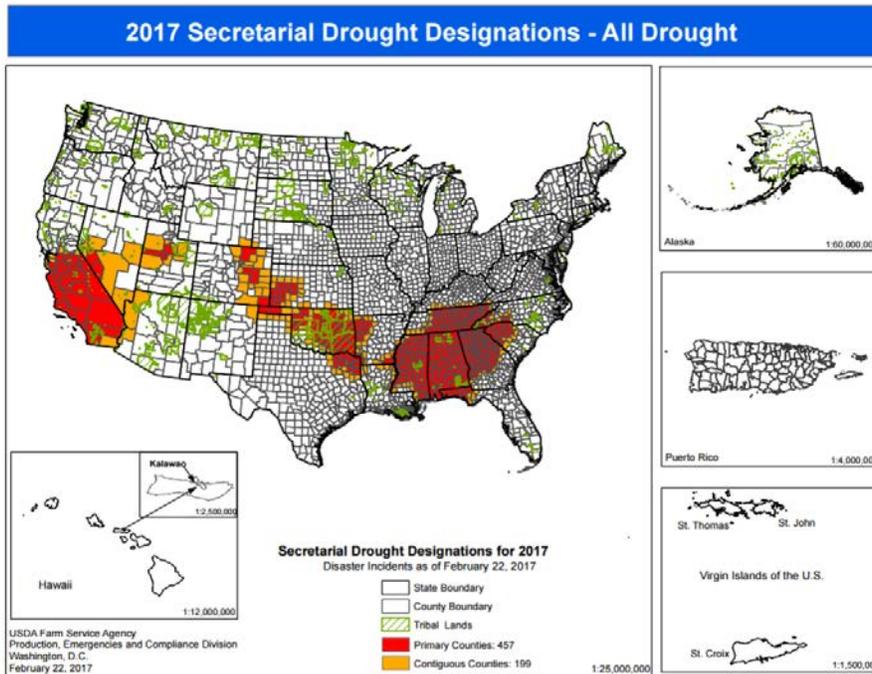
Author: Richard Heim, NOAA/NCEI

“Several weather systems moved across the contiguous U.S. (CONUS) during this U.S. Drought Monitor (USDM) week. Upper-level troughs, surface fronts, and surface low pressure systems slammed into the Pacific Coast, drenching California, Oregon, and Washington with several inches of precipitation, especially in the favored upslope areas. As they crossed the coastal ranges, the weather systems dropped above-normal precipitation across parts of the Southwest and Pacific Northwest. Tapping Gulf of Mexico moisture, a couple systems drenched parts of the Southern Plains to Lower Mississippi Valley, while another brought above-normal precipitation to parts of the Upper Mississippi Valley, but most of the Northern to Central Plains was drier than normal. Upper-level ridging in the central part of the CONUS contributed to above-normal temperatures across most of the country and drier-than-normal weather for most areas east of the Mississippi River. With persistent unusually warm temperatures across much of the CONUS, plants are responding prematurely, especially in the Southeast to Midwest. For example, as noted by the Alabama State Climatologist, plant phenology indicates that Alabama is around 20 days ahead of normal with warm soil temps (and dry soils) so that plants think it is March 12th instead of February 20th. The precipitation that fell this week continued to reduce long-term drought in California and contracted drought in the Southern Plains, but dry conditions in the Mid-Mississippi Valley, Southeast, and Mid-Atlantic expanded drought.”

## USDA 2016 Secretarial Drought Designations



## NEW! USDA 2017 Secretarial Drought Designations

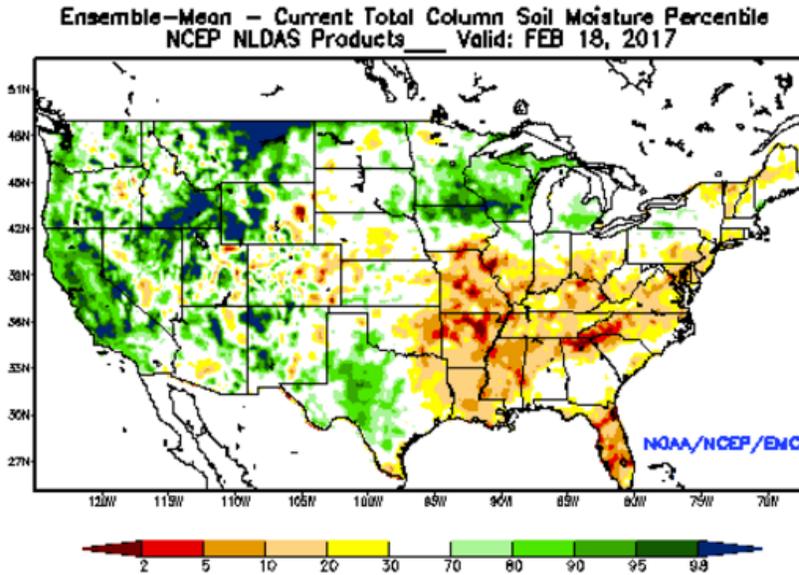


### Highlighted Drought Resources

- [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](#)

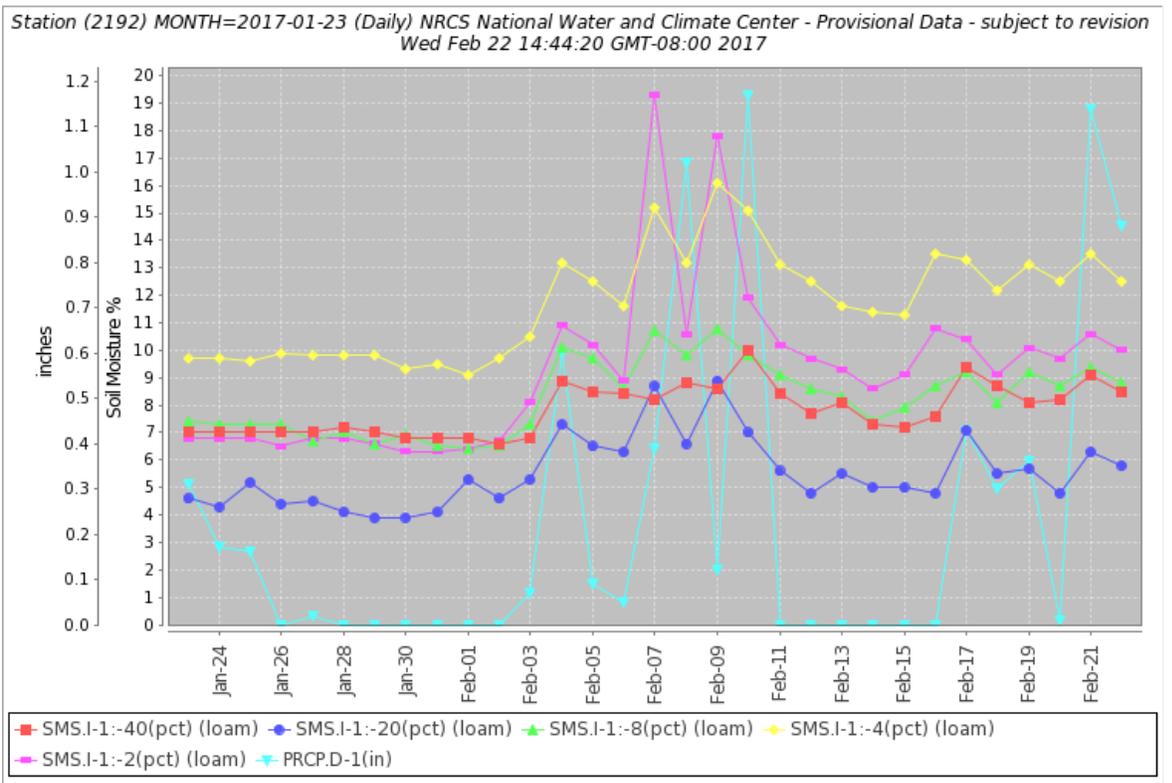
## Other Climatic and Water Supply Indicators

### Soil Moisture



[Modeled soil moisture percentiles](#) as of February 18, 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 last 30 days at the [Eagle Lake SCAN site 2192](#) in California. Precipitation during multiple events in the last month has increased soil moisture at all sensor depths..

**Soil Moisture Data Portals**

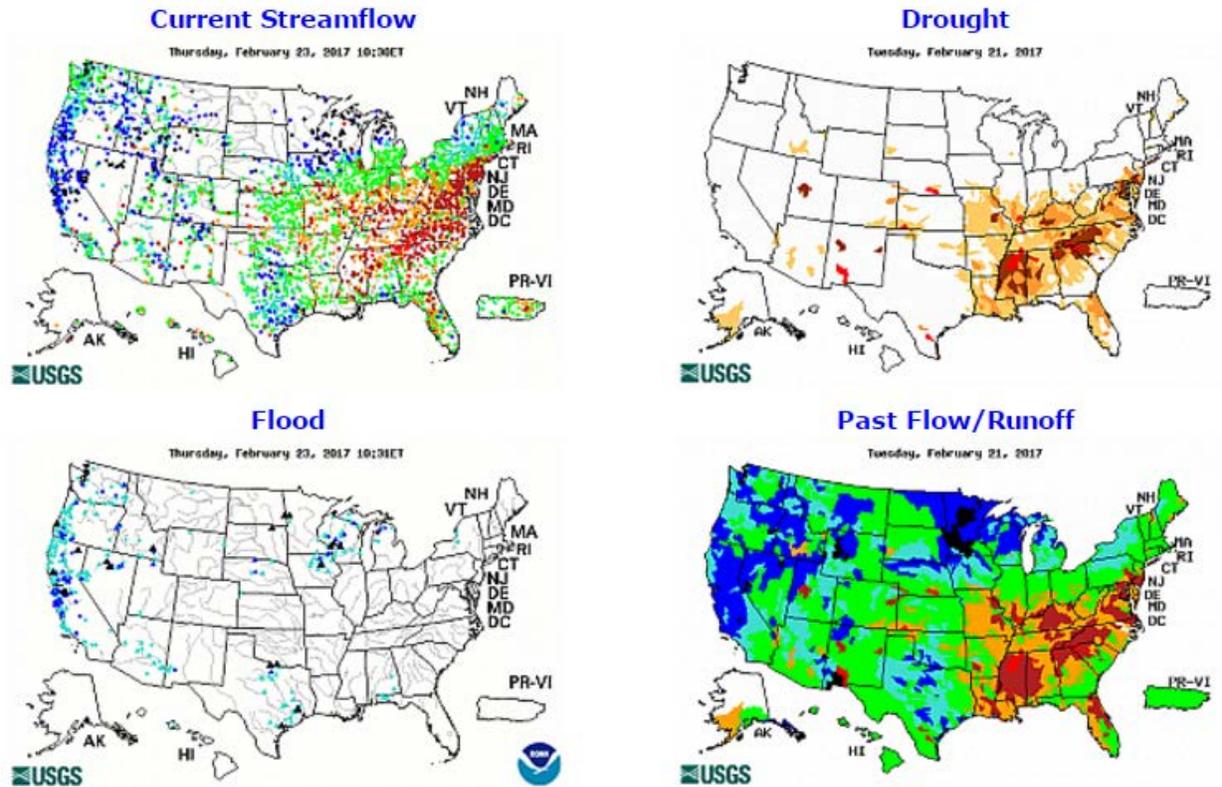
[CRN Soil Moisture](#)

[Texas A&M University North American Soil Moisture Database](#)

[University of Washington Experimental Modeled Soil Moisture](#)

**Streamflow**

Source: USGS



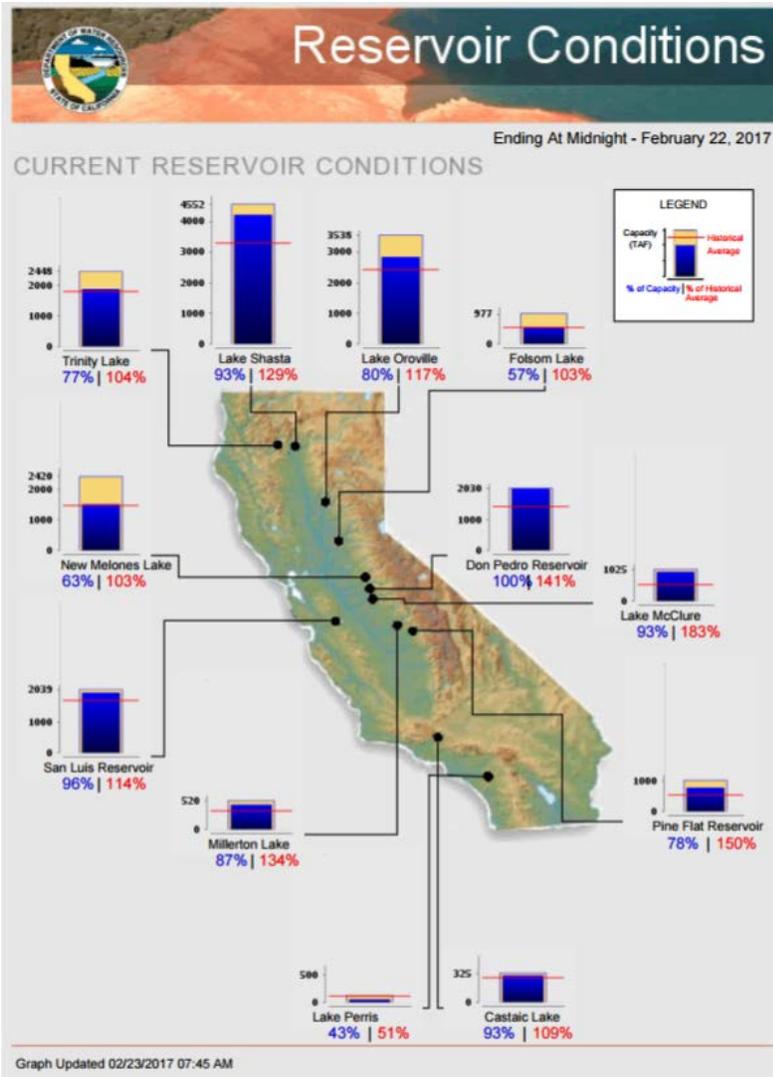
Click graphic to enlarge and display legends

[Current streamflow maps](#)

## Current Reservoir Storage

[National Water and Climate Center Reservoir Data](#)

[California Reservoir Conditions](#)



## 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](#)

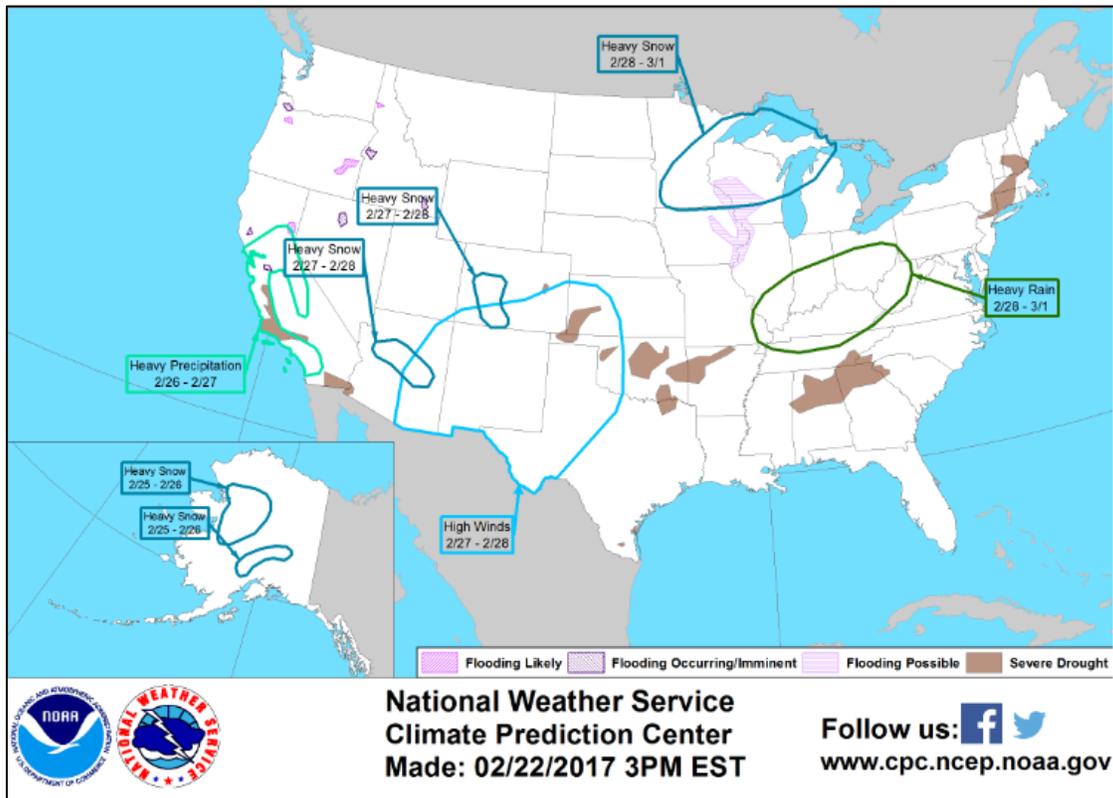
## Short- and Long-Range Outlooks

### Agricultural Weather Highlights

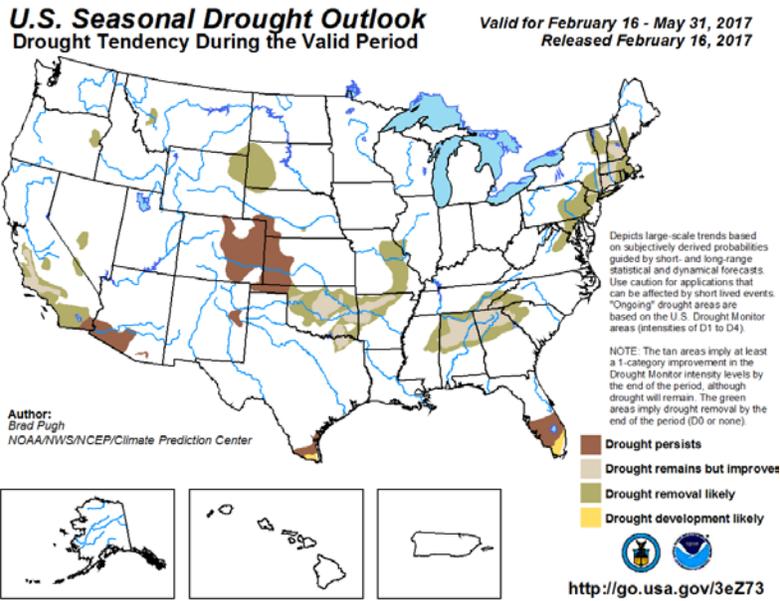
Author: Brad Rippey, Agricultural Meteorologist, USDA/OCE/WAOB

[National Outlook, February 23, 2017](#): “A storm currently centered over the central Plains will move northeastward, reaching Michigan by early Saturday. Heavy, wind-driven snow will fall northwest of the storm’s path, resulting in transportation disruptions, increased livestock stress, and possible blizzard conditions from Wyoming to Michigan’s Upper Peninsula. A few locations in Wyoming, southern South Dakota, and northern Nebraska could receive at least a foot of snow by early Friday. Meanwhile, showers and locally severe thunderstorms will develop across the eastern one-third of the U.S., along the storm’s trailing cold front, on February 24-25. Farther west, precipitation will return to portions of the Pacific Coast States during the weekend, although 5-day precipitation totals should be mostly 2 inches or less. By early next week, heavy rain could erupt across the South and lower Midwest. The NWS 6- to 10-day outlook for February 28 – March 4 calls for the likelihood of above-normal temperatures across the eastern half of the U.S., while colder-than-normal conditions can be expected across the northern High Plains and the West. Meanwhile, near- to above-normal precipitation across most of the country will contrast with drier-than-normal weather across Florida’s peninsula, southern sections of the Rockies and High Plains, and much of California.”

### NWS Climate Prediction Center Weather Hazard Outlook: [February 25 – March 1, 2017](#)



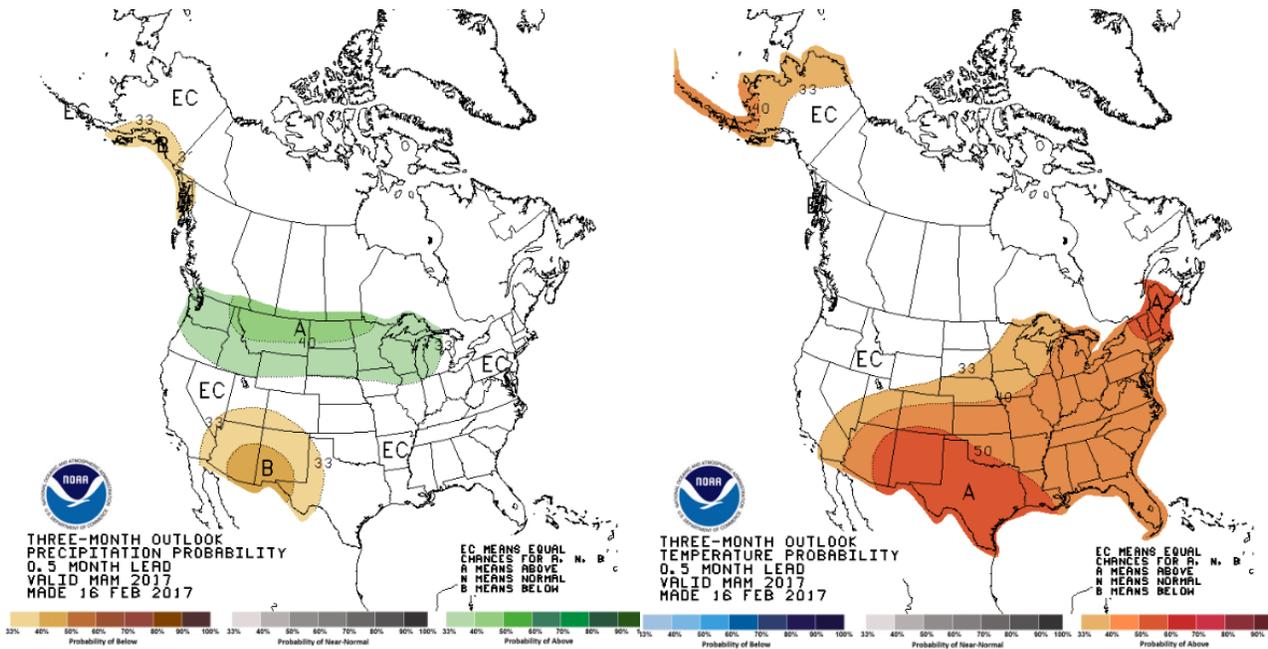
NWS Seasonal Drought Outlook: [February 16 – May 31, 2017](#)



NWS Climate Prediction Center 3-Month Outlook

[Precipitation](#)

[Temperature](#)



[March-April-May \(MAM\) 2017 precipitation outlook summary](#)

[March-April-May \(MAM\) 2017 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](#).