



Water and Climate Update

November 30, 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	12
Precipitation	3	Short- and Long-Range Outlooks.....	15
Temperature.....	7	More Information	17
Drought	9		

Hawaiian volcano peaks see November snow

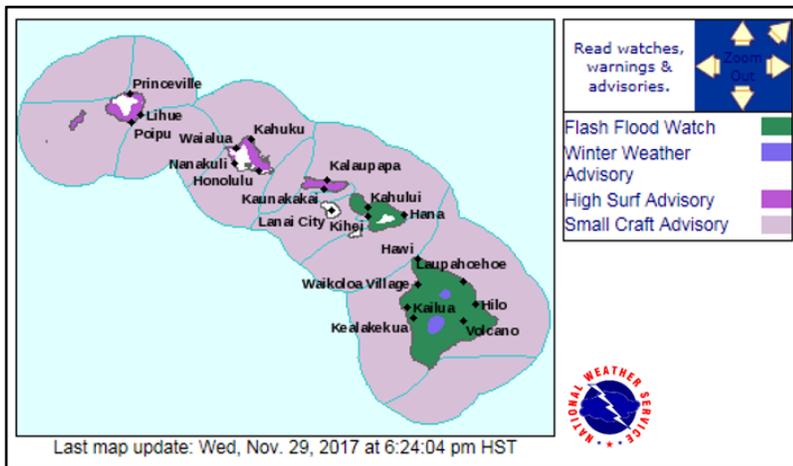


Image: Canada-France-Hawaii Telescope via Storyful Waimea, HI 11/29/2017

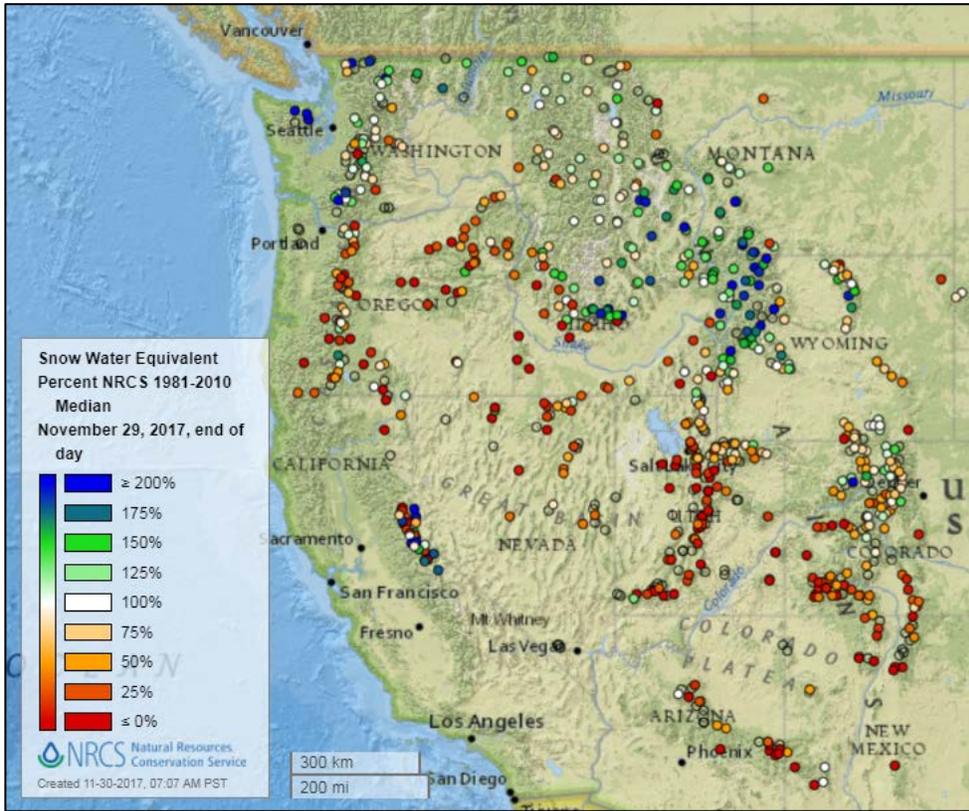
The [National Weather Service](#) (NWS) in Hawaii has posted winter weather warnings for the peaks of the volcanos on Hawaii above 12,500 feet through Thursday evening. Two inches of further snow accumulation is expected. The road to the summit of Mauna Kea was closed for a time at the Visitor Information Center located at 9,200 feet elevation. Snow falls only at the highest peaks in the tropical state at Mauna Kea and Mauna Loa on the island of Hawaii and occasionally on Haleakala on the island of Maui. Wet, trade-wind weather is bringing heavy rain to lower elevations on Hawaii and Maui and the NWS has posted flash flood watches for affected areas.

Related:

- [Winter weather and other advisories for Hawaii Island](#), Hawaii 247.com
- [6 pm Hawaii Weather Update: Heavy Snow, Rain End But More Coming](#), BigIslandVideoNews.com
- [Snow in Hawaii: Mauna Kea Covered in Up to 8 Inches in Unseasonal Snowstorm](#), Newsweek.com
- [It's snowing in Hawaii, but not Utah. Here's why](#), DeseretNews.com
- [It's Snowing In Hawaii \(but No, You Don't Have To Cancel Your Dream Vacation\)](#), Simplemost.com
- [Heavy Snow Falls Over Hawaii's Volcanic Peaks](#), Weather.com

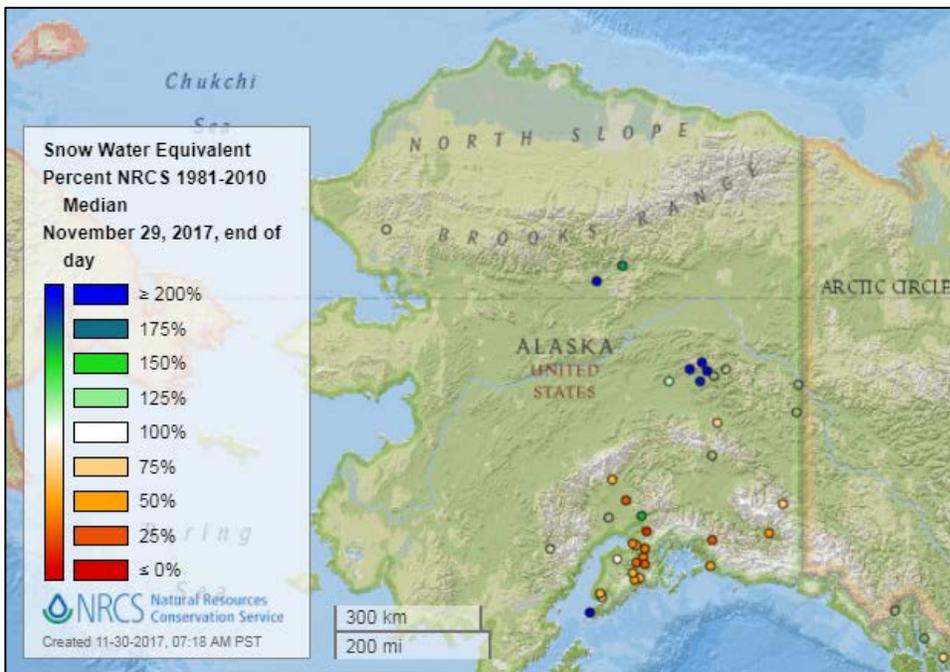
Snow

Current Snow Water Equivalent, NRCS SNOTEL Network



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

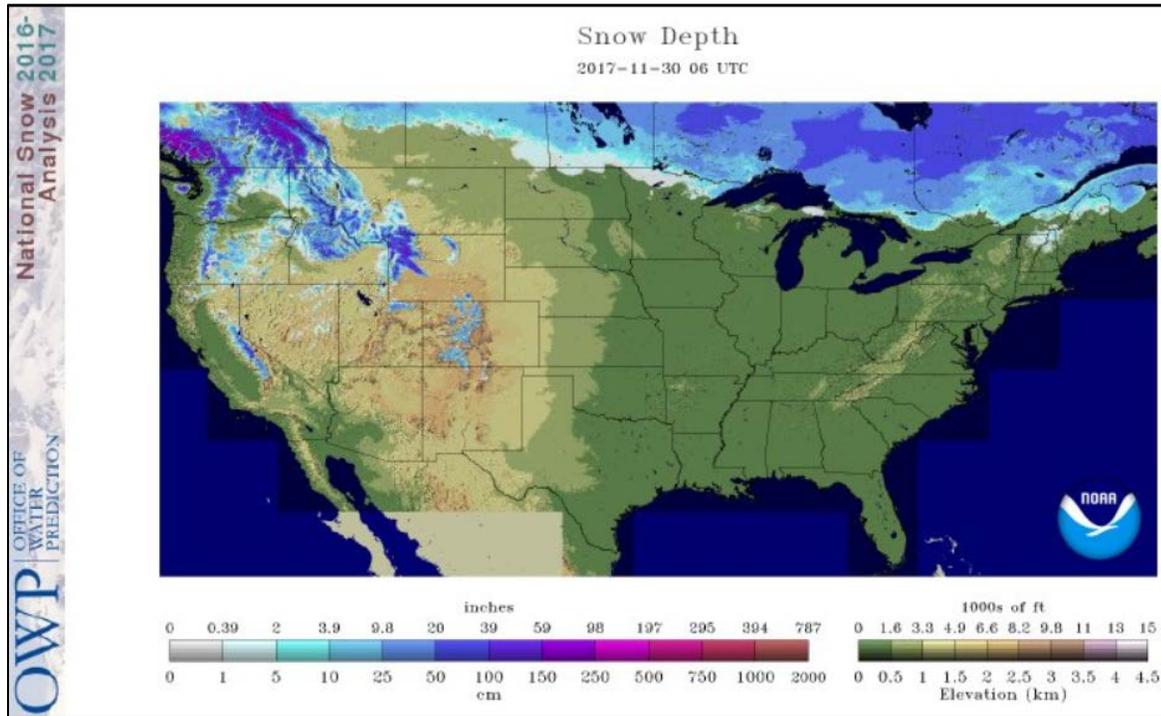
See also:
[Snow water equivalent values \(inches\) map](#)



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

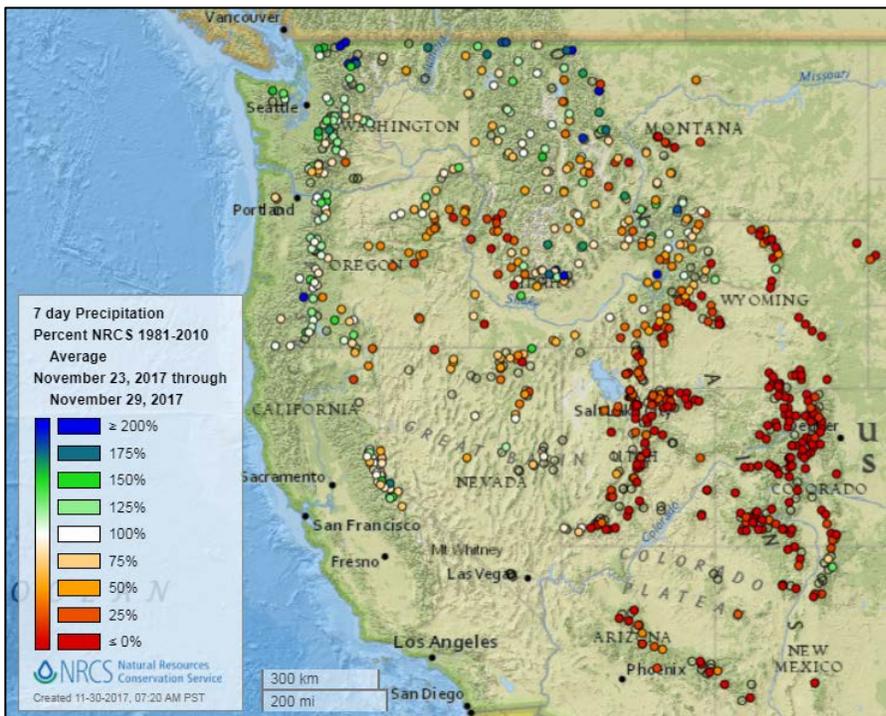
See also:
[Alaska snow water equivalent values \(inches\) map](#)

Current Snow Depth, National Weather Service Snow Analysis



Precipitation

Last 7 Days, NRCS SNOTEL Network



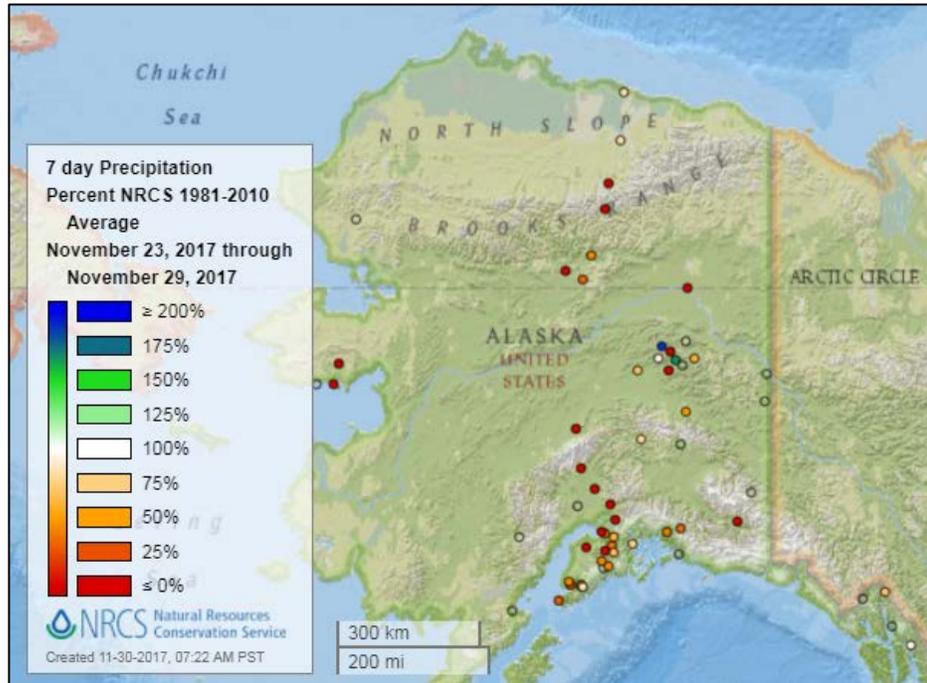
[7-day precipitation percent of average map](#)

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](#)



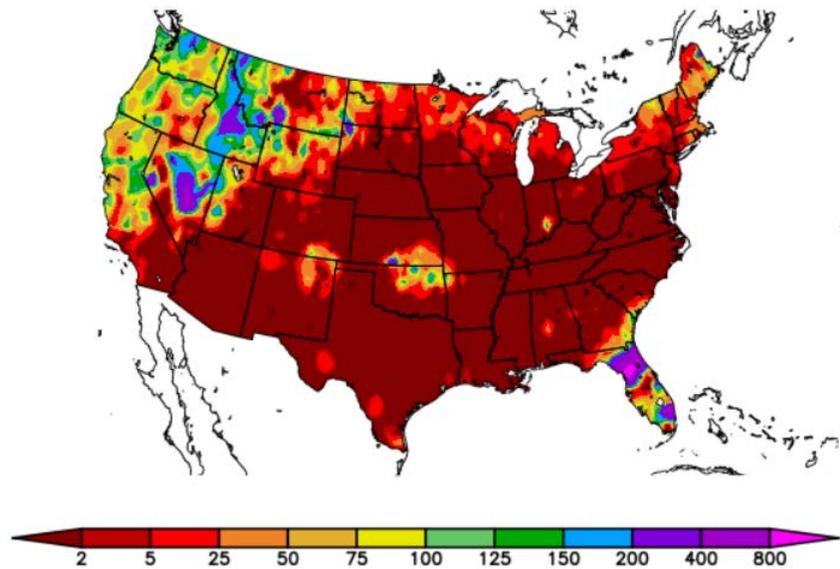
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Percent of Normal Precipitation (%) 11/23/2017 – 11/29/2017



Generated 11/30/2017 at HPRCC using provisional data.

NOAA Regional Climate Centers

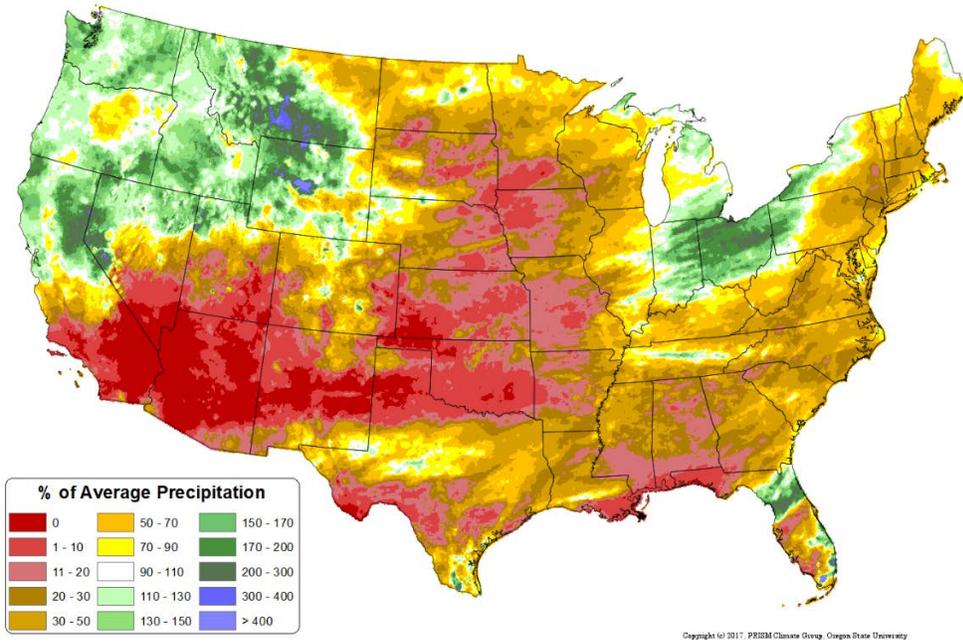
Water and Climate Update

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

Source: PRISM

Total Precipitation Anomaly: 01 November 2017 - 29 November 2017
Period ending 7 AM EST 29 Nov 2017
Base period: 1981-2010
(Map created 30 Nov 2017)

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

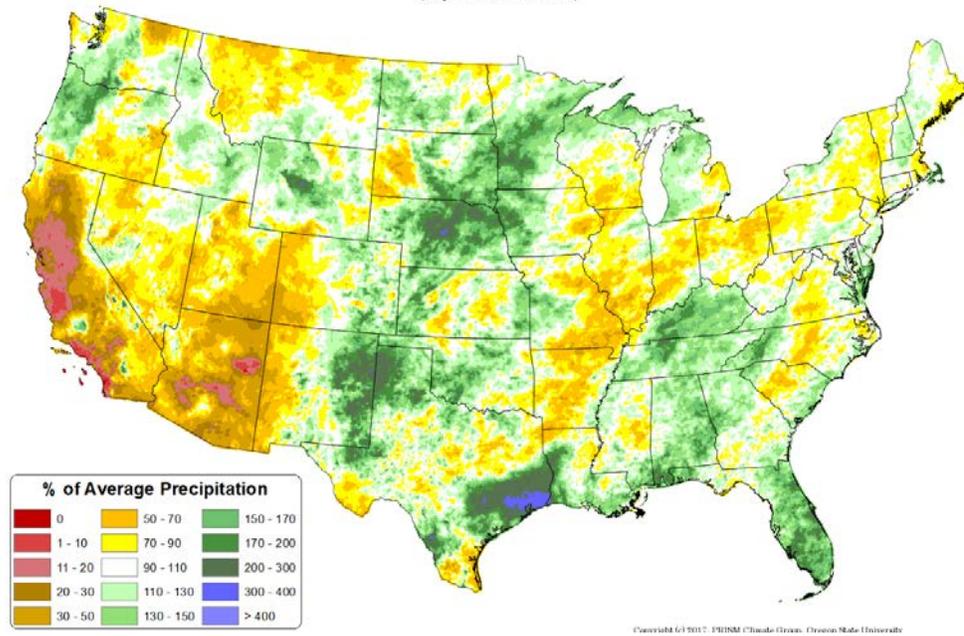


Last 3 Months, All Available Data Including SNOTEL and NWS Networks

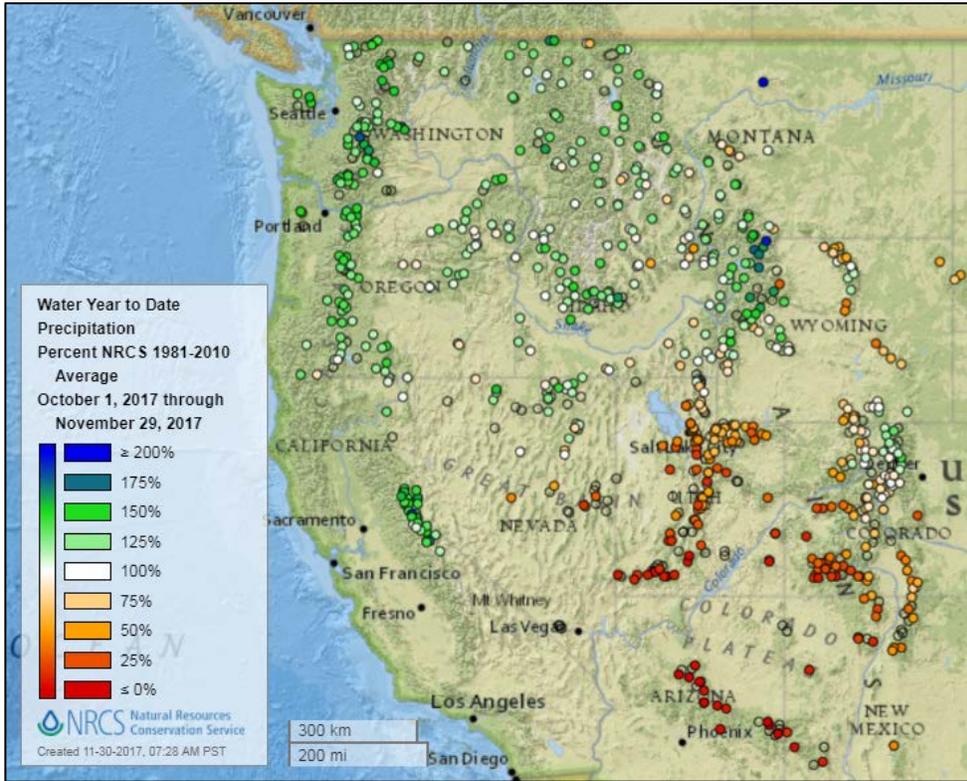
Source: PRISM

[August through October 2017 total precipitation anomaly map](#)

Total Precipitation Anomaly: August 2017 - October 2017
Period ending 7 AM EST 31 Oct 2017
Base period: 1981-2010
(Map created 02 Nov 2017)

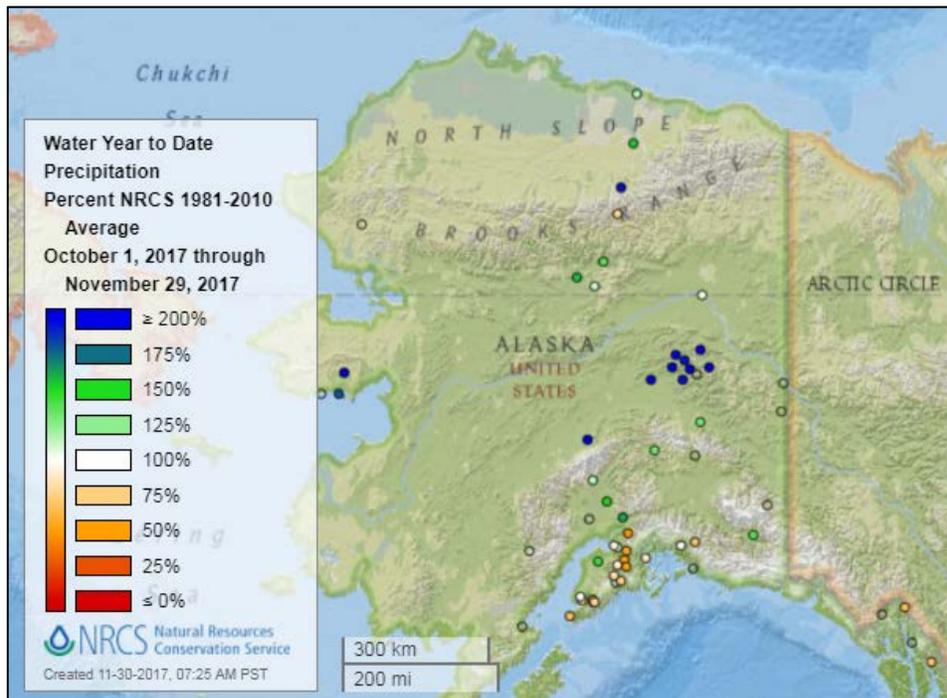


Water Year-to-Date, NRCS SNOTEL Network



[2018 water year-to-date precipitation percent of average map](#)

See also: [2018 water year-to-date precipitation values \(inches\)](#)



[Alaska 2018 water year-to-date precipitation percent of average map](#)

See also: [Alaska 2018 water year-to-date precipitation values \(inches\) map](#)

Temperature

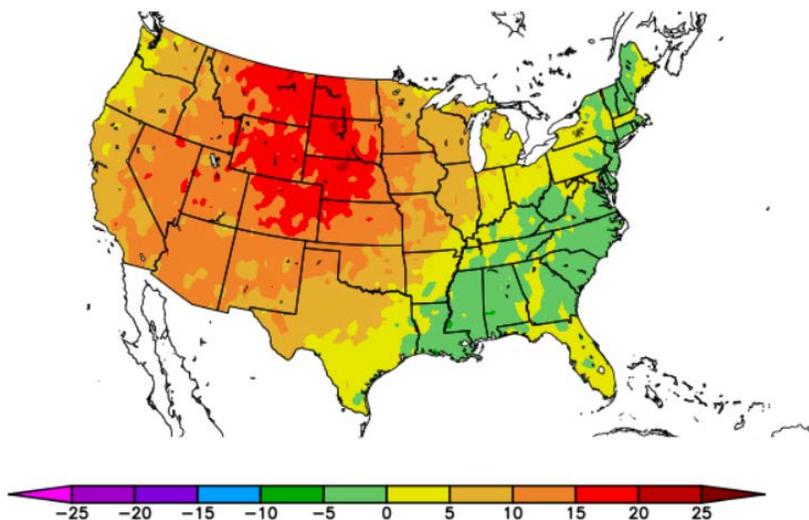
Last 7 Days, National Weather Service (NWS) Networks

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)
11/23/2017 – 11/29/2017



Generated 11/30/2017 at HPRCC using provisional data.

NOAA Regional Climate Centers

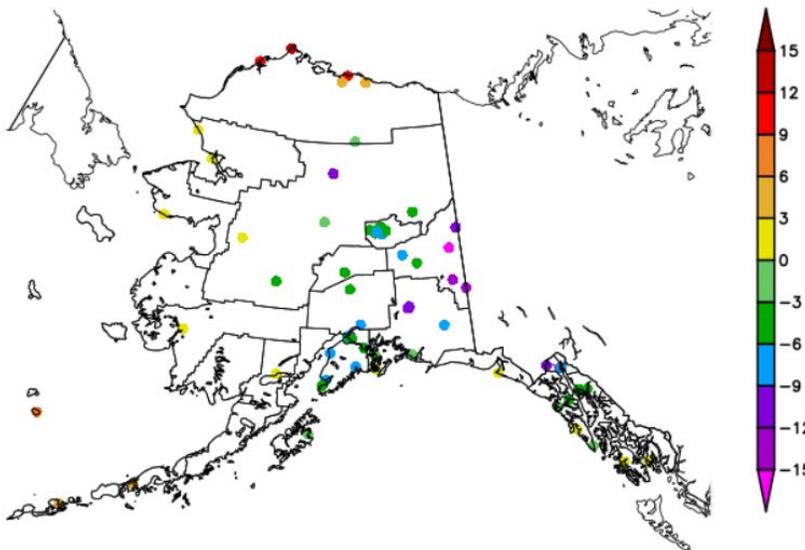
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)
11/23/2017 – 11/29/2017



Generated 11/30/2017 at HPRCC using provisional data.

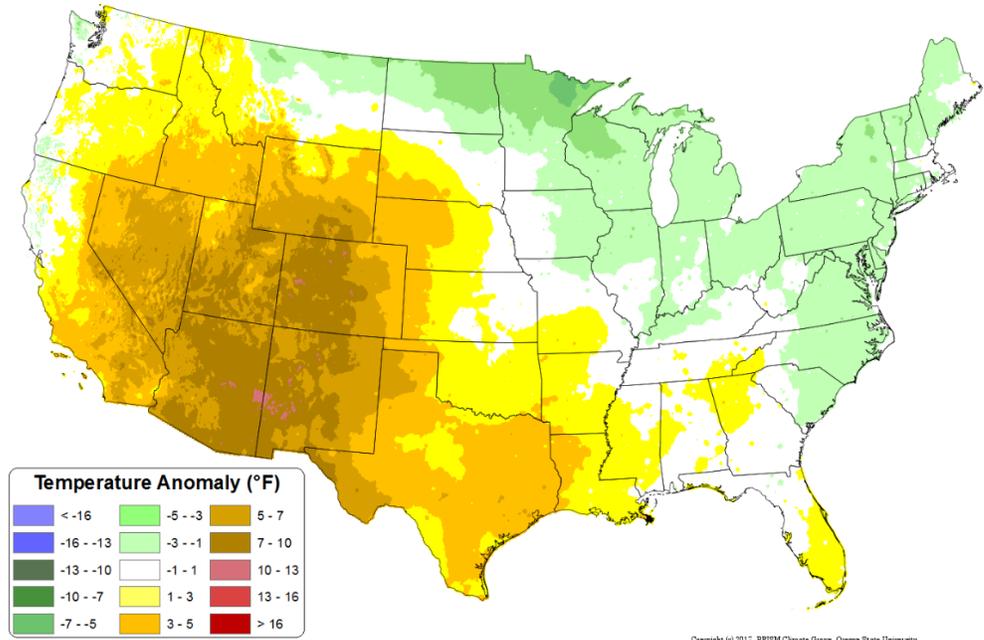
NOAA Regional Climate Centers

Water and Climate Update

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

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

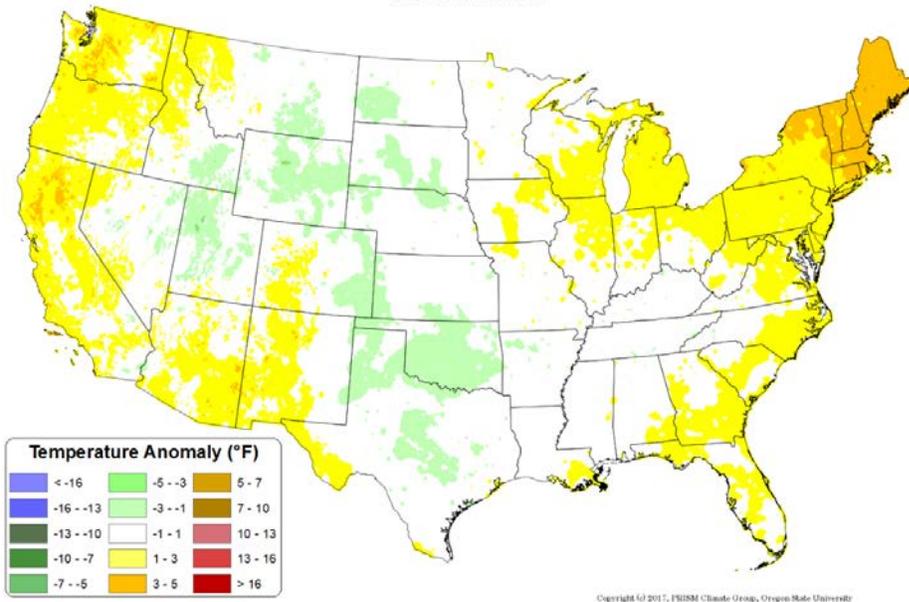
Daily Mean Temperature Anomaly: 01 November 2017 - 29 November 2017
Period ending 7 AM EST 29 Nov 2017
Base period: 1981-2010
(Map created 30 Nov 2017)



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

Daily Mean Temperature Anomaly: August 2017 - October 2017
Period ending 7 AM EST 31 Oct 2017
Base period: 1981-2010
(Map created 02 Nov 2017)

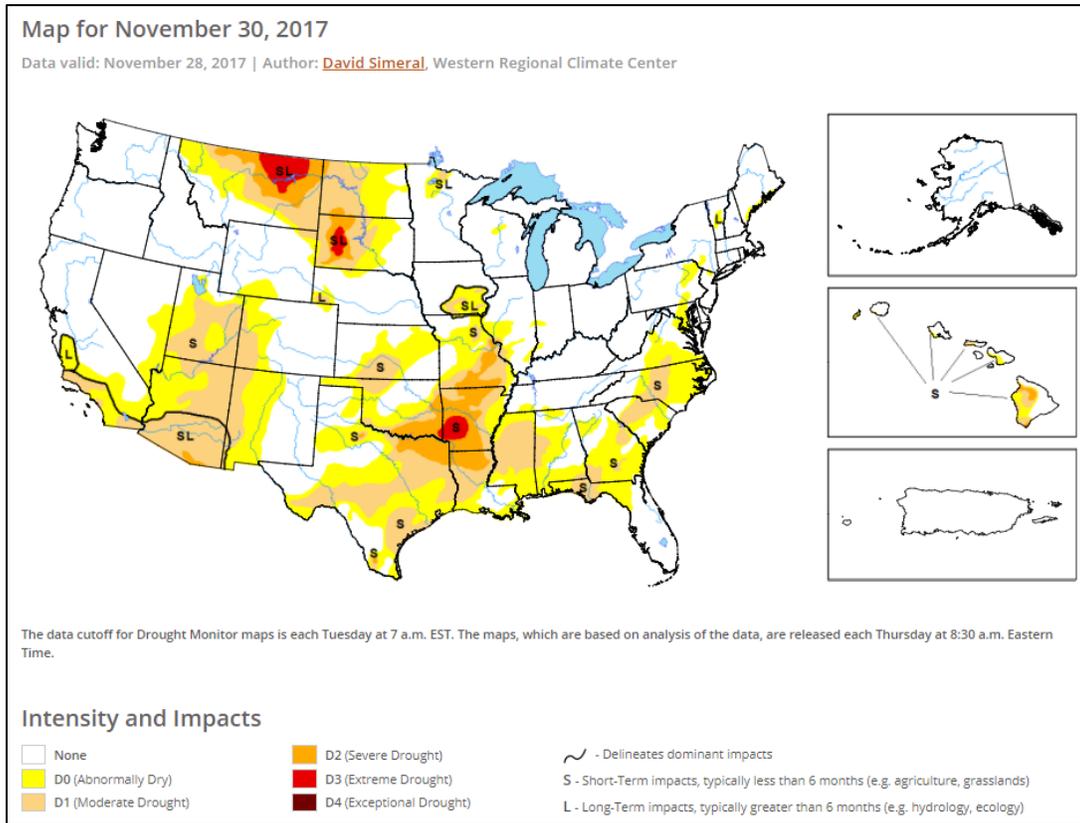
[August through October 2017 daily mean temperature anomaly map](#)



Drought

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

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



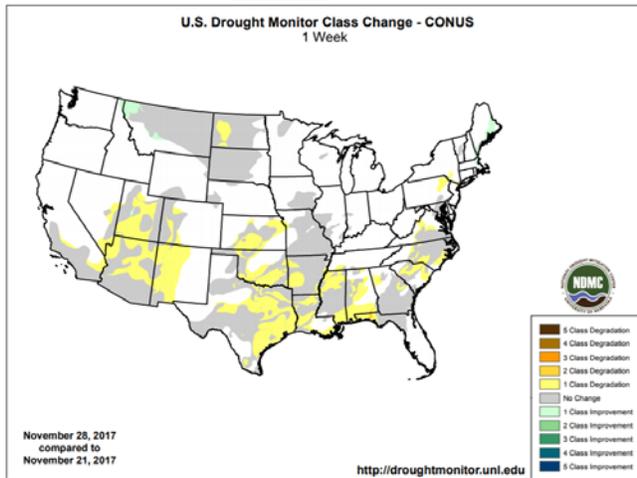
Current [National Drought Summary](#), November 30, 2017

Author: David Simeral, Western Regional Climate Center

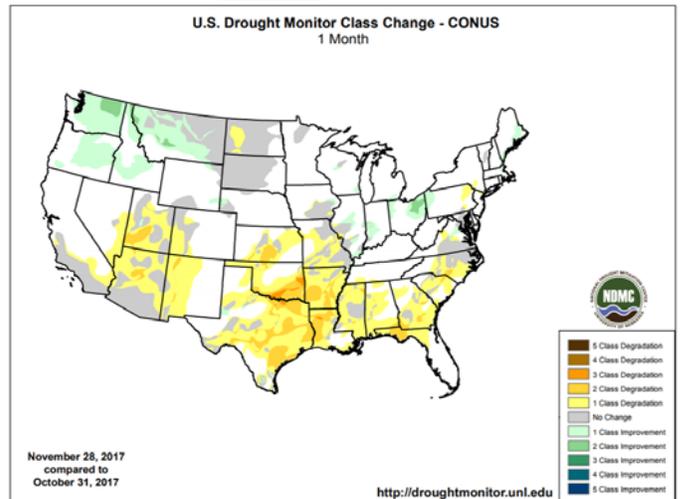
“This U.S. Drought Monitor week saw a series of storms impact the Pacific Northwest, northern California, and northern Rockies. The heaviest precipitation was observed across the Olympic Mountains and North Cascades of western Washington where precipitation accumulations (liquid) ranged from 4-to-12 inches. In the Puget Lowlands of western Washington, runoff from the storm event led to severe flooding on the Skagit River that peaked at 5 feet above flood stage on Friday. Elsewhere in the West, unseasonably warm temperatures were observed across parts of the region including record-breaking high temperatures reported across southern California, the Desert Southwest, western Great Basin, and along the Front Range of Colorado. In the Southwest, the warm and dry pattern of the past several months led to expansion of areas of moderate drought in Arizona, New Mexico, and Utah while drought-related conditions improved in western Montana. In the High Plains, conditions were very dry this week, and temperatures were well above normal across the entire region. In the South and Southern Plains, the overall dry pattern during the past 30-to-60 days led to expansion of areas of moderate-to-severe drought across portions of Arkansas, Louisiana, Mississippi, eastern Oklahoma, and eastern Texas. In the Mid-Atlantic states, short-term precipitation deficits during the past 30 days led to deterioration of conditions across portions of North Carolina and Virginia.”

Changes in Drought Monitor Categories over Time

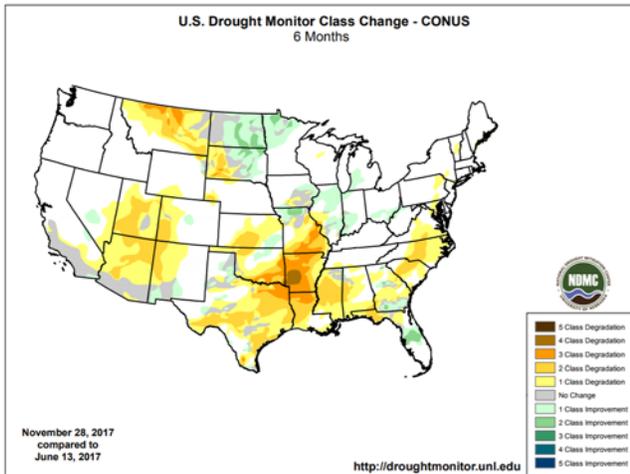
1 Week



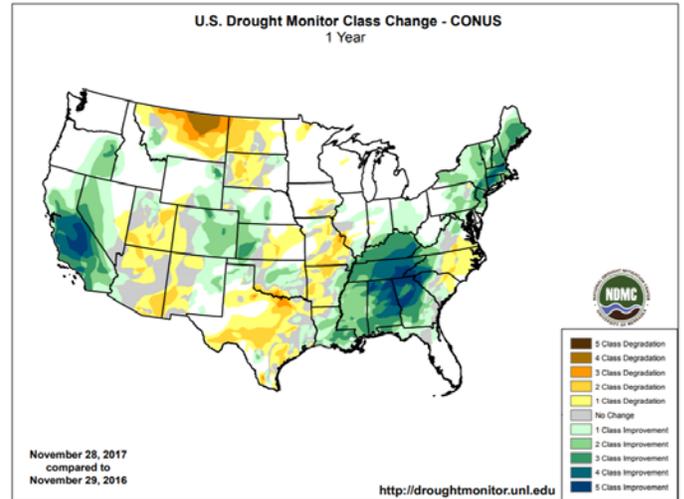
1 Month



6 Months



1 Year

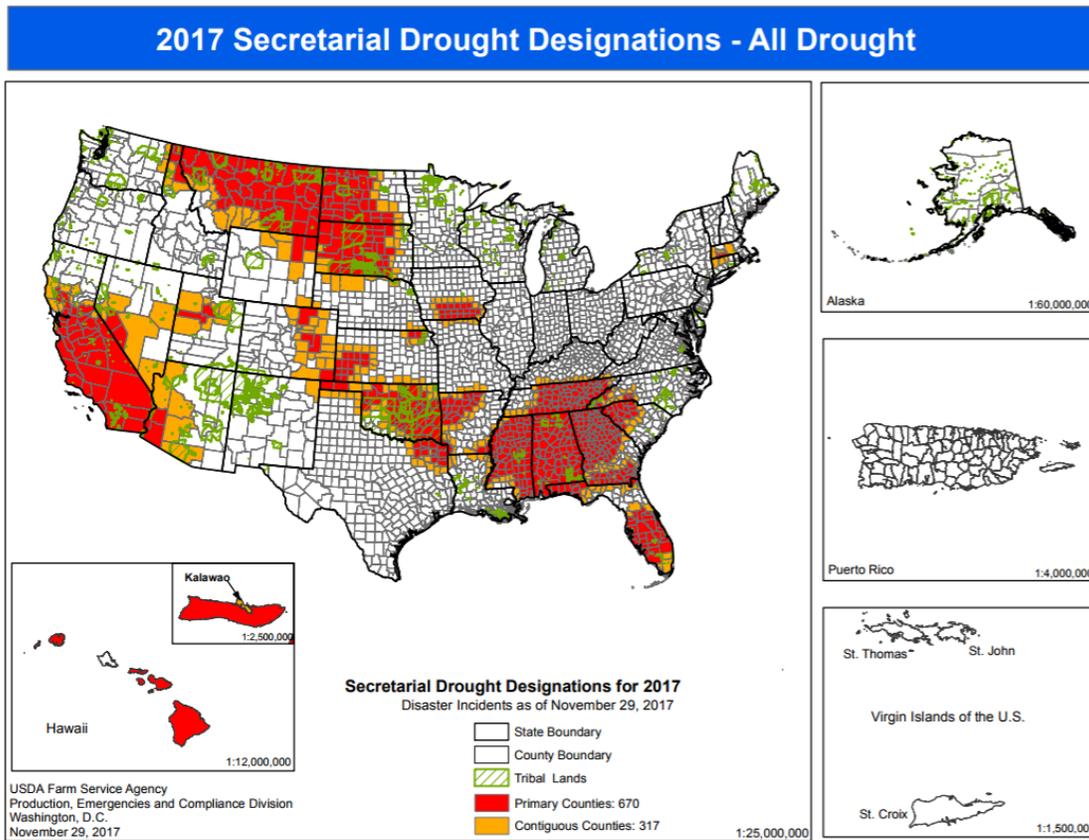


Changes in drought conditions over the last 12 months

Highlighted Drought Resources

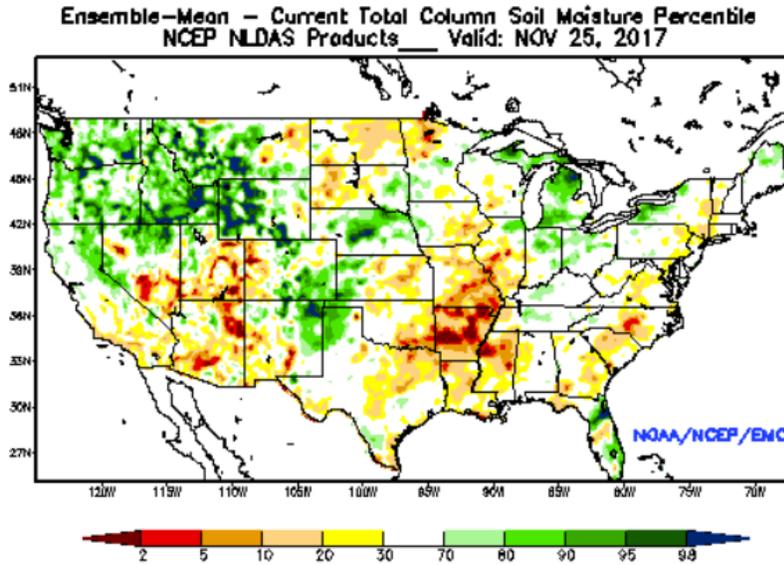
- [Drought Impact Reporter](#)
- [Quarterly Regional Climate Impacts and Outlook](#)
- [U.S. Drought Portal Indicators and Monitoring](#)
- [U.S. Population in Drought, Weekly Comparison](#)
- [USDA Disaster and Drought Information](#)

USDA 2017 Secretarial Drought Designations



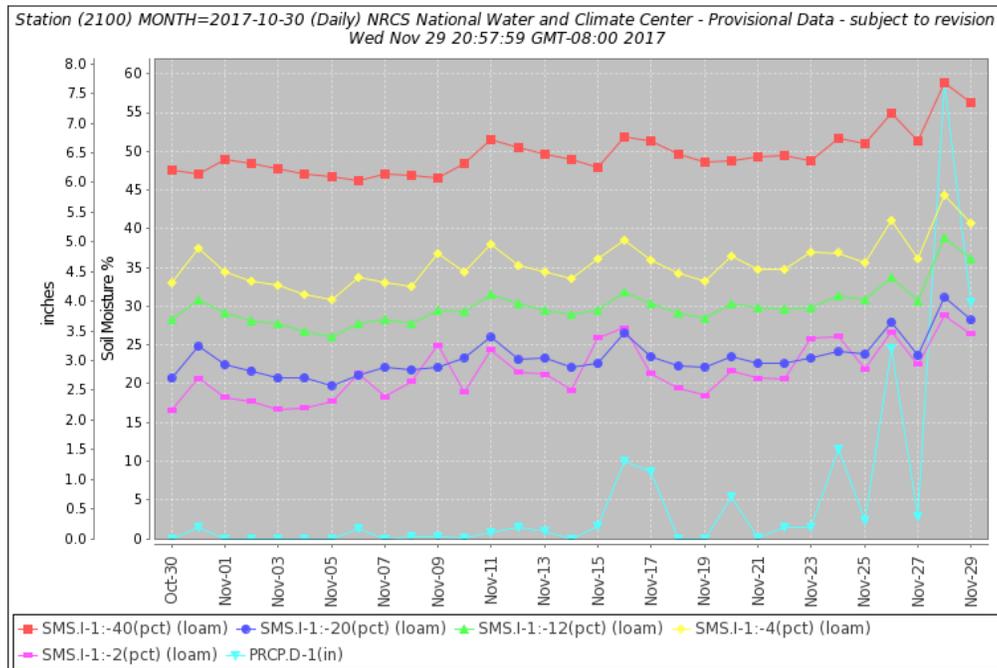
Other Climatic and Water Supply Indicators

Soil Moisture



[Modeled soil moisture percentiles](#) as of November 25, 2017.

Soil Moisture Data: NRCS [Soil Climate Analysis Network \(SCAN\)](#)



The chart shows precipitation and soil moisture for the last 30 days at the [Island Dairy SCAN site 2100 in Hawaii](#). The past 30 days show almost daily precipitation starting on November 15 with all sensors showing increases each day that received precipitation. Precipitation on November 28 was just under 8 inches for the day.

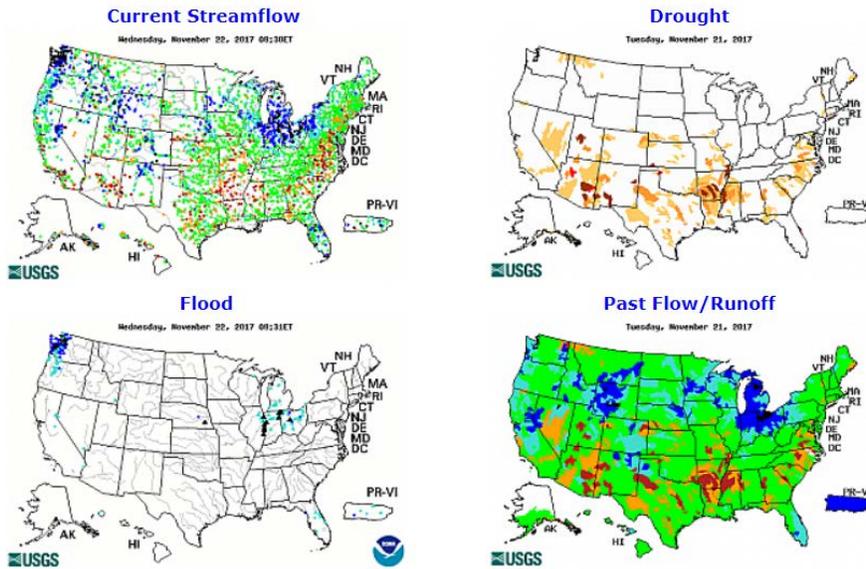
Water and Climate Update

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

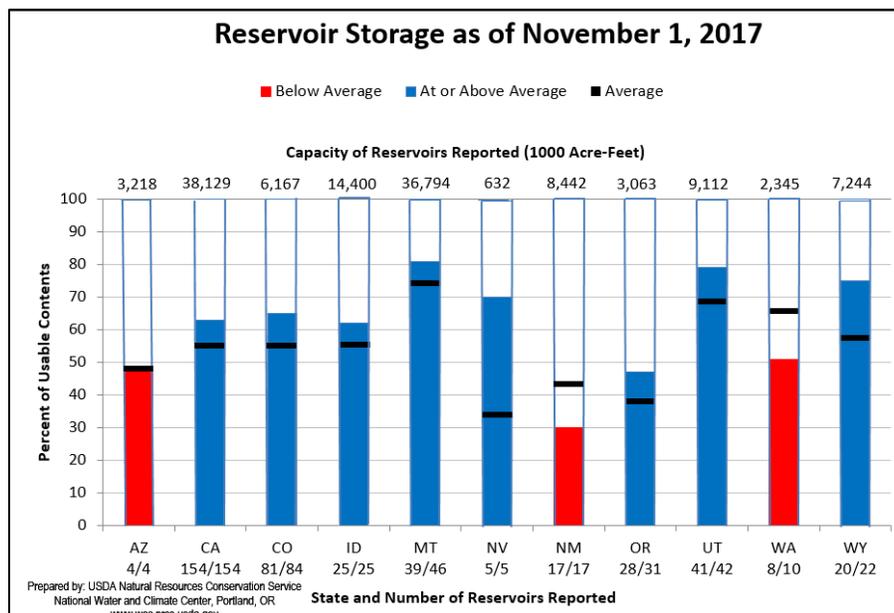


[WaterWatch: Streamflow, drought, flood, and runoff conditions](#)

Reservoir Storage

Western States Reservoir Storage

Source: NRCS National Water and Climate Center



November 1 Reservoir Storage: [Chart](#) | [Dataset](#)

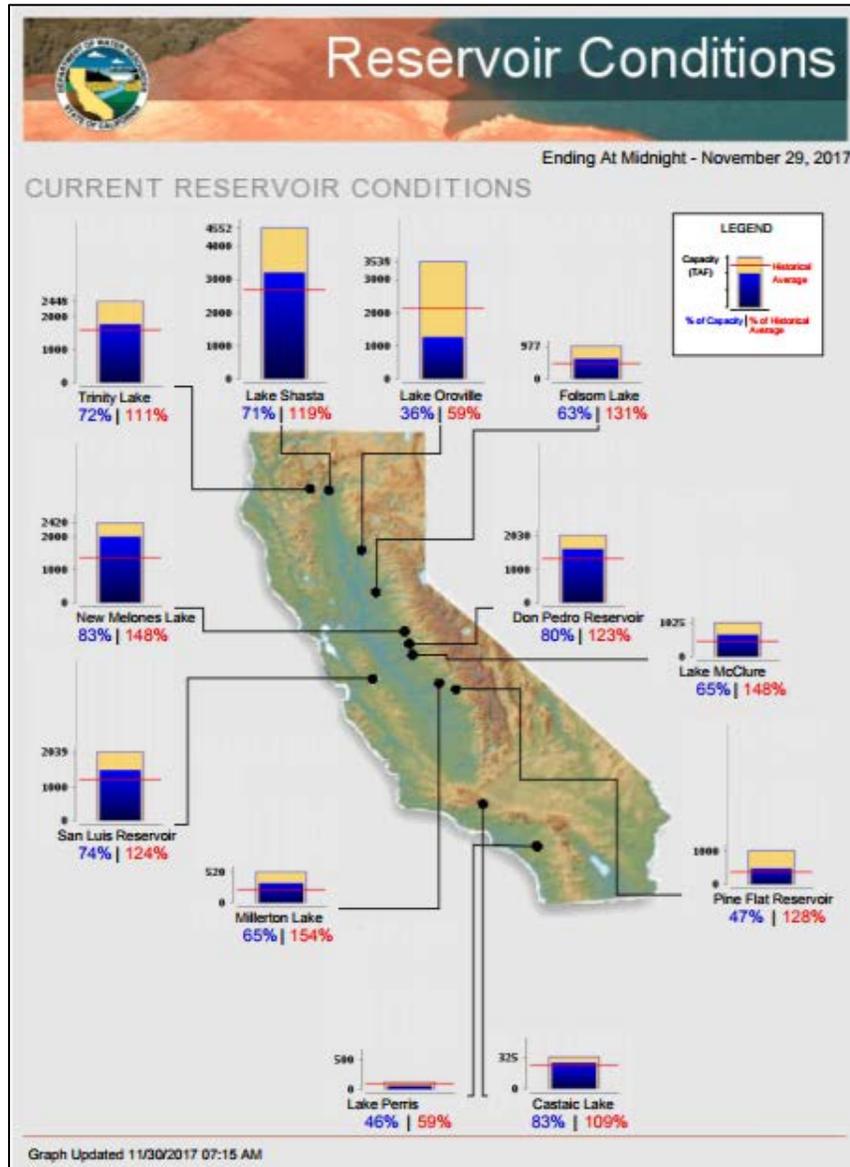
Water and Climate Update

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](#)

Current California Reservoir Conditions

Source: California Department of Water Resources



[California Current Reservoir Conditions](#)

Short- and Long-Range Outlooks

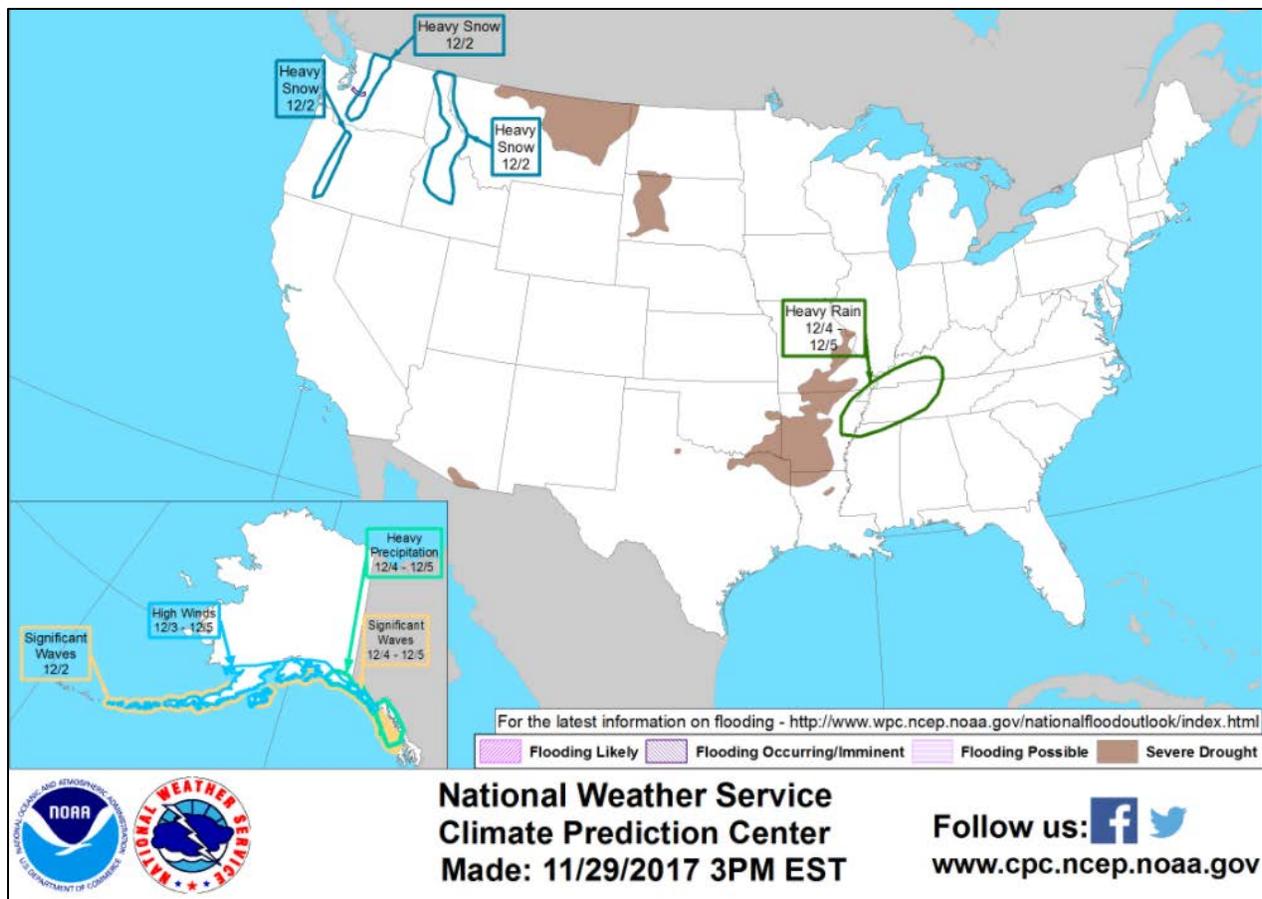
Agricultural Weather Highlights

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

[National Outlook, Wednesday, November 30, 2017](#): “For the remainder of today, light, scattered showers in the vicinity of a cold front will cross the eastern one-third of the U.S. Across the remainder of the country, except the Northwest, mild, mostly dry weather will continue through the weekend. However, 5-day Northwestern precipitation totals could reach 1 to 4 inches west of the Cascades. By early next week, cooler air will arrive in the West before spreading eastward. In addition, early-week showers will develop, mainly along and east of a line from eastern Texas into the upper Mississippi Valley. The NWS 6- to 10-day outlook for December 5 – 9 calls for the likelihood of near- to below-normal temperatures nearly nationwide, while warmer-than-normal weather will be limited to New England, the northern High Plains, California, and the Desert Southwest. Meanwhile, below-normal precipitation in the West and portions of the nation’s mid-section should contrast with wetter-than-normal weather in the Rio Grande Valley and across the eastern one-third of the U.S.”

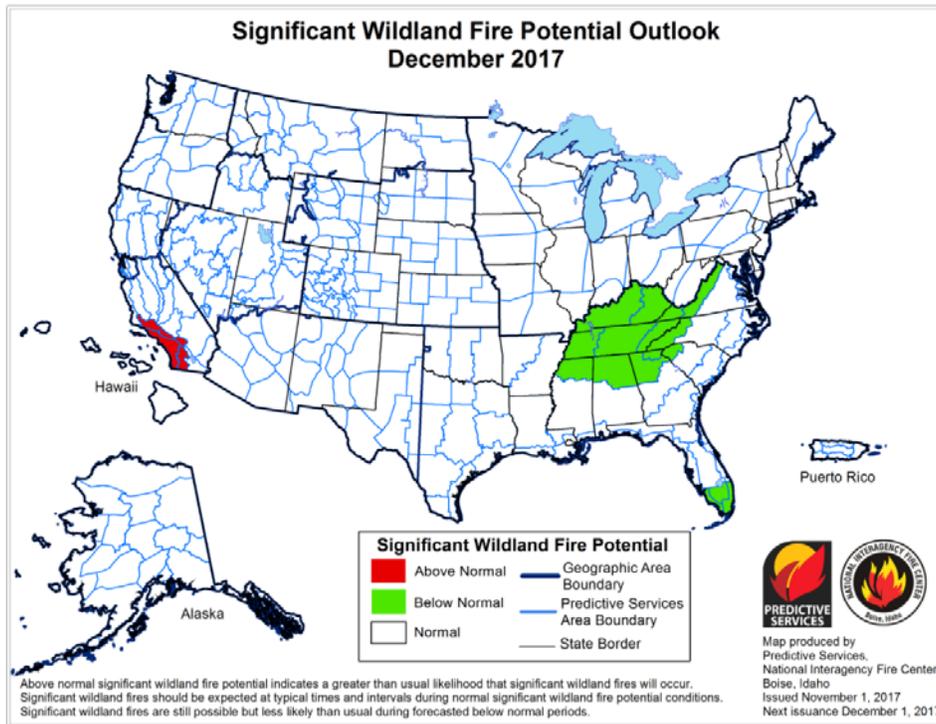
Weather Hazard Outlook [December 2 – 6, 2017](#)

Source: Climate Prediction Center



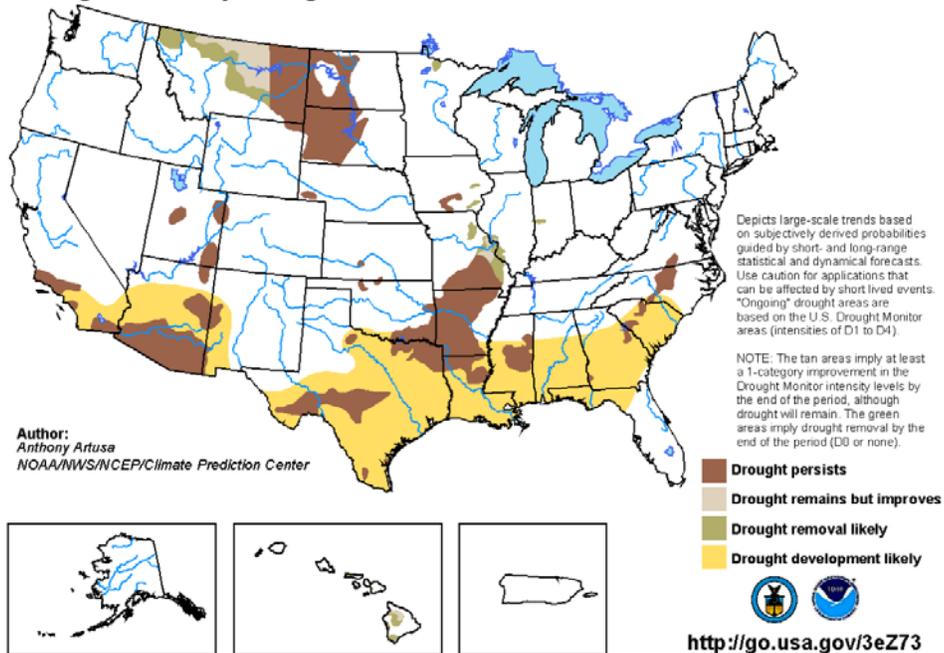
Significant Wildland [Fire Potential Outlook](#)

Source: National Interagency Fire Center



Seasonal Drought Outlook: [November 16, 2017 - February 28, 2018](#) Source: National Weather Service

U.S. Seasonal Drought Outlook Valid for November 16 - February 28, 2018
Drought Tendency During the Valid Period Released November 16, 2017

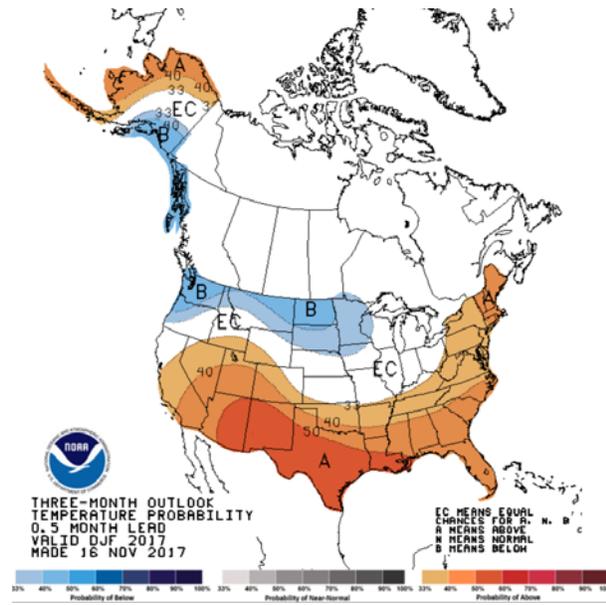
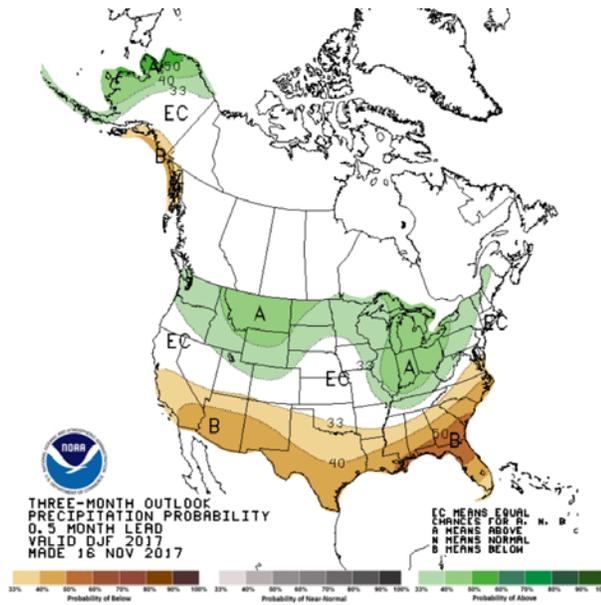


Climate Prediction Center 3-Month Outlook

Source: National Weather Service

Precipitation

Temperature



[Dec-Jan-Feb \(DJF\) 2017-2018 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](#).