



Water and Climate Update

May 3, 2018

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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24-hour record rainfall certification underway in Hawaii

**Potential New National Record
24-Hour Rainfall**

Preliminary data downloaded from a remote rain gage in North Kauai indicate that rainfall during the flash flood event on April 14-15, 2018 broke the U.S. 24-hour rainfall record.

The rain gauge, located in Waipa about one mile west of Hanalei, recorded 49.69 inches of rainfall during the 24-hour period ending at 12:45pm HST April 15.

This total, if certified, will break the current U.S. 24-hour record of 43 inches at Alvin, Texas on July 25-26 1979, and the state of Hawaii record of 38 inches at Kilauea (Kauai) on January 24-25, 1956.

National Weather Service Honolulu
 April 25th, 2018 *issued at 3:30pm HST*

Logos for National Weather Service, NOAA, and social media handles for @NWSHonolulu, weather.gov/honolulu, and facebook.com/NWSHonolulu.

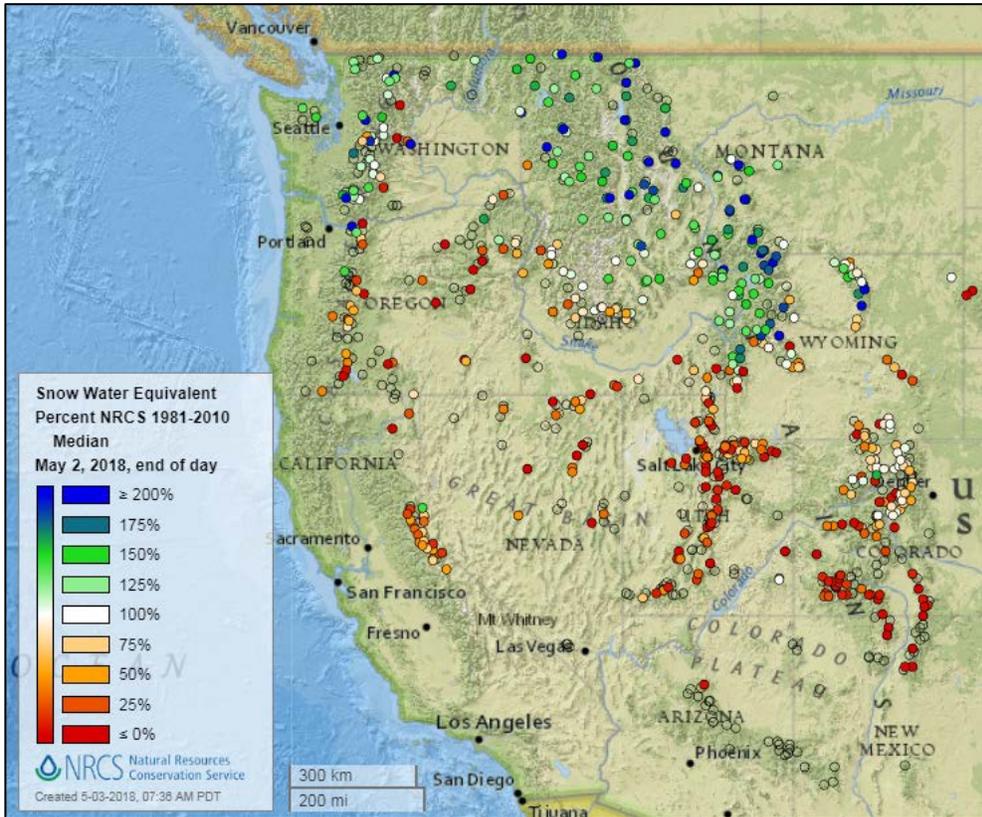
According to the [National Weather Service Honolulu](#) “The National Climatic Extremes Committee will be reviewing the data and gauge site to determine the validity and potentially certify the report from Waipa, Kauai on April 14-15, 2018 as a new national 24-hour rainfall record.” Rainfall measured at this site was 49.69 inches causing major flooding on the north side of the island.

Related:

- [Storm that caused flooding on Hawaiian island may have broken U.S. 24-hour rainfall record](#) KVAL news, OR
- [A small town in Hawaii may have just had the rainiest day in US history](#) USA Today
- [Nearly 50 inches in 24 hours — Hawaii may have broken the national rainfall record](#) – The Washington Post, WDC
- [Kauai woos travelers as island recovers from floods](#) – WTOP, WDC

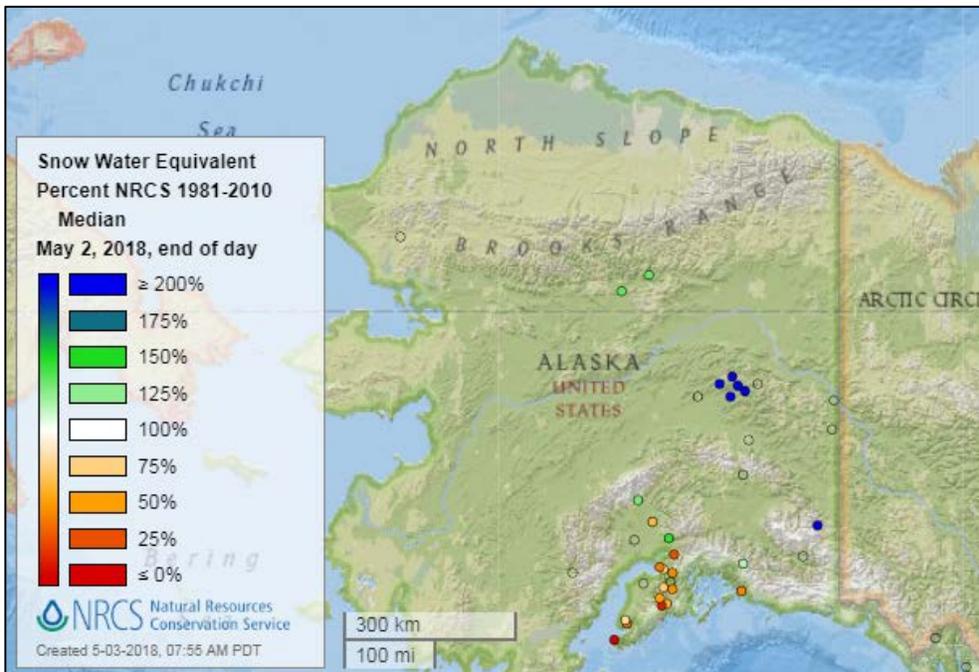
Snow

Current Snow Water Equivalent, NRCS SNOTEL Network



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

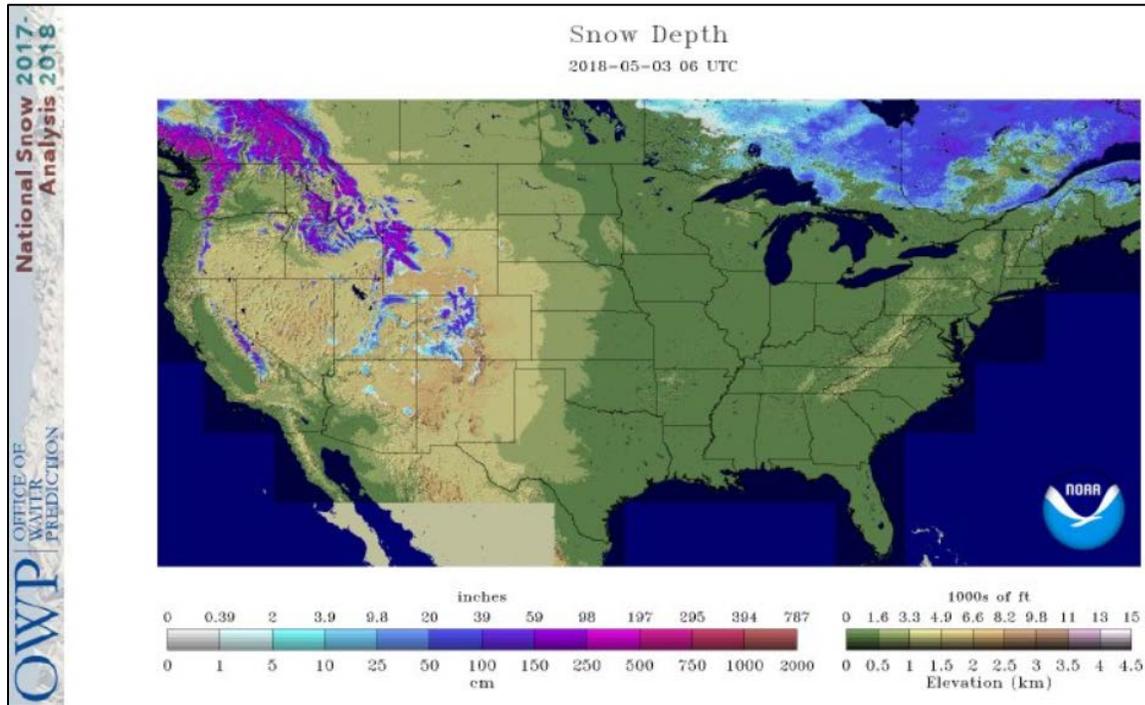
See also:
[Snow water equivalent values \(inches\) map](#)



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

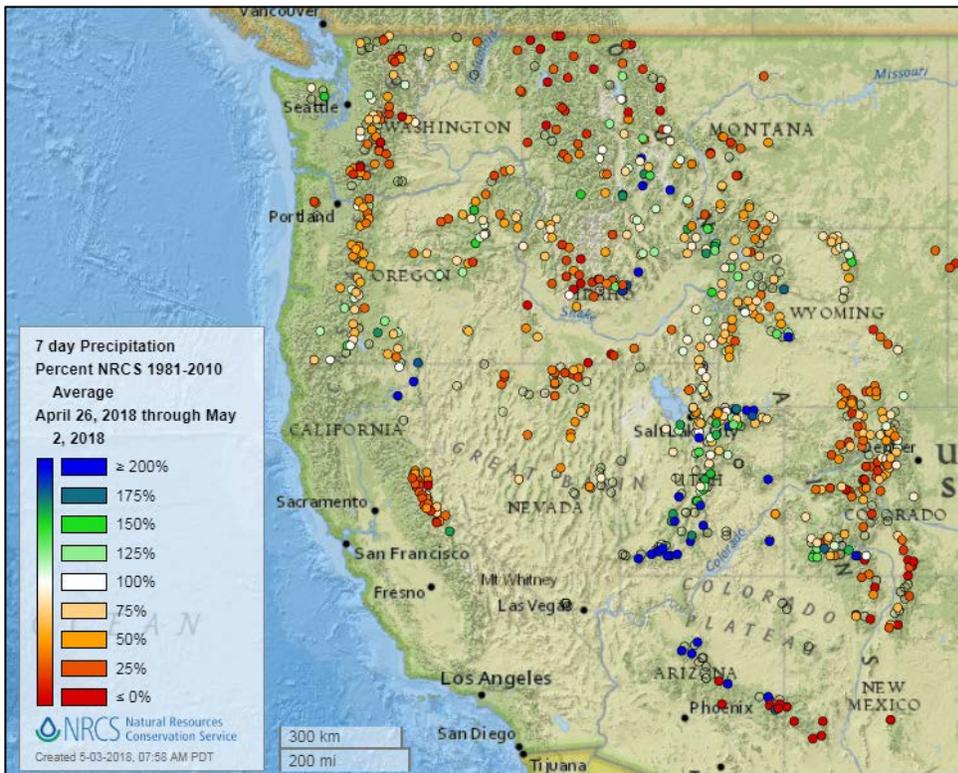
See also:
[Alaska snow water equivalent values \(inches\) map](#)

Current Snow Depth, National Weather Service Snow Analysis



Precipitation

Last 7 Days, NRCS SNOTEL Network



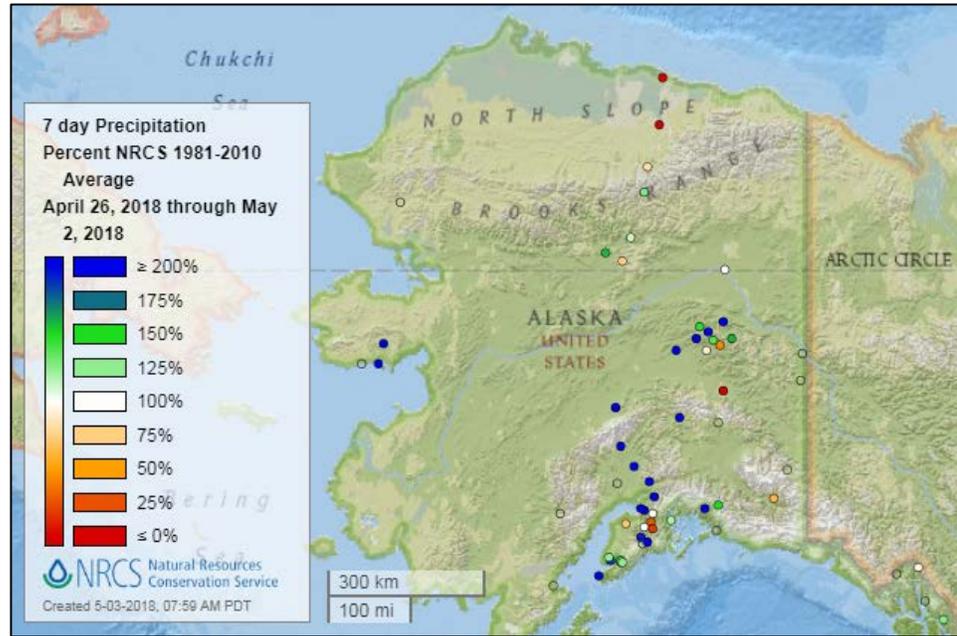
[7-day precipitation percent of average map](#)

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

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

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



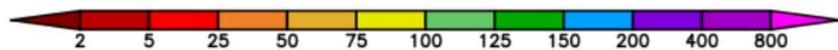
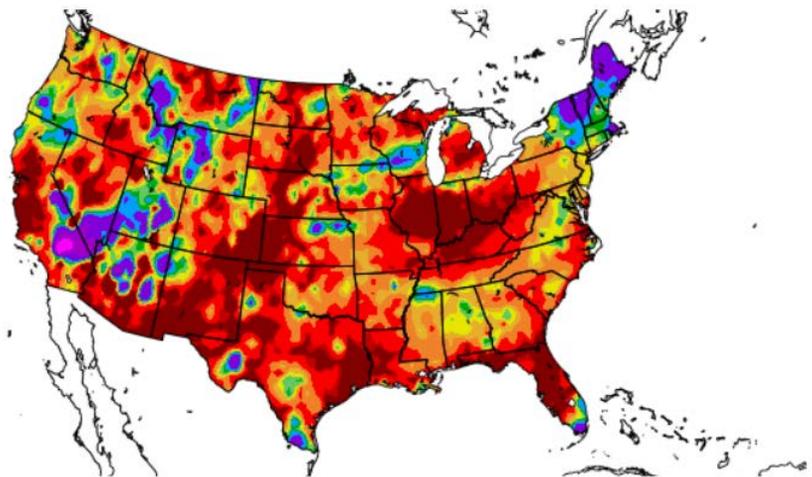
Last 7 Days, National Weather Service (NWS) Networks

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 (%) 4/26/2018 – 5/2/2018



Generated 5/3/2018 at HPRCC using provisional data.

NOAA Regional Climate Centers

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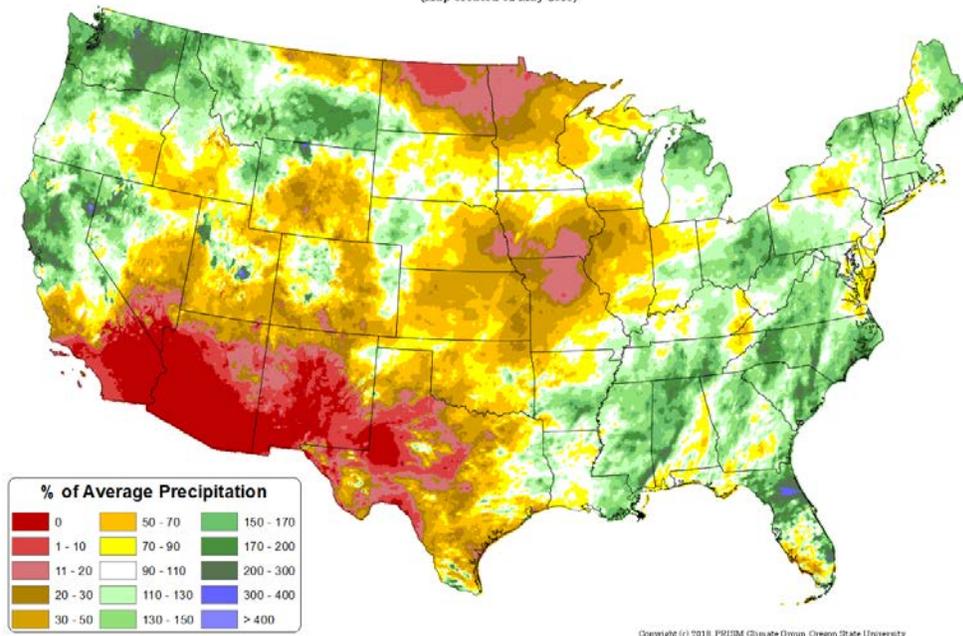
Previous Month, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

Total Precipitation Anomaly: April 2018

Period ending 30 Apr 2018
Base period: 1981-2010
(Map created 02 May 2018)

[Previous month national total precipitation percent of average map](#)



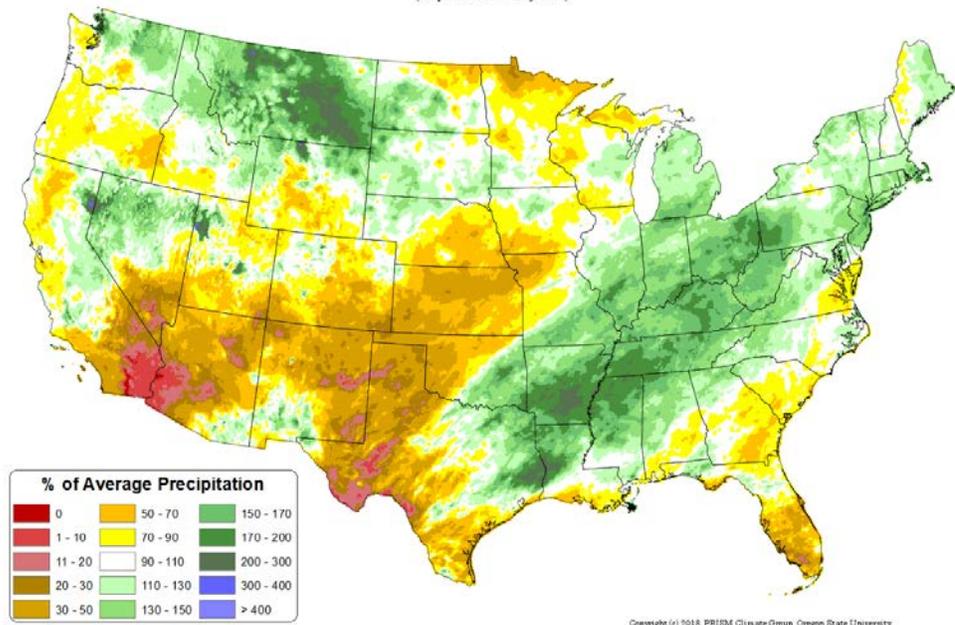
Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

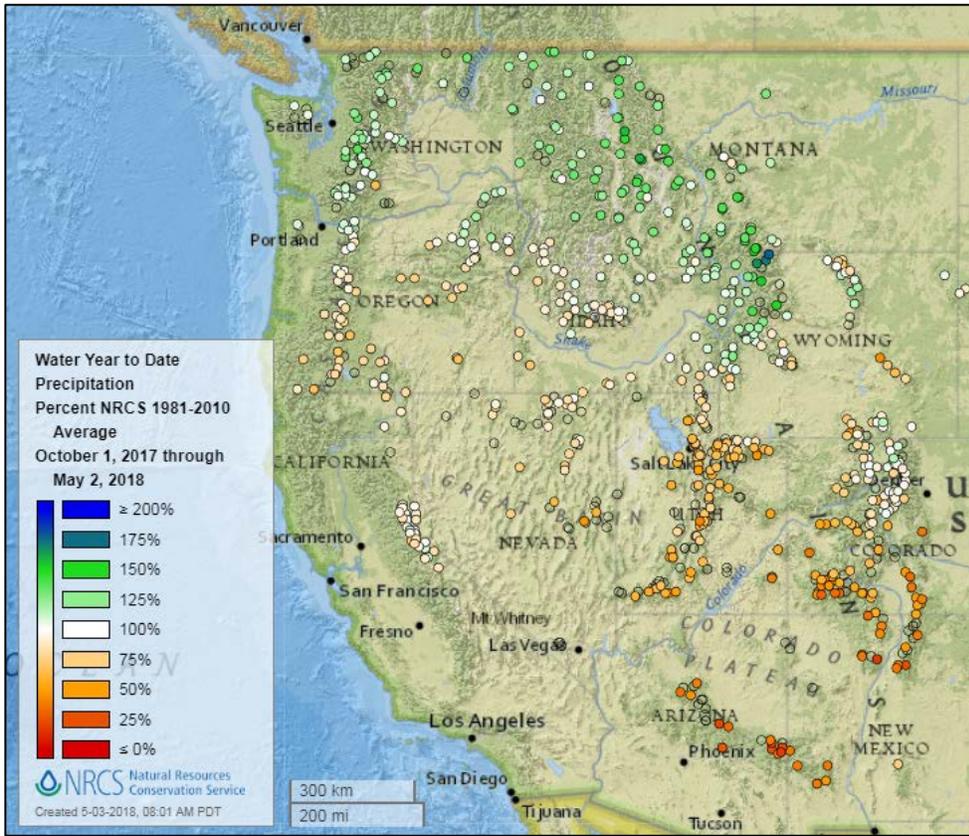
[February through April 2018 total precipitation percent of average map](#)

Total Precipitation Anomaly: February 2018 - April 2018

Period ending 7 AM EST 30 Apr 2018
Base period: 1981-2010
(Map created 02 May 2018)

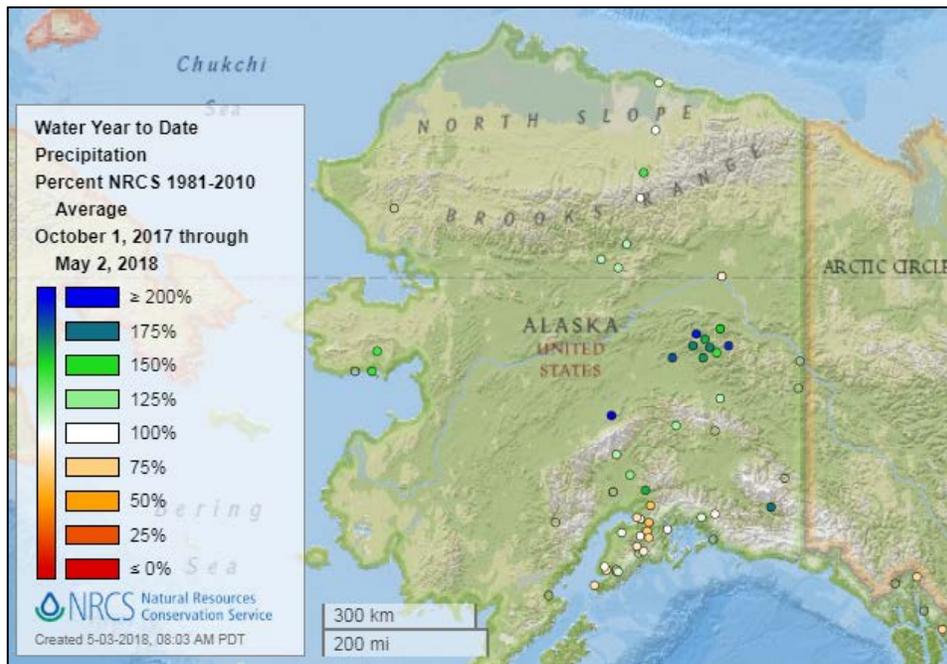


Water Year-to-Date, NRCS SNOTEL Network



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

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



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

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

Temperature

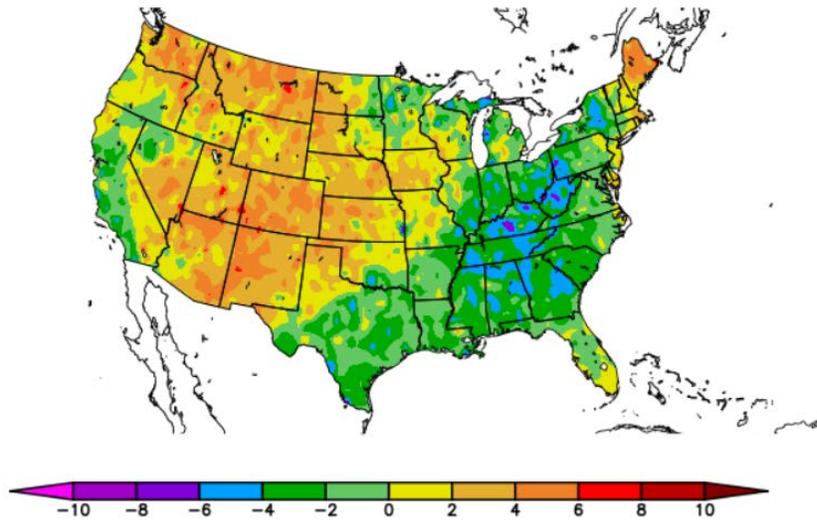
Last 7 Days, National Weather Service (NWS) Networks

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) 4/26/2018 – 5/2/2018



Generated 5/3/2018 at HPRCC using provisional data.

NOAA Regional Climate Centers

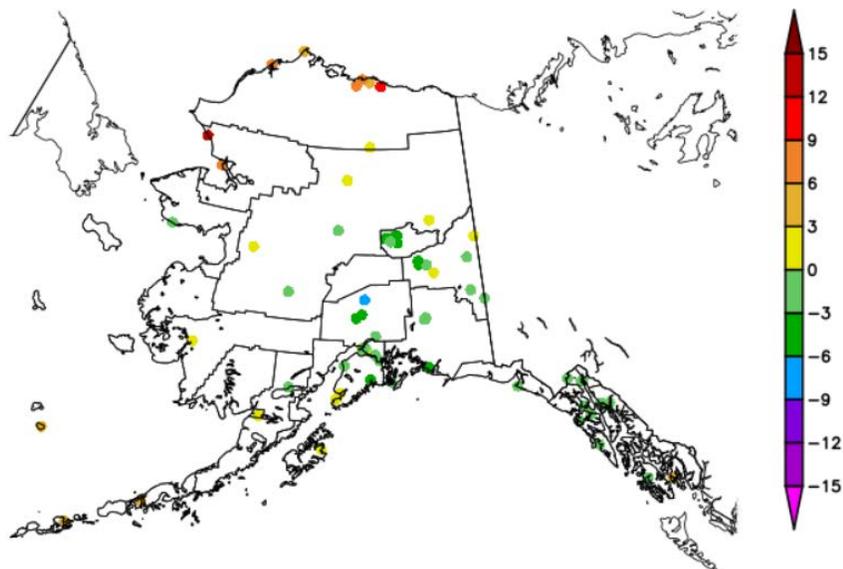
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F) 4/26/2018 – 5/2/2018



Generated 5/3/2018 at HPRCC using provisional data.

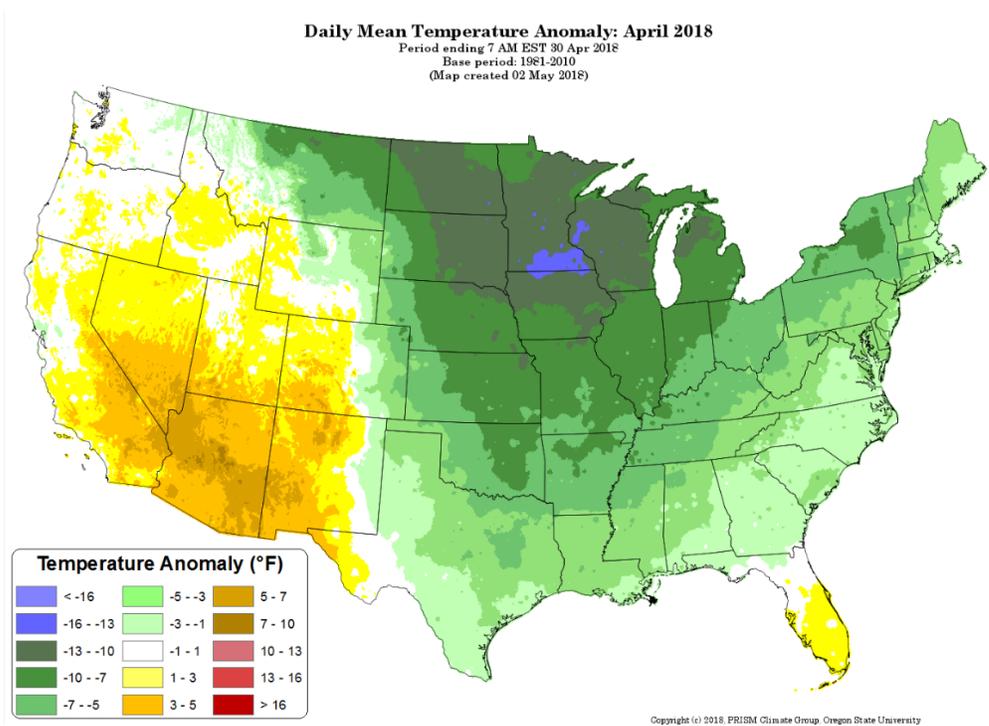
NOAA Regional Climate Centers

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Previous Month, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

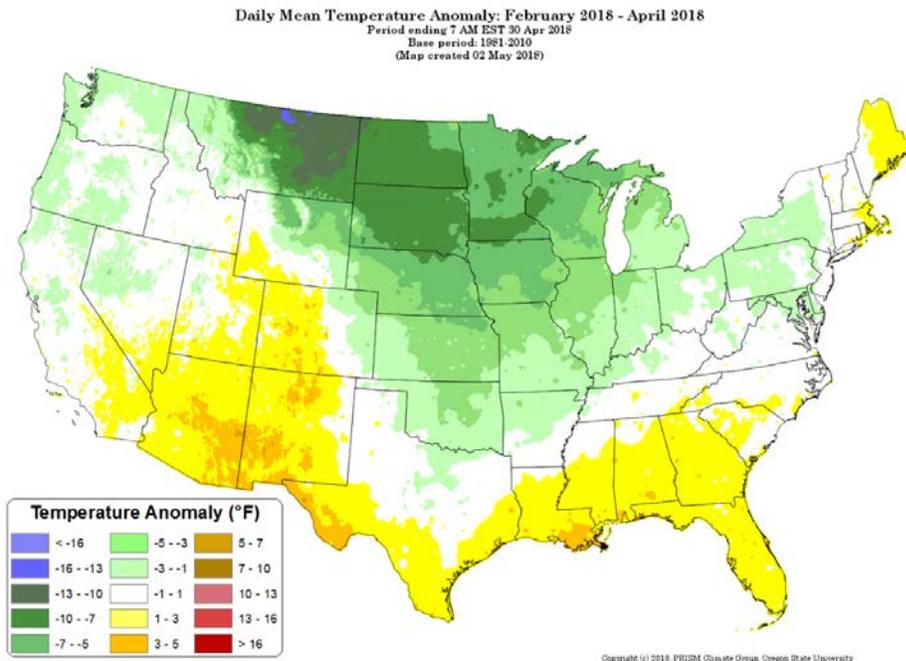
[Previous month national daily mean temperature anomaly map](#)



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

Source: PRISM

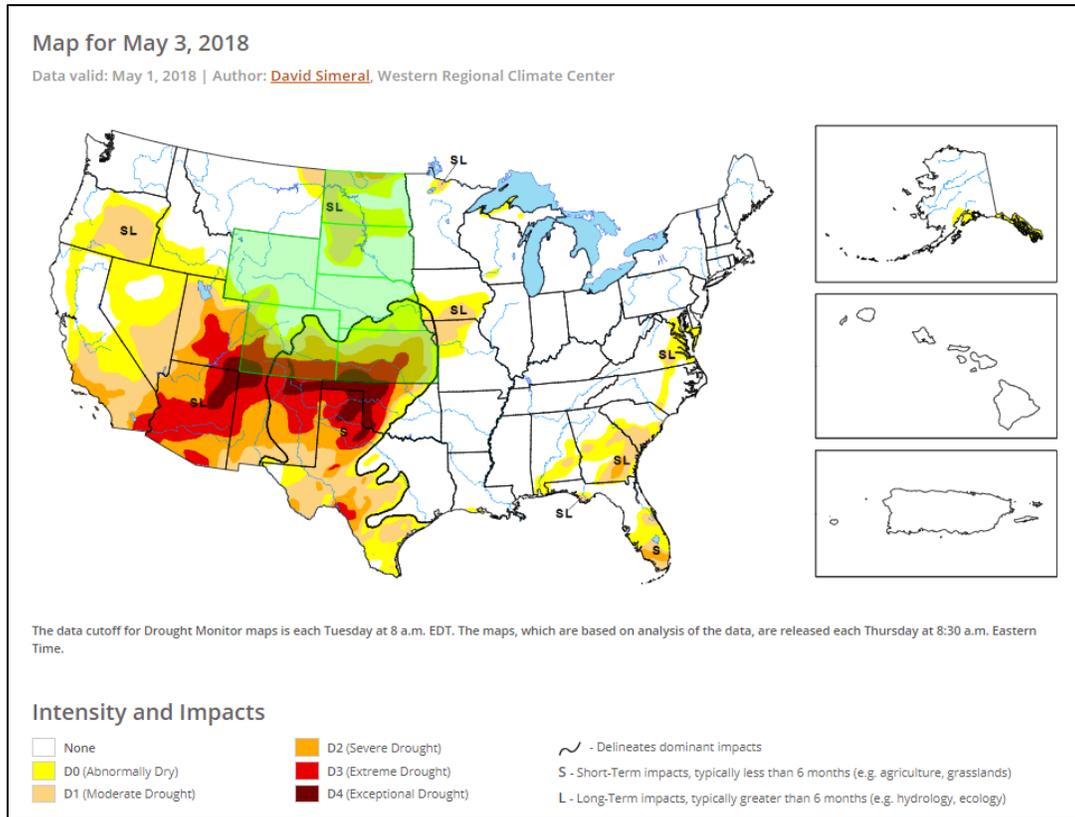
[February through April 2018 daily mean temperature anomaly map](#)



Drought

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

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

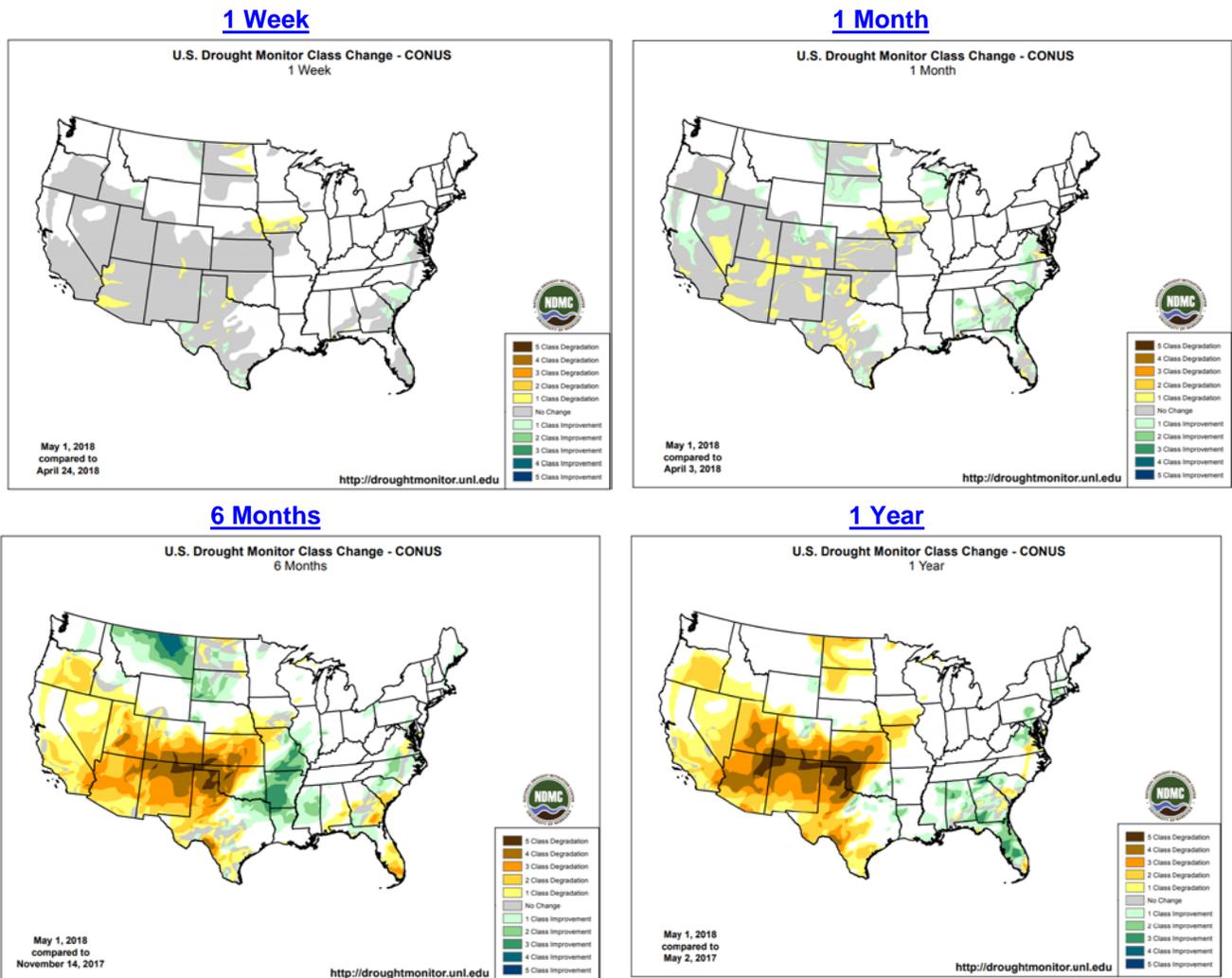


Current [National Drought Summary](#), May 3, 2018

Author: David Simeral, Western Regional Climate Center

“This U.S. Drought Monitor week saw a series of storm systems track across the continental U.S. bringing beneficial rains to portions of the Mid-Atlantic, Northeast, and South. Out West, the storm systems brought rain and mountain snow to higher elevations as well as cooler temperatures to the northern half of the region coming into the weekend after a period of record-setting warmth across parts of the West last week. Unfortunately, the storm systems steered north of drought-stricken areas of the Southwest that saw further deterioration in conditions on this week’s map. In the southern Plains, light shower activity provided some minor relief to dry pasture and rangelands as well as helped to reduce wildlife danger. In Texas, some isolated heavy rainfall activity brought relief to the western Panhandle and Trans-Pecos region. Moving eastward, cool temperatures and scattered shower activity helped improve drought-related conditions in parts of the Mid-Atlantic and Southeast.”

Changes in Drought Monitor Categories over Time

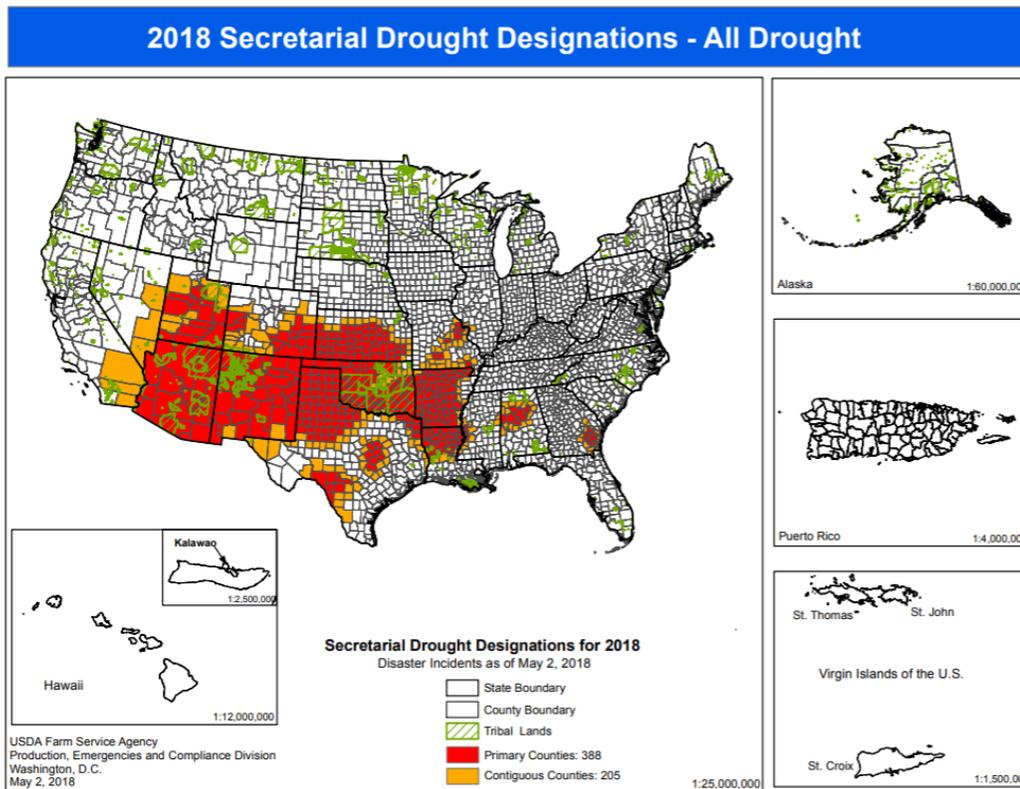


[Changes in drought conditions over the last 12 months](#)

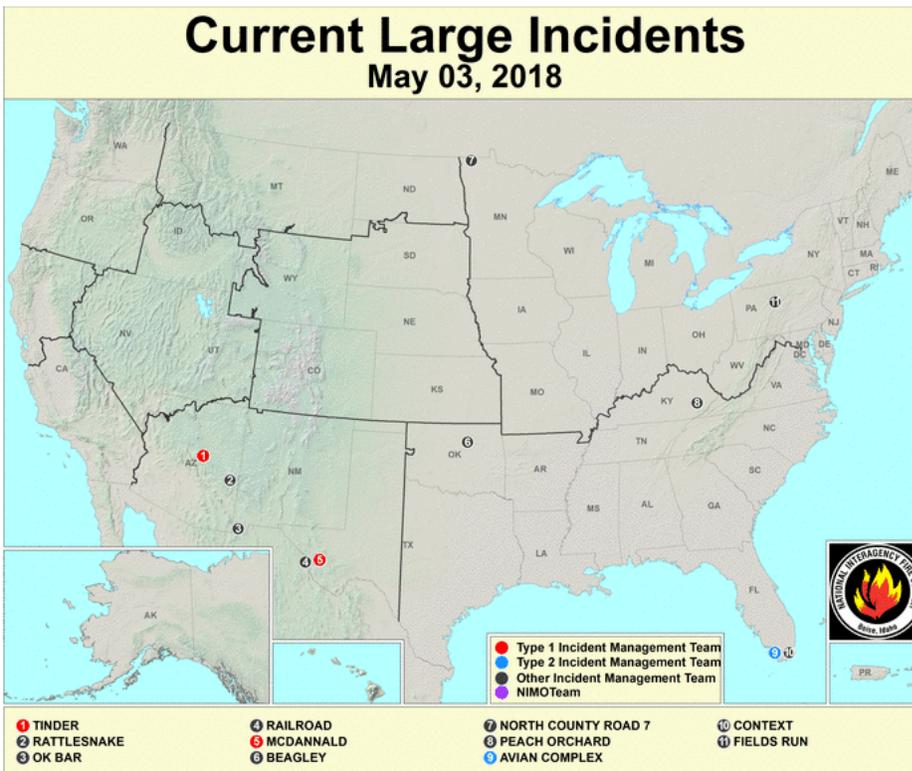
Highlighted Drought Resources

- [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 2018 Secretarial [Drought Designations](#)



Wildfires: [USDA Forest Service Active Fire Mapping](#)



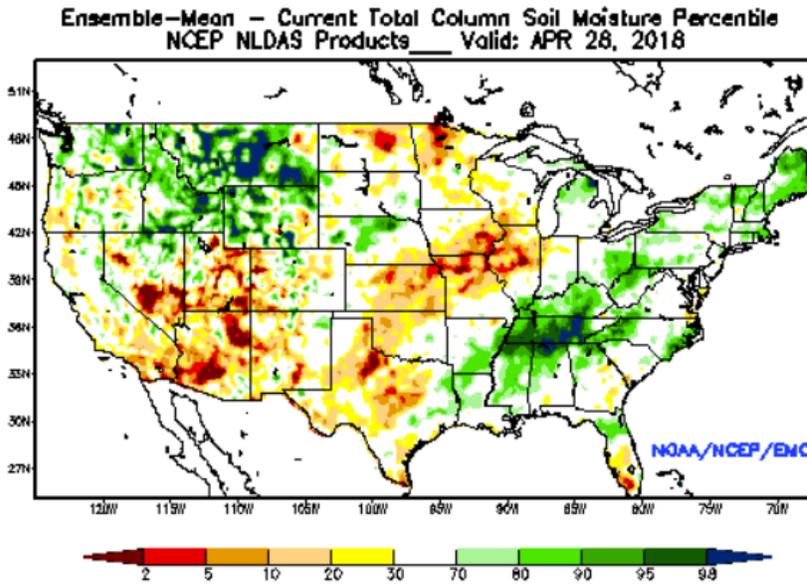
Highlighted Wildfire Resources

- [National Interagency Fire Center](#)
- [InciWeb Incident Information System](#)
- [Significant Wildland Fire Potential Outlook](#)

Other Climatic and Water Supply Indicators

Soil Moisture

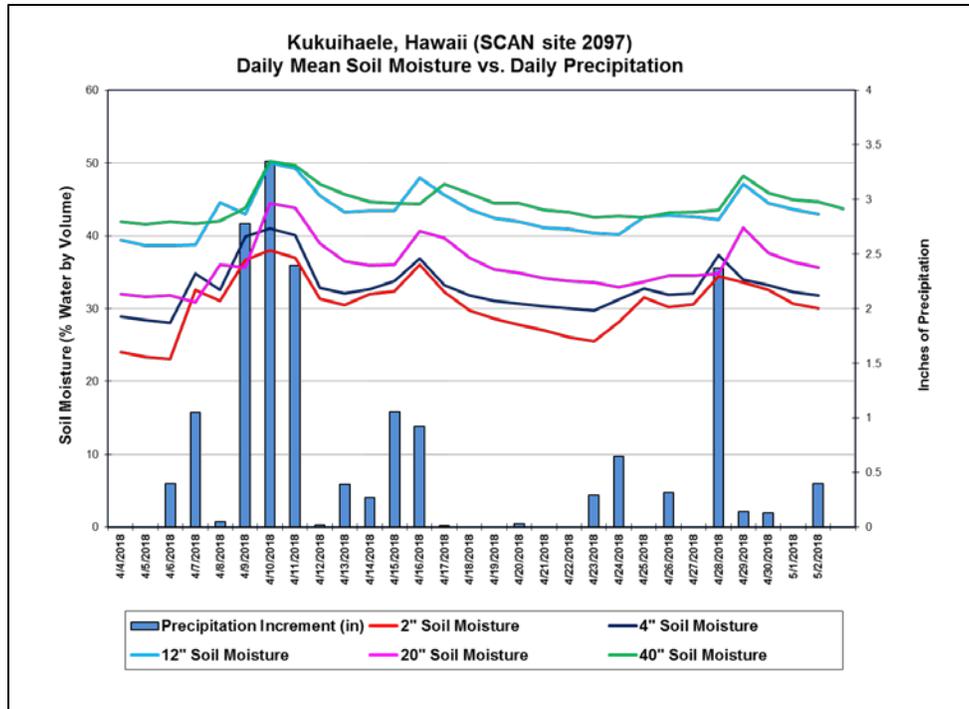
Source: NOAA National Centers for Environmental Prediction



[Modeled soil moisture percentiles](#) as of April 28, 2018.

Soil Moisture Data

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



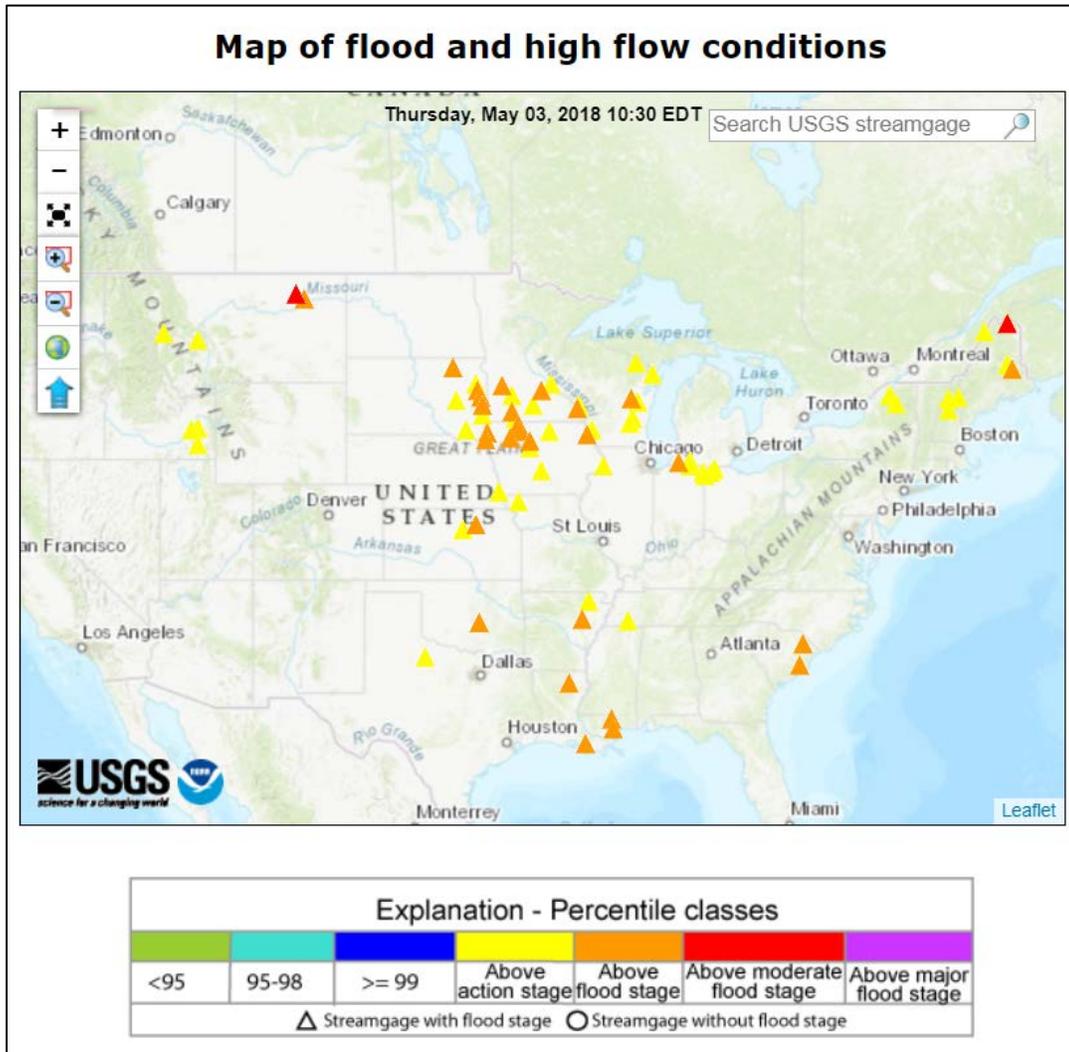
The chart shows precipitation and soil moisture for the last 30 days at the [Kukuihaele SCAN site 2097](#) on the Big Island in Hawaii. The precipitation events increased soil moisture at the 2- and 4-inch depth sensors immediately, whereas the 12-, 20-, and 40-inch sensors showed a slight delay or no response to the events.

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

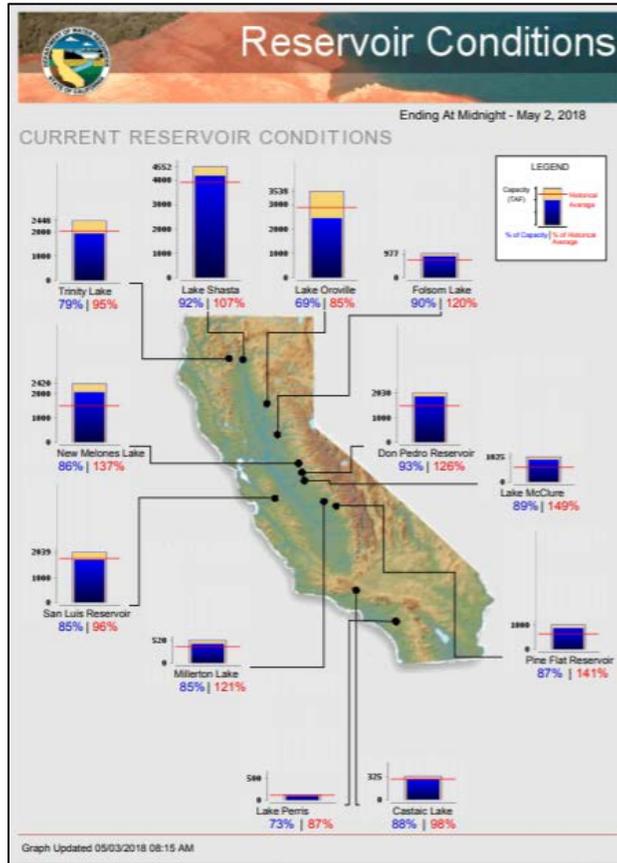


[WaterWatch: Streamflow, drought, flood, and runoff conditions](#)

Reservoir Storage

Current California Reservoir Conditions

Source: California Department of Water Resources



[Current 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

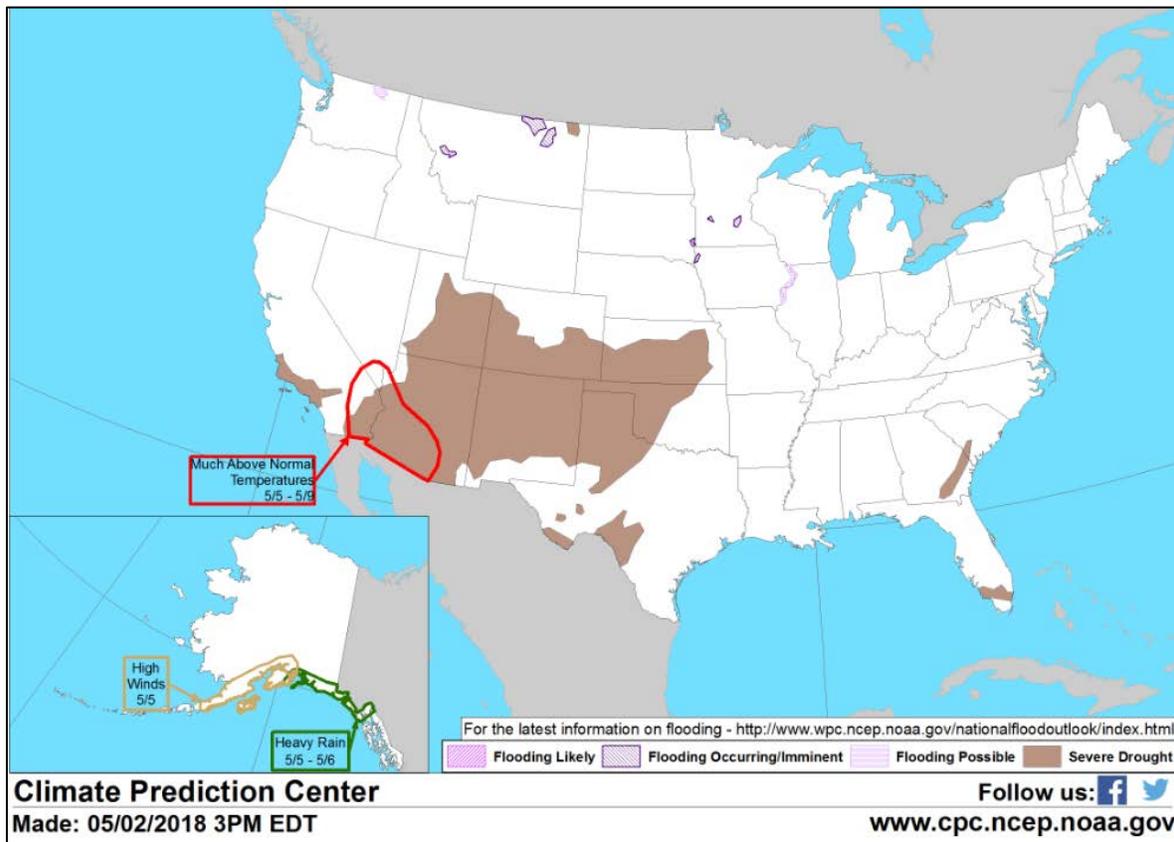
Agricultural Weather Highlights

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

National Outlook, Thursday, May 3: “A nearly-stationary frontal boundary stretching from Texas into the central Great Lakes will remain the focus for locally heavy rain. The front will resume an eastward push, aided by an upper-air disturbance — currently producing rain and mountain snow in the central Rockies — as it begins to accelerate east. Meanwhile, high pressure anchored along the Southeast Coast will maintain sunny skies over the southeastern quarter of the Nation, though the Midwestern cold front will begin to make inroads into the very warm, humid air mass entrenched across the eastern U.S. over the weekend. The greatest chance for heavy rain (an inch or more) over the next five days will be in the central Corn Belt, south-central Texas, and parts of the Northeast. In contrast, rainfall will largely bypass the Southeast and Gulf Coast Region. Out west, mostly dry, increasingly warm weather is expected, with summerlike heat developing from southern California into the Four Corners. The NWS 6- to 10-day outlook for May 8 – 12 calls for above-normal temperatures across much of the Nation, with near- to below-normal temperatures confined to the central Great Lakes and southern Florida. Drier-than-normal conditions are likewise anticipated over much of the contiguous U.S., with pockets of above-normal rainfall limited to Florida, the western Corn Belt, and Pacific Northwest.”

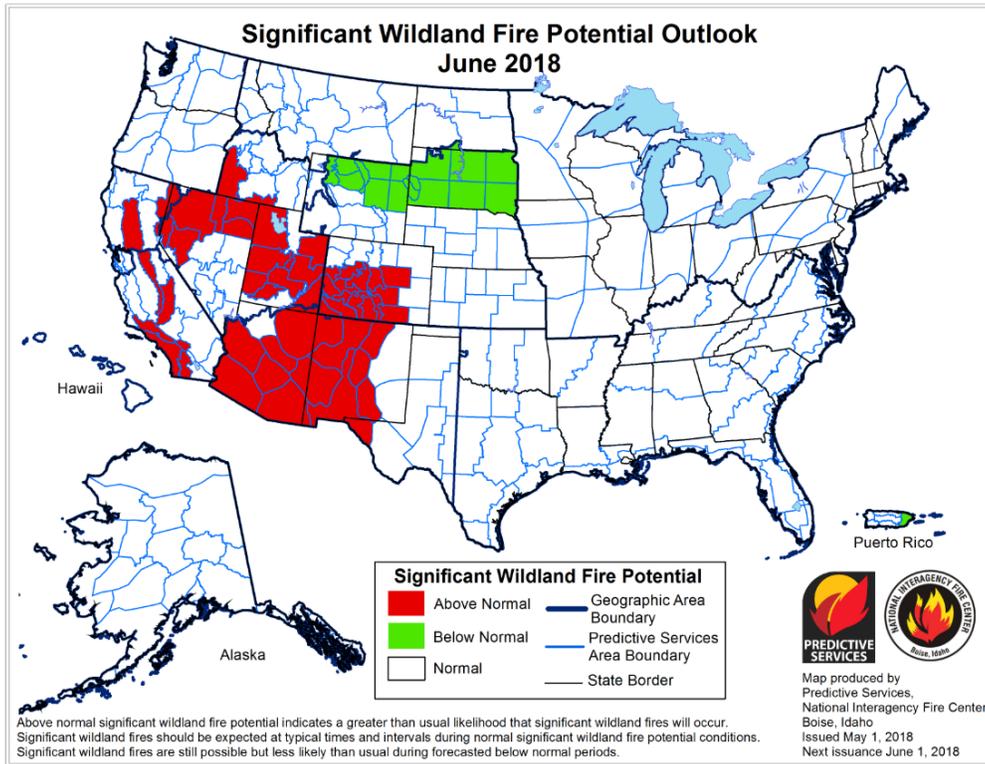
Weather Hazard Outlook May 5 – 9, 2018

Source: Climate Prediction Center



Significant Wildland [Fire Potential Outlook](#)

Source: National Interagency Fire Center

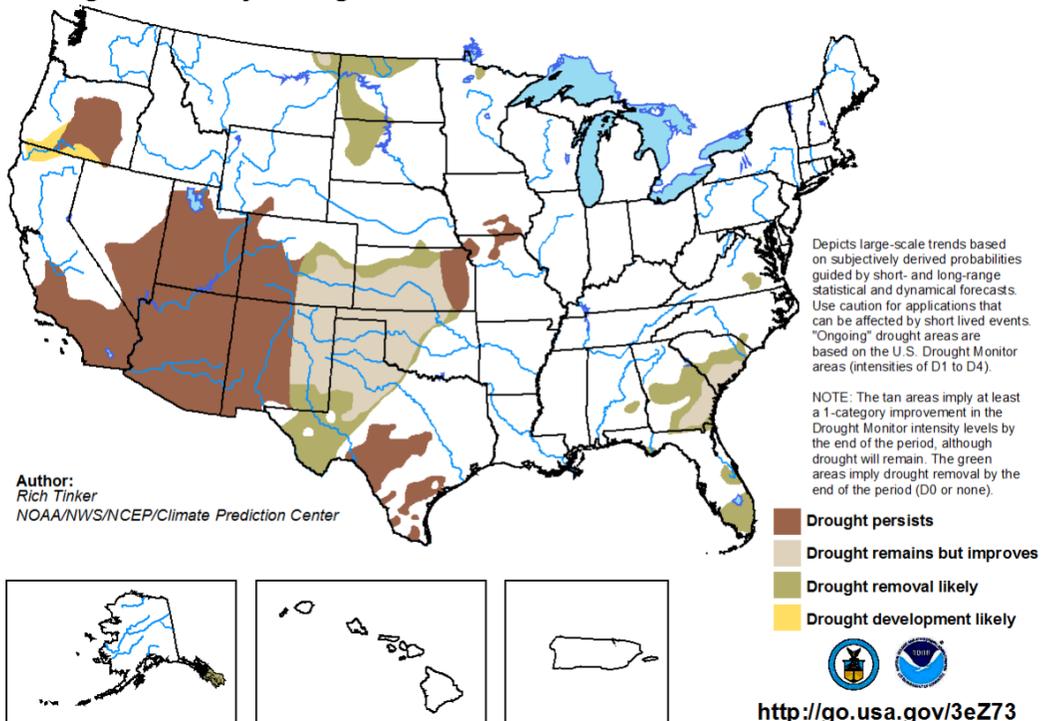


Seasonal Drought Outlook: [April 19 - July 31, 2018](#)

Source: National Weather Service

U.S. Seasonal Drought Outlook
Drought Tendency During the Valid Period

Valid for April 19 - July 31, 2018
Released April 19, 2018

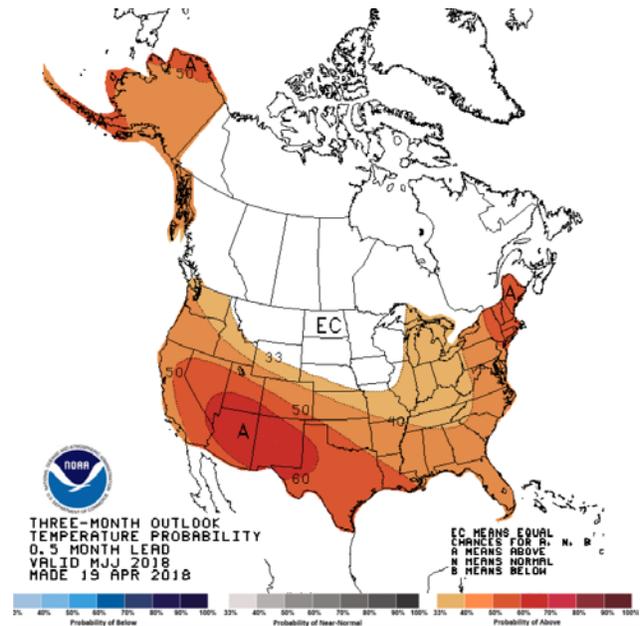
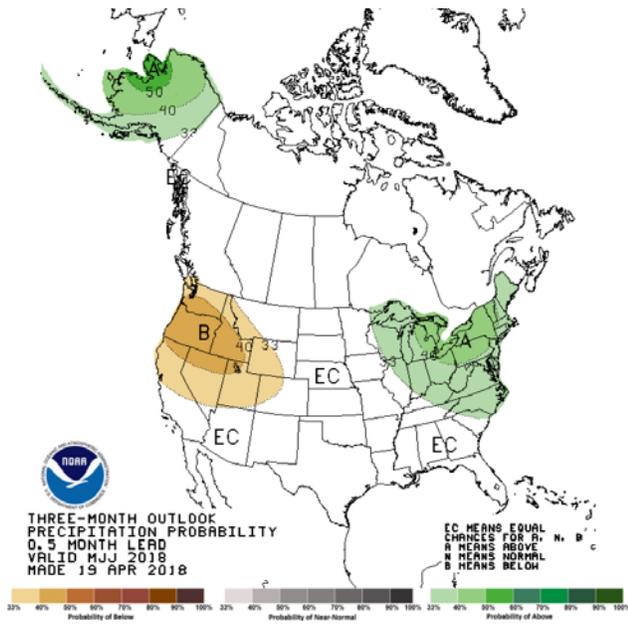


Climate Prediction Center 3-Month Outlook

Source: National Weather Service

[Precipitation](#)

[Temperature](#)



[May-June-July \(MJJ\) 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](#).