United States Department of Agriculture

Water and Climate Update

April 26, 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.

Wildfires impact the southern Plains

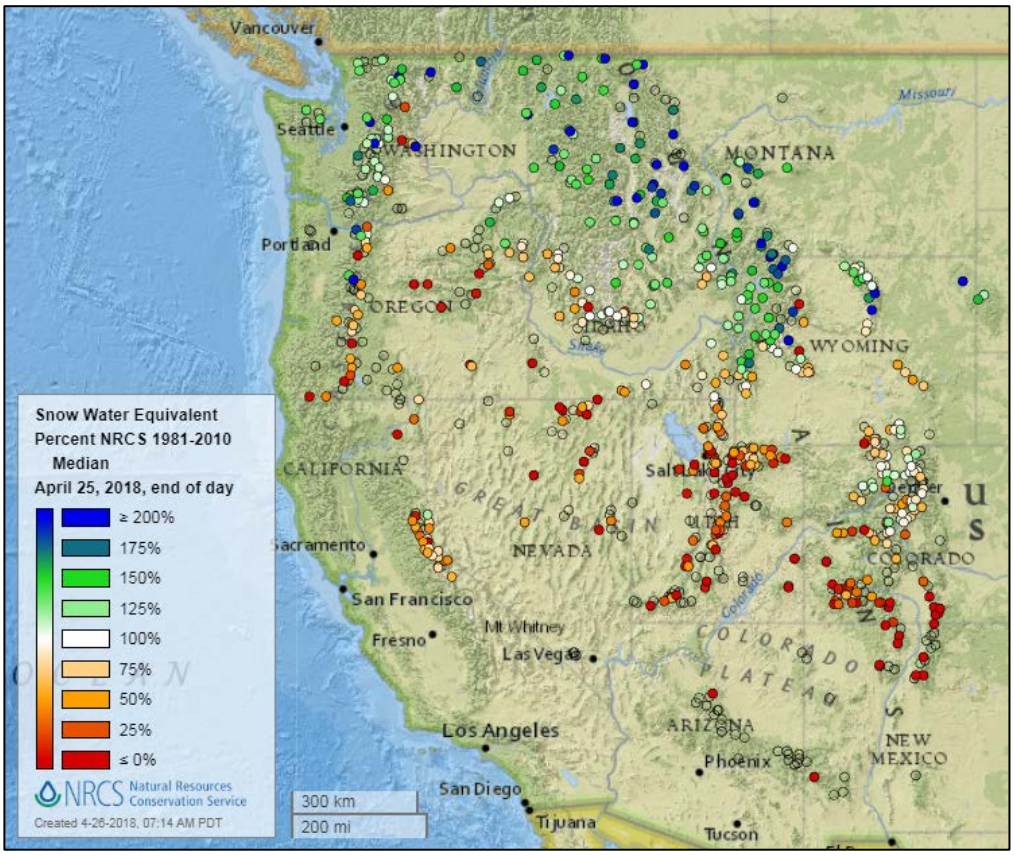
Parts of Oklahoma, Texas, Colorado, Utah, New Mexico, and Arizona have had an exceptionally dry winter which has contributed to extreme wildfire conditions in these states. Wildfires in Oklahoma have burned over 545 square miles, killing more than 1,500 cattle and destroying homes. 52 counties are under a state of emergency in Oklahoma. Recent rains on these fires have assisted firefighters in containment.

Related:

USDA to immediately assist producers for qualifying livestock, honeybee and farm-raised fish program losses - North Texas E-News, TX
USDA Undersecretary Bill Northey Tours Wildfires, Announces Changes to FSA Disaster Programs – OK Farm Report, OK
Four Corners drought goes beyond extreme; no relief in sight – The Journal
Drought and wildfires force cattle ranchers in Colorado, four other states to scramble for feed – The Denver Post
1500 Cattle Die in Oklahoma Wildfires; Death Toll Could Increase - AgWeb
Governor Mary Fallin Declares State of Emergency Due to Wildfires, Drought Conditions – OK Forestry Services

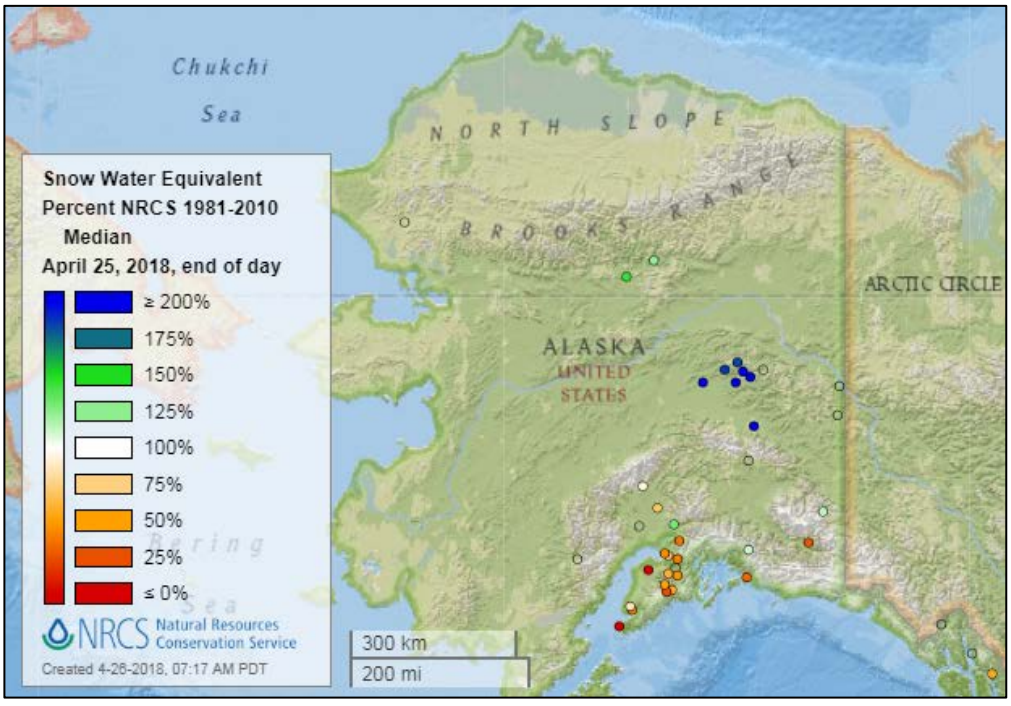
Snow

Current Snow Water Equivalent, NRCS SNOTEL Network



[Snow water equivalent percent of median map]

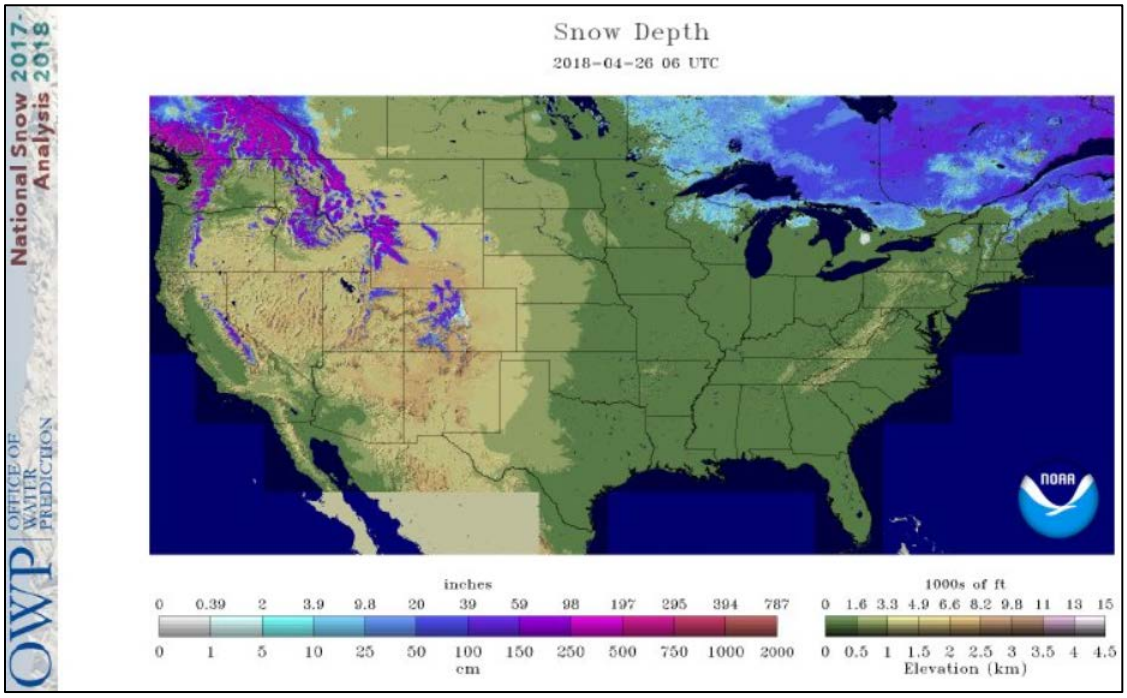
See also:
[Snow water equivalent values (inches) map]



[Alaska snow water equivalent percent of median map]

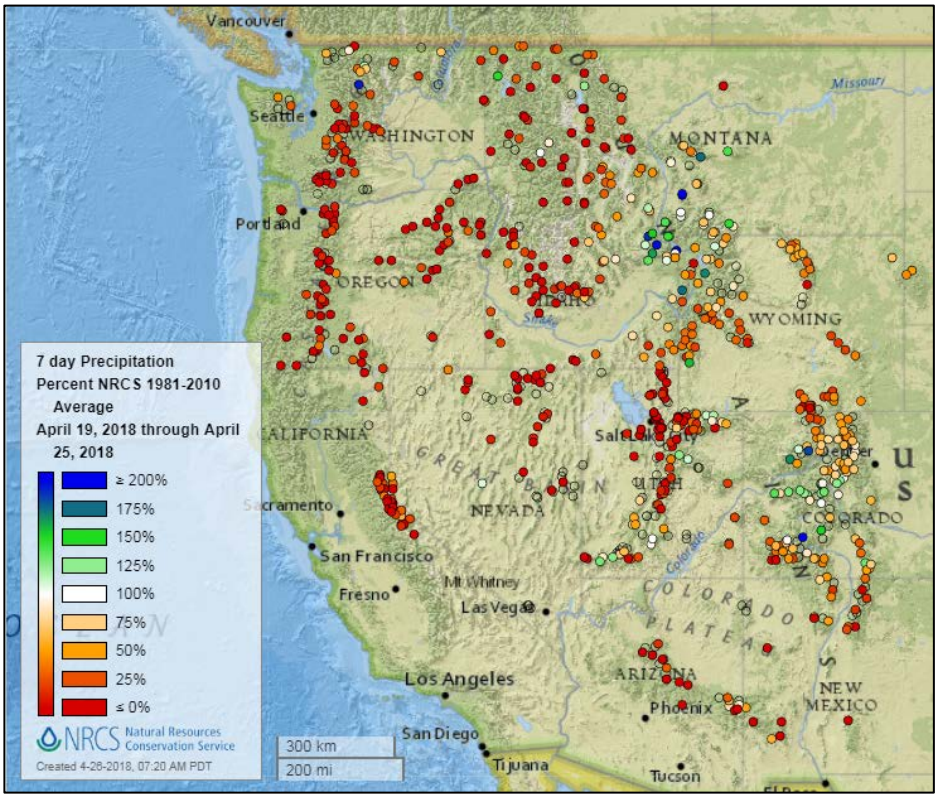
See also:
[Alaska snow water equivalent values (inches) map]

Current Snow Depth, National Weather Service Snow Analysis



Precipitation

Last 7 Days, NRCS SNOTEL Network

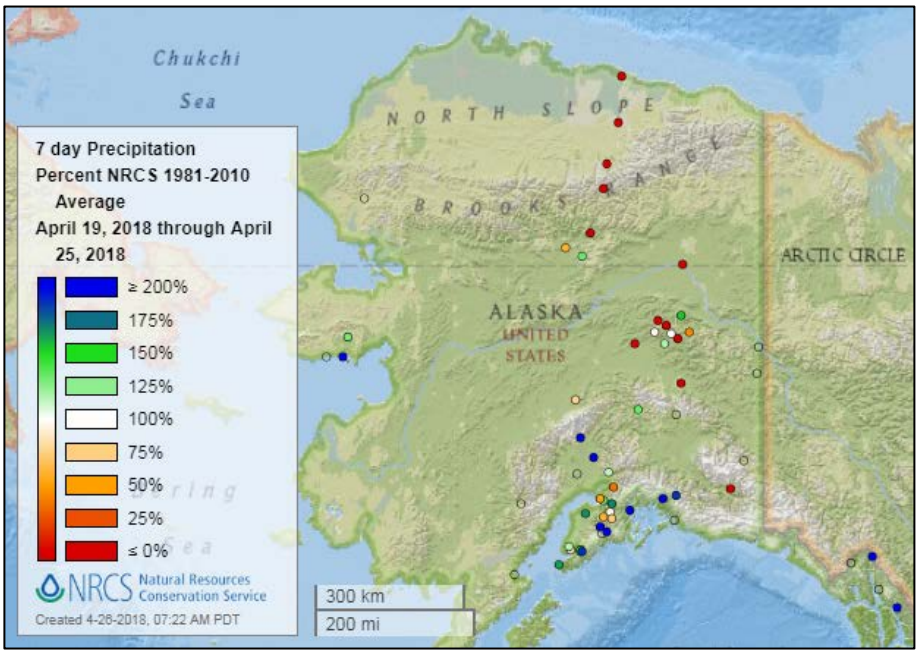


[7-day precipitation percent of average map]

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

[Alaska 7-day precipitation percent of average map]

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

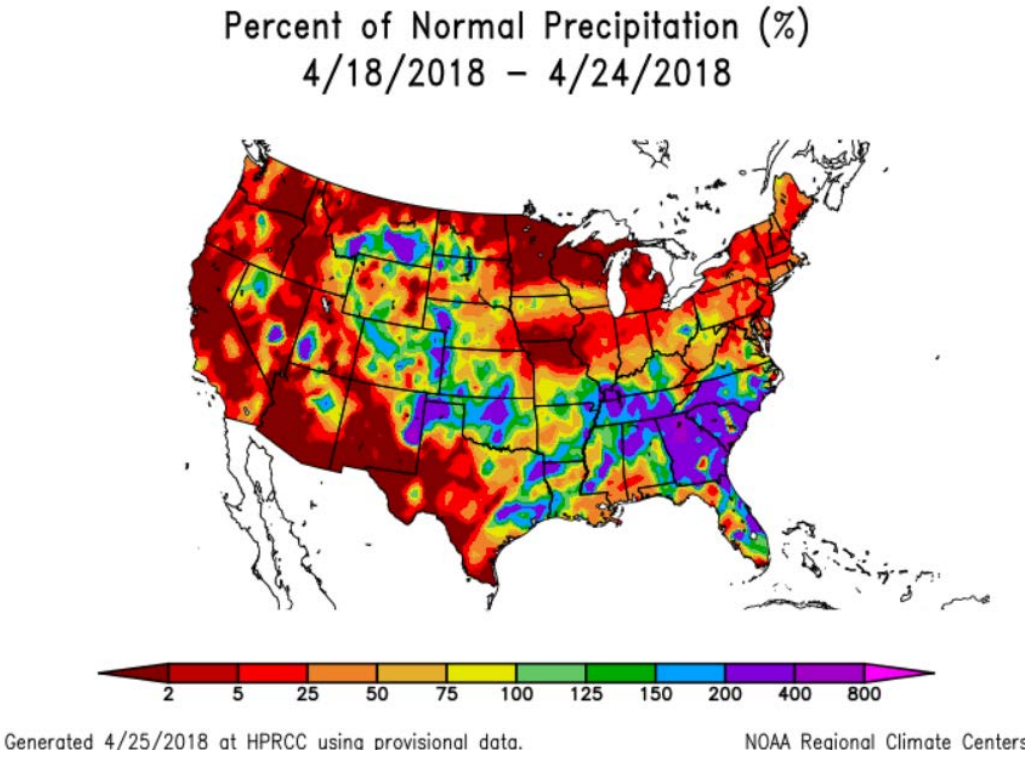


Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

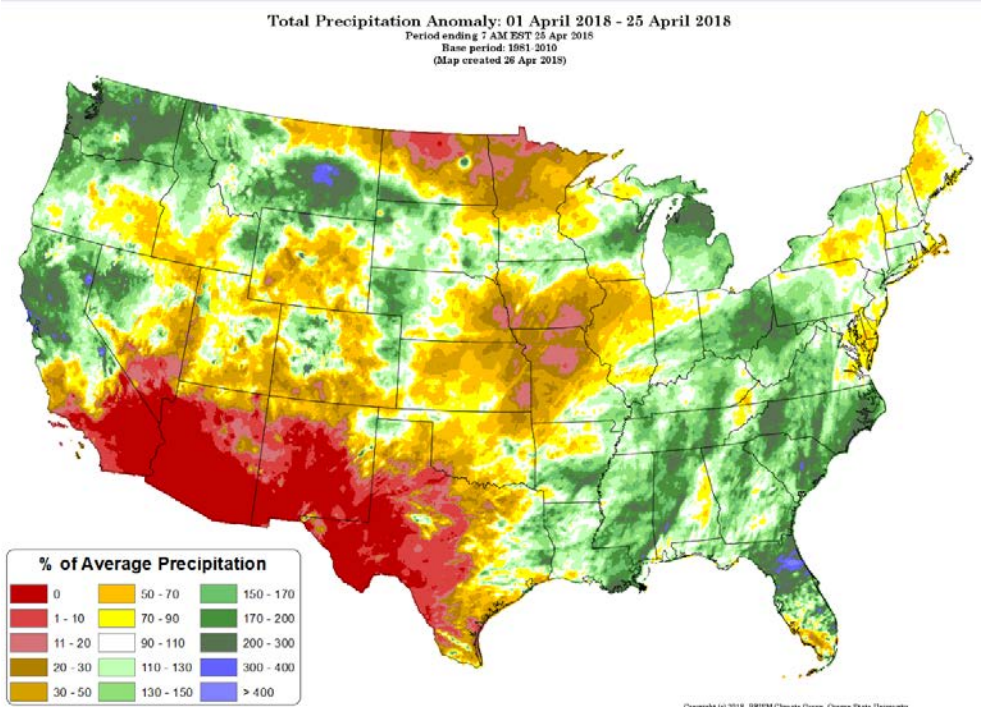
[7-day precipitation percent of normal map] for the continental U.S.

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



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

Source: PRISM

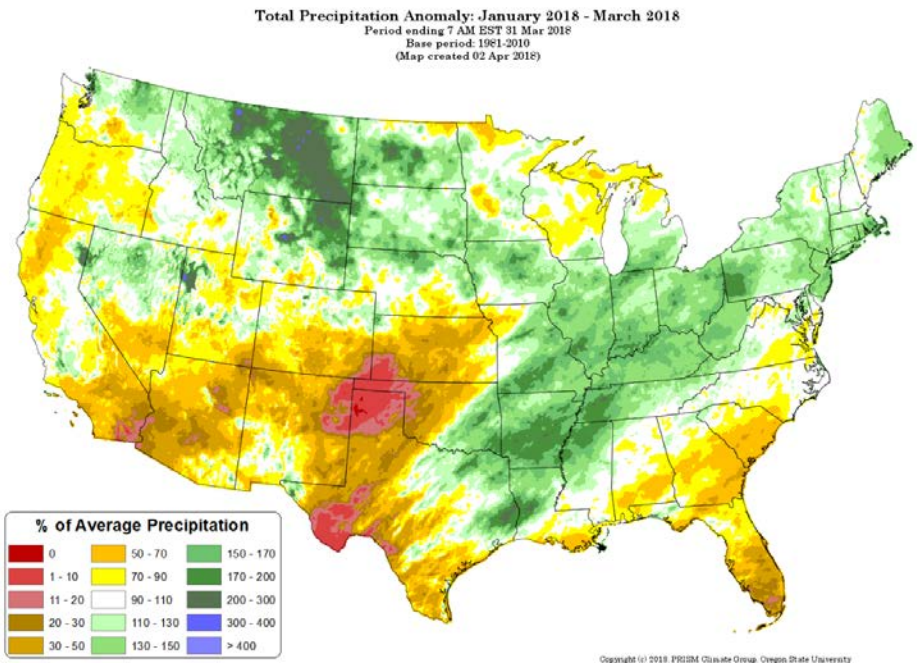


[Month-to-date national total precipitation percent of average map]

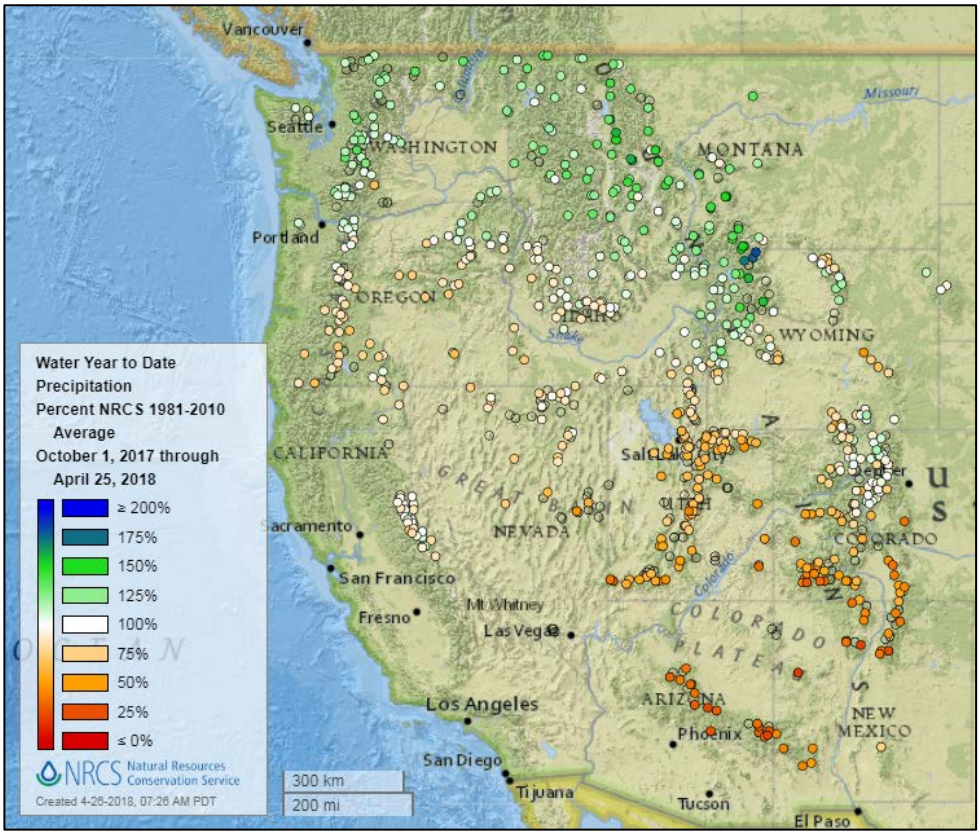
Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

[January through March 2018 total precipitation percent of average map]

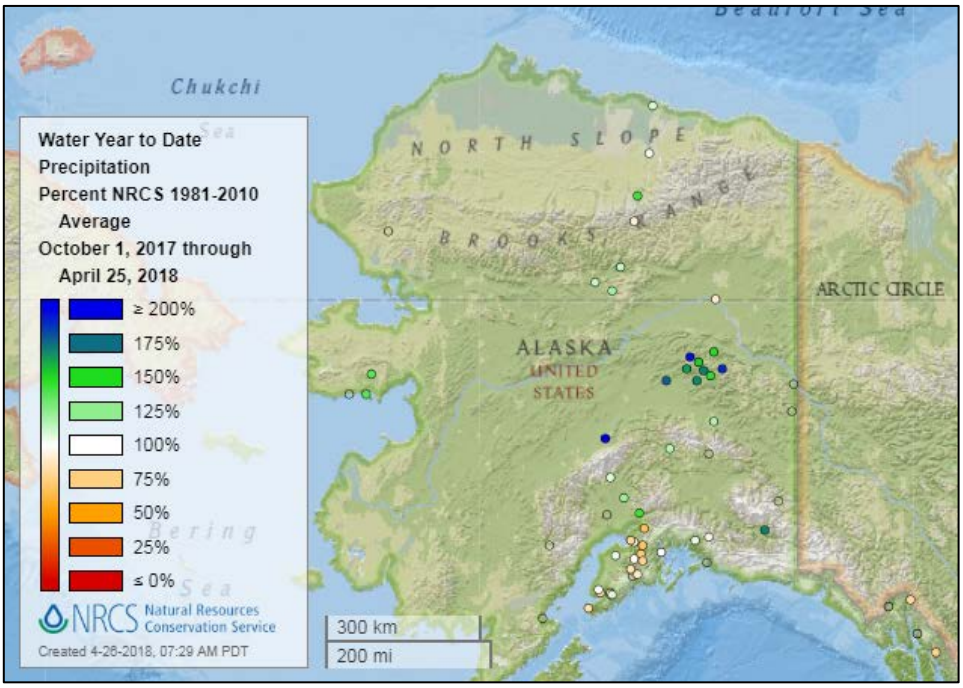


Water Year-to-Date, NRCS SNOTEL Network



[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]

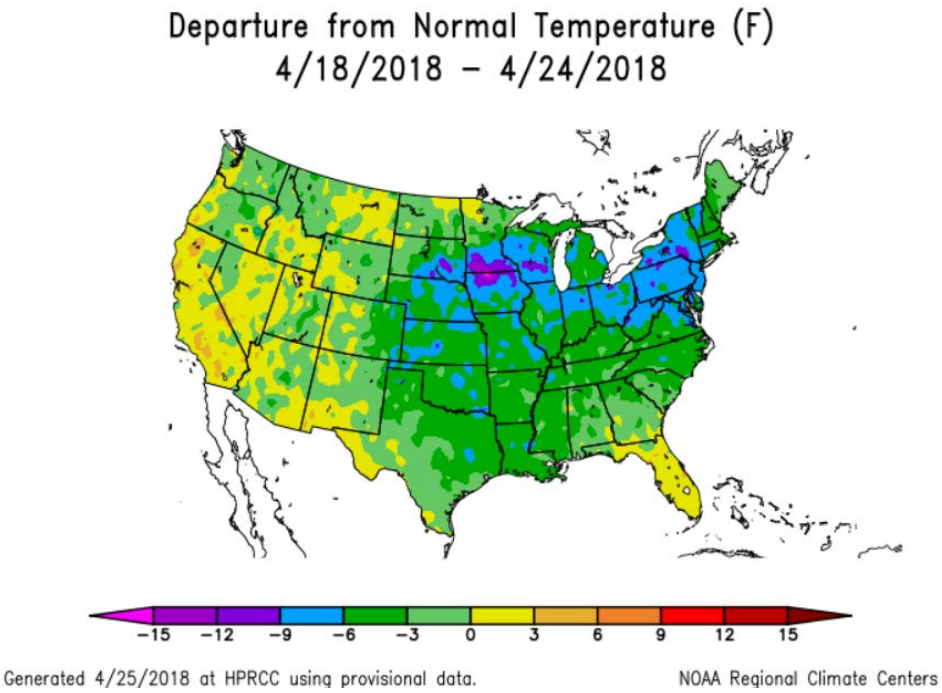
Temperature

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]

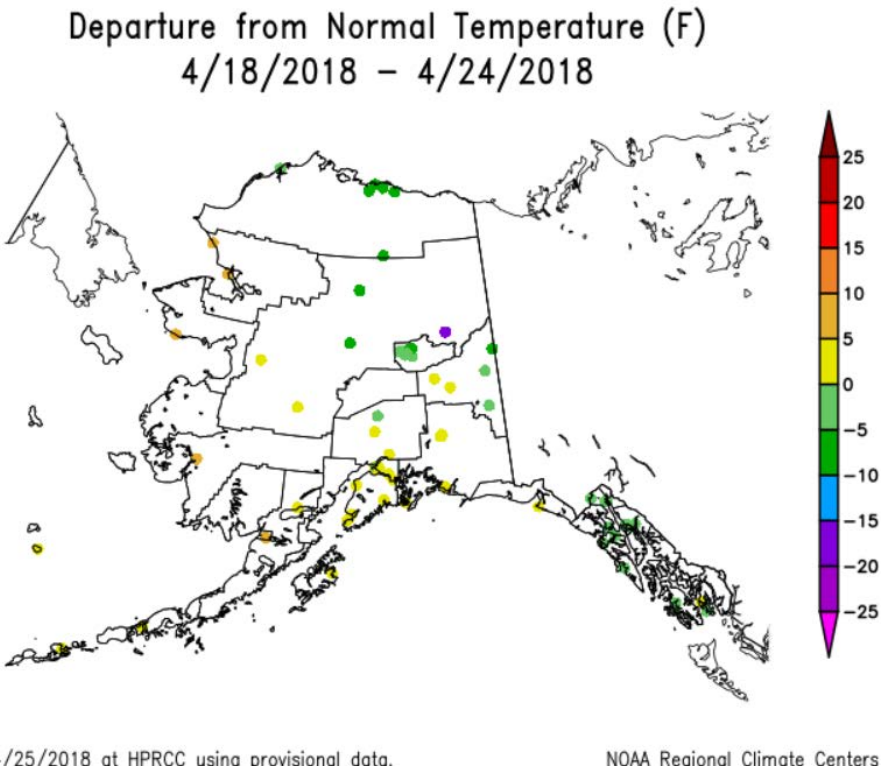


Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

[7-day temperature anomaly map] for Alaska.

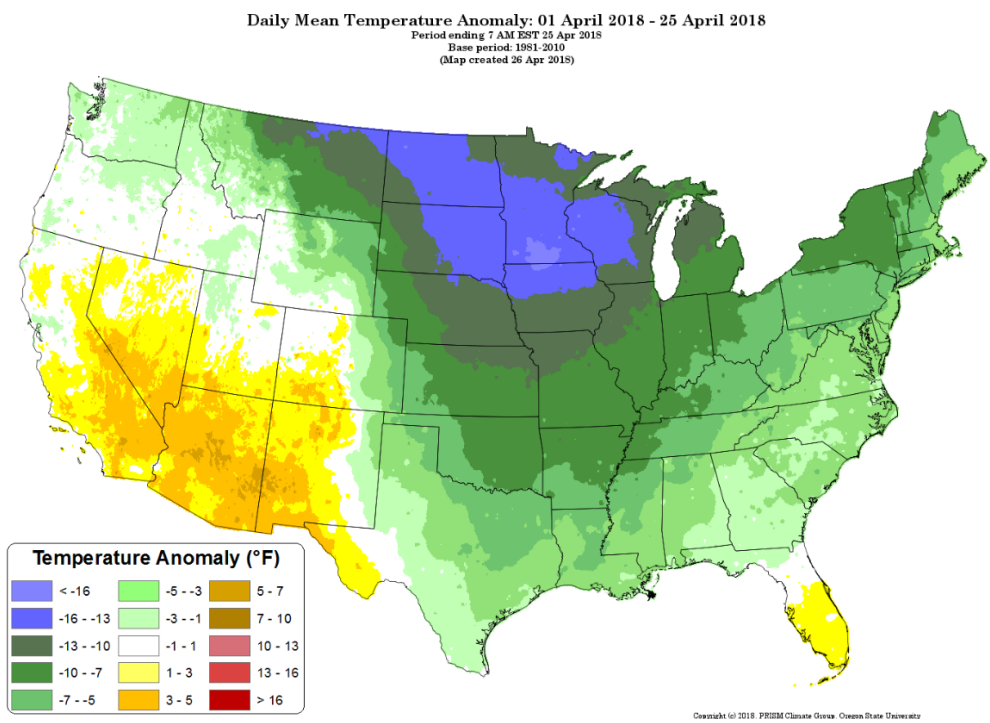
See also: [7-day temperature (° F) map]



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

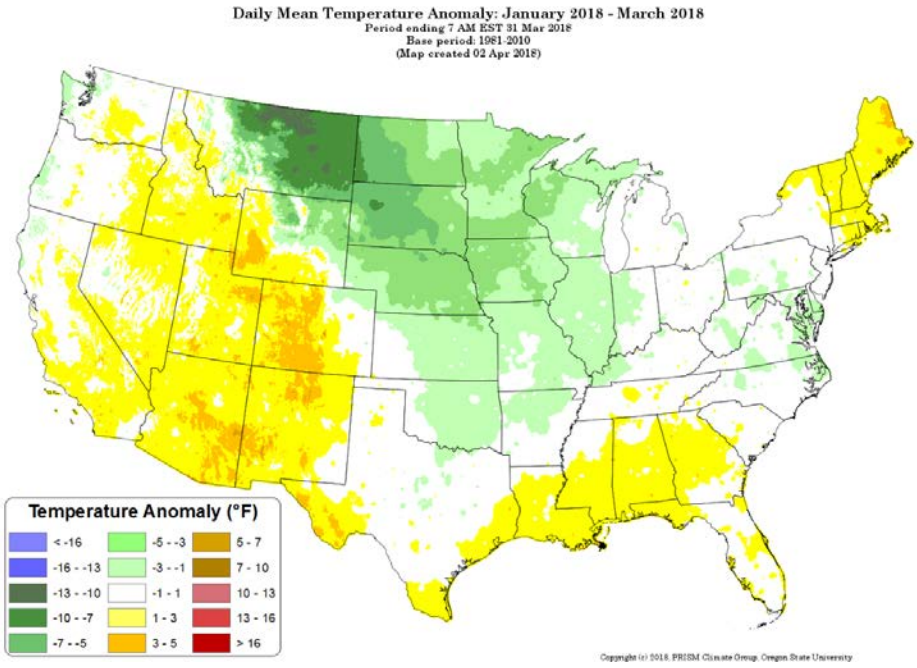
Source: PRISM

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



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

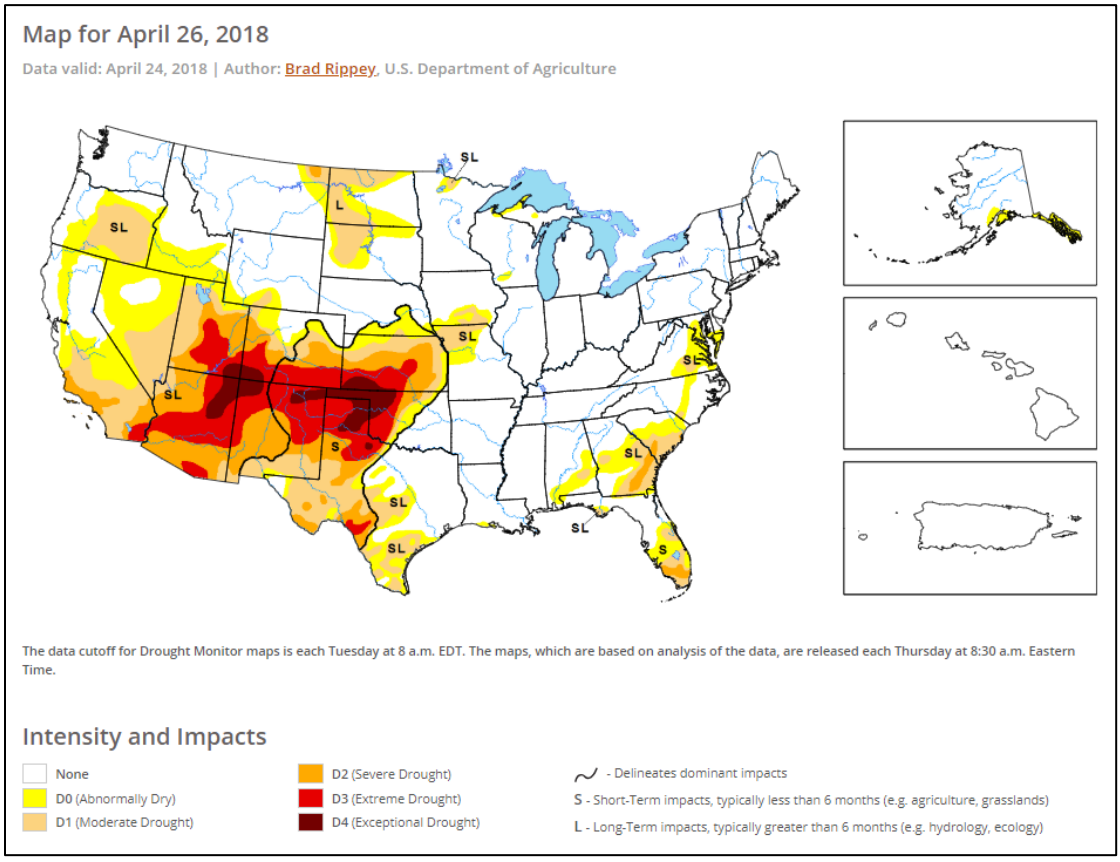
Source: PRISM



[January through March 2018 daily mean temperature anomaly map]

Drought

U.S. Drought Monitor Select map below. U.S. Drought Portal Comprehensive drought resource.



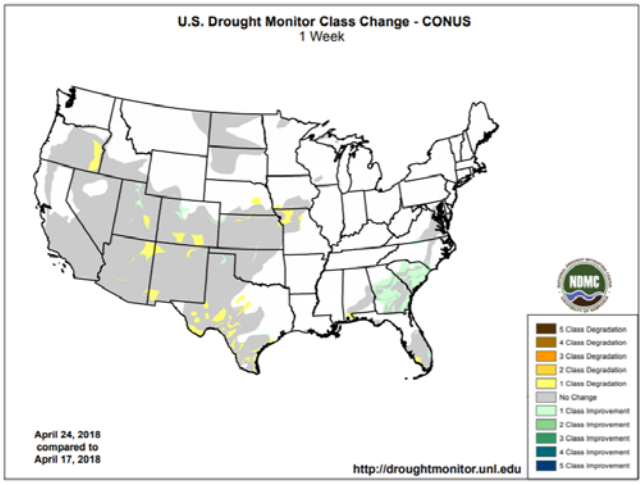
Current National Drought Summary, April 26, 2018

Author: Brad Rippey, U.S. Department of Agriculture

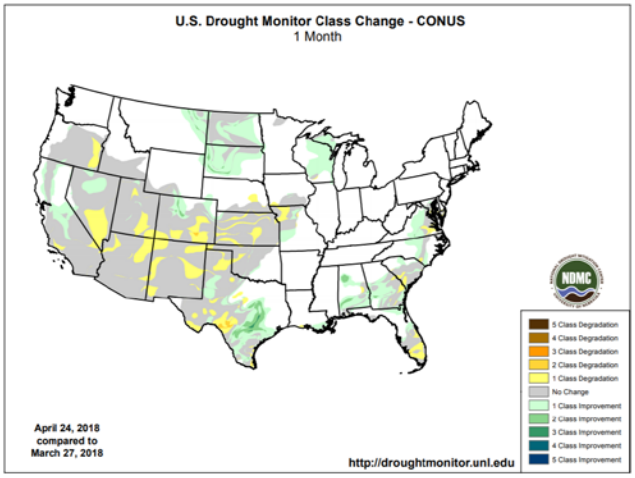
“The southern High Plains’ second wildfire outbreak in less than a week preceded the arrival of storm system that provided much-needed rainfall on April 20-21. Rainfall in the Plains’ drought-affected areas generally totaled around an inch or less. (Additional rain fell across portions of the central and southern Plains on April 24-25 but will be largely reflected next week.) The fires peaked in intensity on April 17, when southwesterly winds fanned flames amid soaring temperatures, but continued into the following day when winds shifted to a northwesterly direction. Oklahoma’s two largest April wildfires—the Rhea Fire (in Dewey County) and the 34 Complex (in Woodward County)—were nearly fully contained by April 24 after destroying more than seven dozen structures and charring approximately 350,000 acres of brush and grass. Meanwhile, drought continued to intensify in parts of the Southwest, where dry, windy weather prevailed. In contrast, another round of heavy rain struck portions of the South and East, as the slow-moving storm system that had produced beneficial rainfall on the southern Plains eventually drifted eastward.”

Changes in Drought Monitor Categories over Time

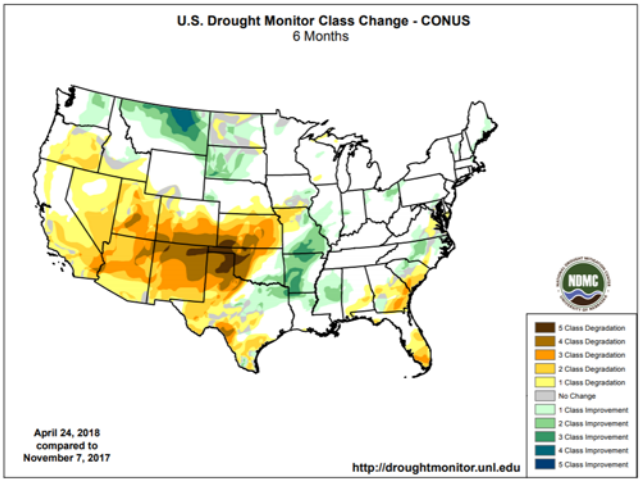
1 Week



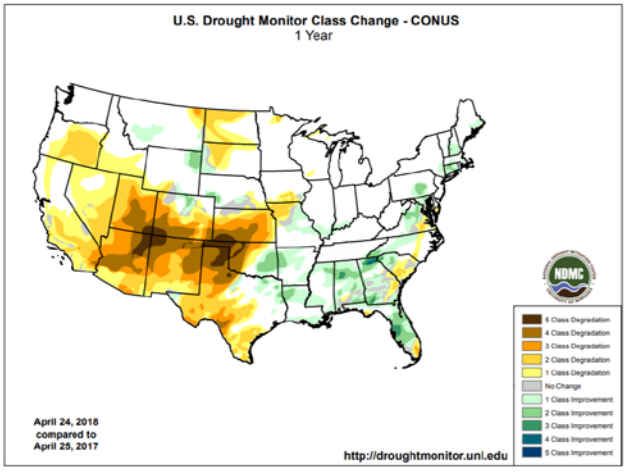
1 Month



6 Months



1 Year

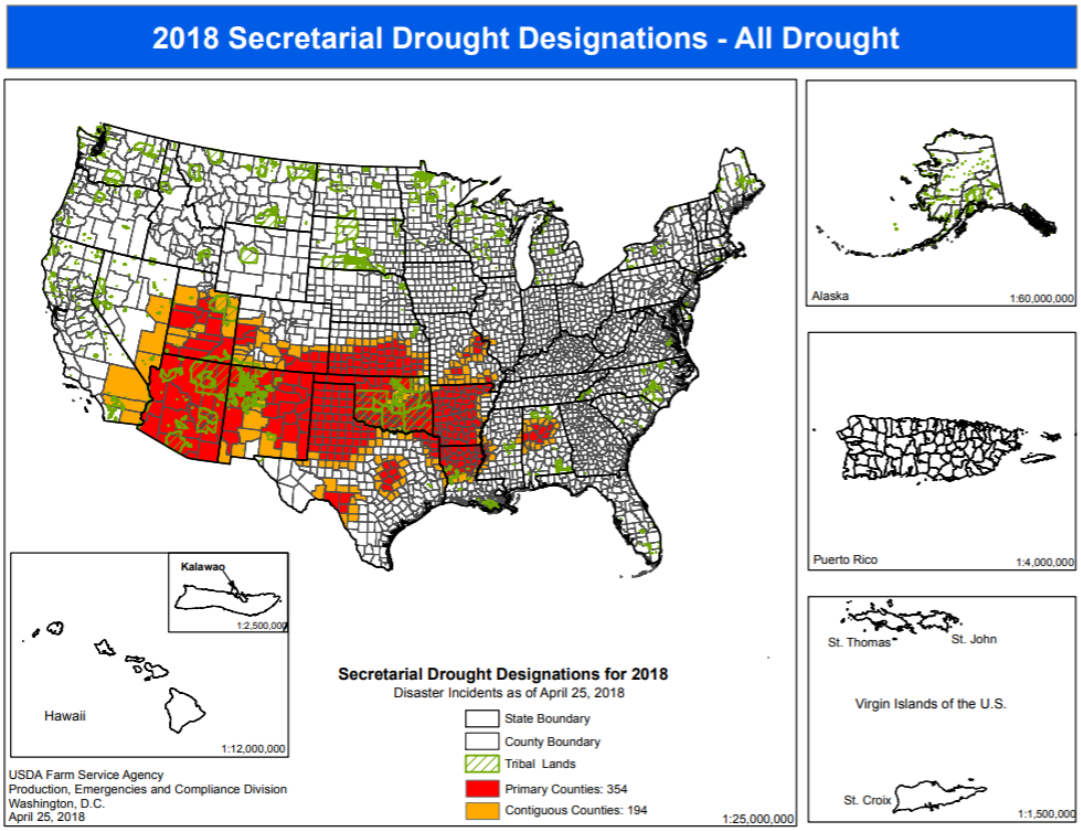


Changes in drought conditions over the last 12 months

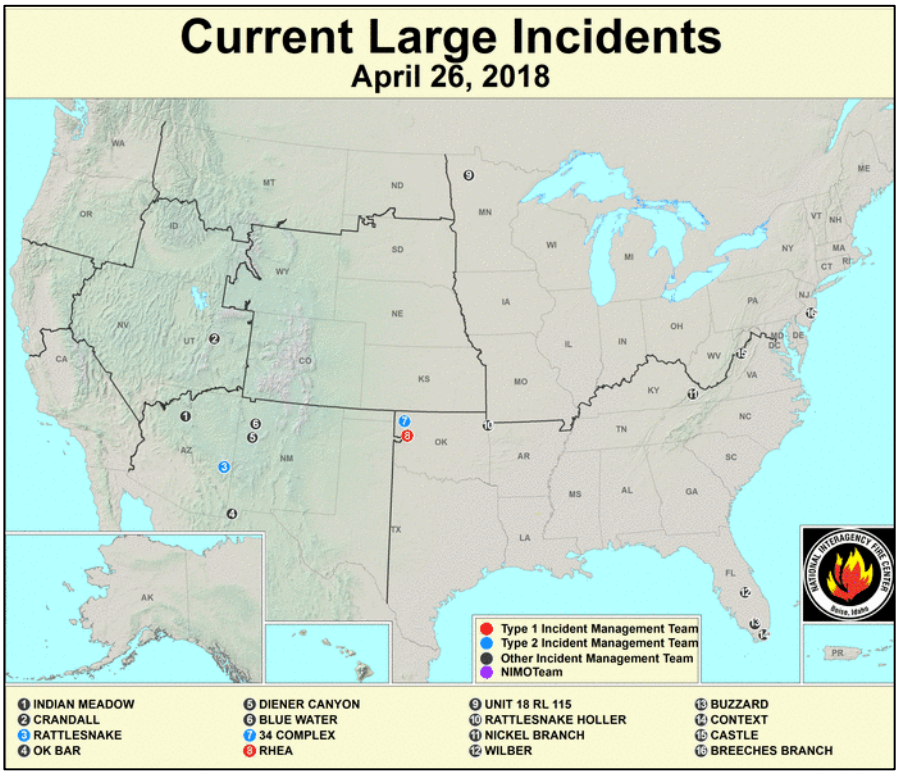
Highlighted Drought Resources

- 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 2018 Secretarial Drought Designations



Wildfires: USDA Forest Service Active Fire Mapping



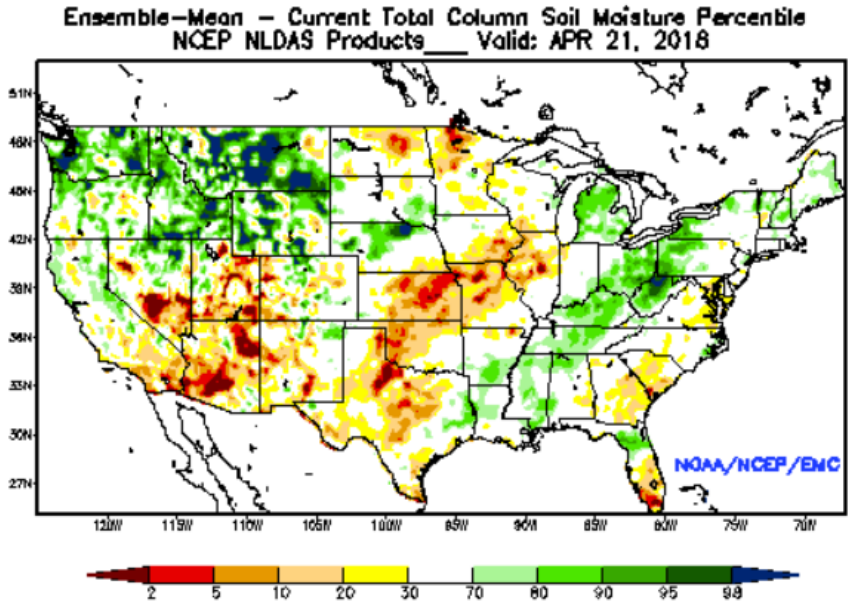
Highlighted Wildfire Resources

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

Other Climatic and Water Supply Indicators

Soil Moisture

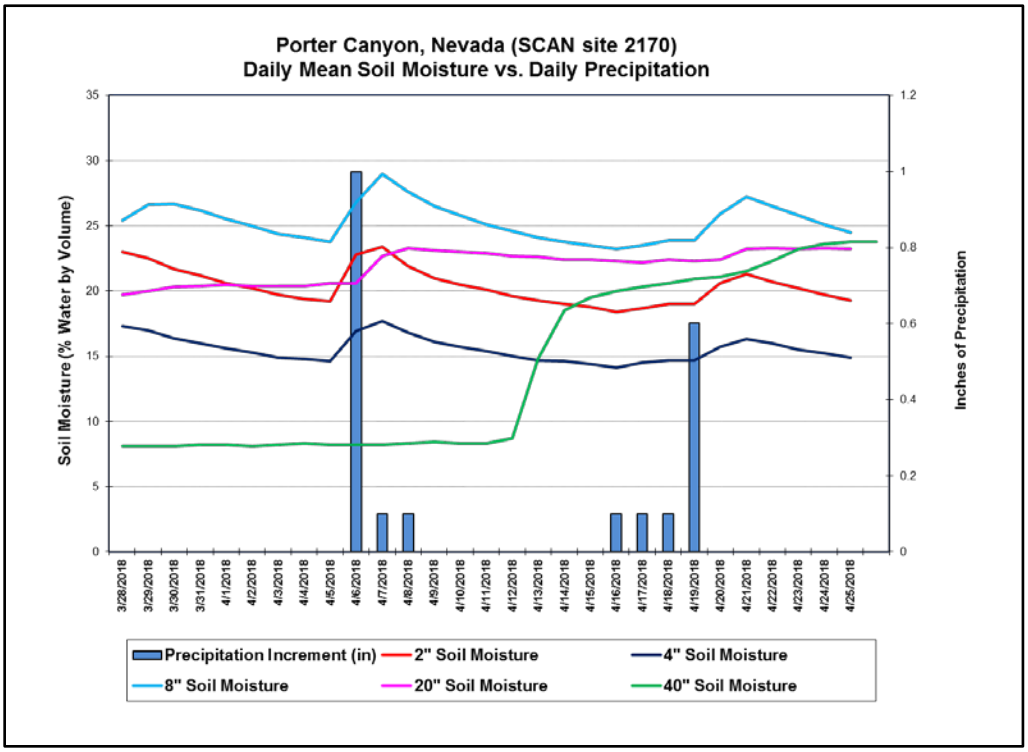
Source: NOAA National Centers for Environmental Prediction



Modeled soil moisture percentiles as of April 21, 2018.

Soil Moisture Data

Source: NRCS Soil Climate Analysis Network (SCAN)



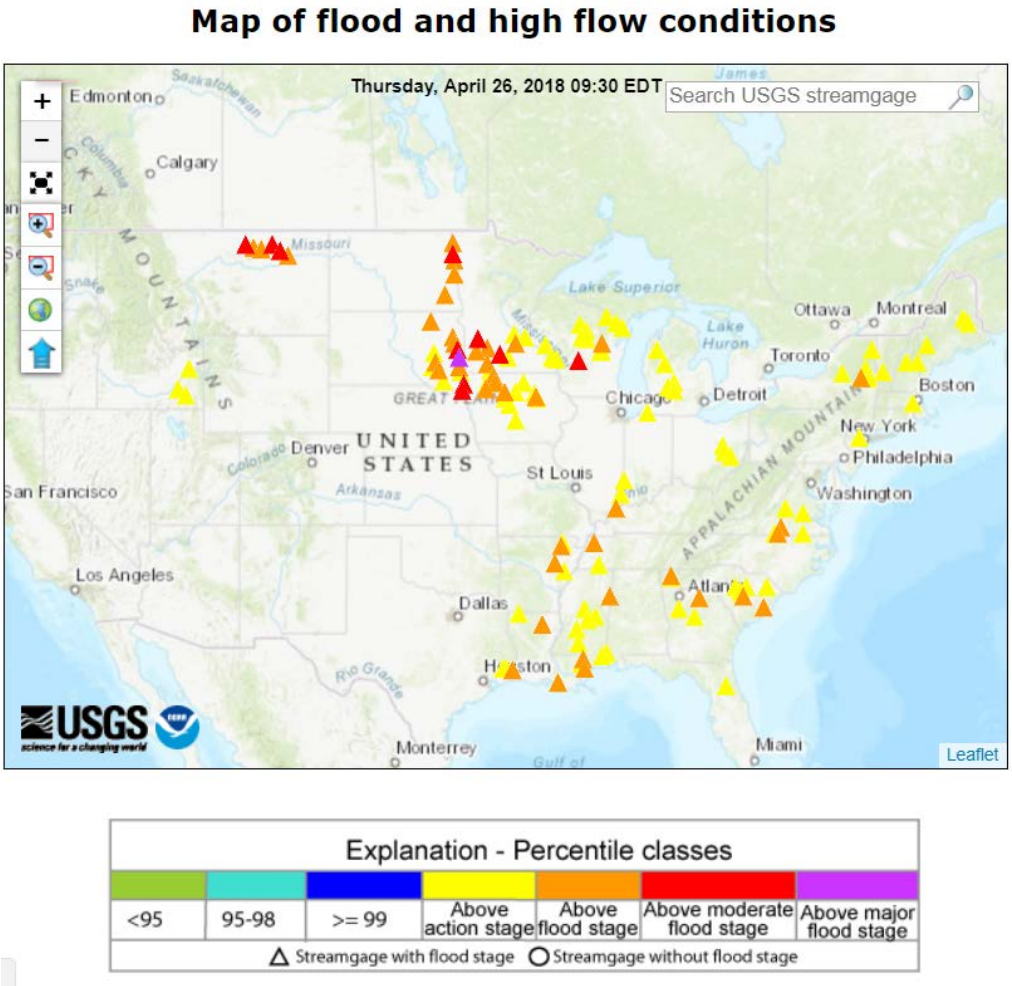
The chart shows precipitation and soil moisture for the last 30 days at the Porter Canyon SCAN site 2170 in Nevada. The precipitation events on April 6 and 19 increased soil moisture at the 2-, 4-, 8- and 20-inch sensors and showed a delayed response at the 40-inch depth sensor.

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

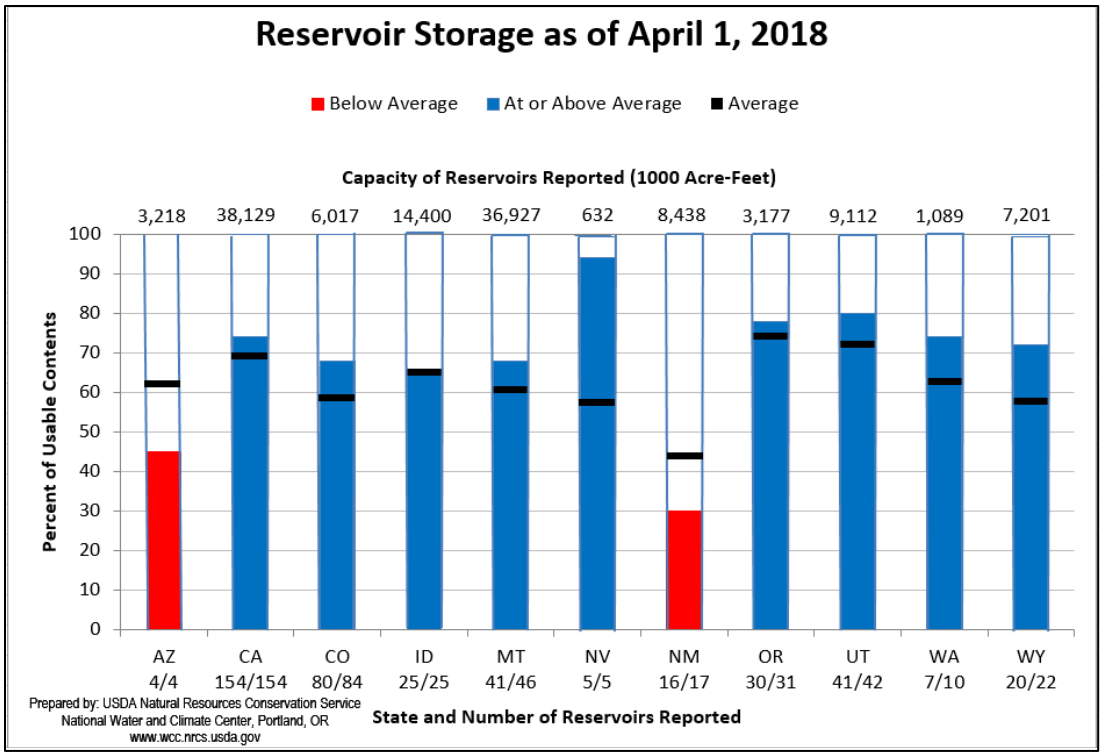


WaterWatch: Streamflow, drought, flood, and runoff conditions

Reservoir Storage

Western States Reservoir Storage

Source: NRCS National Water and Climate Center

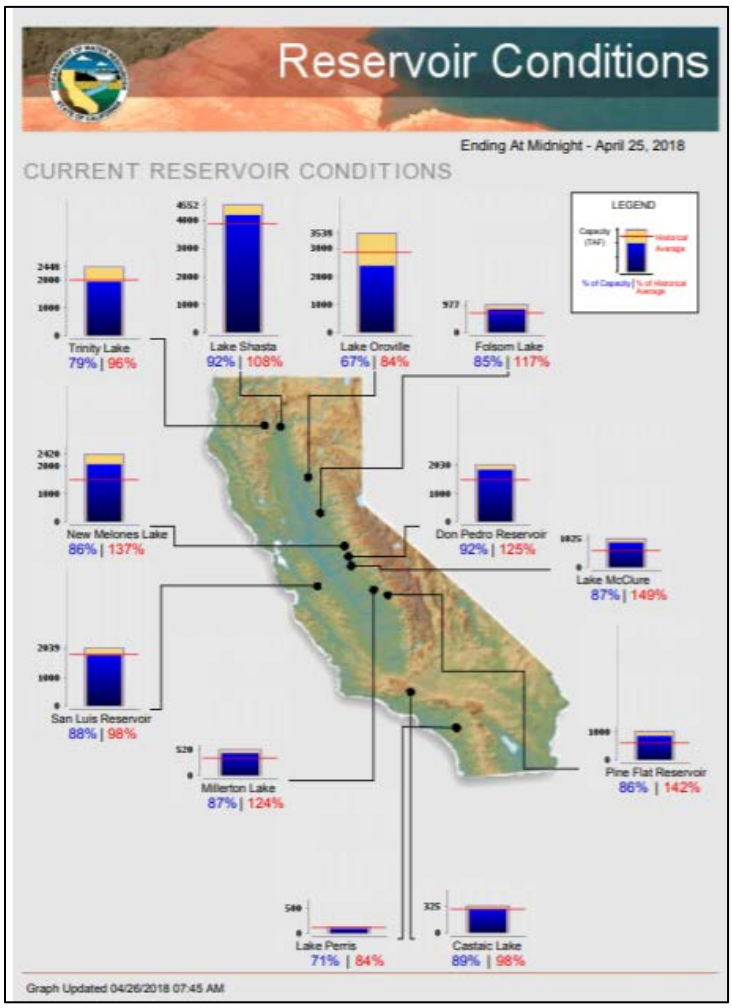


April 1 Reservoir Storage: Chart | Dataset

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



Current California Reservoir Conditions

Short- and Long-Range Outlooks

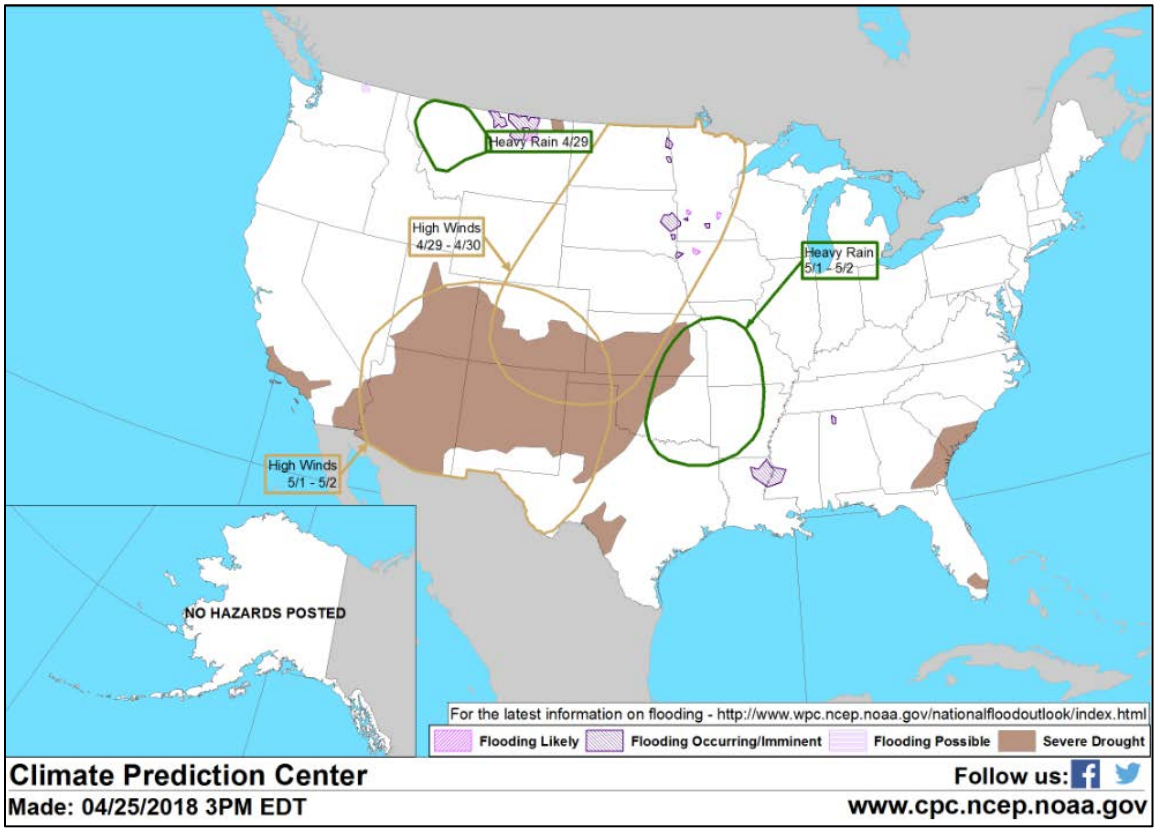
Agricultural Weather Highlights

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

National Outlook, Thursday, April 26: "A collection of disturbances will continue to affect portions of the eastern U.S. during the next couple of days, accompanied by scattered showers and below-normal temperatures. Meanwhile, a Pacific storm will cross the Northwest during the weekend and reach the northern Plains early next week. Storm-total precipitation could reach 1 to 2 inches in the Pacific Northwest and the northern Rockies. Precipitation may briefly reach as far south as the southern Rockies, but southern California and the Desert Southwest will remain dry. A surge of warmth will precede the Western storm, with above-normal temperatures overspreading the Midwest and Northeast early next week. The NWS 6- to 10-day outlook for May 1 – 5 calls for the likelihood of above-normal temperatures in northern California and the Northwest, as well as most areas east of a line from Texas to Lake Superior, while cooler-than-normal conditions can be expected from the Southwest to the northern Plains. Meanwhile, below-normal precipitation in the middle and southern Atlantic States, northern California, and the Pacific Northwest, should contrast with wetter-than-normal weather in the Southwest, mid-South, Midwest, and central and southern Plains."

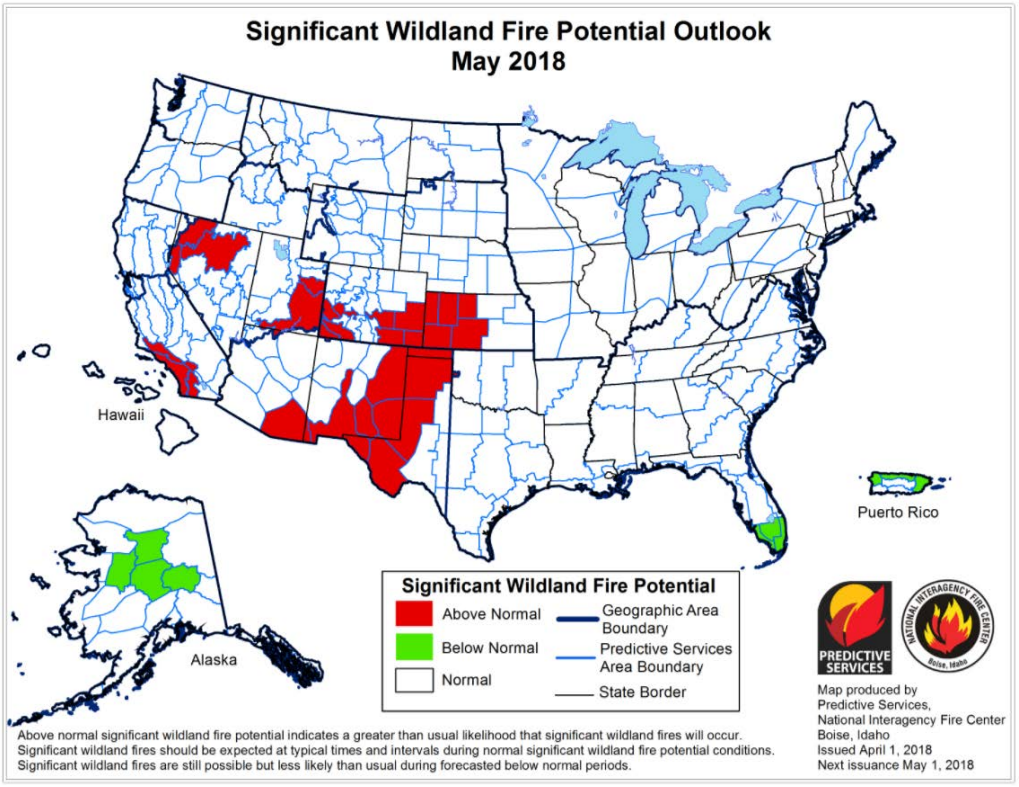
Weather Hazard Outlook April 28 - May 2, 2018

Source: Climate Prediction Center



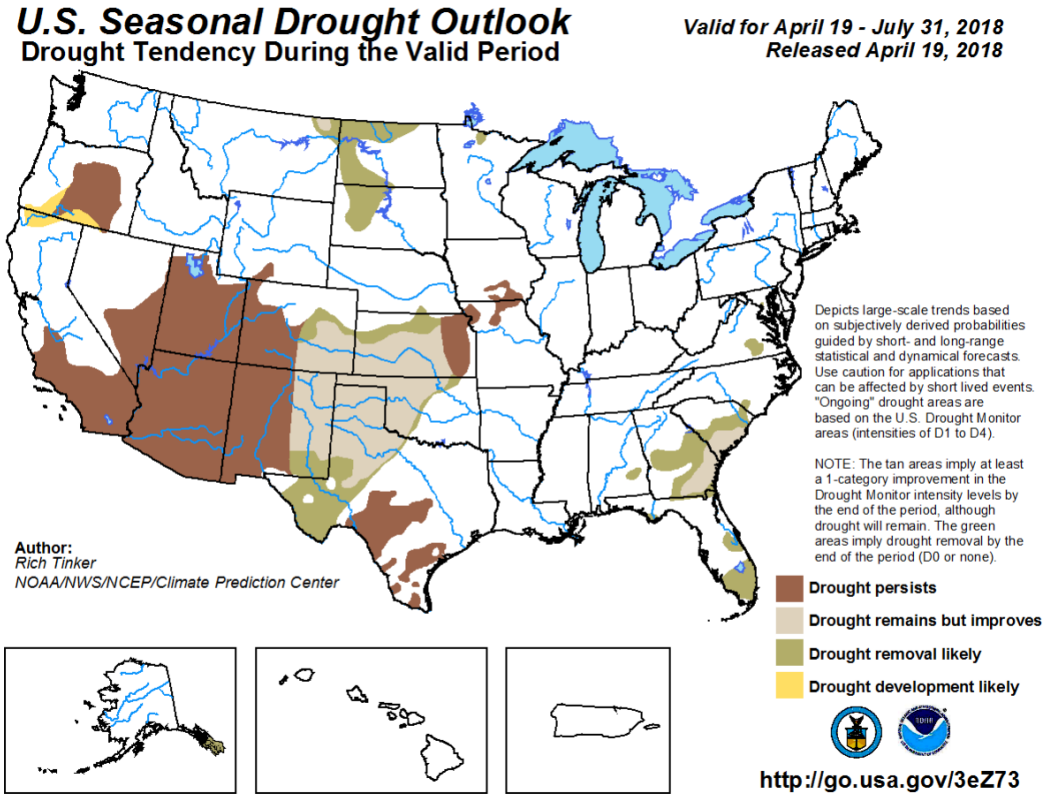
Significant Wildland Fire Potential Outlook

Source: National Interagency Fire Center



Seasonal Drought Outlook: April 19 - July 31, 2018

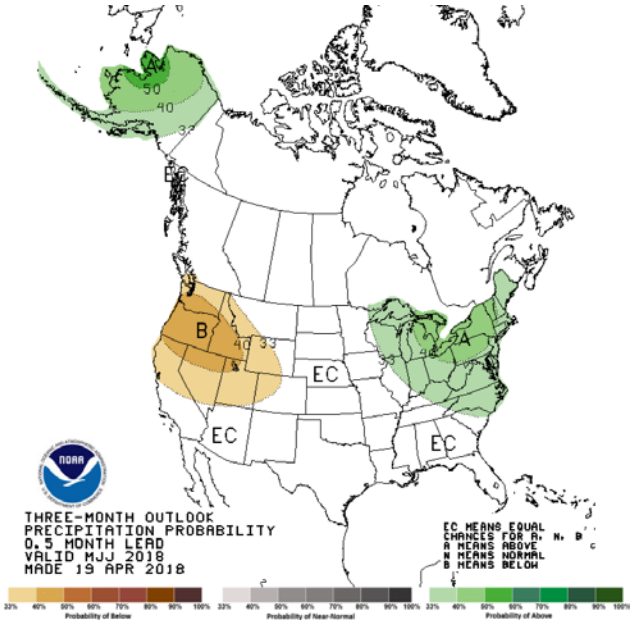
Source: National Weather Service



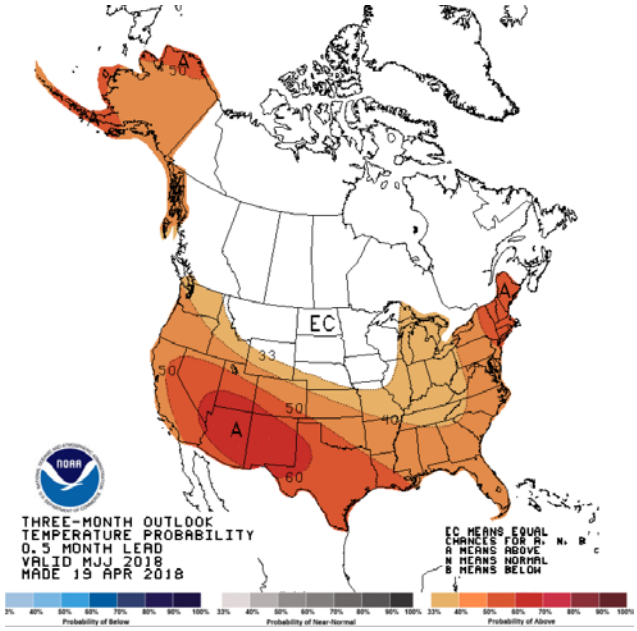
Climate Prediction Center 3-Month Outlook

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.