

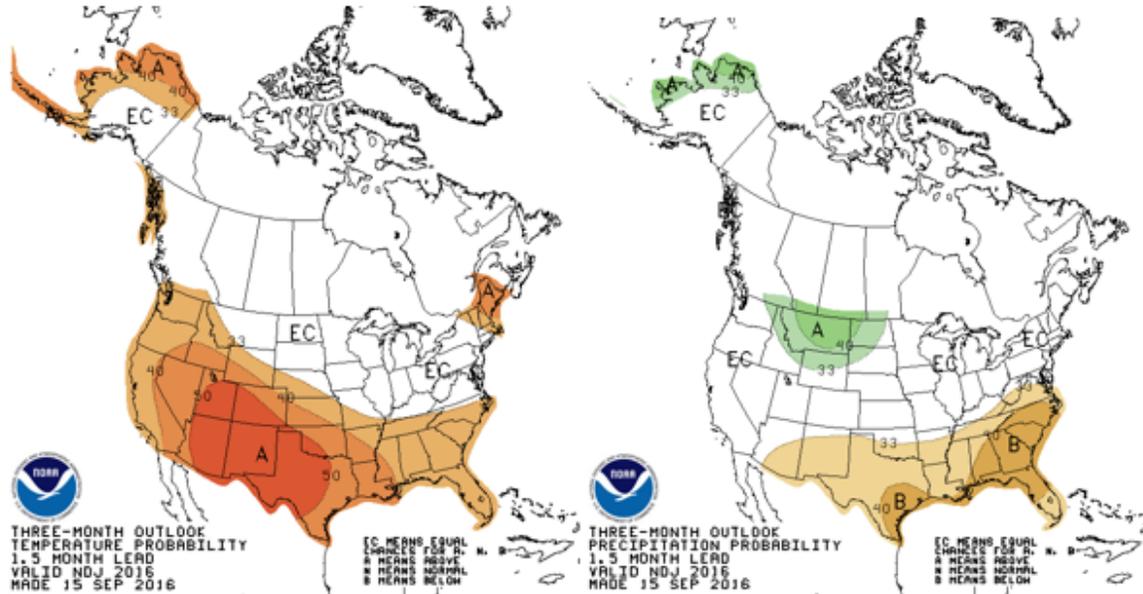
Water and Climate Update

September 29, 2016

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.

Precipitation	2	Other Climatic and Water Supply Indicators	9
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Winter 2016 - 2017 Outlook

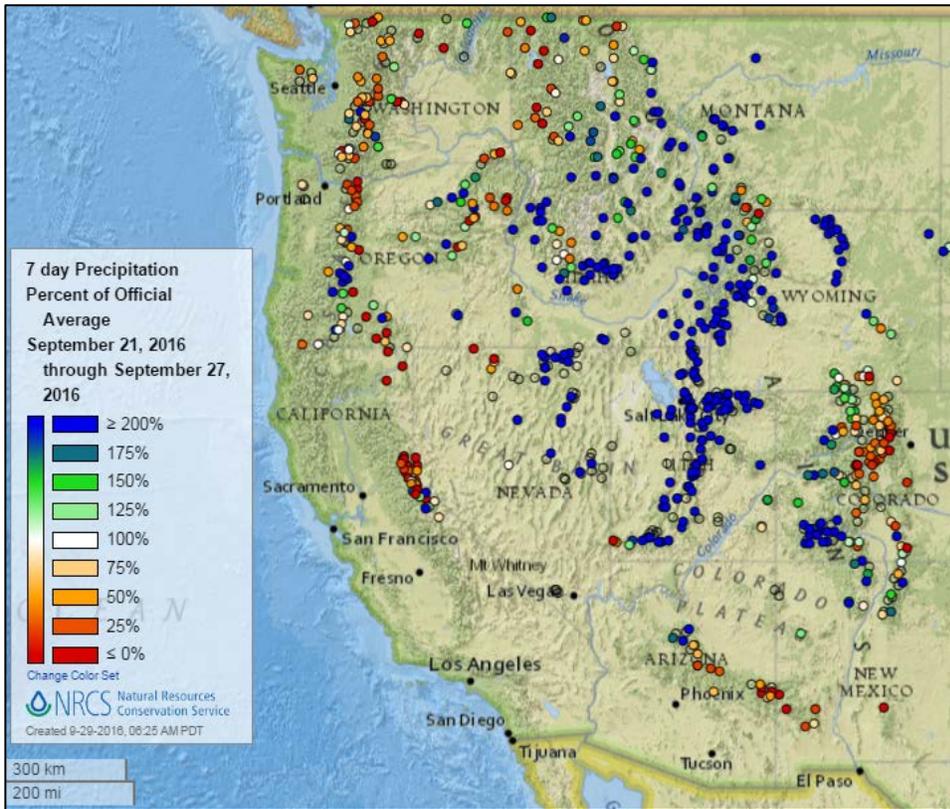


As the 2016 water year comes to a close, we look forward to what the coming winter will bring. The NOAA National Weather Service three-month outlook for November through January maps show higher probabilities for warm and dry conditions across the southern U.S., with warm temperatures also a greater possibility in the Pacific Northwest, the Northeast, and much of coastal Alaska.

The precipitation map on the right shows higher probabilities of below normal precipitation in the southern states, especially in southern Texas across the Gulf Coast and in the Southeast. The smaller areas of higher than normal chances of above normal precipitation occur in the northern Rocky Mountains, the northern Plains, and along the northern coast of Alaska.

Precipitation

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

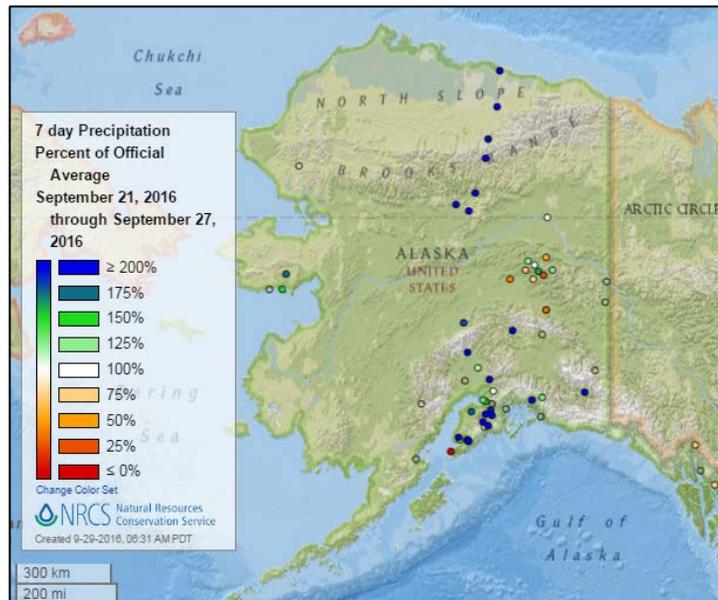


[7-day precipitation percent of average map](#)

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

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

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



Water and Climate Update

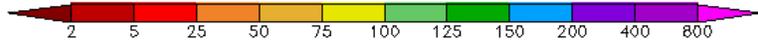
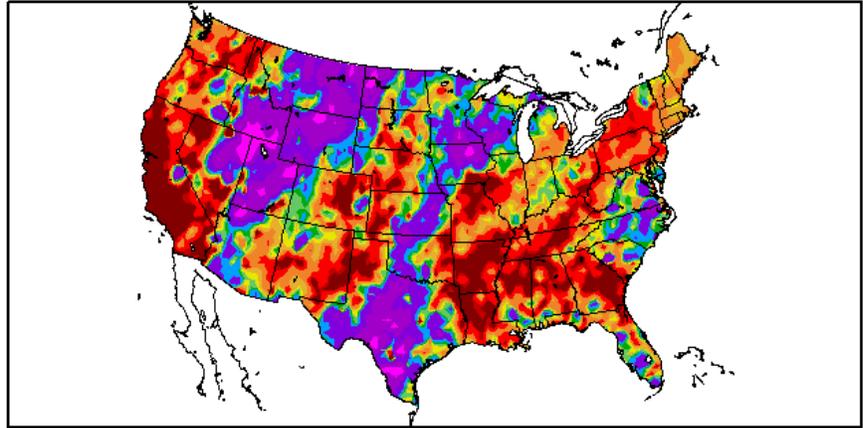
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

Percent of Normal Precipitation (%)
9/22/2016 – 9/28/2016

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



Generated 9/29/2016 at HPRCC using provisional data.

Regional Climate Centers

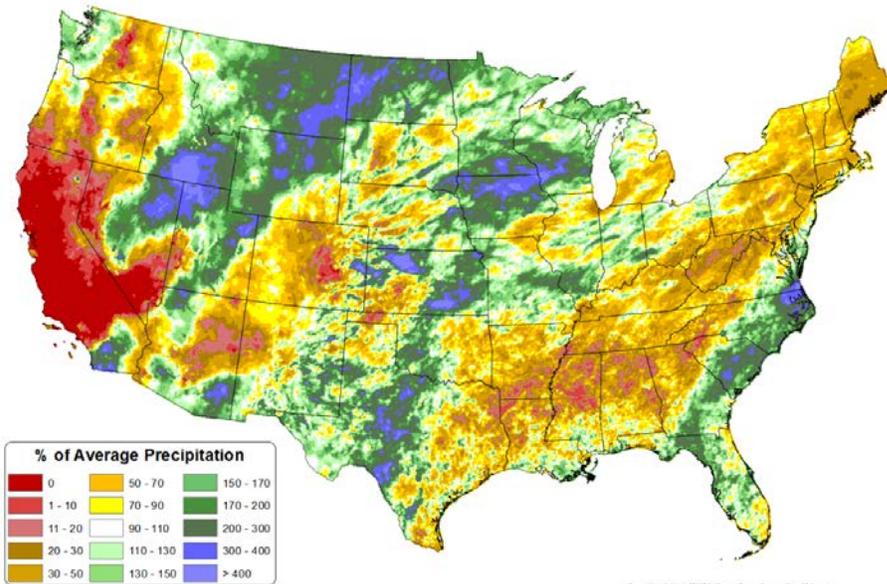
Month-to-Date, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

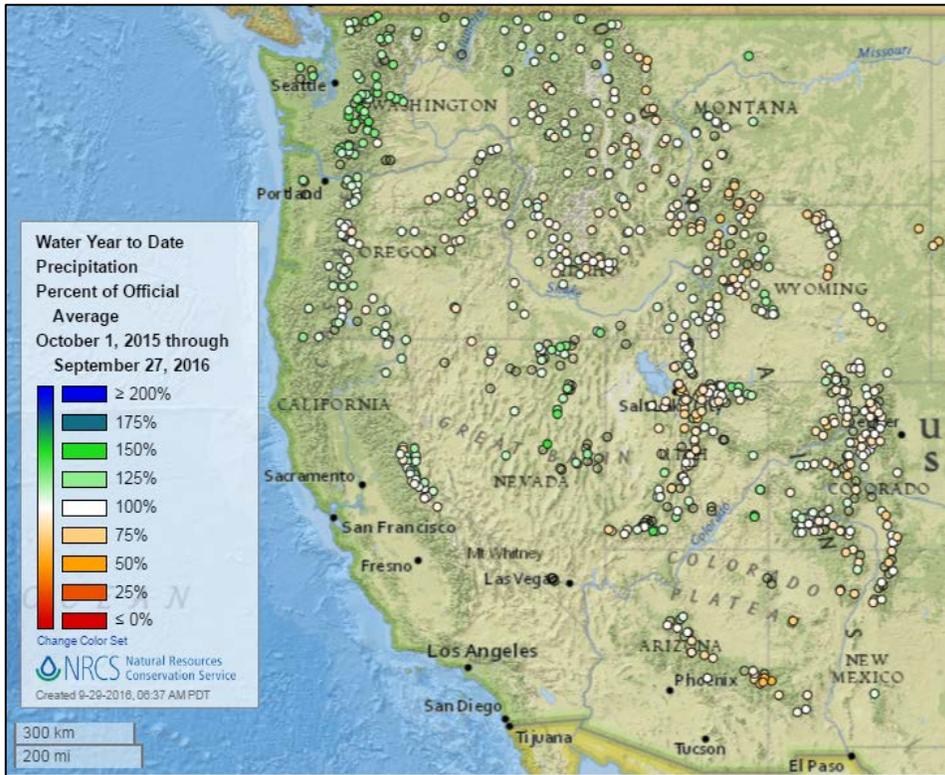
Total Precipitation Anomaly: 01 September 2016 - 27 September 2016
Period ending 7 AM EST 27 Sep 2016
Base period: 1961-2010
(Map created 28 Sep 2016)

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

See also: [Month-to-date national total precipitation values \(inches\) map](#)

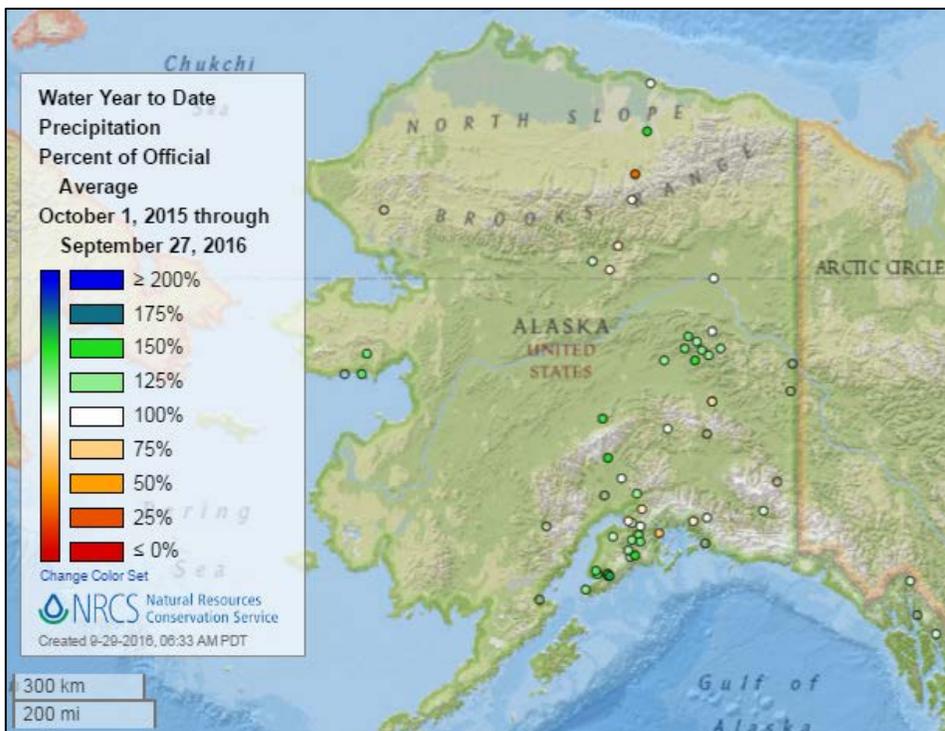


Water Year-to-Date, Western Mountain Sites (NRCS SNOTEL Network)



[2016 water year-to-date precipitation percent of average map](#)

See also: [2016 water year-to-date precipitation values \(inches\)](#)



[Alaska 2016 water year-to-date precipitation percent of average map](#)

See also: [Alaska 2016 water year-to-date precipitation values \(inches\) map](#)

Temperature

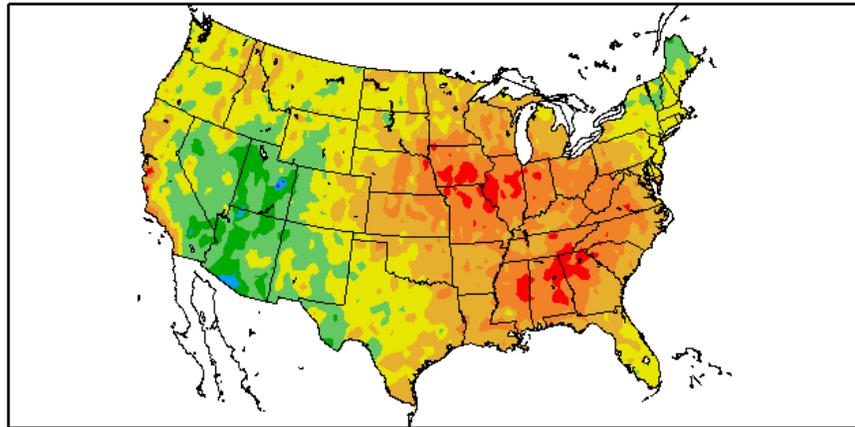
Last 7 Days, National Weather Service (NWS) Networks

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)
9/22/2016 – 9/28/2016



Generated 9/29/2016 at HPRCC using provisional data.

Regional Climate Centers

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

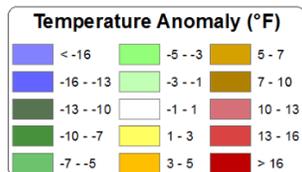
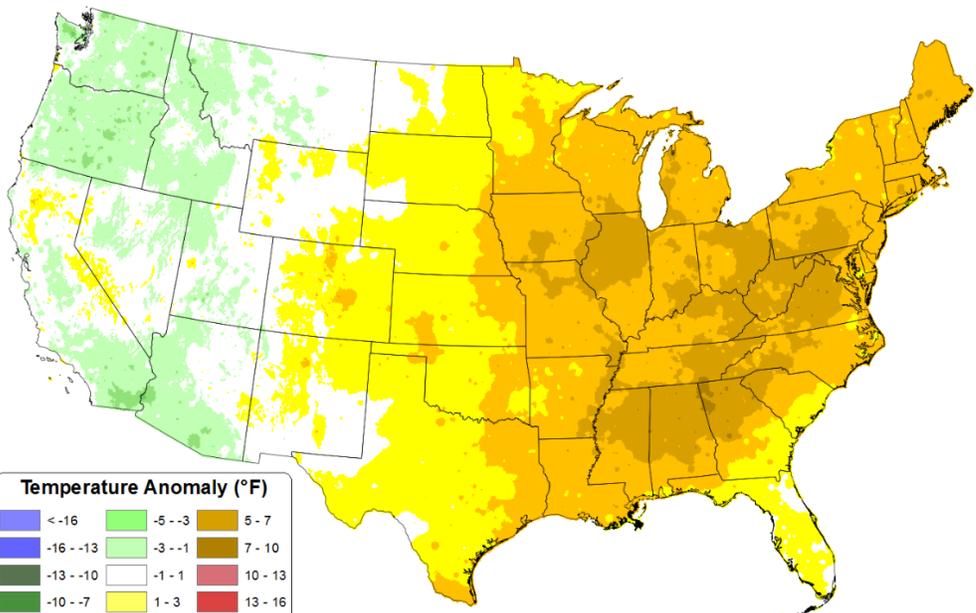
Source: PRISM

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

See also: [Month-to-date national daily mean temperature \(° F\) map](#)

Daily Mean Temperature Anomaly: 01 September 2016 - 28 September 2016

Period ending 7 AM EST 28 Sep 2016
Base period: 1981-2010
(Map created 29 Sep 2016)



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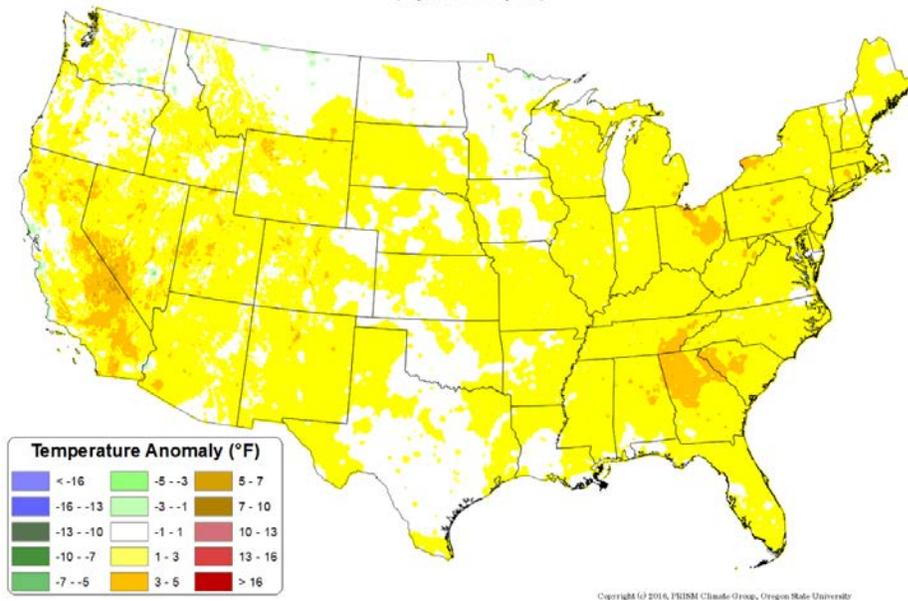
Water and Climate Update

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

Source: PRISM

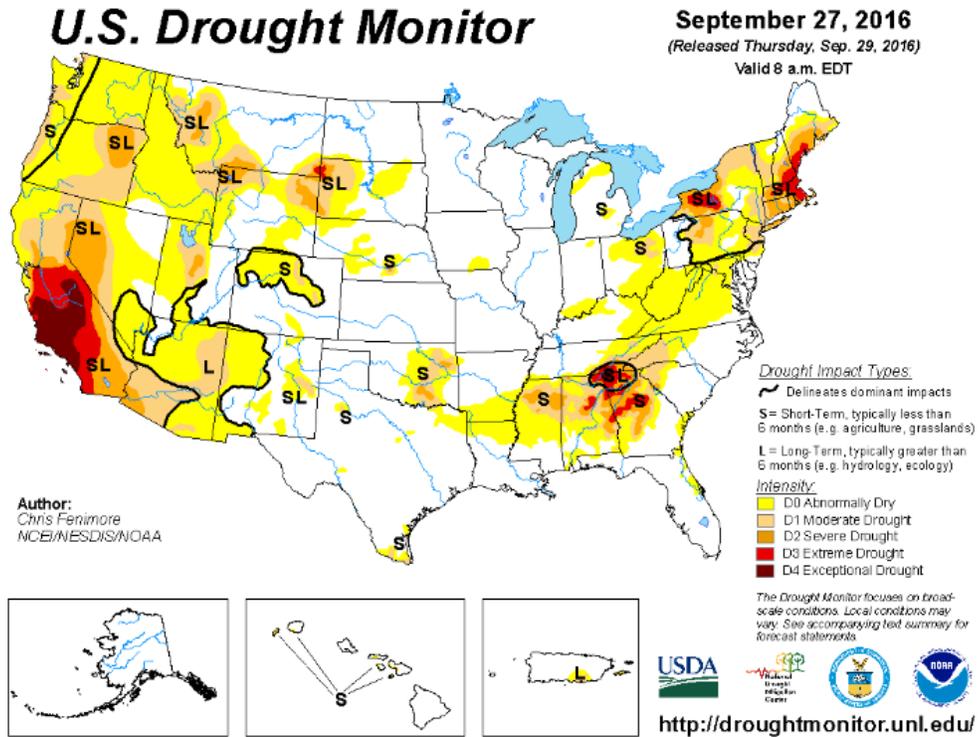
Daily Mean Temperature Anomaly: June 2016 - August 2016
Period ending 7 AM EST 31 Aug 2016
Base period: 1981-2010
(Map created 02 Sep 2016)

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



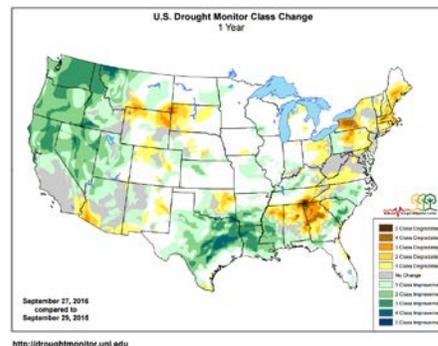
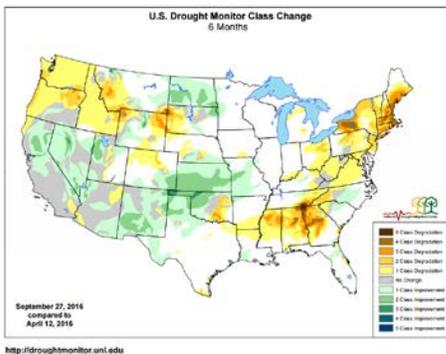
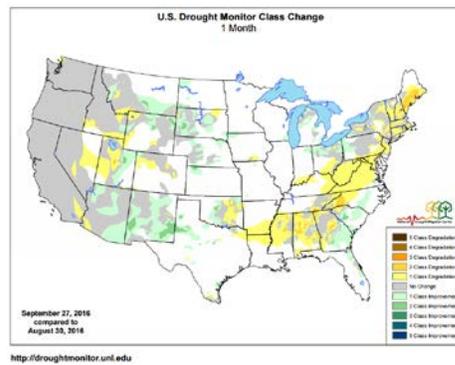
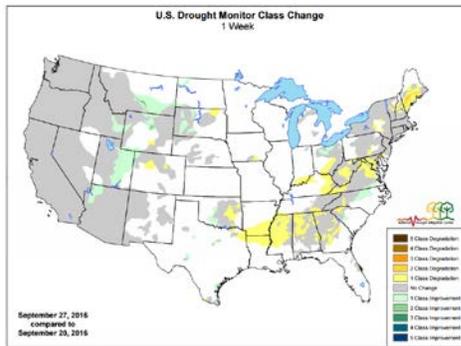
Drought

[U.S. Drought Monitor](#) See map below. [U.S. Drought Portal](#) Comprehensive drought resource.



Changes in Drought Monitor Categories over Time

Click any map to enlarge



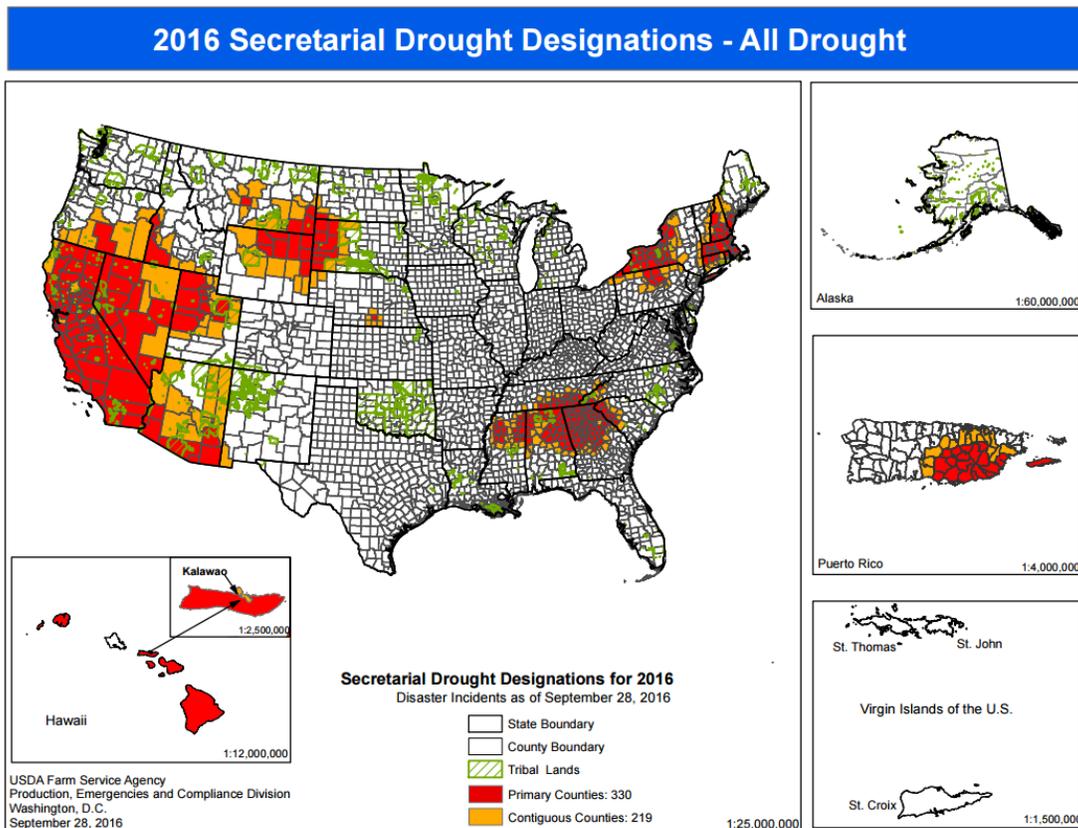
[Changes in drought conditions over the last 12 months](#)

Current National [Drought Summary](#), September 27, 2016

Author: Chris Fenimore, NOAA/NESDIS/NCEI

“For the USDM 7-day period ending on September 27, a low pressure system produced above-normal precipitation in the western High Plains southwestward into the much of the Mountain West. The frontal boundary that was associated with the low produced copious amounts of rainfall for the Southern Plains stretching northward into Upper Midwest. Parts of the Mid-Atlantic also saw above-normal precipitation for the period. Drier-than-normal conditions existed for much of the country east of the Mississippi, especially for the Ohio Valley. Temperatures were as much as 10 degrees above normal for the parts of the Midwest while the Southwest and Northwest were cooler than normal. These warm and dry conditions in the nation’s eastern half contributed to expansion of drought in the Northeast and Southeast, while drought conditions improved in the High Plains and parts of the South. Please note that the Drought Monitor depicts conditions valid through Tuesday morning, 8 a.m., EDT (12 UTC); any of the recent locally heavy rain which fell after Tuesday morning (September 27) will be incorporated into next week’s drought assessment.”

USDA 2016 Secretarial [Drought Designations](#)

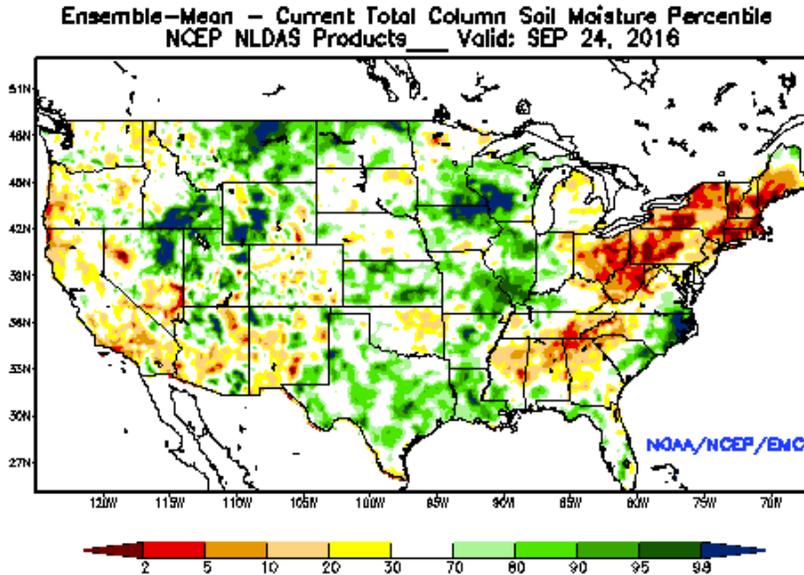


Highlighted Drought Resources

- [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](#)

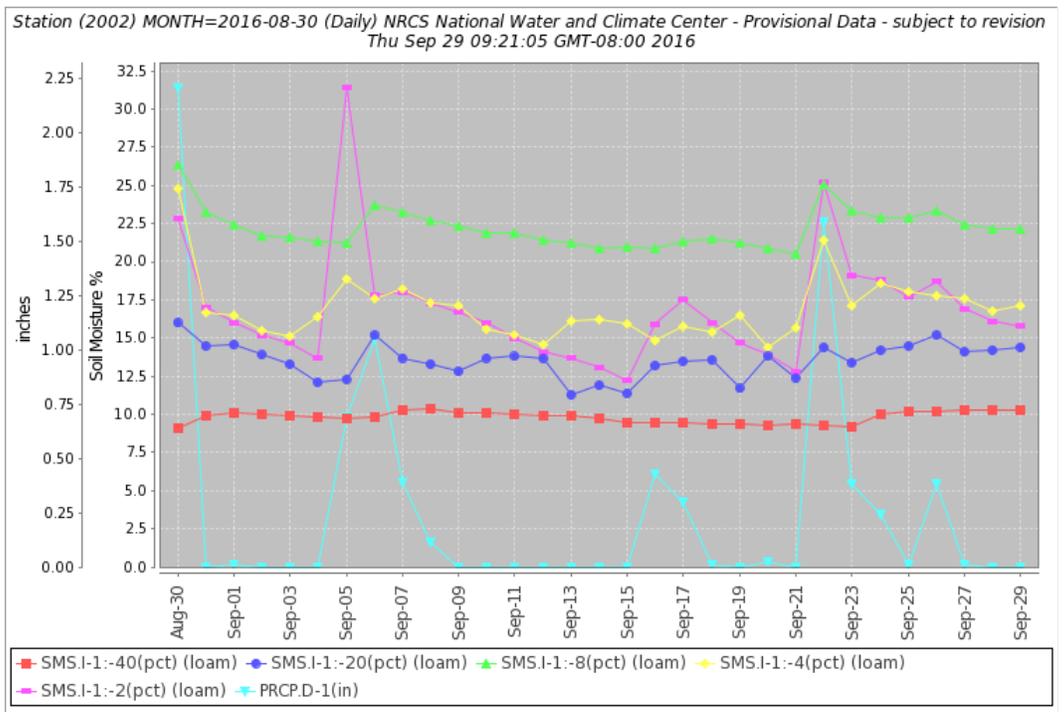
Other Climatic and Water Supply Indicators

Soil Moisture



[Modeled soil moisture percentiles](#) as of September 24, 2016.

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



Soil moisture (at 2-, 4-, 8-, 20-, and 40-inch depths) and precipitation for the past 30 days at the [Crescent Lake #1 SCAN site 2002](#) in Minnesota. Precipitation during the last 30 days has increased soil moisture at all sensor depths, especially during the larger events on August 30, September 5-8, and September 21.

Soil Moisture Data Portals

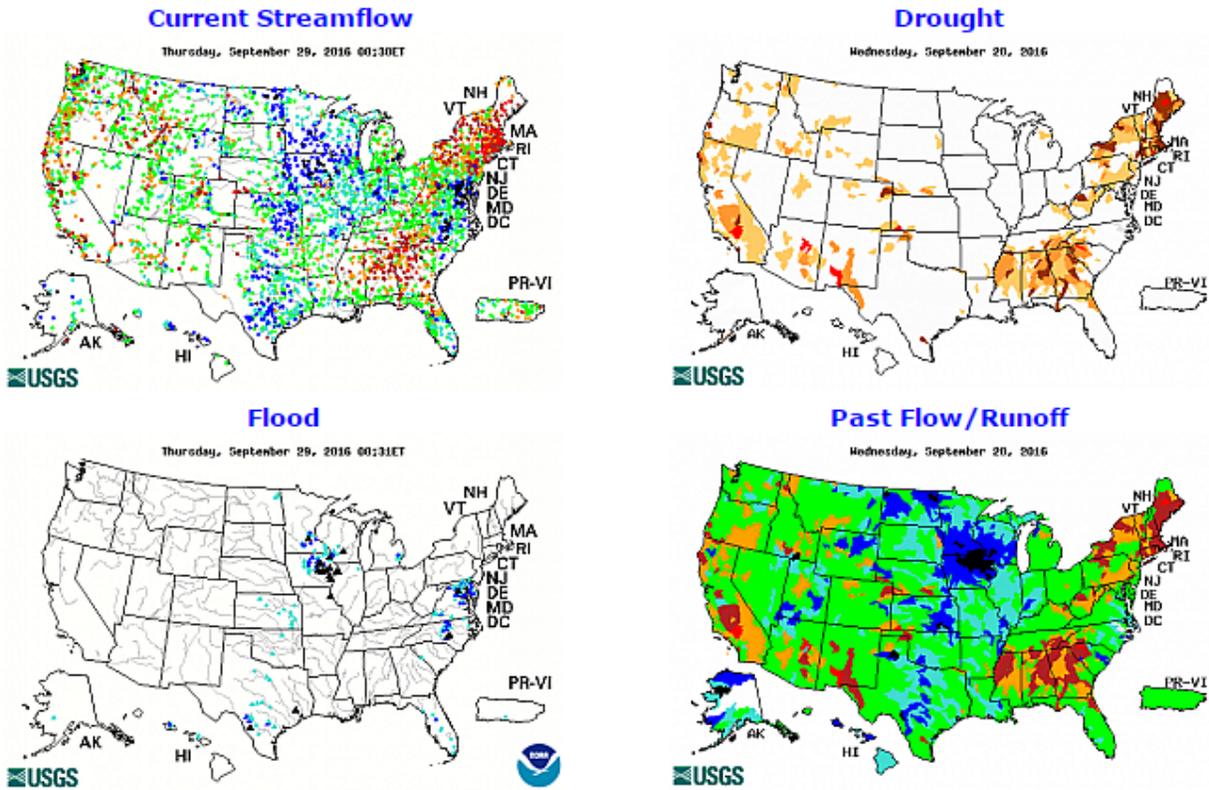
[CRN Soil Moisture](#)

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

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

Streamflow

Source: USGS



Click to enlarge and display legends

[Current streamflow maps](#)

Current Reservoir Storage

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

U.S. Bureau of Reclamation Hydromet Tea Cup Reservoir Depictions:

[Upper Colorado](#)

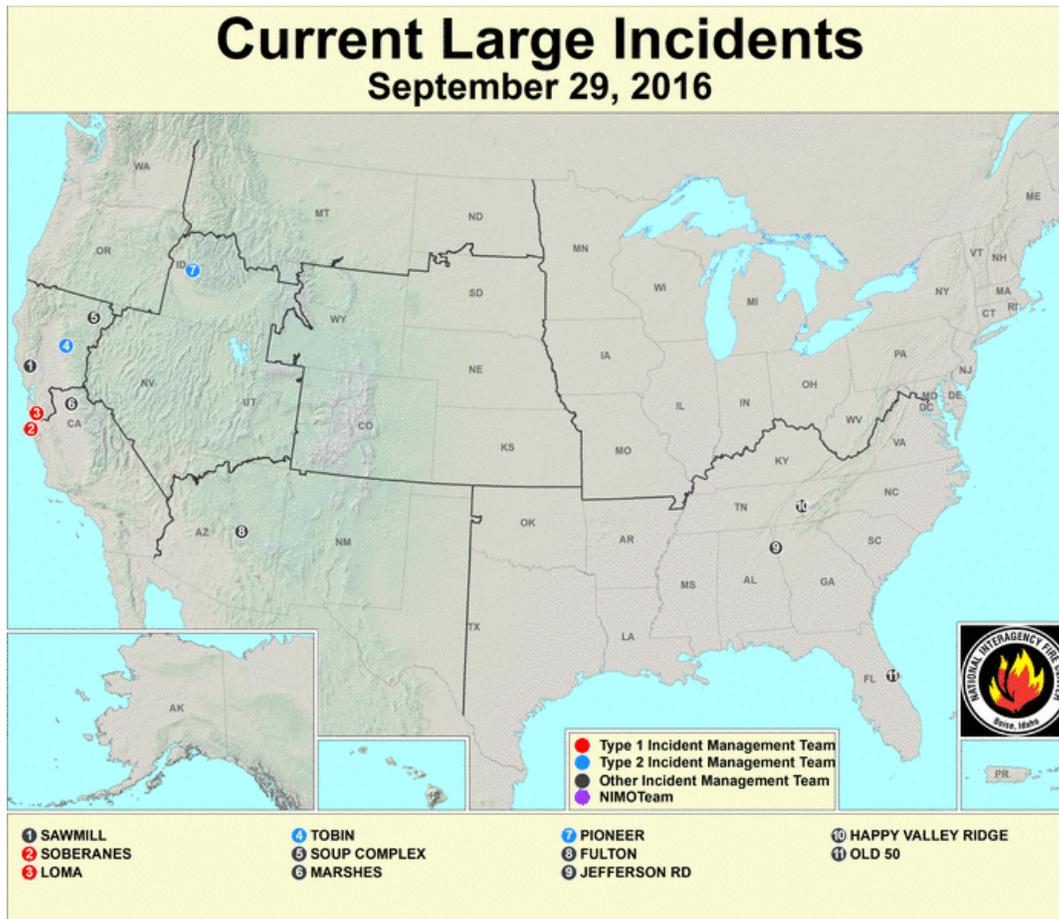
[Pacific Northwest/Snake/Columbia](#)

[Sevier River Water, Utah](#)

[Upper Missouri, Kansas, Oklahoma, Texas](#)

[California Reservoir Conditions](#)

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



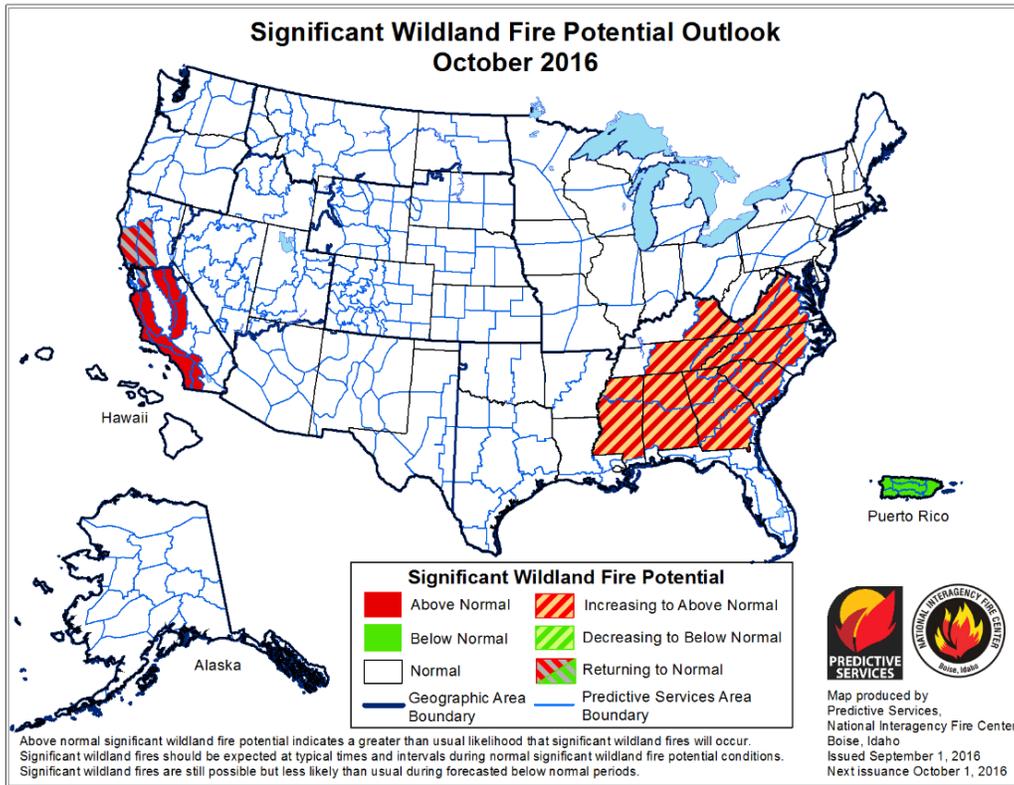
Short- and Long-Range Outlooks

Agricultural Weather Highlights

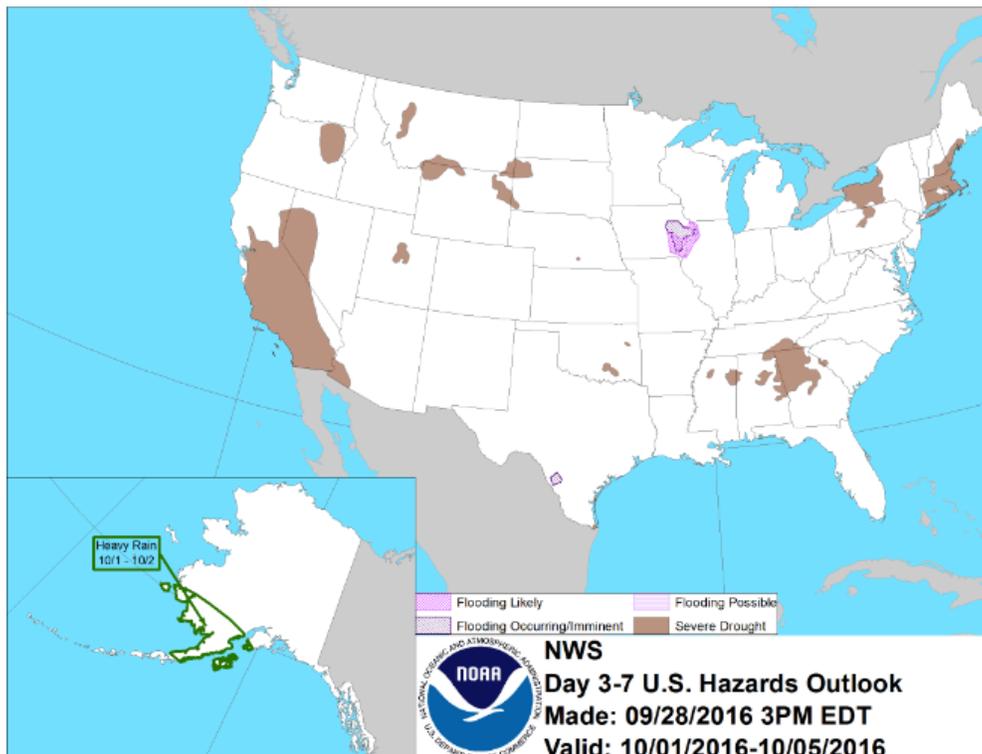
Author: Brad Rippey, Agricultural Meteorologist, USDA/OCE/WAOB

[National Outlook, September 29, 2016](#): “A nearly stationary storm system centered over the Ohio Valley will drift northward into the Great Lakes region during the weekend. The threat for heavy rain and local flooding will persist into Friday across the Mid-Atlantic region, followed by a gradual shift in shower activity—along with diminishing intensity—into the Great Lakes and Northeastern States. Additional rainfall could locally reach 2 to 6 inches in the Mid-Atlantic States. Dry weather will cover the remainder of the U.S., except for showers (locally 1 to 2 inches) in the Pacific Northwest and from the Four Corners States to northern sections of the Rockies and High Plains. Much cooler air will arrive in the Far West during the weekend and spread across the High Plains early next week. Meanwhile, warmth will expand across the central and eastern U.S. The NWS 6- to 10-day outlook for October 4 - 8 calls for the likelihood of above-normal temperatures across the eastern half of the U.S., while cooler-than-normal conditions will stretch from the Pacific Coast to the northern and central High Plains. Meanwhile, below-normal rainfall in the Southwest and from the central Gulf Coast into the lower Great Lakes region will contrast with wetter-than-normal weather along the Atlantic Seaboard and from the Pacific Northwest to the Plains and western Corn Belt.”

Fire Potential Outlook: [October 2016](#)

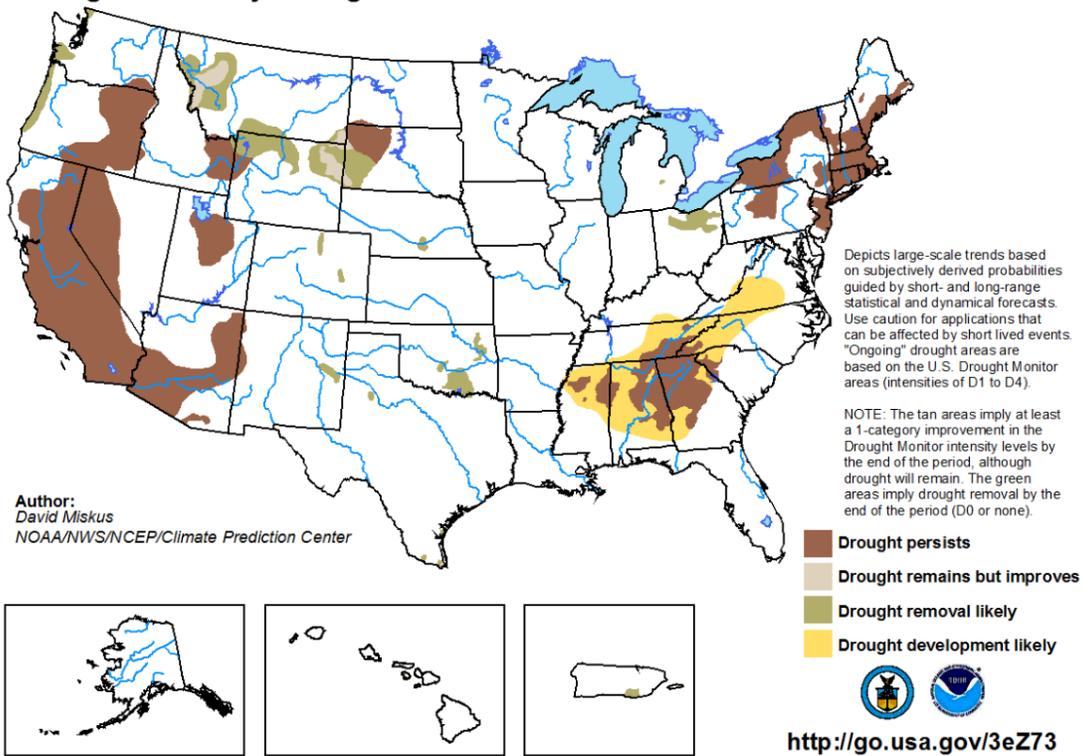


NWS Climate Prediction Center [Weather Hazard Outlook: October 1-5, 2016](#)

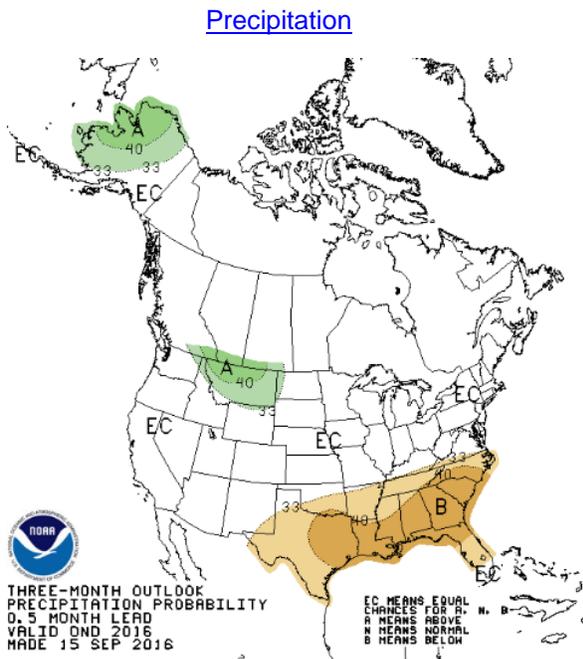


Seasonal Drought Outlook: [September 15-December 31, 2016](#)

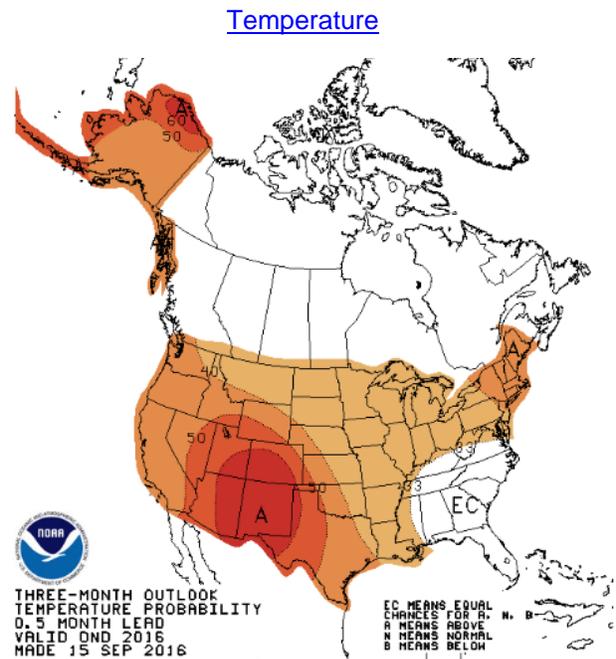
U.S. Seasonal Drought Outlook valid for September 15 - December 31, 2016
 Drought Tendency During the Valid Period
 Released September 15, 2016



NWS Climate Prediction Center 3-Month Outlook



[October-November-December \(OND\) 2016 precipitation outlook summary](#)



[October-November-December \(OND\) 2016 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](#).