

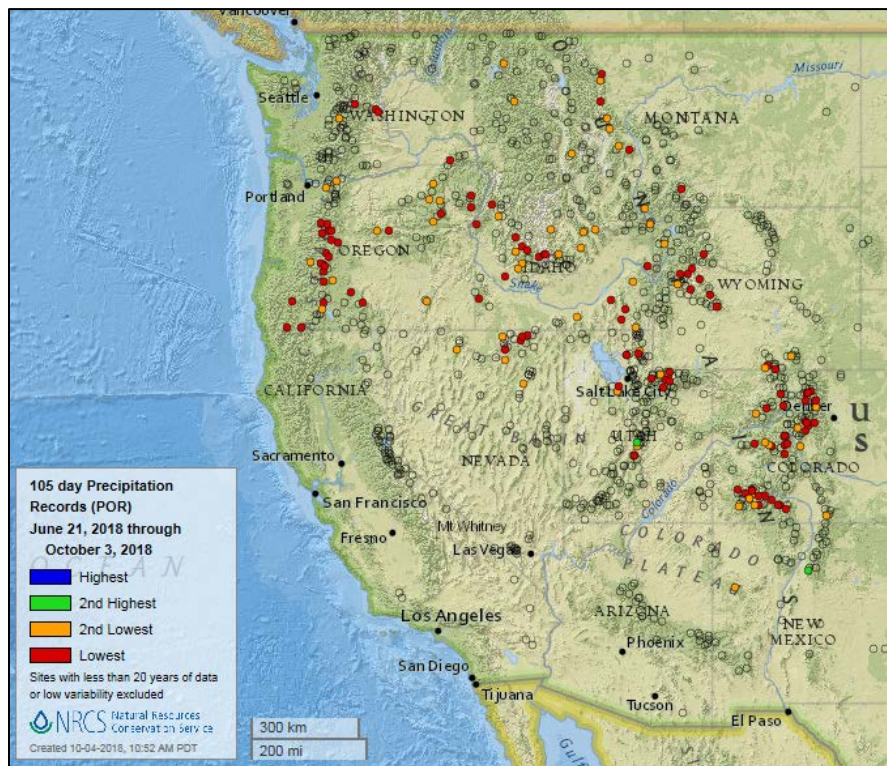
Water and Climate Update

October 4, 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.

Precipitation	1	Other Climatic and Water Supply Indicators	12
Temperature	6	Short- and Long-Range Outlooks.....	15
Drought	8	More Information	17

Dry summer in the West breaks SNOTEL records



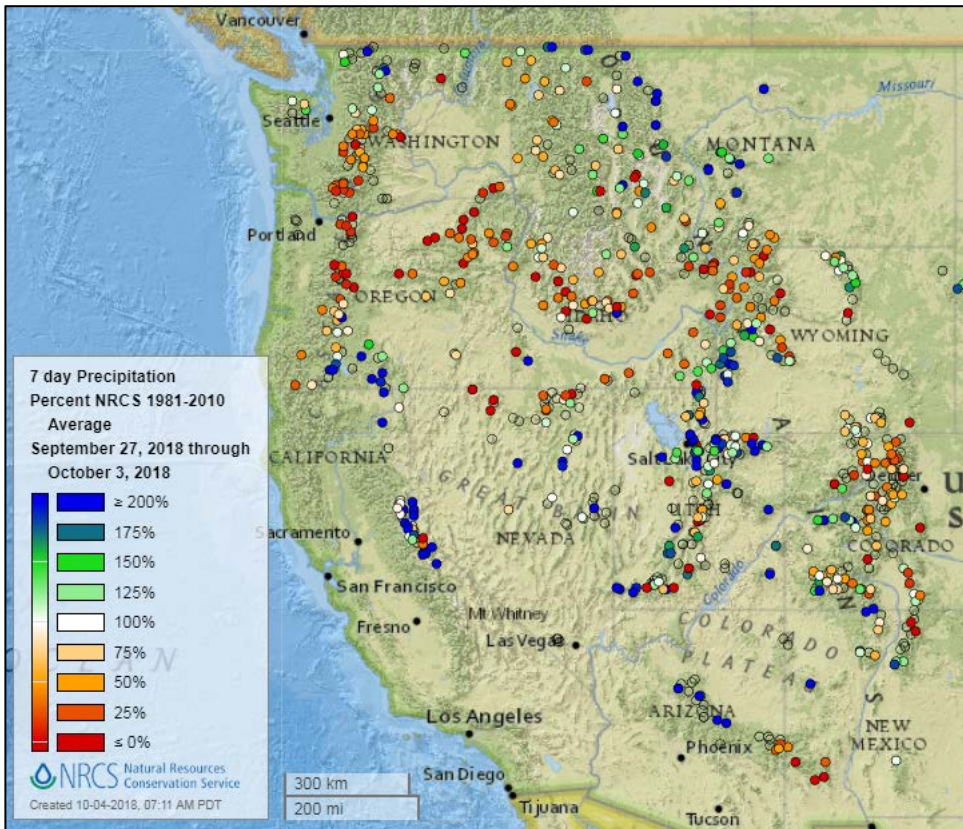
Many SNOTEL stations across the West reported record dry conditions over the summer. From the Cascades and Sierra Nevada, through the Wasatch and Rockies, many stations reported the lowest precipitation totals in their history. Dry conditions prompted drought designations in much of the West in the Drought Monitor. In the last few days Tropical Depression Rosa has soaked parts of the Southwest with up to seven inches of rain in some locations, triggering thunderstorms and flash floods as it continues to travel northeast.

Related:

[Rio Grande, aquatic ecosystems struggling in record drought – The Santa Fe New Mexican \(NM\)](#)
[DWR: Below Average Precipitation for Water Year 2018 – Eastcountytoday.net \(CA\)](#)
[May through September was Seattle's driest five-month stretch on record – King5.com \(WA\)](#)
[2018's 'dry' season was one for the record books - Chinook Observer \(WA\)](#)
[Recent water year was the driest on record in both Blanding and Bluff – San Juan Record \(UT\)](#)
[Colorado drought gets worse, especially in southwest corner – The Denver Post \(CO\)](#)
[Pendleton's dry spell lingers – East Oregonian \(OR\)](#)

Precipitation

Last 7 Days, NRCS SNOTEL Network



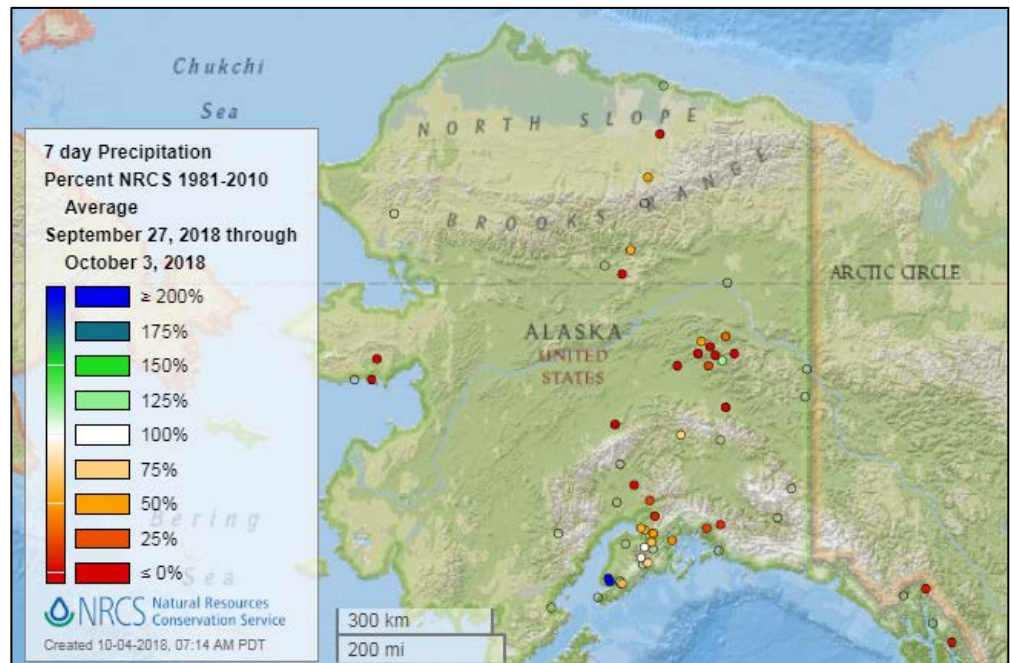
[7-day precipitation percent of average map](#)

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](#)



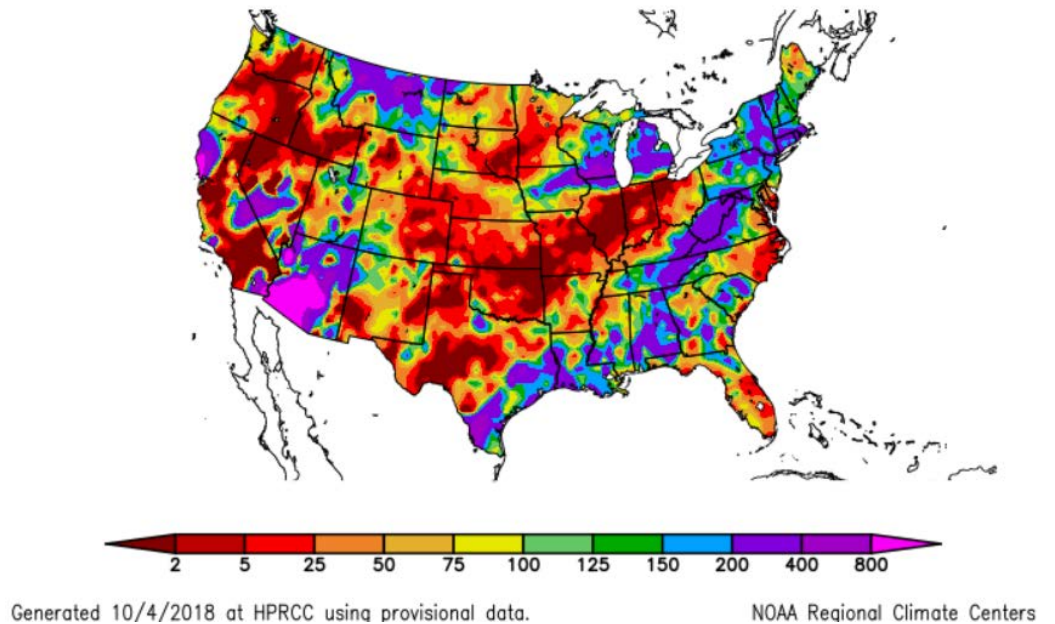
Last 7 Days, National Weather Service (NWS) Networks

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](#)

Percent of Normal Precipitation (%)
9/27/2018 – 10/3/2018



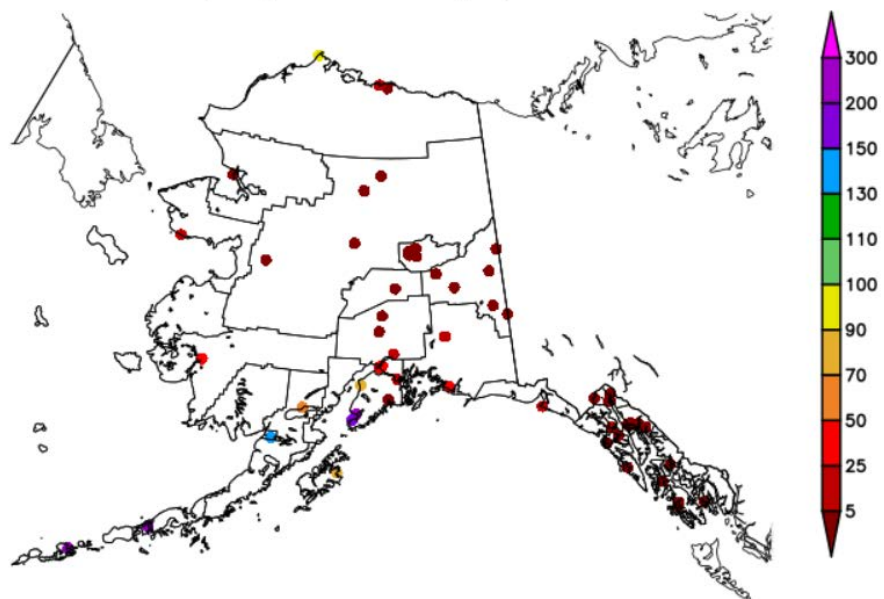
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

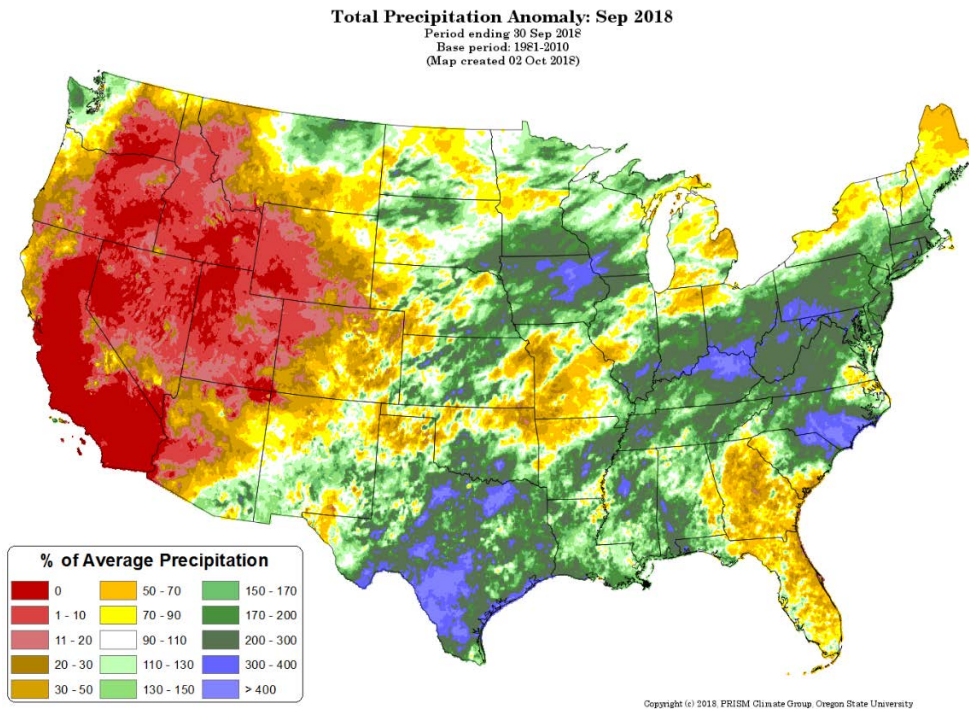
Percent of Normal Precipitation (%)
9/27/2018 – 10/3/2018



Water and Climate Update

Previous Month, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

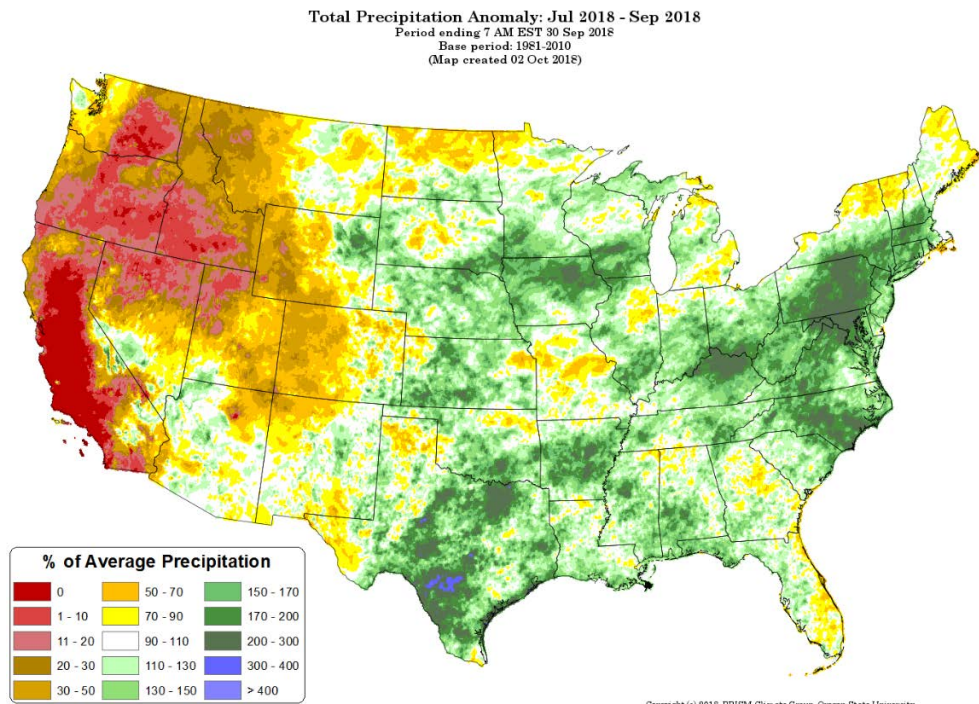


[Previous month national total precipitation percent of average map](#)

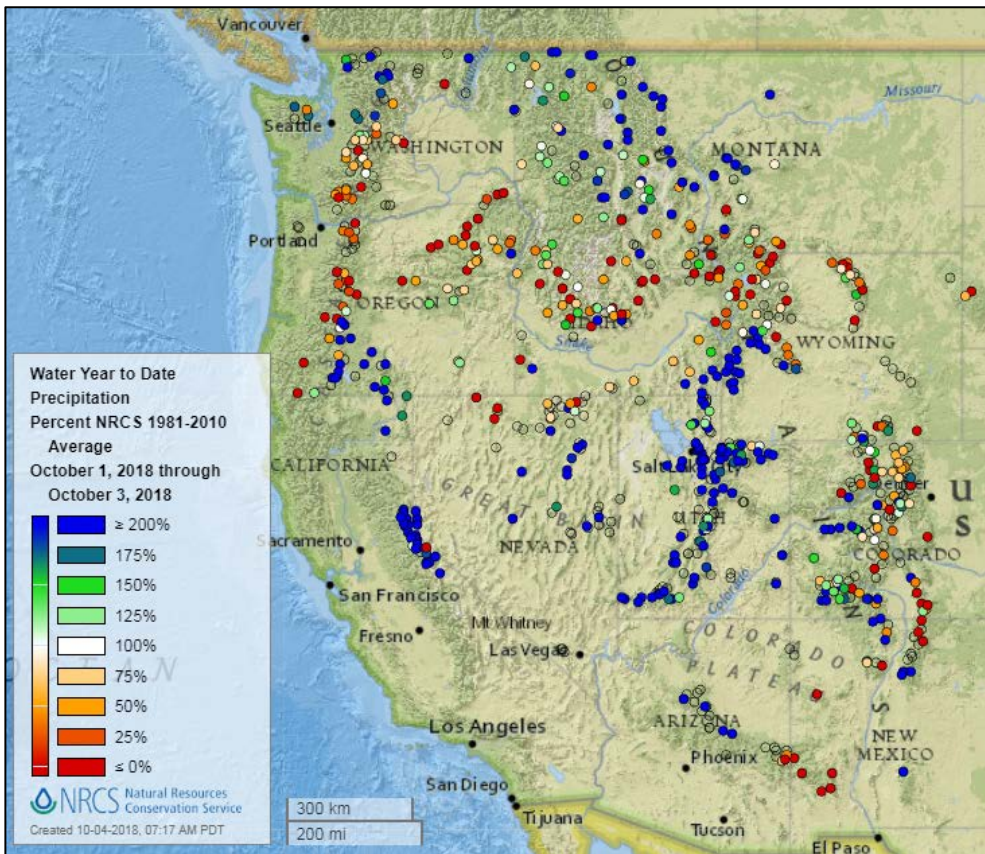
Last 3 Months, All Available Data Including SNOTEL and NWS Networks

Source: PRISM

[July through September 2018 total precipitation percent of average map](#)



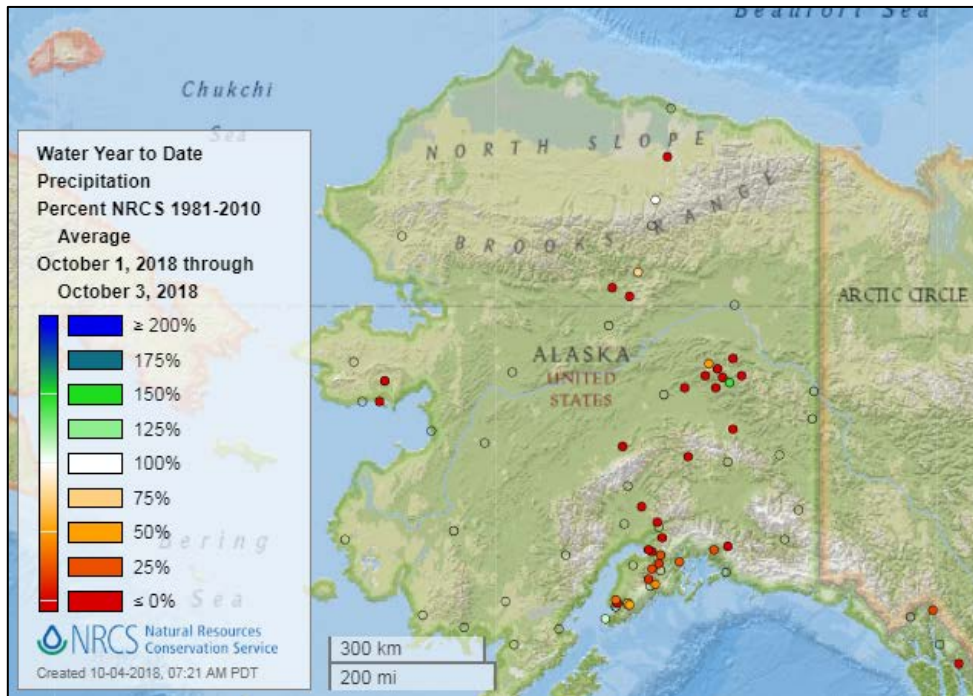
Water Year-to-Date, NRCS SNOTEL Network



Note:
October 1 is
the start of the
2019 Water
Year

[2019 water
year-to-date
precipitation
percent of
average map](#)

See also:
[2019
water year-to-
date
precipitation
values \(inches\)
map](#)



[Alaska 2019
water year-to-date
precipitation percent
of average map](#)

See also: [Alaska
2019 water year-to-
date precipitation
values \(inches\)
map](#)

Temperature

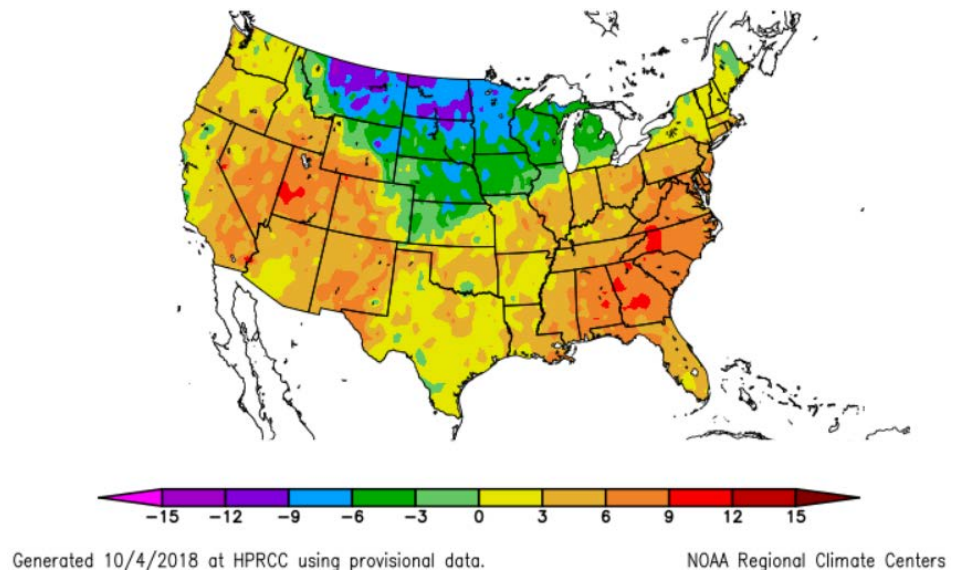
Last 7 Days, National Weather Service (NWS) Networks

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)
9/27/2018 – 10/3/2018



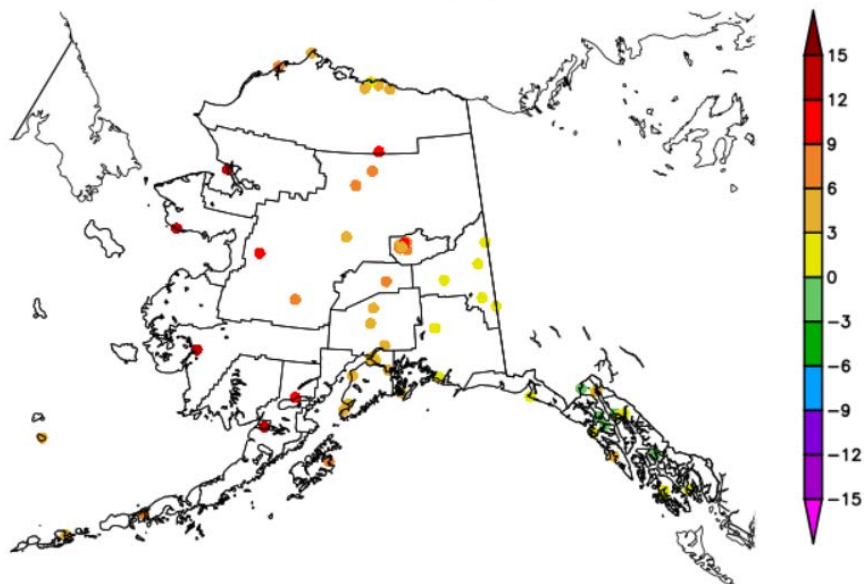
Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

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

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

Departure from Normal Temperature (F)
9/27/2018 – 10/3/2018

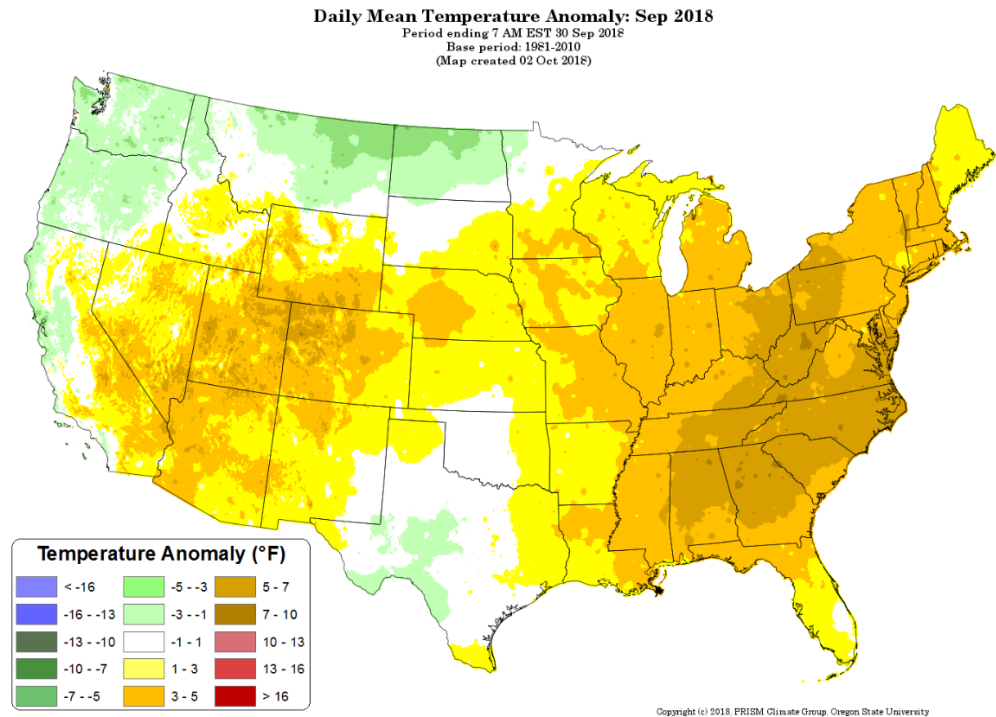


Water and Climate Update

Previous Month, All Available Data Including SNOTEL and NWS Networks

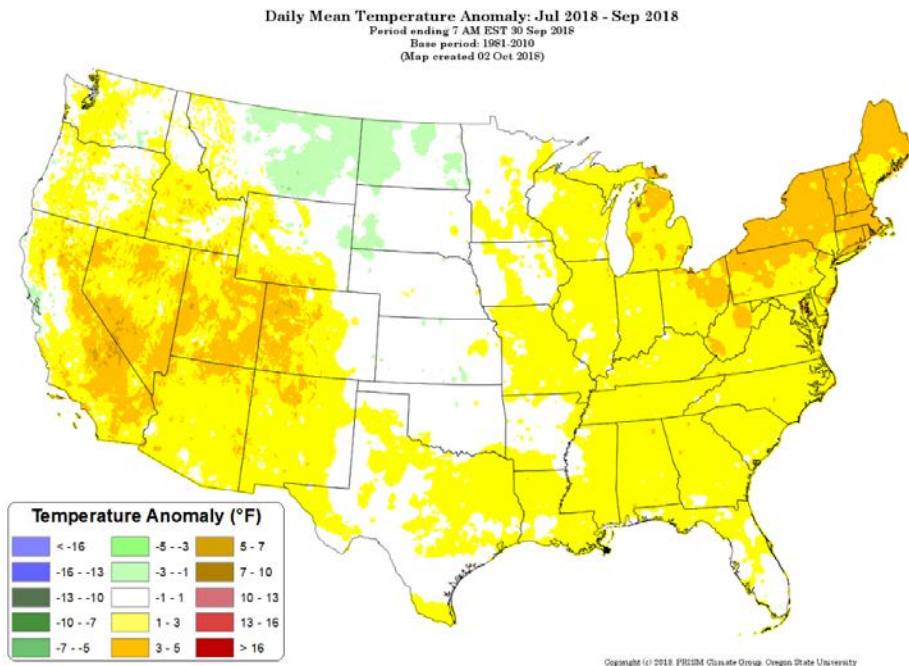
Source: PRISM

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



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

Source: PRISM

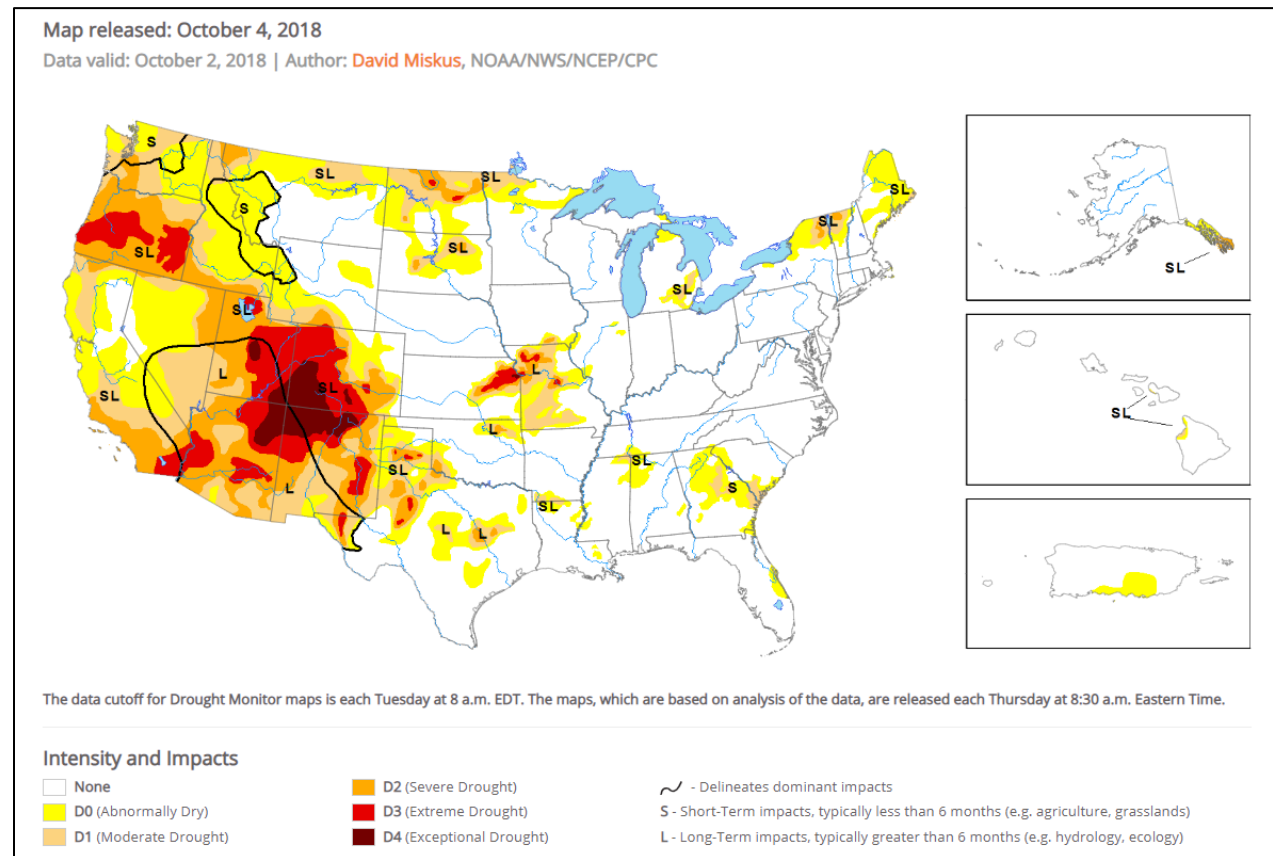


[July through September
2018 daily mean
temperature anomaly map](#)

Drought

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

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



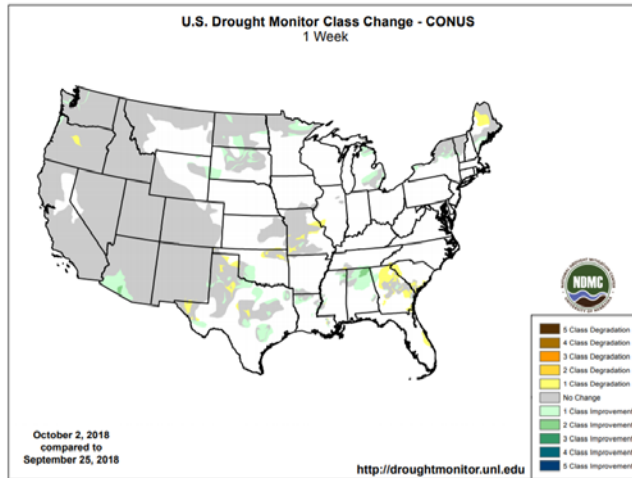
Current [National Drought Summary](#), October 4, 2018

Author: David Miskus, NOAA/NWS/NCEP/CPC

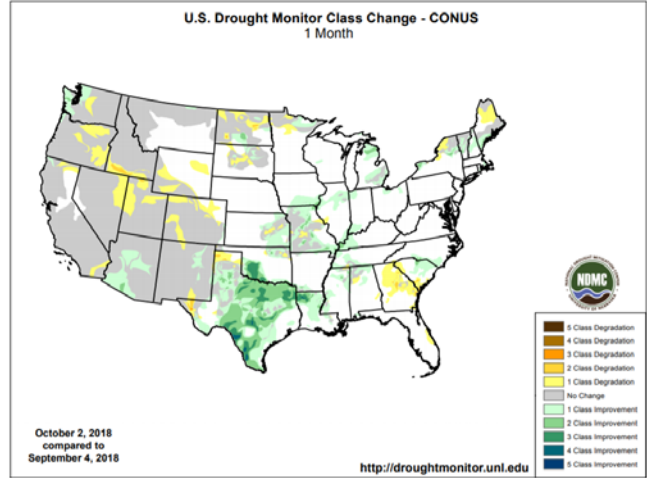
“Multiple cold fronts, associated with an amplified upper-level trough, resulted in heavy rainfall across the eastern third of the continental U.S. during the final week of September. A widespread area of 2 to 4 inches, locally to 10 inches, was observed from the Tennessee Valley northeast to southern New England. A strong subtropical ridge maintained below normal precipitation and above normal temperatures (6 to 8 degrees F) across the Coastal Plain of Georgia south to the Atlantic coastal areas of Florida during the past week. A pair of strong surface highs shifted south from Canada into the north-central U.S. where below-normal temperatures were observed at the end of September through the beginning of October. Hurricane Rosa, in the East Pacific, turned northeast and made landfall as a tropical depression in the northern Baja Peninsula at the beginning of October. Heavy rainfall associated with Rosa spread northward from northwestern Mexico and triggered flash flooding across southern Arizona during October 1-2.”

Changes in Drought Monitor Categories over Time

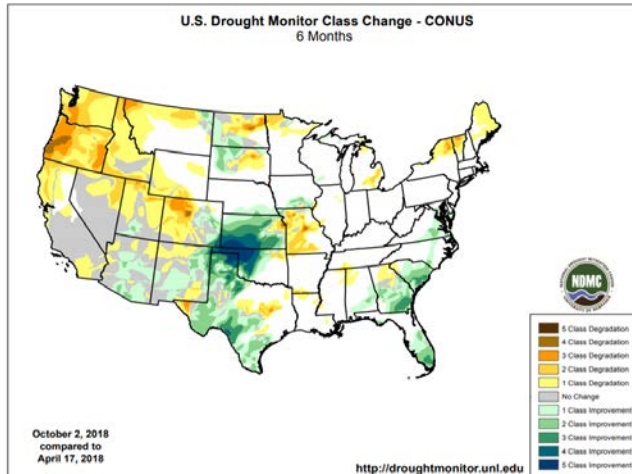
1 Week



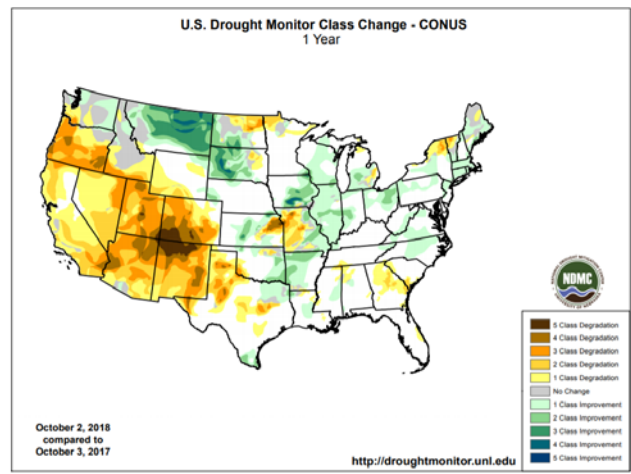
1 Month



6 Months



1 Year

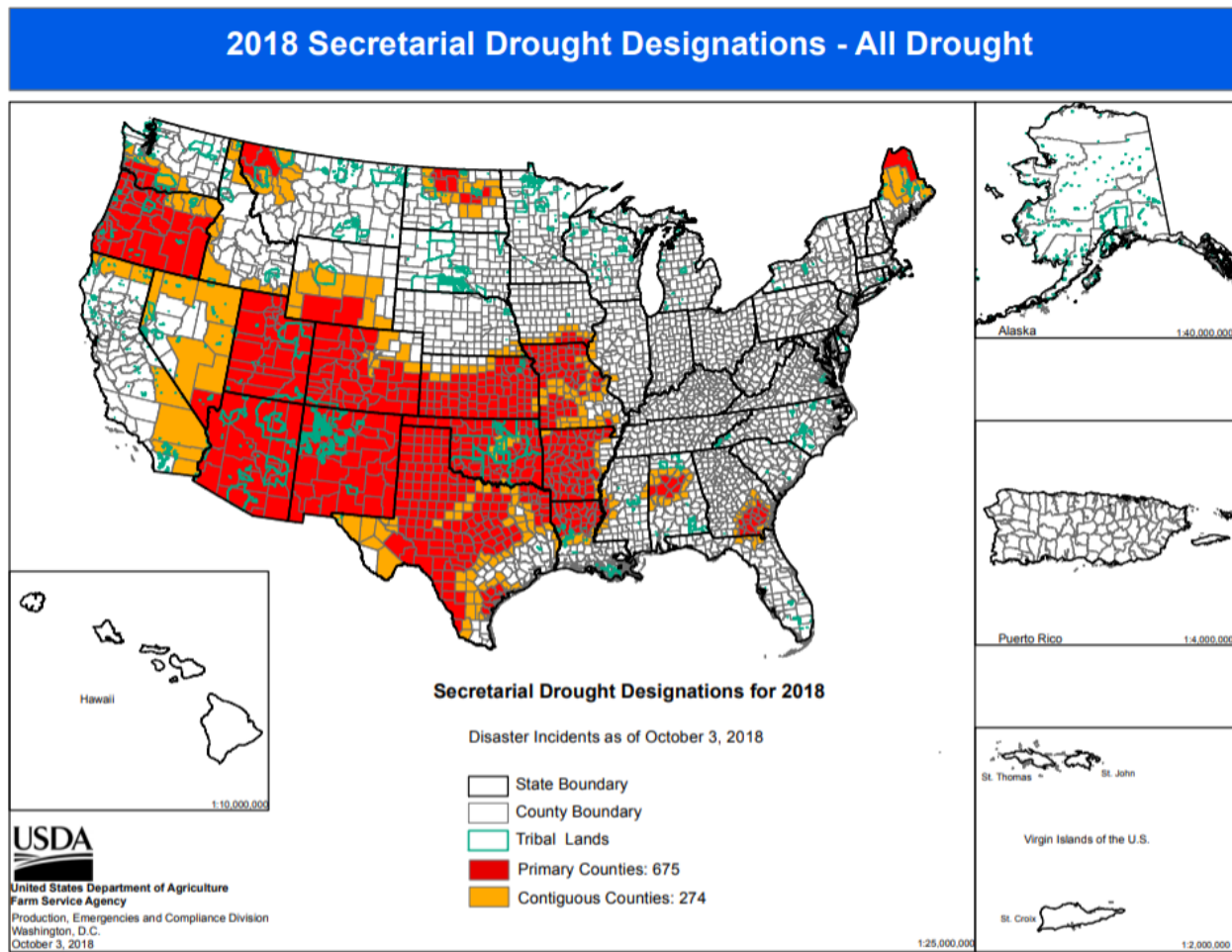


Changes in drought conditions over the last 12 months

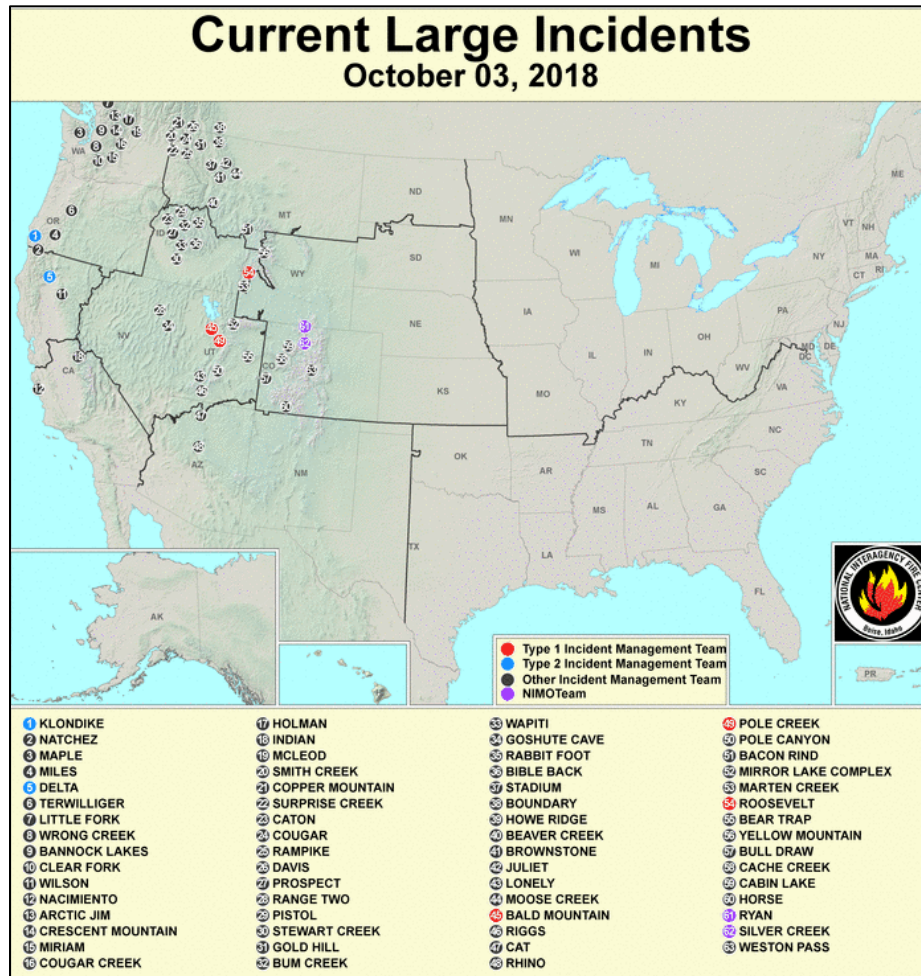
Highlighted Drought Resources

- [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](#)



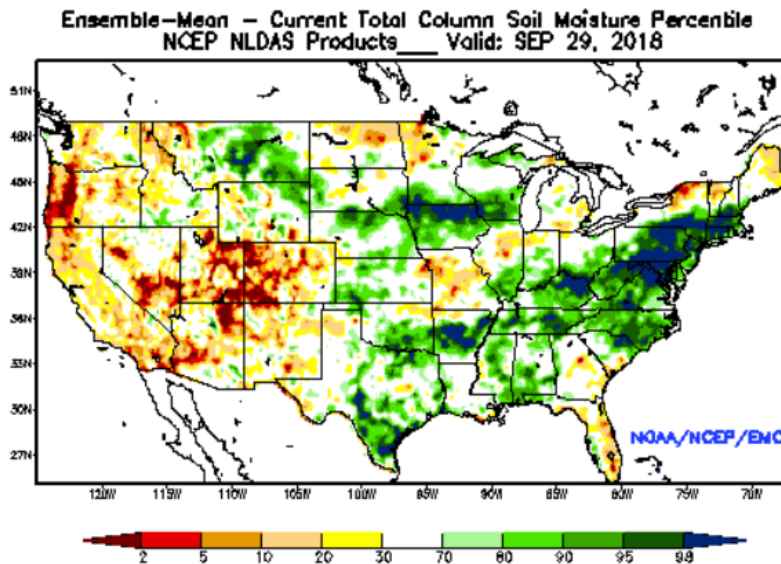
Highlighted Wildfire Resources

- [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



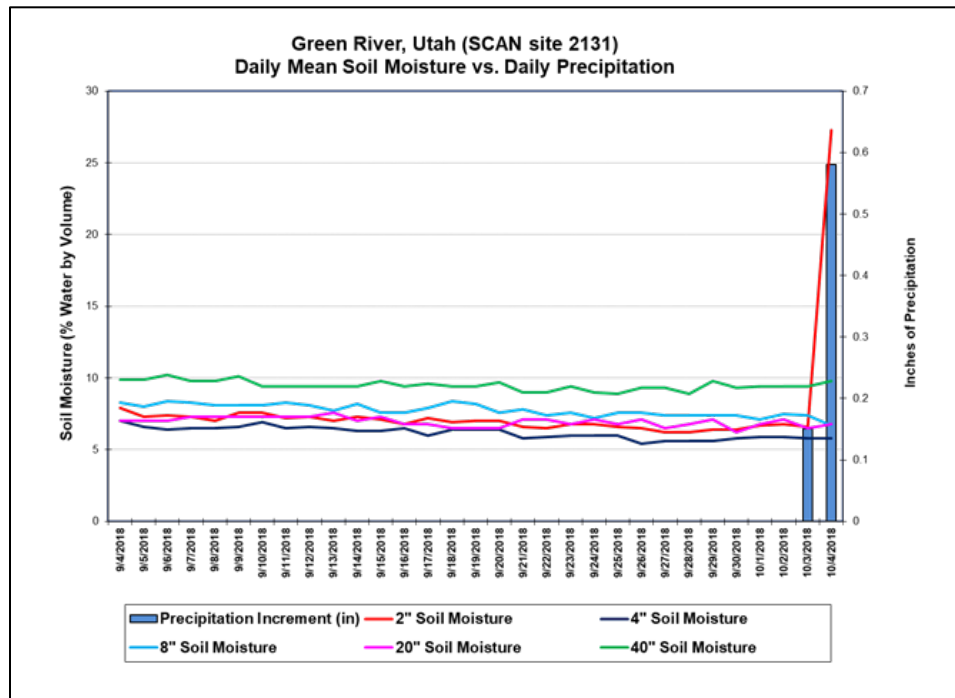
Soil Moisture Data Portals

- [CRN Soil Moisture](#)
- [Texas A&M University North American Soil Moisture Database](#)
- [University of Washington Experimental Modeled Soil Moisture](#)

[Modeled soil moisture percentiles](#) as of September 29, 2018

Soil Moisture Data

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

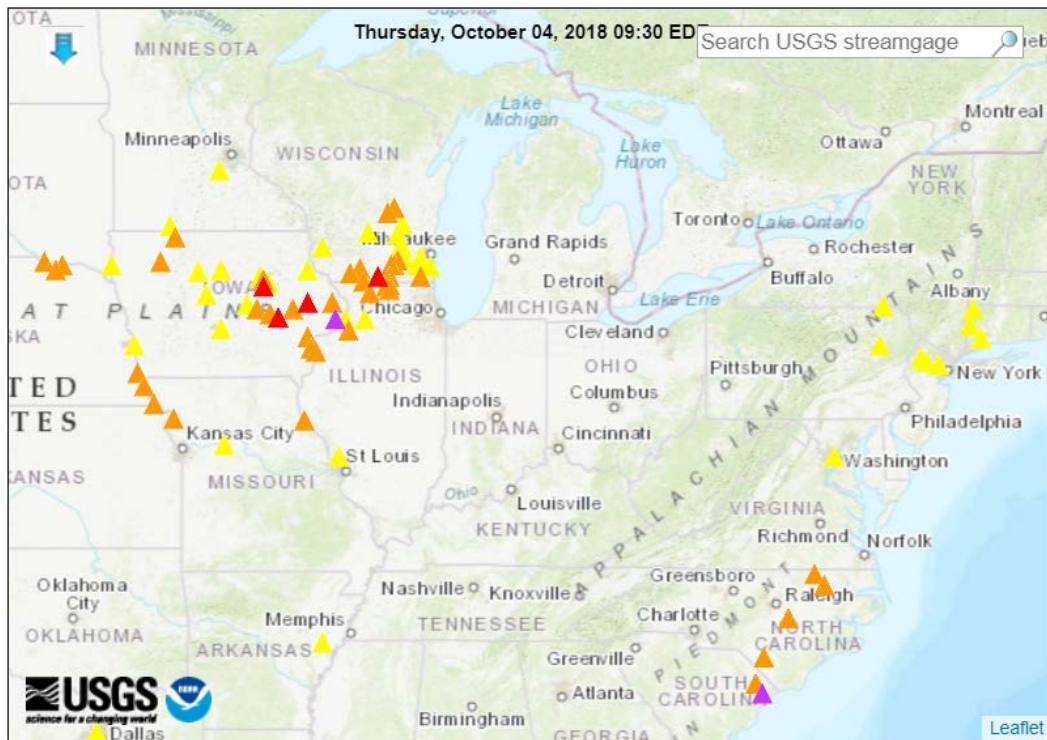


This chart shows precipitation events during the last 30 days at the [Green River SCAN site 2131](#) in Utah. Breaking a period of dry conditions, the accumulated precipitation totaled 0.73 inches from October 3-4. During this event the 2-inch sensor showed a sharp increase in soil moisture levels.

Streamflow

Source: USGS

Map of flood and high flow conditions



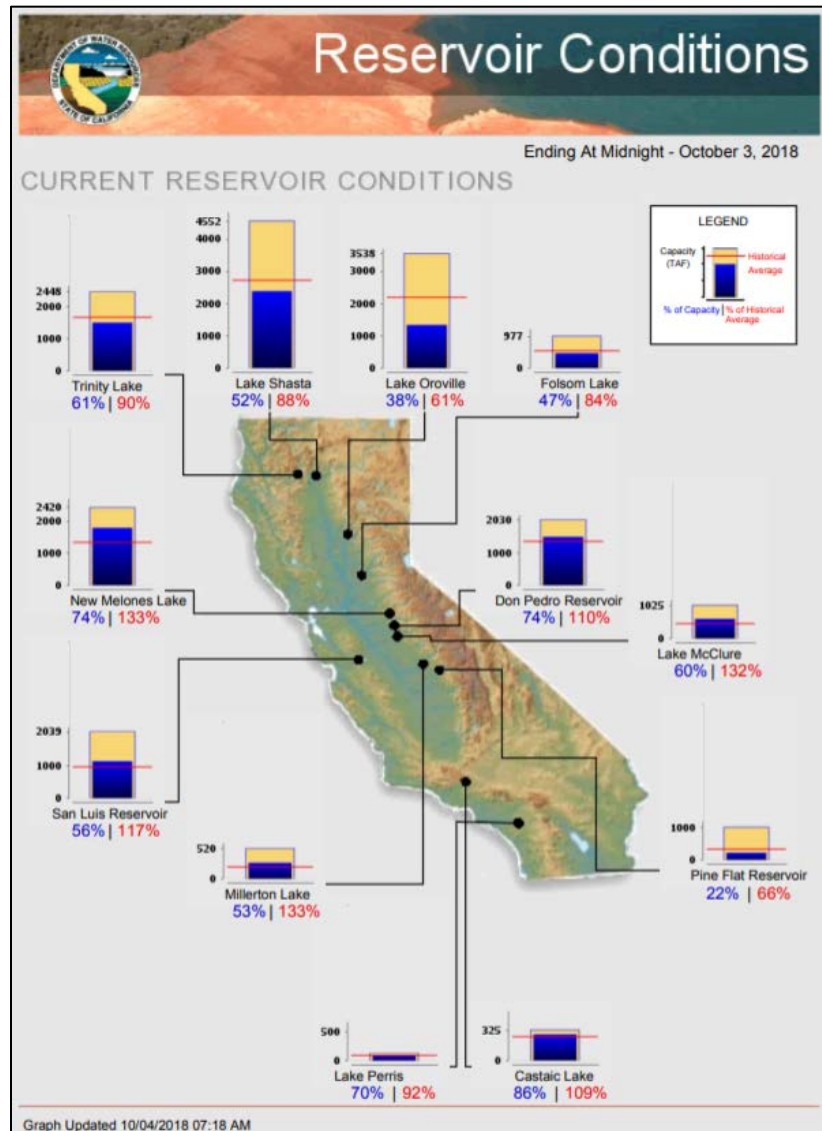
Explanation - Percentile classes						
<95	95-98	>= 99	Above action stage	Above flood stage	Above moderate flood stage	Above major flood stage
△ Streamgage with flood stage ○ Streamgage without flood stage						

[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

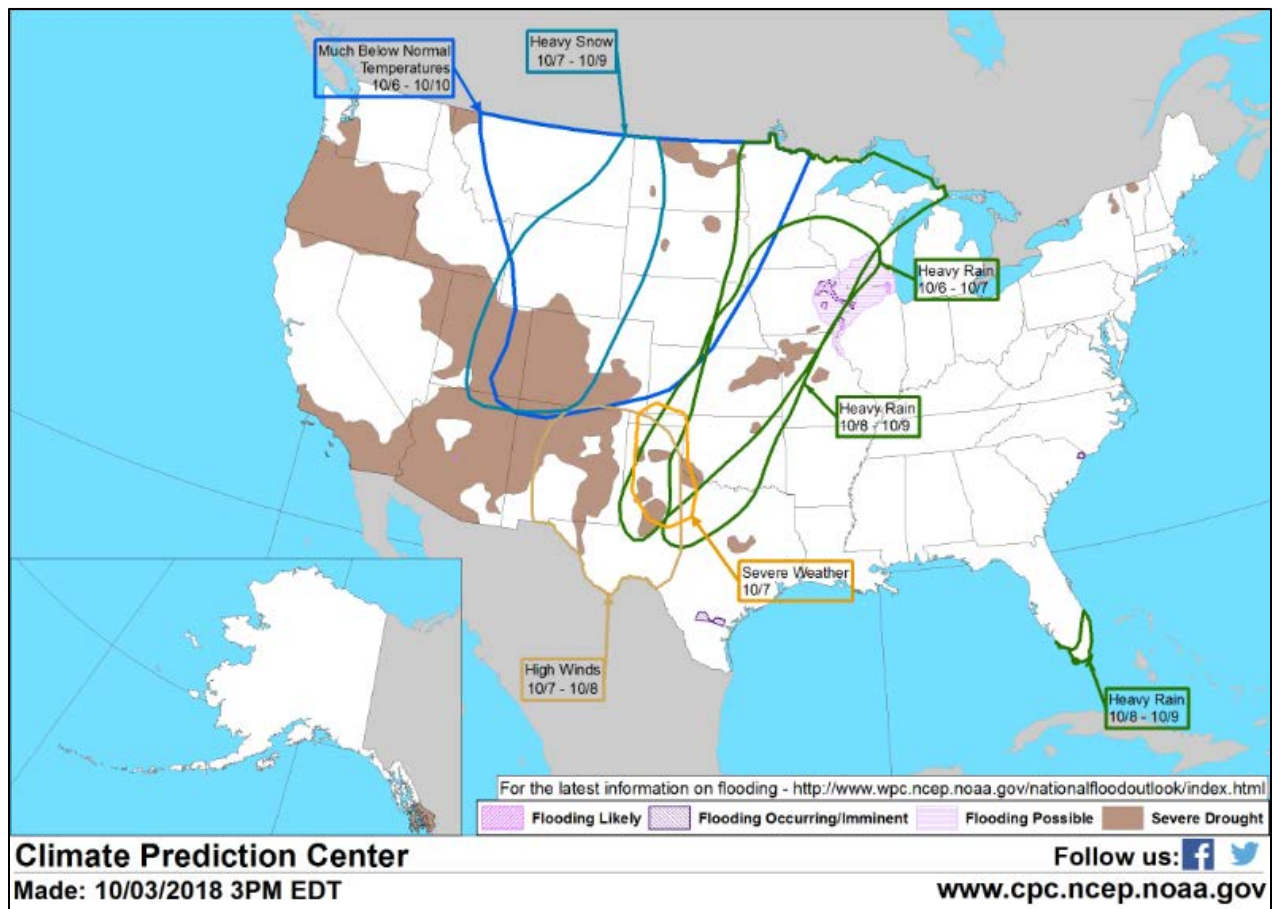
Agricultural Weather Highlights

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

National Outlook, Thursday, October 4: “A major rainfall event is imminent across the nation’s mid-section as the first of two storms begins to emerge from the West. By late Friday, scattered showers will become more concentrated from northern Texas into the Great Lakes region, and heavy rain will persist along the same general axis into next week. Five-day rainfall totals could reach 2 to 8 inches from the southern Plains into the upper Midwest, with renewed flooding expected in the latter region. Significant precipitation (1 to 2 inches) should also occur in parts of the West, with periods of snow affecting portions of the Rockies and northern Plains. In contrast, very warm, mostly dry weather will continue across much of the southern and eastern U.S. The NWS 6- to 10-day outlook for October 9 – 13 calls for below-normal temperatures along and northwest of a line from the southern Rockies to Lake Superior, while warmer-than-normal weather will cover the South, East, and lower Midwest. Meanwhile, wetter-than-normal weather across most of the country should contrast with near- to below-normal precipitation in the middle and northern Atlantic States and along the Pacific Coast.”

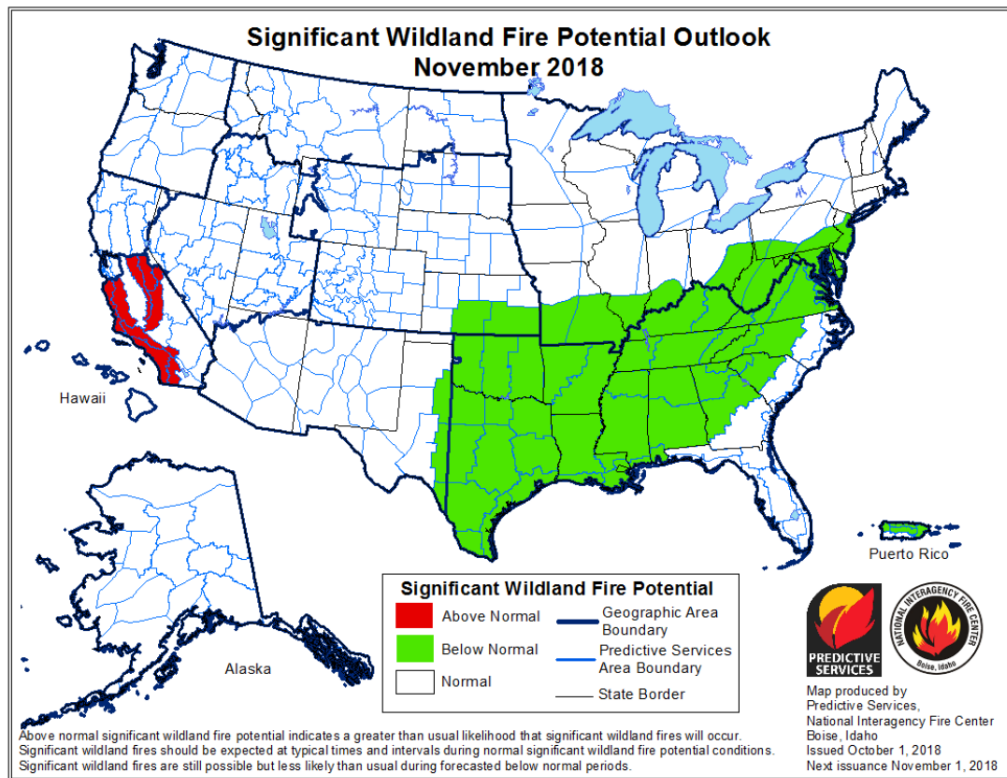
Weather Hazard Outlook October 6 – 10, 2018

Source: Climate Prediction Center



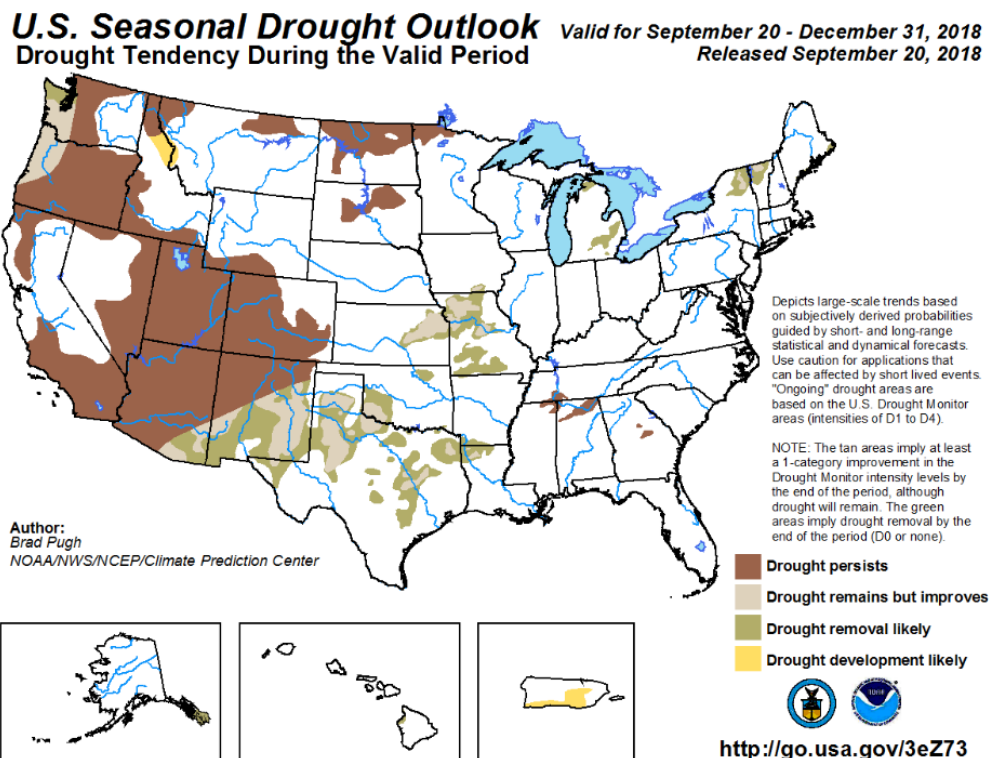
Significant Wildland [Fire Potential Outlook](#)

Source: National Interagency Fire Center



Seasonal Drought Outlook: [September 20 - December 31, 2018](#)
Service

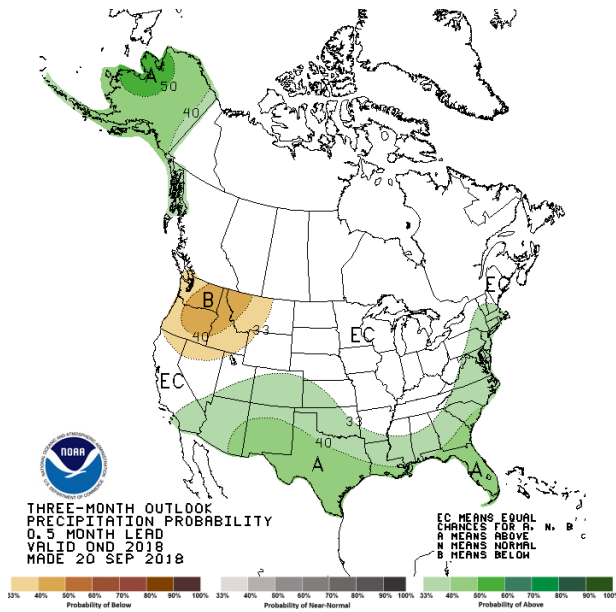
Source: National Weather



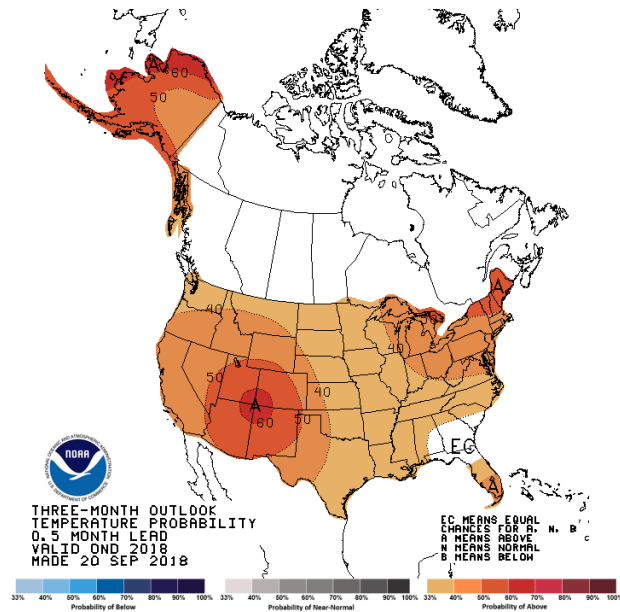
Climate Prediction Center 3-Month Outlook

Source: National Weather Service

Precipitation



Temperature



October-November-December (OND) 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](#).