

Weekly Water and Climate Update

July 30, 2015

This weekly report uses data and products from the National Water and Climate Center and information provided by other agencies. The report focuses on current precipitation, seasonal snowpack, temperature, and drought conditions in the U.S.

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Weekly Highlight: July snow in the northern Rockies; heat returns to both coasts

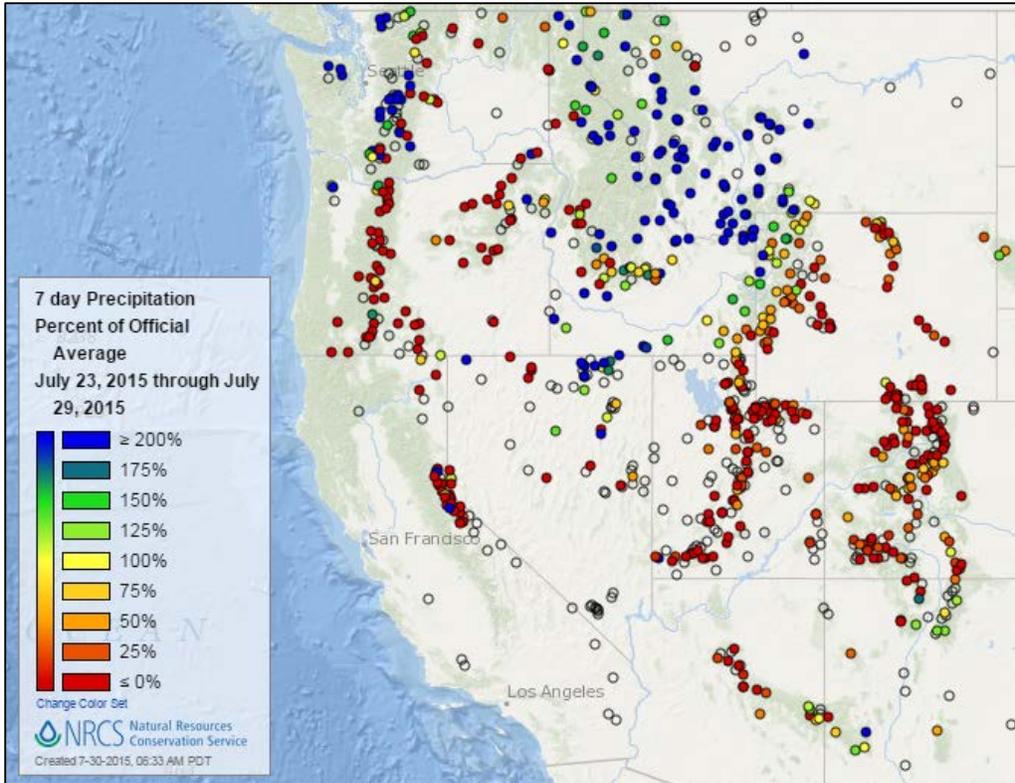


A light dusting of snow blankets the mountains around Bozeman, Montana. Tuesday, July 28, 2015.
Photo by Jeri Lynn Ward, NRCS.

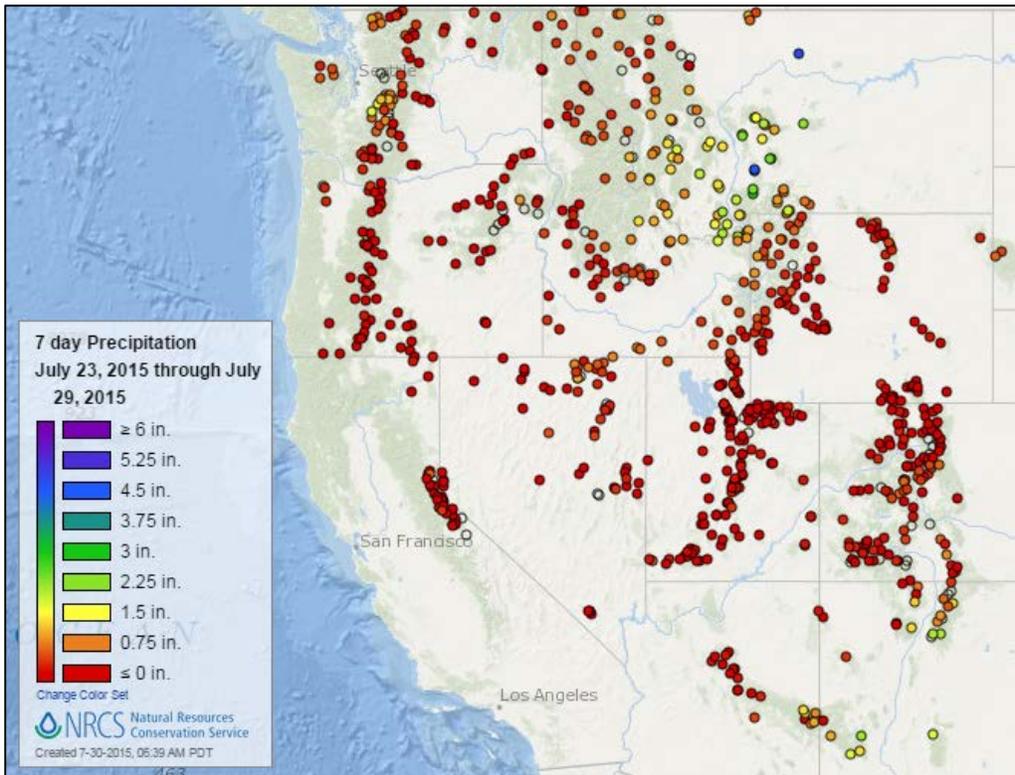
An unusually powerful low-pressure system left several inches of snow in the higher elevations of the northern Rockies this past week. In contrast, searing heat continues in the Midwest while much higher than normal temperatures have returned to the West Coast and the Northeast.

Precipitation

Last 7 Days, Western Mountain Sites (NRCS SNOTEL)



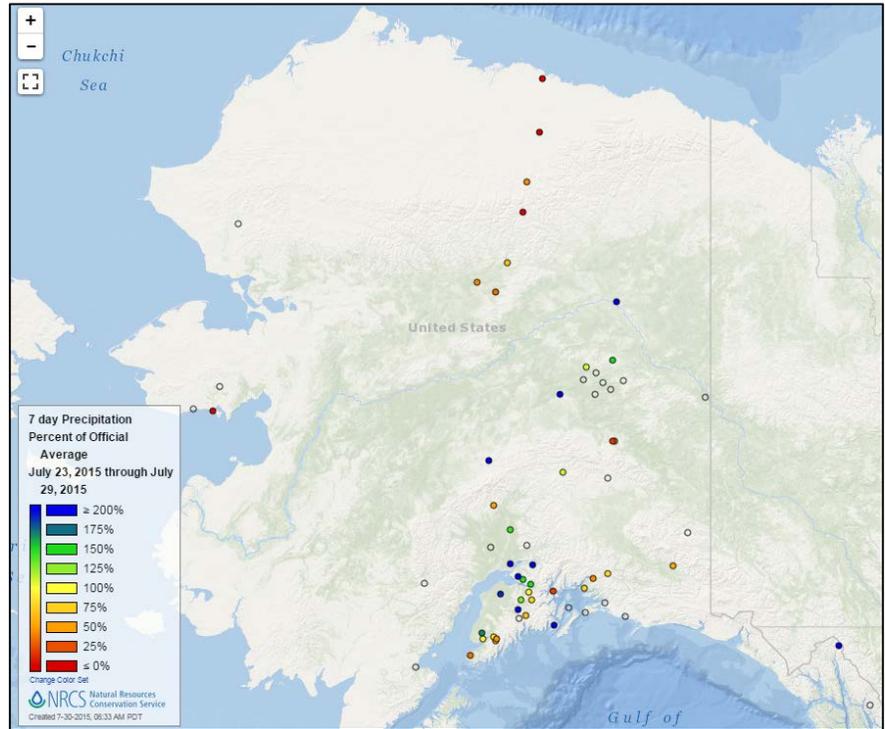
The [precipitation percent of average](#) map shows seasonally very high precipitation in the northern Rockies and western Washington. Portions of Nevada and New Mexico also received above average precipitation.



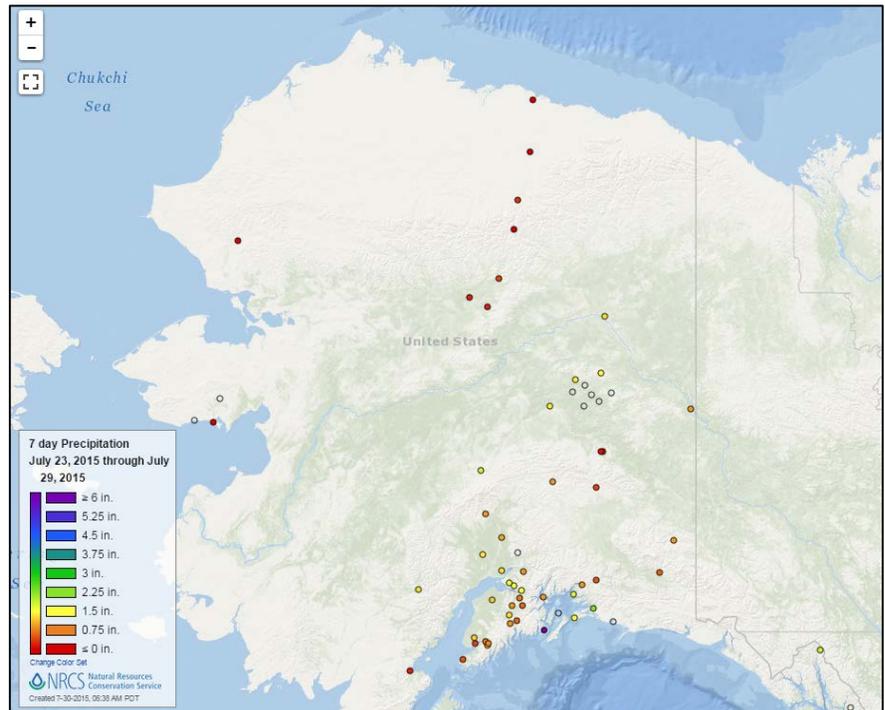
The [total precipitation](#) map shows that the precipitation amounts in the two northern areas were 1-2 inches. Locations in New Mexico received somewhat smaller amounts.

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The Alaska [precipitation percent of average](#) map indicates highly variable precipitation over the state, with some stations well above average and others well below.



The Alaska [total precipitation](#) map shows that the amounts at stations receiving precipitation were generally less than 1 inch.

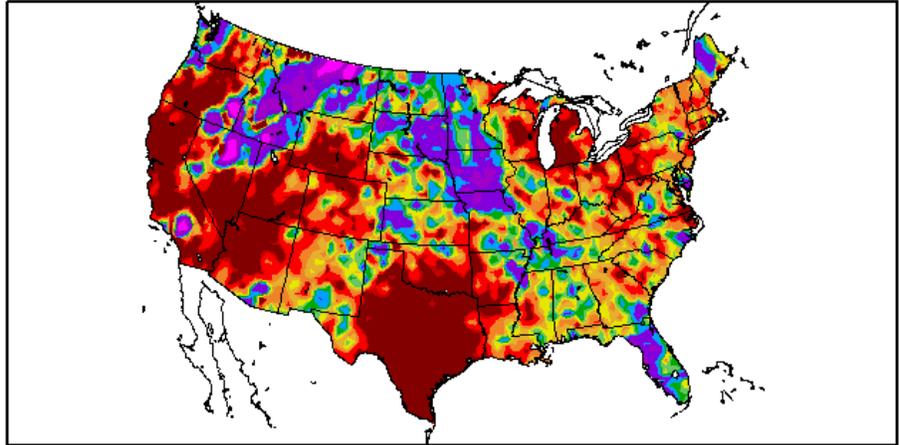


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Last 7 Days, National Weather Service (NWS) Networks

Percent of Normal Precipitation (%)
7/23/2015 - 7/29/2015

The [percent of normal precipitation](#) map for the nation shows major precipitation in several areas, particularly the northern Rockies and the northern Great Plains. Much of the west coast, the Southwest, Texas, and the Upper Midwest were dry.

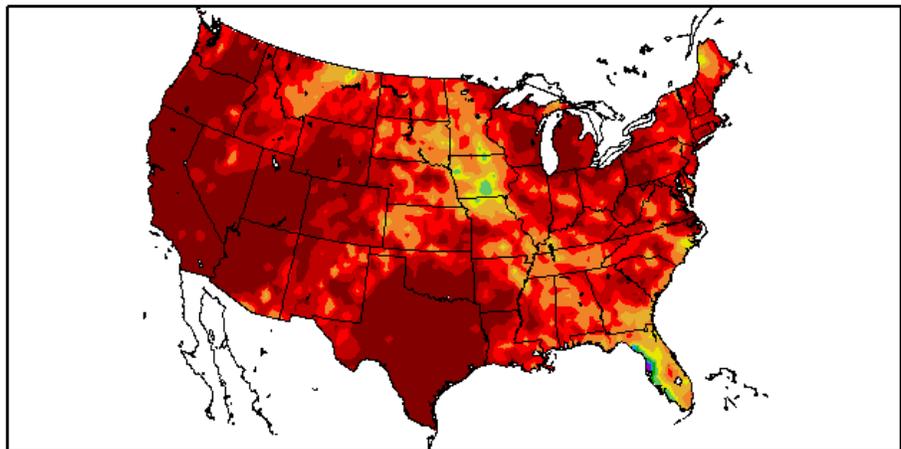


Generated 7/30/2015 at HPRCC using provisional data.

Regional Climate Centers

Precipitation (in)
7/23/2015 - 7/29/2015

In the [7-day total precipitation](#) map, areas of high precipitation amounts that are particularly noticeable are Montana, Iowa, and Florida.



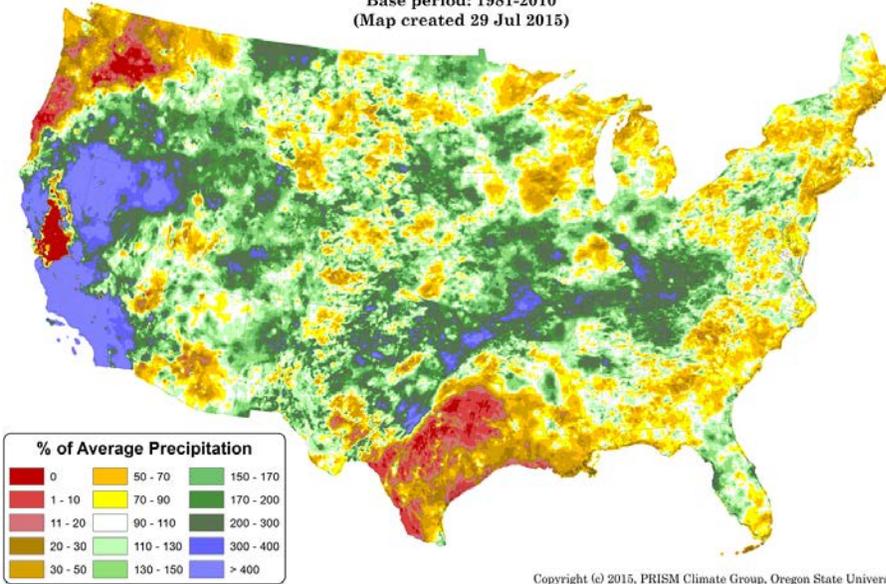
Generated 7/30/2015 at HPRCC using provisional data.

Regional Climate Centers

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Month-to-Date, PRISM Preliminary, All available data including SNOTEL and NWS

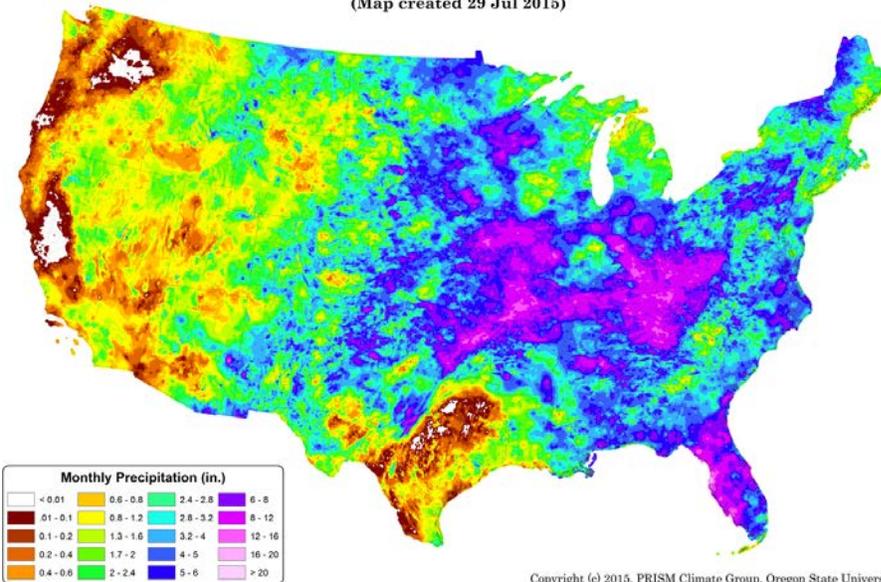
Total Precipitation Anomaly: 01 July 2015 - 28 July 2015
 Period ending 7 AM EST 28 Jul 2015
 Base period: 1981-2010
 (Map created 29 Jul 2015)



Copyright (c) 2015, PRISM Climate Group, Oregon State University

For the month of July to date, the national [total precipitation percent of average](#) pattern reveals much higher than normal precipitation in much of California, southern Oregon, and western Nevada, as well as a band from northern Texas eastward across the Ohio Valley. The Pacific Northwest, central California, the northern Great Plains, much of Texas, the Southeast, and the Atlantic coast remain dry.

Total Precipitation: 01 July 2015 - 28 July 2015
 Period ending 7 AM EST 28 Jul 2015
 (Map created 29 Jul 2015)



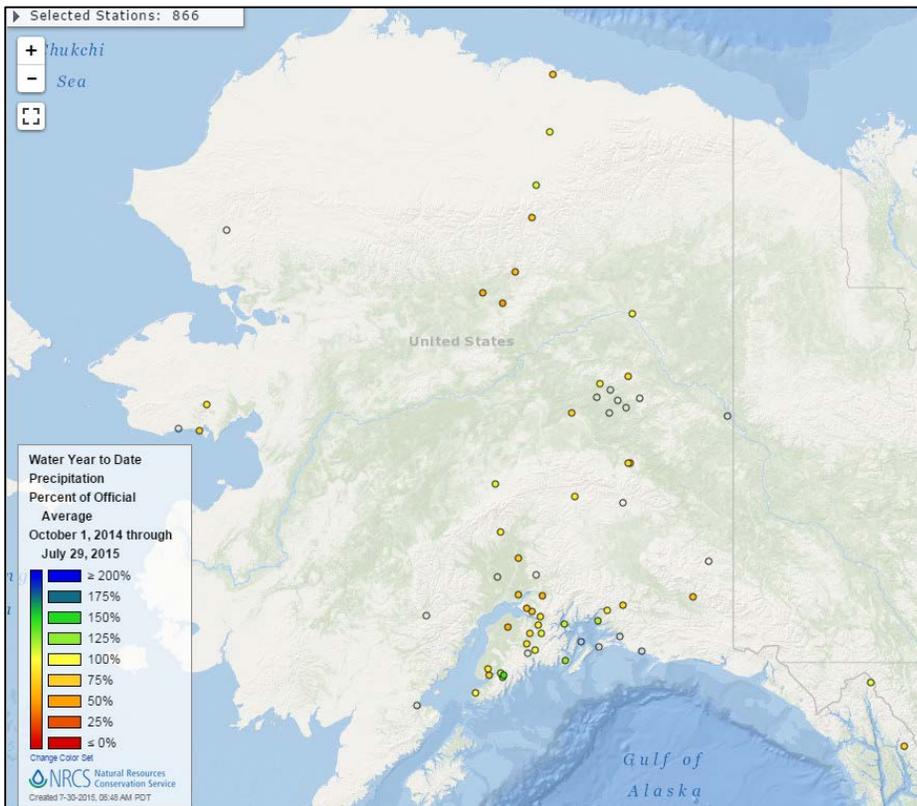
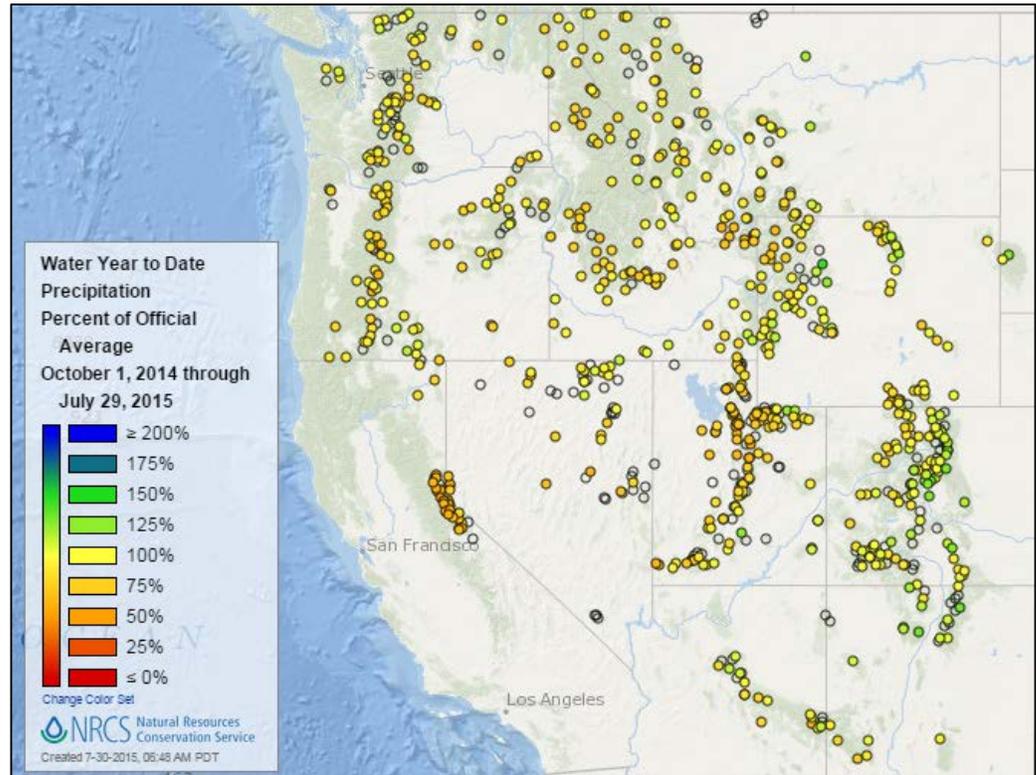
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The [total precipitation](#) map shows significant precipitation especially in the east central part of the country and Florida. In contrast, dry conditions prevailed along the West Coast and in southern Texas.

Weekly Water and Climate Update

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

For the [2015 Water Year](#) that began on October 1, 2014, large fluctuations throughout the year have now evened out to make most areas of the West to be near normal, with the exception of the Lake Tahoe area, which remains below normal.



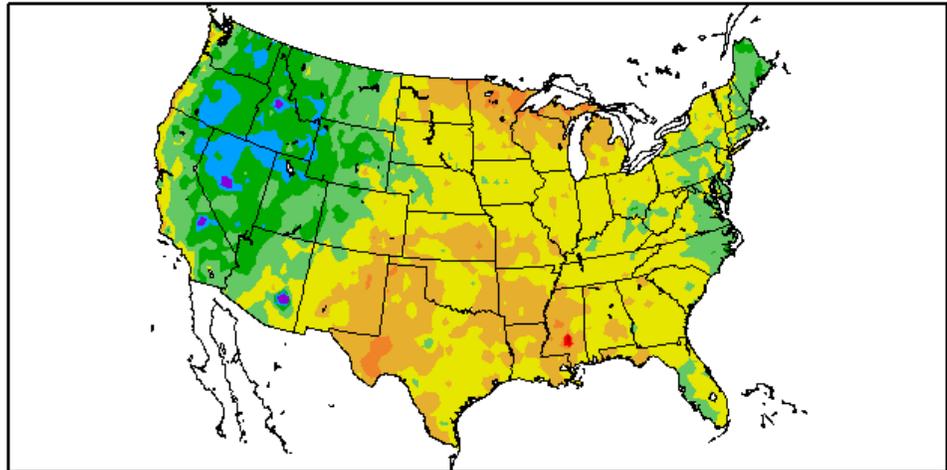
The Alaska [water year-to-date precipitation percent of average](#) map shows a mostly drier than average interior and near to above average conditions along the southern coast.

Temperature

Last 7 Days, National Weather Service (NWS) Networks

Departure from Normal Temperature (F)
7/23/2015 – 7/29/2015

The map of the [average temperature anomalies](#) for the past week indicate much cooler than normal in the West and the Northeast with warmer than normal conditions elsewhere in the country.



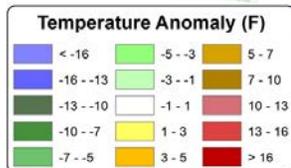
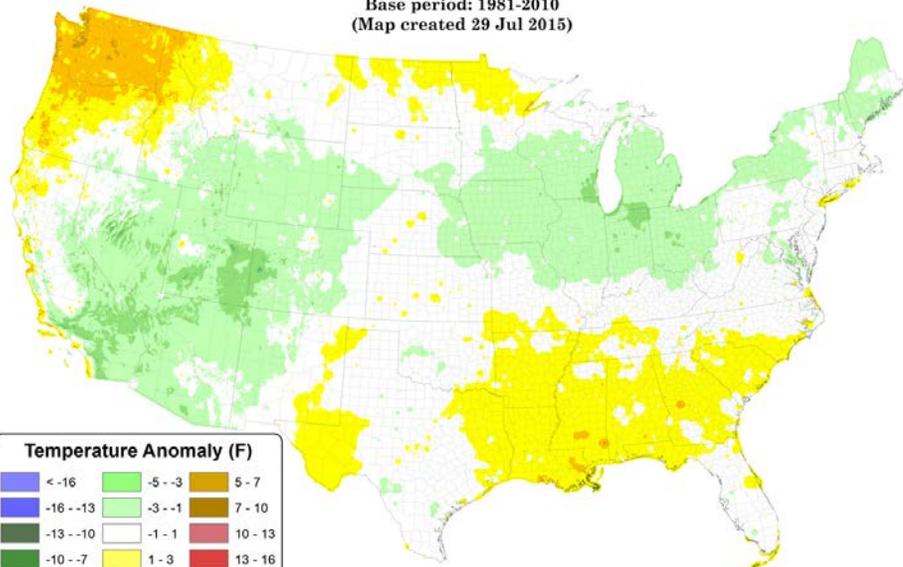
Generated 7/30/2015 at HPRCC using provisional data.

Regional Climate Centers

Month-to-Date, PRISM Preliminary, All available data including SNOTEL and NWS

For July 2015 to date, the national [daily mean temperature anomaly](#) map shows significantly warm temperatures in the Northwest and Southeast, with seasonably cool temperatures in the Southwest, central Rocky Mountain area, the upper Midwest, and some areas in the Northeast.

Daily Mean Temperature Anomaly: 01 July 2015 - 28 July 2015
Period ending 7 AM EST 28 Jul 2015
Base period: 1981-2010
(Map created 29 Jul 2015)

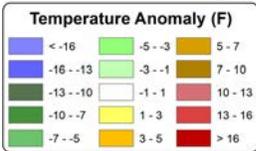
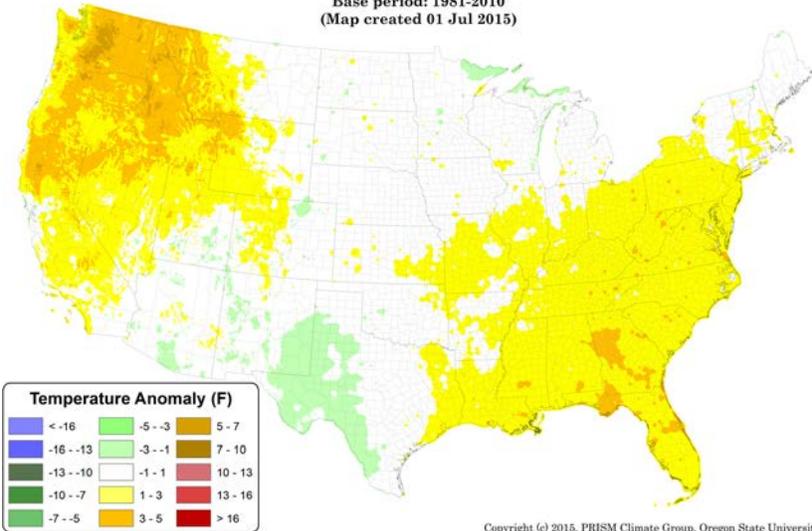


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Weekly Water and Climate Update

Last 3 Months, PRISM Preliminary

Daily Mean Temperature Anomaly: April 2015 - June 2015
 Period ending 7 AM EST 30 Jun 2015
 Base period: 1981-2010
 (Map created 01 Jul 2015)



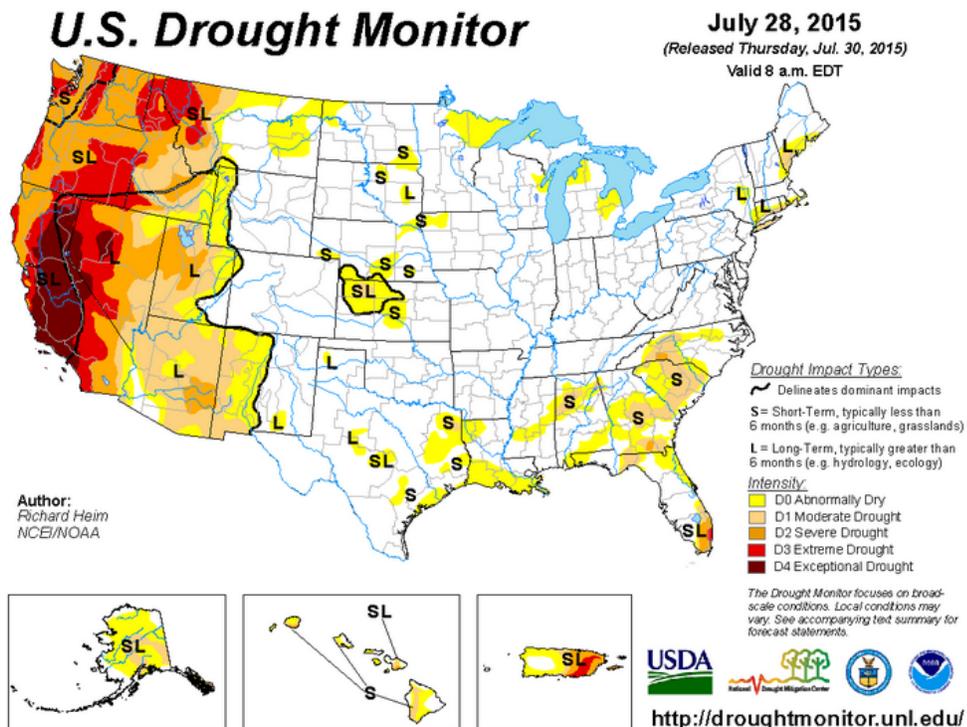
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The April through June national [daily mean temperature anomalies](#) for the U.S. show the West and the Southeast had the largest temperature departures above normal. The rest of the country was mostly near average.

Drought

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

[U.S. Drought Monitor](#) See map below. Exceptional levels of drought continue in California and Nevada, while extreme drought is emerging in northwestern Montana, Washington, and Oregon. To view regional drought conditions, select a region on the map. State maps are available from regional maps.

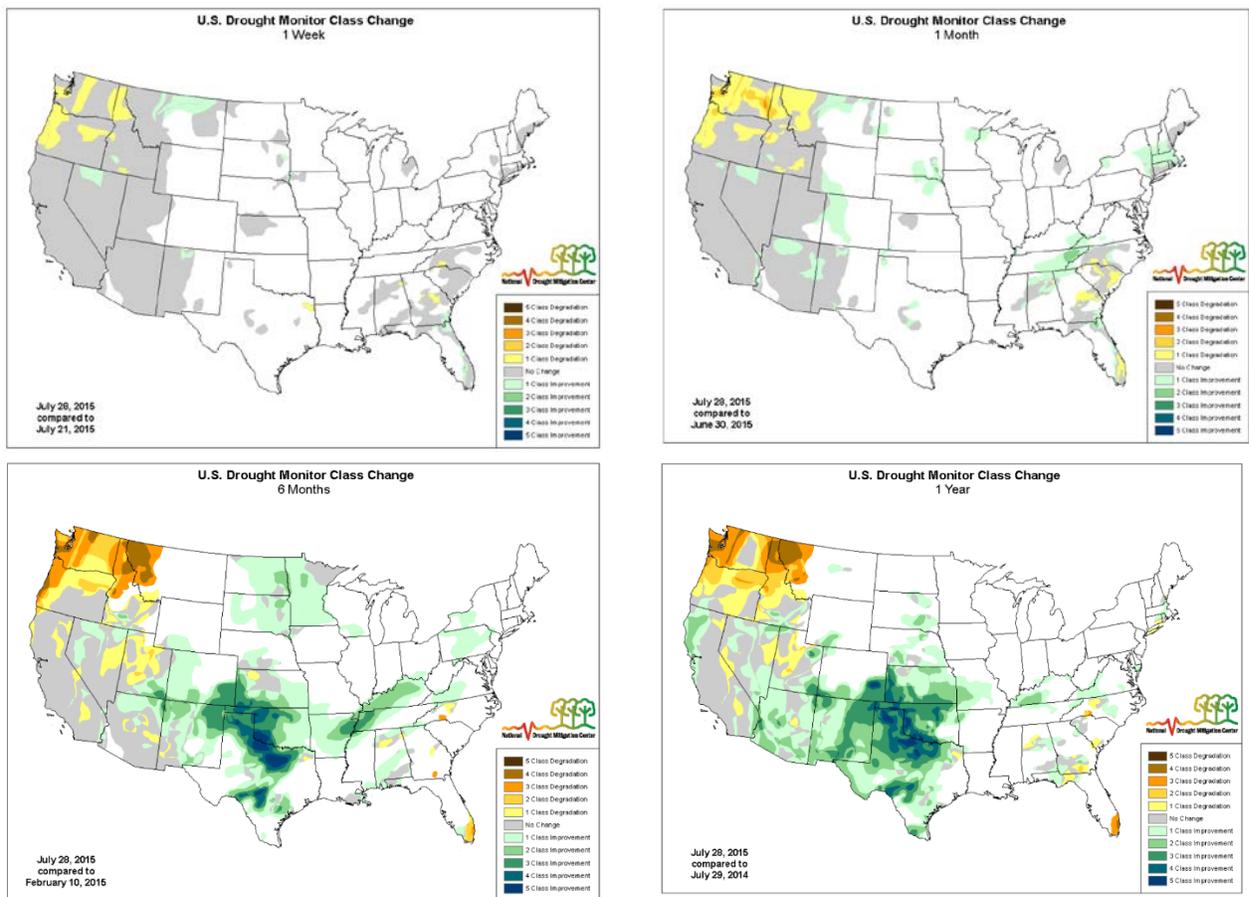


Current National Drought Summary, July 28, 2015

“An upper-level ridge dominated the southern Plains, bringing hot and dry weather, while an active storm track triggered areas of rain across the northern tier States during this U.S. Drought Monitor (USDM) week. Cool fronts sliding southward brought showers and thunderstorms to parts of the central Plains to Southeast. Moderate to exceptional drought maintained its hold on the West. Low streams, parched soils, and the risk of wildfires helped extreme drought to tighten its grip on the Pacific Northwest, while the lack of tropical cyclone rainfall in the Caribbean continued to worsen drought conditions in Puerto Rico. Florida to southeastern Georgia was blanketed with areas of 2+ inches of rain. Hit or miss showers and thunderstorms across the rest of the Southeast gave local downpours to some localities while their neighbors remained parched.” Author: Richard Helm, NOAA/NCEI.

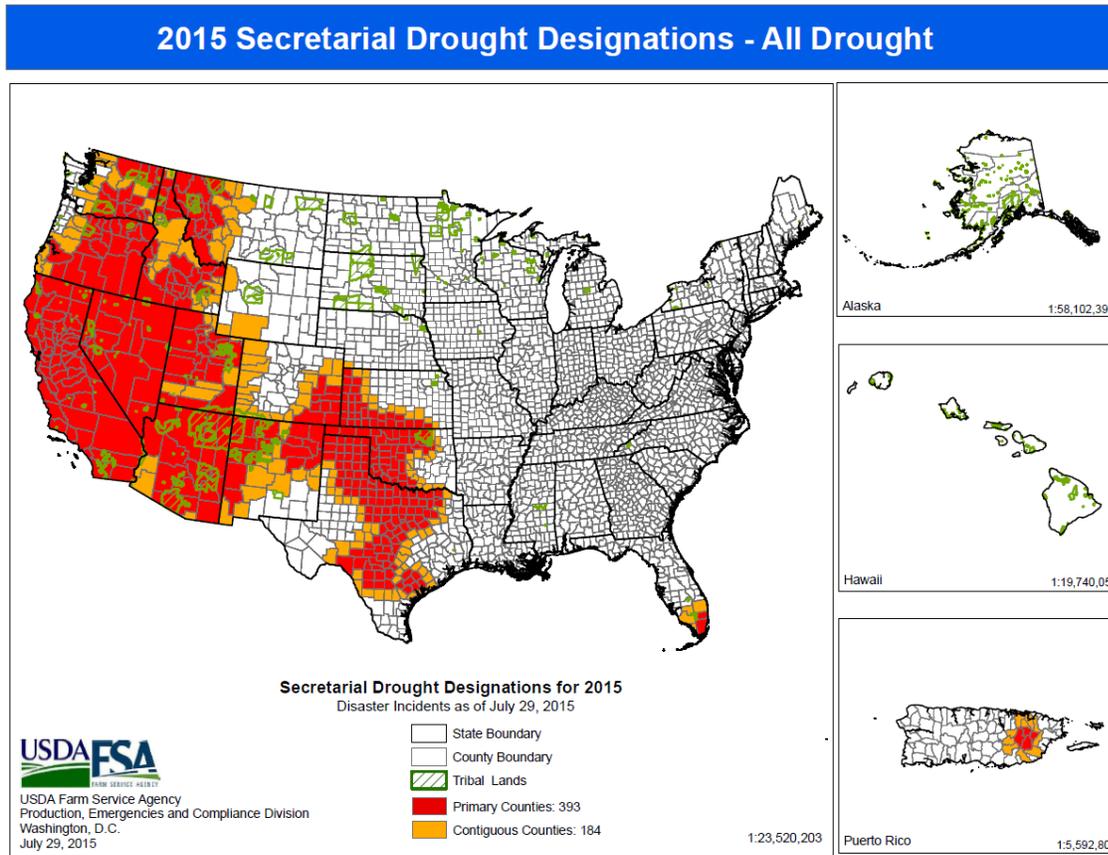
This summary and detailed regional drought narratives for the last week are [here](#).

Changes in Drought Monitor Categories over Time



Intensifying drought is particularly notable in the Northwest. Conditions have improved significantly in the southern Great Plains and the Southwest.

2015 USDA Drought Designations



[USDA Disaster and Drought Information](#)

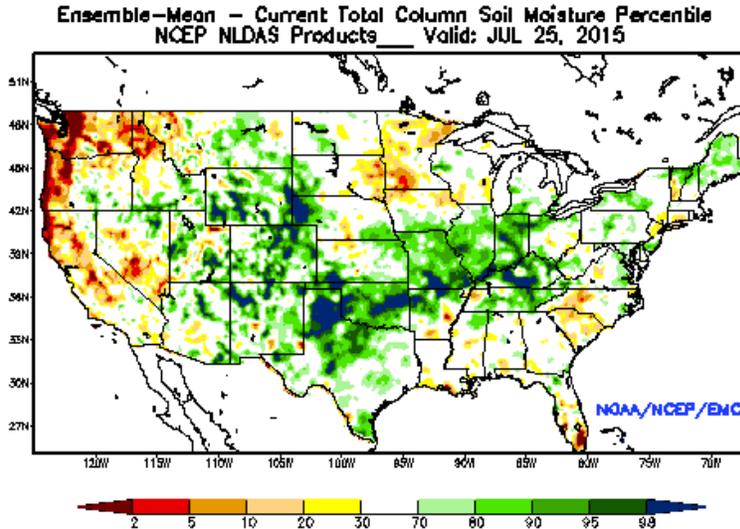
[U.S. Population in Drought, Weekly Comparison](#)

Highlighted Drought Resources

- [Drought Impact Reporter](#)
- [Quarterly Regional Climate Impacts and Outlook](#)
- [U.S. Drought Portal Indicators and Monitoring](#)

Other Climatic and Water Supply Indicators

Soil Moisture

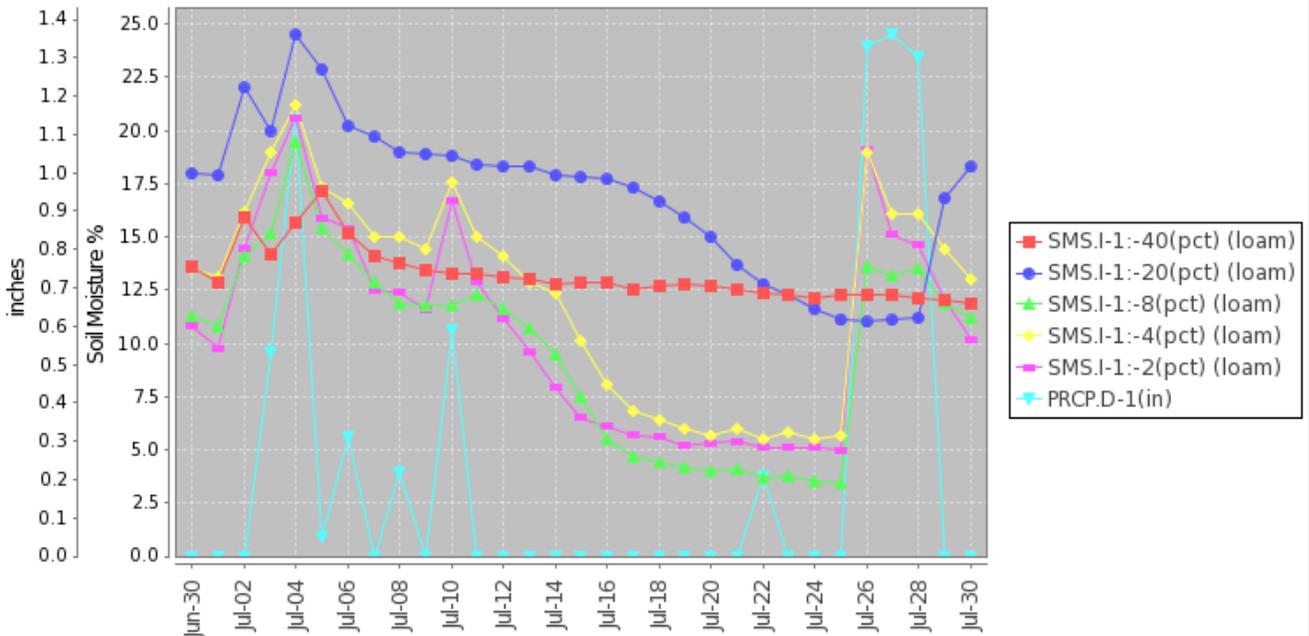


The modeled [soil moisture percentiles](#) as of July 25, 2015 show significant dryness in the far West, Minnesota, and parts of the Southeast. Areas of above normal soil moisture include much of the Rocky Mountains, the southern Great Plains, the Midwest, and the Northeast.

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

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

Station (2074) MONTH=2015-06-30 (Daily) NRCS National Water and Climate Center - Provisional Data - subject to revision
Thu Jul 30 07:16:52 PDT 2015



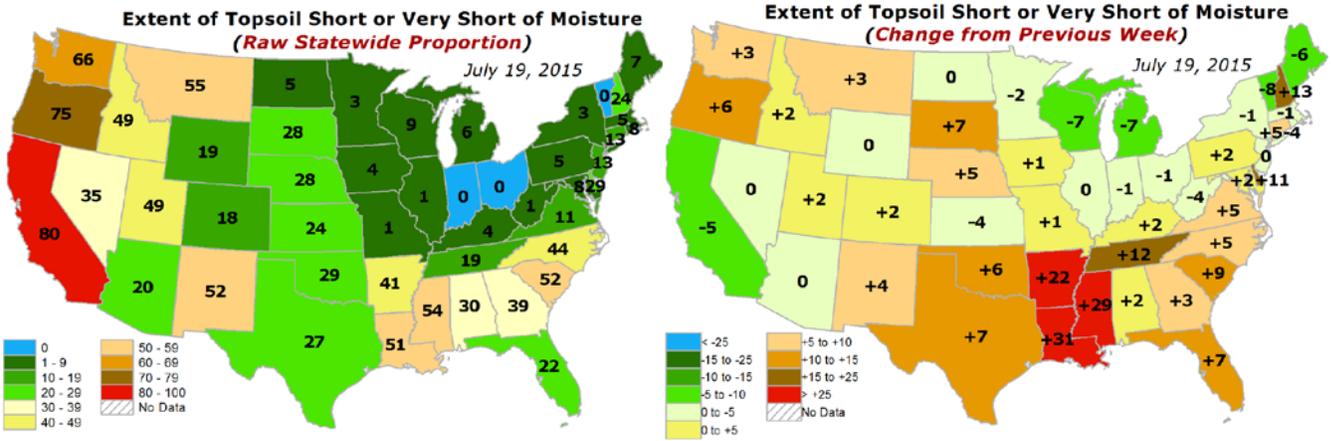
This example NRCS graph shows soil moisture (2, 4, 8, 20, and 40 inch depth) and precipitation for the last month at the [Lynhart Ranch SCAN site](#) (station number 2074) in Oregon. Multiple precipitation events generated corresponding soil moisture response with drying between events.

Soil Moisture Data Portals

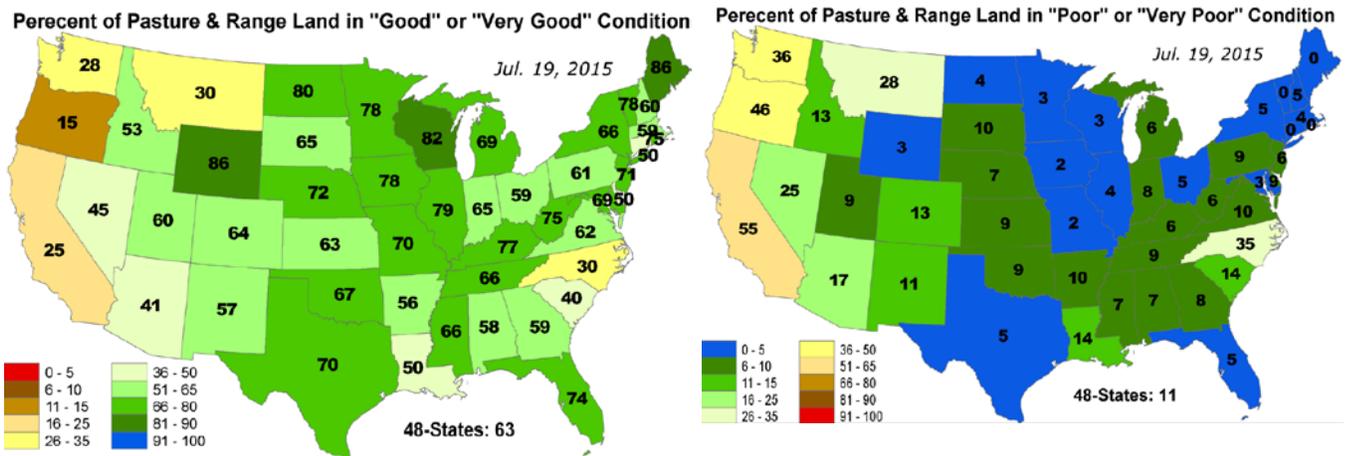
[CRN Soil Moisture](#)
[Texas A&M University North American Soil Moisture Database](#)

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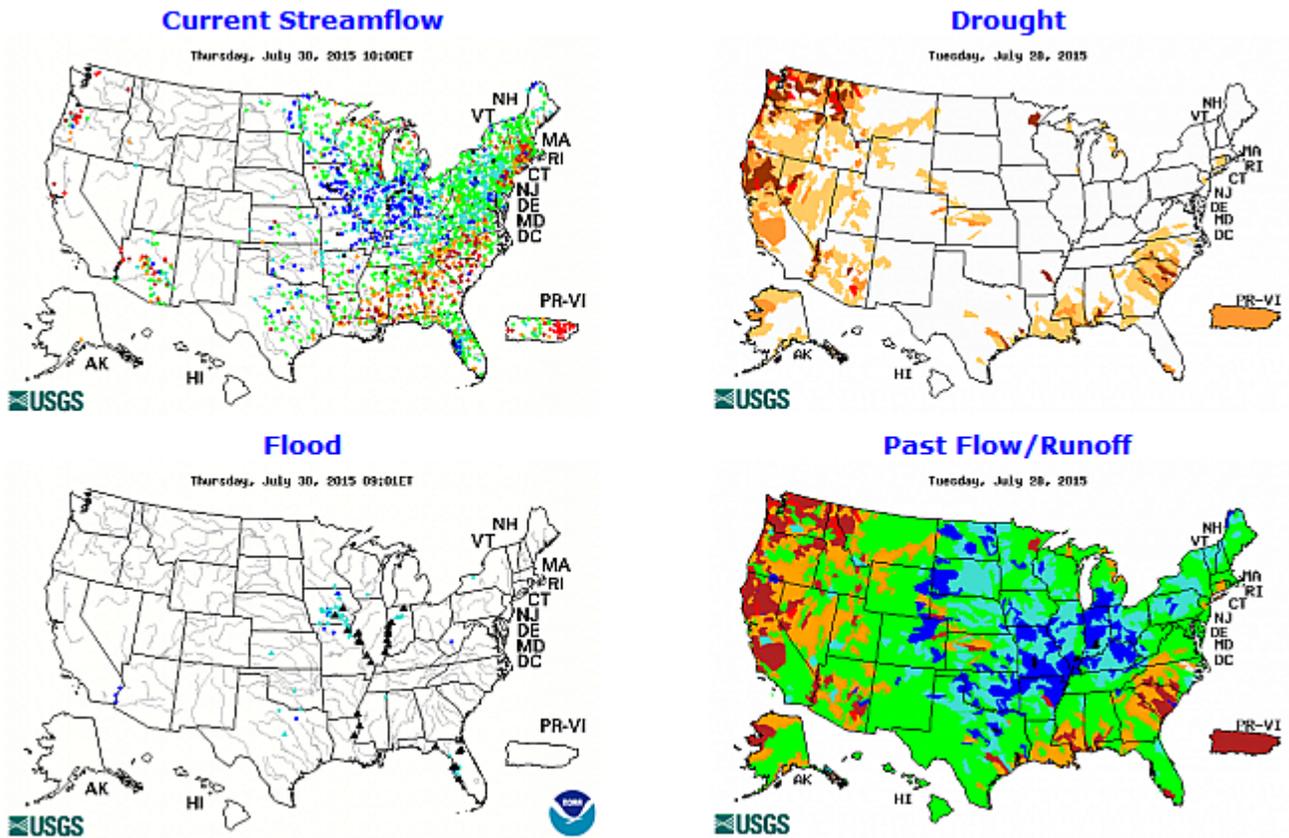
Topsoil



Pasture and Rangeland



Streamflow



[Streamflow](#) remains below normal in northern California, the Northwest, and parts of the Southeast, whereas it is above normal in the central and northeastern parts of the country. From the USGS web site, select any individual map to enlarge and display a legend.

Current Reservoir Storage

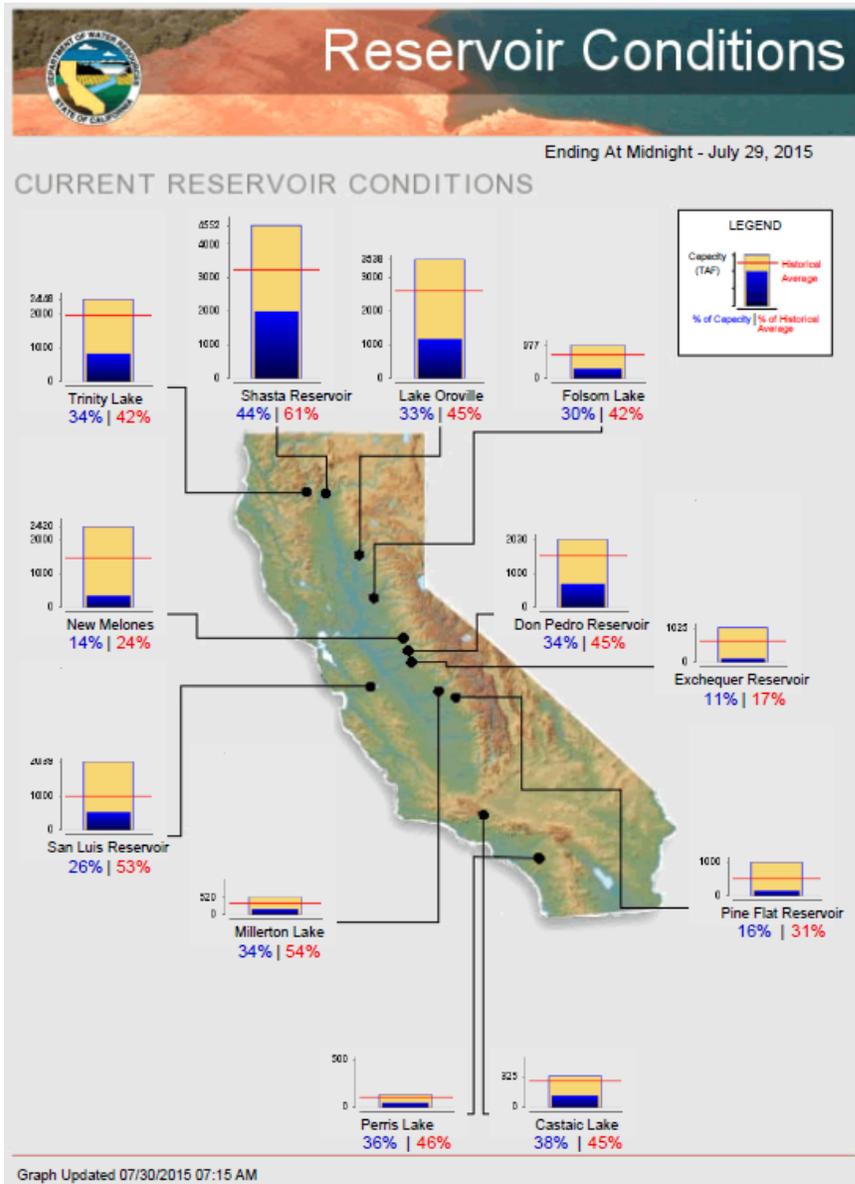
[National Water and Climate Center Reservoir Data](#)

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](#)

Weekly Water and Climate Update

California Reservoir Conditions



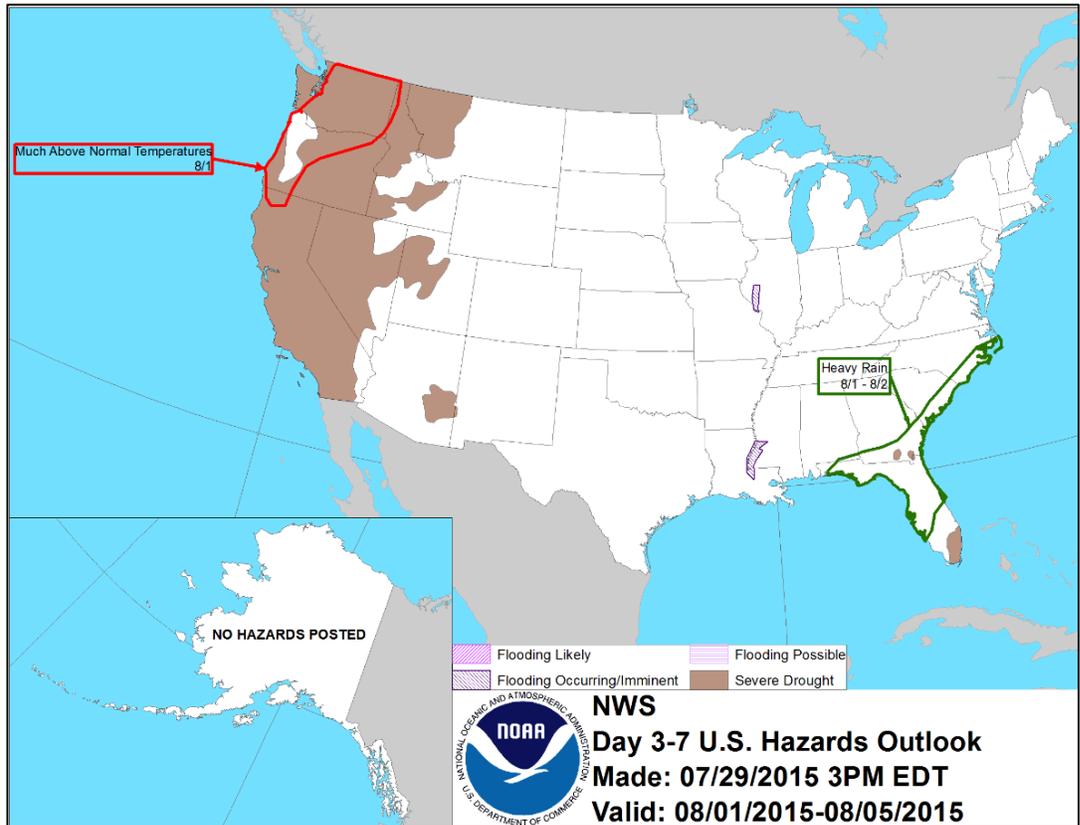
Short- and Long-Range Forecasts

Agricultural Weather Highlights

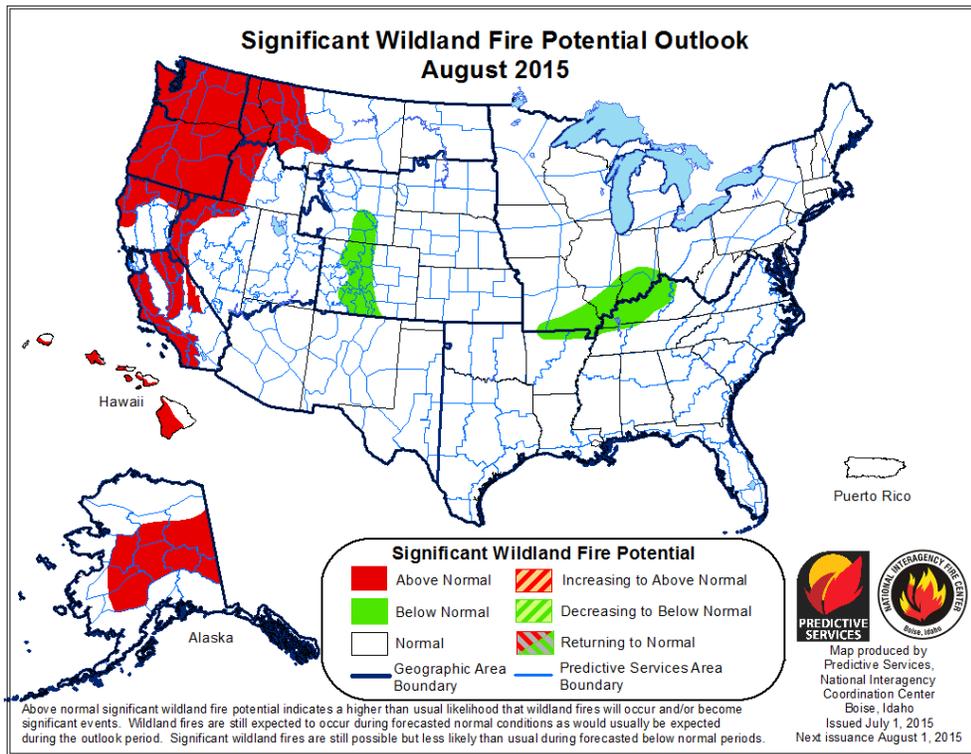
Outlook, July 30, 2015: “During the next several days, the bulk of the nation’s rain will fall across the southern U.S. In the West, showers (locally 1 to 3 inches or more) will be heaviest in Arizona and New Mexico, with some rain spilling across Oklahoma, northern Texas, and environs. Isolated showers will reach as far northwest as central and southern California and the Great Basin. Meanwhile, 1- to 3-inch rainfall totals can be expected in the lower Southeast, with higher amounts likely along Florida’s gulf coast. Elsewhere, little or no rain will fall across the mid-South and the Northwest, while scattered showers will affect the Midwest and Northeast. Northwestern heat will expand eastward, with much of the U.S.—except the Midwest and Northeast—likely to experience above-normal temperatures by early next week. The NWS 6- to 10-day outlook for August 4 – 8 calls for the likelihood of above-normal temperatures throughout the western and southern U.S., while cooler-than-normal conditions can be expected in much of the Midwest. Meanwhile, below-normal rainfall in the Pacific Coast States and much of the South will contrast with wetter-than-normal weather in the Rockies, northern and central Plains, Midwest, and Northeast.” Author: Brad Rippey, USDA Agricultural Meteorologist.

National Weather Hazards

The outlook for [weather hazards](#) over the next several days includes much above normal temperatures in the Northwest and heavy rain in the Southeast. Severe drought remains in the far West.

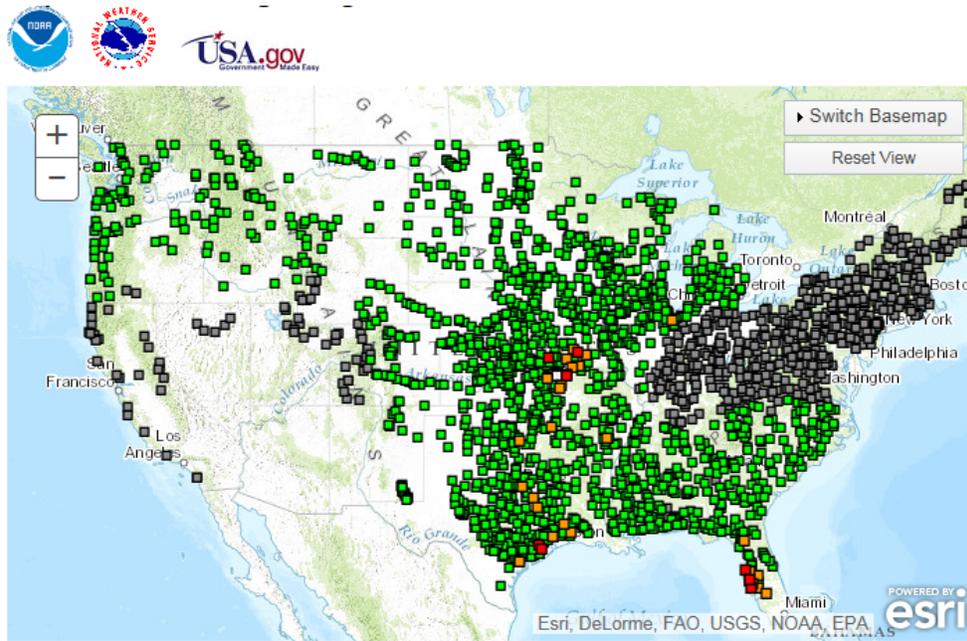


Fire Potential Outlook: August 2015



In August, above normal **fire potential** exists in the Pacific Northwest, California, Alaska, and Hawaii.

Long-Range Flood Outlook



During the next three months, there is some **flooding potential** primarily in the central part of the country.

2358 total gauges
[Show locations with 50% or greater chance of flooding during Aug-Sep-Oct \(39\)](#)

- 0 Gauges: > 50% Major Long-Range Flood Risk
- 9 Gauges: > 50% Moderate Long-Range Flood Risk
- 30 Gauges: > 50% Minor Long-Range Flood Risk
- 1671 Gauges: < 50% Long-Range Flood Risk
- 648 Gauges: No forecast within selected timeframe

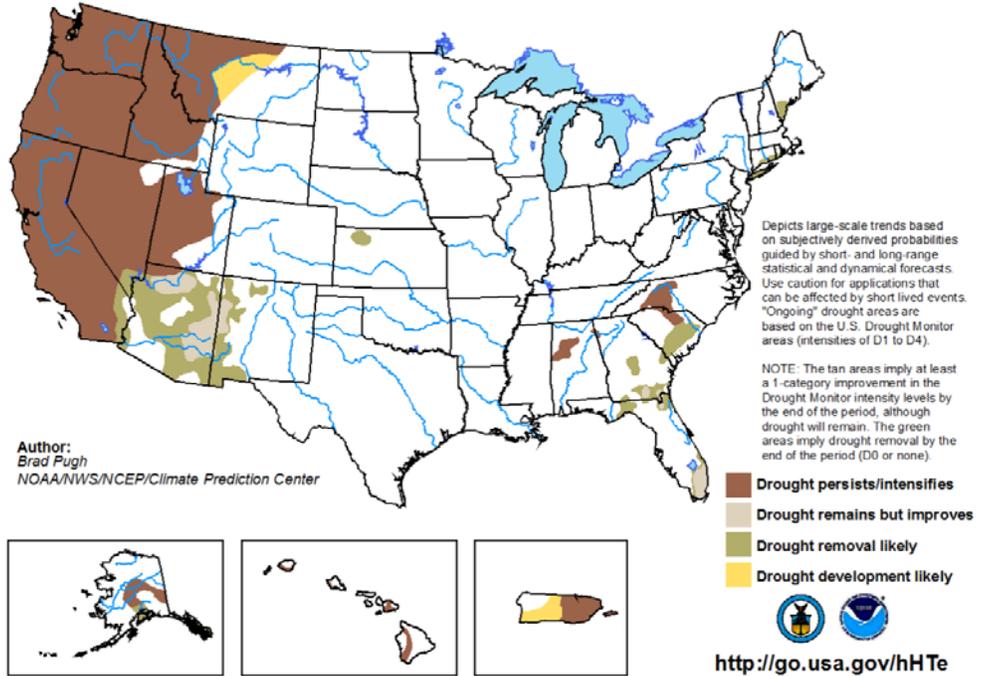
Weekly Water and Climate Update

Seasonal Drought Outlook

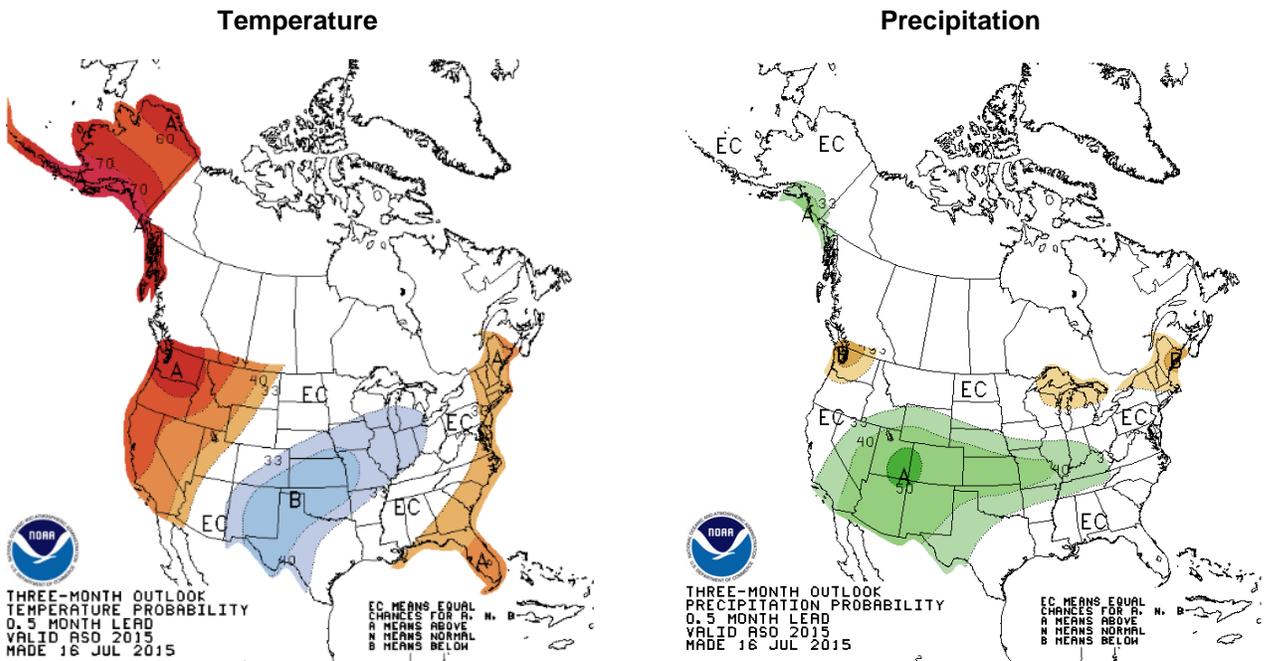
Drought will persist over the far West.

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

Valid for July 16 - October 31, 2015
Released July 16, 2015



Climate Prediction Center 3-Month Outlook



During **August-October**, there is enhanced probability of above normal temperatures in the West, Alaska, and the East Coast, while below normal temperatures are likely in the southern Great Plains and the Midwest. Enhanced probability for above normal precipitation is predicted for the Southwest, the central part of the country, and south coastal Alaska, with below normal precipitation in Washington, the Great Lakes area, and the Northeast.

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](#).