

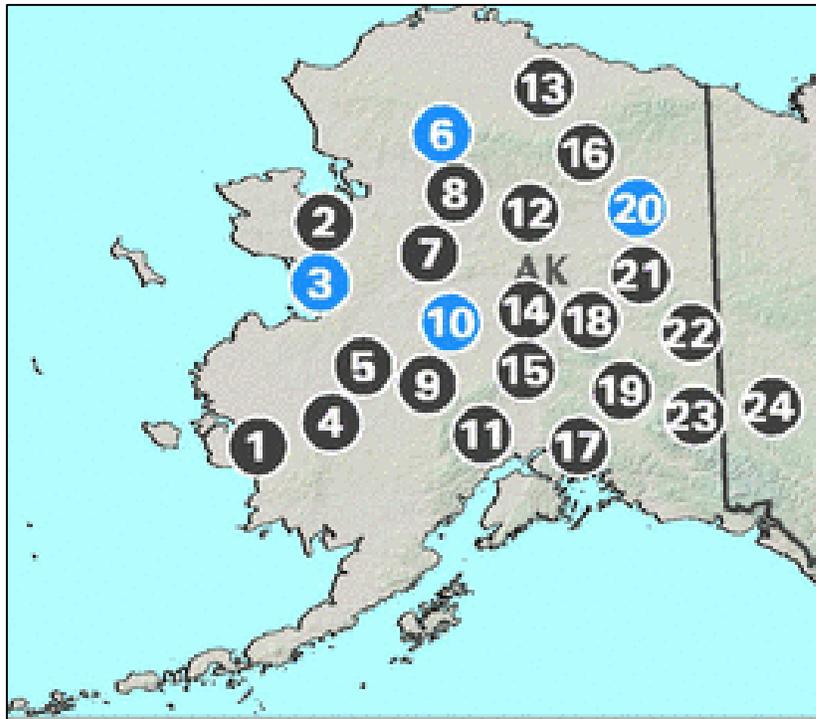
Weekly Water and Climate Update

July 9, 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: 24 'large incident' fires burning in Alaska



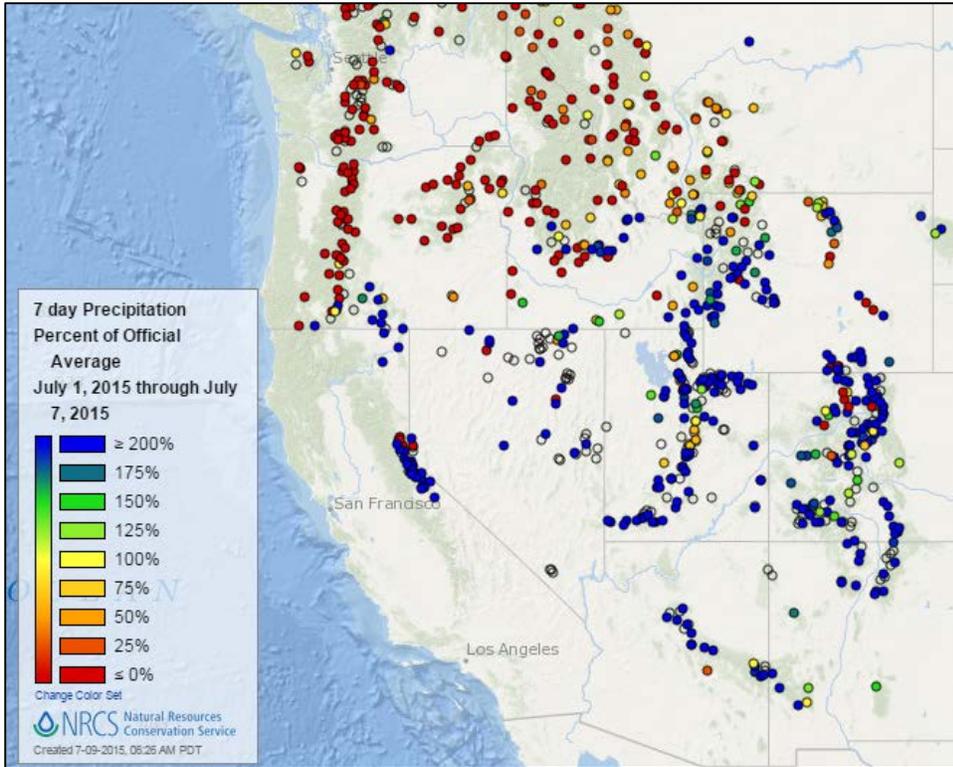
[Current Large Incidents](#), July 9, 2015

Last week, the highlight article was on 14 large fires burning in Oregon and Washington. The continuing hot and dry weather also has impacted Alaska. As of this morning's report, there are currently 24 active fires burning in/near Alaska. [Air quality advisories](#) are in effect for the Central Interior.

Alaska set a new record for the earliest day with temperatures in the 90's, when it hit 91 degrees in Eagle on May 23 (NOAA, www.climate.gov). The low winter snowpack and unusually warm temperatures in the Pacific Northwest and Alaska have increased the potential for wildfires this summer.

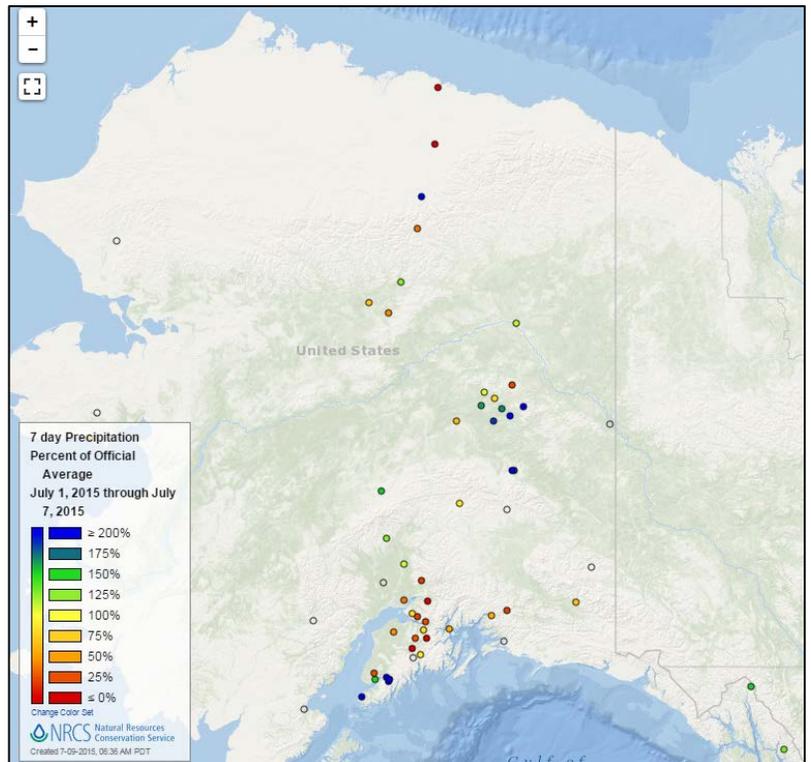
Precipitation

Last 7 Days, Western Mountain Sites (NRCS SNOTEL)

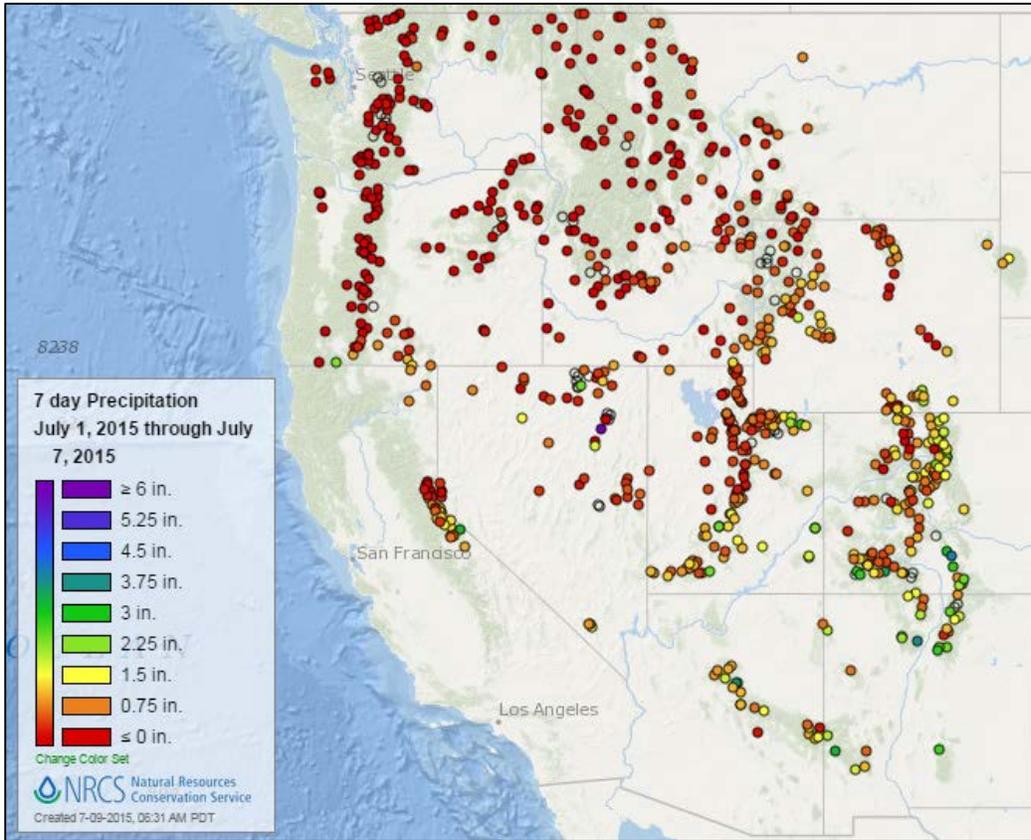


In the West, the [precipitation percent of average](#) map highlights the rain and, often, thunderstorms that happened in the past week in California, Nevada, Utah, Arizona, New Mexico, southern Idaho, Colorado, and Wyoming. The Pacific Northwest continued to be dry.

The Alaska [precipitation percent of average](#) map indicates isolated areas of above normal precipitation, but many areas with little or no precipitation compared to normal.

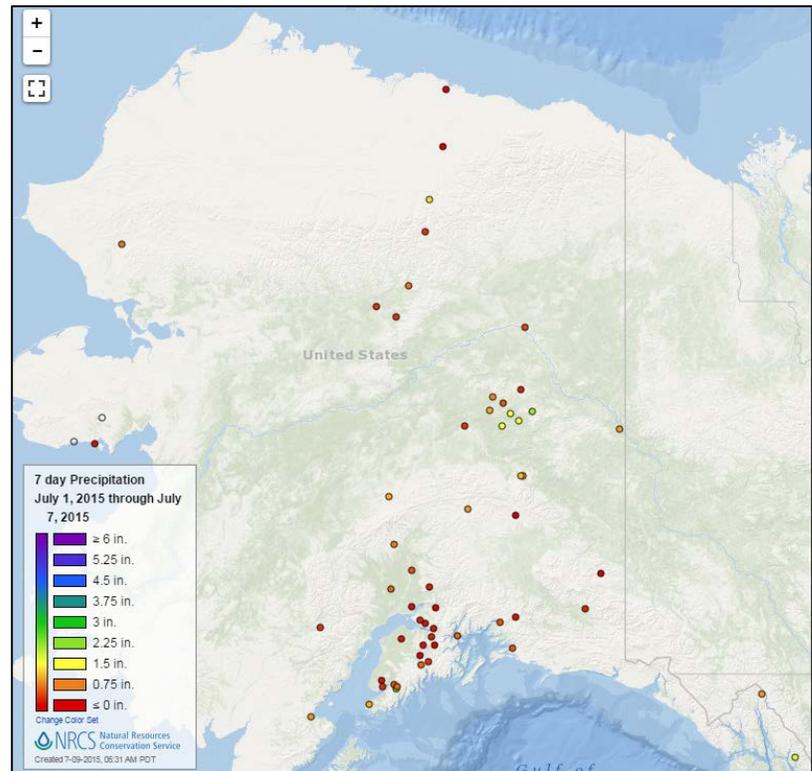


Weekly Water and Climate Update



For the western U.S., the [total precipitation](#) map shows the continued dry conditions in the Northwest and the precipitation that occurred in the Southwest states and along the Front Range of the Rockies.

The Alaska [total precipitation](#) map for the last seven days shows more than an inch of precipitation at SNOTEL sites in East-Central section of the state. Elsewhere precipitation was minimal.



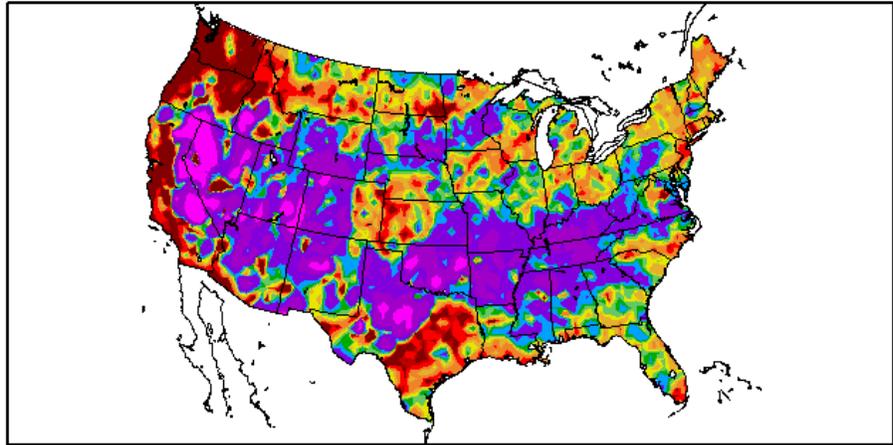
Weekly Water and Climate Update

Last 7 Days, National Weather Service (NWS) Networks

Percent of Normal Precipitation (%)
7/2/2015 – 7/8/2015

This [percent of normal precipitation](#) map for the nation highlights the continued precipitation throughout the Ohio Valley. Again, as noted previously in the West, above normal precipitation occurred in the Southwest from California into Colorado and Wyoming.

The Pacific Northwest continues to be very dry.



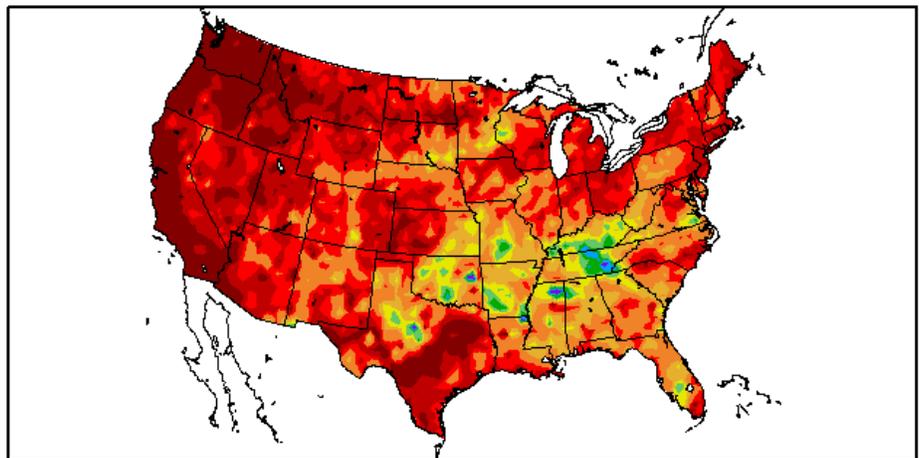
Generated 7/9/2015 at HPRCC using provisional data.

Regional Climate Centers

Precipitation (in)
7/2/2015 – 7/8/2015

The [7-day total precipitation](#) map for the U.S. shows the actual amount of precipitation in inches.

Note that the dark and light orange colors represent one to three inches of precipitation, significant amounts for some areas this time of year.



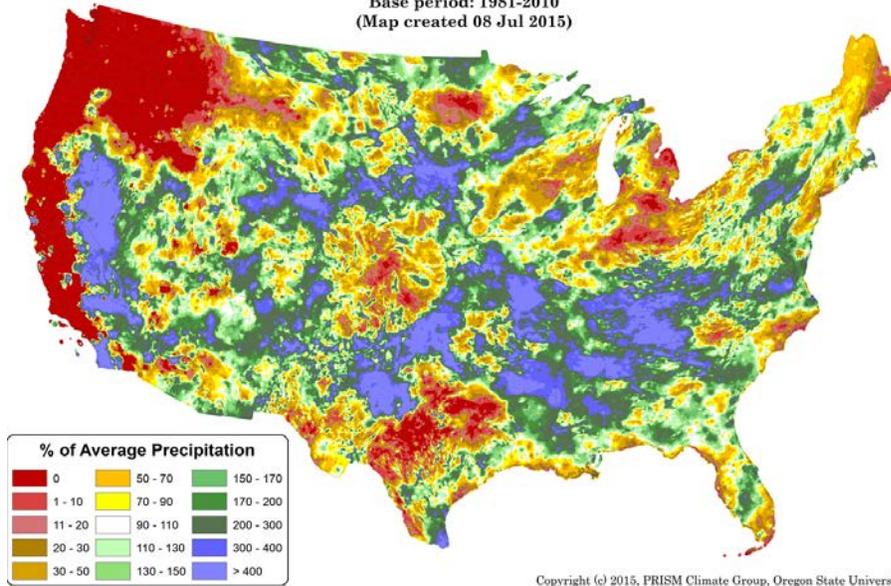
Generated 7/9/2015 at HPRCC using provisional data.

Regional Climate Centers

Weekly Water and Climate Update

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

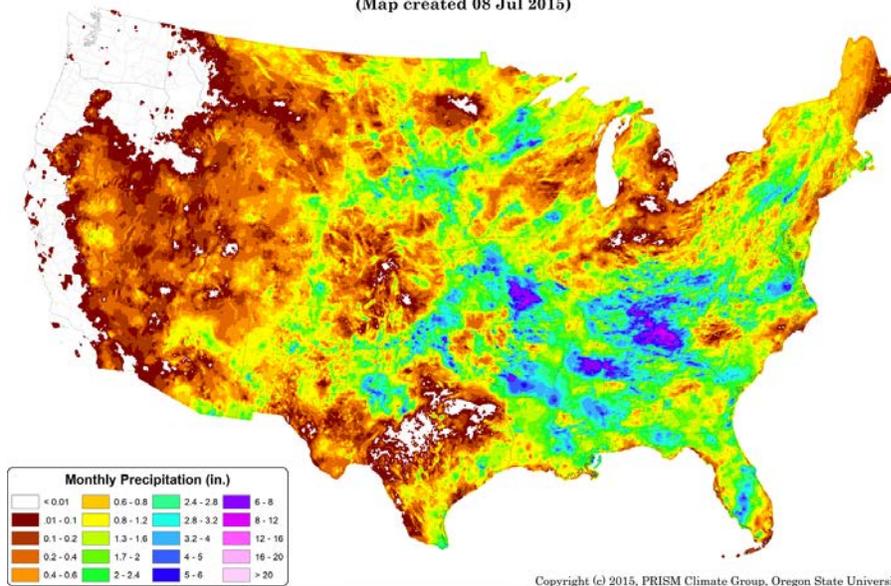
Total Precipitation Anomaly: 01 July 2015 - 07 July 2015
Period ending 7 AM EST 07 Jul 2015
Base period: 1981-2010
(Map created 08 Jul 2015)



For the month of July to date, the national [total precipitation percent of average](#) pattern reveals higher than normal precipitation in the Southwest, Midwest, and Northeast. There was little to no precipitation in parts of the Northwest, Texas, Great Lakes and eastern Maine.

In California, there is a significant contrast between the western half of the state and the Sierra Nevada to the east.

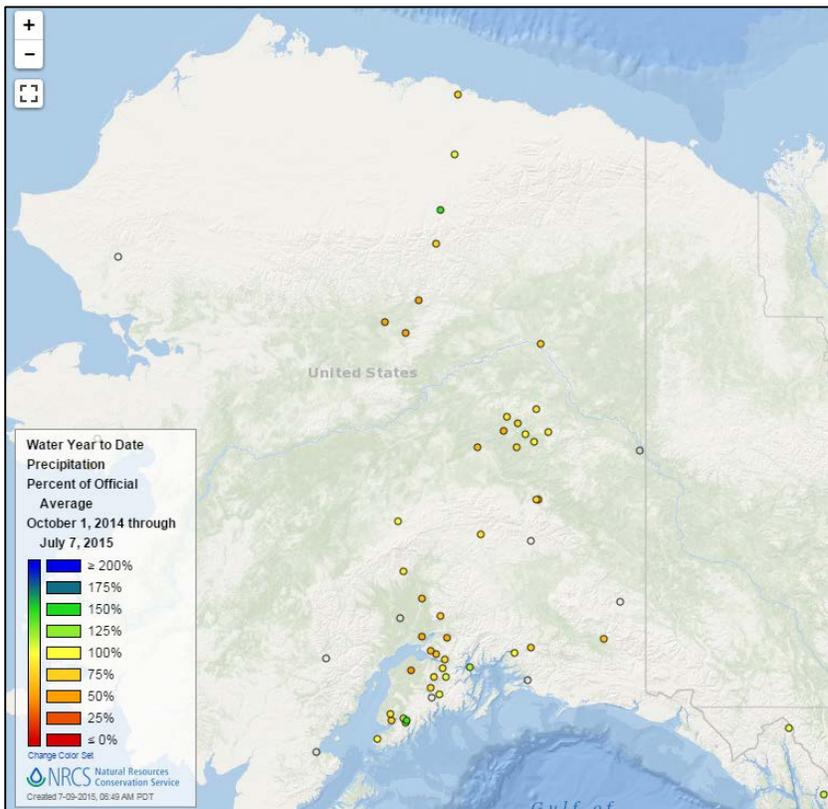
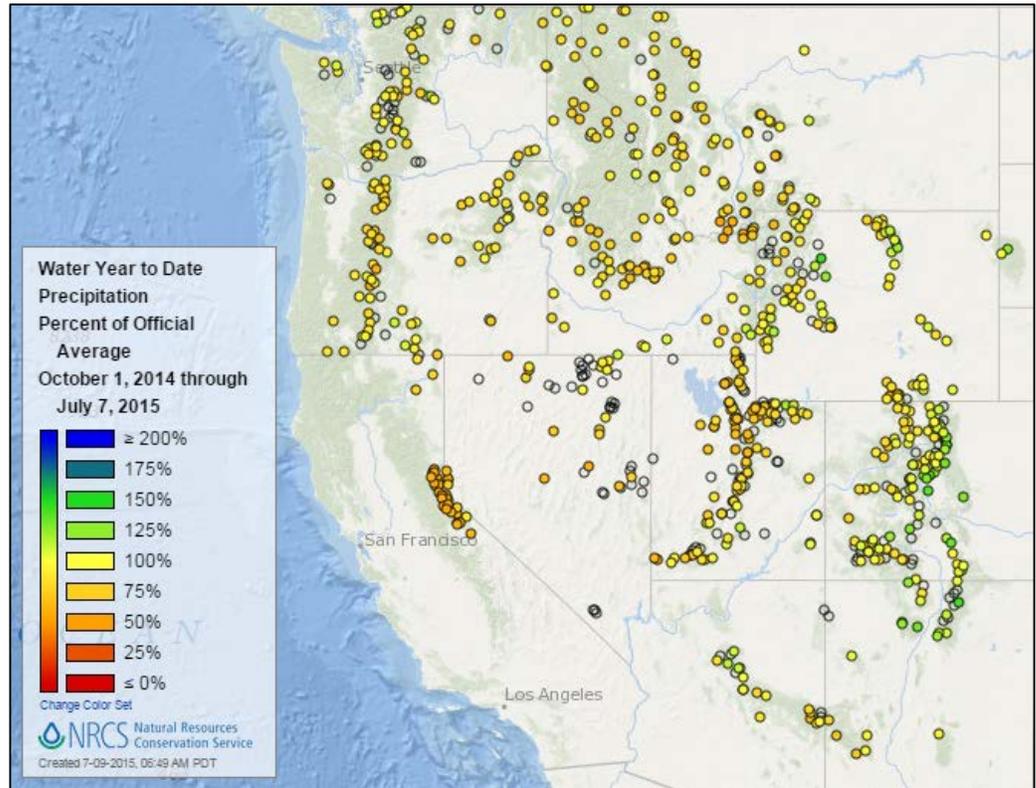
Total Precipitation: 01 July 2015 - 07 July 2015
Period ending 7 AM EST 07 Jul 2015
(Map created 08 Jul 2015)



The [total precipitation](#) map shows large amounts of precipitation fell in some areas of the southeast quadrant of the U.S. since the beginning of the month.

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

For the [2015 Water Year](#) that began on October 1, 2014, precipitation to date has been above normal along the eastern Rockies in Wyoming, Colorado, and northern New Mexico. To the west and north of these areas, precipitation on the whole fades to below to much below average.



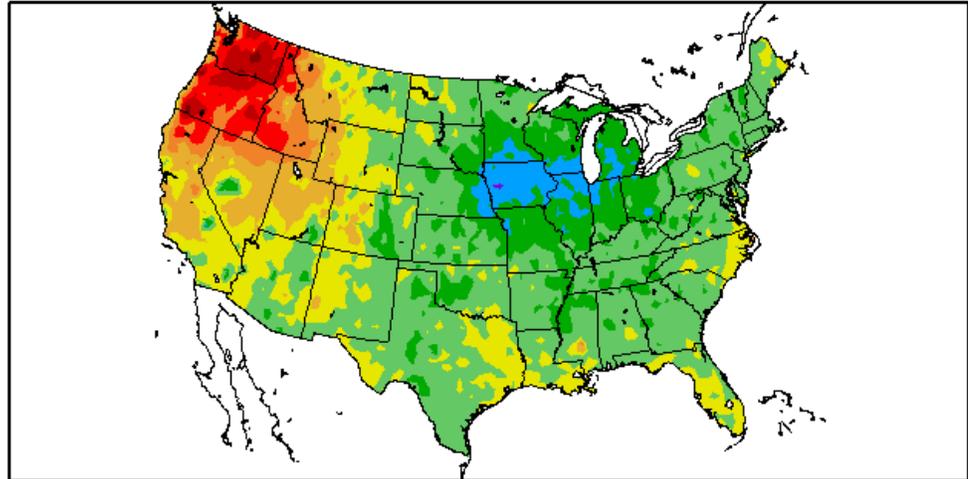
The Alaska [water year-to-date precipitation percent of average](#) map shows a mostly drier than average interior and near to above average conditions along the southern and eastern coasts.

Temperature

Last 7 Days, National Weather Service (NWS) Networks

Departure from Normal Temperature (F) 7/2/2015 – 7/8/2015

The map of the [average temperature anomalies](#) for the past week indicates a hot Pacific Northwest and West with cooler temperatures in the Midwest and Northeast, especially from eastern Nebraska across to western Michigan, where temperatures were much below normal.



Generated 7/9/2015 at HPRCC using provisional data.

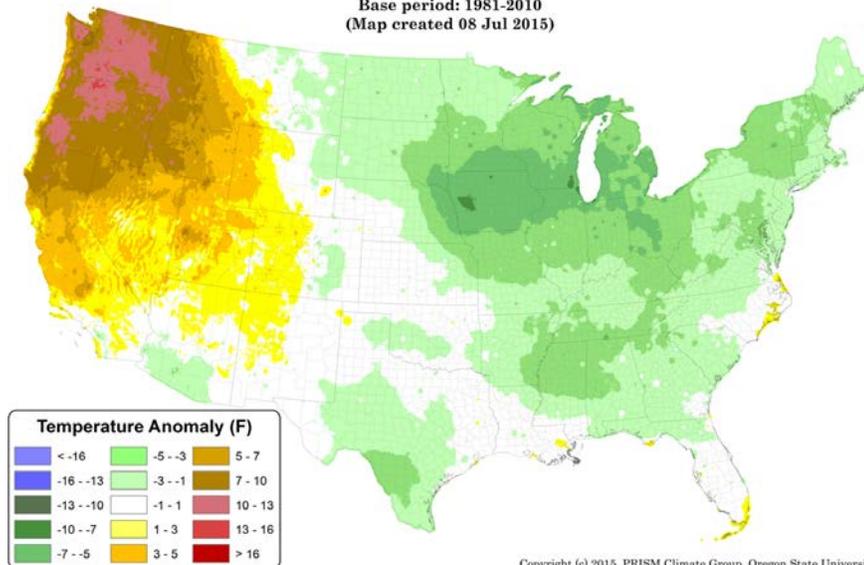
Regional Climate Centers

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

For July 2015, the national [daily mean temperature anomaly](#) map shows 10-13 degrees F above average in the Pacific Northwest. The rest of the West also was above average but to a lesser degree.

Most of the Midwest and Northeast had below normal temperatures.

Daily Mean Temperature Anomaly: 01 July 2015 - 07 July 2015
Period ending 7 AM EST 07 Jul 2015
Base period: 1981-2010
(Map created 08 Jul 2015)

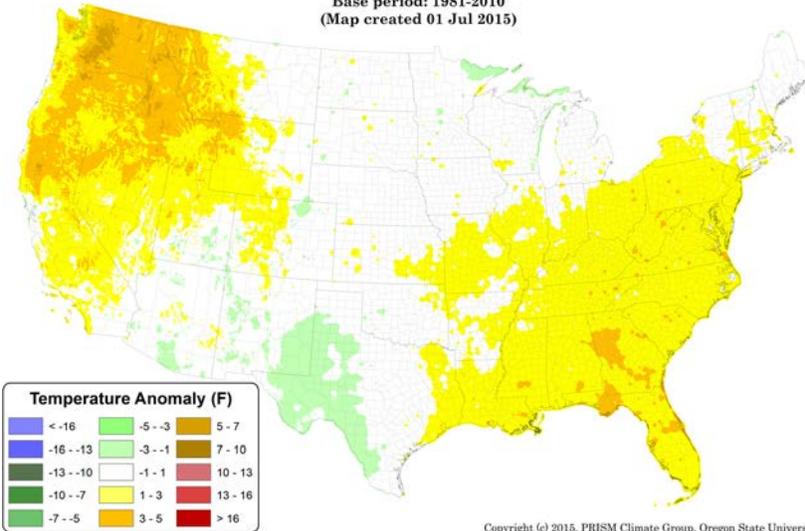


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Weekly Water and Climate Update

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)

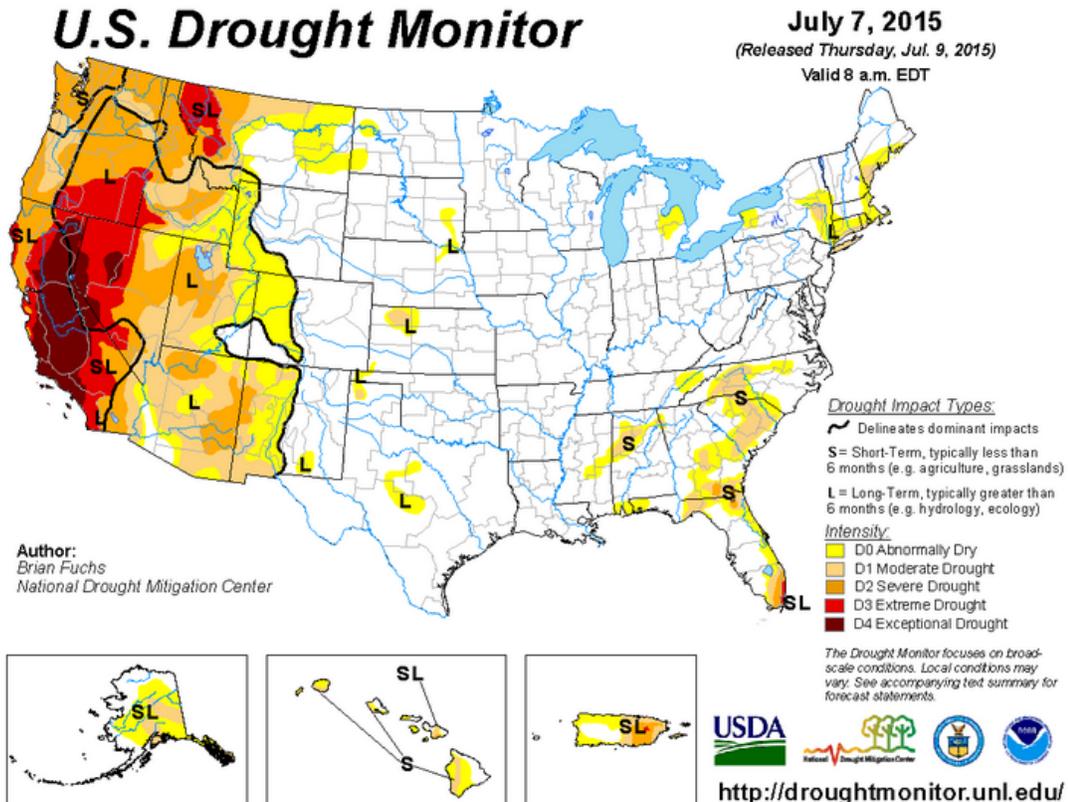


The April through June national [daily mean temperature anomalies](#) for the U.S. show the West and the Southeast had the largest temperature departures above normal. The rest of the country was mostly near average.

Drought

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

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

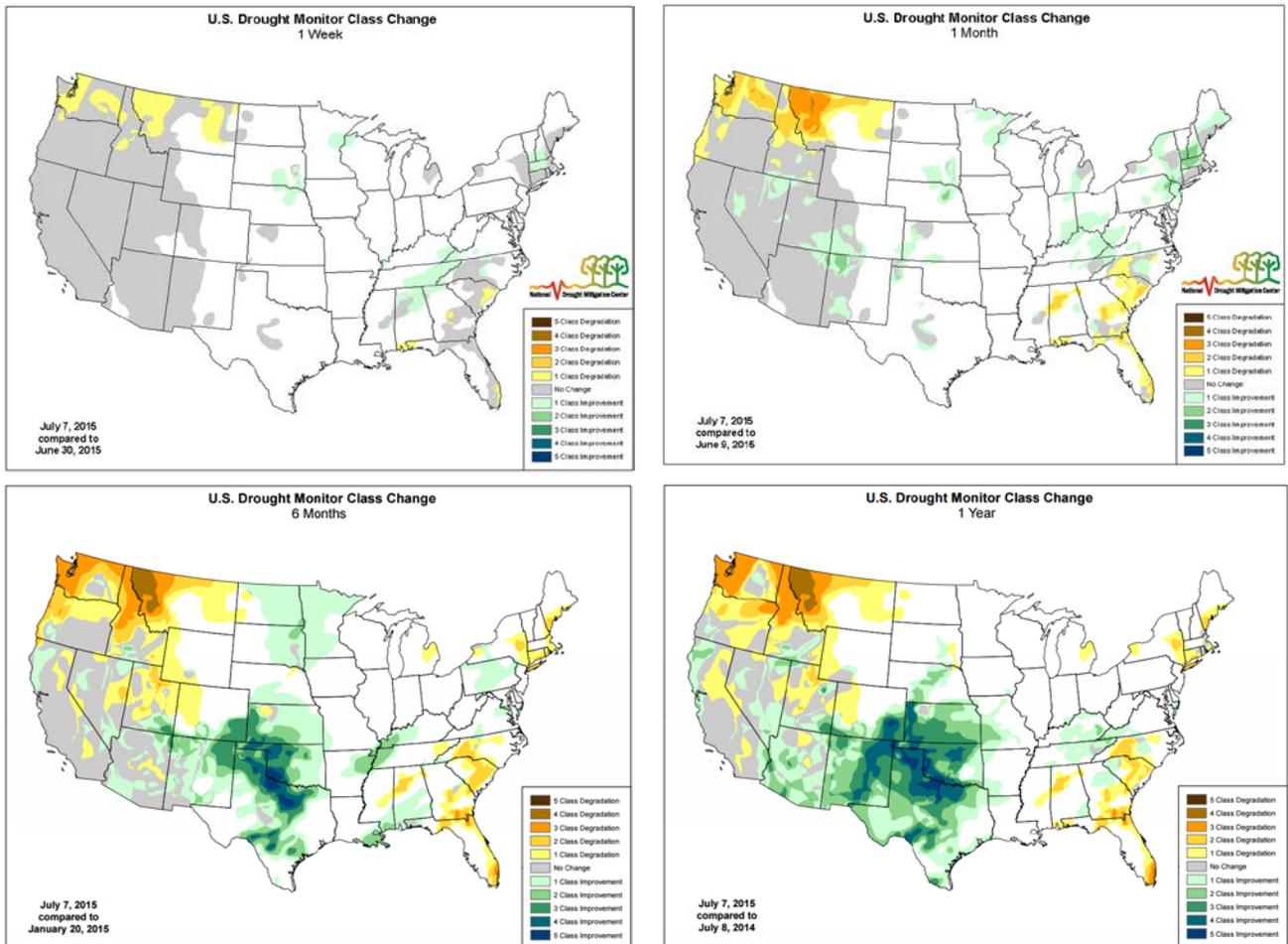


Current National Drought Summary, July 7, 2015

“A strong frontal system passed through the eastern half of the country at the beginning of the Drought Monitor period, with another system toward the end. Much of the southern Midwest and into the Tennessee Valley received significant rains from these two events, bringing with them drought relief. The Pacific Northwest remained very warm and dry all the way into areas of western Montana. Scattered convective precipitation was observed over much of the southeast and central plains and into New England.” Author: Brian Fuchs, National Drought Mitigation Center.

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

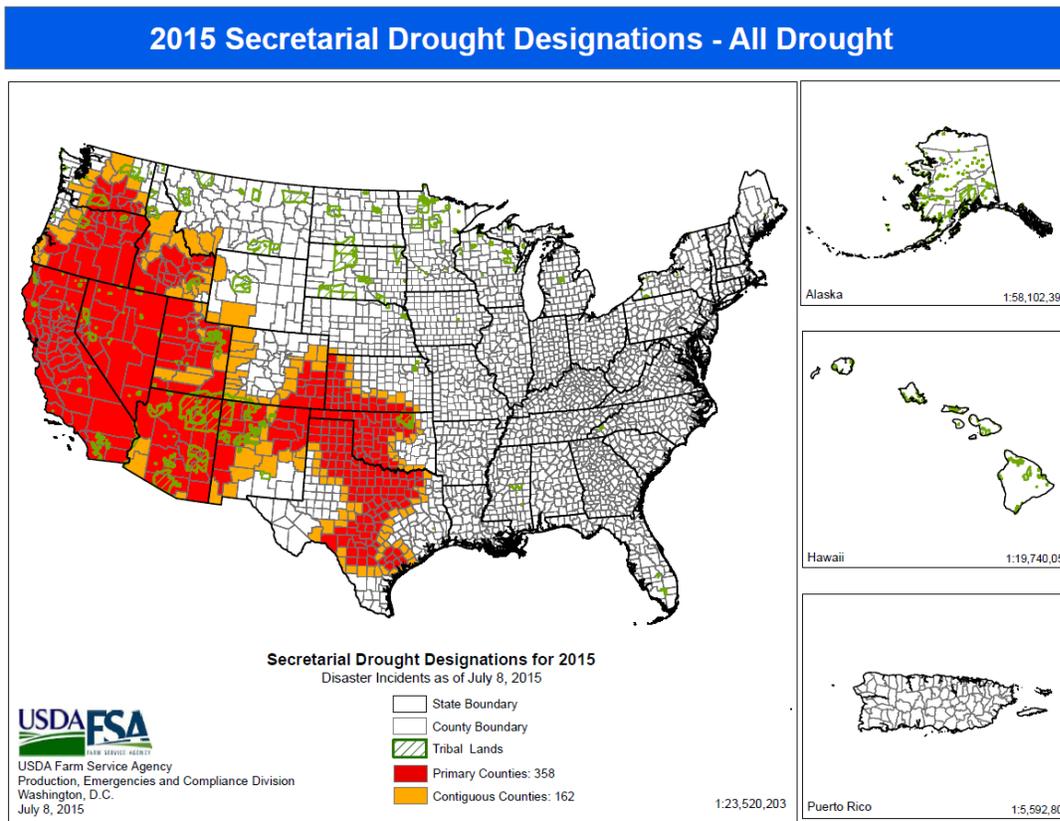
Changes in Drought Monitor Categories Over Time



Intensifying drought is particularly notable in the Northwest and to a lesser extent in the Northeast and parts of the Southeast. Conditions have improved significantly in the southern Great Plains and the Southwest.

2015 USDA Drought Designations

[USDA Disaster and Drought Information](#)

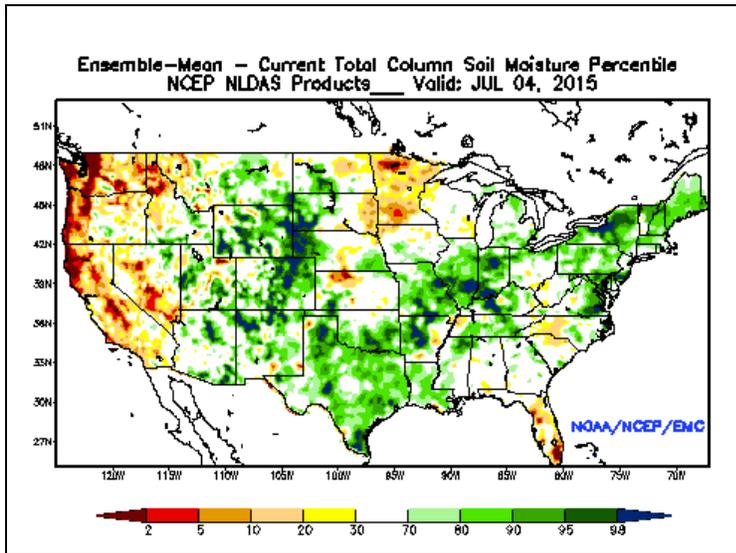


Highlighted Drought Resources

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

Other Climatic and Water Supply Indicators

Soil Moisture

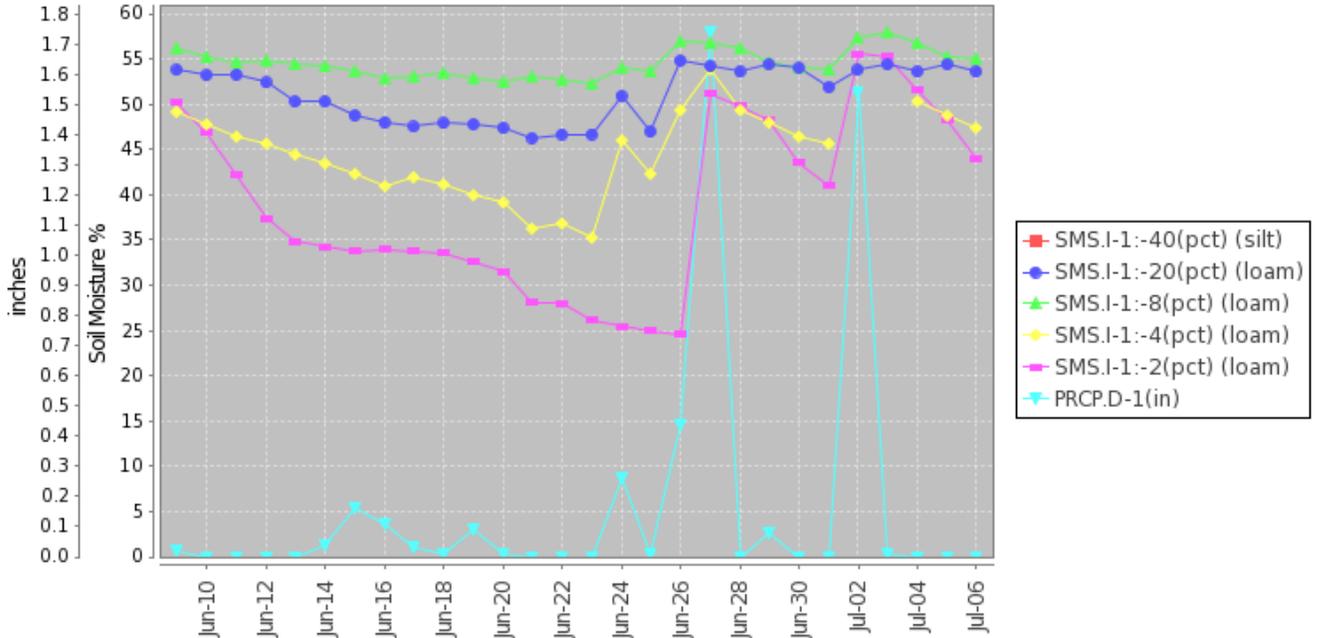


The modeled [soil moisture percentiles](#) as of July 4, 2015 show significant dryness in the far West, Minnesota, and Florida. Areas of above normal soil moisture include much of the Rocky Mountains, the southern Great Plains, the Midwest, and the Northeast.

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

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

Station (2061) MONTH=2015-06-09 (Daily) NRCS National Water and Climate Center - Provisional Data - subject to revision
Thu Jul 09 07:16:20 PDT 2015



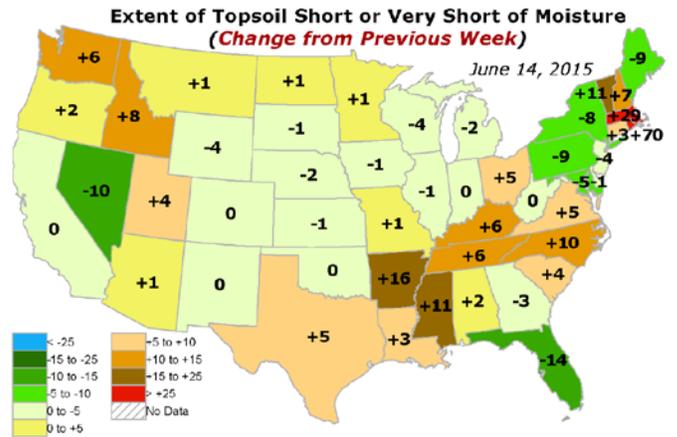
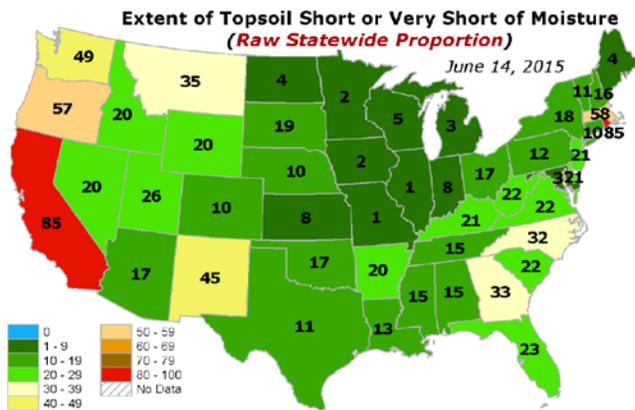
This example NRCS graph shows soil moisture (2, 4, 8, and 20 inch depth) and precipitation for the last month at the [Powell Gardens SCAN site](#) (station number 2061) in Missouri. The soil moisture response to the two significant precipitation events is very noticeable, especially at the two shallower depths.

Soil Moisture Data Portals

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

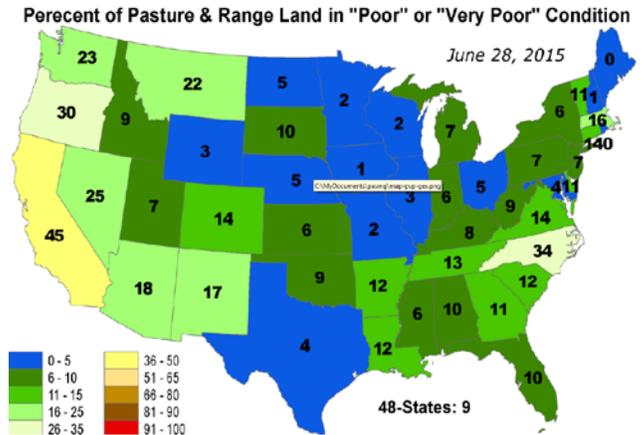
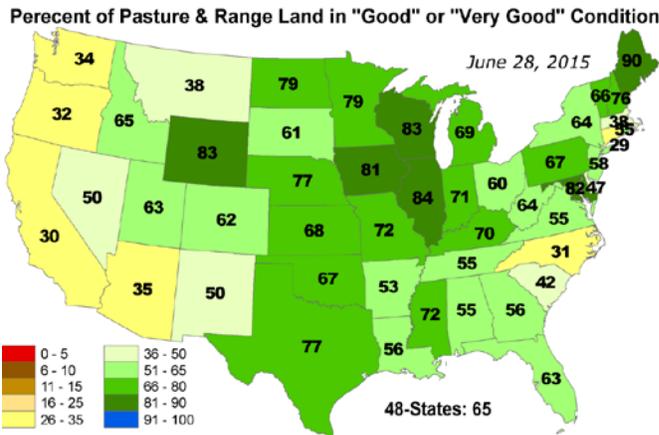
Weekly Water and Climate Update

Topsoil



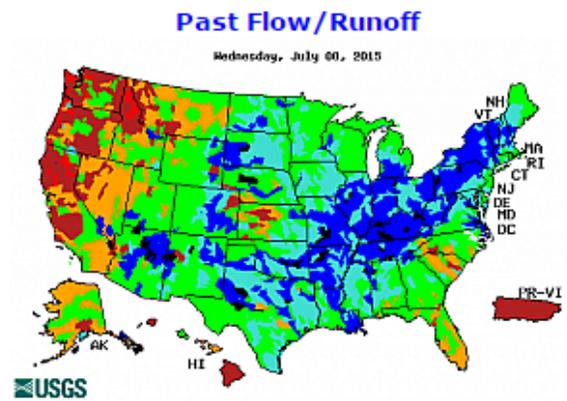
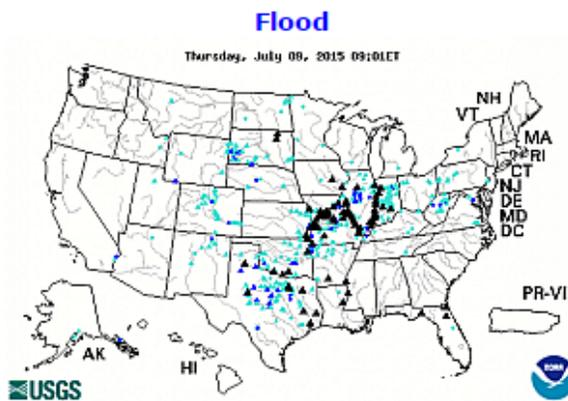
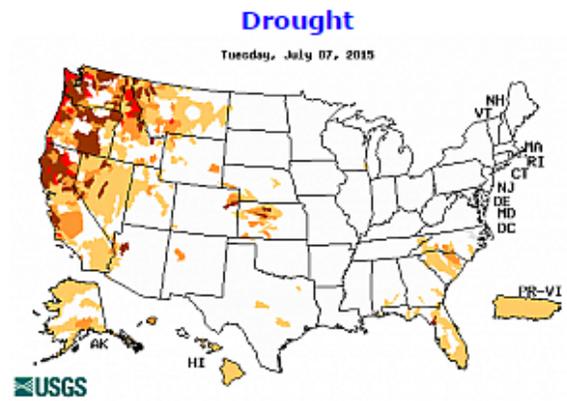
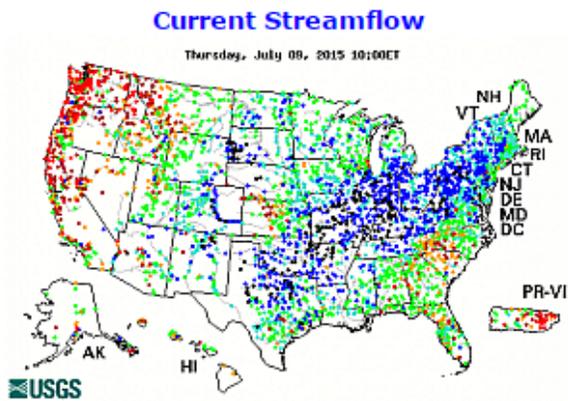
Low [topsoil moisture](#) conditions are especially notable all along the West Coast.

Pasture and Rangeland



[Pasture and rangeland](#) conditions are generally good except on the West Coast and in Arizona.

Streamflow



[Streamflow](#) is currently well below normal in California and the Northwest, 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

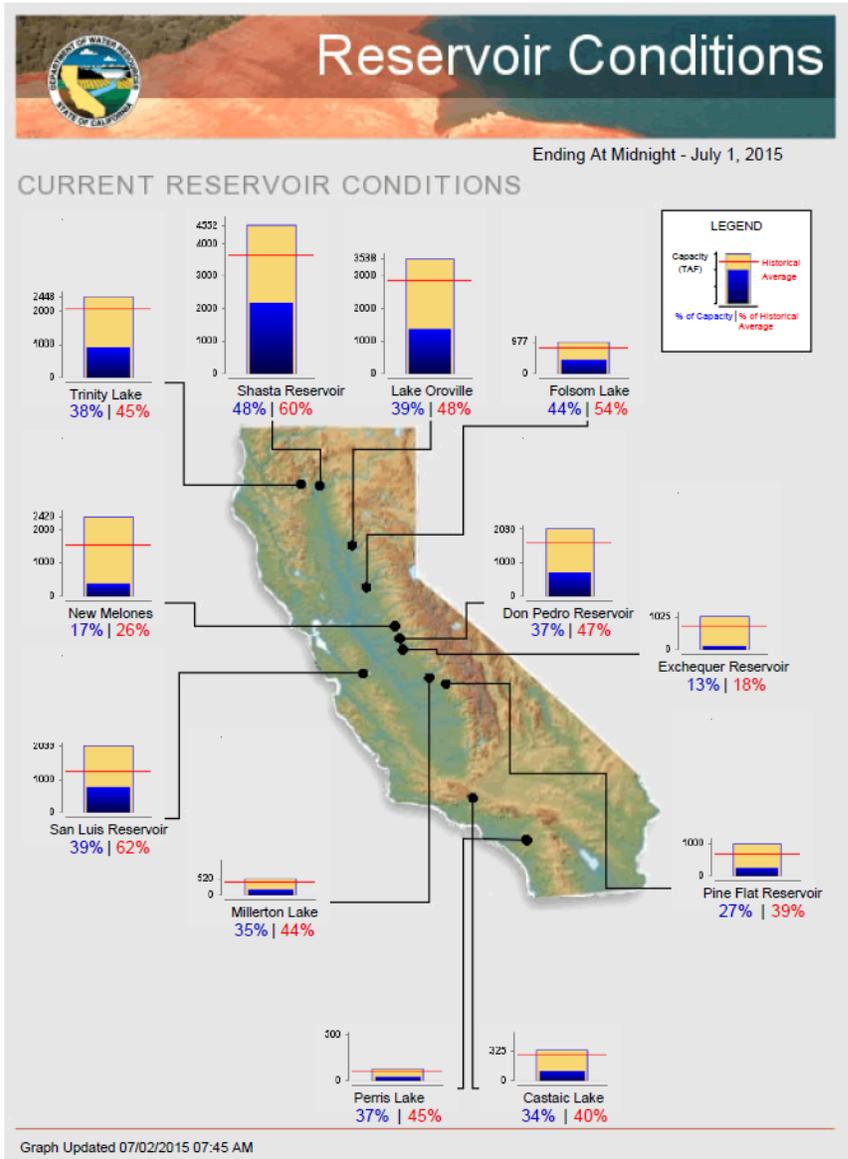
[National Water and Climate Center Reservoir Data](#)

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



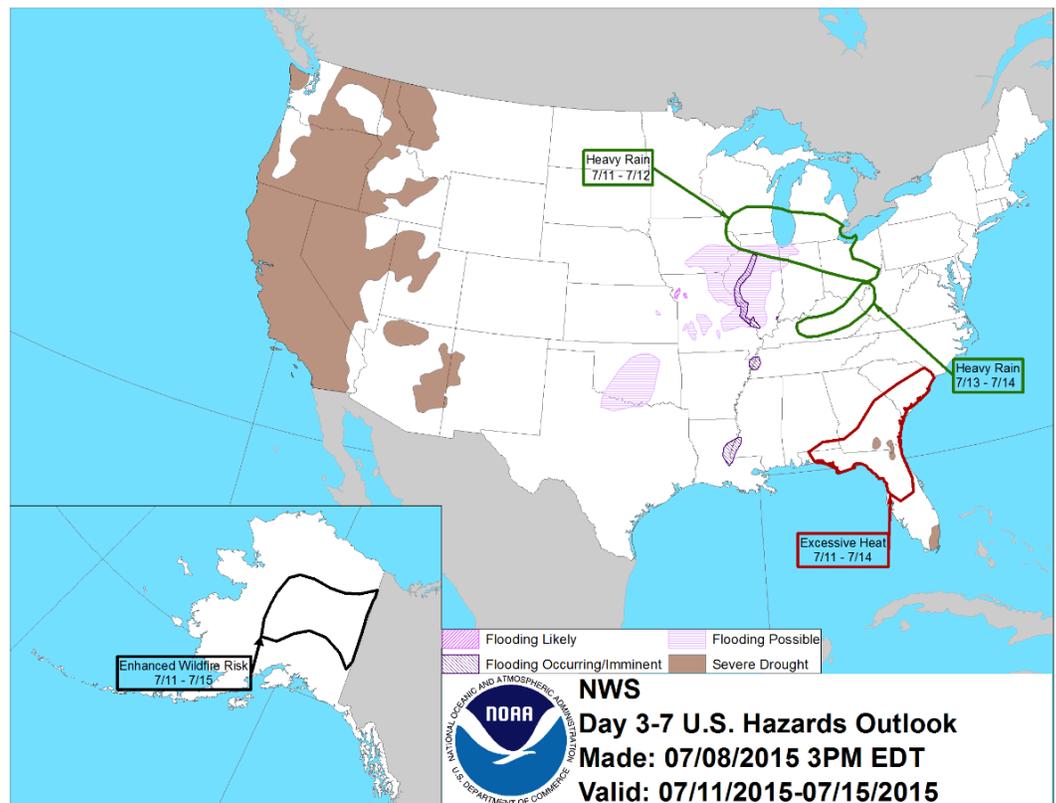
Short- and Long-Range Forecasts

Agricultural Weather Highlights

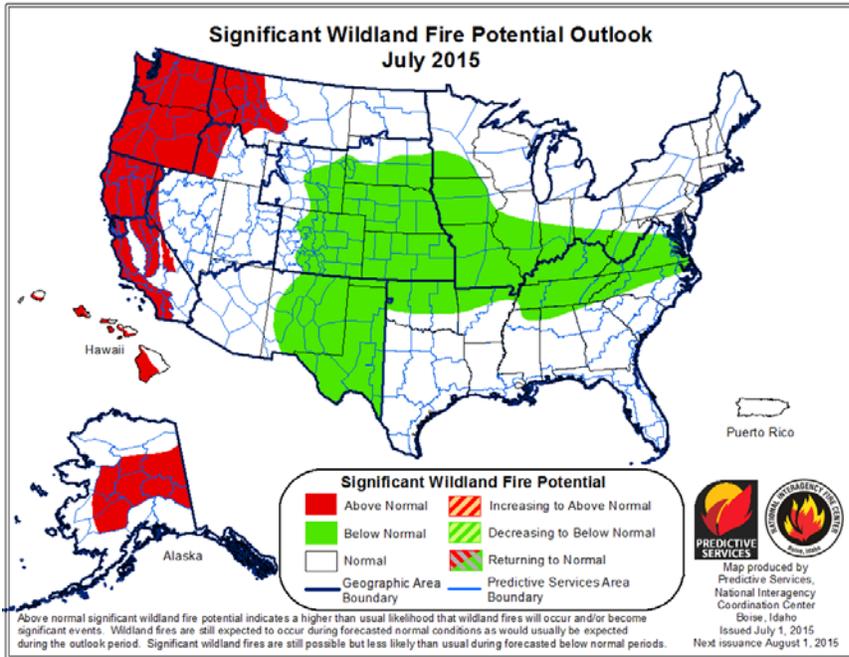
Outlook, July 9, 2015: “During the next several days, cool weather in the West will contrast with gradually building heat in the central and eastern U.S. The long-running Northwestern heat wave will end during the weekend, while temperatures will rise to 100°F or higher as far north as South Dakota. In the western U.S., shower activity will lift northward, bringing much-needed rainfall to parts of the Northwest. Five-day rainfall totals could reach 1 to 2 inches or more in parts of the Rockies and northern Intermountain West. Farther east, little or no rain will fall during the next 5 days across the northern Plains and the western and central Gulf Coast regions. In contrast, rainfall could reach 1 to 3 inches from the middle and upper Mississippi Valley into the northern Mid-Atlantic States. The NWS 6- to 10-day outlook for July 14 – 18 calls for the likelihood of near- to above-normal temperatures and rainfall across most of the U.S. Cooler-than-normal conditions will be limited to the Four Corners region and the Northeast, while drier-than-normal weather will be confined to the Pacific Northwest and the south-central U.S.” Author: Brad Rippey, USDA Agricultural Meteorologist.

National Weather Hazards

The outlook for [weather hazards](#) over the next several days includes heavy rain in the Midwest and excessive heat in the Southeast. Other hazards are flooding potential in the Midwest, enhanced wildfire risk in Alaska, and persistent drought in the far West.

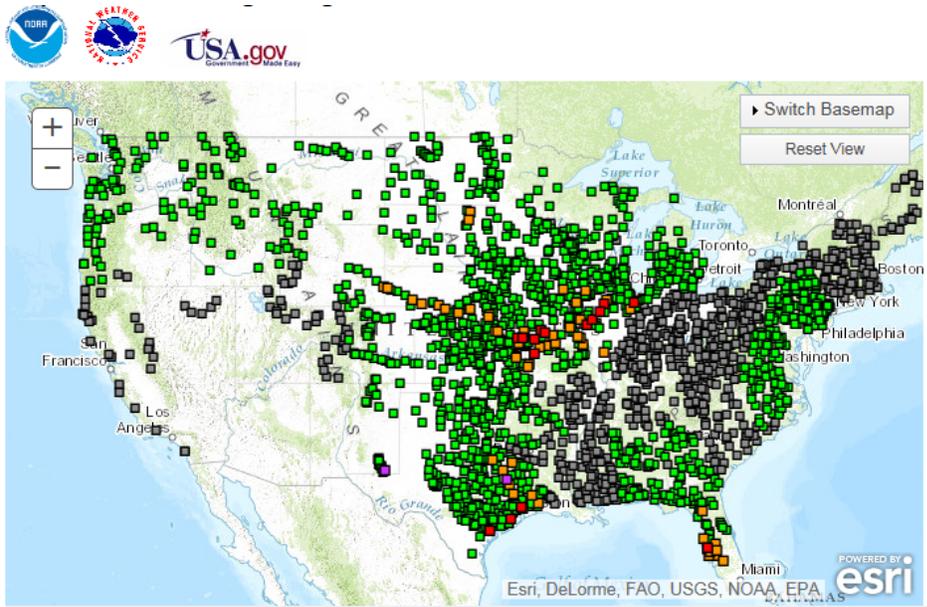


Fire Potential Outlook: July 2015



In July, significantly 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](#) for the central part of the country.

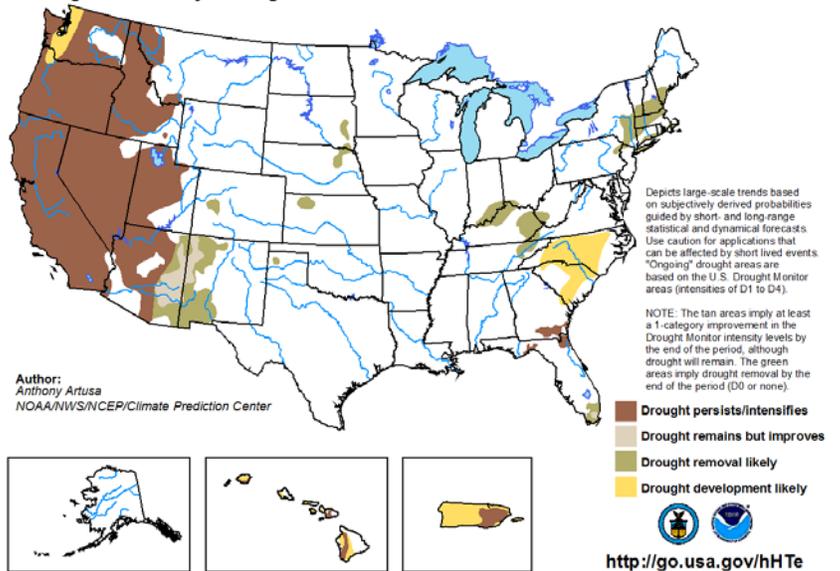
Weekly Water and Climate Update

Seasonal Drought Outlook

[Drought](#) will persist over the far West.

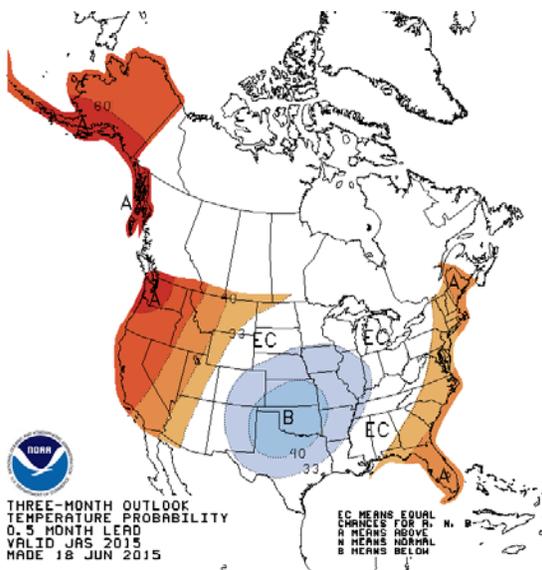
U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period

Valid for June 18 - September 30, 2015
Released June 18, 2015

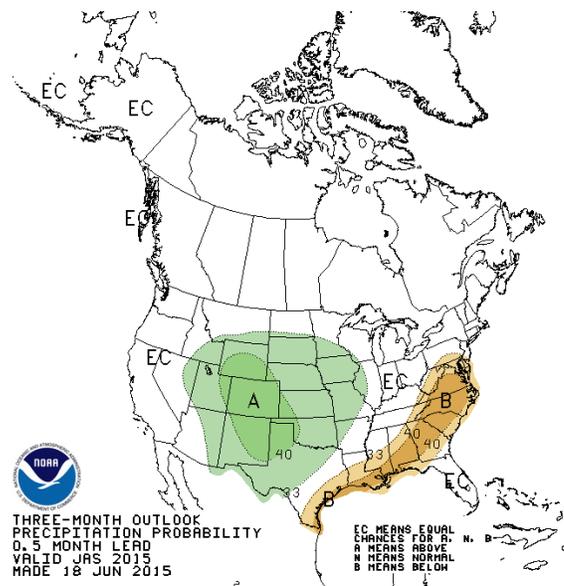


Climate Prediction Center 3-Month Outlook

Temperature



Precipitation



During [July-September](#), 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. Enhanced probability for above normal precipitation is predicted for much of the central part of the country with below normal precipitation for the Southeast.

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](#).