



Weekly Water and Climate Update

July 2, 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, snowpack, temperature, and drought conditions in the U.S.

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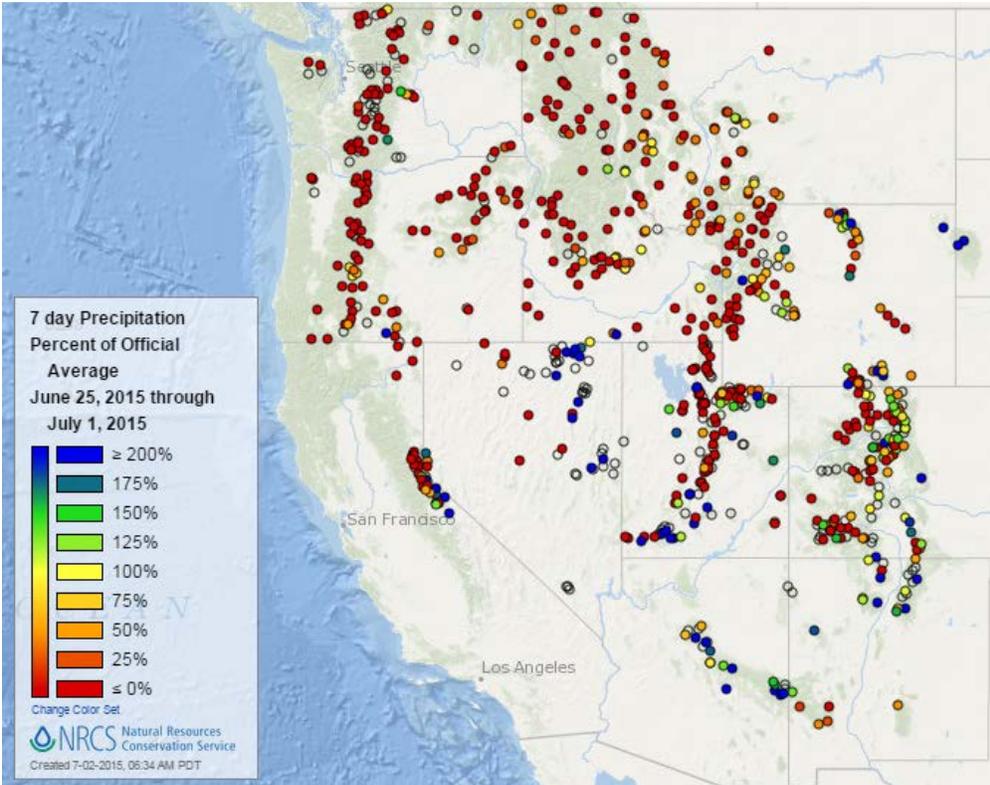
Weekly Highlight: Record-breaking June temperatures; fires break out in Pacific Northwest



Since last week, 14 new [large fires](#) have started in Oregon and Washington. The heat in June broke records in the Pacific Northwest. Precipitation has been at a record low as well. In Oregon, January-June precipitation is the lowest ever measured at many SNOTEL sites, with 35 years of record, such as at Mt. Hood. Lower elevation weather sites, measured over 70 years, also are reporting record low precipitation since the beginning of the year. No widespread rain is in the near-term forecast for this region.

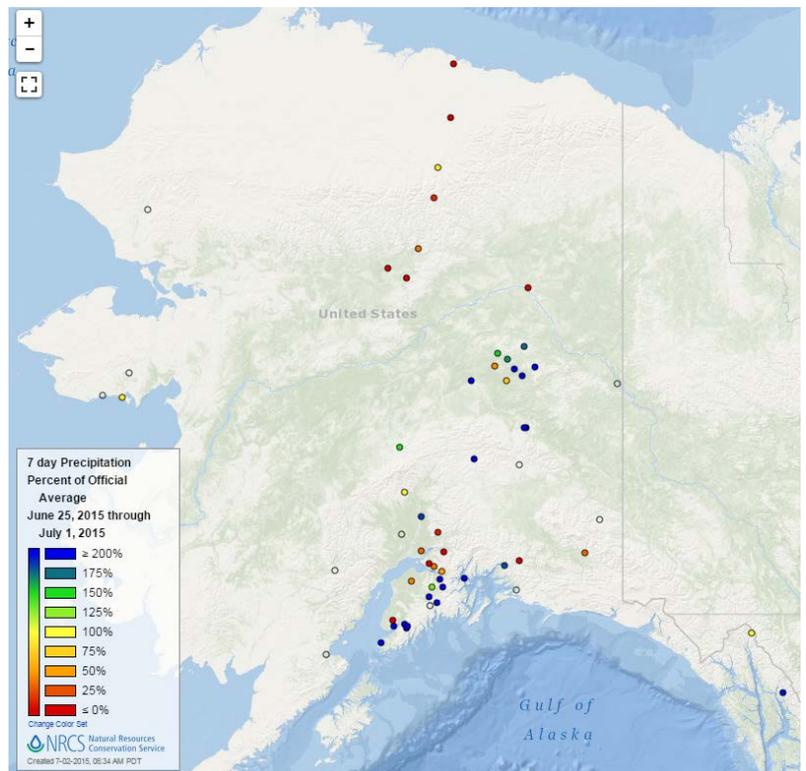
Precipitation

Last 7 Days, Western Mountain Sites (NRCS SNOTEL)

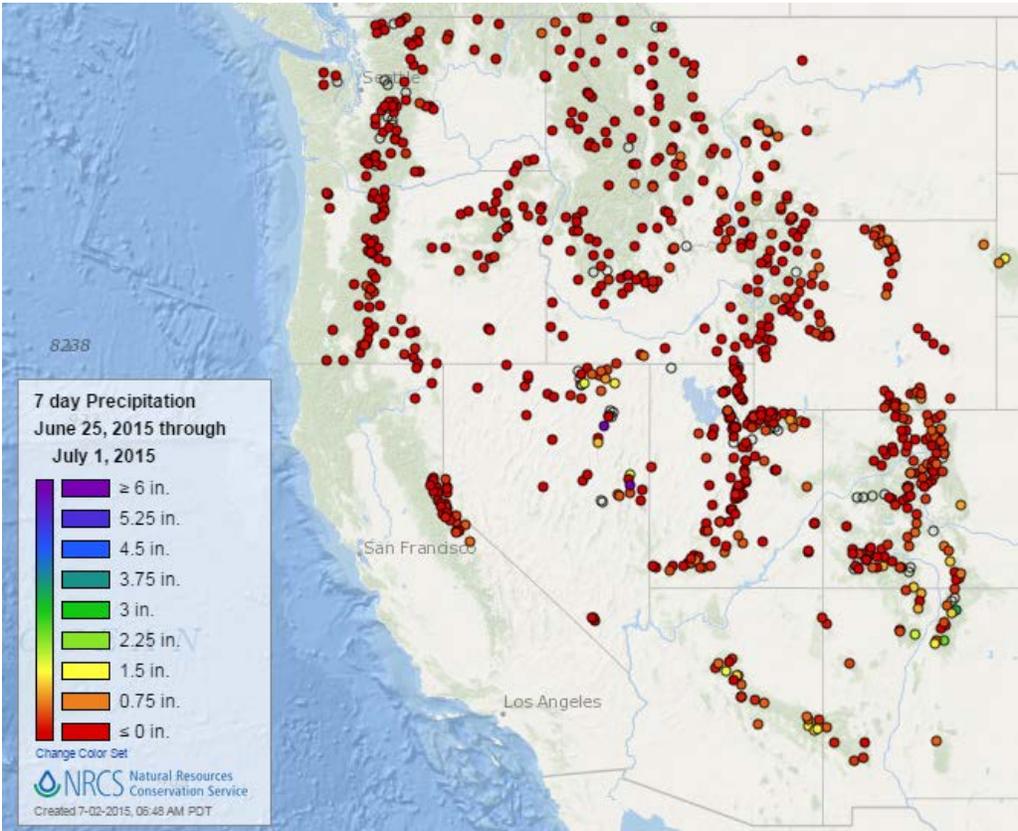


In the West, the [precipitation percent of average](#) map highlights the rain and, often, thunderstorms that happened in the past week in Nevada, Utah, Arizona, New Mexico, and along the eastern edge of the Rockies in Colorado and Wyoming.

The Alaska [precipitation percent of average](#) map indicates above average precipitation occurred at many points south of the Arctic Circle.

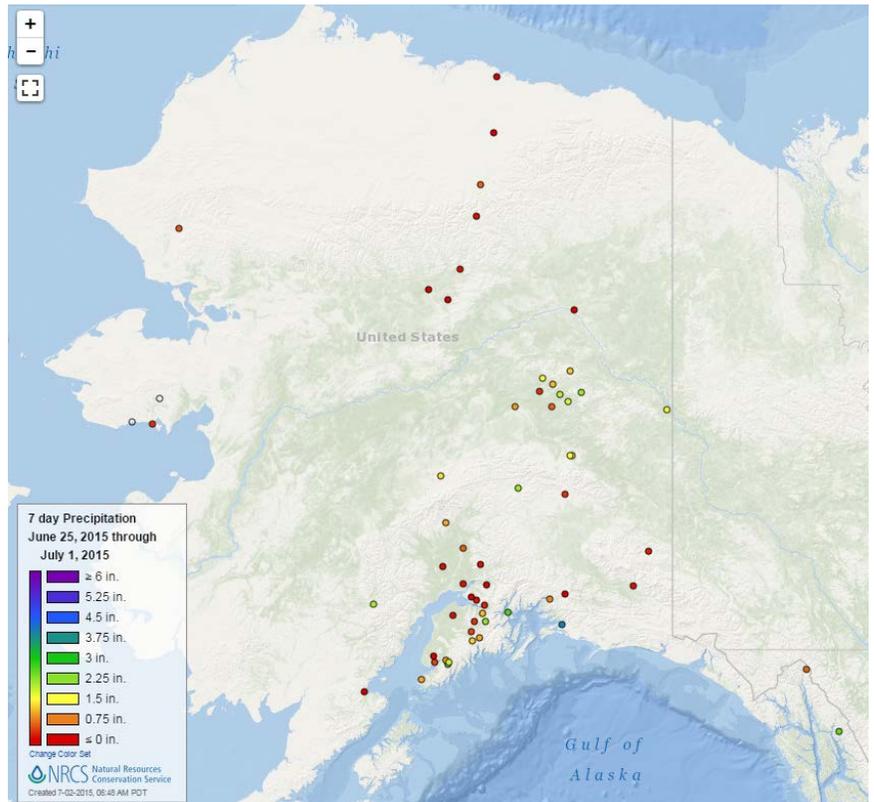


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For the western U.S., the [total precipitation](#) map shows that a number of sites in the Southwest received over an inch of rain this past week.

The Alaska [total precipitation](#) map for the last seven days indicates that more than an inch of precipitation fell in numerous areas.

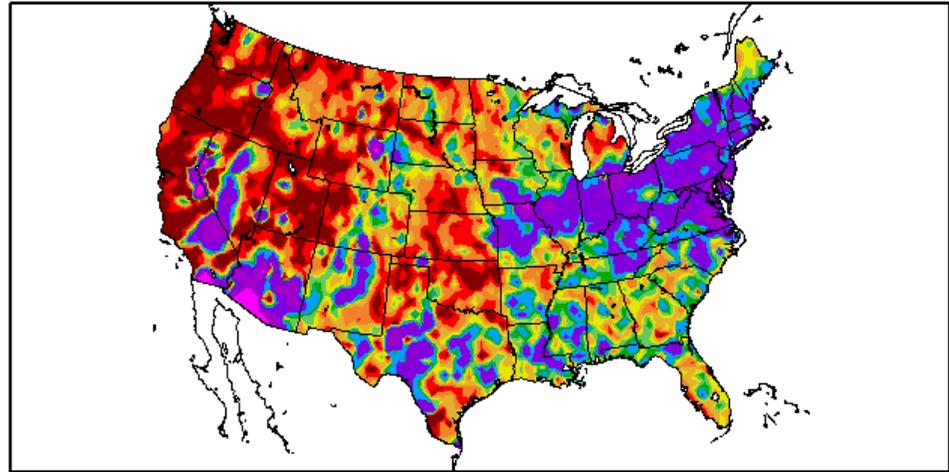


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Last 7 Days, National Weather Service (NWS) Networks

Percent of Normal Precipitation (%)
6/25/2015 – 7/1/2015

This [percent of normal precipitation](#) map for the nation highlights the heavy rain that has continued throughout the Ohio valley and the Northeast.

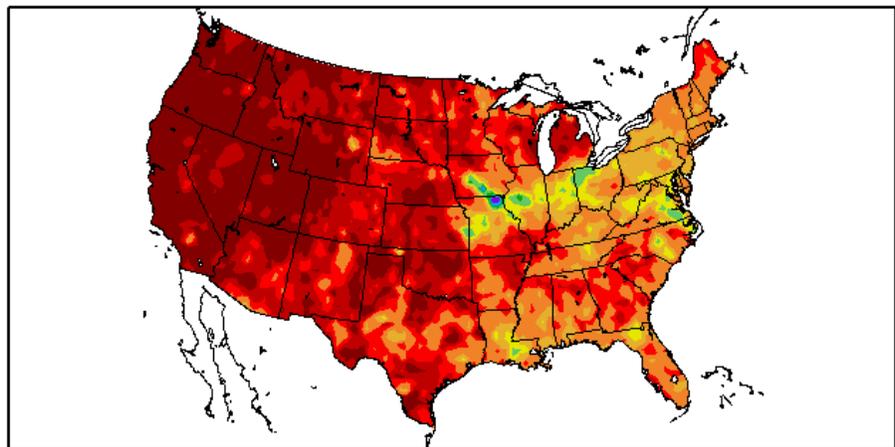


Generated 7/2/2015 at HPRCC using provisional data.

Regional Climate Centers

Precipitation (in)
6/25/2015 – 7/1/2015

The [7-day total precipitation](#) map for the U.S. shows the actual amount of precipitation in inches. Just as in the previous week, areas in the central Midwest have again received more than four inches of precipitation this past week.



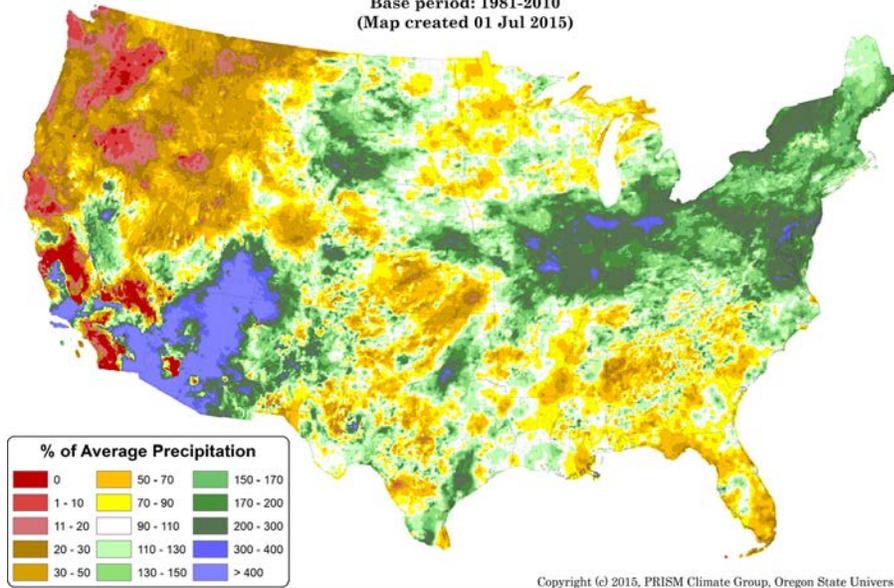
Generated 7/2/2015 at HPRCC using provisional data.

Regional Climate Centers

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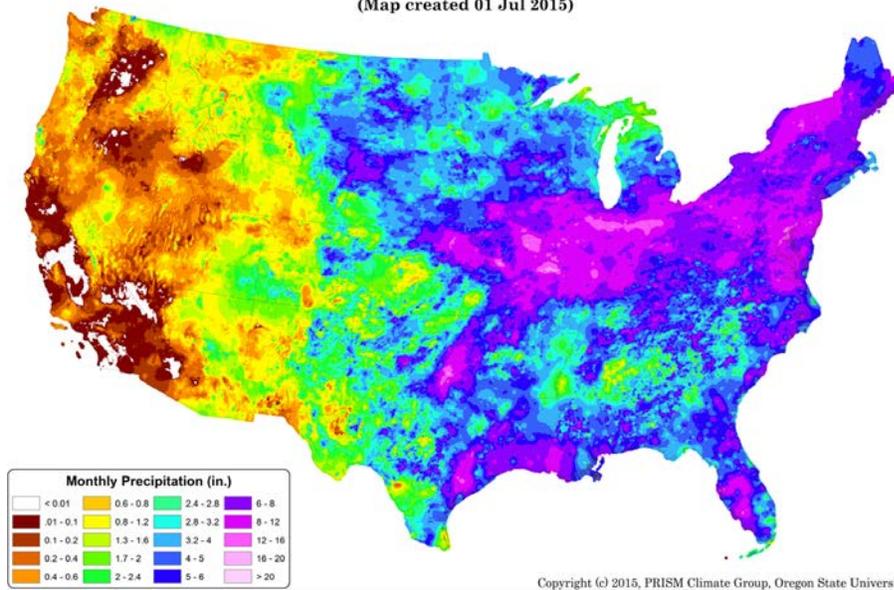
Month-to-Date, PRISM Preliminary, All available data including SNOTEL and NWS

Total Precipitation Anomaly: June 2015
Period ending 30 Jun 2015
Base period: 1981-2010
(Map created 01 Jul 2015)



For the month of June, 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.

Total Precipitation: June 2015
Period ending 30 Jun 2015
(Map created 01 Jul 2015)

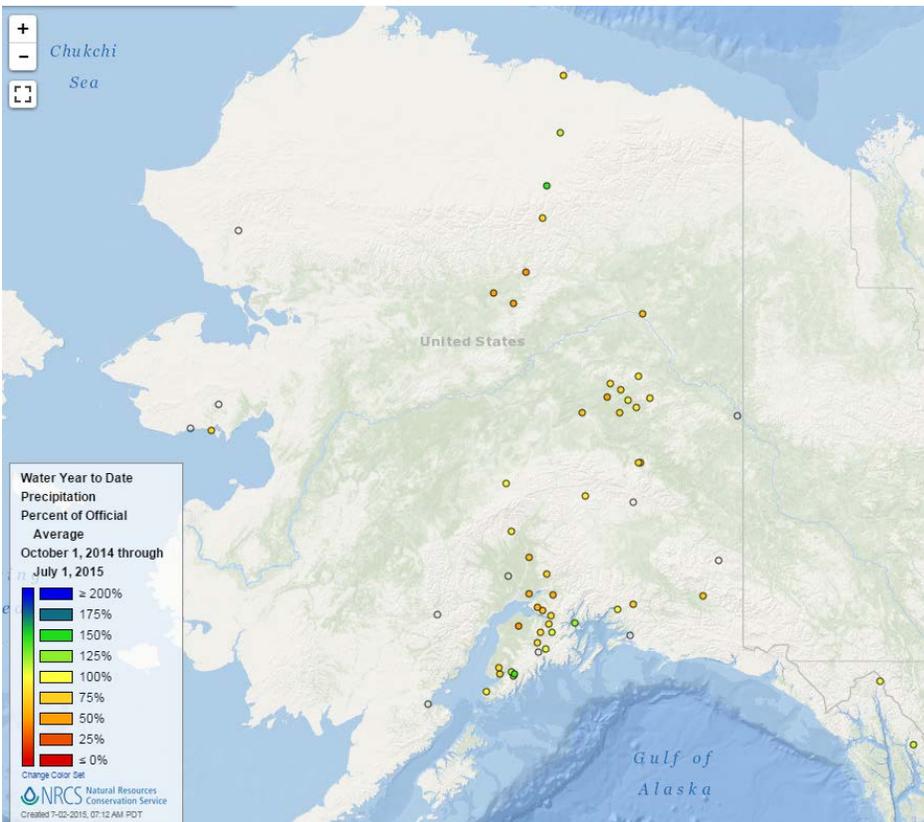
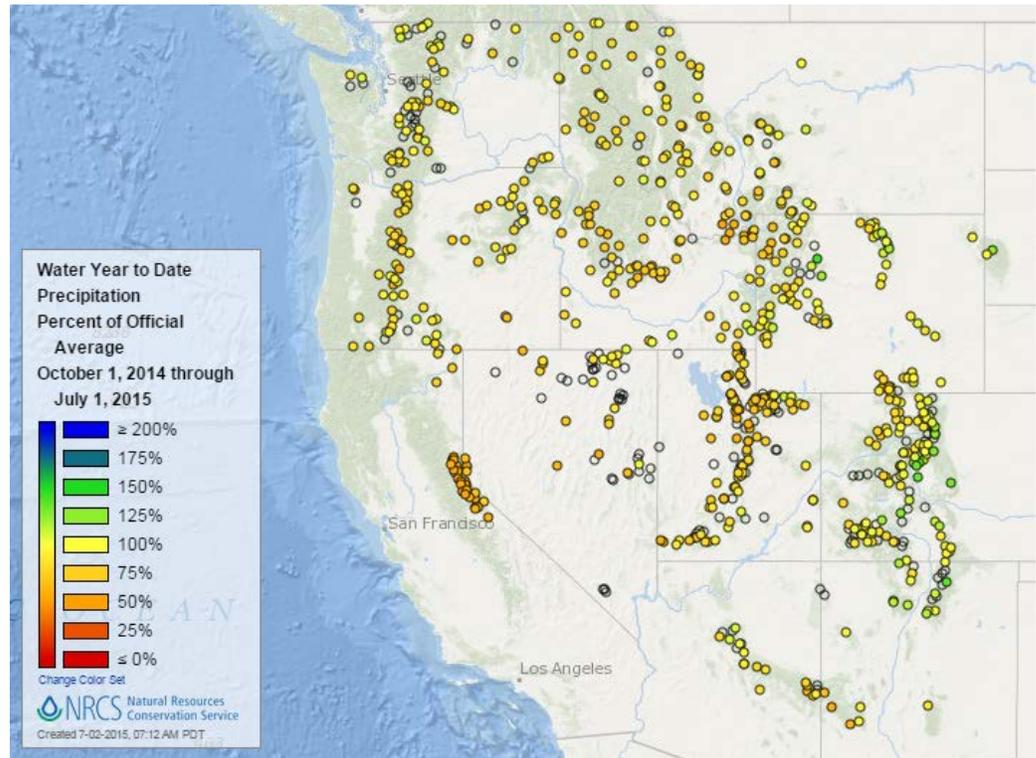


The [total precipitation](#) map shows a marked increase in amount of precipitation from west to east across the continent in June. The highest precipitation occurred in the central Midwest, southern Texas, and the Northeast.

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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.



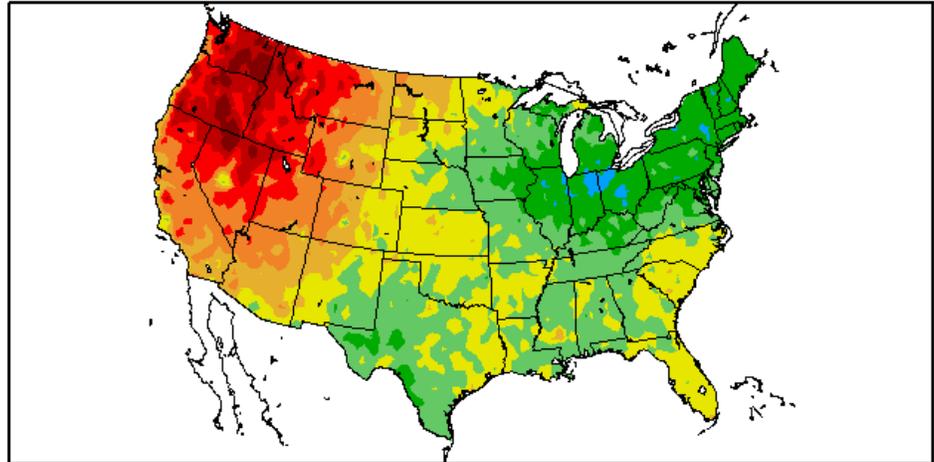
The Alaska [water year-to-date precipitation percent of average](#) map shows a mostly drier than average interior and near to above average conditions along the southern and eastern coasts.

Temperature

Last 7 Days, National Weather Service (NWS) Networks

Departure from Normal Temperature (F)
6/25/2015 – 7/1/2015

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.



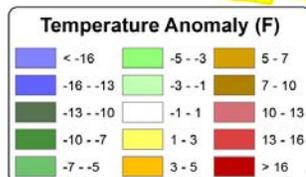
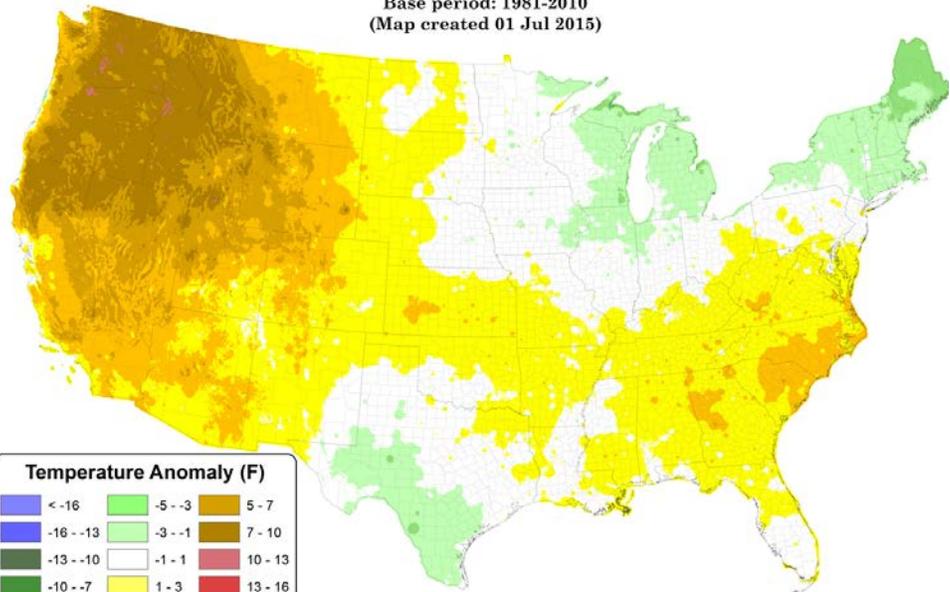
Generated 7/2/2015 at HPRCC using provisional data.

Regional Climate Centers

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

For June 2015, the national [daily mean temperature anomaly](#) map shows 7-10 degrees F above average in the Pacific Northwest. The rest of the West also was above average but to a lesser degree.

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

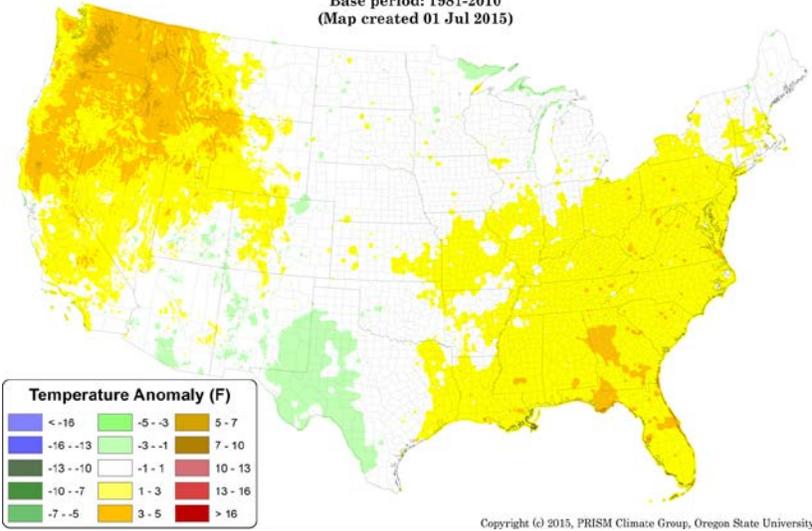


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Last 3 Months, PRISM Preliminary

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)

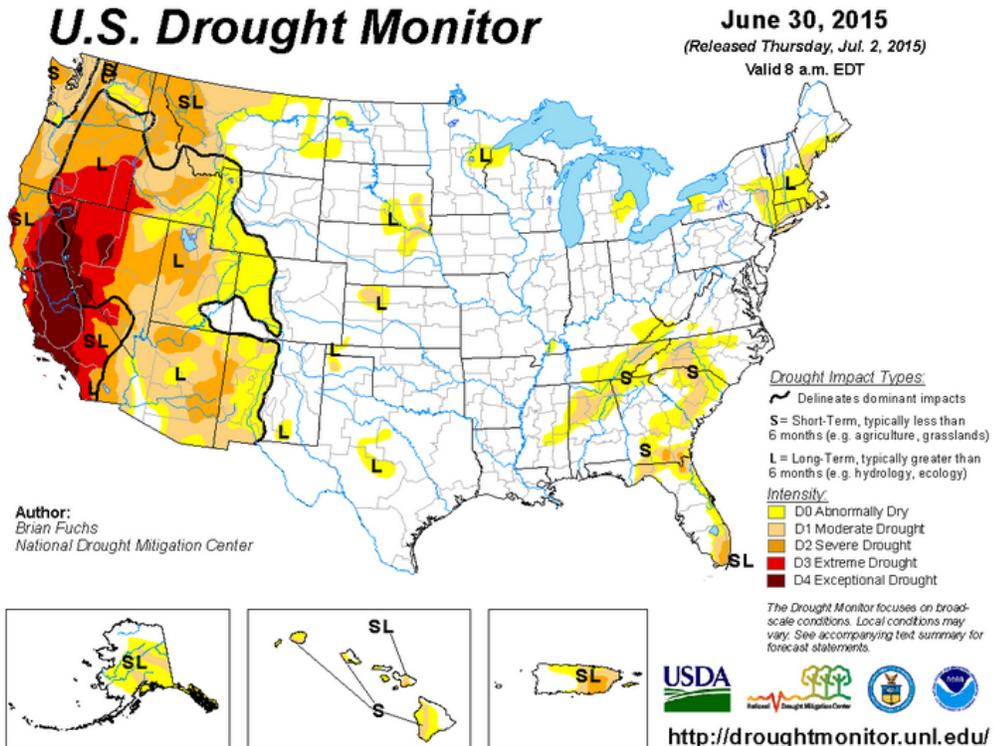


The April through June national [daily mean temperature anomalies](#) for the U.S. show the West and the Southeast had the largest temperature departures above normal. The rest of the country was mostly near average.

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.



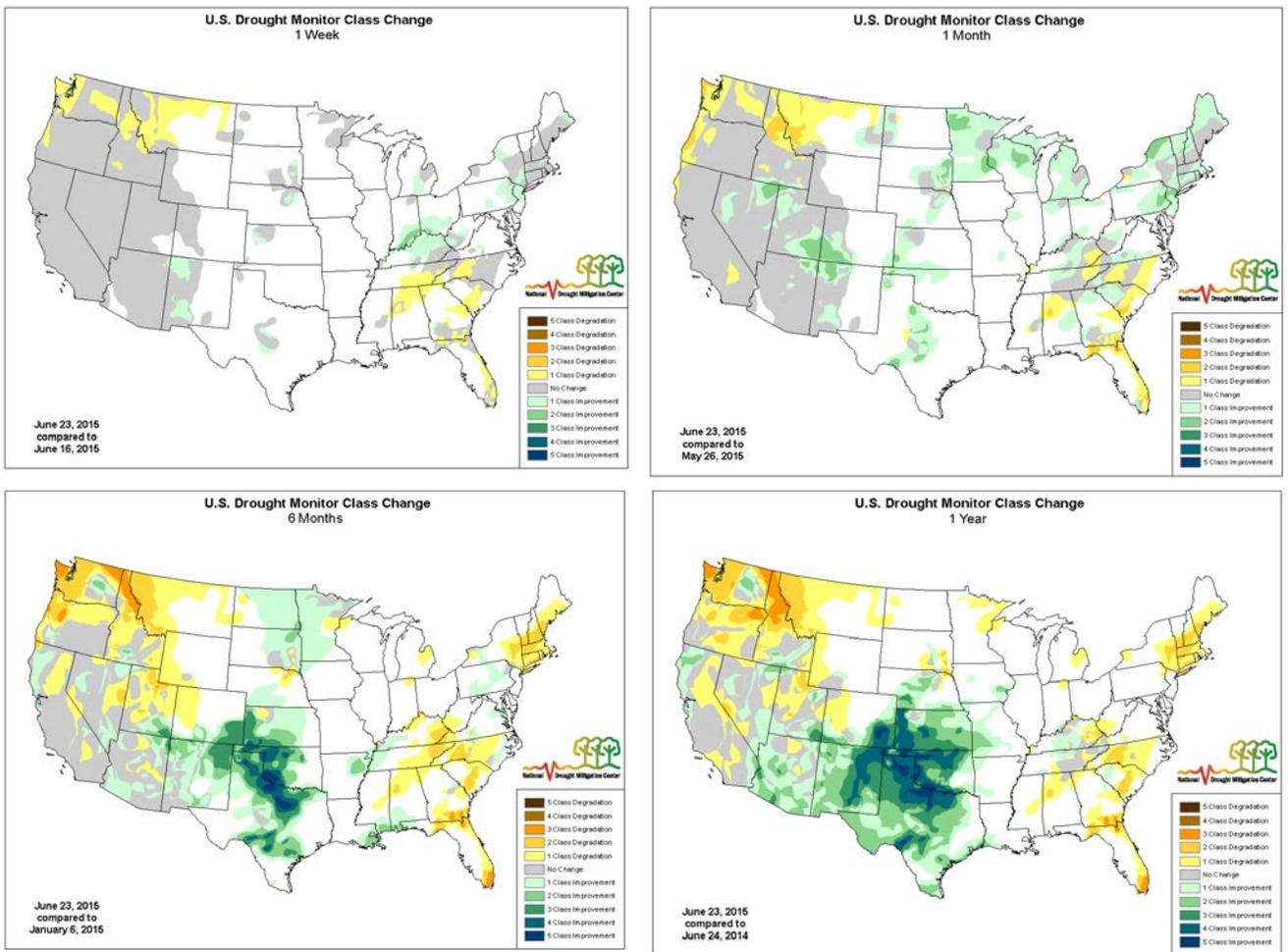
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Current National Drought Summary, June 30, 2015

“A strong ridge over the west and a deep trough over the east dominated the weather this past week. Record high temperatures were recorded over much of the west, with many locations reaching temperatures in the 110 degree range during the week. The heat along with very dry conditions over the last 30 days has elevated the fire risk over much of the west. From the Midwest into New England, several storms tracked through the region, bringing rain to much of the area. Some areas of the Midwest recorded more than 5 inches of rain in the last week. Along with the rain, cooler than normal temperatures prevailed. Spotty convective precipitation was common in the southeast, where temperatures were above normal this week. Rain in Texas helped to keep this area cooler than normal for the week. Much of the central plains was dry and warmer than normal into the Dakotas.” 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

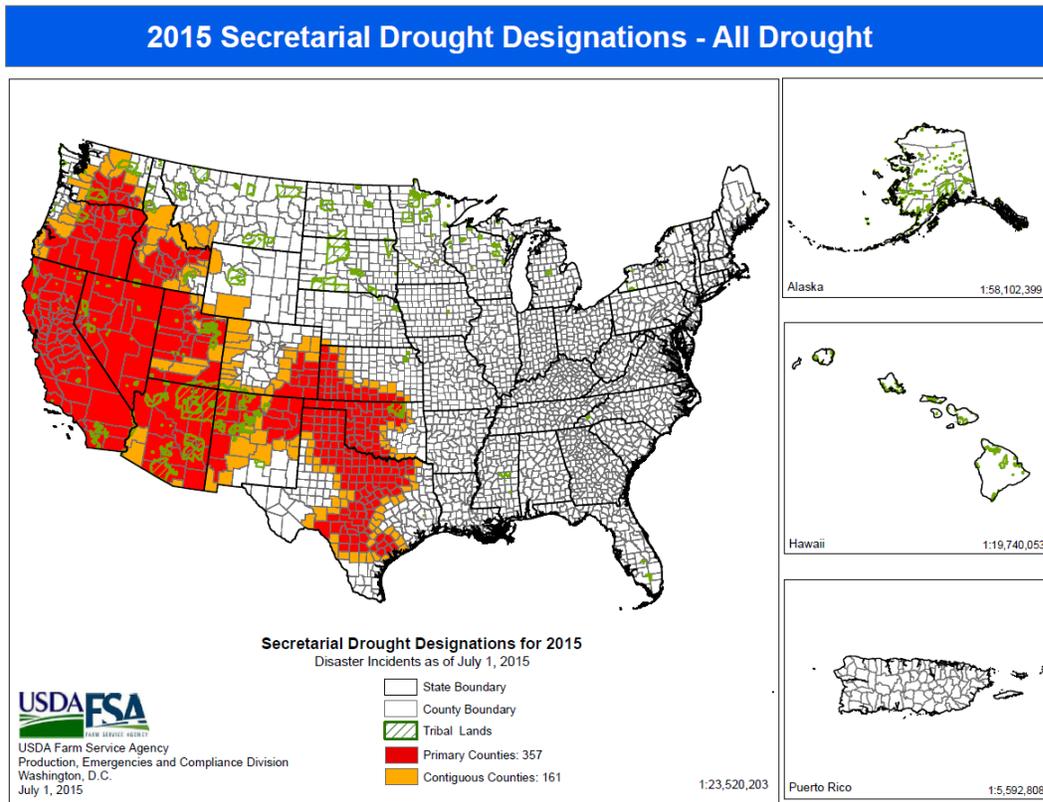


Select any map to enlarge. Over the past 6 to 12 months, intensifying drought is particularly notable in the Northwest and to a lesser extent in the Northeast and parts of the Southeast. Conditions have improved significantly in the southern Great Plains and the Southwest.

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2015 USDA Drought Designations

[USDA Disaster and Drought Information](#)

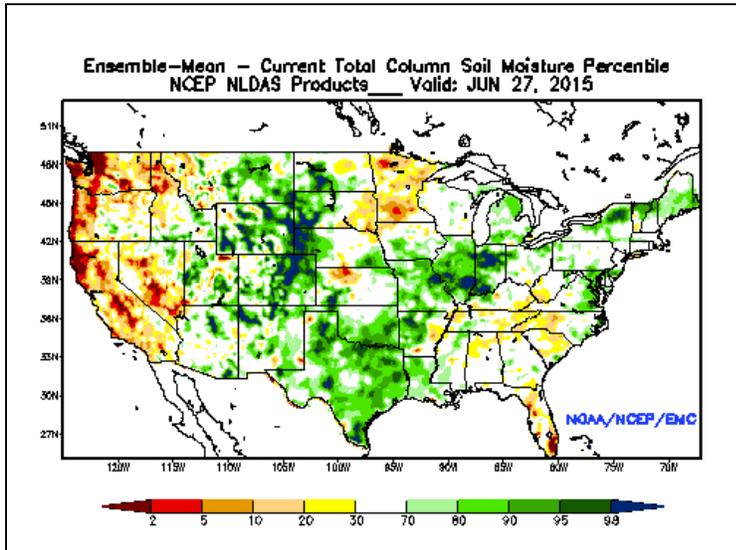


Highlighted Drought Resources

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

Other Climatic and Water Supply Indicators

Soil Moisture

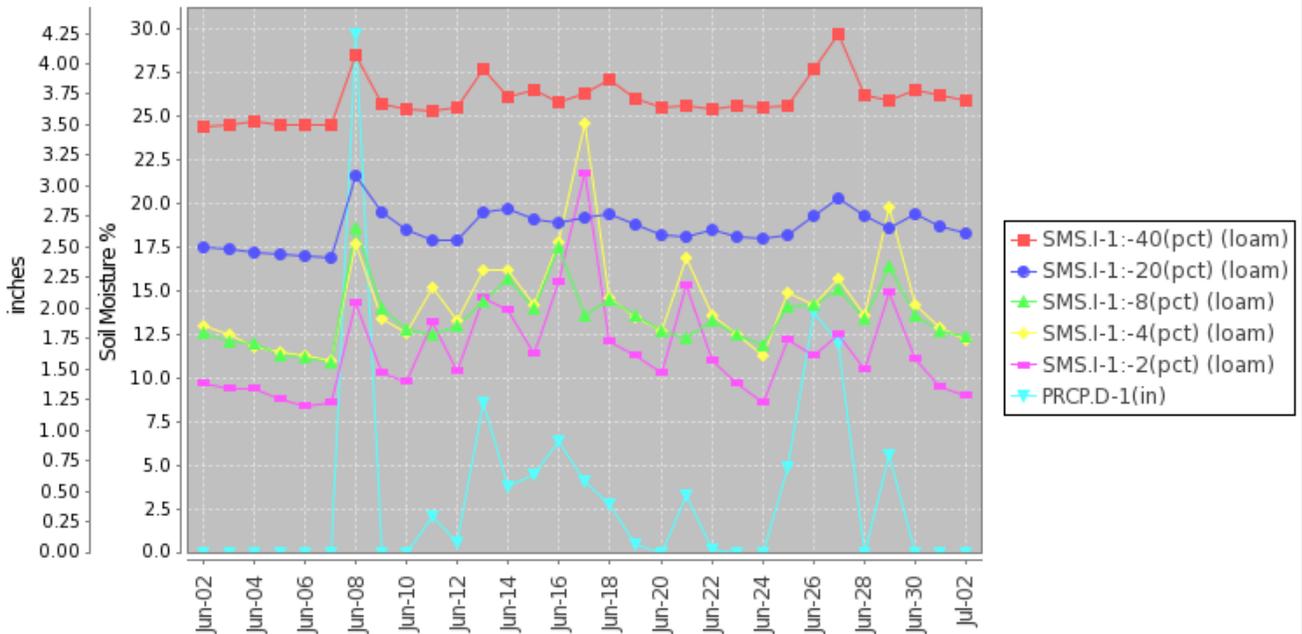


The modeled [soil moisture percentiles](#) as of June 27, 2015 show significant dryness in the far West, Minnesota, and Florida. Areas of above normal soil moisture include much of the Rocky Mountains, the southern Great Plains, the Midwest, and the Northeast.

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

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

Station (2004) MONTH=2015-06-02 (Daily) NRCS National Water and Climate Center - Provisional Data - subject to revision Thu Jul 02 08:05:13 PDT 2015



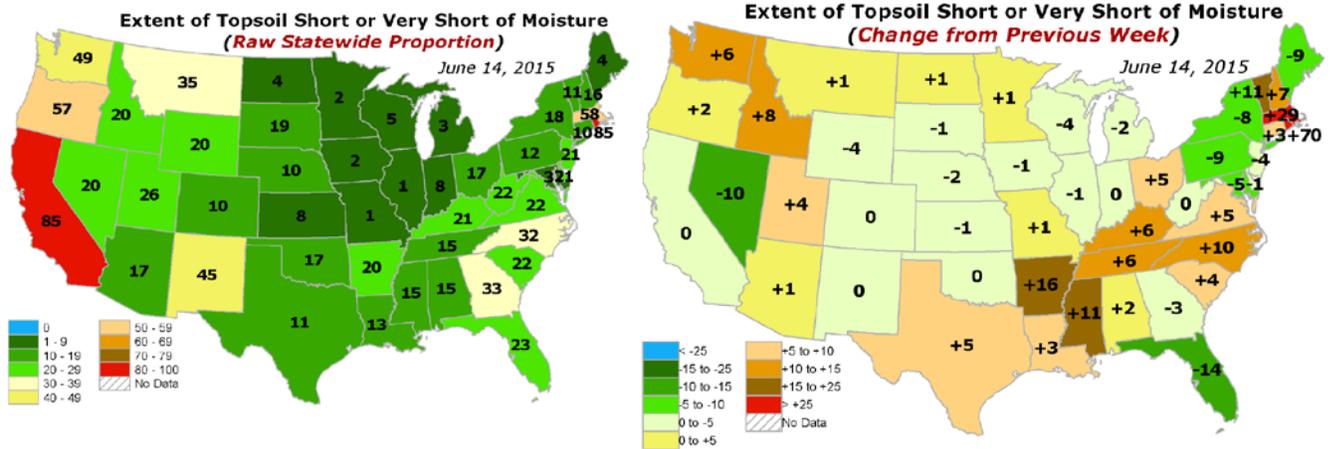
This example NRCS graph shows soil moisture (2, 4, 8, 20, and 40 inches depth) and precipitation for the last month at the [Mason #1 SCAN site](#) (station number 2004) in Illinois. This site had several significant precipitation events, especially on the 8th, 26th, and 27th, and soil moisture responded accordingly.

Soil Moisture Data Portals

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

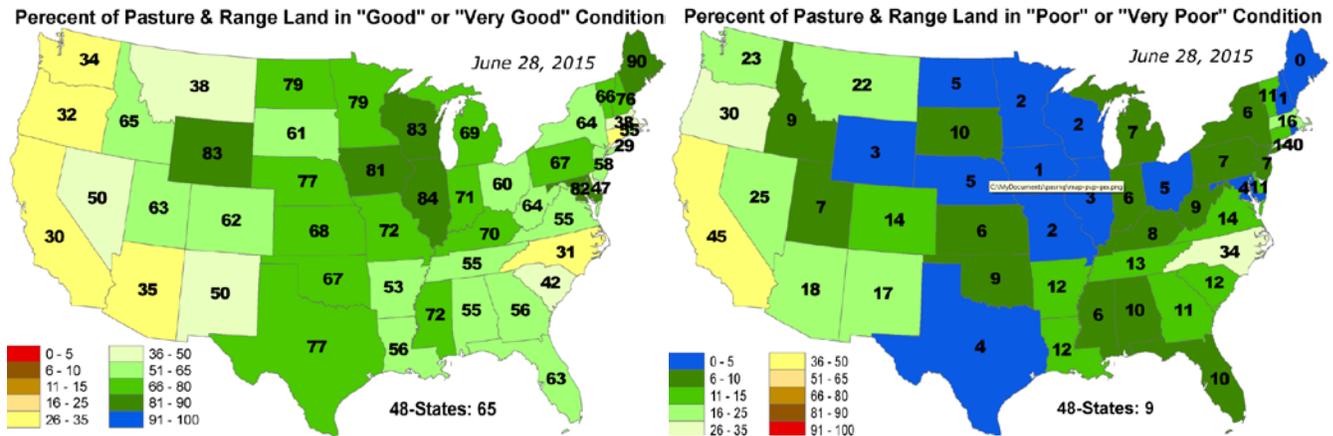
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Topsoil



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

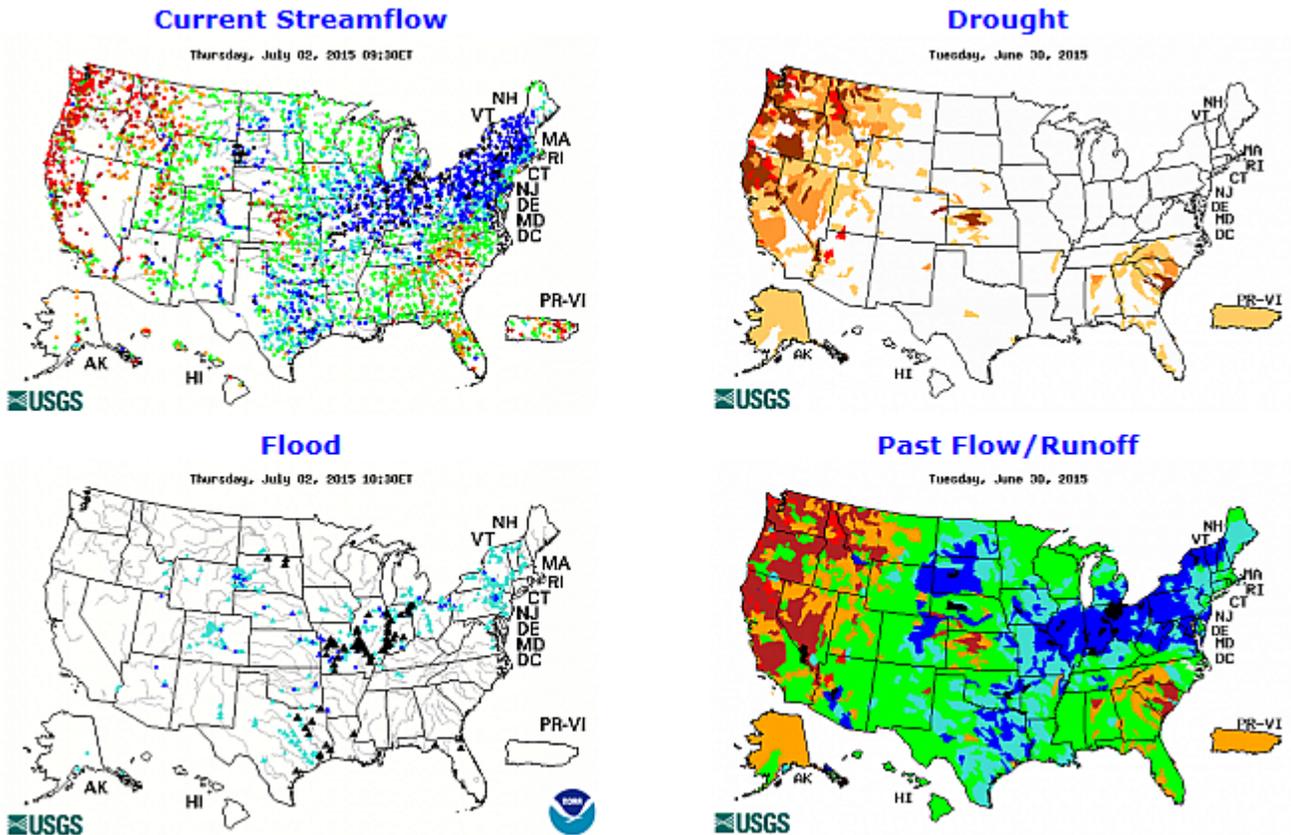
Pasture and Rangeland



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

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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.

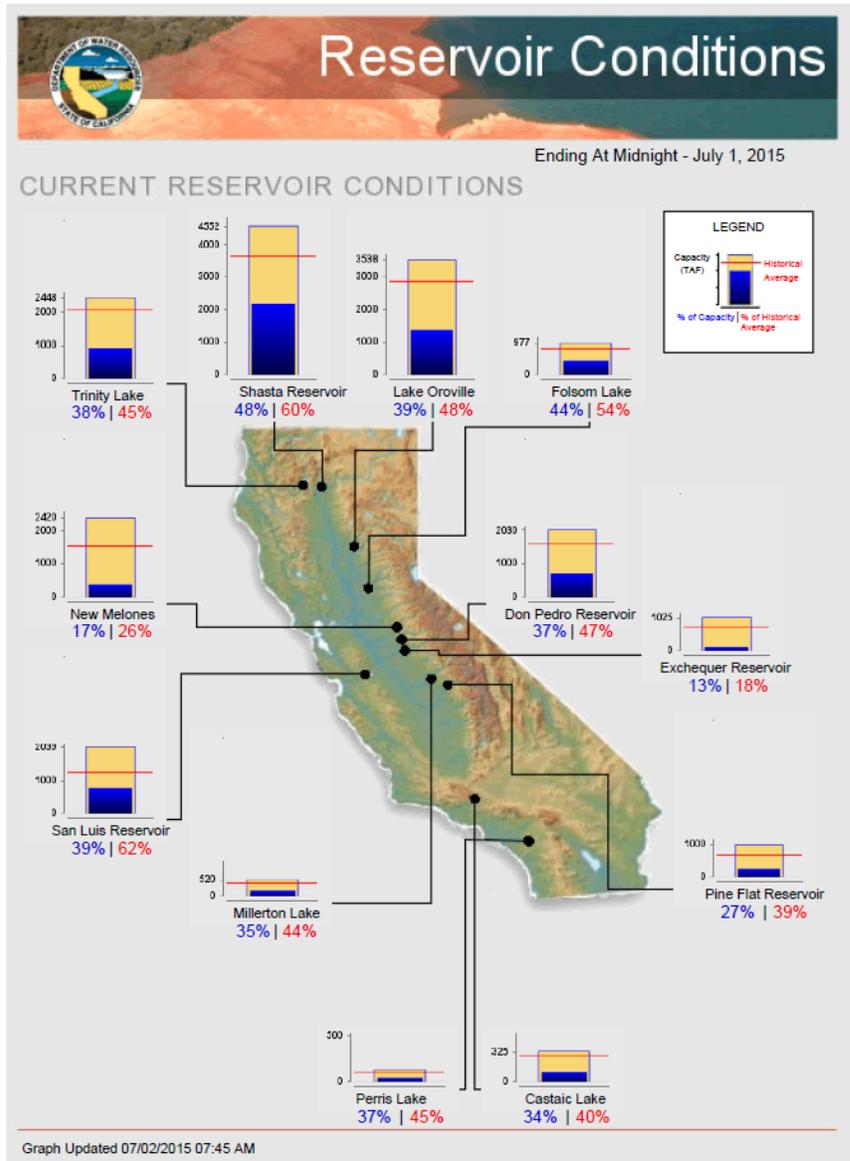
Current Reservoir Storage

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

- <http://www.usbr.gov/uc/water/basin/> ← Upper Colorado
- <http://www.usbr.gov/pn/hydromet/select.html> ← Pacific Northwest/Snake/Columbia
- <http://www.sevierriver.org/reservoirs/teacup-diagram-of-reservoirs/> ← Sevier River Water (UT)
- http://www.usbr.gov/gp/hydromet/teacup_form1.html ← Upper Missouri (also links for KS, OK, TX)

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California Reservoir Conditions



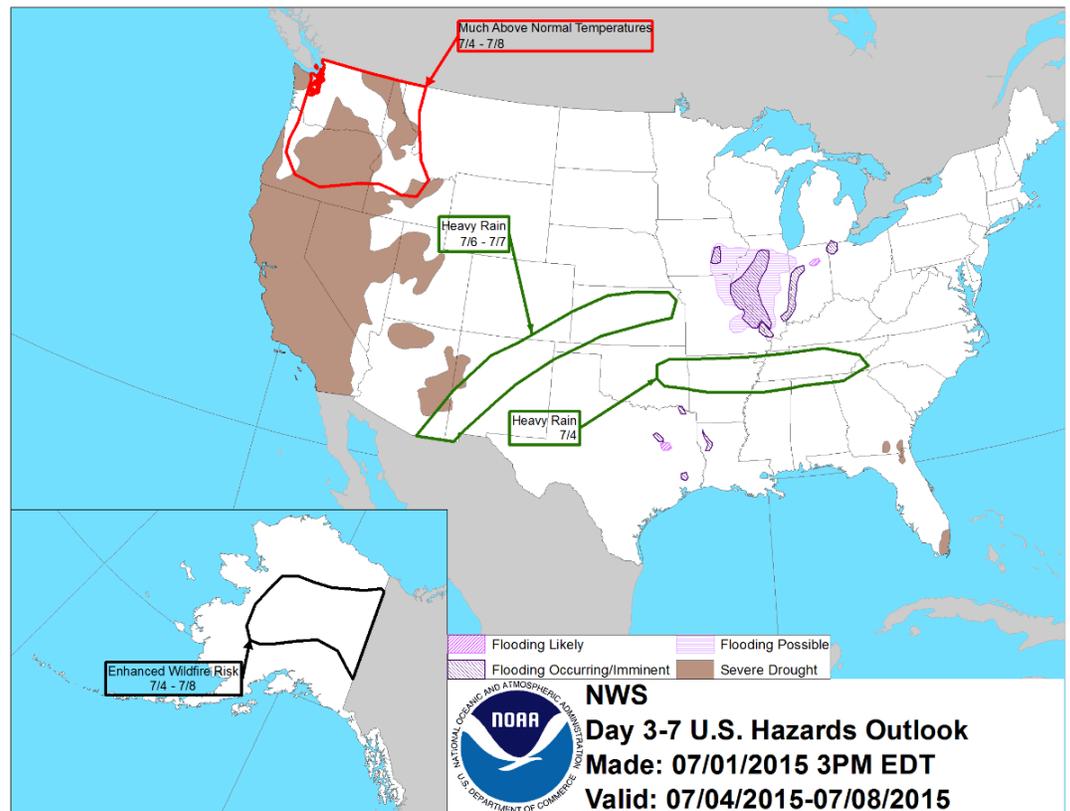
Short- and Long-Range Forecasts

Agricultural Weather Highlights

Outlook, July 2, 2015: “Through the holiday weekend, the focus for heavy rainfall can be expected to stretch from the central and southern Plains to the southern Mid-Atlantic States. Totals of 2 to 4 inches should occur from the mid-South into North Carolina and southern Virginia. Scattered showers will also dot the Plains, although much of Montana and Texas will remain dry. Similarly, the majority of the Corn Belt will experience dry weather into early next week, when showery weather will return. In the West, the early-onset monsoon will contribute to widespread showers in the Great Basin and the Four Corners States. Hot, dry conditions will persist, however, in the Northwest. The NWS 6- to 10-day outlook for July 7 – 11 calls for the likelihood of near- to below-normal temperatures nationwide, except for hotter-than-normal conditions across the Northwest and the lower Southeast. Meanwhile, near- to above normal rainfall across the majority of the U.S. will contrast with drier-than-normal weather in the Pacific Northwest, the north-central U.S., and along and near the Gulf Coast.” Author: Brad Rippey, USDA Agricultural Meteorologist.

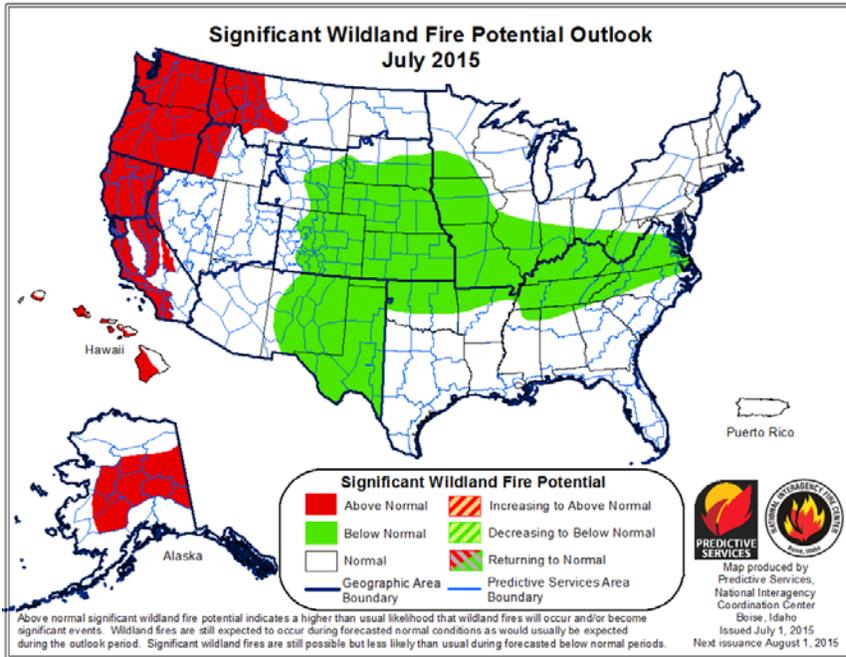
National Weather Hazards

The outlook for [weather hazards](#) over the next several days includes much above normal temperatures in the Northwest and heavy rain in some areas in the southcentral part of the country. Other hazards are flooding potential in the Midwest, enhanced wildfire risk in Alaska, and persistent drought in the far West.



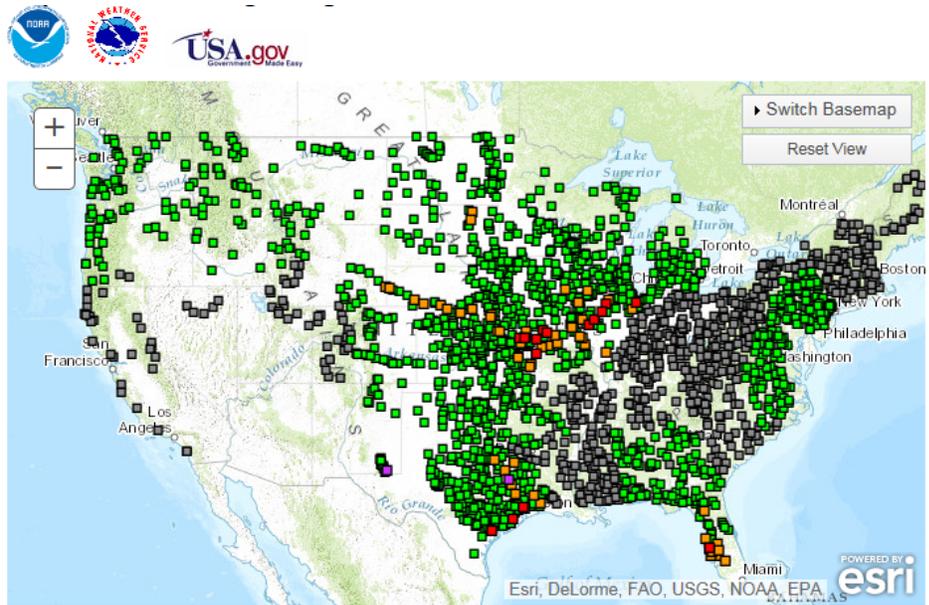
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Fire Potential Outlook: August 2015



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.

Click map to enlarge and update

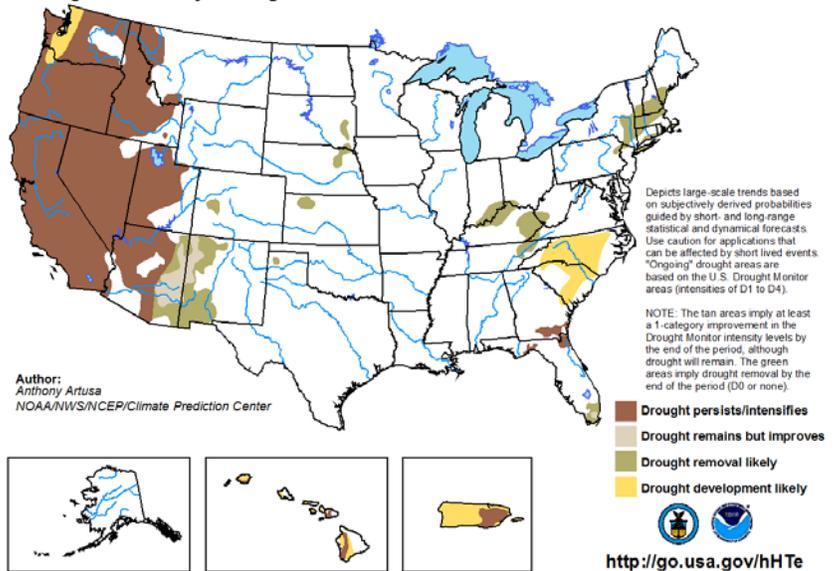
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Seasonal Drought Outlook

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

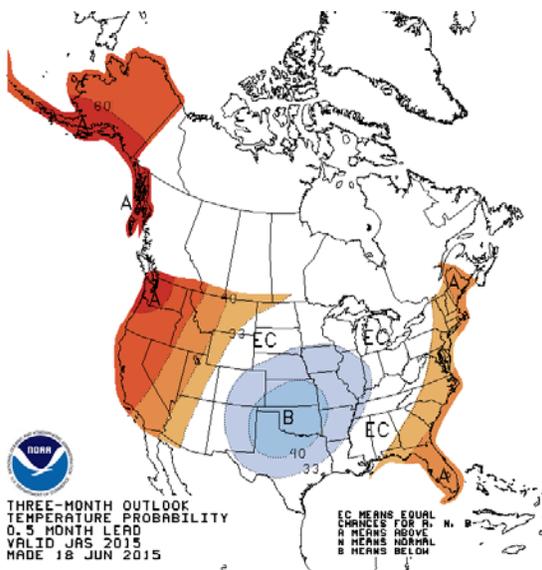
U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period

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

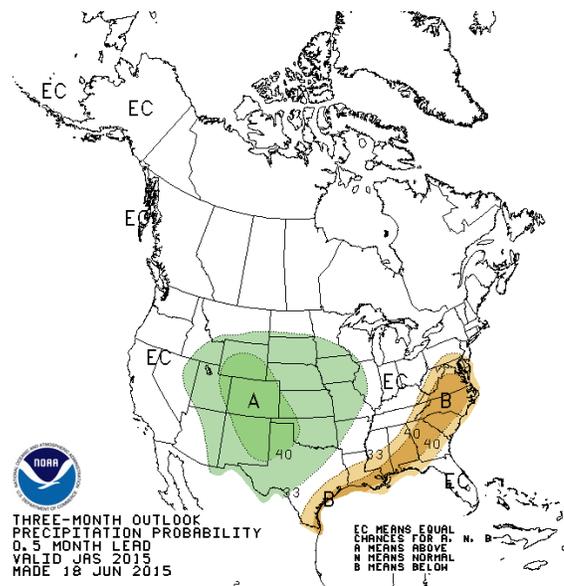


Climate Prediction Center 3-Month Outlook

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

This weekly report is published by the NRCS [National Water and Climate Center](#). We welcome your feedback. If you have questions or comments, please [contact us](#).