

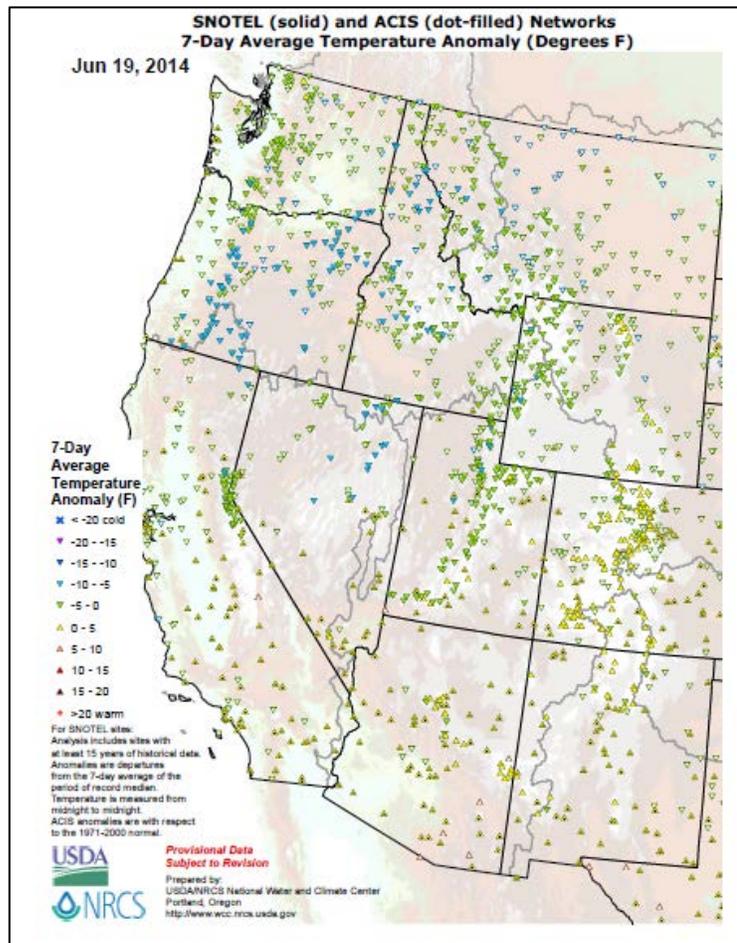


Natural Resources Conservation Service
 P.O. Box 2890
 Washington, D.C. 20013

Weekly Snowpack / Drought Monitor Update June 19, 2014

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Temperature



[SNOTEL](#) and [ACIS 7-day temperature anomaly](#) shows temperatures cooler than normal from the central Sierra through to Wyoming and north, including the Columbia and Missouri River basins. From the southern Sierra to Colorado and the southwest, near normal temperatures prevailed.

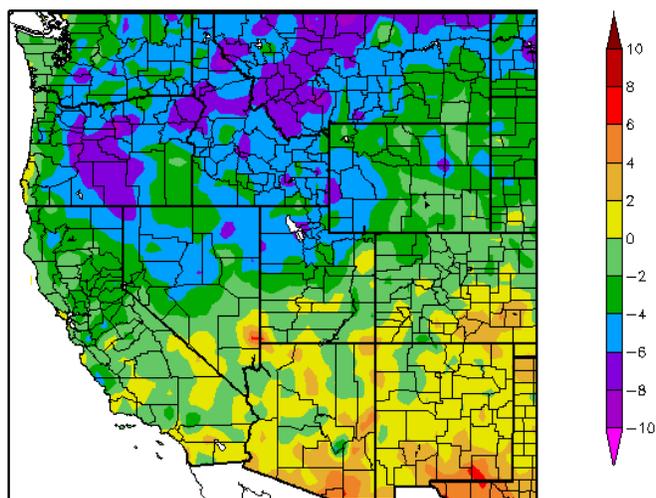
Click on most maps in this report to enlarge and see latest available update.

Weekly Snowpack and Drought Monitor Update Report

[ACIS](#) 7-day average temperature anomalies, ending June 18, show the greatest negative temperature departures scattered over northern Montana, central Idaho, and central Oregon ($<-8^{\circ}\text{F}$). The greatest positive temperature departures occurred in southern Arizona and New Mexico ($>+10^{\circ}\text{F}$).

Also, see [Dashboard](#) and the [Westwide Drought Tracker](#).

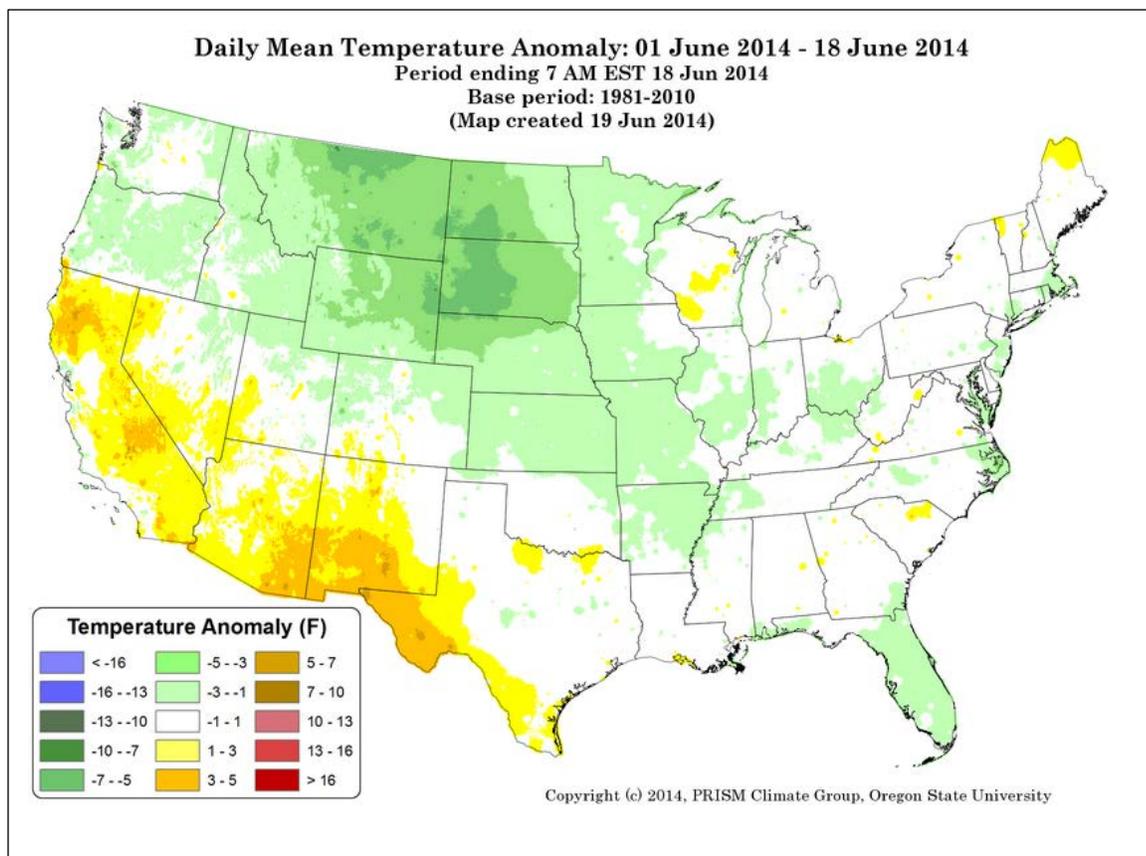
Departure from Normal Temperature (F)
6/12/2014 – 6/18/2014



Generated 6/19/2014 at HPRCC using provisional data.

Regional Climate Centers

This preliminary [PRISM](#) temperature map contains all available network data, including SNOTEL data, and will be updated periodically as additional data become available and are quality controlled.

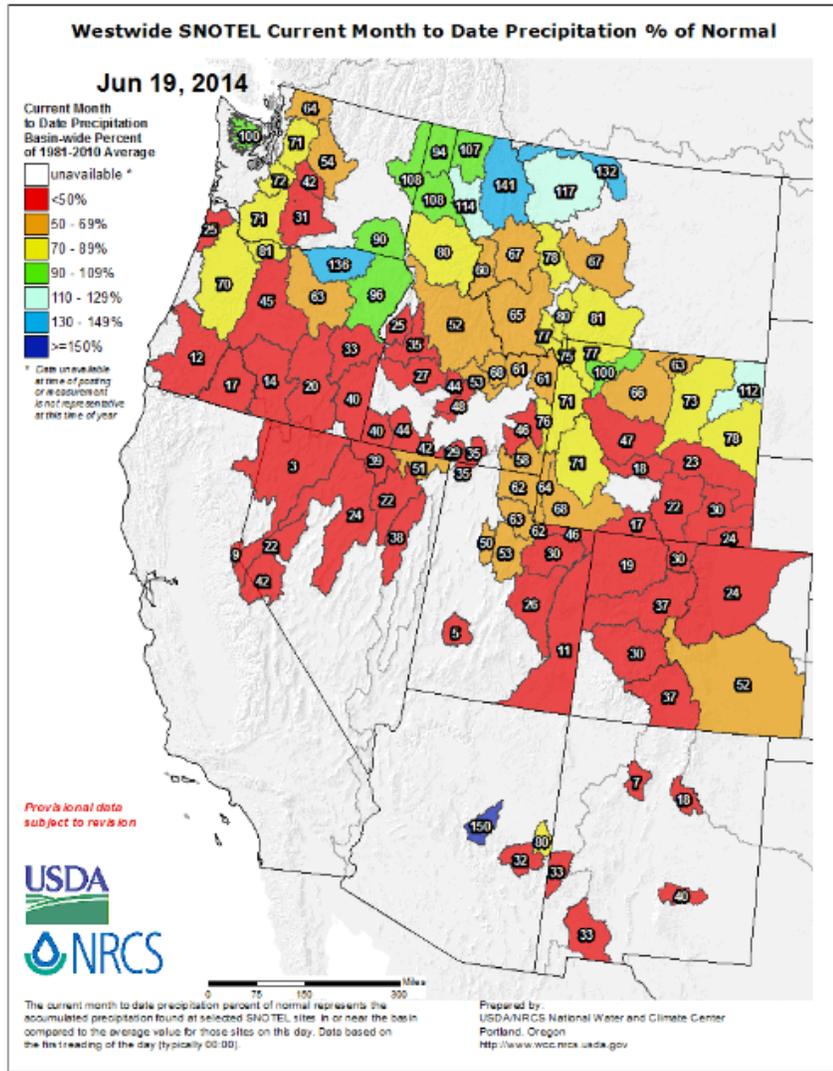


During June 2014, the temperature anomaly [map](#) shows a cold pattern over the northern Great Plains, centered over western South Dakota ($<-7^{\circ}\text{F}$). Above normal temperatures dominated northwestern California ($>+10^{\circ}\text{F}$) and the southern parts of New Mexico, Arizona, and southwest Texas ($>+5^{\circ}\text{F}$).

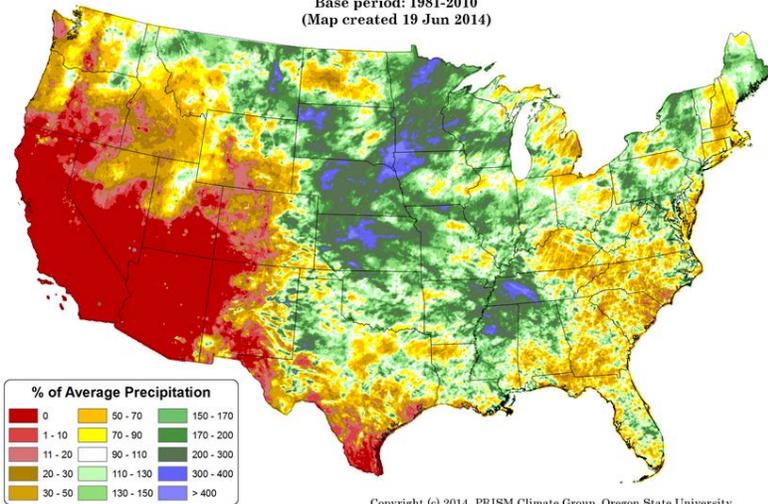
Weekly Snowpack and Drought Monitor Update Report

Precipitation

The June 1 through 19 SNOTEL precipitation percent of normal map shows predominately deficit conditions over much of the West. Areas with near normal conditions are in northern Idaho, northern Montana, northeast Oregon, eastern Washington, and northeastern Wyoming. Above average, localized precipitation was also recorded in central Arizona.



Total Precipitation Anomaly: 01 June 2014 - 18 June 2014
 Period ending 7 AM EST 18 Jun 2014
 Base period: 1981-2010
 (Map created 19 Jun 2014)



← During the first half of June 2014, the [precipitation anomaly](#) pattern reveals surplus moisture scattered across the central part of the nation. Most of the West and southern Texas have seen little or no precipitation. Parts of New England, Michigan, the central and southern Atlantic coast, and west to central Tennessee have also recorded drier than normal conditions.

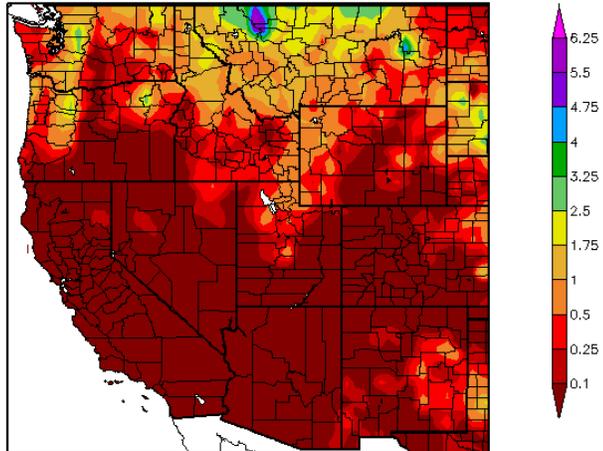
This preliminary daily PRISM precipitation anomaly map contains all available network data, including SNOTEL data, and is updated periodically as additional data become available and are quality controlled.

Weekly Snowpack and Drought Monitor Update Report

The [ACIS 7-day](#) total precipitation map shows mainly dry conditions across the West. A few areas of precipitation were recorded over northern Montana. Scattered thunderstorms are beginning to pop up in areas along the eastern edge of the western states.

Little, if any, precipitation occurred over vast areas of the West.

Precipitation (in)
6/12/2014 - 6/18/2014



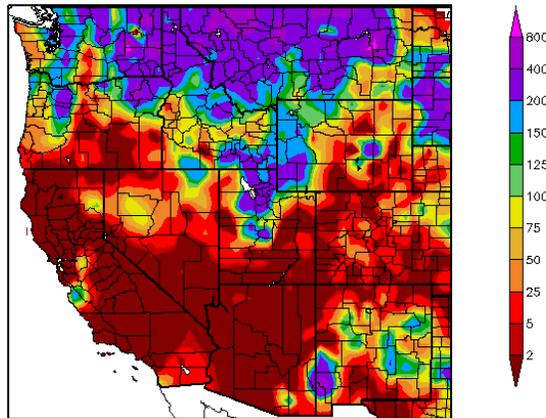
Generated 6/19/2014 at HPRCC using provisional data.

Regional Climate Centers

As would be expected based on the map above, this [map](#) reflects the heaviest precipitation falling across the northern Cascades, the Upper Snake River, and Great Plains.

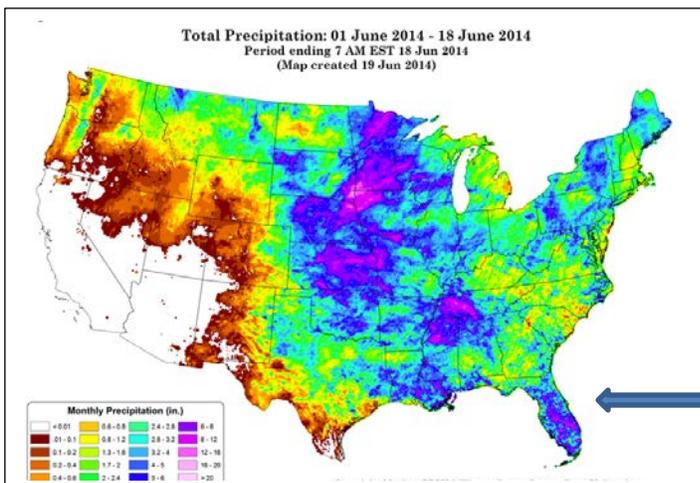
Percent of normal precipitation may be exaggerated in areas where the average for this period is near zero. →

Percent of Normal Precipitation (%)
6/12/2014 - 6/18/2014



Generated 6/19/2014 at HPRCC using provisional data.

Regional Climate Centers



So far in June 2014 the [total precipitation](#) map indicates no precipitation has fallen over most of California and the Southwest. The Midwest, from Canada to the Gulf coast, and Florida have had the highest totals.

See [Go Hydrology](#) for current and forecast conditions over southern Florida.

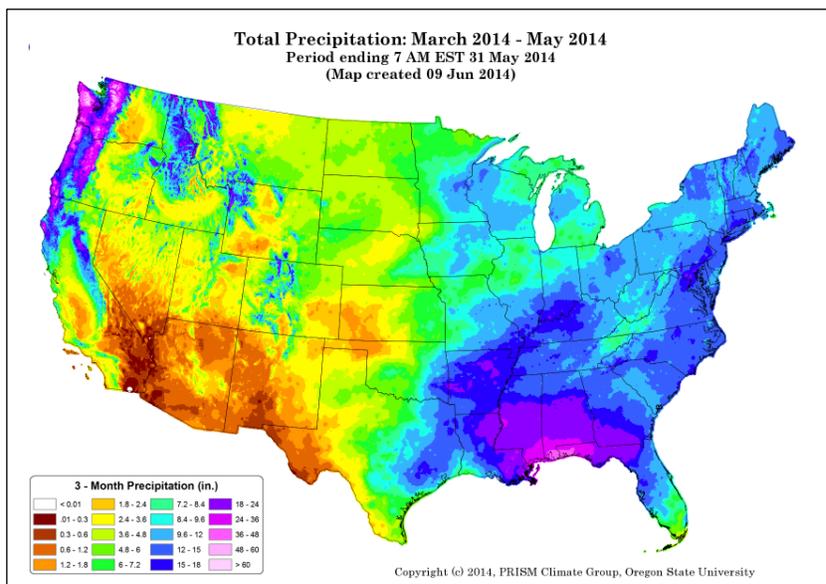
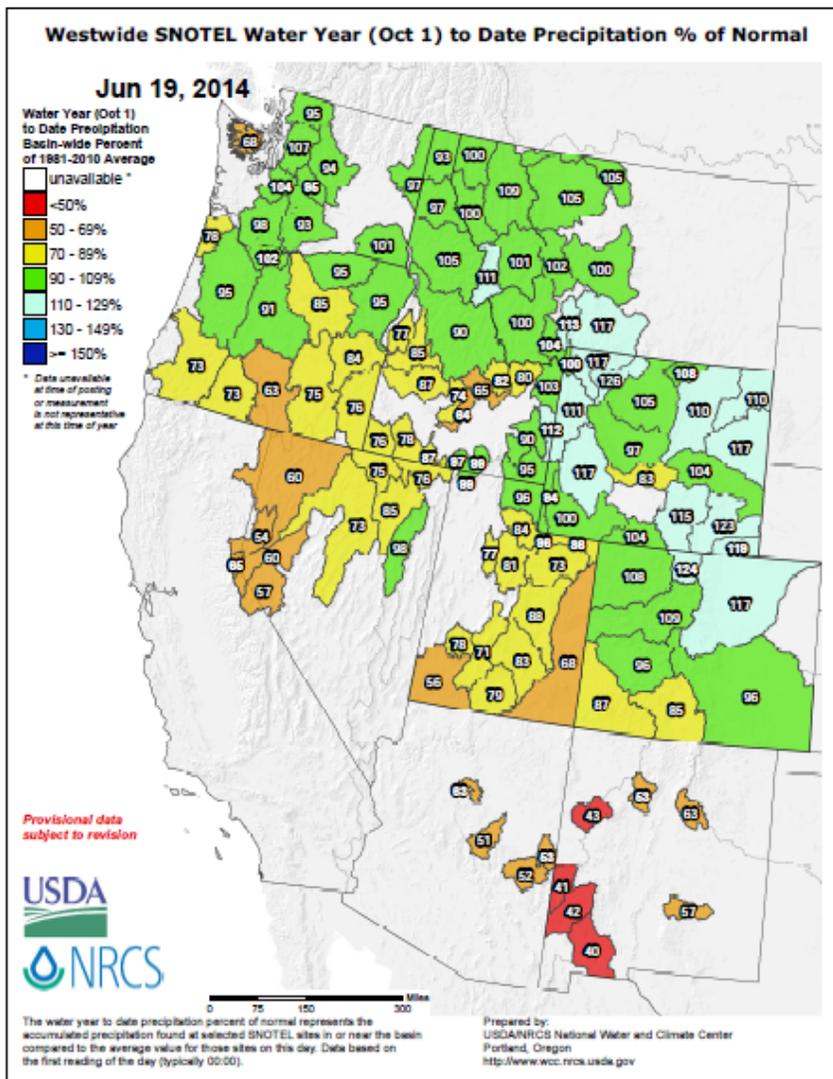
Weekly Snowpack and Drought Monitor Update Report

For the [2014 Water Year](#) that began on October 1, 2013, only south central Montana, most of Wyoming, and northern Colorado are experiencing surpluses.

Near average conditions dominated the northern half of the Cascades, the northern half of Idaho, western Montana, the Lower Bear River in eastern Utah and southeast Idaho, and parts of the southern half of Colorado.

The largest deficits are centered over southern Oregon, western Nevada, southern and eastern Utah, Arizona, and New Mexico.

As the Water Year advances, it becomes more difficult for river basins to change bin categories.



The three-month period (March - May) shows that the eastern half of the nation received precipitation in the range from 5 to greater than 24 inches.

On the other hand, parts of the West received totals less than three inches. The exceptions in the West are over the northern Rockies and Cascades, where totals exceeded 24 inches.

Weekly Snowpack and Drought Monitor Update Report

Weather and Drought Summary

National Drought Summary – June 17, 2014

The following **Weather and Drought Summary** is provided by this week's NDMC Drought Author: Eric Luebehusen, U.S. Department of Agriculture

USDM Map Services: contains [archived maps](#)

“For the contiguous 48 states, the U.S. Drought Monitor showed 35.55 percent of the area in moderate drought or worse, compared with 36.15 percent a week earlier.

For all 50 U.S. states and Puerto Rico, the U.S. Drought Monitor showed 29.70 percent of the area in moderate drought or worse, compared with 30.20 percent a week earlier.”

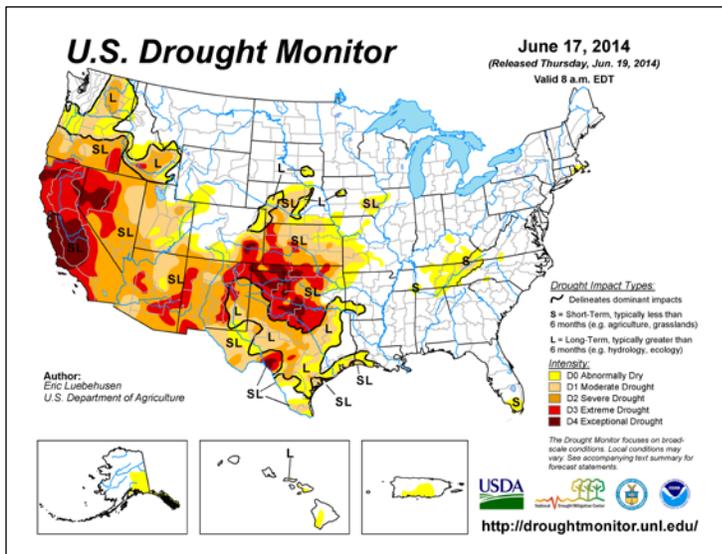
[Current Drought Monitor](#) weekly summary. The exceptional D4 levels of drought are scattered across CA, NV, CO, TX, OK, and NM.

The latest [drought indicator blend and component percentiles](#) spreadsheet is a great resource for climate division drought statistics. This link is for the latest [Drought Outlook](#) (forecast). See [climatological rankings](#).

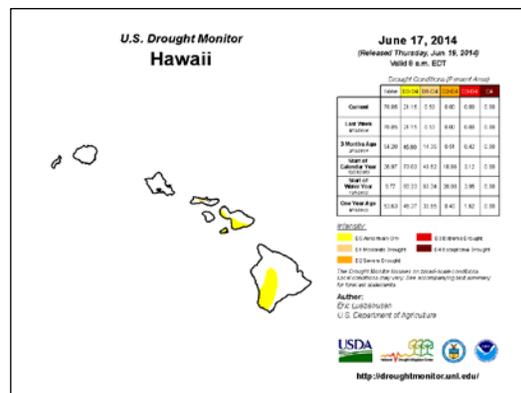
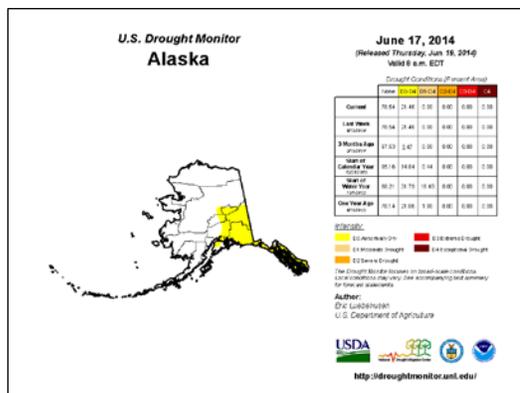
For more drought news, see [Drought Impact Reporter](#). **New:** [ENSO Blog](#).

Drought Management Resources (√):

- ✓ [Watch AgDay TV](#)
- ✓ [Drought Impacts Webinar Series](#)
- ✓ [Quarterly Climate Summary and Outlooks for the Great Lakes, Midwest and Missouri Basin States](#)
- ✓ [The Spring 2014 edition of DroughtScope](#)
- ✓ [U.S. drought conditions stable in April; improvements unlikely in western states and much of plains](#)



See: Latest Drought [Impacts](#) during the past week.



“The [49th](#) and [50th](#) States show relatively benign drought conditions. No changes noted for Alaska and Hawaii this week.

A comprehensive narrative describing drought conditions across other parts of the nation can be found toward the end of this document. For drought impacts definitions for the figures that follow, click [here](#).”

Weekly Snowpack and Drought Monitor Update Report

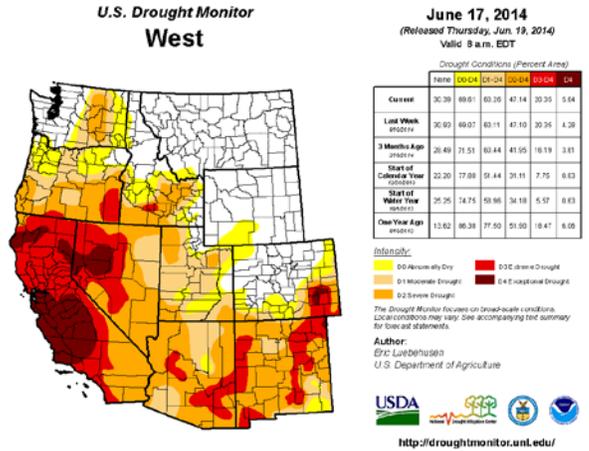
Risk Management Web Resources

Drought Monitor for the [Western States](#)
 Drought Impact Reporter for [New Mexico](#)
[California Data Exchange Center](#) & [Flood Management Intermountain West Climate Dashboard](#)
[Great Basin Dashboard](#)
[California Sierra Nevada-related snow pack](#)

U.S. Impacts during the past week:

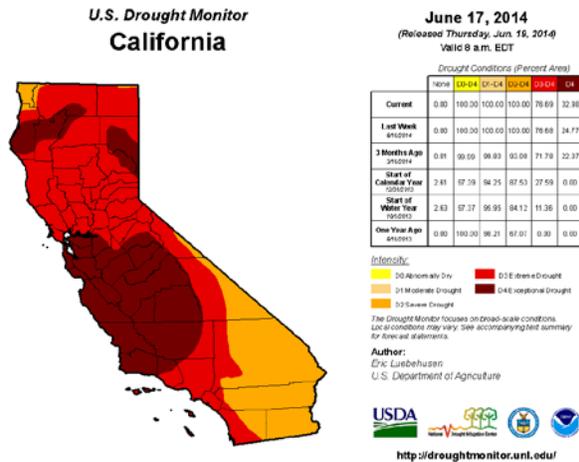
- OR - [Farmers, orchardists fear dry summer](#) – June 9
- Southern Great Plains - [USDA: Drought cuts wheat crop; corn, soybeans good](#) – June 11
- CA-CO-TX - [Water woes force big brewers to tighten the tap](#) – June 11
- [Heavy rain eased drought slightly in Plains](#) – June 13
- OR - [A thirst for water](#) – June 7

[Click to enlarge maps](#)



D4 increased in California occurred this past week.

State with D-4 Exceptional Drought



D4 increased by 8.21% this past week.

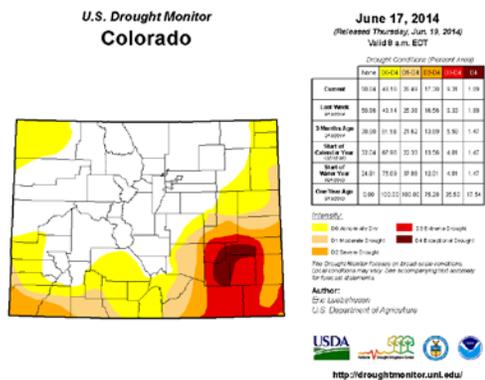
CA Drought Information Resources

Drought News from California

- [Northern California leaders ask for help in drought](#) – June 9
- [Drought, dust and wind equal ugly air](#) – June 11
- CA/OR Klamath Basin [11th-hour pause to water limits](#) – June 13
- [California drought: Voluntary cutback falls short in Bay Area](#) – June 9
- [California Holds Potential to Thwart Water Deficit, Report Says](#) – June 10
- [EBMUD water rates to go up 9.5 percent](#) - June 10

State with D-4 Exceptional Drought

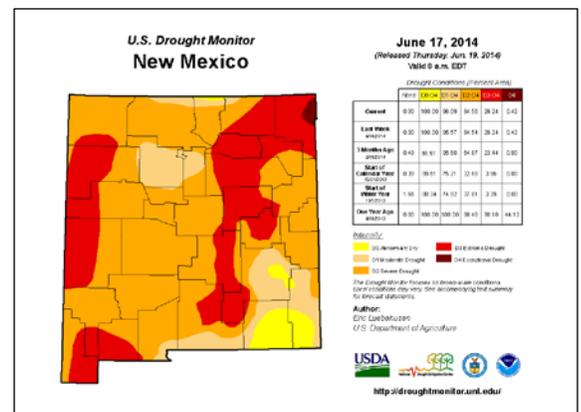
State with D-4 Exceptional Drought



News:

- [Lawless weeds causing a calamity in Colorado](#) – June 12
- [Brownback, other governors meet to discuss drought, environment](#) – June 9

No changes have occurred this past week.

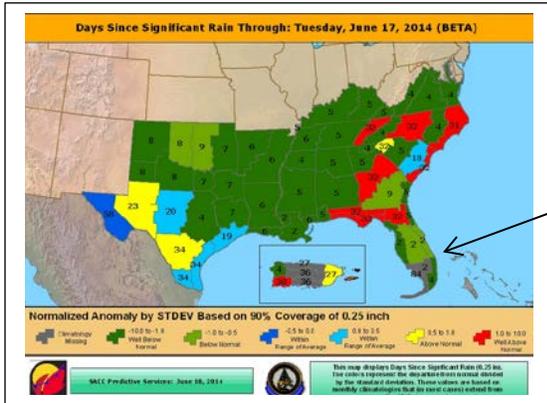


No changes have occurred this past week.

Weekly Snowpack and Drought Monitor Update Report

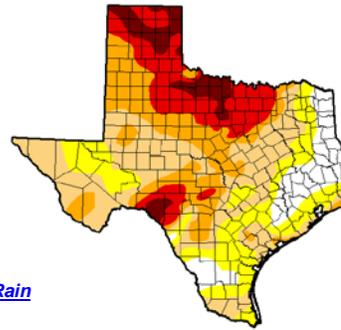
State with D-4 Exceptional Drought

Texas Drought [Website](#).
[Texas Reservoirs](#).
[Texas Drought Monitor Coordination Conference Call](#): on
 Monday's 2:00 PM - 3:00 PM CST



[Days since Significant Rain Summary](#)

U.S. Drought Monitor Texas



June 17, 2014
 (Released Thursday, Jun. 19, 2014)
 Valid 8 a.m. EDT

	Drought Conditions (Percent Area)					
	D0	D1	D2	D3	D4	D5
Current	10.85	39.85	70.95	41.30	21.60	6.56
Last Week previous	11.20	38.72	69.16	45.10	23.23	6.88
3 Months Ago previous	15.24	34.73	64.20	33.18	14.06	1.81
Start of Calendar Year previous	20.60	31.62	43.84	21.15	5.92	0.79
Start of Water Year previous	8.62	33.30	70.95	25.80	4.01	0.12
One Year Ago previous	4.70	35.24	64.62	58.40	28.43	11.83

Intensity:
 D0 Abnormally Dry D3 Extreme Drought
 D1 Moderate Drought D4 Exceptional Drought
 D2 Severe Drought

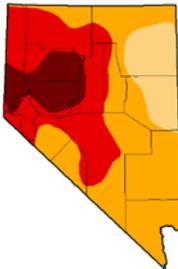
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for times and statements.

Author:
 Eric Lavee-Hughes
 U.S. Department of Agriculture

USDA
<http://droughtmonitor.unl.edu/>

A slight reduction in all drought categories occurred during the past week.

U.S. Drought Monitor Nevada



June 17, 2014
 (Released Thursday, Jun. 19, 2014)
 Valid 8 a.m. EDT

	Drought Conditions (Percent Area)					
	D0	D1	D2	D3	D4	D5
Current	0.00	13.00	51.00	46.32	42.84	7.20
Last Week previous	0.00	13.00	51.00	47.32	42.84	7.20
3 Months Ago previous	0.00	30.00	50.00	42.36	23.48	8.20
Start of Calendar Year previous	0.00	30.00	46.00	27.48	20.96	8.20
Start of Water Year previous	0.00	30.00	46.00	27.48	20.96	8.20
One Year Ago previous	0.00	13.00	51.00	27.72	20.96	8.20

Intensity:
 D0 Abnormally Dry D3 Extreme Drought
 D1 Moderate Drought D4 Exceptional Drought
 D2 Severe Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for times and statements.

Author:
 Eric Lavee-Hughes
 U.S. Department of Agriculture

USDA
<http://droughtmonitor.unl.edu/>

D4 increased by 2.84% during this past week.

- Past 30 days precipitation totals
- Past 30 days precipitation percent of normal
- Calendar Year precipitation totals
- Calendar Year Precip percent of normal
- Short Crop ET

Related Area News

[2014 Kansas Drought Report and Summary](#)

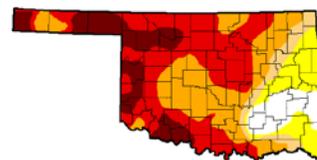
News:

[Green Country Town's Low Water Supply Leads To State Of Emergency](#) – June 10

Slight decrease has occurred in categories D1 - D4 during this past week.

State with D-4 Exceptional Drought

U.S. Drought Monitor Oklahoma



June 17, 2014
 (Released Thursday, Jun. 19, 2014)
 Valid 8 a.m. EDT

	Drought Conditions (Percent Area)					
	D0	D1	D2	D3	D4	D5
Current	8.40	51.52	73.34	73.30	48.17	14.18
Last Week previous	8.40	51.52	68.68	73.10	53.34	17.26
3 Months Ago previous	4.80	55.95	77.25	30.25	14.72	4.07
Start of Calendar Year previous	58.04	40.16	30.17	13.99	4.04	2.40
Start of Water Year previous	21.74	30.24	43.00	17.62	4.42	1.45
One Year Ago previous	48.05	53.14	47.00	36.78	26.35	9.44

Intensity:
 D0 Abnormally Dry D3 Extreme Drought
 D1 Moderate Drought D4 Exceptional Drought
 D2 Severe Drought

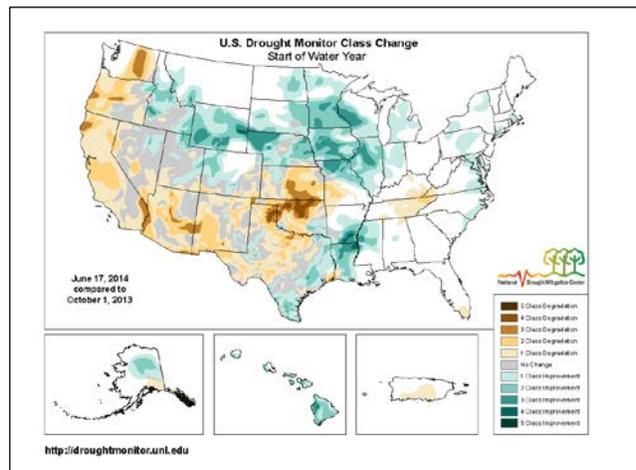
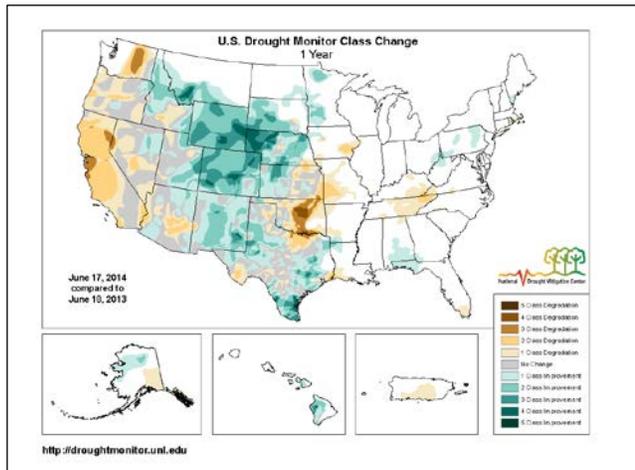
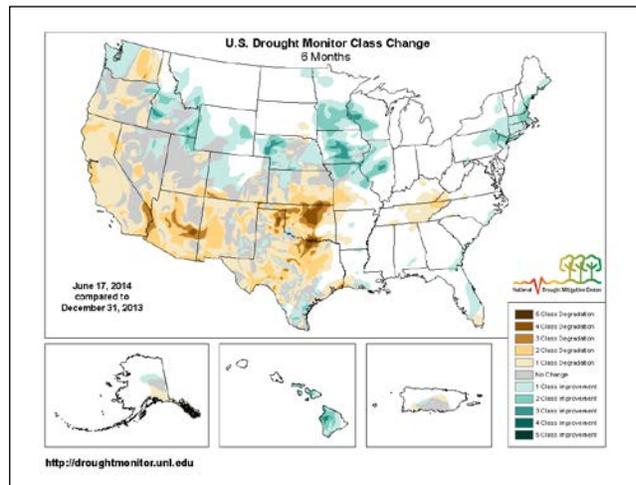
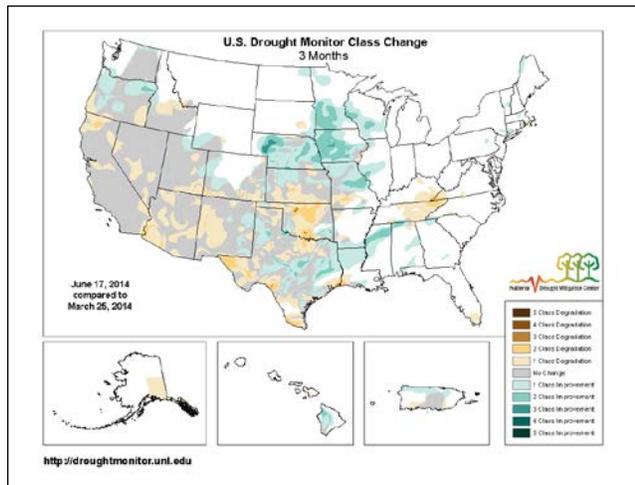
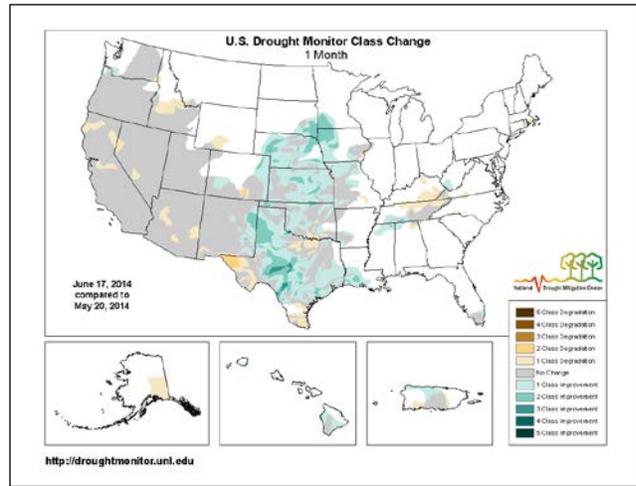
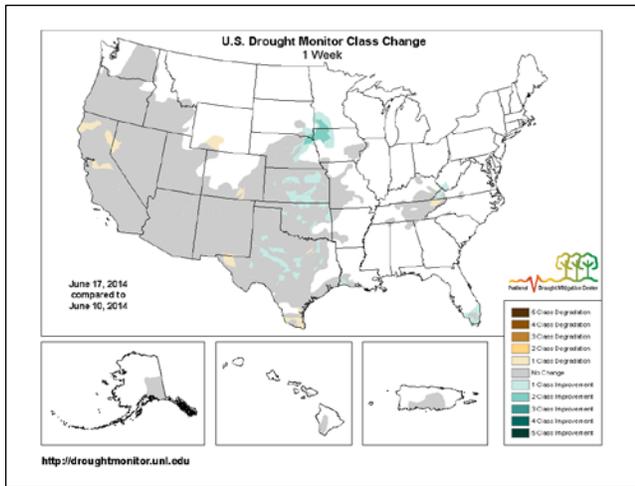
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USDA
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Weekly Snowpack and Drought Monitor Update Report

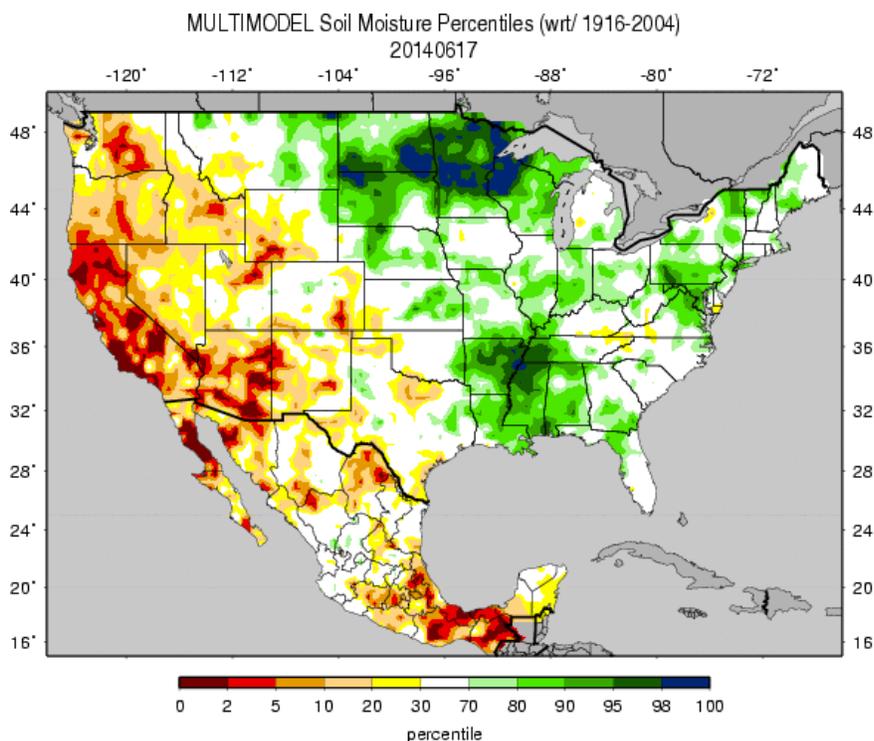
Changes in Drought Monitor Categories (over various time periods)



Click on any of these maps to enlarge. Note how the conditions over the Rockies and northern Great Plains have improved between 6 to 12 months (middle right to lower left maps). However, also note that since the start of the 2014 Water Year last October, conditions over parts of the west coast, the middle and southern Great Plains have deteriorated significantly (lower right map).

Weekly Snowpack and Drought Monitor Update Report

Soil Moisture

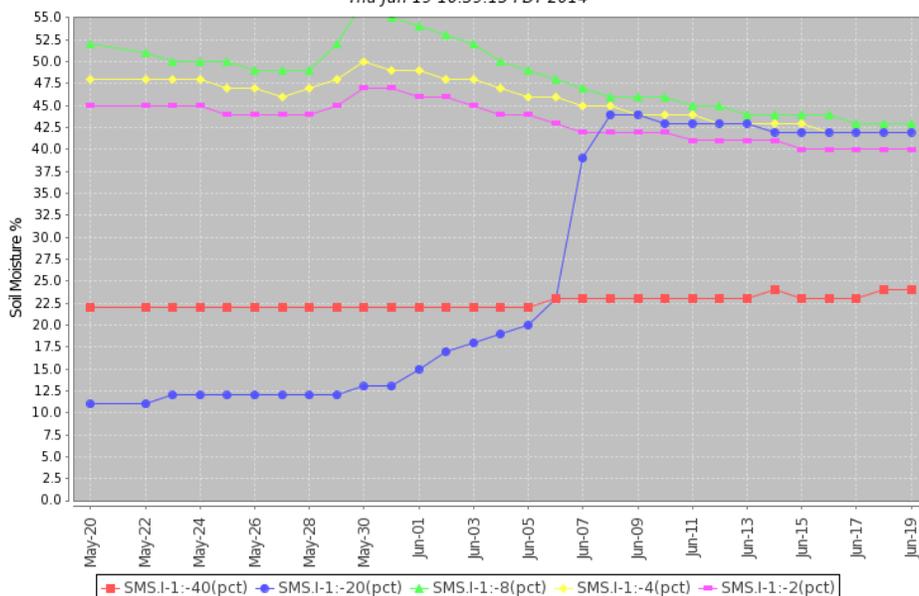


Soil moisture ranking in [percentile](#) as of June 17 shows dryness over California, most of Arizona, and parts of Washington, Oregon, and Idaho. Scattered dryness is also reported in other areas west of the Rockies. Moist soils dominated the southeastern Gulf Coast states, along the southern Mississippi River, and from eastern Montana to the Great Lakes, where the wettest locations were along western Lake Superior.

Useful Hydrological Links: [Crop Moisture Index](#); [Palmer Drought Severity Index](#); [Standardized Precipitation Index](#); [Surface Water Supply Index](#); [Weekly supplemental maps](#), [Minnesota Climate Working Group](#); [Experimental High Resolution Drought Trigger Tool](#); [NLDAS Drought Monitor](#); [Soil Moisture](#).

Soil Climate Analysis Network ([SCAN](#))

Station (2065) MONTH=2014-05-20 (Daily) NRCS National Water and Climate Center - Provisional Data - subject to revision
Thu Jun 19 10:39:13 PDT 2014

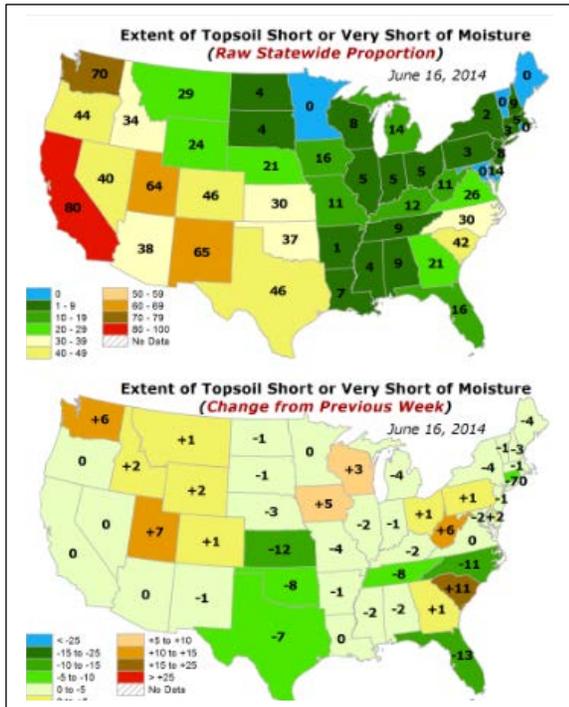


This NRCS resource shows soil moisture data at the [Aniack SCAN station](#) located in western Alaska. Note the increases in soil moisture trend as a result of recent warm temperatures and melt. The deeper soil sensors at 20 inches depth show a delayed response compared to the shallower sensors, while the 40-inch depth has not responded yet.

Useful Agriculture Links: [Vegetation Drought Response Index](#); [Evaporative Stress Index](#); [Vegetation Health Index](#); [NDVI Greenness Map](#); [GRACE-Based Surface Soil Moisture](#); [North American Soil Moisture Network](#). [Monthly Wild Fire Forecast Report](#).

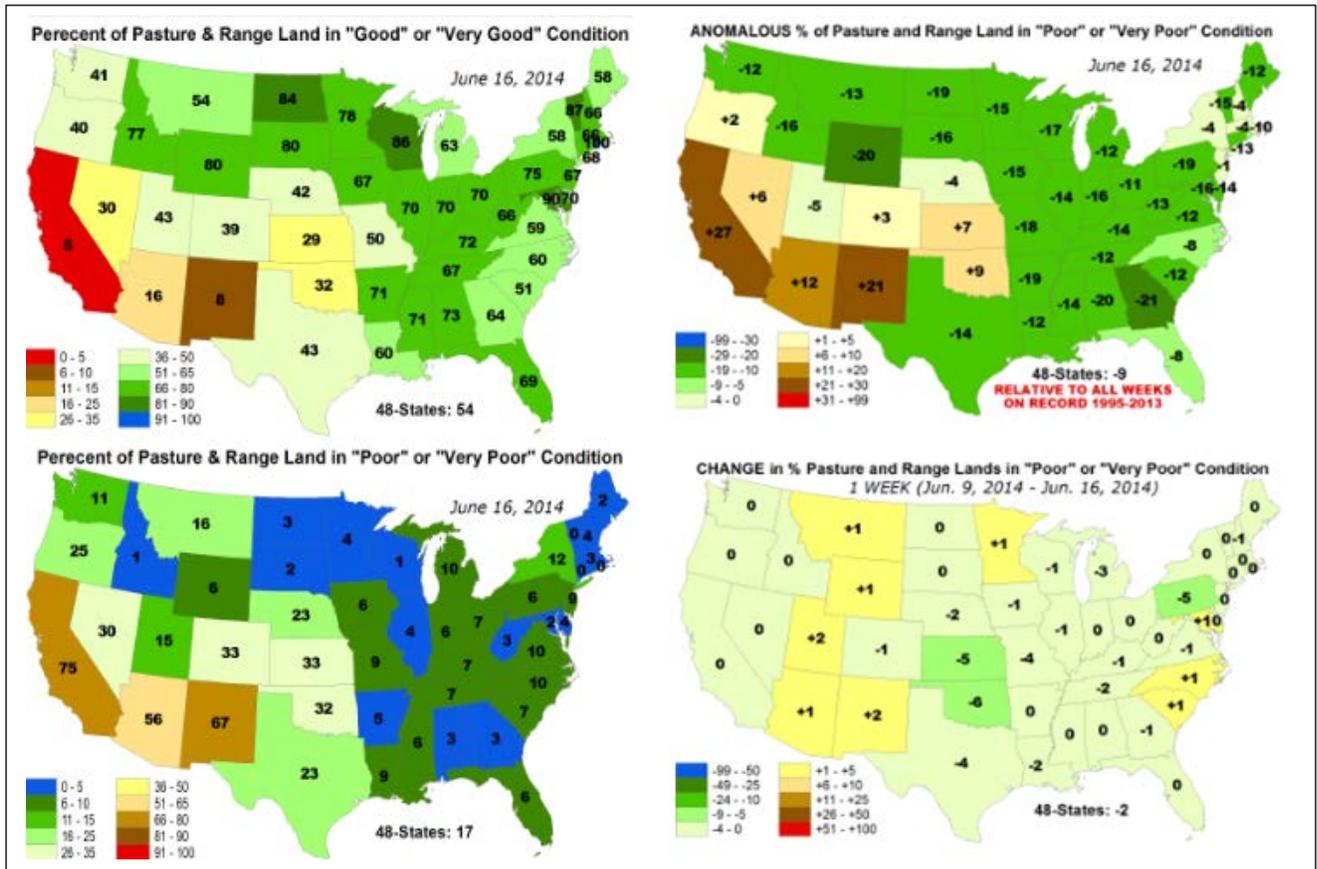
Weekly Snowpack and Drought Monitor Update Report

Topsoil and Pasture & Rangeland Conditions



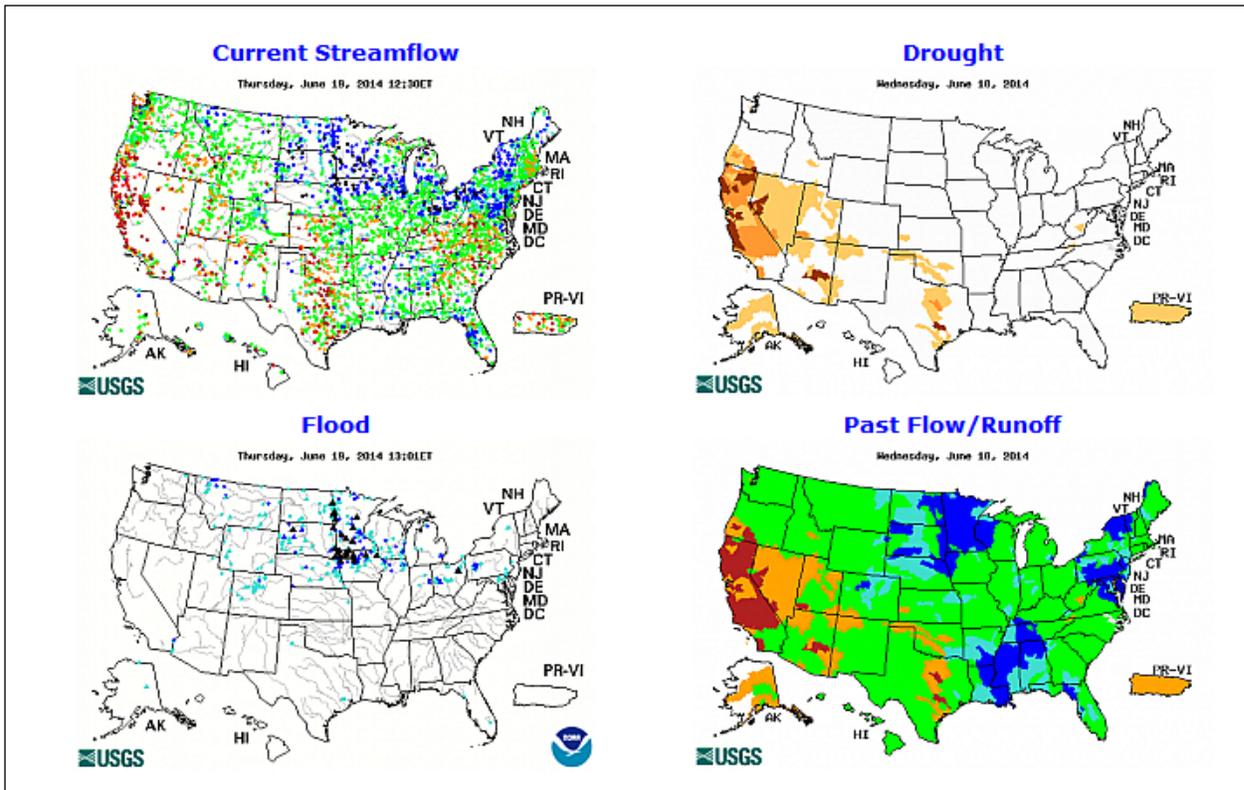
← Topsoils are exceptionally poor (top) over New Mexico, California, Utah, and Washington with values representing more than 60 percent worse conditions than the median for this time of year. Locations in the northern Great Plains across to New England, and along the Mississippi River have good soil moisture conditions.

Much of the states east of the Mississippi River, are doing well, as noted below. These conditions also extend across the northern Great Plains and northern Rockies. Pasture and rangelands are stressed over California, the Great Basin, the Southwest, and the southern half of the Great Plains. Conditions have remained about the same over this past week.



Weekly Snowpack and Drought Monitor Update Report

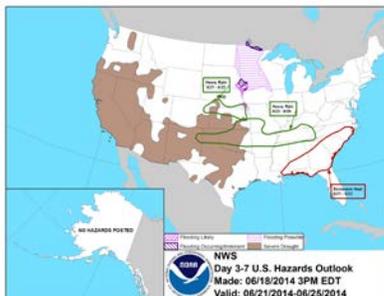
Streamflow



Streams are high over much of the upper Mississippi River Basin, and the upper Ohio Valley, New York and Pennsylvania (left maps). Some flooding is occurring along the Red River of the North, the upper Mississippi River, and tributaries in Minnesota, northern Iowa, and a few scattered rivers in South Dakota and Ohio. (lower left map).

[Click maps to enlarge and update](#)

[Weather hazards](#)



Heavy rains are expected over the middle section of the country. Most of Minnesota and northern Iowa show high flood potential during the next several days.

National Long Range Outlook



During the next three months, there is a risk of flooding in a few places over the Red River Valley in North Dakota, the upper Midwest, the middle Mississippi River Valley and west-central Florida. Currently, **2** gages have a greater than 50% chance to experience major flooding; **12** gages for moderate flooding; **29** gages for minor flooding.

These numbers represent little change since last week.

Weekly Snowpack and Drought Monitor Update Report

[National Drought Summary for June 17, 2014](#)

Prepared by: Drought Monitor Author: Eric Luebehusen, U.S. Department of Agriculture

“During the drought-monitoring period, widespread, locally heavy downpours brought drought relief to the Midwest, central Plains, and southern Florida, while drought conditions prevailed or intensified from California into the central and southern Rockies.

Alaska, Hawaii, and Puerto Rico

There were no changes made to the drought depiction in Alaska, Hawaii, and Puerto Rico this week. In Alaska, cool, showery conditions were noted across western and southern portions of the state, though low streamflows continued to reflect the impacts of a drier-than-normal spring. In Hawaii, most of the Abnormally Dry (D0) and Moderate Drought (D1) areas received little – if any – rain. Likewise, Puerto Rico’s D0 areas were also dry during the monitoring period, with streamflows dropping below the 10th percentile, indicating the island may slip further into D0 or perhaps even D1 should rain not materialize in the upcoming weeks.

Central Plains

Conditions remained largely unchanged on the central High Plains during the monitoring period, as hot weather (readings as high as 100°F) offset the light to moderate showers (0.1 to 1 inch) which dotted western portions of the region. Farther east, however, locally heavy downpours – with totals averaging 1 to nearly 4 inches – resulted in reduction of Severe (D2) and Extreme (D3) Drought in central and southern Kansas. In improved areas, precipitation over the past 30 days has averaged 150 to 240 percent of normal. The improved conditions are noted in the June 15, USDA-NASS crop condition report for Kansas: winter wheat, which is beyond benefiting from rainfall, was rated 63 percent poor to very poor, while corn was only 9 percent poor to very poor (and 50 percent good to excellent).

Delta

Moderate to heavy showers (1-2 inches, locally more) eased Moderate (D1) and Severe (D2) Drought in southwestern Louisiana, though 90-day rainfall remained well below normal (50-65 percent) in the small area of D1 and D2. The rest of the Delta remained free of drought.

Mid-Atlantic and Northeast

The northeastern quarter of the nation remained free of drought, with widespread showers offsetting increasing heat. Pockets of Abnormal Dryness (D0) are still noted in New England, where despite light to moderate showers (locally more than an inch) over the 7-day period, 30-day rainfall has tallied 35 to 65 percent of normal. Meanwhile, locally heavy showers (2 inches or more) eased D0 in southern West Virginia.

Midwest

Heavy to excessive rainfall eradicated drought but submerged low-lying fields and caused historic river flooding in western portions of the region. Persistent, repetitive showers and thunderstorms – also known as “training” – inundated areas from eastern Nebraska and southeastern South Dakota into southern Minnesota and northern Iowa with 3 to 8 inches of rainfall; these amounts may be conservative, with radar-derived estimates as high as 12 inches. Rain of this magnitude was more than sufficient to warrant a rare, but not unheard of, 2-category improvement, eliminating Moderate Drought (D1) and Abnormal Dryness (D0) from the hardest-hit locales. It should be noted, however, that despite the heavy downpours, long-term precipitation deficits linger (less than 70 percent of normal over the past 12 months) in west-central Iowa; consequently, a small area of D0 (with a Long Term, or “L” designation) remained where shortfalls are most pronounced.

Ohio Valley and Southeast

Widespread showers from the Ohio Valley to the Atlantic and Gulf Coast States were sufficient to prevent much expansion of Abnormal Dryness (D0) or Moderate Drought (D1). However, dry conditions persisted in northeastern Tennessee, where D1 was expanded to reflect 90-day rainfall as low as 60 percent of normal and resultant declining streamflows. Localized soil moisture shortages are noted in the Carolinas, though at this juncture none of the areas of dryness warranted D0. In Florida, 2 to 4 inches of rain signaled the onset of the summer rainy season, alleviating Moderate Drought and reducing the areal extent of D0 in southern portions of the state.

Southern Plains and Texas

Despite temperatures in the 90s, rainfall during the week was sufficient to warrant some modest reductions in drought from northern and central Oklahoma southward into central Texas, while hot, mostly dry conditions in western and northeastern portions of Texas led to small increases in drought intensity. Showers and thunderstorms dropped 1 to locally more than 2 inches of rain across much of central and northeastern Oklahoma, which – while not nearly enough to warrant widespread drought reduction or removal – were enough to improve pastures and summer crop prospects. In Texas, similar amounts of rainfall were reported from Lubbock southeast toward Waco and southward into Austin and San Antonio. Consequently, reductions in drought intensity were made in areas where the heaviest rain fell, although long-term impacts continue (i.e. reservoir storage and ground water supplies) despite recent 60-day surpluses. Rain largely bypassed the Dallas-Fort Worth metro area, where 90-day rainfall

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averaged 35 to 55 percent of normal at the end of the period; Severe (D2) to Extreme (D3) drought was increased to reflect the deteriorating conditions. Likewise, temperatures approaching or exceeding 100°F (locally as high as 108°F) in Texas' Trans-Pecos region coupled with 6-month deficits approaching or exceeding 3 inches (locally less than 20 percent of normal) led to increases in Moderate Drought (D1) in western-most portions of the state.

Western U.S.

Unsettled conditions in the north contrasted with ongoing or intensifying drought elsewhere. The lingering benefits of February and early-March precipitation continued to diminish across California and the Southwest as unseasonable warmth and dryness increased water demands and further depleted already-meager snowpacks. In northern portions of the region, a slow-moving Pacific storm triggered increasingly heavy rain and mountain snow from the Cascades into the northern Rockies, the latter of which was hit with heavy snow at elevations as low as 6,500 feet. In the Northwest's Moderate (D1) to Severe (D2) Drought areas, however, rain was mostly light (less than half an inch) and insufficient to warrant any reductions in drought intensity and coverage. To further illustrate the drought's impacts, the USDA-NASS reported Washington's winter wheat as 26 percent poor to very poor as of June 15, with only 30 percent rated good to excellent.

Farther south, a disappointing water year drew to a close, most likely locking portions of the region into a third consecutive year of drought. In northern and central California, Exceptional Drought (D4) was increased to account for the updated (and mostly final) 2013-14 Water Year precipitation totals; from northern portions of the Coastal Range to Mt. Shasta, precipitation since October 1 totaled 30 to 50 percent of normal (deficits of 16 to 32 inches). The corresponding Standardized Precipitation Indices (SPI), which helps quantify precipitation in terms of drought and historical probability, are well into the D4 category. Feedback from local experts as well as updated precipitation data covering the past 2 to 3 years indicated that D4 expansion was warranted across north-central portions of the San Joaquin Valley and environs as well as from Pyramid Lake in western Nevada northwestward into California; water-year precipitation in both of these areas near or less than half of normal (locally less than 40 percent of normal). Assessments of the situation in California over the ensuing weeks may warrant additional increases in drought coverage and intensity.

In the central Rockies and Four Corners, changes to this week's drought depiction were confined to northern and eastern portions of the region. In south-central Wyoming, Abnormal Dryness (D0) was expanded to reflect 180-day precipitation less than 35 percent of normal. In southeastern Colorado, similar precipitation shortfalls and resultant soil moisture deficits led to a small expansion between Pueblo and the New Mexico border.

Looking Ahead

Hot, humid conditions along with scattered afternoon and evening showers and thunderstorms will persist from the central and southern Plains to the Atlantic Coast, while dry weather prevails from California into the Southwest. The best chance for moderate to heavy rain appears to be from northern Texas northward into the Great Lakes, with additional heavy downpours possible in some of the already-flooded areas of the western Corn Belt. Farther south, seasonal showers will persist in Florida, while spotty showers in the interior Southeast may afford localized relief from developing dryness. Out west, rain and mountain snow will diminish in northern portions of the region, while dry, cooler-than-normal weather lingers for much of the period from California into the Four Corners. The NWS 6- to 10-day outlook for June 24-28 calls for above-normal rainfall in the Northwest and from the southern Plains to the central Atlantic Coast. Conversely, drier-than-normal conditions will prevail from northern California into the Four Corners and from the northern Plains into the Upper Midwest. Temperatures are expected to average above normal across much of the contiguous U.S., with cooler-than-normal weather confined to east-central Plains."

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State Activities

[State government drought activities](#) can be tracked through their drought plans. NRCS Snow Survey and Water Supply Forecasting (SSWSF) Program State Office personnel are participating in state drought committee meetings and providing the committees and media with appropriate SSWSF information. Additional information describing the [tools](#) available from the Drought Monitor can also be found at the [U.S. Drought Portal](#).

More Information

The National Water and Climate Center (NWCC) [Homepage](#) provides the latest available snowpack and water supply information. This document is available [weekly](#). CONUS Snowpack and Drought Reports from 2007 are available online. Reports from 2001-2006 are available on request.

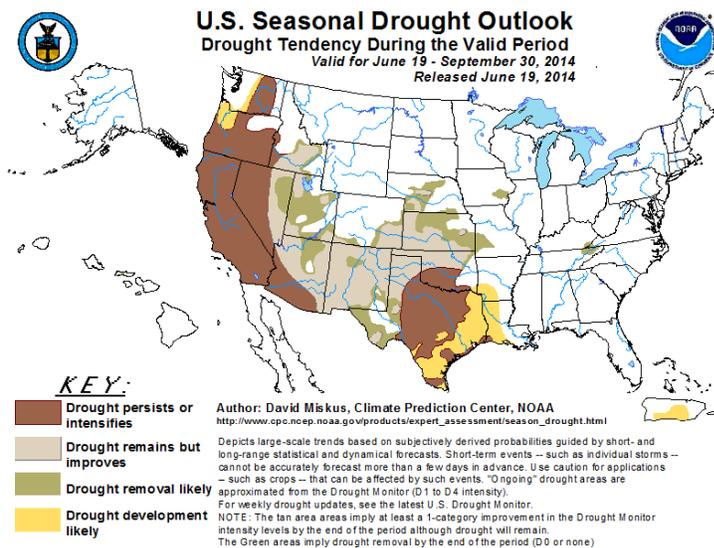
This report uses data and products provided by the Interagency Drought Monitor Consortium members and the National Interagency Fire Center.

/s/

David W. Smith
Acting Deputy Chief, Soil Science and Resource Assessment

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Supplemental Drought Information

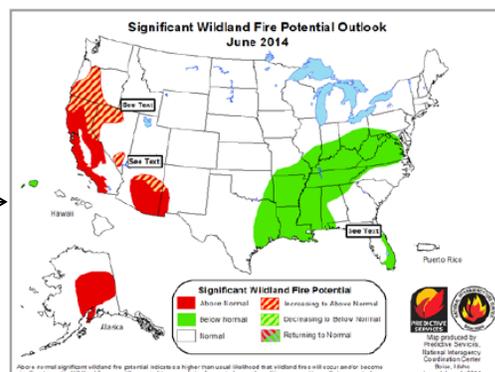


June

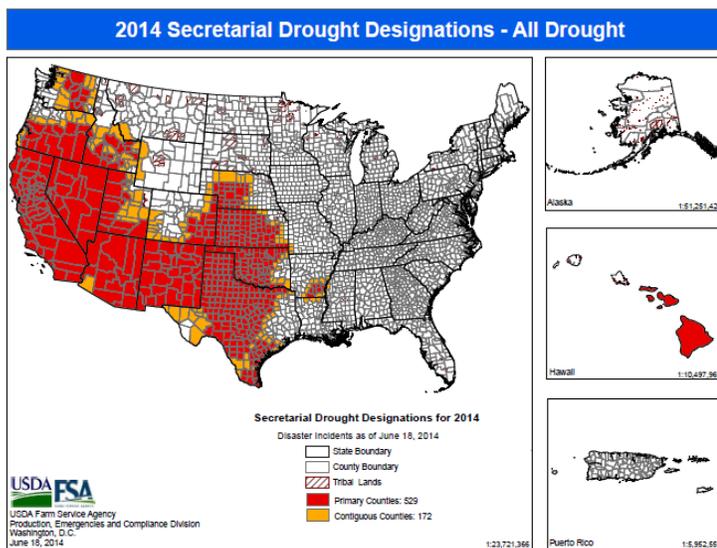
- Above normal fire potential will expand to include northern California, Nevada, and much of Oregon. Most of Alaska will continue to see above normal significant fire potential.
- Below normal fire potential will continue over the lower and mid-Mississippi, Tennessee and Ohio Valleys.

Drought is expected to persist over much of the West and southern Great Plains. Improvements are expected from the Southwest to the central Great Plains.

Also see: [National Significant Wildland Fire Potential Outlook](#) (updated on the **first** of each month) contains a content summary of the previous month’s conditions.



June Forecast



Refer to the USDA Drought Assistance [website](#) and [National Sustainable Agriculture Information Service](#).

Read about the new [USDA Regional Climate Hubs](#).

New useful resource: [NASS Quick Stats](#)

Additional Maps

U.S. Maps PowerPoint presentation can be found at: <http://dmcommunity.unl.edu/maps/US-Maps.ppt>.

The regional zooms of ACIS station data percent-of-normal precipitation can be found at: <http://dmcommunity.unl.edu/maps/All-CONUS-ACIS-PNP.pptx>.

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Supplemental Drought-Agriculture News

Download [archived](#) "U.S. Crops in Drought" files

The following is a collection of drought-related news stories from the past seven days or so. Impact information from these articles is entered into the [Drought Impact Reporter](#). A number of these articles will also be posted on the [Drought Headlines](#) page at the NDMC website. The list is compiled by Denise D. Gutzmer, Drought Impact Specialist, and National Drought Mitigation Center.

"Winter wheat production estimates slip

The U.S. Department of Agriculture revised its wheat production estimate downward as drought continued to hurt winter wheat in Kansas, Oklahoma and Texas since last month's report. Winter wheat production is estimated to be 1.38 billion bushels or two percent lower than the May estimate and 10 percent lower than last year. The estimate for hard red winter wheat, used for bread-making, was 720 million bushels or 3 percent lower than last month.

"Severe drought conditions in the Southern Plains had a dramatic impact on the winter wheat crop, with poor fields in Oklahoma and Texas being baled for hay or otherwise abandoned," said the crop production report. "Late-month precipitation was beneficial to this area but likely too late to revive drought-stricken wheat."

Water conservation in California

Several California cities have fallen short of the 20 percent reduction in water use that Gov. Jerry Brown called for months ago when he declared a drought emergency. Water customers in San Francisco curbed their consumption by 8 percent, while water users in San Jose used more water in the first quarter of 2014, compared to last year. East Bay Municipal Utility District customers used 3 percent less water between February and April, compared to the last three years.

While more than 75 percent of Californians surveyed by the Public Policy Institute view the shrinking water supplies as a problem and as many as 92 percent say they have made changes to conserve water, reductions in water use do not reflect intense concern.

In defense of the Bay Area, water experts say that the conservation ethic is strong and that people were already conserving water with water-efficient appliances and drought-tolerant plants, making it challenging to cut back further.

Dusty, hazy air in Bakersfield, California

Bakersfield endured about 12 hours of hazy air on June 10 and 11 when a low pressure system moved through parched Southern California, bringing enough wind to stir up fine particulate matter and coarse dust particles. Particulate matter readings over a 24-hour period reached 56 micrograms per cubic meter, the highest reading since the windy days of January and February. The chief communications officer for the San Joaquin Valley Air Pollution Control District said the dusty air was related to the drought and may portend a summer of poor air quality.

Tumbleweeds in southeastern Colorado

Crowley and Pueblo counties declared states of emergency to pave the way for state assistance in dealing with the plague of tumbleweeds. The weeds grew abundantly in late August and early September 2013 when rains fell, but drought had stifled grass growth, allowing the Russian thistles to thrive. Cattle would normally eat the tumbleweed, but drought has forced ranchers to sell many of their livestock, leaving too few animals to keep the tumbleweed in check.

State of emergency in Pawnee, Oklahoma

Strict water rationing began in Pawnee because Pawnee Lake was drying up amid continued drought. The Pawnee City Council declared a state of emergency because the town's health and safety may be in jeopardy because they fear running out of water before the end of summer. The council also approved the drilling of two new wells at a cost of \$270,000. A construction company will begin drilling in mid-June and be finished in late July or early August.

Water shortage in Klamath Basin in Oregon, California

Oregon water masters were considering demands from Klamath Basin farmers and the Klamath Tribes in enforcing senior water rights as drought limits the availability of water, said a spokesperson for the Oregon Water Resources Department. The city of Klamath Falls was ordered to shut down two municipal drinking water wells to leave more water for the Klamath Reclamation Project, serving 1,200

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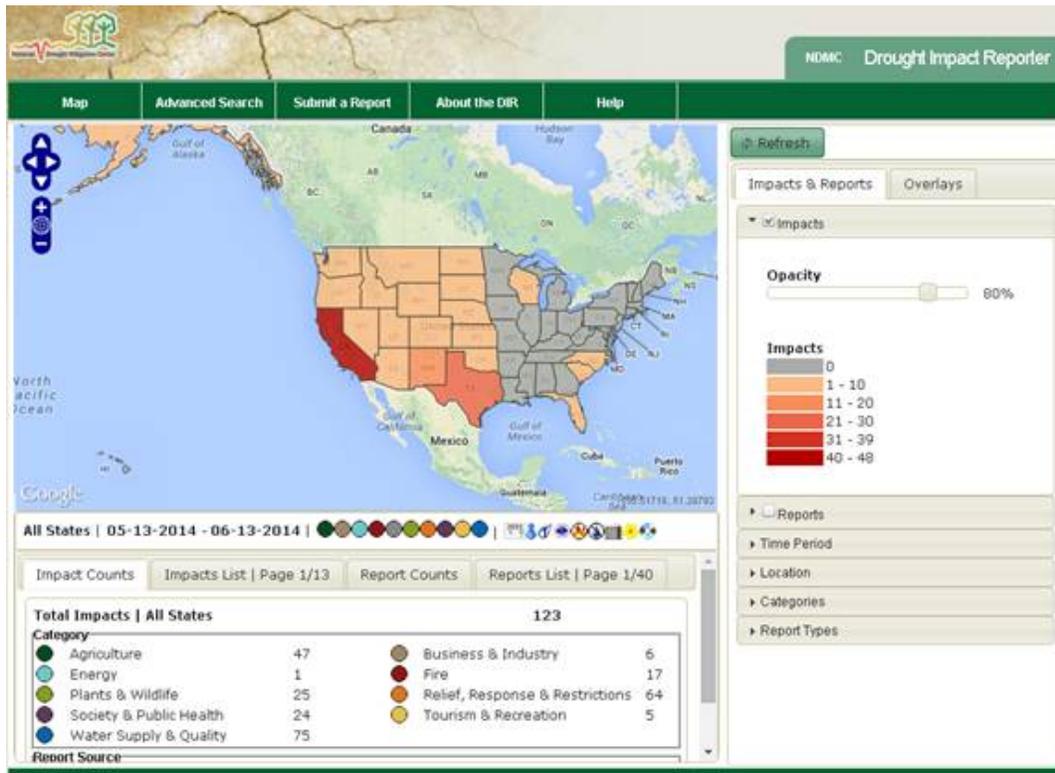
farmers along the Oregon-California border. But Klamath Falls intends to fight the well closure order because state law holds human consumption needs as a higher priority than irrigation, according to the city manager. The calls concerns water use on stretches of the Sprague, Wood and Sycan rivers and several creeks.

Young fish trapped by low water in Medford, Oregon

Severe drought and early withdrawal of irrigation water from Bear Creek left too little water for thousands of juvenile chinook salmon and steelhead to survive in the 70 degree, oxygen-depleted water in downtown Medford. The poor water conditions prompt the fish try to swim upstream to cooler water, but the fish were trapped in small pools within the creek in Medford. Biologists from the Oregon Department of Fish and Wildlife and some volunteers gathered up a few hundred salmon and steelhead and relocated them upstream where the water was cooler.

Breweries trying to curb water use

Miller, Coors and Anheuser-Busch have cut back on the amount of water used to produce their beer as drought and wildfires jeopardize water supplies. Since 2012, MillerCoors cut its water use 9.2 percent and has focused its water saving-efforts on Texas, California and Colorado. The company uses sensors to release the right amount of water for irrigation, planting native grasses to limit erosion and runoff and watching for leaky machinery in its breweries.”



Tea Cup reservoir depictions:

- <http://www.usbr.gov/uc/water/basin/> ← Upper Colorado
- http://www.usbr.gov/uc/wcao/water/basin/tc_gr.html; ← Upper Snake
- <http://www.usbr.gov/pn/hydromet/burtea.html> ← Upper Colorado
- http://www.usbr.gov/uc/water/basin/tc_cr.html ← Upper Colorado
- <http://www.usbr.gov/pn/hydromet/select.html> ← Pacific Northwest
- <http://www.sevierriver.org/reservoirs/teacup-diagram-of-reservoirs/> ← Sevier River Water (UT)

NWCC's Surface Water Supply Index (SWSI) maps are located [here](#).

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Supplemental Information for the Week

[US Drought Monitor News](#) (June 5):

“California topped the U.S. with 70% of its rangeland and pastures rated in very poor to poor condition on June 1, according to USDA. Following California were New Mexico (68% very poor to poor), Arizona (55%), Kansas (43%), Oklahoma (43%), and Nevada (40%). According to the latest “agriculture in drought” statistics, based on the June 3 Drought Monitor, 29% of the domestic hay acreage and 43% of the U.S. cattle inventory were located in a drought-affected area.”

U.S. Cattle Areas Experiencing Drought

*Reflects June 3, 2014
U.S. Drought Monitor data*

*Approximately 43% of the domestic cattle
inventory is within an area experiencing drought,
based on NASS 2007 Census of Agriculture data.*

