

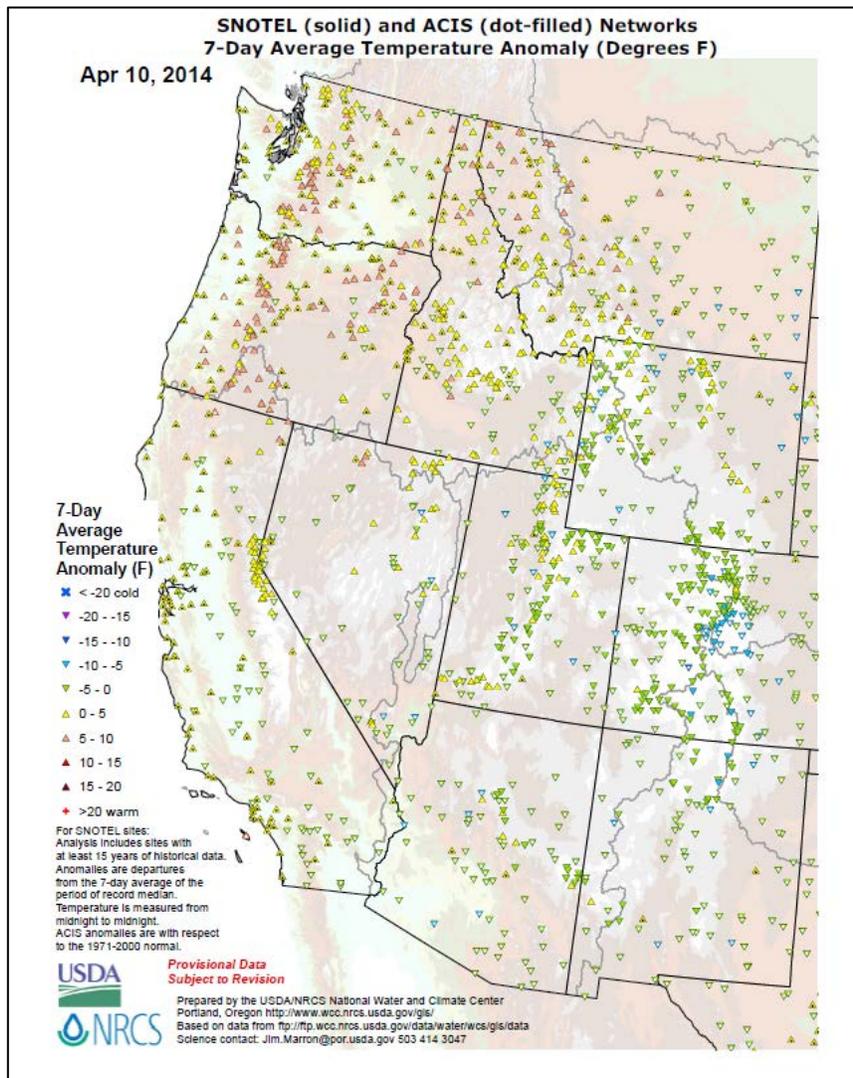


Natural Resources Conservation Service
 P.O. Box 2890
 Washington, D.C. 20013

Weekly Snowpack / Drought Monitor Update April 10, 2014

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Temperature



[SNOTEL](#) and [ACIS 7-day temperature anomaly](#) shows temperatures well above normal over the Pacific Northwest and well below normal over central Colorado.

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

The Natural Resources Conservation Service provides leadership in a partnership effort to help people conserve, maintain, and improve our natural resources and environment

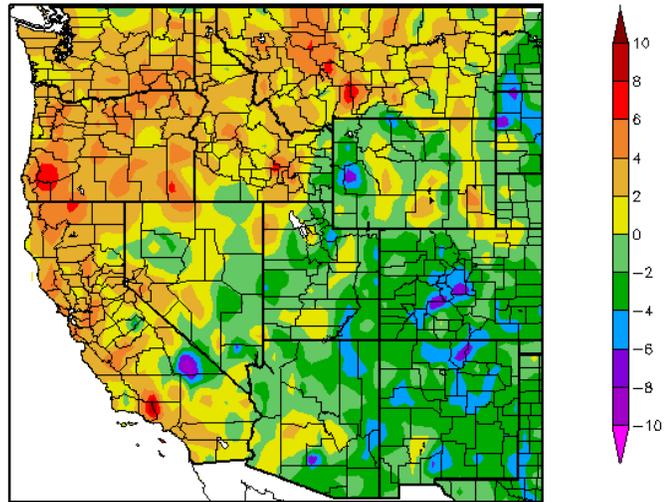
An Equal Opportunity Employer

Weekly Snowpack and Drought Monitor Update Report

[ACIS](#) 7-day average temperature anomalies, ending April 9, show the greatest negative temperature departures over parts of western Wyoming, Colorado, northern New Mexico, western South Dakota, and southcentral California (<-8°F). The greatest positive temperature departures occurred over parts of the Montana Rockies, southwest Oregon, and the Los Angeles Basin (>+6°F).

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

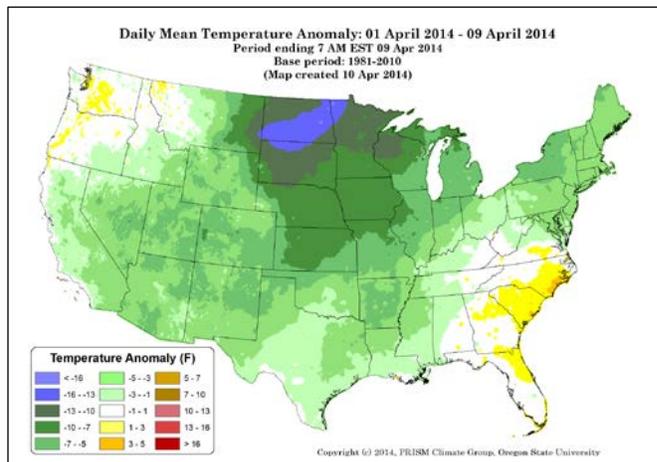
Departure from Normal Temperature (F)
4/3/2014 - 4/9/2014



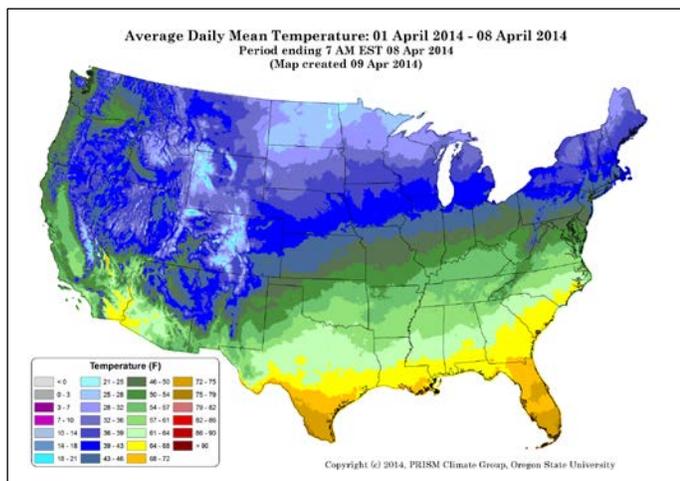
Generated 4/10/2014 at HPRCC using provisional data.

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.



← The April 2014 temperature departures map thus far shows a fairly cold start to the month; especially over the northern Great Plains. Near normal temperatures dominate the Pacific Northwest and southeastern states.



Forecasting the start of the spring snowmelt and subsequent runoff depends, in part, on when average temperatures warm to above freezing. Monitoring this type of climate map is a useful way to gauge when this onset is likely to occur.

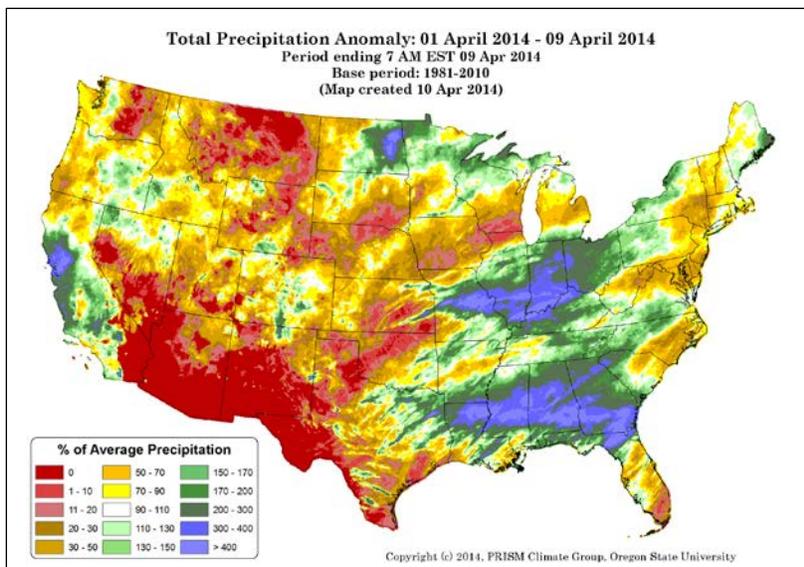
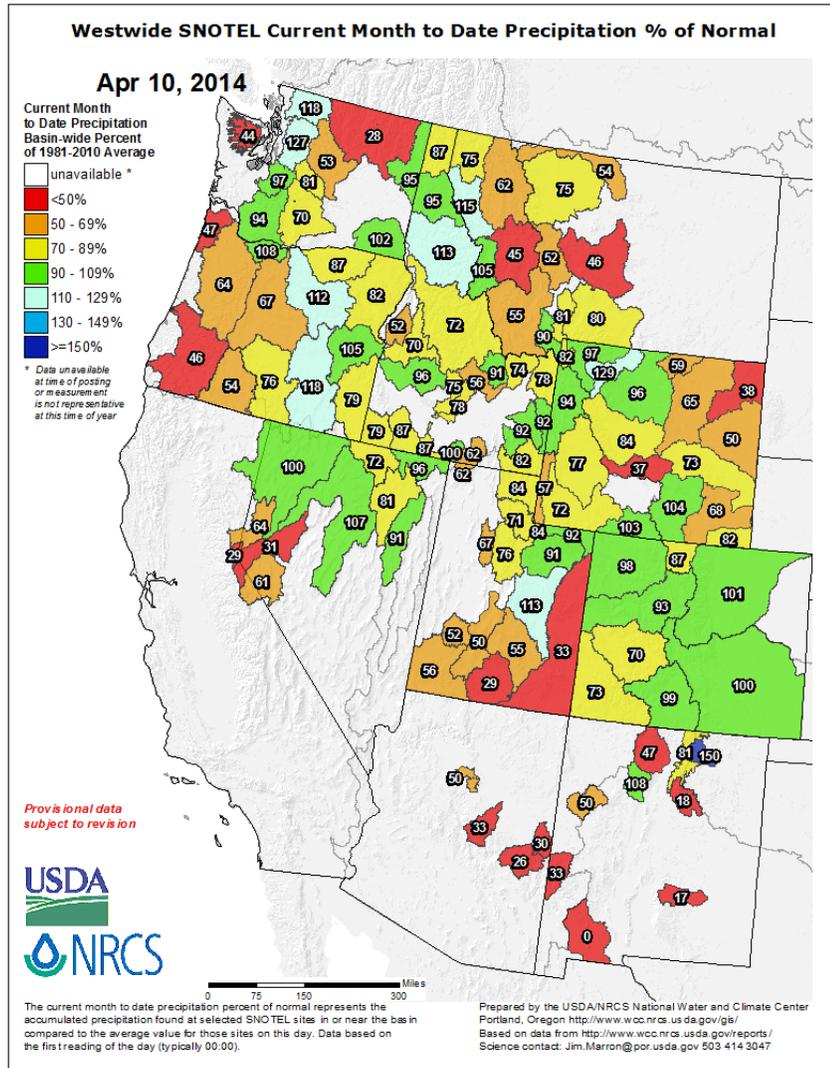
Weekly Snowpack and Drought Monitor Update Report

Precipitation

The April [SNOTEL](#) precipitation percent of normal map shows a rather complex pattern of surpluses and deficits thus far for the month across the West. Northern Nevada and much of Colorado are approaching near normal totals.

Significant deficits dominate the southwest states excluding Colorado, the northern High Plains, and the Sierra Nevada.

Surpluses are noted over east-central Oregon, northwest Washington, and part of the Idaho Panhandle. →



← Thus far, the [April precipitation anomaly](#) pattern reveals a wet start over the Midwest and Gulf Coast states, including coastal California. The Southwest, Northwest, Rockies, and much of the Great Plains are falling beyond in moisture.

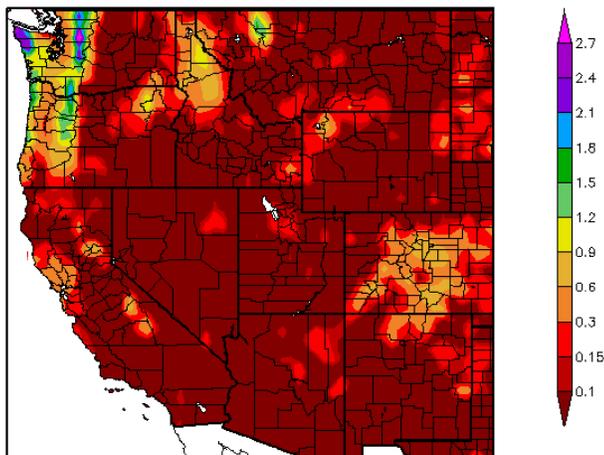
This preliminary daily PRISM precipitation map contains all available network data, including SNOTEL data, and is updated periodically as additional data become available and are quality controlled.

Weekly Snowpack and Drought Monitor Update Report

The [ACIS 7-day](#) total precipitation map shows continued moisture falling over the Cascades and Olympic Mountains in Washington. Lesser amounts fell across scattered regions of California, the Colorado Rockies, and northern Idaho.

Elsewhere, little if any precipitation occurred.

Precipitation (in)
4/3/2014 - 4/9/2014

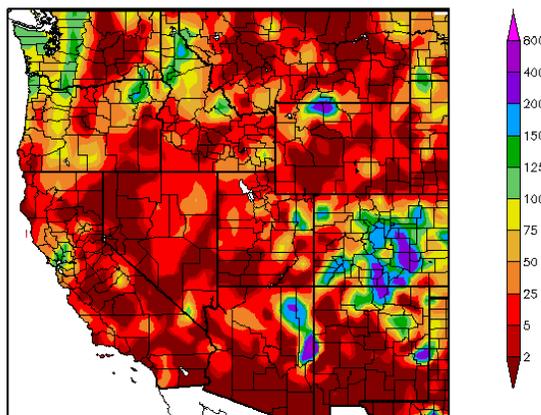


Generated 4/10/2014 at HPRCC using provisional data.

Regional Climate Centers

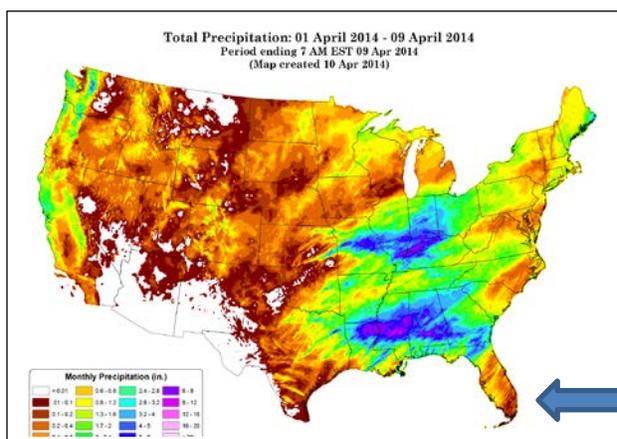
Despite heavier precipitation over the Cascades and Olympic Mountains as noted above, this translated to [near normal percentages](#) for this time of year. Note that lesser precipitation over Colorado resulted in higher percentage of normal. This is due to the fact that lesser precipitation normally falls in this region during April. Even lower amounts fell in eastern Arizona but higher percent of normal values resulted because of unusual rains for this time of year. →

Percent of Normal Precipitation (%)
4/3/2014 - 4/9/2014



Generated 4/10/2014 at HPRCC using provisional data.

Regional Climate Centers



← The April 2014 [total precipitation](#) indicates large regions across the country with significant moisture and dryness.

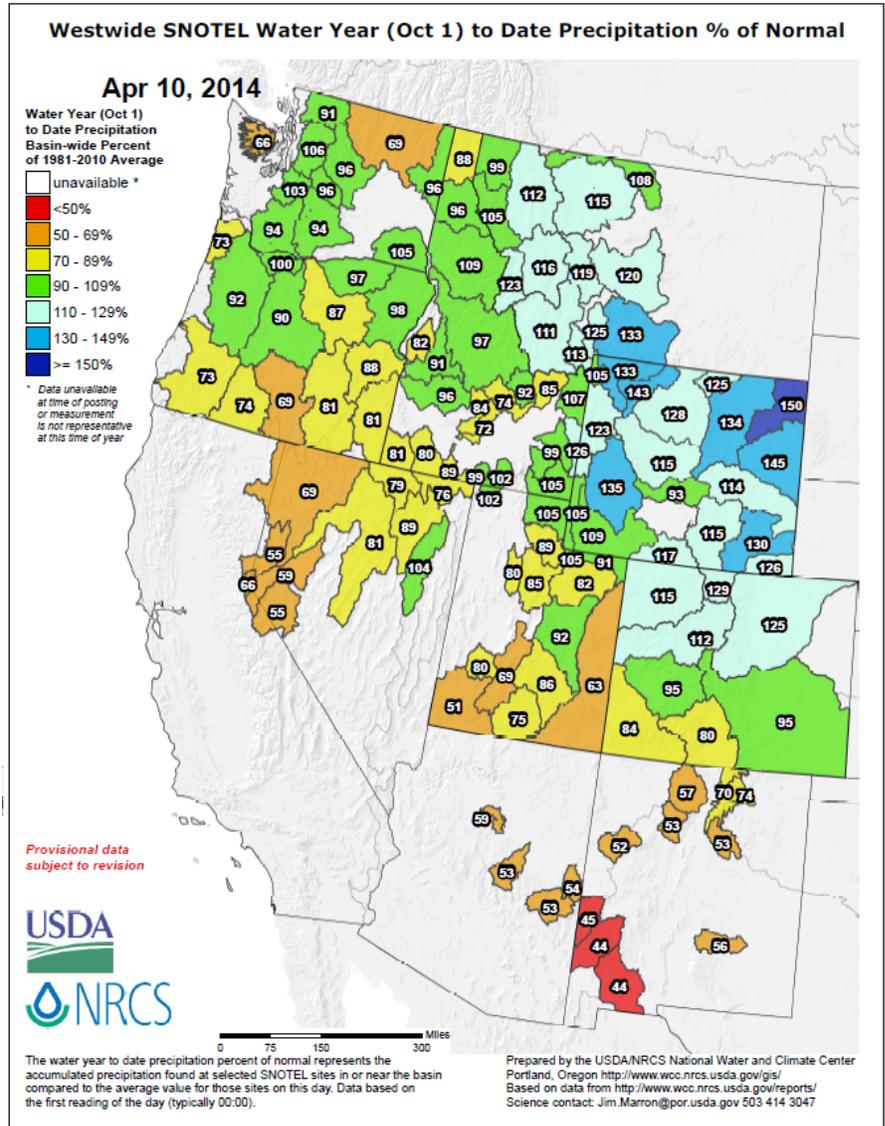
Areas that have been in drought for some time now are not being helped if this pattern persists.

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

Weekly Snowpack and Drought Monitor Update Report

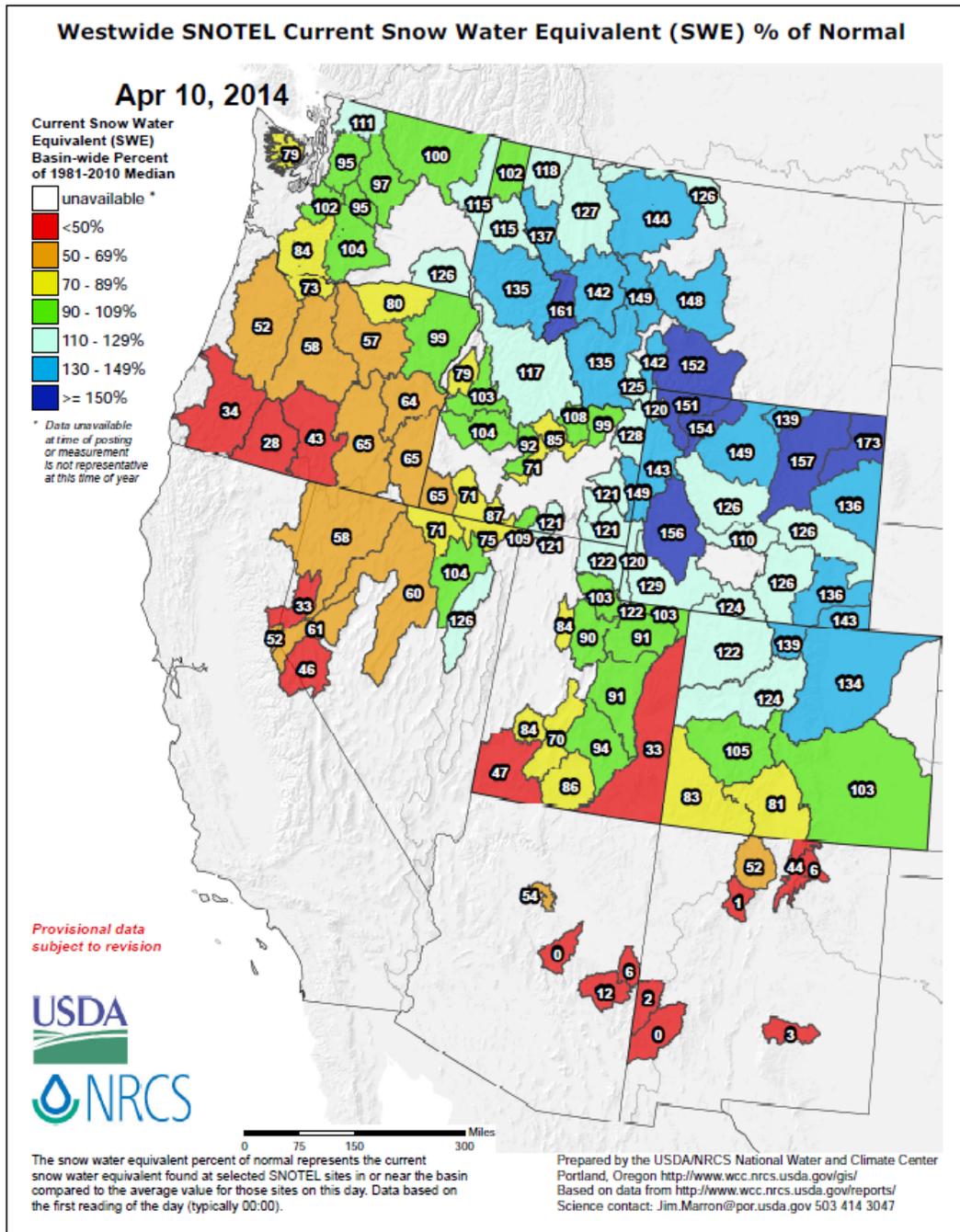
For the [2014 Water Year](#) that began on October 1, 2013, only central Montana, all of Wyoming, and northern Colorado are experiencing surpluses.

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



Weekly Snowpack and Drought Monitor Update Report

Snow



[Snow Water Equivalent](#) (SWE) values are generally higher east of the Continental Divide, with the exception of New Mexico. During this time of year, the percent of normal can increase without additional moisture if the melt of the snowpack is delayed by colder than normal conditions. Values over the Southwest can also ramp up quickly with any precipitation event, because this is usually a dry time of year when the occurrence of precipitation is unusual.

The water supply forecasts issued by the [National Water and Climate Center](#) for the spring and summer months are [now available](#).

See the latest:

- [National Snow Analysis](#)
- [West-Wide Water Supply Forecast Tables](#)

Weekly Snowpack and Drought Monitor Update Report

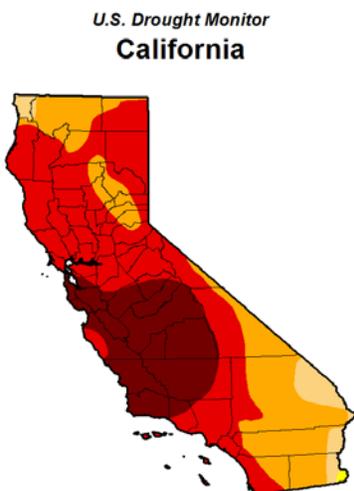
Risk Management Web Resources

- ✓ 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](#)
- ✓ [CLIMAS January 2014 Climate Summary](#)

U.S. [Impacts](#) during the past week

- [Drought to make this year's fire season more dangerous](#)
April 2, **Arizona**
- [Officials gear for fire season in NM](#)
April 1, **New Mexico**
- [Iron County to feds: Remove wild horses or we will](#)
April 3, **Southwestern Utah**
- [New forecast predicts low water supply in New Mexico](#)

State with D-4 Exceptional Drought



U.S. Drought Monitor
California
April 8, 2014
(Released Thursday, Apr. 10, 2014)
Valid 8 a.m. EDT

	Drought Conditions (Percent Area)					
	None	D0-D1	D2-D3	D4	D5	
Current	0.00	100.00	99.81	95.21	68.76	23.4
Last Week 4/1/2014	0.00	100.00	99.81	95.21	68.76	23.4
3 Months Ago 4/7/2014	1.43	98.57	84.25	87.53	27.59	0.0
Start of Calendar Year 1/1/2014	2.81	97.39	84.25	87.53	27.59	0.0
Start of Water Year 10/1/13	2.83	97.37	85.95	84.12	11.36	0.0
One Year Ago 4/8/13	2.84	97.15	48.39	23.22	0.00	0.0

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 forecast statements.

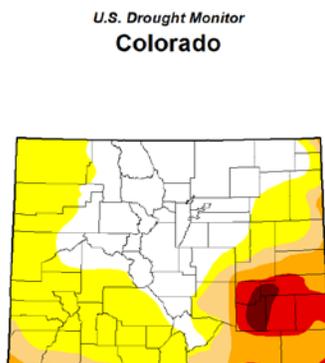
Author:
Brian Fuchs
National Drought Mitigation Center

USDA

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

No significant changes occurred this week.

State with D-4 Exceptional Drought



U.S. Drought Monitor
Colorado
April 8, 2014
(Released Thursday, Apr. 10, 2014)
Valid 8 a.m. EDT

	Drought Conditions (Percent Area)					
	None	D0-D1	D2-D3	D4	D5	
Current	38.38	61.52	23.43	10.26	6.90	1.47
Last Week 4/1/2014	38.38	61.52	23.43	14.93	9.90	1.47
3 Months Ago 4/7/2014	32.04	67.95	22.33	13.56	4.01	1.47
Start of Calendar Year 1/1/2014	32.04	67.95	22.33	13.56	4.01	1.47
Start of Water Year 10/1/13	24.93	75.09	37.88	12.31	4.01	1.47
One Year Ago 4/8/13	3.08	100.00	100.00	88.97	45.92	13.52

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

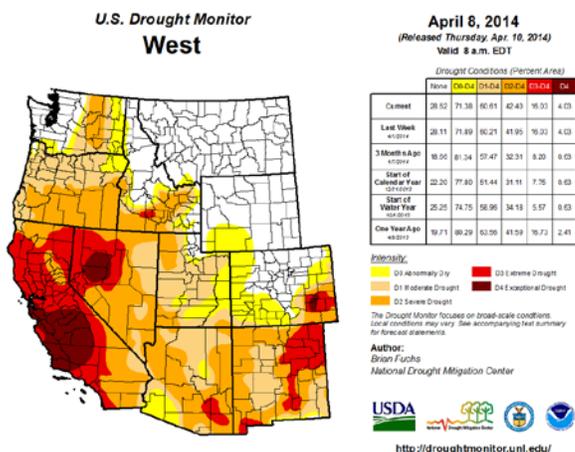
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:
Brian Fuchs
National Drought Mitigation Center

USDA

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

No significant changes occurred this week.



No significant changes occurred this week.

CA Drought Information Resources

[Drought News from California](#)

- [Cal Fire to hire, train seasonal firefighters early due to drought](#) - March 31
- [Drought bill targets homeowner association rules](#) - April 3
- [During drought, farmers must also manage stress](#) - March 31
- [High Sierra Regatta canceled by low water at Huntington Lake](#) - April 2
- [ACWA Calls for Conservation Statewide in Response to Drought](#) - April 1
- [California Drought: After years of over pumping groundwater, state may be ready for reforms](#) - March 30
- [California Drought: Central Valley sinking as farmers race to tap aquifer](#) - March 30
- [Mount Diablo camp spigots go dry during drought](#) - March 28
- [Snowpack Remains Low; State and Feds To Increase Water Pumping](#) - April 1
- [State snowpack survey forebodes tough summer](#) - April 1

See the end of this report for additional California-related drought data (historical perspective).

Related Area News:

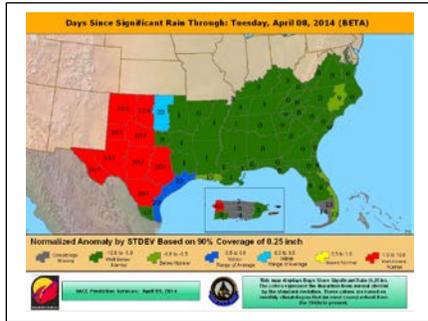
- [Drought Concerns Producers](#) - April 1, **Nebraska**
- [Wheat Fields See Worst Damage in Five Years on Drought to Freeze](#) - April 4, **Kansas**

Weekly Snowpack and Drought Monitor Update Report

State with D-4 Exceptional Drought

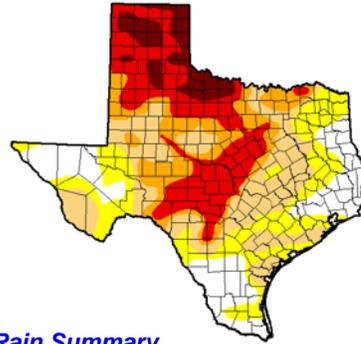
- ✓ Texas Drought [Website](#).
- ✓ [Texas Reservoirs](#).
- ✓ [Texas Drought Monitor Coordination Conference](#)
Call: on Monday's 2:00 PM - 3:00 PM CST

- [Tight water use urged](#) - March 30
- [State to study desalination of Gulf water as viable option in face of drought](#) - April 2
- [Mineral Wells down to 400-day supply of water](#) - March 31



[Days Since Rain Summary](#)

U.S. Drought Monitor Texas



April 8, 2014
(Released Thursday, Apr. 10, 2014)
Valid 9 a.m. EDT

	None	D0-D1	D1-D2	D2-D3	D3-D4	D4
Current	17.48	82.52	63.58	40.46	27.60	7.08
Last Week 4/1/2014	15.40	84.60	66.80	42.96	27.36	4.42
3 Months Ago 1/2/2014	26.13	71.87	43.89	20.84	5.82	0.79
Start of Calendar Year 1/1/2014	20.48	71.52	43.84	21.15	5.82	0.79
Start of Water Year 10/1/2013	6.42	93.38	70.95	25.88	4.01	0.12
One Year Ago 4/8/2013	0.44	99.56	89.44	69.35	29.91	11.59

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

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

Author:
Brian Fuchs
National Drought Mitigation Center

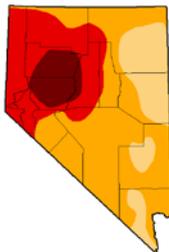


<http://droughtmonitor.unl.edu/>

Deterioration in D4 by 2.5% occurred during the past week.

State with D-4 Exceptional Drought

U.S. Drought Monitor Nevada



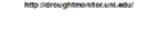
April 8, 2014
(Released Thursday, Apr. 10, 2014)
Valid 9 a.m. EDT

	None	D0-D1	D1-D2	D2-D3	D3-D4	D4
Current	0.00	100.00	100.00	82.21	35.54	0.24
Last Week 4/1/2014	0.00	100.00	100.00	82.21	35.54	0.24
3 Months Ago 1/2/2014	0.00	100.00	100.00	80.30	35.53	0.30
Start of Calendar Year 1/1/2014	0.00	100.00	100.00	77.00	35.53	0.30
Start of Water Year 10/1/2013	0.00	100.00	100.00	74.70	35.53	0.30
One Year Ago 4/8/2013	0.00	100.00	100.00	54.00	32.00	0.00

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

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

Author:
Brian Fuchs
National Drought Mitigation Center



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

No changes have occurred during the past week.

Deterioration has occurred in D4 by 5% this week.

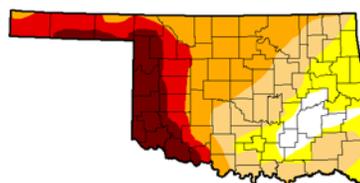
State with D-4 Exceptional Drought

Related news:

- ✓ [2014 Kansas Drought Report and Summary](#)

See the end of this report for additional Oklahoma-related drought data (historical perspective).

U.S. Drought Monitor Oklahoma



April 8, 2014
(Released Thursday, Apr. 10, 2014)
Valid 9 a.m. EDT

	None	D0-D1	D1-D2	D2-D3	D3-D4	D4
Current	6.34	93.66	76.48	52.63	26.39	13.54
Last Week 4/1/2014	4.95	95.95	77.48	50.67	24.83	8.61
3 Months Ago 1/2/2014	50.34	49.16	38.17	18.99	4.94	2.40
Start of Calendar Year 1/1/2014	50.34	49.16	38.17	18.99	4.94	2.40
Start of Water Year 10/1/2013	21.74	78.26	43.80	17.62	4.42	1.45
One Year Ago 4/8/2013	0.70	99.30	85.91	61.00	36.44	6.95

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

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

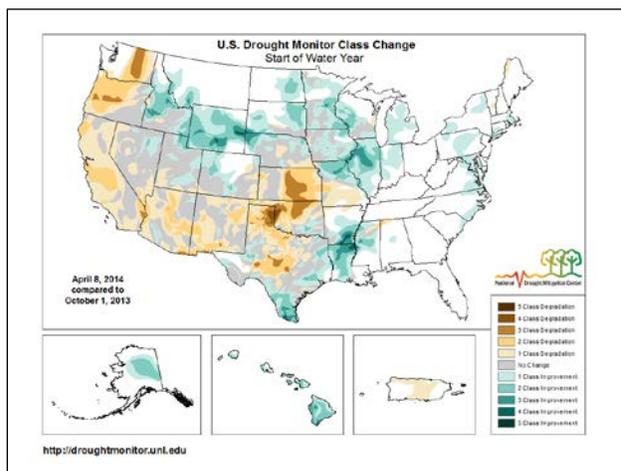
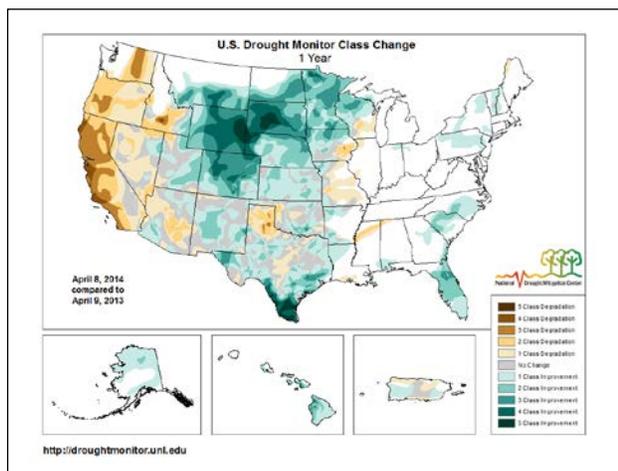
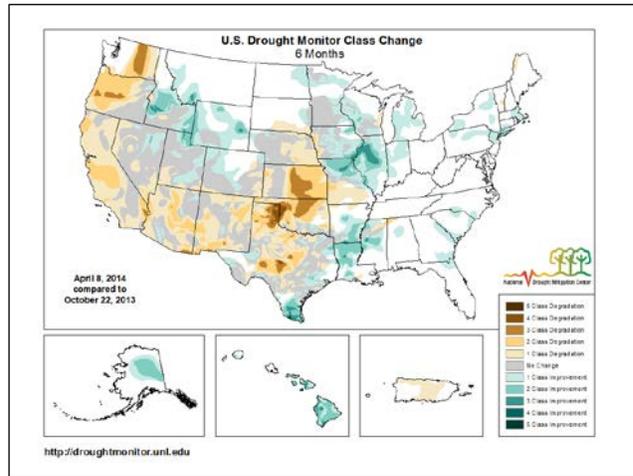
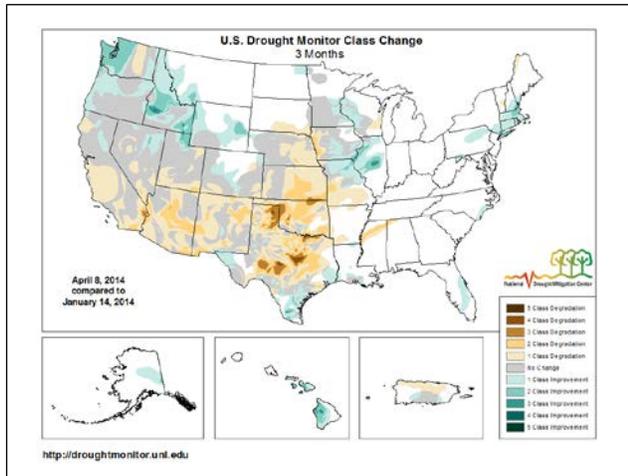
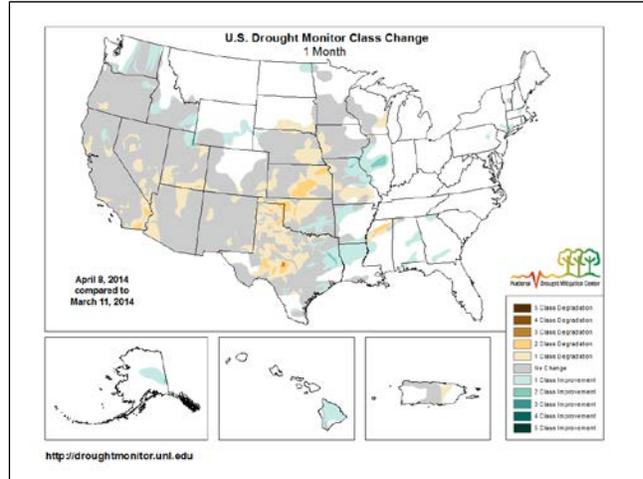
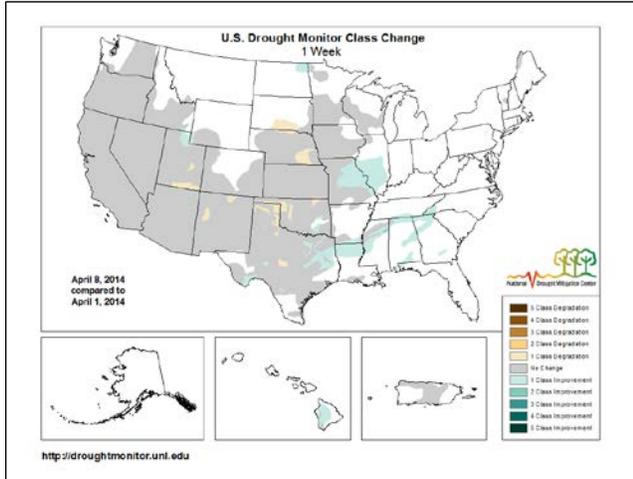
Author:
Brian Fuchs
National Drought Mitigation Center



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

Weekly Snowpack and Drought Monitor Update Report

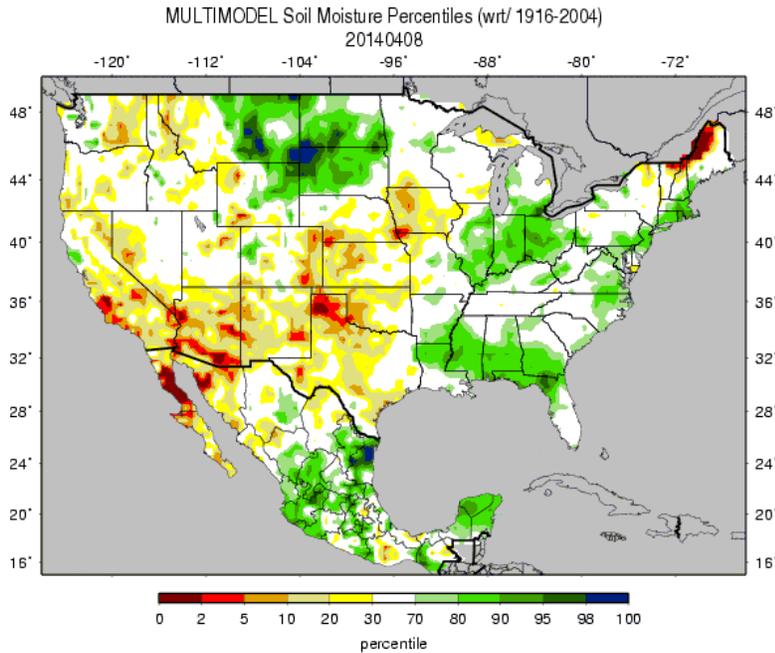
Changes in Drought Monitor Categories (over various time periods)



Changes to the drought monitor usually start to accelerate in the spring. Since the start of the 2014 Water Year (lower right map), the western drought conditions have worsened over the Pacific Northwest and improved over Wyoming and Idaho. Conditions have also improved over the Mississippi River Valley, but have worsened from Kansas to northern Texas.

Weekly Snowpack and Drought Monitor Update Report

Soil Moisture



Note: Northernmost states with continued frozen ground will not have the most accurate and reliable soil moisture measurements until late April.

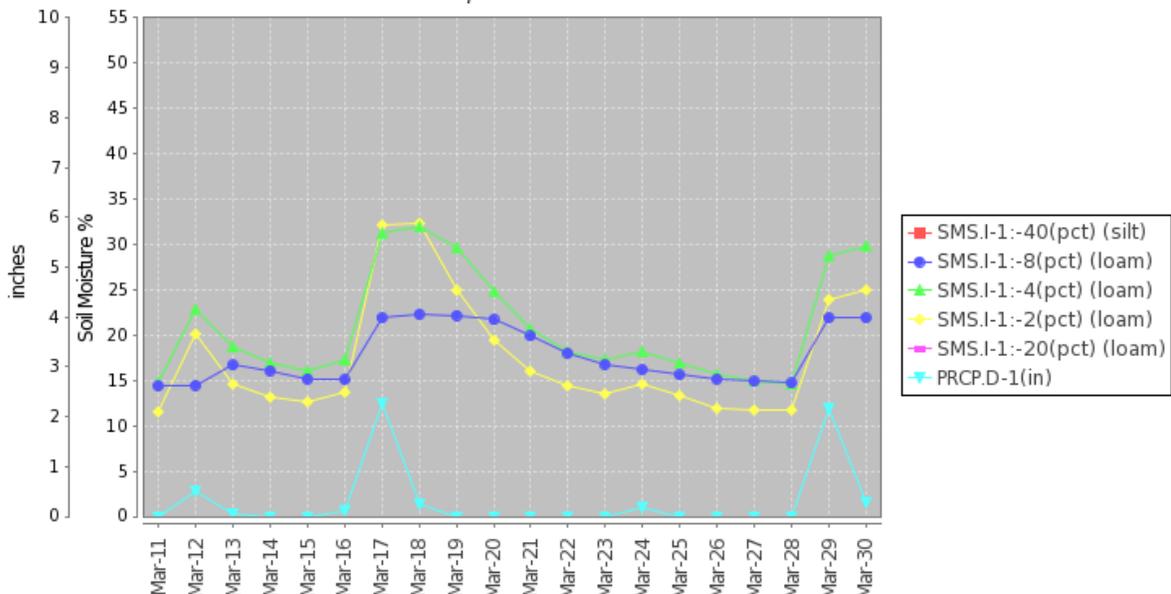
Soil moisture ranking in [percentile](#) as of April 8 shows dryness over central California, southern Arizona, eastern New Mexico, the southwestern Great Plains (i.e., northern Texas), and parts of New England. Moist soils dominate the northern Great Plains. With abundant snowpack in Montana, concern is mounting about potential Missouri River flooding this spring (see the next page for more data).

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 Health-unlock your farm's potential](#)

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

Station (2115) MONTH=2014-03-11 (Daily) NRCS National Water and Climate Center - Provisional Data - subject to revision
Thu Apr 10 08:43:47 PDT 2014

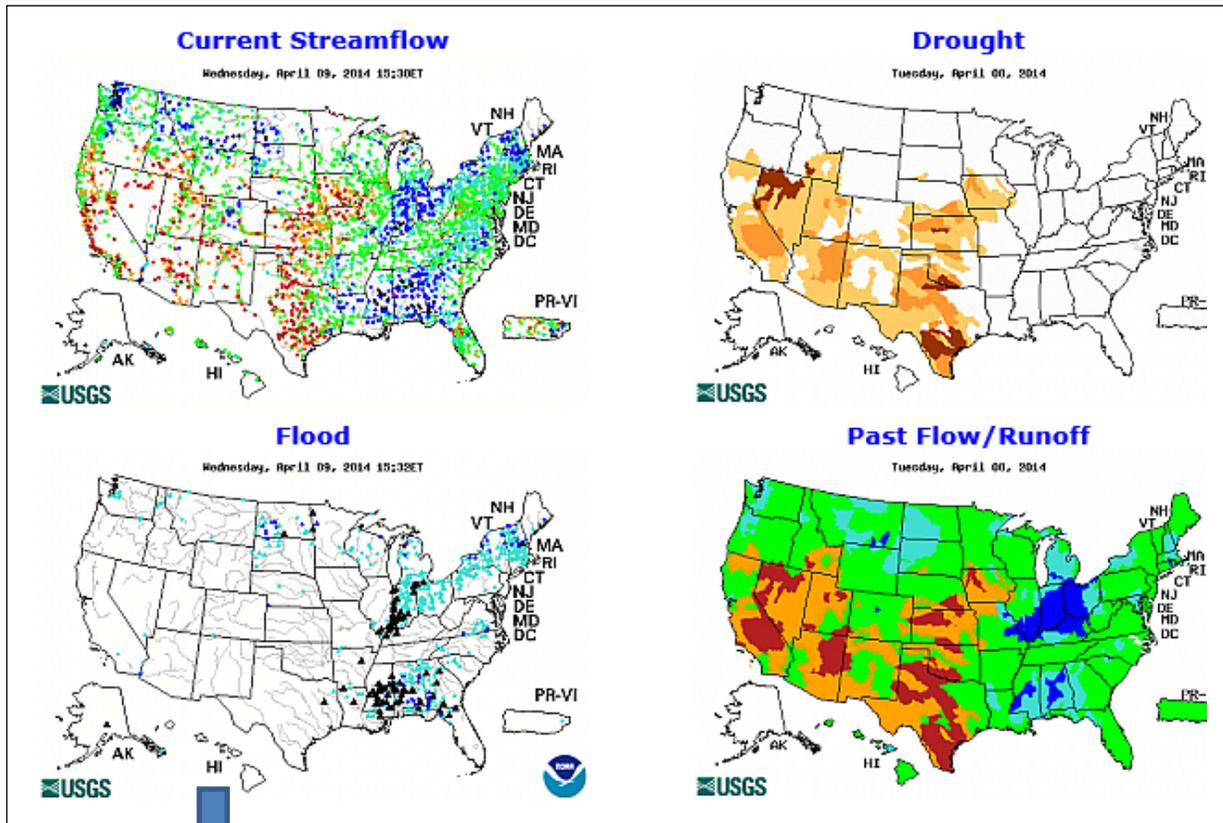


This NRCS resource shows soil moisture data at a SCAN site located in [southeast Alabama](#). Heavy rainfall events are reflected by immediate increases in soil moisture.

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](#).

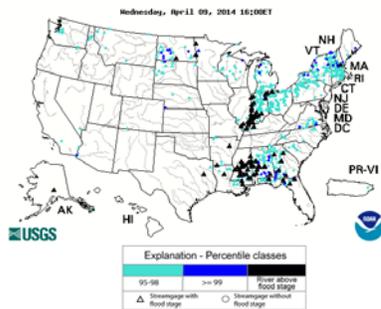
Weekly Snowpack and Drought Monitor Update Report

Streamflow



Click to enlarge & update

Map of flood and high flow condition (United States)



Flooding is currently occurring in some rivers over the Gulf Coast states, the Wabash River along Indiana and Illinois, and the southern Ohio River.

National Long Range Outlook



During the next three months, flooding is possible over the Red River Valley in North Dakota, the upper Midwest, and middle Mississippi River Valley. Currently, 4 gauges have a greater than 50% chance to experience major flooding; 53 gauges for moderate flooding; 229 gauges for minor flooding.

Weekly Snowpack and Drought Monitor Update Report

[National Drought Summary for April 8, 2014](#)

Prepared by: Drought Monitor Author: Brian Fuchs, National Drought Mitigation Center

Hawaii, Alaska, and Puerto Rico

“Wetter than normal conditions in Hawaii since the end of March and into early April brought drought relief to the eastern portions of the state. On the Big Island and Maui, D1 was eliminated and D0 was reduced. Molokai continues to have some long-term drought issues, which include irrigation restrictions on the Kualapuu Reservoir. These restrictions were eased a bit and the D3 conditions were improved to D2 this week because of the recent rains. This is the first time since May 2008 that both the Big Island and Maui are drought free. No changes were made in Alaska or Puerto Rico this week.

Midwest

Another week of below-normal temperatures in the region has stalled the arrival of spring. Most areas were 4-6 degrees Fahrenheit below normal for the week. The southern portions of the region did see the springtime clash of warm moist air from the south along with cold air from the north, resulting in some thunderstorms in central Missouri and eastward into southern Illinois and Indiana. Some areas of central Missouri and southern Indiana recorded more than 4 inches of rain with these events, which allowed for improvements in the drought depiction in the region. All of the recently introduced D0 was removed from southern Illinois while the D0 and D1 conditions in central Missouri and western Illinois were improved a full category where the greatest amounts of precipitation were recorded.

South

The same storm system that brought good rains to the southeast also caught portions of Arkansas, east Texas, and Louisiana. Outside of these areas, the remainder of the region was mostly dry. Although dry, temperatures remained at or below normal, with departures from normal of 2-4 degrees Fahrenheit through portions of west Texas, Arkansas, and Oklahoma. Improvements were made to the D0 in northern Louisiana, removing all of the abnormal dryness this week. In southern Arkansas, D0 was also improved. The rains in east Texas allowed for the improvement of some of the D0 and D1 areas, pushing them to the west, while some D2 was also improved to D1. Similar improvements were made to the D0 and D1 areas in southeast Oklahoma. The Big Bend area of Texas did receive some precipitation, which allowed for improvements to the D1 there. The intensity of the drought conditions in the Texas panhandle, Oklahoma panhandle, and southwest Oklahoma worsened this week. D4 was expanded in both Texas and Oklahoma while D2 and D3 were pushed farther to the east in Oklahoma.

Southeast

A well-developed storm system pushed slowly through the area at the end of the current U.S. Drought Monitor period, bringing with it significant rain over almost the entire region. The only areas remaining dry this week were from central to southern Florida, the coastal areas of North Carolina, and the Mid-Atlantic. Temperatures were above normal for the entire region, with the warmest temperatures (6-8 degrees Fahrenheit above normal) over the Carolinas. In response to the rain event, most of the areas of short-term dryness improved. This allowed for the removal of all D0 from Georgia, western North Carolina, northeast Alabama, southern Alabama, and the Florida panhandle. Improvements to the D0 and D1 areas of northwest Alabama and northern Mississippi were also made.

The Northeast

Weekly Snowpack and Drought Monitor Update Report

A fairly dry week was experienced over much of the region. Portions of western Pennsylvania did record 1.0-1.5 inches of precipitation while portions of western New York recorded up to an inch. Temperatures remained cool, with departures throughout much of the region of 2-4 degrees Fahrenheit quite common. The colder than normal temperatures are also diminishing water demand, which is also eliminating any drought development at this time. There were no changes this week on the U.S. Drought Monitor.

The Plains

As was observed in the Midwest, the plains states are experiencing a delayed spring with cooler than normal temperatures. This week was not any different, with departures from normal temperatures of 4-6 degrees Fahrenheit quite common. Precipitation was scarce in the region, with a few areas of eastern Kansas, northeast and central Nebraska, and western South Dakota recording amounts that were generally less than 1 inch total for the week. Even with the delayed spring, the departures from normal precipitation for the year are starting to reach 4 inches below normal from southern South Dakota into eastern Nebraska as well as eastern and central Kansas. Drought conditions were expanded in southeast Nebraska so that D1 now includes the entire region. In South Dakota, D0 was expanded into the southern portions of the state and including all of north central Nebraska as well. As the northern plains begin to thaw, there is ample moisture in the snowpack, which will help diminish any concerns for dryness, allowing for the D0 in North Dakota to be removed this week as well.

The West

Most of the western United States was dry this week, with the heaviest precipitation recorded in areas west of the Cascades in Washington and Oregon. The warmer than normal conditions also continue for much of the region; this has been the trend for 2014 up to this point. In response to continued dryness and also approaching the end of the typical rainy season and snow accumulation seasons, some drought areas were expanded this week. In northern Arizona and southern Utah, D1 was pushed to the north while D1 was also pushed to the east in eastern Utah. In the Four Corners region, D2 was expanded into southwest Colorado and southeast Utah. In New Mexico, D2 was pushed to the east in the western portion of the state while D2 was expanded in the north central areas of the state. In response to the snowpack conditions, which are well above normal, the D0 and D1 conditions were improved upon in the eastern regions of northern Utah.

Looking Ahead

Over the next 5-7 days, an active weather pattern will take shape over portions of the plains, Midwest, and southeastern United States. Precipitation chances and amounts are greatest over the Midwest, the Ohio River Valley, and portions of the Gulf Coast. Areas of thunderstorms may produce 2-3 inches of rain locally. Precipitation chances are also high over the central to northern Rocky Mountains. Temperatures during this time should be above normal over the western United States, where high temperatures will be up to 12 degrees above normal in the Great Basin and northern California. Normal to slightly below normal high temperatures are expected in the plains and northern plains, respectively, while high temperatures will be above normal over the eastern United States.

The 6-10 day outlook continues with the cooler than normal temperature pattern over the eastern half of the United States, with the best chances for below-normal temperatures in the Great Lakes region. The chances for above-normal temperatures will also continue west of the Great Divide and also for southern Florida. The eastern seaboard and the Pacific Northwest are the two areas with the best chances of above-normal precipitation during this time. The Midwest and southwestern United States have the best chances of recording below-normal precipitation during this period.”

Weekly Snowpack and Drought Monitor Update Report

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

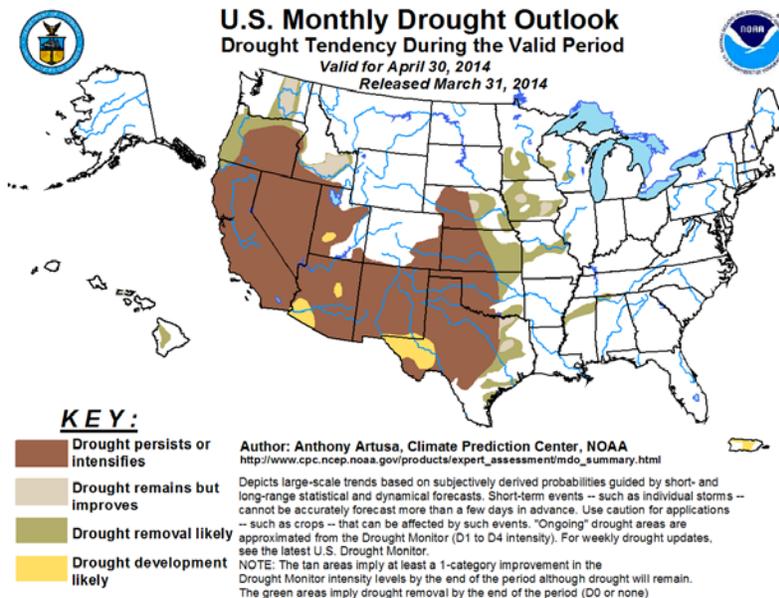
The National Water and Climate Center (NWCC) [Homepage](#) provides the latest available snowpack and water supply information. This document is available [weekly](#). CONUS Snowpack and Drought Reports from 2007 are available online. Reports from 2001-2006 are available on request.

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

/s/

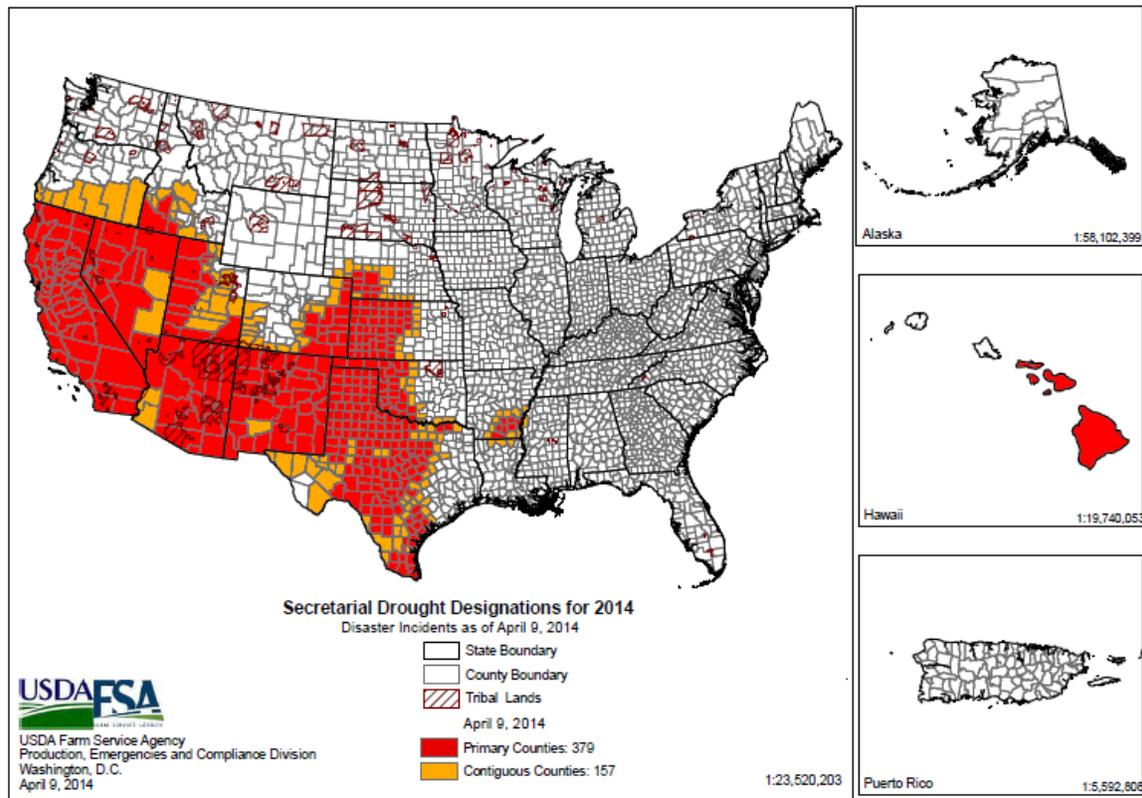
David W. Smith
Acting Deputy Chief, Soil Science and Resource Assessment

[Drought Outlook](#) For April 2014



- Drought is expected to deteriorate over parts of southern Arizona and southwest Texas. Much of the West and southcentral Great Plains are expected to have persistent drought. Improvement is suggested over the Pacific Northwest, eastern High Plains, and upper Mississippi River valley.
- ✓ 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.

2014 Secretarial Drought Designations - All Drought



Refer to the USDA Drought Assistance [website](#) and [National Sustainable Agriculture Information Service](#). Read about the new [USDA Regional Climate Hubs](#).

Supplemental Drought News (provided by Brad Rippey, USDA Meteorologist)

<http://www.usda.gov/oce/weather/Drought/AgInDrought.pdf>

Download archived "U.S. Crops in Drought" files here:

<http://drought.unl.edu/Planning/Impacts/USAgInDroughtArchive.aspx>

Winter Wheat Highlights and Summary

- "Nearly half of the U.S. winter wheat is typically produced by the Plains States from Nebraska southward. The Plains' wheat is mostly hard red winter wheat (HRW).
- More than half (52%) of the U.S. wheat production area is currently in drought.
- U.S. wheat in drought (D1 to D4) has increased from 30 to 52% during the winter and early spring. Wheat in extreme to exceptional drought (D3 to D4) has increased from 5 to 16%.
- On November 24, 2013, only Texas had winter wheat condition issues – 28% of the crop rated very poor to poor. All other states were below 10% very poor to poor.
- Wheat condition issues markedly expanded during the winter and early spring, with very poor to poor ratings currently at 61% in Texas, 48% in Oklahoma, 33% in Colorado, and 27% in Kansas.
- During the last two decades, 2013-14 matches 1995-96 for the most precipitous decline in U.S. winter wheat condition from the last USDA/NASS report in the fall to the first report in the spring.
- This year (2013-14) joins five other seasons (1995-96, 2001-02, 2005-06, 2010-11, and 2012-13) in a cluster of U.S. winter wheat "drought years."
- Perhaps surprisingly, U.S. winter wheat conditions rarely rebound during the spring. Conditions typically remain unchanged or further decline, at least during the last two decades."

This following 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, National Drought Mitigation Center.

Weekly Snowpack and Drought Monitor Update Report

California

April 1 snow survey

Snow surveyors found a snowpack of 32 percent of normal in the Sierra Nevada when the snow is usually at its deepest, said the California Department of Water Resources.

Central Valley farmers anxious about water

Farmers in the Central Valley are beginning to panic as they try to find water, said a Fresno-based well driller. Drought is one of a number of factors driving the short-sighted over pumping, which is causing land subsidence, leading to damaged water canals and bridges. Groundwater is being pumped at about twice the rate as it is being replenished.

More water being pumped south of delta

Four times as much water as usual is being pumped to the south of the Delta while rivers are carrying more storm water from recent rainfall, said Department of Water Resources Director, Mark Cowin.

“The adjustment will remain in effect as long as the rivers carrying storm water into the Delta continue to run relatively high,” Cowin said.

Conversation about water reform

Drought and pressure from California’s governor are leading farmers, environmentalists and urban water districts to talk about protecting the state’s dwindling groundwater. Historically, the Farm Bureau and other influential agricultural groups have opposed efforts at creating statewide rules, but the severity of the groundwater declines and drought has some farm groups willing to talk about measures requiring landowners to report how much groundwater they pump, possibly installing meters and placing limits on water withdrawals.

Wildfires

An uptick in wildfires, despite recent rains, has prompted Cal Fire to hire and train roughly 300 fire fighters statewide earlier than usual to be prepared for the increased fire activity. There have been 875 wildfires that have charred 2,350 acres since the start of the year, compared with last year when 300 fires had blackened 1,050 acres by April 1.

Texas

Water

The Brazos River Authority asked customers to curb water use by 10 percent in the upper basin of the Brazos, including Possum Kingdom Lake, Lake Granbury and Lake Whitney.

The Texas Commission on Environmental Quality notified water rights holders in a March 11 letter that some water rights may be curtailed or suspended without rain to bolster water supplies.

The start of April allows residents in San Angelo to water weekly in contrast to the winter restrictions that permit outdoor watering only once every two weeks, but the city’s public information officer and others implore residents to be frugal with water. San Angelo’s surface water supplies should last the city another 14 months.

Mineral Wells, a community of nearly 17,000 people, tightened its water restrictions to allow outdoor watering once weekly as Lake Palo Pinto dwindles to 25 percent of its capacity.

Arizona, New Mexico fire season worries

Wildfire concerns were ramping up in Arizona and New Mexico as dry conditions and low snowpack portend a dangerous fire season.

Soil moisture concerns in Kansas, Nebraska and Iowa

Kansas, Nebraska and Iowa farmers would like to see precipitation to improve soil moisture levels before planting begins.

Weekly Snowpack and Drought Monitor Update Report

Tea Cup reservoir depictions:

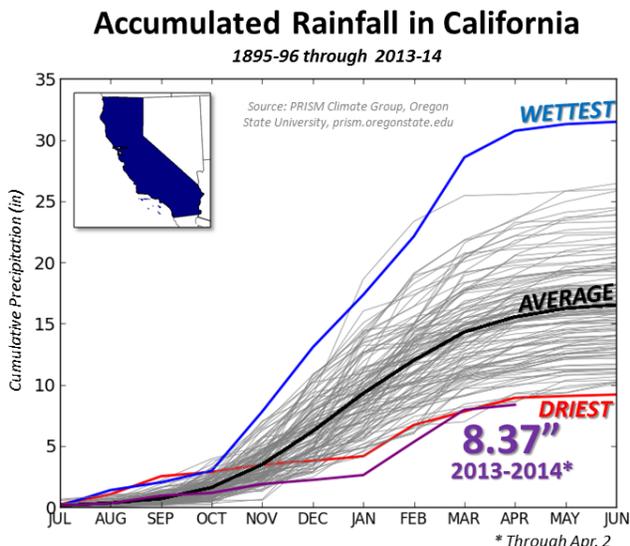
- <http://www.usbr.gov/uc/water/basin/> ← Upper Colorado
- http://www.usbr.gov/uc/wcao/water/basin/tc_gr.html; ← Upper Snake
- <http://www.usbr.gov/pn/hydromet/burtea.html> ← Upper Colorado
- http://www.usbr.gov/uc/water/basin/tc_cr.html ← Upper Colorado
- <http://www.usbr.gov/pn/hydromet/select.html> ← 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 at:
<http://www.wcc.nrcs.usda.gov/wsf/sws.html>

Supplemental Data

California

"Based on a bootstrap methodology, the chance of this year getting to average (purple line up to black line) is literally zero, though I suppose biblical floods are always possible. Likewise, there is a small (3.5%) chance of this year remaining below the red line." - Paul M. Iñiguez Operational Meteorologist/Science & Operations Officer NOAA / NWS San Joaquin Valley/Hanford, CA →



Interact With Us [f NationalWeatherService.Hanford.gov](https://www.facebook.com/NationalWeatherService.Hanford.gov) [@NWSHanford](https://twitter.com/NWSHanford) [YouTube NWSHanford](https://www.youtube.com/channel/UCNWSHanford)

Oklahoma: provided by [Gary McManus](#), OK

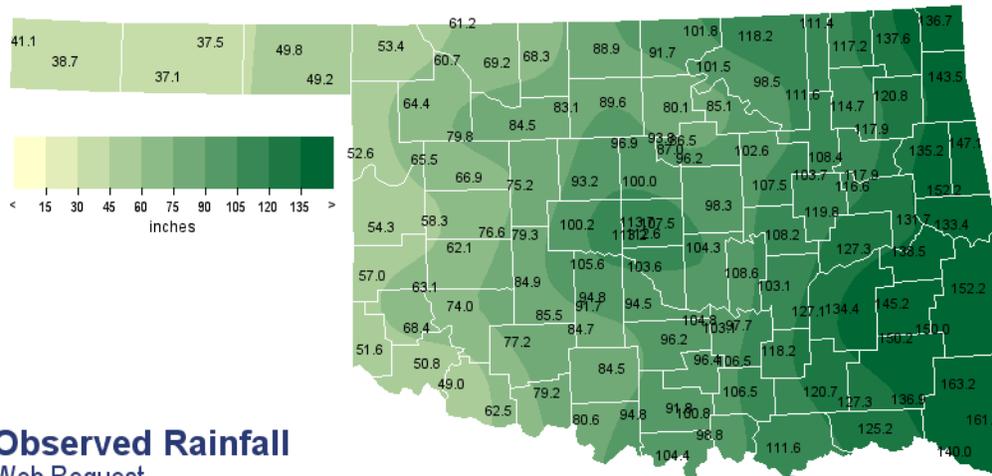
"This is a program that [Deke Arndt](#) wrote many moons ago. It uses the Oklahoma Mesonet data and compares it to the long-term NCDC normals. Mesonet is generally right there with the final NCDC CD statistics (seemingly closer to the new NCDC CD averages), so this should be pretty close to ballpark. This is what it spit out for the **Oct. 1, 2010 through today** period ... 42 months and change. For the ranks, I believed Deke used 1921 to go with the more robust data collection. Now I'm not sure what use this is for current drought indicators, other than to say 'yeah, it's been really really dry for a long time' because the many intervening periods of dry and wet weather can't be tracked by one map.

Interesting that SE OK had 100" more precip than the Panhandle, but they're ranked fairly similarly. I would also add that the drought across eastern Oklahoma probably began in the late-spring or early-summer of 2011."

Climate Division	Total	Departure	Pct of Normal	Rank Since 1921
Oklahoma Statewide	94.24"	-30.97"	75%	6th driest
OK-1: Panhandle	44.90"	-24.55"	65%	6th driest
OK-2: N. Central	78.70"	-29.08"	73%	7th driest
OK-3: Northeast	116.07"	-31.11"	79%	10th driest
OK-4: W. Central	64.33"	-33.87"	66%	3rd driest
OK-5: Central	100.20"	-27.42"	79%	11th driest
OK-6: E. Central	128.46"	-31.77"	80%	13th driest
OK-7: Southwest	69.31"	-34.64"	67%	1st driest
OK-8: S. Central	101.02"	-35.87"	74%	1st driest
OK-9: Southeast	145.21"	-32.88"	82%	7th driest

Weekly Snowpack and Drought Monitor Update Report

Enlarge page to view values



Observed Rainfall

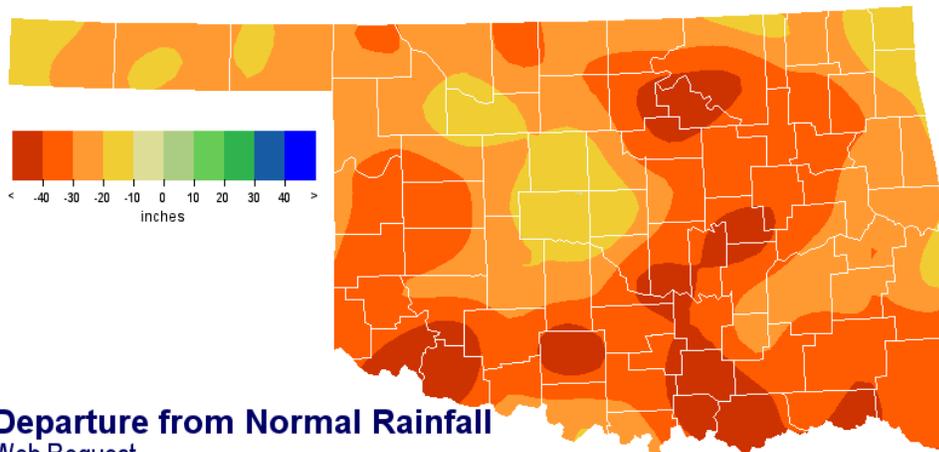
Web Request
Oct 1, 2010 through Apr 9, 2014

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Rainfall data collected by Oklahoma Mesonet.



Image created 09:06 CDT Apr 9, 2014.



Departure from Normal Rainfall

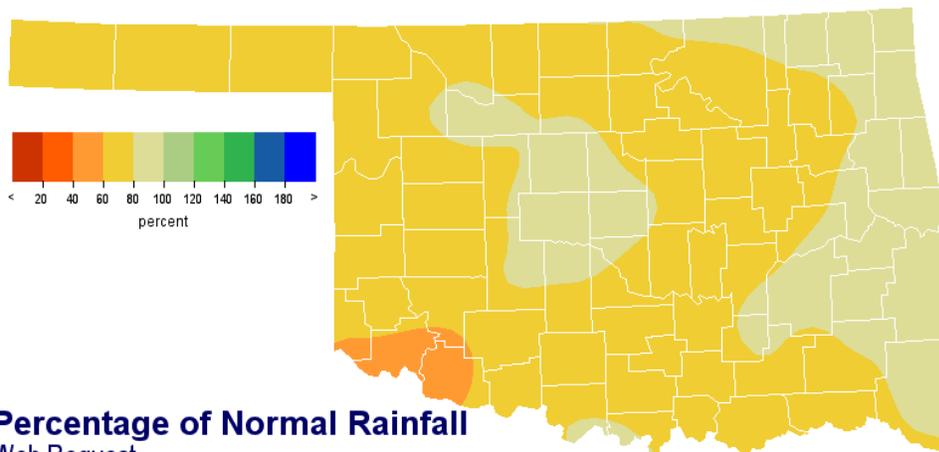
Web Request
Oct 1, 2010 through Apr 9, 2014

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Percentage of Normal Rainfall

Web Request
Oct 1, 2010 through Apr 9, 2014

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