



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

Weekly Water and Climate Update Thursday, January 15, 2015

Snow	2	National Drought Summary for January 13, 2015	16
Precipitation.....	3	Supplemental Drought Information	18
Temperature.....	6	National Seasonal Drought Outlook	18
Weather and Drought Summary	8	2014 USDA Secretarial Drought Designations, as of January 7, 2015.....	19
Risk Management Web Resources.....	9	National Fire Potential Outlook.....	19
U.S. Population in Drought	12	Supplemental Drought-Agriculture News	20
Changes in Drought Monitor Categories	13	Drought Impact Reporter.....	21
Soil Moisture.....	14	Tea Cup Reservoir Depictions.....	21
Soil Climate Analysis Network (SCAN)	14	California Reservoir Conditions	22
Streamflow	15	State Activities	22
National Long-Range Outlook.....	15	More Information.....	22
National Weather Hazards.....	16		



NRCS Snow Survey and Water Supply Forecasting [Photo Contest](#)

2nd Place (Tie) - Equipment

Mt. Baker and Mazama Glacier, Washington
Pilot: Mike Nehring

Photographer: Scott Pattee, NRCS Washington

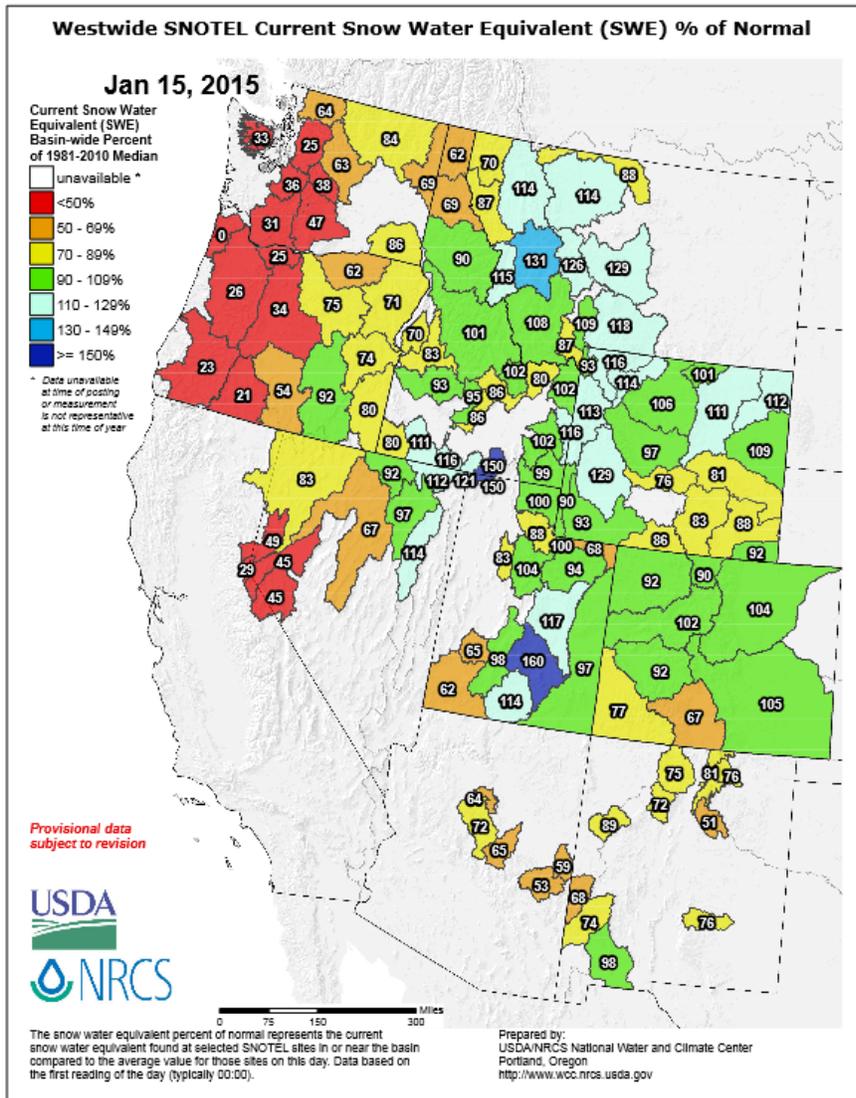
U.S. Weather Outlook: “A warming trend will continue in many parts of the country through week’s end. As a result, above-normal temperatures will eventually cover most of the U.S., except for some lingering cold in the East. At times, high temperatures could approach 60°F on the High Plains as far north as Montana. Meanwhile, the focus for storminess will shift to the Northwest, although light precipitation will continue across the Southeast through January 15. In addition, 1- to 2-inch precipitation totals—including some heavy snow—can be expected in the northern Atlantic States on January 18. Elsewhere, 5-day precipitation totals could reach 1 to 3 inches in the northern Rockies and 2 to 6 inches or more in the Pacific Northwest, while little or no precipitation will occur from central and southern California eastward into the Mississippi Valley. The NWS 6- to 10-day outlook for January 20-24 calls for near- to below-normal temperatures in many parts of the country, while warmer-than-normal weather can be expected across the upper Midwest, lower Southeast, and Far West. Meanwhile, below-normal precipitation in the West and mid-South will contrast with wetter-than-normal conditions across the Plains and the lower Southeast.”

Contact: Brad Rippey, Agricultural Meteorologist, USDA/OCE/WAOB, Washington, D.C. (202-720-2397)

Website: <http://www.usda.gov/oce/weather/pubs/Daily/TODAYSWX.pdf>

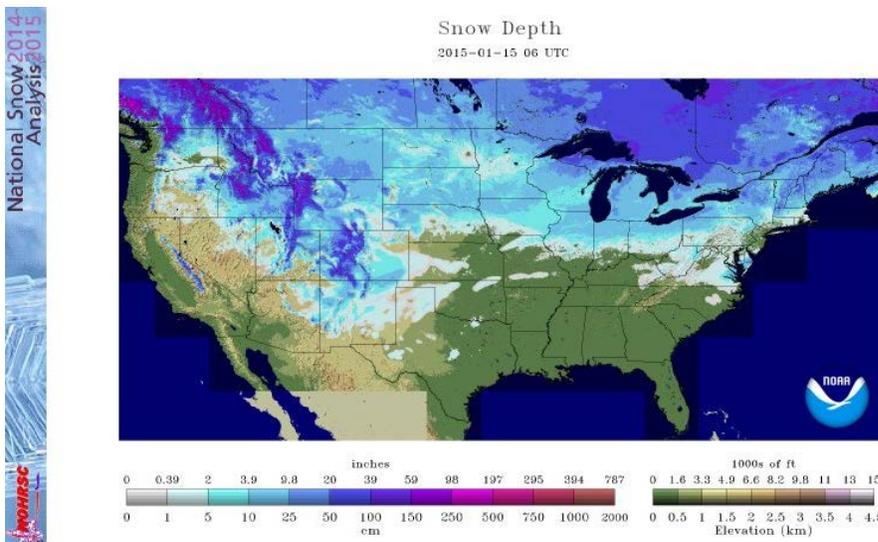
The Natural Resources Conservation Service provides leadership in a partnership effort to help people conserve, maintain, and improve our natural resources and environment

Snow



The current [SNOTEL Snow Water Equivalent \(SWE\) in the Western U.S. map](#), shows basins in Wyoming, Montana, Idaho, eastern Nevada, Colorado, and Utah have recorded above normal SWE values (blue areas) at this time.

The largest snowpack deficits (red areas) are in the Cascades and Olympics of Oregon and Washington, and the Sierra Nevada in Nevada and California. Parts of eastern Washington and Oregon, northern Idaho, southwestern Utah, much of Arizona and New Mexico, and a few basins in other states have less than normal snowpacks as well at this time (orange and yellow areas).



Snow depth map of the U.S. as reported from [NWS NOHRSC](#) for January 15, 2015. Snow is reported across much of the mountains in the West, the upper Midwest, much of the central and northern Plains, and the Northeast. Areas with a substantial snowpack include the Upper Peninsula of Michigan, the Rocky Mountains in Colorado, Wyoming, Montana, and central Idaho. The north Cascades in Washington and northern Maine also have substantial snow.

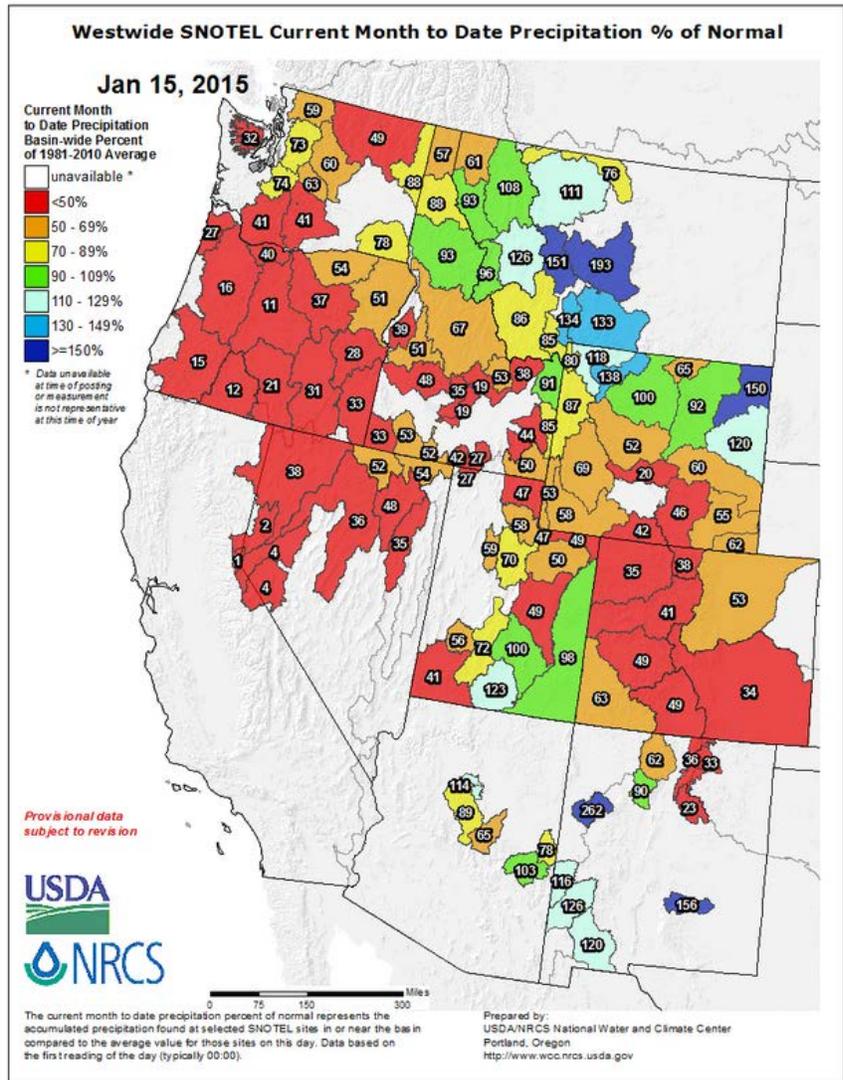
Precipitation

In the West, the [SNOTEL](#) precipitation percent of normal map shows substantial precipitation in Montana, Wyoming, and New Mexico so far in January (blue areas). Above normal precipitation is also reported in one basin in southern Utah, and one basin in central Arizona (light blue areas).

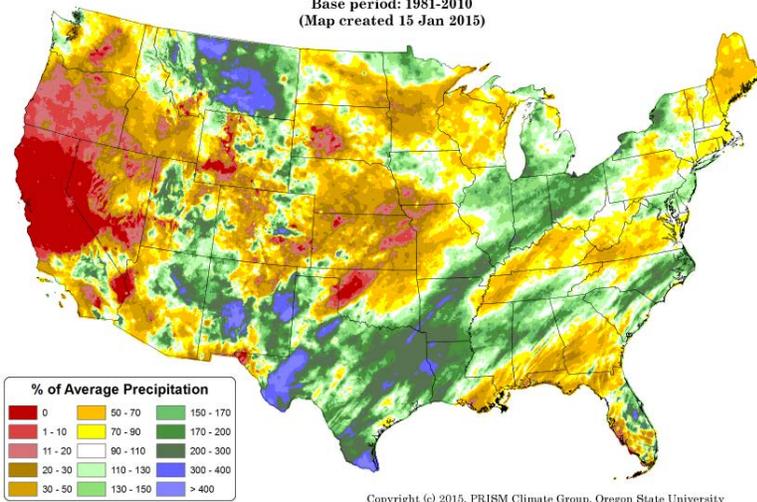
Below normal precipitation is located across most of Washington, Oregon, California, Nevada, Idaho, northern and southwest Utah, southern Wyoming, Colorado, and northern New Mexico.

The percent of normal values (especially the dark blue areas) may be amplified where normally very little precipitation falls during this time of year.

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



Total Precipitation Anomaly: 01 January 2015 - 14 January 2015
 Period ending 7 AM EST 14 Jan 2015
 Base period: 1981-2010
 (Map created 15 Jan 2015)



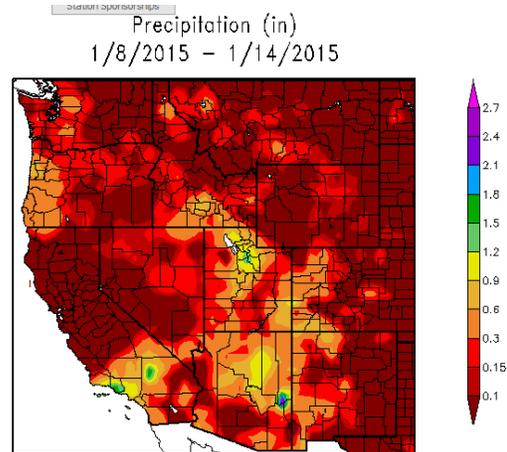
Thus far in January 2105, the national [precipitation anomaly](#) pattern reveals some higher than normal precipitation, primarily in central Montana, central Arizona, central and eastern New Mexico, parts of Texas, Louisiana, and Arkansas. A few isolated areas of Colorado, Florida, and other states also received above normal precipitation. There was little or no precipitation in California, Oregon, Washington, southern Idaho, central Wyoming, Nevada, Oklahoma, Kansas, and South Dakota (red areas).

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 Water and Climate Update

The [ACIS 7-day](#) total precipitation map for the western U.S. shows scattered precipitation concentrated in Utah, western Colorado, Arizona, southern California, and western Oregon. The few spots of significant precipitation were in central Utah and southern California (over 1.2 inches), and southeast Arizona (2.1 inches).

Little to no precipitation fell across most of the West this week (dark red). This includes northern California, much of Nevada, eastern Oregon, eastern Washington, most of Montana and Wyoming, northern Idaho, eastern Colorado, and eastern New Mexico.

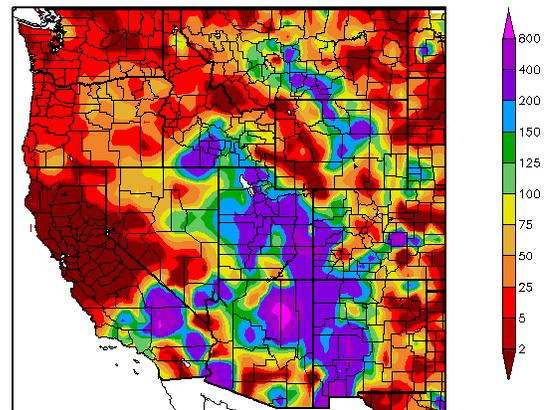


Generated 1/15/2015 at HPRCC using provisional data.

Regional Climate Centers

This percent of normal [map](#) of the West for the last seven days reflects heavy precipitation scattered across the south and central part of the region. The heaviest percent of normal precipitation fell in central Arizona and southern Colorado (over 600%). Southern Montana, central Wyoming, southern Idaho, Utah, Arizona, Colorado, and new Mexico had areas with over 200% of normal (purple areas). The largest contiguous areas of little to no precipitation were in California, Nevada, central Washington, and western Wyoming. Other smaller areas in the West also had little to no precipitation (red areas).

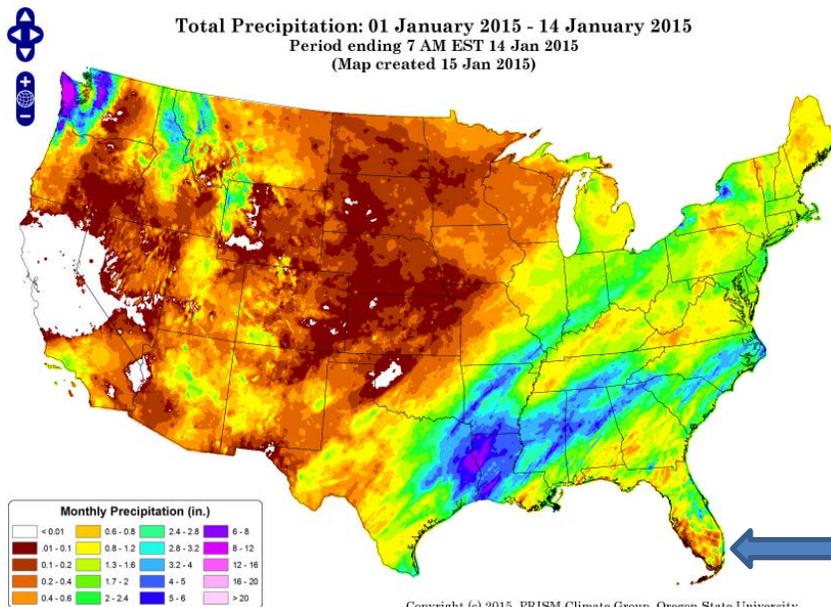
Percent of Normal Precipitation (%)
1/8/2015 - 1/14/2015



Generated 1/15/2015 at HPRCC using provisional data.

Regional Climate Centers

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



So far in January 2015, the [total precipitation](#) across the continental U.S. was heaviest in northwest Washington with over 8 inches recorded. Eastern Texas and central Louisiana also had an area of precipitation above 6 inches for the week. In contrast, much of California, Nevada, and parts of Wyoming, Colorado, New Mexico, Oklahoma, and South Dakota were mainly dry.

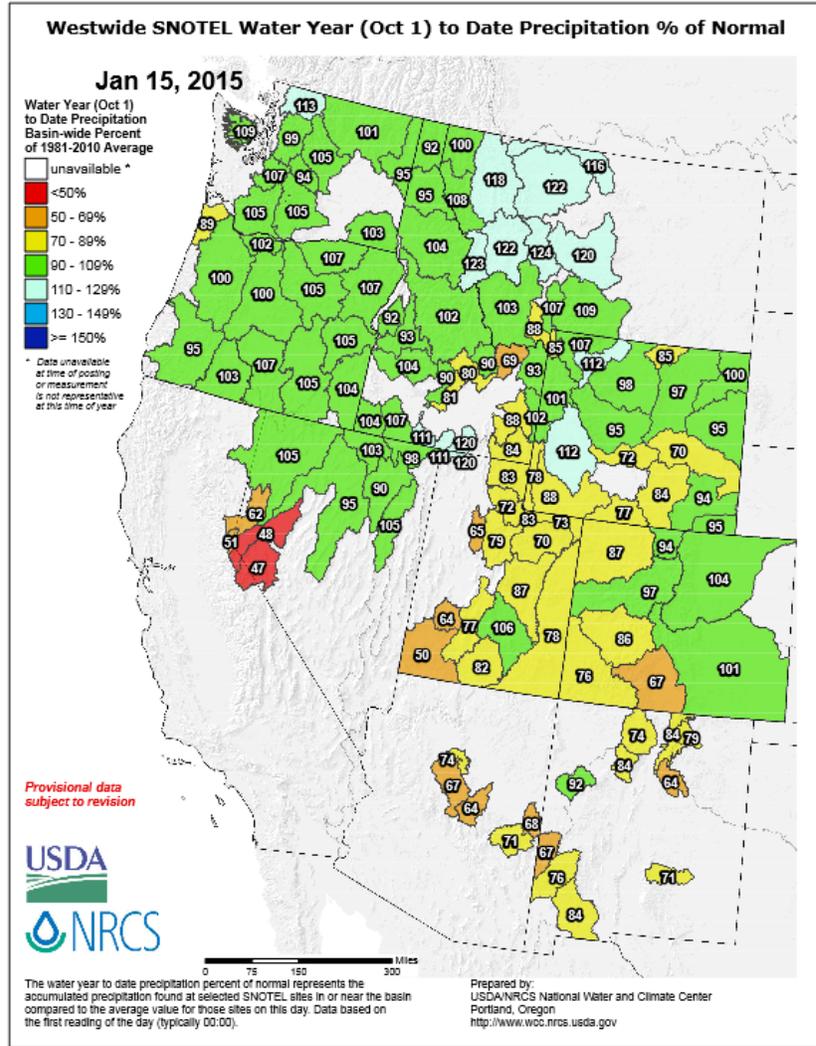
See [Go Hydrology](#) for current and forecast conditions over southern Florida.

Weekly Water and Climate Update

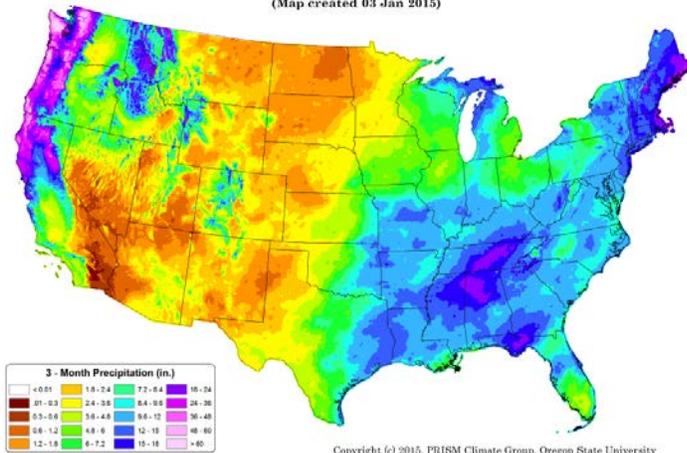
For the [2015 Water Year](#) that began on October 1, 2014, the highest precipitation surpluses are reported in southern Idaho, Montana and western Wyoming with above normal precipitation ranging from 111 to 124% of average.

Many basins across the West have near normal conditions for this part of the Water Year (mapped in green). A few areas have less than normal precipitation for the Water Year. These include basins in eastern Idaho, eastern Wyoming, Utah, western Colorado, Arizona, and New Mexico (mapped in yellow and orange). Nevada and California contain basins with much below normal precipitation in the central Sierra Nevada.

At the beginning of the Water Year, basin conditions can change rapidly with small amounts of precipitation. As the Water Year advances, it becomes more difficult for river basins to change bin categories.



Total Precipitation: October 2014 - December 2014
 Period ending 7 AM EST 31 Dec 2014
 (Map created 03 Jan 2015)



The national map of the [three-month period](#) (October - December) shows that the eastern half of the nation received precipitation in the range from 6 inches to greater than 48 inches. The highest amounts over 48 inches were recorded in California, Oregon, and Washington. Colorado, Wyoming, Idaho, Montana, New Hampshire, Maine, Massachusetts, Tennessee, Alabama, Mississippi, and Florida all received precipitation over 18 inches in some areas.

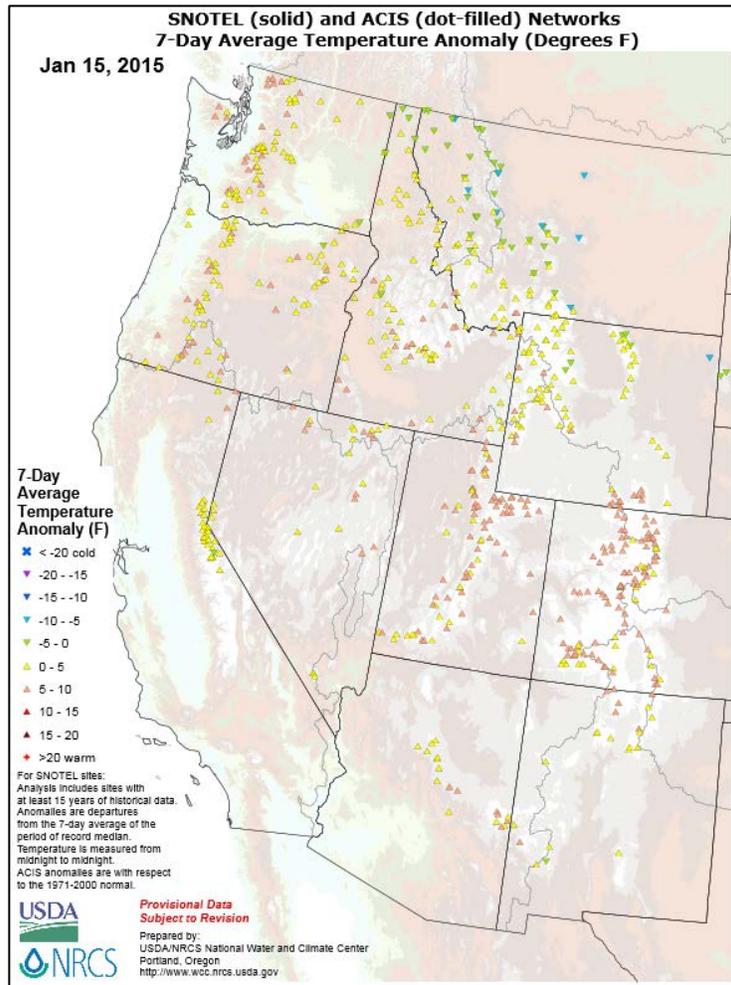
In contrast, parts of the West received totals of less than 1.8 inches. Southern California, southern Nevada, and parts of Arizona and Utah had little to no precipitation for the period.

Weekly Water and Climate Update

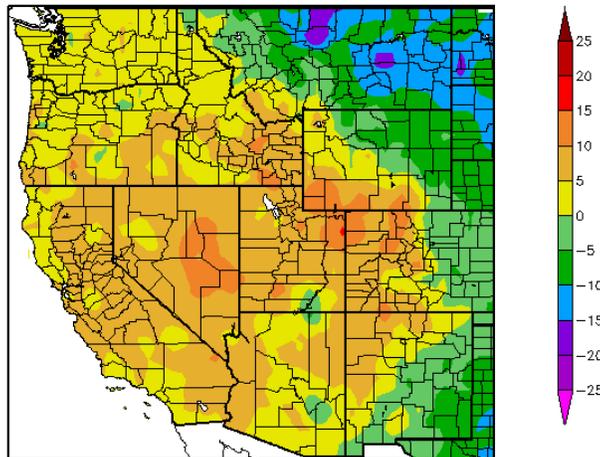
Temperature

The SNOTEL and ACIS [7-day temperature anomaly](#) map for the western U.S. shows most of the West was near normal to slightly above normal for the week. The warmest recorded temperature anomalies were scattered in the central Colorado Rockies, across most of Utah, and east central Arizona. Other scattered warmer than normal temperatures occurred in the Cascade regions of Oregon and Washington, as well as some scattered higher temperatures in eastern Oregon, central Idaho, and northern Nevada. These anomalies across the West were only slightly warmer than normal, in the 5- to 10-degree range.

The coolest anomalies in the West were in the northern Rockies in Montana, and in eastern Wyoming, where temperature departures were only slightly cooler than normal in the 5- to 10-degree range.



Departure from Normal Temperature (F)
1/8/2015 – 1/14/2015



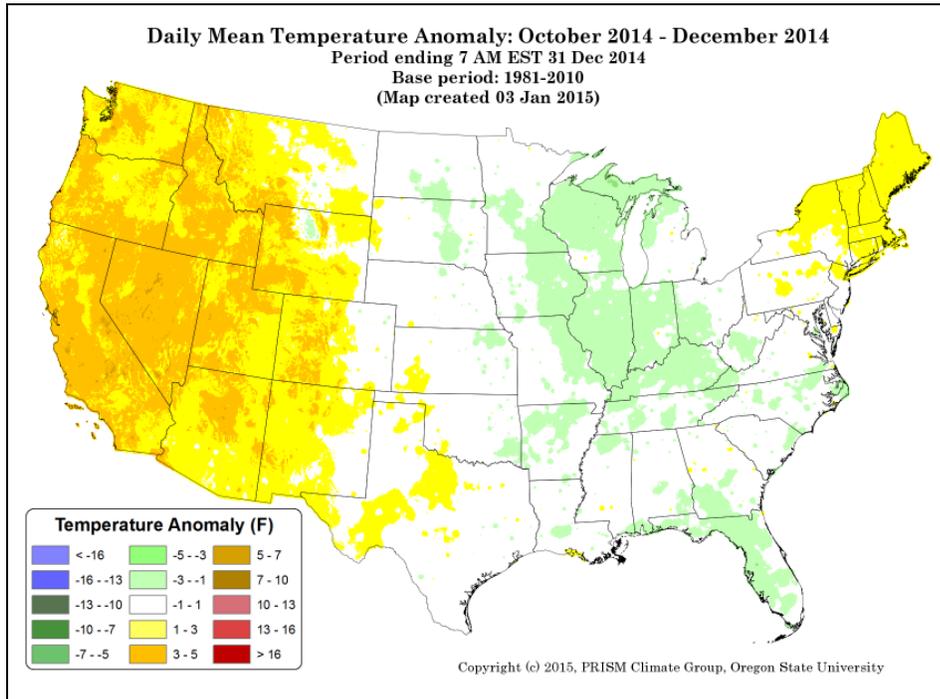
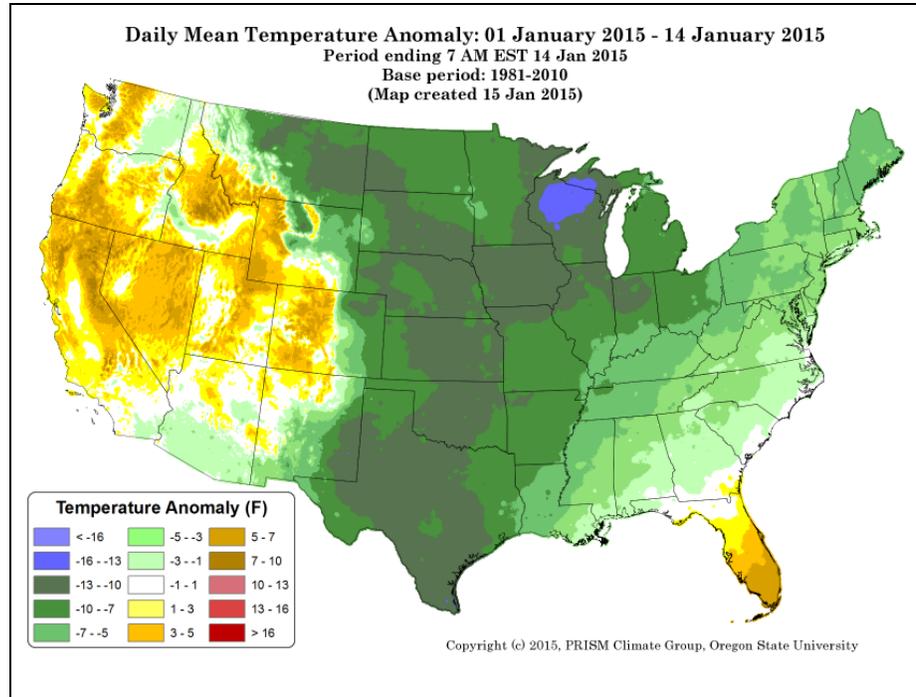
The [ACIS](#) map of the 7-day average temperature anomalies in the West ending January 14, shows that the greatest positive temperature departures occurred in eastern Utah (>+15°F). Other warm temperatures occurred in a large area covering California, Nevada, southern Idaho and Oregon, Arizona, northwest New Mexico, western Colorado, and southern Wyoming. There were negative temperature departures concentrated in north central and eastern Montana. (<-15°F).

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

Weekly Water and Climate Update

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.

Thus far in January 2015, the national daily mean temperature anomaly [map](#) shows a large cool region over most of the country, with the coldest anomaly in northern Wisconsin (<-13°F). Cold Canadian airflow caused much of the central U.S. to be cooler than average so far in January. Above normal temperatures were recorded in the West, and in southern Florida. (>+7°F).



The October - December national daily mean temperature anomalies for the U.S. in this [climate map](#) show the western U.S. had slightly to above normal temperatures (>+7°F). The central portion of the country reported normal to slightly cooler than normal temperatures for this period, with the coolest temperatures in a small area of northern Michigan (<-3°F).

Weekly Water and Climate Update

Weather and Drought Summary

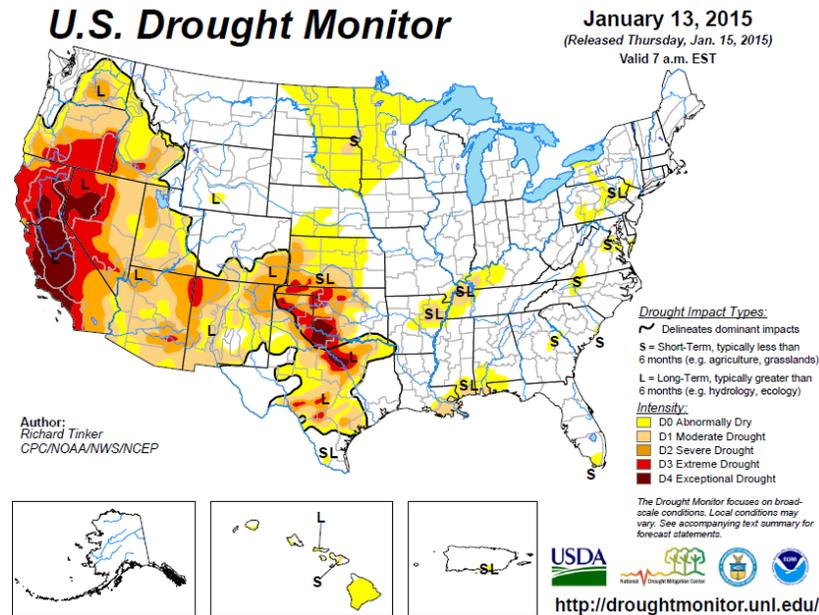
National Drought Summary – January 13, 2015

The following **Weather and Drought Summary** is provided by this week's NDMC Drought Author, Richard Tinker, NOAA/NWS/NCEP/CPC.

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

"For the contiguous 48 states, the U.S. Drought Monitor showed 27.97 percent of the area in moderate drought or worse, compared with 28.10 percent a week earlier. Drought now affects 65,976,460 people, compared with 65,357,178 a week earlier.

For all 50 U.S. states and Puerto Rico, the U.S. Drought Monitor showed 23.37 percent of the area in moderate drought or worse, compared with 23.48 percent a week earlier. Drought now affects 66,000,013 people, compared with 65,380,730 a week earlier."



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

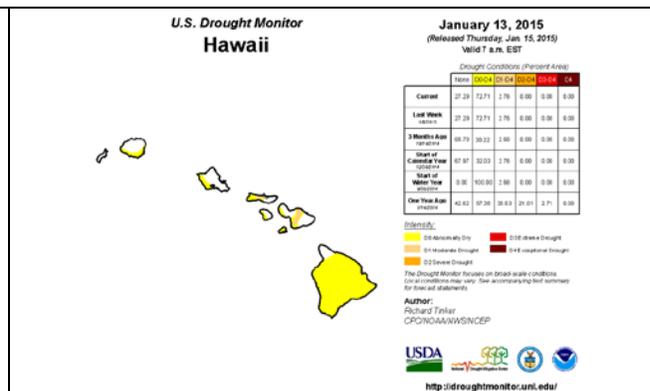
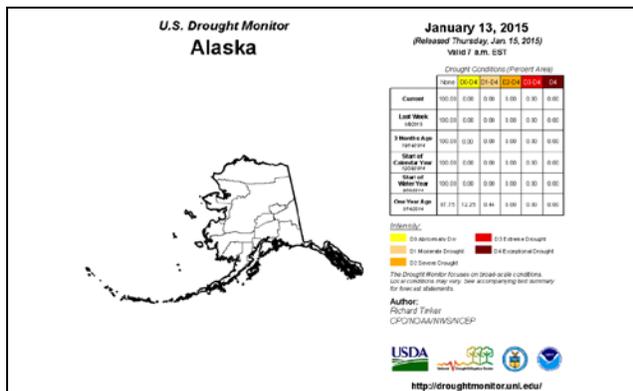
[Current Drought Monitor](#) weekly summary. The exceptional D4 levels of drought are scattered across CA, NV, TX, and OK.

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](#).

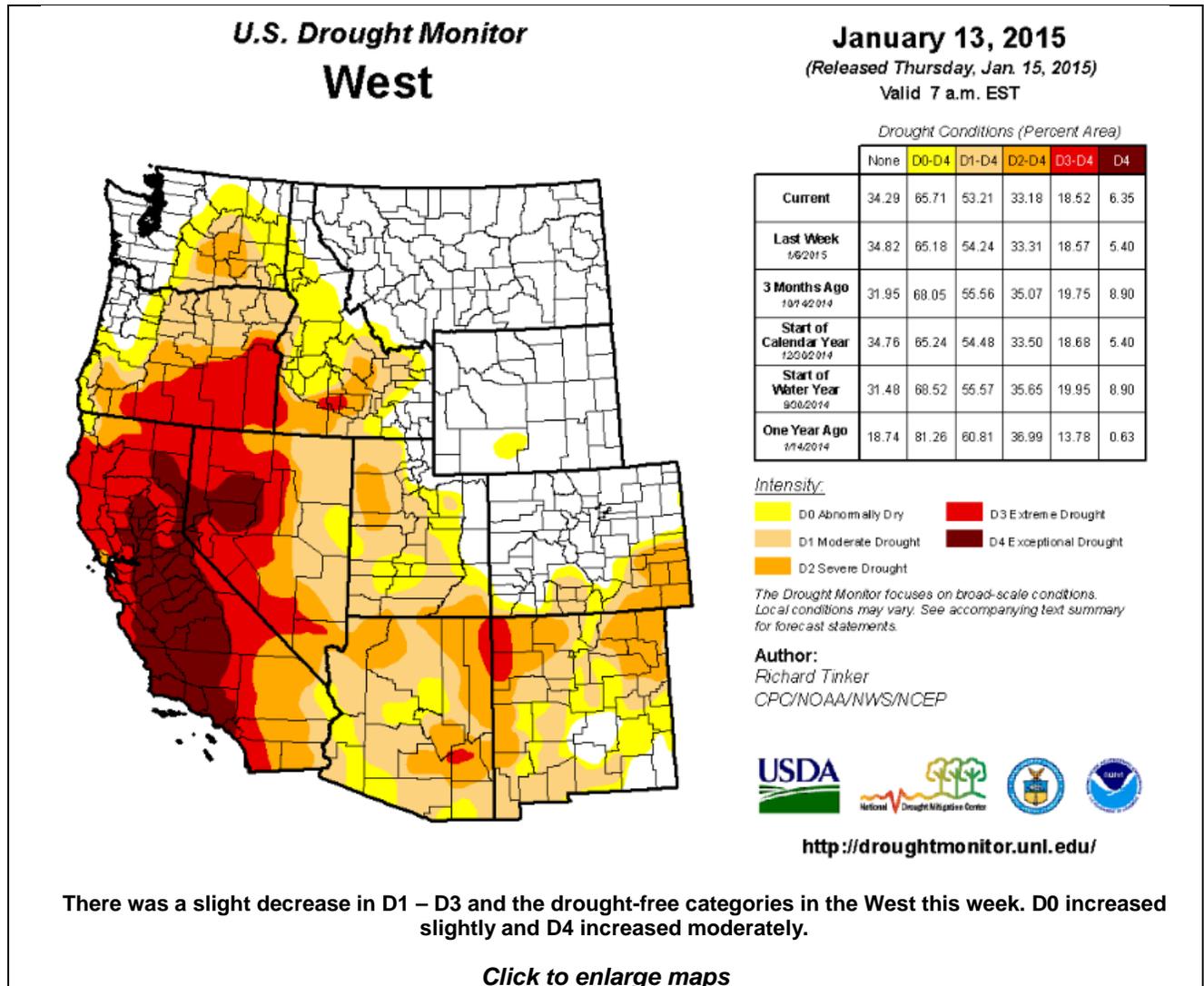
Drought Management Resources:

- ✓ <http://www.usda.gov/oce/weather/Drought/AgInDrought.pdf>
- ✓ [Watch AgDay TV](#)
- ✓ [Drought Impacts Webinar Series](#)
- ✓ [NIDIS Quarterly Climate Impacts and Outlook](#)
- ✓ [The Spring 2014 edition of DroughtScope](#)
- ✓ [U.S.Crops in Drought](#)



"The [49th](#) and [50th](#) States show normal to moderate drought conditions. No changes were noted for Alaska or 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 Water and Climate Update



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](#)
[California Sierra Nevada-related snow pack](#)

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

- U.S. - [No Doubt It's A Climate-Change Drought, Scientists Say](#) – Jan 1
- U.S. - [Western Drought Tops the List of 2014 Billion-Dollar Disasters in US](#) – Jan 9
- N.M. - [Ag uses for highly saline water researched](#) – Jan 5
- N.M. - [State braces for another year of drought](#) – Jan 7
- West - [Stray satellite signals help measure snowfall in arid West](#) – Jan 9

Weekly Water and Climate Update

State with D-4 Exceptional Drought

U.S. Drought Monitor California

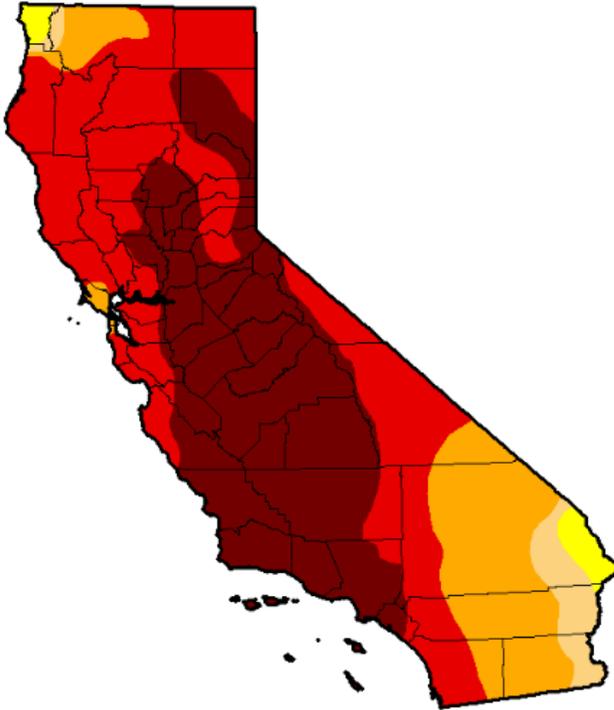
January 13, 2015

(Released Thursday, Jan. 15, 2015)

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	98.12	94.34	77.52	39.15
Last Week 1/6/2015	0.00	100.00	98.12	94.34	77.94	32.21
3 Months Ago 10/4/2014	0.00	100.00	100.00	95.04	81.92	58.41
Start of Calendar Year 12/31/2014	0.00	100.00	98.12	94.34	77.94	32.21
Start of Water Year 9/30/2014	0.00	100.00	100.00	95.04	81.92	58.41
One Year Ago 1/14/2014	1.43	98.57	94.18	89.91	62.71	0.00



Intensity:



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

Author:

Richard Tinker
CPC/NOAA/NWS/NCEP



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

There was a slight decrease in D3 and D4 in California this past week.

[CA Drought Information Resources](#)

[Drought News from California:](#)

[Experts say California farmers lost \\$2B in 2014 – Jan 9](#)

[California drought brings smaller harvests, more hunger among farmworkers – Dec 26](#)

[Santa Clara County residents may have to cut water use further — for the fish – Jan 6](#)

[Capitol Hill Californians will push for drought legislation again – Jan 6](#)

[Tahoe Queen Runs Aground, Stranding 200 New Year's Revelers In Sub-Freezing Temperatures – Jan 1](#)

[California drought: State residents increase conservation but still fall far short of governor's goal – Jan 6](#)

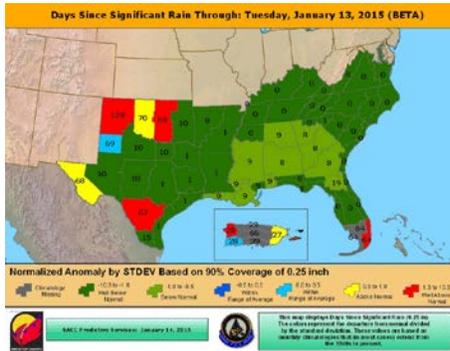
[EBMUD puts rate hike on hold – Jan 6](#)

Weekly Water and Climate Update

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

Texas Drought News:

[Dallas drought measures may see new types of enforcement](#) – Jan 6

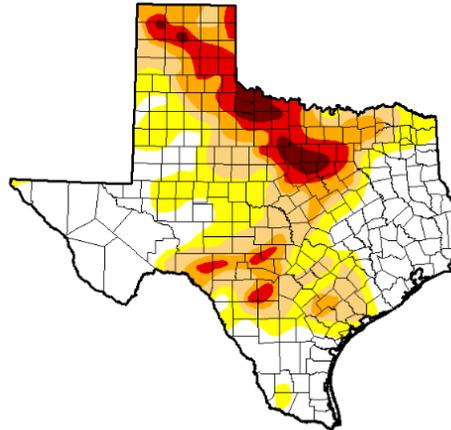


[Days since Significant Rain Summary](#)

State with D-4 Exceptional Drought

U.S. Drought Monitor Texas

January 13, 2015
 (Released Thursday, Jan. 15, 2015)
 Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	39.90	60.20	40.34	23.49	11.03	2.90
Last Week 1/6/2015	36.95	61.05	41.81	24.07	10.72	2.47
3 Months Ago 10/14/2014	30.96	69.04	48.42	27.50	10.97	2.88
Start of Calendar Year 12/02/2014	34.37	65.63	44.68	25.73	11.70	3.17
Start of Water Year 9/08/2014	28.92	71.08	48.95	29.54	11.26	2.69
One Year Ago 1/14/2014	26.18	73.82	44.54	21.59	6.68	0.79

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:
 Richard Tinker
 CPC/NOAA/NWS/NCEP



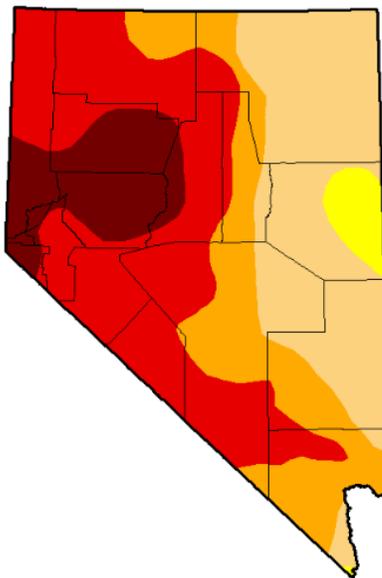
<http://droughtmonitor.unl.edu/>

There was a slight decrease in all drought categories in Texas this past week. The drought-free area also increased.

State with D-4 Exceptional Drought

U.S. Drought Monitor Nevada

January 13, 2015
 (Released Thursday, Jan. 15, 2015)
 Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	96.98	68.25	48.38	12.18
Last Week 1/6/2015	0.00	100.00	96.98	68.25	48.38	11.89
3 Months Ago 10/14/2014	0.00	100.00	97.07	68.89	48.38	11.89
Start of Calendar Year 12/02/2014	0.00	100.00	96.98	68.25	48.38	11.89
Start of Water Year 9/08/2014	0.00	100.00	97.04	68.89	48.38	11.89
One Year Ago 1/14/2014	0.00	100.00	96.80	80.30	38.17	5.37

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:
 Richard Tinker
 CPC/NOAA/NWS/NCEP



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

There was no change in Nevada this past week.

Nevada Drought News:

[Tahoe Queen Runs Aground, Stranding 200 New Year's Revelers In Sub-Freezing Temperatures](#) – Jan 1

1

Weekly Water and Climate Update

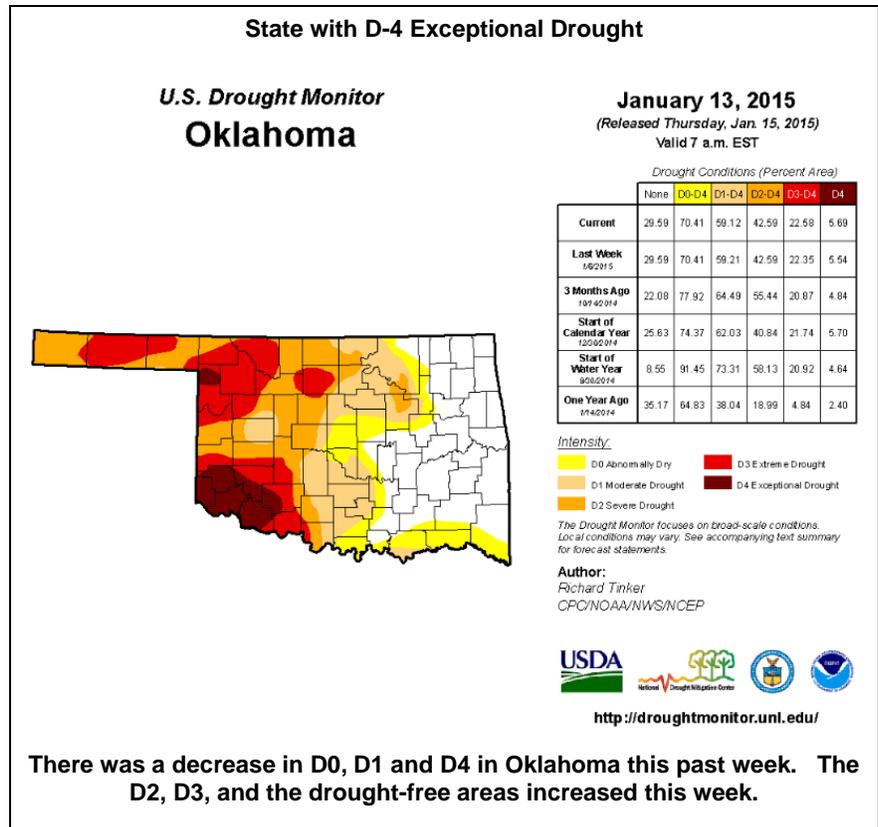
Related Area News:

[2014 Kansas Drought Report and Summary](#)

- [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](#)

Oklahoma Drought News:

[Drought persists in parts of state](#) – Jan 7



U.S. Population in Drought

Number of people in each drought category in the U.S. for the week ending January 13, 2015

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
2015-01-13	209,514,510	95,882,945	65,976,461	48,798,912	37,502,373	21,021,588
2015-01-06	212,867,550	92,529,905	65,357,178	48,954,980	38,640,675	19,053,615

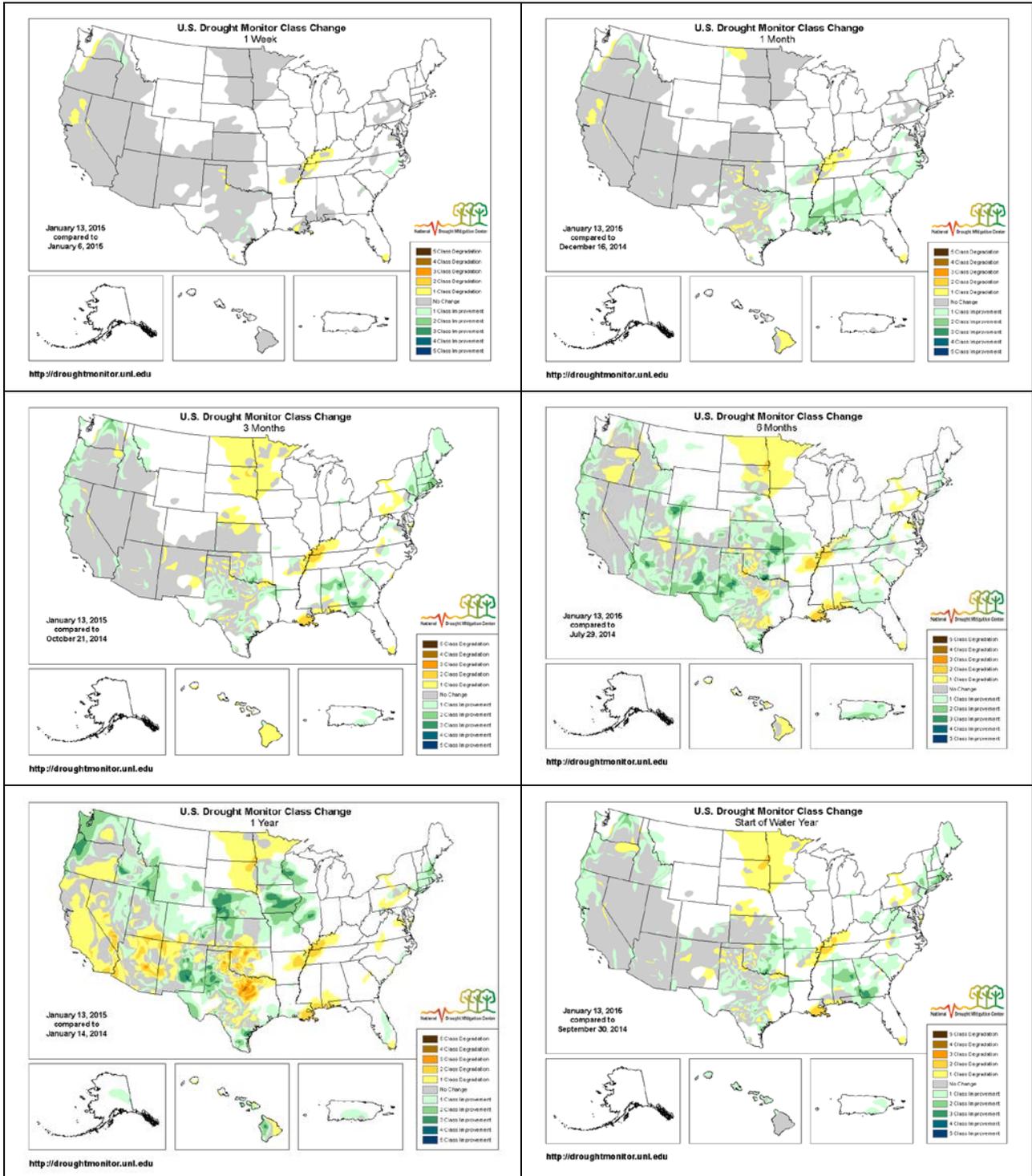
Population figures affected by drought in the U.S. Drought Monitor website show that for this week, more than 65,970,000 people in the United States were in a drought-affected area, which increased slightly by over 619,000 people from last week.

Population Statistics Methodology:
 The U.S. Drought Monitor population statistics are calculated at the county level, and aggregated to the state, regional, and national levels. The population densities have been calculated for each county. The proportion of the physical area of the county that is in drought is multiplied by the uniform population density in order to obtain a number for each county. The county values are then summed at the state, regional, and national level.

Weekly Water and Climate Update

Changes in Drought Monitor Categories

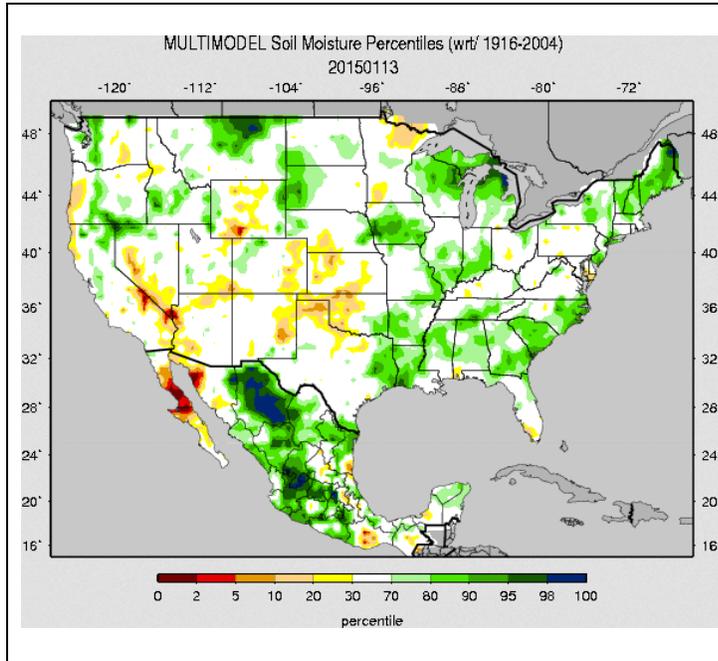
Over Various Time Periods



Click on any of these maps to enlarge. Note how the conditions over the Rockies and central Great Plains have improved between 6 to 12 months (middle right to lower left maps). However, also note that since a year ago, conditions over parts of the Northeast, the South, parts of the southern Great Plains, and the Pacific coast states have deteriorated significantly (lower left map).

Weekly Water and Climate Update

Soil Moisture

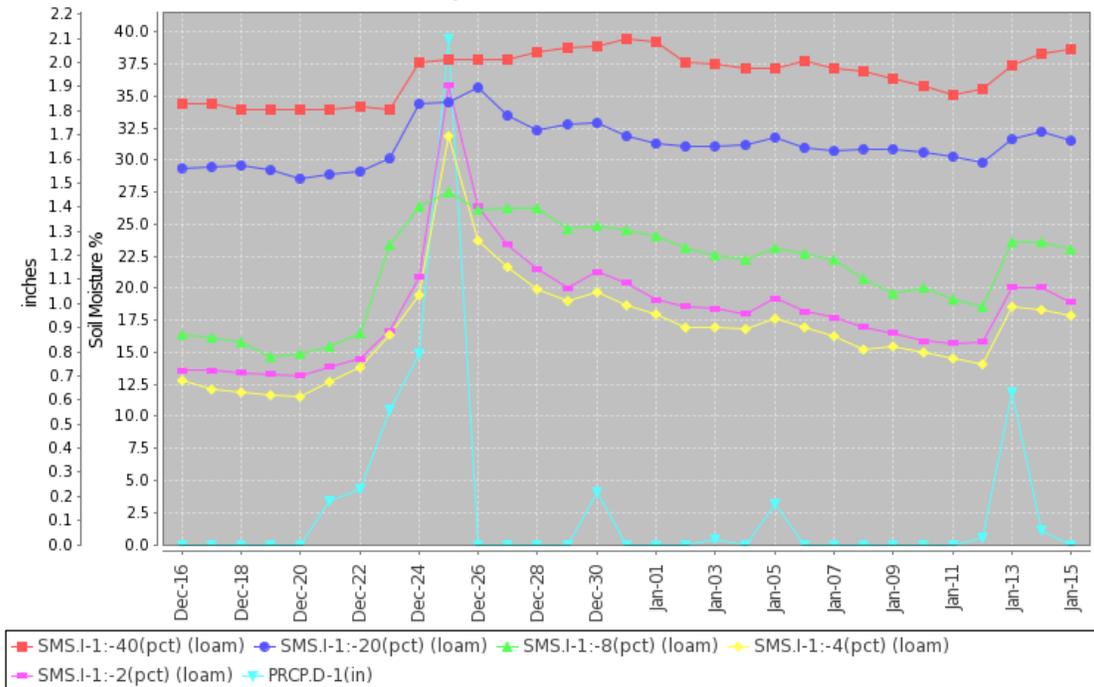


The national soil moisture model ranking in [percentile](#) as of January 13, 2015, shows dryness over most of the south central and southwest U.S. The driest areas are in southern Wyoming, southern Nevada, southern California, and southeast Maryland. There were additional dry areas elsewhere. Moist soils dominated north central Montana, western Washington, western South Dakota, Iowa, northern Wisconsin, Michigan, Maine, southeastern South Carolina, and southern Louisiana. Slightly moist soils were also scattered elsewhere throughout the country, especially in the Northeast and Southeast.

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 (2038) MONTH=2014-12-16 (Daily) NRCS National Water and Climate Center - Provisional Data - subject to revision Thu Jan 15 09:25:16 PST 2015

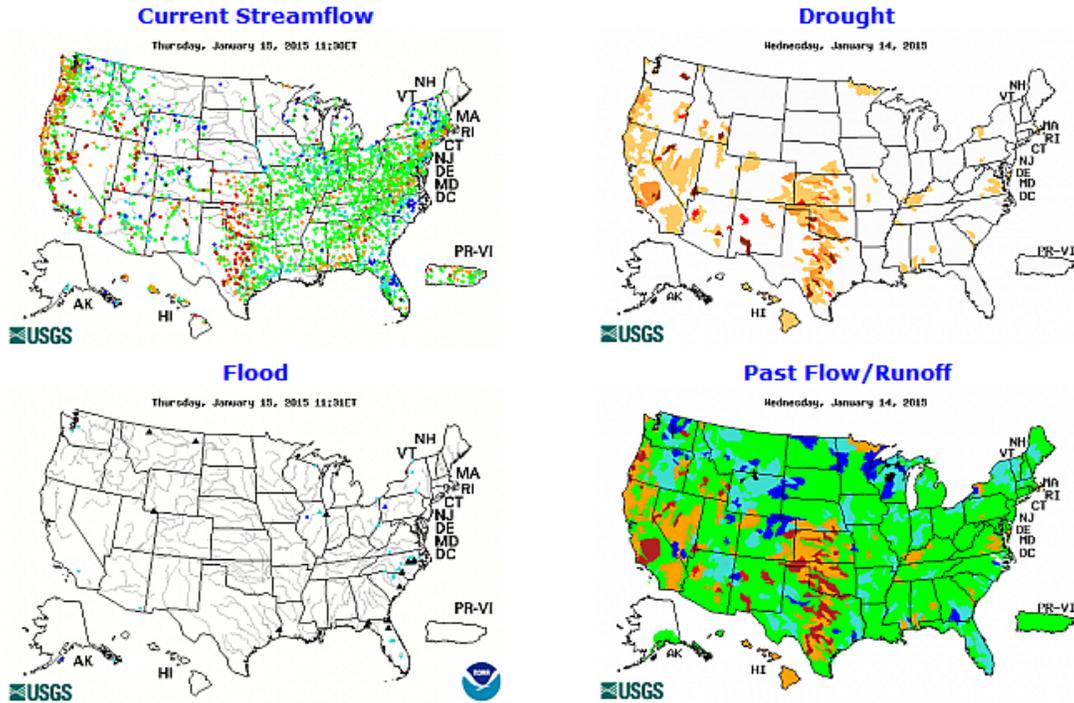


This NRCS resource shows soil moisture data for the last month at [Youmans Farm \(site # 2038\)](#) in South Carolina. The area had precipitation several times between December 25 and January 13 (graphed in light blue). This rainfall resulted in an increase in soil moisture, primarily at the 2-, 4-, and 8-inch depths. The 20- and 40-inch depth sensors also reported a slight increase in soil moisture from the precipitation events.

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 Water and Climate Update

Streamflow



Scattered gages in many parts of the U.S. are reporting much above normal streamflow. Some gages in the northern states are now frozen, so may not relate to the precipitation and snow conditions in that area. The rivers above flood stage are the Marias River near Shelby, MT, the Poplar River near Poplar, MT, the Henry's Fork near Manila, WY, Kankakee River at Shelby, IN, Sabine River near Ruliff, TX, Santee River near Jamestown, SC, as well as four stations in North Carolina, and five stations in northern Florida.

National Long-Range Outlook



[Click map to enlarge and update](#)

Currently the Upper Midwest part of the map has not been calculated for the long range flood outlook (dark gray dots).

During the next three months, there is a risk of flooding in much of the eastern U.S. The Southeast and the Midwest, have gauges with a slight to higher risk of flooding. Currently, **2** gauges have a greater than 50% chance to experience major flooding; **20** gauges for moderate flooding, and **215** gauges for minor flooding.

These numbers represent a **15** gage decrease in the greater than 50 percent chance of minor flooding category since last week.

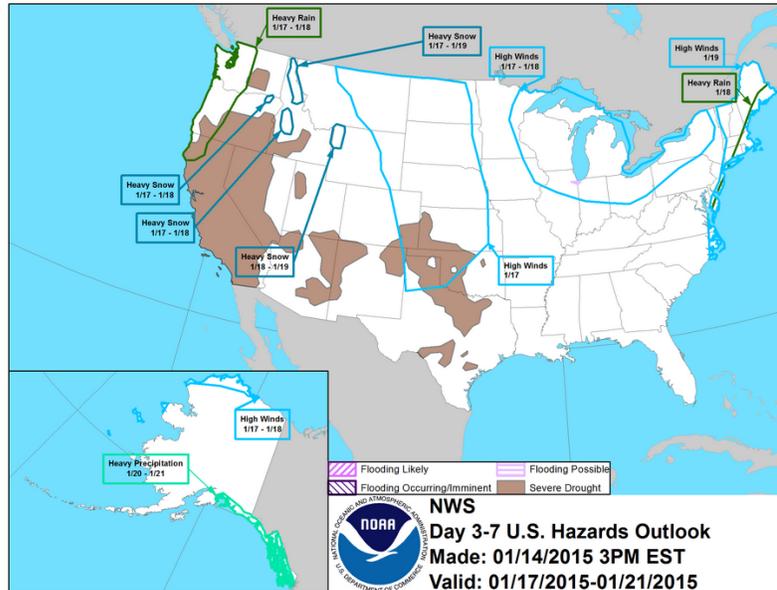
Weekly Water and Climate Update

National [Weather Hazards](#)

High winds are expected in a large area of the central and eastern U.S., extending from Canada to Texas, over the Great Lakes, and along the mid Atlantic and New England (in light blue) (1/17-19). Heavy rain is also predicted along the coast from New England to Maryland (1/18), and along the north Pacific coast (1/17-18). Heavy snow is expected in several mountainous regions in the northern Rockies (1/17-19).

In Alaska, high winds are expected along the north and west coast (1/17-18), and heavy precipitation in the southeast part of the state (1/20-21).

Severe drought remains a large issue in much of the south central and western U.S.



[National Drought Summary for January 13, 2015](#)

Prepared by the Drought Monitor Author: Richard Tinker, NOAA/NWS/NCEP/CPC.

Summary

"The week was relatively dry nationwide, with the High Plains separating generally warmer-than-normal conditions to the west from colder weather farther east. Precipitation totals exceeding an inch were common in a few regions; specifically, parts of New Jersey and Delaware, the Carolinas, the Florida Peninsula and adjacent southeastern Georgia, central and eastern Tennessee and adjacent Alabama, eastern Texas and parts of central and western Louisiana, southwestern California, portions of the Aleutians and coastal southern Alaska, and the Alaskan Panhandle. Heavy amounts exceeding 5 inches, however, were limited to a couple of isolated sites on Kodiak Island and in the southernmost Alaskan Panhandle.

California

Light to moderate precipitation fell on southern parts of the state away from the deserts, with amounts exceeding an inch common along the southwest coastline and the adjacent windward slopes. Little or none fell elsewhere.

Benefits from last month's storms continue to be felt in west-central California, prompting improvements to D2 in Marin, adjacent Sonoma, San Francisco, and northernmost San Mateo Counties.

Farther east, improvement has not been as resilient in much of the Sacramento Valley, and following a month of subnormal precipitation, D4 has been brought back into part of the Sacramento Valley from Sacramento, Yolo, and western El Dorado Counties northward through Butte County. Reservoirs near and north of this region are still above their levels at the start of the current wet season, but water-year-to-date totals have dropped back to near average and 24-month precipitation totals are among the lowest 2 to 10 percent of historical occurrences.

Along and east of the central and southern Sierra Nevada, D4 was expanded eastward past the ridge line to include the eastern slopes of the range from Inyo County, California northward through Douglas County, Nevada. Subnormal winter precipitation has combined with abnormal warmth to leave Sierra Nevada snowpack well short of the historic mid-January average in central and southern parts of the range. Since

Weekly Water and Climate Update

October 1, 2014, precipitation totals are 3 inches to locally over a foot below normal from the slopes of eastern Fresno and adjacent Inyo Counties northward through eastern Nevada County.

Central and Southern Plains

Moderate to locally heavy precipitation prompted patchy improvement across southern and eastern Texas, but it was a cold and dry week elsewhere, keeping dryness and drought predominantly unchanged. Some deterioration was noted in a few spots in northern Texas, including some D4 expansion into Hardeman and Foard Counties just southeast of the Panhandle. Precipitation since October 2014 has totaled less than 75 percent of normal across much of the Panhandle and in adjacent areas to the east, and 6-month totals below half of normal were noted in a few small areas in southwestern Oklahoma and the central Texas Panhandle.

Hawaii and Puerto Rico

Only light precipitation at best fell on the Hawaiian Island chain and the dry area in south-central Puerto Rico. No changes were made to the areas of dryness in either region.

Northern Plains and upper Midwest

A very cold and dry week kept conditions locked as they were the previous week, with broad-scale abnormal dryness and a smaller area of moderate drought.

Tennessee and lower Mississippi Valley

From central Arkansas northeastward through central Kentucky, most locations recorded between one-quarter and three-quarters of an inch of precipitation. Abnormal dryness was expanded northeastward in Kentucky and Tennessee where 90-day totals were generally 4 or more inches below normal, and moderate drought was introduced in southwestern Kentucky and western Tennessee where deficits exceed 6 inches. For the last 6 months, precipitation totaled 8 to 12 inches less than normal in the D1 areas in northeastern Arkansas and in part of northwestern Tennessee.

The Atlantic Seaboard

Moderate precipitation brought an end to D0 in eastern North Carolina, part of southeastern Virginia, and small areas in northeastern South Carolina and near the Georgia/South Carolina border, but other extant areas of dryness persisted. In south Florida, below-normal precipitation has prevailed for the past several months, thus abnormal dryness was introduced in the southernmost reaches of the state. Since October 2014, the region received less than 75 percent of normal rainfall, with some areas reporting under half of normal (this is a relatively dry time of the year for the region, however, and few impacts have been noted so far).

The Central Gulf Coast

Little or no precipitation, in concert with a colder than normal week, left conditions essentially unchanged. Moderate drought was expanded slightly westward in southern Louisiana to encompass areas where 6-month deficits exceed 6 inches.

The Pacific Northwest

Little precipitation of significance fell last week, but some adjustments were made based on a re-assessment of information. So far, winter has not been markedly wet or dry in general across the Cascades, but it has been warmer than normal, and snowpack is low for this time of year. As a result, D0 conditions were expanded to cover the Oregon Cascades, and the ridge line and eastern slopes of the Cascades in central and southern Washington. In contrast, D1 was retracted from the southwest Oregon coastal region, and reports of lessening impacts led to improvements in the D0 to D2 conditions across central and eastern Washington and adjacent Idaho.

The Southern Rockies and Eastern Intermountain West

From central sections of Idaho and Nevada eastward across the Four Corners states and small portions of southern Wyoming and southwestern Montana, no changes were made to the analysis. South and west of the central Rockies, D0 to D2 conditions prevail, with spots of D3 in southern Idaho, southeastern Arizona, and along the northern Arizona/New Mexico border. Precipitation totals exceeding an inch were confined to isolated locales in the highest elevations.

Weekly Water and Climate Update

Looking Ahead

The upcoming 5-day period (January 14 – 18, 2015) looks generally mild and dry across the contiguous 48 states. According to the Weather Prediction Center, heavy precipitation (2 to 7 inches) should be limited to northwest California and the Pacific Northwest along and west of the Cascades, with the largest amounts expected along parts of the immediate coastline and windward mountain slopes. Moderate to locally heavy precipitation (1.5 to 3.0 inches) is expected in parts of central and northern Idaho. Elsewhere, amounts of 0.5 to 1.5 inches are forecast across the remainders of northern California, the Pacific Northwest, and Idaho, plus adjacent portions of western Montana and northwestern Wyoming. Farther south and east, totals above 0.5 inch should be limited to New England, the Outer Banks, and the immediate central Gulf Coast. The rest of the East Coast, southern sections of the central Gulf Coast states, and the upper Great Lakes regions are expected to receive light precipitation, with little or none anticipated elsewhere.

Temperatures should average at least somewhat above normal from the Mississippi Valley westward, with daily highs averaging 90F to 180F above normal from south-central sections of the Plains and Front Range northward to the Canadian border.

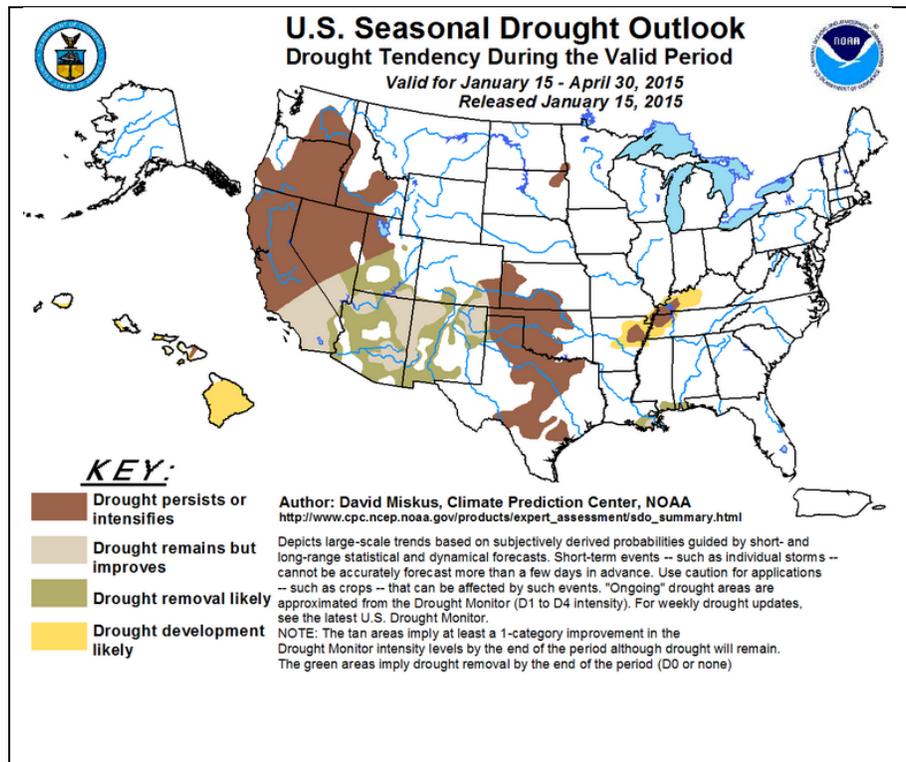
For the ensuing 5 days (January 19 – 23, 2015), warmer than normal weather is favored across almost all of the 49 continental states, except northwestern Alaska and parts of the central and northern High Plains and adjacent Rockies. Subnormal precipitation is anticipated throughout the West Coast states, western Arizona, and most of Nevada while surplus precipitation is expected from the eastern edge of the Rockies eastward through the Great Lakes region, the middle Ohio Valley, and the central Gulf Coast region. Wet weather is also favored throughout Alaska.”

Supplemental Drought Information

National Seasonal Drought Outlook

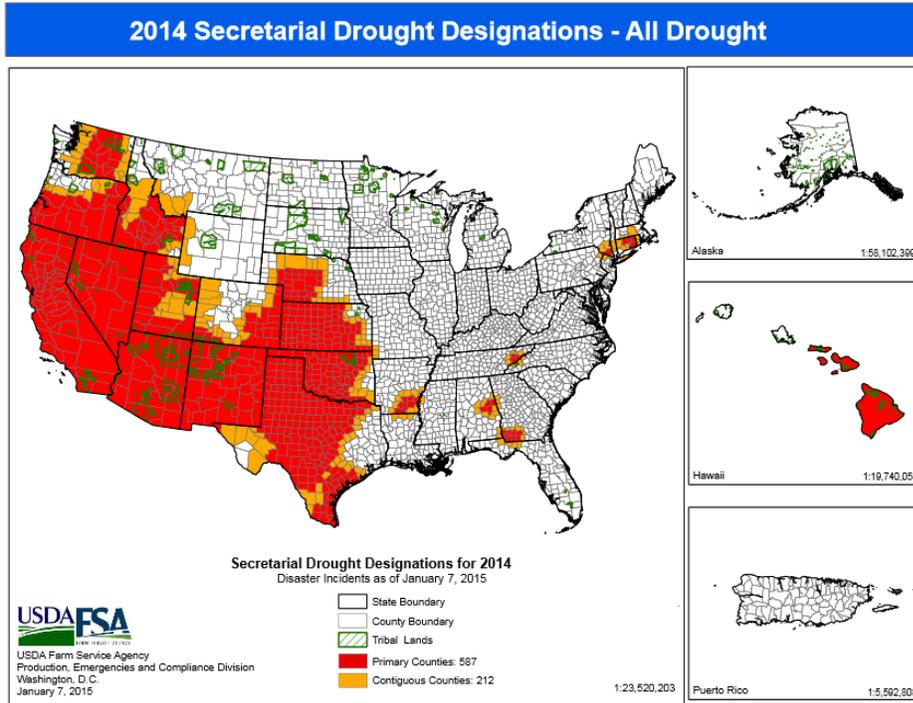
Nationally, [drought](#) is expected to persist or intensify over much of the West and south central U.S., including Nevada, Oregon, Washington, Idaho, Utah, Arizona, New Mexico, Texas, Oklahoma, Nebraska, and Colorado. Improvements are expected in southern California and in parts of the Southwest and Texas. The area of drought in Arkansas, Tennessee, and Kentucky are likely to develop further. Hawaii drought development is also likely.

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.



Weekly Water and Climate Update

2014 USDA Secretarial Drought Designations, as of January 7, 2015

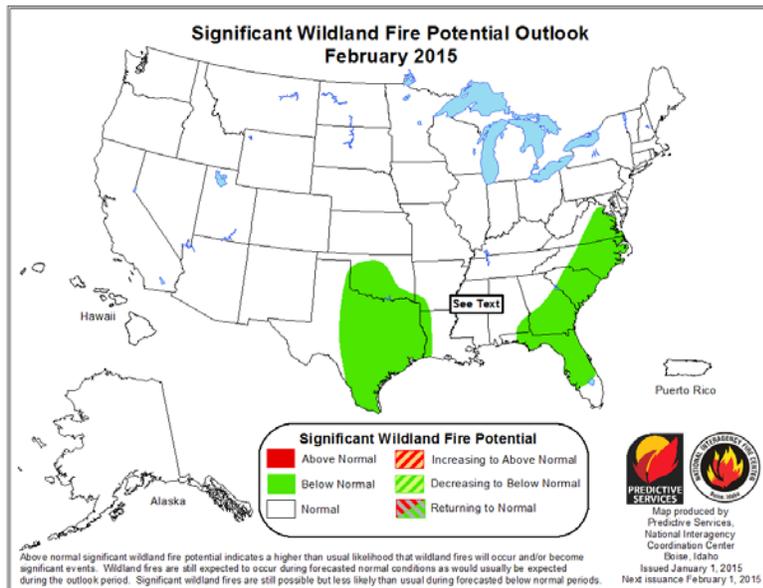


Refer to the USDA Drought Assistance [website](#) and [National Sustainable Agriculture Information Service](#).

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

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

National Fire Potential Outlook



February Fire Forecast

In January, much of the U.S. has normal [fire potential](#).

The below normal fire potential area in green on the map is forecast for Texas, and the Southeast, to the Mid-Atlantic States.

Weekly Water and Climate Update

Additional Maps

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

Regional zooms of ACIS station data percent-of-normal precipitation:
<http://dmcommunity.unl.edu/maps/All-CONUS-ACIS-PNP.pptx>.

National Water and Climate Center (NWCC) Surface Water Supply Index (SWSI) maps:
<http://www.wcc.nrcs.usda.gov/wsf/swsi.html>

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.

First California snow survey of the year

The first snow survey of 2015 showed the snowpack to be 43 percent of normal for the date. California's largest reservoirs, Shasta and Oroville, rose to about 40 percent of capacity, thanks to the December rainfall. Those reservoirs are typically around 60 percent full at this time of year.

November water conservation figures

Statewide, water conservation climbed to 9.8 percent in November in comparison with November 2013 water use. In the South Coast region, comprised of Los Angeles, San Diego, Orange and Riverside counties, conservation amounted to 3.2 percent, while in the Bay Area and Sacramento, water consumption was 18 and 25 percent. Temperature differences and more rainfall in Northern California may have contributed to the difference in conservation results. In January 2013, the governor asked for 20 percent water conservation.

New year for California water legislation

With Republicans in control of the House and Senate, California lawmakers will again be pushing drought legislation to send more water to farmers south of the Sacramento-San Joaquin Delta.

Unemployed and underemployed farmworkers get food in southern Central Valley

Farmworkers in the southern Central Valley continued to struggle to get by as agricultural employers cut jobs, due to drought, leading to hunger in an area where half of the country's fruits, vegetables and nuts are grown. Many laborers relied on charity to keep food on the table. The ripple effects are felt by farm-related businesses as the regional economy shares the pain.

Texas

Dallas' reservoirs were 35.4 percent depleted on Jan. 2, compared to being 27.7 percent depleted at the start of 2014. The water deficit beyond 35 percent triggered the first stage of their drought plan.

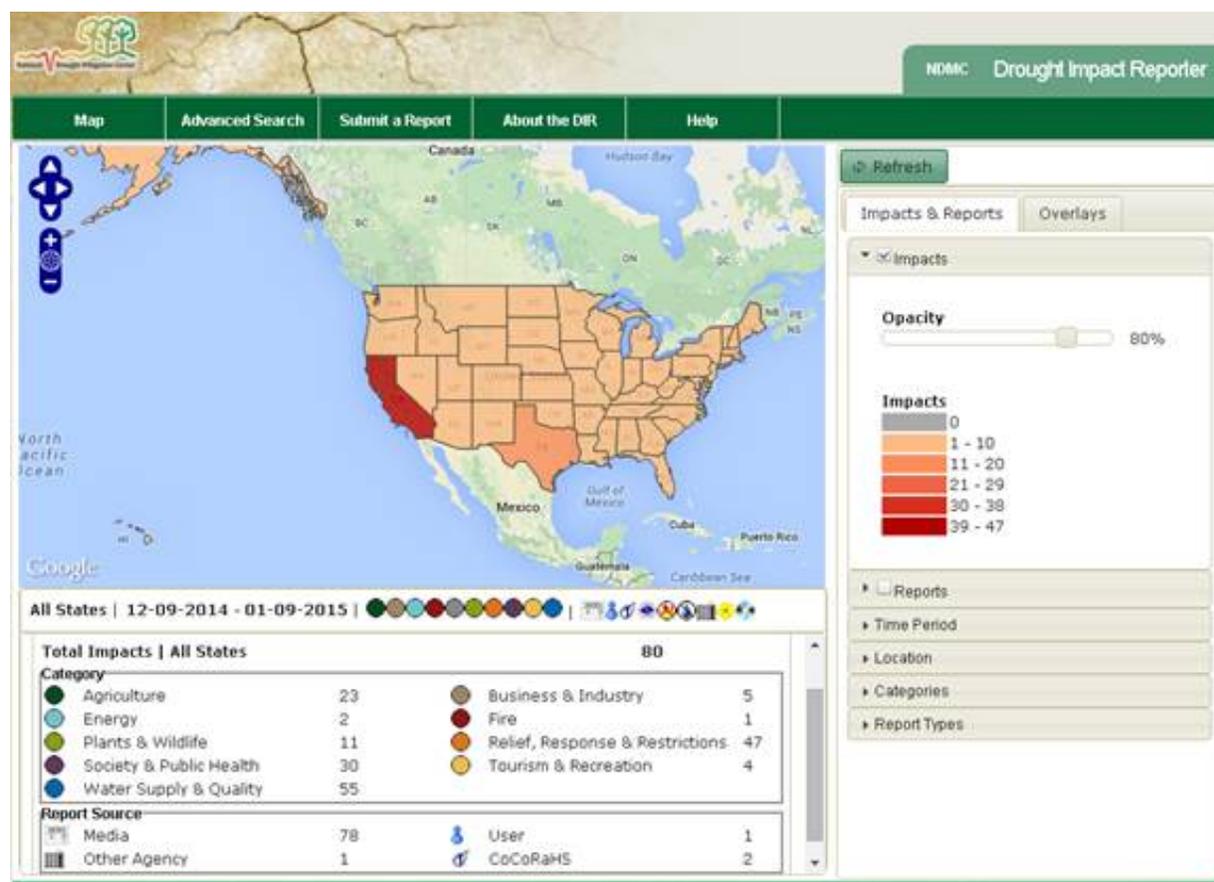
New Mexico

Meager mountain snows in northern New Mexico and southern Colorado led the National Water and Climate Center to forecast another year of drought for New Mexico. Even a wet spring may not rescue the state from below average flows on the Rio Grande River.

Farmers in the southern part of the state will feel the pain because Elephant Butte Reservoir held 13 percent of capacity.

Weekly Water and Climate Update

[Drought Impact Reporter](#)



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)

California Agriculture Losses for 2014.

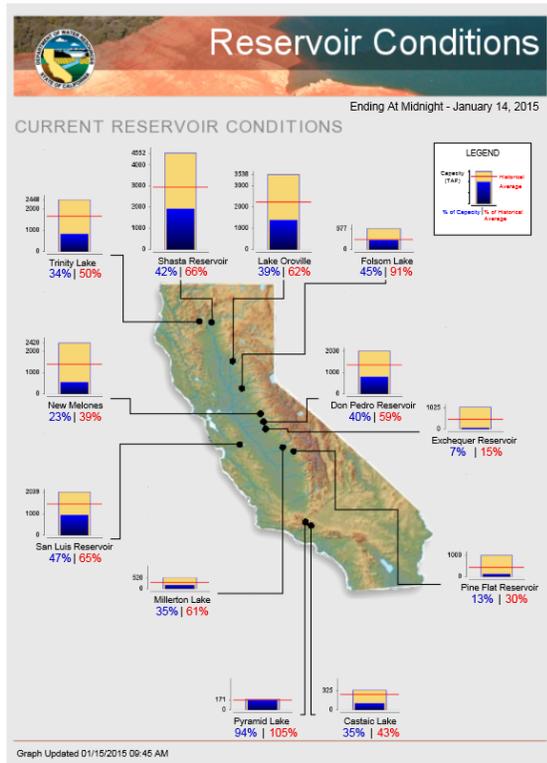
[Experts say California farmers lost \\$2B in 2014](#) – Jan 9

"We estimated about \$2 billion, \$2.2 billion worth of damage, economic damage to the State of California. About 17,000 jobs were lost, just in agriculture," Watershed Sciences Director (U.C. Davis) Jay Lund, Ph.D., said.

Weekly Water and Climate Update

California Reservoir Conditions

[California Major Reservoir conditions from the CA Department of Water Resources](#)



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 Water and Climate Updates 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

Deputy Chief, Soil Science and Resource Assessment