

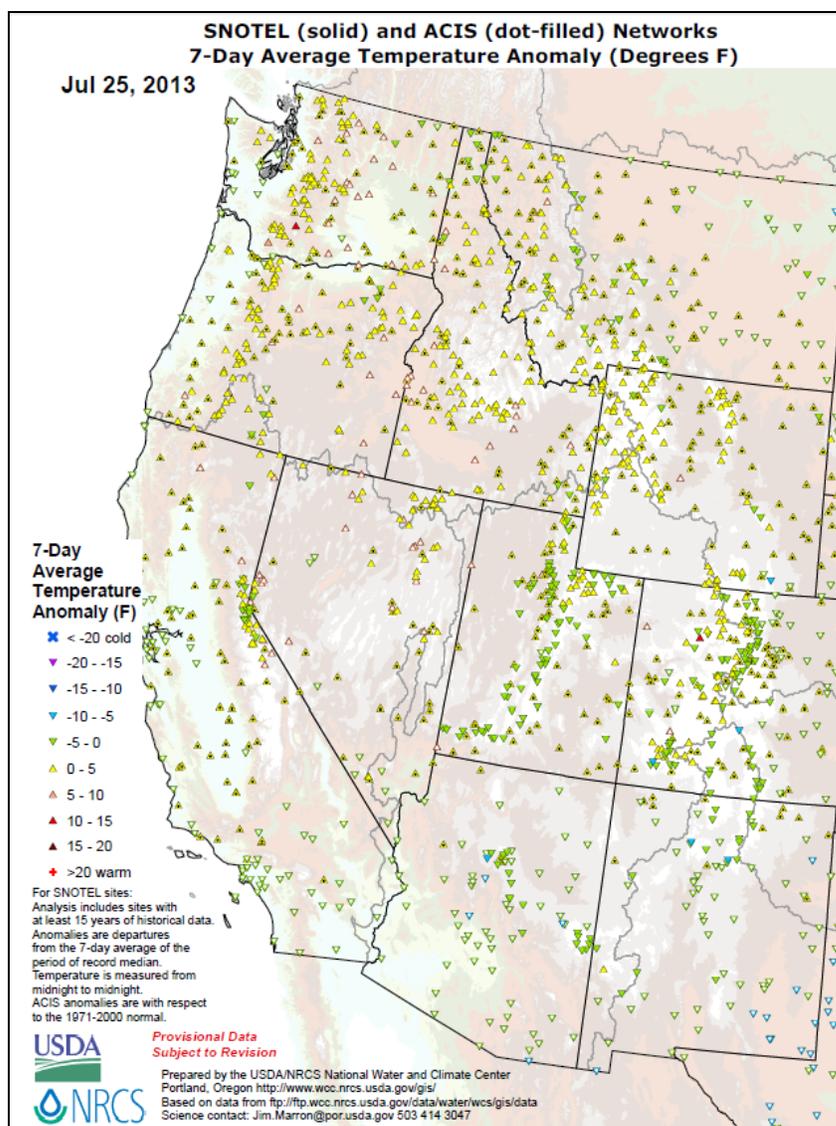


Natural Resources Conservation Service
 P.O. Box 2890
 Washington, D.C. 20013

Weekly Snowpack / Drought Monitor Update 25 July 2013

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Temperature



[SNOTEL](#) and ACIS 7-day temperature anomaly ending this morning reveals temperatures within $\pm 5^{\circ}\text{F}$ with warmer bias in northern tier states.

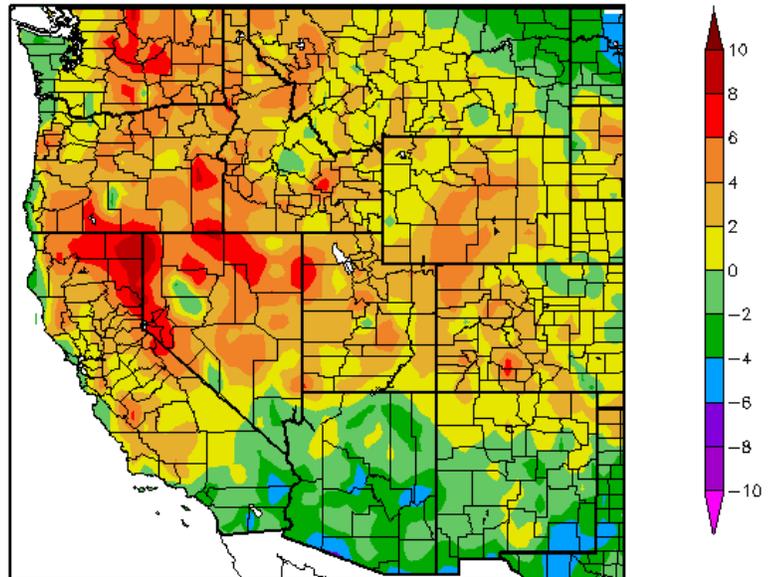
Weekly Snowpack and Drought Monitor Update Report

[ACIS 7-day](#) average temperature anomalies, ending Wednesday morning, show the greatest positive temperature departures concentrated over the Interior West with the highest values over northeast California (>+8°F). The coolest departures occurred over southern Arizona and New Mexico, as a result of an active monsoon. (<-4°F).

This map currently does not use SNOTEL data, but is expected to later this summer.

For more figures, see the Western Water Assessment's Intermountain West Climate [Dashboard](#). See the [Westwide Drought Tracker](#) for more maps.

Departure from Normal Temperature (F)
7/18/2013 – 7/24/2013



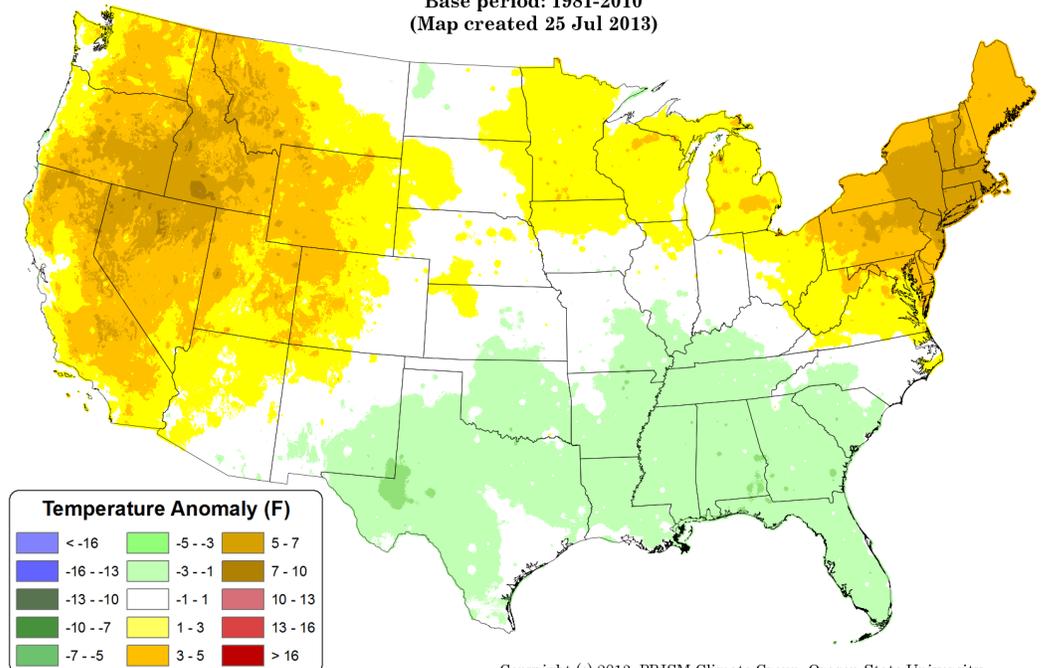
Generated 7/25/2013 at HPRCC using provisional data.

Regional Climate Centers

This preliminary [PRISM](#) temperature map, updated daily, will be available to the public by **30 September**. →

The map contains all available network data, including SNOTEL data, and will be updated periodically as additional data become available and are quality controlled.

Daily Mean Temperature Anomaly: 01 July 2013 - 24 July 2013
Period ending 7 AM EST 24 Jul 2013
Base period: 1981-2010
(Map created 25 Jul 2013)



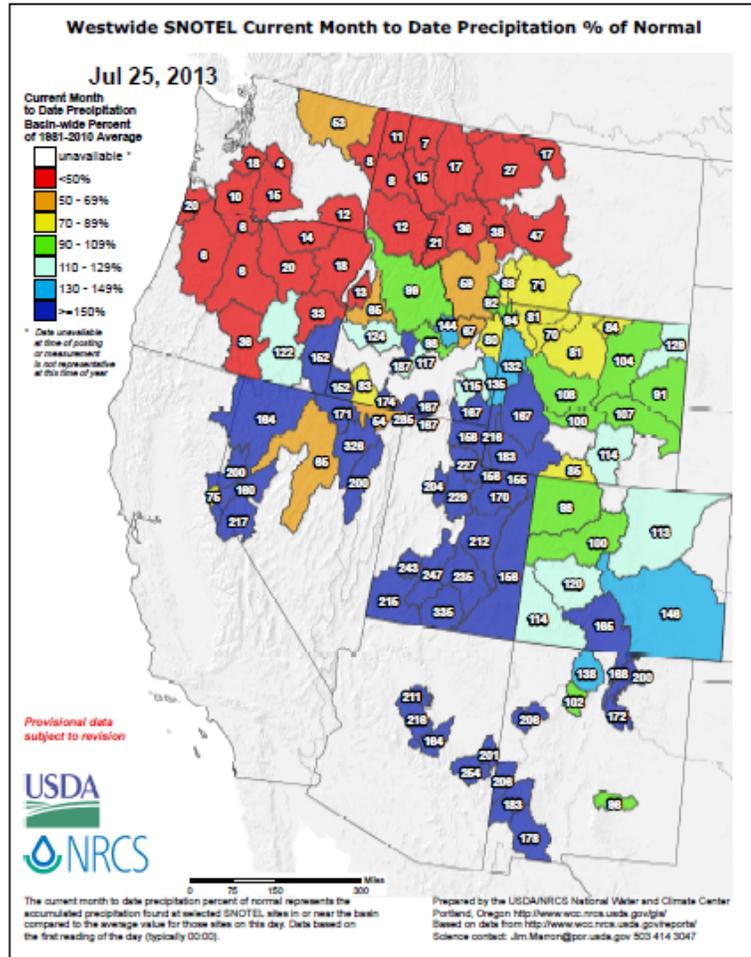
Copyright (c) 2013, PRISM Climate Group, Oregon State University

Accumulated average temperatures for July have been considerably warmer than normal across the western third of the U.S. and New England. The southern plains, mid-Mississippi River Valley, and Southeast have been somewhat cooler than normal. This pattern remains unchanged from the previous weekly report.

Weekly Snowpack and Drought Monitor Update Report

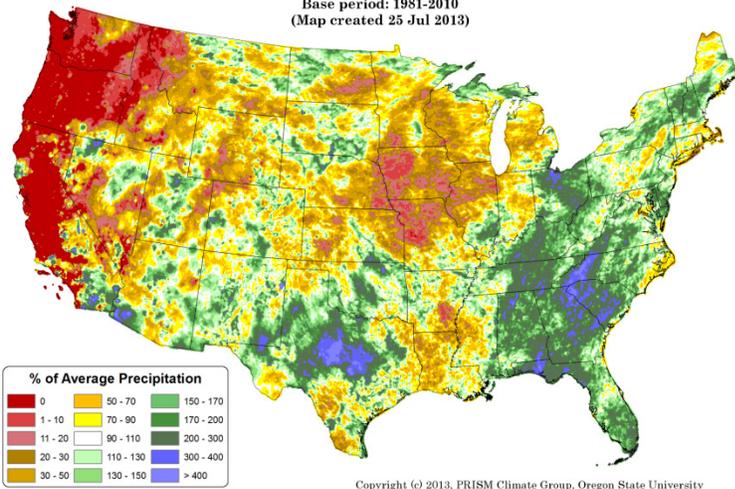
Precipitation

SNOTEL [month to date](#) precipitation percent of normal pattern shows the typically dry Pacific Northwest, and wetter southern tier states due to the development of the Southwest Monsoon.



Click images for enlarged version

Total Precipitation Anomaly: 01 July 2013 - 24 July 2013
Period ending 7 AM EST 24 Jul 2013
Base period: 1981-2010
(Map created 25 Jul 2013)



Accumulated total precipitation thus far for July shows a rainfall pattern that has favored parts of the Interior West, Southwest (due to the seasonal monsoon), northern Rockies, and especially the eastern third of the nation. Drier conditions have dominated the southern through northeastern plains (with the exception of east-central Texas), with extreme lack of moisture over much of the west coast states.

<--- This preliminary [PRISM](#) precipitation map will be available to the public by **30 September**. It contains all available network data, including SNOTEL data, and will be updated periodically as additional data become available and are quality controlled.

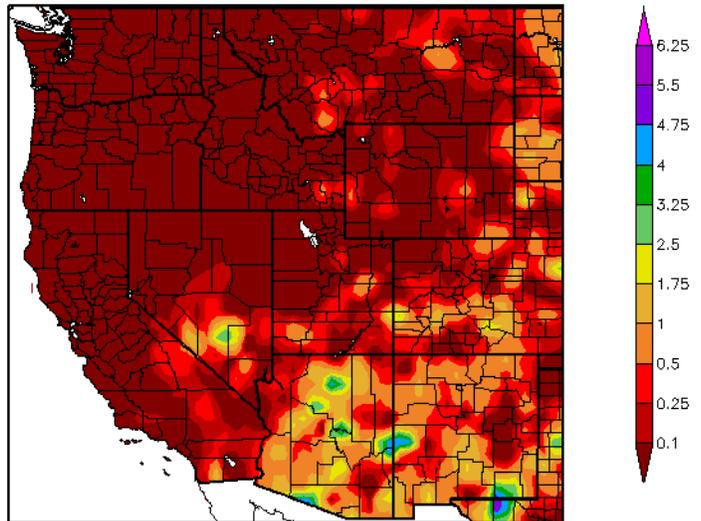
The Pacific Northwest and Midwest have been much drier than central Texas and much of the Eastern States thus far this July. See last page for total precipitation across New Mexico and portions of Arizona in response to an active summer monsoon.

Weekly Snowpack and Drought Monitor Update Report

[ACIS](#) 7-day average precipitation amounts for the period ending July 24 show an active monsoon over Arizona, parts of New Mexico, and southern Nevada. Other than isolated thunderstorms, typical dry conditions prevailed this week across the interior West and Northwest.

This map currently does not use SNOTEL data, but is expected to later this summer.

Precipitation (in)
7/18/2013 - 7/24/2013



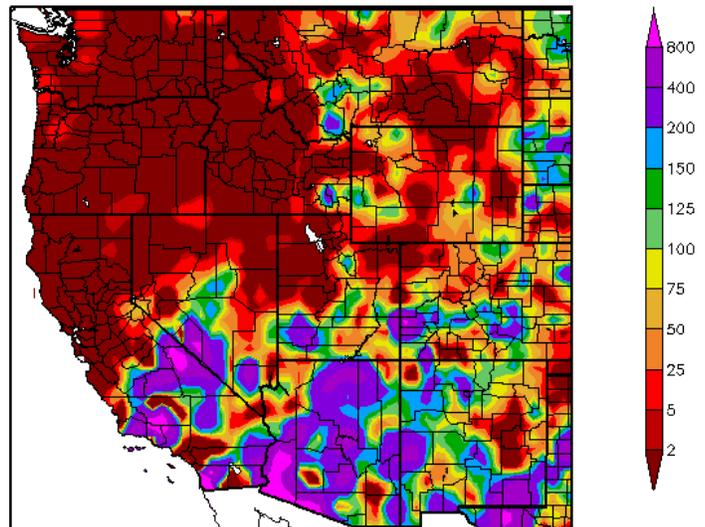
Generated 7/25/2013 at HPRCC using provisional data.

Regional Climate Center

In this [map](#), the impact of the Southwest Monsoon is apparent over much of the southern tier states of the West.

This map currently does not use SNOTEL data, but is expected to later this summer.

Percent of Normal Precipitation (%)
7/18/2013 - 7/24/2013



Generated 7/25/2013 at HPRCC using provisional data.

Regional Climate Center

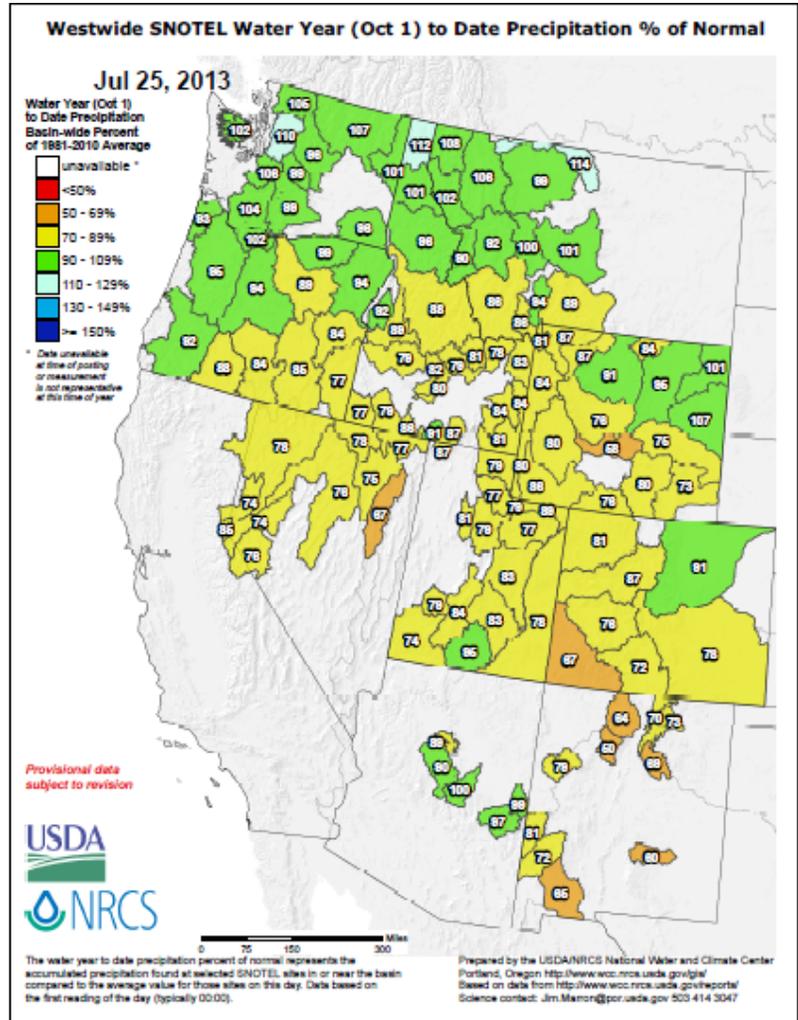
Weekly Snowpack and Drought Monitor Update Report

For the [2013 Water Year](#) that began on 1 October 2012, the pattern continues to resemble La Niña (i.e., wetter northern tier).

Southeastern Oregon, southern Idaho, and northern Nevada have bucked this tendency over the northern tier states with less precipitation. Southwestern Utah, southwestern Colorado, along with all of New Mexico is experiencing deficits.

For the remainder of this water year, values should not change significantly from this depiction.

For additional information, daily reports by SNOTEL site are available [here](#).



Click image for larger version

Weather and Drought Summary

Western Drought Summary – July 16, 2013

The following **Weather and Drought Summary** is provided by this week's NDMC Author: [Richard Heim, National Climatic Data Center, NOAA](#).

Weather Summary: “A broad upper-level ridge brought above-normal temperatures to the northern half of the United States during this July 23 U.S. Drought Monitor week. Troughs moving in this upper-level flow pushed cold fronts which brought areas of rain east of the Rockies along with outbreaks of cooler air to the northern states. An upper-level low retrograding beneath the ridge brought below-normal temperatures and locally heavy rain to the southern Plains and reinforced the Southwest monsoon.”

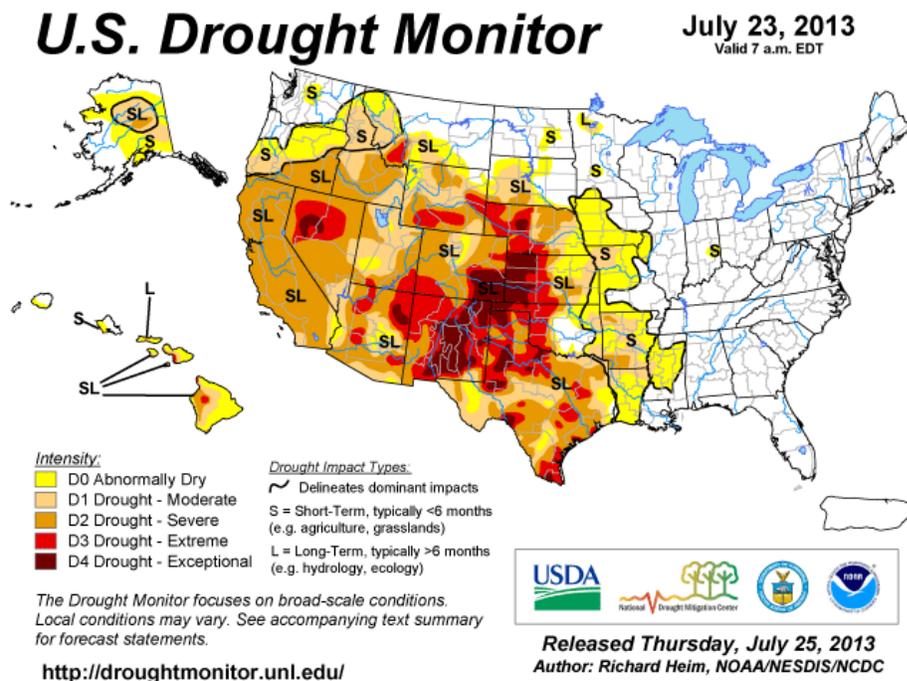
The West: “Monsoon rains, enhanced by the retrograding upper low, brought above-normal precipitation to much of the Southwest, while the upper ridge inhibited showers in the Northwest and northern Rockies. D1 and D2 were pulled back in Utah and D1-D3 were trimmed in Arizona. Several CoCoRaHS stations near Carlsbad reported 3.00-4.49 inches of rain, so D2-D4 were pulled back in southeastern New Mexico while D3-D4 were shaved in southwestern New Mexico. Over 6 inches of moisture has fallen in July to date over parts of south central Colorado where D3 (extreme drought) was trimmed, recent rains improved crop conditions resulting in pullback of D3 in northeastern Colorado, and D1 shrank near Denver and other Front Range communities due to improving vegetation and reservoir levels. But the drought is far from over in the

Weekly Snowpack and Drought Monitor Update Report

Southwest, with 80% of the topsoil short or very short of moisture in Colorado and New Mexico, 74% so rated in Oregon, and over 60% that dry in Utah. As of July 21, the USDA reported pasture and range land in poor to very poor condition for 95% of California, 79% of Arizona and New Mexico, 70% of Nevada, and 64% of Colorado.”

“Drier and warmer than normal weather further dried out soils in the northern states of the West, with the USDA rating topsoil short or very short of moisture for 62% of Wyoming and 47% of Montana, which are jumps of 14% and 10%, respectively, from last week. The Palmer Crop Moisture Index showed progressively worsening conditions. This week began with only 4 large wildfires burning in the Northwest, but it ended with firefighters battling over a dozen. As a result, D0-D1 expanded in northern Idaho and western Montana, and D3 expanded into southwestern Wyoming.”

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



Current [Drought Monitor](#) weekly summary. The exceptional D4 levels of drought are scattered across the western Corn Belt of the Plains into southeastern Colorado and eastern New Mexico. For more drought news, see [Drought Impact Reporter](#).

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](#).

National Drought Related News:

- [Drought persists though worst levels shrinking](#) - July 18, U.S.
- [Record US Corn Yield Expected This year](#) – July 21, U.S.
- [Power Plants Face 'Collision Course' With Water, Researchers Say](#) - July 16, U.S.
- [Interior Chief Says Drought May Cause Record Wildfires in U.S.](#) - July 17, U.S.

- ✓ The [summer 2013 edition of DroughtScope](#), from the National Drought Mitigation Center, is now available.

Weekly Snowpack and Drought Monitor Update Report

- ✓ **Drought Management Resources:**
 - ✓ Drought Monitor for the [Western States](#)
 - ✓ Drought Impact Reporter for [New Mexico](#)
 - ✓ [California Data Exchange Center](#) & [Flood Management](#)

News (•) Stories:

- [Almond market reacts to short crop estimate](#) - July 19, **California**
- [Dry summer causing major concerns for Cache farmers](#) - July 19, **N. Utah**
- [Thousands evacuated from path of raging Southern California wildfire](#) - July 18, **S. California**
- [Dry period in mid-valley is historic, expert says](#) - July 18, **Willamette Valley in Oregon**
- [Brush-clearing saved homes](#) - July 17, **Arizona**
- [Worsening Drought Impacts Western Rangeland on Public Lands](#) - July 14, **Western U.S.**
- [Judge rules against Klamath farmers](#) - July 17, **Upper Klamath River Basin in S. Oregon, N. California**

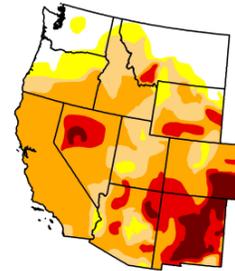
U.S. Drought Monitor

July 23, 2013
Valid 7 a.m. EST

West

	Drought Conditions (Percent Area)					
	None	D0-D1	D1-D4	D2-D4	D3-D4	D4
Current	13.24	86.76	77.17	57.79	18.07	5.86
Last Week (07/16/2013 map)	14.44	85.56	76.84	59.31	18.96	6.15
3 Months Ago (04/23/2013 map)	20.28	79.72	66.00	43.41	16.10	1.87
Start of Calendar Year (01/01/2013 map)	24.39	75.61	69.31	45.04	18.01	2.15
Start of Water Year (09/25/2012 map)	15.12	84.88	77.15	43.65	16.85	1.77
One Year Ago (07/17/2012 map)	20.03	79.97	67.85	49.00	15.87	0.16

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



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

<http://droughtmonitor.unl.edu>



Released Thursday, July 25, 2013
Richard Heim, National Climatic Data Center, NOAA

Note that there was a slight improvement in drought conditions this past week due to the onset of the SW Monsoon.

- ✓ [NIDIS Upper Colorado River Regional Drought Earlier Warning System](#)
- ✓ [July 13 Southwest Climate Outlook](#)

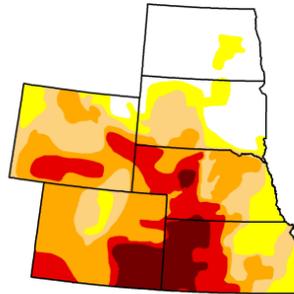
U.S. Drought Monitor

July 23, 2013
Valid 7 a.m. EST

High Plains

	Drought Conditions (Percent Area)					
	None	D0-D1	D1-D4	D2-D4	D3-D4	D4
Current	19.86	80.14	66.27	47.65	22.59	8.47
Last Week (07/16/2013 map)	21.99	78.01	67.00	48.02	22.41	7.87
3 Months Ago (04/23/2013 map)	7.07	92.93	86.14	69.80	37.82	7.32
Start of Calendar Year (01/01/2013 map)	1.54	98.46	93.01	86.20	60.25	26.99
Start of Water Year (09/25/2012 map)	0.00	100.00	98.91	83.80	61.26	24.35
One Year Ago (07/17/2012 map)	3.52	96.48	85.88	68.44	28.07	1.35

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



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

<http://droughtmonitor.unl.edu>



Released Thursday, July 25, 2013
Richard Heim, National Climatic Data Center, NOAA

No significant changes during this past week.

Region with D-4 Exceptional Drought

- ✓ [Kansas Drought Update.](#)
- [Is Drought Returning to Eastern Nebraska?](#) - July 19, **Nebraska**
- [Officials OK Fish Salvage in Platte River](#) - July 13, **East central Nebraska**
- [CRP emergency haying and grazing approved for 66 Kansas counties](#) - July 19, **Kansas**
- [Emergency haying and grazing authorized in area counties](#) - July 16, **Nebraska**
- [First week of July turns tragic](#) - July 11, **Kansas**

Region with D-4 Exceptional Drought

- ✓ [Texas Drought Website.](#)
- ✓ [Texas Reservoirs.](#)
- [Oklahoma drought update: Tulsa gets worse, but other areas improve](#) - July 18, **Oklahoma**
- [Drought Leaves Many High and Dry in Travis County](#) - July 18, **Lake Travis near Austin, Texas**

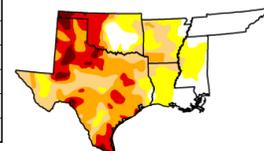
U.S. Drought Monitor

July 23, 2013
Valid 7 a.m. EST

South

	Drought Conditions (Percent Area)					
	None	D0-D1	D1-D4	D2-D4	D3-D4	D4
Current	20.12	79.87	60.49	39.97	18.33	3.78
Last Week (07/16/2013 map)	26.53	73.47	60.32	41.39	20.92	6.67
3 Months Ago (04/23/2013 map)	34.09	65.91	57.02	42.53	23.28	6.78
Start of Calendar Year (01/01/2013 map)	21.18	78.82	63.69	50.50	32.80	10.98
Start of Water Year (09/25/2012 map)	24.13	75.87	66.61	51.50	29.96	9.11
One Year Ago (07/17/2012 map)	17.29	82.71	68.69	40.29	13.63	1.09

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



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

<http://droughtmonitor.unl.edu>

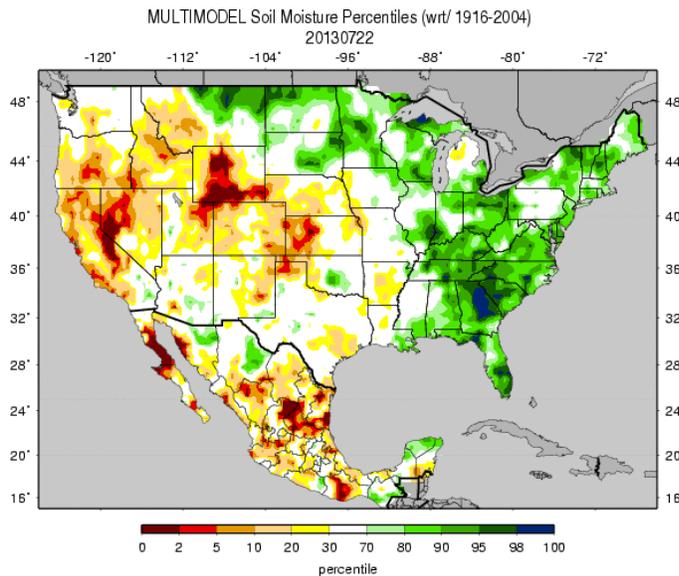


Released Thursday, July 25, 2013
Richard Heim, National Climatic Data Center, NOAA

Note some improvement in the higher D-categories during this past week.

Weekly Snowpack and Drought Monitor Update Report

Soil Moisture

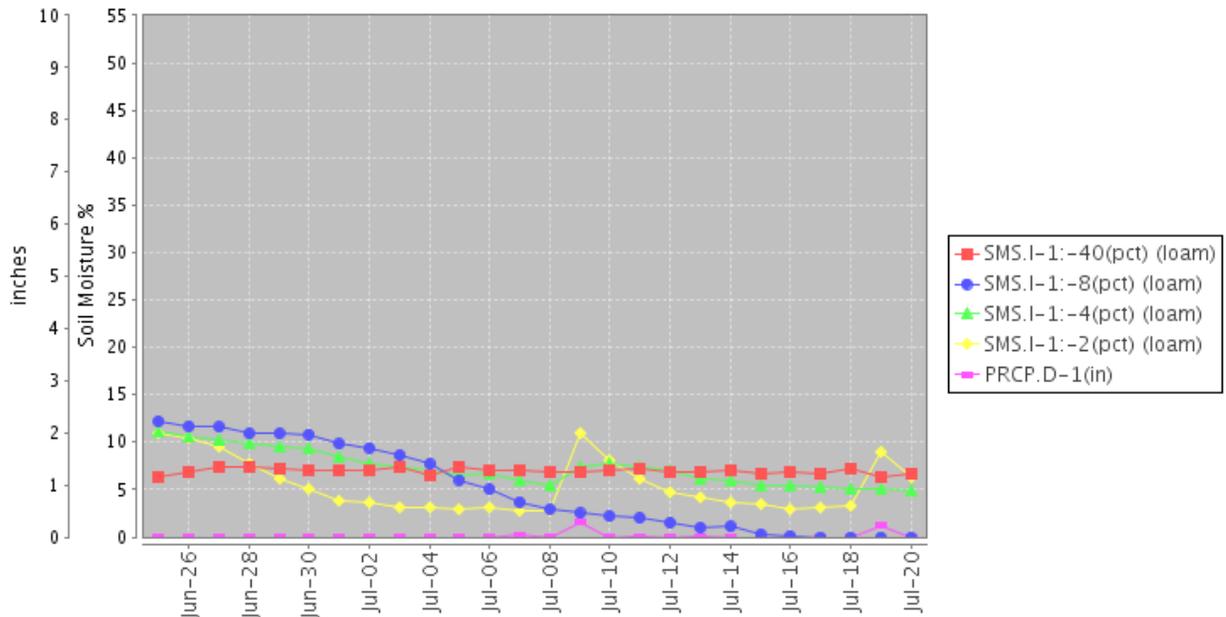


Soil moisture ranking in [percentile](#) as of July 22 shows considerable dryness over the western Great Basin, eastern California, Wyoming Rockies, and the central plains. Excess moisture is noted over northern Montana and much of the eastern seaboard; especially over the Southeastern states. Improvement over Arizona and New Mexico, due to the SW Monsoon, is quite evident since last week.

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](#))

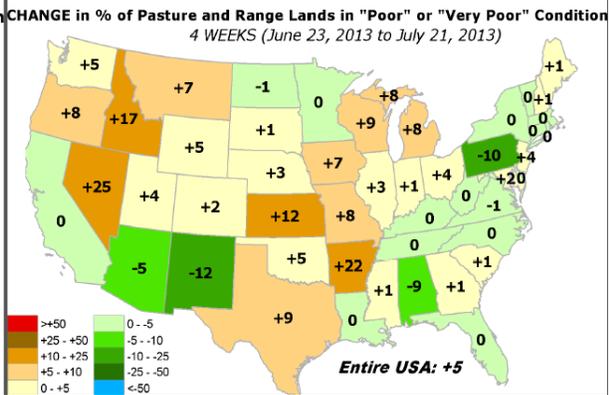
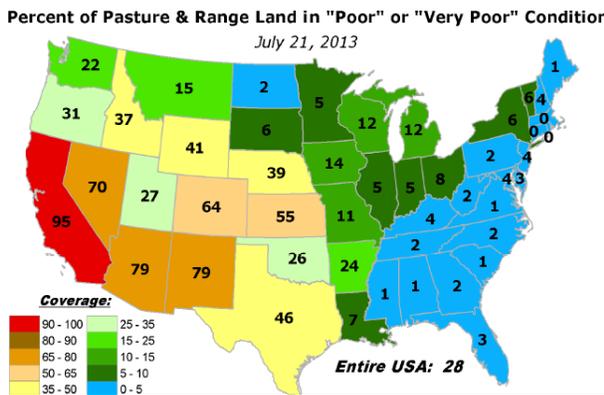
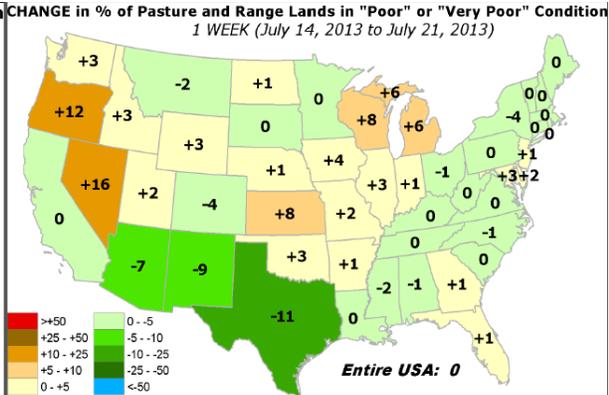
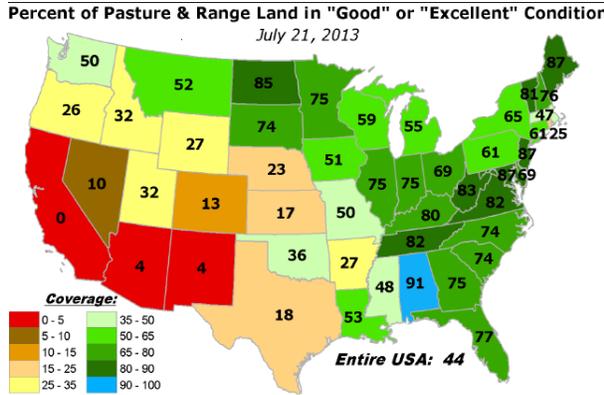
Station (2018) MONTH=2013-06-25 (Daily) NRCS National Water and Climate Center – Provisional Data – subject to revision as of Thu Jul 25 08:40:56 PDT 2013



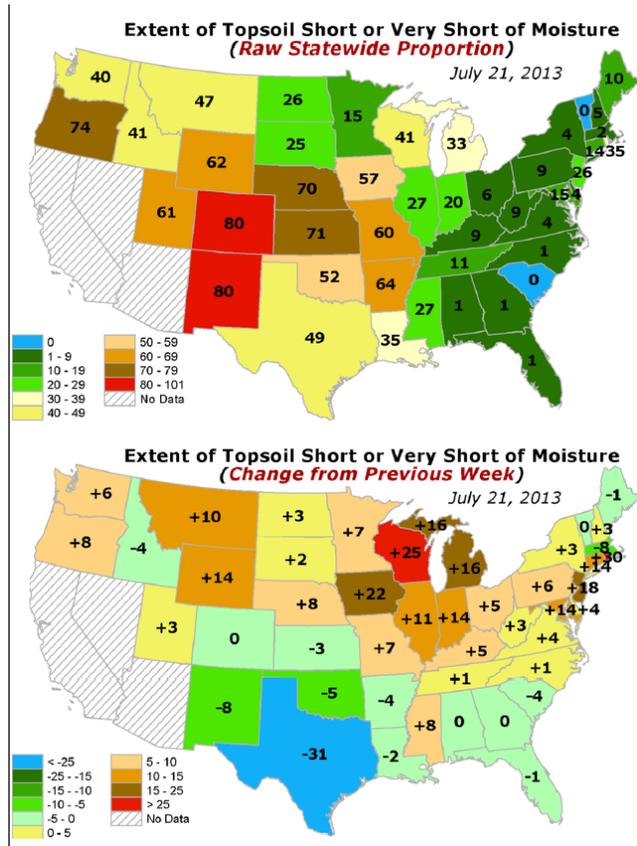
This NRCS resource shows a site over southeast Wyoming. Very dry soils exist at all levels as a result of little rainfall during the past month.

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



Pastures and rangelands continue to suffer over much of the West; especially over California, Arizona, and New Mexico (top left panel). The East has little to no adverse conditions (lower left). Texas is the big winner for improvement this week while Nevada and Arkansas show the greatest deterioration.



Topsoil continues to be exceptionally poor over Colorado and New Mexico although conditions in Michigan have deteriorated significantly in this past week. Texas, on the other hand, has improved considerably.

The Southwest Monsoon over New Mexico is reflected in an 8% improvement this week, but much more rain is needed.

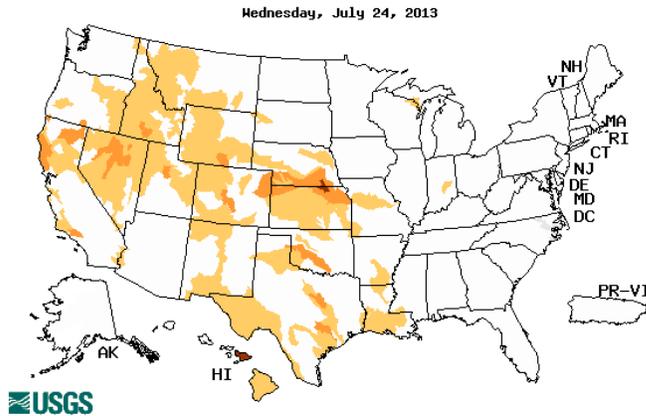
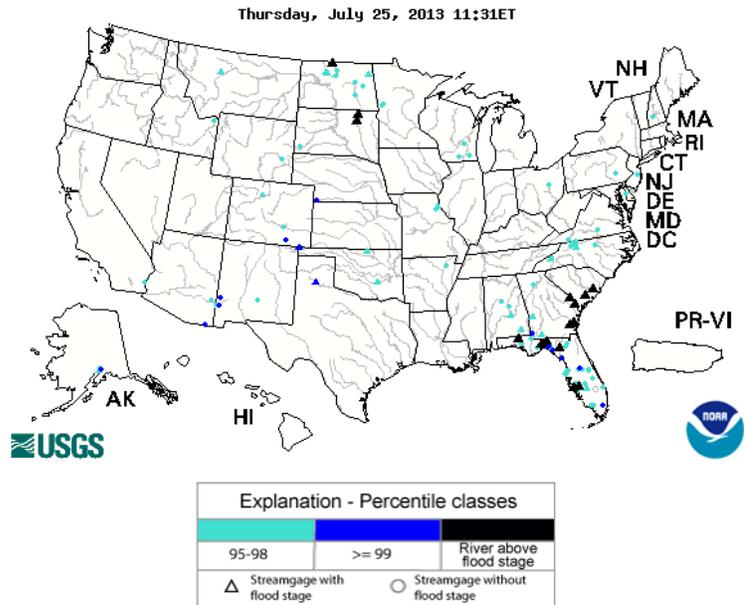
Values for California, Nevada, and Arizona are not available.

Weekly Snowpack and Drought Monitor Update Report

U.S. Historical Streamflow

Flooding has decreased significantly this week but persists along the southeast coastal regions (e.g., NC, SC, GA, and n. FL) and the Red River Valley in South Dakota.

See the [USGS National Water Information System Mapper](#).



Severe conditions exist only over a small area in southeastern Nebraska and northeast Kansas.

Weekly Snowpack and Drought Monitor Update Report

Complete National Drought Summary

The following complete **Weather and Drought Summary** is provided by this week's NDMC Author: [Richard Heim, National Climatic Data Center, NOAA](#)

National Drought Summary -- July 23, 2013

The discussion in the Looking Ahead section is simply a description of what the official national guidance from the National Weather Service (NWS) National Centers for Environmental Prediction is depicting for current areas of dryness and drought. The NWS forecast products utilized include the HPC 5-day QPF and 5-day Mean Temperature progs, the 6-10 Day Outlooks of Temperature and Precipitation Probability, and the 8-14 Day Outlooks of Temperature and Precipitation Probability, valid as of late Wednesday afternoon of the USDM release week. The NWS forecast web page used for this section is: <http://www.cpc.ncep.noaa.gov/products/forecasts/>.

Weather Summary: "A broad upper-level ridge brought above-normal temperatures to the northern half of the United States during this July 23 U.S. Drought Monitor week. Troughs moving in this upper-level flow pushed cold fronts which brought areas of rain east of the Rockies along with outbreaks of cooler air to the northern states. An upper-level low retrograding beneath the ridge brought below-normal temperatures and locally heavy rain to the southern Plains and reinforced the Southwest monsoon.

The East: Long-term conditions remained wet across the East. While locally heavy rains occurred in a few places, above-normal temperatures and generally below-normal precipitation this week continued a drying trend for the Northeast. Although soil moisture continued to decrease, little negative impact was felt by agricultural interests so no change was made to the USDM map, although the Northeast region should be watched if the heat and dryness continue. The Southeast averaged cooler than normal with areas of above- and below-normal rainfall. The eastern half of North Carolina was dry, but there were no signs of drought or negative impacts statewide.

The Plains, Midwest, and Lower Mississippi Valley: The week was warmer than normal and generally dry for the Midwest, although storm systems brought above-normal rainfall to places, with 3 inches or more reported locally in Upper Michigan, Illinois, and southern Iowa. Elsewhere, 5 inches or more of rain occurred with a meso-scale complex that moved through southeast Kansas and northeast Oklahoma, 5+ inches fell with storms in west Texas from the retrograding upper low, and 4+ inches were reported from storms moving through the Mid-Mississippi valley in western Tennessee and locally from monsoon rains in southern Arizona and southern New Mexico.

For the Midwest to Lower Mississippi Valley, the heavy rains helped alleviate precipitation deficits in the local areas that they fell in, but they were not widespread and the deficits have been building over the last 30 to 90 days. Places unfortunate enough to have missed out on the rains had 30-day precipitation deficits of 3 inches or more. According to July 21 U.S. Department of Agriculture (USDA) reports, 64% of the topsoil was rated short or very short of moisture in Arkansas with 24% of the pasture and rangeland in poor or very poor condition. Missouri had 60% of the topsoil short or very short of moisture and Iowa had 57% so rated, which was a jump of 22% since last week. Consequently, D0 (abnormally dry) conditions spread eastward further into southern Minnesota, Iowa, Missouri, Louisiana, and Mississippi; D1 (moderate drought) expanded in Missouri, Arkansas, Louisiana, and Mississippi; and D2 (severe drought) expanded in southwestern Arkansas. The rains seem to have missed southeastern Indiana, so a spot of D0 was added where streamflow was below normal, soil moisture was drying out, and 90-day precipitation deficits were greatest.

In the Plains, D1-D2 were pulled back in southeast Kansas-northeast Oklahoma and southeast Oklahoma where 2+ inches of rain fell. Most of Texas had above-normal precipitation this week, so many parts of the state saw D1-D4 improvement. But much of the central to northern Plains was drier than normal this week. In Kansas, D0 expanded in the north and D4 (exceptional drought) in the west. A spot of D0 was added to eastern North Dakota where soil moisture and 60-day precipitation deficits were driest. With 70-71% of the topsoil moisture in Nebraska and Kansas rated short or very

Weekly Snowpack and Drought Monitor Update Report

short, 55% of the pasture and range land in Kansas in poor to very poor condition, 30-day precipitation deficits of 2-4 inches and 12-month precipitation deficits of 10 inches or more widespread across the two states, significant rains will be needed to improve conditions. Extension office reports indicated that, depending on crop emergence and crop planting times, some corn, soybean, and other crops in eastern Nebraska were burning up while others were still viable. Much of the variance was associated with rooting structures that are inadequate to meet above ground vegetative water demands. With many of the fields in the early reproductive stage, rain is especially needed in the next 7-10 days. Crops were facing a similar predicament in Missouri and Iowa.

The West: Monsoon rains, enhanced by the retrograding upper low, brought above-normal precipitation to much of the Southwest, while the upper ridge inhibited showers in the Northwest and northern Rockies. D1 and D2 were pulled back in Utah and D1-D3 were trimmed in Arizona. Several CoCoRaHS stations near Carlsbad reported 3.00-4.49 inches of rain, so D2-D4 were pulled back in southeastern New Mexico while D3-D4 were shaved in southwestern New Mexico. Over 6 inches of moisture has fallen in July to date over parts of south central Colorado where D3 (extreme drought) was trimmed, recent rains improved crop conditions resulting in pullback of D3 in northeastern Colorado, and D1 shrank near Denver and other Front Range communities due to improving vegetation and reservoir levels. But the drought is far from over in the Southwest, with 80% of the topsoil short or very short of moisture in Colorado and New Mexico, 74% so rated in Oregon, and over 60% that dry in Utah. As of July 21, the USDA reported pasture and range land in poor to very poor condition for 95% of California, 79% of Arizona and New Mexico, 70% of Nevada, and 64% of Colorado.

Drier and warmer than normal weather further dried out soils in the northern states of the West, with the USDA rating topsoil short or very short of moisture for 62% of Wyoming and 47% of Montana, which are jumps of 14% and 10%, respectively, from last week. The Palmer Crop Moisture Index showed progressively worsening conditions. This week began with only 4 large wildfires burning in the Northwest, but it ended with firefighters battling over a dozen. As a result, D0-D1 expanded in northern Idaho and western Montana, and D3 expanded into southwestern Wyoming.

Hawaii, Alaska and Puerto Rico: Rainfall was below normal at most of the stations in Hawaii this week, continuing a dry trend and prompting expansion of D0 on Oahu and Kauai. With sufficient rainfall and above-normal streamflow, Puerto Rico remained free of drought and abnormal dryness on the USDM map. Alaska had a mixed precipitation pattern this week with some stations above normal and others below normal, but the pattern for the last 60 days (and longer) has been very dry. D0 and D1 were expanded southward to reflect the longer-term precipitation deficits, depleted modeled soil moisture, and persistent wildfire activity. An oval of D2 was introduced in central Alaska to reflect low streamflow and Standardized Precipitation Index values, as well as a very dry water year for the Upper Tanana basin (SNOTEL measurements rate the basin as having 22% of its normal precipitation for the water year to date). The impacts were designated SL for short and long-term dryness in the interior and S for the shorter-term dryness surrounding the interior region.

Looking Ahead: During the next 6 days (July 24-29), an upper-level trough with associated cool front will dominate the weather east of the Rockies, bringing below-normal temperatures and areas of rain. Half an inch or more of precipitation is forecast from the Plains to the East Coast, except for the Ohio and Tennessee valleys and southern Texas, where very little rain will fall. An inch or more may fall from the western Great Lakes to Nebraska, and from Arkansas to Mississippi, bringing relief to the newly expanded D0 areas, as well as from Florida to the Mid-Atlantic coastal areas. The heaviest rains (2 inches or more) are forecast for parts of Kansas and Oklahoma. Monsoon rains are predicted to continue for the Southwest to central Rockies states, with up to an inch across much of New Mexico and Colorado. Otherwise, above-normal temperatures are forecast for the West beneath an upper-level ridge with little to no rainfall for the Northwest and coastal California.

The NWS 6-10 day and 8-14 day forecasts (for July 30-August 7) show the highest likelihood of above-normal precipitation for the northern Plains to Great Lakes, then extending down to the Southeast, and the highest likelihood for below-normal precipitation from the Pacific Northwest to the southern Plains. Above-normal temperatures are expected for the Southwest into western Texas, and for coastal New England, while below-normal temperatures are anticipated for the Southeast, northern Plains to

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western Great Lakes, and coastal Northwest. The southern two-thirds of Alaska should be warmer and drier than normal with the north wetter than normal.”

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](#).

For More Information

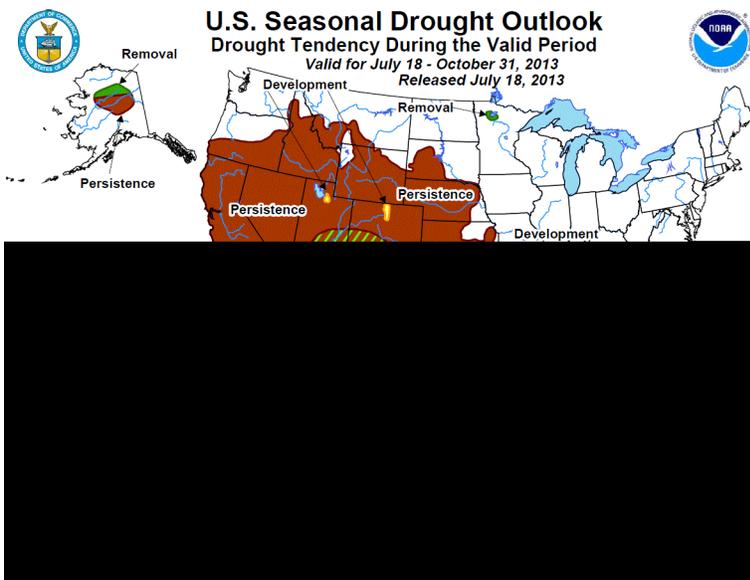
The National Water and Climate Center (NWCC) [Homepage](#) provides the latest available snowpack and water supply information. This document is available [Weekly](#). CONUS Snowpack and Drought Report. Reports from 2007 are available online. Reports from 2001-2006 are available on request.

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

/s/

Micheal L. Golden
Deputy Chief, Soil Science and Resource Assessment

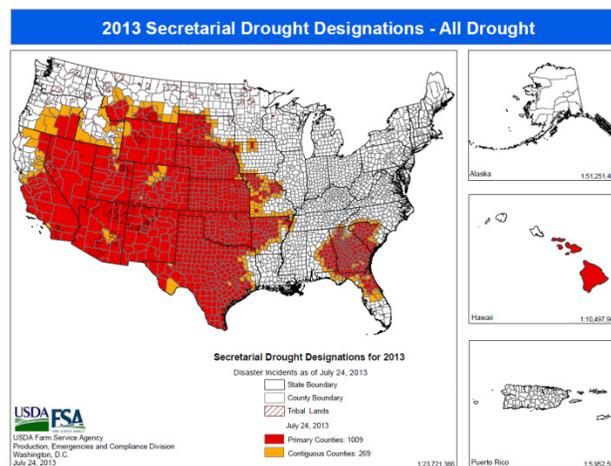
[Drought Outlook](#) (Forecast through October)



U.S. Seasonal Drought Outlook released 18 July.

Note: Expect improvements over parts of the Four Corner States and the Big Bend region of Texas by the end of October.

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

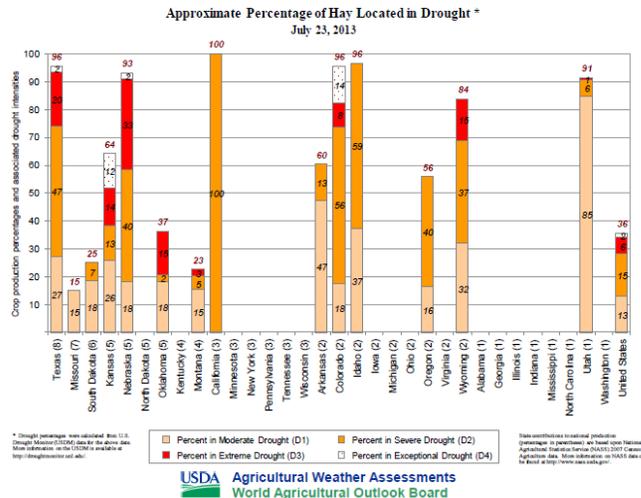
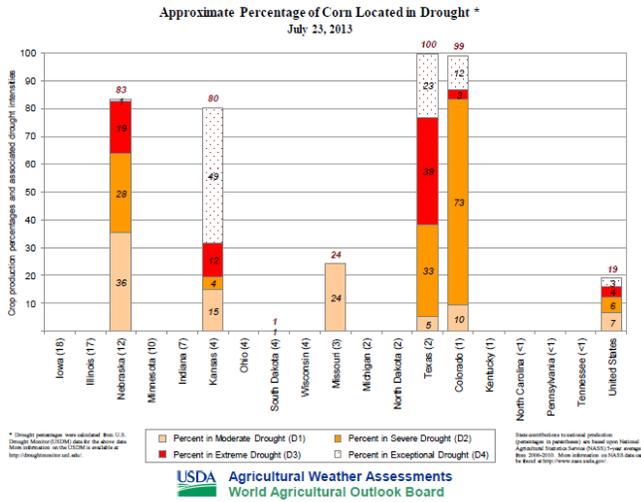
Supplemental Data (provided by - Brad Rippey, USDA Meteorologist)

The "Ag in Drought" file is now available at: <http://www.usda.gov/oce/weather/Drought/AgInDrought.pdf> and additional maps at: <ftp://snr-0563.unl.edu/Outgoing/US-Maps.ppt>.

Highlights for the drought-monitoring period ending 7 am EDT on July 23 include:

- Short-term dryness (D0) and moderate to severe drought (D1 to D2) continued to expand and intensify from the Mississippi Delta northward into the western Corn Belt. For the first time in nearly a month, drought appeared (in west-central Mississippi) east of the Mississippi River. Meanwhile, heavy showers chipped away at long-term drought in the south-central and southwestern U.S. In Texas, coverage of exceptional drought (D4) fell from 12.07 to 6.35% in the last week.
- Overall U.S. drought coverage increased 0.42% in the last week to 46.55%. Drought coverage has increased 2.71% in the last 4 weeks, but is 18.90% below the peak coverage in late-September 2012.
- Coverage of abnormal dryness and drought (D0 to D4) has increased sharply in recent weeks, mainly due to emerging, short-term dryness and drought from the lower Mississippi Valley northward into the western Corn Belt. Continental U.S. D0 to D4 coverage reached 58.30% on July 23, up 7.41% from just 3 weeks ago.
- Hay in drought (36%) increased for the third consecutive week, while cattle in drought was unchanged at 48%. Two percentage point increases were noted for corn in drought (19%) and soybeans in drought (11%). Winter wheat, three-quarters harvested nationally by July 21, had 49% of its production area in drought.
- Weather outlook: For the remainder of today, showers will linger along the Atlantic Seaboard and the Gulf Coast. Meanwhile, the interaction between the monsoon circulation and a strong cold front will spark rainfall from the Southwest into the upper Midwest. Showers and thunderstorms will accompany the cold front as it drives southeastward, reaching the Atlantic Coast States by week's end. Precipitation will return to the nation's mid-section during the weekend and early next week. Only the northern Rockies and parts of the Pacific Coast States will remain dry during the next 5 days. Unusually cool weather will dominate the Plains and Corn Belt during the next several days, with weekend temperatures below 40°F possible in parts of the upper Midwest.

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Corn and Hay production in drought regions as of 23 July.

Drought News

This 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.

Noteworthy topics in the news this week:

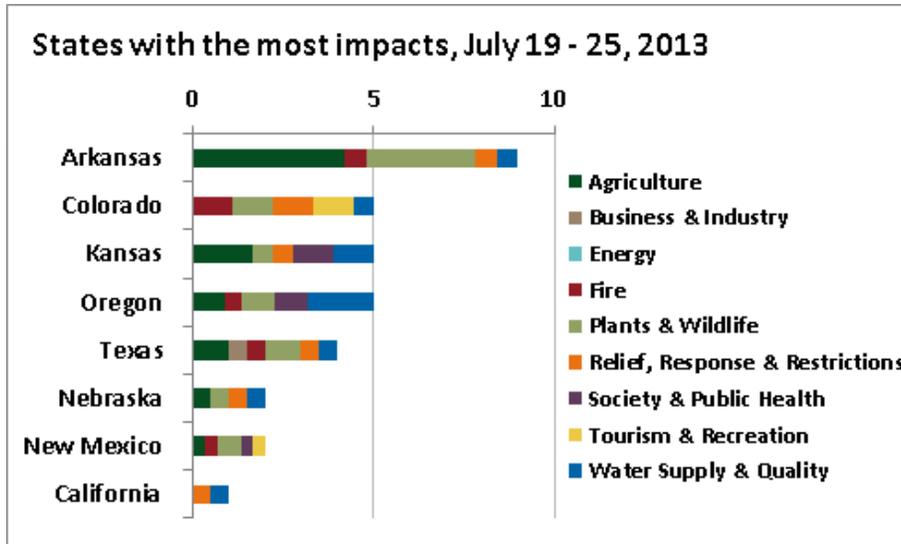
Ag

- Estimate for the almond crop in California is down by 7.5 percent since May, due to dry weather and heat
- Corn in Boone County in northwestern Arkansas died from drought; pasture growth slowing in northwestern Arkansas
- Emergency haying and grazing approved in about half of the counties in Nebraska and Kansas

Water

- The California Water Resources Control Board warned water rights holders in the Sacramento Valley that curtailments may be in the offing
- Irrigation water shut offs continue in Upper Klamath Basin in Oregon; water shortages in southeastern Oregon also
- Low water, warm water temperatures killing fish in Platte River in south central Nebraska

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I've been in contact with Chris Buonanno with the NWS in Little Rock, Arkansas to get impact information from his neck of the woods, which explains some of the impacts for Arkansas.

It is difficult to find drought information for some states because it just doesn't make it into the news, and CustomScoop, our electronic clipping service, misses some articles too. Arkansas, Oklahoma and Utah are some states for which it can be difficult to find good information sometimes. I contacted a reporter from Tulsa World who wrote about the DM in her column and urged her to write about the DIR and invite readers to submit their drought observations. Hopefully her column will bring in a few user reports, but the drought situation isn't so bad around Tulsa right now.

Wildfire stats

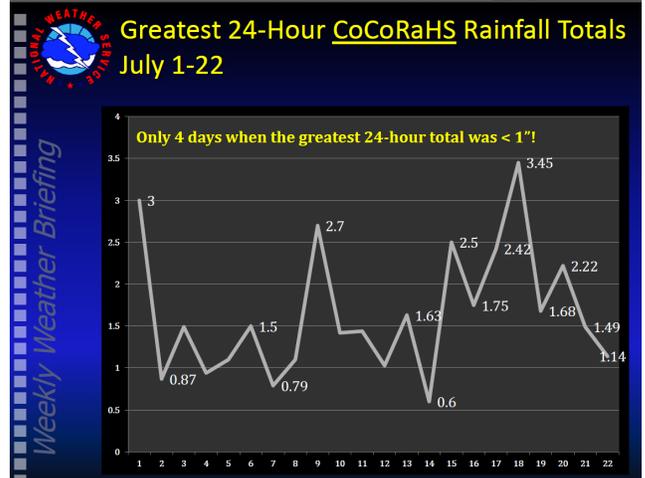
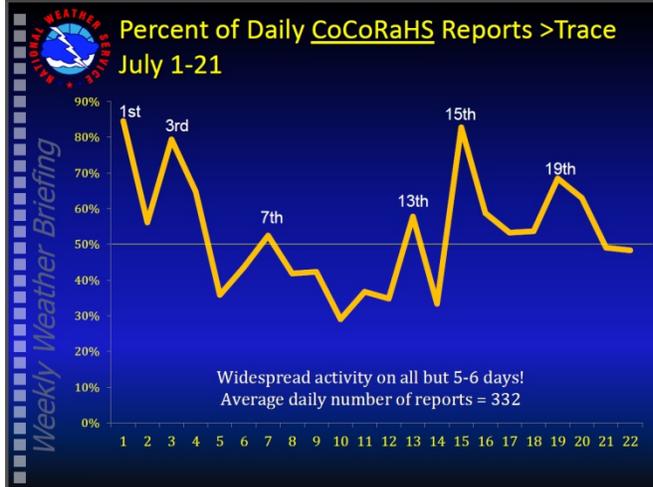
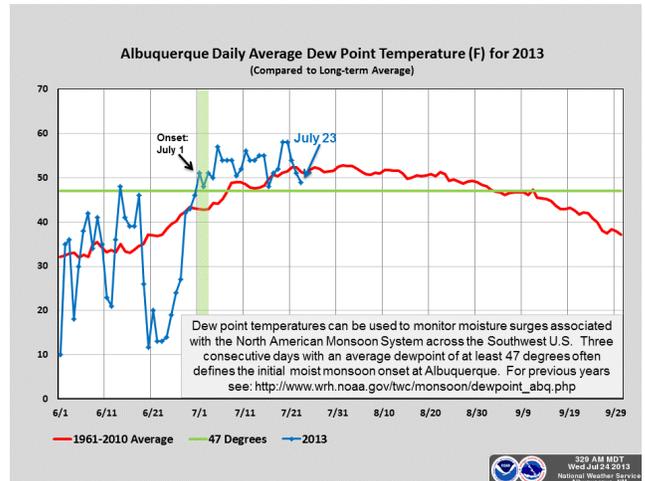
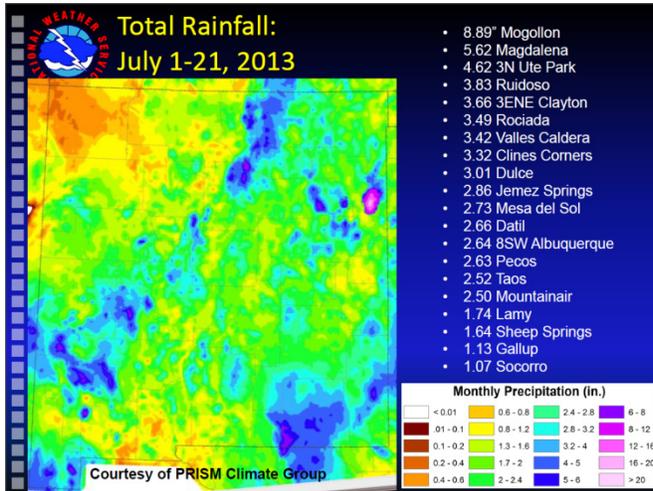
These are the year-to-date [wildfire statistics](#) through July 11 from the National Interagency Fire Center for states with more than 20,000 acres burned. All of the states are affected by significant areas of drought.

State	Wildland fires		Prescribed burns	
	# Acres	# Fires	# Fires	# Acres
Alaska	1,043,908	451	16	5,177
New Mexico	200,205	771	29	17,390
Colorado	131,447	551	111	5,357
Nevada	117,247	266	24	572
Arizona	91,509	1,058	85	32,022
California	86,325	4,657	334	28,446
Oregon	46,846	487	142	35,506
Idaho	44,203	273	90	7,200

New Mexico in the **highlight**

Since the [official start](#) of the 2013 Monsoon in New Mexico on 1 July, there has been several days with considering rainfall. A brief video clip of recent rains near Santa Fe (by Jan Curtis): [Anatomy of a 100-Year Rain Event in Exceptional Drought Conditions](#) illustrates why floods can occur during prolonged drought.

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A fairly active monsoon has helped drought ridden New Mexico thus far.

