

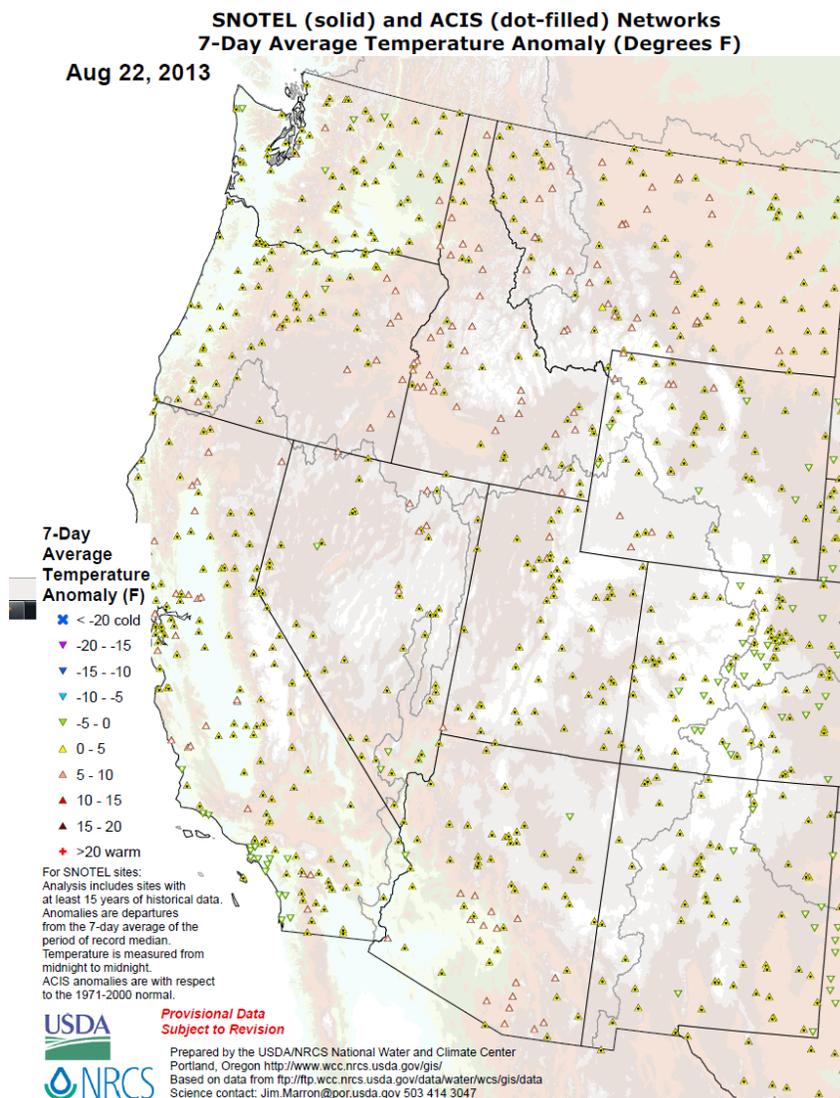


Natural Resources Conservation Service  
 P.O. Box 2890  
 Washington, D.C. 20013

## Weekly Snowpack / Drought Monitor Update August 22, 2013

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### Temperature



SNOTEL and ACIS [7-day temperature anomaly](#) map shows a warmer than average week across the western states. Exceptions to this overall pattern are found over the southern California coastline and over parts of Colorado.

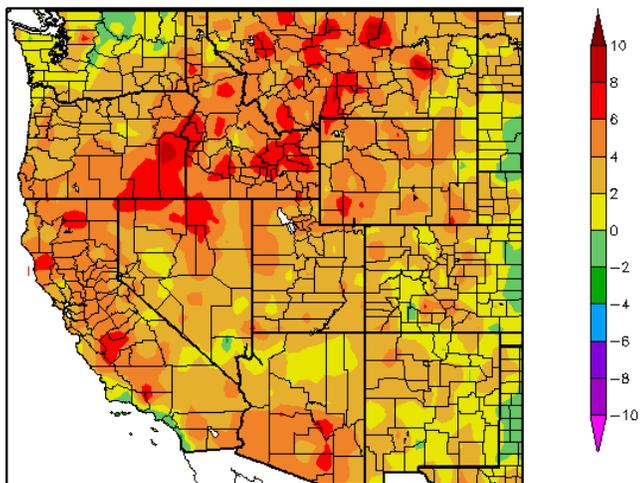
## Weekly Snowpack and Drought Monitor Update Report

[ACIS](#) 7-day average temperature anomalies, ending August 21, show the greatest positive temperature departures were scattered across southern Oregon to eastern Montana (>8°F). The coolest departures occurred over the northernmost Cascades in Washington (>-2°F).

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

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

Departure from Normal Temperature (F)  
8/15/2013 - 8/21/2013



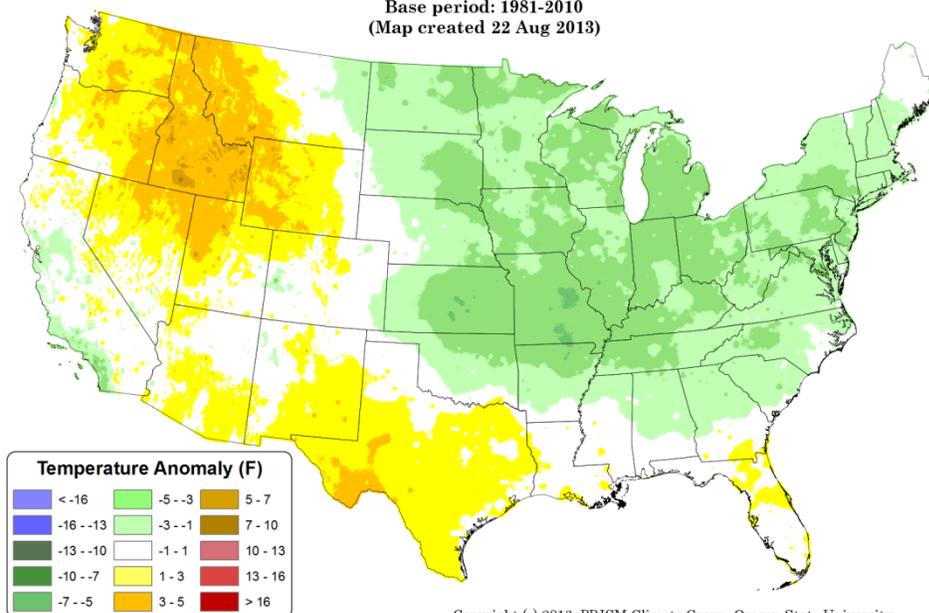
Generated 8/22/2013 at HPRCC using provisional data.

Regional Climate Centers

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

*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 August 2013 - 21 August 2013  
Period ending 7 AM EST 21 Aug 2013  
Base period: 1981-2010  
(Map created 22 Aug 2013)



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

Accumulated average temperatures for August thus far have been considerably warmer than normal across the Interior West, especially centered over Idaho. Cooler conditions have prevailed over much of the eastern half of the nation, with the exception of Texas and northern Florida.

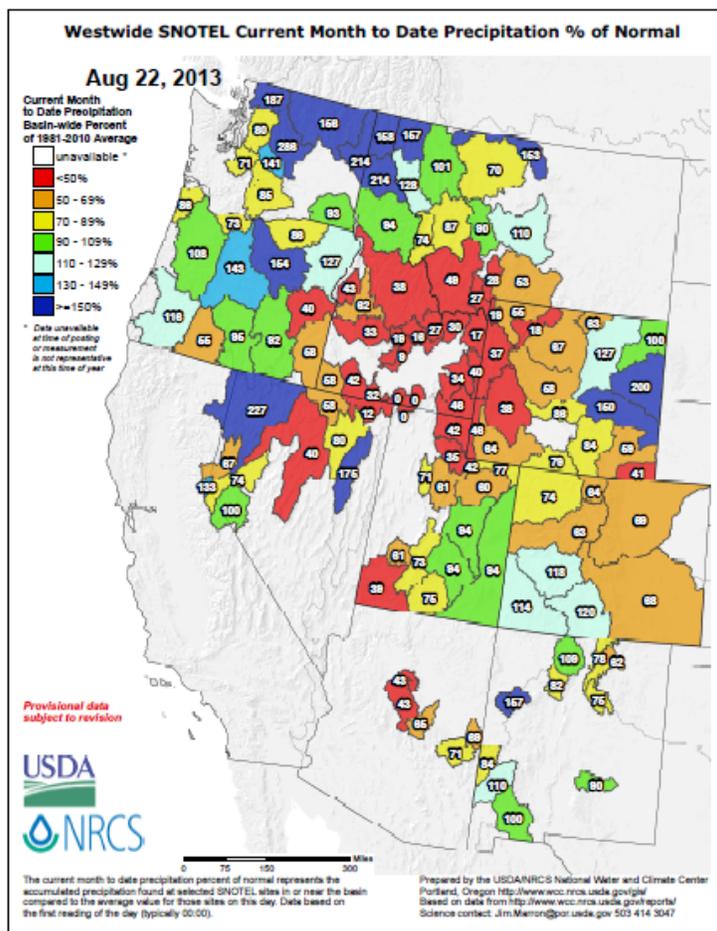
# Weekly Snowpack and Drought Monitor Update Report

## Precipitation

SNOTEL [month to date](#) precipitation percent of normal update map shows a mixed pattern of wetter and drier regions.

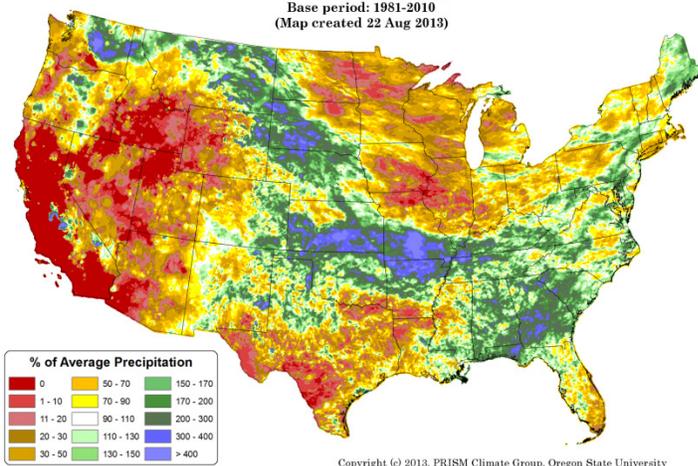
The standout for below normal precipitation is centered over Idaho. This situation has contributed to the many wildfires that are currently occurring there.

Additional dryness is also being experienced over parts of the eastern slope of the Rockies, from southern Montana to southern Colorado. Abundant moisture has dominated the northern Cascades, northernmost Rockies, the northern Great Basin, eastern Wyoming, and southwestern Colorado.



[Click images for enlarged version](#)

**Total Precipitation Anomaly: 01 August 2013 - 21 August 2013**  
 Period ending 7 AM EST 21 Aug 2013  
 Base period: 1981-2010  
 (Map created 22 Aug 2013)



Accumulated total precipitation through 7a.m. August 21 shows a rainfall pattern that has favored parts of Washington through Montana, southeastward to Arkansas and now over the Southeast. Drier conditions dominated over Iowa and Texas. The far West is typically very dry this time of year.

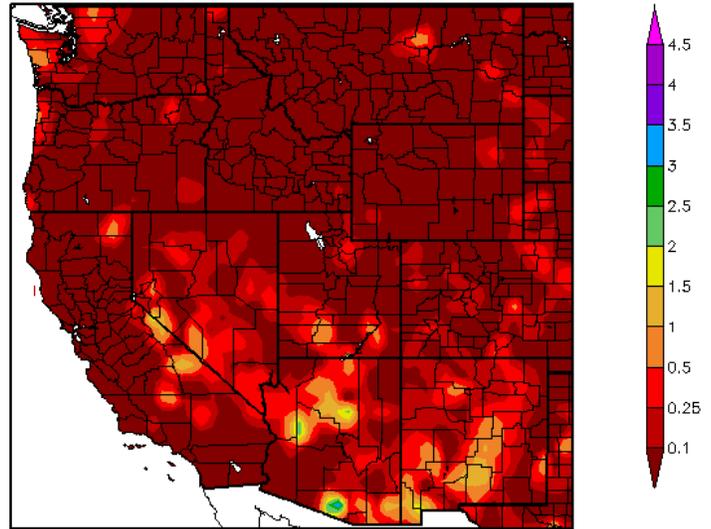
*This preliminary [PRISM](#) precipitation map will be available to the public by **September 30**. It contains all available network data, including SNOTEL data, and will be updated periodically as additional data become available and are quality controlled.*

## Weekly Snowpack and Drought Monitor Update Report

[ACIS 7-day](#) average precipitation amounts for the period ending August 21 show a weakening monsoon over the Southwest. The remainder of the West experienced their typically dry conditions for this time of year, with isolated thunderstorms over the northern tier states.

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

Precipitation (in)  
8/15/2013 - 8/21/2013



Generated 8/22/2013 at HPRCC using provisional data.

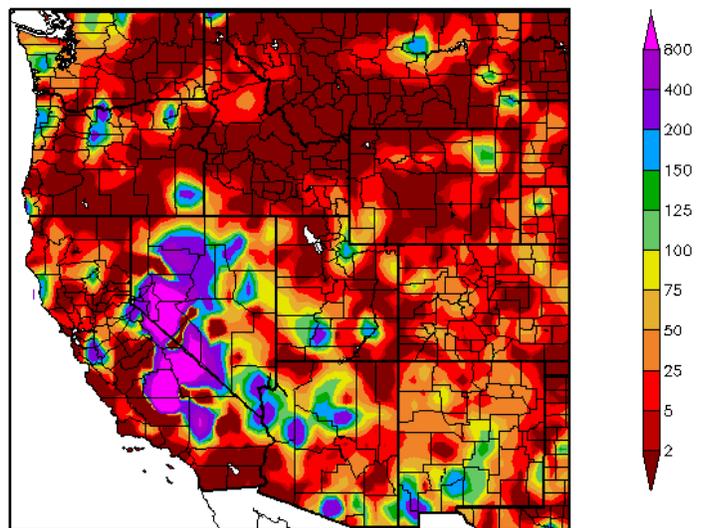
Regional Climate Center

In this [map](#), California and Nevada rains were enough to register amounts exceeding what would normally be expected for the week by four to eight times.

An excellent summary of how the Southwest monsoon is proceeding in Arizona and New Mexico can be found at: [August 2013 Southwest Climate Outlook](#)

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

Percent of Normal Precipitation (%)  
8/15/2013 - 8/21/2013



Generated 8/22/2013 at HPRCC using provisional data.

Regional Climate Center

## Weekly Snowpack and Drought Monitor Update Report

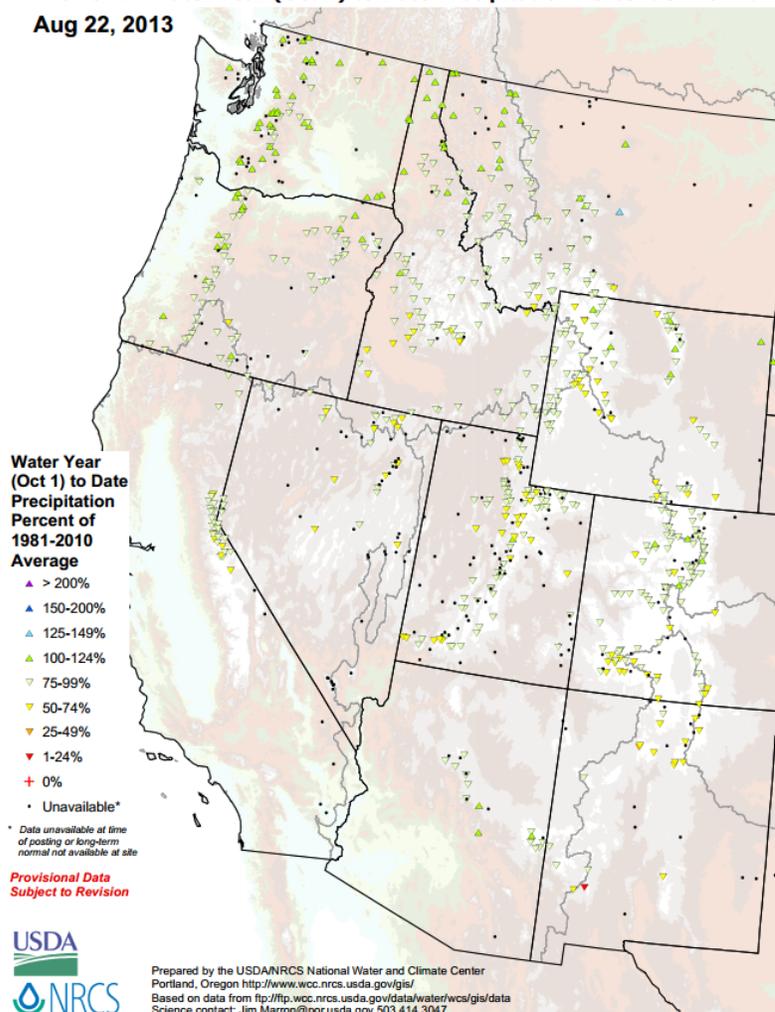
For the [2013 Water Year](#) that began on October 1, 2012, the pattern continues to resemble La Niña (i.e., wetter northern tier).

The impact of the Southwest Monsoon is apparent over Arizona, with near normal values. Despite good July rains over New Mexico, the precipitation deficit from earlier this year has still not improved very much.

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](#).

SNOTEL Water Year (Oct 1) to Date Precipitation Percent of Normal  
Aug 22, 2013



[Click image for larger version](#)

## Weather and Drought Summary

### Western Drought Summary – August 20, 2013

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

**Summary:** "This US Drought Monitor week was dominated by a persistent weather system that dumped precipitation in the South and Southeast over multiple days. Radar estimates go as high as 10+ inches in one location in eastern Louisiana. The High and Southern Plains also benefitted from precipitation, from southern South Dakota down into Texas while areas of the West and Midwest remained dry."

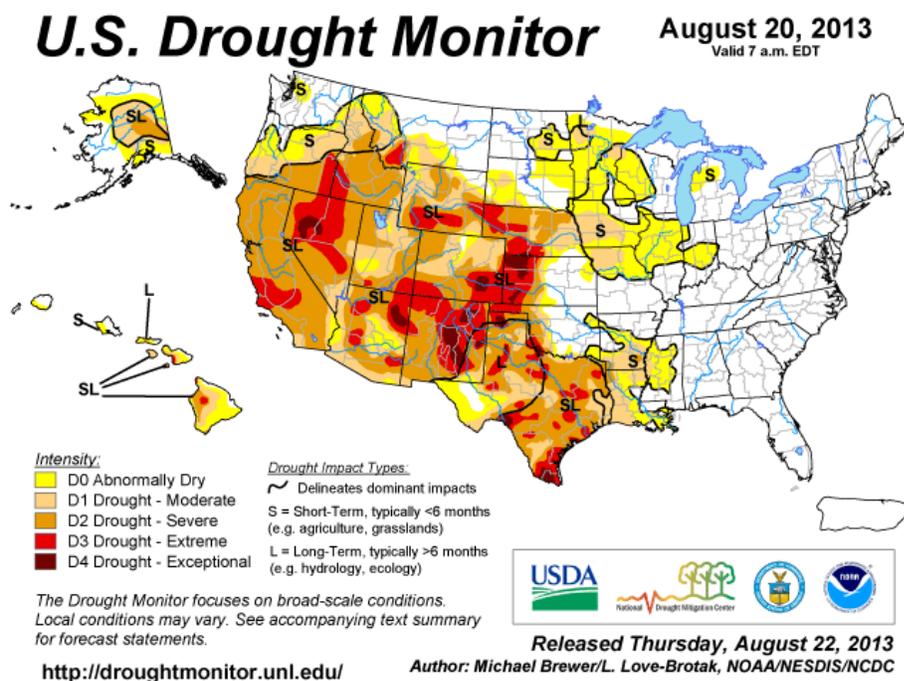
**The West:** "Conditions continue to degrade in the northern sections of the West. Idaho, western Montana, and northern Utah experienced an expansion of Severe Drought (D2) and western Montana saw an expansion of Moderate Drought (D1). Some of this area has experienced low precipitation for over a year with wildfire activity increasing as of late. Conversely, conditions continue to improve slightly in eastern New Mexico, which experienced a decrease of Exceptional (D4), Extreme (D3), and

## Weekly Snowpack and Drought Monitor Update Report

Severe Drought (D2), eastern Colorado where Extreme (D3) and Severe Drought (D2) conditions eased, and eastern Wyoming where Severe (D2) and Moderate Drought (D1) and Abnormal Dryness (D0) abated.”

“Wildfires remain a problem in parts of the West. The National Interagency Fire Center reported 51 active, large wildfires on August 20, up from last week. Large fires continue to 10 western states including Idaho, where the Elk Fire has consumed over 130,000 acres of vegetation, an increase of over 30,000 acres this week. According to numerous sources, the cost of battling wildfires in 2013 has now exceeded \$1 billion.”

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, eastern Arizona and New Mexico, western Nevada, and the northernmost and southernmost regions of Texas.

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 (•):

- [Burger costs rising with beef supply at 21-year low](#) - Aug 11, U.S.
- [Cargill profit soars on grain handling, processing](#) - Aug 7, U.S.
- [UPDATE: ADM 2nd-Quarter Net Falls 21% on Legal Co](#) - Aug 6, U.S.
- [Drought Jitters Send Soybeans, Corn Soaring](#) - Aug 19, U.S.

# 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](#)
- ✓ [NIDIS Upper Colorado River Regional Drought Earlier Warning System](#)

### News Stories:

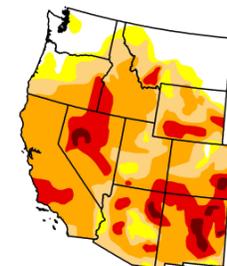
- [Drought Forces Restrictions On Colorado River Water Releases](#) – NPR Story
- [Demand high for Montana hay in drought-bit Western states, Midwest](#) - Aug 11, **Montana**.
- [Klamath drought forces ranchers to move cattle](#) – Aug 15, Southern Oregon
- [Brutal Wildfire Season Expected for California](#) - Aug 13, **California**
- [Stuart Creek 2 Fire springs back to life, blanket Fairbanks region with smoke](#) - Aug 10, **Alaska**
- [New Fishing Closure on Big Hole River](#) - Aug 19
- [Arid Southwest Cities' Plea: Lose the Lawn](#)
- [Reservoirs drawn down as historic drought deepens](#) - Aug 15, **Central Coast of California**

## U.S. Drought Monitor

August 20, 2013  
Valid 7 a.m. EST

### West

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	13.36	66.64	77.69	58.05	18.31	2.07
Last Week (08/13/2013 map)	13.31	66.69	77.53	56.74	20.35	3.09
3 Months Ago (05/21/2013 map)	13.30	66.70	71.40	47.04	15.04	5.99
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	64.88	77.15	43.65	16.85	1.77
One Year Ago (08/14/2012 map)	16.88	83.12	69.22	50.43	16.95	0.81



#### Intensity:



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, August 22, 2013  
Michael Brewer, National Climatic Data Center, NOAA

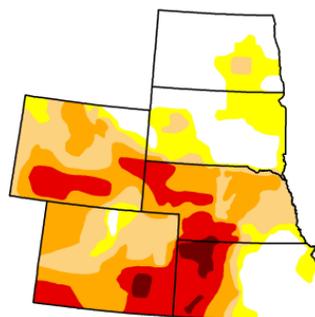
Note that there was another percent improvement in D4 conditions this past week due to the SW Monsoon.

## U.S. Drought Monitor

August 20, 2013  
Valid 7 a.m. EST

### High Plains

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	27.30	72.70	58.18	38.84	17.29	2.14
Last Week (08/13/2013 map)	27.33	72.67	58.36	40.42	18.42	3.40
3 Months Ago (05/21/2013 map)	11.10	88.90	76.75	60.09	25.05	7.62
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	61.28	24.35
One Year Ago (08/14/2012 map)	4.48	95.52	86.05	76.97	49.64	15.52



#### Intensity:



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, August 22, 2013  
Michael Brewer, National Climatic Data Center, NOAA

Improvement continues in the D2-D4 categories this past week.

## Region with D-4 Exceptional Drought

- ✓ [Kansas Drought Update](#).

- [Wettest Summer](#)

- [2012 Great Plains drought not caused by climate change](#)
- [South Dakota group adopting out wild horses because of drought](#) - Aug 14, **South Dakota**

## Region with D-4 Exceptional Drought

- ✓ [Texas Drought Website](#).
- ✓ [Texas Reservoirs](#).

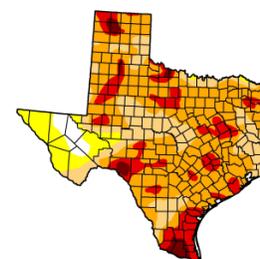
- [Weather wipes out half of West Texas' cotton acres](#) - Aug 16, **West Texas**
- [Drought creates precarious conditions at Brazoria National Wildlife Refuge](#) - Aug 8, **Texas**
- [TX agencies asking Texans to share how drought has affected their lives](#) - Aug 7, **Texas**
- [Drought forces water shutoff at Guadalupe River State Park](#) - Aug 13, **Texas**

## U.S. Drought Monitor

August 20, 2013  
Valid 7 a.m. EST

### Texas

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	2.82	97.18	88.93	66.86	17.80	2.58
Last Week (08/13/2013 map)	2.82	97.18	87.90	65.92	20.64	3.84
3 Months Ago (05/21/2013 map)	2.84	97.16	89.70	67.10	35.38	18.02
Start of Calendar Year (01/01/2013 map)	3.04	96.96	87.00	65.39	35.03	11.96
Start of Water Year (09/25/2012 map)	9.13	90.87	78.73	57.41	24.91	5.18
One Year Ago (08/14/2012 map)	11.08	88.92	78.72	44.03	12.59	0.82



#### Intensity:



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

<http://droughtmonitor.unl.edu>

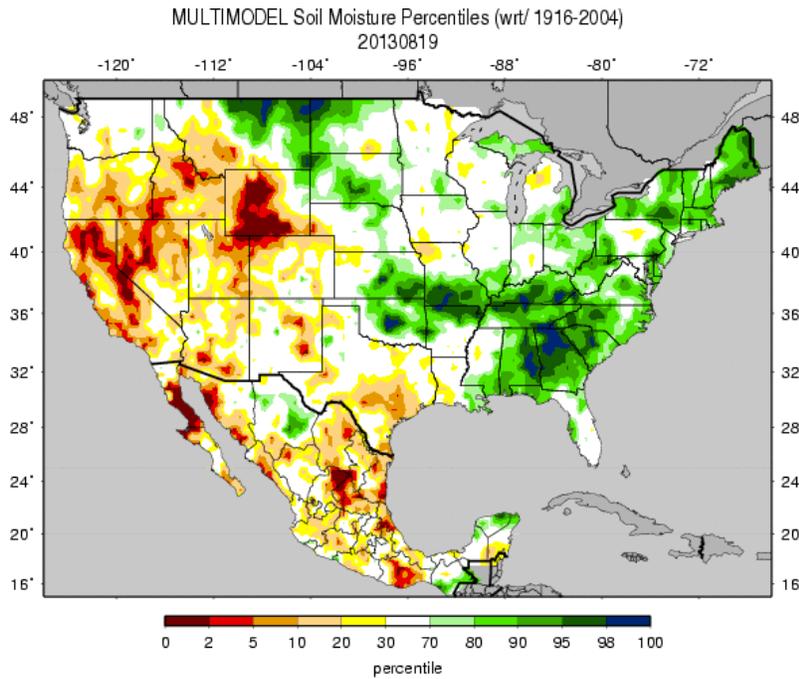


Released Thursday, August 22, 2013  
Michael Brewer, National Climatic Data Center, NOAA

Nice improvement over Texas in the higher D-categories

# Weekly Snowpack and Drought Monitor Update Report

## Soil Moisture

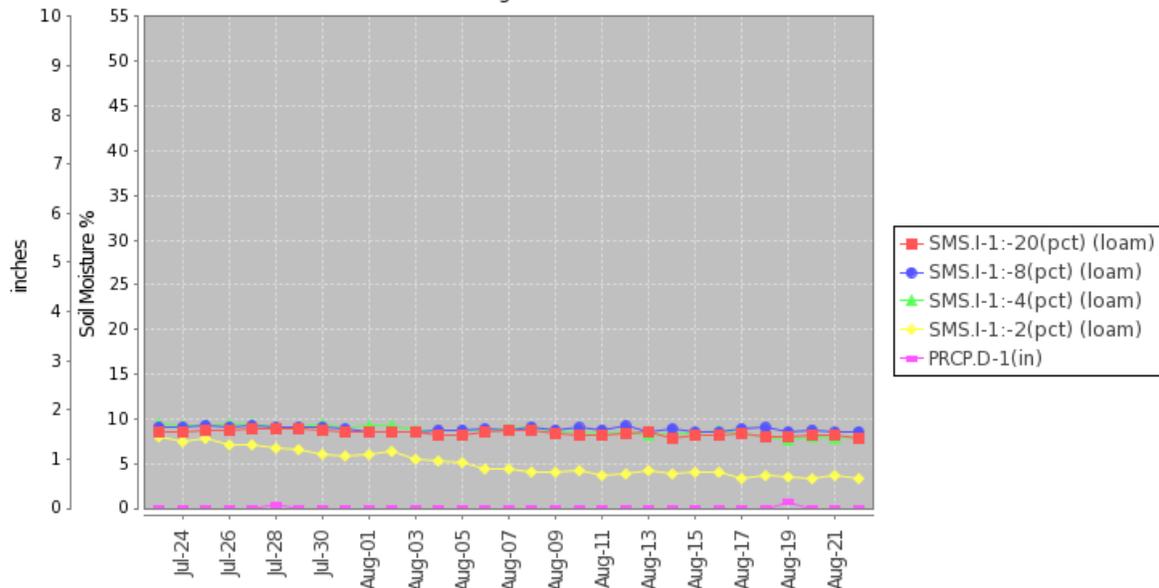


Soil moisture ranking in [percentile](#) as of August 19 shows considerable dryness over Wyoming, the western Great Basin, and northeastern California. Excess moisture is noted over northern Montana, southern Missouri and vicinity, and much of the Southeast.

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 (2151) MONTH=2013-07-23 (Daily) NRCS National Water and Climate Center - Provisional Data - subject to revision as of Thu Aug 22 06:53:10 PDT 2013



This NRCS resource shows a site over northeastern Utah. Persistent dry conditions have resulted in unchanged low moisture content at all depths.

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](#).

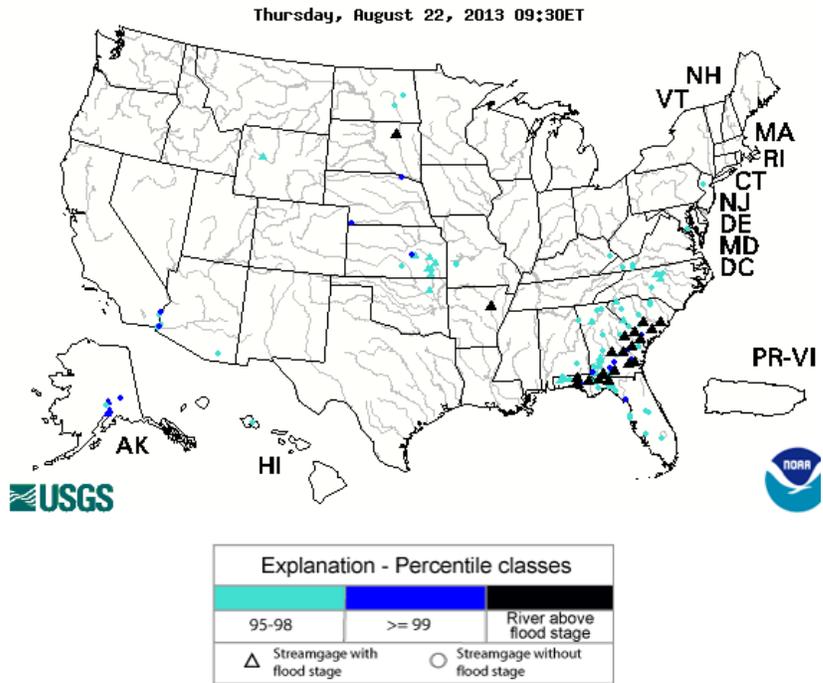
# Weekly Snowpack and Drought Monitor Update Report

## U.S. Historical Streamflow

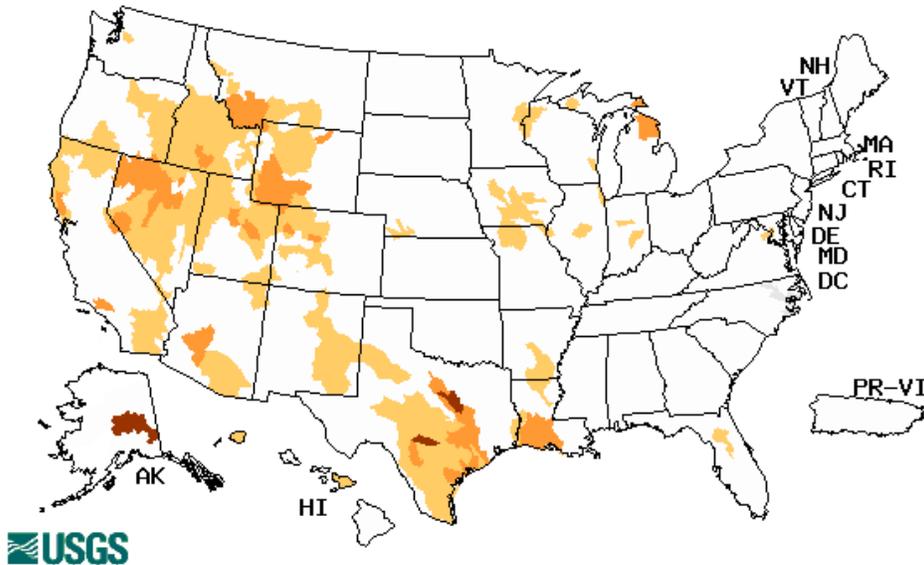
Flood and high water conditions as of August 22 show recent heavy rains over the southeastern states have caused significant, wide-spread flooding.

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

The "Flood and high flow" map shows the location of streamgages where the water level is currently at or above flood stage (depicted as a black triangle) or at high flow (depicted as blue circles) The high flow conditions are expressed as **percentiles** that compare the current (i.e., within the past several hours) instantaneous flow value to historical daily mean flow values for all days of the year. Please note that flood conditions may be more extensive than shown on the map because the National Weather Service (NWS) has not identified a flood stage (for flood forecasting purposes) at all USGS streamgages. Also, the NWS has determined flood stages for some non-USGS streamgages, which are not shown on the map. The most complete depiction of streamgages at or above flood stage is on the [NWS River Conditions Map](#).



Wednesday, August 21, 2013



Explanation - Percentile classes				
Low	≤5	6-9	10-24	Insufficient data for a hydrologic region
Extreme hydrologic drought	Severe hydrologic drought	Moderate hydrologic drought	Below normal	

This map shows [the 7-day average streamflow conditions in hydrologic units](#) of the United States and Puerto Rico for the day of year. The colors represent 7-day average streamflow **percentiles** based on historical streamflow for the day of the year. Thus, the map shows conditions adjusted for this time of the year. Only stations having at least 30 years of record are used. Subregions shaded gray indicate that insufficient data were available to compute a reliable 7-day average streamflow value.

Parts of Texas and Alaska are the only states experiencing severe hydrologic drought this week.

## 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: [Michael Brewer, National Climatic Data Center, NOAA.](#)

*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/>.*

“This US Drought Monitor week was dominated by a persistent weather system that dumped precipitation in the South and Southeast over multiple days. Radar estimates go as high as 10+ inches in one location in eastern Louisiana. The High and Southern Plains also benefitted from precipitation, from southern South Dakota down into Texas while areas of the West and Midwest remained dry.

**The East:** The eastern U.S. remains drought free again this week.

**The South and Southern Plains:** Beneficial rains fell again this week across portions of northern Texas, Oklahoma, Kansas, and Arkansas, leading to improvements in drought conditions in western and central Kansas, western and central Oklahoma, the Panhandle of Texas, south-central Arkansas, and eastern Louisiana. Conversely, Extreme (D3), Severe (D2) and Moderate Drought (D1) expanded in Texas and northern Louisiana and Abnormal Dryness (D0) expanded in Louisiana and southern Arkansas.

**The Central and Northern Plains:** Beneficial rainfall continues to improve drought conditions in western and southern South Dakota, where Moderate Drought (D1) and Abnormal Dryness (D0) have abated, and in northern Nebraska where Extreme Drought (D3) was reduced. Conversely, eastern parts of Iowa and South Dakota have seen less precipitation than normal and Abnormal Dryness (D0) has expanded there.

**The Midwest:** Lack of recent precipitation is beginning to be felt throughout the region. Abnormal Dryness (D0) expanded across eastern Illinois and into western Indiana, in northern Michigan, and across most of Minnesota and parts of Wisconsin. Likewise, Moderate Drought (D1) expanded in Minnesota and northern Wisconsin. Cooler temperatures have helped abate the lack of moisture lately but that could be changing as above-normal temperatures are expected in the area over the next two weeks.

**The West:** Conditions continue to degrade in the northern sections of the West. Idaho, western Montana, and northern Utah experienced an expansion of Severe Drought (D2) and western Montana saw an expansion of Moderate Drought (D1). Some of this area has experienced low precipitation for over a year with wildfire activity increasing as of late. Conversely, conditions continue to improve slightly in eastern New Mexico, which experienced a decrease of Exceptional (D4), Extreme (D3), and Severe Drought (D2), eastern Colorado where Extreme (D3) and Severe Drought (D2) conditions eased, and eastern Wyoming where Severe (D2) and Moderate Drought (D1) and Abnormal Dryness (D0) abated.

Wildfires remain a problem in parts of the West. The National Interagency Fire Center reported 51 active, large wildfires on August 20, up from last week. Large fires continue to 10 western states including Idaho, where the Elk Fire has consumed over 130,000 acres of vegetation, an increase of over 30,000 acres this week. According to numerous sources, the cost of battling wildfires in 2013 has now exceeded \$1 billion.

**Hawaii, Alaska and Puerto Rico:** Beneficial rains on the eastern tip of the Big Island of Hawaii have proven sufficient to meet agricultural needs in the area. Abnormal Dryness (D0) was removed

## Weekly Snowpack and Drought Monitor Update Report

from the area. Drought continues to expand in southern Alaska with expansion of Severe (D2) and Moderate Drought (D1). Agricultural impacts are being felt in the area as soils dry and temperatures remain above normal. Puerto Rico remains drought free.

**Looking Ahead:** During the August 22-26, 2013 time period, there is an above-normal chance for precipitation mainly in the Southeast, the extreme Southern Plains, and the Southwest. Temperatures are expected to be above-normal across the northern part of the country from Montana through New England and below-normal on both the East and West Coasts.

For the ensuing 5 days (August 27-31, 2013), the odds favor normal to above-normal temperatures across the entire contiguous US, as well as across southern Alaska. Below-normal temperatures are favored only in northern Alaska. Above normal-precipitation is likely across the northern half of the country from Maine to eastern Oregon and over most of Alaska. Below-normal precipitation is expected in the Southern Plains and the Pacific Northwest, as well as in northern Alaska.”

### 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 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.

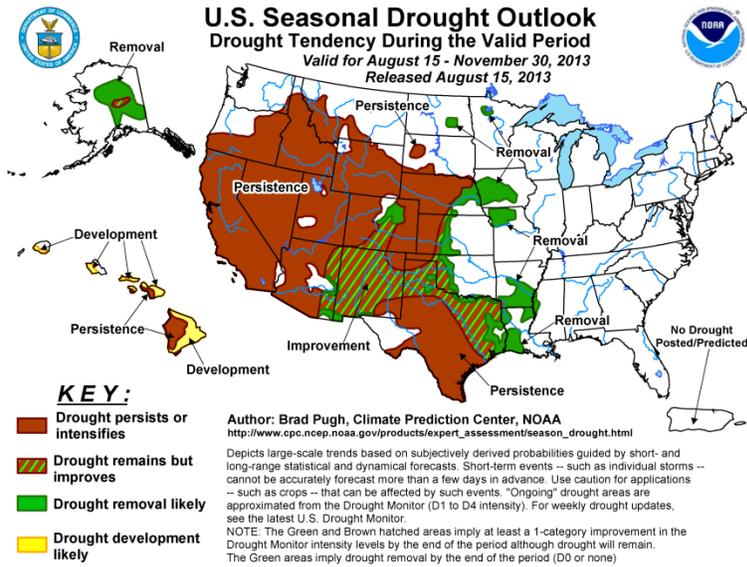
/s/

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

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# Weekly Snowpack and Drought Monitor Update Report

## Drought Outlook (Forecast through November)

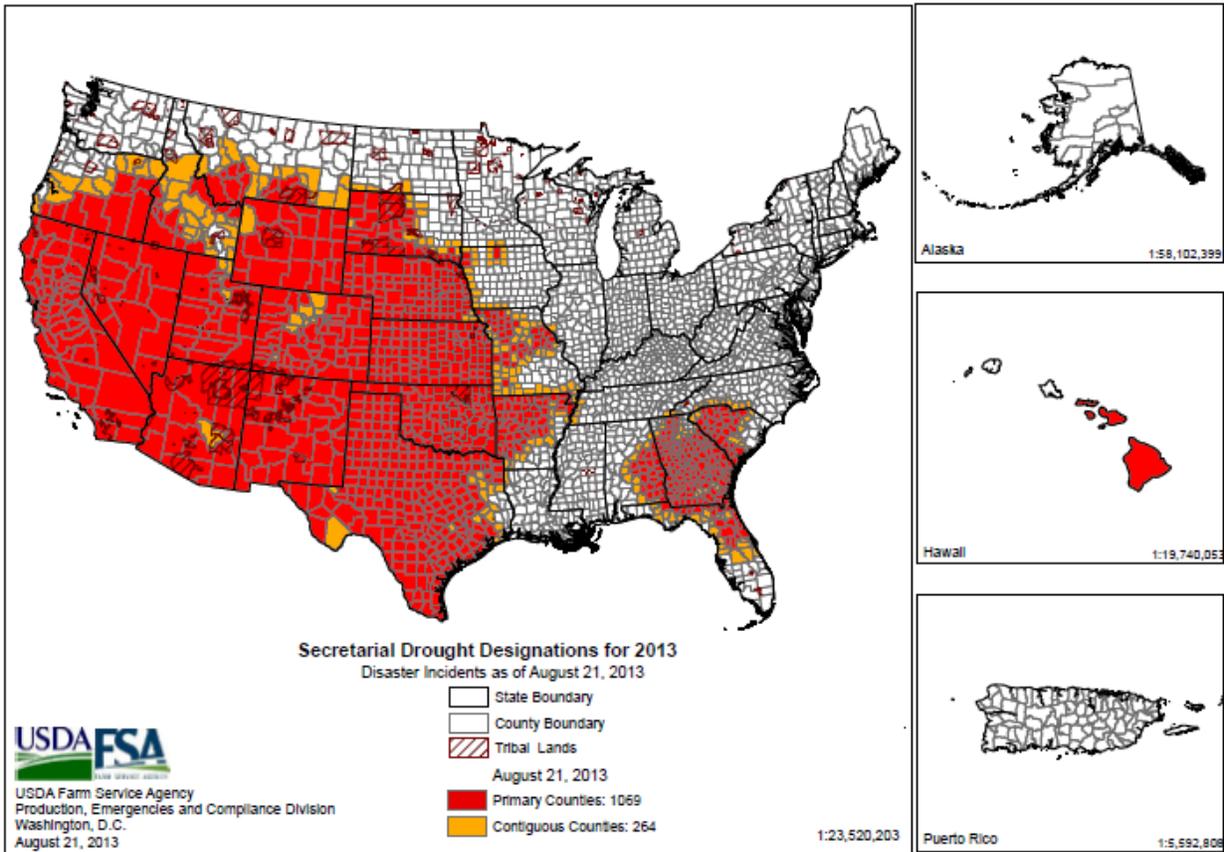


U.S. [Monthly](#) Drought Outlook released August 15.

Expect improvements over New Mexico and northern and eastern Texas by the end of November.

Drought is expected to hold over much of the West, while the end of drought is forecast over Iowa, Arkansas, and Louisiana.

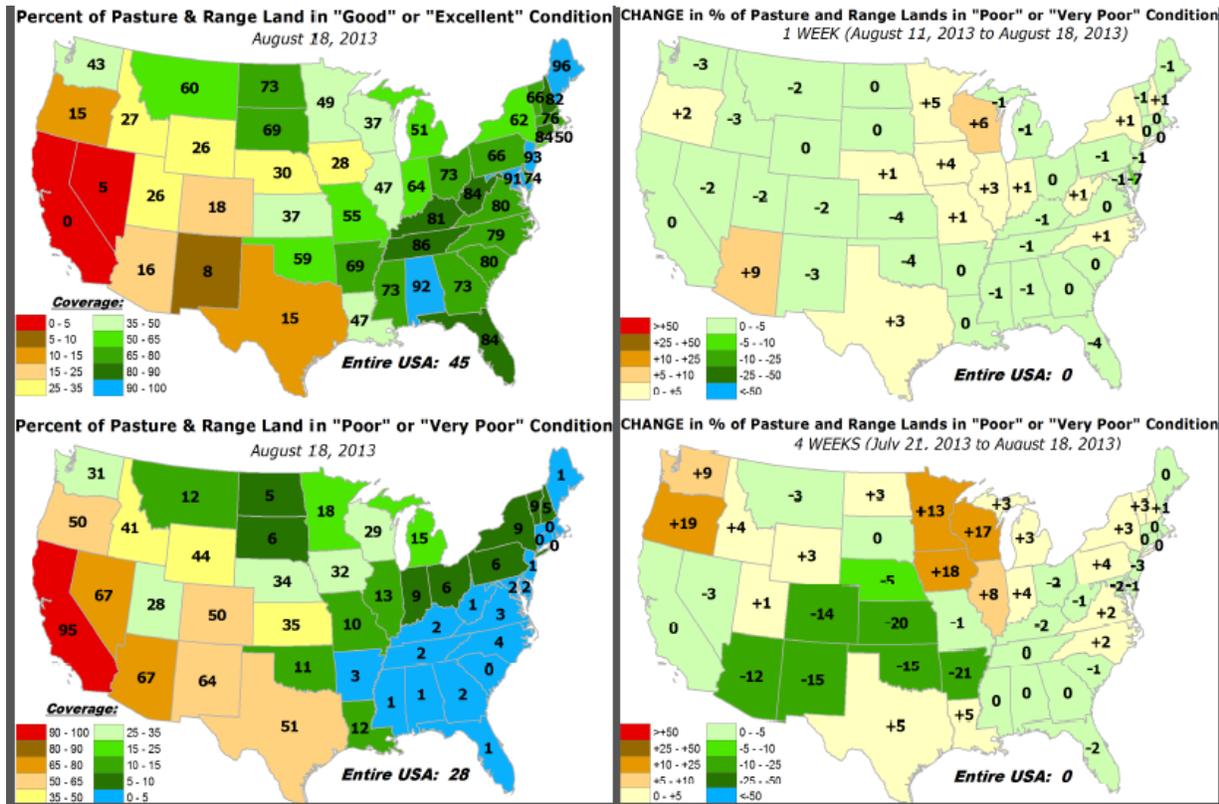
## 2013 Secretarial Drought Designations - All Drought



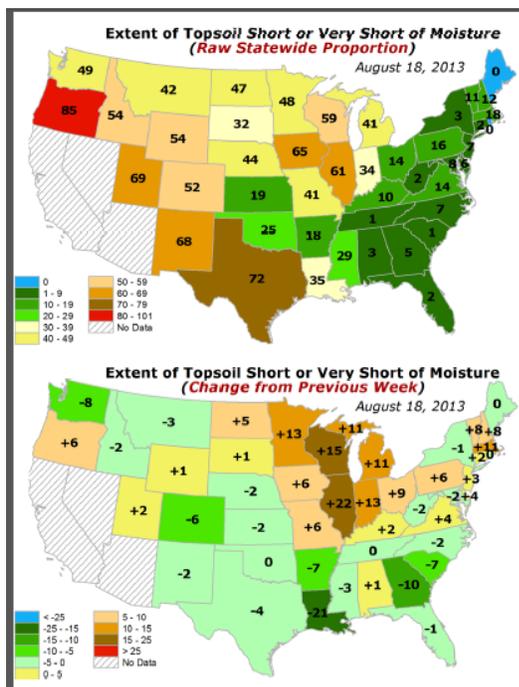
Refer to USDA Drought Assistance [website](#) and [National Sustainable Agriculture Information Service](#). Read about the new [USDA Regional Climate Hubs](#).

# Weekly Snowpack and Drought Monitor Update Report

## Supplemental Drought Information



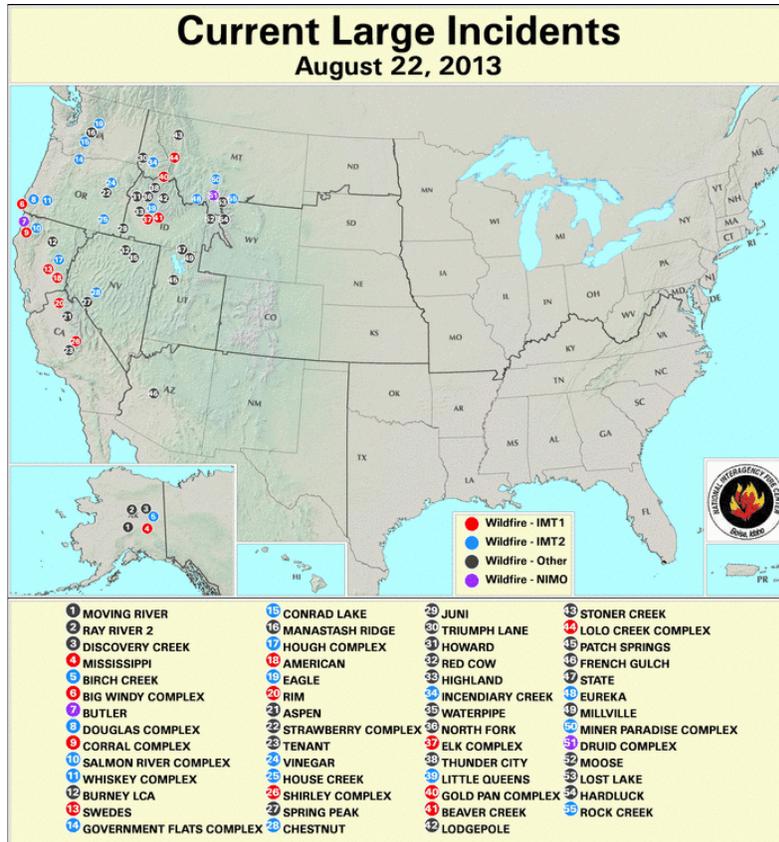
California and Nevada have the least amount of good or better pasture land (top left) and California leads the nation with the greatest poor conditions (bottom left). During the past week, Delaware had the greatest improvement and Arizona had the greatest deterioration (upper right). During the past four weeks (lower right), the positive impact from the SW Monsoon is quite evident.



← The highest percentage of poor top soil conditions are in Oregon, but are also high in Utah, New Mexico, Texas, Iowa, and Illinois. The least amount of poor soils resides over the eastern third of the country and in Kansas and Oklahoma.

← During the past week, conditions deteriorated over the Great Lake States, including Illinois. Conditions improved significantly over Louisiana.

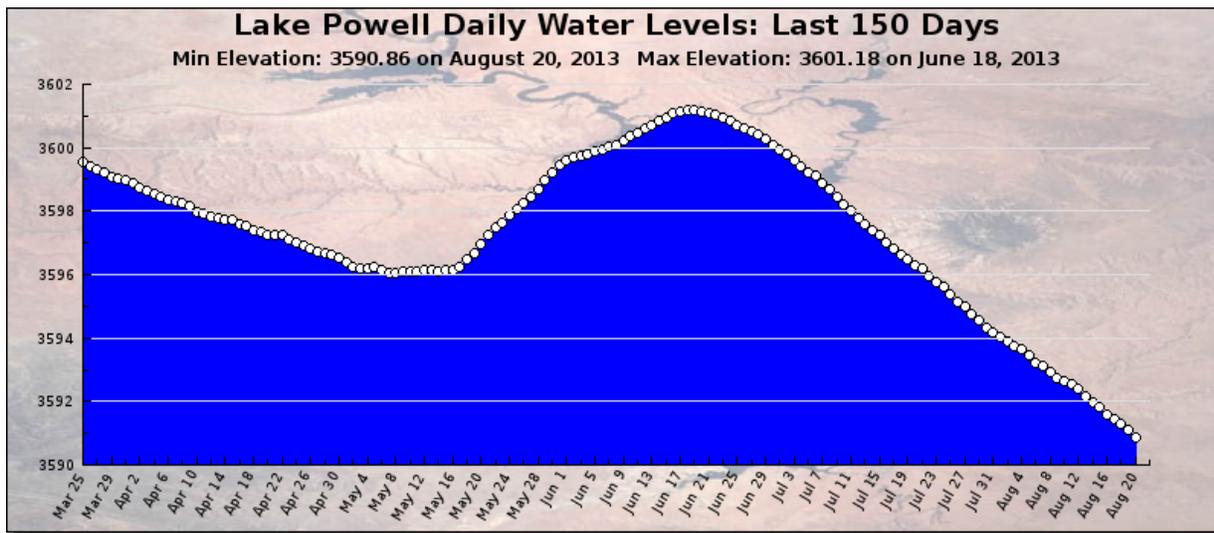
## Weekly Snowpack and Drought Monitor Update Report



The [Information Incident System](#) shows the most recent fires and their status across the U.S.

### Lake Powell in the Colorado River Basin

The U.S. Bureau of Reclamation said in its August forecast that less water will be released from Lake Powell in 2014, sending the smallest amount of water downstream to Lake Mead since the Glen Canyon Dam was constructed. The head of the Southern Nevada Water Authority was considering requesting federal disaster aid as the level of Lake Mead continues to fall, due to drought and increased water demand.



From the Lake Powell Water Database at <http://lakepowell.water-data.com/>

# Weekly Snowpack and Drought Monitor Update Report

## Water transfer in California

Meanwhile, the U.S. Bureau of Reclamation announced plans to transfer water from Folsom Lake to Southern California and will draw Folsom Lake down to about 300,000 acre-feet by December 2013. At that level, the lake will hold less water than it did during the 1976-77 drought. A dry winter could leave Roseville, Folsom, and Granite Bay with little water to spare.

## Supplemental AG-related Drought Information

The following data are provided by Brad Rippey, USDA Meteorologist, Office of the Chief Economist, World Agricultural Outlook Board). Also see: [ftp://snr-0563.unl.edu/Outgoing/US-Maps.ppt](http://snr-0563.unl.edu/Outgoing/US-Maps.ppt)

Highlights for the drought-monitoring period ending 7 am EDT on August 20 include:

- "Until recently, rain has been falling in several areas experiencing long-term drought, including the central and southern Plains and the Southwest. At the same time, 1- to 2-month rainfall deficits remain a concern in some of the nation's key crop production areas, including parts of the Midwest. As a result, the latest U.S. Drought Monitor, valid August 20, indicates a general reduction in the severity of long-term drought in the south-central and southwestern U.S., but an expansion of short-term drought in the Corn Belt.

- Overall U.S. moderate to exceptional (D1 to D4) drought coverage increased about one-third of a percentage point (0.35 point) to 45.61%. Drought coverage is nearly twenty percentage points (19.84 points) below the peak of 65.45% in September 2012.

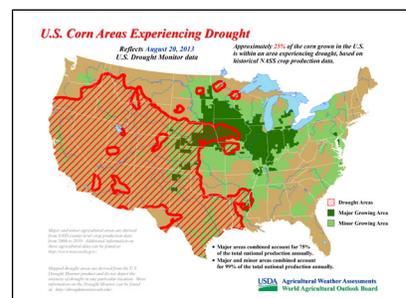
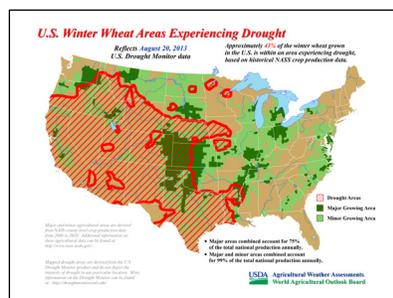
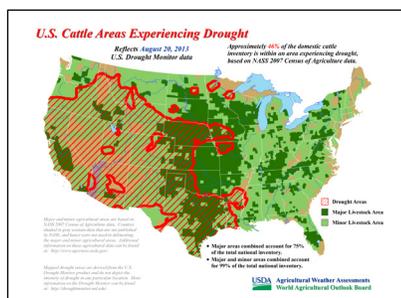
- On August 20, exceptional drought (D4) covered just 1.32% of the continental U.S., down nearly three-quarters of a percentage point (0.71%) from a week ago to the lowest value since July 17, 2012. Similarly, coverage of extreme to exceptional drought (D3 to D4) fell more than a percentage point to 10.54% of the Lower 48 states, the smallest area since July 3, 2012.

- Resurgent drought in the western Corn Belt has left moderate drought (D1) covering 35% of Iowa; 15% of Missouri; and 10% of Minnesota. According to USDA, Iowa led the Midwest with topsoil moisture rated 65% very short to short on August 18. Drought also continues to push farther into the Northwest, where dozens of large wildfires remain active. On August 18, Oregon's topsoil moisture was 85% very short to short, tops among reporting states.

- The portion of the U.S. corn production area in drought has been edging upward in recent weeks, from 17 to 25% between July 9 and August 20. The increase has been largely due to the return of drought to parts of the western Corn Belt. Soybeans in drought have also increased in the last six weeks, from 8 to 16%. Hay (33%) and cattle in drought (46%) were both unchanged from last week.

- On July 23, severe drought (D2) made its first-ever appearance in Alaska. D2 expanded during the week ending August 20 and now covers nearly 7% of Alaska. USDA reported that Alaska's topsoil moisture was rated 70% very short to short on August 18, and that pastures were rated 40% very poor to poor.

- **Weather outlook:** Late-summer warmth will continue across much of the U.S. During the weekend and early next week, heat will build across the north-central U.S., while somewhat cooler air will overspread areas west of the Rockies. Meanwhile, showers will continue to rotate around a ridge of high pressure centered over the nation's mid-section. As a result, little or no rain will fall during the next 5 days across the central and southern Plains and Mid-South, while 1- to 3-inch totals may occur in the Southwest, Southeast, and far upper Midwest."



These maps are not clickable

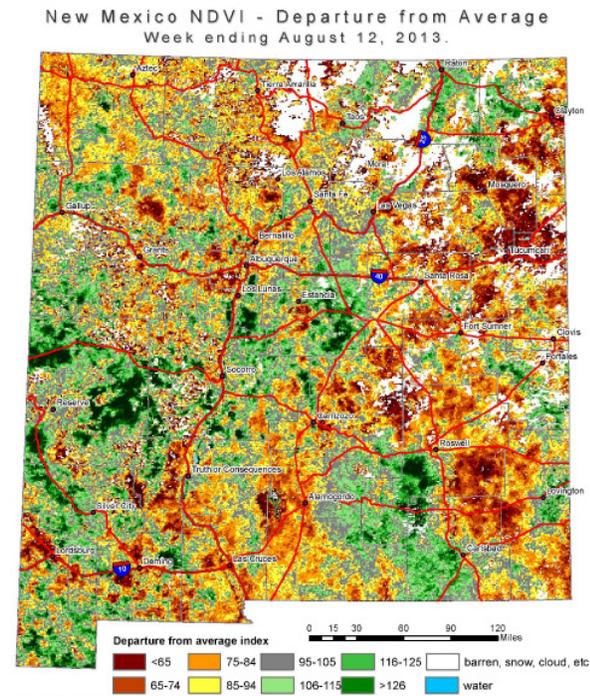
# Weekly Snowpack and Drought Monitor Update Report

Following provided by [Victor Murphy](#), NOAA. **Note:** *The following maps do not have direct hyperlinks.*

The below images shows the beauty of the summer monsoon in NM, which usually starts around July 1st and runs into September.

On the left is the Normalized Difference Vegetation Index (NDVI) for the week ended 8/12/13. On the right is the week ended 8/13/12. Average statewide rainfall in July 2013? 3.60", or about 150% of the statewide average of 2.43". July 2011 was the 14th driest on record (1.44"), and July 2012 was the 20th driest (1.65"), dating back to 1895. See below.

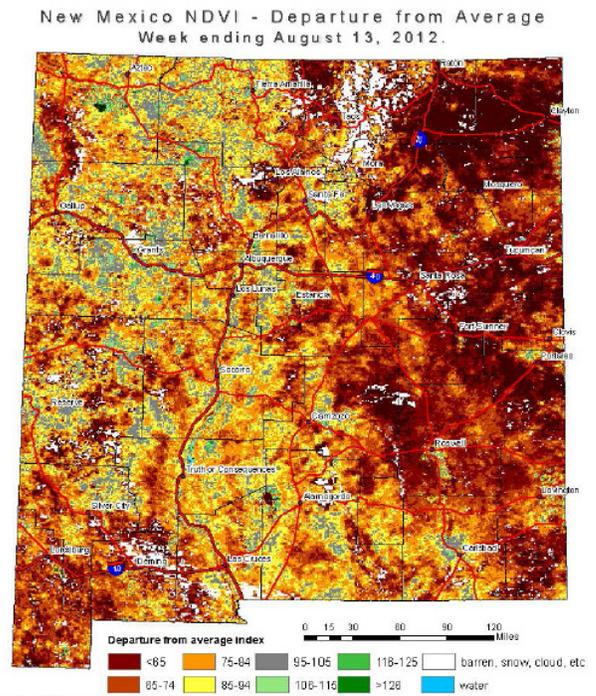
Hopefully the remainder of the monsoon season will stay robust enough to provide continued drought relief to NM without any excess flooding, etc.



Normalized Difference Vegetation Index (NDVI) is a measure of photosynthetic activity on the earth's surface calculated using infrared and near-infrared data from satellite sensors. The departure from average index is the deviation from normal (100) for the time period indicated.

NDVI maps can be utilized by natural resource managers to aid in monitoring drought conditions. For more information please contact Les Owen at [lowen@nmda.nmsu.edu](mailto:lowen@nmda.nmsu.edu).

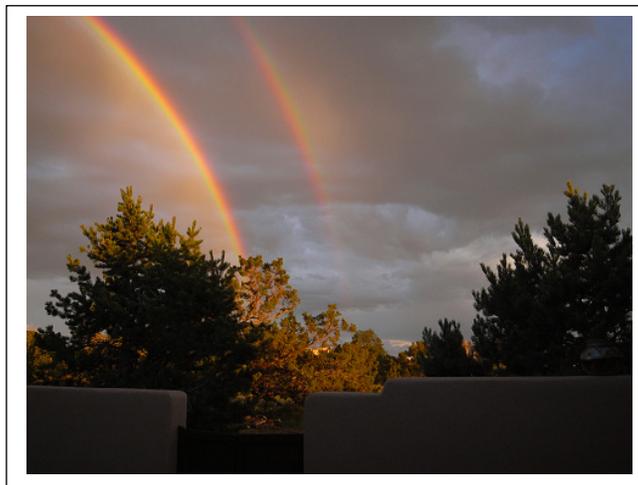
original data downloaded at: <http://ftp2.fsl.fed.us/pub/ndvi/>



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Double Rainbow from near Santa Fe, NM – J. Curtis