



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

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**Weekly Report - Snowpack / Drought (& Flood) Monitor Update**    **Date: 18 August 2011**

## **SNOTEL SNOWPACK AND PRECIPITATION SUMMARY**

**Temperature** SNOTEL and ACIS 7-day temperature anomaly shows +5°F departures over the 4-Corner States and -5°F departures elsewhere (Fig. 1). ACIS 7-day average temperature anomalies show the greatest positive temperature departures across southeastern New Mexico (>+6°F) and the greatest negative departures over north-central Washington (<-6°F) (Fig. 1a).

**Precipitation:** ACIS 7-day average precipitation amounts for the period ending yesterday shows the heaviest precipitation over south-central New Mexico (Fig. 2). In terms of percent of normal, the precipitation in the form of widely scattered thunderstorms is noted across the West (Fig 2a). The Summer Southwest Monsoon is suggested but not well established (Fig. 2a). For the 2011 Water-Year that began on 1 October 2010, the greatest deficits are found over the extreme southern reaches of the Southwest although there was a marginal one category improvement due to the monsoon this week. Areas with the highest values are found over the Great Basin, Cascades, Sierra, and parts of Northern and Central Rockies. The [Southwest Monsoon](#) in New Mexico is not contributing much to [water deficits](#) thus far this season (Fig. 2b).

[Flooding persists](#) along the flood plain of much of the [Missouri River](#). Releases are expected to decrease by 40% by the end of August at Gavins Point.

**Summary:** Many areas of the United States found some drought relief in a series of storms from Texas to New Hampshire. Agricultural sectors from New Mexico to Illinois continue to experience stress on crops and rangelands, particularly in non-irrigated areas. Drought recovery is slow in the heart of the states with exceptional drought.

**West:** San Bernardino County in California is upgraded to drought-free on this week's map. Rainfall over the last month has brought relief to these southeastern deserts. In northwestern Arizona, the lack of strong monsoonal moisture has created abnormal dryness, or D0, in Mohave, Yavapai and Coconino counties. Eastern Arizona has fared slightly better, and Cochise County in the southeast and the area surrounding Window Rock, AZ, to Gallup, NM, all have one category improvements. Additionally, the monsoon has brought enough storm activity to southwestern New Mexico to warrant a change to extreme drought in and around Las Cruces. **Author:** [Laura Edwards, Western Regional Climate Center](#)

***A comprehensive narrative describing drought conditions for the nation can be found at the end of this document.***

### **Drought Impacts Definitions**

The possible impacts associated with **D4 (H, A)** drought include widespread crop/pasture losses and shortages of water in reservoirs, streams, and wells creating water emergencies. The possible impacts associated with **D3 (H, A)** drought include major crop/pasture losses and widespread water shortages or restrictions. Possible impacts from **D2 (H, A)** drought are focused on water shortages common and water restrictions imposed and crop or pasture losses likely. The possible impacts associated with **D1 (H, A)** drought are focused on water shortages

## Weekly Snowpack and Drought Monitor Update Report

developing in streams, reservoirs, or wells, and some damage to crops and pastures (Figs. 3 through 3d).

### Soil Moisture

Soil moisture (Figs. 4a and 4b), is simulated by the [VIC macroscale hydrologic model](#). The detailed, physically-based VIC model is driven by observed daily precipitation and temperature maxima and minima from approximately 2130 stations, selected for reporting reliably in real-time and for having records of longer than 45 years (and various other criteria). Another good resource can be found at: <http://www.emc.ncep.noaa.gov/mmb/nldas/drought/>.

### Soil Climate Analysis Network (SCAN)

Figure 5 provides supplemental data on soil conditions (moisture and temperatures at various depths from 2 inches to 80 inches. For more information about SCAN see ([brochure](#)).

### U.S. Historical Streamflow

This map, (Fig. 6) 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. Sub-regions shaded gray indicate that insufficient data were available to compute a reliable 7-day average streamflow value. During winter months, this situation frequently arises due to ice effects. The data used to produce this map are provisional and have not been reviewed or edited. They may be subject to significant change.

### State Activities

State government drought activities can be tracked at the following URL: <http://drought.unl.edu/mitigate/mitigate.htm>. NRCS SS/WSF State Office personnel are participating in state drought committee meetings and providing the committees and media with appropriate SS/WSF information - <http://www.wcc.nrcs.usda.gov/cgibin/bor.pl>. Additional information describing the products available from the Drought Monitor can be found at the following URL: <http://drought.unl.edu/dm/> and <http://www.drought.gov>.

### For More Information

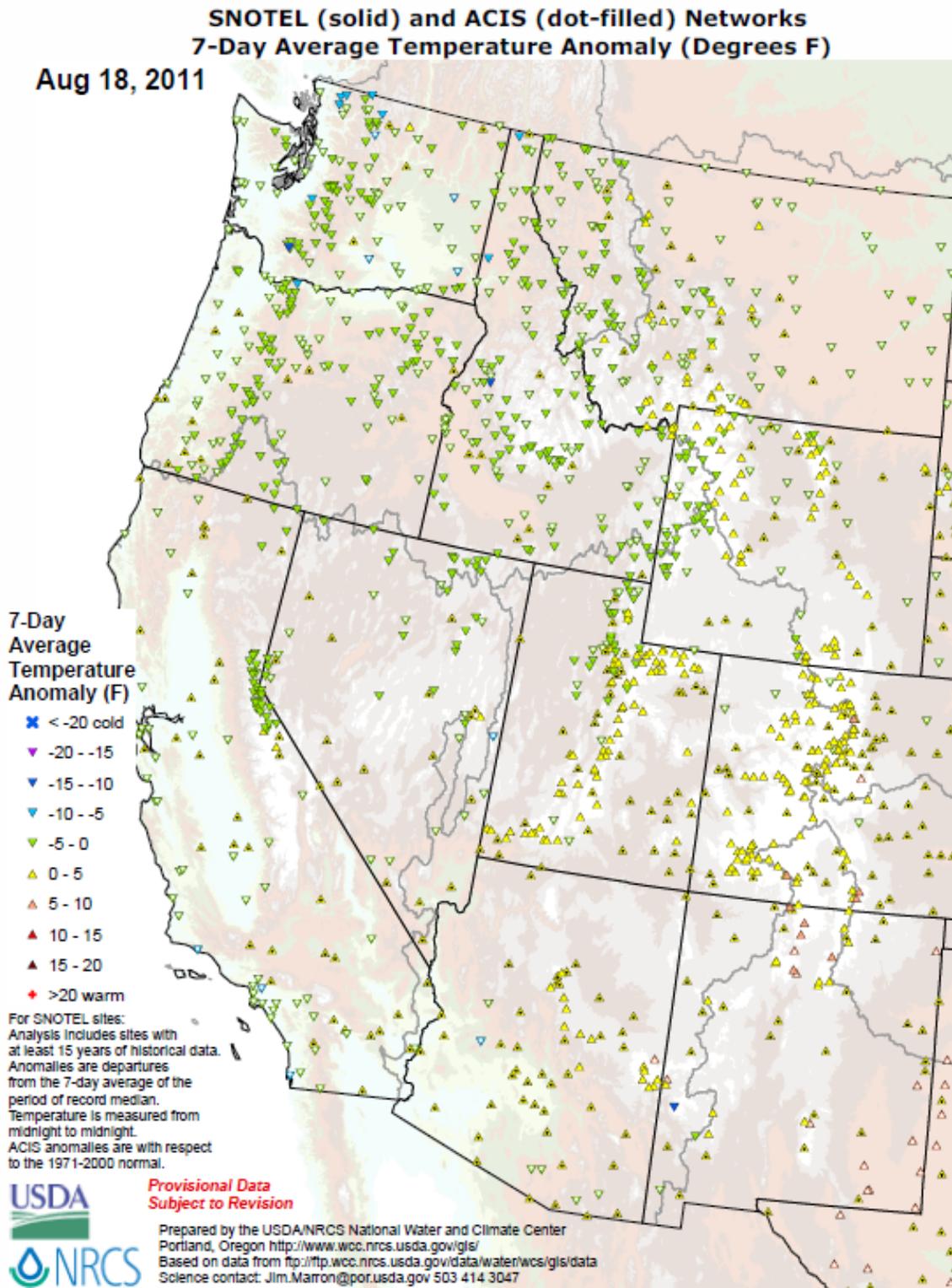
The National Water and Climate Center Homepage provide the latest available snowpack and water supply information. Please visit us at <http://www.wcc.nrcs.usda.gov>. This document is available from the following location on the NWCC homepage - <http://www.wcc.nrcs.usda.gov/water/drought/wdr.pl>. Reports from 2007 are available on-line while ones from 2001-2006 can be acquired upon request.

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

/s/

Douglas Lawrence  
Deputy Chief, Soil Survey and Resource Assessment

# Weekly Snowpack and Drought Monitor Update Report

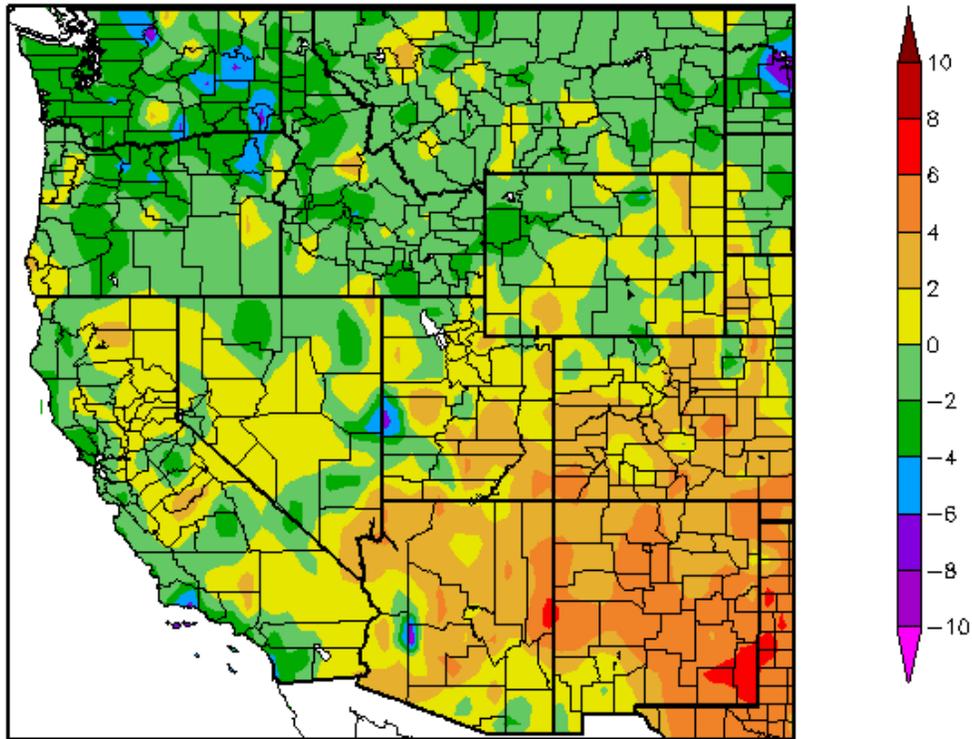


**Fig. 1: SNOTEL and ACIS 7-day temperature anomaly shows +5°F departures over the 4-Corner States and -5°F departures elsewhere.**

Ref: <http://www.wcc.nrcs.usda.gov/ftpref/data/water/wcs/gis/maps/WestwideTavg7dAnomalyAcis.pdf>

## Weekly Snowpack and Drought Monitor Update Report

Departure from Normal Temperature (F)  
8/11/2011 – 8/17/2011



Generated 8/18/2011 at HPRCC using provisional data.

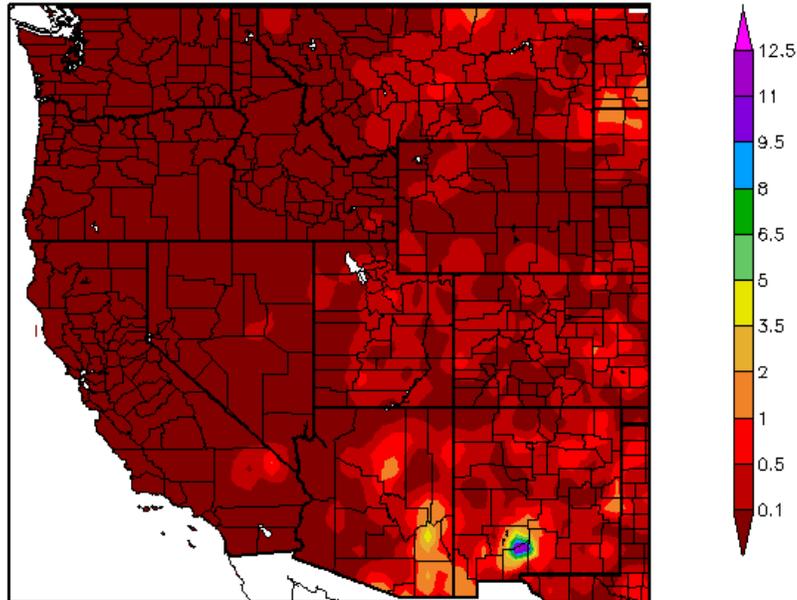
Regional Climate Centers

**Fig. 1a: ACIS 7-day average temperature anomalies show the greatest positive temperature departures across southeastern New Mexico (>+6°F) and the greatest negative departures over north-central Washington (<-6°F).**

Ref: [http://www.hprcc.unl.edu/maps/current/index.php?action=update\\_daterange&daterange=14d](http://www.hprcc.unl.edu/maps/current/index.php?action=update_daterange&daterange=14d)

## Weekly Snowpack and Drought Monitor Update Report

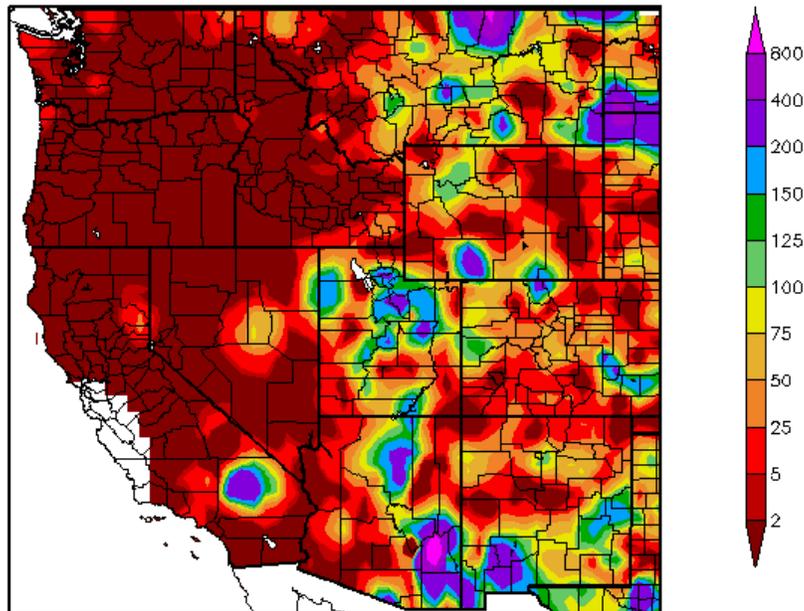
Precipitation (in)  
8/11/2011 – 8/17/2011



Generated 8/18/2011 at HPRCC using provisional data.

Regional Climate Centers

Percent of Normal Precipitation (%)  
8/11/2011 – 8/17/2011

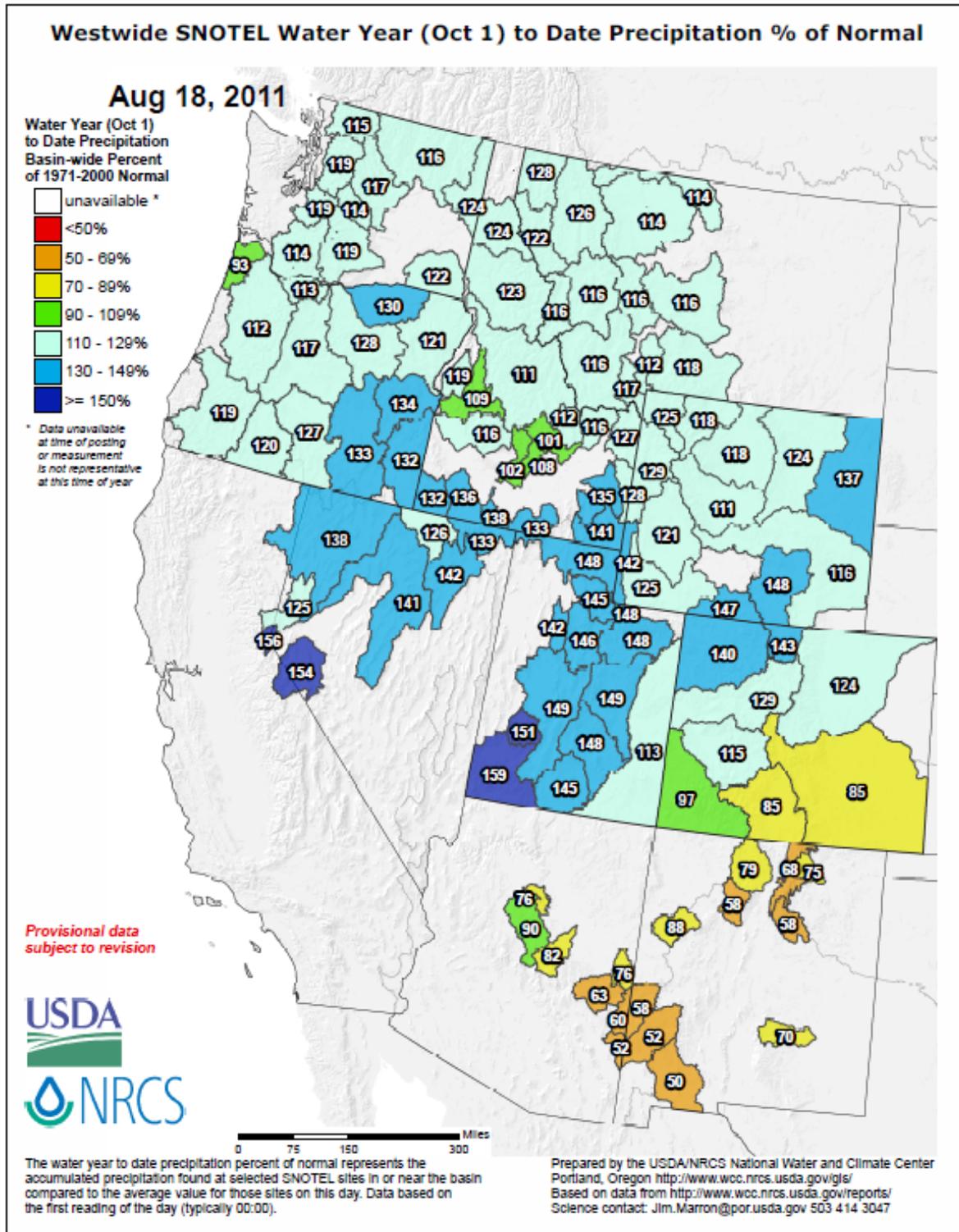


Generated 8/18/2011 at HPRCC using provisional data.

Regional Climate Centers

**Fig. 2 and 2a:** ACIS 7-day average precipitation amounts for the period ending yesterday shows the heaviest precipitation over south-central New Mexico (Fig. 2). In terms of percent of normal, the precipitation in the form of widely scattered thunderstorms is noted across the West (Fig 2a). The Summer Southwest Monsoon is suggested but not well established. Ref: <http://www.hprcc.unl.edu/maps/current/>

## Weekly Snowpack and Drought Monitor Update Report

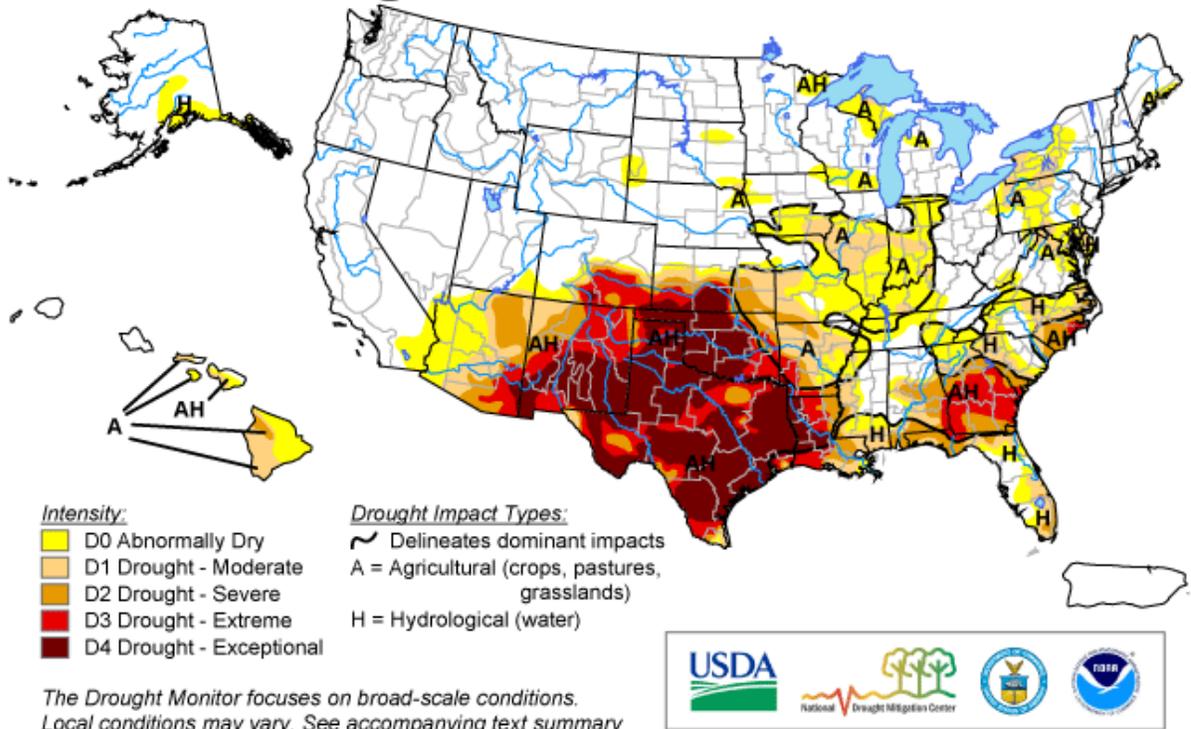


**Fig 2b:** For the 2011 Water-Year that began on 1 October 2010, the greatest deficits are found over the extreme southern reaches of the Southwest although there was a marginal one category improvement due to the monsoon this week. Areas with the highest values are found over the Great Basin, Cascades, Sierra, and parts of Northern and Central Rockies. The [Southwest Monsoon](#) in New Mexico is not contributing much to [water deficits](#) thus far this season.

Ref: [http://www.wcc.nrcs.usda.gov/ftpref/data/water/wcs/gis/maps/west\\_wytdprecptnormal\\_update.pdf](http://www.wcc.nrcs.usda.gov/ftpref/data/water/wcs/gis/maps/west_wytdprecptnormal_update.pdf)

# U.S. Drought Monitor

August 16, 2011  
Valid 8 a.m. EDT



<http://drought.unl.edu/dm>

**Fig. 3: Current Drought Monitor weekly summary. The exceptional D4 levels of drought are found over southeast Arizona, New Mexico, extreme southeast Colorado, Texas\*, Oklahoma, Louisiana, and Georgia. Ref: <http://www.drought.unl.edu/dm/monitor.html>**

- 2010 TX Planted Acreage 5.57 million acres\*
- 2010 TX Harvested Acreage 5.35 million acres
- 2010 TX Yield 703 pounds per acre
- 2010 TX Abandonment 4 percent
- 2010 TX Production 7.84 million 480-lb bales (3.76 billion lbs)
- 2010 TX Cotton Value approx. \$3.1 billion (\$0.83 per pound)
  
- 2011 TX Planted Acreage 7.12 million acres
- 2011 TX Est. Harvest Acreage 3.40 million acres
- 2011 Est. TX Yield 635 pounds per acre
- 2011 Est. TX Abandonment 52 percent
- 2011 Est. TX Production 4.50 million 480-lb bales (2.16 billion lbs)
- 2011 Est. TX Cotton Value approx. \$1.8 billion (using last year's price)

**Comments:** The estimated Texas cotton value for 2011 is estimated using the 2010 U.S. cotton price of 83 cents per bushel. Cotton prices have been running higher this year but have fallen in recent weeks. Early in the year, cotton was trading near \$2 per pound, but in recent weeks the price has fallen to near \$1.

If Texas had experienced a near-optimum year in 2011 (see 2010 for near-optimum results), the state could have achieved a production total of approximately 4.80 billion pounds (1.00 billion 480-pound bales). This is a rounded value assuming a 2011 optimum harvested acreage of 6.85 million acres (4 percent abandonment) and an optimum yield of 700 pounds per acre.

At the 2010 U.S. cotton price of 83 cents per pound, this year's Texas crop had a potential value of \$4.0 billion. Given the 2011 estimated Texas cotton value of approximately \$1.8 billion, it is fairly safe to say that the raw losses from this year's cotton crop are in the ballpark of \$2.2 billion. As an aside, the record-high cotton abandonment in Texas was set in 1998, with 42%. -Brad Rippey, USDA

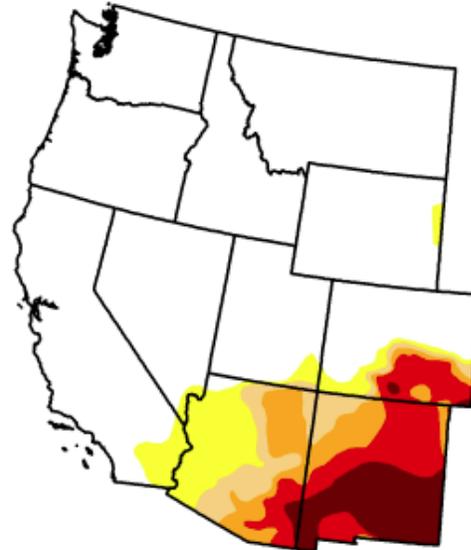
# U.S. Drought Monitor

## West

August 16, 2011  
Valid 7 a.m. EST

*Drought Conditions (Percent Area)*

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	75.03	24.97	18.93	15.21	10.62	4.65
Last Week (08/09/2011 map)	75.17	24.83	18.82	15.30	10.88	5.44
3 Months Ago (05/17/2011 map)	76.18	23.82	19.58	14.72	8.78	3.28
Start of Calendar Year (12/28/2010 map)	73.26	26.74	11.98	0.89	0.00	0.00
Start of Water Year (09/28/2010 map)	62.50	37.50	8.14	0.56	0.00	0.00
One Year Ago (08/10/2010 map)	73.90	26.10	6.43	0.50	0.00	0.00



*Intensity:*

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

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



Released Thursday, August 18, 2011  
Laura Edwards, Western Regional Climate Center

<http://drought.unl.edu/dm>

**Fig. 3a: Drought Monitor for the Western States with statistics over various time periods. Regionally there were no significant changes this week.**

Ref: [http://www.drought.unl.edu/dm/DM\\_west.htm](http://www.drought.unl.edu/dm/DM_west.htm)

Weekly Snowpack and Drought Monitor Update Report

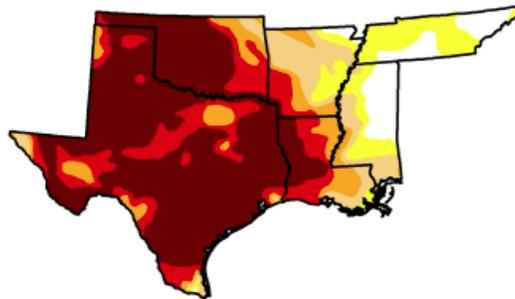
# U.S. Drought Monitor

## South

August 16, 2011  
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	7.07	92.93	83.11	73.73	64.82	49.27
Last Week (08/09/2011 map)	9.69	90.31	83.96	77.45	67.21	50.63
3 Months Ago (05/17/2011 map)	24.63	75.37	67.88	61.38	49.24	27.15
Start of Calendar Year (12/28/2010 map)	8.86	91.14	67.65	35.21	10.17	0.00
Start of Water Year (09/28/2010 map)	54.23	45.77	20.04	6.79	0.83	0.00
One Year Ago (08/10/2010 map)	74.37	25.63	11.51	5.03	1.69	0.00



**Intensity:**

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

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

<http://drought.unl.edu/dm>



Released Thursday, August 18, 2011  
Laura Edwards, Western Regional Climate Center

Fig. 3b: Drought Monitor for the South-Central States with statistics over various time periods. This region has shown slight improvement in D2-D4 over the past week. Ref: [http://www.drought.unl.edu/dm/DM\\_south.htm](http://www.drought.unl.edu/dm/DM_south.htm). Fig. 3b(1) shows improving D3-D4 stats for Oklahoma below. Ref: [http://droughtmonitor.unl.edu/DM\\_state.htm?OK,S](http://droughtmonitor.unl.edu/DM_state.htm?OK,S)

# U.S. Drought Monitor

## Oklahoma

August 16, 2011  
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	100.00	96.35	85.39	66.84
Last Week (08/09/2011 map)	0.00	100.00	100.00	100.00	92.88	64.70
3 Months Ago (05/17/2011 map)	23.40	76.60	67.60	54.97	40.14	13.67
Start of Calendar Year (12/28/2010 map)	13.82	86.18	47.90	1.50	0.00	0.00
Start of Water Year (09/28/2010 map)	66.28	33.72	4.21	0.00	0.00	0.00
One Year Ago (08/10/2010 map)	85.46	14.54	4.27	1.34	0.00	0.00



**Intensity:**

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

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

<http://drought.unl.edu/dm>



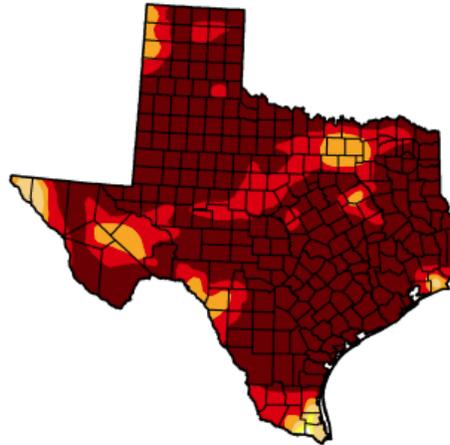
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# Weekly Snowpack and Drought Monitor Update Report

## U.S. Drought Monitor Texas

August 16, 2011  
Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.07	99.93	99.72	98.36	92.78	74.50
Last Week (08/09/2011 map)	0.07	99.93	99.48	97.99	94.27	78.26
3 Months Ago (05/17/2011 map)	0.00	100.00	97.01	92.40	80.02	47.87
Start of Calendar Year (12/28/2010 map)	7.89	92.11	69.43	37.46	9.59	0.00
Start of Water Year (09/28/2010 map)	75.57	24.43	2.43	0.99	0.00	0.00
One Year Ago (08/10/2010 map)	90.68	9.32	2.45	0.22	0.00	0.00



**Intensity:**



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

<http://drought.unl.edu/dm>



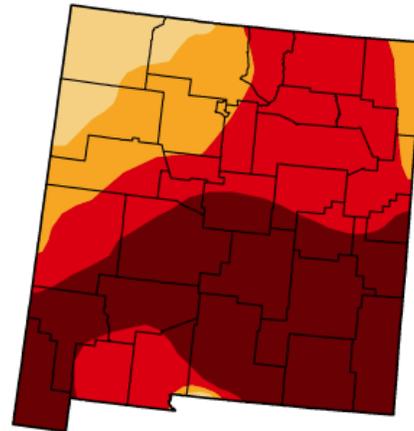
Released Thursday, August 18, 2011  
Laura Edwards, Western Regional Climate Center

Fig. 3c: Currently, 74% of [Texas](#) is experiencing “Exceptional” D4 drought. Almost 93% of the state is in D3 and D4 drought! Ref: [http://www.drought.unl.edu/dm/DM\\_state.htm?TX,S](http://www.drought.unl.edu/dm/DM_state.htm?TX,S)

## U.S. Drought Monitor New Mexico

August 16, 2011  
Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	100.00	92.66	77.07	42.39
Last Week (08/09/2011 map)	0.00	100.00	100.00	93.16	77.31	47.30
3 Months Ago (05/17/2011 map)	0.00	100.00	96.66	87.36	64.59	31.67
Start of Calendar Year (12/28/2010 map)	6.16	93.84	40.40	0.00	0.00	0.00
Start of Water Year (09/28/2010 map)	76.66	23.34	0.00	0.00	0.00	0.00
One Year Ago (08/10/2010 map)	79.55	20.45	0.00	0.00	0.00	0.00



**Intensity:**



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

<http://drought.unl.edu/dm>

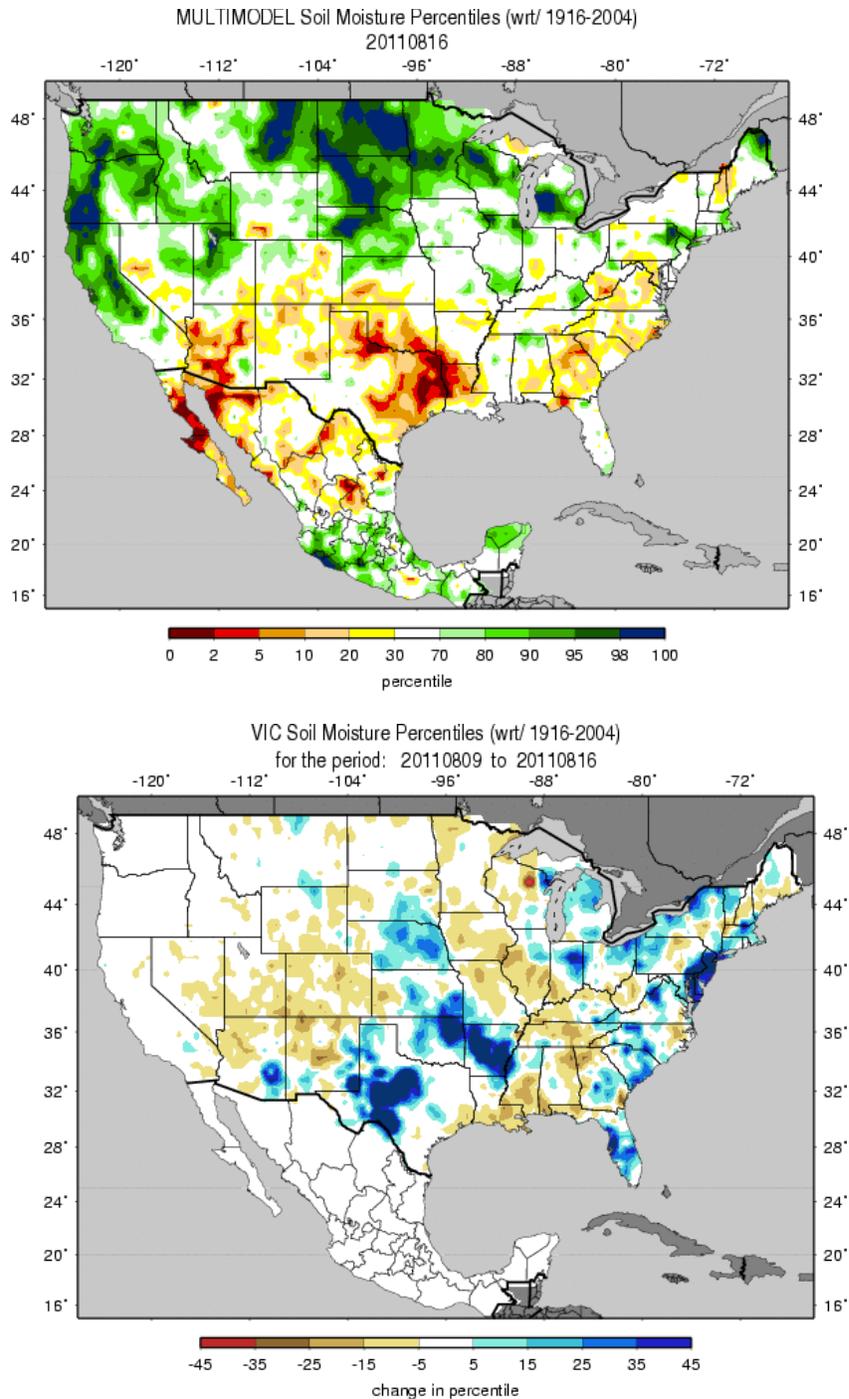


Released Thursday, August 18, 2011  
Laura Edwards, Western Regional Climate Center

Fig. 3d: Drought Monitor for [New Mexico](#) with statistics over various time periods. Thus far, the impacts of the Southwest Monsoon have been negligible.

Ref: [http://www.drought.unl.edu/dm/DM\\_state.htm?NM,W](http://www.drought.unl.edu/dm/DM_state.htm?NM,W)

## Weekly Snowpack and Drought Monitor Update Report



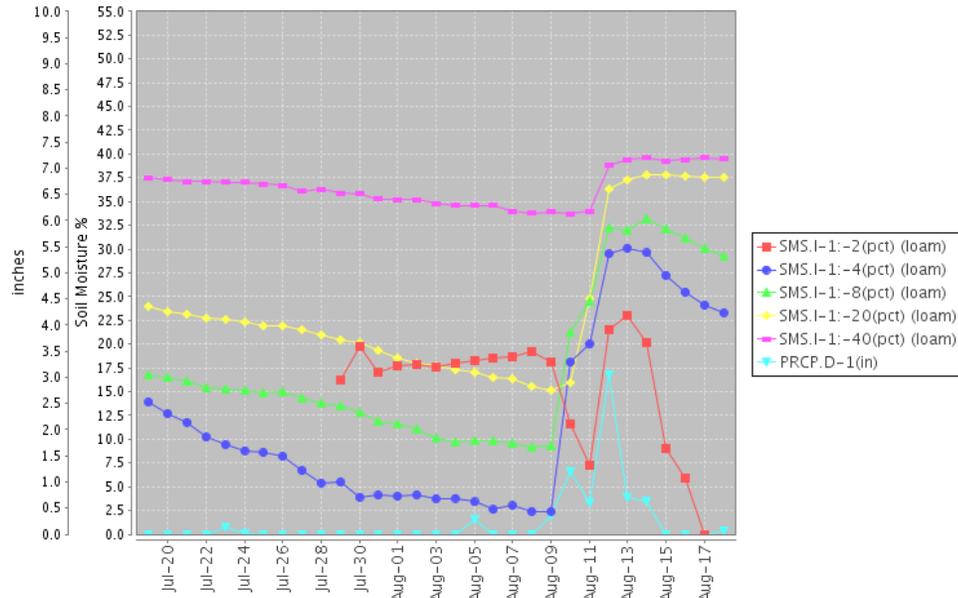
**Figs. 4a and 4b: Soil Moisture ranking in percentile as of 16 August (top) shows moist conditions over much of the Northern Tier States east of the Mississippi River with dryness over the Southern Plains. A continuation of a rather complex pattern of moistening and drying occurred again this week across the nation (bottom) with substantial improvements over west-central Texas and eastern Oklahoma.**

[http://www.hydro.washington.edu/forecast/monitor/curr/conus.mexico/CONUS.MEXICO.multimodel.sm\\_qnt.gif](http://www.hydro.washington.edu/forecast/monitor/curr/conus.mexico/CONUS.MEXICO.multimodel.sm_qnt.gif)  
[http://www.hydro.washington.edu/forecast/monitor/curr/conus.mexico/CONUS.MEXICO.vic.sm\\_qnt.1wk.gif](http://www.hydro.washington.edu/forecast/monitor/curr/conus.mexico/CONUS.MEXICO.vic.sm_qnt.1wk.gif)

# Weekly Snowpack and Drought Monitor Update Report

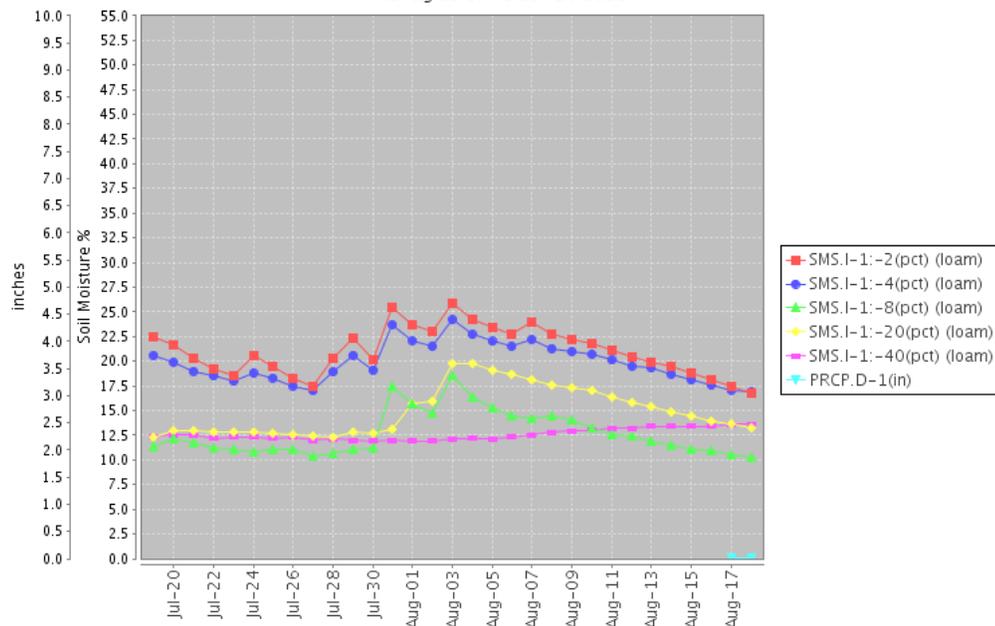
## Soil Climate Analysis Network (SCAN)

Station (2090) MONTH=2011-07-19 (Daily) NRCS National Water and Climate Center - Provisional Data - subject to revision  
Thu Aug 18 07:38:14 PDT 2011



**Fig. 5a:** This NRCS resource shows a site in central Arkansas with improving soil moisture as heavy rains dominated on August 12. Ref: <http://www.wcc.nrcs.usda.gov/nwcc/site?sitenum=2090&state=ar>

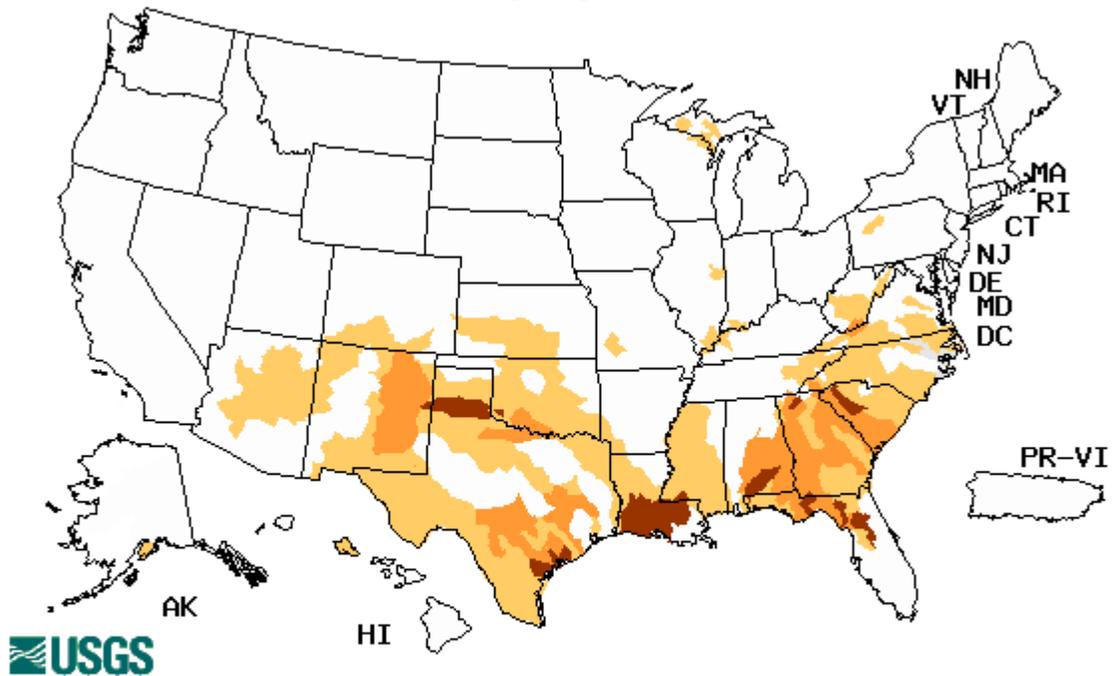
Station (2003) MONTH=2011-07-19 (Daily) NRCS National Water and Climate Center - Provisional Data - subject to revision  
Thu Aug 18 07:40:29 PDT 2011



**Fig. 5b:** This SCAN station is located in northeast Wisconsin shows a gradual decline in soil moisture at the 20 inch and shallower. Ref: <http://www.wcc.nrcs.usda.gov/nwcc/site?sitenum=2003&state=wi>

# Weekly Snowpack and Drought Monitor Update Report

Wednesday, August 17, 2011



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	

Fig. 6: Map of below normal 7-day average streamflow compared to historical streamflow for the day of year. Portions of the Texas, Louisiana, Alabama, Georgia, Florida, and South Carolina are experiencing severe conditions. Ref: <http://waterwatch.usgs.gov/?m=dryw&r>.

# Weekly Snowpack and Drought Monitor Update Report

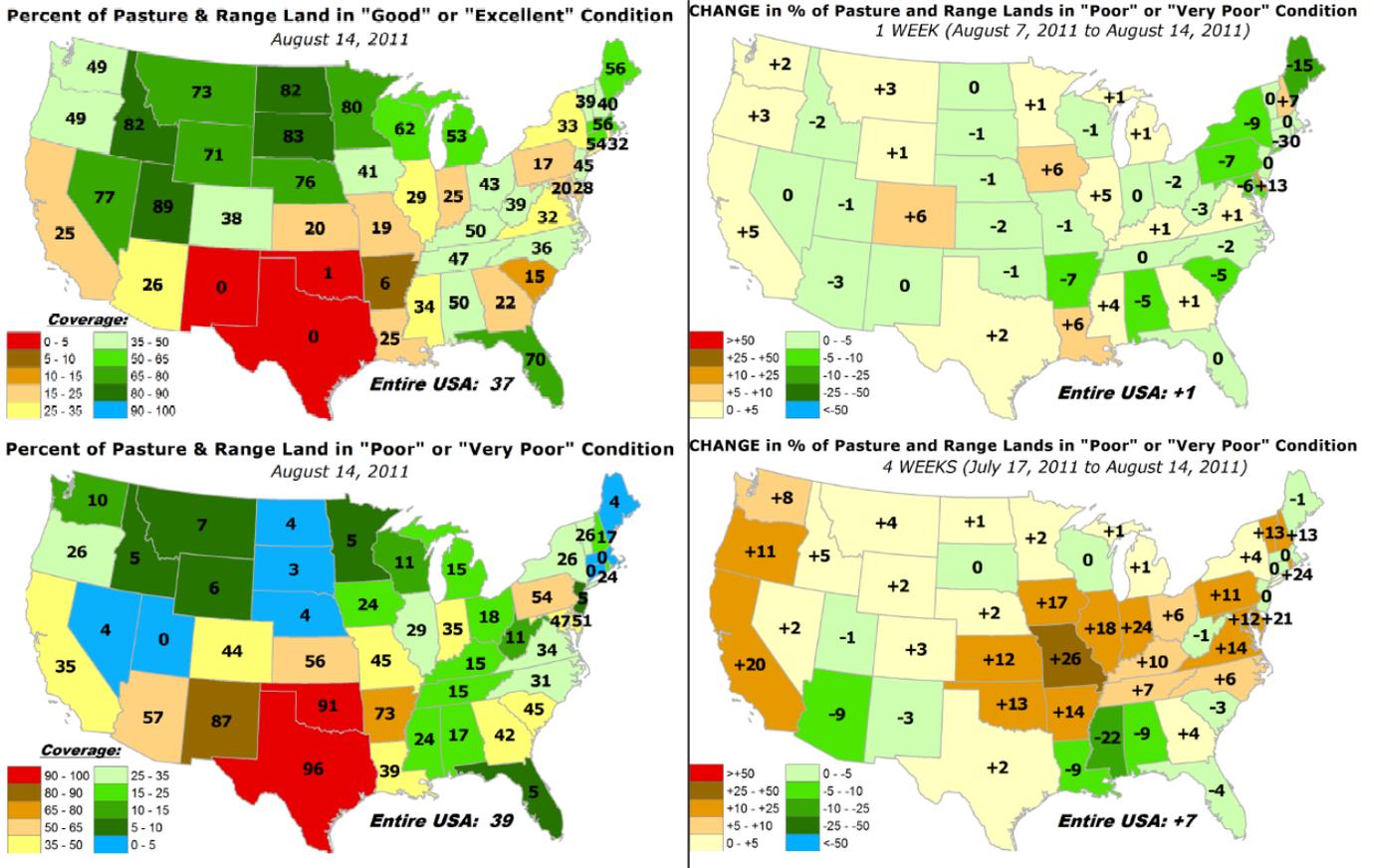


Fig. 7: Current pasture and rangeland conditions and recent changes. For the week, Colorado had the greatest worsening and Arizona had the greatest improvement in the West (upper right map).

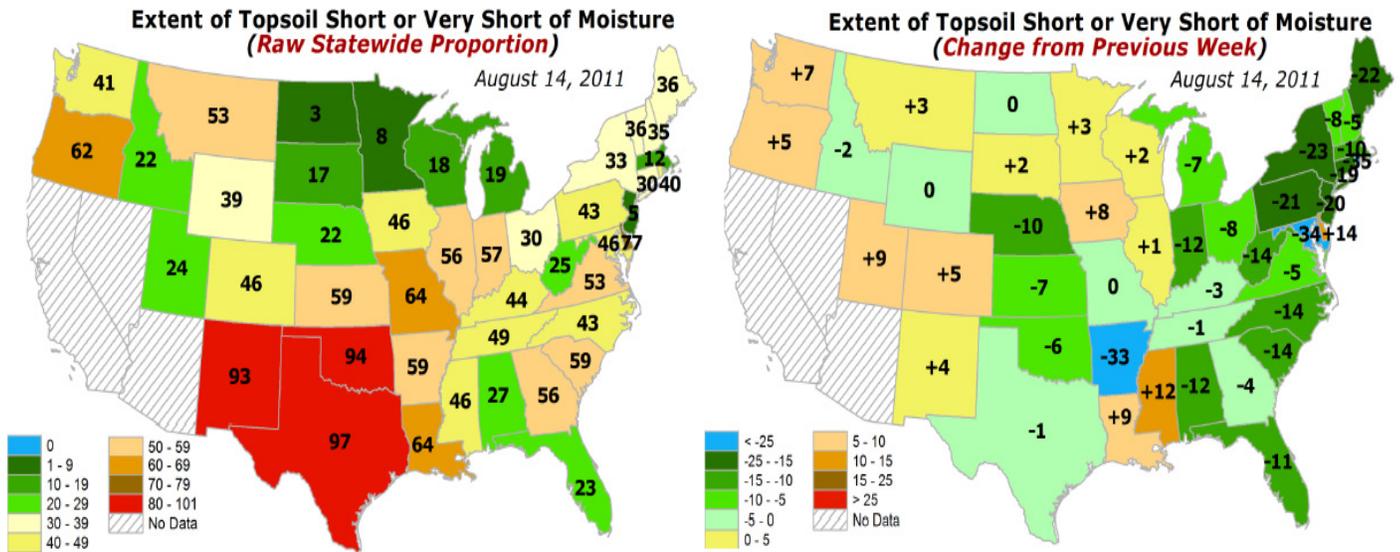
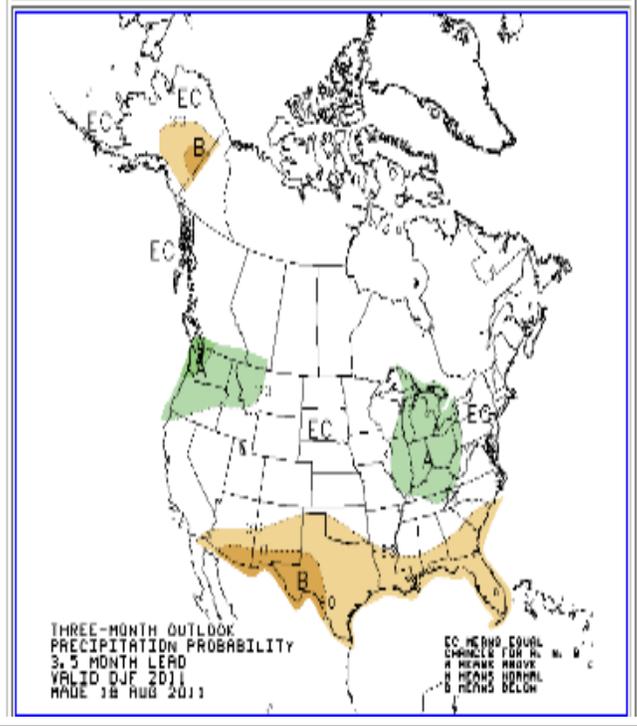
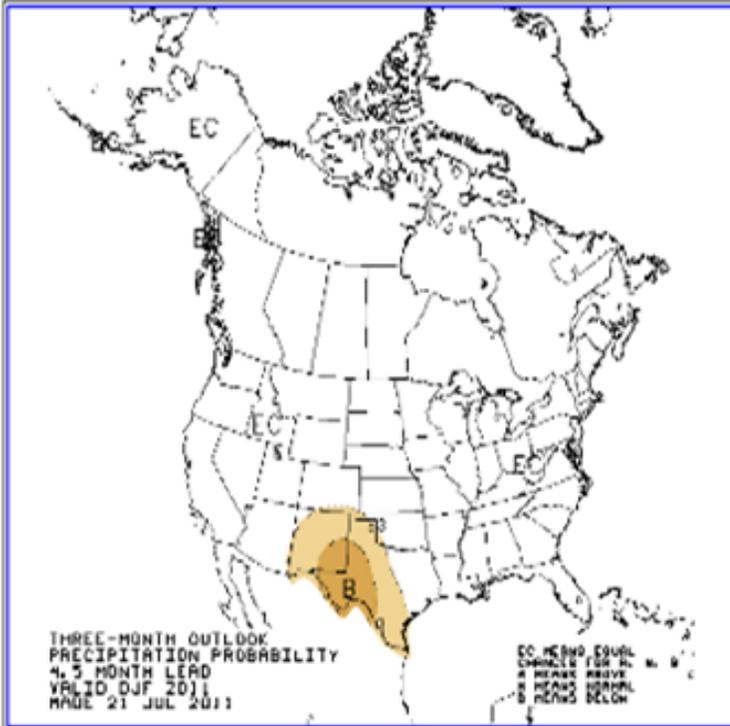
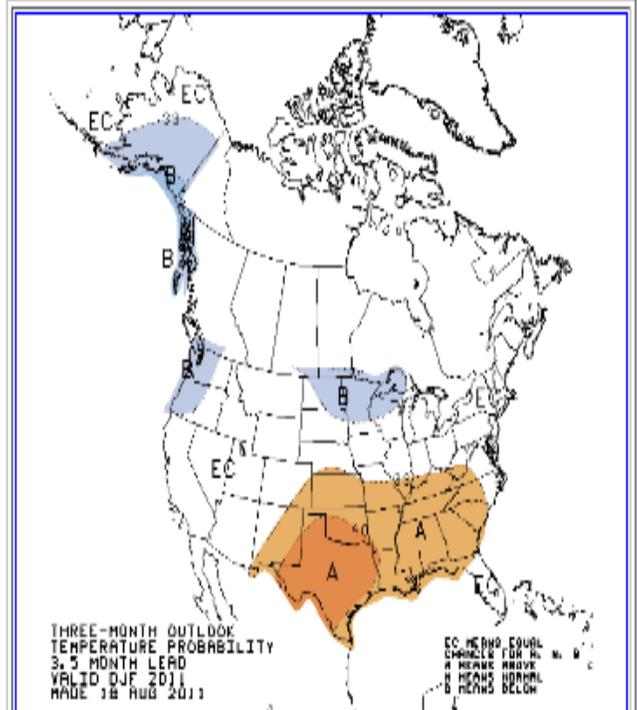
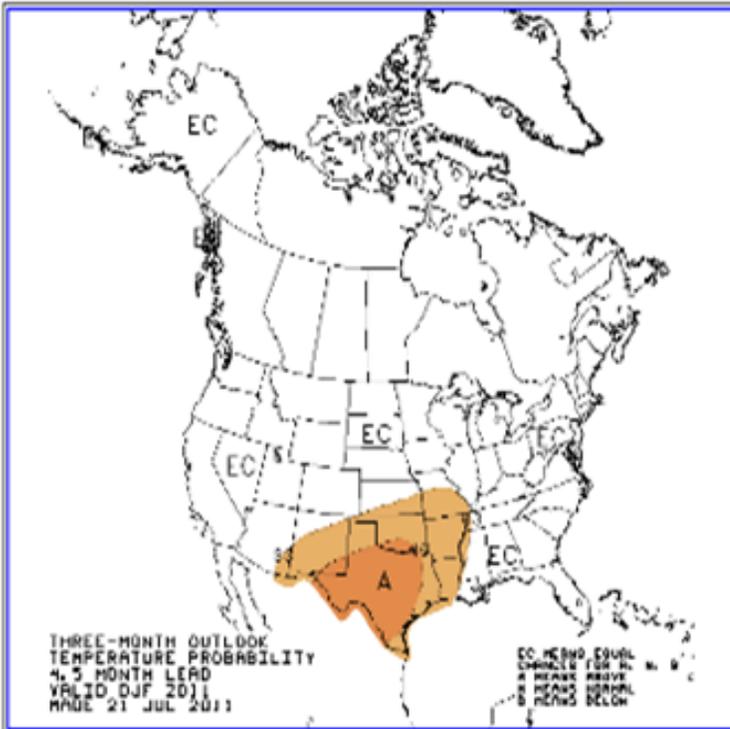


Fig. 7a: Current top soil condition and changes for the past week. Clearly Texas, Oklahoma, and New Mexico have extreme soil moisture deficits.

# Weekly Snowpack and Drought Monitor Update Report

Special Report (released today)

## Seasonal Outlook



December through February temperature & precipitation Seasonal outlook made on 21 July.

December through February outlooks made **today** show the projected influence of a re-emerging La Niña.

## Weekly Snowpack and Drought Monitor Update Report

### National Drought Summary -- August 16, 2011

*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/>.

**Summary:** Many areas of the United States found some drought relief in a series of storms from Texas to New Hampshire. Agricultural sectors from New Mexico to Illinois continue to experience stress on crops and rangelands, particularly in non-irrigated areas. Drought recovery is slow in the heart of the states with exceptional drought.

**Northeast and Mid-Atlantic:** Widespread improvements in the depiction across these regions reflect the welcome rains during this monitoring period. From Maine to Virginia, one-category changes are made in nearly all of last week's drought regions. In upstate New York, central Pennsylvania, and northern Maryland, abnormally dry conditions persist after this short-term relief. Local weekly precipitation totals of around eight inches were reported in northern Maryland and northern Delaware. An area of two to six inches of rainfall also occurred along the Lake Erie coast. The precipitation pattern was highly variable across the region, and some areas remain wetter or drier than depicted on the National scale.

**Southeast:** Several areas of less severe drought conditions are reflected from the Carolinas to Florida and in western Alabama. The worst areas in Georgia have been reassessed, and are now in D3, extreme drought severity. A drought-free region in the Carolinas is expanded as storm systems continue to pass from Charlotte, NC, to Charleston, SC. Across Tennessee and into western North Carolina, abnormally dry conditions have developed and this is depicted on the map, due to deficits in rainfall over the last 30 to 60 days. A finger of significant moisture in western Alabama led to an expanded drought-free area around Wilcox and Monroe counties.

In Florida, dryness has been alleviated and reductions of one-category are made from the Georgia border to Miami. Lake Okeechobee area residents continue to suffer from limited water supply provided by the lake and the chain of lakes in central Florida, so this area is now depicted in moderate drought. A swath of rain across the peninsula from Tampa to Palm Beach is reflected in the map as well.

**South:** A band of exceptional rainfall totals from Kansas to Mississippi was beneficial and created some short-term relief from the extended drought, but missed southwest Kansas where Stanton, Grant and Kearny counties are now degraded to D3. A large swath of one-category improvement is made to reflect storm totals upwards of six inches, primarily impacting eastern Oklahoma and Arkansas. Even though a second area of considerable rainfall was reported in central Oklahoma, there has not been a corresponding reduction in drought impacts and thus the depiction remains the same.

Cities such as Del Rio and Midland in Texas were delighted to see more rainfall in one day than in nearly a year. Del Rio recorded 4.47 inches on August 11, and Midland recorded .36 inches on the same date. Previously, Del Rio had measured 4.25 inches in the previous 334 days and

## Weekly Snowpack and Drought Monitor Update Report

Midland's single day total was more than double that of the previous 319 days. These areas are now in severe or extreme drought, one category lower than last week. Exceptional drought continues its long-lasting grip in central Texas, and is creeping along the Red River valley, now encompassing the area from Lake Texoma to Texarkana.

**Central and Midwest:** Abnormally dry conditions have developed in the Ohio River valley, from Indiana to the Mississippi River. Recent reports indicate that corn and other crops are showing signs of stress. Soil moisture is running lower than normal in this area, and is especially impacting fields with sandier soils. A large D0 is introduced this week, with two areas of moderate drought in Kentucky. Precipitation data for the last 30 days show shortages as well.

In northwestern Ohio, a respite from the dryness has arrived and reductions in both D1 and D0 are made following recent precipitation, and reduced reports of impacts. Elsewhere, abnormally dry conditions were alleviated in northern Illinois, southwest Iowa and southeastern Nebraska. Even with the removal of D0 conditions in these areas, there are still pockets of residual dryness too small to depict on a National scale. Further west, two new areas of D0 are introduced in northeastern South Dakota and in the Black Hills. Rainfall deficits are beginning to accumulate this season, and stress in the later-planted soybean and corn fields south of Aberdeen is apparent.

Michigan's Upper Peninsula's dry streak continues, and moderate drought is introduced from Houghton and the Keweenaw Peninsula to Marquette. Abnormally dry conditions are expanded from there, eastward along the northern shore. On the Lower Peninsula of Michigan, Flint and the surrounding region has fared better, and the map now depicts no dryness.

**West:** San Bernardino County in California is upgraded to drought-free on this week's map. Rainfall over the last month has brought relief to these southeastern deserts. In northwestern Arizona, the lack of strong monsoonal moisture has created abnormal dryness, or D0, in Mohave, Yavapai and Coconino counties. Eastern Arizona has fared slightly better, and Cochise County in the southeast and the area surrounding Window Rock, AZ, to Gallup, NM, all have one category improvements. Additionally, the monsoon has brought enough storm activity to southwestern New Mexico to warrant a change to extreme drought in and around Las Cruces.

**Hawaii, Alaska and Puerto Rico:** There were no changes to these regions this week.

**Looking Ahead:** The current forecast for the next several days includes a ridge holding over the western US and a trough in the East. Accompanying this weather pattern is drier and warmer in the West, and wetter and cooler in the East. Cooler conditions may affect most of Alaska with wetter areas along the south and southeast with this large-scale weather pattern. Should this forecast verify, precipitation in the eastern states could further alleviate drought concerns that have been in place for many months. In the extended outlook, this same pattern is projected, and could prove beneficial after this year's long drought period. The majority of the exceptional drought areas fall in between the wet and dry regions to the east and west, so some improvement may come in the form of localized systems, but no drought-busters are in sight at this time. **Author:** [Laura Edwards, Western Regional Climate Center](#)

## Weekly Snowpack and Drought Monitor Update Report

### Dryness Categories

D0 ... Abnormally Dry ... used for areas showing dryness but not yet in drought, or for areas recovering from drought.

### Drought Intensity Categories

D1 ... Moderate Drought

D2 ... Severe Drought

D3 ... Extreme Drought

D4 ... Exceptional Drought

### Drought or Dryness Types

A ... Agricultural

H ... Hydrological

*Updated August 17, 2011*

### Special Remarks:

By **BETSY BLANEY**

The Associated Press

Published: 9:26 a.m. Wednesday, Aug. 17, 2011

**LUBBOCK, Texas — Texas agriculture officials say estimated crop and livestock losses from the blistering drought are a record \$5.2 billion, and could go higher.**

**AgriLife Extension Service economist David Anderson said Wednesday livestock losses were \$2.1 billion, and crop losses made up the remainder. The estimate comes from field surveys as of Aug. 1. Anderson said there could be further losses by the time crops are harvested.**

**The previous record was \$4.1 billion in 2006.**

**Texas has a long history with droughts. Since 1998, drought has cost Texas agriculture \$13.1 billion.**

**Crops and rangeland across the state have been scorched from lack of rainfall and record triple-digit temperatures throughout parts of Texas. Most of the state has been in the two worst stages of drought since the beginning of May.**