



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

Weekly Report - Snowpack / Drought (& Flood) Monitor Update

Date: 28 July 2011

SNOTEL SNOWPACK AND PRECIPITATION SUMMARY

Snow: 13 sites in Washington (there is still [plenty of snow](#) to ski on in late July), 2 sites in Montana and California have more than 5 inches of SWE as of July 27, 2011 (Fig. 1).

Paradise SNOTEL at Mt. Rainier leads the way, still with 50 inches of SWE left to melt and a depth of 64 inches with 78% density. Looks like it is on track to be the latest melt-out since 1999 which was the latest on record (30 years). Any possible latent snowmelt induced flooding is now found along the Missouri River. For the current map depicting flooding conditions, see: <http://www.hpc.ncep.noaa.gov/nationalfloodoutlook/>.

Total snowfall for the 2010-2011 season was estimated from the maximum snow water amounts. The highest snowfall sites by basin in Idaho-Wyoming include...

Bear Mountain (Panhandle) 792in (66ft)	Trinity Mountain (Boise) 501in (42ft)
Lost Lake (Clearwater) 781in (65ft)	Emigrant Summit (Bear) 399in (33ft)
Grand Targhee (Tetons) 744in (62ft)	Howell Canyon (Southside Snake) 393in (33ft)
Lewis Lake Divide (Upper Snake) 569in (47ft)	Mountain Meadows (Salmon) 342in (29ft)
Deadwood Summit (Payette) 538in (45ft)	Galena Summit (Wood) 263in (22ft)

Temperature: SNOTEL and ACIS 7-day temperature anomaly shows coolest departures over the Pacific Northwest and warmest departures over the Southwest and Central Rockies (Fig. 2). ACIS (lower elevation station) 7-day average temperature anomalies show the greatest positive temperature departures across eastern New Mexico (>+6°F) and the greatest negative departures over portions of the Northern Cascades of Washington (<-8°F) (Fig. 2a).

Precipitation: ACIS 7-day average precipitation amounts for the period ending yesterday shows the bulk of the heaviest precipitation scattered across the northern stretches of the Northern Tier States and most of the 4-Corner States (Fig. 3). In terms of percent of normal, the precipitation was highest over Washington, Montana, and the Southwest (excluding much of Colorado) (Fig 3a). The Summer Southwest Monsoon is clearly depicted in this week's map (Fig 3a). Click on the hyperlink for the latest information on the [Southwest Monsoon](#). For the 2011 Water-Year that began on 1 October 2010, the greatest deficits are found over the extreme southern reaches of the Southwest. Areas with the highest values are found over the Great Basin, Cascades, Sierra, and parts of Northern and Central Rockies. These values are more or less locked in (static) for the remainder of the summer with the possible exception of Arizona and New Mexico due to the influence of the Southwest Monsoon. Some improvement has occurred over central Arizona during the past two week (Fig 3b).

Weekly Snowpack and Drought Monitor Update Report



The SW Monsoon is taking hold over parts of New Mexico. Photo: by J. Curtis on 24 July just S. of Santa Fe.

Weekly Weather Summary: A record-setting heat wave gripped most areas from the Plains to the East Coast. The combination of high temperatures, oppressive humidity, and a lack of overnight cooling resulted in significant stress on humans, animals, and crops. In contrast, cool weather prevailed in the Pacific Coast States. Meanwhile, little or no rain fell from the southern Plains into the lower Ohio Valley. The combination of heat and a lack of rain caused further devastation in the drought-ravaged south-central U.S. and brought the season's first round of stress to some Midwestern crops. The Midwest's problems were compounded by the fact that for some corn and soybeans, the heat wave coincided with the reproductive stage of development. Late in the week, however, beneficial rain fell across an area of emerging dryness from Iowa into the lower Great Lakes region. Areas to the south, however, including the middle Mississippi Valley, remained dry. Hot weather also contributed to an increase in crop stress in parts of the East. Rain tempered the heat's effects in some areas. Farther west, beneficial monsoon showers dotted the Southwest.

The Southwest: A plume of tropical moisture triggered scattered monsoon showers. Some of the most widespread rain fell from southeastern Arizona into northeastern New Mexico and Southeastern Colorado. However, only minimal changes were introduced, as the rain provided only limited and localized relief from a serious drought situation. On July 24, USDA rated 89% of New Mexico's rangeland and pastures in very poor to poor condition. Author: Brad Rippey, U.S. Department of Agriculture

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 developing in streams, reservoirs, or wells, and some damage to crops and pastures (Figs. 4 through 4d).

Weekly Snowpack and Drought Monitor Update Report

Soil Moisture

Soil moisture (Figs. 5a and 5b), 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 6 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. 8) 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/cqibin/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/

Gregory K. Johnson, Acting Director
Resources Inventory Division

Weekly Snowpack and Drought Monitor Update Report

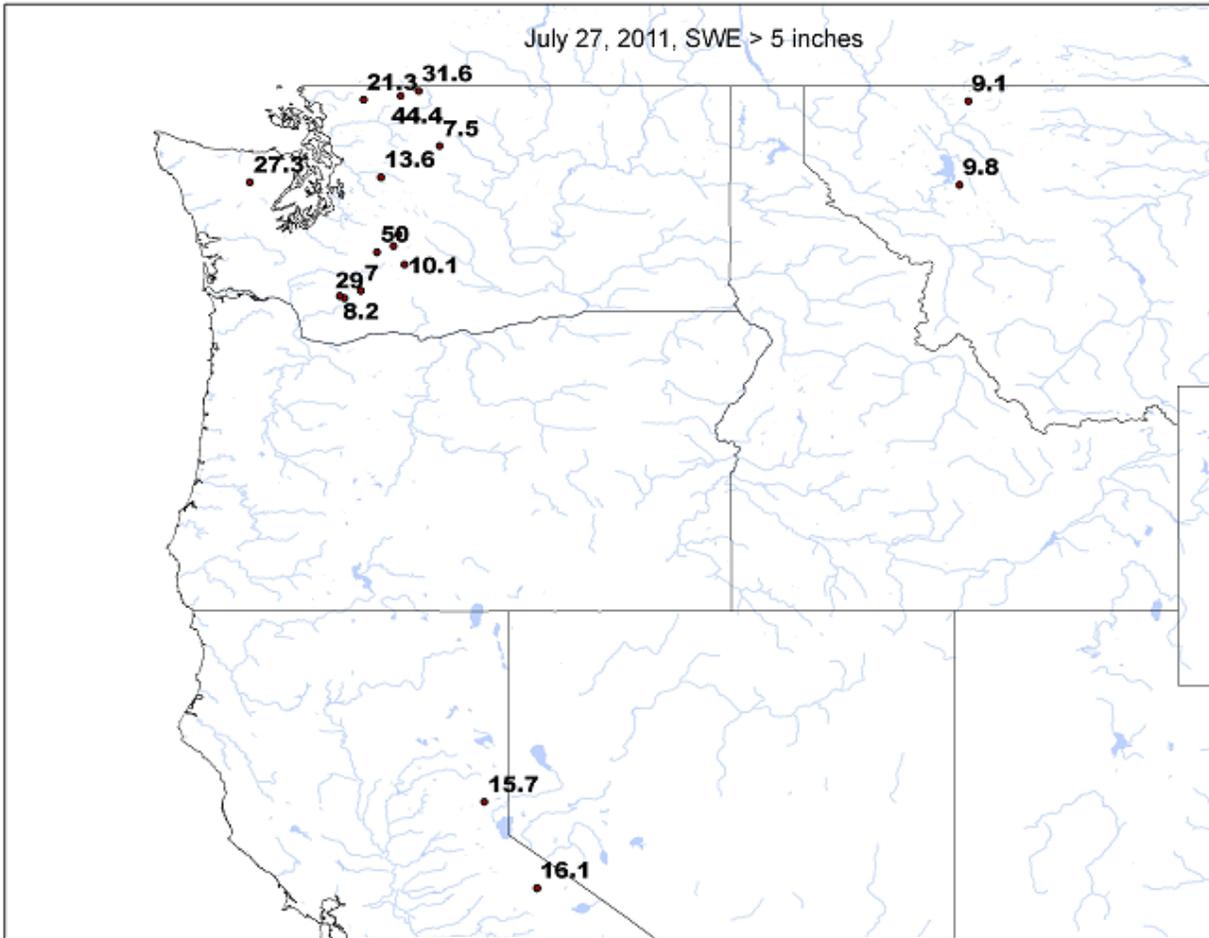


Fig. 1: SNOTEL Snow-Water Equivalent (SWE) greater than 5" across the network of sites.
Courtesy: Gus Goodbody, NWCC

Weekly Snowpack and Drought Monitor Update Report

SNOTEL (solid) and ACIS (dot-filled) Networks 7-Day Average Temperature Anomaly (Degrees F)

Jul 27, 2011

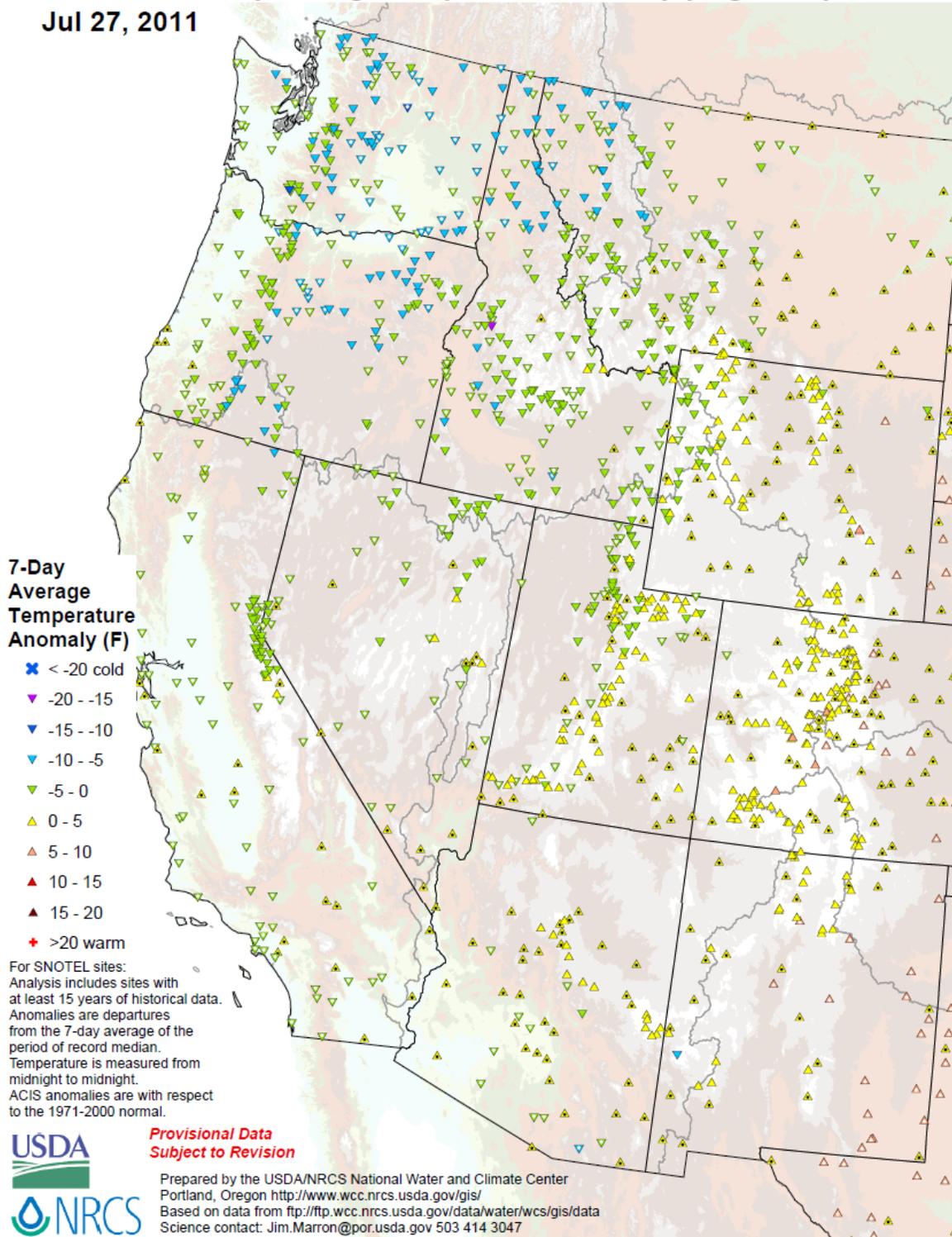
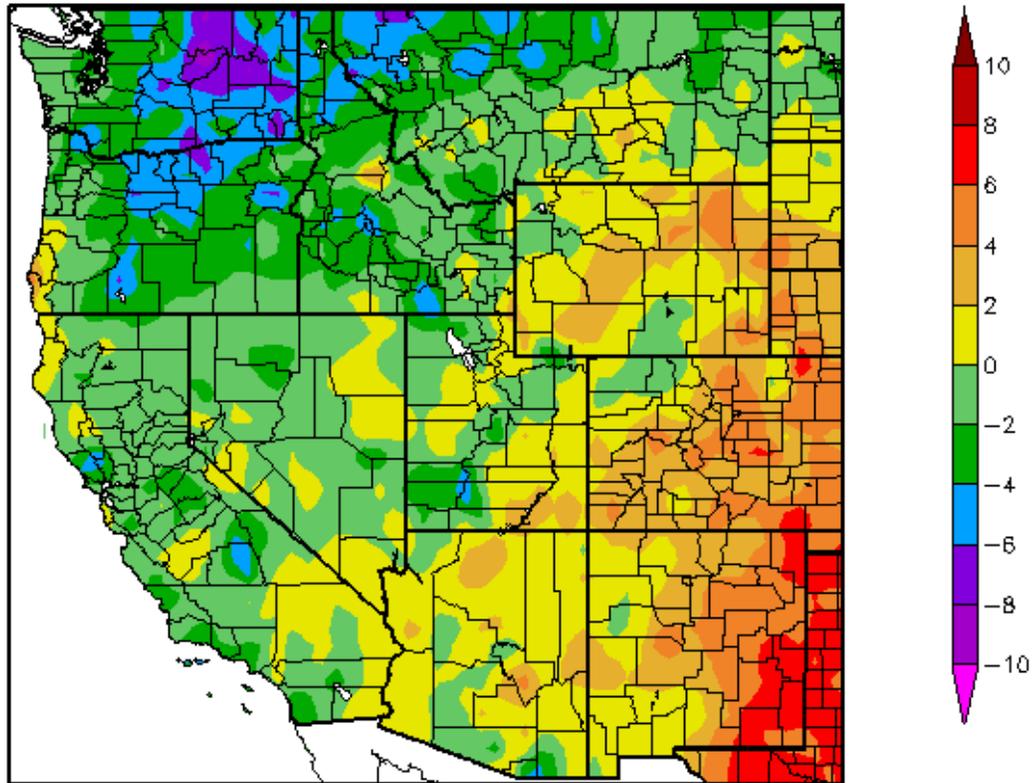


Fig. 2: SNOTEL and ACIS 7-day temperature anomaly shows coolest departures over the Pacific Northwest and warmest departures over the Southwest and Central Rockies.

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)
7/21/2011 – 7/27/2011



Generated 7/28/2011 at HPRCC using provisional data.

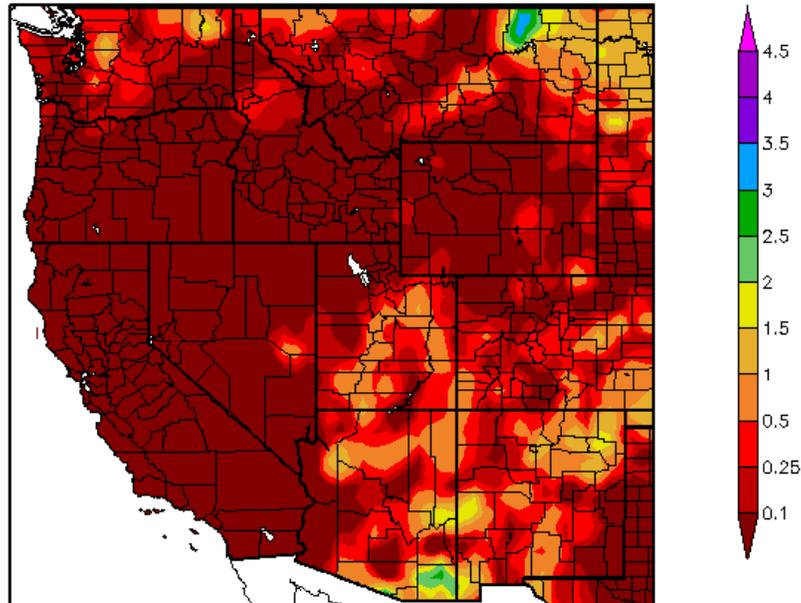
Regional Climate Centers

Fig. 2a: ACIS 7-day average temperature anomalies show the greatest positive temperature departures across eastern New Mexico (>+6°F) and the greatest negative departures over portions of the Northern Cascades of Washington (<-8°F).

Ref: http://www.hprcc.unl.edu/maps/current/index.php?action=update_daterange&daterange=7d

Weekly Snowpack and Drought Monitor Update Report

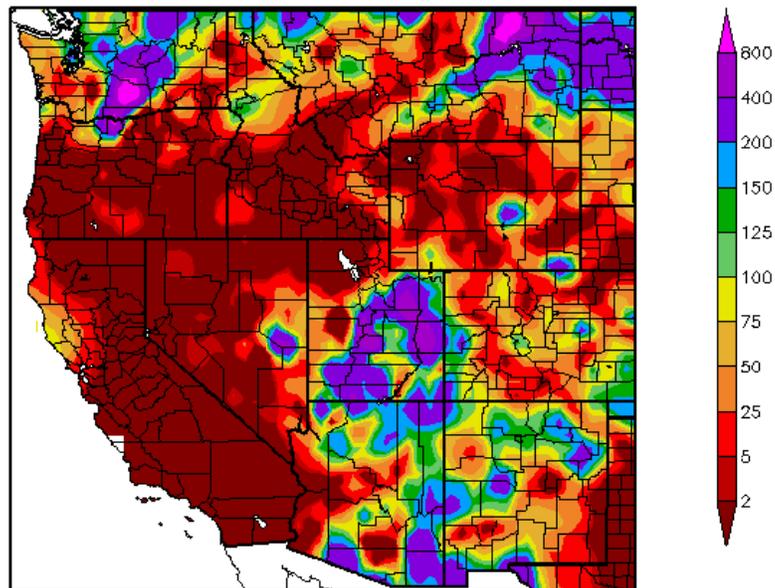
Precipitation (in)
7/21/2011 - 7/27/2011



Generated 7/28/2011 at HPRCC using provisional data.

Regional Climate Centers

Percent of Normal Precipitation (%)
7/21/2011 - 7/27/2011



Generated 7/28/2011 at HPRCC using provisional data.

Regional Climate Centers

Fig. 3 and 3a: ACIS 7-day average precipitation amounts for the period ending yesterday shows the bulk of the heaviest precipitation scattered across the northern stretches of the Northern Tier States and must of the 4-Corner States (Fig. 3). In terms of percent of normal, the precipitation was highest over Washington, Montana, and the Southwest (excluding much of Colorado) (Fig 3a). The Summer Southwest Monsoon is clearly depicted in this week's map. Ref: <http://www.hprcc.unl.edu/maps/current/>.

Weekly Snowpack and Drought Monitor Update Report

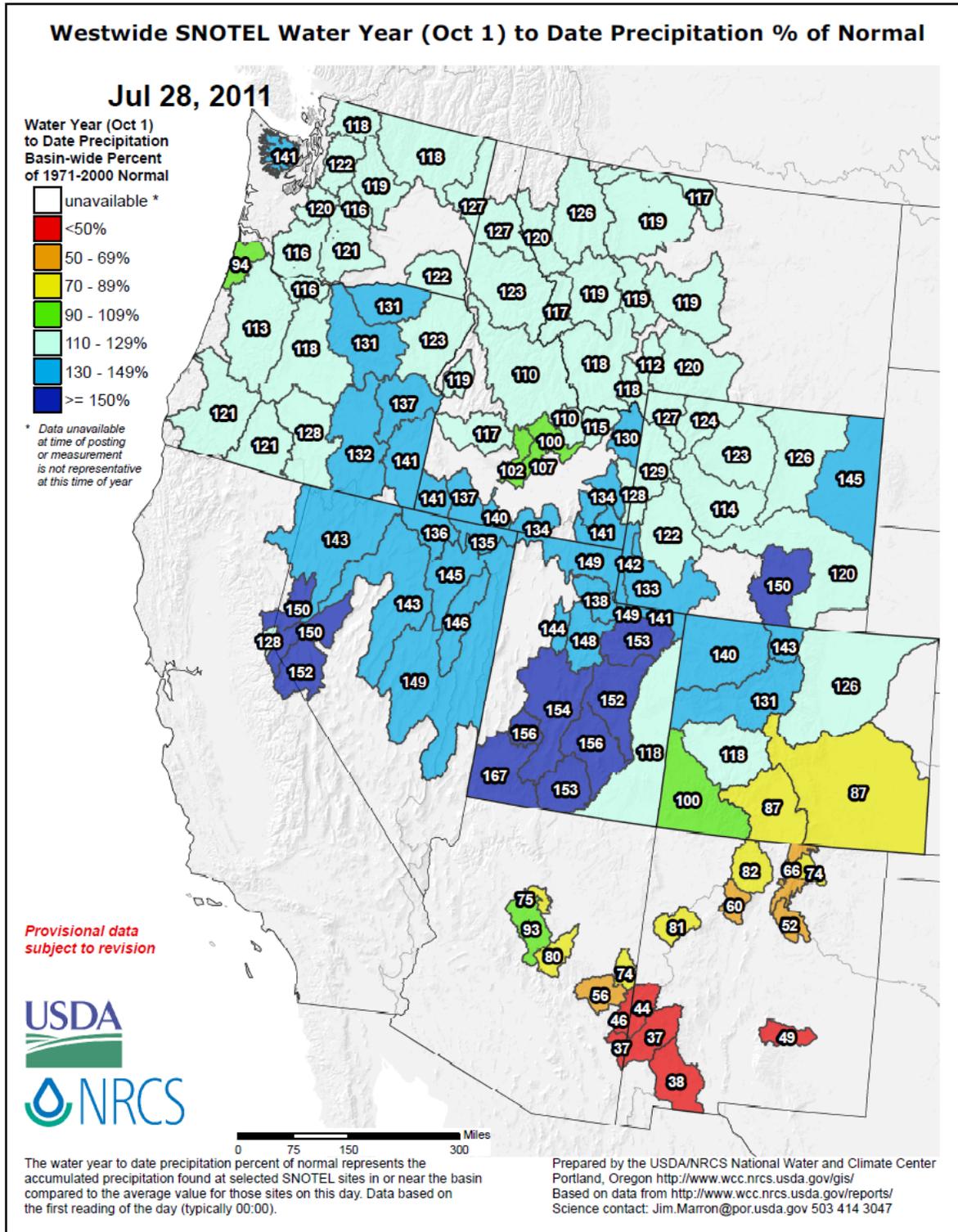


Fig 3b: For the 2011 Water-Year that began on 1 October 2010, the greatest deficits are found over the extreme southern reaches of the Southwest. Areas with the highest values are found over the Great Basin, Cascades, Sierra, and parts of Northern and Central Rockies. These values are more or less locked in (static) for the remainder of the summer with the possible exception of Arizona and New Mexico due to the influence of the Southwest Monsoon. Some improvement has occurred over central Arizona during the past two week.

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

U.S. Drought Monitor

July 26, 2011
Valid 8 a.m. EDT

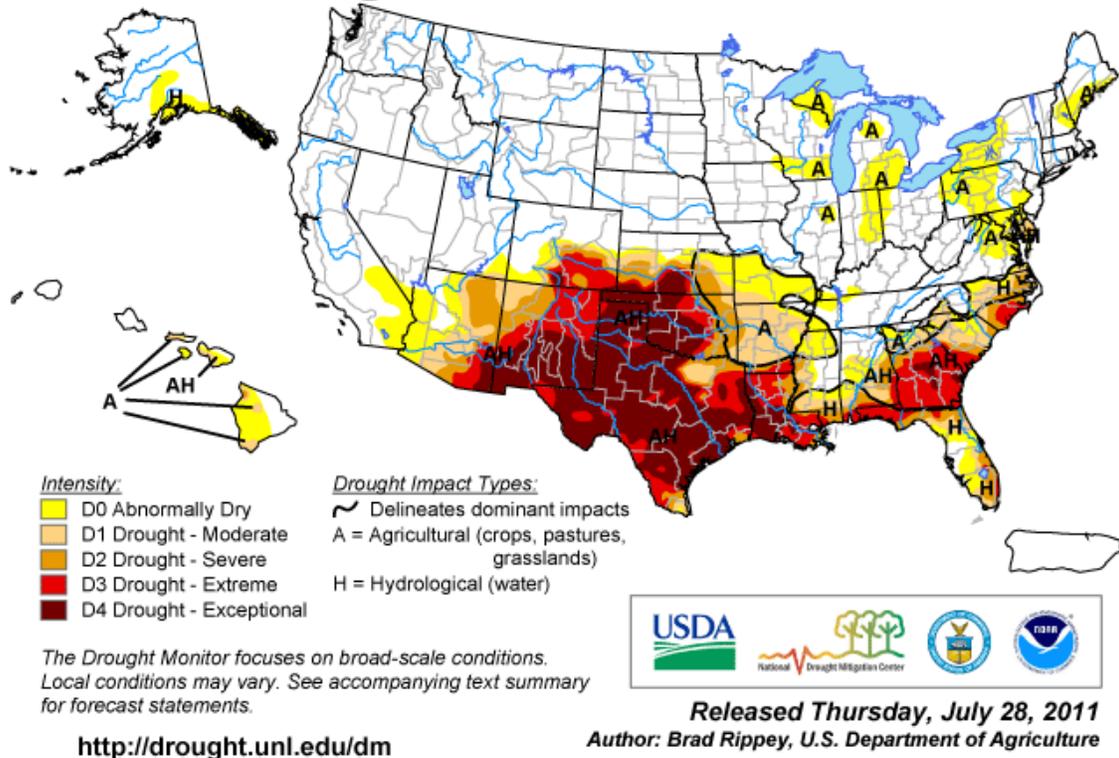


Fig. 4: Current Drought Monitor weekly summary. The exceptional D4 levels of drought are found over southeast Arizona, New Mexico, extreme southeast Colorado, Texas, Oklahoma, Louisiana, and Georgia. Ref: <http://www.drought.unl.edu/dm/monitor.html>.

Agriculture Drought News

July 21, [South central Kansas](#). Alfalfa is not growing as tall as it should before blooming, due to the lack of moisture.

July 22, [South Carolina](#). The corn crop statewide was yielding 50 to 70 percent less than usual while hay crops were down 30 to 50 percent.

July 15, [Southwestern Oklahoma](#). Oklahoma Bureau of Narcotics agents weren't finding any marijuana plots because it's too dry to grow crops without irrigation. I suppose growers can't participate in federal aid programs if/when the area qualifies.

July 18, [Southwestern Oklahoma](#). A hay production company in Elgin devised an alternative feed comprised of alfalfa, grass and baled corn and milo that is helping cattle put on weight.

July 18, [Southwestern Missouri](#). One farmer reported that his hay cutting was down by about a third. A farm supply store was selling more supplements for livestock and stock tanks than usual.

July 20, [Oklahoma](#). Horse owners are hard-pressed to find hay for their horses. Some horse owners have dumped their horses because they can't afford to feed them.

July 15, [Louisiana](#). Drought and heat discouraged cattle from eating as much hay as they normally would, which is reflected in the lighter milk production. Hay and rice crops are threatened by drought. Water supplies are contaminated by salt, abundance of wildfires, etc.

July 22, [Southern Colorado](#). Winter wheat yields are expected to be down, while losses of cool season grasses reached 75 percent.

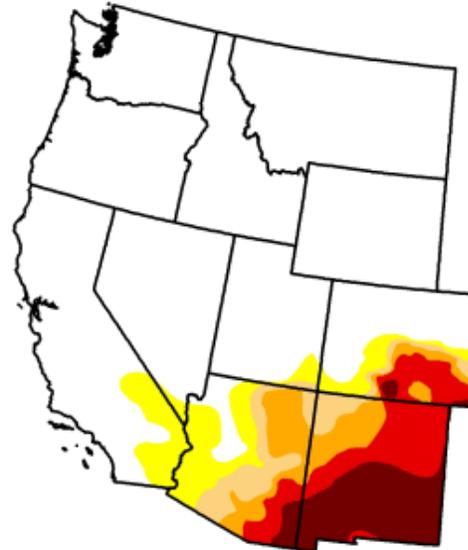
U.S. Drought Monitor

West

July 26, 2011
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	74.71	25.29	19.01	15.46	11.11	5.55
Last Week (07/19/2011 map)	74.71	25.29	19.01	15.52	11.03	5.59
3 Months Ago (04/26/2011 map)	75.48	24.52	20.07	13.35	7.09	0.00
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 (07/20/2010 map)	68.98	31.02	9.64	0.65	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>



Released Thursday, July 28, 2011
Brad Rippey, U.S. Department of Agriculture

Fig. 4a: 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

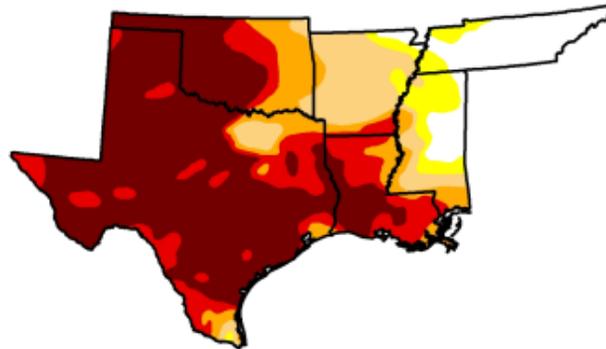
U.S. Drought Monitor

South

July 26, 2011
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	9.44	90.56	85.25	73.95	63.56	47.93
Last Week (07/19/2011 map)	12.21	87.79	80.28	71.23	62.57	47.48
3 Months Ago (04/26/2011 map)	17.47	82.53	74.25	64.80	44.26	9.51
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 (07/20/2010 map)	72.71	27.29	12.01	4.38	1.42	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, July 28, 2011
Brad Rippey, U.S. Department of Agriculture

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

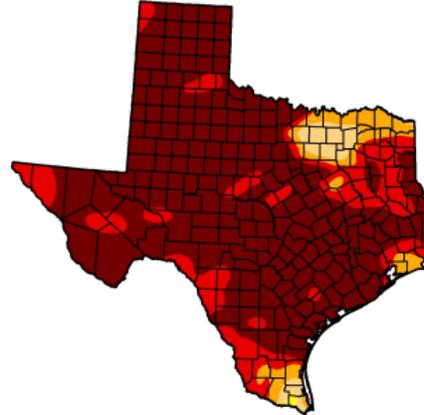
Fig. 4b: Drought Monitor for the South-Central States with statistics over various time periods. This region has shown some deterioration in all drought categories over the past week. Ref: http://www.drought.unl.edu/dm/DM_south.htm

Weekly Snowpack and Drought Monitor Update Report

U.S. Drought Monitor
Texas

July 26, 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	99.85	96.88	91.65	75.23
Last Week (07/19/2011 map)	0.00	100.00	88.96	85.78	91.19	75.15
3 Months Ago (04/26/2011 map)	0.00	100.00	100.00	94.97	70.42	17.16
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 (07/20/2010 map)	82.43	17.57	7.37	0.61	0.00	0.00



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://drought.unl.edu/dm>



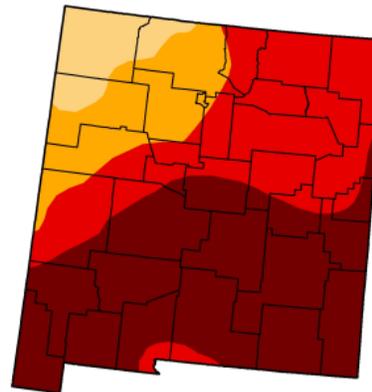
Released Thursday, July 28, 2011
Brad Rippey, U.S. Department of Agriculture

Fig. 4c: Currently, 75% of Texas is experiencing “Exceptional” D4 drought. Almost 97% of the state is in D3 and D4 drought! Ref: http://www.drought.unl.edu/dm/DM_state.htm?TX,S

U.S. Drought Monitor
New Mexico

July 26, 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	93.24	79.34	47.76
Last Week (07/19/2011 map)	0.00	100.00	100.00	93.24	79.00	48.10
3 Months Ago (04/26/2011 map)	0.00	100.00	96.54	74.67	55.61	0.00
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 (07/20/2010 map)	47.23	52.77	23.97	0.00	0.00	0.00



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://drought.unl.edu/dm>

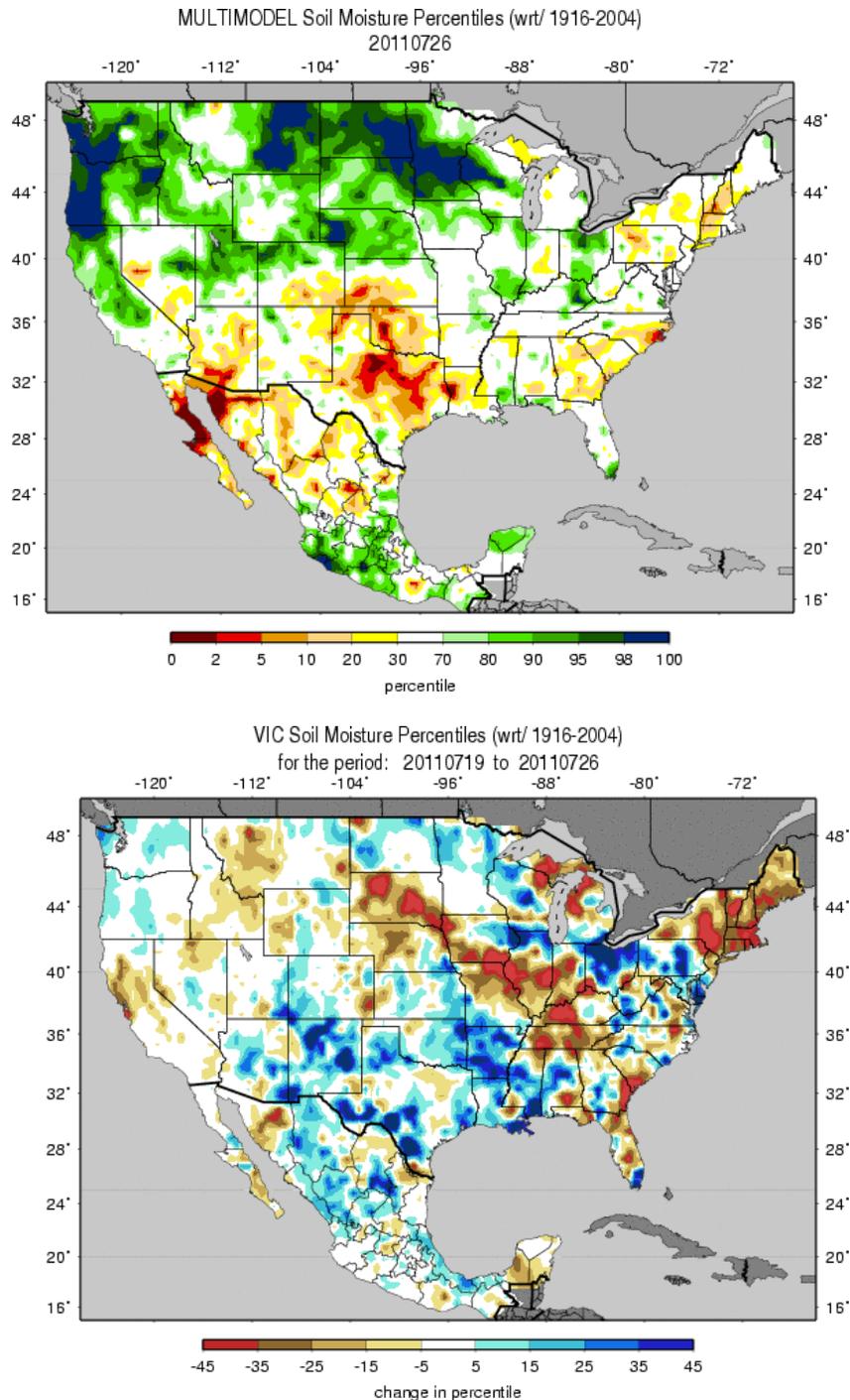


Released Thursday, July 28, 2011
Brad Rippey, U.S. Department of Agriculture

Fig. 4d: 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

Note: Although monsoon showers have reduced the active fires in New Mexico, many restriction exist for accessing the National Forests for recreation.

Weekly Snowpack and Drought Monitor Update Report



Figs. 5a and 5b: Soil Moisture ranking in percentile as of 26 July (top) shows moist conditions over much of the Northern Tier States east of the Mississippi River with dryness over the Southern Plains. A rather complex pattern of moistening and drying occurred this week across the nation (bottom).

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

Weekly Snowpack and Drought Monitor Update Report

Soil Climate Analysis Network (SCAN)

Station (2082) MONTH=2011-06-28 (Daily) NRCS National Water and Climate Center - Provisional Data - subject to revision
Thu Jul 28 06:58:16 PDT 2011

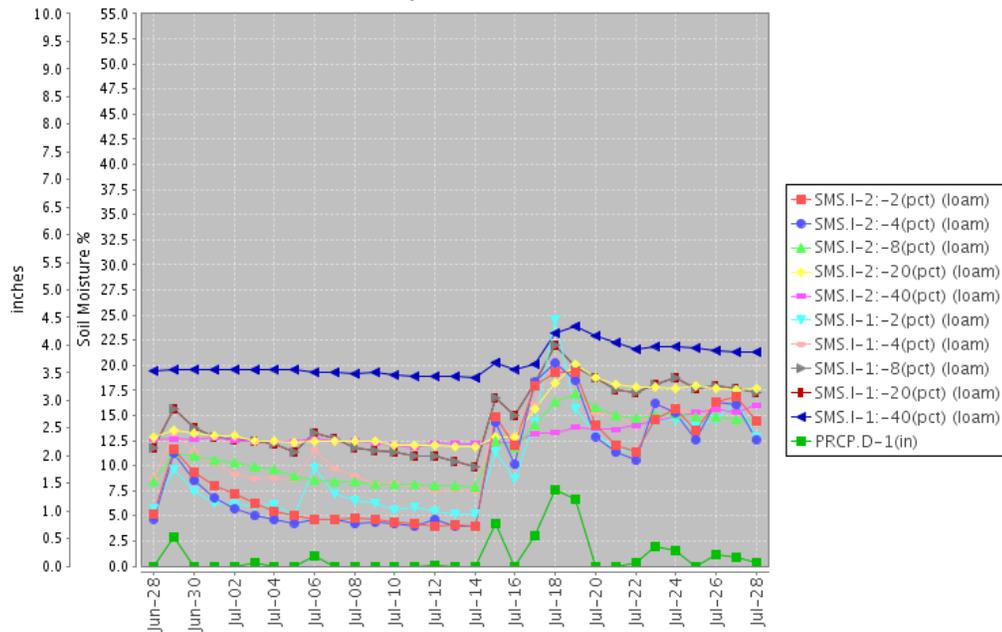


Fig. 6a: This NRCS resource shows a site in Coastal Mississippi with improving soil moisture as heavy rains dominated during mid-July. Ref: <http://www.wcc.nrcs.usda.gov/nwcc/site?sitenum=2082&state=ms>

Station (2022) MONTH=2011-06-28 (Daily) NRCS National Water and Climate Center - Provisional Data - subject to revision
Thu Jul 28 07:01:37 PDT 2011

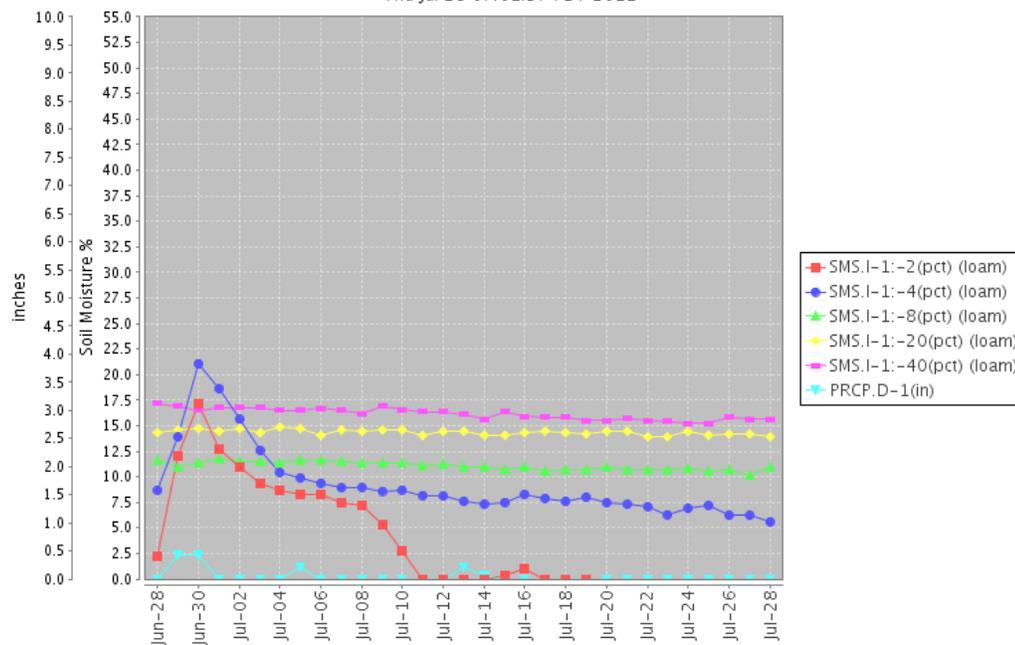


Fig. 6b: This SCAN station is located in central Oklahoma shows a steady decline in soil moisture as the drought intensifies. Ref: <http://www.wcc.nrcs.usda.gov/nwcc/site?sitenum=2022&state=ok>

Weekly Snowpack and Drought Monitor Update Report

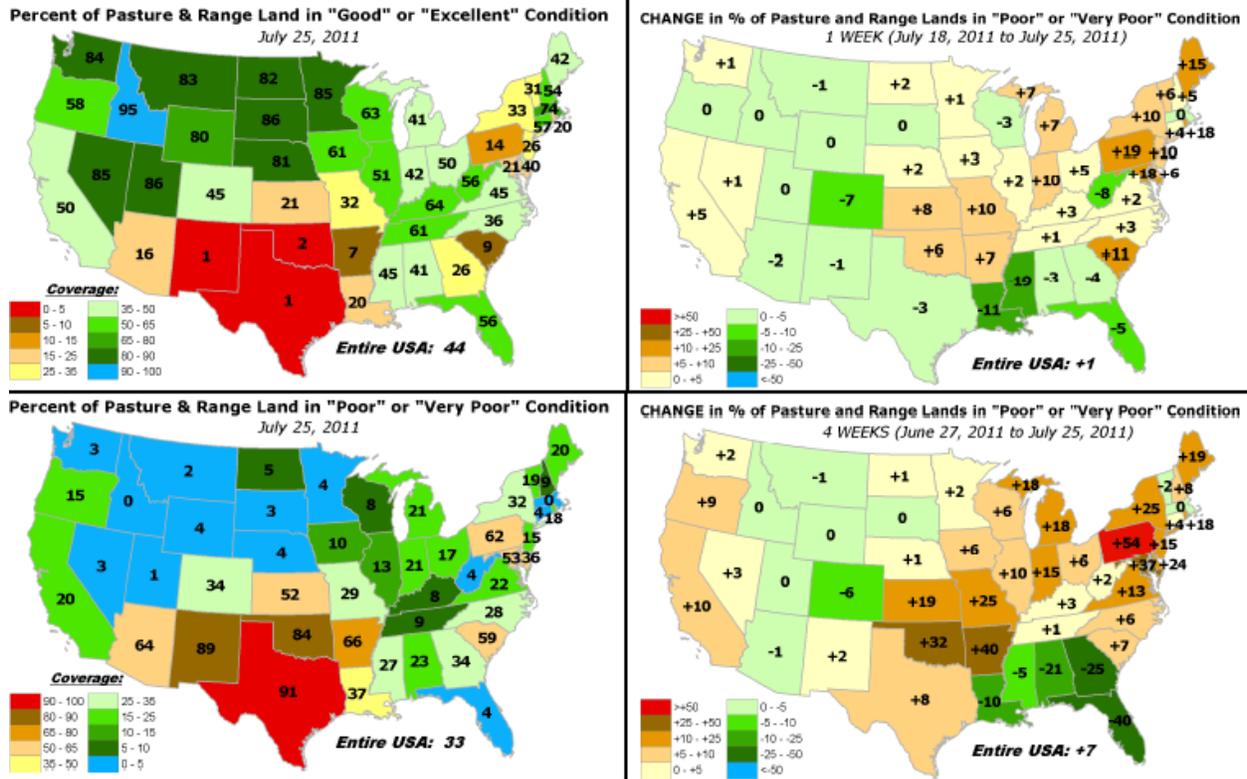


Fig. 7: Percent and changes to pasture and range lands show the depth of the Texas, New Mexico, and Oklahoma drought.

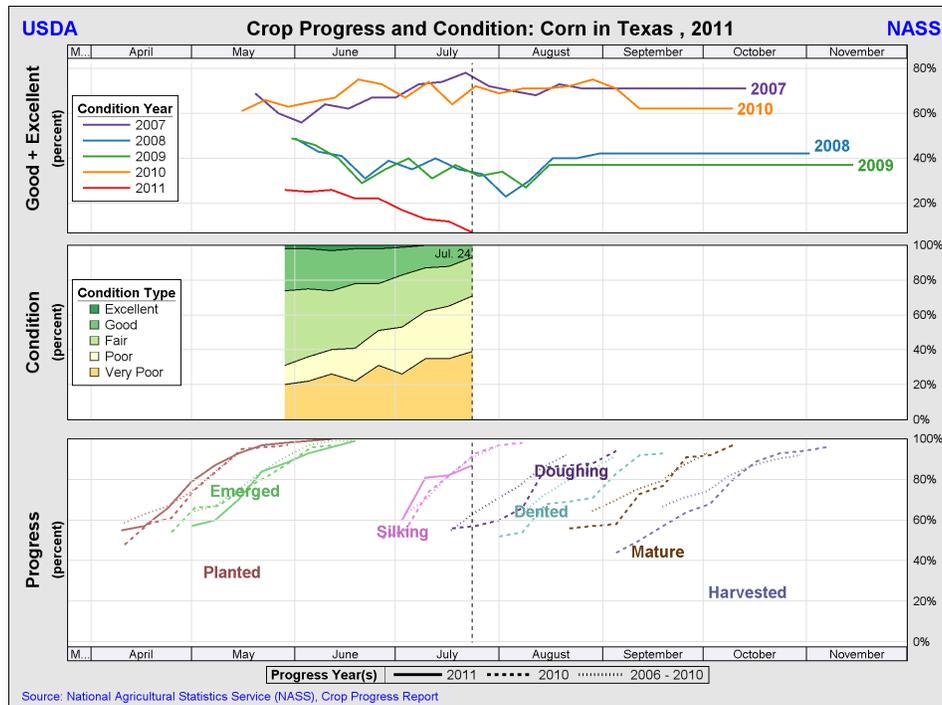


Fig. 7a: This figure shows the impact of Texas' drought on corn as compared to the previous several years. For more charts, see http://www.nass.usda.gov/Charts_and_Maps/Crop_Progress_and_Condition/2011/TX_2011.pdf.

Weekly Snowpack and Drought Monitor Update Report

Wednesday, July 27, 2011

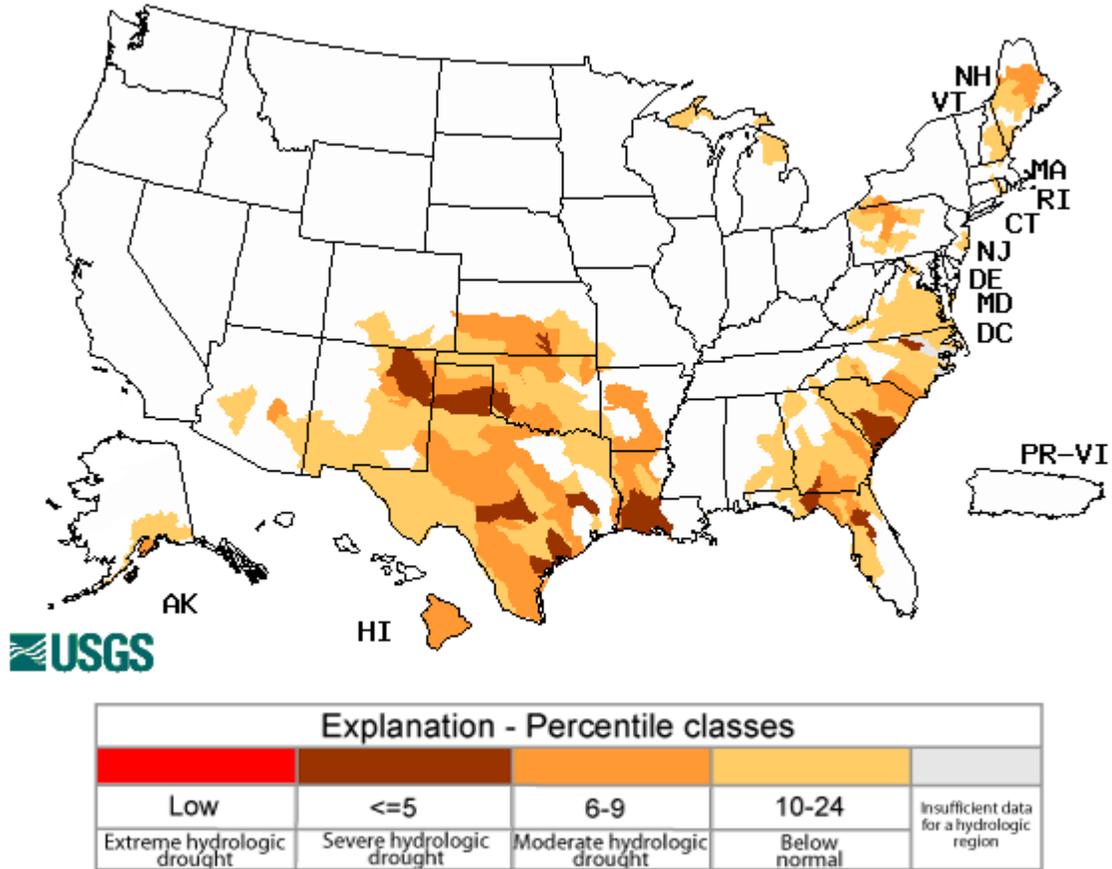


Fig. 8: Map of below normal 7-day average streamflow compared to historical streamflow for the day of year. Portions of the Southern Plains, New Mexico, and Coastal Southeastern States are experiencing severe conditions. Ref: <http://waterwatch.usgs.gov/?m=dryw&r>.

Weekly Snowpack and Drought Monitor Update Report

National Drought Summary -- July 26, 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/>.

Weekly Weather Summary: A record-setting heat wave gripped most areas from the Plains to the East Coast. The combination of high temperatures, oppressive humidity, and a lack of overnight cooling resulted in significant stress on humans, animals, and crops. In contrast, cool weather prevailed in the Pacific Coast States. Meanwhile, little or no rain fell from the southern Plains into the lower Ohio Valley. The combination of heat and a lack of rain caused further devastation in the drought-ravaged south-central U.S. and brought the season's first round of stress to some Midwestern crops. The Midwest's problems were compounded by the fact that for some corn and soybeans, the heat wave coincided with the reproductive stage of development. Late in the week, however, beneficial rain fell across an area of emerging dryness from Iowa into the lower Great Lakes region. Areas to the south, however, including the middle Mississippi Valley, remained dry. Hot weather also contributed to an increase in crop stress in parts of the East. Rain tempered the heat's effects in some areas. Farther west, beneficial monsoon showers dotted the Southwest.

The Midwest and Northeast: Record-setting heat affected both regions for several days. On July 18, Rochester, Minnesota, set an all-time record with a dew point of 83°F (previously, 82°F on July 12 and 13, 1995). On July 19, Aberdeen, South Dakota, reported its first triple-digit heat since July 7, 2007, while Moline, Illinois, registered a 100-degree day for the first time since July 17, 2006. Even more impressively, Rockford, Illinois (100°F on July 19), tallied its first high of 100°F or greater since July 10, 1989, while Indianapolis, IN (100°F on July 21), experienced its hottest day since August 16, 1988. Later, record-shattering heat spread into the East. On July 22, highs soared to 108°F in Newark, New Jersey, and downtown Baltimore, Maryland. Newark's former all-time record of 105°F had been set on August 9, 2001, and several earlier dates. Downtown Baltimore's reading missed the Maryland state record by 1°F. All-time-record highs were also set or tied on July 22 in locations such as Virginia's Dulles Airport (105°F; previously, 104°F on August 20, 1983, and July 16, 1988); Bridgeport, Connecticut (103°F; tied the record set on July 22, 1957); Reading, Pennsylvania (106°F; previously, 105°F on August 7, 1918); and Georgetown, Delaware (104°F; previously, 102°F on July 31, 1954, and July 6, 2010). A July record was set in Portland, Maine (100°F on July 22), where it was the hottest day since August 2, 1975 (103°F). In Pittsburgh, Pennsylvania (96°F on July 22), it was the hottest day since August 15, 1995. In some locations, including Reading (102, 106, and 100°F from July 21-23), daily-record highs were set on 3 days in a row. At the height of the heat wave, all-time records for the highest minimum temperature were set or tied in numerous locations, including Newark (86°F on July 22); Washington, D.C. (84°F on July 23 and 24); New York's Central Park (84°F on July 22); and Scranton, Pennsylvania (80°F on July 22). In Omaha, Nebraska, the minimum temperature remained at 80°F or higher from July 17-20, marking the second-longest such streak on record behind 8 days from July 18-25, 1934. However, as the heat relaxed, heavy rain erupted in a few areas, especially from eastern Iowa into northern

Weekly Snowpack and Drought Monitor Update Report

Illinois. In particular, July 23 was the wettest day on record in Chicago, Illinois, where 6.86 inches fell (previously, 6.64 inches on September 13, 2008).

The heat wave struck at an inopportune time for crops, resulting in a broad expansion of D0A. In Pennsylvania, the portion of the corn crop rated in very poor to poor condition jumped from 11 to 30% between July 17 and 24. During the same period, Missouri noted an increase from 16 to 22%. By July 24, the portion of pastures rated in very poor to poor condition stood at 62% in Pennsylvania and 53% in Maryland. Nearly all (92%) of Pennsylvania's topsoil moisture was rated very short to short, along with 80% in Maine, 73% in New York, 72% in Michigan, and 53% in Indiana.

The Southeast: Scattered showers helped to offset the effects of heat in some areas. Rainfall was heaviest in the central Gulf Coast region and along the western slopes of the central and southern Appalachians, resulting in some modest improvements in the drought depiction. Meanwhile, short-term dryness (D0A) began to push northeastward across the Mid-South, reaching into central Missouri and western sections of Kentucky and Tennessee. In Arkansas, nearly two-thirds (66%) of the pastures were rated in very poor to poor condition on July 24, while topsoil moisture was 86% very short to short. Ft. Smith, Arkansas, reported 22 consecutive days of 100°F heat (and counting) from July 5-26, shattering its previous record of 17 days in July 1934. In the Southeast, some lingering poor crop conditions were noted on July 24. In Alabama, for example, nearly one-third of the peanuts (32%) and cotton (33%) were rated very poor to poor. On the same date, 37% of Georgia's cotton was rated very poor to poor. In Florida, concern still exists for Lake Okeechobee, which had an average surface elevation of 10.26 feet on July 26. This level is 3.71 feet below the level observed a year earlier, on July 26, 2010.

The Central and Southern Plains: Disastrously hot, dry conditions persisted across much of the drought region, which extended as far north as southeastern Colorado and the southern half of Kansas. In northern Texas, Amarillo's tally of 100°F readings reached 30 days on July 26; the former annual record of 26 days had been set in 1953. Elsewhere in Texas, Tyler recorded 29 consecutive days (and counting) of 100-degree heat from June 28 – July 26, demolishing its record of 20 days in a row set from July 15 – August 3, 1998. From 1995-2010, the coverage of Texas rangeland and pastures in very poor to poor condition peaked at 81% in August 1998 and 2006; on July 24, 2011, coverage stood at 91%. The rangeland and pasture situation was nearly as bad in Oklahoma (84% very poor to poor) and Kansas (52%). One of the region's hardest-hit row crops was cotton, with 79% rated very poor to poor in Oklahoma and 59% in Texas. Spotty showers dotted western and southern Texas, as well as the central and southern High Plains, but in many cases temporary drought relief was more than offset by the relentless heat. One exception was extreme southeastern Texas, where heavy rain took a bite out of the extreme to exceptional drought.

The Southwest: A plume of tropical moisture triggered scattered monsoon showers. Some of the most widespread rain fell from southeastern Arizona into northeastern New Mexico and southeastern Colorado. However, only minimal changes were introduced, as the rain provided only limited and localized relief from a serious drought situation. On July 24, USDA rated 89% of New Mexico's rangeland and pastures in very poor to poor condition.

Puerto Rico, Hawaii, and Alaska: No changes were introduced in Puerto Rico (no dryness or drought), Hawaii, or Alaska. Hawaii is currently in the midst of its dry season; long-term rainfall

Weekly Snowpack and Drought Monitor Update Report

deficits persist across portions of the central and eastern Hawaiian Islands. Meanwhile, patchy dryness lingered across south-central and southeastern Alaska.

Looking Ahead: During the next 5 days (July 28 – August 1), Tropical Storm Don will cross the Gulf of Mexico, contributing to late-week rainfall in the central and western Gulf Coast States. The degree of drought relief provided by Don will depend upon the storm's intensity, as well as the track and forward speed. Meanwhile, the Southwestern monsoon circulation interacting with a cold front will produce widespread showers and thunderstorms from the Four Corners region into the northern Plains, Midwest, and Northeast. Showers will increase in coverage over the Southeast, but hot, mostly dry conditions will persist from the southern Plains into the Ohio Valley and northern Mid-Atlantic region.

The CPC 6- to 10-day outlook for August 2-6 calls for hotter-than-normal weather east of a line from New Mexico to Minnesota, excluding New England, while below-normal temperatures will be confined to the northern Rockies, northern California, and the Pacific Northwest. Meanwhile, wetter-than-normal conditions will arc across the Four Corners region, northern Plains, Midwest, Ohio Valley, and southern Mid-Atlantic States, but the remainder of the U.S. will experience near- to below-normal rainfall.

Author: [Brad Rippey, U.S. Department of Agriculture](#)

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 July 27, 2011