United States Department of Agriculture

NRCS

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

Weekly Report - Snowpack / Drought (& Flood) Monitor Update **Date: 17 June 2011**

SNOTEL SNOWPACK AND PRECIPITATION SUMMARY

Snow: SNOTEL Snow-Water Equivalent (SWE) percent of normal values for 16 June 2011 shows very high values for many SNOTEL basins since seasonal snowmelt has been delayed due to cooler than average temperatures for this time of year. Since we are well past the peak SWE, values can increase statistically but in most cases the "total" SWE is actually less than the preceding week. However, with the onset any hot weather or heavy rainfall, flooding potential increases dramatically as a result of this abundant snow pack (Fig. 1). 7-Day snow depth changes reflect rapid melting of one to three feet. As a result, some significant flooding can be anticipated across portions of the West in the coming weeks but the threat is lessening in scope. For the current flooding conditions, see: http://www.hpc.ncep.noaa.gov/nationalfloodoutlook/ (Fig.1a).

Photo was taken by an unidentified photographer on Friday, June 3, 2011.
Location is ALT-14 near the Big Horn / Sheridan County Line in north-central Wyoming (near the 9,430-foot summit).
This is also near the headwaters of the Tongue River, which drains into the Yellowstone River near Miles City, MT, which drains into the Missouri River just above Williston, ND.

Temperature: SNOTEL and ACIS 7-day temperature anomaly shows a rather cool week over most of the West with the exception of slightly above normal temperatures over the Colorado and New Mexico Rockies (fig. 2). ACIS 7-day average temperature anomalies show that the

greatest positive temperature departures across southeast New Mexico (>+6°F) and the greatest negative departures over portions of Montana (<-8°F) (Fig. 2).

Precipitation: ACIS 7-day average precipitation amounts for the period ending 15 June shows the bulk of the heaviest precipitation confined to the Northern Tier States (especially over Montana and northern Wyoming) (Fig. 3). 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, and parts of Northern and Central Rockies. Week to week changes become less likely during the remainder of the water-year (Fig 3b).

The West: The ample snowpack is still replenishing the water storage of the region, with the melt off taking place even more rapidly with warmer temperatures. Montana continues to stay very wet with more than 200 percent of normal precipitation over the last 30 days for the entire state. Intensification of drought conditions in Colorado included the expansion of D2 and D3 over eastern Colorado while the area of abnormally dry conditions along the western slopes was pushed to the west. With several locations in southeast Arizona recording the driest January to June period of record, D4 was expanded to include more of southeast Arizona along the New Mexico border. Author: Brian Fuchs, National Drought Mitigation Center.

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

DROUGHT IMPACTS DEFINITIONS (http://drought.unl.edu/dm/classify.htm)
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 4e).

U.S. HISTORICAL STREAMFLOW
http://water.usgs.gov/cgi-bin/waterwatch?state=us&map_type=dryw&web_type=map.

This map, (Fig. 7) 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://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

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

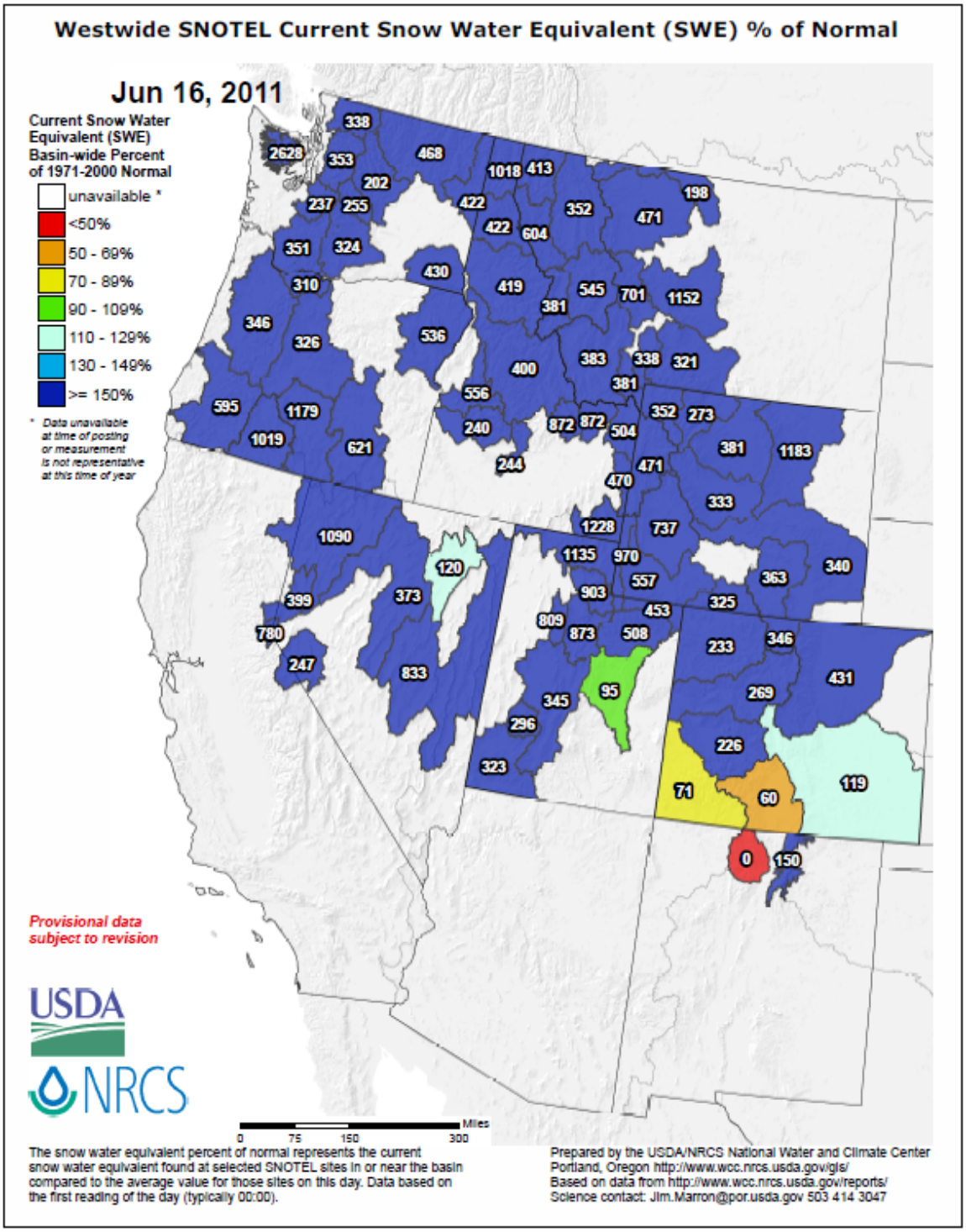


Fig. 1: SNOTEL Snow-Water Equivalent (SWE) percent of normal values for 16 June 2011 shows very high values for many SNOTEL basins since seasonal snowmelt has been delayed due to cooler than average temperatures for this time of year. Since we are well past the peak SWE, values can increase statistically but in most cases the "total" SWE is actually less than the preceding week. However, with the onset any hot weather or heavy rainfall, flooding potential increases dramatically as a result of this abundant snow pack. Ref: http://www.wcc.nrcs.usda.gov/ftpref/data/water/wcs/gis/maps/west_swepctnormal_update.pdf

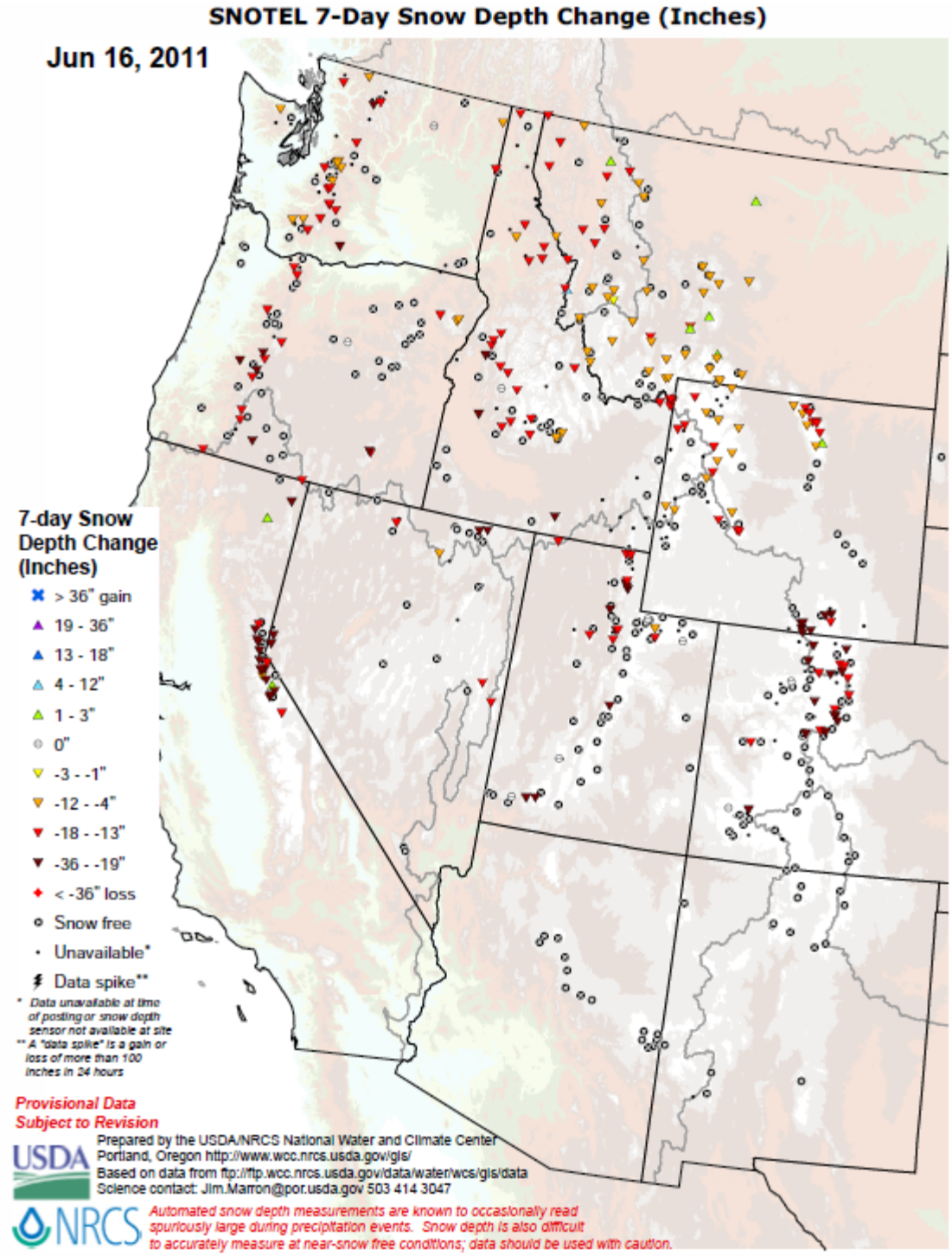


Fig. 1a: 7-Day snow depth changes reflect rapid melting of one to three feet. As a result, some significant flooding can be anticipated across portions of the West in the coming weeks but the threat is lessening in scope *as the snowpack diminishes*.

For the current flooding conditions, see: http://www.hpc.ncep.noaa.gov/nationalfloodoutlook/.

Ref: http://www.wcc.nrcs.usda.gov/ftpref/data/water/wcs/gis/maps/west_snowdepth_7ddelta.pdf

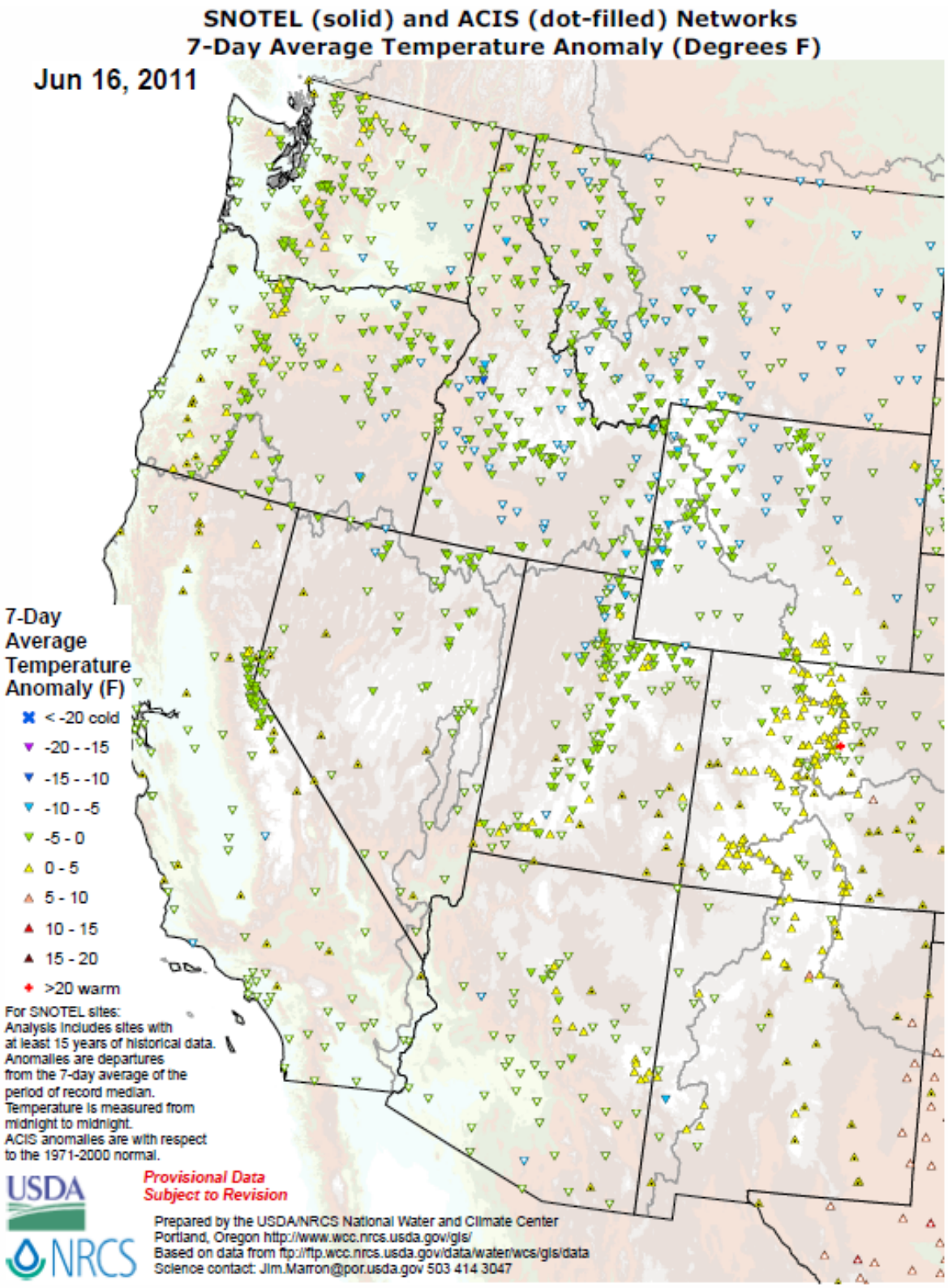


Fig. 2: SNOTEL and ACIS 7-day temperature anomaly shows a rather cool week over most of the West with the exception of slightly above normal temperatures over the Colorado and New Mexico Rockies. Ref: http://www.wcc.nrcs.usda.gov/ftpref/data/water/wcs/gis/maps/WestwideTavg7dAnomalyAcis.pdf

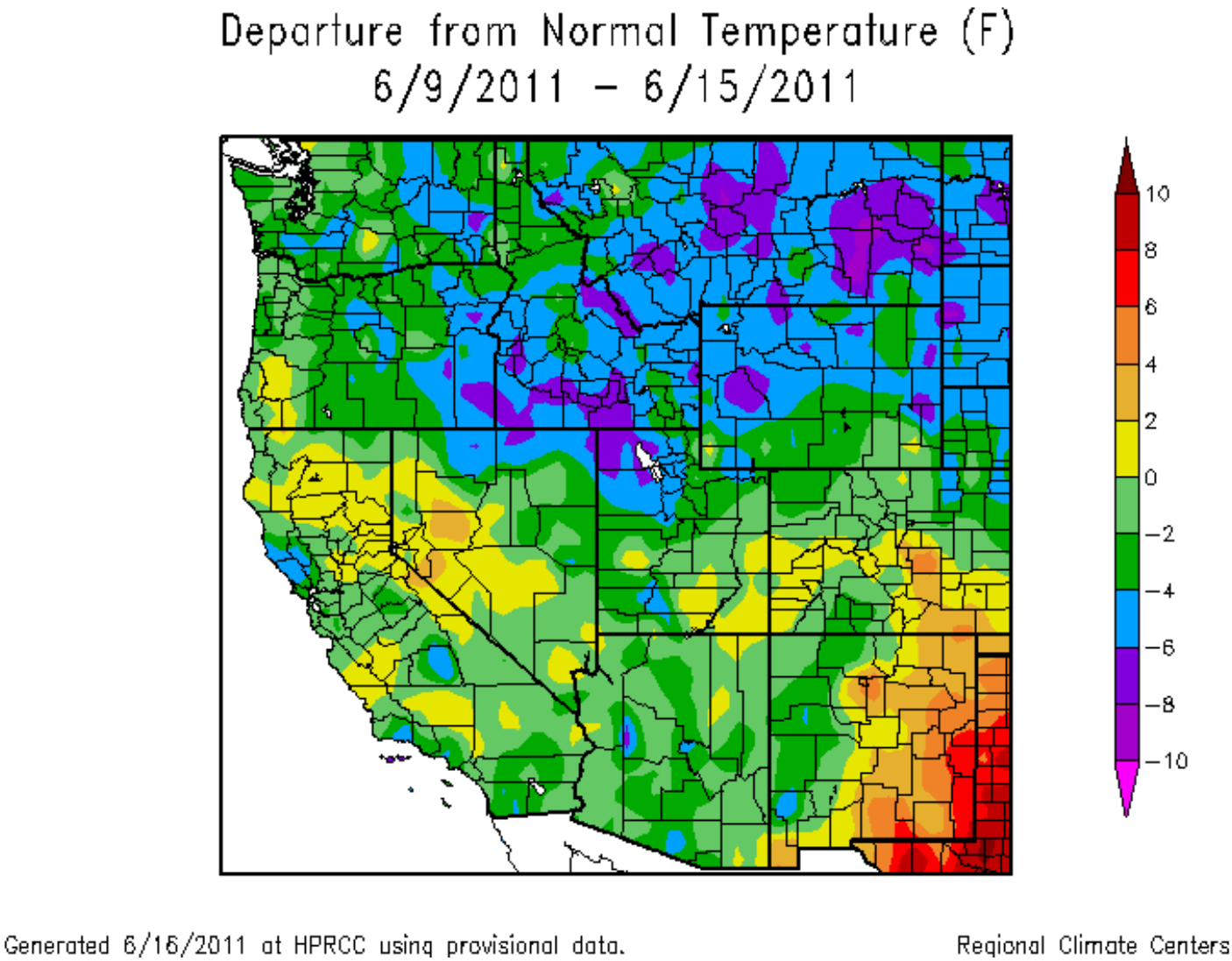
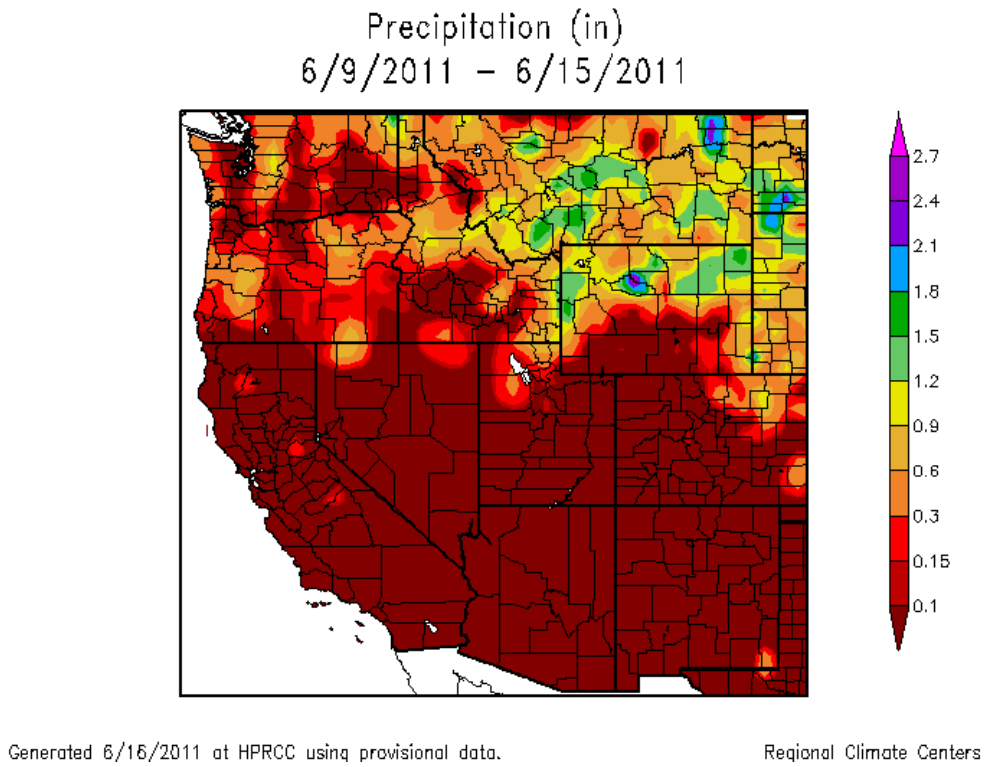


Fig. 2a: ACIS 7-day average temperature anomalies show that the greatest positive temperature departures across southeast New Mexico (>+6°F) and the greatest negative departures over portions of Montana (<-8°F).

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



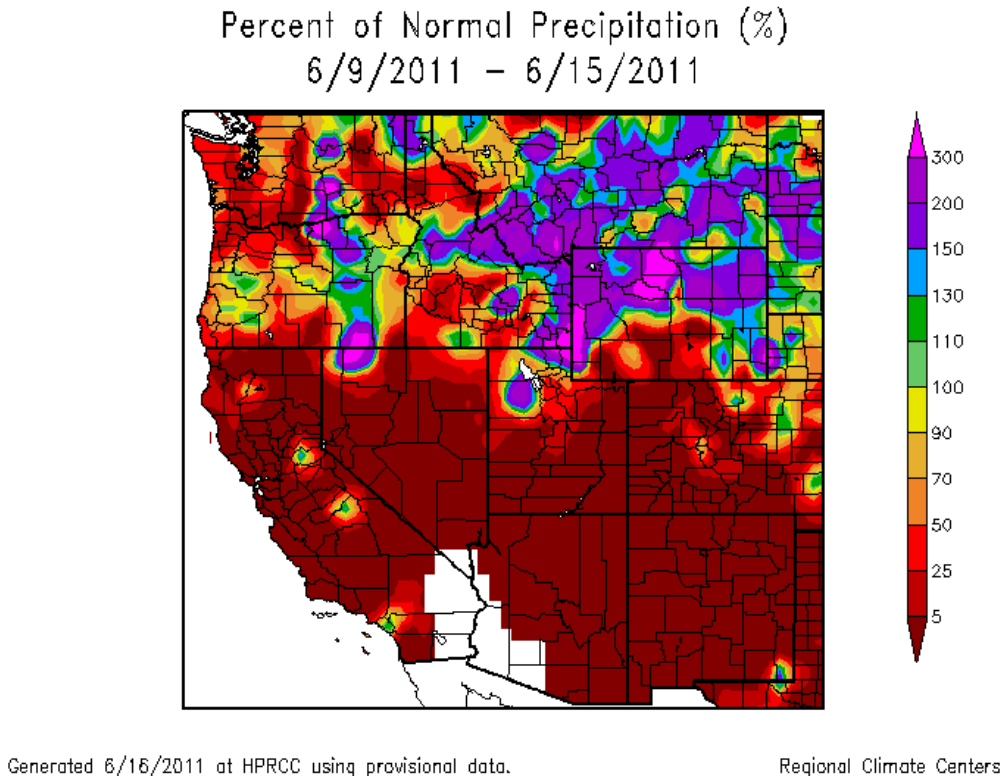


Fig. 3 and 3a: ACIS 7-day average precipitation amounts for the period ending 15 June shows the bulk of the heaviest precipitation confined to the Northern Tier States (especially over Montana and northern Wyoming) (Fig. 3). In terms of percent of normal, the precipitation was highest in a large swatch extending from east of the Cascades to the Northern High Plains (Fig 3a).

Ref: http://www.hprcc.unl.edu/maps/current/

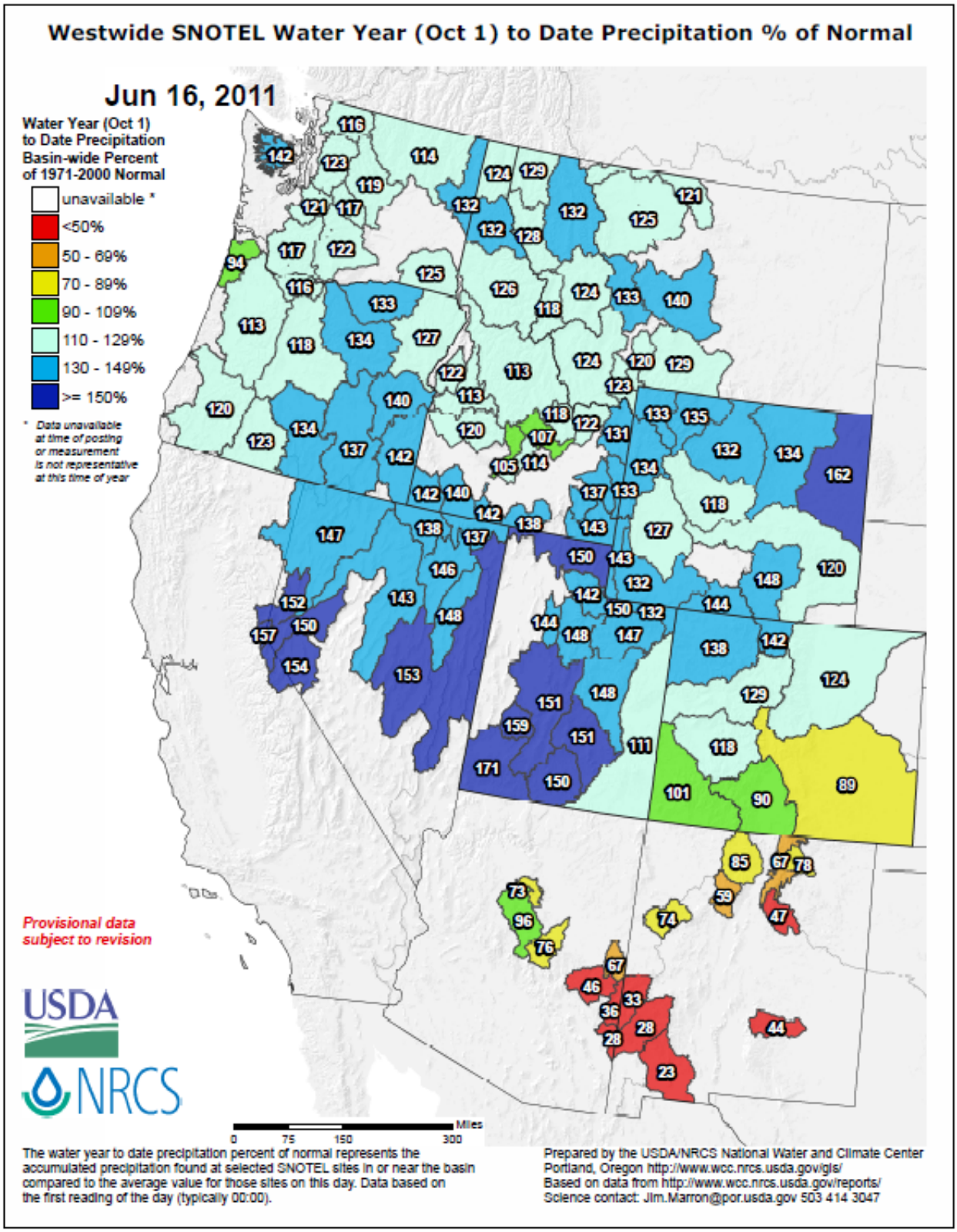


Fig 3b: For the 2011 Water-Year that began on 1 October 2010, the greatest deficits are found over the extreme southern reaches of the Southwest. Areas with the highest values are found over the Great Basin, Cascades, and parts of Northern and Central Rockies. Week to week changes become less likely during the remainder of the water-year.

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

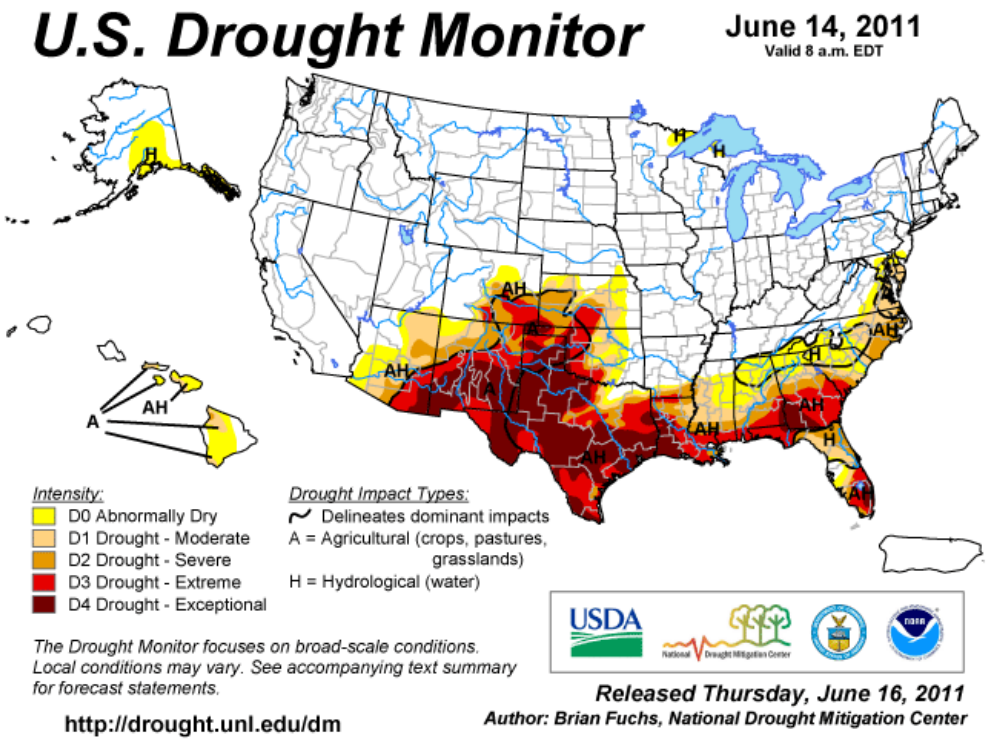
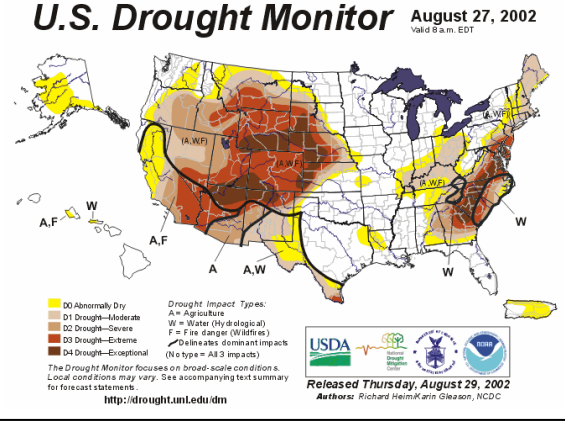


Fig. 4: Current Drought Monitor weekly summary. The exceptional D4 levels of drought are found over New Mexico, Texas, Oklahoma, Louisiana, Georgia, and Florida.
Ref: http://www.drought.unl.edu/dm/monitor.html

Date	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
06/14/11	66.95	33.05	27.12	21.79	16.42	9.03
06/07/11	67.68	32.32	26.77	21.32	15.74	7.80
05/31/11	68.95	31.05	25.56	20.69	14.68	6.25
05/24/11	68.67	31.33	25.47	20.26	13.46	5.62
05/17/11	67.69	32.31	26.35	20.68	13.18	6.04
05/10/11	66.19	33.81	26.42	20.53	12.48	5.94
05/03/11	66.22	33.78	26.39	19.26	11.66	3.12
04/26/11	65.70	34.30	26.59	18.50	10.86	1.66
09/24/02	31.90	68.10	52.72	35.70	18.79	3.29
09/17/02	28.58	71.42	53.50	37.09	19.92	3.88
09/10/02	28.94	71.06	54.63	38.04	20.52	5.00
09/03/02	32.08	67.92	49.95	36.13	21.43	6.23
08/27/02	36.68	63.32	49.31	35.28	23.50	7.41
08/20/02	35.10	64.90	49.05	35.11	23.71	7.85
08/13/02	31.46	68.54	50.50	35.35	23.42	7.45
08/06/02	31.51	68.49	50.09	35.78	23.22	6.98
07/30/02	28.68	71.32	50.45	34.65	22.50	6.11
07/23/02	28.15	71.85	51.48	35.91	22.55	5.99
07/16/02	34.32	65.68	48.53	34.03	21.31	5.52
07/09/02	36.16	63.84	47.79	33.14	20.51	5.51
07/02/02	36.88	63.12	48.14	34.66	20.92	5.29
06/25/02	37.74	62.26	47.82	33.47	19.91	3.50
06/18/02	54.04	45.96	31.79	31.79	17.93	2.48

Table: shows the percent of the contiguous US in various drought categories during the past few weeks as compared to the last great drought in 2002. Note that while the D3-D4 percentages are about 16.4%, at the height of the 2002 drought, these categories reached 23.7%. Another difference between these droughts is that the regional extent of the 2002 drought was more than double the current drought.



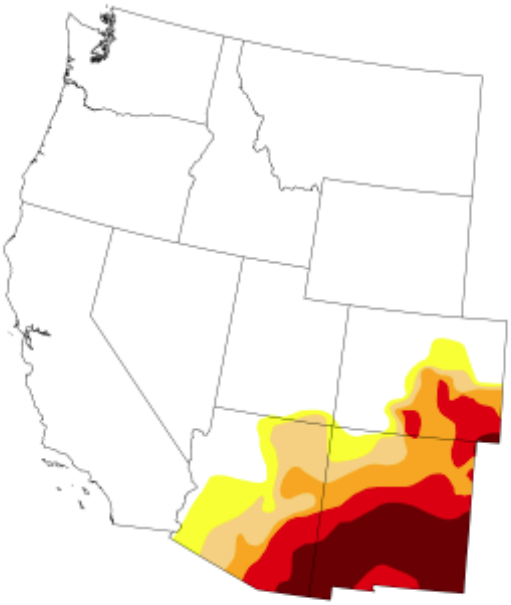
U.S. Drought Monitor

June 14, 2011
Valid 7 a.m. EST

West

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	78.53	21.47	17.94	14.04	9.85	5.22
Last Week (06/07/2011 map)	78.60	21.40	17.94	13.92	9.57	4.74
3 Months Ago (03/15/2011 map)	74.39	25.61	17.06	7.78	1.52	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 (06/08/2010 map)	68.88	31.12	13.38	3.39	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, June 16, 2011
Brian Fuchs, National Drought Mitigation Center

Fig. 4a: **Drought Monitor for the Western States with statistics over various time periods. Regionally there was no significant change during the past week.**

Ref: http://www.drought.unl.edu/dm/DM_west.htm

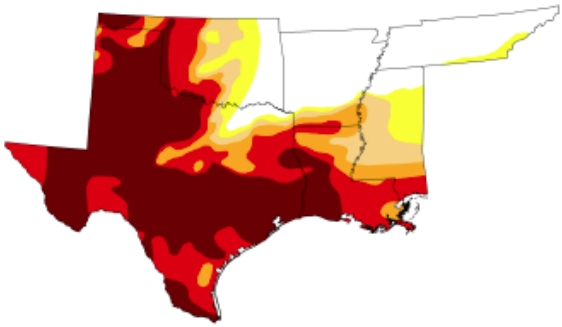
U.S. Drought Monitor

South

June 14, 2011
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	21.17	78.83	72.17	64.96	56.42	36.55
Last Week (06/07/2011 map)	21.94	78.06	72.36	64.67	54.75	32.36
3 Months Ago (03/15/2011 map)	9.54	90.46	72.50	44.16	13.23	0.00
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 (06/08/2010 map)	73.96	26.04	9.68	2.41	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, June 16, 2011
Brian Fuchs, National Drought Mitigation Center

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

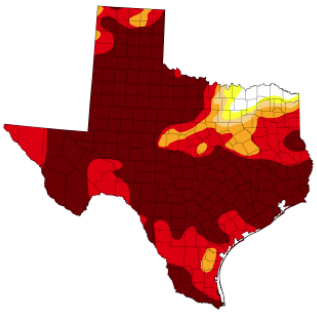
U.S. Drought Monitor

Texas

June 14, 2011
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	1.97	98.03	96.53	94.77	88.57	64.78
Last Week (06/07/2011 map)	1.97	98.03	96.53	94.05	85.41	57.83
3 Months Ago (03/15/2011 map)	3.23	96.77	83.75	56.98	17.13	0.00
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 (06/08/2010 map)	76.75	23.25	7.04	0.00	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, June 16, 2011
Brian Fuchs, National Drought Mitigation Center

Fig. 4c: Some more worsening of drought over the State of Texas this week.

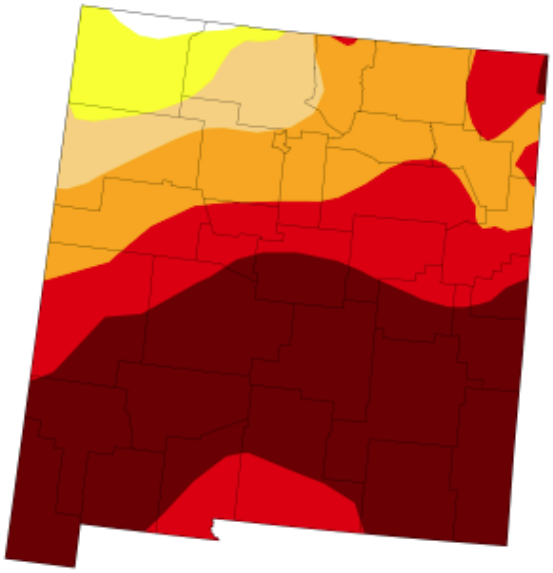
U.S. Drought Monitor

June 14, 2011
Valid 7 a.m. EST

New Mexico

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.75	99.25	93.98	87.35	67.86	44.90
Last Week (06/07/2011 map)	0.75	99.25	93.98	87.35	67.91	44.53
3 Months Ago (03/15/2011 map)	7.79	92.21	84.02	33.82	9.25	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 (06/08/2010 map)	81.91	18.09	0.02	0.00	0.00	0.00



Intensity:

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

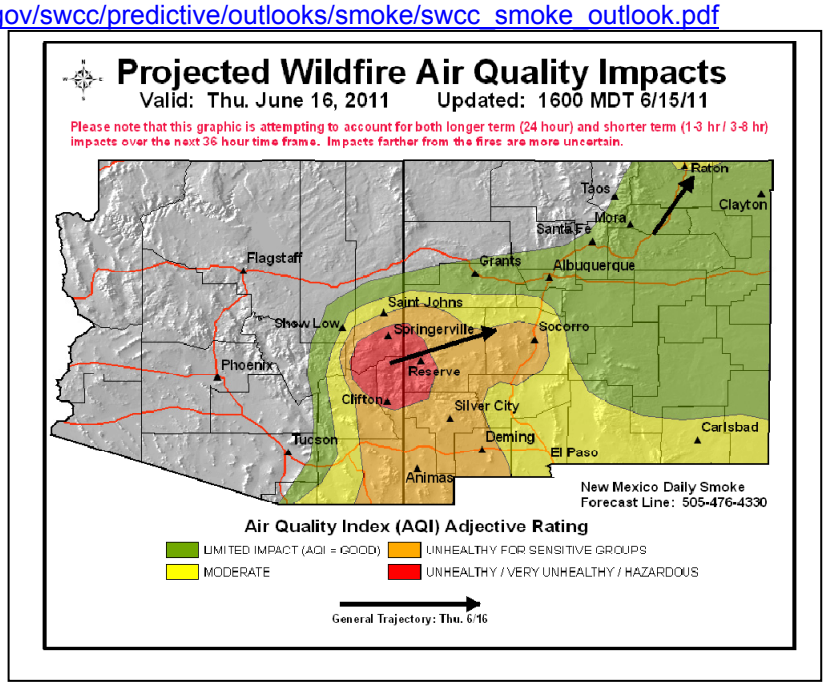
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

http://drought.unl.edu/dm

Released Thursday, June 16, 2011
Brian Fuchs, National Drought Mitigation Center

Fig. 4d: **Drought Monitor for New Mexico with statistics over various time periods. All but 0.75% of the state is in some sort of drought or water stressed situation.** Ref: http://www.drought.unl.edu/dm/DM_state.htm?NM,W

Note: Major fires in Arizona are spreading dense smoke over New Mexico:
http://gacc.nifc.gov/swcc/predictive/outlooks/smoke/swcc_smoke_outlook.pdf



Agriculture

Blueberries struggle in hot, dry weather
http://www.wtoc.com/Global/story.asp?S=14837444
June 3, **Southeastern Georgia**. The evapotranspiration rate was roughly 0.5 inches daily per acre, nearly outpacing irrigation systems and forcing blueberry growers to irrigate heavily.

Dairies deal with drought
http://www.lascrucesbulletin.com/index.php?pSetup=lascrucesbulletin&curDate=20110603&pageToLoad=showFreeArticle.php&type=art&index=04&title=Dairies+deal+with+drought
June 3, **Southern New Mexico**. The cost of alfalfa has risen, since it is a water-intensive crop, putting a burden on dairy farmers who need alfalfa for their livestock. Only 0.5 inches of precipitation fell on Las Cruces during the past year, leaving a deficit of 2.87 inches.

DeWitt farmers sweating it out as drought continues
http://www.cuerorecord.com/?Story=2937
June 7, **DeWitt County in southern Texas**. Some of the corn has failed, while other fields may yield 10 to 20 percent of average.

Drought has farmers sweating
http://www.andalusiastarnews.com/2011/06/08/drought-has-farmers-sweating/
June 8, **Southern Alabama**. Hay supplies for next winter were becoming depleted since there was no pasture for cattle to graze. Farmers were not able to get a first cutting of hay because there was insufficient moisture for the hay to grow. Some of the corn was already a complete loss.

Drought hurting local farmers
http://www.dailyworld.com/article/20110605/NEWS01/106050310/Drought-hurting-local-farmers?odyssey=tab|topnews|text|FRONTPAGE
June 4, **Southern Louisiana**. Farmers worry about their soybeans, corn and sweet potatoes and expect reduced yields.

Drought Hurts Tomato Growth
http://www.wtvy.com/alabamanews/headlines/Drought_Hurts_Tomato_Growth_123282523.html
June 6, S**outheastern Alabama**. Farmers irrigate their tomatoes daily, but can't provide enough water for them.

Drought in southwest Kansas wheat fields is worst since Dust Bowl
http://www.kansascity.com/2011/06/07/2934854/drought-hits-wheat-farmers-in.html
June 7, **Kansas**. The winter wheat harvest is anticipated to be 27 percent lower than 2010.

Drought Threatens Crops
http://www.klfy.com/story/14837063/drought-threatens-crops
June 3, **Southwestern Louisiana**. The lack of rainfall allows water from the Gulf to increase the salinity of area bays. Farmers irrigate with this water, which raises the amount of salt in the soil and harms crops. They desperately need rain to flush away the accumulated salt.

Drought Threatens to Overwhelm Texas
http://www.925thepatriot.com/cc-common/news/sections/newsarticle.html?feed=119078&article=8676180
June 8, **Texas**. The state is on track to experience its worst drought ever. Many ranchers were selling cattle early rather than buying expensive and increasingly scarce hay.

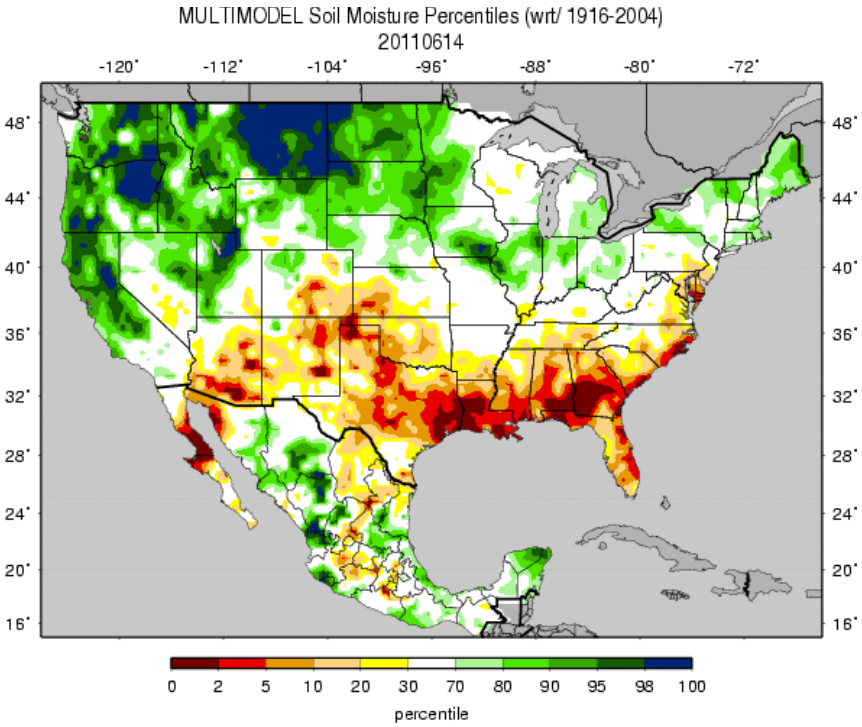
Farmers in Mississippi Delta Fighting Flood and Drought at Same Time
http://www.mpbonline.org/news/story/farmers-mississippi-delta-fighting-flood-and-drought-same-time
June 9, **Mississippi Delta**. This farmer was dealing with drought and flood on his farm and had lost about half of his crops.

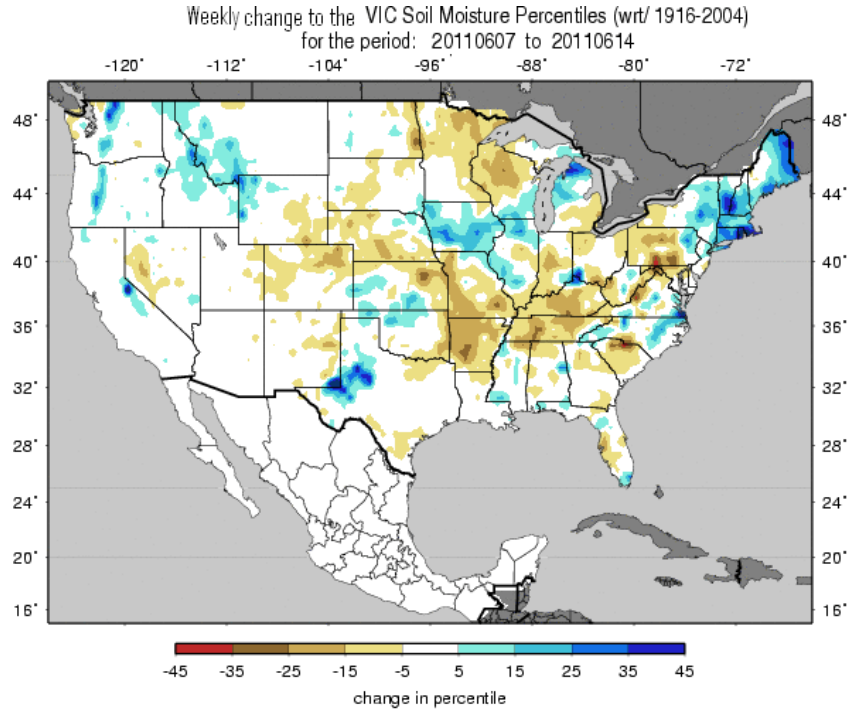
Florida drought wilts crops, sparks wildfires
http://www.bradenton.com/2011/06/10/3263192/florida-drought-wilts-crops-sparks.html
June 10, **Florida**. Farmers are getting lower yields as drought slows crop growth and development. Meanwhile, there were 115 wildfires—three times as many as usual—in the Everglades District. Includes quotes from our own Brian F.

Harvest Near
http://www.saljournal.com/news/story/wheat-harvest-creeping-north-6611
June 7, **Kansas**. A custom harvester from Nebraska reported that there was no wheat to harvest at their usual stops in Texas or Oklahoma. They have heard that Colorado wheat was not harvestable. Since drought has devastated wheat throughout the southern plains this year, a yield of 20 bushels per acre is impressive.

Its not a drought yet
http://www.delmarvanow.com/apps/pbcs.dll/article?AID=/20110607/NEWS01/110607001/It-s-not-drought-yet-?odyssey=nav|head
June 7, **Lower Delmarva Peninsula, Maryland**. Well, according to the Drought Monitor, it is a drought, but the Maryland Department of the Environment does not recognize the area as having drought. The article noted corn stress and crop loss, but wasn't more specific. This weather will prove beneficial to the grape crops.

Fig. 4e: Representative list of news related stories about the drought impact on agriculture.





Figs. 5a and 5b: Soil Moisture ranking in percentile as of 14 June (top) shows moist conditions over much of the Northern Tier States with dryness over the Southern Tier States (classic La Niña pattern). The Western Great Lakes, Mid-Mississippi River Valley, and Pennsylvania have dried out considerably this week while New England and Western Texas has moistened (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

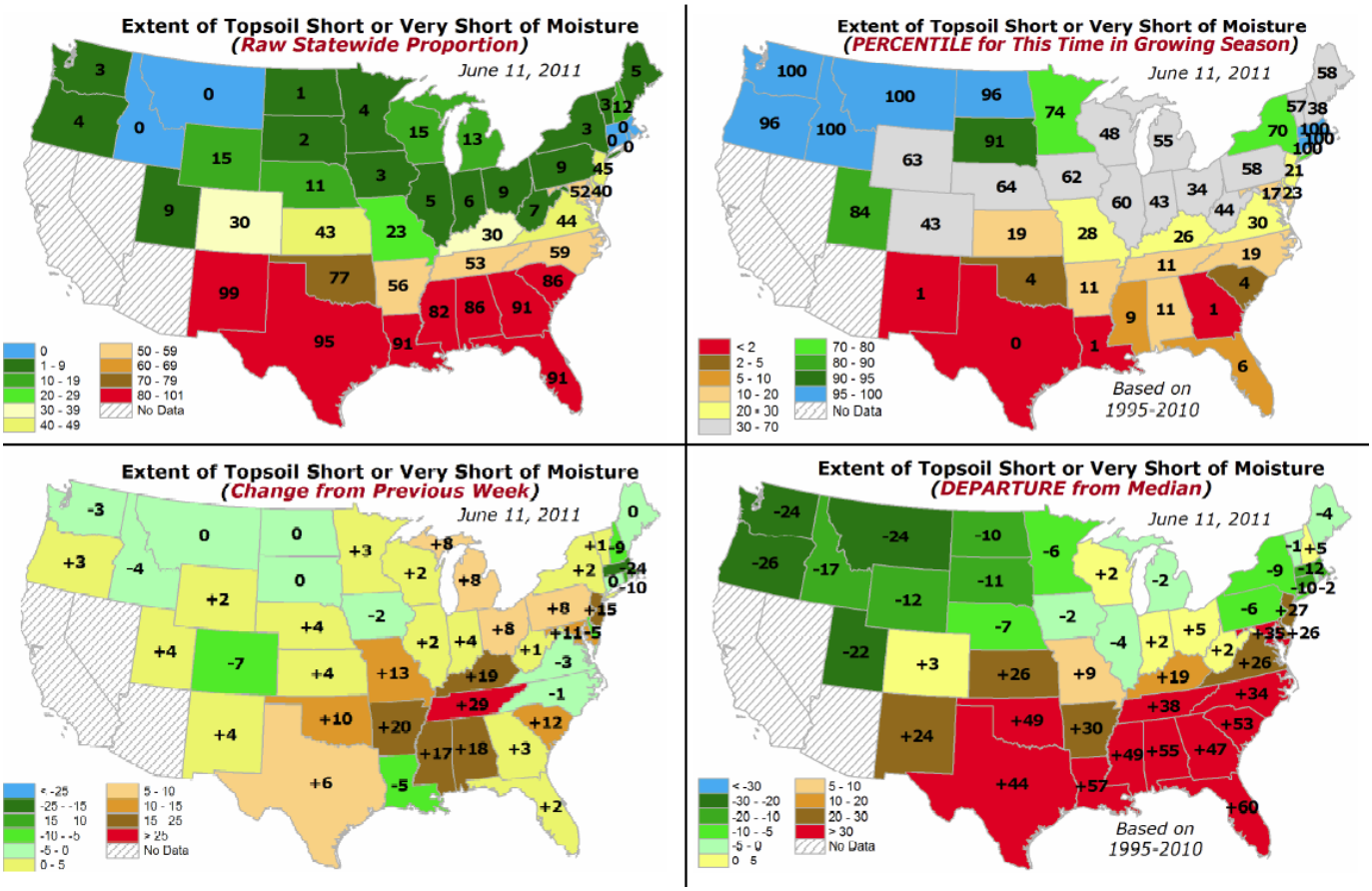


Fig. 6: Topsoil moisture has improved the most over Colorado (in the West) while Tennessee worsened the most in the nation this week (lower left panel).

Ref: http://www.cpc.ncep.noaa.gov/products/predictions/experimental/edb/topsoil-statewide-statistics.pdf

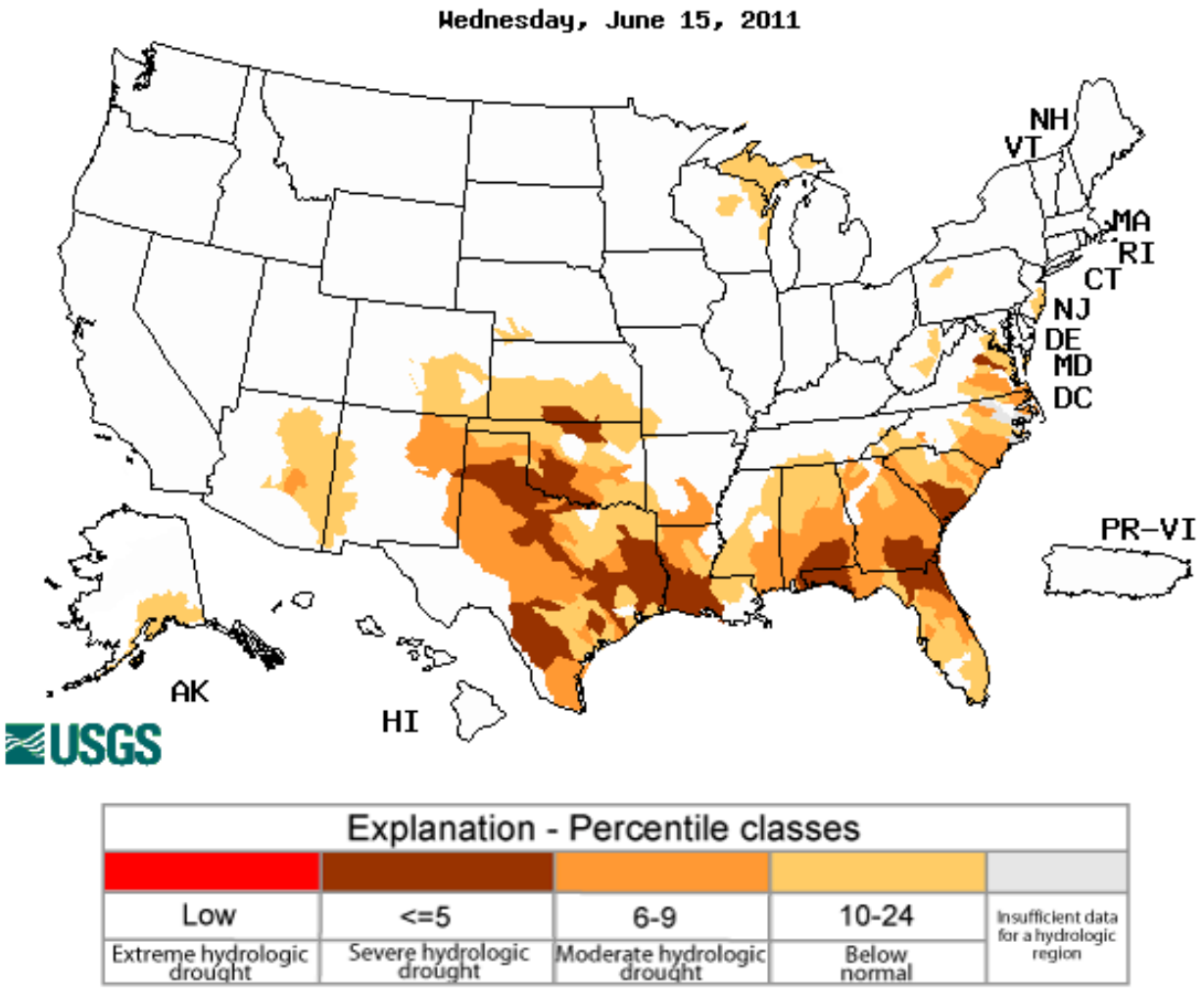


Fig. 7: Map of below normal 7-day average streamflow compared to historical streamflow for the day of year. Portions of the Texas, the Gulf Coast States, South Carolina, Nebraska, and Oklahoma are indicating severe conditions.

Ref: http://waterwatch.usgs.gov/?m=dryw&r

National Drought Summary -- June 14, 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/.

The Northeast and Mid Atlantic: Most of New England saw above-normal precipitation for the week and temperatures that were at or slightly above normal. Much of the Mid Atlantic was dry outside of central Virginia. Concerns are starting to develop as short-term dryness starts to impact the Mid Atlantic, coupled with temperatures 6-8 degrees Fahrenheit above normal. D0 was expanded to include more of northern Virginia, Maryland and the Washington, D.C., area.

Southeast: A week that had temperatures well above normal and only scattered precipitation led to further intensification of the drought conditions. D4 was expanded to include all of southwest Georgia, northern Florida and more of southeast Alabama. D0 was expanded to include most of northern Alabama and extreme southern Tennessee as agricultural impacts are becoming quite common with the heat and lack of normal precipitation. Streamflows for this time of year are worse than they were in 2007 when the same portions of Alabama and Georgia were being impacted by a significant drought event. In the panhandle of Florida, a categorical intensification took place where D0 was replaced with D1, and D2 and D3 conditions also expanded. In central Florida, D3 was expanded northward while D0 and D1 were expanded to the west. A continued slow start to the wet season in Florida continues to prolong and intensify the drought conditions.

The Plains: Conditions were fairly wet over much of the northern plains, with scattered precipitation in the central plains. Dry conditions continued in the southern plains. The heaviest rains were in the Dakotas and along the Kansas and Oklahoma border. With all the precipitation, the northern plains were 4-6 degrees Fahrenheit below normal this last week while the southern plains were 6-8 degrees Fahrenheit above normal. In central Oklahoma, D1 was improved to D0 with some stations recording more than 2.50 inches of rain over the last week and close to 8 inches over the last month. Other locations that did receive decent rains were left unchanged this week as the mounting deficits and heat quickly diminished any relief they brought. In central Texas, D1 was intensified to D2, while D2, D3 and D4 were all expanded as well. In the Texas Panhandle, D4 was expanded in the northern sections and along the southern coast; D3 was expanded along the coastline. An area along the Gulf Coast of Texas and Louisiana was also intensified from D3 to D4 this week as more indicators were bringing this region in line with current D4 classifications.

Midwest: The region remained unchanged this week as ample precipitation was recorded over much of the area. Some portions of central and northern Wisconsin as well as the upper peninsula of Michigan are showing some signs of dryness over the last 30-60 days and should be monitored closely.

The West: The ample snowpack is still replenishing the water storage of the region, with the melt off taking place even more rapidly with warmer temperatures. Montana continues to stay very wet with more than 200 percent of normal precipitation over the last 30 days for the entire state. Intensification of drought conditions in Colorado included the expansion of D2 and D3 over eastern Colorado while the area of abnormally dry conditions along the western slopes was pushed to the west. With several locations in southeast Arizona recording the driest January to June period of record, D4 was expanded to include more of southeast Arizona along the New Mexico border.

Hawaii, Alaska and Puerto Rico: Some improvements were made in Hawaii on the Big Island this week as recovery from drought is taking place slowly. D2 was improved to D1 in Pohakuloa and D0 and D1 conditions were also improved on the Kau slopes and South Kona. No changes were made in Alaska or Puerto Rico this week.

Looking Ahead: Over the next 5 days (June 15-19), a ridge of high pressure will set up over the southeastern United States, bringing with it warm temperatures. Temperatures will range from 6-9 degrees Fahrenheit above normal from the southern plains to the Carolinas. Dry conditions are expected over much of the southwest, southern plains and west coast, with the wettest areas to the north of the ridge. Precipitation maxima of 3-4 inches could be recorded from Iowa to Ohio during this time.

The CPC 6-10 day forecast (June 20-24) continues to show the ridge over the southeastern United States, bringing above-normal temperatures through much of the region, with the warmest temperatures expected over Alabama, Georgia and the Carolinas. Temperatures are expected to be below normal over the northern Rocky Mountains, Plains and Midwest as well as the Pacific coast. Above-normal temperatures are likely over most of Alaska as well. Precipitation will continue to ride along the northern extent of the ridge over the southeast, with the best chances for above-normal precipitation over the Midwest and northern plains. Dry conditions are likely over the central and southern plains, southeast, Alaska, and the Great Basin.

Author: Brian Fuchs, National Drought Mitigation Center

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 June 15, 2011

For the latest Seasonal Forecast issued today by the NOAA CPC, see:

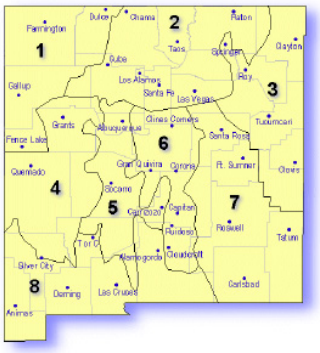
http://www.cpc.ncep.noaa.gov/products/predictions/30day/

Also, questions about the Southwest Monsoon have prompted the NWS Office in Albuquerque to issue the following summary:

June through August precipitation in New Mexico

Years in the which the snowpack was very low at March 1 and summer precipitation by climate division

Year	CD1	CD2	CD3	CD4	CD5	CD6	CD7	CD8	*STATE*	% normal
1967	5.76	10.76	10.44	7.57	6.42	10.54	6.50	6.01	8.00	135%
1970	3.45	7.10	5.92	5.42	3.38	7.23	4.63	4.02	5.14	87%
1971	3.67	7.08	8.03	5.53	3.38	7.25	7.42	3.69	5.76	97%
1977	4.26	7.76	7.11	7.19	4.23	7.53	5.65	5.66	6.17	104%
1981	4.04	8.55	11.87	6.94	4.10	9.02	8.87	6.09	7.44	126%
1990	4.22	7.18	6.93	6.52	4.65	8.44	5.85	6.12	6.24	105%
1996	3.95	8.77	11.40	7.98	5.95	11.42	9.59	6.27	8.17	138%
1999	6.80	9.38	7.31	9.10	6.75	9.02	6.73	8.57	7.96	134%
2000	2.77	5.39	6.35	5.29	3.92	8.63	6.07	7.00	5.68	96%
2002	2.62	4.50	5.48	5.41	3.27	4.47	5.42	3.82	4.37	74%
2006	6.96	8.94	10.19	10.38	9.09	12.97	8.36	9.42	9.54	161%
Average	4.41	7.76	8.28	7.03	5.01	8.77	6.83	6.06	6.77	
Normal	3.87	6.95	7.64	6.10	4.18	7.68	6.03	4.93	5.92	
%Normal	**114%**	**112%**	**108%**	**115%**	**120%**	**114%**	**113%**	**123%**	**114%**	
Std Dev.	1.48	1.79	2.29	1.66	1.83	2.30	1.56	1.83	1.56	
Max	6.96	10.76	11.87	10.38	9.09	12.97	9.59	9.42	9.54	
Year	2006	1967	1981	2006	2006	2006	1996	2006	2006	
Years wet	3	5	4	6	4	5	4	7	5	
Normal	6	4	4	4	6	5	6	1	4	
Years dry	2	2	3	1	1	1	1	3	2	



Low snowpack years have generally been favored with near normal to above normal summer precipitation.

Summer precipitation in New Mexico during all La Nina episodes has averaged 96 percent of normal. In the above chart, 1971 and 1999 were La Nina Summers, while 2000 had a weak La Nina influence. Statewide, 1971 saw 97 percent of normal precipitation, while 1999 saw 134 percent of normal precipitation. The La Nina influence on New Mexico summer precipitation has not been as negative compared to winter and spring.

NWS ABQ Jul-07 eap

Finally, for those interested in more information about the Southwest Monsoon, I highly recommend reading:

http://www.climas.arizona.edu/monsoon-tracker/jun2011.