



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

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

Date: 23 June 2011

SNOTEL SNOWPACK AND PRECIPITATION SUMMARY

Snow: SNOTEL Snow-Water Equivalent (SWE) percent of normal values for 23 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 actual “total” SWE is less than the preceding week (Fig. 1). 7-Day snow depth changes reflect melting up to 18 inches for SNOTEL sites with snow (Fig.1a). It should be noted that there are considerably less sites with snow cover than in last week’s report. Central Montana, southern Wyoming, and northern Colorado have areas with significant river flooding. For the current map depicting flooding conditions, see: <http://www.hpc.ncep.noaa.gov/nationalfloodoutlook/>.

Temperature: SNOTEL and ACIS 7-day temperature anomaly shows a rather cool week over most of the West (fig. 2). This late snow season coolness reflects a growing trend during the more recent years over the West. ACIS 7-day average temperature anomalies show the greatest positive temperature departures across southeast New Mexico and central California (>+4°F) and the greatest negative departures over portions of western and northern Utah and north-central Montana (<-10°F). This temperature pattern is almost identical to last week’s report (Fig. 2).

Precipitation: ACIS 7-day average precipitation amounts for the period ending 22 June shows the bulk of the heaviest precipitation confined to the High Plains (especially over northeast Montana and eastern Colorado) (Fig. 3). In terms of percent of normal, the precipitation was highest in a large swatch extending from central Nevada to the Northern and Central High Plains (Fig 3a). The precipitation pattern has shifted south from last week’s report. 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. There was no significant change during the past week (Fig 3b).

The West: Dry conditions prevailed over much of the southwest this week, with wet conditions over the Rocky Mountains and northern Utah. Improvements were made to the drought status in southeast Colorado after several days of precipitation. Improvements to D1/D2/D3 along the Colorado and Kansas borders were made while some D0 was improved in northern Colorado. In southwest Colorado, continued dryness has allowed for D0 to be pushed north out of New Mexico and into Colorado.

Dryness in New Mexico continued, with D3 expanded in northeast New Mexico and D4 pushed farther south along the border with Texas. 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.

Weekly Snowpack and Drought Monitor Update Report

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).

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/>.

U.S. HISTORICAL STREAMFLOW

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

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://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

Weekly Snowpack and Drought Monitor Update Report

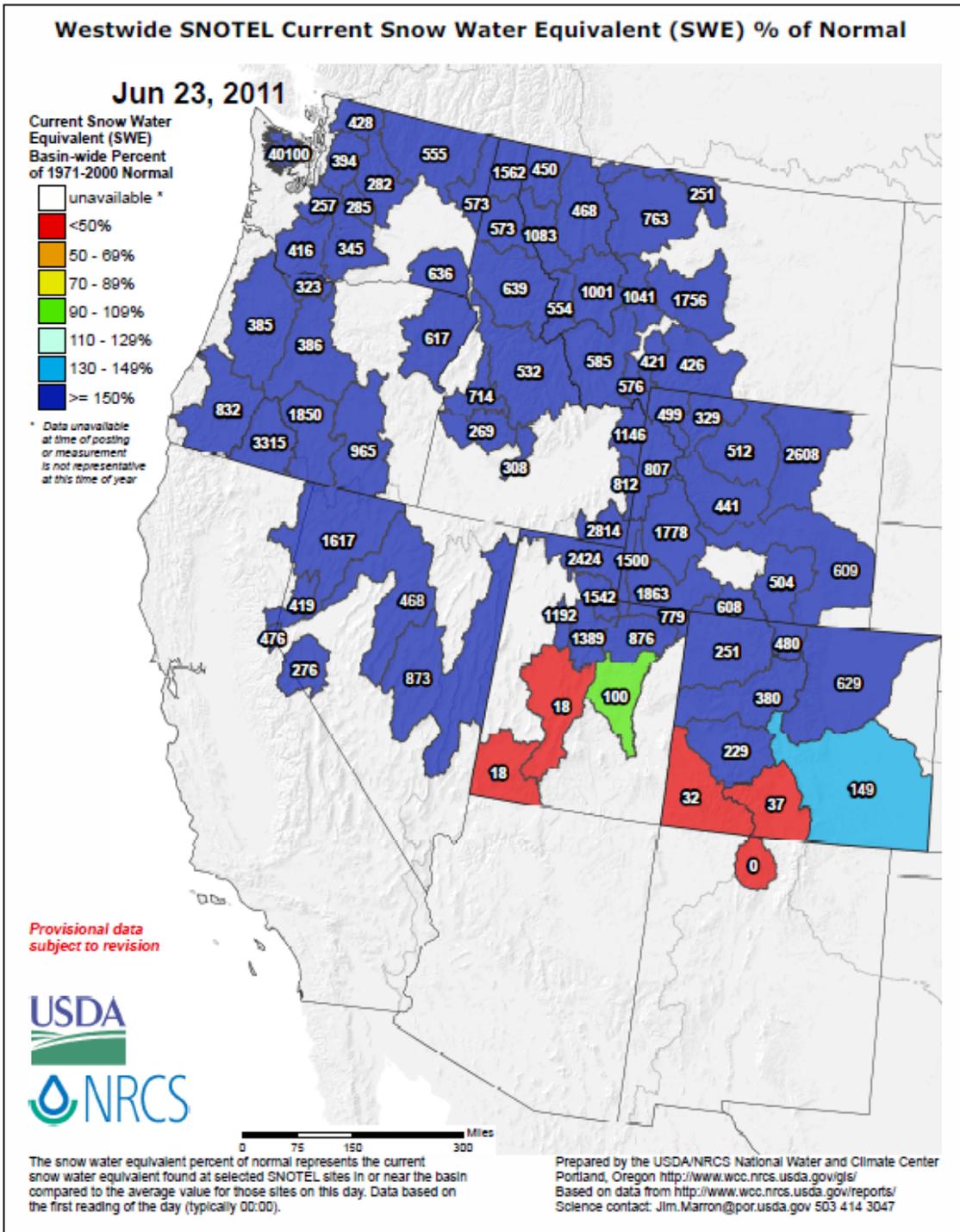


Fig. 1: SNOTEL Snow-Water Equivalent (SWE) percent of normal values for 23 June 2011 shows very high values for many SNOTEL basins since seasonal snowmelt has been delayed due to cooler than average temperatures for this time of year. Since we are well past the peak SWE, values can increase statistically but in most cases the actual “total” SWE is actually less than the preceding week.

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

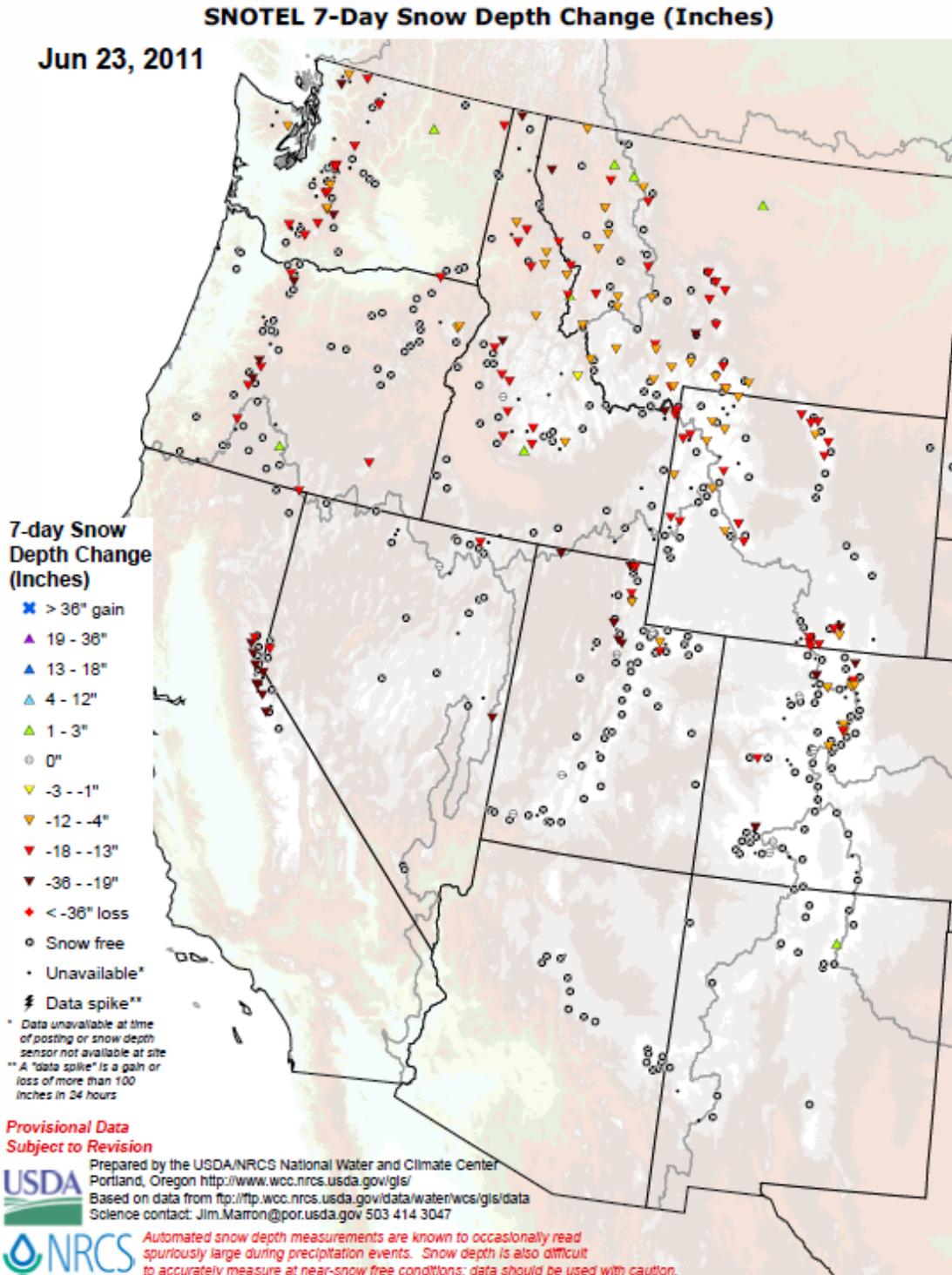


Fig. 1a: 7-Day snow depth changes reflect melting up to 18 inches for SNOTEL sites with snow. It should be noted that there are considerably less sites with snow cover than in last week's report. Central Montana, southern Wyoming, and northern Colorado have areas with significant river flooding. For the current map depicting flooding conditions, see:

<http://www.hpc.ncep.noaa.gov/nationalfloodoutlook/>.

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

Weekly Snowpack and Drought Monitor Update Report

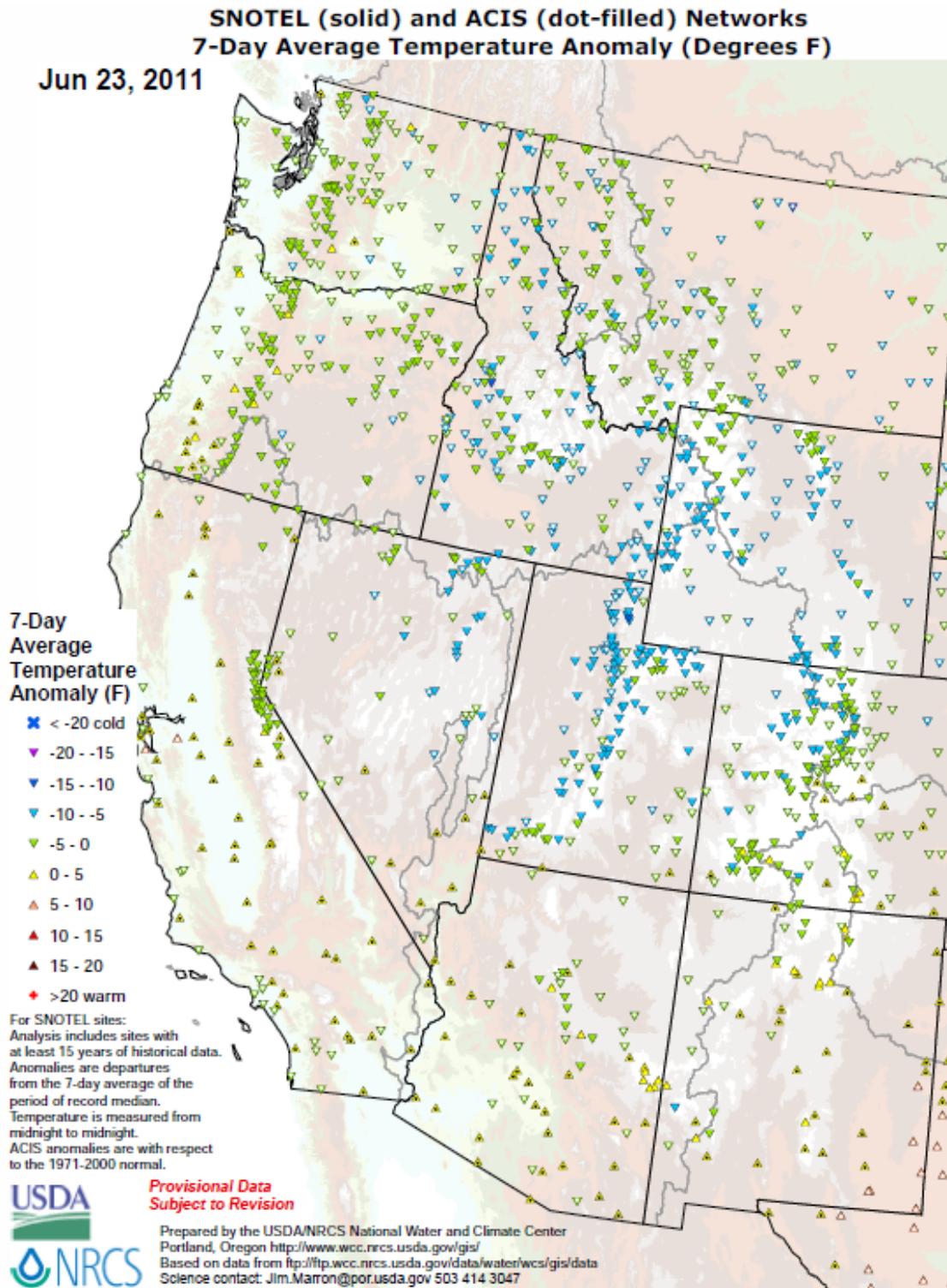
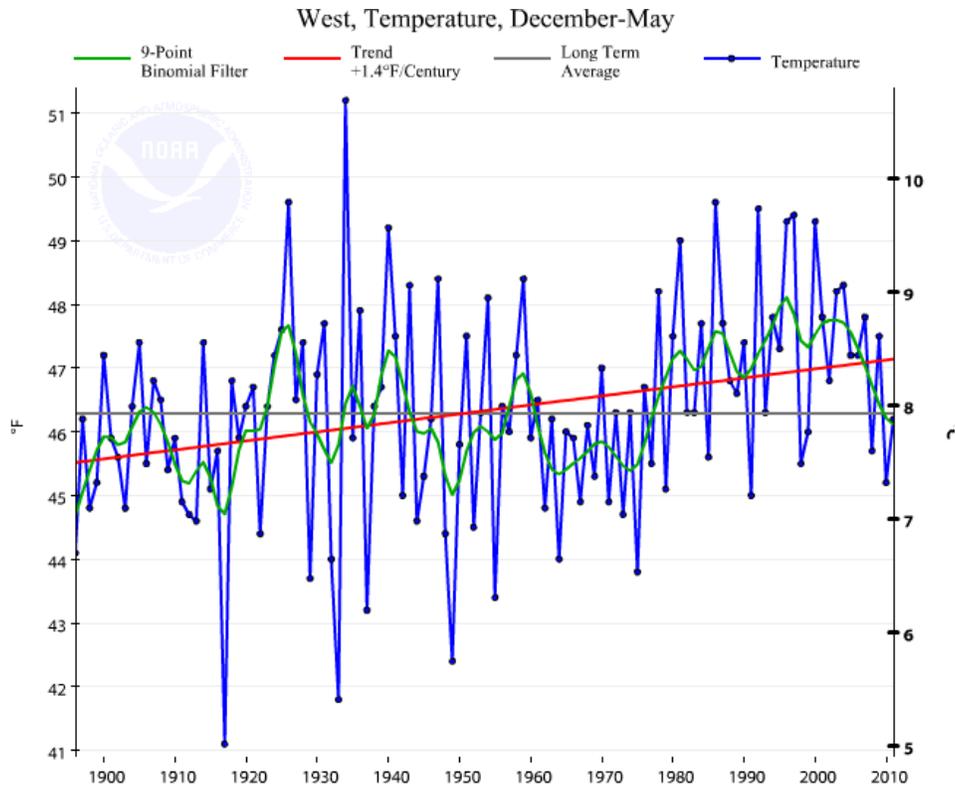


Fig. 2: SNOTEL and ACIS 7-day temperature anomaly shows a rather cool week over most of the West. This late snow season coolness has been more the exception during the past decade (see graph below). Ref:

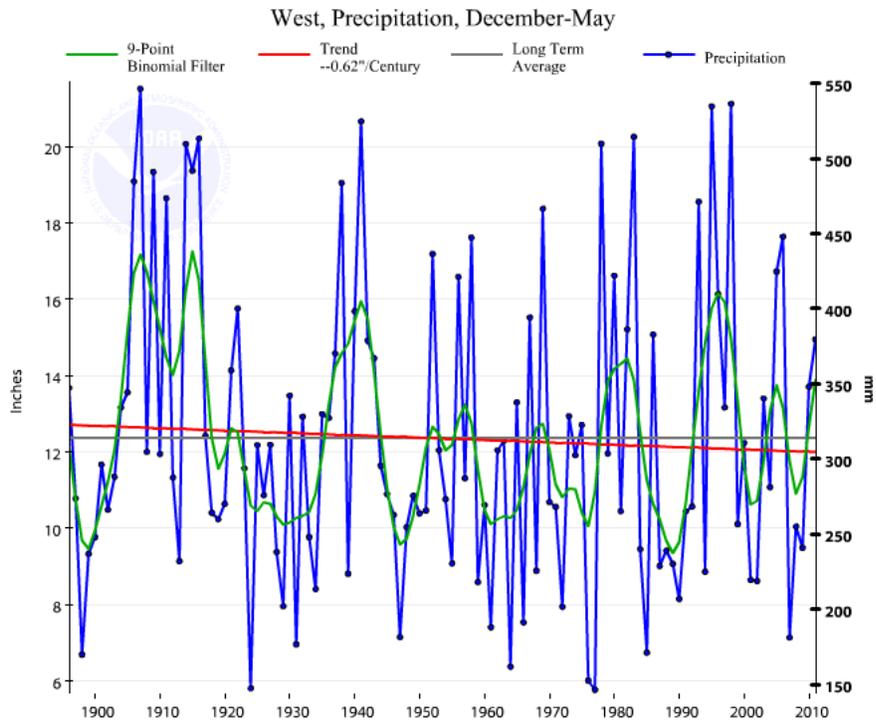
<http://www.wcc.nrcs.usda.gov/ftpref/data/water/wcs/gis/maps/WestwideTavg7dAnomalyAcis.pdf>

Weekly Snowpack and Drought Monitor Update Report

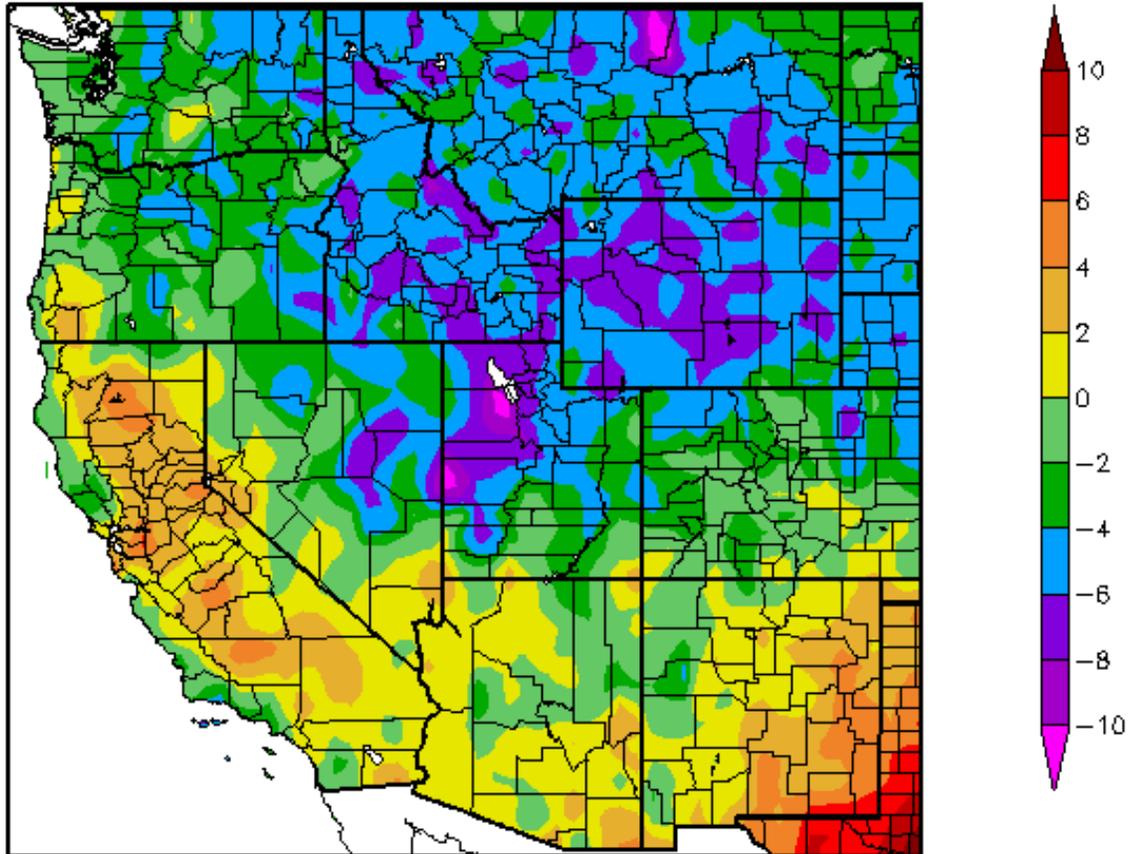


Graph: Shows the December-May average temperatures across the West since 1896. Note the downward trend over the past few years. Below, the same depiction except for precipitation.

Ref; <http://www.ncdc.noaa.gov/temp-and-precip/time-series/index.php?parameter=tmp&month=5&year=2011&filter=6&state=109&div=0>



Departure from Normal Temperature (F)
6/16/2011 – 6/22/2011



Generated 6/23/2011 at HPRCC using provisional data.

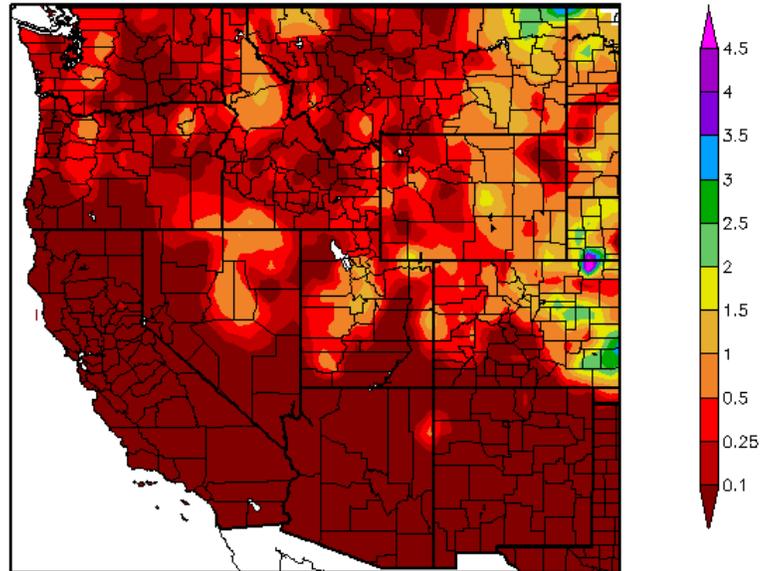
Regional Climate Centers

Fig. 2a: ACIS 7-day average temperature anomalies show the greatest positive temperature departures across southeast New Mexico and central California (>+4°F) and the greatest negative departures over portions of western and northern Utah and north-central Montana (<-10°F). This temperature pattern is almost identical to last week's report.

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

Weekly Snowpack and Drought Monitor Update Report

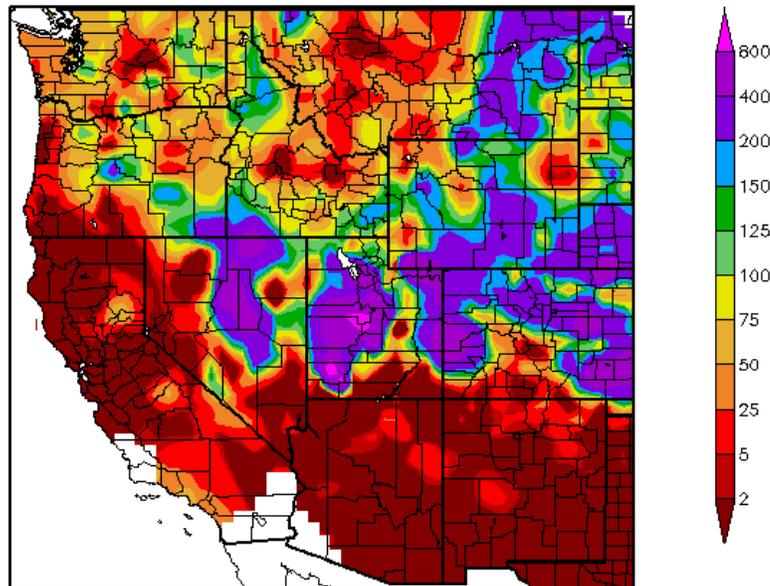
Precipitation (in)
6/16/2011 – 6/22/2011



Generated 6/23/2011 at HPRCC using provisional data.

Regional Climate Centers

Percent of Normal Precipitation (%)
6/16/2011 – 6/22/2011



Generated 6/23/2011 at HPRCC using provisional data.

Regional Climate Centers

Fig. 3 and 3a: ACIS 7-day average precipitation amounts for the period ending 22 June shows the bulk of the heaviest precipitation confined to the High Plains (especially over northeast Montana and eastern Colorado) (Fig. 3). In terms of percent of normal, the precipitation was highest in a large swatch extending from central Nevada to the Northern and Central High Plains (Fig 3a). The precipitation pattern has shifted south from last week's report.

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

Weekly Snowpack and Drought Monitor Update Report

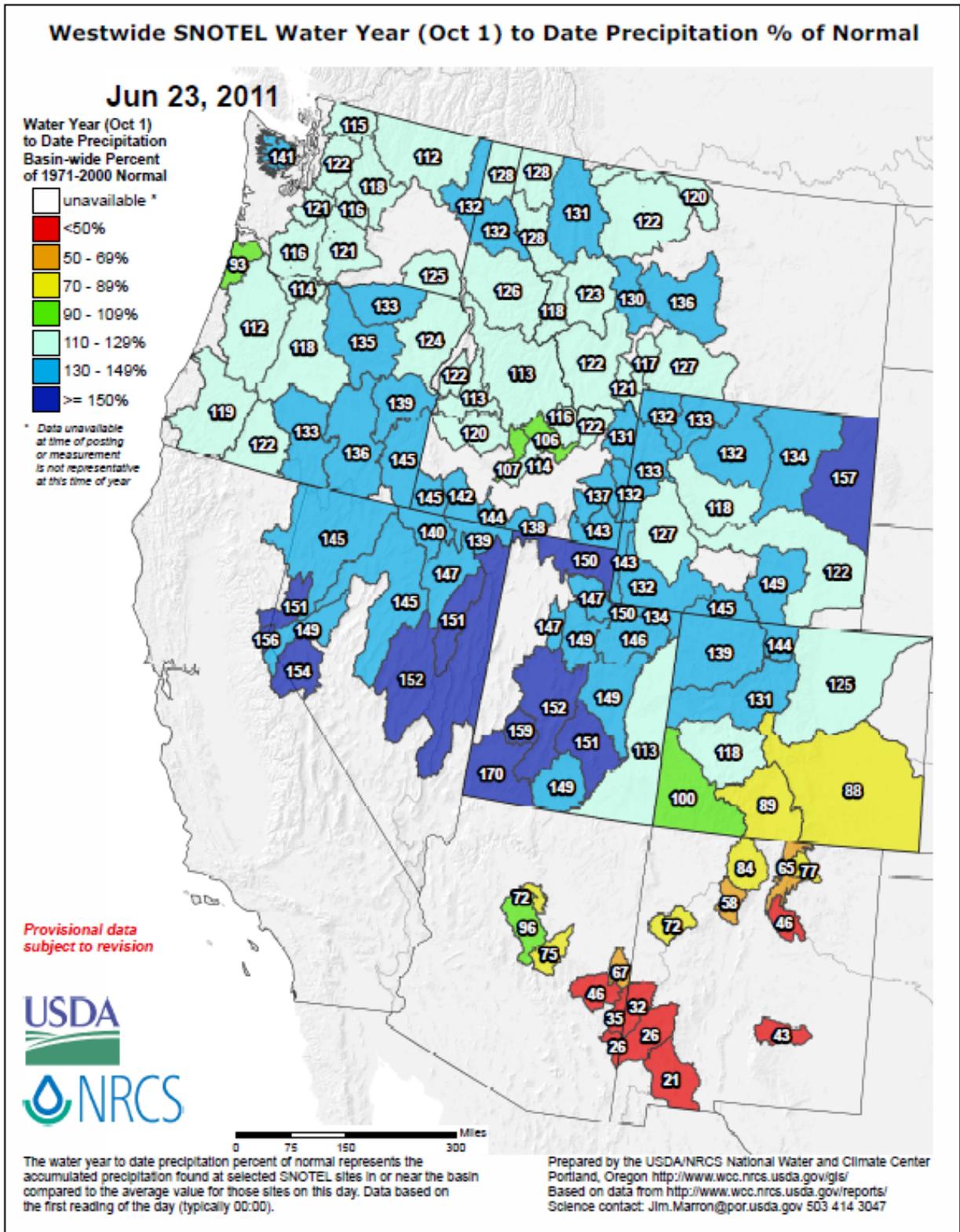


Fig 3b: For the 2011 Water-Year that began on 1 October 2010, the greatest deficits are found over the extreme southern reaches of the Southwest. Areas with the highest values are found over the Great Basin, Cascades, and parts of Northern and Central Rockies. There was no significant change during the past week.

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

U.S. Drought Monitor

June 21, 2011
Valid 8 a.m. EDT

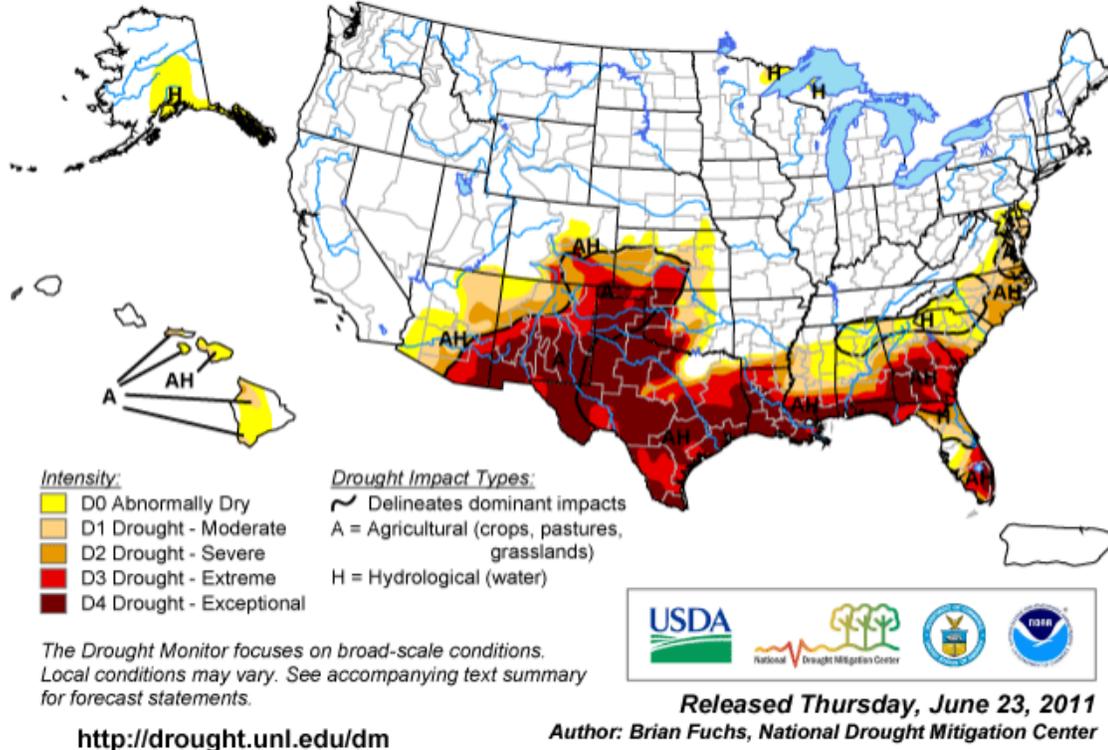


Fig. 4: Current Drought Monitor weekly summary. The exceptional D4 levels of drought are found over New Mexico, Texas, Oklahoma, Louisiana, Alabama, Georgia, and Florida.

Ref: <http://www.drought.unl.edu/dm/monitor.html>

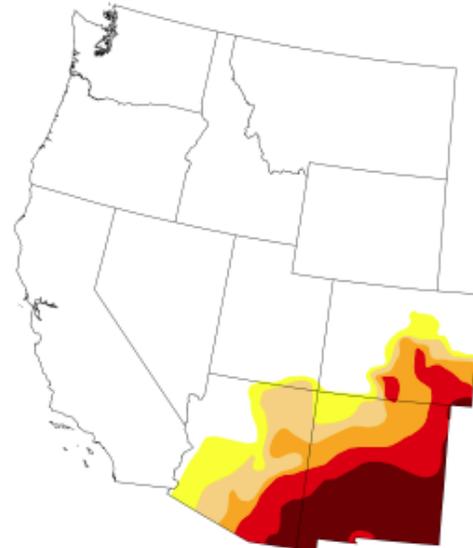
U.S. Drought Monitor

West

June 21, 2011
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	78.53	21.47	17.90	13.98	10.10	5.65
Last Week (06/14/2011 map)	78.53	21.47	17.94	14.04	9.85	5.22
3 Months Ago (03/22/2011 map)	75.16	24.84	17.68	9.52	1.62	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 (06/15/2010 map)	65.97	34.03	13.99	1.62	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 23, 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

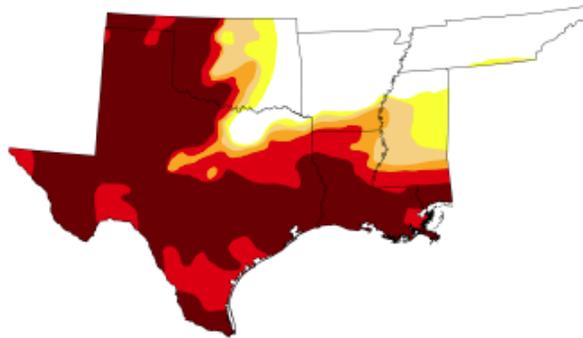
U.S. Drought Monitor

South

June 21, 2011
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	22.27	77.73	72.54	66.68	61.92	46.53
Last Week (06/14/2011 map)	21.17	78.83	72.17	64.96	56.42	36.55
3 Months Ago (03/22/2011 map)	8.76	91.24	77.39	50.26	20.47	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 (06/15/2010 map)	79.47	20.53	6.16	2.41	0.00	0.00



Intensity:

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

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

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

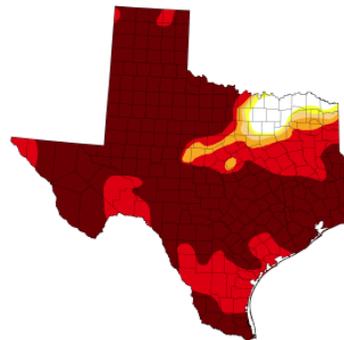
U.S. Drought Monitor

Texas

June 21, 2011
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	3.33	96.67	95.71	94.52	91.31	70.61
Last Week (06/14/2011 map)	1.97	98.03	96.53	94.77	88.57	64.78
3 Months Ago (03/22/2011 map)	1.70	98.30	92.05	64.06	28.98	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 (06/15/2010 map)	83.39	16.61	1.02	0.00	0.00	0.00



Intensity:

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

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

Fig. 4c: Some more worsening of drought over the State of Texas this week. Ref: http://www.drought.unl.edu/dm/DM_state.htm?TX,S

Weekly Snowpack and Drought Monitor Update Report

U.S. Drought Monitor

June 21, 2011

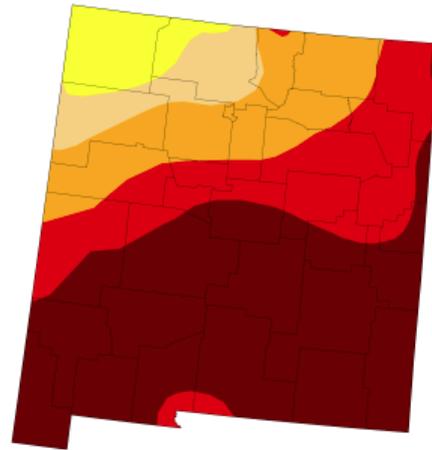
Valid 7 a.m. EST

New Mexico

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	93.98	87.35	71.18	49.09
Last Week (06/14/2011 map)	0.75	99.25	93.98	87.35	67.86	44.90
3 Months Ago (03/22/2011 map)	5.41	94.59	89.61	46.13	10.20	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 (06/15/2010 map)	50.60	49.40	17.27	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 23, 2011
Brian Fuchs, National Drought Mitigation Center

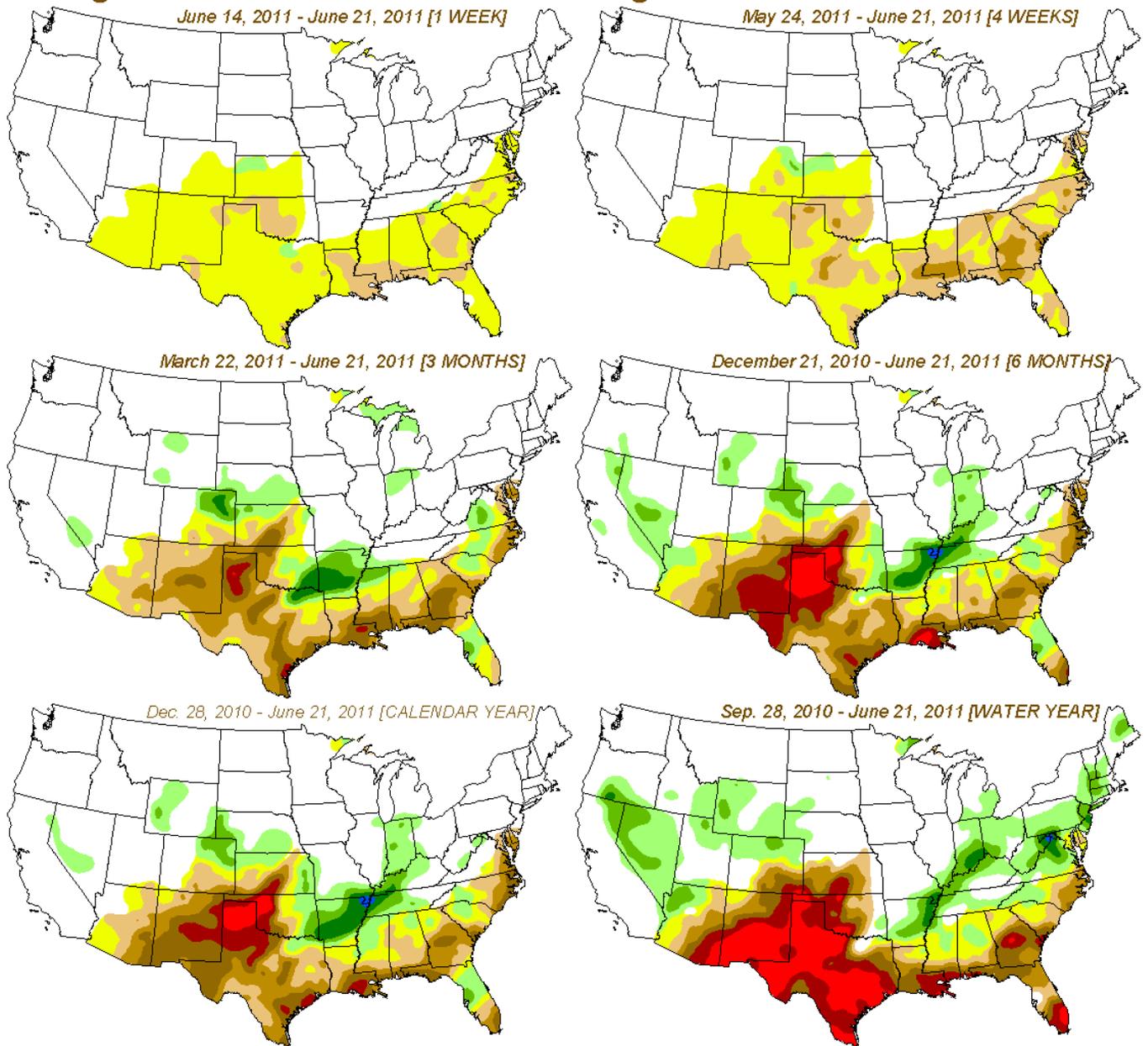
Fig. 4d: Drought Monitor for New Mexico with statistics over various time periods. Conditions continue to deteriorate in the D3-D4 categories.

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



Drought Monitor Classification Changes for Selected Time Periods



■ 5 class improvement	■ 1 class deterioration
■ 4 class improvement	■ 2 class deterioration
■ 3 class improvement	■ 3 class deterioration
■ 2 class improvement	■ 4 class deterioration
■ 1 class improvement	■ 5 class deterioration
■ unchanged	

These maps depict approximate changes in drought intensity from selected initial times to the current week, with no consideration given to intervening weeks. The difference calculations are based on interpolated 4 km grids of Drought Monitor classifications, and as a result, will be smoother than would similar products based directly on the published versions of the Drought Monitor.

Fig. 4e: Progressive deterioration in drought conditions over the Southern Tier States is very evident in the series of time periods noted above.

Weekly Snowpack and Drought Monitor Update Report

Agriculture

[Crops in Pender County suffering because of drought conditions](http://www.whiteville.com/articles/2011/06/14/news/doc4df2928473ed7883660727.txt)

<http://www.whiteville.com/articles/2011/06/14/news/doc4df2928473ed7883660727.txt>

June 14, **Southeastern North Carolina**. Late-planted corn in Pender County was about knee-high when it ought to be closer to 6 feet tall.

[Devastating Drought For NM Farmers](http://www.publicbroadcasting.net/krwg/news.newsmain/article/0/0/1814686/Regional/Devastating.Drought.For.NM.Farmers)

<http://www.publicbroadcasting.net/krwg/news.newsmain/article/0/0/1814686/Regional/Devastating.Drought.For.NM.Farmers>

June 13, **Eastern New Mexico**. Drought continues to stifle alfalfa, wheat and pasture growth, all of which increases costs for farmers and ranchers.

[Drought creates crisis for local farmers; prices at store may soar](http://www2.eprisenow.com/news/2011/jun/10/drought-cracks-corn-threatens-peanuts-ar-1955753/)

<http://www2.eprisenow.com/news/2011/jun/10/drought-cracks-corn-threatens-peanuts-ar-1955753/>

June 10, **Augusta, Georgia**. A farmer near Augusta stated that his corn would not yield anything at this stage, despite any rain that might fall. All of his crops were harshly affected by the drought.

[Drought derailing crews harvest routine](http://www.mcphersonsentinel.com/topstories/x1336434341/Drought-derailing-crew-s-harvest-routine)

<http://www.mcphersonsentinel.com/topstories/x1336434341/Drought-derailing-crew-s-harvest-routine>

June 16, **Kansas**. Custom harvesters from Inman, Kansas reported that they didn't harvest near Stamford, Texas or Ness City, Kansas because the wheat was devastated by drought. Most of the wheat that they did harvest had low yields.

[Drought, high temps threaten corn crop](http://news.tradingcharts.com/futures/9/0/160288109.html)

<http://news.tradingcharts.com/futures/9/0/160288109.html>

June 17, **Northern Alabama**. Dryland corn in northern Alabama will be lost within days if substantial rains don't fall, according to an agronomist with the Tennessee Valley Regional Extension Center.

[Drought Takes a Toll on Georgia Farmers](http://www2.wsav.com/news/2011/jun/13/drought-takes-toll-georgia-farmers-ar-1967499/)

<http://www2.wsav.com/news/2011/jun/13/drought-takes-toll-georgia-farmers-ar-1967499/>

June 13, **Near Savannah, Georgia**. Hay, blackberries, strawberries and blueberries were struggling in the drought and heat. Some of the berries had shriveled up, while others were very small.

[Dryland farmers desperate for rain](http://www.woai.com/news/local/story/Dryland-farmers-desperate-for-rain/7WVRdui-sU27AFK3dLLDrA.csp)

<http://www.woai.com/news/local/story/Dryland-farmers-desperate-for-rain/7WVRdui-sU27AFK3dLLDrA.csp>

June 15, **Vicinity of San Antonio, Texas**. A farmer just northeast of San Antonio stated that his unirrigated corn was a loss.

[Heat & Drought Create Grim Cotton Crop Outlook](http://www.ktxs.com/big_country_news/28225281/detail.html)

http://www.ktxs.com/big_country_news/28225281/detail.html

June 13, **Midwest Texas**. This season's cotton crop doesn't have the moisture to grow and develop well. There have been predictions of an abandonment rate as high as 35 percent in Texas. Other cotton-growing states, such as Oklahoma, Arizona and New Mexico, are not positioned to do much better.

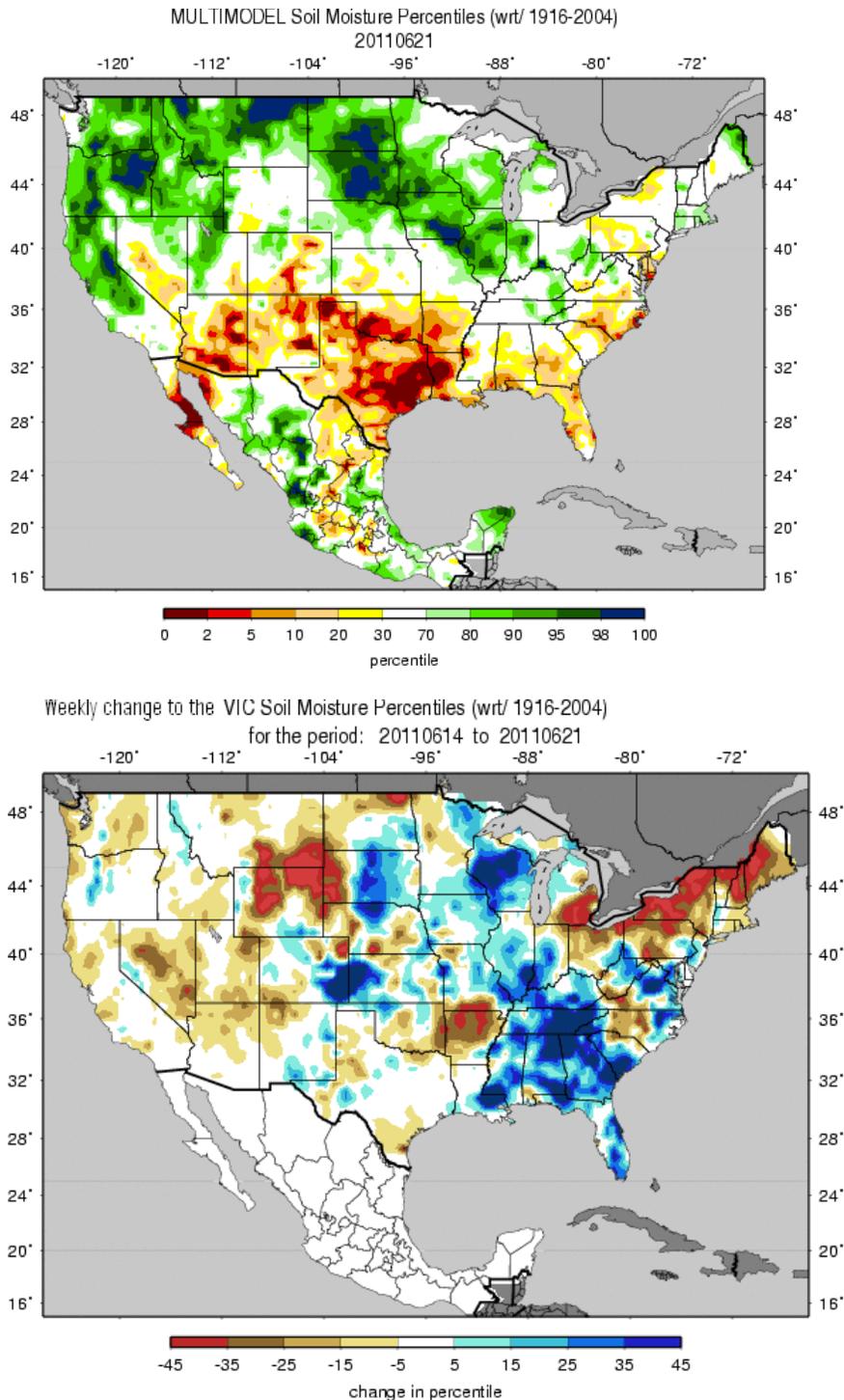
[Texas Wheat Harvest Down Because of Drought](http://www.agweb.com/article/texas_wheat_harvest_down_because_of_drought/)

http://www.agweb.com/article/texas_wheat_harvest_down_because_of_drought/

June 12, **Near San Angelo, Texas**. A grain elevator took in about 25 percent of the usual amount of wheat. Drought led many farmers to plow their wheat under since most wheat in this area is not irrigated.

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

Weekly Snowpack and Drought Monitor Update Report

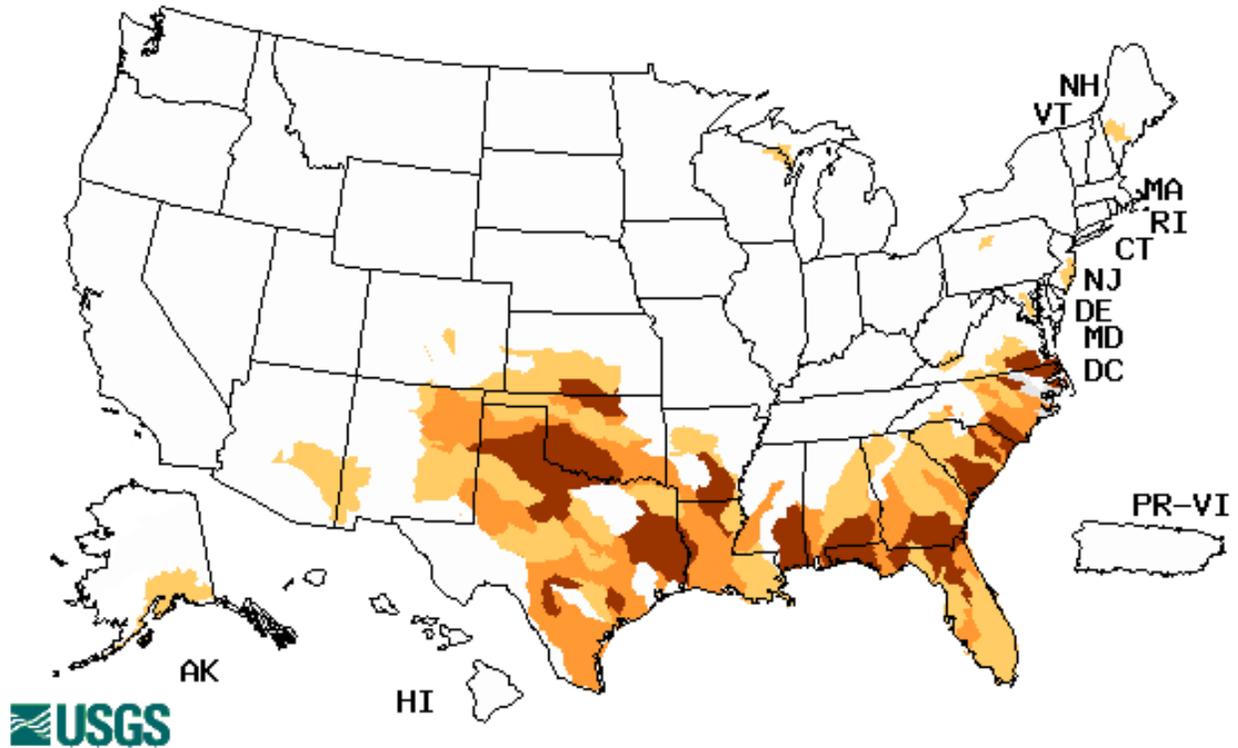


Figs. 5a and 5b: Soil Moisture ranking in percentile as of 21 June (top) shows moist conditions over much of the western two-thirds of the Northern Tier States with dryness over the Southern Tier States and into the Mid-Atlantic Seaboard (classic La Niña pattern). The moisture change pattern this week is rather complex reflecting hit and miss thunderstorm activity (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

Wednesday, June 22, 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 Gulf Coast States, the Mid-Atlantic States, and the Southern and Central Plains are indicating severe conditions.

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

Weekly Snowpack and Drought Monitor Update Report

National Drought Summary -- June 21, 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/>.

After the cut-off period for data to be analyzed for this week's United States Drought Monitor product, many areas in Texas and along the Gulf Coast recorded significant rainfall over drought impacted regions. None of the precipitation that was observed after Tuesday morning was considered for this week's map, and it will need to be assessed in next week's product. As a reminder, the period analyzed each week is from Tuesday to Tuesday, with the product being released on Thursday.

The Northeast and Mid-Atlantic: It was a mainly dry week over much of the northeast, with much of Pennsylvania and New England drier than normal. Decent rains in northern Virginia, Maryland and the panhandle of West Virginia helped to ease the dryness that has impacted much of the region over the last 30 days. No changes in drought status were made in either region this week.

Southeast: A mix of dry conditions and scattered showers over the last seven days did not provide enough moisture to hold off the intensification of the drought. D4 was expanded in southern Georgia, southeast Alabama and the Florida panhandle. D4 was expanded in east Florida along the coast. D2 and D3 were expanded in northern Florida as well as in southwest Florida. A categorical push of the drought intensities to the north in Georgia also took place while D1 and D2 were expanded in eastern North Carolina. D0 was improved in western North Carolina and eastern Tennessee.

In Mississippi and Louisiana, a categorical degradation took place, adding D4 along the coast and pushing the D2 and D3 categories to the north. D2 was also expanded in northeast Louisiana and D3 was introduced into northern Louisiana.

The Plains: The northern plains remained wet and cool while the southern plains remained hot and dry. The wet spring and abundant snowpack have led to flooding concerns all along the Missouri River. Water restrictions are in place for many communities in Texas, with low to moderate water pressures impacting communities. In Texas this week, D2 was intensified to D3 and D4 was expanded in south Texas. East Texas had an expansion of D3 conditions while D4 was expanded to include almost the entire panhandle. Some improvements were made in and around the Dallas metro area, as up to 3.50 inches of rain were recorded at the end of the U.S. Drought Monitor period. This allowed for the drought-free area to expand and also for a categorical improvement where the most rain was recorded in Dallas, Tarrant, Rockwall, Collin, Denton, Wise, and Jack counties. Most of Oklahoma had a categorical degradation this week as well, as the hot and dry conditions continued and potential evapotranspiration values were almost double normal values.

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Improvements were made in western Kansas where D0/D1/D2 conditions were all improved in response to rain events taking place at the end of the U.S. Drought Monitor period. More than 3.00 inches of rain was recorded in Gove, Wallace and Hamilton counties.

Midwest: It was another wet week over much of the region, with widely scattered thunderstorms and even severe weather. Moderate drought was introduced in northeast Minnesota this week as this region continues to miss out on precipitation, and hydrological concerns still exist. With the new area of D1, this area has recorded less than 25 percent of normal precipitation since April 1.

The West: Dry conditions prevailed over much of the southwest this week, with wet conditions over the Rocky Mountains and northern Utah. Improvements were made to the drought status in southeast Colorado after several days of precipitation. Improvements to D1/D2/D3 along the Colorado and Kansas borders were made while some D0 was improved in northern Colorado. In southwest Colorado, continued dryness has allowed for D0 to be pushed north out of New Mexico and into Colorado.

Dryness in New Mexico continued, with D3 expanded in northeast New Mexico and D4 pushed farther south along the border with Texas.

Hawaii, Alaska and Puerto Rico: No changes were made to Hawaii, Alaska, or Puerto Rico this week.

Looking Ahead: Over the next five days (June 22-26), a ridge develops over the southwest while the ridge over the east weakens. Temperatures are expected to be 6-9 degrees Fahrenheit above normal in the southwest and 3-6 degrees Fahrenheit above normal in the southeast. Cooler than normal temperatures over the upper Midwest, New England, and the west coast should prevail with temperatures generally 3-6 degrees Fahrenheit below normal. Precipitation chances are greatest over the Missouri River basin and into the northeast, where 2 inches or more could be possible. Continued rains along the Gulf Coast and into Florida could help to ease drought tensions in those areas.

The CPC 6-10 day forecast (June 27-July 1) shows most of the United States having a good chance at above normal temperatures with the best chances over the Midwest and into New England. Cooler than normal temperatures are expected from Alaska south along the coast to California during this time. Dry conditions are projected to take place over the Great Lakes region and into New England while the southwest will also remain dry. The best chances for above normal precipitation are in the southeast, Pacific Northwest and Alaska.

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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

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D4 ... Exceptional Drought

Drought or Dryness Types

A ... Agricultural

H ... Hydrological

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

http://www.climas.arizona.edu/files/climas/pdfs/periodicals/SWClimateOutlook_jun11.pdf (see pages 3-5).