



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

Weekly Report - Snowpack / Drought Monitor Update **Date: 22 May, 2008**

SNOTEL SNOWPACK AND PRECIPITATION SUMMARY

Snow: As would be expected by the 3rd week in May, most mountain SNOTEL sites have or are nearly melted out. However, a few exceptions exist over the Cascades and scattered across the Northern and Central Rockies and Intermountain West where snow-water equivalent values are still greater than 50% of the seasonal peak values which normally occurs in early April (Fig. 1). Snow-water equivalent percent for this Water Year as of 22 May shows well above normal values continuing over the Cascades, Idaho Panhandle, and over parts of Colorado, Wyoming, and Montana. A heat wave last weekend over the West contributed to a rapid decline in SWE. However, due to this season's late runoff, SWE values are still exceptionally high (Fig. 1a).

Temperature: For the past seven days, average temperature anomalies were up to 15 degrees F above average across much of the West. The Colorado and New Mexico Rockies were the exceptions with temperatures 5 degrees F below average (Fig. 2). Specifically, the greatest negative temperature departures occurred over southeast New Mexico (-6F) and the greatest positive departures occurred over central California (>+15F) (Fig. 2a).

Precipitation: Preliminary precipitation totals for the 7-day period ending 21 May shows an abundant amount of precipitation falling over the Northern Cascades, much of New Mexico, and scattered elsewhere. However, in general, much of the West was dry (Fig. 3). Seasonal precipitation (rain & snow water equivalent) as a percent of normal for the 2008 Water Year that began on October 1, 2007 shows above normal totals over much of Colorado, central Arizona, northeast Wyoming, and the Central Oregon Cascades (Fig. 3a).

WESTERN DROUGHT STATUS

The West: The Far West, especially the Pacific Northwest, experienced an abrupt transition from unseasonably cool conditions to near-record and record heat as readings soared into the 90s and 100s degrees F. The summer-like temperatures quickly melted an above-normal mountain snowpack, causing rivers to rapidly rise to near-record levels for mid-May and produce some localized flooding, most notably impacting the water treatment plant for Yakima, Washington. The extreme heat came after a long spell of subnormal temperatures dating back to mid-March in the Pacific Northwest. This allowed the mountain snow pack to build as little melted, and even though precipitation was generally below normal, it continued to fall in the form of snow. Even with the recent melting, basin average snow water content (SWC) on May 20 still remained above-normal at many Washington, southern and northeastern Oregon, northern Idaho, Montana, Wyoming, and Colorado basins. California's four Sierra Nevada basins were a notable exception, with SWC running at 23%, 1%, 21%, and 50% (north to south), and water-year-to-date (WYTD) precipitation averaging between 70 and 79% of normal. In contrast, nearly all of the remaining Western basins average precipitation was close to or above-normal this water year.

Precipitation was negligible across most of the West, except for light amounts (0.1 to 0.5 inch) in western Washington, northern Idaho, parts of the Rockies, and north-central Arizona, and 0.5 to 1.5 inches in central Colorado and western Washington. In central Oregon and south-central

Weekly Snowpack and Drought Monitor Update Report

Washington, however, after a good start to the water year (October-December), much drier weather has occurred since the start of 2008, with 25-50% of the normal precipitation falling during the past 90 days. In response, D0(AH) was extended northward into south-central Washington. Additionally, winter wheat conditions have deteriorated in Oregon, with 39% rated poor to very poor, while pastures and range conditions rated poor to very poor have declined to 22% and 16% in Oregon and Washington, respectively, according to NASS/USDA on May 18. In even worse shape was California's pastures and ranges, 91% rated poor to very poor. Although the Southwest observed hot and dry weather, no changes were made as we wait for the all of the mountain snow packs to melt out, and then reassess conditions. Author: David Miskus, Joint Agricultural Weather Facility, CPC/NCEP/NWS/NOAA.

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, 4a, 4b, and 4c).

SOIL MOISTURE

Soil moisture (Figs. 5 and 5a), 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).

OBSERVED FIRE DANGER CLASS

The National Interagency Coordination Center provides a variety of products that describe the current wildfire status for the U.S. - <http://www.nifc.gov/information.html>. The latest Observed Fire Danger Class is shown in Figs. 6 shows the current active wildfires across the West - <http://geomac.usgs.gov/>.

U.S. HISTORICAL STREAMFLOW

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

VEGETATION HEALTH

Associated with vegetation health are pasture and rangeland conditions (Fig. 8) as noted at: <http://www.cpc.ncep.noaa.gov/products/predictions/experimental/edb/pasture-range-statewide-conditions.pdf>

Weekly Snowpack and Drought Monitor Update Report

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/>

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/ NOLLER HERBERT
Director, Conservation Engineering Division

Weekly Snowpack and Drought Monitor Update Report

SNOTEL Current Snow Water Equivalent (SWE) Percent of Normal Peak May 22, 2008

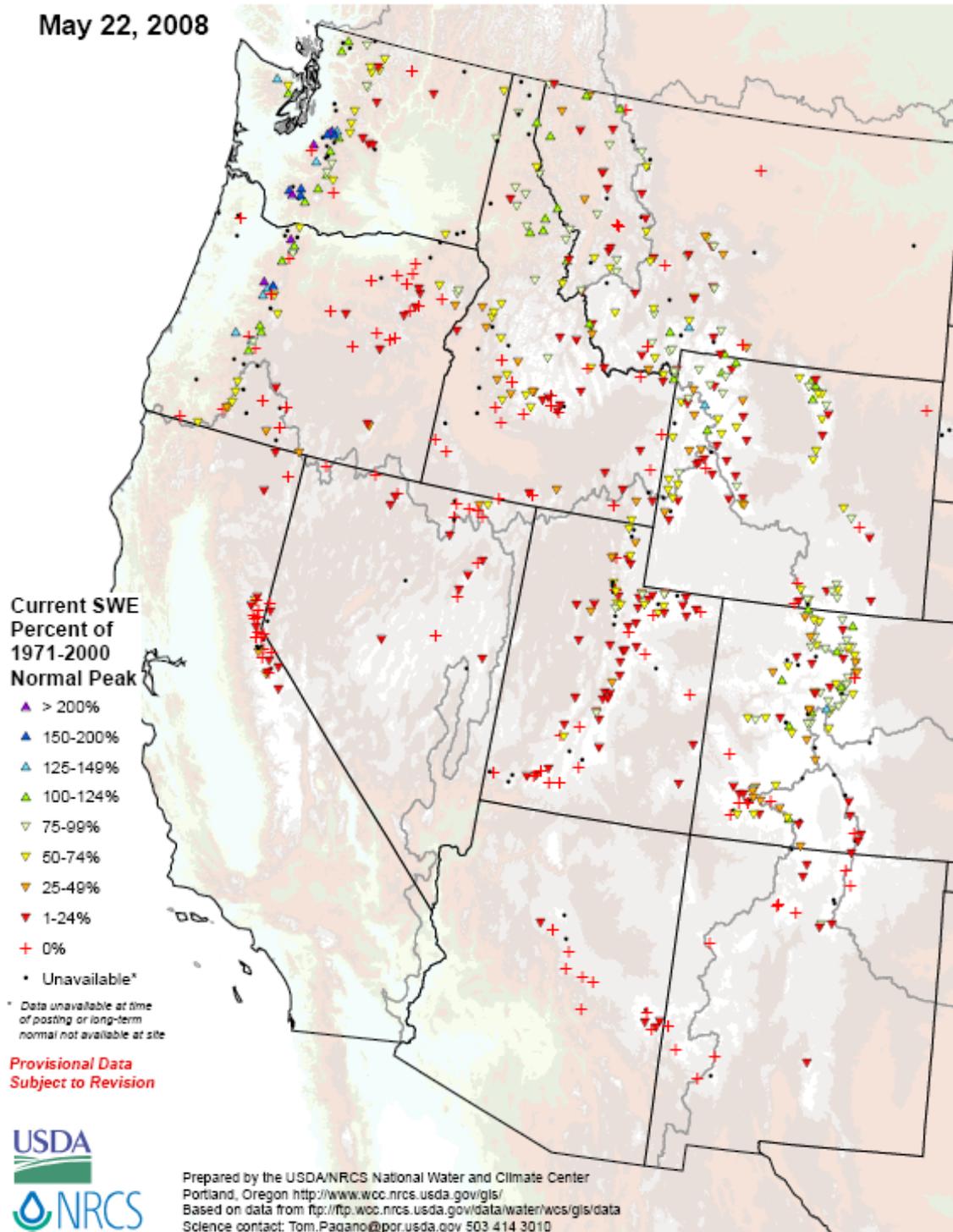


Fig. 1. As would be expected by the 3rd week in May, most mountain SNOTEL sites have or are nearly melted out. However, a few exceptions exist over the Cascades and scattered across the Northern and Central Rockies and Intermountain West where snow-water equivalent values are still greater than 50% of the seasonal peak values which normally occurs in early April.

Ref: <ftp://ftp.wcc.nrcs.usda.gov/data/water/wcs/gis/maps/WestwideSWEPercentPeak.pdf>

Weekly Snowpack and Drought Monitor Update Report

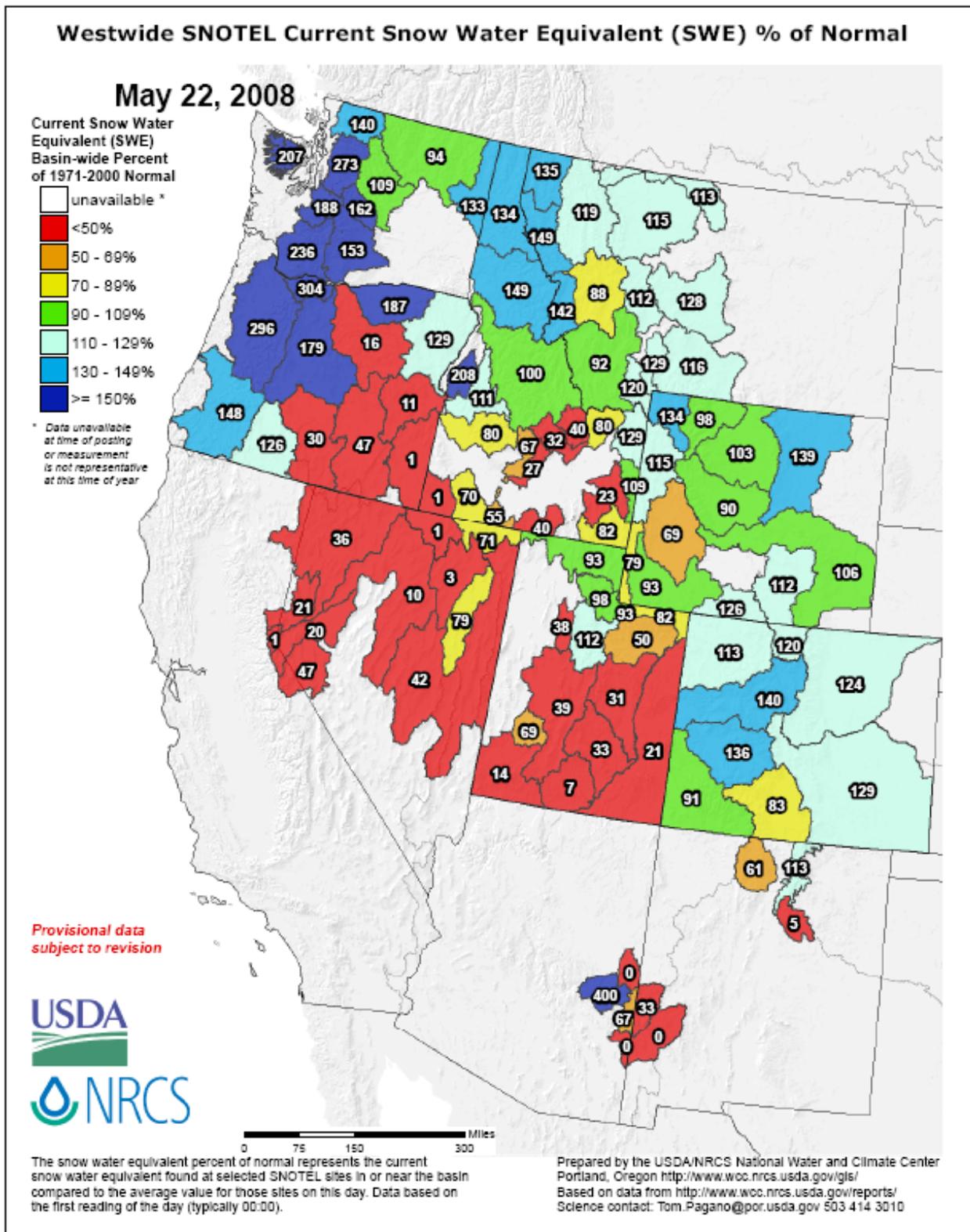


Fig. 1a. Snow-water equivalent percent for this Water Year as of 22 May shows well above normal values continuing over the Cascades, Idaho Panhandle, and over parts of Colorado, Wyoming, and Montana. A heat wave last weekend over the West contributed to a rapid decline in SWE. However, due to this season's late runoff, SWE values are still exceptionally high. Ref: ftp://ftp.wcc.nrcs.usda.gov/data/water/wcs/gis/maps/west_swepctnormal_update.pdf

Weekly Snowpack and Drought Monitor Update Report
SNOTEL (solid) and ACIS (dot-filled) Networks
7-Day Average Temperature Anomaly (Degrees F)

May 22, 2008

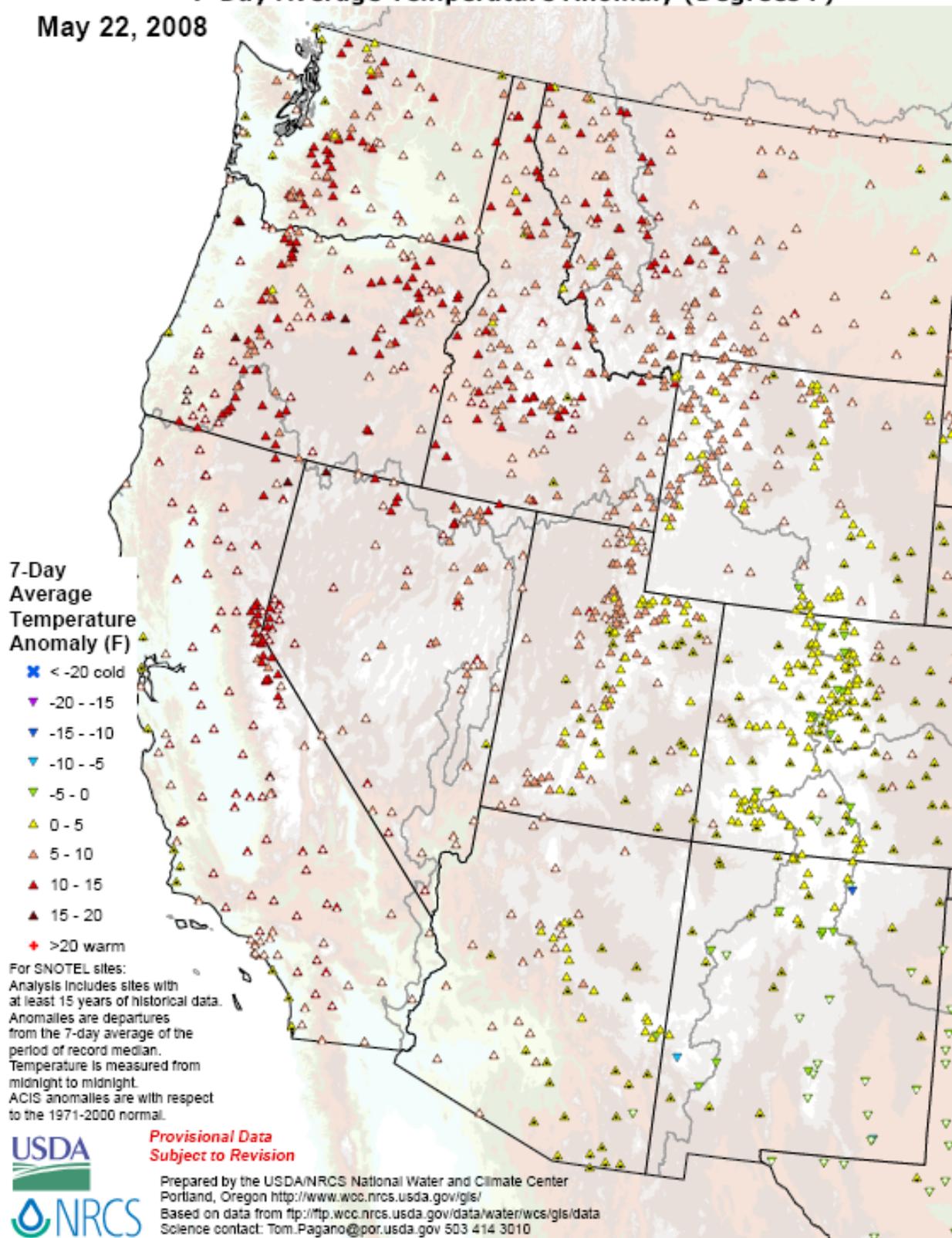
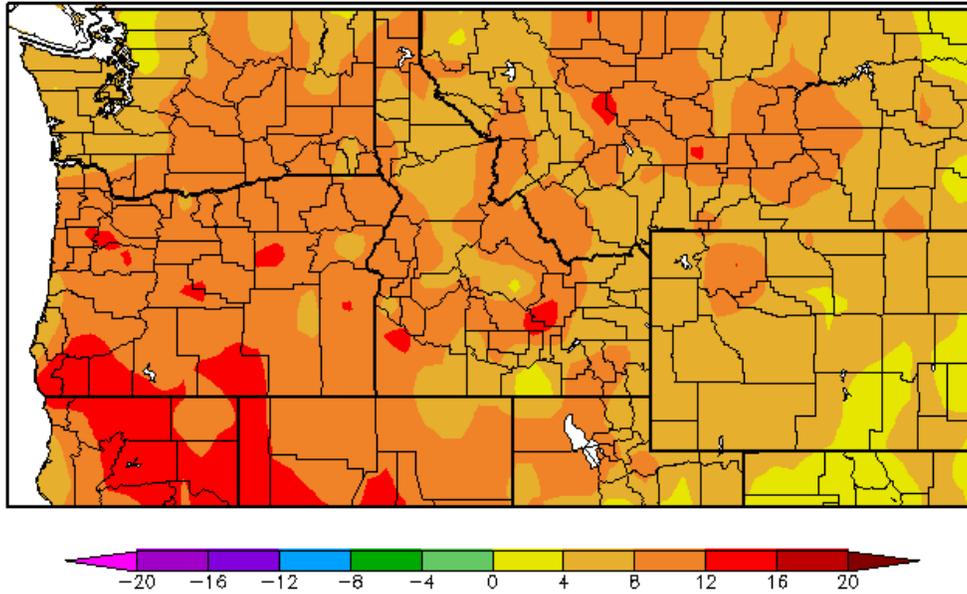


Fig. 2. SNOTEL & ACIS 7-day station average temperature anomalies were up to 15 degrees F above average across much of the West. The Colorado and New Mexico Rockies were the exceptions with temperatures 5 degrees F below average.

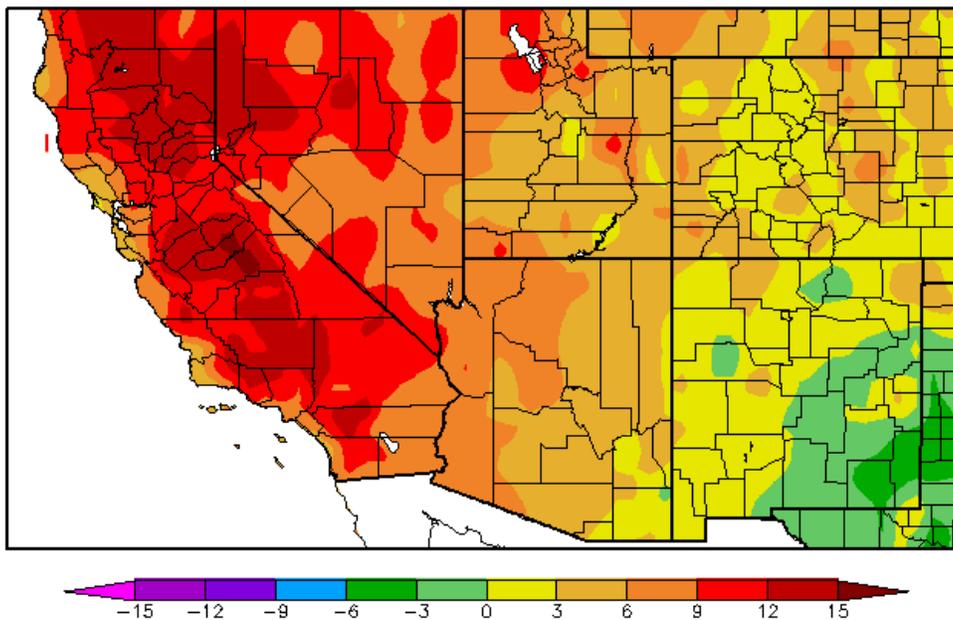
Ref: <ftp://ftp.wcc.nrcs.usda.gov/data/water/wcs/gis/maps/WestwideTavg7dAnomalyAcis.pdf>

Weekly Snowpack and Drought Monitor Update Report

Departure from Normal Temperature (F)
5/15/2008 – 5/21/2008



Departure from Normal Temperature (F)
5/15/2008 – 5/21/2008



Generated 5/22/2008 at HPRCC using provisional data.

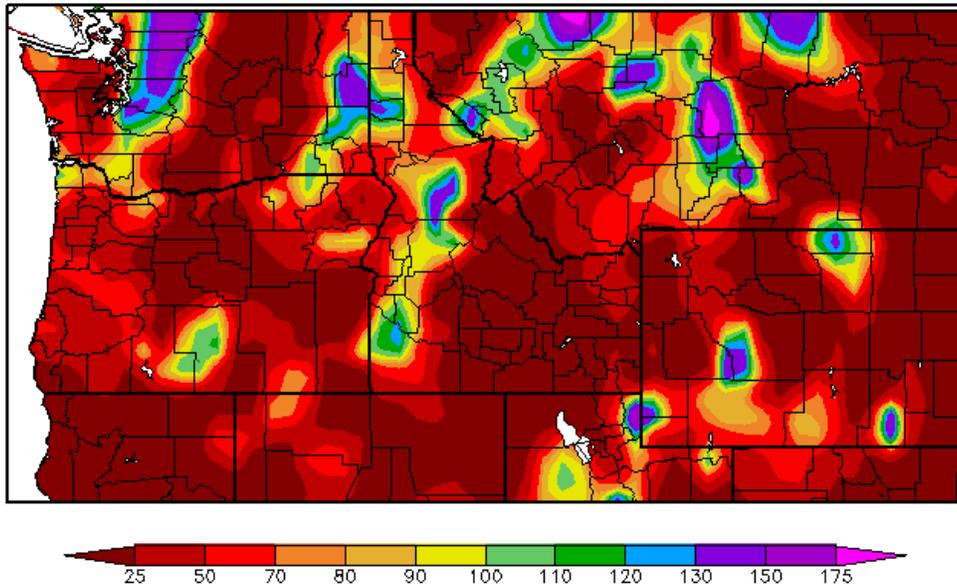
NOAA Regional Climate Centers

Fig. 2a. ACIS 7-day average temperature anomalies: Greatest negative temperature departures over southeast New Mexico (<-6F) and greatest positive departures over central California (>+15F).

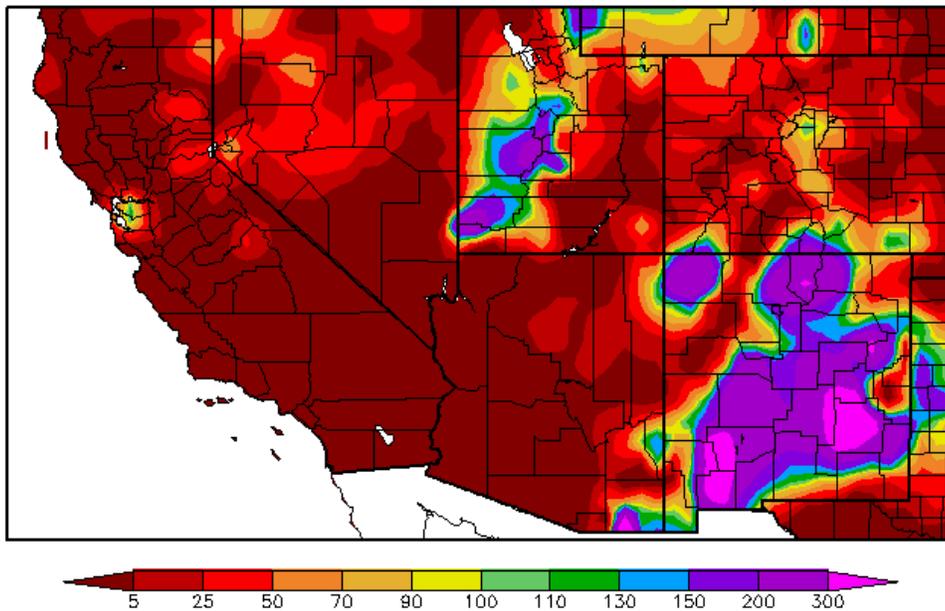
Ref: http://www.hprcc.unl.edu/maps/current/index.php?action=update_product&product=TDdept

Weekly Snowpack and Drought Monitor Update Report

Percent of Normal Precipitation (%)
5/15/2008 – 5/21/2008



Percent of Normal Precipitation (%)
5/15/2008 – 5/21/2008



Generated 5/22/2008 at HPRCC using provisional data.

NOAA Regional Climate Centers

Fig. 3. ACIS 7-day average precipitation anomaly: Preliminary precipitation totals for the 7-day period ending 21 May shows an abundant amount of precipitation falling over the Northern Cascades, much of New Mexico, and scattered elsewhere. However, in general, much of the West was dry. Ref: http://www.hprcc.unl.edu/maps/index.php?action=update_product&product=PNorm

Weekly Snowpack and Drought Monitor Update Report

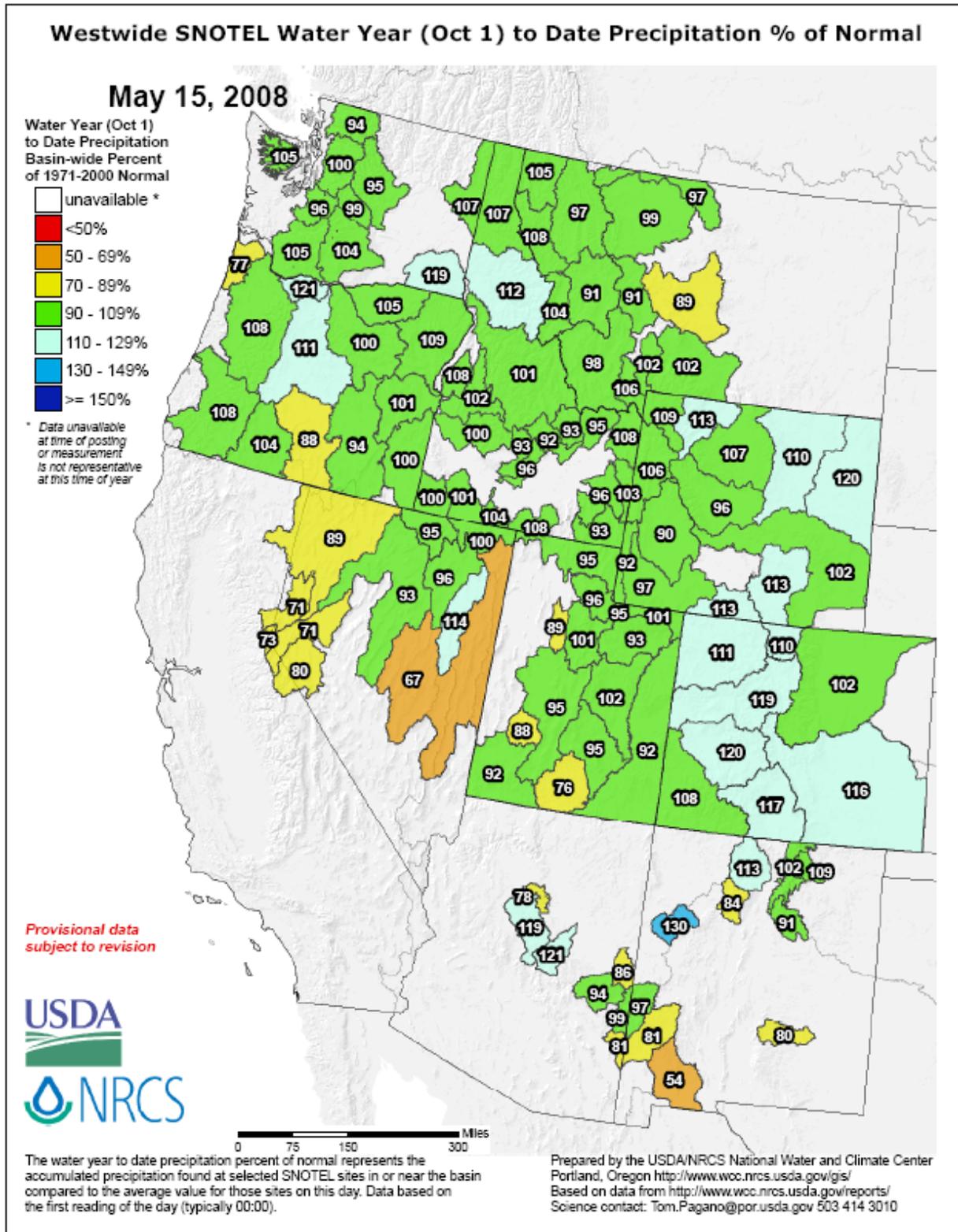


Fig 3a. Seasonal precipitation (rain & snow water equivalent) as a percent of normal for the 2008 Water Year that began on October 1, 2007 shows above normal totals over much of Colorado, central Arizona, northeast Wyoming, and the Central Oregon Cascades.
ftp://ftp.wcc.nrcs.usda.gov/data/water/wcs/gis/maps/west_wytdprecpcnormal_update.pdf

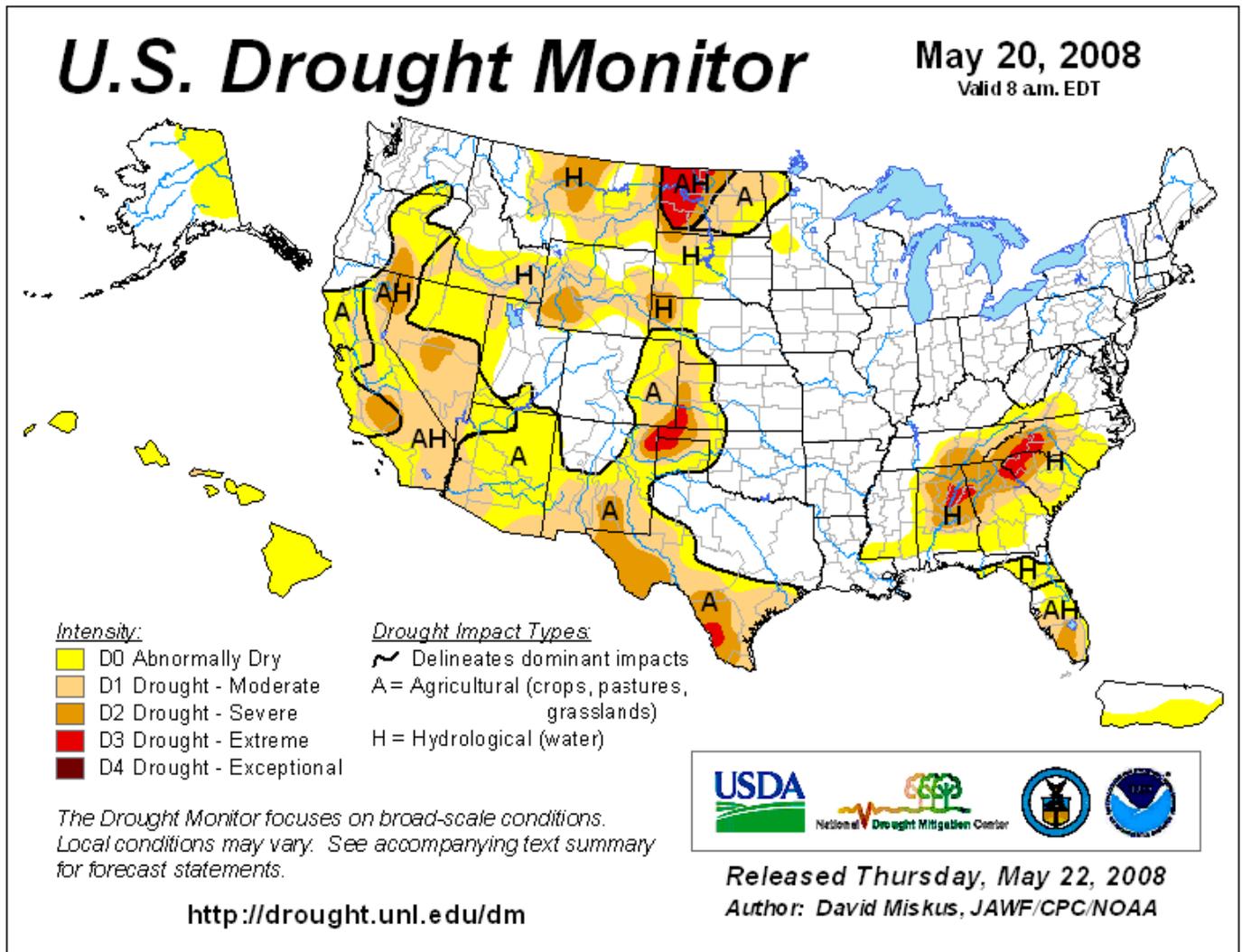


Fig. 4. Current Drought Monitor weekly summary.

Ref: National Drought Mitigation Center (NDMC) - <http://www.drought.unl.edu/dm/monitor.html>

U.S. Drought Monitor

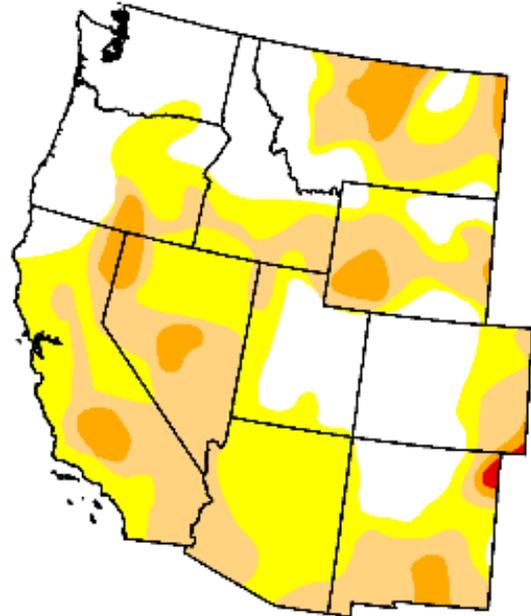
West

May 20, 2008

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	32.8	67.2	34.5	6.8	0.2	0.0
Last Week (05/13/2008 map)	33.4	66.6	35.8	6.2	0.0	0.0
3 Months Ago (02/26/2008 map)	37.8	62.2	37.0	16.6	0.0	0.0
Start of Calendar Year (01/01/2008 map)	26.3	73.7	54.7	33.1	2.7	0.0
Start of Water Year (10/02/2007 map)	22.0	78.0	62.3	44.7	12.4	0.0
One Year Ago (05/22/2007 map)	30.9	69.1	51.2	24.4	7.5	0.0



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, May 22, 2008

Author: David Miskus, JAWF/CPC/NOAA

Fig. 4a. Drought Monitor for the Western States with statistics over various time periods. Note no significant change since last week. Ref: http://www.drought.unl.edu/dm/DM_west.htm

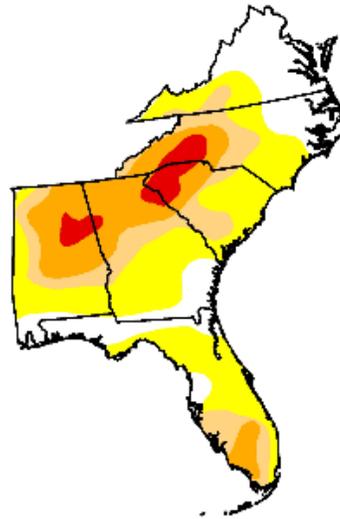
U.S. Drought Monitor

Southeast

May 20, 2008
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	24.5	75.5	39.2	22.9	4.8	0.0
Last Week (05/13/2008 map)	30.3	69.7	40.2	23.5	8.3	0.0
3 Months Ago (02/26/2008 map)	18.1	81.9	66.2	48.6	27.1	8.9
Start of Calendar Year (01/01/2008 map)	9.6	90.4	74.3	58.5	41.0	22.0
Start of Water Year (10/02/2007 map)	10.1	89.9	77.9	63.8	45.2	24.0
One Year Ago (05/22/2007 map)	14.8	85.2	72.5	46.2	25.5	0.0



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

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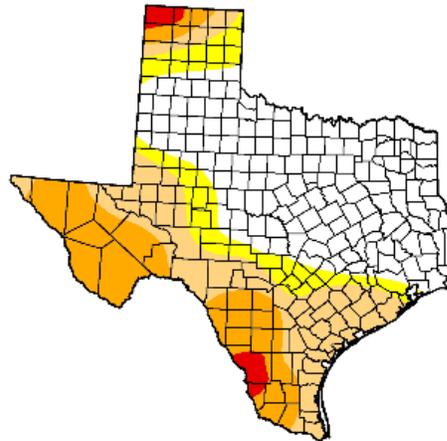
U.S. Drought Monitor

Texas

May 20, 2008
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	47.2	52.8	42.1	20.3	1.9	0.0
Last Week (05/13/2008 map)	46.7	53.3	36.6	24.3	6.9	0.0
3 Months Ago (02/26/2008 map)	29.0	71.0	44.2	19.3	2.0	0.0
Start of Calendar Year (01/01/2008 map)	52.0	48.0	11.6	0.0	0.0	0.0
Start of Water Year (10/02/2007 map)	97.9	2.1	0.0	0.0	0.0	0.0
One Year Ago (05/22/2007 map)	96.0	4.0	0.0	0.0	0.0	0.0



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, May 22, 2008
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Fig. 4b: Drought Monitor for the Southeastern States and Texas with statistics over various time periods. Note some improvement over the Southeast and southern Texas in the D4 regions but worsening over the Texas Panhandle. Ref: http://www.drought.unl.edu/dm/DM_southeast.htm

Weekly Snowpack and Drought Monitor Update Report

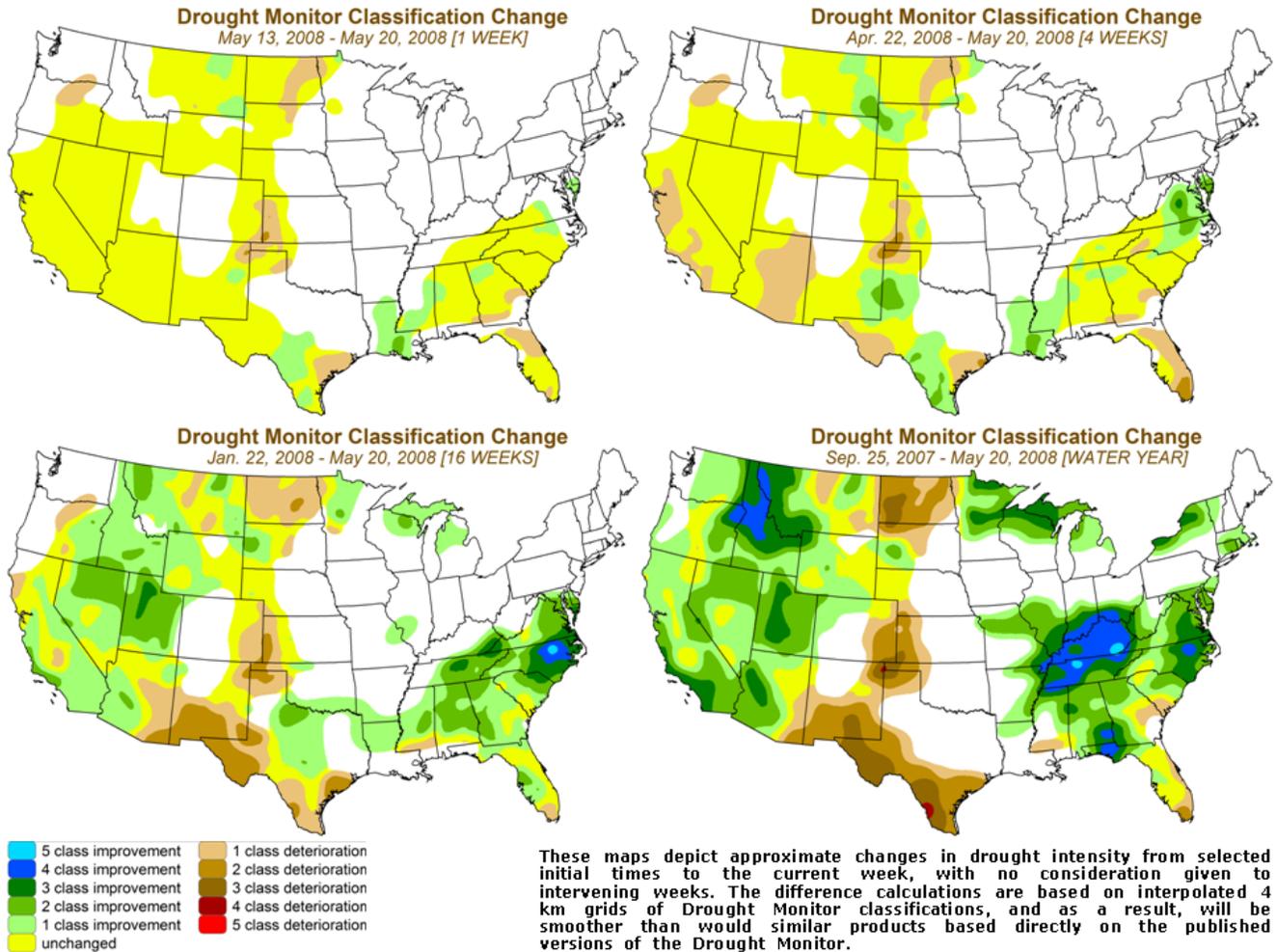
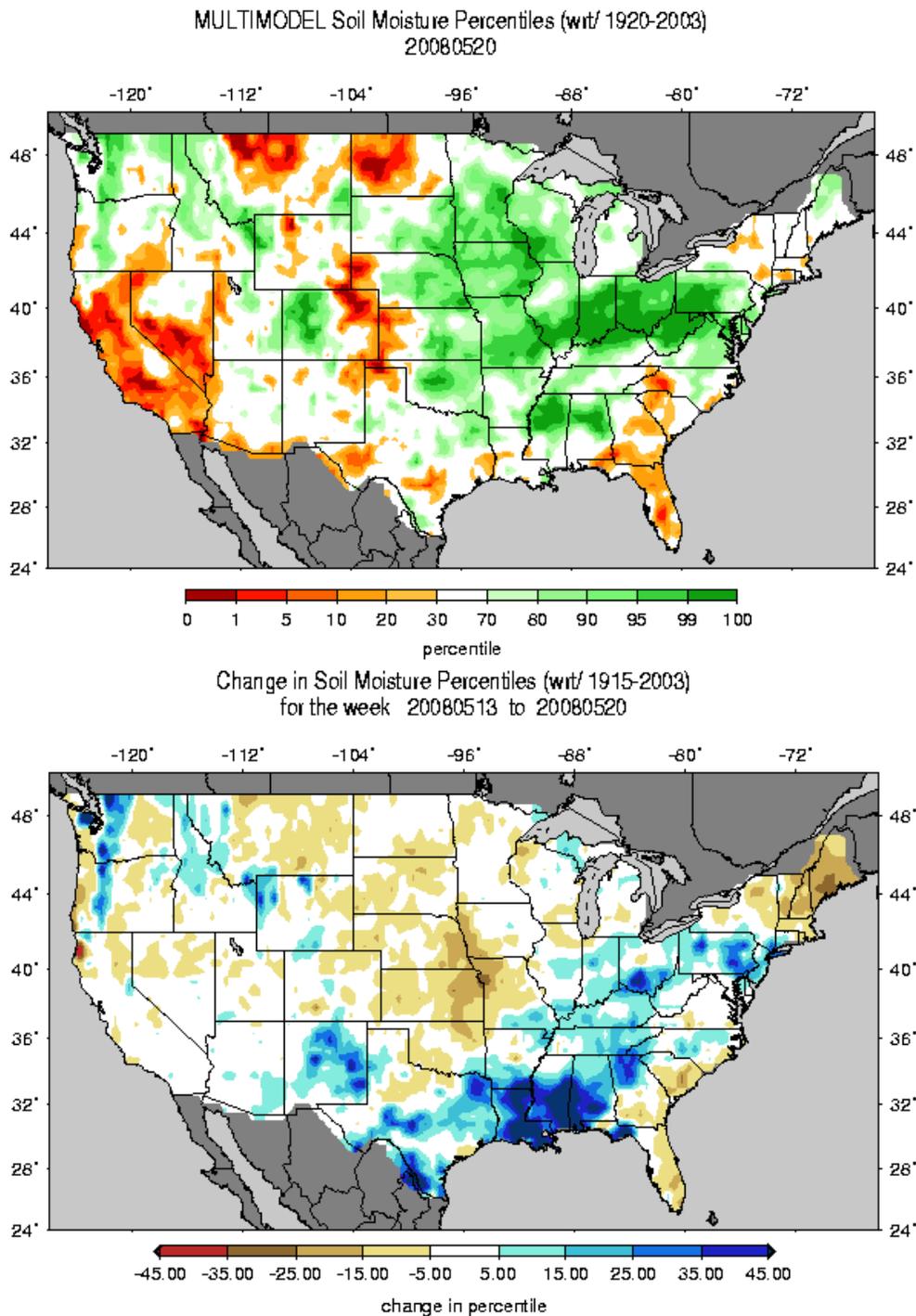


Fig 4c: Drought Monitor Classification Change for various time periods. Note little change last week but major improvement over Idaho, the Tennessee Valley, and the Florida Panhandle since the start of the Water Year (lower right panel). Also note significant worsening in drought over the Northern Plains (ND), Oklahoma Panhandle, southern Texas, and southern New Mexico.

Ref: <http://www.cpc.ncep.noaa.gov/products/predictions/experimental/edb/dm-change-4maps.png>

Weekly Snowpack and Drought Monitor Update Report



Figs. 5 & 5a: Soil Moisture Ranking and change in percentile based on 1915-2003 climatology for this past week. The excessively moist mid-West and dryness over California and southern Nevada continue to dominate since last week (Fig. 5). Last week saw a significant increase in soil moisture over the Deep South while England's dryness has improved somewhat (Fig. 5a).

Ref: http://www.hydro.washington.edu/forecast/monitor/curr/CONUS.multimodel.sm_gnt.gif
http://www.hydro.washington.edu/forecast/monitor/curr/CONUS.sm_gnt.1wk.gif

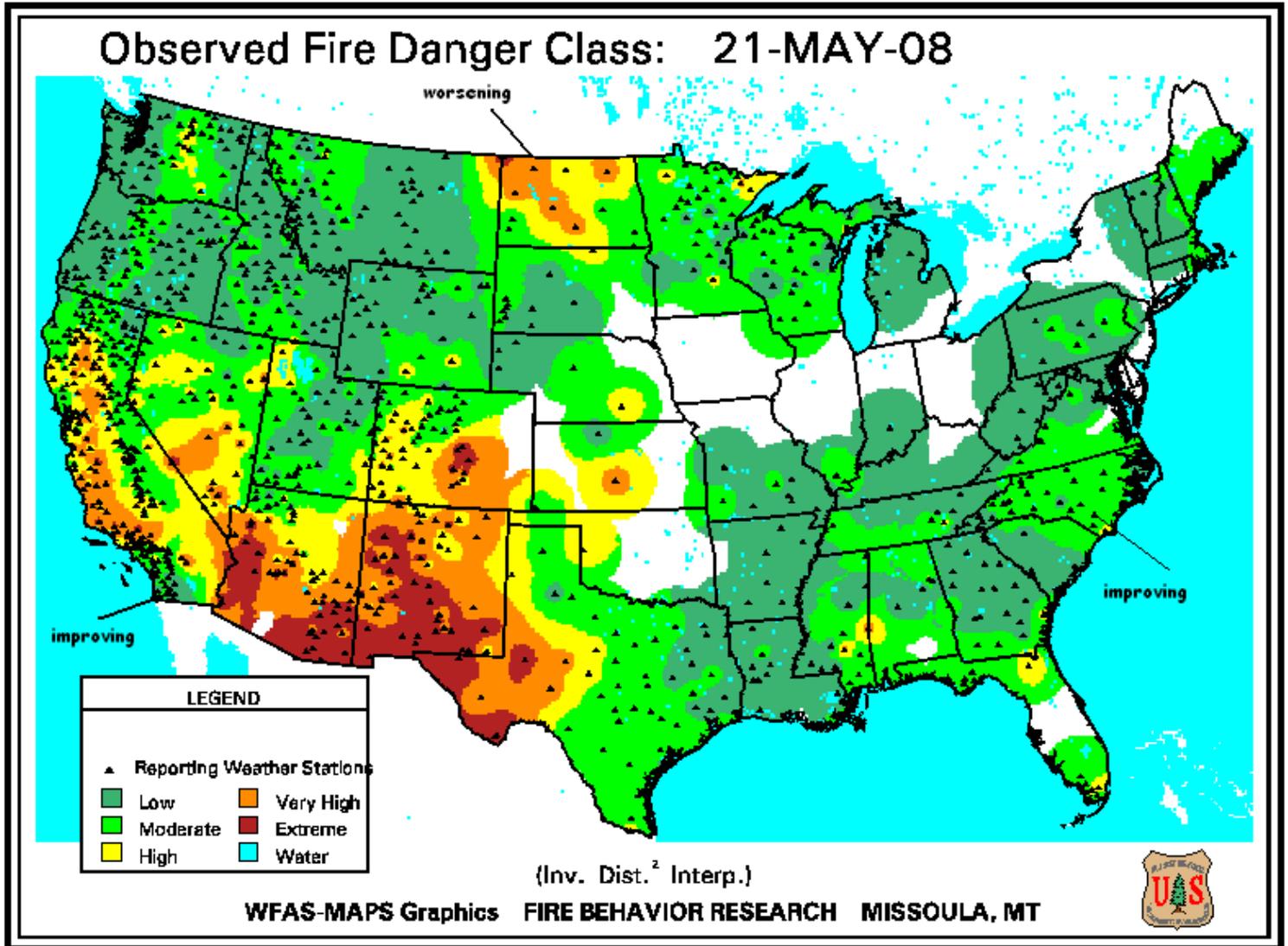


Fig. 6. Observed Fire Danger Class. Note extreme fire danger over the Southwest Texas, southern New Mexico, and southern Arizona but conditions have improved over southern California and eastern North Carolina since last week. Worsening conditions have developed over North Dakota Source: Forest Service Fire Behavior Research – Missoula, MT. Ref: http://www.fs.fed.us/land/wfas/fd_class.gif

Weekly Snowpack and Drought Monitor Update Report

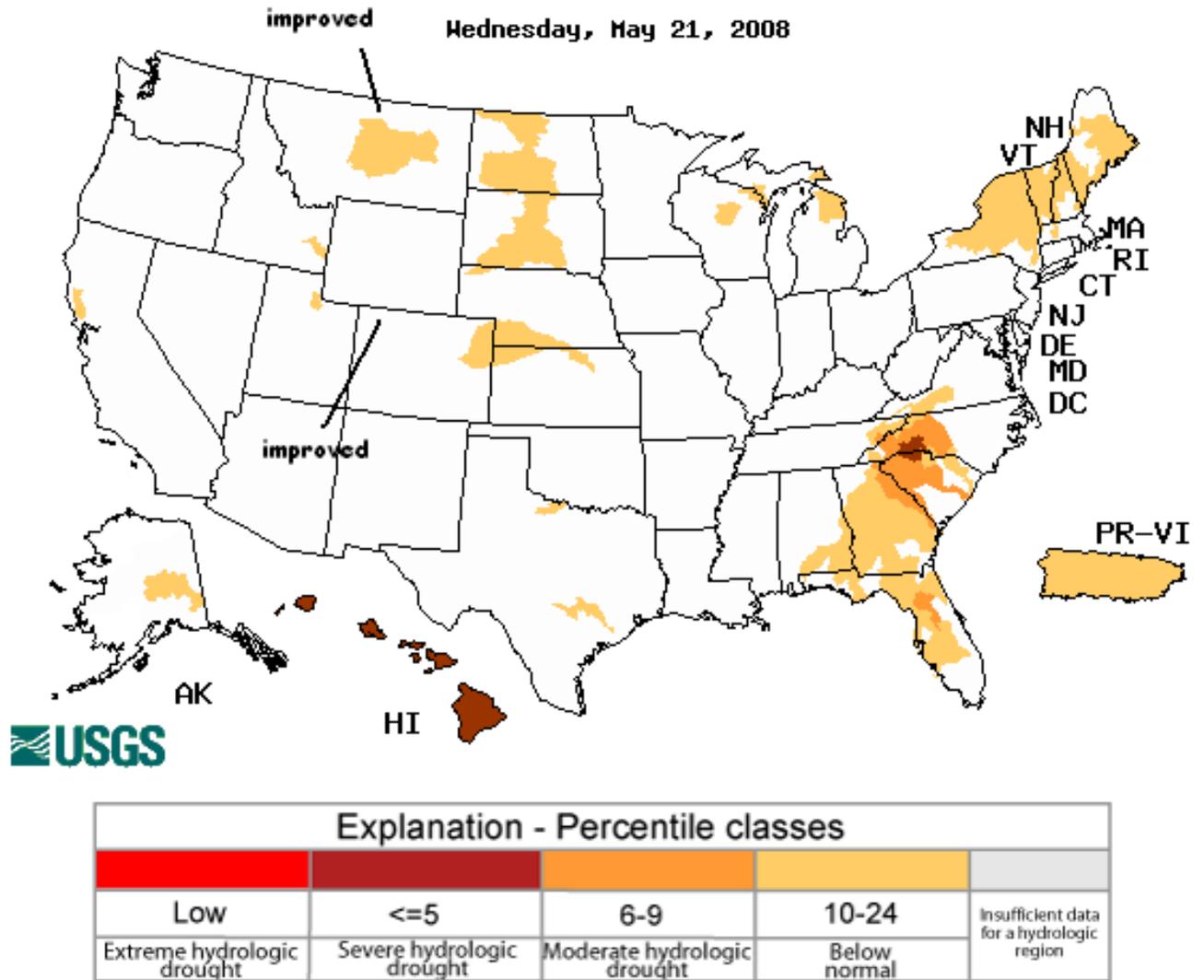
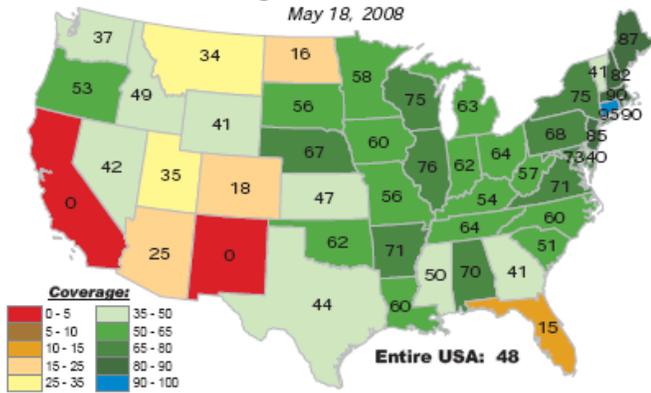


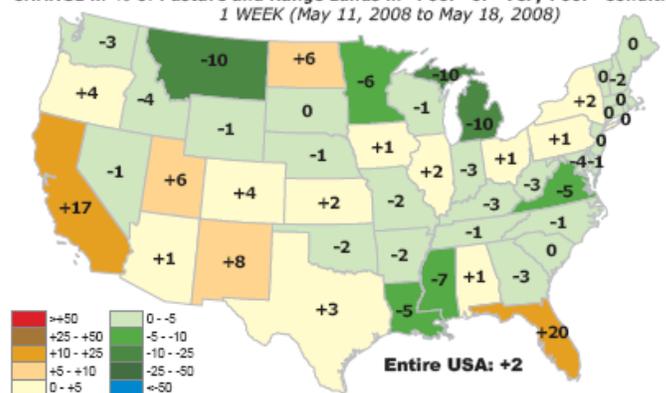
Fig. 7. This week's map shows significant improvement over the Rockies since last week.
 Ref: USGS <http://water.usgs.gov/waterwatch/?m=dryw&w=map&r=us>

Weekly Snowpack and Drought Monitor Update Report

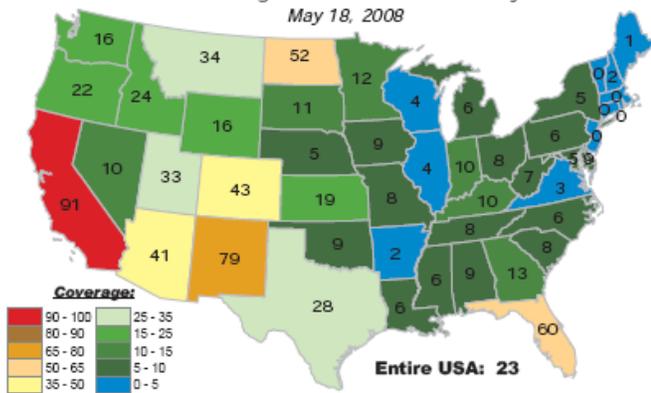
Percent of Pasture & Range Land in "Good" or "Excellent" Condition
May 18, 2008



CHANGE in % of Pasture and Range Lands in "Poor" or "Very Poor" Condition
1 WEEK (May 11, 2008 to May 18, 2008)



Percent of Pasture & Range Land in "Poor" or "Very Poor" Condition
May 18, 2008



CHANGE in % of Pasture and Range Lands in "Poor" or "Very Poor" Condition
4 WEEKS (October 21, 2007 to May 18, 2008)

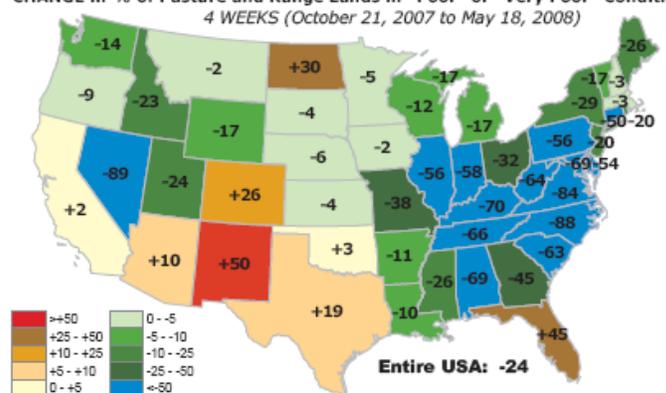


Fig. 8: Pasture and rangeland conditions and changes for various periods. Note poor conditions over California and New Mexico (lower left) and worsening conditions over California and Florida since last week (upper right).

Ref: <http://www.cpc.ncep.noaa.gov/products/predictions/experimental/edb/pasture-range-statewide-conditions.pdf>

Weekly Snowpack and Drought Monitor Update Report

National Drought Summary – May 20, 2008

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/>.

Weather Summary: The week was dominated by upper-air ridging (high pressure) in the West and troughing (low pressure) in the East. This brought unseasonably hot and mostly dry weather to the Far West, spurring rapid snow melt of the above-normal mountain snow pack, particularly in the Northwest, and causing localized river flooding. Farther east, a series of cold fronts, with embedded waves of low pressure, produced cool and unsettled conditions, with heavy rains falling on the southern Great Plains, lower Delta, parts of the Southeast, and from the middle Mississippi, Tennessee, and Ohio Valleys eastward into the mid-Atlantic. Mostly dry weather was beneficial to the soggy western Corn Belt, but unwelcome in central and southern Florida, south-central High Plains, and the northern Great Plains.

The mid-Atlantic, Southeast, and lower Delta: Once again, another week of wet (1 to 2 inches of rain) and cool (temperatures averaging 2 to 6 degrees F below normal) weather in the mid-Atlantic alleviated residual D0(H) in the Delmarva Peninsula, and further eroded D0 and D1 in portions of south-central Virginia and north-central North Carolina. Since April 1, 14.95, 14.13, and 13.40 inches of rain have fallen on Washington/Dulles, VA, Washington/National, DC, and Richmond, VA, accumulating surpluses of 9.05, 8.91, and 7.67 inches, respectively.

Farther south, light and scattered rains (0.1 to 0.5 inch) maintained conditions in the remainder of the Carolinas. Farther west, however, moderate to heavy showers and thunderstorms, including 4 to 8 inches across northern and south-central Louisiana and central Mississippi (locally 11 inches at Shreveport, LA), eliminated D0 across the lower Delta and improved the D1 to D0 across southern Mississippi where totals were generally lower (2 to 3 inches). Two to four inches of rain also soaked portions of west-central Alabama and the Florida Panhandle, easing drought by one category in east-central Mississippi and west-central Alabama. Another 1 to 2 inches of rain in northern Georgia was enough to remove the area's D3 as light to moderate precipitation since early February has been enough to warrant improvements in the state, although long-term deficits (24- to 36-months) exceeding 20 inches still remained, and most 7- and 14-day USGS averaged streamflows remained in the lower 25th percentile. Similarly, 1 to 2 inches of rain in southeastern Tennessee and southwestern North Carolina produced some slight drought reduction.

In contrast, while western and northern sections of the Southeast received decent rains, the eastern Gulf and southern Atlantic Coasts mostly missed out. Only 0.1 to 0.4 inch of rain was measured in southeastern Alabama, southern Georgia, and central Florida, and little or no rain fell on southern Florida. Accordingly, short-term dryness (30- and 60-days) has developed in southeastern Alabama and southern Georgia, and expanded across north-central Florida. In the latter area, adequate topsoil moisture but low well water levels and 7-day USGS stream flows in the lower 10th percentile required the 'H' impact designation. In central and southern Florida, the onset of the summer rainy season has been slow to develop as the last decent rainfall (1 to 2 inches) across the southern half of Florida occurred on April 6-7. Lake Okeechobee continued to drop, reaching an average depth of 9.81 feet, or 3.49 feet below normal, although still far from its all-time record low of 8.82 feet in July 2007. In addition, numerous large wildfires continued to

Weekly Snowpack and Drought Monitor Update Report

burn, with the National Interagency Fire Center reporting 4 large, active wildfires affecting 77 043 acres as of May 21. Accordingly, D1 was expanded eastward and D2 southward.

The Plains and Upper Midwest: Widespread showers and thunderstorms, some severe, dropped moderate to heavy rains (1 to 5 inches) on much of central and eastern Texas and on parts of the central and lower Rio Grande Valley, with lighter amounts (0.5 to 1.5 inches) falling on the southern High Plains. In south-central Texas (Burnet, Lampasas, San Saba, and Llano counties), 3 to 5 inches of rain erased abnormal dryness, while over 2 inches of rain in south Texas near Uvalde, Carrizo Springs, Rio Grande City, and Roma shrank the D3(A). In east-central New Mexico, 1 to 1.5 inches of rain split the D1(A) area in two as lesser amounts fell to the north and south. Around Laredo (0.4 inches), however, D3(A) remained as the heavy rains missed to the north and south. Similarly in southeastern Texas (an area from Victoria to Bayport to south of Austin), weekly totals were a meager 0.1 to 0.2 inch. Significant rains have bypassed this region for the past 2 months, creating short-term deficits of 4 to 6 inches, and D1 was expanded into this triangle.

In the south-central High Plains, a continued lack of significant precipitation and reports from county district conservationists and agronomists indicated conditions worse than have been depicted. In northeastern New Mexico, the Panhandles of extreme northern Texas and western Oklahoma, southeastern Colorado, and western Kansas, precipitation during the water-year-to-date and past 60-days (main rainy season is the spring) have been dismal, with most location reporting under 25% of normal, and some even less. In Cimarron County, Oklahoma, few dryland winter wheat acres will be harvested, and little to no acres were available for grazing. Erosion from wind was being reported for the first time in years. Accordingly, D1-D3 was expanded to incorporate the areas with the lowest percent of normal precipitation during the past 60-days and back to October 1, 2007, plus declining regional impacts.

Farther north, a windy and mostly dry week (less than 0.1 inch) in the northern Great Plains and upper Midwest caused rapid depletion of the topsoil moisture in north-central South Dakota, eastern North Dakota, and northwestern Minnesota. In the latter two areas, although long-term precipitation (6- to 12-months) was at or above-normal, short-term deficiencies (90-days or less) have combined with recent strong winds and high evaporative rates to degrade topsoil moisture conditions as well as ripping out some sugar beet seedlings that will require replanting. As a result, D1(A) now includes most of eastern North Dakota and extreme northwestern Minnesota. Finally, changes that were suggested last week for eastern Montana (but accidentally omitted) were implemented this week, and included 1-category improvements in climate division 6 (removing some D0) and 7 (D1 to D0, and some D0 removed).

The West: The Far West, especially the Pacific Northwest, experienced an abrupt transition from unseasonably cool conditions to near-record and record heat as readings soared into the 90s and 100s degrees F. The summer-like temperatures quickly melted an above-normal mountain snowpack, causing rivers to rapidly rise to near-record levels for mid-May and produce some localized flooding, most notably impacting the water treatment plant for Yakima, Washington. The extreme heat came after a long spell of subnormal temperatures dating back to mid-March in the Pacific Northwest. This allowed the mountain snow pack to build as little melted, and even though precipitation was generally below normal, it continued to fall in the form of snow. Even with the recent melting, basin average snow water content (SWC) on May 20 still remained above-normal at many Washington, southern and northeastern Oregon, northern Idaho, Montana, Wyoming, and Colorado basins. California's four Sierra Nevada basins were a notable exception, with SWC running at 23%, 1%, 21%, and 50% (north to south), and water-year-to-date (WYTD) precipitation averaging between 70 and 79% of normal. In contrast, nearly all of the remaining Western basins average precipitation was close to or above-normal this water year.

Weekly Snowpack and Drought Monitor Update Report

Precipitation was negligible across most of the West, except for light amounts (0.1 to 0.5 inch) in western Washington, northern Idaho, parts of the Rockies, and north-central Arizona, and 0.5 to 1.5 inches in central Colorado and western Washington. In central Oregon and south-central Washington, however, after a good start to the water year (October-December), much drier weather has occurred since the start of 2008, with 25-50% of the normal precipitation falling during the past 90 days. In response, D0(AH) was extended northward into south-central Washington. Additionally, winter wheat conditions have deteriorated in Oregon, with 39% rated poor to very poor, while pastures and range conditions rated poor to very poor have declined to 22% and 16% in Oregon and Washington, respectively, according to NASS/USDA on May 18. In even worse shape was California's pastures and ranges, 91% rated poor to very poor. Although the Southwest observed hot and dry weather, no changes were made as we wait for the all of the mountain snow packs to melt out, and then reassess conditions.

Hawaii, Alaska and Puerto Rico: In Hawaii, little or no rain fell on most of the islands, although a few windward locations on Kauai, Oahu, and the Big Island, plus some leeward stations on Maui and the Big Island, received 0.5 to 1.5 inches of rain. The limited number of USGS streamflow gauges on Hawaii were quite low (less than 10th percentile, some at record low levels, especially on Kauai, Oahu, and Maui), but no new water restrictions were made this week, and impacts in agriculture and the public water supply had not been felt too strongly. With the lack of new or worsening impacts, status-quo was maintained in Hawaii, although it will be closely monitored for any further deterioration.

In Alaska, unsettled weather generated light amounts of precipitation and subnormal temperatures in central sections of the state (weekly totals of 0.3 to 1 inch), with some locally heavier totals. Nenana (in central Alaska) reported 2.95 inches, while McGrath, Bettles, Northway, and Fairbanks (near or inside the D0 area) measured between 0.25 and 0.35 inch. With the widespread cool and wet weather, the D0 area was slightly edged eastward to reflect improving moisture conditions.

With 1.5 to 2.5 inches of rain falling on west-central Puerto Rico, plus the heavy widespread rains of late April and early May, D0 was further reduced in west-central portions of the island as short-term deficits greatly declined or disappeared. The rest of the island with D0, however, saw lighter amounts (0.3 inch or less), maintaining abnormal dryness there.

Looking Ahead: For May 22-26, upper-air troughing (low pressure) will remain in place over the West while ridging (high pressure) gradually envelops the East. This will produce cool and wet conditions in the West, even including parts of the Southwest, with a good chance of weekend rains in the northern and central Plains. Showers and thunderstorms are likely along the central and eastern Gulf early in the period. In contrast, mostly dry weather and moderating temperatures are in store for the East, although New England may remain unsettled. Overall, this is a favorable 5-day forecast, with generally dry weather where it is wet and a chance of rain in many drought-stricken regions.

For the ensuing 5 days (May 27-31), the CPC 6-10 day outlook favors wetter-than-usual weather in the Northwest, and from the central Great Plains eastward into the mid-Atlantic and Carolinas. Subnormal precipitation is expected in Alaska, the upper Great Lakes region, and along the southern tier of States, except for central and southern Florida (normal). Temperatures are expected to average above-normal across much of the lower 48 States and Alaska, with below-normal readings limited to the upper Great Lakes region, New England, and southern Florida.

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Weekly Snowpack and Drought Monitor Update Report

Dryness Categories

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

Drought Intensity Categories

D1 ... Moderate Drought

D2 ... Severe Drought

D3 ... Extreme Drought

D4 ... Exceptional Drought

Drought or Dryness Types

A ... Agricultural

H ... Hydrological

Updated May 22, 2008