United States Department of Agriculture

NRCS

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

Weekly Report - Snowpack / Drought Monitor Update **Date: 30 December 2010**

SNOTEL SNOWPACK AND PRECIPITATION SUMMARY

Snow: SNOTEL Snow-Water Equivalent percent of normal values for 30 December 2010 shows abundant surpluses over Oregon, the Great Basin, southern Idaho, Utah, western Colorado and Wyoming. Significant shortfalls exist over the extreme southern reaches of the Southwest (Fig 1). SNOTEL 7-day snow depth changes show considerably gains in accumulation across much of the Pacific Northwest. Snowpack was on the decline over Utah and Colorado (Fig. 1a).

Temperature: SNOTEL 7-day average temperature departure from normal map shows temperatures were much above normal over Colorado and closer to Normal over the Far West (Fig 2). ACIS 7-day average temperature anomalies: Greatest positive temperature departures occurred over parts of northwestern Nevada (>+12°F) and the greatest negative departures occurred over southwest Wyoming, eastern Nevada, and north-central Montana (<-6°F) (Fig. 2a). ACIS average temperature anomalies for 2010 show temperatures generally within 2 degrees of normal with the coolest departures over California and Montana (Fig. 2b).

Precipitation: ACIS 7-day average precipitation amounts for the period ending 29 December shows the bulk of the heaviest precipitation confined to Pacific Northwest Coastal and Cascade Ranges and Sierra Mountains (Fig. 3). In terms of percent of normal, the precipitation pattern was extremely wet over most of the West, west of the Continental Divide (Fig. 3a). ACIS average precipitation anomaly for 2010 shows significant surpluses across the West. Deficits dominated portions of the Southwest and Wyoming (Fig. 3b). For the 2011 Water-Year that began on 1 October 2010, excessive precipitation has fallen over the middle portions of the West with nearly normal conditions over the Northernmost Tier States and significant deficits over the extreme southern reaches of the Southwest (Fig. 3c).

Southwest: The storm system that soaked the West, especially southern California (refer to Intermountain West summary below), also hit northwestern and central Arizona and northern New Mexico with decent precipitation (1 to 3 inches) and provided drought relief (D1 to D0 in Arizona's southwest Maricopa and northern Pinal Counties; D0 removal in Mohave, Yavapai, western Coconino, northwestern Gila, and northern Maricopa Counties). December 28 SNOTEL average basin Snow Water Content (SWC) in central Arizona stood between 105 to136 percent of normal, a large jump from 60 to 86 percent of normal just 2 weeks ago. In northern New Mexico, D0 was eased from northern Rio Arriba County as SNOTEL average basin Water Year to date (WYTD) precipitation and Dec. 28 SWC ranged between 110 to 120 percent of normal. Unfortunately, the storm mostly missed southern sections of Arizona (less than 0.5 inches) and New Mexico (less than 0.2 inches) and western Texas (dry), keeping conditions status quo since D1 was introduced in southern New Mexico and southwestern Texas last week. Both SNOTEL basin average WYTD precipitation and Dec. 28 SWC for southeastern Arizona and most of New Mexico remained subnormal, with several basins less than 40 percent of normal. The impacts line, however, was modified to AH in southern Arizona and southwestern New Mexico as both short and long-term deficits were noted while southeastern New Mexico and southwest Texas remained at A with only short-term dryness effects.

Intermountain West and north-central Rockies: Pacific storms continued to lash the West, dropping more than 2 inches of precipitation along the entire West Coast and on the Sierra Nevada. The small D0 area in west-central California (San Benito, northwest Fresno, and southwest Merced Counties) was erased after another 0.5 to 1 inches of rain fell there. Farther south, a fetch of deep Pacific moisture dumped copious rains on southern California (5 to 10 inches in southeastern Los Angeles, southwestern San Bernardino, western Riverside, and northern San Diego Counties) and eastward into southeastern California (1 to 5 inches in eastern San Bernardino and southeastern Inyo Counties), southern Nevada (1 to 4 inches in southern Nye, southern Lincoln, and Clark Counties), northwestern Arizona (refer to Southwest narrative), and eastward into Utah, western Wyoming, and western Colorado, abruptly ending the D0 in southern Nevada and further trimming the D0 in central Nevada. The D1 in central Nevada was also removed as all available indicators supported no drought, and the few available sites had more than 200 percent of normal WYTD precipitation. Another wet week (0.5 to 2 inches, locally to 3.5 inches in southwestern Colorado) was enough to trim more D0 in southeastern Utah, southwestern Colorado, and northwestern New Mexico. Farther north, although individual stations are sparse in southwestern Wyoming, the Upper Green River Basin reported good soil and stream flow conditions, along with more than 300 percent of normal precipitation so far this month. Also, adjacent SNOTEL average basins WYTD precipitation and Dec. 28 SWC were between 130 to 170 percent, so D0 was eased in southwestern Wyoming. Furthermore, the western D0 and D1 edges were slightly trimmed away as 0.5 to 1.5 inches of precipitation fell. SNOTEL average basins in western Wyoming are now above 100 percent for both WYTD precipitation and Dec. 28 SWC, but lower elevation sites remained subnormal. Author: David Miskus, 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 and 4a).

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/ JEFF GOEBEL
Acting Director, Resource Inventory Division

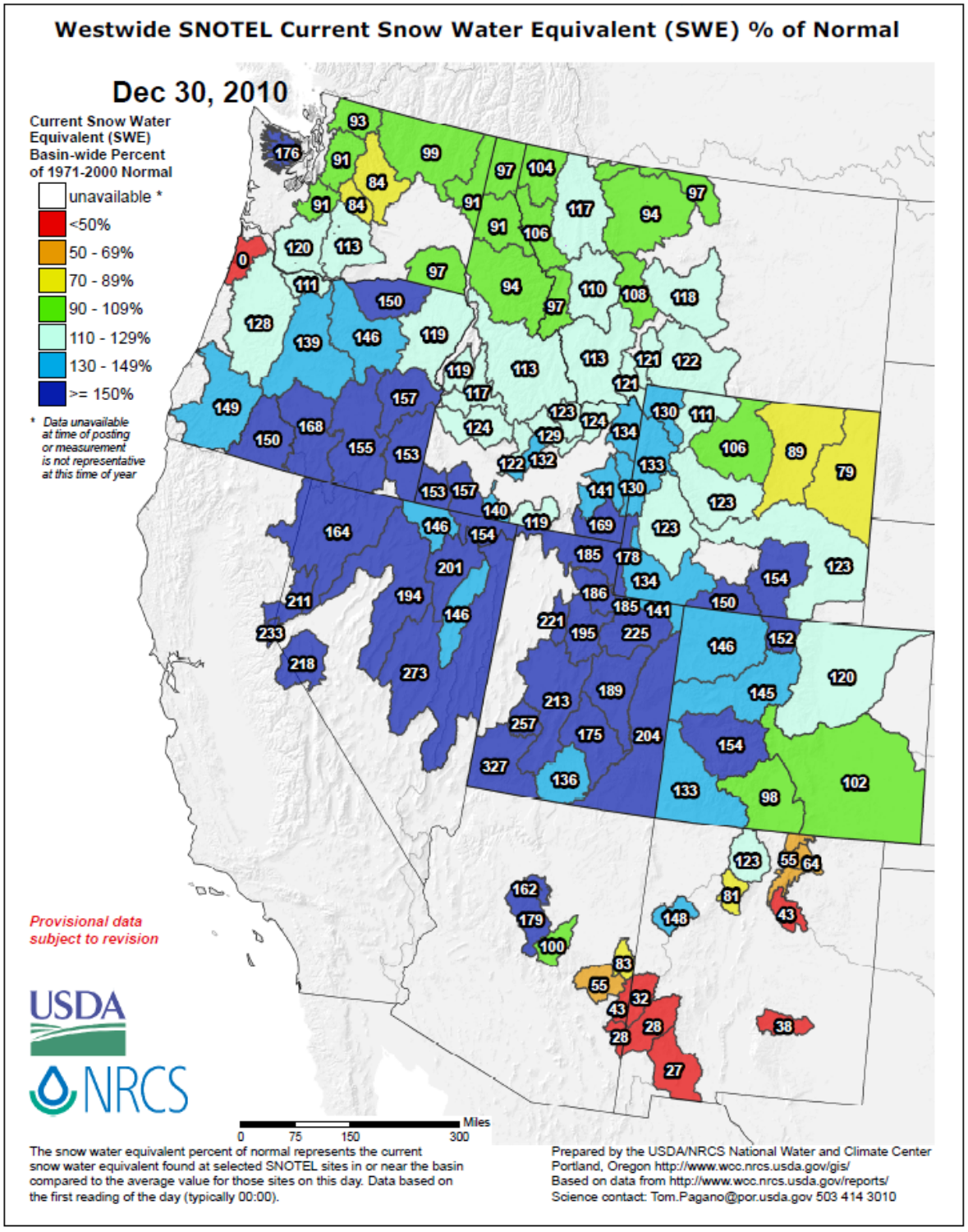


Fig 1. SNOTEL Snow-Water Equivalent percent of normal values for 30 December 2010 shows abundant surpluses over Oregon, the Great Basin, southern Idaho, Utah, western Colorado and Wyoming. Significant shortfalls exist over the extreme southern reaches of the Southwest.

Ref: ftp://ftp.wcc.nrcs.usda.gov/data/water/wcs/gis/maps/west_swepctnormal_update.pdf

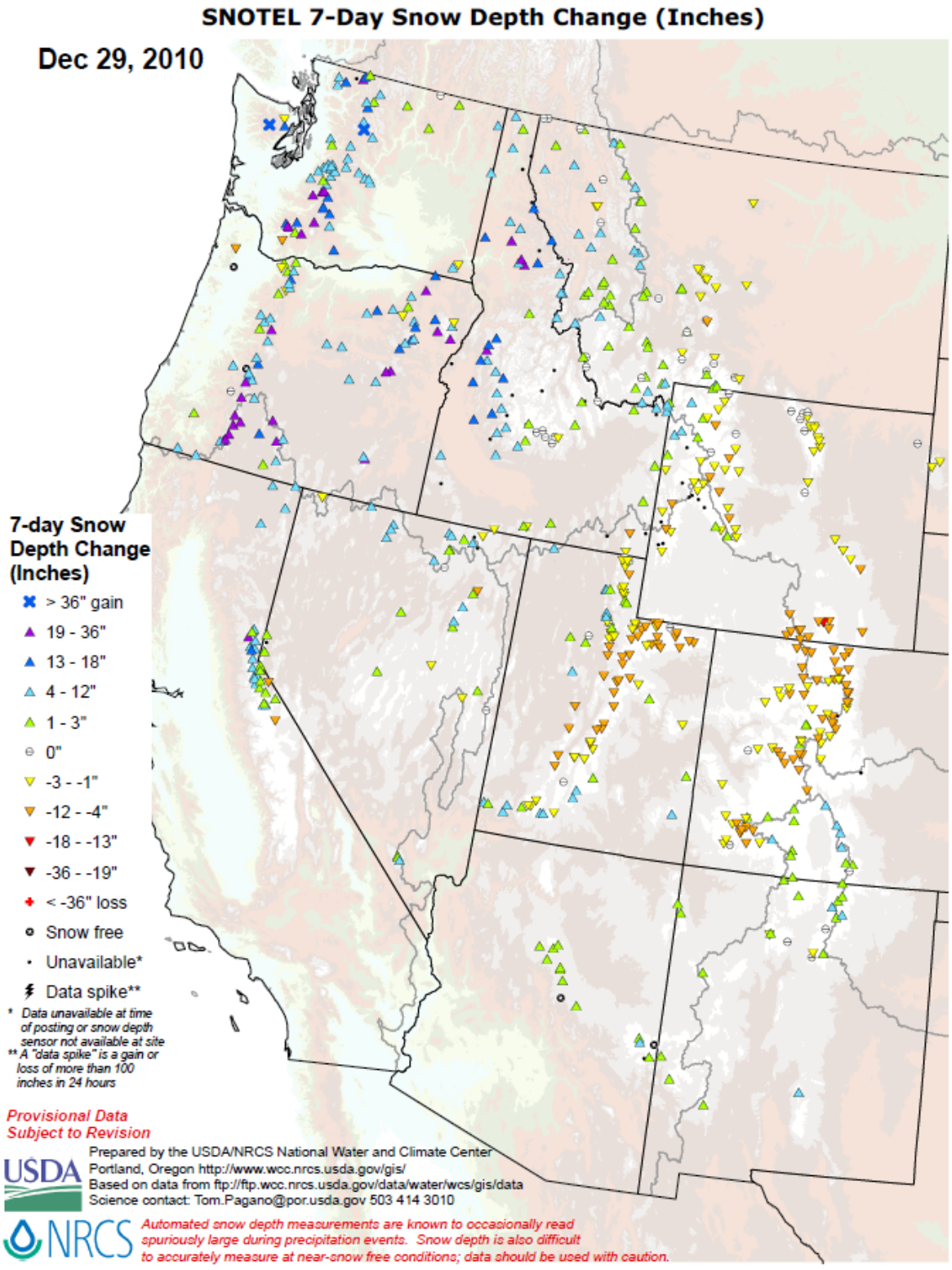


Fig 1a. SNOTEL 7-day snow depth changes show considerably gains in accumulation across much of the Pacific Northwest. Snowpack was on the decline over Utah and Colorado.
Ref: http://www.wcc.nrcs.usda.gov/ftpref/data/water/wcs/gis/maps/west_snowdepth_7ddelta.pdf

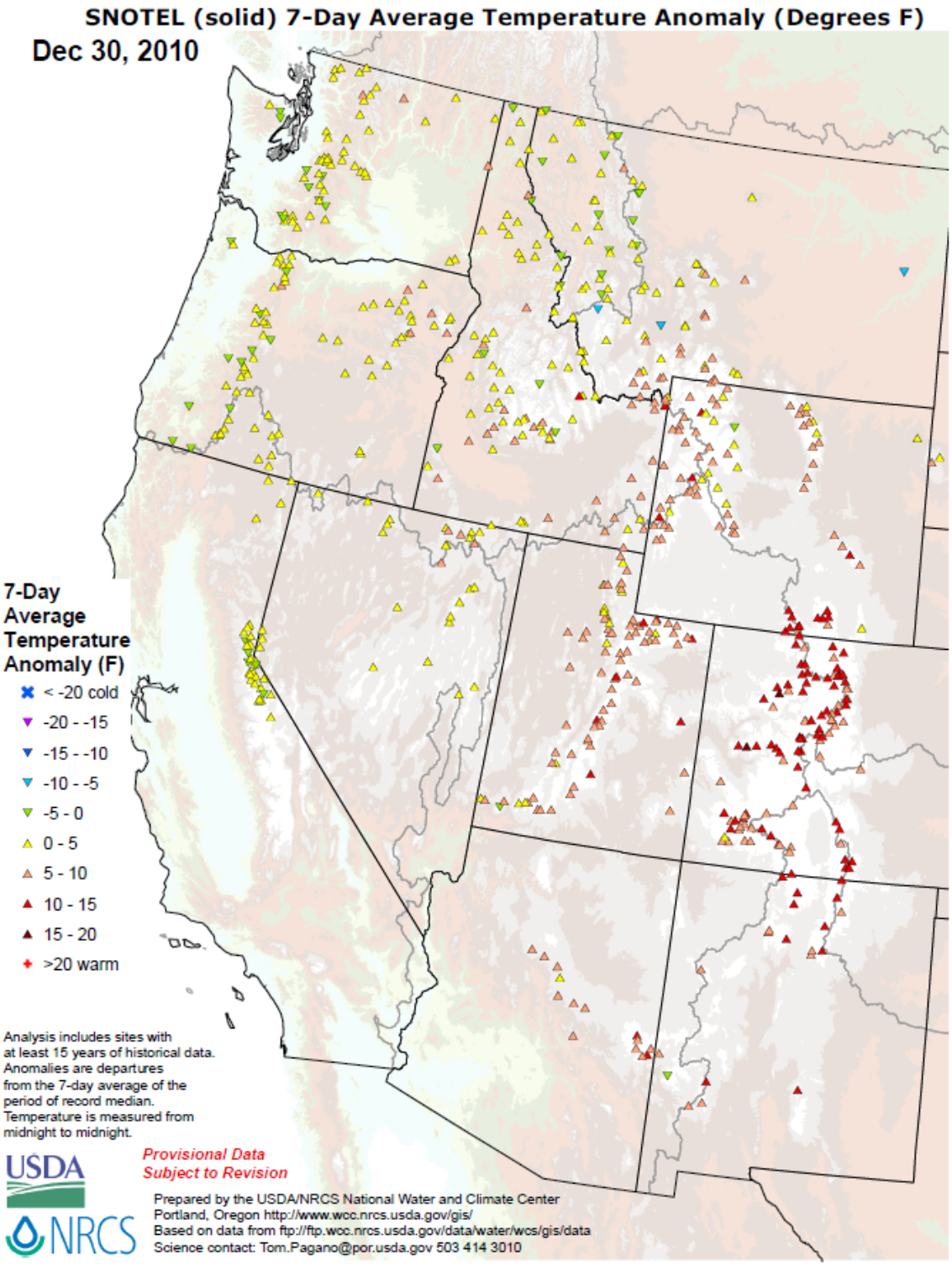


Fig. 2: SNOTEL 7-day average temperature departure from normal map shows temperatures were much above normal over Colorado and closer to Normal over the Far West.
Ref: http://www.wcc.nrcs.usda.gov/ftpref/data/water/wcs/gis/maps/WestwideTavg7dAnomaly.pdf

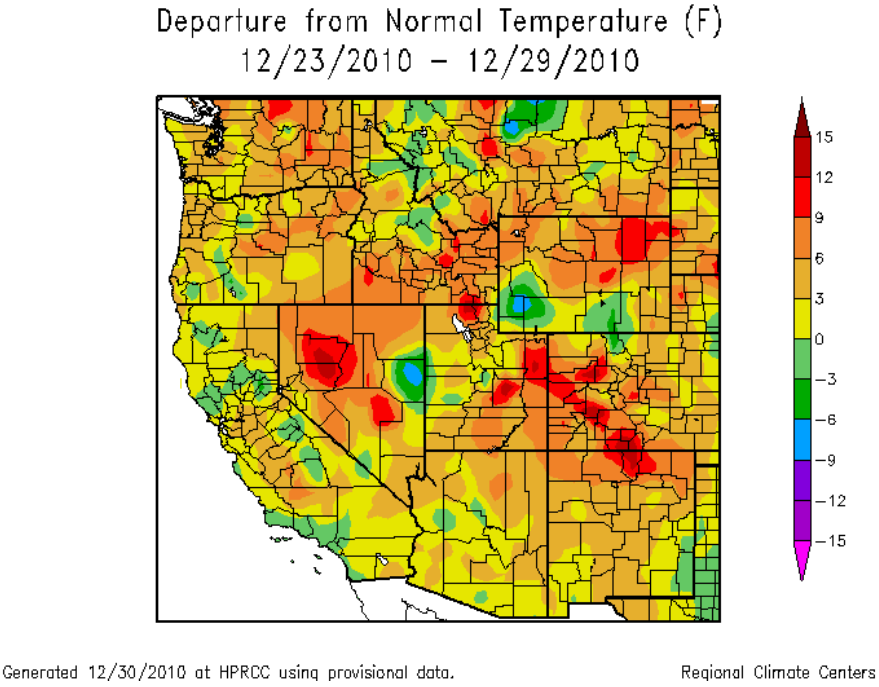


Fig. 2a: ACIS 7-day average temperature anomalies: Greatest positive temperature departures occurred over parts of northwestern Nevada (>+12°F) and the greatest negative departures occurred over southwest Wyoming, eastern Nevada, and north-central Montana (<-6°F). Ref: http://www.hprcc.unl.edu/maps/current/index.php?action=update_product&product=TDept

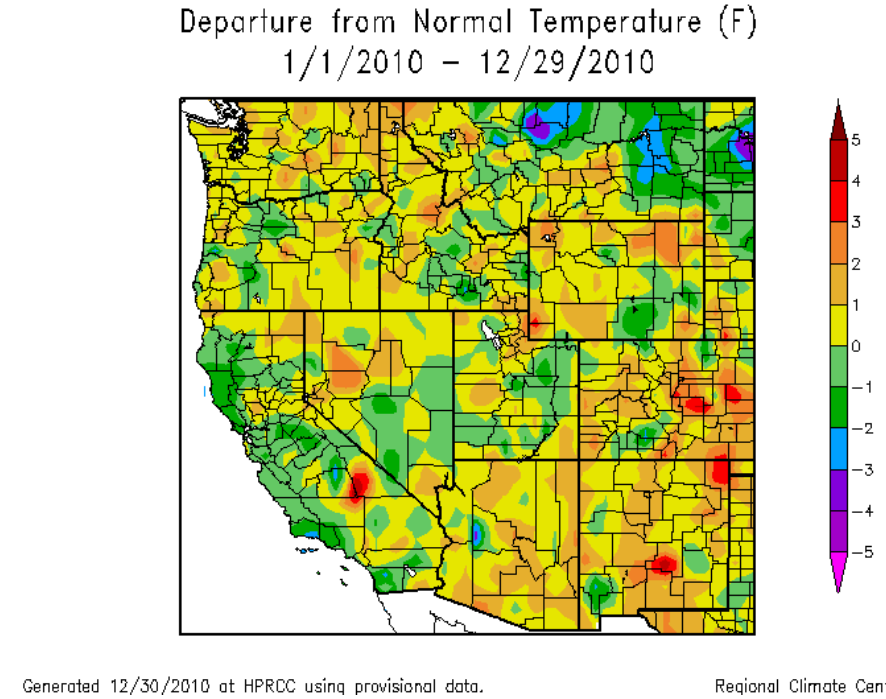
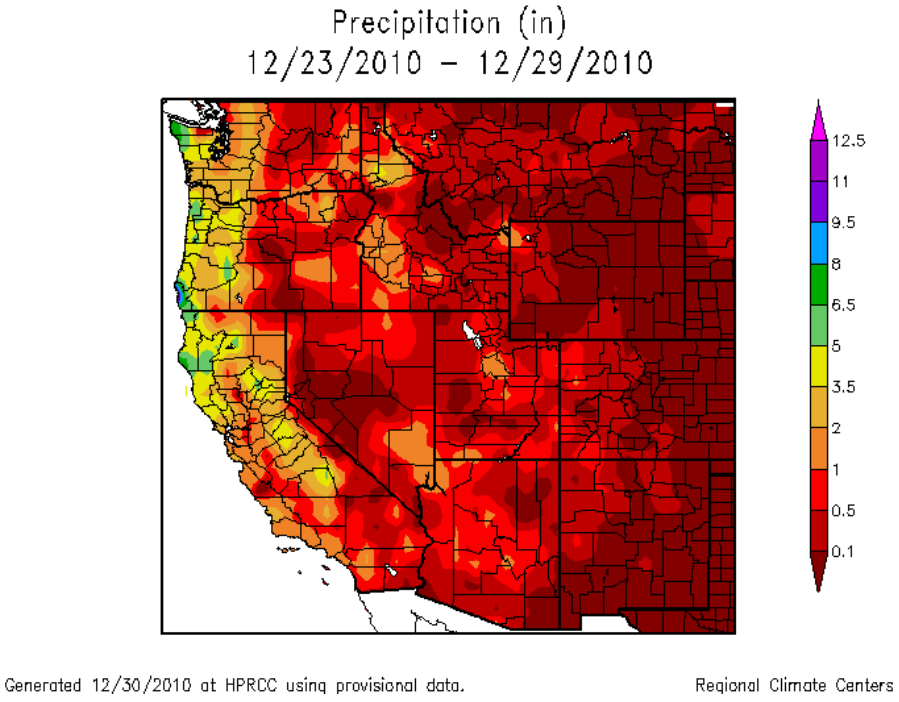


Fig. 2b: ACIS average temperature anomalies for 2010 show temperatures generally within 2 degrees of normal with the coolest departures over California and Montana.
http://www.hprcc.unl.edu/maps/current/index.php?action=update_daterange&daterange=Year.



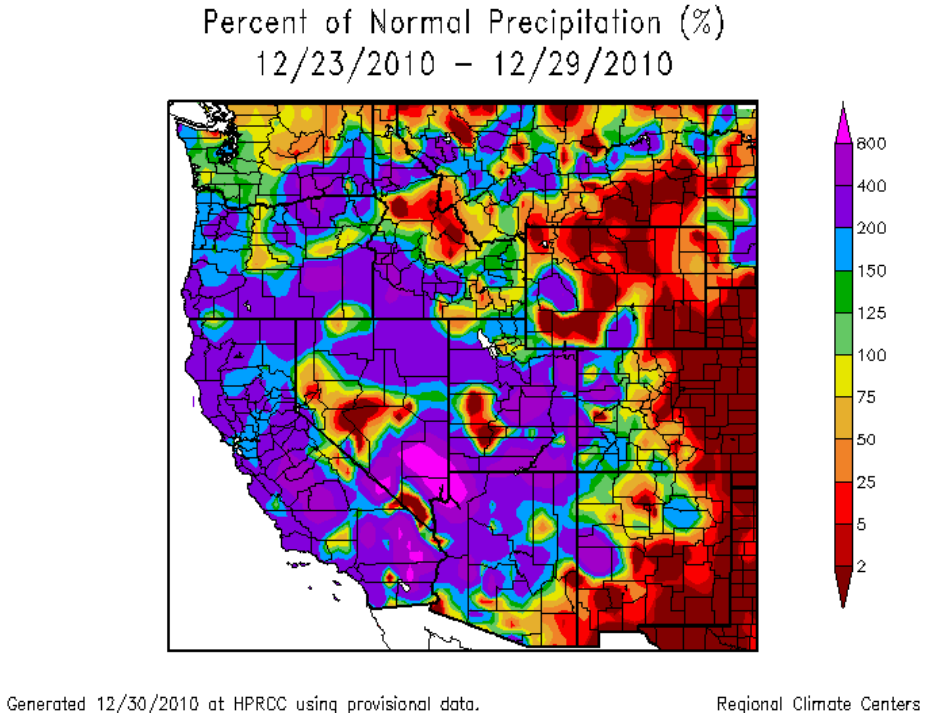


Fig. 3 and 3a: ACIS 7-day average precipitation amounts for the period ending 29 December shows the bulk of the heaviest precipitation confined to Pacific Northwest Coastal and Cascade Ranges and Sierra Mountains (Fig. 3). In terms of percent of normal, the precipitation pattern was extremely wet over most of the West, west of the Continental Divide (Fig. 3a). Ref: http://www.hprcc.unl.edu/maps/current/

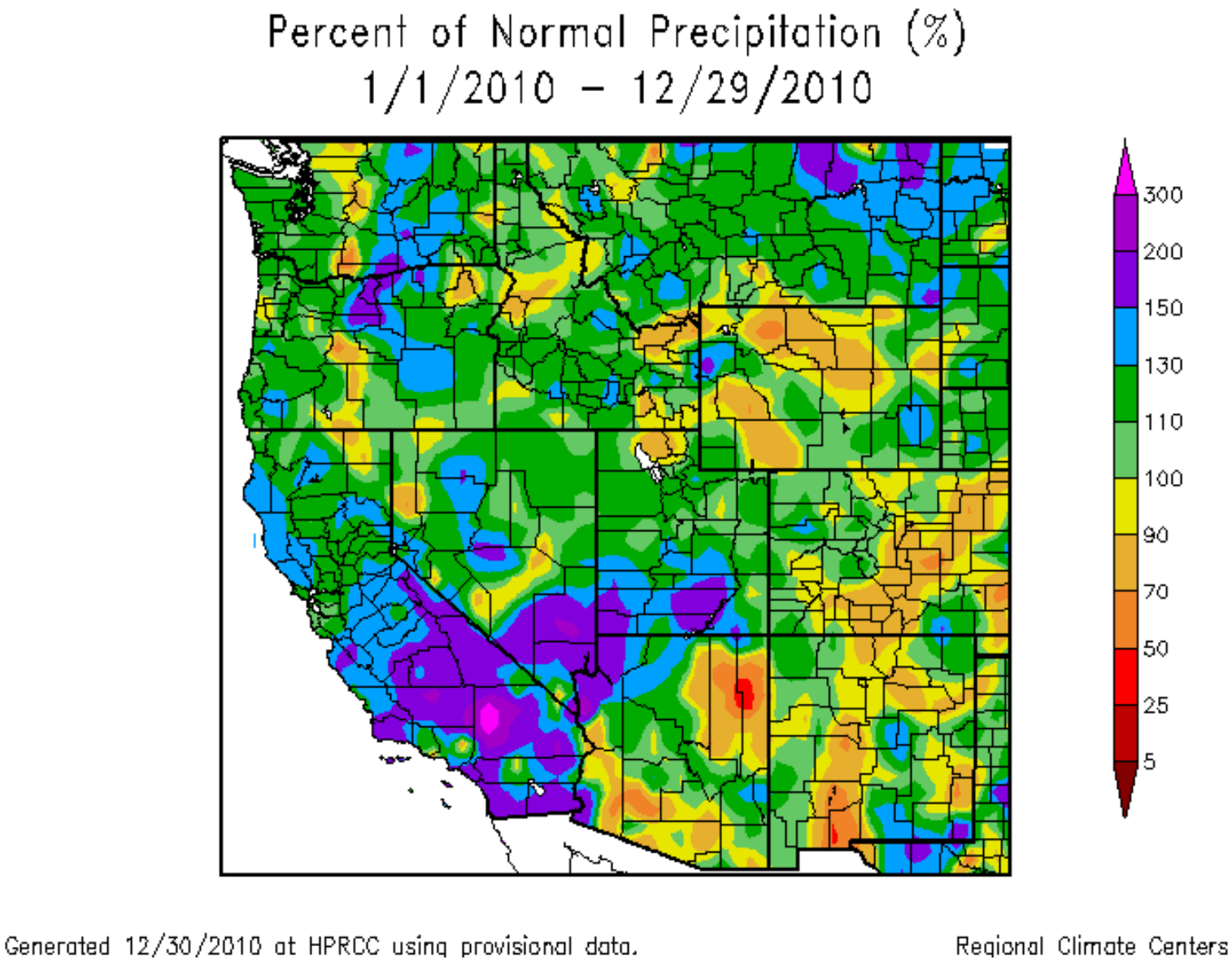


Fig. 3b: ACIS average precipitation anomaly for 2010 shows significant surpluses across the West. Deficits dominated portions of the Southwest and Wyoming.

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

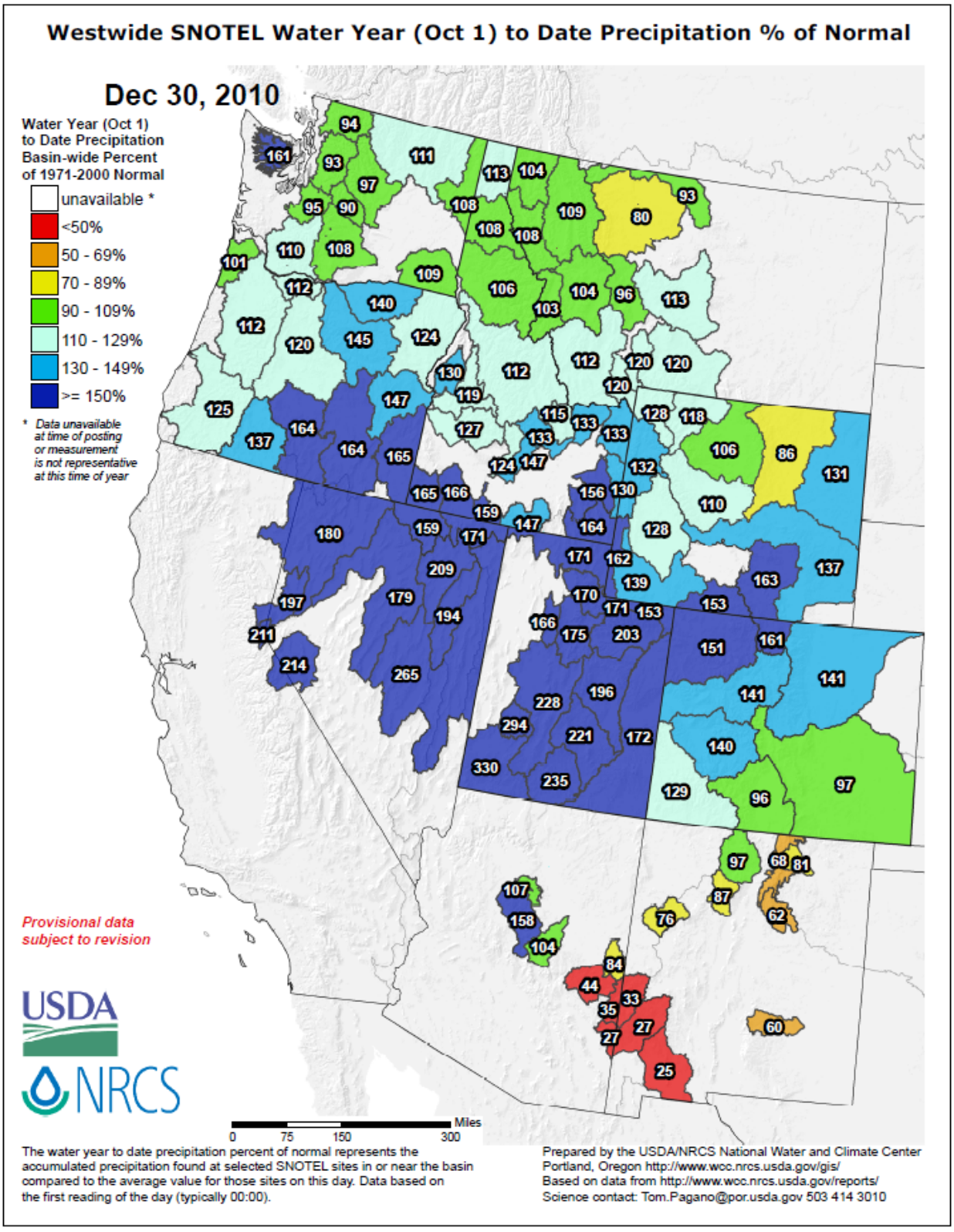


Fig 3c: For the 2011 Water-Year that began on 1 October 2010, excessive precipitation has fallen over the middle portions of the West with nearly normal conditions over the Northernmost Tier States and significant deficits over the extreme southern reaches of the Southwest.

Ref: ftp://ftp.wcc.nrcs.usda.gov/data/water/wcs/gis/maps/west_wytdprecpctnormal_update.pdf

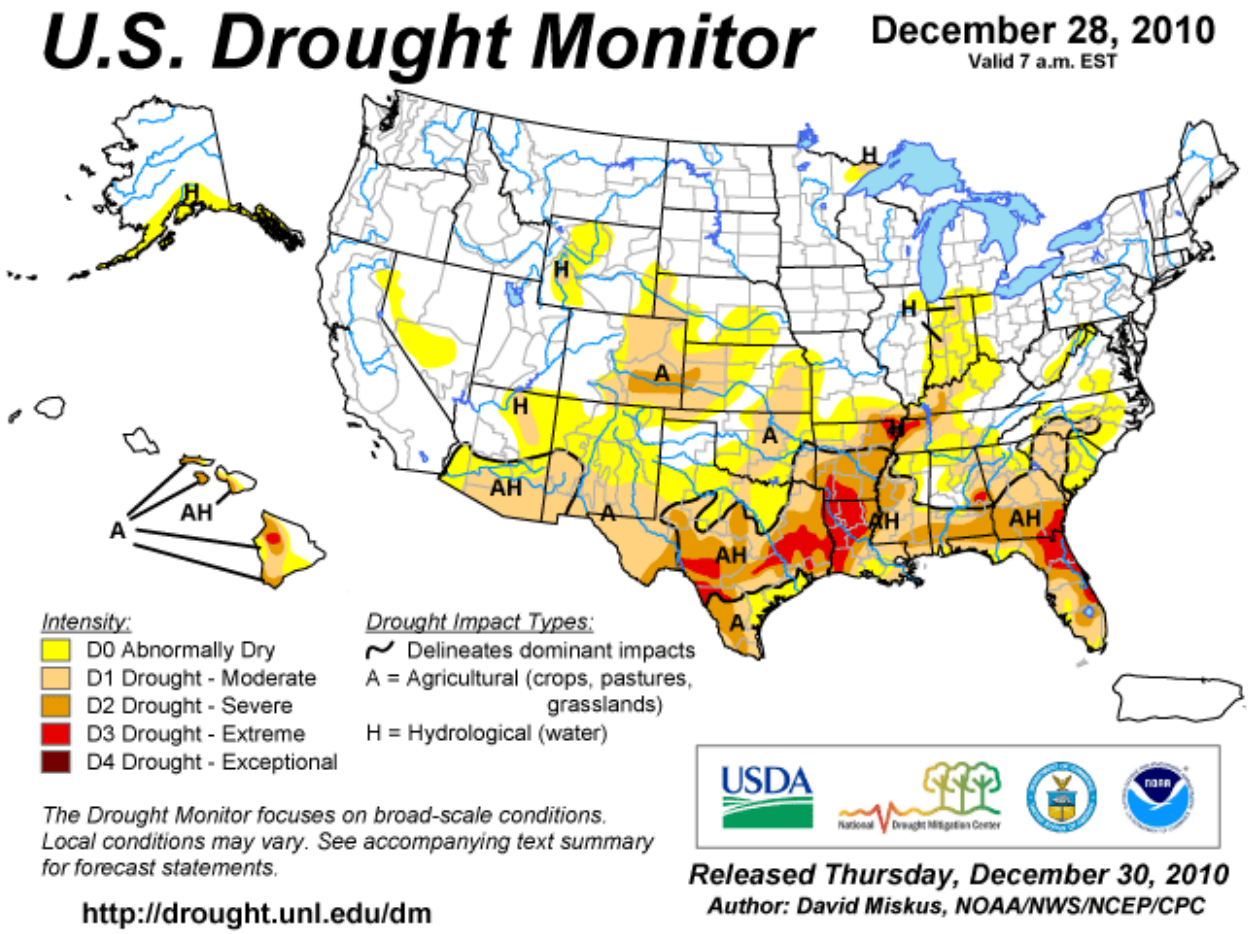


Fig. 4: Current Drought Monitor weekly summary. The severest D3 levels of drought dominate Hawaii, and is scattered across Texas to Florida (typical La Niña signature).
Ref: http://www.drought.unl.edu/dm/monitor.html

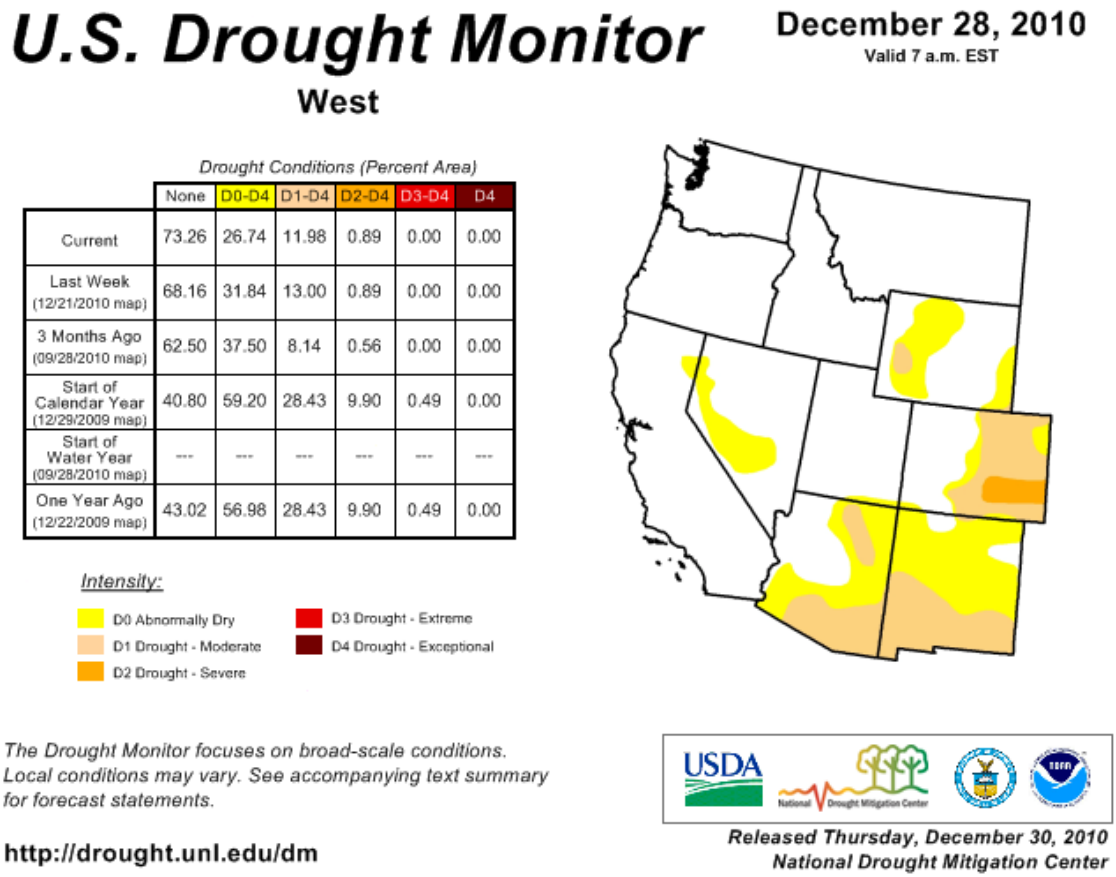
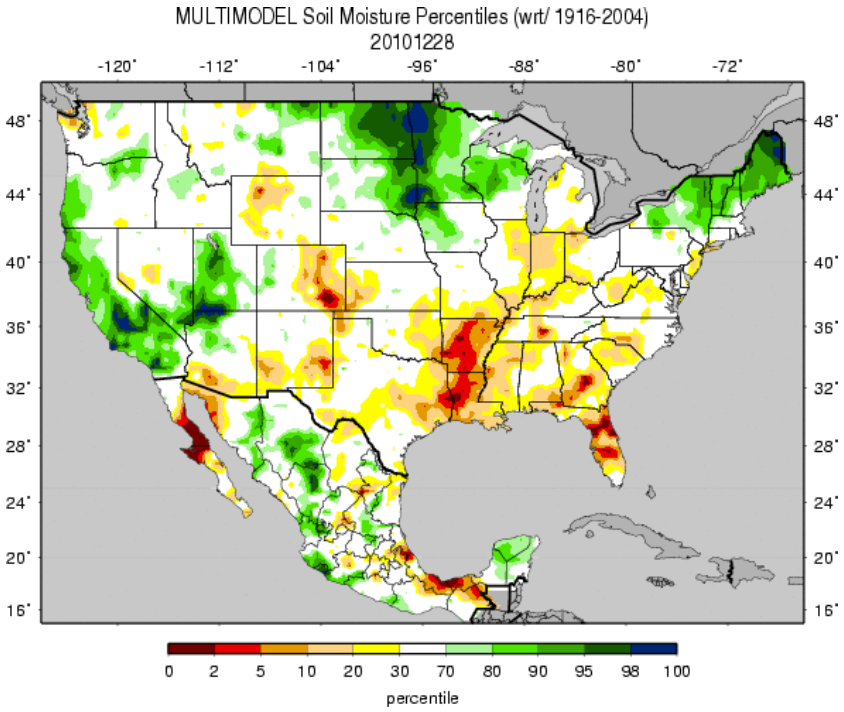
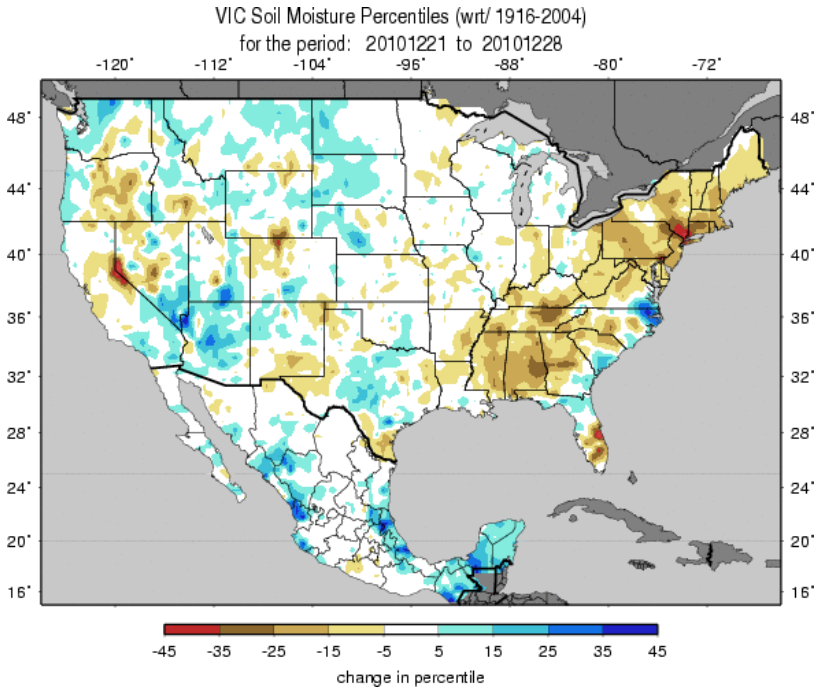


Fig. 4a: **Drought Monitor for the Western States with statistics over various time periods. Regionally there was significant improvement during the past week and over 2010.**

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





Figs. 5a and 5b: Soil Moisture ranking in percentile based on 1916-2004 climatology as of 28 December (Fig. 5a). Wetter conditions dominate New England, the Northeast Plains, Utah, and California. Drier conditions dominate much of the Southern Tier States and eastern Colorado. During the past week, much wetter conditions developed over parts of the Southwest. The dryness over the Northeast is inconsistent with record snowfall during this past week and should be ignored (Fig. 5b).

Ref: 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

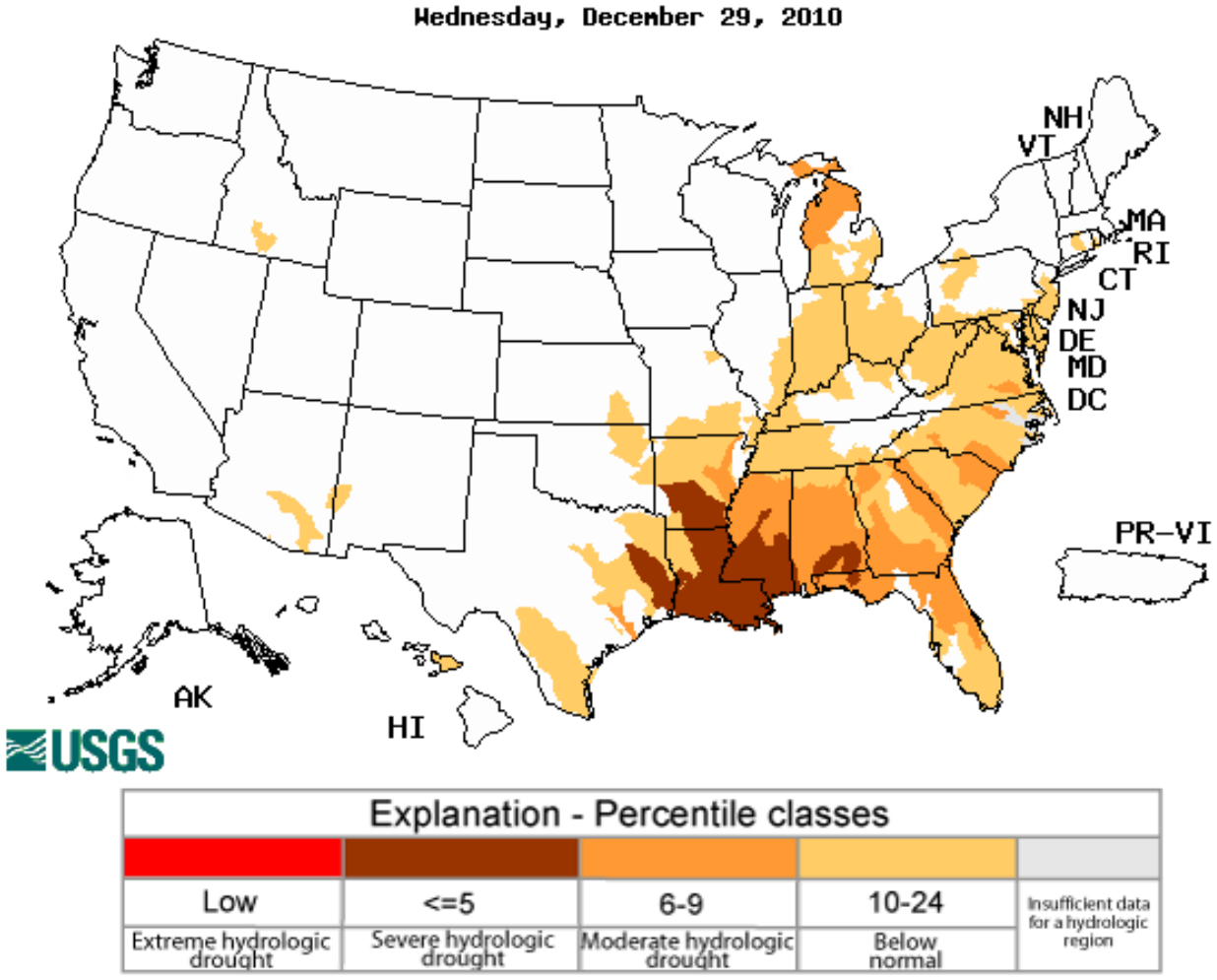


Fig. 6: Map of below normal 7-day average streamflow compared to historical streamflow for the day of year. Clearly, the Lower-Mississippi River and much of the Southern States are reflecting La Niña conditions of dryness. Note: northern site gauges will become less accurate as rivers and streams freeze. Ref: http://waterwatch.usgs.gov/?m=dryw&r

National Drought Summary -- December 28, 2010

The discussion in the Looking Ahead section is simply a description of what the official national guidance from the National Weather Service (NWS) National Centers for Environmental Prediction is depicting for current areas of dryness and drought. The NWS forecast products utilized include the HPC 5-day QPF and 5-day Mean Temperature progs, the 6-10 Day Outlooks of Temperature and Precipitation Probability, and the 8-14 Day Outlooks of Temperature and Precipitation Probability, valid as of late Wednesday afternoon of the USDM release week. The NWS forecast web page used for this section is: http://www.cpc.ncep.noaa.gov/products/forecasts/.

Weekly Summary: Heavy precipitation inundated parts of the Southwest (especially southern sections of California and Nevada, northwestern Arizona, Utah, and southwestern Colorado) early in the period, but not before flash flooding and mudslides, along with heavy snows at higher elevations, battered southern sections of California and Nevada. Numerous Southwestern sites broke not only daily precipitation records but also December records, while some stations approached or equaled their normal ANNUAL total. Before the weekend, light to moderate snow fell on parts of the Midwest, namely the middle Mississippi Valley, while the now weakened Pacific storm system tracked across the southern Plains, dropping beneficial precipitation on parts of the south-central Great Plains. Between 1 to 2 inches of rain fell on central and southeastern parts of Texas and southeastern Oklahoma, with much lighter amounts occurring farther to the east (e.g. Arkansas, Louisiana, Mississippi, and Tennessee) and north (northern Oklahoma, Kansas, eastern Colorado, and Nebraska). By the weekend, this storm reorganized in the Gulf of Mexico and moved up the Atlantic Coast, dumping heavy snows on the Northeast after giving parts of the Southeast a rare White Christmas. Above-normal temperatures enveloped most of the West, upper Midwest, and New England, while subnormal readings covered the northern and central Plains and eastern third of the Nation. Alaska remained mostly dry and frigid, while more heavy showers fell on the western Hawaiian Islands. This time, however, the western and southern portions of the Big Island were the recipients of moderate to heavy rains (2 to 6 inches).

Southeast and mid-Atlantic: A weak storm system brought mostly light precipitation (about 0.5 inches) to the Southeast, generally keeping conditions status-quo. Some of the precipitation was in the form of snow, providing a rare White Christmas to unaccustomed Southeastern cities such as Huntsville, AL, Atlanta and Athens, GA, Columbia, SC, and Raleigh, NC. This system eventually strengthened off the mid-Atlantic coast, generating heavy snows and strong winds from New Jersey into Maine. Enough precipitation (about an inch) fell on the southern Appalachians (western North Carolina) and along the Carolina Coast to trim away D0 there. Farther south for the second consecutive week, another swath of rain (0.5 to 1 inch) fell from Apalachicola, FL, northeastward to the Carolina Coast, slightly trimming the western and northern D3 edge in northern Florida and eastern Georgia, easing D2 in eastern Georgia, and improving D0 and D1 in north-central Florida. Even with the light precipitation, USGS stream flow levels remained in the lower tenth percentiles, with many sites still near or at record low levels. In contrast, much lighter precipitation (0 to 0.3 inches) warranted deteriorating conditions in most of Mississippi, Alabama, and southern Florida where D0 to D2 expanded. D1 also enveloped southern Mississippi and parts of southeastern Louisiana, while D2 increased in western Mississippi as nearly all USGS stream flow values fell into the lower tenth percentile in Mississippi and Alabama. In the mid-Atlantic, light precipitation (0.1 to 0.5 inches) was enough to keep conditions static, but widespread decreasing stream flow values and growing short-term deficits warrant close monitoring of this region.

Ohio, Tennessee, and lower Mississippi Valleys: Light to moderate precipitation (0.3 to 0.7 inches) fell on parts of the middle Mississippi and western Ohio Valleys, eroding away some of the D0 in

northeastern Illinois, but farther east, little or no precipitation (less than 0.2 inches) was reported, maintaining D0 and D1 in Indiana and Kentucky, and slightly expanding D0 into northwest and southwest Ohio where short and long-term deficiencies, respectively, have resurfaced. In the Tennessee Valley, 0.2 to 0.5 inches of precipitation kept conditions status-quo. Farther south, however, where normal winter precipitation (e.g. lower Mississippi Valley) is much greater than it is to the north, shortages continued to grow as precipitation amounts were generally less than 0.3 inches. Month-to-date deficiencies exceeded 4 inches in most of Arkansas, Louisiana, and western Mississippi, with 2 to 4 inch deficits common from eastern Texas and Oklahoma eastward to western Kentucky, central Tennessee, and central Alabama, and northward into southern Missouri and Illinois. With most USGS stream flow levels in the lower tenth percentile, many soil moisture models in the lower fifth percentile, and short and long-term blends depicting D2 to D4 conditions, D3 was increased into most of Louisiana and southern Arkansas (6-month deficits between 12 and 16 inches), and D2 into northern and western Arkansas, western Mississippi, and northeastern Texas. D0 and D1 were also slightly expanded into western and southern Missouri and northwestern Arkansas. Lastly, if Louisiana receives no more rain this year (not likely), 2010 will be the 4th driest year on record (since 1895), and the driest since 1954.

Central and Southern Plains: A mixed bag of conditions affected Texas. A swath of moderate rain (1 to 2 inches) fell on central parts, light to moderate rains (0.5 to 1.5 inches) occurred in southeastern sections, light rains (about 0.5 inches) was reported in eastern portions, and little or no precipitation fell on southwest, northwest, and southern Texas. Oklahoma also saw 0.5 to 1.5 inches of precipitation in the southeast but little to the north and west, while eastern Colorado, Nebraska, and most of Kansas measured no precipitation. For improvements, a 1-category change was made in north-central and southeastern Texas (from D2 to D1, and D1 to D0) where 1 to 2 inches of rain fell and short-term dryness was much less than surrounding areas. The southern D3 edge was also slightly trimmed where at least 1 inch of rain was observed. For degradations, D0 was expanded northward in northwestern Texas due to little or no precipitation the past 60-days; D1 and D2 were increased in southern Texas as little or no rain has fallen the past 90-days; and D3 edged into eastern Texas (southwest Nacogdoches and eastern parts of Harrison, Panola, and Marion Counties). The remainder of the state did not change. Farther north in the central Plains, the continued lack of significant precipitation out to 90-days warranted a slight expansion of D0 in southwest and central Nebraska, north-central Kansas, and western Missouri, while D1 increased into the Oklahoma Panhandle, eastern Kansas, and northeastern Oklahoma. In eastern Colorado, although the past 4.5 months have been extremely dry (Fort Collins to Trinidad in the lower tenth percentile), the overall 2010 summer water supplies were good and Colorado's mountain snowpack is off to a good start. Thus, no degradation was made due to the lack of any negative impacts.

Southwest: The storm system that soaked the West, especially southern California (refer to Intermountain West summary below), also hit northwestern and central Arizona and northern New Mexico with decent precipitation (1 to 3 inches) and provided drought relief (D1 to D0 in Arizona's southwest Maricopa and northern Pinal Counties; D0 removal in Mohave, Yavapai, western Coconino, northwestern Gila, and northern Maricopa Counties). December 28 SNOTEL average basin Snow Water Content (SWC) in central Arizona stood between 105 to136 percent of normal, a large jump from 60 to 86 percent of normal just 2 weeks ago. In northern New Mexico, D0 was eased from northern Rio Arriba County as SNOTEL average basin Water Year to date (WYTD) precipitation and Dec. 28 SWC ranged between 110 to 120 percent of normal. Unfortunately, the storm mostly missed southern sections of Arizona (less than 0.5 inches) and New Mexico (less than 0.2 inches) and western Texas (dry), keeping conditions status quo since D1 was introduced in southern New Mexico and southwestern Texas last week. Both SNOTEL basin average WYTD precipitation and Dec. 28 SWC for southeastern Arizona and most of New Mexico remained subnormal, with several basins less than 40

percent of normal. The impacts line, however, was modified to AH in southern Arizona and southwestern New Mexico as both short and long-term deficits were noted while southeastern New Mexico and southwest Texas remained at A with only short-term dryness effects.

Intermountain West and north-central Rockies: Pacific storms continued to lash the West, dropping more than 2 inches of precipitation along the entire West Coast and on the Sierra Nevada. The small D0 area in west-central California (San Benito, northwest Fresno, and southwest Merced Counties) was erased after another 0.5 to 1 inches of rain fell there. Farther south, a fetch of deep Pacific moisture dumped copious rains on southern California (5 to 10 inches in southeastern Los Angeles, southwestern San Bernardino, western Riverside, and northern San Diego Counties) and eastward into southeastern California (1 to 5 inches in eastern San Bernardino and southeastern Inyo Counties), southern Nevada (1 to 4 inches in southern Nye, southern Lincoln, and Clark Counties), northwestern Arizona (refer to Southwest narrative), and eastward into Utah, western Wyoming, and western Colorado, abruptly ending the D0 in southern Nevada and further trimming the D0 in central Nevada. The D1 in central Nevada was also removed as all available indicators supported no drought, and the few available sites had more than 200 percent of normal WYTD precipitation. Another wet week (0.5 to 2 inches, locally to 3.5 inches in southwestern Colorado) was enough to trim more D0 in southeastern Utah, southwestern Colorado, and northwestern New Mexico. Farther north, although individual stations are sparse in southwestern Wyoming, the Upper Green River Basin reported good soil and stream flow conditions, along with more than 300 percent of normal precipitation so far this month. Also, adjacent SNOTEL average basins WYTD precipitation and Dec. 28 SWC were between 130 to 170 percent, so D0 was eased in southwestern Wyoming. Furthermore, the western D0 and D1 edges were slightly trimmed away as 0.5 to 1.5 inches of precipitation fell. SNOTEL average basins in western Wyoming are now above 100 percent for both WYTD precipitation and Dec. 28 SWC, but lower elevation sites remained subnormal.

Hawaii and Alaska: Continued widespread heavy showers on the westernmost islands (2 to 6 inches, locally up to 12.02 inches at Mt. Waialeale from 8am HST Dec. 21 to 8am HST Dec. 28) on both the windward and leeward sides of Kauai eliminated D0 there. The Big Island finally received moderate to heavy weekly rains (2 to 6 inches) on the western (Honaunau 5.78 inches and Kealakekua 3.42 inches) and southern (Pali 6.20 inches; Kapapala Ranch 5.59 inches; and Pahala 5.09 inches) sections, requiring a 1 category improvement (D3 to D2) in southern and northwestern areas (improved pasture conditions in the latter area), D2 to D1 in south-central parts, and D0 and D1 along western coast shifted toward the interior (upslope). The existing D3 areas was shrunk and moved southeastward based upon refinement from FSA data as brush fire reports still rated the Pohakuloa and Waikoloa areas at extreme risk. Lighter totals (less than 1 inch) on Maui, Molokai, and Lanai maintained conditions.

In Alaska, a cold and dry December continued as deficits grew, especially along the southern and southeastern coasts where normal fall and winter precipitation totals are large. Although some precipitation fell along the southeastern coast this week, less than 40 percent of normal December precipitation has been measured, with month-to-date deficits reaching 3.41 inches at Juneau, 4.30 inches at Kodiak, 5.53 inches at Cordova, 6.12 inches at Sitka, and 8.66 inches at Yakutat. Accordingly, D0 was expanded into the southeastern Alaskan Panhandle except for extreme southern sections that are closer to normal precipitation this month (e.g. Ketchikan observed 9.03 inches versus a normal of 11.99 inches).

Looking Ahead: December 30, 2010-January 3, 2011 weather will feature a change in the persistent December weather pattern. Colder and tranquil weather will envelop the West and unseasonably mild air and increased storminess will occur in the East and South, with the greatest 5-day totals (1.5 to 4

inches) expected from eastern Texas and Arkansas into Alabama and Tennessee. The upper Midwest may see a major snow storm. Before this period (Dec. 29), southern California and Arizona received additional precipitation from another potent Pacific storm system while rain developed in the lower Mississippi and Tennessee Valleys.

For the ensuing 5 days (January 4-8, 2011), above-normal precipitation is expected along the Pacific Northwest Coast, in southern California and Arizona, along the central and eastern Gulf and southern Atlantic Coasts, and in northern and southeastern Alaska. Subnormal precipitation is forecast from the Great Basin into the northern Plains, from the southern Plains to the middle Mississippi Valley then eastward to the mid-Atlantic and New England, southern Florida, and southwestern Alaska. Subnormal temperatures should prevail in the Southwest, Southeast, and western Alaska, with above-normal readings limited to southeastern Alaska and extreme New England.

Author: David Miskus, CPC/NCEP/NWS/NOAA

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 December 30, 2010