



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

Weekly Report - Snowpack / Drought Monitor Update

Date: 28 February 2013

SNOTEL SNOWPACK AND PRECIPITATION SUMMARY

Temperature: [SNOTEL](#) and ACIS 7-day temperature anomaly ending 28 February shows generally warmer than normal conditions over the Cascades and cooler over the Four Corner States (Fig. 1a). ACIS [7-day](#) average temperature anomalies show the greatest positive temperature departures over north-central Montana ($>+6^{\circ}\text{F}$). The greatest negative departures occurred over the Uinta Mountains of Utah, the Front Range on Colorado, and the Southeast Ranges in Arizona ($<-12^{\circ}\text{F}$) (Fig. 1b). For February, warmer than average temperatures dominate Montana while persistent large negative departures remain entrenched over Utah, as has been the situation since the start of 2013. The southern half of the West experienced a generally colder than average month (Fig. 1c).

Precipitation: [ACIS](#) 7-day average precipitation amounts for the period ending yesterday show very little heavy precipitation falling across the West with the exception of the Olympic Mountains in Washington (Fig. 2a). However, in terms of percent of normal, even a small amount of moisture reflects a high value since this time of year is usually quite dry (Fig. 2b). This statistical quirk is represented as scattered enhanced values across the Western Cascades, and east of the Continental Divide in Colorado and New Mexico. Note that very low percentages occurred over California, much of the Great Basin, east of the Cascades, Montana, and northern Arizona and New Mexico. SNOTEL [month to date](#) precipitation percent of normal for February shows as very dry month across the West with notable exceptions: eastern Wyoming, some river basins in the northeast corner of the Great Basin, some basins along the eastern slope of the Montana Rockies, and near Seattle, WA and Raton, NM (Fig. 2c). For the [2013 Water Year](#) that began on 1 October 2012, the moisture surplus pattern continues to resemble La Niña with normal to above normal values over the Northern Tier States of the West and drier conditions from Wyoming southward to the Four Corner States. Arizona stands out as an exception to the dryness seen over the Southwest. (Fig. 2d).

Snow: The [7-day snow depth changes](#) for the week showed some snow depth increases over the Front Range of the Rockies (including the Bighorn Mountain in Wyoming) as a result of this past Sunday's blizzard and over the Washington Cascades from a winter storm last Friday. However, much of the West saw decreases of up to a foot (Fig. 3a). [Snow-Water Equivalent](#) (SWE): The largest deficits continue over much of Central and Southern Rockies. Most basins remained within 5% of last week's values despite a winter storm that moved through the Four Corner States. The Washington Cascades did see an increase of about 10 percent in SWE due to last week's series of storms (Fig. 3b).

Week in Review: Over the last 7 days, the most active area for precipitation was in the southeast United States where areas of southern Georgia and South Carolina recorded over 2 inches of rain, with locally heavier amounts of close to 3.50 inches in Georgia. A winter storm over the southern Plains brought wet snow to much of the panhandle of Texas and into portions of Oklahoma. Areas of southern Florida received up to 2 inches of rain.

The West: Even with some snows in portions of eastern New Mexico, some new areas of D4 were introduced this week. The long-term issues in the state are causing concern, with a lack of

Weekly Snowpack and Drought Monitor Update Report

water in reservoirs as well as depleted soil moisture being the main impacts. In California, the last two months have been very dry and allowed for all of northern California to be in D0 this week. In central California, D2 was shifted to the north as groundwater concerns have become more widespread. Author: Brian Fuchs, National Drought Mitigation Center.

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

Drought Impacts Definitions

The possible impacts associated with **D4 (S, L)** drought include widespread crop/pasture losses and shortages of water in reservoirs, streams, and wells creating water emergencies. The possible impacts associated with **D3 (S, L)** drought include major crop/pasture losses and widespread water shortages or restrictions. Possible impacts from **D2 (S, L)** drought are focused on water shortages, water restrictions imposed, and crop or pasture losses. The possible impacts associated with **D1 (S, L)** drought are focused on water shortages developing in streams, reservoirs, or wells, and some damage to crops and pastures (Figs. 4 through 4c).

Soil Moisture

Soil moisture (Fig. 5) is simulated by the [VIC macroscale hydrologic model](#). The detailed, physically-based VIC model is driven by observed daily precipitation and temperature maxima and minima from approximately 2130 stations, selected for reporting reliably in real-time and for having records of longer than 45 years (and various other criteria). Another good resource can be found at: <http://www.emc.ncep.noaa.gov/mmb/nldas/drought/>.

Soil Climate Analysis Network (SCAN)

Figure 6 provides supplemental data on soil conditions (moisture and temperatures at various depths from 2 inches up to 40 inches. For more information about SCAN see [brochure](#).

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.

State Activities

State government drought activities can be tracked at the following URL: <http://drought.unl.edu/mitigate/mitigate.htm>. NRCS Snow Survey and Water Supply Forecasting (SSWSF) State Office personnel are participating in state drought committee meetings and providing the committees and media with appropriate SSWSF 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 URLs: <http://drought.unl.edu/dm/> and <http://www.drought.gov>.

For More Information

The National Water and Climate Center (NWCC) Homepage provides 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 -

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<http://www.wcc.nrcs.usda.gov/water/drought/wdr.pl>. Reports from 2007 are available online while ones from 2001-2006 can be acquired on request.

This report uses data and products provided by the Interagency Drought Monitor Consortium members and the National Interagency Fire Center.

/s/

Micheal L. Golden

Deputy Chief, Soil Science and Resource Assessment

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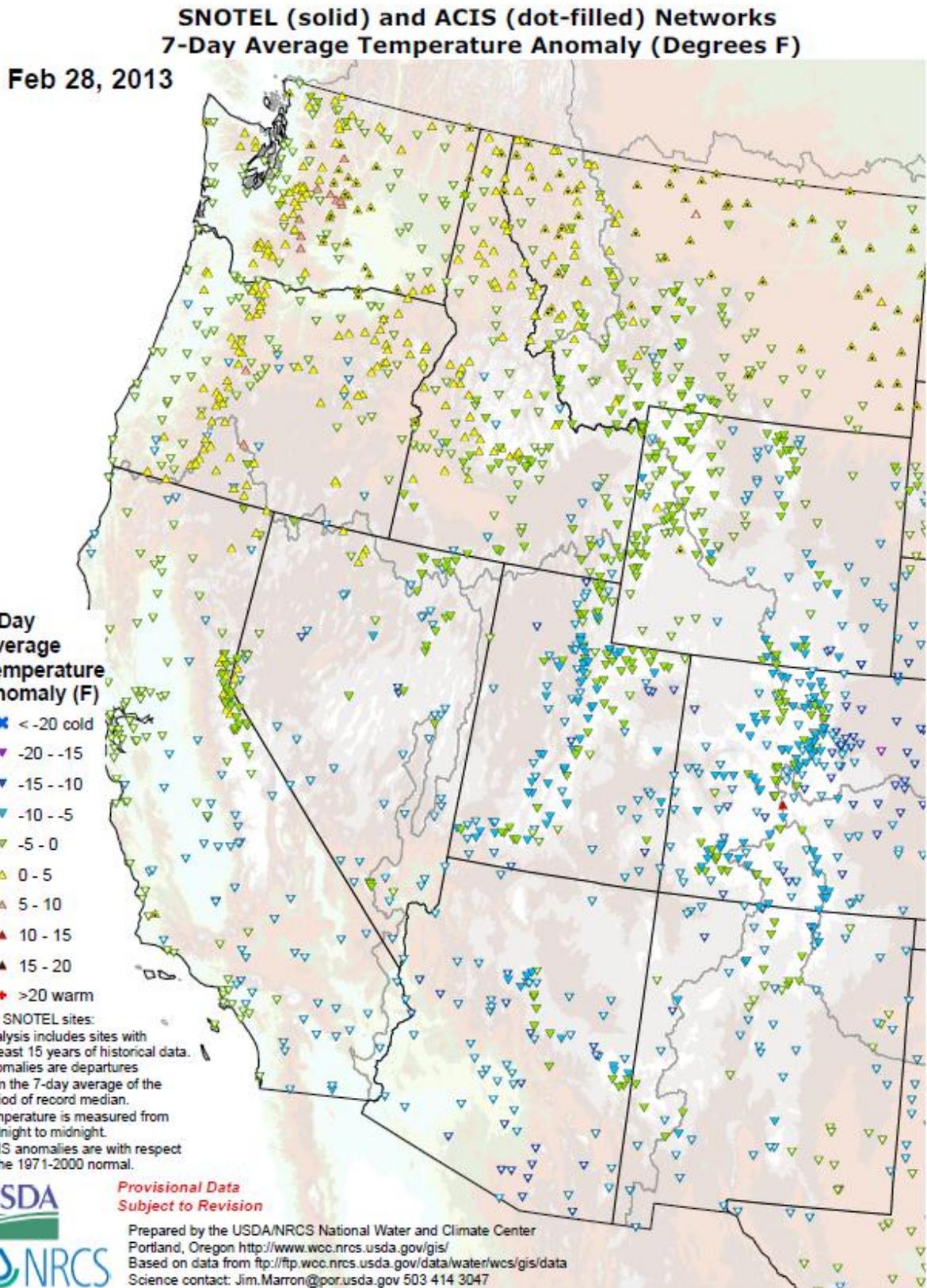
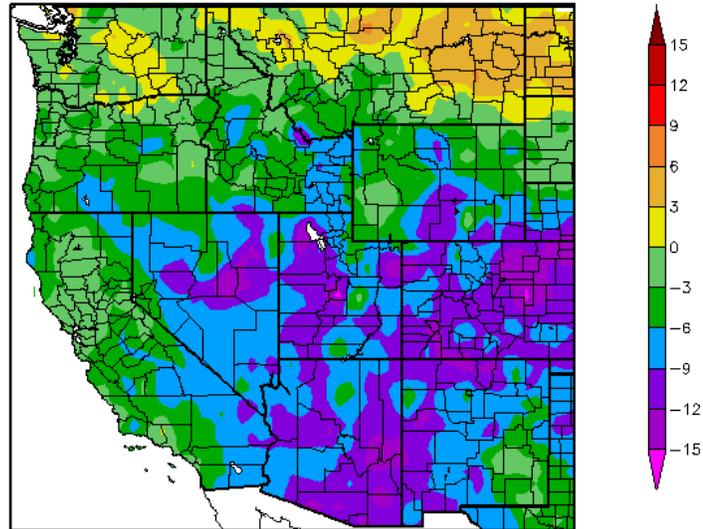


Fig. 1a: SNOTEL and ACIS 7-day temperature anomaly ending 28 February shows generally warmer than normal conditions over the Cascades and cooler over the Four Corner States.

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Departure from Normal Temperature (F)
2/21/2013 – 2/27/2013

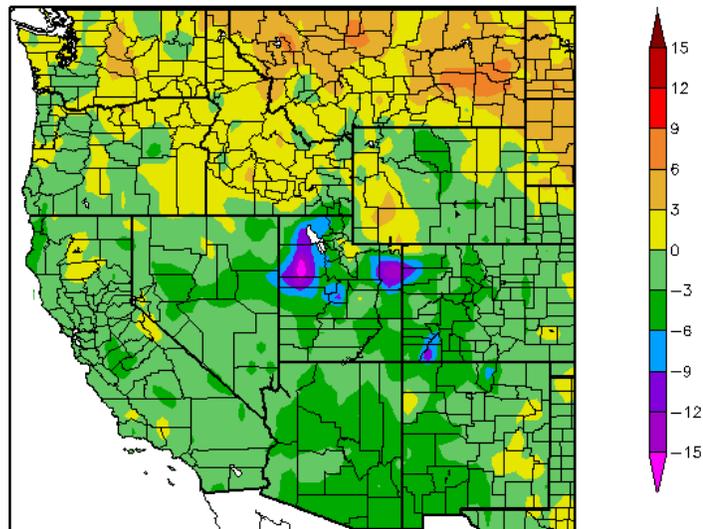


Generated 2/28/2013 at HPRCC using provisional data.

Regional Climate Centers

Fig. 1b: ACIS **7-day** average temperature anomalies show the greatest positive temperature departures over north-central Montana (>+6°F). The greatest negative departures occurred over the Uinta Mountains of Utah, the Front Range on Colorado, and the Southeast Ranges in Arizona (<-12°F). For more figures, see the Western Water Assessment's Intermountain West Climate [Dashboard](#).

Departure from Normal Temperature (F)
2/1/2013 – 2/27/2013



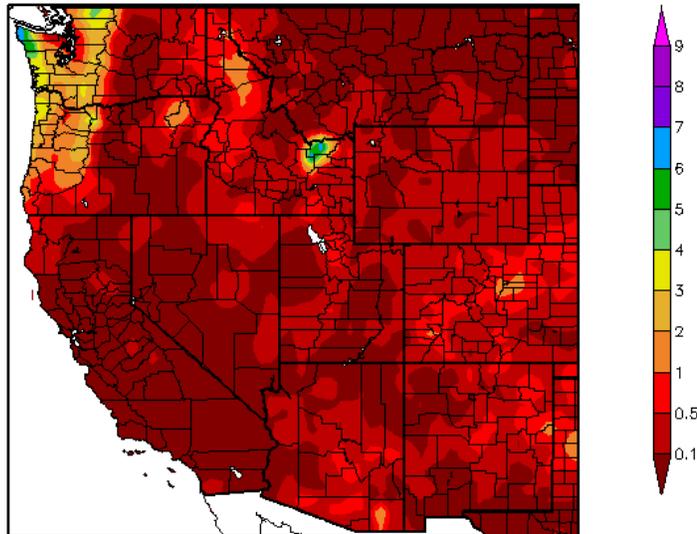
Generated 2/28/2013 at HPRCC using provisional data.

Regional Climate Centers

Fig. 1c: For February, warmer than average temperatures dominate Montana while persistent large negative departures remain entrenched over Utah, as has been the situation since the start of 2013. The southern half of the West experienced a generally colder than average month.

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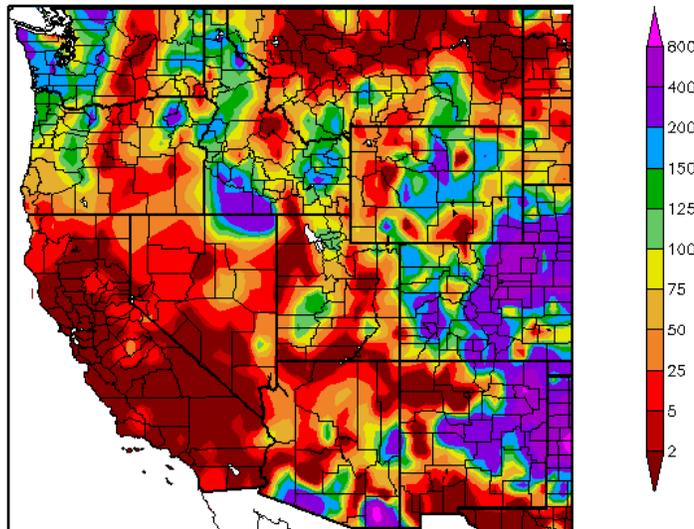
Precipitation (in)
2/21/2013 - 2/27/2013



Generated 2/28/2013 at HPRCC using provisional data.

Regional Climate Centers

Percent of Normal Precipitation (%)
2/21/2013 - 2/27/2013



Generated 2/28/2013 at HPRCC using provisional data.

Regional Climate Centers

Fig. 2a and 2b: ACIS 7-day average precipitation amounts for the period ending yesterday show very little heavy precipitation falling across the West with the exception of the Olympic Mountains in Washington (Fig. 2a). However, in terms of percent of normal, even a small amount of moisture reflects a high value since this time of year is usually quite dry (Fig. 2b). This statistical quirk is represented as scattered enhanced values across the Western Cascades, and east of the Continental Divide in Colorado and New Mexico. Note that very low percentages occurred over California, much of the Great Basin, east of the Cascades, Montana, and northern Arizona and New Mexico.

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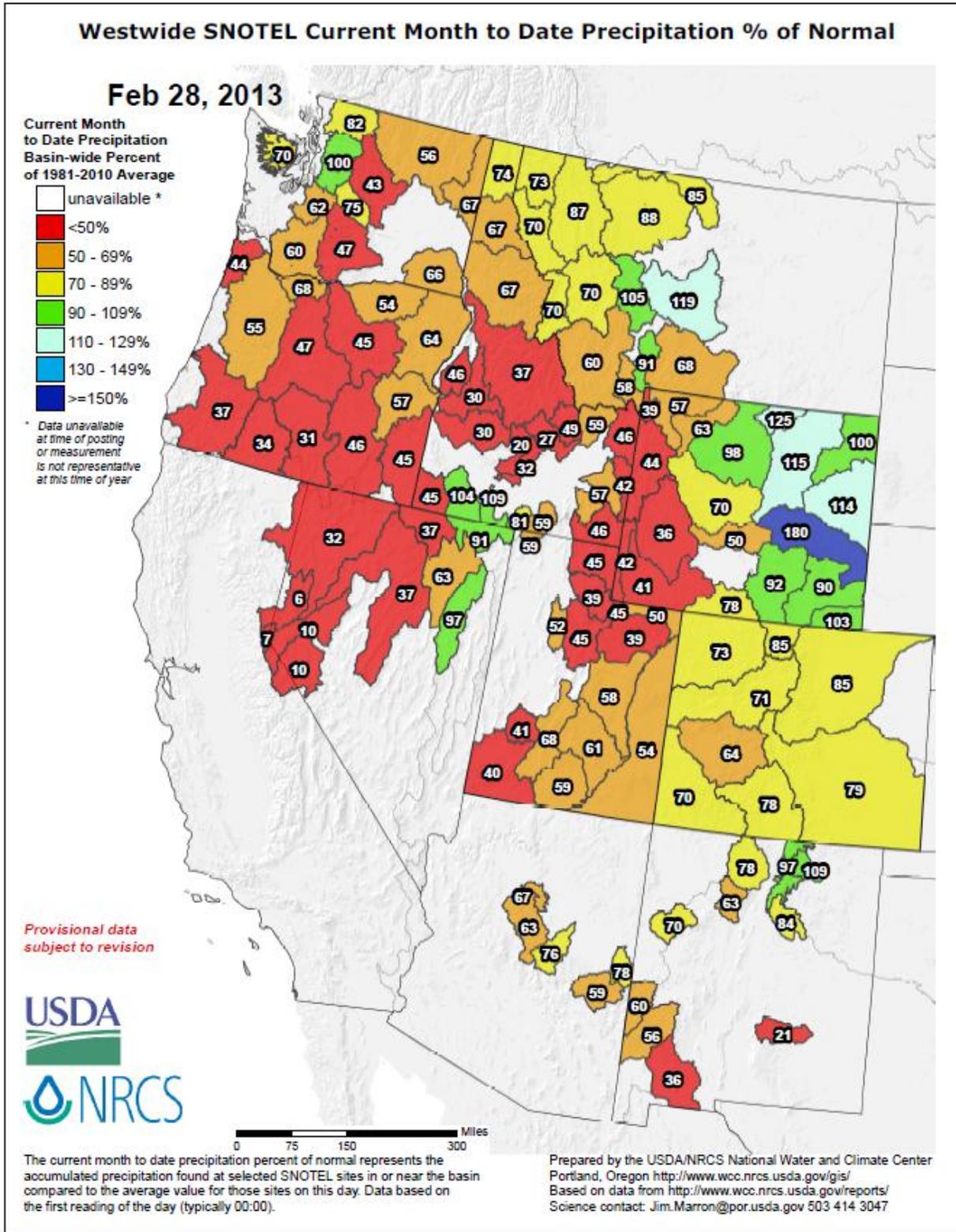


Fig. 2c: SNOTEL month to date precipitation percent of normal for February shows as very dry month across the West with notable exceptions: eastern Wyoming, some river basins in the northeast corner of the Great Basin, some basins along the eastern slope of the Montana Rockies, and near Seattle, WA and Raton, NM.

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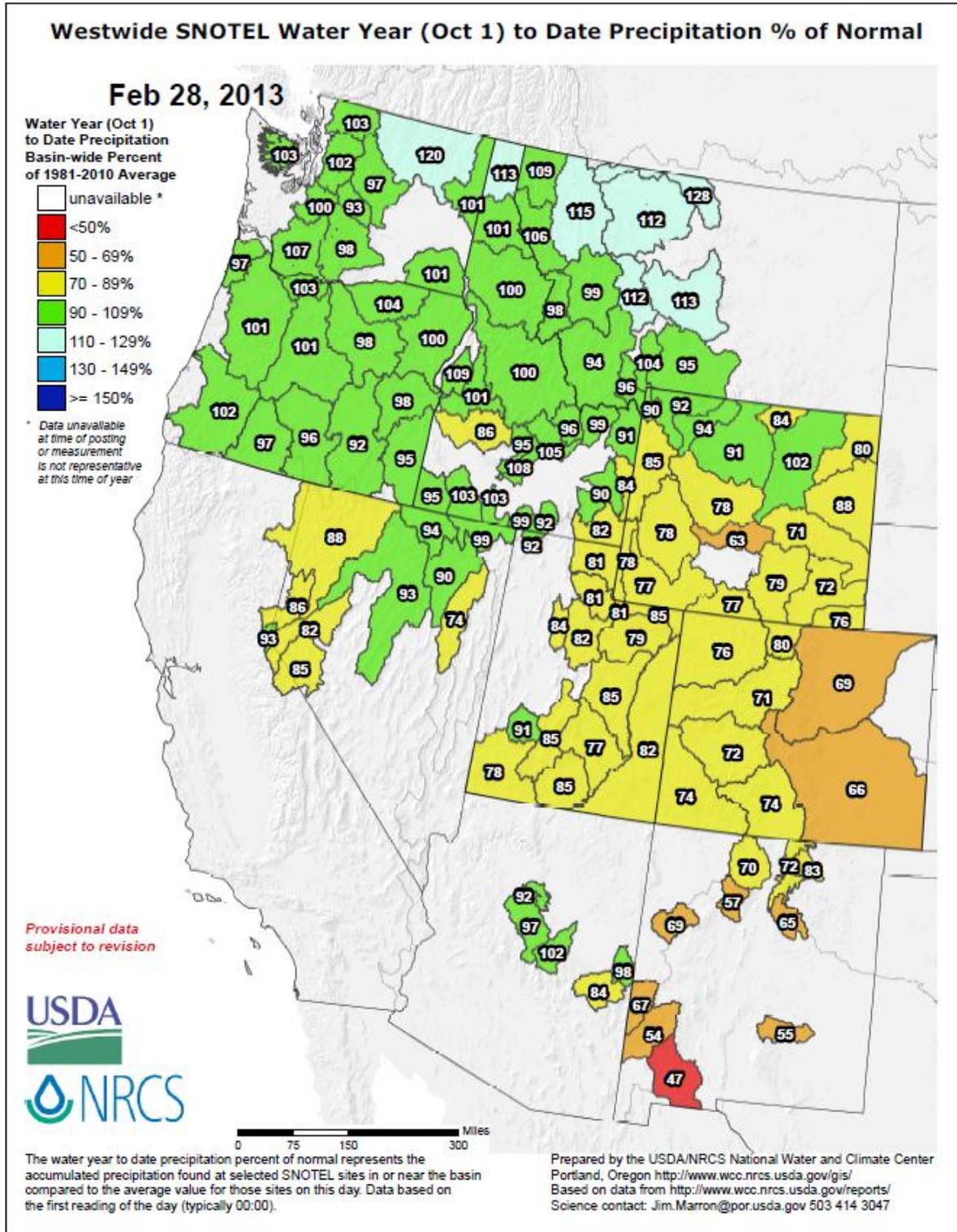


Fig. 2d: For the [2013 Water Year](#) that began on 1 October 2012, the moisture surplus pattern continues to resemble a La Niña with normal to above normal values over the Northern Tier States of the West and drier conditions from Wyoming southward to the Four Corner States. Arizona stands out as an exception to the dryness seen over the Southwest. For additional information, daily reports by SNOTEL sites can be acquired by clicking [here](#).

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SNOTEL 7-Day Snow Depth Change (Inches)

Feb 28, 2013

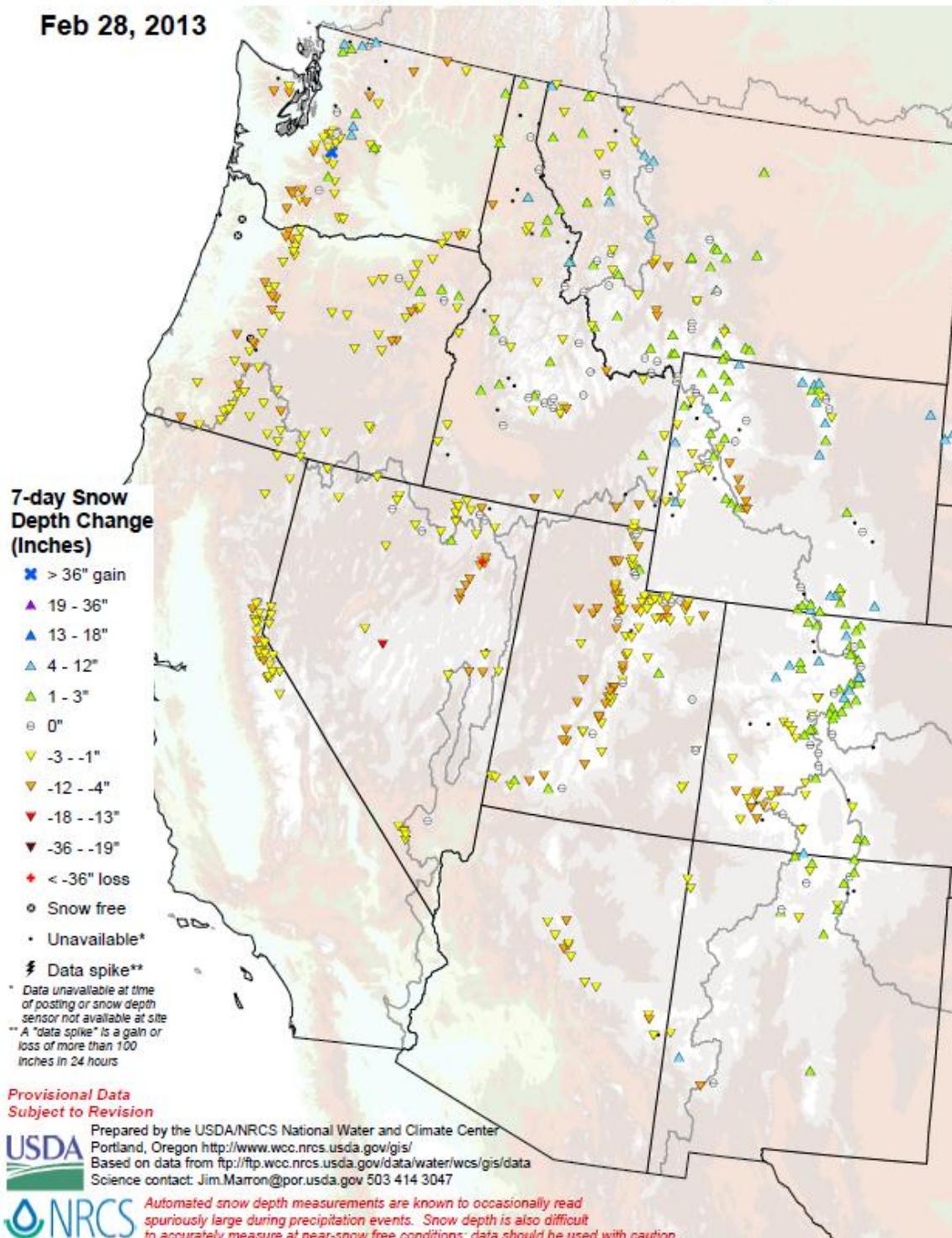


Fig. 3a: The [7-day snow depth changes](#) for the week showed some snow depth increases over the Front Range of the Rockies (including the Bighorn Mountain in Wyoming) from this past Sunday's blizzard and Washington Cascades winter storm from last Friday. However, much of the West saw decreases of up to a foot.

Weekly Snowpack and Drought Monitor Update Report

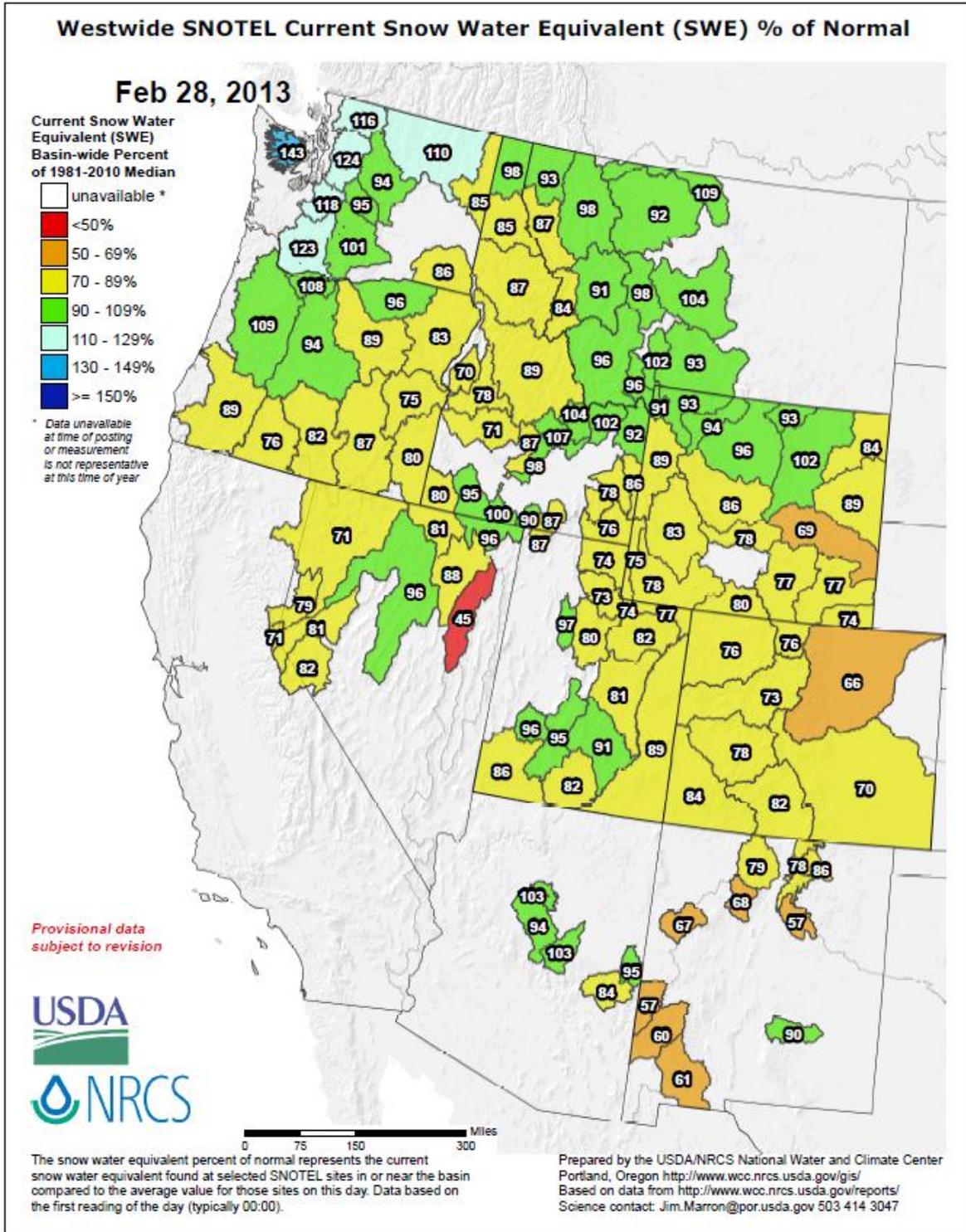


Fig. 3b: [Snow-Water Equivalent](#) (SWE): Largest deficits continue over much of Central and Southern Rockies. Most basins remained within 5% of last week's values despite a winter storm moving through the Four Corner States. The Washington Cascades did see an increase of about 10 percent in SWE due to last week's storms. For expected snowfall amounts, click [here](#). A useful basin-by-basin assessment of SWE to date can be viewed by state [here](#) and [here](#).

Weekly Snowpack and Drought Monitor Update Report

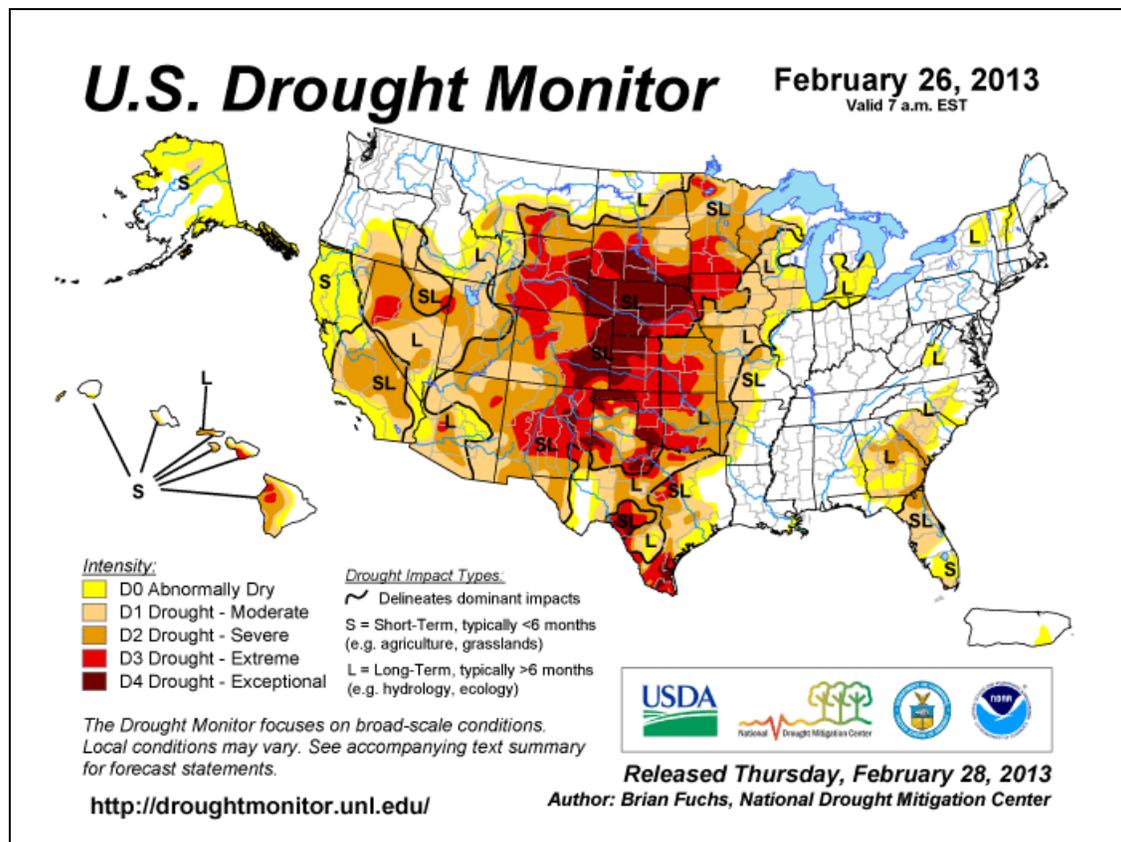


Fig. 4: Current [Drought Monitor](#) weekly summary. The exceptional D4 levels of drought are scattered across the western Corn Belt of the Plains into southeastern Colorado and Wyoming, easternmost New Mexico, and southward into Texas. For more drought news, see [Drought Impact Reporter](#). Click for the latest statistics for [California Reservoirs](#). The latest [drought indicator blend and component percentiles](#) spreadsheet is a great resource for climate division drought statistics. See Fig. 8 for the latest [Drought Outlook](#) (forecast).

For an interesting website on Lake Mead drought update, click [here](#).

Agriculture and Drought in the News

[Drought, stressed pastures make for seed shortage](#)

Feb 19, **Arkansas**. Drought in Kansas, Oklahoma and the southwest reduced the amount of forage seed available. Arkansas ag officials urge cattle producers to purchase seed early to ensure they get the desired type of seed.

[Texas crop, weather: Much wheat is unlikely to make a crop](#)

Feb 20, **Texas**. Much of the Rolling Plains and the northern and western parts of the High Plains in Texas may not produce a wheat crop, but the wheat looks better in other parts of the state.

Water Supply & Quality

[Number Of New Irrigation Wells Surges In Drought Stricken Areas](#)

Feb 22, **Nebraska**. More than 1,000 new irrigation wells were registered with the Nebraska Department of Natural Resources in 2012.

[Reservoirs dropping as drought concerns rise](#) - Feb 18, **Denver, Colorado**

[Santa Fe prepares for third year of drought, heat](#)

Feb 21, **Santa Fe, New Mexico**. Santa Fe has several years' worth of water stored in the San Juan-Chama project to fall back on if water deliveries are reduced this year.

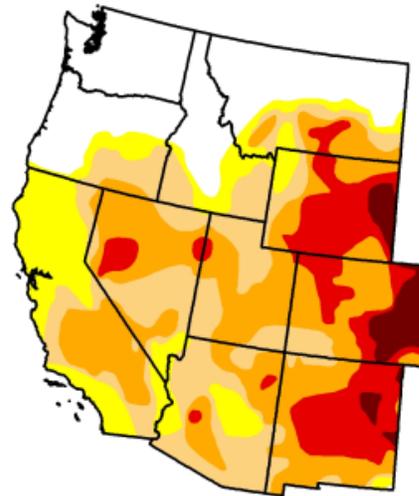
U.S. Drought Monitor

West

February 26, 2013
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	21.53	78.47	64.32	42.23	15.92	3.47
Last Week (02/19/2013 map)	23.76	76.24	64.34	41.81	15.89	3.15
3 Months Ago (11/27/2012 map)	18.70	81.30	72.70	46.27	17.45	2.03
Start of Calendar Year (01/01/2013 map)	24.39	75.61	69.31	45.04	18.01	2.15
Start of Water Year (09/25/2012 map)	15.12	84.88	77.15	43.65	16.85	1.77
One Year Ago (02/21/2012 map)	32.32	67.68	42.87	11.59	2.56	0.83



Intensity:

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

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



Released Thursday, February 28, 2013
Brian Fuchs, National Drought Mitigation Center

<http://droughtmonitor.unl.edu>

Fig. 4a: Drought Monitor for the [Western States](#) with statistics over various time periods. Note slight deterioration in D2-D4 this past week. See latest [Southwest Climate Outlook](#).

In California, there are cooperative snow surveys made up of 35 or so utilities, water agencies, government agencies and the Department of Water Resources. The NRCS is one of the cooperating agencies. Through this cooperative, California has over 200 manual snow surveys and has a similar number of snow pillows. With this data they publish a Bulletin 120 every month from February through May which provides a forecast of April through July runoff. We provide daily snow reports through the California Data Exchange Center (which also posts the Bulletin 120 at

<http://cdec.water.ca.gov/snow/bulletin120/index2.html>) through the following links:

- Current PAGE6 report: <http://cdec.water.ca.gov/cgi-progs/snow/PAGE6>
 - Current DLYSWEQ report: <http://cdec.water.ca.gov/cgi-progs/snow/DLYSWEQ>
 - Current Regional Snowpack Plots: http://cdec.water.ca.gov/cgi-progs/snow/PLOT_SWC
- California also hosts a statewide water conditions page at: http://cdec.water.ca.gov/water_cond.html which has links to precipitation, reservoir storage, snowpack, runoff, and summary reports.

From the latest USDA/NASS weekly agricultural report, valid February 25, 2013:
http://www.nass.usda.gov/Statistics_by_State/California/Publications/Crop_Progress_&Condition/index.asp

Also see:

- <http://www.usda.gov/oce/weather/pubs/Other/MWCACP/Graphs/USA/allhay.pdf>
- http://www.usda.gov/oce/weather/pubs/Other/MWCACP/Graphs/USA/US_WheatWinter.pdf

Weekly Snowpack and Drought Monitor Update Report

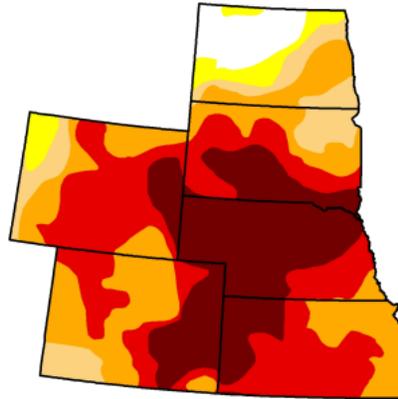
U.S. Drought Monitor
High Plains

February 26, 2013
Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	4.66	95.34	91.34	82.51	56.77	26.68
Last Week (02/19/2013 map)	5.01	94.99	91.35	82.51	57.67	29.11
3 Months Ago (11/27/2012 map)	1.20	98.80	93.69	85.96	57.89	26.72
Start of Calendar Year (01/01/2013 map)	1.54	98.46	93.01	86.20	60.25	26.99
Start of Water Year (09/25/2012 map)	0.00	100.00	98.91	83.80	61.28	24.35
One Year Ago (02/21/2012 map)	44.70	55.30	22.83	6.13	1.56	0.04

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://droughtmonitor.unl.edu>



Released Thursday, February 28, 2013
Brian Fuchs, National Drought Mitigation Center

Fig. 4b: Drought Monitor for the [High Plains](#) with statistics over various time periods. Note some improvement in D4 for the week.

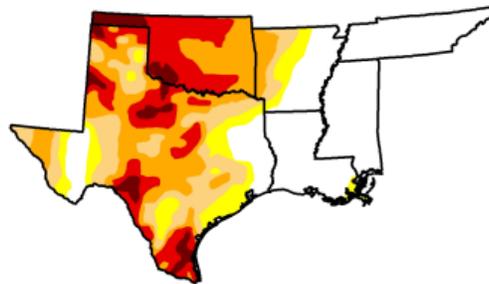
U.S. Drought Monitor
South

February 26, 2013
Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	36.37	63.63	54.44	40.13	19.33	4.18
Last Week (02/19/2013 map)	36.26	63.74	53.89	39.86	24.59	9.53
3 Months Ago (11/27/2012 map)	20.96	79.04	63.53	45.32	26.83	8.44
Start of Calendar Year (01/01/2013 map)	21.18	78.82	63.69	50.50	32.80	10.98
Start of Water Year (09/25/2012 map)	24.13	75.87	66.61	51.50	29.86	9.11
One Year Ago (02/21/2012 map)	36.89	63.11	55.18	41.39	23.22	7.54

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.

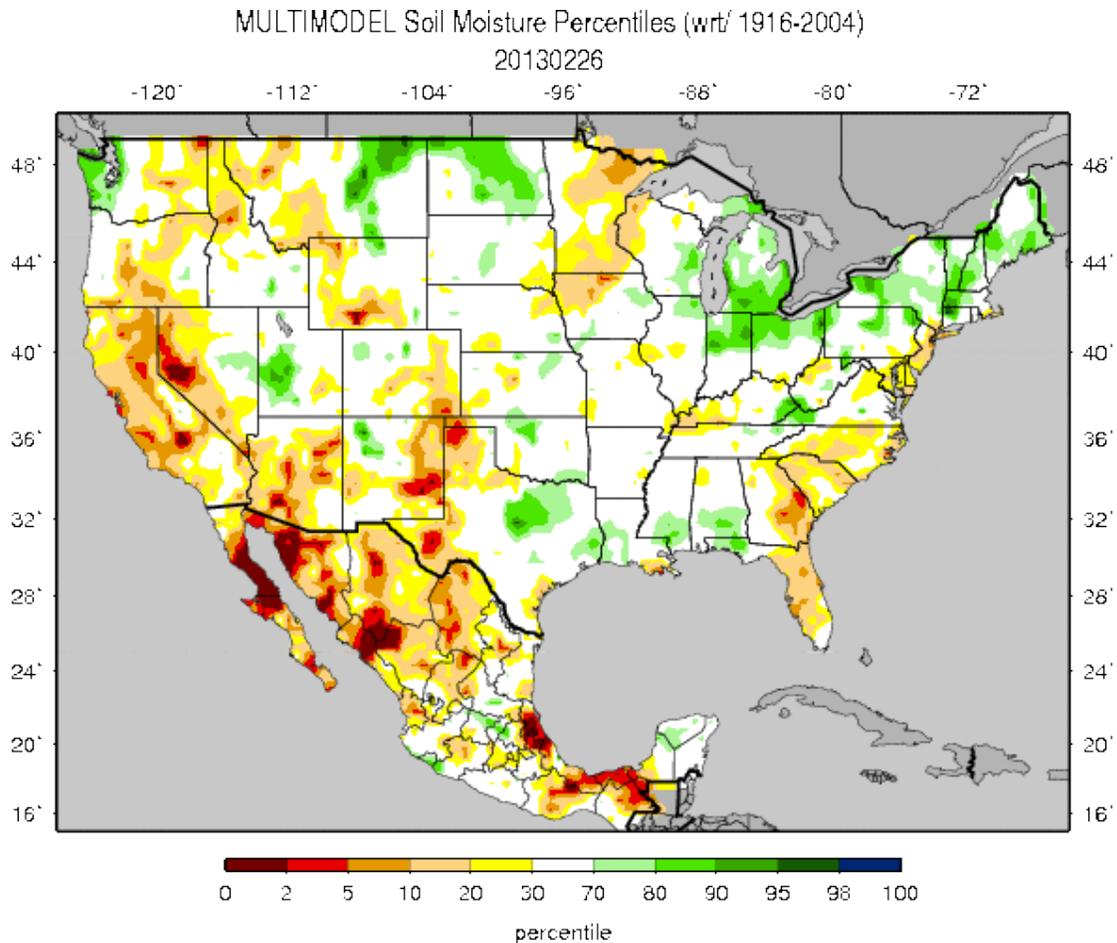
<http://droughtmonitor.unl.edu>



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Brian Fuchs, National Drought Mitigation Center

Fig. 4c: Drought Monitor for the [South-Central Region](#) with statistics over various time periods. Note the strong improvement in D3 and D4 this week. Check out the [Texas Drought Website](#).

Weekly Snowpack and Drought Monitor Update Report



Figs. 5: Soil moisture ranking in [percentile](#) as of 26 February shows dryness scattered across the California, the Western Great Basin, Arizona, and New Mexico. Some residual dryness persists over the Southeastern States and Minnesota. However, freezing soils will distort actual moisture values, making them less than reliable over the Northern States like Minnesota.

Useful Hydrological Links:

USDA western U.S. mountain snow water content anomaly map.

USGS (U.S. Geological Service) [observed streamflow](#); NOAA Climate Prediction Center (CPC) modeled runoff [anomalies](#) and [percentiles](#); VIC (University of Washington Variable Infiltration Capacity macro scale hydrologic model) [1-](#), [2-](#), [3-](#), and [6-month](#) and [water year-to-date](#) runoff percentiles; NLDAS (North American Land Data Assimilation System) modeled streamflow [anomalies](#) and [percentiles](#); NLDAS model runoff [anomalies](#) and [percentiles](#); USGS groundwater observations ([real-time network](#), [climate response network](#), [total active network](#)); USDA snow water content observations for the West (SNOTEL station [percentiles](#) and [percent of normal](#), SNOTEL basin [percent of normal](#) and [percent of average](#)) and Alaska ([SNOTEL station percent of normal](#), [SNOTEL basin percent of normal](#)); USDA reservoir storage as [percent of capacity](#).

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Soil Climate Analysis Network ([SCAN](#))

tion (2002) MONTH=2013-01-29 (Daily) NRCS National Water and Climate Center - Provisional Data - subject to revision
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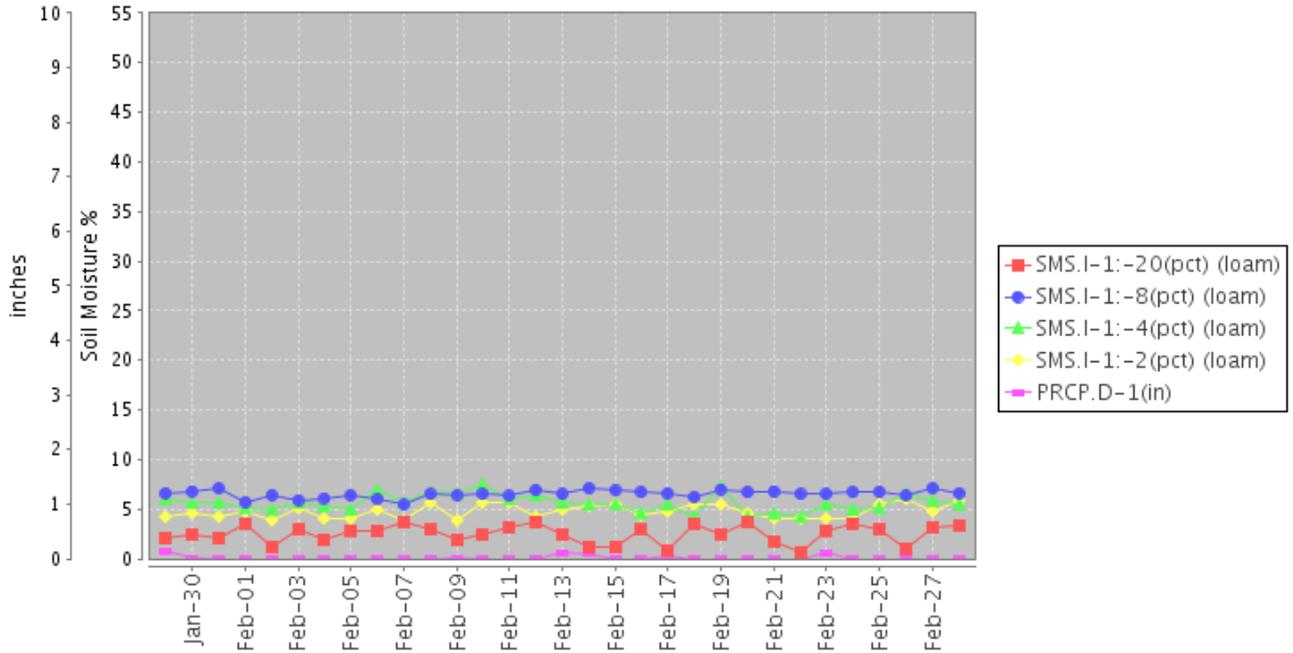


Fig. 6: This NRCS resource shows a site over [south-central Minnesota](#) with low soil moisture values at all levels. However, caution should be exercised if soils are frozen as is probably the case with this site. Moisture sensor accuracies become unreliable when the soil temperature falls below 32°F.

Useful Agriculture Links:

USDA (U.S. Department of Agriculture) [observed soil moisture conditions](#), [departures and percentiles](#), and comparison to [5-year average](#) and [10-year average](#); the Palmer [Crop Moisture Index \(CMI\)](#), which intensified during the month in the West and Lower to Mid-Mississippi Valley (weeks [1](#), [2](#), [3](#), [4](#), [5](#)); CPC modeled soil moisture [anomalies](#) and [percentiles](#) for end of May, and [soil moisture anomaly change](#) compared to previous month; CPC's Leaky Bucket model [soil moisture percentiles](#); NLDAS modeled soil moisture percentiles for the [top soil layer](#) and [total soil layer](#); VIC modeled [soil moisture percentiles](#), and [soil moisture percentile change](#) compared to previous month; USDA observed [pasture and rangeland conditions](#); [Vegetation Drought Response Index \(VegDRI\)](#); the NOAA/NESDIS satellite-based [Vegetation Health Index \(VHI\)](#); the USGS agro-hydrologic model ([Soil Water Index](#), [Water Requirement Satisfaction Index](#)); Selected SNOTEL Sites (measured [2"](#), [4"](#), [8"](#), [20"](#), and [40"](#) soil moisture depths); Monthly [SCAN Report](#) from Utah.

Weekly Snowpack and Drought Monitor Update Report

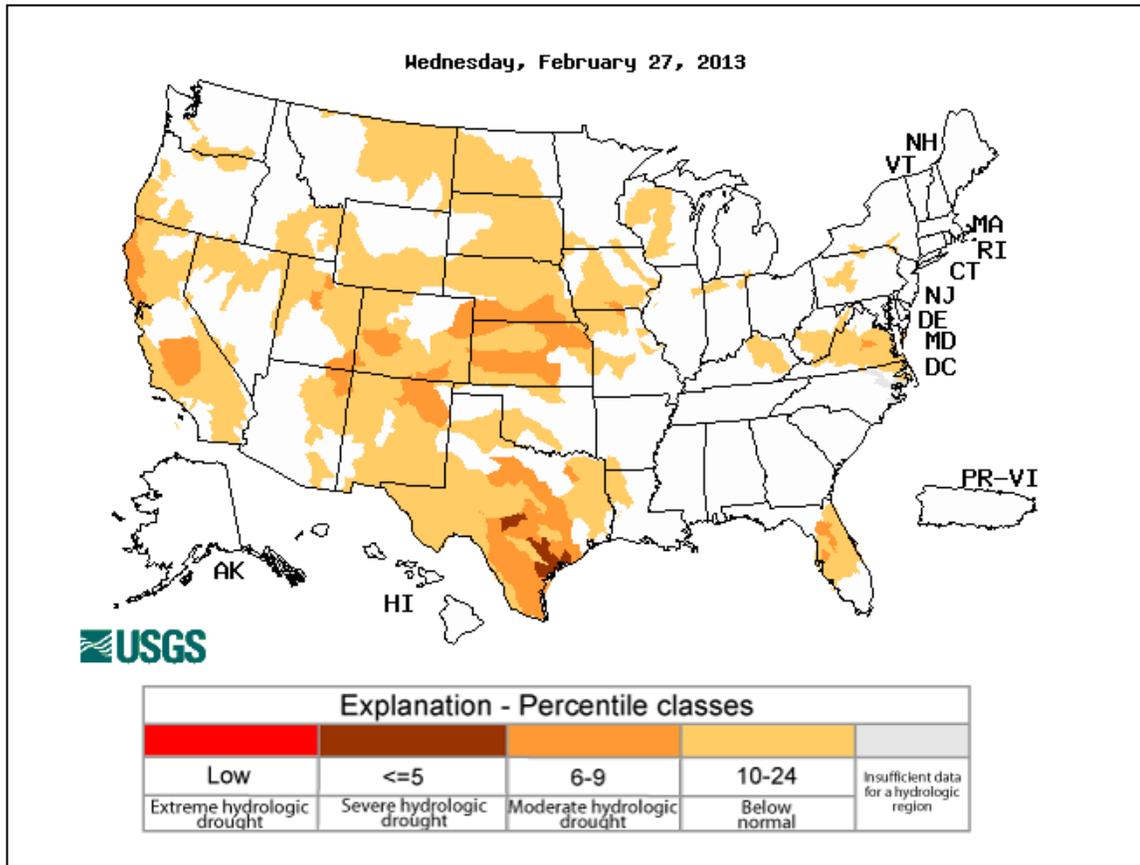


Fig. 7: Map of below normal 7-day average [streamflow](#) compared to historical streamflow for the day of the year. **Severe** conditions exist over south-central Texas. As with soil moisture, streamflow data can be severely compromised by prolonged freezing temperatures. See the USGS [National Water Information System Mapper](#).

Weekly Snowpack and Drought Monitor Update Report

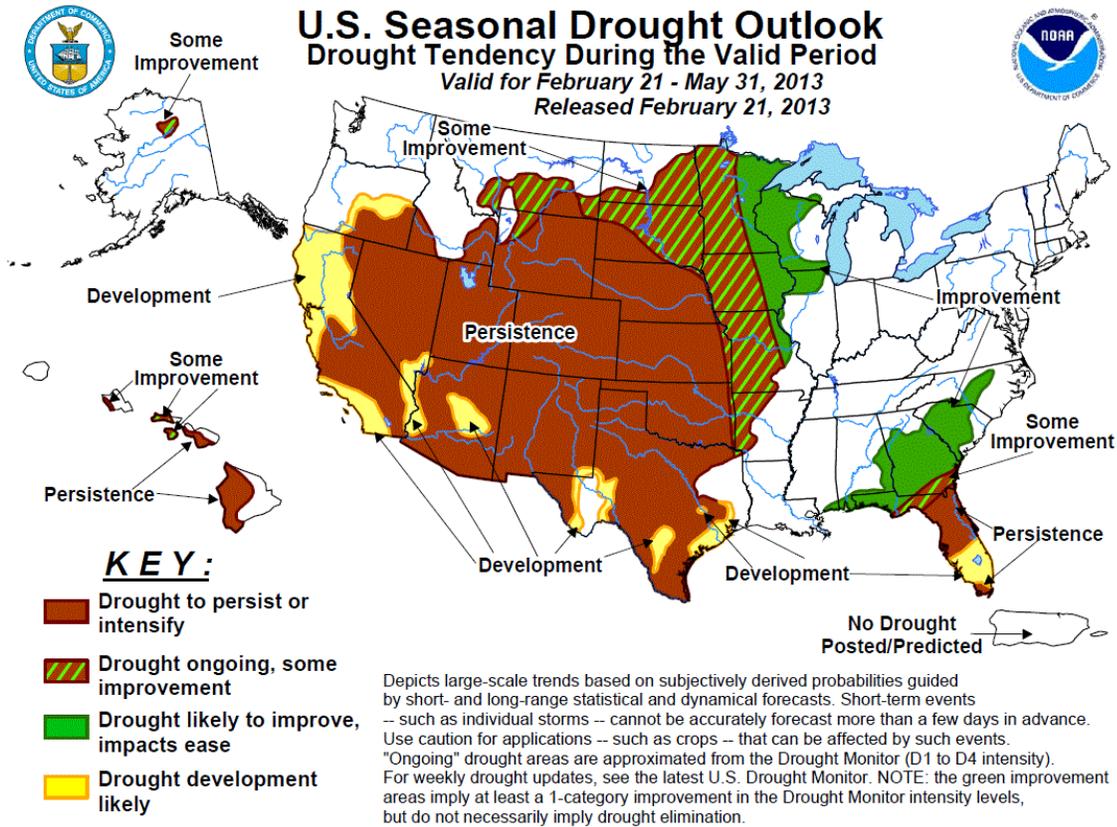
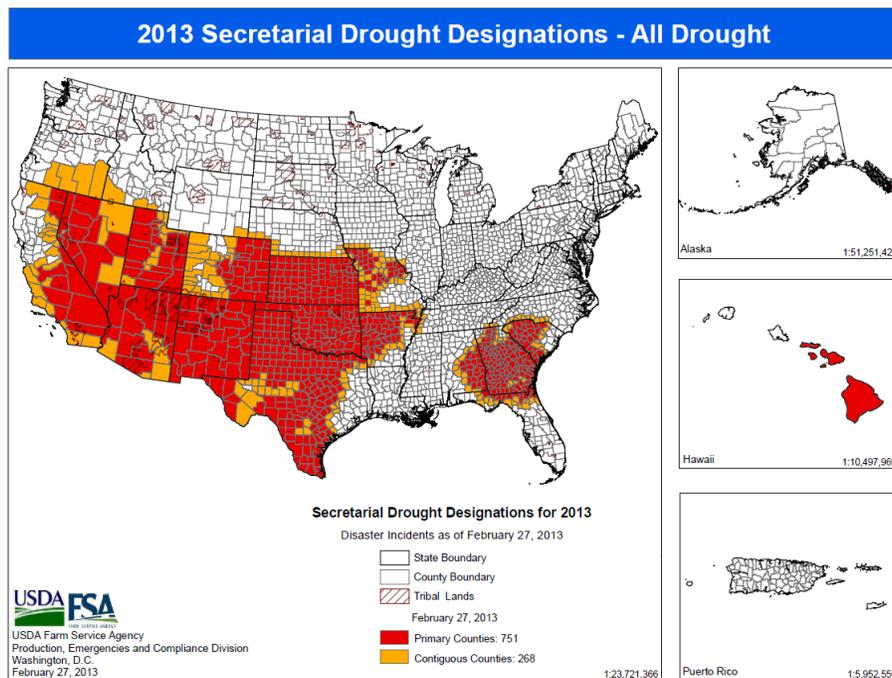


Fig. 8: U.S. seasonal [Drought Outlook](#) updated, 21 February.



See [USDA Drought Assistance website](#).

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National Drought Summary -- February 26, 2013

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/>.

A continuing pattern of above normal precipitation for the southeast helped to introduce widespread improvements for this week. A series of winter storms impacted conditions on the Plains, where areas of Texas, Oklahoma, Kansas, and Missouri were recipients of moisture from multiple storms.

The Northeast: A fairly dry week did not allow for any improvements in the region, but no degradation was warranted either. More than an inch of precipitation was recorded along the coast from Massachusetts to Maine.

Mid-Atlantic: A dry week as most of the significant precipitation was south of the region. No changes were made this week.

Southeast: Significant rains over the last week and generally over the last month allowed for widespread improvements in Georgia, northern Florida, Alabama and the Carolinas. Generally, a full category improvement was made while in areas of northern Florida and southern Georgia, conditions improved by two categories. The region is free of an extreme drought (or worse) for the first time since August 2010.

South: The precipitation events that impacted the southeast also brought several inches of precipitation along the Gulf Coast. Most areas of D0 were improved this week as the region responded to the ample precipitation.

Midwest: Snow and rain were common in the region from Missouri into Illinois. Up to 3 inches of water was sampled out of the snows in Missouri. Some improvements were started in Missouri, and in the western part of the state, the full impact of the moisture can be assessed as the snow begins to melt and the response is observed.

The Plains: Up to a foot of snow fell in portions of Nebraska this week and even more to the south in Kansas, Oklahoma and Texas. The precipitation amounts in Nebraska were generally less than 0.50 inches, and no improvements were made. In Kansas, D4 conditions were eased in the north central and south central portions of the state while D3 was eased in the northeast. In Oklahoma, much of the state saw a full category improvement as the combination of rain and snow from several events improved conditions. The improvements continued in the panhandle of Texas, where generally a full category improvement was observed. In Texas, drought areas were assessed in the southern and central portions of the state, leading to a mixed bag of improvements and degradation. In west Texas, the D0 and D1 lines shifted to the west.

The West: Even with some snows in portions of eastern New Mexico, some new areas of D4 were introduced this week. The long-term issues in the state are causing concern, with

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a lack of water in reservoirs as well as depleted soil moisture being the main impacts. In California, the last two months have been very dry and allowed for all of northern California to be in D0 this week. In central California, D2 was shifted to the north as groundwater concerns have become more widespread.

Hawaii, Alaska and Puerto Rico: In Hawaii, a fairly wet week was observed, but much of the precipitation did not fall on drought areas. Some improvements were made on Maui this week, shifting the D0 and D1 lines to the south. No changes in Alaska or Puerto Rico this week.

Looking Ahead: Over the next five days (February 27-March 3) precipitation chances are limited to the Pacific Northwest and also from the Great Lakes up into New England. Amounts are generally in the 0.50 to 1.0 inch range in the Great Lakes to New England and up to 1.5 inches along the coast in Washington. Temperatures during this time look to remain well below normal for the eastern half of the country. Departures of 12 to 15 degrees below normal can be expected over the south with some above normal temperatures over the west coast.

The CPC 6-10 day forecast (March 5-9) shows the greatest chances for below normal temperatures over the area from Nebraska to Texas, east to the coast. Warmer than normal temperatures are anticipated over Alaska and also in the southwest. Precipitation chances are best over the northern plains and Tennessee River Valley while below normal chances of precipitation are projected in the southwest and along the east coast.

Author: [Brian Fuchs, National Drought Mitigation Center](#)

Dryness Categories

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

Drought Intensity Categories

D1 ... Moderate Drought

D2 ... Severe Drought

D3 ... Extreme Drought

D4 ... Exceptional Drought

Drought or Dryness Types

S ... Short-Term, typically <6 months (e.g. agricultural, grasslands)

L ... Long-Term, typically >6 months (e.g. hydrology, ecology)

Updated February 27, 2013

[USDA Highlights](#)

Highlights for the drought-monitoring period ending 7 am EST on February 19 include:

- Overall U.S. drought coverage increased slightly to 55.82% of the contiguous U.S., up 0.09% from last week but down 5.27% since the beginning of the year. The developing storm over the nation's mid-section, which is producing rain, snow, sleet, and freezing rain across a broad area, will be reflected in next week's Drought Monitor.

Weekly Snowpack and Drought Monitor Update Report

- The portion of the contiguous U.S. in the worst category – D4, or exceptional drought – also increased slightly (0.05%) to 6.66%. D4 coverage has ranged from 5 to 7% for 28 consecutive weeks (August 14, 2012 – February 19, 2013).

- The percent of hay in drought (57%), winter wheat in drought (59%), and cattle in drought (67%) were unchanged from a week ago. For the 33rd consecutive week (July 10, 2012 – February 19, 2013), drought encompassed more than two-thirds of the domestic cattle inventory.

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PUBLIC INFORMATION STATEMENT...CORRECTION
NATIONAL WEATHER SERVICE SAN FRANCISCO BAY AREA
252 AM PST WED FEB 27 2013
...HOW DRY HAS IT BEEN?...

HAS IT SEEMED LIKE A DRY 2013 SO FAR? WITH DRY WEATHER EXPECTED THROUGH THE END OF FEBRUARY LETS SEE HOW DRY HAS IT BEEN ACROSS THE SAN FRANCISCO AND MONTEREY BAY AREAS BETWEEN JANUARY 1 2013 THROUGH FEBRUARY 28 2013.

LOCATION	NORMAL RAINFALL (JAN 1 - FEB 28)	2013 (RANK)	DRIEST (YEAR)
SONOMA COUNTY AP	13.45 IN	1.19 IN (1)	1.19 IN (2013)
NAPA COUNTY AP	8.17 IN	0.62 IN (1)	0.62 IN (2013)
SAN FRANCISCO (DT)	8.96 IN	1.82 IN (5)	0.68 IN (1852)
SFO AIRPORT	8.25 IN	0.87 IN (1)	0.87 IN (2013)
OAKLAND AP	7.94 IN	0.81 IN (1)	0.81 IN (2013)
REDWOOD CITY	7.98 IN	1.18 IN (2)	1.06 IN (1976)
CONCORD AP	6.61 IN	0.72 IN (1)	0.72 IN (2013)
LIVERMORE AP	6.04 IN	1.12 IN (1)	1.12 IN (2013)
HAYWARD AP	6.77 IN	0.67 IN (1)	0.67 IN (2013)
SAN JOSE	5.95 IN	0.81 IN (2)	0.74 IN (1920)
SANTA CRUZ	12.52 IN	1.22 IN (1)	1.22 IN (2013)
WATSONVILLE AP	8.05 IN	1.15 IN (1)	1.15 IN (2013)
MONTEREY AP	6.24 IN	1.58 IN (4)	1.21 IN (1976)
SALINAS AP	5.09 IN	1.60 IN (10)	0.47 IN (2002)

NOTE: DAILY RAINFALL HAVE BEEN KEPT IN SAN FRANCISCO SINCE 1849!