



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

---

## Weekly Report - Snowpack / Drought Monitor Update

Date: 29 December 2011

[End of Year Edition]

### SNOTEL SNOWPACK AND PRECIPITATION SUMMARY

**Snow:** [Snow Water-Equivalent](#): The Northern Tier States continue to decline while Arizona and New Mexico are substantially higher than normal (Fig. 1). [7-Day Snow Depth Change](#) ending this morning shows generally light accumulation over much of the West with the most over the Northern Cascades and Northern Rockies (Fig. 1a).

**Temperature:** [SNOTEL](#) and ACIS 7-day temperature anomaly shows a mixed pattern of temperature departures. Generally, temperatures fell within  $\pm 5^{\circ}\text{F}$  of the typical value for this time of year but were much warmer over the Northern Plains and much colder over the southern region of the Southwest (Fig. 2). [ACIS](#) 7-day average temperature anomalies show the greatest positive temperature departures over northern Montana ( $>+20^{\circ}\text{F}$ ) and the greatest negative departures over parts of Colorado and New Mexico ( $<-15^{\circ}\text{F}$ ). This pattern is opposition of a typical La Niña pattern (Fig. 2a). [ACIS](#) 2011 average temperature anomalies show the greatest positive departures over southern New Mexico ( $>+3^{\circ}\text{F}$ ) and the greatest negative departures over parts of western Utah ( $<-3^{\circ}\text{F}$ ).

**Precipitation:** The [ACIS](#) 2011 total precipitation anomalies show the greatest positive departures over northern Montana ( $>200\%$ ) and the greatest negative departures over parts of Great Basin, southwest Arizona, and southeast New Mexico ( $<50\%$ ) (Fig. 2d). [ACIS](#) 7-day average precipitation amounts for the period ending yesterday shows the greatest amounts over the Olympics (Fig. 3). However, in terms of percent of normal, the Central and Southern Rockies easily represented the region of the West that benefited the most in terms of moisture (Fig 3a). Thus far, since the start of the [2012 Water-Year](#) that began on 1 October 2011, the seasonal moisture has favored the Southwest while the Great Basin, Cascades, and Western Slope of the Rockies have seen significant deficits.

**Weekly Weather Summary:** Back-to-back storms produced heavy rain in much of the Southeast, including drought-affected areas from eastern Texas to the southern Appalachians. Meanwhile, snow blanketed the southern Rockies and adjacent High Plains. Farther north, mild, dry conditions persisted across the northern Plains and upper Midwest. Elsewhere, cool, unusually dry conditions persisted west of the Rockies, except for some beneficial precipitation in Arizona. In California's Central Valley, dry conditions and low overnight temperatures led to stunted pasture growth, forcing some ranchers to keep their animals at higher elevations or provide supplemental sources of food and water.

**The Southwest:** Like the southern High Plains, the southern Rockies were graced with abundant, drought-easing snowfall. By December 27, the water equivalent (SWE) of the high-elevation snow pack generally ranged from 100 to 200% of normal, with a few higher values, in most watersheds across Arizona and New Mexico.

**California, the Great Basin, and the Northwest:** In stark contrast, extremely dry conditions persisted in northern and central California and the Great Basin, where many basin-level SWE values were less than 25% of normal for late December. Effects have not yet become

## Weekly Snowpack and Drought Monitor Update Report

significantly hydrological in nature; for example, California's 154 intrastate reservoirs held 125% of their normal water volume for December 1. However, agricultural impacts are beginning to mount, especially in parts of California's Central Valley. According to USDA, "rangeland had started to deteriorate due to lack of rains" and "supplemental feeding of livestock [will] continue until new vegetation [gains] strength." Due to short-term dryness, D0 was broadly expanded southward into California and eastward into the Great Basin. The coverage of dryness also increased across the interior Northwest, while some moderate drought (D1) was introduced in an area centered on the California-Nevada-Oregon triple point. Author: Brad Rippey, U.S. Department of Agriculture.

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

### 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/>.

### Soil Climate Analysis Network (SCAN)

Figure 6 provides supplemental data on soil conditions (moisture and temperatures at various depths from 2 inches to 80 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 SS/WSF State Office personnel are

## Weekly Snowpack and Drought Monitor Update Report

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://www.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>. Reports from 2007 are available on-line while ones from 2001-2006 can be acquired upon request.

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

/s/

Douglas Lawrence  
Deputy Chief, Soil Survey and Resource Assessment  
(Retiring 31 December 2011)

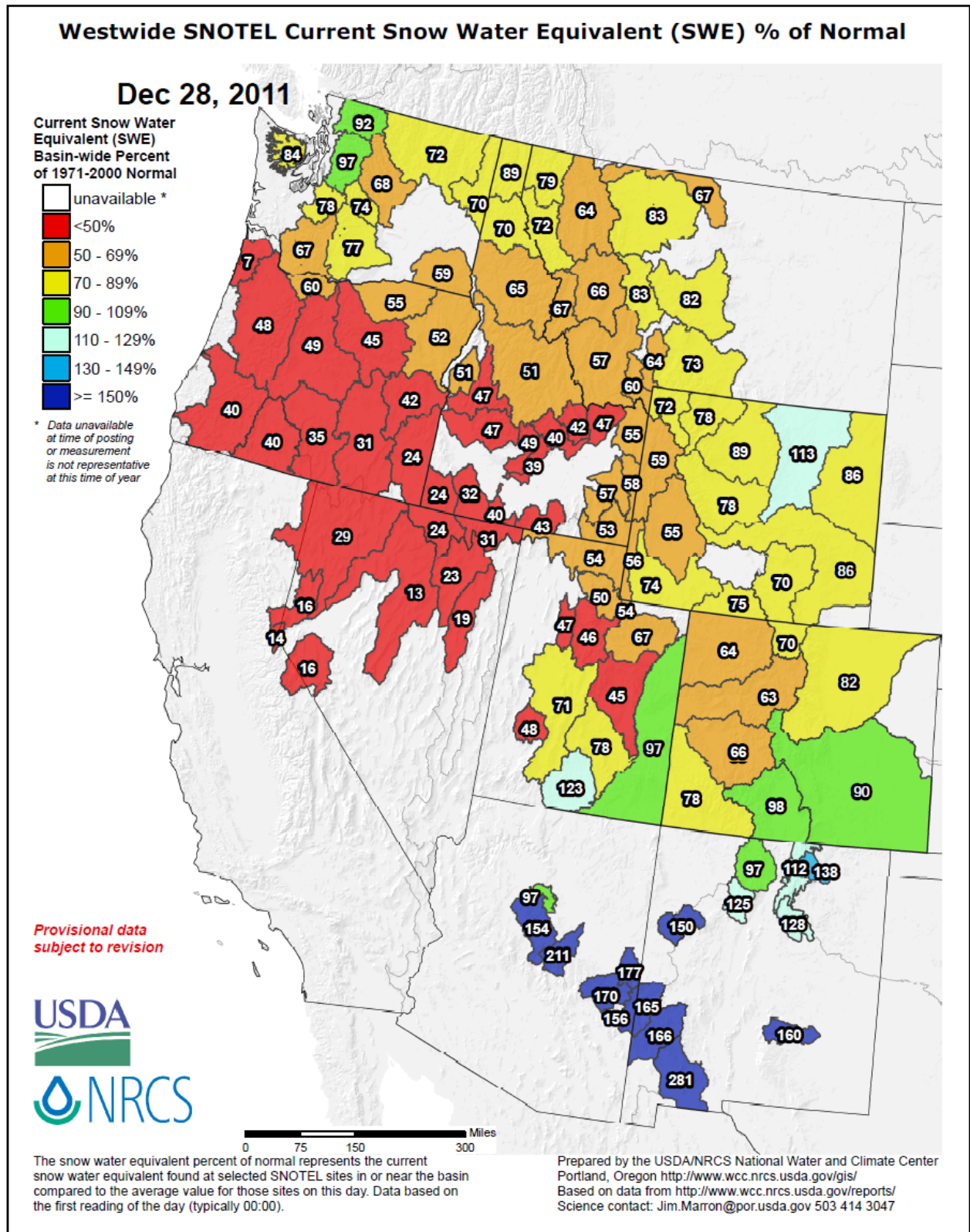


Fig. 1: Snow Water-Equivalent: The Northern Tier States continue to decline while Arizona and New Mexico are substantially higher than normal.



## Weekly Snowpack and Drought Monitor Update Report

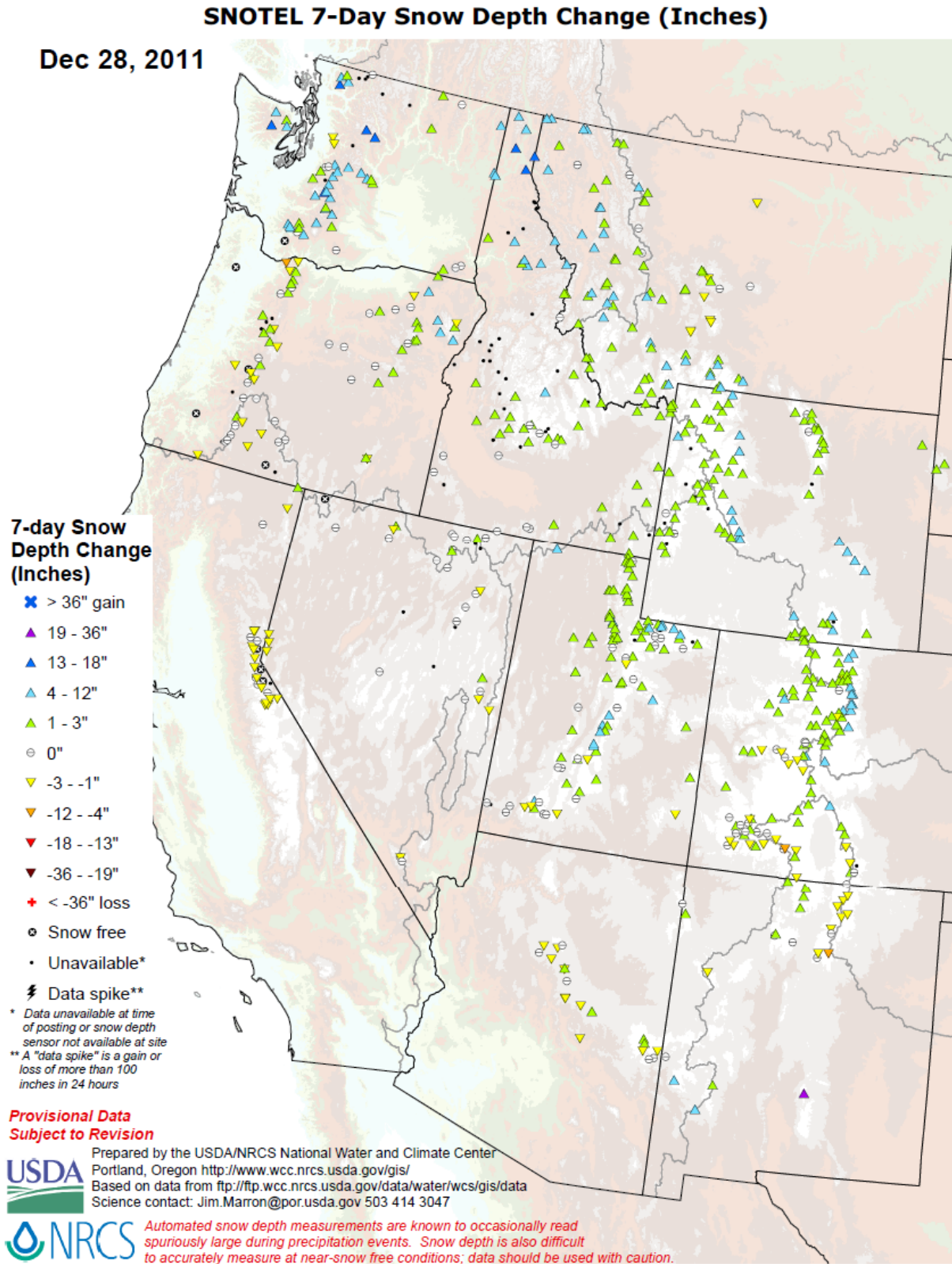
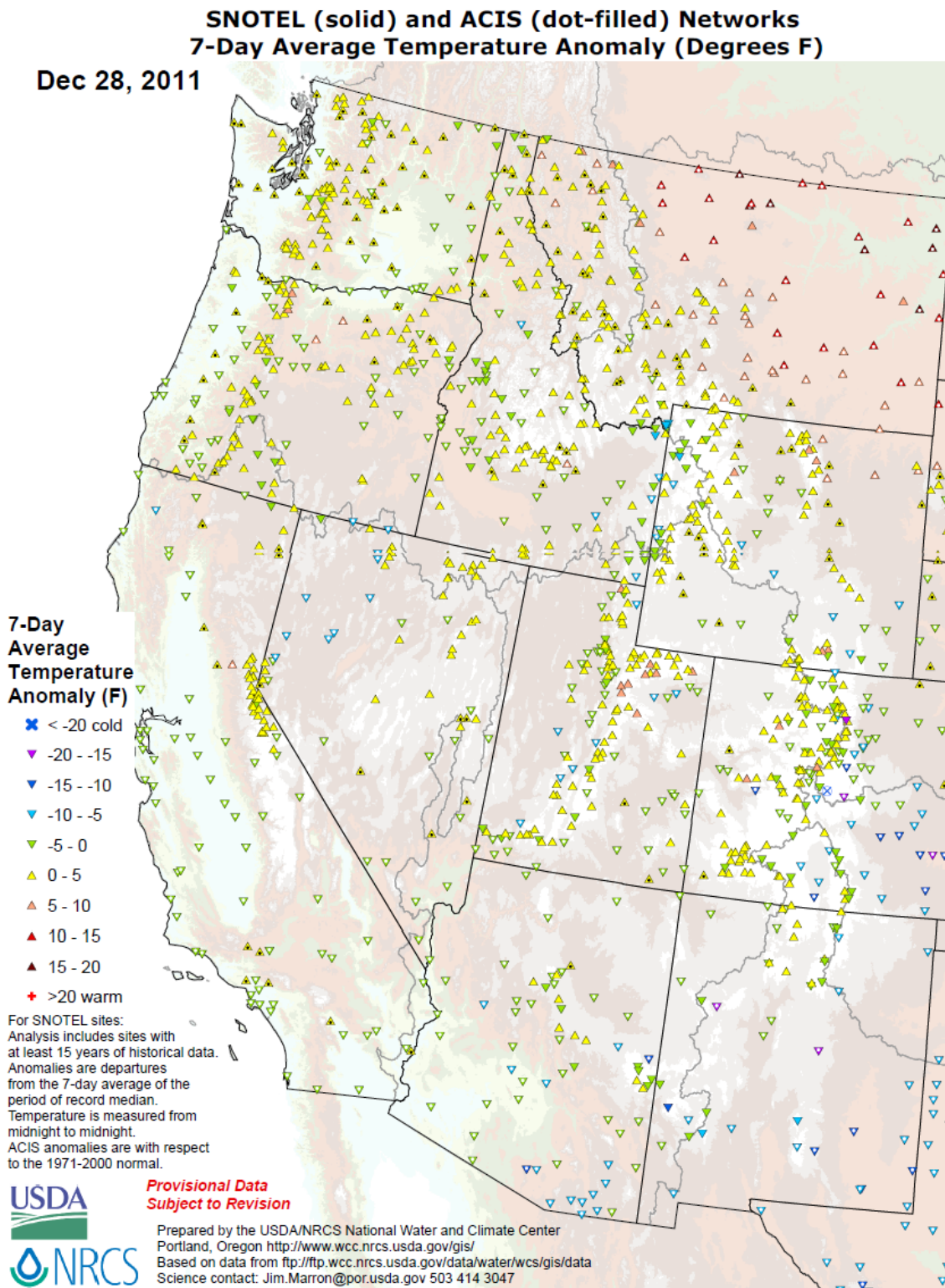


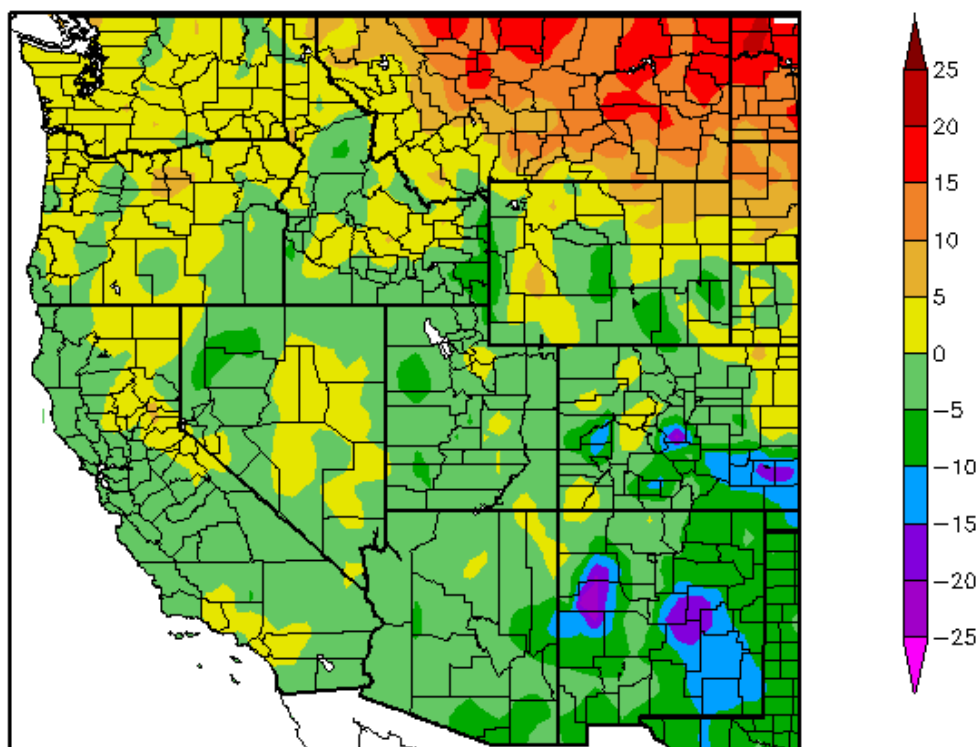
Fig. 1a: 7-Day Snow Depth Change ending this morning shows generally light accumulation over much of the West with the most over the Northern Cascades and Northern Rockies.

## Weekly Snowpack and Drought Monitor Update Report



**Fig. 2: SNOTEL and ACIS 7-day temperature anomaly shows a mixed pattern of temperature departures. Generally, temperatures fell within  $\pm 5^{\circ}\text{F}$  of the typical value for this time of year but were much warmer over the Northern Plains and much colder over the southern region of the Southwest.**

Departure from Normal Temperature (F)  
12/22/2011 – 12/28/2011



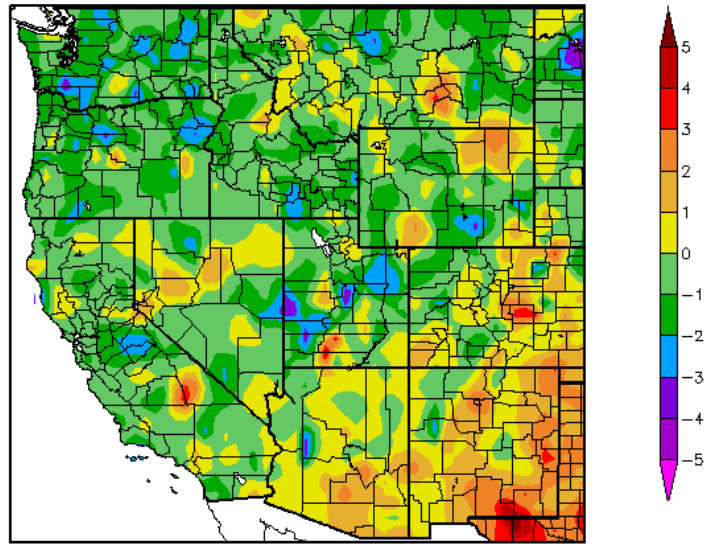
Generated 12/29/2011 at HPRCC using provisional data.

Regional Climate Centers

**Fig. 2a:** [ACIS](#) 7-day average temperature anomalies show the greatest positive temperature departures over northern Montana (>+20°F) and the greatest negative departures over parts of Colorado and New Mexico (<-15°F). This pattern is opposition of a typical La Niña.

## Weekly Snowpack and Drought Monitor Update Report

Departure from Normal Temperature (F)  
1/1/2011 – 12/28/2011

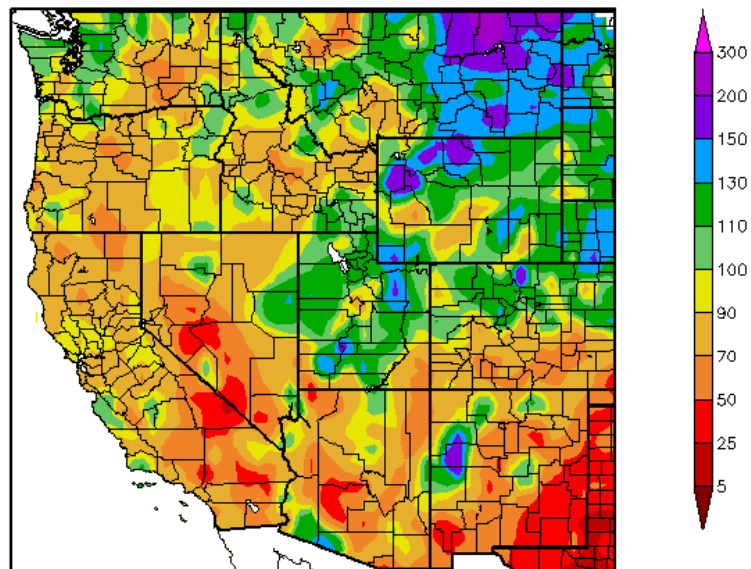


Generated 12/29/2011 at HPRCC using provisional data.

Regional Climate Centers

**Fig. 2c:** [ACIS](#) 2011 average temperature anomalies show the greatest positive departures over southern New Mexico ( $>+3^{\circ}\text{F}$ ) and the greatest negative departures over parts of western Utah ( $<-3^{\circ}\text{F}$ ).

Percent of Normal Precipitation (%)  
1/1/2011 – 12/28/2011



Generated 12/29/2011 at HPRCC using provisional data.

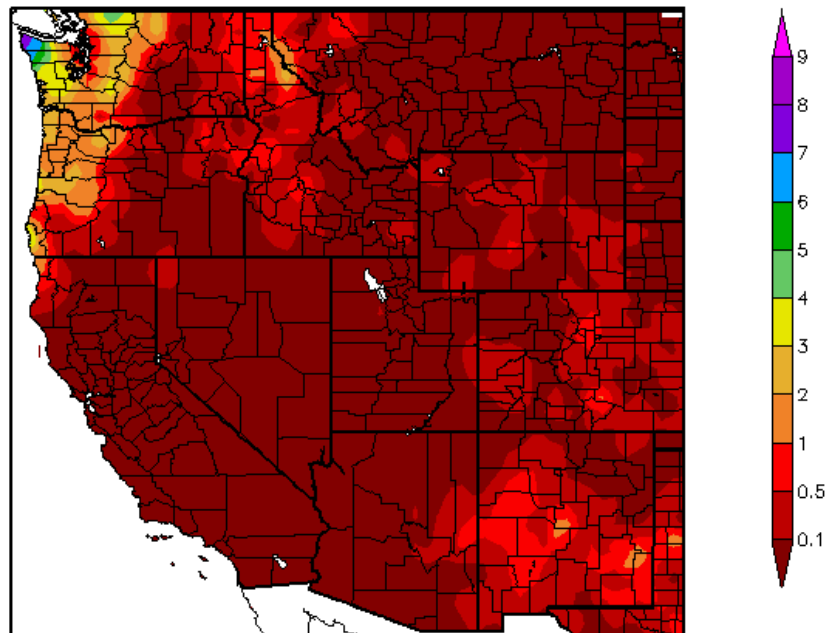
Regional Climate Centers

**Fig. 2d:** [ACIS](#) 2011 total precipitation anomalies show the greatest positive departures over northern Montana ( $>200\%$ ) and the greatest negative departures over parts of Great Basin, southwest Arizona, and southeast New Mexico ( $<50\%$ ).



## Weekly Snowpack and Drought Monitor Update Report

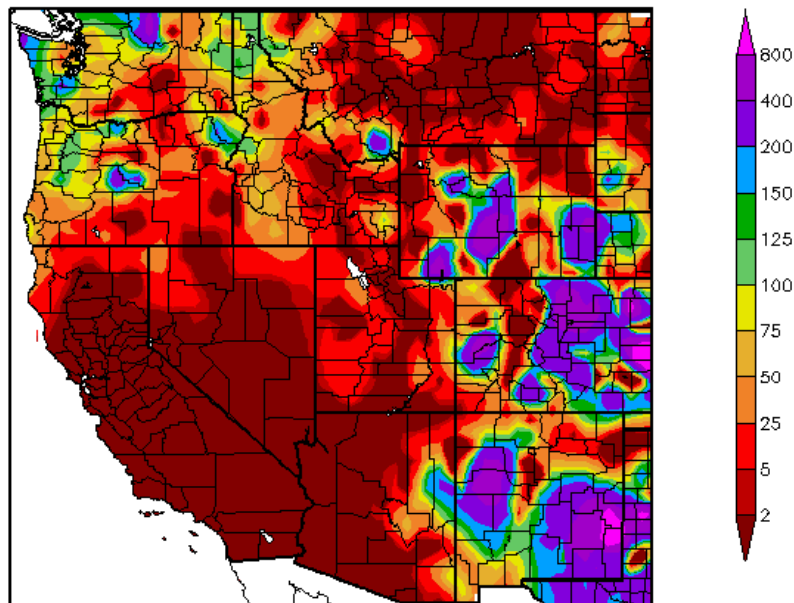
Precipitation (in)  
12/22/2011 – 12/28/2011



Generated 12/29/2011 at HPRCC using provisional data.

Regional Climate Centers

Percent of Normal Precipitation (%)  
12/22/2011 – 12/28/2011



Generated 12/29/2011 at HPRCC using provisional data.

Regional Climate Centers

**Fig. 3 and 3a:** [ACIS](#) 7-day average precipitation amounts for the period ending yesterday shows the greatest amounts over the Olympics (Fig. 3). However, in terms of percent of normal, the Central and Southern Rockies easily represented the region of the West that benefited the most in terms of moisture (Fig 3a).

## Weekly Snowpack and Drought Monitor Update Report

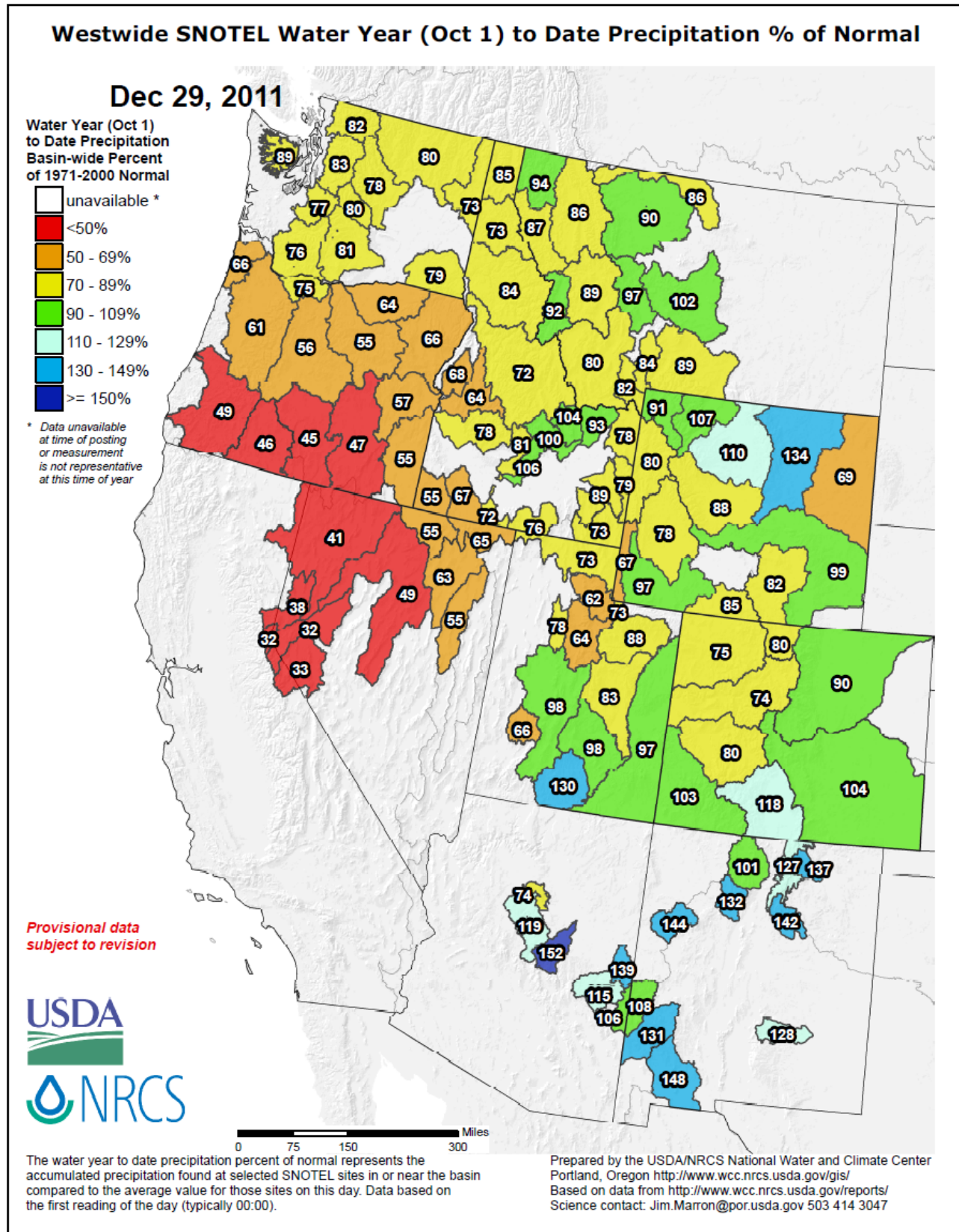


Fig 3b: Thus far, since the start of the [2012 Water-Year](#) that began on 1 October 2011, the seasonal moisture has favored the Southwest while the Great Basin, Cascades, and Western Slope of the Rockies have seen significant deficits.

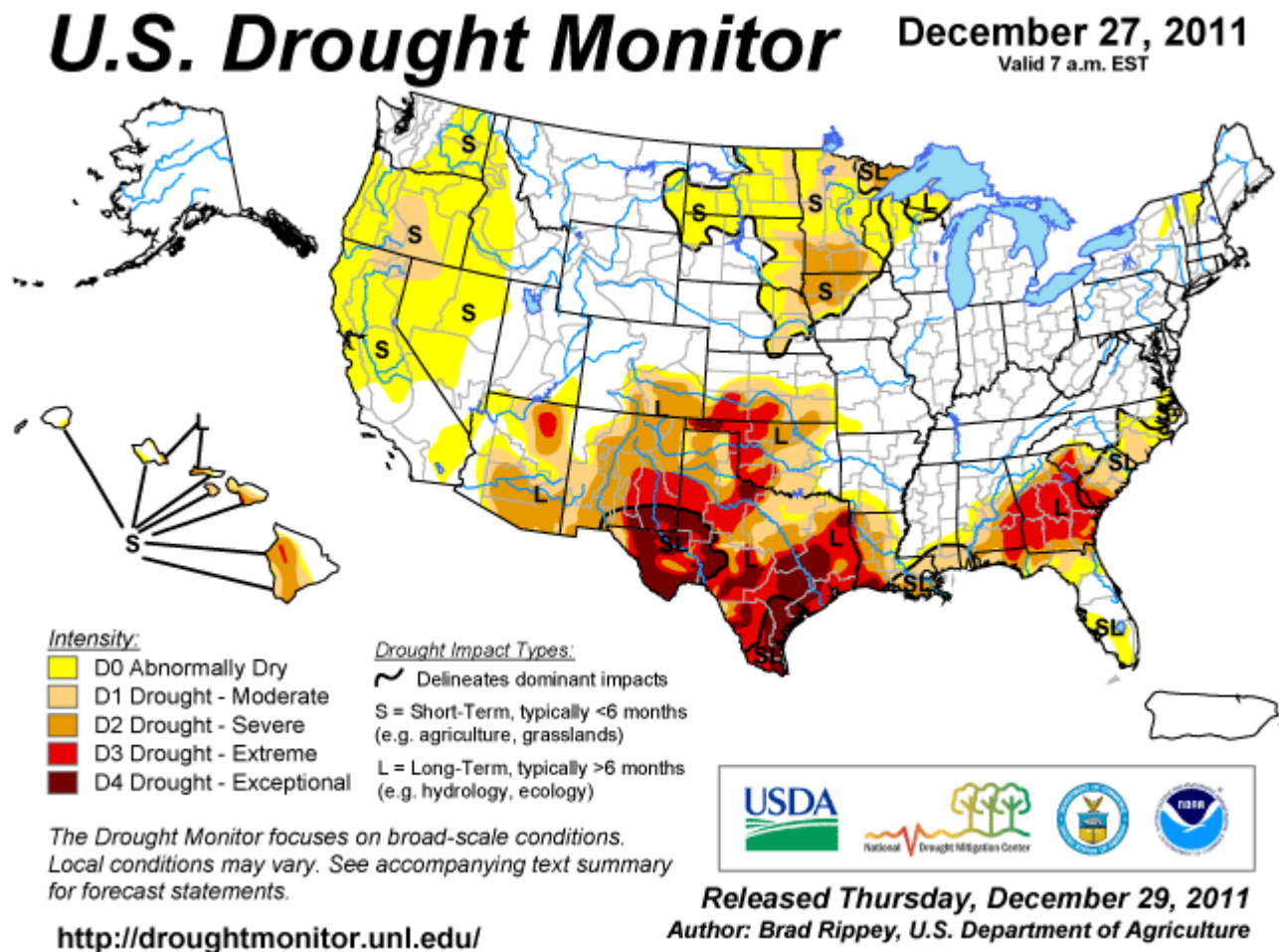


Fig. 4: Current [Drought Monitor](#) weekly summary. The exceptional D4 levels of drought are found over southeastern New Mexico, mostly southern Texas, the Panhandle of Oklahoma, and southwestern & northwestern Louisiana. For more drought news see: [Drought Impact Reporter](#).

## Agriculture

### [Disasters doom Texas oyster crop](#)

Dec 14, Gulf Coast of Texas. The closure of the coastal oyster beds has hurt the oyster industry, putting fishermen and oyster processors and shippers out of work and cutting into area businesses' bottom lines.

### [Shortages mean mistletoe gets the kiss-off this year](#)

Dec 14, Texas. Drought in Texas has reduced the growth of mistletoe, which is a parasitic plant that grows on trees.

### [Texas drought takes cow numbers down by 600K](#)

Dec 16, Texas. The decline in cattle numbers occurred since the start of 2011. Beef prices are expected to rise about 5.5 percent in 2012, according to the U.S. Department of Agriculture, after an increase of 9 percent this year.

# U.S. Drought Monitor

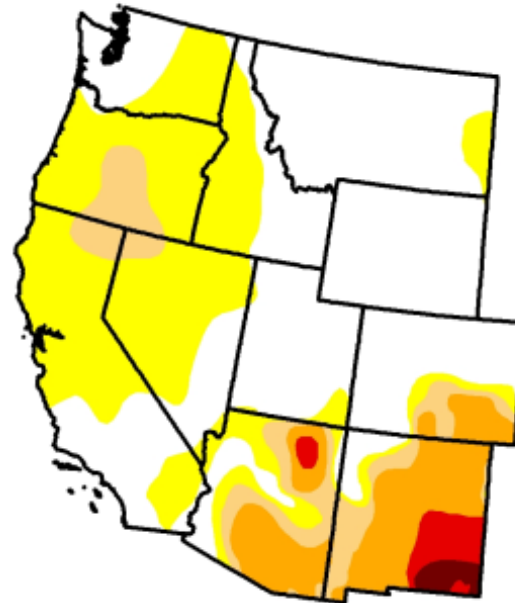
## West

December 27, 2011  
Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	48.49	51.51	20.05	12.22	2.67	0.78
Last Week (12/20/2011 map)	66.71	33.29	17.00	12.22	4.16	1.82
3 Months Ago (09/27/2011 map)	66.72	33.28	19.04	14.99	9.30	3.81
Start of Calendar Year (12/28/2010 map)	73.26	26.74	11.98	0.89	0.00	0.00
Start of Water Year (09/27/2011 map)	66.72	33.28	19.04	14.99	9.30	3.81
One Year Ago (12/21/2010 map)	68.16	31.84	13.00	0.89	0.00	0.00

### Intensity:

<span style="background-color: yellow;">   </span> D0 Abnormally Dry	<span style="background-color: red;">   </span> D3 Drought - Extreme
<span style="background-color: orange;">   </span> D1 Drought - Moderate	<span style="background-color: darkred;">   </span> D4 Drought - Exceptional
<span style="background-color: darkorange;">   </span> D2 Drought - Severe	



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, December 29, 2011  
Brad Rippey, U.S. Department of Agriculture

Fig. 4a: Drought Monitor for the [Western States](#) with statistics over various time periods. Regionally there was significant deterioration in D0 as the West continues to dry out this week. With a ridge of high pressure expected to establish over the West in the coming weeks, continued drying is anticipated.



# Weekly Snowpack and Drought Monitor Update Report

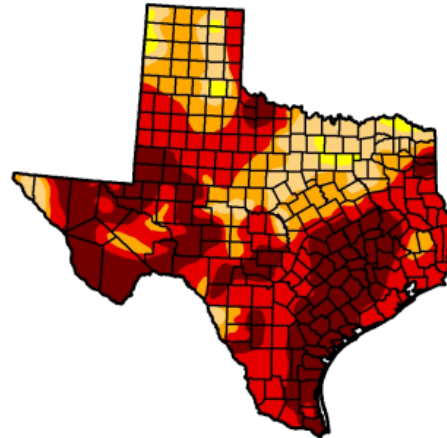
## U.S. Drought Monitor Texas

December 27, 2011  
Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.01	99.99	97.83	84.81	67.32	32.36
Last Week (12/20/2011 map)	0.01	99.99	97.85	84.81	69.35	38.84
3 Months Ago (09/27/2011 map)	0.00	100.00	100.00	99.16	96.65	85.75
Start of Calendar Year (12/28/2010 map)	7.89	92.11	69.43	37.46	9.59	0.00
Start of Water Year (09/27/2011 map)	0.00	100.00	100.00	99.16	96.65	85.75
One Year Ago (12/21/2010 map)	13.61	86.39	73.68	38.41	9.66	0.00

### Intensity:

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



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, December 29, 2011  
Brad Rippey, U.S. Department of Agriculture

Fig. 4b(1): Currently, ~32% of [Texas](#) is experiencing “Exceptional” D4 drought. 67% of the state is in D3 and D4 drought! Overall, this represents a 6% improvement in D4 this week.

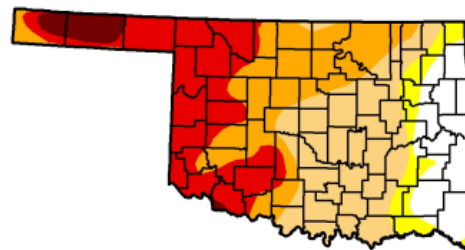
## U.S. Drought Monitor Oklahoma

December 27, 2011  
Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	14.83	85.17	78.76	50.55	27.48	3.33
Last Week (12/20/2011 map)	14.83	85.17	78.78	50.55	27.48	3.33
3 Months Ago (09/27/2011 map)	0.00	100.00	100.00	100.00	78.97	66.42
Start of Calendar Year (12/28/2010 map)	13.82	86.18	47.90	1.50	0.00	0.00
Start of Water Year (09/27/2011 map)	0.00	100.00	100.00	100.00	78.97	66.42
One Year Ago (12/21/2010 map)	14.73	85.27	38.09	0.85	0.00	0.00

### Intensity:

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



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, December 29, 2011  
Brad Rippey, U.S. Department of Agriculture

Fig. 4b(2): Currently, over 3% of [Oklahoma](#) is experiencing “Exceptional” D4 drought. Over 27% of the state is in D3 and D4 drought! This week saw no change.

# U.S. Drought Monitor

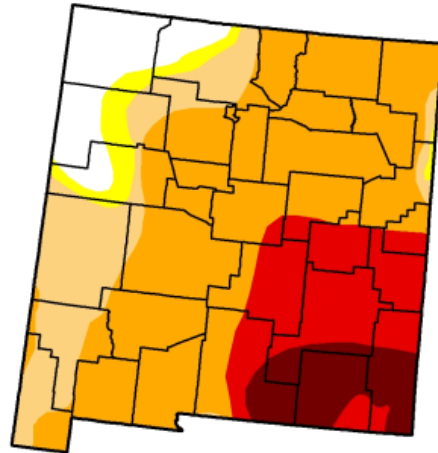
## New Mexico

December 27, 2011  
Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	8.63	91.37	87.60	72.15	23.37	7.57
Last Week (12/20/2011 map)	8.63	91.37	87.60	72.15	37.97	17.79
3 Months Ago (09/27/2011 map)	0.00	100.00	96.40	88.99	69.61	35.13
Start of Calendar Year (12/28/2010 map)	6.16	93.84	40.40	0.00	0.00	0.00
Start of Water Year (09/27/2011 map)	0.00	100.00	96.40	88.99	69.61	35.13
One Year Ago (12/21/2010 map)	5.18	94.82	40.35	0.00	0.00	0.00

### Intensity:

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



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, December 29, 2011  
Brad Rippey, U.S. Department of Agriculture

Fig. 4b(3): Currently, ~7% of New Mexico is experiencing "Exceptional" D4 drought. 23% of the state is in D3 and D4 drought. Overall, this represents about a 10% improvement this week.

# U.S. Drought Monitor

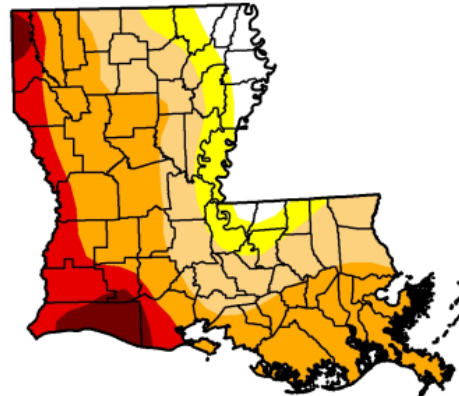
## Louisiana

December 27, 2011  
Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	5.57	94.43	83.40	57.47	15.98	4.10
Last Week (12/20/2011 map)	1.43	98.57	90.37	64.80	32.55	7.53
3 Months Ago (09/27/2011 map)	45.37	54.63	44.43	35.94	27.14	16.37
Start of Calendar Year (12/28/2010 map)	0.00	100.00	87.22	59.72	40.99	0.00
Start of Water Year (09/27/2011 map)	45.37	54.63	44.43	35.94	27.14	16.37
One Year Ago (12/21/2010 map)	0.00	100.00	80.53	59.07	24.59	0.00

### Intensity:

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



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

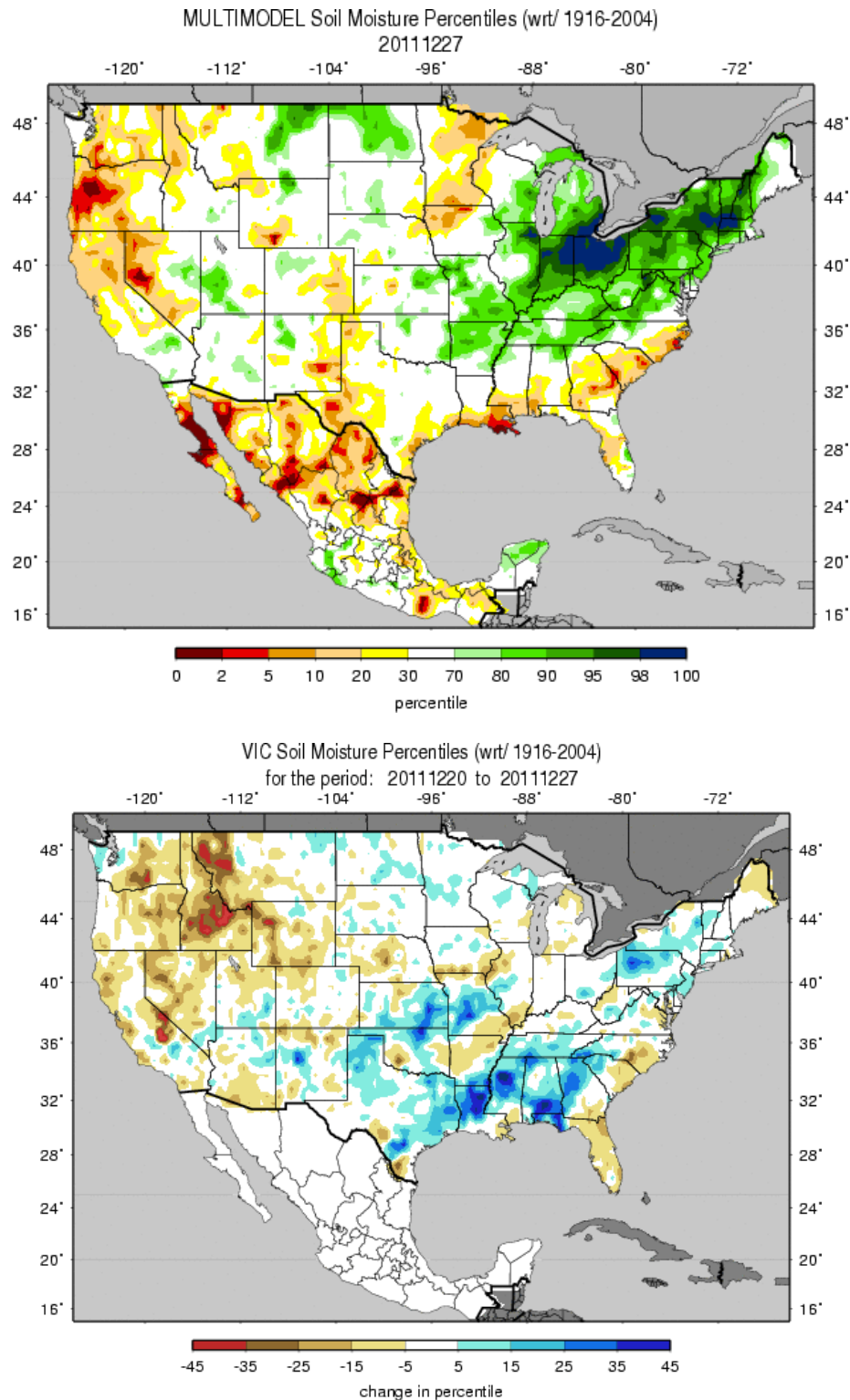
<http://droughtmonitor.unl.edu>



Released Thursday, December 29, 2011  
Brad Rippey, U.S. Department of Agriculture

Fig. 4b(4): Currently, 4% of Louisiana is experiencing "Exceptional" D4 drought. Over 16% of the state is in D3 and D4 drought. Overall, this represents significant improvement the week.

## Weekly Snowpack and Drought Monitor Update Report



Figs. 5a and 5b: Soil Moisture ranking in [percentile](#) as of 27 December (top) shows a wet Ohio Valley to New England pattern continuing. Dryness is noted over Oregon, and western Nevada. [During the week](#), moisture increased over the Gulf Coast States (bottom). Drying has expanded over the Northern Rockies and southern Sierra in California. Note: Soil moisture measurements become more suspect in winter with frozen ground.

## Weekly Snowpack and Drought Monitor Update Report

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

Station (2029) MONTH=2011-11-29 (Daily) NRCS National Water and Climate Center - Provisional Data - subject to revision  
Thu Dec 29 07:38:36 PST 2011

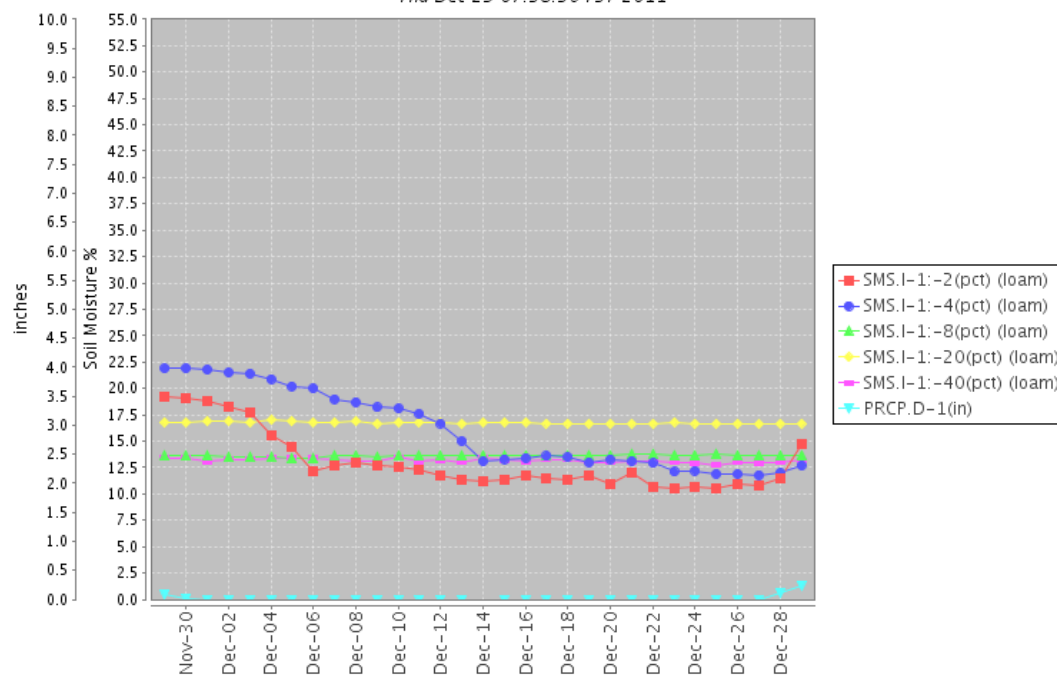


Fig. 6a: This NRCS resource shows a site over [western Idaho](#) with a slow drying trend.

Station (2177) MONTH=2011-11-29 (Daily) NRCS National Water and Climate Center - Provisional Data - subject to revision  
Thu Dec 29 07:41:09 PST 2011

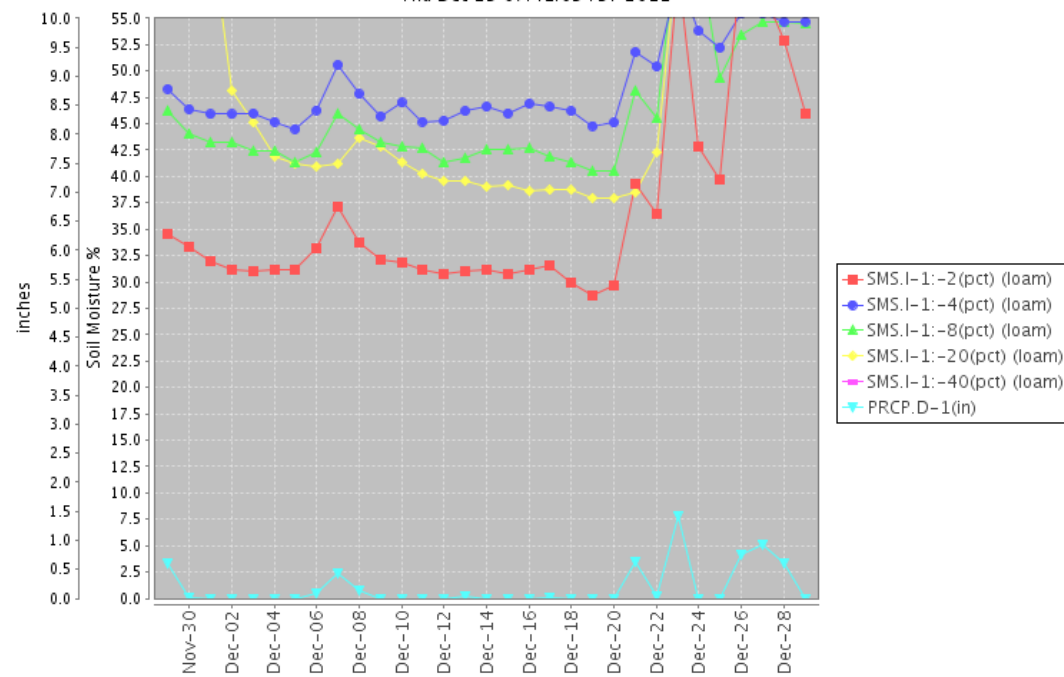
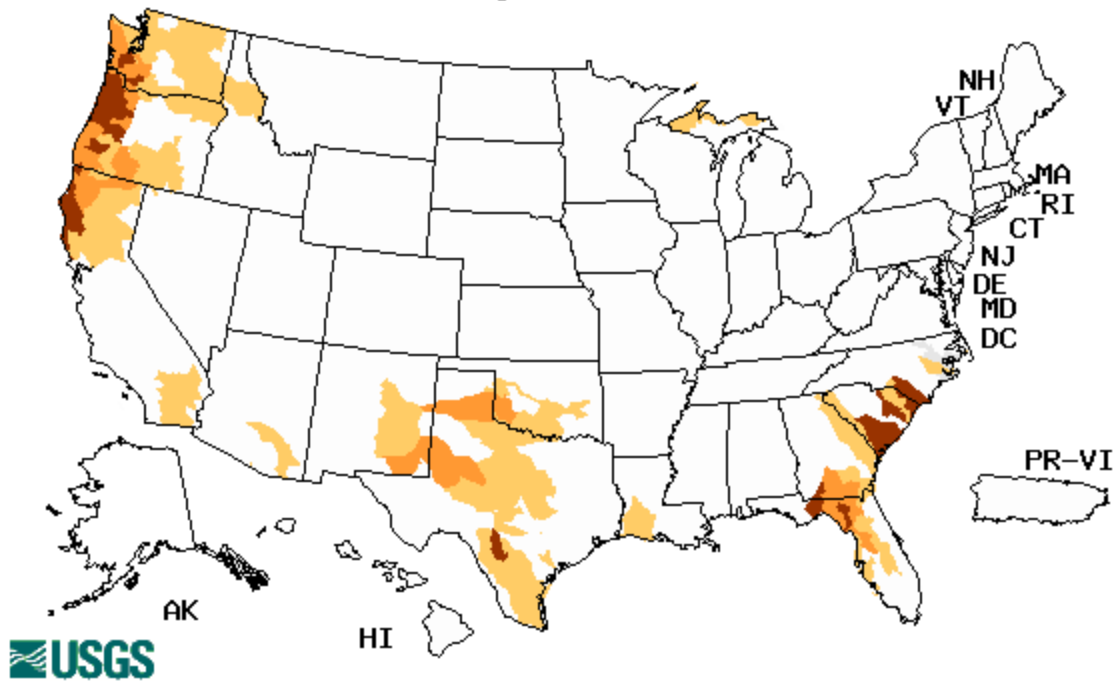


Fig. 6b: This SCAN station is located in [south-central Alabama](#) shows very high moisture values.



## Weekly Snowpack and Drought Monitor Update Report

Wednesday, December 28, 2011



Explanation - Percentile classes				
Low	$\leq 5$	6-9	10-24	Insufficient data for a hydrologic region
Extreme hydrologic drought	Severe hydrologic drought	Moderate hydrologic drought	Below normal	

Fig. 7: Map of below normal 7-day average [streamflow](#) compared to historical streamflow for the day of year. Severe conditions exist over the Florida Panhandle, South and North Carolina, north California Coast, and western Oregon and Washington.

## Weekly Snowpack and Drought Monitor Update Report

### National Drought Summary -- December 27, 2011

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

<http://www.cpc.ncep.noaa.gov/products/forecasts/>.

**Weekly Weather Summary:** Back-to-back storms produced heavy rain in much of the Southeast, including drought-affected areas from eastern Texas to the southern Appalachians. Meanwhile, snow blanketed the southern Rockies and adjacent High Plains. Farther north, mild, dry conditions persisted across the northern Plains and upper Midwest. Elsewhere, cool, unusually dry conditions persisted west of the Rockies, except for some beneficial precipitation in Arizona. In California's Central Valley, dry conditions and low overnight temperatures led to stunted pasture growth, forcing some ranchers to keep their animals at higher elevations or provide supplemental sources of food and water.

**Northeast:** The snow season has gotten off to a slow start in much of the Northeast. Through December 24, New York locations such as Buffalo (3.0 inches) and Rochester (2.2 inches) experienced record-low season-to-date totals. Previous records had been set with respective totals of 3.1 inches (in 1998) in Buffalo and 2.6 inches (in 1939) in Rochester. Precipitation moved into the Northeast on December 26-27, but higher amounts again bypassed the pockets of abnormal dryness (D0) in northern portions of New York and New England.

**Southeast:** Substantial rain fell in most drought-affected areas west of a line from the western Carolinas into western Florida, resulting in widespread one-category reductions in drought intensity. From December 20-26, Pensacola, Florida, received 7.30 inches of rain. Farther west, December 20-26 totals topped 4 inches in a multitude of locations across Louisiana (e.g. Alexandria, Lake Charles), Mississippi (e.g. Jackson, Meridian, Natchez), and neighboring states. However, significant rain bypassed a few areas, including the central Gulf Coast and southern Atlantic regions. In particular, abnormal dryness (D0) continued to gradually expand across Florida's peninsula on the strength of very dry conditions since November 1. With rainfall totaling only 0.17 inch from December 1-27, Sarasota-Bradenton, Florida, was on a pace to experience its driest December since 1949, when 0.03 inch fell.

**Southern and Central Plains:** In the wake of the December 19-20 storm, a few additional improvements in the drought depiction were made on the central Plains. A second storm followed the December 19-20 event, resulting in substantial snow (and some drought relief) on the southern High Plains. Pueblo, CO, was affected by both storms, reporting 16.0 inches of snow from December 19-22. Farther south, December 22-24 snowfall reached 10.0 inches in Roswell, NM, and 6.4 inches in Midland, TX. By the morning of December 25, snow depths included 8 inches at Roswell and Clayton, NM, as well as Pueblo, CO. As a result of the widespread snowfall, the core area of exceptional drought (D4) centered over western Texas and southeastern New Mexico diminished in size. As more precipitation has fallen, the focus of the southern Plains' drought has begun to shift toward groundwater recharge, reservoir replenishment, and long-term recovery from the damage done to rangeland and pastures.

## Weekly Snowpack and Drought Monitor Update Report

**Northern Plains and Midwest:** Unseasonably mild, dry weather persisted in the areas affected by dryness (D0) and drought (D1 and D2). Since this region's normal winter precipitation is typically very light, changes in the drought depiction have been, and will continue to be, very gradual.

**The Southwest:** Like the southern High Plains, the southern Rockies were graced with abundant, drought-easing snowfall. By December 27, the water equivalent (SWE) of the high-elevation snow pack generally ranged from 100 to 200% of normal, with a few higher values, in most watersheds across Arizona and New Mexico.

**California, the Great Basin, and the Northwest:** In stark contrast, extremely dry conditions persisted in northern and central California and the Great Basin, where many basin-level SWE values were less than 25% of normal for late December. Effects have not yet become significantly hydrological in nature; for example, California's 154 intrastate reservoirs held 125% of their normal water volume for December 1. However, agricultural impacts are beginning to mount, especially in parts of California's Central Valley. According to USDA, "rangeland had started to deteriorate due to lack of rains" and "supplemental feeding of livestock [will] continue until new vegetation [gains] strength." Due to short-term dryness, D0 was broadly expanded southward into California and eastward into the Great Basin. The coverage of dryness also increased across the interior Northwest, while some moderate drought (D1) was introduced in an area centered on the California-Nevada-Oregon triple point.

**Hawaii:** Heavy showers dotted Hawaii's windward locations, especially on the Big Island. As a result, extreme drought (D3) was eliminated from the southeastern portion of the Big Island. Elsewhere on the Big Island, Hilo's December 1-27 rainfall climbed to 19.45 inches, 188% of normal. No changes were introduced elsewhere on the Hawaiian Islands.

**Looking Ahead:** During the next 5 days (December 29, 2011 – January 2, 2012), a pattern change will bring an increase in storminess to the nation's northern tier, while little or no precipitation will fall across the southern two-thirds of the nation. Five-day precipitation totals could reach 2 to 8 inches in the Pacific Northwest and 2 to 4 inches in the northern Rockies. Generally light precipitation will fall from the northern Plains into the Northeast, with some locally heavier snow in the Great Lakes region. Much of the U.S. will experience near- or above-normal temperatures through week's end, but colder air will arrive in the East early in the New Year.

The CPC 6- to 10-day outlook for January 3-7, 2012, call for above-normal temperatures across the western two-thirds of the U.S., while colder-than-normal weather will prevail in the East. Meanwhile, drier-than-normal conditions across the majority of the nation will contrast with near-normal precipitation in western Washington and from the lower Great Lakes region into New England.

**Author:** [Brad Rippey, U.S. Department of Agriculture](#)

### 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

## Weekly Snowpack and Drought Monitor Update Report

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 December 28, 2011*