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: 21 November 2012**

SNOTEL SNOWPACK AND PRECIPITATION SUMMARY

Temperature: SNOTEL and ACIS 7-day temperature anomaly ending 20 November shows warmer than average conditions dominated the West; this is especially true over the Central Rockies (Fig. 1). ACIS 7-day average temperature anomalies show the greatest positive temperature departures over the Northwestern High Plains and over southeast Idaho (>+10°F). The greatest negative departure occurred over north-central Montana (<-10°F) (Fig. 1a).

Precipitation: ACIS 7-day average precipitation amounts for the period ending yesterday shows spectacular amounts of heavy precipitation over the Coastal Ranges of Oregon and Washington as well as the Cascades (Fig. 2). In terms of percent of normal, the Pacific Northwest, much of northern California, and southeast Idaho recorded over the typical November's total amount in just this week after a rather dry first half of the month (Fig. 2a). SNOTEL month to date precipitation percent of normal shows many basins over the Pacific Northwest catching up on their percentages while several are still below normal. As for the remainder of the West, much of the western half of Utah and Arizona are showing surpluses but not necessarily in terms of snow water-equivalent (Fig. 3 below) due to above average temperatures (Fig. 2b). For the 2013 Water-Year that began on 1 October 2012, statistics continue to suggest a La Niña-like precipitation pattern that is favoring the Northern Tier States (Fig. 2c).

Snow (Snow Water-Equivalent): Early season snowfall over the Washington Cascades, Sierra, northern Wasatch, and Uintah Mountains are reflecting surplus values but much of the precipitation that has fallen across the West this season fell as rain (Fig. 3).

Summary: Mostly dry weather prevailed across the contiguous U.S., with above-normal temperatures from the Corn Belt to the Pacific Coast contrasting with cooler-than-normal conditions across the eastern and south-central U.S. Locally heavy rain and mountain snow arrived across the central and northern Pacific Coast states, reaching the interior Northwest and northern Rockies, while a disturbance generated light to moderate rain across portions of the Southeast. Overall, drought conditions remained unchanged or deteriorated.

Western U.S.: Stormy conditions provided beneficial precipitation across western and northern portions of the region, while dry, unfavorably warm weather prevailed over central and southern drought areas of the west.

In northern portions of the region, a surge of Pacific moisture generated moderate to heavy rain and mountain snow (2-10 inches liquid equivalent, locally more), maintaining a favorable start to the winter wet season. As of November 20, snow water equivalent (SWE) rankings ranged from the 60th to 90th percentile in the Sierra Nevada to the 50th to 80th percentile in the Cascades. Early-season SWE percentile rankings remained unfavorably low across northern portions of the Rockies (locally as low as the 10th percentile), although short-term precipitation prospects remained mostly favorable.

In central and southern portions of the region, mostly dry weather maintained or intensified drought. Severe Drought (D2) expanded in southwestern Nevada and adjacent portions of southeastern California in response to updated long-term precipitation (year-to-date precipitation was less than 50 percent of normal in the expanded D2 area). Severe to Extreme (D2-D3) drought was likewise expanded across west-central and eastern New Mexico to reflect unfavorably dry conditions at both the long-term (less than 50 percent of normal since January 1) and short term (locally less than 25 percent of normal over the past 2 months). In southwestern California, Abnormal Dryness (D0) — and to a lesser extent Moderate Drought (D1) — was expanded to reflect short-term dryness (60-day rainfall less than 50 percent of normal, locally less than 25 percent). Dry weather prevailed across the remainder of the Four Corners region, although there were no other changes made to drought designation**.** Author: Eric Luebehusen, 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 (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 common and water restrictions imposed and crop or pasture losses likely. 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 4d).

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 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

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/
Micheal L. Golden
Deputy Chief, Soil Survey and Resource Assessment

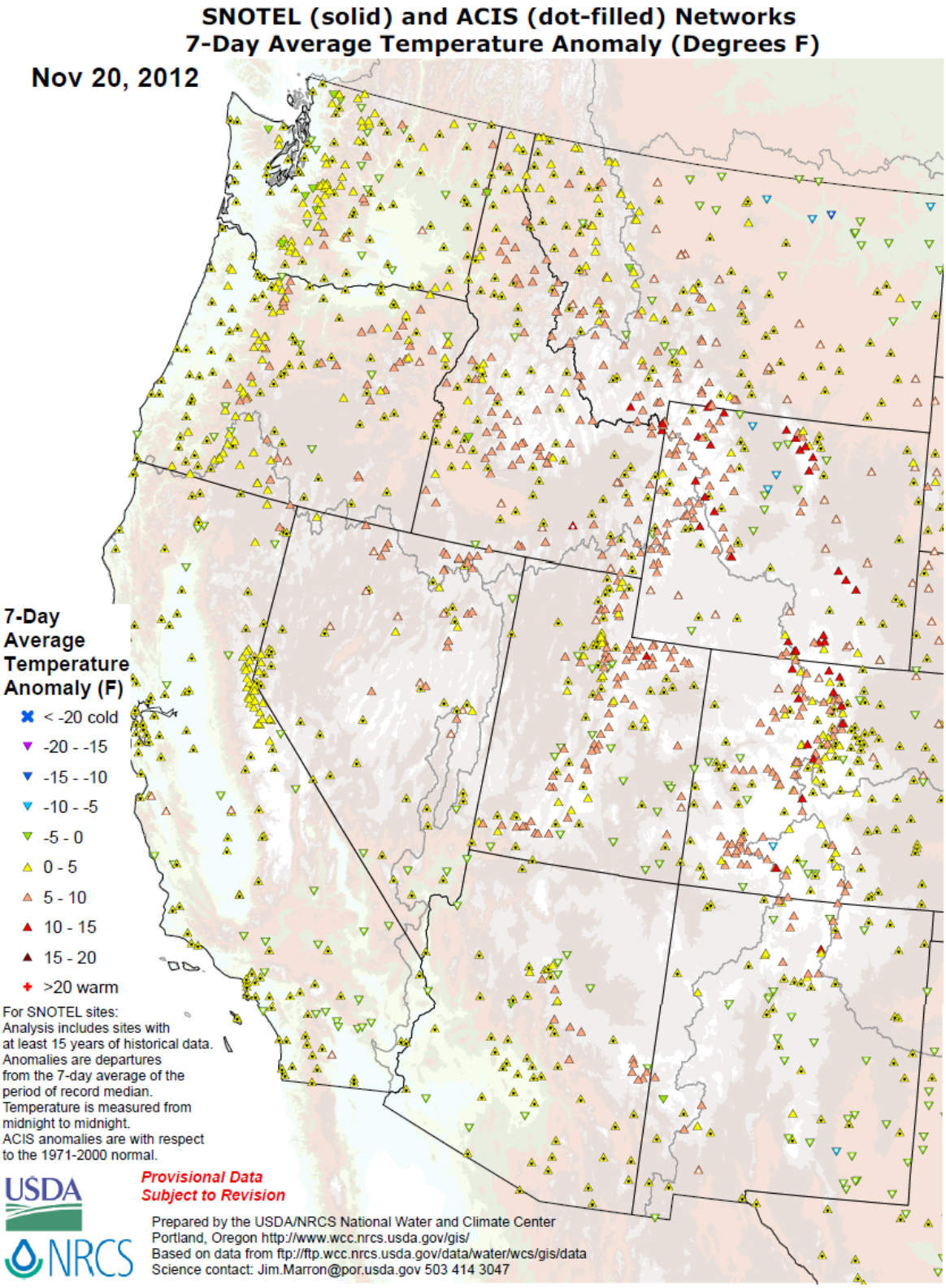


Fig. 1: SNOTEL and ACIS 7-day temperature anomaly ending 20 November shows warmer than average conditions dominated the West; especially over the Central Rockies.

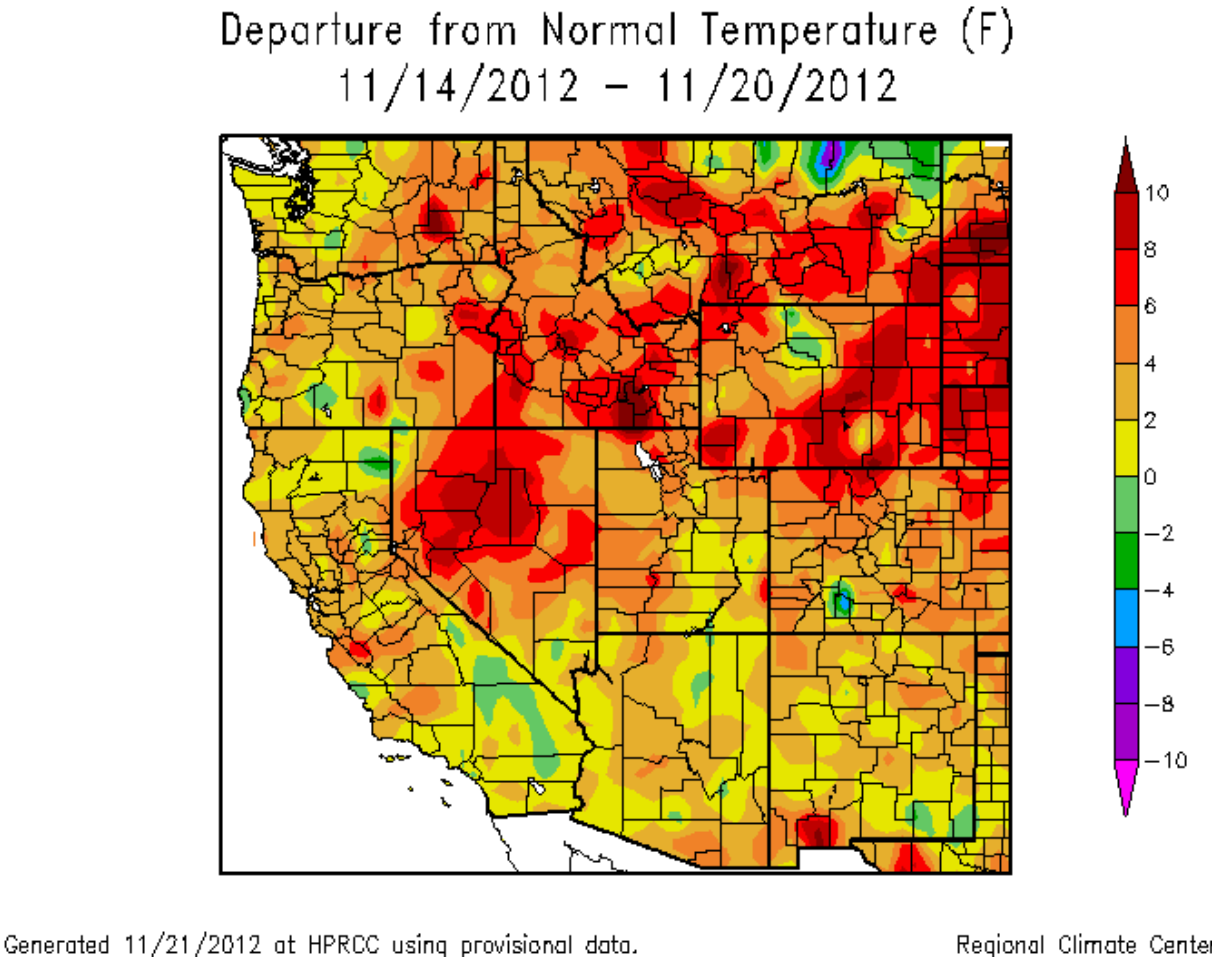
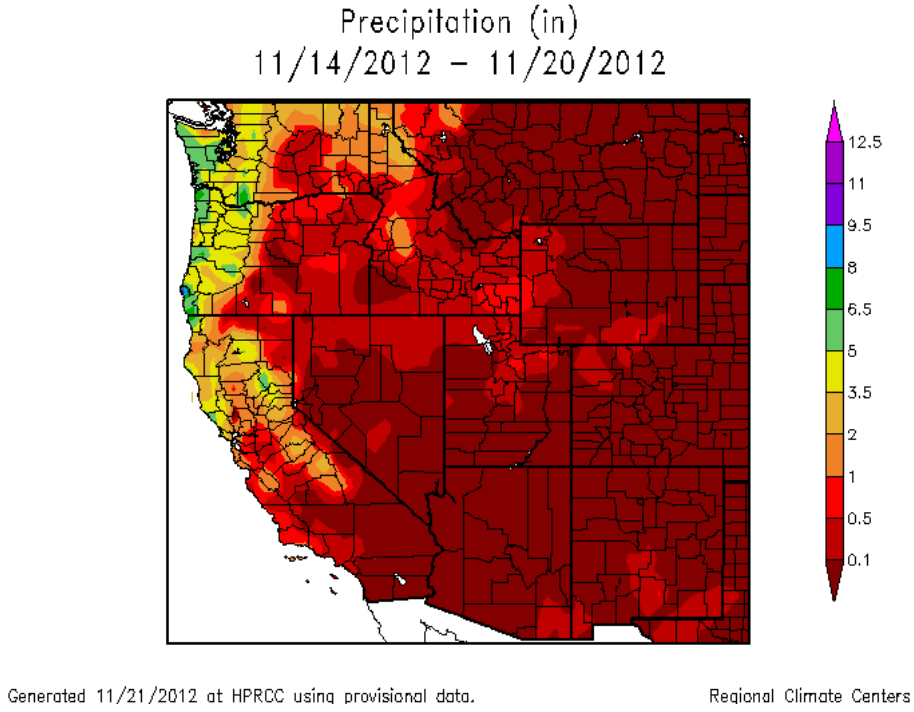


Fig. 1a: ACIS 7-day average temperature anomalies show the greatest positive temperature departures over the Northwestern High Plains and over southeast Idaho (>+10°F). The greatest negative departure occurred over north-central Montana (<-10°F).



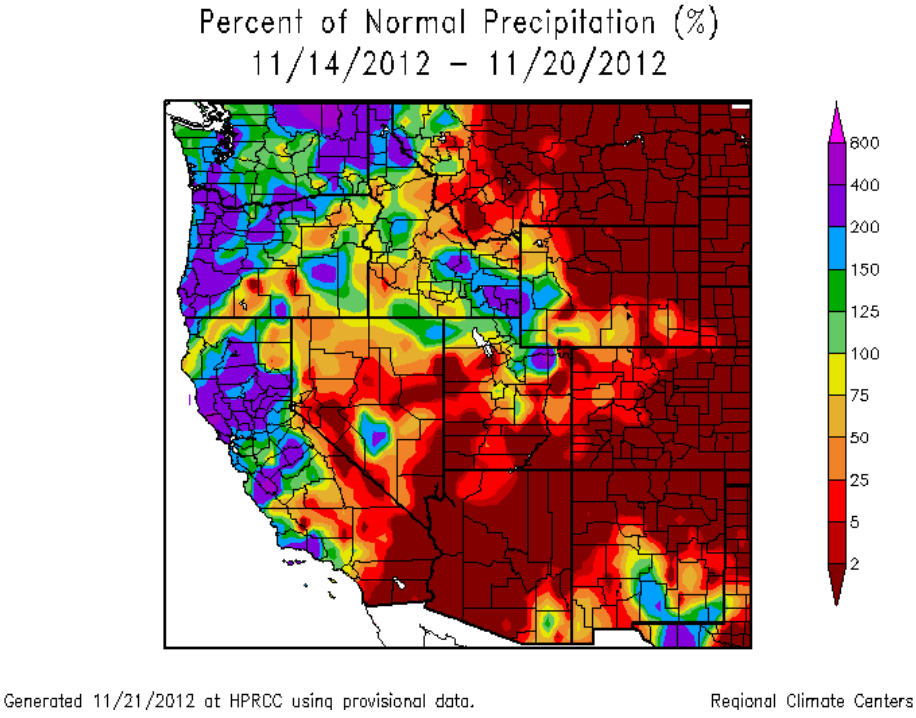


Fig. 2 and 2a: ACIS 7-day average precipitation amounts for the period ending yesterday shows spectacular amounts of heavy precipitation over the Coastal Ranges of Oregon and Washington as well as the Cascades (top). In terms of percent of normal, the Pacific Northwest, much of northern California, and southeast Idaho recorded over a typical November's total amount in just this week after a rather dry first half of the month (bottom).

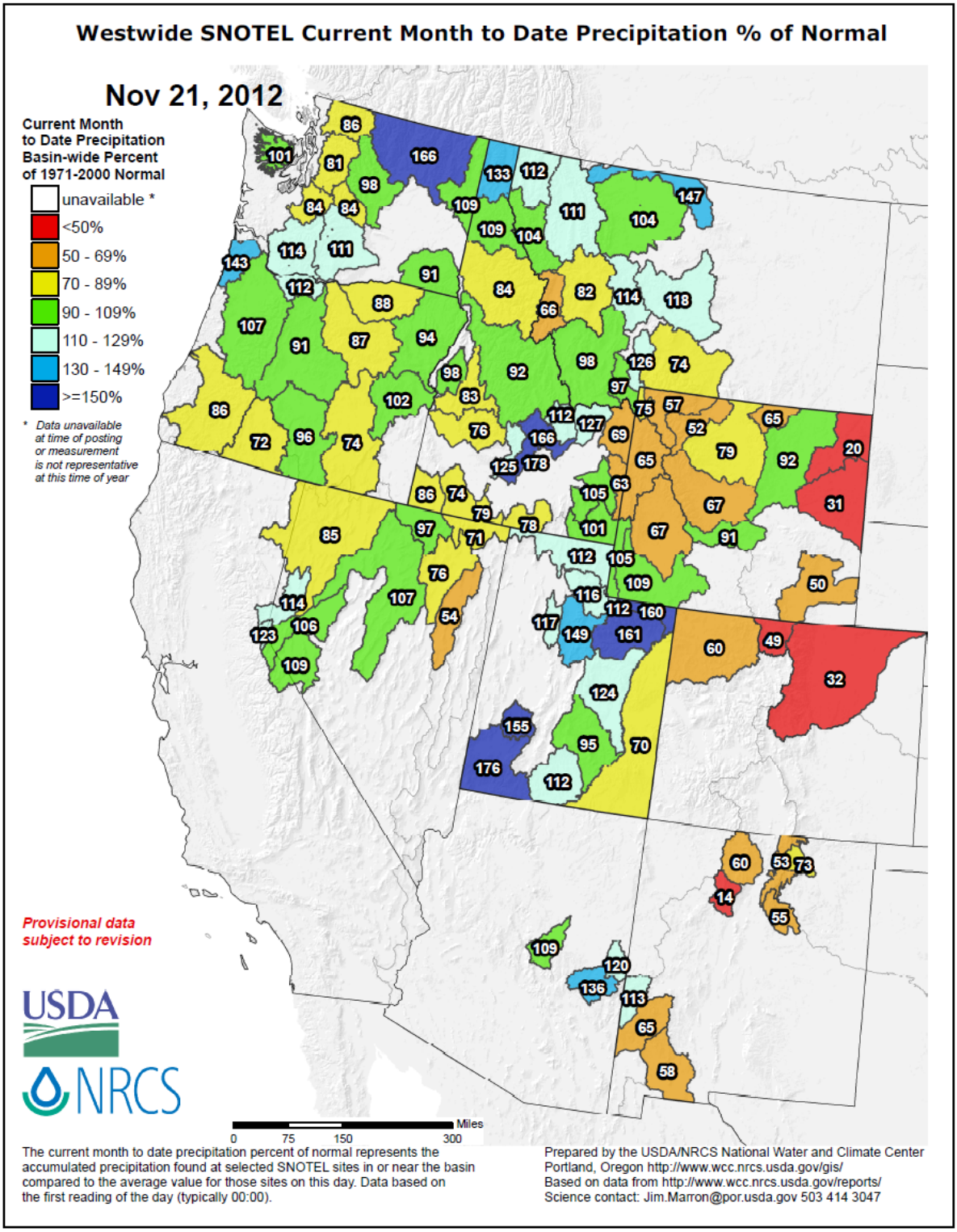


Fig. 2b: SNOTEL month to date precipitation percent of normal shows many basins over the Pacific Northwest catching up on their percentages while several are still below normal. As for the remainder of the West, much of the western half of Utah and Arizona are showing surpluses but not necessarily in terms of snow water-equivalent (Fig. 3 below) due to above average temperatures.

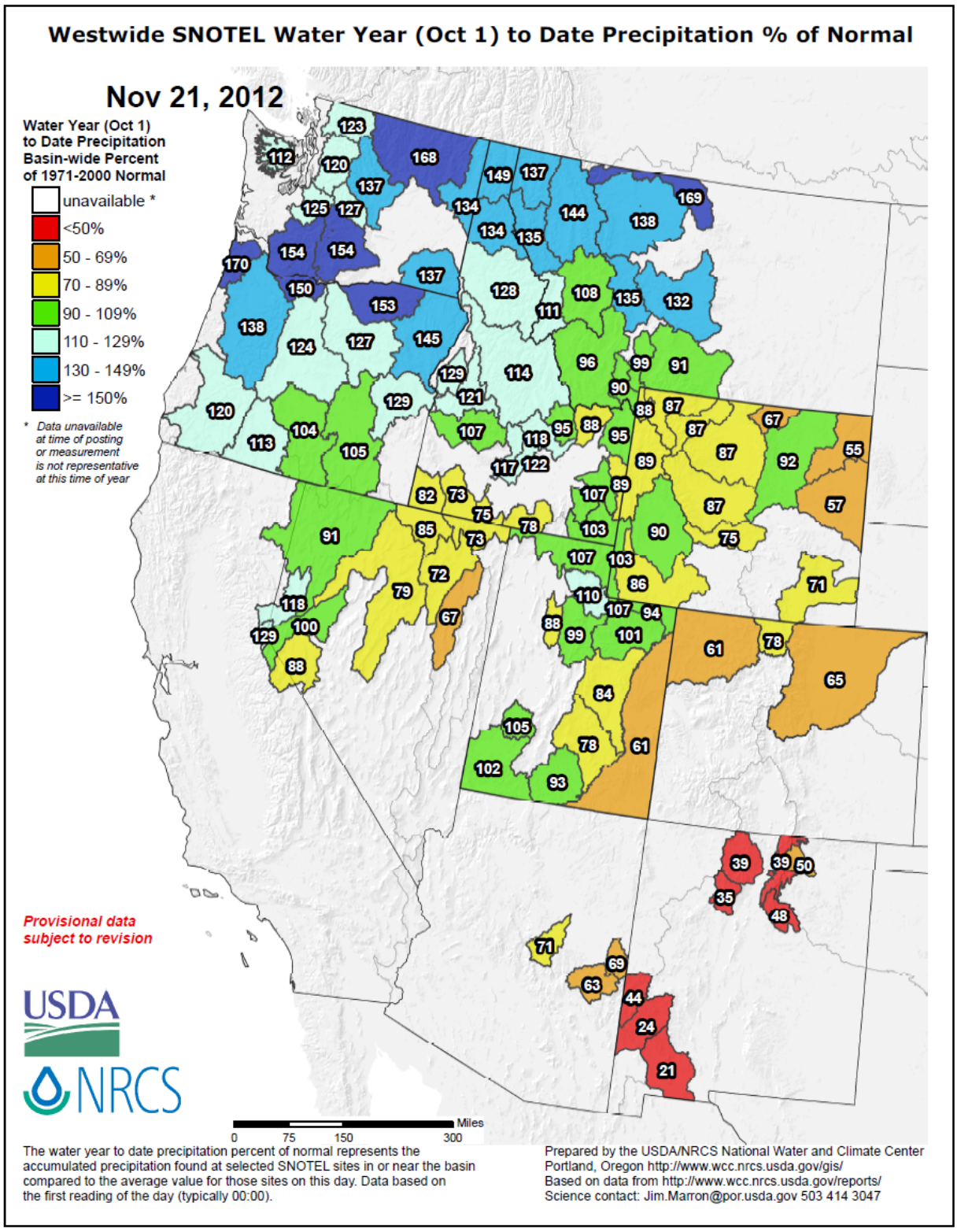


Fig. 2c: For the 2013 Water-Year that began on 1 October 2012, statistics continue to suggest a La Niña-like precipitation pattern that is favoring the Northern Tier States.

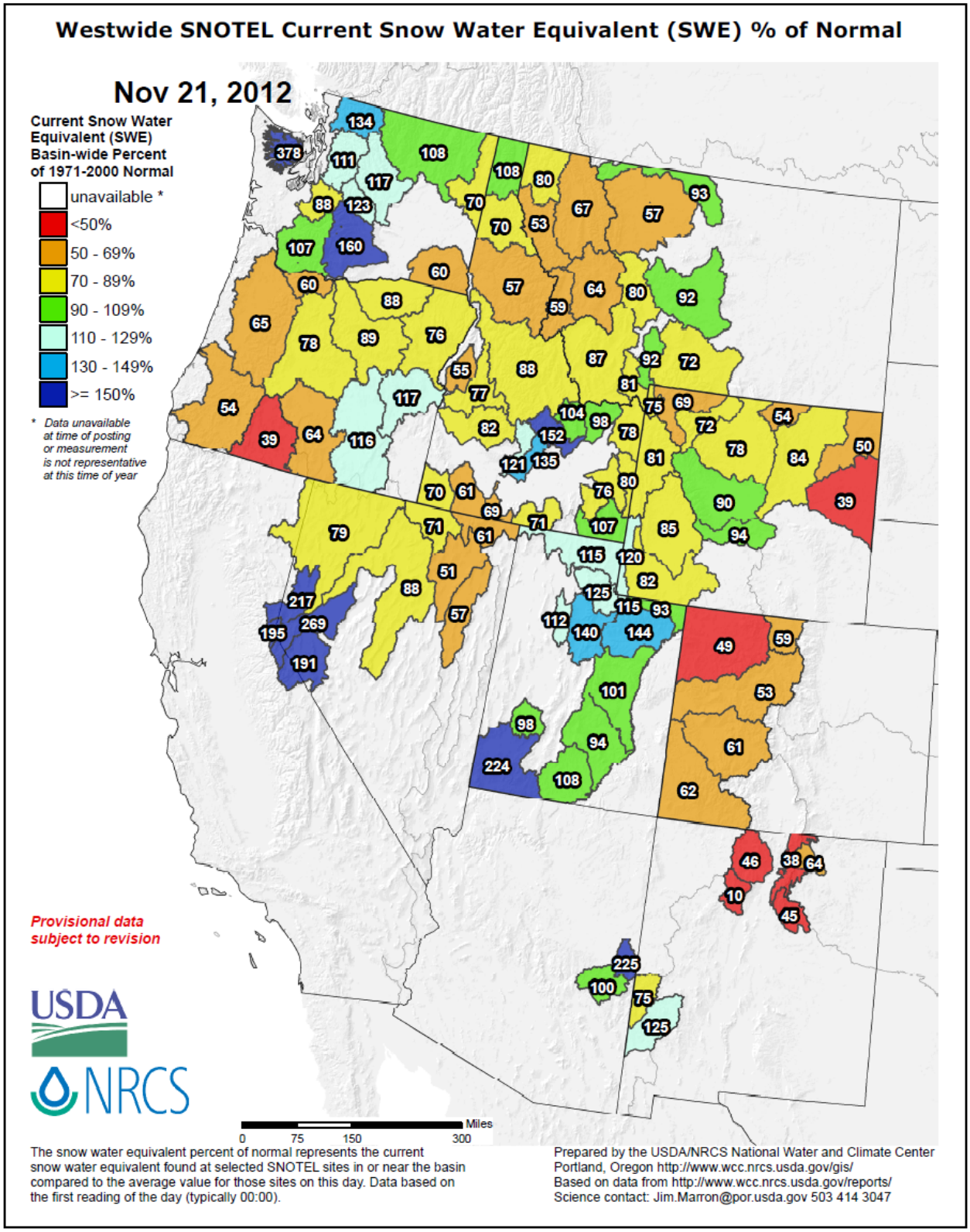


Fig. 3: Snow Water-Equivalent: Early season snowfall over the Washington Cascades, Sierra, northern Wasatch, and Uintah Mountains are reflecting surplus values but much of the precipitation that has fallen across the West this season fell as rain.

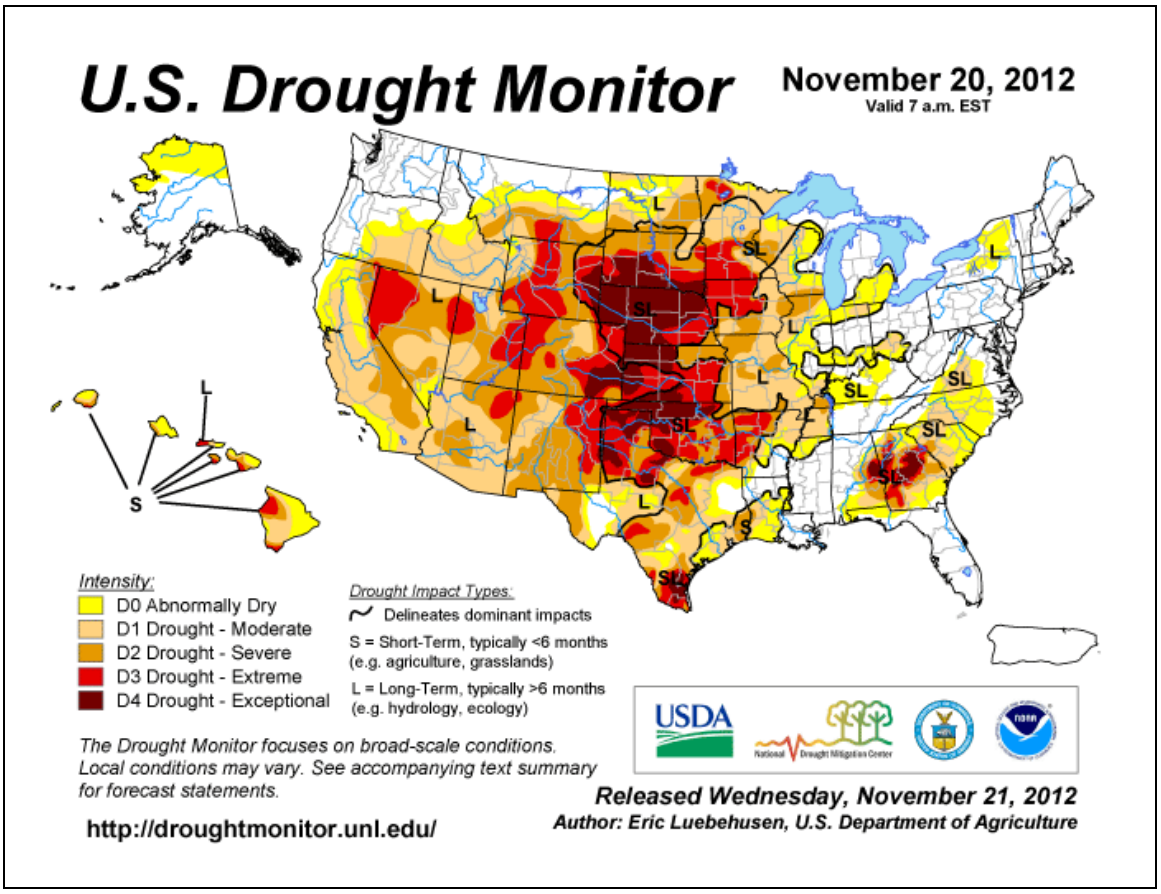


Fig. 4: Current Drought Monitor weekly summary. The exceptional D4 levels of drought are found over Georgia, Alabama, and scattered across the western corn belt of the Central Plains into Colorado and Wyoming including the Southern Plains. For more drought news, see Drought Impact Reporter. Click for the latest statistics for California Reservoirs. The late October 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).

Agriculture

Analysis: Nervous farmers scramble for corn seed after drought
Nov 13, **U.S**. Two of the country's largest seed companies foresaw a potential corn seed shortage and increased seed imports by as much as 20 percent to have adequate supplies. In producing this year's crop, farmers used 25 million bushels of seed corn, 2.4 percent more than the previous year as farmers planted more corn. Roughly 0.2 percent of the nation's corn was used as seed.

Cattle Grazing Wheat Fields to Decline as Drought Cuts Prospects
Nov 14, **Kansas, Oklahoma**. Dry weather left just 36 percent of the winter wheat in Kansas and Oklahoma in good to excellent condition, as of Nov. 11, in comparison with the five-year average of 50 percent, according to the U.S. Department of Agriculture. Dry soil and windstorms that blasted Kansas and Oklahoma in mid-October blew out some of the winter wheat seed that had not yet produced roots, according to the president of Plains Grains Inc. in Stillwater, Oklahoma. Farmers had to reseed some of those areas.

Ohio agriculture officials encourage bee feeding
Nov 11, **Ohio**. The Ohio Agriculture Department strongly recommended that beekeepers feed their bees to help them endure the winter. The dry summer and limited food storage at some bee colonies may lead queen bees to produce fewer eggs.

- Talking turkey: Thanksgiving meal costs will rise in 2012, 2013
- US wholesale prices fell 0.2 percent in October

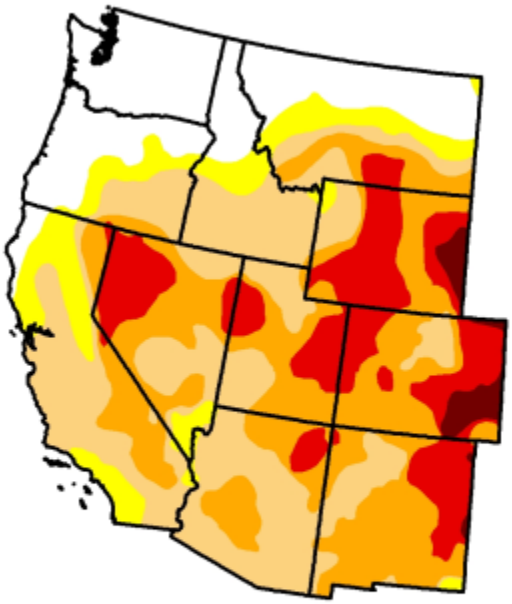
U.S. Drought Monitor

November 20, 2012
Valid 7 a.m. EST

West

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	18.30	81.70	72.33	43.17	16.92	1.83
Last Week (11/13/2012 map)	18.61	81.39	72.16	41.56	16.23	1.80
3 Months Ago (08/21/2012 map)	15.32	84.68	74.24	48.34	14.68	0.85
Start of Calendar Year (12/27/2011 map)	48.49	51.51	20.05	12.22	2.67	0.78
Start of Water Year (09/25/2012 map)	15.12	84.88	77.15	43.65	16.85	1.77
One Year Ago (11/15/2011 map)	72.72	27.28	18.57	15.00	9.51	2.85



Intensity:

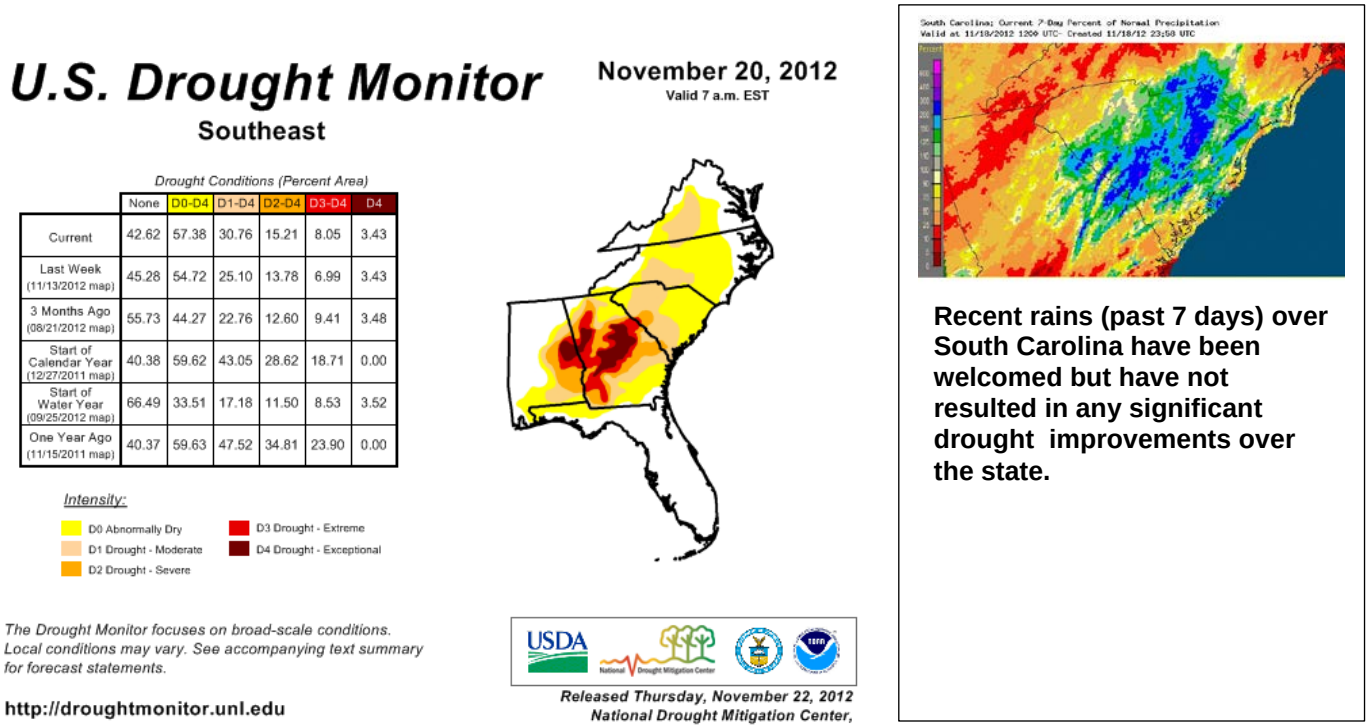
- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

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, November 22, 2012
National Drought Mitigation Center,

Fig. 4a: Drought Monitor for the Western States with statistics over various time periods. No significant changes are noted this week.



U.S. Drought Monitor
Southeast

November 20, 2012
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	42.62	57.38	30.76	15.21	8.05	3.43
Last Week (11/13/2012 map)	45.28	54.72	25.10	13.78	6.99	3.43
3 Months Ago (08/21/2012 map)	55.73	44.27	22.76	12.60	9.41	3.48
Start of Calendar Year (12/27/2011 map)	40.38	59.62	43.05	28.62	18.71	0.00
Start of Water Year (09/25/2012 map)	66.49	33.51	17.18	11.50	8.53	3.52
One Year Ago (11/15/2011 map)	40.37	59.63	47.52	34.81	23.90	0.00

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

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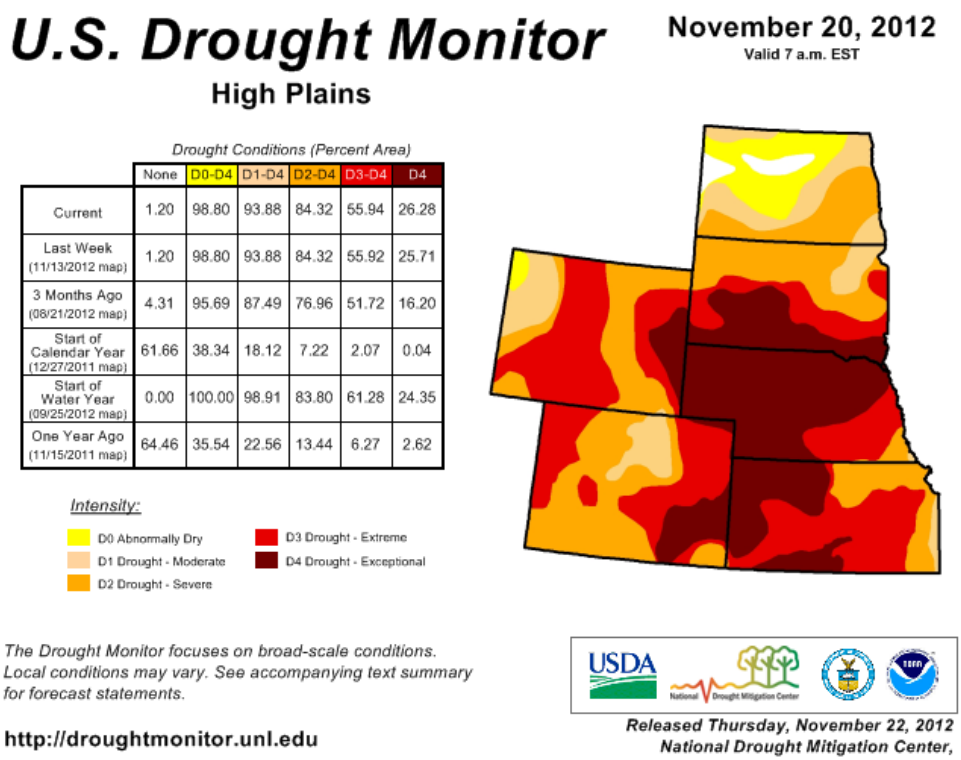
http://droughtmonitor.unl.edu

Released Thursday, November 22, 2012
National Drought Mitigation Center,

South Carolina: Current 7-Day Percent of Normal Precipitation
Valid at 11/18/2012 1200 UTC- Created 11/18/12 23:58 UTC

Recent rains (past 7 days) over South Carolina have been welcomed but have not resulted in any significant drought improvements over the state.

Fig. 4b: Note Georgia's drought statistics over various time periods. D4 conditions are also noted over eastern Alabama. See the Weekly GriDSSAT Output Products: http://gridssat.nsstc.uah.edu/ for more details.



U.S. Drought Monitor
High Plains

November 20, 2012
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	1.20	98.80	93.88	84.32	55.94	26.28
Last Week (11/13/2012 map)	1.20	98.80	93.88	84.32	55.92	25.71
3 Months Ago (08/21/2012 map)	4.31	95.69	87.49	76.96	51.72	16.20
Start of Calendar Year (12/27/2011 map)	61.66	38.34	18.12	7.22	2.07	0.04
Start of Water Year (09/25/2012 map)	0.00	100.00	98.91	83.80	61.28	24.35
One Year Ago (11/15/2011 map)	64.46	35.54	22.56	13.44	6.27	2.62

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, November 22, 2012
National Drought Mitigation Center,

Fig. 4c: Drought Monitor for the High Plains with statistics over various time periods. D4 has increased to >26%. See the latest Kansas Drought Report.

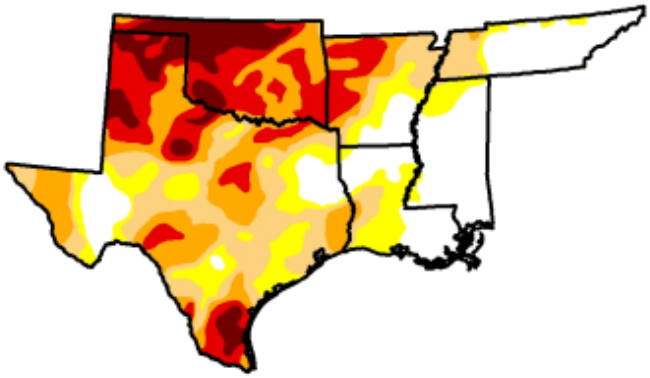
U.S. Drought Monitor

South

November 20, 2012
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	24.39	75.61	61.12	42.60	23.57	8.17
Last Week (11/13/2012 map)	27.60	72.40	57.21	36.31	21.46	7.34
3 Months Ago (08/21/2012 map)	21.86	78.14	66.80	45.62	27.98	11.71
Start of Calendar Year (12/27/2011 map)	26.47	73.53	69.01	54.81	39.11	17.15
Start of Water Year (09/25/2012 map)	24.13	75.87	66.61	51.50	29.86	9.11
One Year Ago (11/15/2011 map)	10.39	89.61	80.43	68.71	58.36	41.00



Intensity:

- D0 Abnormally Dry
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The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

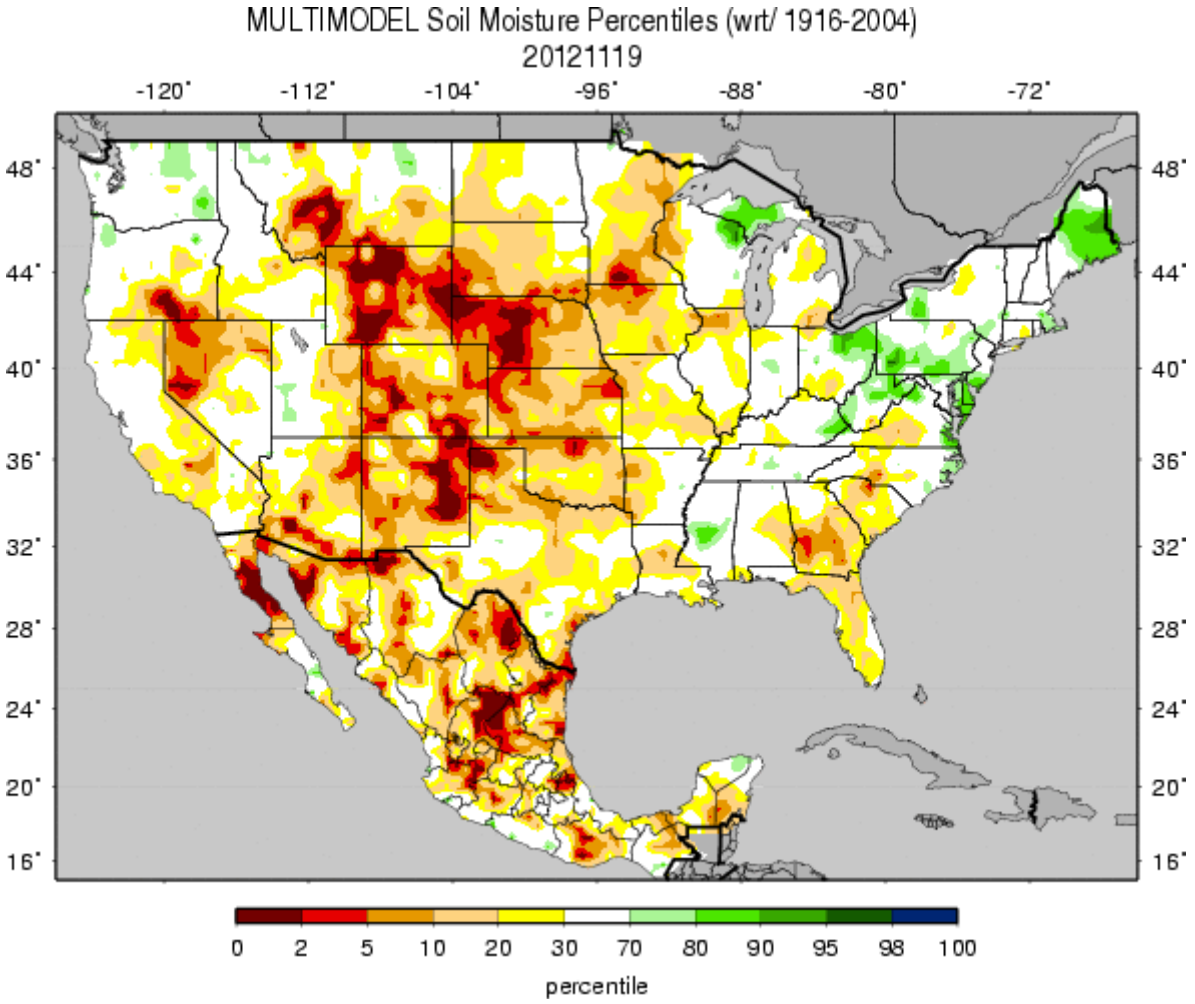
http://droughtmonitor.unl.edu

Released Thursday, November 22, 2012
National Drought Mitigation Center,

Fig. 4d: **Drought Monitor for the South-Central Region with statistics over various time periods. Note increased deterioration this week. D4 increased to >8%. Check out the Texas Drought Website.**

FYI....a nice story from the *Omaha World-Herald* over the weekend with some good references to the Ken Burns "The Dust Bowl" documentary and of course some great quotes from modern day drought by Mark Svoboda from the National Drought Mitigation Center:

http://www.omaha.com/article/20121117/LIVING/711179948/1696



Figs. 5: Soil Moisture ranking in percentile as of 19 November shows dryness scattered across the Plains and Rockies.

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.

Soil Climate Analysis Network (SCAN)

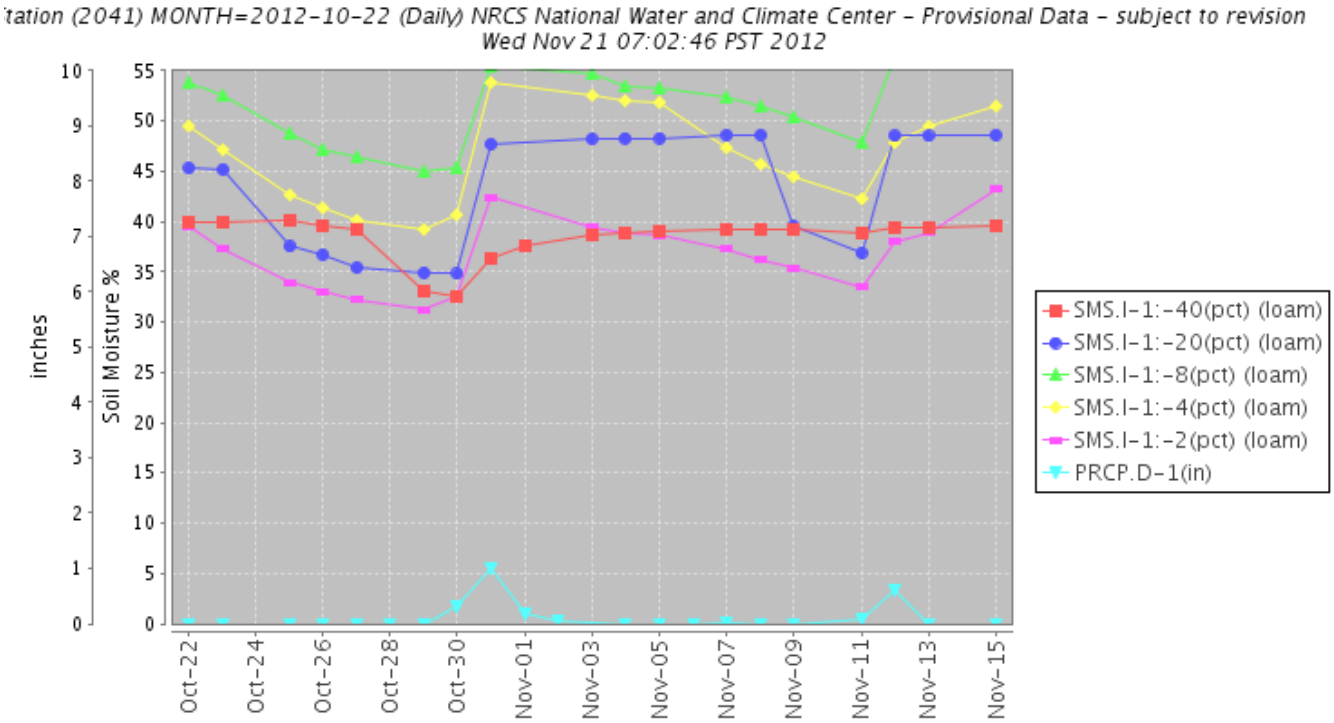


Fig. 6: This NRCS resource shows a site over northern Vermont with moist soil moisture at all depths.

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).

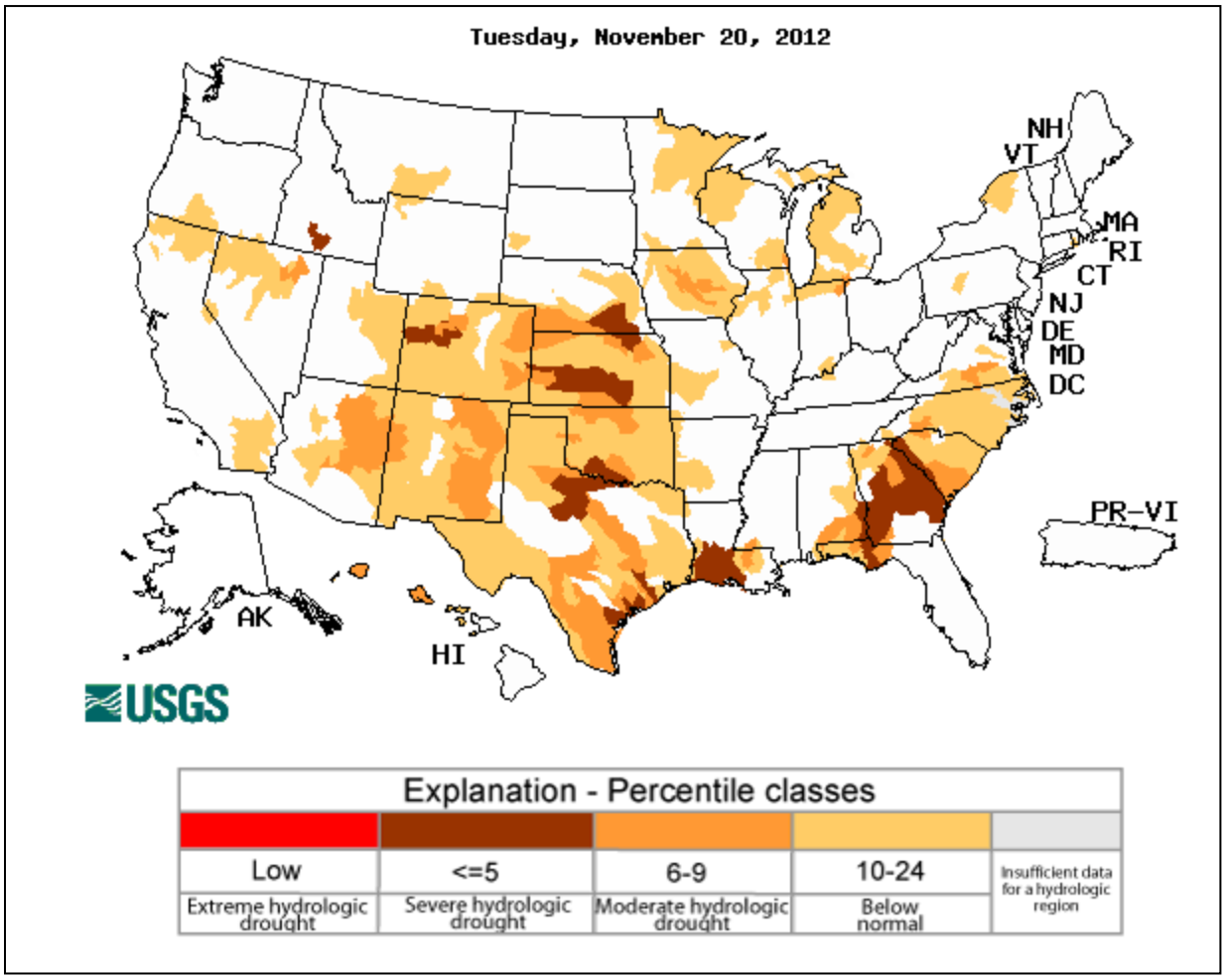


Fig. 7: Map of below normal 7-day average streamflow compared to historical streamflow for the day of year. Severe conditions exist over parts of western Colorado, the Central and Southern Plains, Southwest, Louisiana, and Southeast. See the USGS National Water Information System Mapper.

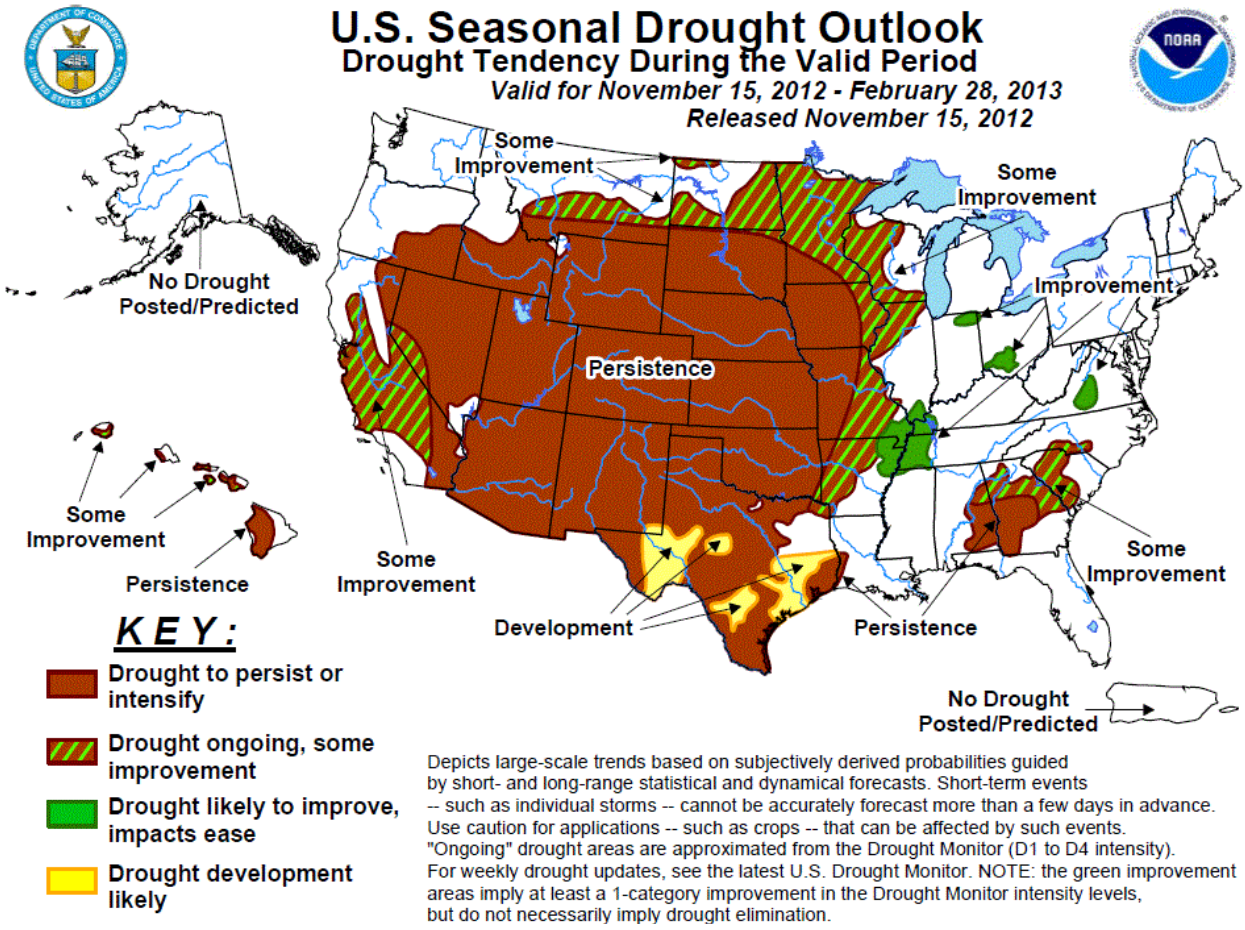


Fig. 8: U.S. seasonal Drought Outlook released 15 November 2012.

National Drought Summary -- November 20, 2012

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/.

Summary: Mostly dry weather prevailed across the contiguous U.S., with above-normal temperatures from the Corn Belt to the Pacific Coast contrasting with cooler-than-normal conditions across the eastern and south-central U.S. Locally heavy rain and mountain snow arrived across the central and northern Pacific Coast states, reaching the interior Northwest and northern Rockies, while a disturbance generated light to moderate rain across portions of the Southeast. Overall, drought conditions remained unchanged or deteriorated.

Mid-Atlantic and Northeast: Mostly dry, cool weather prevailed. In upstate New York, Abnormal Dryness (D0) was expanded to reflect declining streamflows as well as increasing precipitation deficits (locally less than 70 percent of normal over the past 60 to 90 days). Meanwhile, Moderate Drought (D1) was expanded across southwestern Virginia, where 90-day rainfall has tallied less than 60 percent of normal and streamflows have likewise dropped into the 10th percentile or lower.

Southeast: Despite cooler-than-normal weather, conditions deteriorated across much of the region, although pockets of heavy rain provided localized relief along the southern North Carolina Coast. A disturbance triggered showers (0.75 to 2 inches) from east-central Georgia into southern North Carolina, but the rain was not heavy enough to afford any substantial drought relief; in fact, the rainfall likely staved off drought expansion, if only for a short time. One exception was the southeastern tip of North Carolina, where amounts of 2 to 4 inches alleviated Abnormal Dryness (D0). From central and southern Alabama into Georgia and interior portions of the Carolinas, rainfall deficits continued to mount (25 to 50 percent of normal over the past 90 days) while streamflows and soil moisture levels fell further. Dry conditions are also increasing across northern Florida, where rain will be needed soon to prevent this portion of the state from slipping into drought.

Delta: Dry, chilly weather (temperatures up to 7°F below normal) prevailed, with Abnormal Dryness (D0) and Moderate Drought (D1) expanding in southern portions of the region despite the cool conditions. The lack of short-term rainfall is most pronounced in southern and southwestern Louisiana, where precipitation has totaled less locally less than 50 percent of normal over the past 90 days. The last 30 days have been exceptionally dry, with many locales reporting less than 2 inches of rainfall (well shy of the 5 to 6 inch normal). Streamflows in southwestern Louisiana have dropped below the 5th percentile, reflecting the rapidly increasing impacts of the short-term dryness.

South-Central U.S.: Drought intensified across much of the region as rainfall deficits increased and soil moisture, streamflows, and other water reserves rapidly declined. Dry conditions have intensified since the beginning of October, and impacts are noted in the region's agricultural reports. As of November 18, the Texas winter wheat crop was rated 25 percent poor to very

poor, while the state's pastures have deteriorated to 49 percent poor to very poor. In Oklahoma, winter wheat and pastures stood at 44 and 77 percent poor to very poor, respectively. The high-resolution, satellite-derived Vegetation Health Index (VHI) indicated the worst conditions were west of San Antonio and from Lubbock, Texas northward into the Oklahoma Panhandle, and eastward to Ponca City, Oklahoma, along the Kansas border.

Central and Northern Plains: Unseasonably warm, dry conditions maintained drought across most of the region. The most notable change was the introduction of Exceptional Drought (D4) to southern Kansas, where rainfall has totaled less than 25 percent of normal over the past 90 to 180 days. The high-resolution, satellite-derived Vegetation Health Index (VHI) indicated the worst conditions were southwest of Wichita, with the core of the poorest VHI centered on Medicine Lodge. As of November 18, Kansas' winter wheat and pastures were rated 24 and 81 percent poor to very poor, respectively. Farther north, there were no changes made to the drought designation from Nebraska into the Dakotas, although additional deterioration may be warranted in the near future. In South Dakota, winter wheat was rated 60 percent poor to very poor as of November 18, while pastures stood at 83 percent poor to very poor as of October 28.

Midwest: Drought areas of the Midwest were largely unchanged, although drier-than-normal conditions persisted. Modest increases in D0 (Abnormal Dryness) were made in Kentucky to reflect increasingly dry conditions at 30 and 60 days. Elsewhere, areas of Moderate to Extreme Drought (D1-D3) from the upper Midwest into western portions of the Corn Belt and Great Lakes reported above-normal temperatures (locally more than 10°F above normal) and dry weather; additional increases in drought intensity and coverage are likely if precipitation does not materialize soon in these locales.

Western U.S.: Stormy conditions provided beneficial precipitation across western and northern portions of the region, while dry, unfavorably warm weather prevailed over central and southern drought areas of the west.

In northern portions of the region, a surge of Pacific moisture generated moderate to heavy rain and mountain snow (2-10 inches liquid equivalent, locally more), maintaining a favorable start to the winter wet season. As of November 20, snow water equivalent (SWE) rankings ranged from the 60th to 90th percentile in the Sierra Nevada to the 50th to 80th percentile in the Cascades. Early-season SWE percentile rankings remained unfavorably low across northern portions of the Rockies (locally as low as the 10th percentile), although short-term precipitation prospects remained mostly favorable.

In central and southern portions of the region, mostly dry weather maintained or intensified drought. Severe Drought (D2) expanded in southwestern Nevada and adjacent portions of southeastern California in response to updated long-term precipitation (year-to-date precipitation was less than 50 percent of normal in the expanded D2 area). Severe to Extreme (D2-D3) drought was likewise expanded across west-central and eastern New Mexico to reflect unfavorably dry conditions at both the long-term (less than 50 percent of normal since January 1) and short term (locally less than 25 percent of normal over the past 2 months). In southwestern California, Abnormal Dryness (D0) — and to a lesser extent Moderate Drought (D1) — was expanded to reflect short-term dryness (60-day rainfall less than 50 percent of normal, locally less than 25 percent). Dry weather prevailed across the remainder of the Four Corners region, although there were no other changes made to drought designation.

Alaska, Hawaii, and Puerto Rico: In Alaska, cold conditions continued, with temperatures averaging up to 12°F below normal. Dry weather prevailed, and the state's low snow water equivalent values (15th to 30th percentile) indicated this region will need to be monitored over the upcoming weeks for additional assessment. In Hawaii, east-facing slopes (D0) received almost daily rainfall to prevent further degradation, while there has been no new impact information to warrant changes to existing Moderate to Severe Drought (D1-D3) areas elsewhere on the islands. There were no concerns for drought on Puerto Rico, with moderate to heavy rain (2-4 inches) reported across northern and western sections of the island.

Looking Ahead: Pacific moisture will continue to stream onshore, although locally heavy precipitation across the Northwest will give way to decreasing rain and snow totals over northern portions of the Rockies and Great Plains. Generally dry conditions are expected across the remainder of the contiguous U.S., affording most drought areas little — if any — relief over the next 5 to 7 days. A cold front will generate mostly light rain across the Midwest, while an influx of Gulf moisture may lead to localized showers in far southern Texas. Otherwise, dry, increasingly cool weather is expected. The CPC 6-10 day forecast for November 26-30 calls for below-normal temperatures from the Rockies to the East Coast, with warmer-than-normal conditions confined to the southwestern quarter of the nation. However, above-normal precipitation is expected to develop from the northeastern Gulf into the Northeast, and across central portions of the Rockies and High Plains. Drier-than-normal conditions are anticipated from the Southwest into Texas and Oklahoma, extending northeastward into the western Corn Belt.

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Dryness Categories

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

Drought Intensity Categories

D1 ... Moderate Drought
D2 ... Severe Drought
D3 ... Extreme Drought
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)

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