

Oklahoma Water Resources Bulletin & Summary of Current Conditions

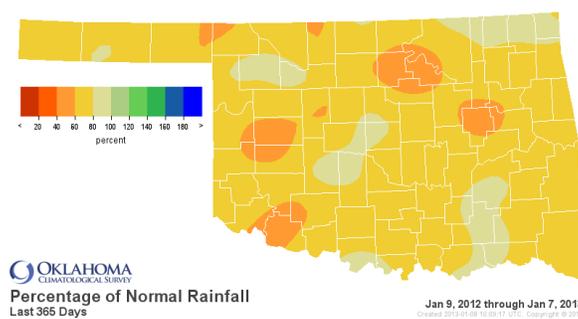
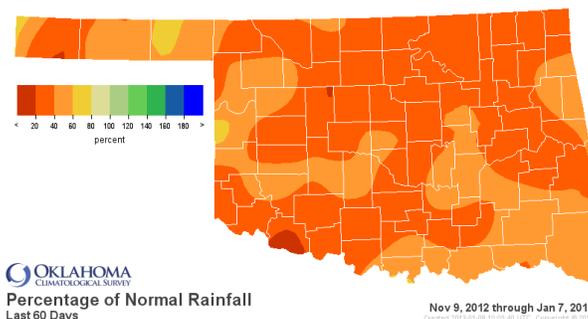


January 10, 2013

PRECIPITATION

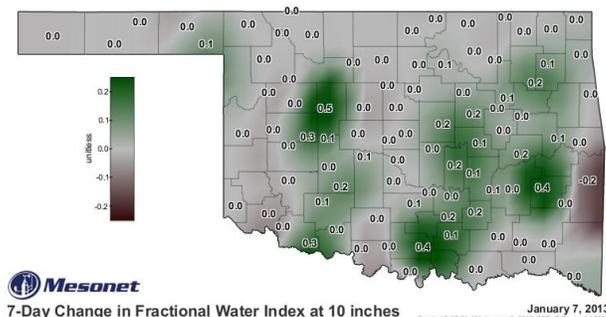
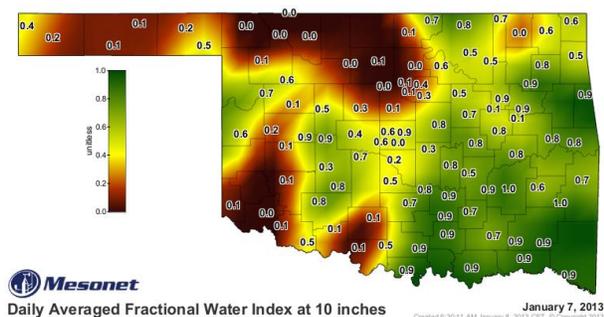
Statewide Precipitation

CLIMATE DIVISION	Last 60 Days November 9, 2012 – January 7, 2013				Last 365 Days January 9, 2012 – January 7, 2013			
	TOTAL RAINFALL (INCHES)	DEPARTURE FROM NORMAL (INCHES)	PERCENT OF NORMAL	RANK SINCE 1921	TOTAL RAINFALL (INCHES)	DEPARTURE FROM NORMAL (INCHES)	PERCENT OF NORMAL	RANK SINCE 1921
Panhandle	0.65"	-0.93"	41%	28th driest	13.92"	-7.17"	66%	9th driest
North Central	0.98"	-2.06"	32%	13th driest	21.57"	-10.05"	68%	9th driest
Northeast	1.89"	-3.40"	36%	8th driest	30.22"	-11.70"	72%	10th driest
West Central	0.96"	-1.65"	37%	18th driest	17.81"	-11.25"	61%	6th driest
Central	1.51"	-2.87"	35%	12th driest	26.24"	-11.71"	69%	10th driest
East Central	2.62"	-3.99"	40%	8th driest	30.46"	-15.56"	66%	7th driest
Southwest	0.98"	-1.91"	34%	16th driest	21.02"	-9.75"	68%	12th driest
South Central	2.01"	-3.22"	38%	11th driest	29.16"	-11.74"	71%	12th driest
Southeast	3.63"	-4.79"	43%	10th driest	37.83"	-13.02"	74%	9th driest
Statewide	1.67"	-2.75"	38%	9th driest	25.37"	-11.27"	69%	7th driest



SOIL MOISTURE

Fractional Water Index¹ January 7, 2013



¹ The Fractional Water Index ranges from very dry soil having a value of 0 to soil at field capacity illustrated by a value of 1. [1.0-0.8 = Enhanced Growth; 0.8-0.5 = Limited Growth; 0.5-0.3 = Plants Wilting; 0.3-0.1 = Plants Dying; <0.1 = Barren Soil.]

DROUGHT INDICES

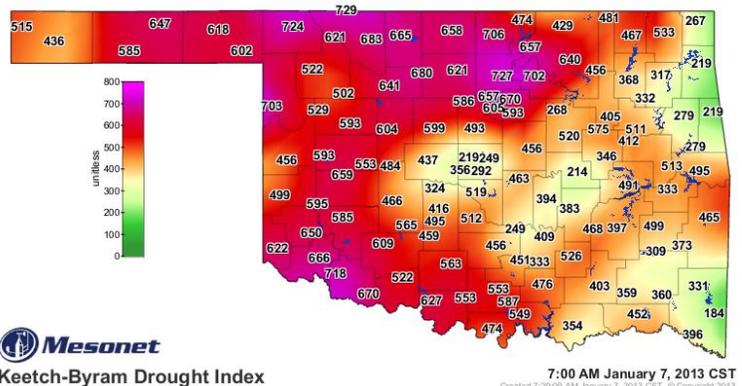
Palmer Drought Severity Index ¹					Standardized Precipitation Index ² Through November 2012			
CLIMATE DIVISION	CURRENT STATUS 1/5/2013	VALUE		CHANGE IN VALUE	3-MONTH	6-MONTH	9-MONTH	12-MONTH
		1/5	12/1					
Northwest	SEVERE DROUGHT	-3.46	-4.09	0.63	ABNORMALLY DRY	SEVERELY DRY	MODERATELY DRY	NEAR NORMAL
North Central	SEVERE DROUGHT	-3.69	-3.54	-0.15	SEVERELY DRY	EXCEPTIONALLY DRY	MODERATELY DRY	ABNORMALLY DRY
Northeast	SEVERE DROUGHT	-3.65	-3.42	-0.23	MODERATELY DRY	EXTREMELY DRY	MODERATELY DRY	MODERATELY DRY
West Central	SEVERE DROUGHT	-3.46	-3.60	0.14	MODERATELY DRY	SEVERELY DRY	SEVERELY DRY	MODERATELY DRY
Central	SEVERE DROUGHT	-3.67	-3.63	-0.04	MODERATELY DRY	SEVERELY DRY	MODERATELY DRY	MODERATELY DRY
East Central	SEVERE DROUGHT	-3.46	-3.57	0.11	MODERATELY DRY	MODERATELY DRY	MODERATELY DRY	MODERATELY DRY
Southwest	SEVERE DROUGHT	-3.62	-3.64	0.02	MODERATELY DRY	SEVERELY DRY	MODERATELY DRY	MODERATELY DRY
South Central	SEVERE DROUGHT	-3.68	-3.79	0.11	MODERATELY DRY	MODERATELY DRY	MODERATELY DRY	ABNORMALLY DRY
Southeast	SEVERE DROUGHT	-3.64	-3.64	0.00	SEVERELY DRY	SEVERELY DRY	EXTREMELY DRY	MODERATELY DRY

- All nine climate divisions are experiencing severe drought conditions, according to the PDSI. But only three climate divisions have undergone a PDSI moisture decrease since December 1. All climate divisions continue to experience near long-term dry conditions, and virtually all for a two-year period or longer, according to the SPI.

Keetch-Byram Drought Fire Index³

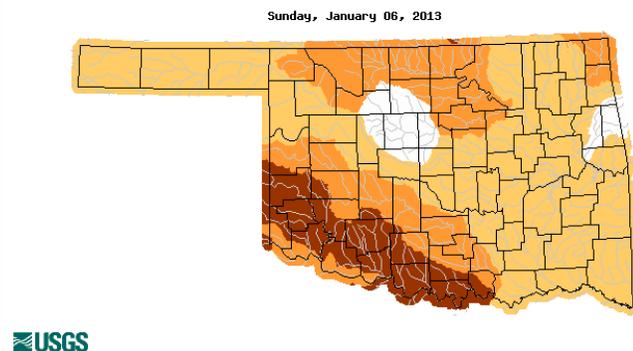
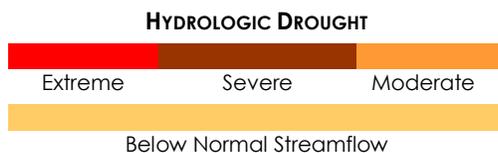
MESONET STATION	CLIMATE DIVISION	CURRENT VALUE 1/7/2013
May Ranch	North Central	729
Red Rock	North Central	727
Buffalo	Northwest	724

- Stations currently at or above 600 (January 7) = 30
- Stations above 600 on December 3 = 39



STREAMFLOW CONDITIONS

January 6, 2013



¹ The Palmer Drought Severity Index is based upon precipitation, temperature, and soil moisture. Though widely used by government agencies and states to trigger drought relief programs, the PDSI may underestimate or overestimate the severity of ongoing dry periods.

² The Standardized Precipitation Index, more sensitive than the PDSI, provides a comparison of precipitation over a specified period with precipitation totals from that same period for all years included in the historical record. The 3-month SPI provides a seasonal estimation of precipitation while the 6-month SPI can be very effective in showing precipitation over distinct seasons.

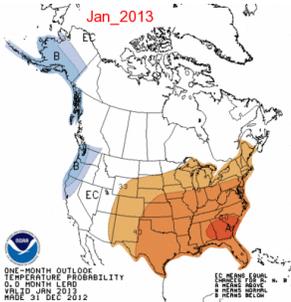
³ The Keetch-Byram Drought Index measures the state of near-surface soil moisture (within the uppermost eight inches of soil) as well as the amount of fuel available for fires. KBDI values of 600 and above are often associated with more severe drought and increased wildfire occurrence.

WEATHER/DROUGHT FORECAST

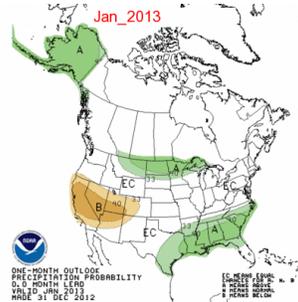
Seasonal Outlook

January

Temperature

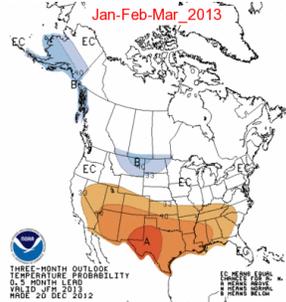


Precipitation

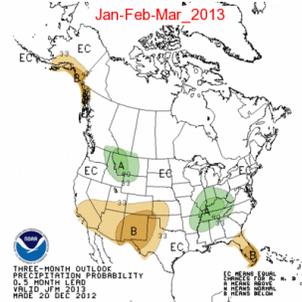


January-February-March

Temperature



Precipitation



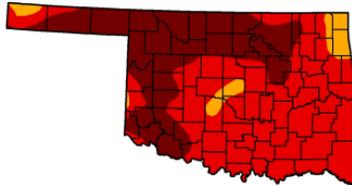
Regional Drought Summary & Outlook

U.S. Drought Monitor

Oklahoma

January 8, 2013
Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	100.00	100.00	94.89	37.06
Last Week (01/01/2013 map)	0.00	100.00	100.00	100.00	94.89	37.06
3 Months Ago (10/09/2012 map)	0.00	100.00	100.00	99.71	80.57	30.53
Start of Calendar Year (01/01/2013 map)	0.00	100.00	100.00	100.00	94.89	37.06
Start of Water Year (09/25/2012 map)	0.00	100.00	100.00	99.98	95.33	42.09
One Year Ago (01/03/2012 map)	14.83	85.17	78.76	50.55	27.48	3.78



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, January 10, 2013
David Simeral, Western Regional Climate Center

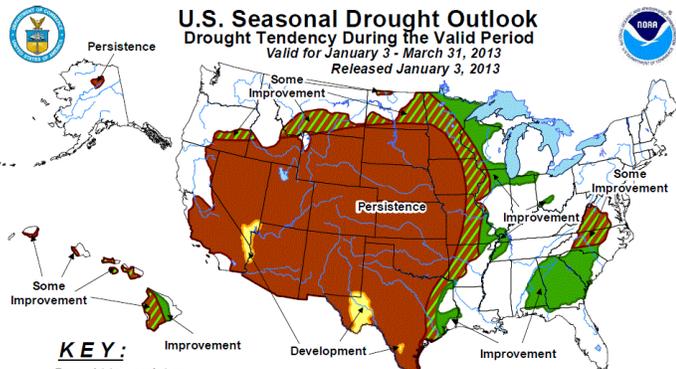
January 8—The latest U.S. Drought Monitor reports that the Plains region continued to experience an overall dry pattern during the past seven-day period with the exception of some light rainfall in portions of Oklahoma and scattered snow showers over Kansas. In the Northern Plains, temperatures were above average for the period while the Central and Southern Plains experienced near normal to below normal conditions. The western U.S. was generally dry. Current snowpack conditions show significant deficits in snow water content over the mountains of Colorado, New Mexico, northeastern Nevada, eastern Oregon, eastern Wyoming, and sections of northern Montana. Conversely, notable surpluses exist over the Cascades, Sierras, Sawtooths, Uintas, and the mountains of Arizona. Temperatures overall in the west have been well below normal.

Almost 95 percent of Oklahoma is classified in Extreme Drought. More than 37 percent of the state—including much of northern and western Oklahoma and most of the Panhandle—is considered Exceptional, the most intense drought category.

According to the latest Drought Outlook (January 3), general persistence of extreme to exceptional drought is expected across the Plains states during the dry season.

U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period
Valid for January 3 - March 31, 2013
Released January 3, 2013



KEY:

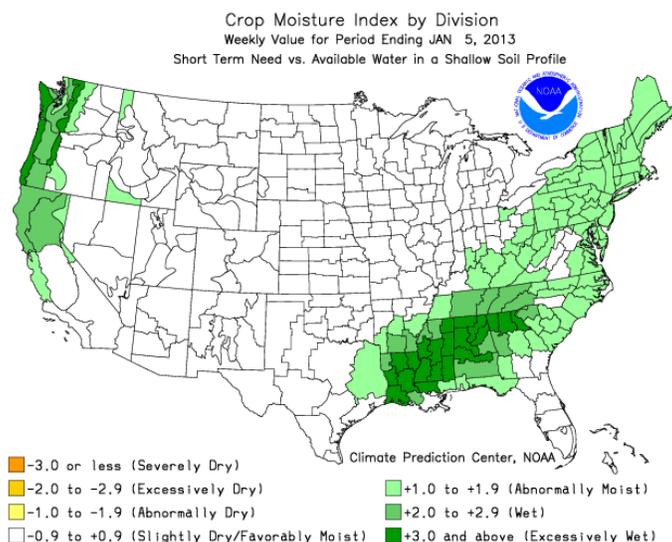
- Drought to persist or intensify
- Drought ongoing, some improvement
- Drought likely to improve, impacts ease
- Drought development likely

Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events—such as individual storms—cannot be accurately forecast more than a few days in advance. Use caution for applications—such as crops—that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity). For weekly drought updates, see the latest U.S. Drought Monitor. NOTE: the green improvement areas imply at least a 1-category improvement in the Drought Monitor intensity levels, but do not necessarily imply drought elimination.

CROP REPORT SUMMARY

December 31, 2012 – Seventy percent of rye, 65 percent of canola and 61 percent of wheat were rated poor to very poor at the end of December. The poor condition of small grains meant limited grazing opportunities for livestock producers already facing poor pastures and low hay supplies. Overall the moisture received during December was still far below average for the month, leaving seasonal totals even further behind. Topsoil moisture conditions were rated 92 percent short to very short. Subsoil moisture conditions declined from the last report and were rated 98 percent short to very short.

Pasture and range conditions continued to be rated poor to very poor throughout December. Several precipitation events the last week of the month may benefit conditions, but much more moisture is needed for grass to recover from the extended drought. The limited availability of small grain grazing along with the poor condition of pasture and grass meant hay and supplementary feed were crucial for livestock producers during December. Low pond levels from the extended drought continued to be problematic as well. Despite these difficulties, livestock conditions continued to be rated mostly in the good to fair range.



RESERVOIR STORAGE

January 3, 2013

