

Oklahoma Water Resources Bulletin & Summary of Current Conditions

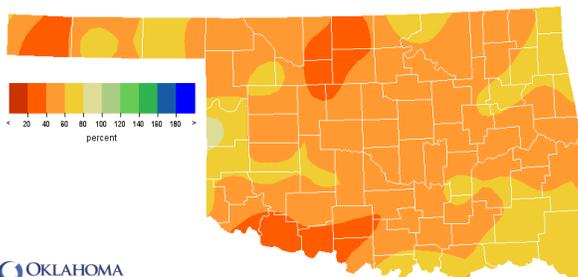


February 7, 2013

PRECIPITATION

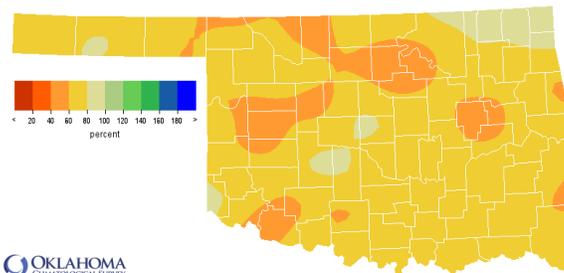
Statewide Precipitation

CLIMATE DIVISION	Last 90 Days November 7, 2012 – February 4, 2013				Last 365 Days February 6, 2012 – February 4, 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	1.11"	-1.03"	52%	30th driest	13.46"	-7.62"	64%	9th driest
North Central	1.95"	-2.12"	48%	22nd driest	19.53"	-12.08"	62%	6th driest
Northeast	4.20"	-2.82"	60%	25th driest	30.82"	-11.09"	74%	10th driest
West Central	1.99"	-1.58"	56%	32nd driest	17.25"	-11.81"	59%	4th driest
Central	2.94"	-2.96"	50%	18th driest	25.56"	-12.38"	67%	11th driest
East Central	4.94"	-3.96"	55%	18th driest	28.86"	-17.16"	63%	5th driest
Southwest	2.03"	-1.99"	51%	19th driest	21.06"	-9.70"	68%	9th driest
South Central	3.66"	-3.57"	51%	14th driest	26.63"	-14.27"	65%	6th driest
Southeast	7.05"	-4.33"	62%	19th driest	34.68"	-16.16"	68%	5th driest
Statewide	3.26"	-2.71"	55%	16th driest	24.25"	-12.39"	66%	5th driest



OKLAHOMA CLIMATOLOGICAL SURVEY
Percentage of Normal Rainfall
Last 90 Days

Nov 7, 2012 through Feb 4, 2013



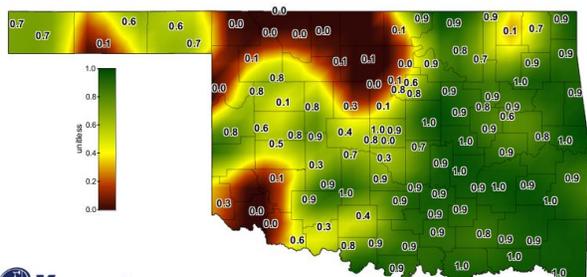
OKLAHOMA CLIMATOLOGICAL SURVEY
Percentage of Normal Rainfall
Last 365 Days

Feb 6, 2012 through Feb 4, 2013

SOIL MOISTURE

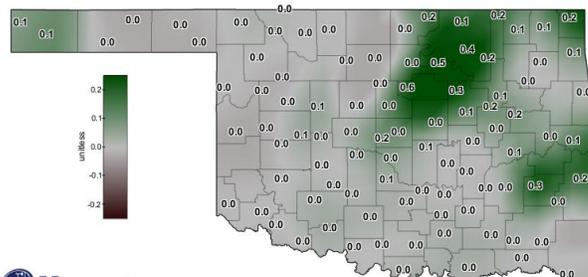
Fractional Water Index¹

February 4, 2013



Mesonet
Daily Averaged Fractional Water Index at 10 inches

February 4, 2013



Mesonet
7-Day Change in Fractional Water Index at 10 inches

February 4, 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

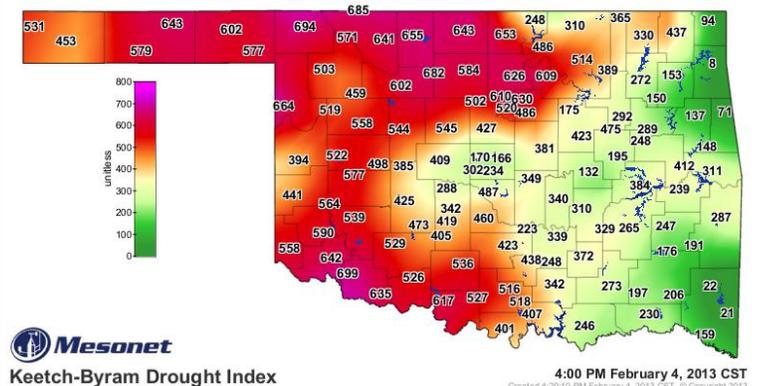
Palmer Drought Severity Index ¹					Standardized Precipitation Index ² Through December 2012			
CLIMATE DIVISION	CURRENT STATUS 2/2/2013	VALUE		CHANGE IN VALUE	3-MONTH	6-MONTH	9-MONTH	12-MONTH
		2/2	1/5					
Northwest	SEVERE DROUGHT	-3.18	-3.46	0.28	MODERATELY DRY	MODERATELY DRY	SEVERELY DRY	ABNORMALLY DRY
North Central	SEVERE DROUGHT	-3.39	-3.69	0.30	EXTREMELY DRY	EXCEPTIONALLY DRY	EXTREMELY DRY	MODERATELY DRY
Northeast	MODERATE DROUGHT	-2.68	-3.65	0.97	MODERATELY DRY	EXTREMELY DRY	EXCEPTIONALLY DRY	SEVERELY DRY
West Central	SEVERE DROUGHT	-3.02	-3.46	0.44	SEVERELY DRY	SEVERELY DRY	EXTREMELY DRY	MODERATELY DRY
Central	SEVERE DROUGHT	-3.40	-3.67	0.27	MODERATELY DRY	SEVERELY DRY	EXTREMELY DRY	MODERATELY DRY
East Central	MODERATE DROUGHT	-2.98	-3.46	0.48	SEVERELY DRY	MODERATELY DRY	EXTREMELY DRY	MODERATELY DRY
Southwest	SEVERE DROUGHT	-3.45	-3.62	0.17	SEVERELY DRY	SEVERELY DRY	SEVERELY DRY	MODERATELY DRY
South Central	SEVERE DROUGHT	-3.52	-3.68	0.16	MODERATELY DRY	MODERATELY DRY	SEVERELY DRY	MODERATELY DRY
Southeast	SEVERE DROUGHT	-3.23	-3.64	0.41	SEVERELY DRY	SEVERELY DRY	EXTREMELY DRY	MODERATELY DRY

- All nine climate divisions continue to experience moderate to severe drought conditions, according to the PDSI, but conditions have improved as all regions have undergone a PDSI moisture increase since January 5. According to the SPI, all climate divisions continue to experience near long-term dry conditions for at least a two-year period.

Keetch-Byram Drought Fire Index³

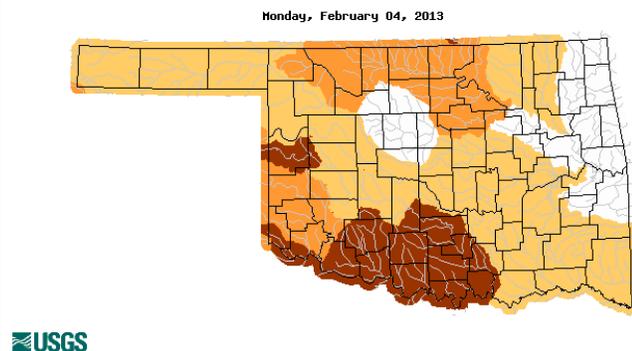
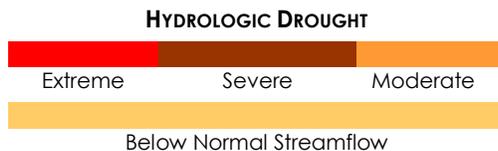
MESONET STATION	CLIMATE DIVISION	CURRENT VALUE 2/4/2013
Tipton	Southwest	699
Buffalo	Northwest	693
May Ranch	North Central	684

- Stations currently at or above 600 (February 4) = 19
- Stations above 600 on January 7 = 30



STREAMFLOW CONDITIONS

February 4, 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.

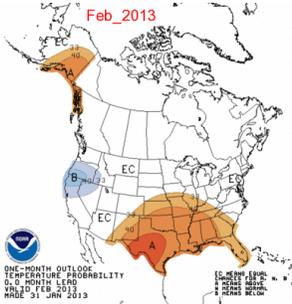
³ The Keetch-Byram Drought Index measures the state of near-surface soil moisture (within the uppermost eight inches of soil) as well as the amount of fuel available for fires. KBDI values of 600 and above are often associated with more severe drought and increased wildfire occurrence.

WEATHER/DROUGHT FORECAST

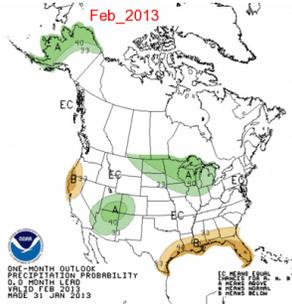
Seasonal Outlook

February

Temperature

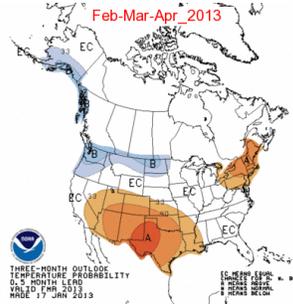


Precipitation

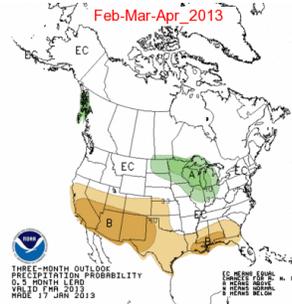


February-March-April

Temperature



Precipitation



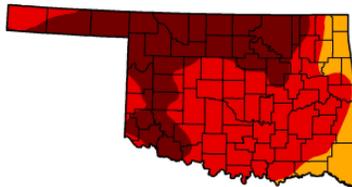
Regional Drought Summary & Outlook

U.S. Drought Monitor

Oklahoma

February 5, 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	89.64	39.58	
Last Week (01/29/2013 map)	0.00	100.00	100.00	100.00	92.14	39.58	
3 Months Ago (11/06/2012 map)	0.00	100.00	100.00	99.96	75.74	31.90	
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 (01/01/2012 map)	24.91	75.09	66.53	49.80	26.62	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.



Released Thursday, February 7, 2013
Michael Brewer, National Climatic Data Center, NOAA

<http://droughtmonitor.unl.edu>

February 5—The latest U.S. Drought Monitor reports that severe storms that dumped precipitation from the southern Plains into the Midwest and also from the Deep South through upstate New York had a positive impact on the drought situation in portions of Oklahoma. Eastern Oklahoma through Arkansas saw significant improvements in Extreme (D3), Severe (D2), and Moderate Drought (D1) and Abnormal Dryness this week with the passing of the January 29-30 storm. In southern Texas and the Oklahoma Panhandle, areas of Exceptional (D4), Extreme (D3), Severe (D2), and Moderate Drought (D1) expanded as did Abnormal Dryness (D0). In South Texas, this was largely due to dry conditions compounded by above normal temperatures and wind.

Almost 90 percent of Oklahoma is classified in Extreme Drought. More than 39 percent of the state—including most of northern and western Oklahoma and the Panhandle—is considered Exceptional, the most intense drought category.

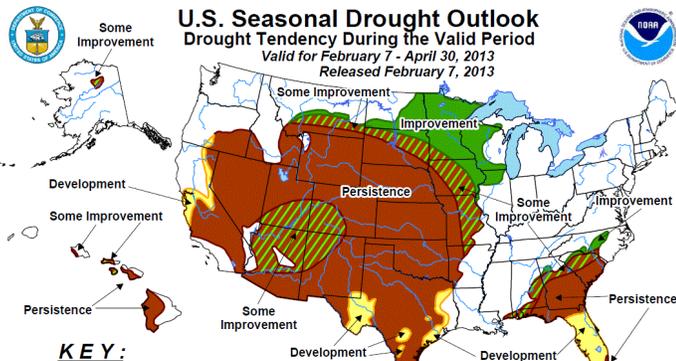
According to the latest Drought Outlook (February 7), general persistence of current drought conditions is expected across the Plains states and much of the western U.S. through April.

U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for February 7 - April 30, 2013

Released February 7, 2013



KEY:

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

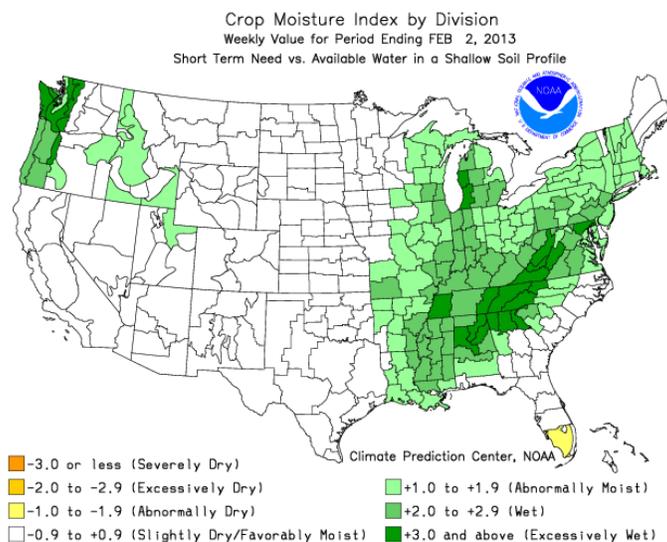
Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events – such as individual storms – cannot be accurately forecast more than a few days in advance. Use caution for applications – such as crops – that 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

January 28, 2013 – Another month of below normal precipitation added to the ongoing drought in Oklahoma. The result of the continuing drought has been poor conditions for all fall planted crops and limited grazing of small grains. Livestock producers are low on water and hay supplies in addition to the lack of grazing. Topsoil moisture conditions improved slightly from December, but 90 percent was rated short to very short. Subsoil moisture conditions were still rated 98 percent short to very short, though the portion rated very short dropped from 80 percent in December to 75 percent in January.

Conditions of all small grains and canola declined over the past month and were rated mostly poor to very poor. Only 22 percent of the wheat crop was being grazed, 14 points below the five-year average. Thirty one percent of rye was reported as grazed, 30 points less than normal. Ten percent of oats were being grazed, compared to 47 percent of oats grazed last year, and a five-year average of 24 percent.

Pasture and range conditions continued to be rated poor to very poor. Below average rainfall was not enough to significantly improve conditions. Producers continued to provide hay and supplementary feed to herds. Pond levels have not improved overall and the availability of water is a major concern for livestock producers. Although some operations were reducing herds, livestock conditions continued to be rated mostly in the good to fair range.



RESERVOIR STORAGE

February 4, 2013

