

Oklahoma Water Resources Bulletin & Summary of Current Conditions

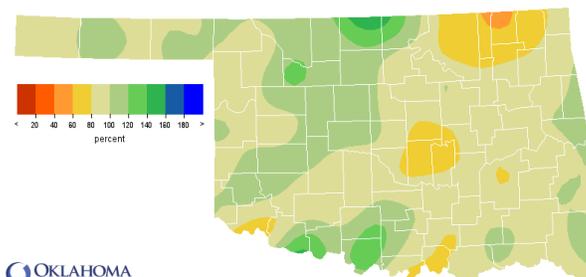


January 12, 2012

PRECIPITATION

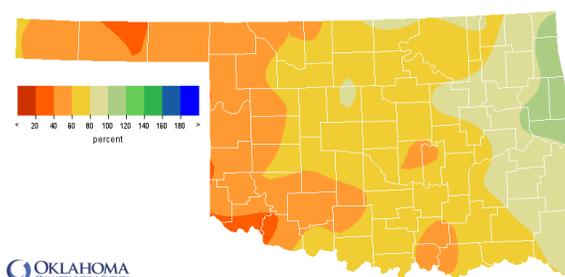
Statewide Precipitation

CLIMATE DIVISION	Cool Growing Season September 1, 2011 – January 10, 2012				Last 365 Days January 11, 2011 – January 10, 2012			
	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	4.77"	-0.53"	90%	42nd wettest	9.86"	-11.24"	47%	1st driest
North Central	9.96"	+0.49"	105%	30th wettest	20.87"	-10.78"	66%	7th driest
Northeast	12.11"	-2.70"	82%	39th driest	35.11"	-6.86"	84%	22nd driest
West Central	8.61"	-0.13"	99%	37th wettest	15.52"	-13.57"	53%	3rd driest
Central	11.38"	-1.65"	87%	44th wettest	25.48"	-12.51"	67%	10th driest
East Central	15.58"	-1.62"	91%	42nd wettest	41.06"	-5.03"	89%	31st driest
Southwest	9.74"	-0.08"	99%	37th wettest	16.25"	-14.55"	53%	1st driest
South Central	13.66"	-1.17"	92%	41st wettest	25.62"	-15.34"	63%	6th driest
Southeast	18.74"	-0.84"	96%	33rd wettest	42.51"	-8.43"	83%	22nd driest
Statewide	11.53"	-0.97"	92%	41st wettest	25.72"	-10.97"	70%	7th driest



OKLAHOMA CLIMATOLOGICAL SURVEY
Percentage of Normal Rainfall
Cool Growing Season

Sep 1, 2011 through Jan 10, 2012
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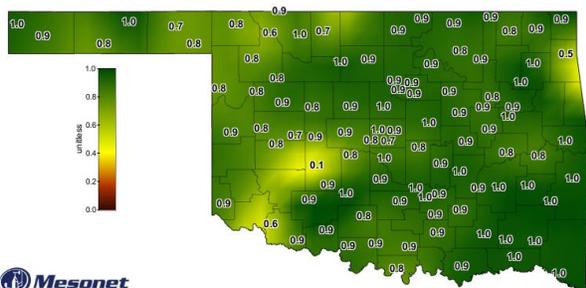


OKLAHOMA CLIMATOLOGICAL SURVEY
Percentage of Normal Rainfall
Last 365 Days

Jan 11, 2011 through Jan 10, 2012
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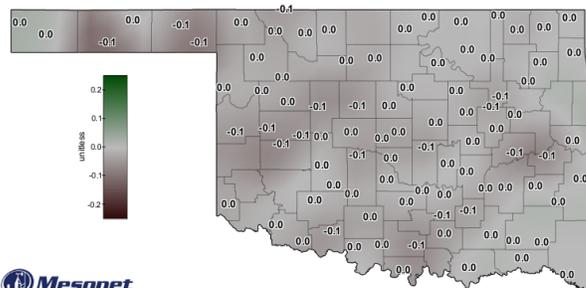
SOIL MOISTURE

Fractional Water Index¹ January 9, 2012



Mesonet
Daily Averaged Fractional Water Index at 10 inches

January 9, 2012
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Mesonet
7-Day Change in Fractional Water Index at 10 inches

January 9, 2012
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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.]

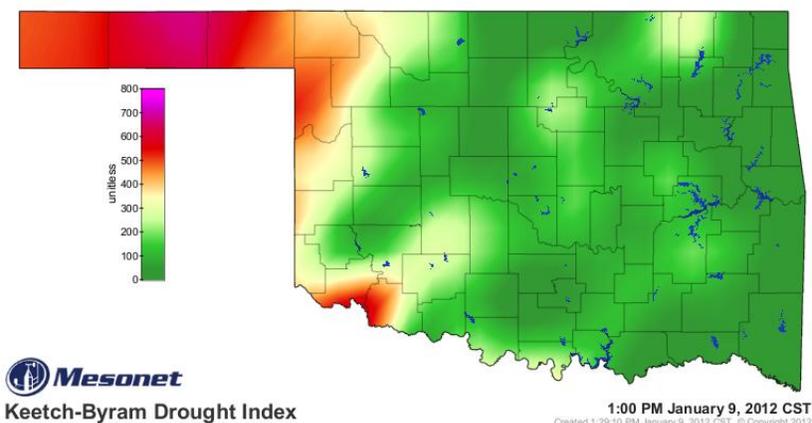
DROUGHT INDICES

Palmer Drought Severity Index ¹					Standardized Precipitation Index ² Through December 2011			
CLIMATE DIVISION	CURRENT STATUS 1/7/2012	VALUE		CHANGE IN VALUE	3-MONTH	6-MONTH	9-MONTH	12-MONTH
		1/7	11/26					
Northwest	MILD DROUGHT	-1.82	-3.95	2.13	NEAR NORMAL	MODERATELY DRY	EXTREMELY DRY	EXTREMELY DRY
North Central	INCIPIENT MOIST SPELL	0.55	-1.42	1.97	MODERATELY WET	NEAR NORMAL	NEAR NORMAL	MODERATELY DRY
Northeast	NEAR NORMAL	-0.23	-0.39	0.16	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL
West Central	MILD DROUGHT	-1.33	-2.73	1.40	MODERATELY WET	NEAR NORMAL	VERY DRY	VERY DRY
Central	MILD DROUGHT	-1.43	-2.10	0.67	MODERATELY WET	NEAR NORMAL	MODERATELY DRY	MODERATELY DRY
East Central	NEAR NORMAL	0.10	0.15	-0.05	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	MODERATELY DRY
Southwest	MILD DROUGHT	-1.69	-2.95	1.26	VERY WET	NEAR NORMAL	VERY DRY	VERY DRY
South Central	MILD DROUGHT	-1.84	-2.82	0.98	NEAR NORMAL	NEAR NORMAL	MODERATELY DRY	VERY DRY
Southeast	NEAR NORMAL	0.38	-0.65	1.03	VERY WET	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL

- Five climate divisions are currently experiencing drought conditions, according to the PDSI; all are in mild drought. Only one climate division has undergone a PDSI moisture decrease since November 26.
- Seven climate divisions are experiencing near long-term dry conditions, according to the SPI.

Keetch-Byram Drought Fire Index³

MESONET STATION	CLIMATE DIVISION	CURRENT VALUE 1/9/2012	
Hooker	Panhandle	676	<ul style="list-style-type: none"> • Stations currently at or above 600 (January 9) = 1 • Stations above 600 on November 28 = 4
Goodwell	Panhandle	593	
Beaver	Panhandle	548	



¹ The Palmer Drought Severity Index, the first comprehensive drought index developed in the United States, is calculated based on 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

8- to 14-Day Outlook January 17-23, 2012

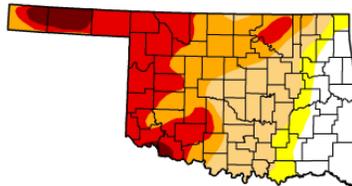


Regional Drought Summary & Outlook

U.S. Drought Monitor Oklahoma

January 10, 2012
Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	17.84	82.16	74.53	50.55	28.96	3.78
Last Week (01/03/2012 map)	14.83	85.17	78.76	50.55	27.48	3.78
3 Months Ago (10/11/2011 map)	0.00	100.00	100.00	100.00	80.31	59.10
Start of Calendar Year (12/27/2011 map)	14.83	85.17	78.76	50.55	27.48	3.33
Start of Water Year (09/27/2011 map)	0.00	100.00	100.00	100.00	78.97	66.42
One Year Ago (01/04/2011 map)	8.81	91.19	12.53	1.85	0.00	0.00



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.

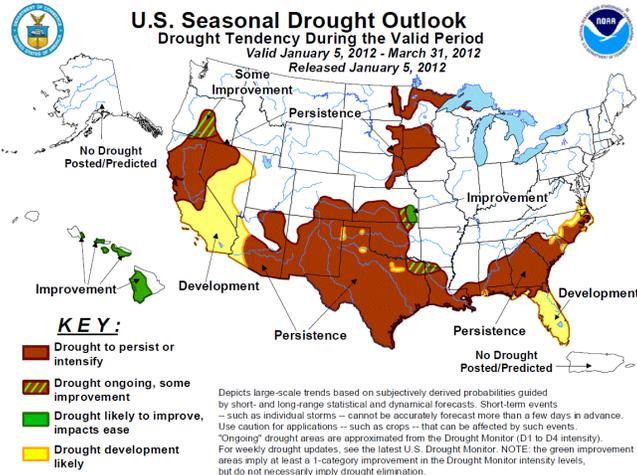


Released Thursday, January 12, 2012

Laura Edwards, Western Regional Climate Center and South Dakota 5

<http://droughtmonitor.unl.edu>

U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period Valid January 5, 2012 - March 31, 2012 Released January 5, 2012



January 10—The latest U.S. Drought Monitor reports that a couple of strong storm systems brought relief to the southern and central plains, leading to one-category improvements across much of Texas where impact lines were shifted to better reflect the short- and long-term nature of drought in the state. Snowfall totals upwards of more than ten inches were reported in panhandle region of Texas. As much as three or more inches of rain fell along the Gulf coast from Galveston to Lake Charles, Louisiana, over a two-day period earlier this week. This warranted removal of Exceptional drought in southwestern Louisiana and one-category improvements are depicted in this broad area. Low reservoir levels and other impacts remain, however, and an Extreme Drought situation continues. One area of worsening conditions is shown in Osage county, in northeastern Oklahoma, as a result of slow reservoir response to recent precipitation in the area.

Nationally, for all but the southern states, it was another mild weather week as drought conditions continued across much of the west, north and east. A broad expansion of dry conditions is depicted over much of the West, from Idaho to Colorado to California.

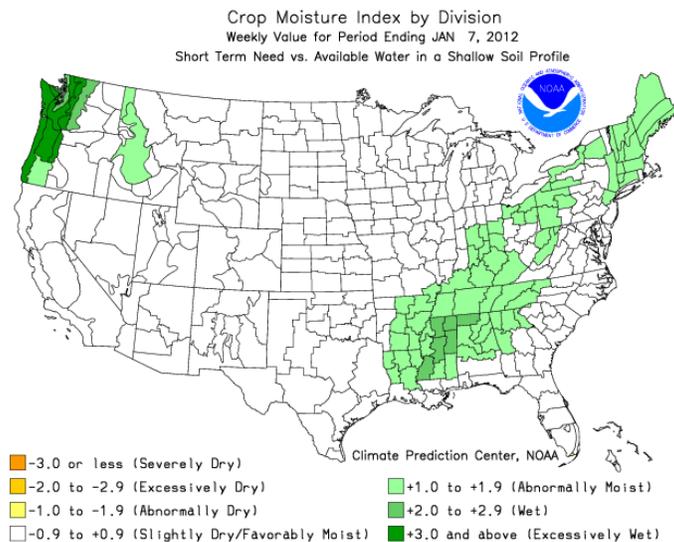
According to the latest Drought Outlook (January 5), frequent periods of precipitation improved drought conditions across the southern Plains during the past two months. However, a return of dry weather and the ongoing La Niña favor persistence across most of southern Kansas, Oklahoma, and Texas. Despite the early winter snowfall in Arizona and New Mexico, La Niña elevates the odds for drought persistence across the Southwest.

CROP REPORT

January 3, 2012 – A frigid end to the first week of the month was felt December 6-7 with negative wind chills in the Panhandle and temperatures in the teens and twenties throughout the state. A record low temperature for December 6th in Oklahoma was recorded at -6 degrees in Kenton. Temperatures were unseasonably warm only a week later, in true Oklahoma fashion. A blizzard hit the Panhandle December 19th with snowfall reports of up to 15 inches and drifts as high as 10 feet. Despite the dangerous conditions and road closings, the blizzard did bring snow cover for the Panhandle's wheat crop. The month ended with more unseasonably warm weather and a high of 82 degrees was recorded in Mangum and Cheyenne on New Year's Eve. Precipitation for the month averaged 2.41 inches, which is above normal for December. Several precipitation events throughout the month have improved conditions for small grains in the ground, but more moisture is needed to recover from the long drought. The lack of runoff meant pond levels were still low, which was a concern for livestock operators along with low quality hay. However, the mild temperatures for most of the month have benefitted cattle producers. Topsoil moisture conditions improved slightly with 67 percent rated adequate or surplus and 33 percent rated short to very short. Subsoil moisture conditions continued to be rated mostly short to very short, though 31 percent of the state was rated as adequate.

Conditions for all small grains were rated mostly good, while the canola condition was rated mostly good to fair. Wheat grazed was at 37 percent, three points above the previous year. Rye grazed was at 63 percent. Oats grazed was at 42 percent, 27 points above the five-year average.

Pasture and range conditions were rated mostly poor to very poor. Conditions improved slightly from November, but producers were looking to small grain grazing due to the limited availability cool season grasses. Livestock conditions were rated mostly in the good to fair range with 26 percent rated poor to very poor. Operators are feeding hay and continue to sell cattle as needed. The availability of water continued to be a major concern as December rainfall was not enough to replenish critically low ponds. There were a few reports of cattle deaths due to the blizzard in the Panhandle.



RESERVOIR STORAGE

- 15 major reservoirs are currently operating at less than full capacity (compared to 21 six weeks ago).
- 14 reservoirs have experienced lake level decreases.

Storage in Selected Oklahoma Lakes & Reservoirs					
January 10, 2012					
Lake or Reservoir	Normal Pool Elevation (feet)	Previous Elevation 11/28/2011 (feet)	Current Elevation 1/10/2012 (feet)	Change in Elevation (feet)	Current Flood Control Storage (acre-feet)
North Central					
Fort Supply	2004.00	2000.98	2001.77	0.79	(3,565)
Great Salt Plains	1125.00	1123.44	1125.10	1.66	1,040
Kaw*	1013.00	1009.72	1013.14	3.42	2,438
Northeast					
Birch	750.50	742.33	742.09	(0.24)	(8,335)
Copan	710.00	709.56	710.77	1.21	3,508
Fort Gibson	554.00	554.67	554.36	(0.31)	6,948
Grand*	742.00	742.02	742.02	0.00	881
Hudson	619.00	620.33	619.49	(0.84)	5,414
Hulah	733.00	731.49	733.92	2.43	3,010
Keystone	723.00	723.47	723.59	0.12	9,974
Oologah	638.00	635.98	637.66	1.68	(9,612)
Skiatook	714.00	701.67	701.14	(0.53)	(115,069)
West Central					
Canton	1615.40	1603.69	1603.82	0.13	(69,546)
Foss	1642.00	1635.83	1635.53	(0.30)	(40,089)
Central					
Arcadia	1006.00	1006.35	1006.35	0.00	675
Heyburn	761.50	761.48	761.55	0.07	33
Thunderbird	1039.00	1034.13	1033.92	(0.21)	(28,250)
East Central					
Eufaula	585.00	582.69	583.54	0.85	(133,426)
Tenkiller	632.00	633.17	632.52	(0.65)	7,138
Southwest					
Fort Cobb	1342.00	1338.22	1338.37	0.15	(12,750)
Lugert-Altus	1559.00	1532.02	1532.03	0.01	(109,673)
Tom Steed	1411.00	1404.55	1404.27	(0.28)	(37,158)
South Central					
Arbuckle	872.00	867.74	867.47	(0.27)	(10,134)
McGee Creek**	175.90	174.20	174.52	0.32	(16,303)
Texoma*	616.60	612.18	613.14	0.96	(251,278)
Waurika	951.40	945.99	945.62	(0.37)	(52,112)
Southeast					
Broken Bow*	599.50	600.53	599.56	(0.97)	808
Hugo*	406.00	412.06	406.37	(5.69)	5,234
Pine Creek	433.00	441.66	433.31	(8.35)	896
Sardis	599.00	597.89	599.31	1.42	4,232
Wister	478.00	492.38	478.41	(13.97)	2,174

* indicates seasonal pool operation

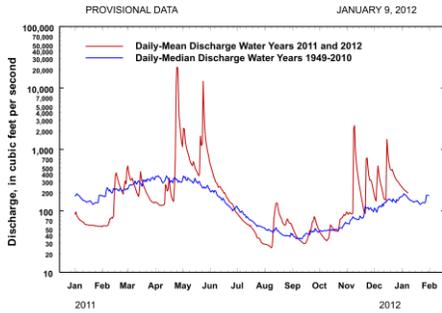
** elevation in meters

negative numbers in red, parentheses

STREAMFLOW CONDITIONS

Baron Fork at Eldon

Baron Fork at Eldon, Oklahoma
Station No. 07197000 Northeast Oklahoma
Drainage Area 307 square miles

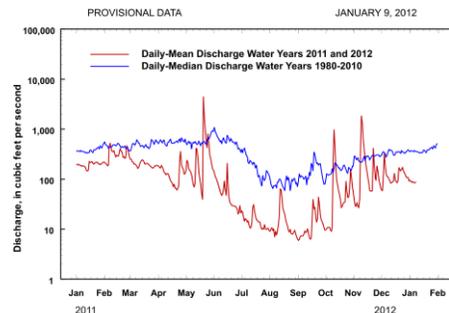


Comparison of daily discharges for water years 2011 and 2012 and period of record

Data from U.S. Geological Survey

Canadian River at Purcell

Canadian River at Purcell, Oklahoma
Station No. 07229200 Central Oklahoma
Drainage Area 25,939 square miles

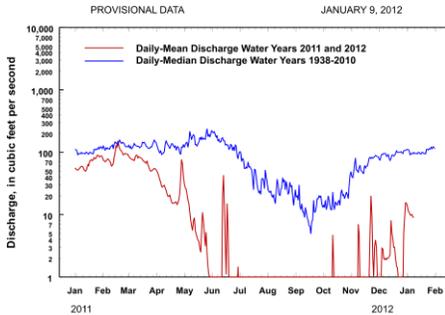


Comparison of daily discharges for water years 2011 and 2012 and period of record

Data from U.S. Geological Survey

Cimarron River near Waynoka

Cimarron River near Waynoka, Oklahoma
Station No. 07158000 Northwest Oklahoma
Drainage Area 13,334 square miles

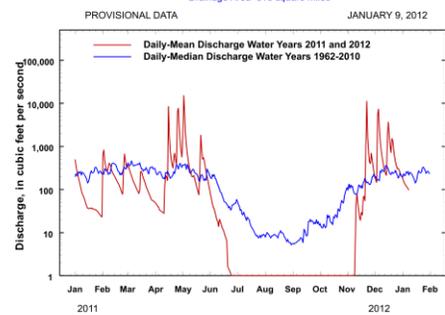


Comparison of daily discharges for water years 2011 and 2012 and period of record

Data from U.S. Geological Survey

Glover River near Glover

Glover River near Glover, Oklahoma
Station No. 07337900 Southeast Oklahoma
Drainage Area 315 square miles

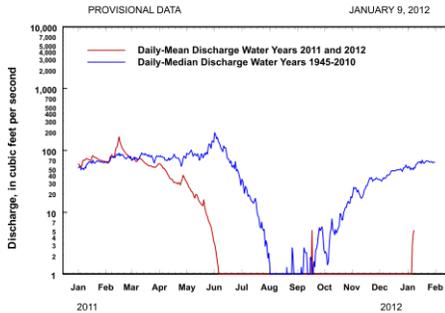


Comparison of daily discharges for water years 2011 and 2012 and period of record

Data from U.S. Geological Survey

North Fork of the Red River near Carter

North Fork of the Red River near Carter, Oklahoma
Station No. 07301500 Southwest Oklahoma
Drainage Area 2,337 square miles

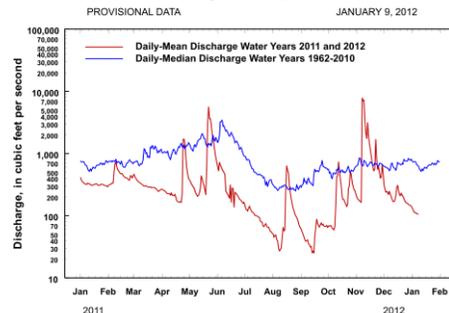


Comparison of daily discharges for water years 2011 and 2012 and period of record

Data from U.S. Geological Survey

Washita River near Dickson

Washita River near Dickson, Oklahoma
Station No. 07331000 South-Central Oklahoma
Drainage Area 7,202 square miles



Comparison of daily discharges for water years 2011 and 2012 and period of record

Data from U.S. Geological Survey



Water Bulletin information/data courtesy of National Weather Service, Climate Prediction Center, Oklahoma Climatological Survey, State Department of Agriculture, Food, and Forestry, Agricultural Statistics Service, U.S. Army Corps of Engineers, U.S. Department of Agriculture/Forest Service, U.S. Geological Survey, Western Drought Coordination Council, and National Drought Mitigation Center. For more information, visit www.owrb.ok.gov and www.mesonet.org.