Oklahoma Water Resources Bulletin & Summary of Current Conditions

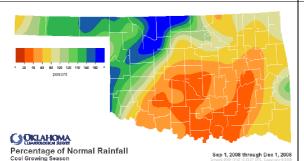


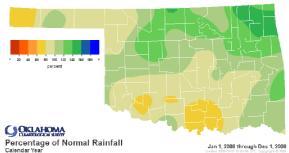
December 4, 2008

PRECIPITATION

Statewide Precipitation

	S	Cool Grow eptember 1—D	•		Calendar Year January 1—December 1, 2008			
Climate Division (#)	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	5.66"	+1.21"	127%	21st wettest	17.61"	-2.81"	86%	28th driest
North Central	11.28"	+3.37"	143%	11th wettest	35.31"	+4.92"	116%	12th wettest
Northeast	9.35"	-2.76"	77%	39th driest	53.36"	+13.59"	134%	4th wettest
West Central	10.23"	+2.88"	139%	11th wettest	30.52"	+2.54"	109%	13th wettest
Central	5.31"	-5.33"	50%	16th driest	35.34"	-0.70"	98%	30th wettest
East Central	7.54"	-6.09"	55%	20th driest	47.73"	+4.53"	110%	14th wettest
Southwest	5.34"	-2.81"	66%	27th driest	26.06"	-3.40"	88%	35th driest
South Central	4.31"	-7.46"	37%	8th driest	30.65"	-7.86"	80%	21st driest
Southeast	10.37"	-4.36"	70%	29th driest	51.84"	+4.84"	110%	17th wettest
Statewide	7.54"	-2.54"	75%	36th driest	36.37"	+1.63"	105%	20th wettest

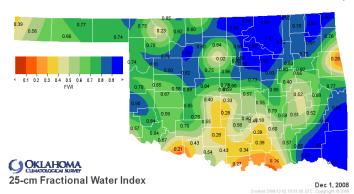


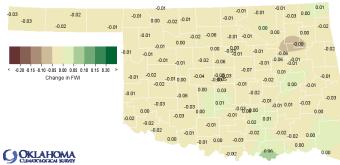


SOIL MOISTURE

Fractional Water Index¹ December 1, 2008

25 CM (~10 INCHES)





7-Day Change in 25-cm Fractional Water Index

Dec 1, 200 ed 2008-12-02 10:01:12 UTC. Copyright © 201

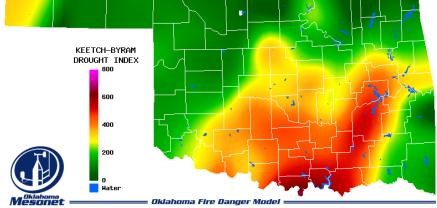
¹ The Fractional Water Index ranges from very dry soil having a value of 0 to soil at field capacity illustrated by a value of 1. Specifically, 1.0 to 0.8 equals Enhanced Growth, 0.8 to 0.5 equals Limited Growth, 0.5 to 0.3 equals Plants Wilting, 0.3 to 0.1 equals Plants Dying, and less than 0.1 equals Barren Soil.

DROUGHT INDICES									
Palm	ner Drought Seve	erity Ind	dex ¹		Standardized Precipitation Index ² Through October 2008				
Сымате	CURRENT STATUS	VALUE		CHANGE	3-Монтн	6-Month	9-Month	12-Month	
Division (#)	11/29/2008	11/29	11/1	In Value					
Northwest (1)	UNUSUAL MOIST SPELL	2.46	3.11	-0.65	EXTREMELY WET	VERY WET	MODERATELY WET	NEAR NORMAL	
North Central (2)	EXTREME MOIST SPELL	5.03	5.52	-0.49	VERY WET	VERY WET	VERY WET	VERY WET	
Northeast (3)	VERY MOIST SPELL	3.78	4.23	-0.45	NEAR NORMAL	VERY WET	EXTREMELY WET	EXTREMELY WET	
West Central (4)	VERY MOIST SPELL	3.39	4.23	-0.84	VERY WET	VERY WET	VERY WET	VERY WET	
Central (5)	MOIST SPELL	1.87	2.46	-0.59	NEAR NORMAL	NEAR NORMAL	MODERATELY WET	MODERATELY WET	
East Central (6)	MOIST SPELL	1.18	2.27	-1.09	NEAR NORMAL	NEAR NORMAL	MODERATELY WET	NEAR NORMAL	
Southwest (7)	INCIPIENT MOIST SPELL	0.69	1.70	-1.01	MODERATELY WET	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	
South Central (8)	INCIPIENT DROUGHT	-0.87	-0.36	-0.51	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	
Southeast (9)	UNUSUAL MOIST SPELL	2.86	3.32	-0.46	MODERATELY WET	NEAR NORMAL	VERY WET	NEAR NORMAL	

- No climate divisions are currently experiencing drought conditions, according to the PDSI.
- All nine climate divisions have undergone a PDSI moisture decrease since November 1.
- No climate divisions are experiencing near long-term dry conditions, according to the SPI.

Keetch-Byram Drought Fire Index³

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MESONET STATION	COUNTY CLIMATE DIVISION		CURRENT VALUE 12/2/2008	 Stations currently above 600 (December 2) = 1 				
Burneyville	Love	South Central	622	• Stations above 600 on November 3 = 1				
Madill	Marshall	South Central	578	• Stations above 600 on November 5 = 1				
Ardmore	Carter	South Central	540					
	02-Dec-2	2008 09:00 AM CST 12/02/08	15 UTC					
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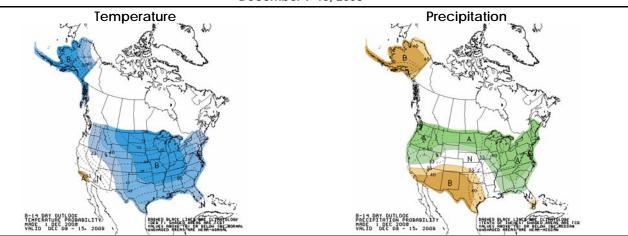
¹ The Palmer Drought Severity Index, the first comprehensive drought index developed in the United States, is calculated based on precipitation, temperature, and soil moisture. Though widely used by government agencies and states to trigger drought relief programs, the PDSI may underestimate or overestimate 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.

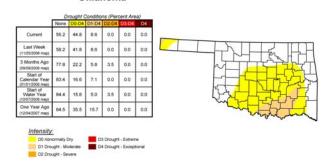
WEATHER/DROUGHT FORECAST

8- to 14-Day Outlook December 9-15, 2008



U.S. Drought Monitor

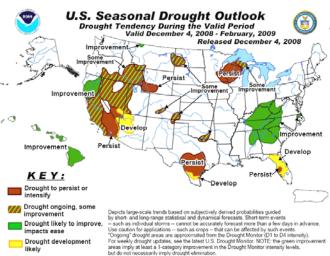
December 2, 2008



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

Released Thursday, December 4, 2008

http://drought.unl.edu/dm



Regional Drought Summary & Outlook:

December 2—Again this week, rainfall largely evaded this region with little to no precipitation falling from the Dakotas down through Texas. This resulted in expansion of drought in Oklahoma and Texas. Exceptional drought (D4) was introduced into central Texas and extreme (D3) and abnormally dry conditions (D0) expanded in southern Texas. San Antonio has had the driest January – November period since 1954 and the fourth driest since 1871. Oklahoma saw expansion of abnormally dry (D0) and moderate drought (D1) across the central portions of the state.

According to the latest Drought Outlook (December 4), drought should persist and expand slightly southward across central Texas. Drought should at least nominally improve in south-central Oklahoma and adjacent Texas, where current indicators are mixed, and limited improvement is also anticipated for the small areas of drought in the High Plains and central Colorado.

CROP REPORT

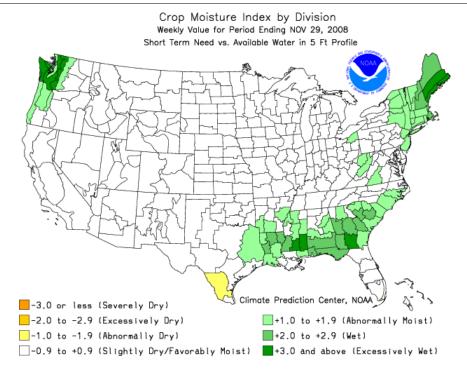
November 24, 2008—Very few areas in the state received rainfall last week. Early last week saw particularly warm and windy conditions. In contrast, Friday was extremely cold with lows below 20 degrees. Small grain producers have reported many different problems throughout the state; however, conditions stay within the good to fair range. High winds in the Panhandle have blown out wheat fields in some areas causing producers to replant. These dry conditions have led to an accelerated pace for soybean and peanut harvest. Both topsoil and subsoil moisture levels continued to dwindle last week but were still judged mostly adequate. There were 6.3 days suitable for fieldwork last week.

Wheat and rye conditions remain mostly in good to fair condition. However, producers have reported small grain troubles such as drought related stress, wind damage, leaf rust, insect damage, and nitrogen deficiencies. Some replanting has been necessary. Producers continue to place cattle on wheat and rye for grazing. Winter wheat emerged increased four points from the previous week to reach 96 percent complete, four points ahead of the five-year average. Seedbed preparation for oats was 79 percent complete, increasing one point from the previous week but 16 points behind normal. Oats planted was 48 percent complete, 22 points behind the five-year average. Forty percent of oats had emerged by week's end, 23 points behind normal.

Producers were able to increase the harvest pace with the past week's dry weather conditions. Sixty-nine percent of the sorghum in the state was harvested by the end of the week, a 15-point increase from the previous week but 14 points behind normal. Ninety-one percent of soybeans had been harvested by week's end, a 13-point increase from the previous week and three points ahead of the five-year average. Virtually all of the peanuts were harvested by week's end, increasing five percentage points from the week prior and up three points from the five-year average. Cotton harvested reached 56 percent by week's end, up 12 points from the previous week but 12 points behind the five-year average. Cotton conditions remained mostly good to fair.

Alfalfa conditions were rated mostly in the good to fair range. Alfalfa fifth cutting was 91 percent complete, two points ahead of normal. The sixth cutting of alfalfa was half complete by week's end, up 1 point from the previous week but seven points behind normal. Other hay second cutting was 90 percent complete, up one point from the previous week but six points behind normal.

Statewide, pasture and range conditions continued to deteriorate due to lack of rainfall but remained mostly in the good to fair range. Livestock conditions were rated mostly good to fair with mostly light to moderate insect activity reported.



RESERVOIR STORAGE

- 17 reservoirs are currently operating at less than full capacity (compared to 13 one month ago).
- 15 reservoirs have experienced lake level decreases.

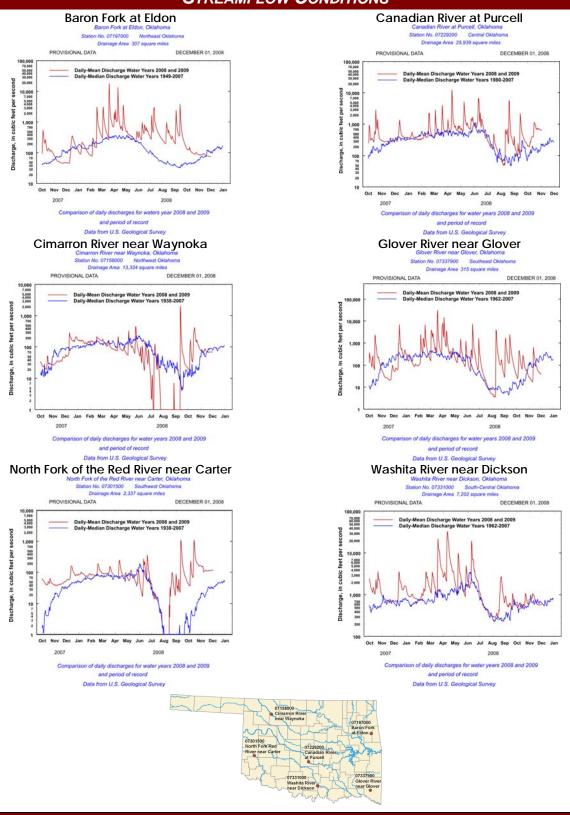
Storage in Selected Oklahoma Lakes & Reservoirs December 3, 2008								
Lake or Reservoir	Normal Pool Elevation	<i>Previous Elevation 11/03/2008</i>	Current Elevation 12/03/2008	Change in Elevation	Current Flood Control Storage			
	(feet)	(feet)	(feet)	(feet)	(acre-feet)			
North Central								
Fort Supply	2004.00	2004.01	2004.06	0.05	113			
Great Salt Plains	1125.00	1125.81	1125.28	(0.53)	2,350			
Kaw*	1010.70	1010.29	1010.94	0.65	4,671			
Northeast								
Birch	750.50	750.54	750.33	(0.21)	(195)			
Copan	710.00	710.20	710.28	0.08	1,589			
Fort Gibson	554.00	555.53	555.05	(0.48)	20,300			
Grand*	742.00	742.03	742.03	0.00	1,321			
Hudson	619.00	619.51	619.33	(0.18)	3,647			
Hulah	733.00	733.59	732.60	(0.99)	(1,162)			
Keystone*	723.00	724.77	723.44	(1.33)	10,143			
Oologah*	638.00	638.08	635.98	(2.10)	(59,193)			
Skiatook	714.00	712.15	713.16	1.01	(8,474)			
West Central								
Canton	1615.40	1615.62	1615.27	(0.35)	(1,032)			
Foss	1642.00	1641.47	1641.51	0.04	(3,273)			
Central								
Arcadia	1006.00	1005.87	1006.01	0.14	19			
Heyburn	761.50	760.62	760.86	0.24	(590)			
Thunderbird	1039.00	1038.60	1038.71	0.11	(1,740)			
East Central								
Eufaula*	585.00	584.00	584.17	0.17	(76,963)			
Tenkiller	632.00	631.83	631.83	0.00	(2,227)			
Southwest								
Fort Cobb	1342.00	1342.20	1342.26	0.06	1,012			
Lugert-Altus	1559.00	1546.16	1547.38	1.22	(60,538)			
Tom Steed	1411.00	1408.36	1407.86	(0.50)	(18,633)			
South Central								
Arbuckle	872.00	869.31	868.79	(0.52)	(7,278)			
McGee Creek**	175.90	175.95	175.82	(0.13)	(970)			
Texoma*	618.40	616.42	616.56	0.14	(139,260)			
Waurika*	951.40	951.29	950.94	(0.35)	(4,637)			
Southeast								
Broken Bow*	599.50	600.39	599.31	(1.08)	(2,694)			
Hugo*	406.00	405.99	406.41	0.42	5,800			
Pine Creek*	438.00	438.13	438.42	0.29	1,621			
Sardis	599.00	599.19	599.05	(0.14)	693			
Wister	478.00	478.61	478.20	(0.41)	1,535			

^{*} indicates seasonal pool operation

negative numbers in red, parentheses

^{**} elevation in meters

STREAMFLOW CONDITIONS



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.