Oklahoma Water Resources Bulletin & Summary of Current Conditions

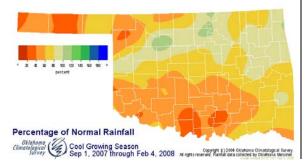


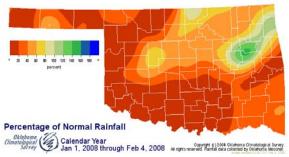
February 7, 2008

PRECIPITATION

Preliminary Statewide Precipitation

	Cool Growing Season September 1, 2007—February 4, 2008				Calendar Year January 1— February 4, 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	2.79"	-2.95"	49%	9th driest	0.11"	-0.49"	19%	12th driest
North Central	8.31"	-1.95"	81%	36th driest	0.41"	-0.69"	37%	24th driest
Northeast	13.85"	-2.31"	86%	41st driest	1.38"	-0.46"	75%	36th driest
West Central	6.74"	-2.75"	71%	29th driest	0.32"	-0.72"	31%	21st driest
Central	9.35"	-4.86"	66%	22nd driest	0.58"	-1.04"	36%	21st driest
East Central	13.97"	-5.00"	74%	31st driest	1.24"	-1.23"	50%	24th driest
Southwest	5.88"	-4.84"	55%	12th driest	0.12"	-1.12"	10%	9th driest
South Central	7.13"	-9.30"	43%	7th driest	0.24"	-1.96"	11%	3rd driest
Southeast	14.73"	-7.18"	67%	17th driest	0.98"	-2.27"	30%	6th driest
Statewide	9.15"	-4.57"	67%	19th driest	0.60"	-1.09"	35%	11th driest

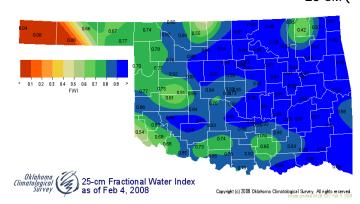


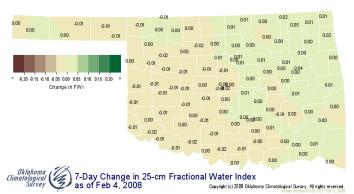


SOIL MOISTURE

Fractional Water Index¹ February 4, 2008

25 CM (~10 INCHES)





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	er Drought Seve	dex ¹		Standardized Precipitation Index ² Through January 2007					
CLIMATE	CURRENT STATUS	VALUE		CHANGE	3-Month	6-Month	9-Month	12-Month	
DIVISION (#)	2/2/2008	2/2	12/29	IN V ALUE	3-IVIONIH	0-IVIONIH	7-IVIONIH	12-IVIONIH	
Northwest (1)	NEAR NORMAL	-0.28	0.42	-0.70	NEAR NORMAL	MODERATELY DRY	MODERATELY DRY	NEAR NORMAL	
North Central (2)	VERY MOIST SPELL	3.09	3.70	-0.61	NEAR NORMAL	NEAR NORMAL	VERY WET	VERY WET	
Northeast (3)	MOIST SPELL	1.49	1.96	-0.47	NEAR NORMAL	NEAR NORMAL	VERY WET	MODERATELY WET	
West Central (4)	VERY MOIST SPELL	3.12	4.21	-1.09	NEAR NORMAL	NEAR NORMAL	EXTREMELY WET	EXTREMELY WET	
Central (5)	VERY MOIST SPELL	3.64	4.58	-0.94	NEAR NORMAL	NEAR NORMAL	EXTREMELY WET	EXTREMELY WET	
East Central (6)	INCIPIENT MOIST SPELL	0.62	1.46	-0.84	MODERATELY DRY	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	
Southwest (7)	UNUSUAL MOIST SPELL	2.18	3.60	-1.42	NEAR NORMAL	NEAR NORMAL	VERY WET	VERY WET	
South Central (8)	NEAR NORMAL	-0.27	1.25	-1.52	MODERATELY DRY	VERY DRY	MODERATELY WET	MODERATELY WET	
Southeast (9)	INCIPIENT MOIST SPELL	0.86	2.29	-1.43	MODERATELY DRY	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	

- No climate divisions are currently experiencing drought conditions, according to the PDSI.
- All climate divisions have undergone PDSI moisture decreases since December 29.
- Four climate divisions are experiencing dry conditions, according to the SPI.

Keetch-Byram Drought Fire Index³

MESONET STATION	County	CLIMATE DIVISION	Current Value 2/4/2008	
Hooker	Texas	Northwest	627	0(-1)
Goodwell	Texas	Northwest	618	 Stations currently above 600 (February 4) = 2
Boise City	Cimarron	Northwest	575	 Stations above 600 on January 3 = 2
	04-	Feb-2008 04:00 PM CST 02/04	/08 22 UTC	
		KEETCH-BYRAM DROUGHT INDEX 888 668 468 266 486		

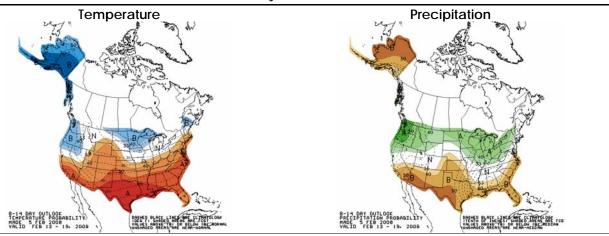
¹ The Palmer Drought Severity Index, the first comprehensive drought index developed in the United States, is calculated based on precipitation, temperature, and soil moisture. Though widely used by government agencies and states to trigger drought relief programs, the PDSI may underestimate or overestimate 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

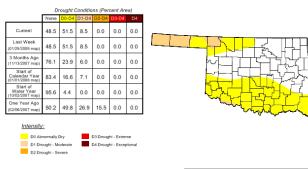
8- to 14-Day Outlook February 13-19, 2008



U.S. Drought Monitor

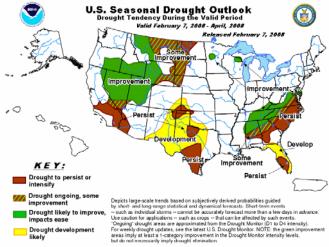
February 5, 2008

(*)



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

http://drought.unl.edu/dm Released Thursday, February 7, 2008
Author: J. Lawrimore/L. Love-Brotak, NOAA/NESDIS/NCDC



Regional Drought Summary & Outlook:

February 5—Conditions deteriorated in areas of the northern and southern Plains as large parts of the region received little or no precipitation during the week. More widespread deterioration occurred in Texas where an extended dry period continued. Following an extremely wet first eight months of 2007 that had large parts of the state on track to a wettest year on record, a pattern change in September led to a sharp reversal in moisture conditions in much of the state. Deteriorating conditions also occurred in a large part of northeastern Texas where abnormally dry D0A conditions were introduced along with an expansion of D1A drought in north-central Texas, where 90-day precipitation totals are less than 50% of normal for the period. In Oklahoma, there was no change in drought status with half of the state either abnormally dry or in moderate drought.

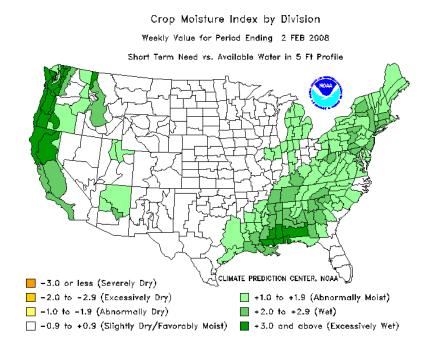
According to the latest Drought Outlook, the northern part of the Southeastern drought region should continue to see improvement, while the odds for drought relief diminish farther south, resulting in persisting drought from south-central Alabama eastward and northward through the Carolinas into southeastern Virginia. Even where improvement is anticipated, many reservoirs and wells will remain low due to lingering impacts from the extreme rainfall deficits incurred last year. Expanding drought is likely across the southern Plains, extending back over eastern and southern New Mexico. To the north, some improvement is likely for most of the northern Plains from the Dakotas into central Montana while more significant improvement is expected across the remaining drought areas in the interior Northwest and Great Basin. In the Southwest, the odds favor little or no improvement from southern California into western Arizona.

CROP REPORT

February 4—Temperatures were highly variable during the month of January. The last day of January brought freezing temperatures as well as icy rain and snow to the northern part of the state. Despite the small winter storms, precipitation is still needed in many areas; a little over half an inch was the average amount of rainfall received across the state during the month of January. A Burn Ban was issued by the Governor for several Oklahoma counties. Strong winds in some areas caused damage to small grain crops as well as to trees and buildings. Topsoil moisture decreased during the month with 46 percent rated in the adequate to surplus range. Subsoil moisture levels also decreased during the month with 54 percent rated in the adequate to surplus range.

The condition of all small grain crops was mostly in the fair to good range. Nine percent of small grains were reported having light to moderate freeze damage. Dry conditions as well as high winds were impacting the wheat crop in many areas. However, most irrigated acres were looking good. Top-dressing has been applied to wheat in a few areas, which has increased the need for rainfall. Also, greenbugs have begun to invade wheat fields in isolated areas. Twenty-five percent of the winter wheat was being grazed, 10 points behind normal.

Seventy-seven percent of pastures were in the fair to good range. Pastures are dry and in need of precipitation. Cool season grasses were providing some grazing. Livestock remained in mostly fair to good condition. Livestock marketings were average. The wavering temperatures were extremely hard on cattle operations. Cattle producers in many areas are continuing to provide hay to their herds.



RESERVOIR STORAGE

- 15 reservoirs are currently operating at less than full capacity (compared to 10 last month).
- 19 reservoirs have experienced lake level decreases.

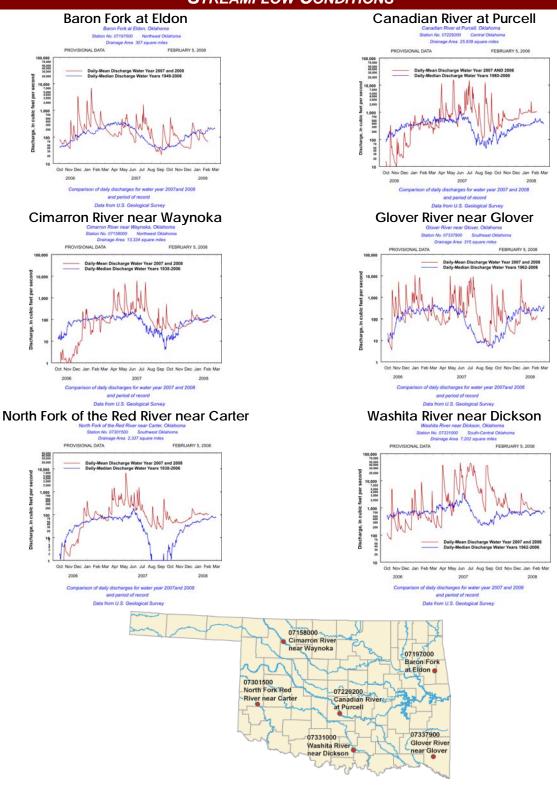
Storage in Selected Oklahoma Lakes & Reservoirs February 5, 2008								
	Normal Pool	Previous	Current	Change in	Current Flood			
	Elevation	Elevation	Elevation	Elevation	Control Storage			
Lake or Reservoir		01/02/2008	02/05/2008		-			
	(feet)	(feet)	(feet)	(feet)	(acre-feet)			
North Central								
Fort Supply	2004.00	2004.18	2004.52	0.34	976			
Great Salt Plains	1125.00	1125.39	1125.36	(0.03)	3,021			
Kaw*	1012.40	1012.71	1013.70	0.99	12,793			
Northeast								
Birch	750.50	750.55	750.48	(0.07)	(23)			
Copan	710.00	710.63	710.71	0.08	4,029			
Fort Gibson	554.00	555.68	556.85	1.17	57,065			
Grand	745.00	742.01	742.09	0.08	(131,039)			
Hudson	619.00	619.93	619.50	(0.43)	5,525			
Hulah	733.00	735.26	733.45	(1.81)	2,775			
Keystone	723.00	724.85	722.90	(1.95)	(2,190)			
Oologah	638.00	640.92	638.33	(2.59)	10,444			
Skiatook	714.00	713.31	714.00	0.69	(6,860)			
West Central								
Canton	1615.40	1615.63	1615.65	0.02	1,985			
Foss	1642.00	1641.48	1641.91	0.43	(601)			
Central								
Arcadia	1006.00	1006.44	1005.81	(0.63)	(338)			
Heyburn	761.50	761.78	761.77	(0.01)	274			
Thunderbird	1039.00	1039.74	1039.48	(0.26)	2,928			
East Central								
Eufaula*	585.00	584.48	583.60	(0.88)	(128,677)			
Tenkiller	632.00	632.65	631.08	(1.57)	(12,052)			
Southwest								
Fort Cobb	1342.00	1342.76	1343.01	0.25	3,934			
Lugert-Altus	1559.00	1552.15	1553.17	1.02	(33,398)			
Tom Steed	1411.00	1410.24	1409.90	(0.34)	(6,861)			
South Central								
Arbuckle	872.00	871.59	871.28	(0.31)	(1,670)			
McGee Creek**	175.90	175.79	175.66	(0.13)	(2,910)			
Texoma*	615.50	615.80	614.47	(1.33)	(69,130)			
Waurika*	951.40	951.80	952.05	0.25	6,607			
Southeast								
Broken Bow*	599.50	597.70	594.82	(2.88)	(64,934)			
Hugo*	404.50	407.34	404.44	(2.90)	(4,035)			
Pine Creek*	438.00	441.22	438.32	(2.90)	1,235			
Sardis	599.00	599.44	599.44	0.00	6,103			
Wister	478.00	480.43	478.30	(2.13)	2,302			

^{*} 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.state.ok.us and http://www.mesonet.ou.edu/public.