Oklahoma Water Resources Bulletin
& Summary of Current Conditions

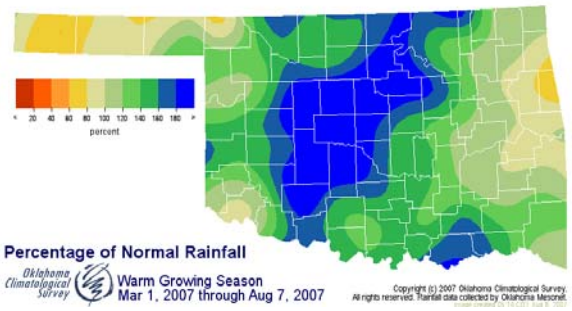
State of Oklahoma OWRB Water Resources Board the water agency

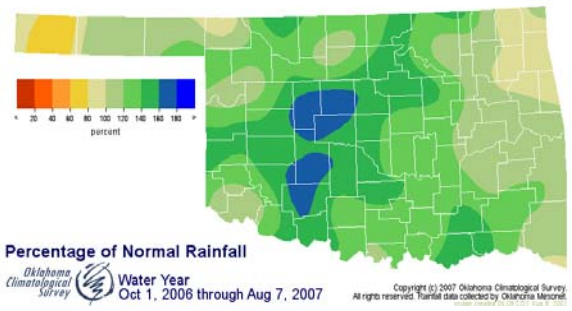
August 8, 2007

PRECIPITATION

Preliminary Statewide Precipitation

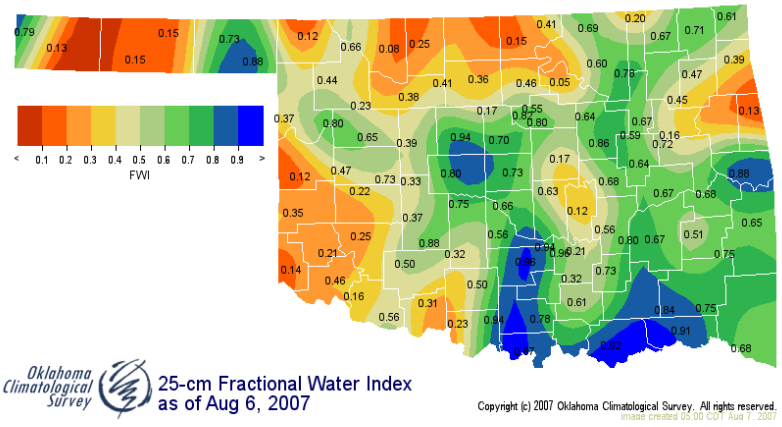
Climate Division (#)	Warm Growing Season March 1—August 7, 2007 Total Rainfall (inches)	Departure From Normal (inches)	Percent Of Normal	Rank Since 1921	Water Year October 1, 2006—August 7, 2007 Total Rainfall (inches)	Departure From Normal (inches)	Percent Of Normal	Rank Since 1921
Panhandle	12.03"	-0.84"	93%	39th wettest	17.34"	+0.06"	100%	32nd wettest
North Central	28.28"	+10.31"	157%	4th wettest	33.88"	+7.73"	130%	6th wettest
Northeast	28.73"	+7.08"	133%	9th wettest	39.40"	+4.67"	113%	15th wettest
West Central	25.52"	+9.02"	155%	2nd wettest	33.33"	+9.37"	139%	2nd wettest
Central	36.22"	+16.09"	180%	1st wettest	46.10"	+14.26"	145%	1st wettest
East Central	23.99"	+1.19"	105%	30th wettest	42.87"	+3.96"	110%	18th wettest
Southwest	26.30"	+9.45"	156%	3rd wettest	36.28"	+10.95"	143%	3rd wettest
South Central	30.37"	+9.71"	147%	4th wettest	45.50"	+10.85"	131%	6th wettest
Southeast	28.91"	+4.69"	119%	13th wettest	52.25"	+7.98"	118%	11th wettest
Statewide	27.07"	+7.76"	140%	3rd wettest	38.64"	+7.91"	126%	6th wettest





SOIL MOISTURE

Fractional Water Index[1]
August 6, 2007
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

Palmer Drought Severity Index[1] / Standardized Precipitation Index[2] Through July 2007

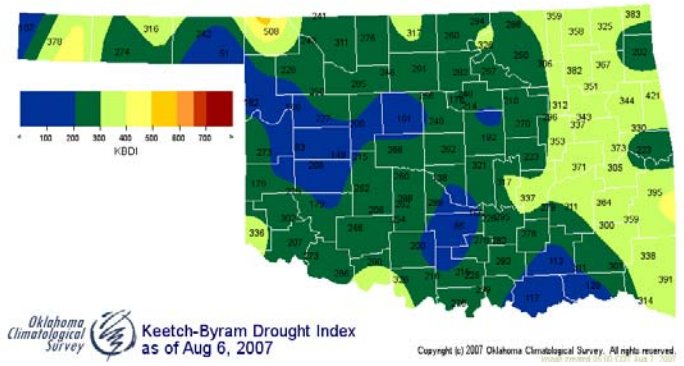
Climate Division (#)	Current Status 8/4/2007	Value 8/4	Value 7/7	Change In Value	3-Month	6-Month	9-Month	12-Month
Northwest (1)	VERY MOIST SPELL	3.38	3.66	**-0.28**	NEAR NORMAL	NEAR NORMAL	VERY WET	VERY WET
North Central (2)	EXTREME MOIST SPELL	4.21	4.55	**-0.34**	VERY WET	EXTREMELY WET	VERY WET	VERY WET
Northeast (3)	MOIST SPELL	1.81	2.73	**-0.92**	EXTREMELY WET	VERY WET	VERY WET	MODERATELY WET
West Central (4)	EXTREME MOIST SPELL	4.54	4.82	**-0.28**	EXTREMELY WET	EXTREMELY WET	EXTREMELY WET	EXTREMELY WET
Central (5)	EXTREME MOIST SPELL	4.62	4.37	**0.25**	EXTREMELY WET	EXTREMELY WET	EXTREMELY WET	EXTREMELY WET
East Central (6)	MOIST SPELL	1.46	1.70	**-0.24**	VERY WET	NEAR NORMAL	VERY WET	MODERATELY WET
Southwest (7)	EXTREME MOIST SPELL	4.96	5.12	**-0.16**	VERY WET	VERY WET	VERY WET	VERY WET
South Central (8)	EXTREME MOIST SPELL	4.03	3.69	**0.34**	VERY WET	VERY WET	VERY WET	VERY WET
Southeast (9)	UNUSUAL MOIST SPELL	2.19	2.02	**0.17**	VERY WET	MODERATELY WET	VERY WET	VERY WET

- No climate divisions are currently experiencing drought conditions, according to the PDSI.
- Six climate divisions have undergone PDSI moisture decreases since July 7.

Keetch-Byram Drought Fire Index[3]

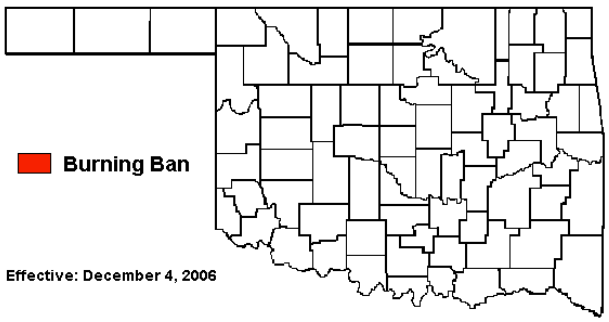
Mesonet Station	County	Climate Division	Current Value 8/6/2007
Buffalo	Harper	Northwest	494
Boise City	Cimarron	Northwest	460
West	Adair	East Central	427

- Stations currently above 600 (August 6) = 0
- Stations above 600 on July 9 = 0



Statewide Wildfire Preparedness

There is no ban on outdoor burning for any counties in Oklahoma. However, citizens are encouraged to use caution. Dry, grassy fuels will ignite easily when the humidity is low and the temperature and winds are high.



[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.

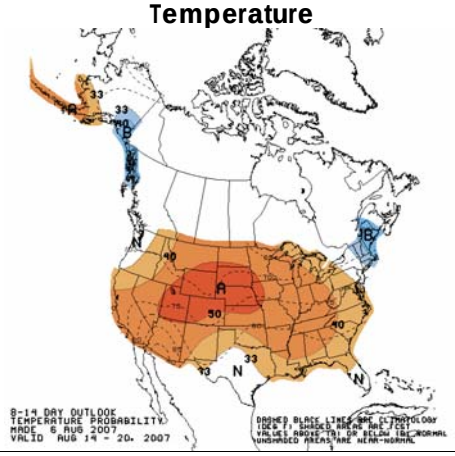
[2] The Standardized Precipitation Index, more sensitive than the PDSI, provides a comparison of precipitation over a specified period with precipitation totals from that same period for all years included in the historical record. The 3-month SPI provides a seasonal estimation of precipitation while 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.

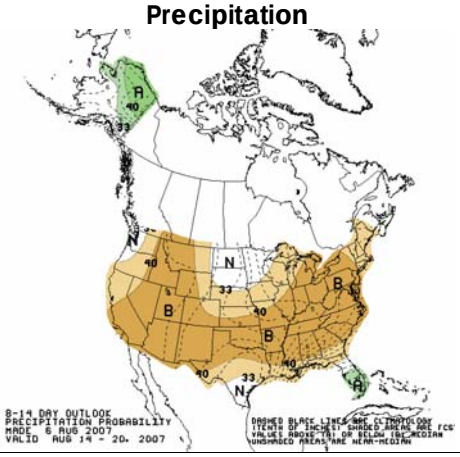
WEATHER/DROUGHT FORECAST

8- to 14-Day Outlook
August 14-20, 2007

Temperature



Precipitation



U.S. Drought Monitor
Oklahoma

August 7, 2007
Valid 7 a.m. EST

Drought Conditions (Percent Area)

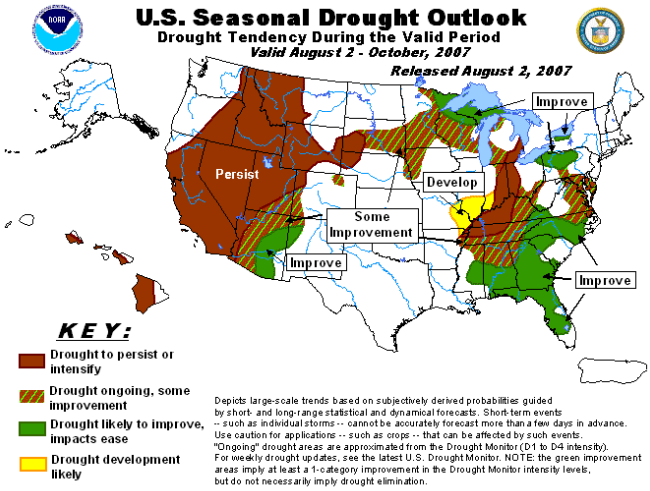
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	97.8	2.2	0.0	0.0	0.0	0.0
Last Week (07/31/2007 map)	97.8	2.2	0.0	0.0	0.0	0.0
3 Months Ago (05/15/2007 map)	100.0	0.0	0.0	0.0	0.0	0.0
Start of Calendar Year (01/02/2007 map)	31.3	68.7	39.8	24.5	18.2	0.0
Start of Water Year (10/03/2006 map)	2.7	97.3	92.7	46.2	16.6	0.0
One Year Ago (08/08/2006 map)	0.0	100.0	100.0	91.8	63.1	13.6

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://drought.unl.edu/dm

Released Thursday, August 9, 2007
Author: Brian Fuchs, National Drought Mitigation Center



Drought Summary & Outlook:

August 7—Hot and dry conditions dominated the weather conditions this past week. As a dome of high pressure settled in over the Midwest, temperatures were 4-8°F above normal for many locations. Temperatures were also well above normal through the High Plains and northern Rocky Mountains. The coolest temperatures were observed over the Southwest and into Texas, where the monsoon season continued. Precipitation was widely scattered, with the areas north of the dome of high pressure seeing the most significant rains. Some localized amounts of greater than 5 inches were observed in parts of Wisconsin, Florida, South Dakota and Nebraska. In general, a few improvements to the drought status of some states took place, but an overall worsening of the drought continued to plague the country.

According to the latest Drought Outlook, hot, dry weather during the first half of August will contribute to persisting drought from southern Michigan into western parts of Kentucky and Tennessee, with a good chance drought may expand into southeastern Missouri and southern Illinois. From the northern Gulf States into eastern Kentucky and southern Ohio, a return to drier weather should be followed by more seasonal rains, resulting in some improvement. Hot, dry weather in early August will cause drought to worsen from Maryland and Virginia into North Carolina, but the odds favor increased rainfall later in the season, resulting in overall improvement by October. The outlook remains favorable for improvement over most of the Southeast. Forecasters expect an active Atlantic storm season. The Upper Midwest will experience beneficial rains in early August from Wisconsin into Minnesota, but overall improvement may be limited. In the West, the summer thunderstorm season will continue to provide spotty relief for many areas.

CROP REPORT

August 6— Scattered storms struck parts of the state last week. Average high temperatures over the weekend increased as a warm front moved through Oklahoma. Topsoil moisture was rated 73 percent surplus to adequate, compared to just 5 percent a year ago. Subsoil moisture was rated 85 percent surplus to adequate, compared to just 2 percent last year. There were 5.7 days suitable for fieldwork.

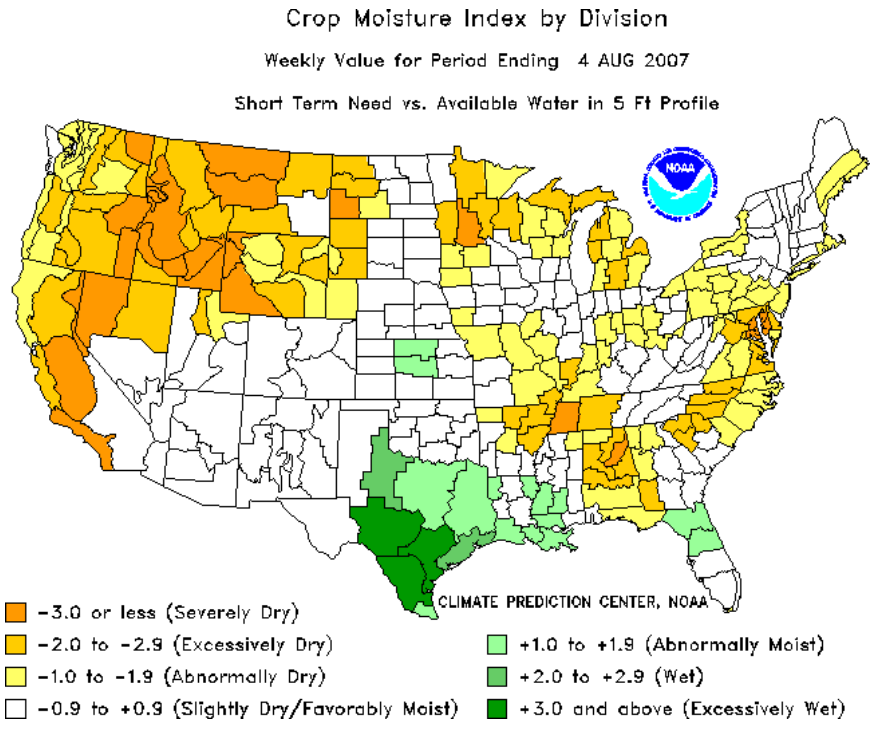
With the exception of possibly a few remaining fields, producers had the majority of wheat harvested by Sunday. Nearly two-thirds of the state's wheat stubble has been plowed. Seedbed preparation for wheat had begun on a limited scale. Rising fuel costs are prompting some producers to consider no-till in their operation for the 2008 wheat crop. Farmers had 93 percent of oats and 94 percent of rye harvested by the end of the week.

Irrigation systems were in full swing across the drier parts of the state. Corn growers had begun harvesting their crop in a few isolated areas. Ninety-eight percent of the corn crop was silking by the end of last week and 80 percent of the state's acreage had reached the doughing stage of development. Sixteen percent of corn was mature, 11 points behind normal. Half of the sorghum acreage was headed. Ninety-five percent of peanuts had reached the pegging stage and 67 percent of the crop was setting pods, both behind normal. Seventy-nine percent of the cotton acreage was squaring, and 27 percent was setting bolls, both behind the five-year average. Soybeans were 95 percent planted by the end of last week and 89 percent had emerged, both behind normal.

Producers continued cutting and baling hay last week. As of Sunday, producers had made the first cutting on 91 percent of other hay acres, 4 points behind normal. Producers had 23 percent of other hay second cuttings completed by the end of the week, 17 points behind the five-year average. The third cuttings of alfalfa were 82 complete, a 23-point jump from last week. Alfalfa and other hay conditions remained mostly in the good to fair range.

Watermelon harvest increased 2 points from the previous week to reach 61 percent, but was 15 points behind the five-year average. Over three-fourths of the state's peaches were harvested by the end of the week.

Livestock conditions diminished but were rated in the excellent to good range. Livestock marketings were average last week. High temperatures and drier weather caused pasture conditions to drop slightly but were still rated mostly in the excellent to good range.



RESERVOIR STORAGE

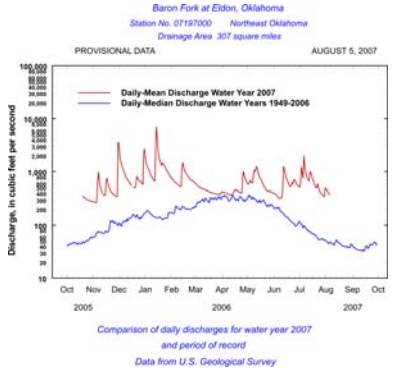
- 0.2 percent decrease in total storage (99.8%) from that recorded on July 11 (100%)
- 31 reservoirs have experienced lake level decreases
- 2 reservoirs are currently operating at less than full capacity (compared to 0 four weeks ago)
- 0 reservoirs are below 80 percent of their total conservation storage

Storage in Selected Oklahoma Lakes & Reservoirs
August 7, 2007

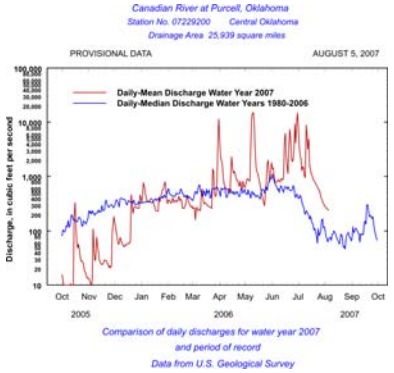
Climate Division *Lake or Reservoir*	*Conservation Storage* (acre-feet)	*Present Storage* (acre-feet)	*Percent of Conservation Storage*
North Central			
Fort Supply	13,900	13,900	100.0
Great Salt Plains	31,420	31,420	100.0
Kaw*	375,160	375,160	100.0
Regional Totals/Averages	**420,480**	**420,480**	**100.0**
Northeast			
Birch	19,225	19,225	100.0
Copan	34,634	34,634	100.0
Fort Gibson	365,200	365,200	100.0
Grand	1,672,000	1,672,000	100.0
Hudson	200,300	200,300	100.0
Hulah	22,565	22,565	100.0
Keystone	564,011	564,011	100.0
Oologah	552,219	552,219	100.0
Skiatook	322,700	322,700	100.0
Regional Totals/Averages	**3,752,854**	**3,752,854**	**100.0**
West Central			
Canton	111,310	111,310	100.0
Foss	165,480	164,077	99.2
Regional Totals/Averages	**276,790**	**275,387**	**99.5**
Central			
Arcadia	27,520	27,520	100.0
Heyburn	7,105	7,105	100.0
Thunderbird	119,600	119,600	100.0
Regional Totals/Averages	**154,225**	**154,225**	**100.0**
East Central			
Eufaula*	2,336,039	2,336,039	100.0
Tenkiller	654,100	654,100	100.0
Regional Totals/Averages	**2,990,139**	**2,990,139**	**100.0**
Southwest			
Fort Cobb	80,010	80,010	100.0
Lugert-Altus	132,830	110,873	83.5
Tom Steed	88,970	88,970	100.0
Regional Totals/Averages	**301,810**	**279,853**	**92.7**
South Central			
Arbuckle	72,400	72,400	100.0
McGee Creek	113,930	113,930	100.0
Texoma*	2,637,002	2,637,002	100.0
Waurika*	190,200	190,200	100.0
Regional Totals/Averages	**3,013,532**	**3,013,532**	**100.0**
Southeast			
Broken Bow*	958,180	958,180	100.0
Hugo*	179,657	179,657	100.0
Pine Creek*	63,862	63,862	100.0
Sardis	274,330	274,330	100.0
Wister	60,162	60,162	100.0
Regional Totals/Averages	**1,536,191**	**1,536,191**	**100.0**
State Totals	**12,446,021**	**12,422,661**	**99.8**

STREAMFLOW CONDITIONS

Baron Fork at Eldon

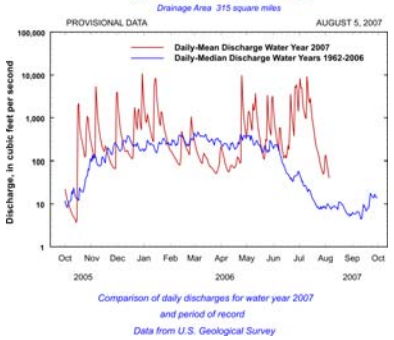


Canadian River at Purcell

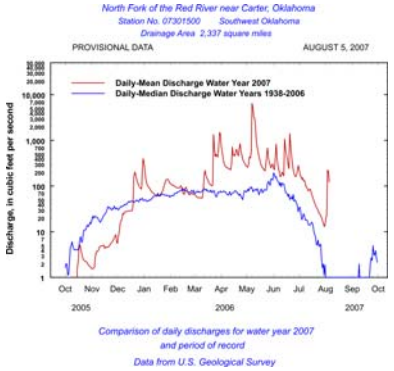


Cimarron River near Waynoka

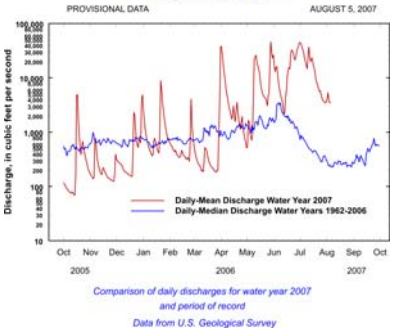
Glover River near Glover



North Fork of the Red River near Carter



Washita River near Dickson



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**.