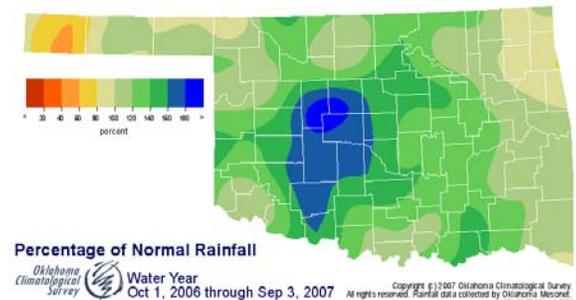
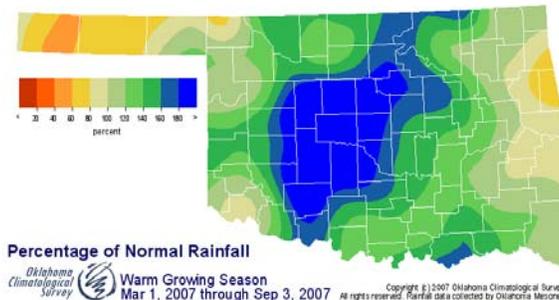


September 5, 2007

## PRECIPITATION

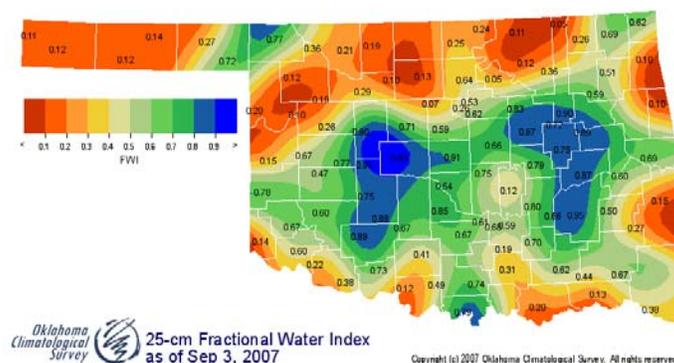
### Preliminary Statewide Precipitation

Climate Division (#)	Warm Growing Season March 1—September 3, 2007				Water Year October 1, 2006—September 3, 2007			
	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	12.83"	-2.17"	86%	34th driest	18.13"	-1.28"	93%	42nd driest
North Central	30.00"	+9.35"	145%	2nd wettest	35.60"	+6.77"	123%	6th wettest
Northeast	31.23"	+6.65"	127%	10th wettest	41.91"	+4.24"	111%	18th wettest
West Central	28.86"	+9.94"	153%	1st wettest	36.66"	+10.30"	139%	1st wettest
Central	40.95"	+18.36"	181%	1st wettest	50.82"	+16.53"	148%	1st wettest
East Central	27.87"	+2.36"	109%	21st wettest	46.76"	+5.13"	112%	14th wettest
Southwest	30.70"	+11.43"	159%	1st wettest	40.68"	+12.93"	147%	1st wettest
South Central	32.78"	+9.72"	142%	4th wettest	47.91"	+10.86"	129%	6th wettest
Southeast	30.32"	+3.54"	113%	23rd wettest	53.65"	+6.83"	115%	16th wettest
<b>Statewide</b>	<b>29.90"</b>	<b>+8.07"</b>	<b>137%</b>	<b>2nd wettest</b>	<b>41.47"</b>	<b>+8.21"</b>	<b>125%</b>	<b>4th wettest</b>



## SOIL MOISTURE

### Fractional Water Index<sup>1</sup> September 3, 2007 25 CM (~10 INCHES)



<sup>1</sup> 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.

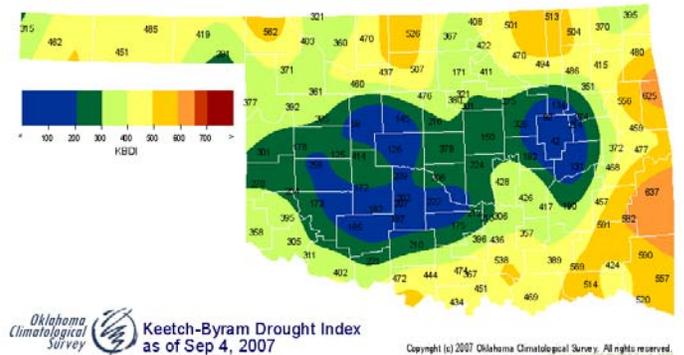
## DROUGHT INDICES

Palmer Drought Severity Index <sup>1</sup>					Standardized Precipitation Index <sup>2</sup> Through August 2007			
CLIMATE DIVISION (#)	CURRENT STATUS 9/1/2007	VALUE		CHANGE IN VALUE	3-MONTH	6-MONTH	9-MONTH	12-MONTH
		9/1	8/4					
Northwest (1)	MOIST SPELL	1.39	3.38	-1.99	NEAR NORMAL	NEAR NORMAL	VERY WET	MODERATELY WET
North Central (2)	VERY MOIST SPELL	3.39	4.21	-0.82	MODERATELY WET	EXTREMELY WET	EXTREMELY WET	MODERATELY WET
Northeast (3)	MOIST SPELL	1.11	1.81	-0.70	VERY WET	VERY WET	VERY WET	MODERATELY WET
West Central (4)	EXTREME MOIST SPELL	4.92	4.54	0.38	EXTREMELY WET	EXCEPTIONALLY WET	EXCEPTIONALLY WET	EXTREMELY WET
Central (5)	EXTREME MOIST SPELL	5.54	4.62	0.92	EXTREMELY WET	EXCEPTIONALLY WET	EXTREMELY WET	EXTREMELY WET
East Central (6)	MOIST SPELL	1.99	1.46	0.53	EXTREMELY WET	VERY WET	VERY WET	VERY WET
Southwest (7)	EXTREME MOIST SPELL	5.73	4.96	0.77	VERY WET	EXTREMELY WET	VERY WET	VERY WET
South Central (8)	VERY MOIST SPELL	3.80	4.03	-0.23	MODERATELY WET	VERY WET	VERY WET	VERY WET
Southeast (9)	MOIST SPELL	1.36	2.19	-0.83	MODERATELY WET	NEAR NORMAL	MODERATELY WET	VERY WET

- No climate divisions are currently experiencing drought conditions, according to the PDSI.
- Five climate divisions have undergone PDSI moisture decreases since August 4.

### Keetch-Byram Drought Fire Index<sup>3</sup>

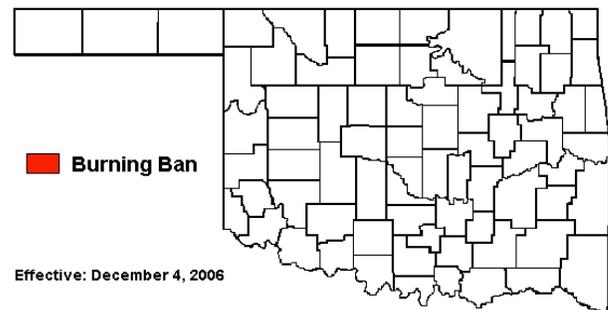
MESONET STATION	COUNTY	CLIMATE DIVISION	CURRENT VALUE 9/4/2007
Wister	LeFlore	Southeast	649
Westville	Adair	East Central	639
Mt Herman	McCurtain	Southeast	599



- Stations currently above 600 (September 4) = 2
- Stations above 600 on August 6 = 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.



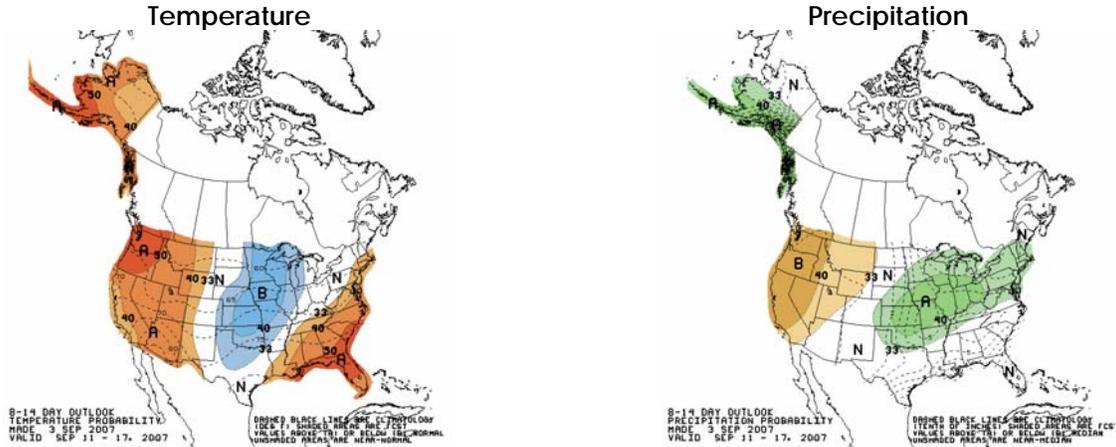
<sup>1</sup> The Palmer Drought Severity Index, the first comprehensive drought index developed in the United States, is calculated based on precipitation, temperature, and soil moisture. Though widely used by government agencies and states to trigger drought relief programs, the PDSI may underestimate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

<sup>2</sup> 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.

<sup>3</sup> 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  
September 11-17, 2007

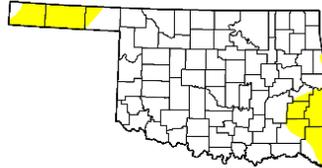


## U.S. Drought Monitor

September 4, 2007  
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	87.5	12.5	0.0	0.0	0.0	0.0
Last Week (08/28/2007 map)	87.0	13.0	0.0	0.0	0.0	0.0
3 Months Ago (06/12/2007 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 (09/05/2006 map)	1.1	98.9	96.2	48.9	22.6	0.0



**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>

USDA National Drought Watch Center  
 Released Thursday, September 6, 2007  
 Author: Thomas Heddinghaus, CPC/NOAA

## Drought Summary & Outlook:

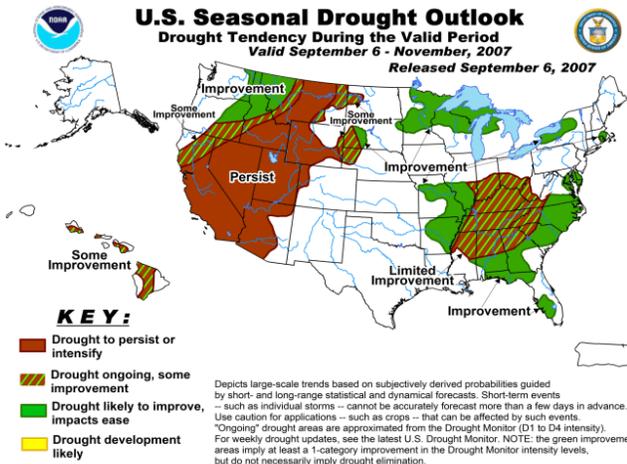
September 4—Mainly dry weather in the Ohio Valley allowed drought to creep northward in southern portions of Illinois, Indiana, and Ohio. A lingering cold front helped to focus widespread shower activity across the southeastern drought region, resulting in improvement over many areas. Temperatures also turned more seasonable following the previous week's record heat, although weekly average temperatures remained at least 4 degrees F above normal in Tennessee and Kentucky, where rainfall was spotty and improvement was minimal. Amounts of 1 to 2 inches, with locally over 3 inches, spread from Mississippi into Alabama and Georgia, resulting in shrinkage of D3 and D4 drought. Weekly average streamflows, responding to recent downpours, neared median levels at many locations in northern and western Alabama. In Mississippi, topsoil moisture ratings improved from 76 percent short or worse to 59 percent short in the past week.

According to the latest Drought Outlook, forecasts from 5 days to 3 months call for near- or above-normal precipitation in much of the middle Mississippi Valley, areas near the Gulf and Atlantic Coasts, and the Great Lakes region. Limited improvement is also likely across the lower Ohio Valley and interior South. To the south and east, in a large area stretching from interior Montana southward and westward through the central and southern Rockies, Great Basin, most of California, and the desert Southwest, most forecasts on all time scales call for enhanced chances for below-normal precipitation as the monsoon season winds down.

## U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period  
Valid September 6 - November, 2007

Released September 6, 2007



## CROP REPORT

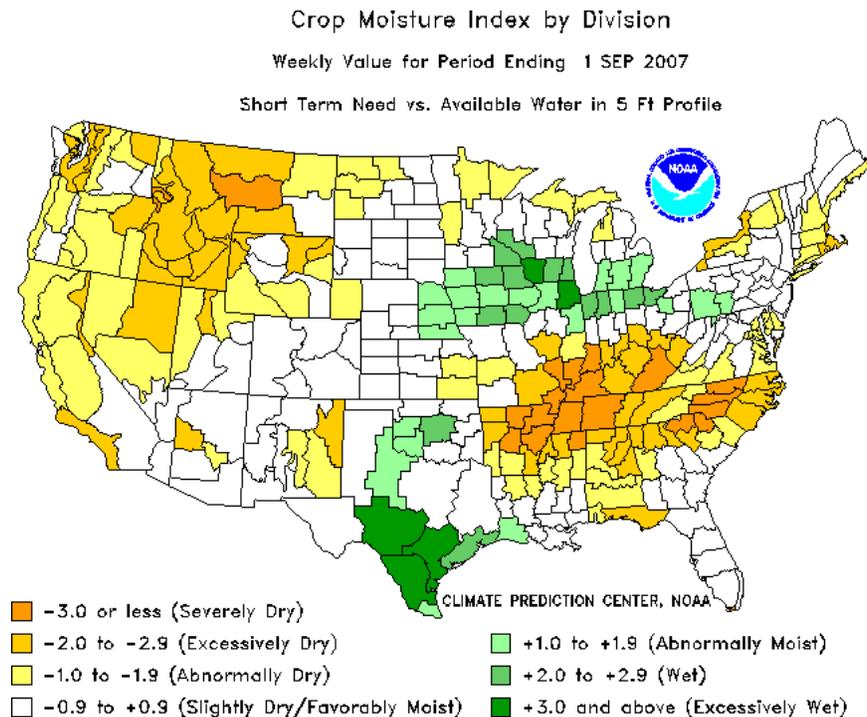
September 4—Weather conditions were very nice last week with very little precipitation and average temperatures in the mid- to high- 70's. Both topsoil and subsoil moisture levels dropped slightly this past week but were still much better than this time last year. Reduced soil moisture levels in some areas had farmers concerned as they continued making preparations for fall plantings. There were 6.1 days suitable for fieldwork.

Producers in areas affected by Hurricane Erin spent part of last week repairing flood damaged fields. As of Sunday, 55 percent of wheat seedbed preparation was complete, 7 points behind the five-year average. Wheat had been planted in a few isolated areas. Rye and oat seedbed preparation was 49 and 44 percent complete, respectively, both behind normal. Producers in many areas were hoping for additional moisture before planting small grains.

Producers in some areas were turning off irrigation systems to crops that have reached maturity. Eighty-one percent of soybeans were blooming and 62 percent were setting pods, both well behind normal. Soybean harvest has begun on a limited scale. Nearly the entire corn crop was in the doughing stage and 59 percent of the state's acreage had reached maturity. Producers made good progress harvesting corn this past week with 28 percent of the crop harvested by week's end, a jump of 16 points from the previous week. Grain sorghum was 91 percent headed and 35 percent of the crop had reached maturity. Ninety-six percent of cotton was setting bolls, slightly behind normal. Nearly half of peanuts were mature, with the majority of the crop condition rated as good to fair.

Clear skies and mild temperatures allowed producers to cut and bale hay the entire week in most areas. Growers had 59 percent of other hay second cuttings completed by the end of the week, 10 points behind the five-year average. Eighty percent of the fourth cutting of alfalfa was complete and producers had completed 22 percent of the fifth cutting. Alfalfa and other hay conditions remained mostly in the good to fair range. Watermelon harvest increased 2 points from the previous week to reach 93 percent, but was running 4 points behind normal. Producers had the majority of the state's peach acreage harvested by the end of the week.

Livestock conditions were still rated mostly in the excellent to good range. Livestock marketings remained average last week. Pasture and range conditions were rated mostly in the good to fair range.



## RESERVOIR STORAGE

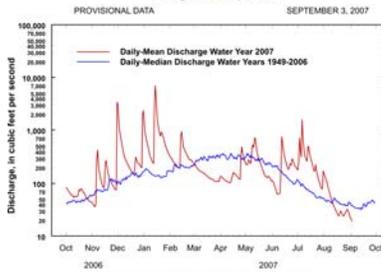
- 1.7 percent decrease in total storage (98.1%) from that recorded on August 7 (99.8%)
- 28 reservoirs have experienced lake level decreases
- 5 reservoirs are currently operating at less than full capacity (compared to 2 four weeks ago)
- 1 reservoir—Lugert-Altus—is below 80 percent of total conservation storage

Storage in Selected Oklahoma Lakes & Reservoirs			
September 4, 2007			
<i>Climate Division</i> <i>Lake or Reservoir</i>	<i>Conservation</i> <i>Storage</i> <i>(acre-feet)</i>	<i>Present</i> <i>Storage</i> <i>(acre-feet)</i>	<i>Percent of</i> <i>Conservation Storage</i>
<b>North Central</b>			
Fort Supply	13,900	13,900	100.0
Great Salt Plains	31,420	31,420	100.0
Kaw*	375,160	375,160	100.0
<b>Regional Totals/Averages</b>	<b>420,480</b>	<b>420,480</b>	<b>100.0</b>
<b>Northeast</b>			
Birch	19,225	18,870	98.2
Copan	34,634	34,634	100.0
Fort Gibson	365,200	365,200	100.0
Grand	1,672,000	1,541,399	92.2
Hudson	200,300	200,300	100.0
Hulah	22,565	22,565	100.0
Keystone	510,059	510,059	100.0
Oologah	552,219	552,219	100.0
Skiatook	322,700	322,700	100.0
<b>Regional Totals/Averages</b>	<b>3,698,902</b>	<b>3,567,946</b>	<b>96.5</b>
<b>West Central</b>			
Canton	111,310	111,310	100.0
Foss	165,480	163,476	98.8
<b>Regional Totals/Averages</b>	<b>276,790</b>	<b>274,786</b>	<b>99.3</b>
<b>Central</b>			
Arcadia	27,520	27,520	100.0
Heyburn	7,105	7,105	100.0
Thunderbird	119,600	119,600	100.0
<b>Regional Totals/Averages</b>	<b>154,225</b>	<b>154,225</b>	<b>100.0</b>
<b>East Central</b>			
Eufaula*	2,314,583	2,314,583	100.0
Tenkiller	654,100	654,100	100.0
<b>Regional Totals/Averages</b>	<b>2,968,683</b>	<b>2,968,683</b>	<b>100.0</b>
<b>Southwest</b>			
Fort Cobb	80,010	80,010	100.0
Lugert-Altus	132,830	82,251	61.9
Tom Steed	88,970	88,970	100.0
<b>Regional Totals/Averages</b>	<b>301,810</b>	<b>251,231</b>	<b>83.2</b>
<b>South Central</b>			
Arbuckle	72,400	72,400	100.0
McGee Creek	113,930	113,930	100.0
Texoma*	2,548,034	2,548,034	100.0
Waurika*	190,200	190,200	100.0
<b>Regional Totals/Averages</b>	<b>2,924,564</b>	<b>2,924,564</b>	<b>100.0</b>
<b>Southeast</b>			
Broken Bow*	958,180	883,539	92.2
Hugo*	158,617	179,657	113.3
Pine Creek*	61,570	63,862	103.7
Sardis	274,330	274,330	100.0
Wister	60,162	60,162	100.0
<b>Regional Totals/Averages</b>	<b>1,512,859</b>	<b>1,461,550</b>	<b>96.6</b>
<b>State Totals</b>	<b>12,258,313</b>	<b>12,023,465</b>	<b>98.1</b>

# STREAMFLOW CONDITIONS

## Baron Fork at Eldon

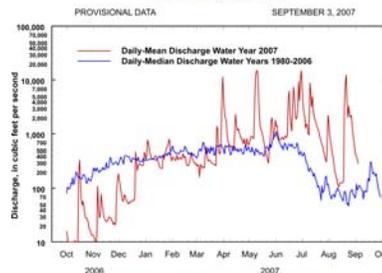
Baron Fork at Eldon, Oklahoma  
 Station No. 07197000 Northwest Oklahoma  
 Drainage Area 307 square miles



Comparison of daily discharges for water year 2007 and period of record  
 Data from U.S. Geological Survey

## Canadian River at Purcell

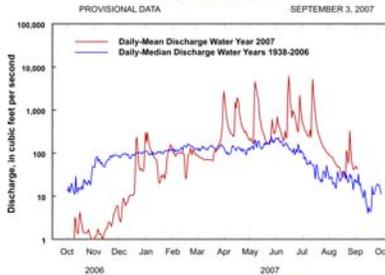
Canadian River at Purcell, Oklahoma  
 Station No. 07229200 Central Oklahoma  
 Drainage Area 25,939 square miles



Comparison of daily discharges for water year 2007 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 year 2007 and period of record  
 Data from U.S. Geological Survey

## Glover River near Glover

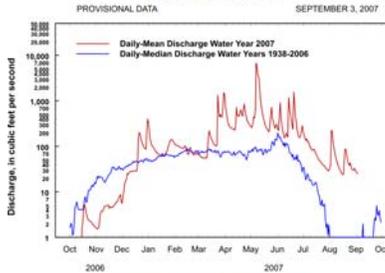
Glover River near Glover, Oklahoma  
 Station No. 07337900 Southeast Oklahoma  
 Drainage Area 315 square miles



Comparison of daily discharges for water year 2007 and period of record  
 Data from U.S. Geological Survey

## North Fork of the Red River near Carter

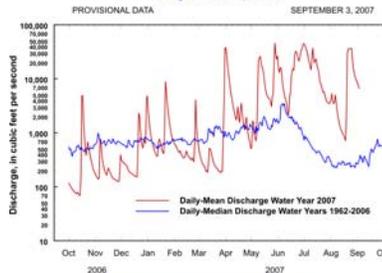
North Fork of the Red River near Carter, Oklahoma  
 Station No. 07301500 Southwest Oklahoma  
 Drainage Area 2,337 square miles



Comparison of daily discharges for water year 2007 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 year 2007 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.state.ok.us](http://www.owrb.state.ok.us) and <http://www.mesonet.ou.edu/public>.