Oklahoma Water Resources Bulletin
& Summary of Current Conditions

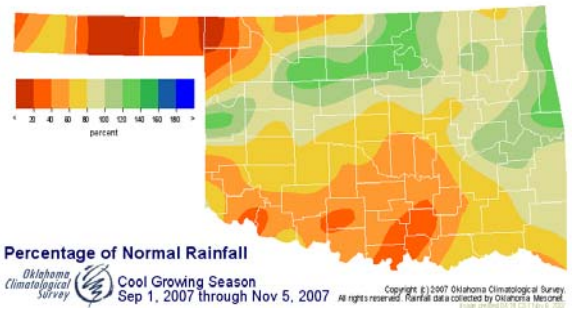
State of Oklahoma OWRB Water Resources Board the water agency

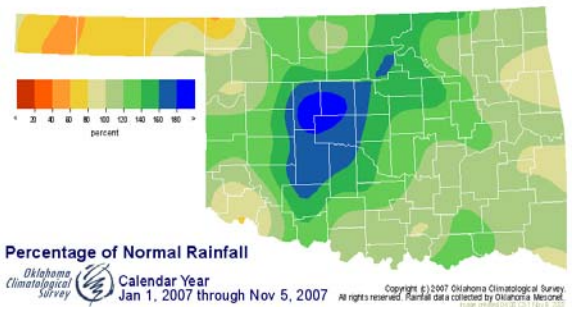
November 7, 2007

PRECIPITATION

Preliminary Statewide Precipitation

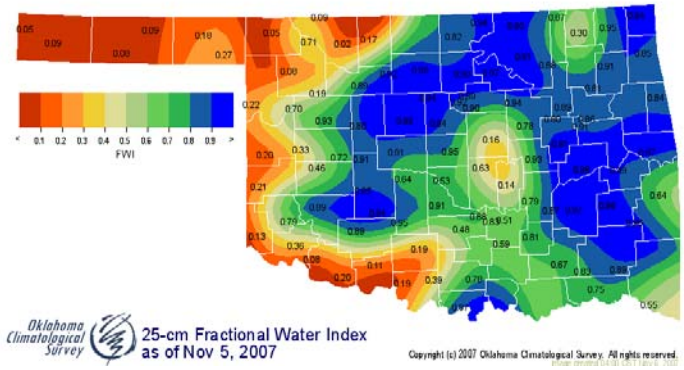
Climate Division (#)	Cool Growing Season September 1—November 5, 2007				Calendar Year January 1— November 5, 2007			
	Total Rainfall (inches)	Departure From Normal (inches)	Percent Of Normal	Rank Since 1921	Total Rainfall (inches)	Departure From Normal (inches)	Percent Of Normal	Rank Since 1921
Panhandle	1.13"	-2.43"	32%	6th driest	14.94"	-4.59"	76%	16th driest
North Central	6.03"	-0.11"	98%	35th wettest	37.57"	+8.95"	131%	4th wettest
Northeast	9.12"	+0.10"	101%	34th wettest	43.67"	+6.99"	119%	12th wettest
West Central	4.93"	-0.94"	84%	42nd driest	35.19"	+8.69"	133%	5th wettest
Central	6.00"	-2.24"	73%	33rd driest	49.60"	+15.96"	147%	1st wettest
East Central	9.43"	-0.52"	95%	39th wettest	42.74"	+3.21"	108%	23rd wettest
Southwest	4.19"	-2.47"	63%	25th driest	36.87"	+8.89"	132%	5th wettest
South Central	3.99"	-5.12"	44%	13th driest	40.27"	+4.42"	112%	15th wettest
Southeast	8.27"	-2.10"	80%	37th driest	44.99"	+2.34"	105%	27th wettest
Statewide	5.87"	-1.79"	77%	31st driest	38.73"	+6.41"	120%	7th wettest





SOIL MOISTURE

Fractional Water Index[1]
November 5, 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 October 2007

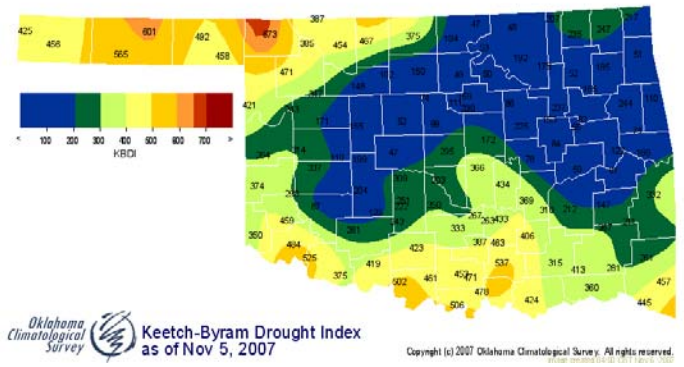
Climate Division (#)	Current Status 11/3/2007	Value 11/3	Value 9/29	Change In Value	3-Month	6-Month	9-Month	12-Month
Northwest (1)	NEAR NORMAL	0.31	1.80	**-1.49**	MODERATELY DRY	MODERATELY DRY	NEAR NORMAL	NEAR NORMAL
North Central (2)	VERY MOIST SPELL	3.86	3.73	**0.13**	NEAR NORMAL	VERY WET	EXTREMELY WET	EXTREMELY WET
Northeast (3)	UNUSUAL MOIST SPELL	2.41	1.95	**0.46**	NEAR NORMAL	VERY WET	VERY WET	VERY WET
West Central (4)	EXTREME MOIST SPELL	4.62	5.45	**-0.83**	NEAR NORMAL	EXTREMELY WET	EXTREMELY WET	EXTREMELY WET
Central (5)	EXTREME MOIST SPELL	4.93	5.52	**-0.59**	MODERATELY WET	EXCEPTIONALLY WET	EXTREMELY WET	EXTREMELY WET
East Central (6)	UNUSUAL MOIST SPELL	2.56	2.72	**-0.16**	VERY WET	VERY WET	MODERATELY WET	VERY WET
Southwest (7)	EXTREME MOIST SPELL	4.66	5.63	**-0.97**	NEAR NORMAL	VERY WET	VERY WET	VERY WET
South Central (8)	UNUSUAL MOIST SPELL	2.43	3.33	**-0.90**	MODERATELY DRY	VERY WET	MODERATELY WET	VERY WET
Southeast (9)	UNUSUAL MOIST SPELL	2.50	2.51	**-0.01**	NEAR NORMAL	VERY WET	NEAR NORMAL	VERY WET

- No climate divisions are currently experiencing drought conditions, according to the PDSI.
- Seven climate divisions have undergone PDSI moisture decreases since September 29.

Keetch-Byram Drought Fire Index[3]

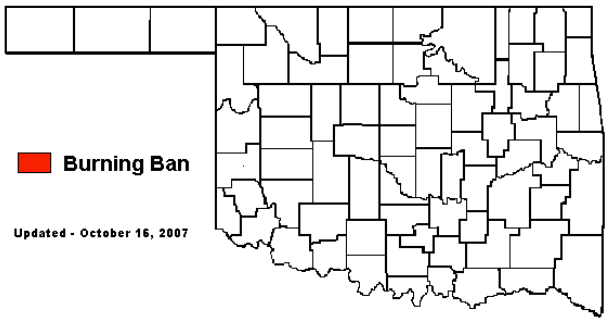
Mesonet Station	County	Climate Division	Current Value 11/5/2007
Buffalo	Harper	Northwest	701
Hooker	Texas	Northwest	645
Goodwell	Texas	Northwest	615

- Stations currently above 600 (November 5) = 3
- Stations above 600 on October 1 = 2



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.

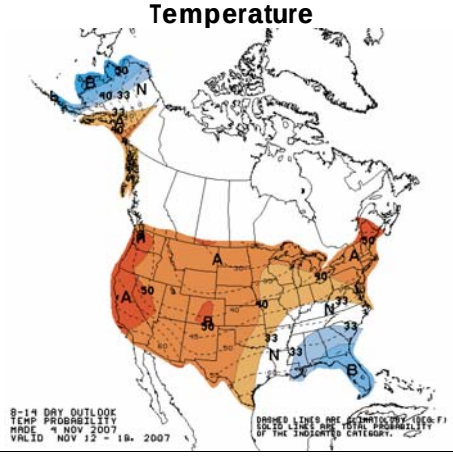
[2] The Standardized Precipitation Index, more sensitive than the PDSI, provides a comparison of precipitation over a specified period with precipitation totals from that same period for all years included in the historical record. The 3-month SPI provides a seasonal estimation of precipitation while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

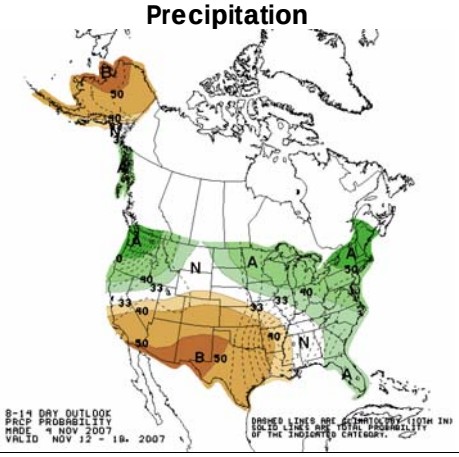
WEATHER/DROUGHT FORECAST

8- to 14-Day Outlook
November 12-18, 2007

Temperature



Precipitation

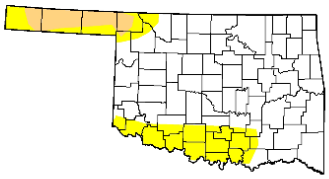


U.S. Drought Monitor
Oklahoma

November 6, 2007
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	76.7	23.3	6.0	0.0	0.0	0.0
Last Week (10/30/2007 map)	88.8	11.2	0.0	0.0	0.0	0.0
3 Months Ago (08/14/2007 map)	97.8	2.2	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 (10/02/2007 map)	95.6	4.4	0.0	0.0	0.0	0.0
One Year Ago (11/07/2006 map)	10.5	89.5	68.6	38.1	8.8	0.0



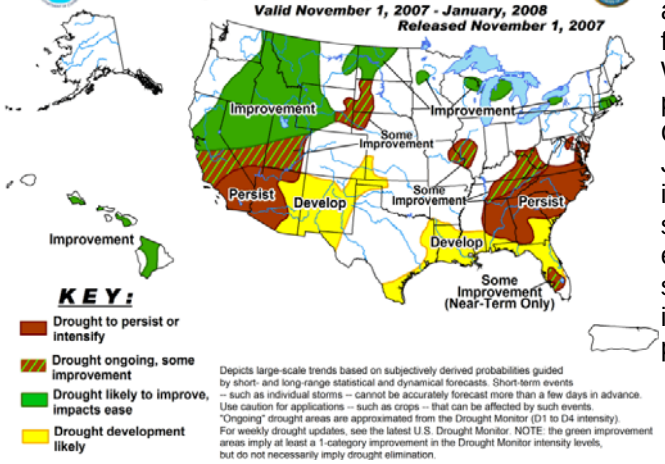
Intensity:
- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

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

http://drought.unl.edu/dm

Released Thursday, November 8, 2007
Author: Douglas Le Comte, CPC/NOAA

U.S. Seasonal Drought Outlook
Drought Tendency During the Valid Period
Valid November 1, 2007 - January, 2008
Released November 1, 2007



KEY:
- Drought to persist or intensify
- Drought ongoing, some improvement
- Drought likely to improve, impacts ease
- Drought development likely

Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more than a few days in advance. Use caution for applications -- such as crops -- that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity). For weekly drought updates, see the latest U.S. Drought Monitor. NOTE: the green improvement areas imply at least a 1-category improvement in the Drought Monitor intensity levels, but do not necessarily imply drought elimination.

Drought Summary & Outlook:
November 6—Short-term dry weather has resulted in development of D1 (moderate drought) in the Oklahoma Panhandle and development of D0 (abnormally dry conditions) in southern Oklahoma and the Lower Plains of Texas. D0 also expanded southwestward from northern Louisiana into central Texas. Farmers in parts of Texas need rain to improve grain and pasture conditions, and the dry weather has raised wildfire concerns. Below normal rainfall is anticipated for the southwest and southern Plains during the next two weeks.

According to the latest Drought Outlook, La Niña conditions are expected to persist and intensify through January. The forecast calls for drought persistence or development along most of the Gulf Coast and the southern half of the Atlantic Coast, save southern Florida. Some improvement is anticipated farther inland across the upper South, and improvement is expected for the Great Lakes region and the Northeast. To the West, the northern Plains and the northern and central portions of the Rockies, Intermountain West, and West Coast all should see some improvement by the end of January. In Contrast, drought persistence or intensification is likely in the Southwest and adjacent southern Rockies while drought should expand eastward through much of the southern Rockies and southern High Plains by the end of January. Limited improvement is anticipated between the areas of persistence and improvement in the West.

CROP REPORT

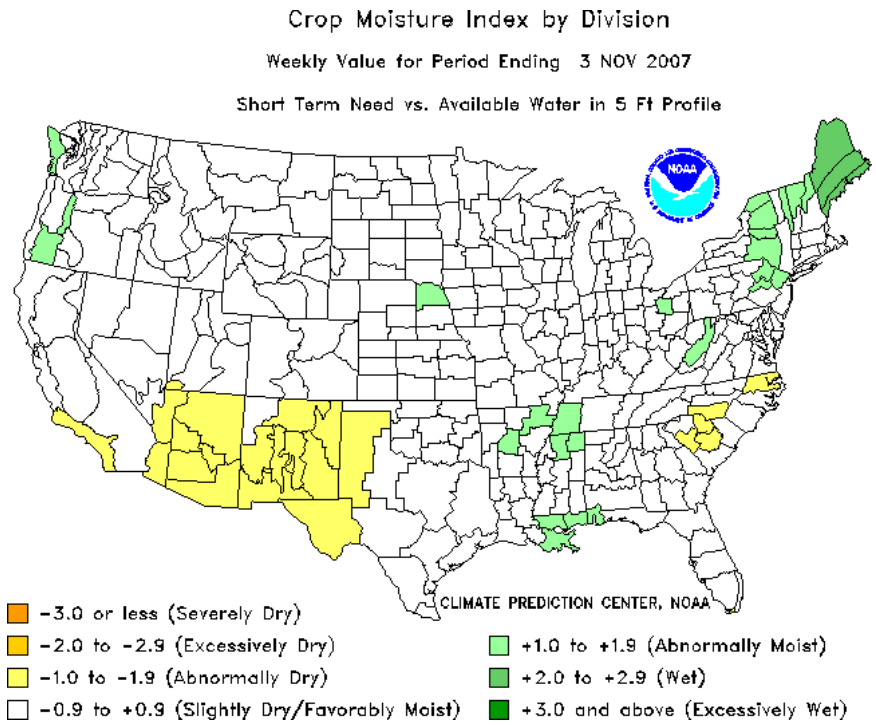
November 5—Temperatures this past week were unusually warm for late October and early November. While temperatures were pleasant across most of the state, precipitation was nonexistent with no measurable rainfall last week. The Panhandle remained the hardest hit from dry conditions. There were 6.4 days suitable for fieldwork.

Lack of rainfall has stalled small grain development in many areas. Early-planted wheat began turning a yellowish color from low soil moisture levels in some areas. Wheat seeding increased 5 points from the previous week to reach 89 percent complete, but was 6 percentage points behind normal. Just over two-thirds of the state's wheat acreage had emerged, 18 percentage points behind the five-year average. Rye planted was 95 percent complete, a 2 point increase from the previous week. Eighty-eight percent of the state's rye had emerged. Oat seedbed preparation was 87 percent complete with 69 percent of the crop planted by week's end.

Three fourths of soybeans were mature with 44 percent harvested by week's end. Ninety-five percent of grain sorghum had reached maturity with 70 percent of the harvest completed, both ahead of normal. Ninety-one percent of peanuts were dug, an increase of 17 points from last week. As of Sunday, 77 percent of the crop was combined, 11 points ahead of the five-year average. Forty percent of cotton was harvested by week's end, an increase of 16 points from the previous week.

Producers continued baling hay in a few locations. Growers had 91 percent of other hay second cuttings complete, two points behind normal. Eighty-three percent of the fifth cutting of alfalfa and 43 percent of the sixth cutting were completed. Alfalfa and other hay conditions remained mostly in the good to fair range.

Producers had begun supplemental feeding in some isolated locations. Limited precipitation and cooler temperatures had pastures turning brown in parts of the state. Livestock conditions were rated mostly in the good to fair range. Pasture and range conditions also remained mostly in the good to fair range.



RESERVOIR STORAGE

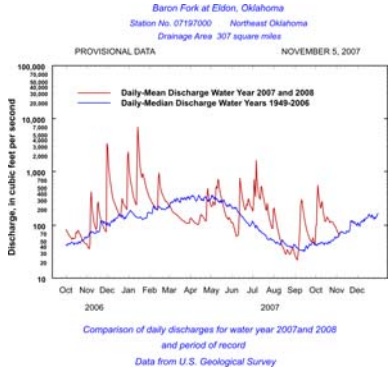
- 0.8 percent decrease in total storage (97.0%) from that recorded on October 3 (97.8%)
- 20 reservoirs have experienced lake level decreases
- 10 reservoirs are currently operating at less than full capacity (compared to 5 five weeks ago)
- 1 reservoir—Lugert-Altus—is below 80 percent of total conservation storage

Storage in Selected Oklahoma Lakes & Reservoirs
November 6, 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*	393,988	393,988	100.0
Regional Totals/Averages	**439,308**	**439,308**	**100.0**
Northeast			
Birch	19,225	19,191	99.8
Copan	34,634	34,634	100.0
Fort Gibson	365,200	365,200	100.0
Grand	1,672,000	1,539,199	92.1
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	317,253	98.3
Regional Totals/Averages	**3,698,902**	**3,560,620**	**96.3**
West Central			
Canton	111,310	111,310	100.0
Foss	165,480	161,873	97.8
Regional Totals/Averages	**276,790**	**273,183**	**98.7**
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*	2,314,583	2,314,583	100.0
Tenkiller	654,100	654,100	100.0
Regional Totals/Averages	**2,968,683**	**2,968,683**	**100.0**
Southwest			
Fort Cobb	80,010	80,010	100.0
Lugert-Altus	132,830	86,625	65.2
Tom Steed	88,970	87,465	98.3
Regional Totals/Averages	**301,810**	**254,100**	**84.2**
South Central			
Arbuckle	72,400	72,400	100.0
McGee Creek	113,930	112,839	99.0
Texoma*	2,701,706	2,564,951	94.9
Waurika*	190,200	190,200	100.0
Regional Totals/Averages	**3,078,236**	**2,940,390**	**95.5**
Southeast			
Broken Bow*	918,070	872,813	95.1
Hugo*	158,617	158,617	100.0
Pine Creek*	53,750	53,750	100.0
Sardis	274,330	273,928	99.9
Wister	60,162	60,162	100.0
Regional Totals/Averages	**1,464,929**	**1,419,270**	**96.9**
State Totals	**12,382,883**	**12,009,779**	**97.0**

STREAMFLOW CONDITIONS

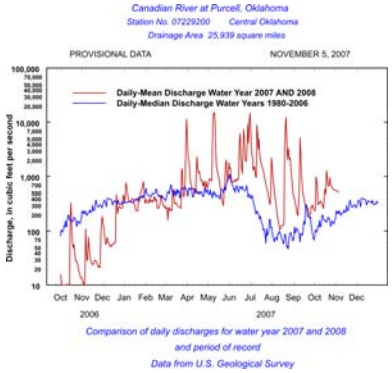
Baron Fork at Eldon



Comparison of daily discharges for water year 2007and 2008 and period of record

Data from U.S. Geological Survey

Canadian River at Purcell



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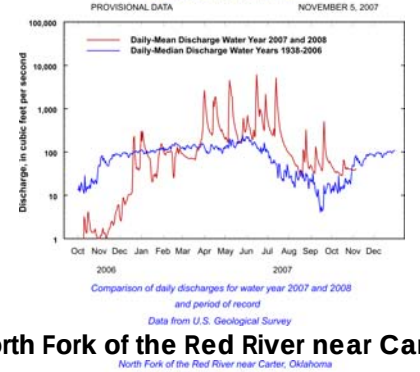
Cimarron River near Waynoka



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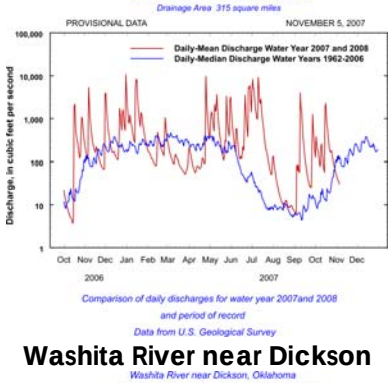
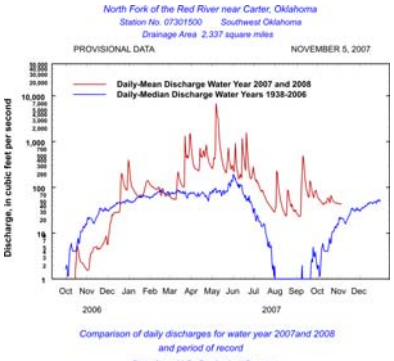
Glover River near Glover



Comparison of daily discharges for water year 2007and 2008 and period of record

Data from U.S. Geological Survey

North Fork of the Red River near Carter



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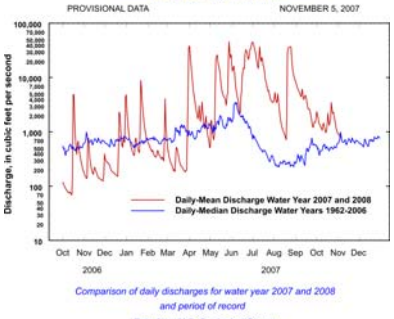
Washita River near Dickson



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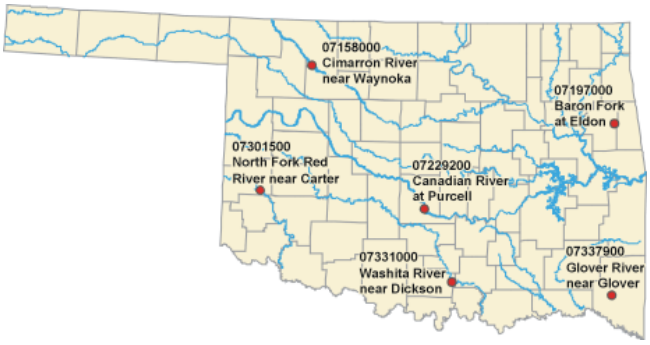

Water Bulletin information/data courtesy of National Weather Service, Climate Prediction Center, Oklahoma Climatological Survey, State Department of Agriculture, Food, and Forestry, Agricultural Statistics Service, U.S. Army Corps of Engineers, U.S. Department of Agriculture/Forest Service, U.S. Geological 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**.