Oklahoma Water Resources Bulletin
& Summary of Current Conditions

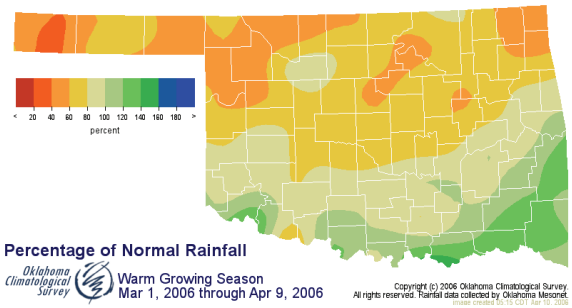
State of Oklahoma OWRB Water Resources Board the water agency

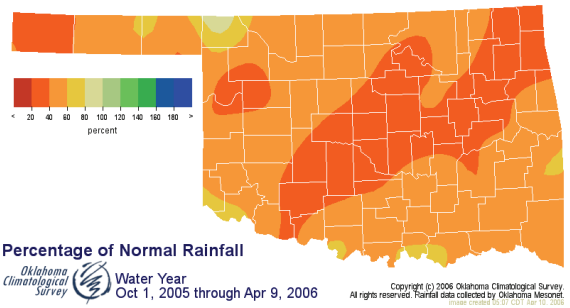
April 12, 2006

PRECIPITATION

Preliminary Statewide Precipitation

Climate Division (#)	Warm Growing Season March 1—April 9, 2006 Total Rainfall (inches)	Departure From Normal (inches)	Percent Of Normal	Rank Since 1921	Water Year October 1, 2005—April 9, 2006 Total Rainfall (inches)	Departure From Normal (inches)	Percent Of Normal	Rank Since 1921
Panhandle	1.14"	-1.05"	52%	39th driest	3.27"	-3.32"	50%	16th driest
North Central	2.24"	-1.33"	63%	39th driest	5.66"	-6.10"	48%	13th driest
Northeast	3.08"	-1.79"	63%	31st driest	6.96"	-10.99"	39%	2nd driest
West Central	2.29"	-0.89"	72%	42nd wettest	4.62"	-6.01"	43%	6th driest
Central	2.81"	-1.49"	65%	37th driest	5.61"	-10.40"	35%	2nd driest
East Central	4.55"	-0.84"	84%	34th wettest	8.70"	-12.80"	40%	3rd driest
Southwest	2.71"	-0.35"	89%	30th wettest	5.15"	-6.39"	45%	6th driest
South Central	4.66"	-0.02"	100%	24th wettest	9.51"	-9.15"	51%	7th driest
Southeast	6.81"	+0.98"	117%	18th wettest	13.84"	-12.03"	53%	6th driest
Statewide	3.30"	-0.82"	80%	39th wettest	6.93"	-8.62"	45%	3rd driest

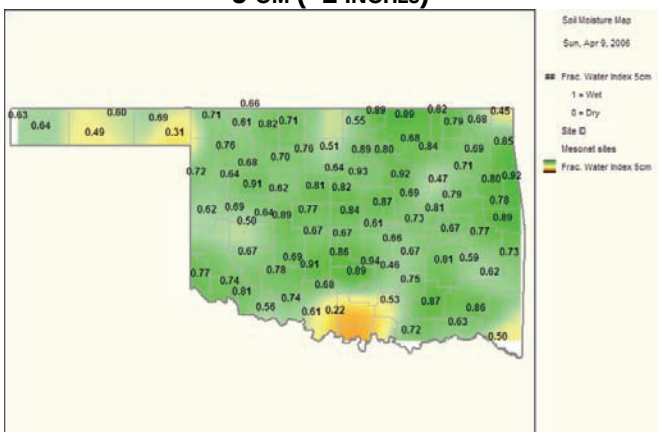




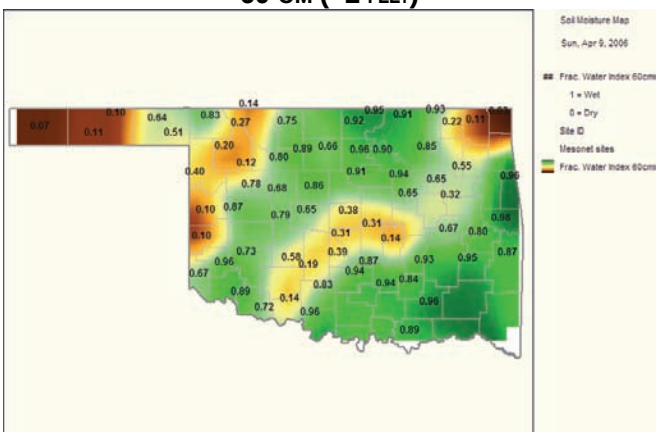
SOIL MOISTURE

Fractional Water Index[1]
April 9, 2006

5 CM (~2 INCHES)



60 CM (~2 FEET)



[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 March 2006

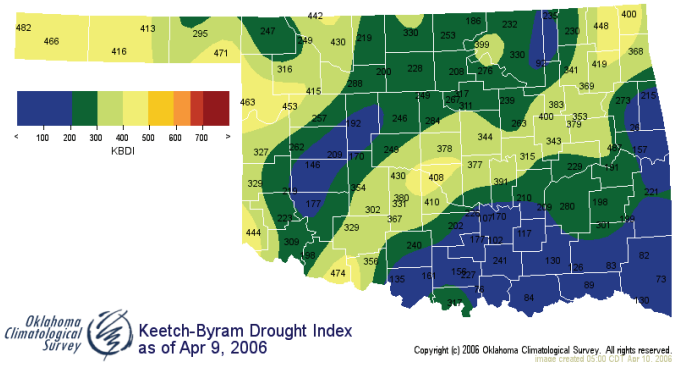
Climate Division (#)	Current Status 4/8/2006	Value 4/8	Value 3/25	Change In Value	3-Month	6-Month	9-Month	12-Month
Northwest (1)	MILD DROUGHT	-1.38	-0.53	**-0.85**	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL
North Central (2)	MILD DROUGHT	-1.80	-0.94	**-0.86**	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL
Northeast (3)	SEVERE DROUGHT	-3.67	-3.33	**-0.34**	MODERATELY DRY	EXTREMELY DRY	VERY DRY	VERY DRY
West Central (4)	MILD DROUGHT	-1.05	-0.39	**-0.66**	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL
Central (5)	MODERATE DROUGHT	-2.69	-2.02	**-0.67**	MODERATELY DRY	VERY DRY	NEAR NORMAL	MODERATELY DRY
East Central (6)	SEVERE DROUGHT	-3.77	-3.34	**-0.43**	NEAR NORMAL	EXTREMELY DRY	EXTREMELY DRY	EXTREMELY DRY
Southwest (7)	MODERATE DROUGHT	-2.10	-1.39	**-0.71**	NEAR NORMAL	VERY DRY	NEAR NORMAL	MODERATELY DRY
South Central (8)	MILD DROUGHT	-1.82	-1.03	**-0.79**	NEAR NORMAL	MODERATELY DRY	NEAR NORMAL	MODERATELY DRY
Southeast (9)	MODERATE DROUGHT	-2.73	-1.92	**-0.81**	NEAR NORMAL	VERY DRY	VERY DRY	EXTREMELY DRY

- Nine climate divisions are currently experiencing drought conditions.
- All of Oklahoma's nine climate divisions have undergone PDSI moisture decreases since March 25.

Keetch-Byram Drought Fire Index[3]

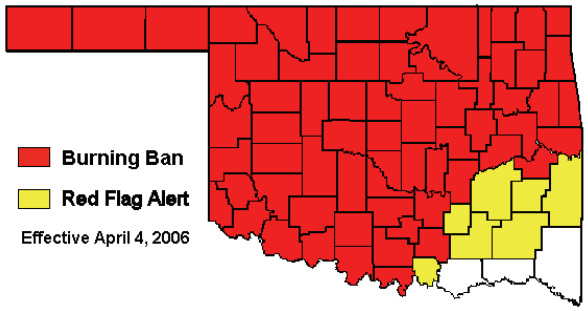
Mesonet Station	County	Climate Division	Current Value 4/10/2006
Webbers Falls	Muskogee	East Central	487
Kenton	Cimarron	Northwest	482
Grandfield	Tillman	Southwest	474

- Stations currently above 600 (April 10) = 0
- Stations above 600 on March 27 = 0



Statewide Wildfire Preparedness

Statewide Wildfire Preparedness remains at Level 3 (high fire danger). As of April 4, Gov. Henry's Burning Ban has been amended to include 67 counties. Pittsburg, Latimer, Leflore, Pushmataha, Atoka, Coal, and Marshall Counties remain in a Red Flag Fire Alert while Bryan, Choctaw, and McCurtain Counties have been removed from alert status. Extended dry conditions and high winds have increased the fire danger. Dry vegetation will ignite easily and burn with surprising intensity.



[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.

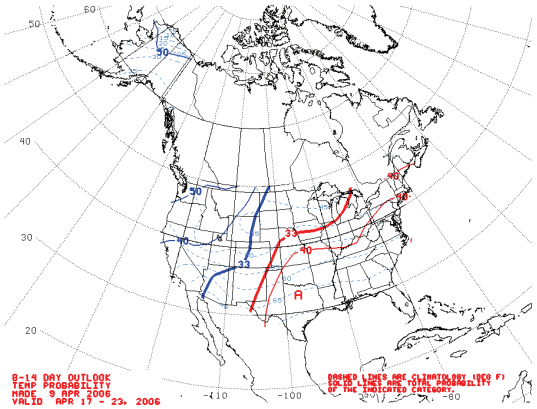
[2] The Standardized Precipitation Index, more sensitive than the PDSI, provides a comparison of precipitation over a specified period with precipitation totals from that same period for all years included in the historical record. The 3-month SPI provides a seasonal estimation of precipitation while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

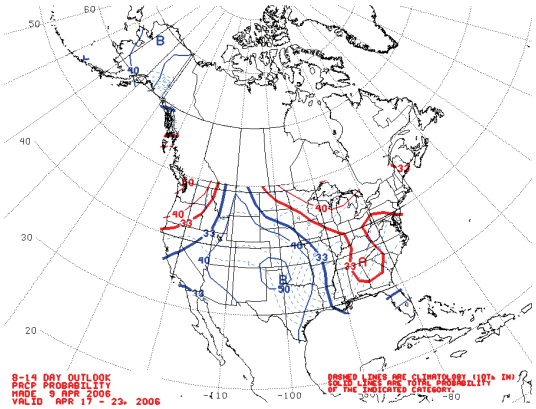
WEATHER/DROUGHT FORECAST

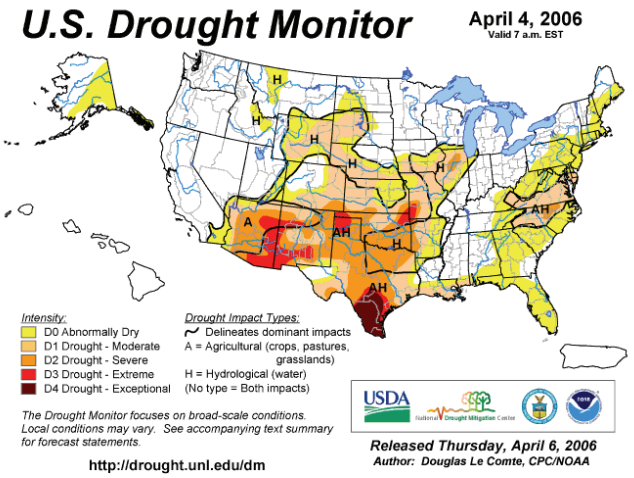
8 to 14-Day Forecast
April 17-23, 2006

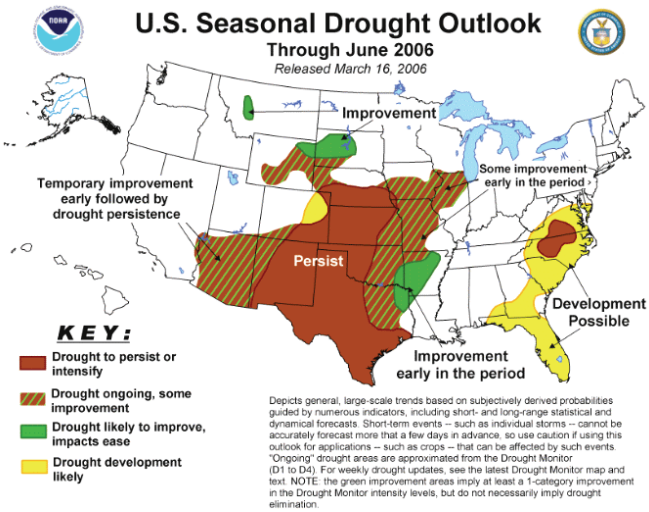
Temperature



Precipitation







National Drought Summary—The Plains:
Two storm systems crossed the region, bringing severe weather to many states, including a major tornado outbreak on Sunday, April 2. The heavy rains that fell on March 28 resulted in some reduction of the D3 drought in southern Texas, but weekly amounts were generally too scattered to significantly ease drought over the remainder of the southern Plains.

Looking Ahead:
Weather that could have an impact over ongoing dry or drought areas include 1) storm systems in the next 2 weeks spreading precipitation eastward from the west, resulting in above normal rainfall for the West, northern Plains, and upper Midwest; and 2) below normal rainfall over the South and East Coast beyond the first 5 days of the outlook period.

CROP REPORT

April 10 – Warm, dry weather during most of the week accelerated wheat growth and spurred additional row crop ground preparation. High winds reduced soil moisture supplies and caused some soil erosion. Topsoil moisture supplies dwindled from 46% to 71% short-to-very short during the past week. Subsoil moisture supplies were once again rated over 50% very short after a two week break from this statistic. Some farmers were surprised by an unexpected cold snap Saturday morning with temperatures in many areas of the state plunging below freezing. There were 5.9 days suitable for fieldwork during the week.

Small grain condition ratings dropped slightly as dry weather reduced needed moisture supplies. Insurance adjusters were actively inspecting wheat fields in several localities in western Oklahoma to determine the extent of drought-damaged wheat. Wheat heading ranged from zero in the Panhandle and northeast regions to 20 percent in the southwest district. Some agronomists said that heads were already established and rain the past couple of weeks did not change the number of heads; however, yields may still be enhanced by additional rain and cool temperatures. Green bug infestations were noticeable across much of Oklahoma and Hessian flies have damaged small grain crops in areas of north central Oklahoma.

Preparing seedbeds for planting was the primary activity on row crops although some additional corn acreage was planted. Only the Panhandle has yet to plant corn. Corn plantings in the rest of the state ranged from 35% in the east central region to 66% in the north central region. Soybeans were 4% planted and were limited to eastern and southern counties. Planting of sorghum and peanuts had just started. Planting of watermelons was restricted to the southern two-thirds of the state. Thirteen percent of the 2006 crop had been planted. The 2006 peach crop was hit by freezing temperatures, causing many trees to loose blooms. The full extent of freeze damage won't be known until later as trees move further along in the growth cycle. Fruit set in Oklahoma was reported as mostly light; however, the south central and northeast regions reported an average fruit set.

Pastures improved slightly during the week because of recent rains and warmer temperatures. Most of the good-to-excellent condition reports came from the eastern third of Oklahoma. Cattle remained in mostly poor-to-fair condition. Marketing was mostly average. A few reports of lice, ticks, and flies were reported in the northeast and north central regions.

RESERVOIR STORAGE

- 1.1 percent increase (91.5%) in total storage from that recorded on March 27 (90.4%)
- 17 reservoirs have experienced lake level decreases
- 21 reservoirs are currently operating at less than full capacity (compared to 23 two weeks ago)
- 5 reservoirs are now below 80 percent capacity

Storage in Selected Oklahoma Lakes & Reservoirs
April 10, 2006

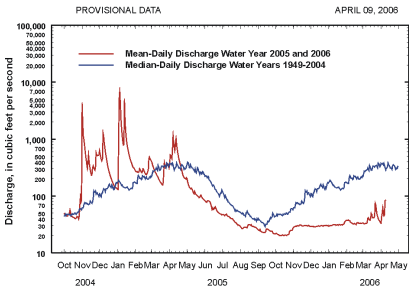
Climate Division Lake or Reservoir	Conservation Storage (acre-feet)	Present Storage (acre-feet)	Percent of Conservation Storage
North Central			
Fort Supply	13,900	13,440	96.7
Great Salt Plains	31,420	31,420	100.0
Kaw*	403,402	403,402	100.0
Regional Totals/Averages	**448,722**	**448,262**	**99.9**
Northeast			
Birch	19,225	12,996	67.6
Copan	34,634	33,346	96.3
Fort Gibson	365,200	365,200	100.0
Grand	1,541,020	1,541,020	100.0
Hudson	200,300	196,016	97.9
Hulah	22,565	20,356	90.2
Keystone	510,059	456,927	89.6
Oologah	552,219	520,877	94.3
Skiatook	322,700	253,990	78.7
Regional Totals/Averages	**3,567,922**	**3,400,728**	**95.3**
West Central			
Canton	111,310	111,310	100.0
Foss	165,480	153,098	92.5
Regional Totals/Averages	**276,790**	**264,408**	**95.5**
Central			
Arcadia	27,520	27,520	100.0
Heyburn	7,105	6,271	88.3
Thunderbird	119,600	96,346	80.6
Regional Totals/Averages	**154,225**	**130,137**	**84.4**
East Central			
Eufaula*	2,314,583	1,827,282	78.9
Tenkiller	654,100	539,098	82.4
Regional Totals/Averages	**2,968,683**	**2,366,380**	**79.7**
Southwest			
Fort Cobb	80,010	80,010	100.0
Lugert-Altus	132,830	59,295	44.6
Tom Steed	88,970	57,147	64.2
Regional Totals/Averages	**301,810**	**196,452**	**65.1**
South Central			
Arbuckle	72,400	69,464	95.9
McGee Creek	113,930	107,019	93.9
Texoma*	2,418,626	2,417,252	99.9
Waurika*	190,200	168,774	88.7
Regional Totals/Averages	**2,795,156**	**2,762,509**	**98.8**
Southeast			
Broken Bow*	923,470	860,704	93.2
Hugo*	198,067	198,067	100.0
Pine Creek*	68,446	68,446	100.0
Sardis	274,330	262,949	95.9
Wister	60,162	60,162	100.0
Regional Totals/Averages	**1,524,475**	**1,450,328**	**95.1**
State Totals	**12,037,783**	**11,019,204**	**91.5**

* indicates seasonal pool operation; actual storage figures/percentages may vary.

STREAMFLOW CONDITIONS

Baron Fork at Eldon

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

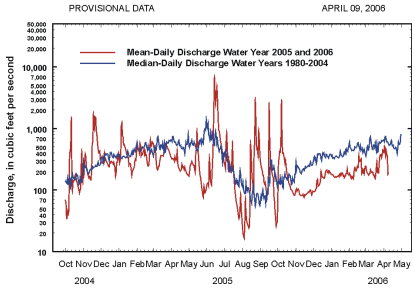


Comparison of daily discharges for water year 2005 and 2006 and period of record

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

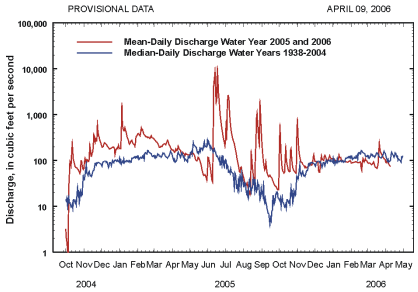


Comparison of daily discharges for water year 2005 and 2006 and period of record

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

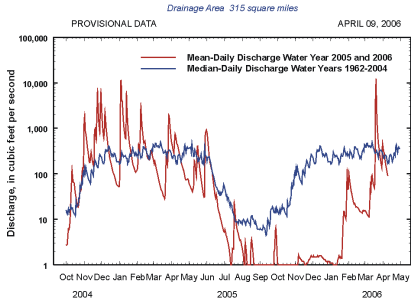


Comparison of daily discharges for water year 2005 and 2006 and period of record

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

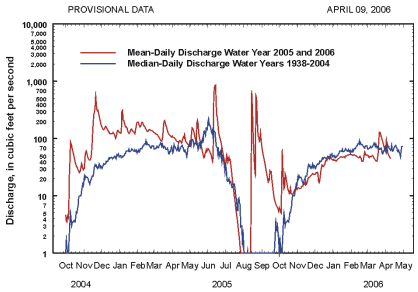


Comparison of daily discharges for water year 2005 and 2006 and period of record

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

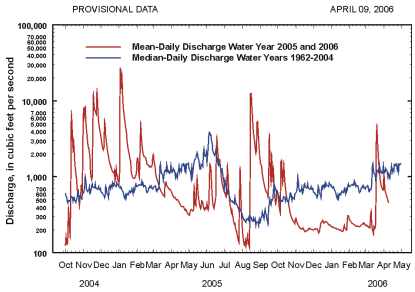


Comparison of daily discharges for water year 2005 and 2006 and period of record

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



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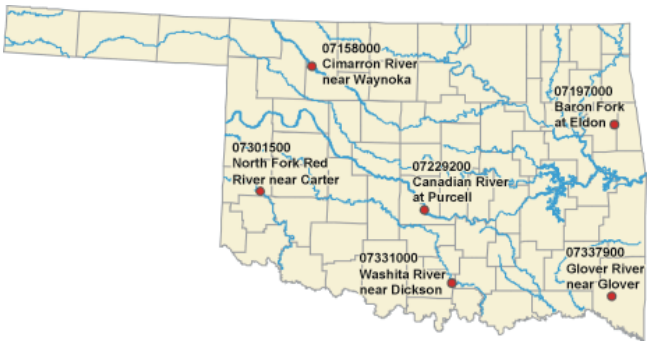

Water Bulletin information/data courtesy of National Weather Service, Climate Prediction Center, Oklahoma Climatological Survey, State Department of Agriculture, Food, and Forestry, Agricultural Statistics Service, U.S. Army Corps of Engineers, U.S. Department of Agriculture/Forest Service, U.S. Geological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