07335500 RED RIVER AT ARTHUR CITY, TX

Red-Little Basin
Bois D'Arc-Island Subbasin

LOCATION.--Lat 33°52′30″, long 95°30′06″ referenced to North American Datum of 1927, in NW ¼ sec.11, T.8 S., R.17 E., Choctaw County, OK, Hydrologic Unit 11140101, on right downstream bank of bridge on U.S. Highway 271 at Arthur City, 10.6 mi downstream from Muddy Boggy River, 26.0 mi upstream from Kiamichi River, and at mile 633.1.

DRAINAGE AREA.--44,531 mi^2 of which 5,936 mi^2 probably is noncontributing.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--January to September 1905 (gage heights and discharge measurements only), October 1905 to December 1911, July 1936 to current year. Monthly discharge only for some periods, published in WSP 1311. Gage-height records collected at same site since 1891 are contained in reports of the National Weather Service.

REVISED RECORDS.--WSP 1241: Drainage area. WSP 1311: 1906-11.

GAGE.--Water-stage recorder. Datum of gage is 375.07 ft above NGVD of 1929. Prior to Oct. 7, 2008, at datum 5.00 ft. higher. From 1905-11 nonrecording gage at St. Louis-San Francisco Railway Co. bridge 200 ft upstream at prior datum. July 1, 1936, to Mar. 24, 1940, nonrecording gage at present site and prior datum.

REMARKS.--Records poor. Flow regulated since October 1943 by Lake Texoma (station 07331500), 92.8 mi upstream from station. U.S. Army Corps of Engineers' satellite telemeter at station.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1,390	377	400	711	1,980	2,650	1,150	37,400	31,000	3,560	3,410	1,250
2	2,860	705	380	e440	1,180	2,270	1,420	34,000	30,900	3,790	3,350	2,750
3	2,030	537	349	e390	739	1,290	1,810	26,800	32,600	2,870	2,480	2,520
4	1,460	411	354	e470	1,180	1,200	1,750	23,300	35,900	2,700	1,520	1,830
5	1,380	376	371	707	1,950	1,540	1,620	27,400	33,300	2,760	1,300	1,740
6	1,250	467	365	e470	2,120	1,410	1,570	39,100	32,300	2,650	2,300	1,710
7	755	480	627	e410	2,280	1,420	1,270	48,800	32,700	2,500	2,750	1,530
8	694	373	560	e1,050	2,370	1,520	1,040	47,600	32,800	2,670	2,930	1,020
9	1,140	364	e450	1,070	1,660	1,530	1,240	39,900	29,200	2,750	2,500	933
10	1,220	326	e415	1,050	1,250	1,190	1,170	45,200	16,500	2,670	2,120	1,470
11	1,170	382	e380	805	1,540	1,220	1,220	51,600	13,400	2,620	1,350	1,650
12	1,120	442	e360	889	2,770	2,240	1,630	48,300	13,800	2,570	e2,280	1,990
13	1,010	438	e365	591	2,910	2,660	2,600	45,200	16,600	2,080	e3,240	2,040
14	588	458	713	613	3,550	2,210	1,830	35,900	17,800	1,350	e3,350	2,130
15	518	503	e475	1,010	2,860	2,310	1,720	26,700	17,500	1,380	e4,560	2,020
16	504	494	e410	1,080	1,900	2,090	1,640	23,100	17,800	2,290	e5,610	3,330
17	449	405	e380	1,110	1,340	1,540	1,870	29,000	13,000	2,510	e3,040	4,240
18	424	370	e405	1,130	1,870	1,250	1,690	32,100	11,200	2,540	1,310	5,620
19	416	357	724	861	2,640	1,450	2,440	35,800	9,240	2,560	e3,160	6,470
20	410	318	e590	563	2,040	1,590	2,150	39,900	7,860	2,050	e5,650	5,000
21	407	389	e490	896	3,170	1,610	1,640	40,700	7,080	1,260	e5,690	2,940
22	406	570	e430	1,630	2,700	1,600	1,370	36,000	3,930	1,280	e5,710	5,760
23	752	503	e385	1,730	1,760	1,600	1,310	31,800	3,280	e2,300	e5,700	8,780
24	546	496	492	1,750	1,210	1,230	1,460	31,600	4,140	e2,440	2,400	6,080
25	432	491	707	1,780	1,740	1,050	1,330	31,100	4,140	e2,520	1,230	5,380
26	393	433	e475	1,110	1,900	1,330	1,320	30,900	4,060	e2,530	2,610	4,330
27	400	681	e430	689	2,540	1,650	1,270	35,100	3,980	2,000	e5,710	3,680
28	390	569	e405	1,140	2,540	1,820	1,100	38,700	3,940	1,290	e5,810	2,570
29	384	435	e390	1,340	---	1,850	1,280	35,800	2,860	1,320	e5,860	1,610
30	378	371	e370	2,450	---	1,840	13,500	31,700	2,590	2,530	e5,860	1,820
31	374	---	e480	2,000	---	1,370	---	31,400	---	2,680	2,420	---
Total	25,650	13,521	14,127	31,935	57,689	51,530	58,410	1,111,900	485,400	73,020	107,210	94,193
Mean	827	451	456	1,030	2,060	1,662	1,947	35,870	16,180	2,355	3,458	3,140
Max	2,860	705	724	2,450	3,550	2,660	13,500	51,600	35,900	3,790	5,860	8,780
Min	374	318	349	390	739	1,050	1,040	23,100	2,590	1,260	1,230	933
Ac-ft	50,880	26,820	28,020	63,340	114,400	102,200	115,900	2,205,000	962,800	144,800	212,700	186,800

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2009, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	6,286	7,082	7,190	7,175	8,347	10,710	11,560	16,150	16,870	8,093	5,194	4,684
Max	40,240	37,170	32,340	39,930	32,130	39,430	55,500	103,900	83,820	55,530	36,590	19,010
(WY)	(1982)	(1975)	(1992)	(1992)	(2001)	(2001)	(1990)	(1990)	(1957)	(2007)	(2007)	(1950)
Min	263	242	456	870	1,138	1,118	1,344	2,779	1,719	1,586	1,039	399
(WY)	(1957)	(1957)	(2009)	(2006)	(1959)	(1967)	(1956)	(2005)	(2006)	(1956)	(2006)	(2006)

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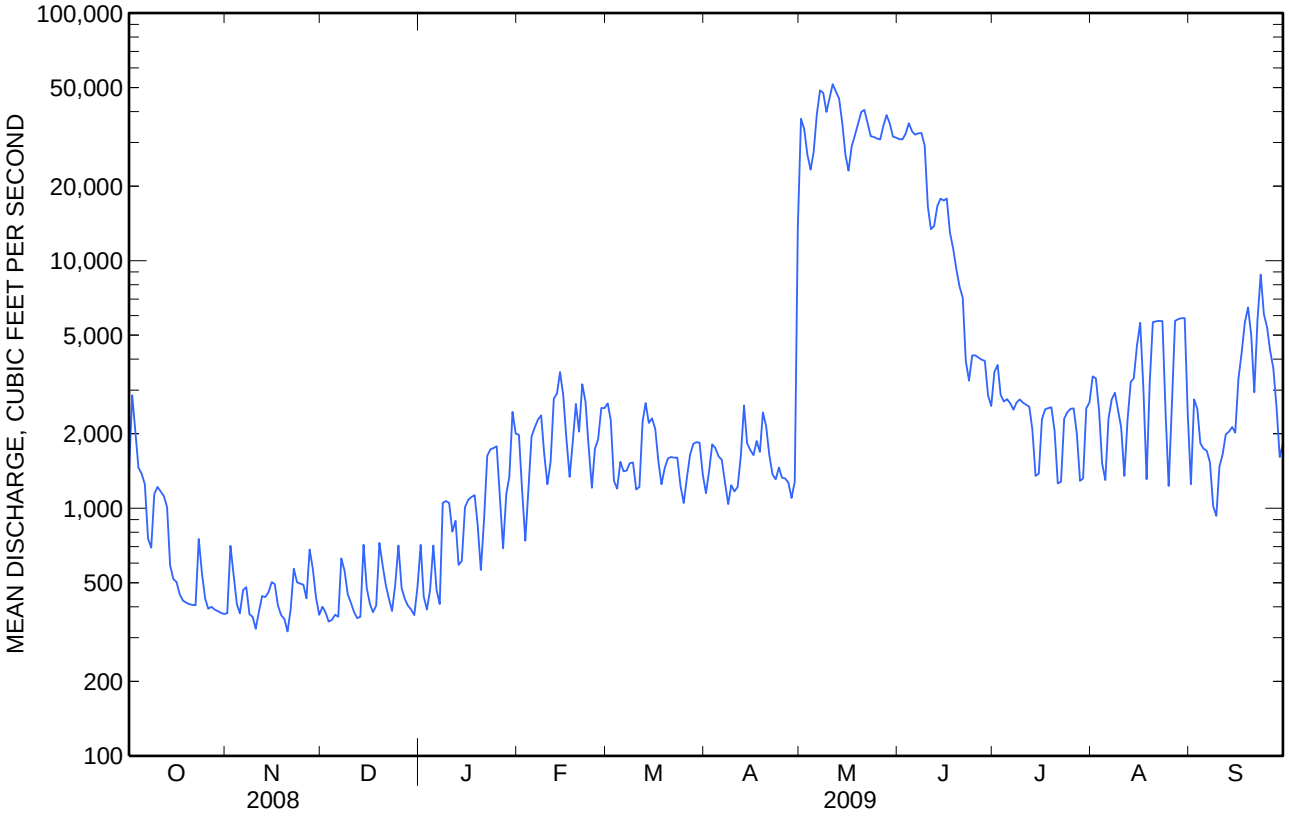
SUMMARY STATISTICS

	Calendar Year 2008		Water Year 2009		Water Years 1945 - 2009	
Annual total	2,235,255		2,124,585			
Annual mean	6,107		5,821		[a]9,107	
Highest annual mean					23,290	1990
Lowest annual mean					1,794	2006
Highest daily mean	70,000	Mar 20	51,600	May 11	269,000	May 4, 1990
Lowest daily mean	318	Nov 20	318	Nov 20	134	Dec 11, 1956[b]
Annual seven-day minimum	370	Nov 30	370	Nov 30	134	Dec 11, 1956
Maximum peak flow			53,200	May 11	[c]275,000	May 4, 1990
Maximum peak stage			22.79	May 11	[d]34.21	May 4, 1990
Annual runoff (ac-ft)	4,434,000		4,214,000		6,598,000	
10 percent exceeds	17,800		27,000		24,000	
50 percent exceeds	3,200		1,660		4,130	
90 percent exceeds	410		409		1,300	

[a] Prior to regulation, water years 1906-11, 1937-43, 9,266 ft³/s.

[b] Also occurred Dec. 12, 1956.

[c] Maximum discharge for period of record, 400,000 ft³/s, May 28, 1908.

[d] Maximum gage height for period of record, 43.2 ft, May 28, 1908.