Water-Data Report 2011

07336820 RED RIVER NEAR DE KALB, TX

Red-Little Basin
Pecan-Waterhole Subbasin

LOCATION.--Lat 33°41′02″, long 94°41′39″ referenced to North American Datum of 1927, Bowie County, TX, Hydrologic Unit 11140106, on right bank at downstream side of bridge on U.S. Highway 259, 4.8 mi upstream from North Mill Creek, 13 mi north of De Kalb, and at mile 556.9.

DRAINAGE AREA.--47,348 mi^2 of which 5,936 mi^2 probably is noncontributing.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1968 to September 1998, October 2004 to present. Records for June 1 2002 through Sept. 30 2004, previously available on NWIS Web are unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 302.92 ft above NGVD of 1929.

REMARKS.--Records fair, except for estimated periods which are poor. Flow has been regulated since 1943 by Lake Texhoma (station 07331500) located approximately 169 mi upstream, and low flows may be affected by releases for the generation of electric power. Storage and/or releases from Hugo Lake on the Kiamichi River, a tributary to the Red River about 45 mi upstream, may affect flows.Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since 1957, 205,000 ft^3/s June 1957 (gage height, 32.2 ft), from rating curve extended above 186,500 ft^3/s. The greatest flood since 1936 occurred in February 1938, stage unknown.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	3,040	758	769	4,940	2,150	e1,260	1,040	14,700	2,960	1,990	1,510	1,700
2	2,700	e776	763	4,740	2,550	1,170	1,600	20,200	2,430	1,980	1,530	e1,850
3	2,500	883	748	3,790	2,160	1,100	2,020	30,400	2,180	1,980	1,560	1,610
4	2,400	900	722	3,110	3,120	1,100	1,950	e38,500	2,000	1,970	1,560	e1,540
5	1,960	1,010	725	2,730	5,590	e1,140	2,070	e40,800	1,830	2,020	1,550	e1,470
6	1,610	1,080	1,350	e2,480	8,930	1,630	1,840	35,700	1,710	2,020	1,600	1,470
7	1,360	1,100	1,680	2,300	7,060	1,680	1,330	30,300	1,580	1,930	1,930	1,490
8	1,210	1,080	1,420	2,230	e4,470	1,930	1,680	26,700	1,710	e1,700	2,050	1,500
9	1,200	926	1,030	2,190	4,200	2,050	1,700	24,500	1,960	1,600	e2,160	1,510
10	1,140	834	961	3,050	4,260	2,270	1,180	21,300	1,870	1,560	1,790	1,490
11	1,100	794	1,400	2,770	4,030	3,000	e958	17,300	1,800	1,540	e1,670	1,450
12	1,070	e764	1,830	2,000	3,330	2,500	941	15,100	1,770	1,530	e1,740	1,120
13	1,040	e768	2,230	2,240	4,130	2,290	917	14,000	1,770	1,490	e1,720	889
14	1,030	758	1,850	3,110	4,150	1,980	1,010	13,200	1,990	e1,190	1,660	788
15	891	772	1,510	3,400	3,280	1,550	e972	9,800	2,040	986	1,620	e740
16	857	859	1,660	e3,580	2,990	1,780	e1,040	7,290	2,040	1,070	1,620	e700
17	851	e853	2,280	e3,770	3,070	1,370	1,010	5,870	1,990	1,380	1,650	861
18	813	e841	1,950	3,020	2,820	1,170	964	3,990	1,980	e1,400	e1,630	1,290
19	788	787	1,590	2,400	1,930	e2,110	2,060	2,980	1,960	e1,430	1,620	1,430
20	767	750	1,710	2,000	1,520	1,690	2,950	2,530	1,930	1,470	1,620	1,130
21	756	737	2,490	2,500	e1,360	2,200	2,080	5,400	1,960	1,480	1,790	867
22	749	734	2,820	2,860	1,260	2,560	1,840	9,740	1,970	1,470	e2,300	759
23	748	e740	2,200	2,970	1,180	e1,880	2,470	15,800	2,000	1,470	2,090	730
24	834	747	2,280	2,220	e1,170	1,280	2,690	18,700	2,000	1,470	1,810	706
25	871	e755	1,710	2,720	1,640	1,140	3,370	18,700	1,990	1,480	1,700	e694
26	e904	747	1,880	2,310	2,070	1,670	15,100	17,400	2,090	1,530	1,640	660
27	879	746	2,060	1,870	1,670	2,020	16,500	13,100	2,340	e1,530	1,640	626
28	862	741	2,310	2,420	e1,360	2,050	18,900	7,660	e2,120	1,520	1,920	608
29	905	769	3,400	2,680	---	1,960	19,100	6,370	2,160	1,510	2,220	596
30	830	e730	4,360	2,780	---	1,800	17,800	4,760	2,010	1,510	1,850	577
31	782	---	e5,280	2,270	---	1,260	---	3,620	---	1,530	1,680	---
Total	37,447	24,739	58,968	87,450	87,450	54,590	129,082	496,410	60,140	48,736	54,430	32,851
Mean	1,208	825	1,902	2,821	3,123	1,761	4,303	16,010	2,005	1,572	1,756	1,095
Max	3,040	1,100	5,280	4,940	8,930	3,000	19,100	40,800	2,960	2,020	2,300	1,850
Min	748	730	722	1,870	1,170	1,100	917	2,530	1,580	986	1,510	577
Ac-ft	74,280	49,070	117,000	173,500	173,500	108,300	256,000	984,600	119,300	96,670	108,000	65,160

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	8,482	13,070	13,370	13,000	13,670	18,380	17,520	23,220	22,910	10,050	6,502	5,944
Max	39,980	53,170	45,440	56,380	31,000	48,590	62,330	125,500	67,360	62,090	44,720	24,010
(WY)	(1982)	(1975)	(1972)	(1998)	(1969)	(1987)	(1990)	(1990)	(1987)	(2007)	(2007)	(1974)
Min	1,208	825	865	1,005	1,652	1,761	2,361	3,491	1,948	1,572	1,418	881
(WY)	(2011)	(2011)	(2006)	(2006)	(2006)	(2011)	(2006)	(2005)	(2006)	(2011)	(1972)	(2006)

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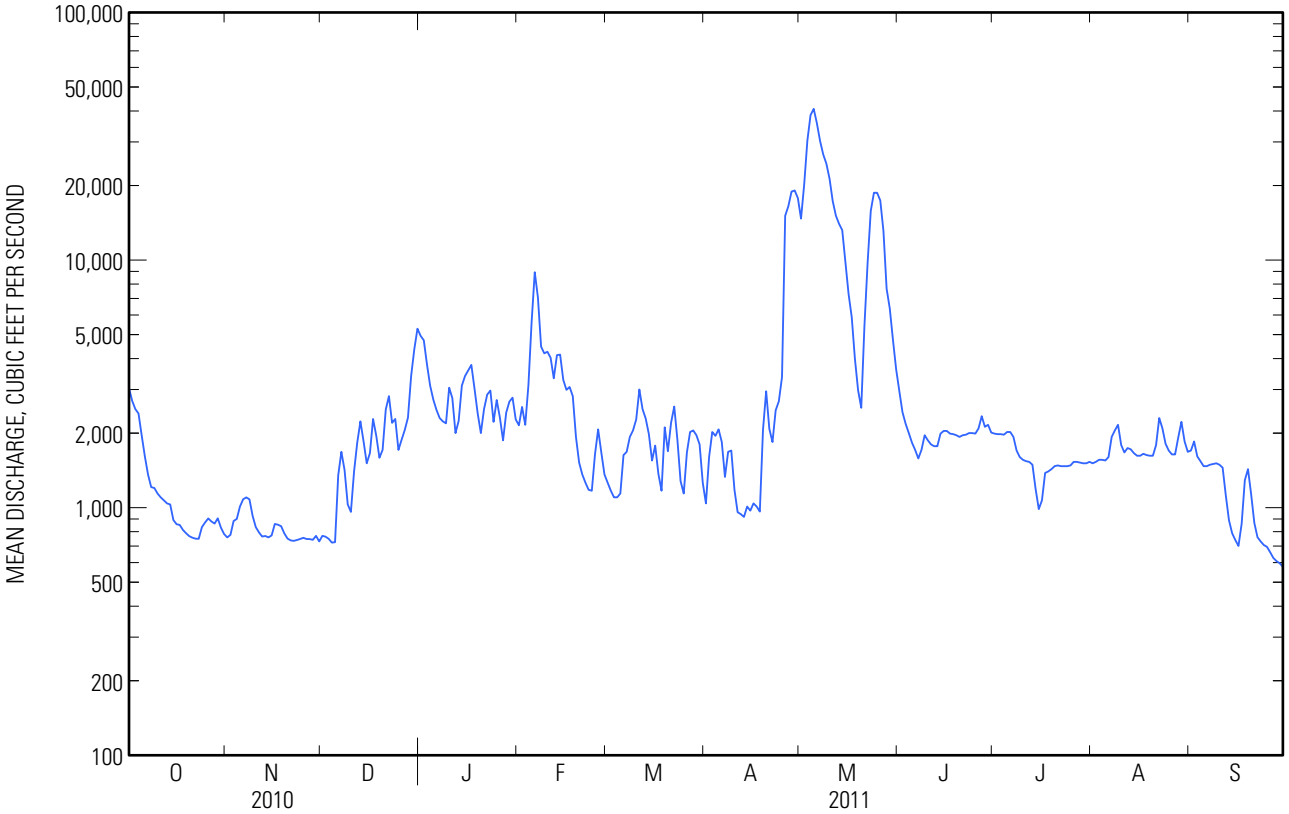
SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1969 - 2011	
Annual total	3,129,624		1,172,293			
Annual mean	8,574		3,212		13,960	
Highest annual mean					30,100	1990
Lowest annual mean					2,426	2006
Highest daily mean	45,400	Feb 10	[a]40,800	May 5	278,000	May 7, 1990
Lowest daily mean	722	Dec 4	577	Sep 30	254	Nov 29, 1979
Annual seven-day minimum	744	Nov 21	638	Sep 24	443	Oct 9, 2006
Maximum peak flow			41,000	May 5	279,000	May 6, 1990
Maximum peak stage			21.97	May 5	34.42	May 6, 1990
Annual runoff (ac-ft)	6,208,000		2,325,000		10,110,000	
10 percent exceeds	20,500		4,830		38,900	
50 percent exceeds	6,060		1,710		6,390	
90 percent exceeds	852		774		1,850	

[a] Estimated.