

Water-Data Report TX-2005

08162000 Colorado River at Wharton, TX

Colorado River Basin

LOCATION.--Lat 29°18'32", long 96°06'13" referenced to North American Datum of 1927, Wharton County, Hydrologic Unit 12090302, near left bank at downstream side of downstream bridge on U.S. Highway 59 in Wharton, 1,100 ft downstream from Texas and New Orleans Railroad Co. bridge, 12 mi upstream from Jones Creek, and at mile 66.6.

DRAINAGE AREA.--42,003 mi² of which 11,403 mi² probably is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1916 to Aug. 1918 (intermittent periods), Mar. 1919 to Sept. 1925 and July and Aug. 1938 (flood discharge measurements only), Oct. 1938 to current year. June to Nov. 1901, May to Sept. 1902, daily records published in U.S. Department of Agriculture, Office of Experiment Stations, Bulletin Nos. 119 and 133. Gage-height records collected in this vicinity since 1935 are contained in reports of the National Weather Service. Water-quality records: Chemical data: Apr. 1944 to Sept. 1995. Biochemical data: Jan. 1968 to Sept. 1995. Radiochemical data: Dec. 1973 to Sept. 1995. Pesticide data: Oct. 1967 to June 1982. Sediment data: Oct. 1974 to Sept. 1995.

REVISED RECORDS.--WSP 878: 1938(M). WDR TX-81-3: Drainage area. WDR TX-88-3: 1985.

GAGE.--Water-stage recorder. Datum of gage is 52.42 ft above NGVD of 1929. Prior to Oct. 1, 1938, various types of recording and nonrecording gages 800 ft upstream at different datum. Oct. 1, 1938, to June 1, 1956, nonrecording gage 100 ft upstream at datum 13.00 ft higher. June 1, 1966, to Sept. 30, 1975, water-stage recorder at present site at datum 13.00 ft higher. Oct. 1, 1975, to Mar. 1, 1983, water-stage recorder at present site at datum 10.00 ft higher. Satellite telemeter at station.

REMARKS.--Records good. Since installation of gage in Oct. 1938, at least 10% of contributing drainage area has been regulated. There are many diversions above station for irrigation, municipal supply, cooling water for thermal-electric power plant, and oil field operations.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1869, 51.9 ft Dec. 8, 1913, present datum, from information by local residents; below Wharton floodwater combined with that of the Brazos River. Flood of about July 12, 1869, reached about same height. Flood of June 20, 1935, reached a stage of 51.2 ft, present datum, furnished by National Weather Service (discharge, 159,000 ft³/s), from rating curve defined by current-meter measurements below 145,000 ft³/s. Flood of July 30, 1938, reached a stage of 50.4 ft, present datum, observed by U.S. Geological Survey personnel (discharge, 145,000 ft³/s).

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	596	1,210	27,100	2,250	6,210	4,140	5,810	1,830	2,610	1,560	1,190	651
2	504	1,330	26,400	2,070	7,950	5,210	5,860	1,820	3,170	1,470	1,160	650
3	526	1,690	25,900	2,490	8,380	7,820	6,470	1,670	2,920	1,470	1,160	724
4	741	3,500	25,300	2,900	7,670	11,300	6,610	1,340	2,640	1,440	1,130	602
5	1,490	2,820	21,900	2,710	6,560	12,400	5,920	1,360	2,490	1,480	982	673
6	1,990	1,900	16,100	2,740	5,020	9,300	5,710	1,270	1,690	1,560	915	853
7	1,450	1,470	12,100	4,030	4,700	9,400	5,230	1,040	1,320	1,470	890	1,000
8	1,280	1,230	11,100	4,470	9,080	10,800	5,150	1,110	1,090	1,480	979	915
9	1,360	1,090	9,930	4,570	14,100	11,700	5,170	2,590	1,730	1,470	982	985
10	1,220	991	10,300	4,580	9,980	10,300	4,480	3,610	2,060	1,550	1,090	1,060
11	1,130	881	10,200	4,490	6,590	9,430	4,070	5,900	2,140	1,540	1,650	1,050
12	1,010	846	9,960	3,660	5,800	9,080	3,920	4,880	2,130	1,580	1,280	1,070
13	923	807	9,360	4,040	5,030	8,810	3,480	3,350	1,670	1,550	997	1,190
14	1,250	747	8,090	3,780	4,320	8,580	3,750	2,520	1,510	1,740	1,400	1,300
15	1,190	742	7,640	3,390	4,450	7,030	3,610	1,970	1,590	2,430	1,230	1,500
16	1,360	779	7,230	2,970	4,030	6,430	3,260	1,820	1,460	2,810	996	1,570
17	1,350	984	6,110	2,770	3,390	7,870	3,240	1,550	1,390	2,580	820	1,520
18	1,160	1,420	4,840	2,410	3,000	8,400	2,840	1,370	1,490	2,790	742	1,480
19	1,100	5,880	4,380	2,050	3,070	8,400	2,680	1,380	1,430	2,680	711	1,530
20	1,060	18,300	4,100	1,930	3,390	9,100	2,440	1,420	1,550	2,730	585	1,600
21	998	30,000	3,480	2,090	3,110	8,600	2,480	1,350	1,690	2,320	633	1,670
22	987	32,900	3,240	2,590	3,060	7,620	2,270	1,210	1,730	1,880	701	2,200
23	949	42,500	3,060	2,770	2,840	7,070	2,230	1,210	1,780	1,570	712	2,410
24	999	52,300	3,020	2,800	3,240	7,820	2,010	1,460	1,820	1,400	685	2,410
25	1,090	65,800	2,910	2,880	3,140	7,090	1,900	1,350	1,800	1,380	466	1,970
26	3,370	72,000	2,890	2,800	3,060	6,770	1,980	1,350	1,740	1,250	269	1,410
27	3,880	67,100	3,040	2,360	3,360	5,780	2,080	1,600	1,770	1,220	261	903
28	2,320	42,400	3,310	1,930	3,810	5,470	2,050	1,640	1,880	1,140	327	652
29	1,740	27,300	3,240	4,280	---	6,290	2,060	1,630	1,960	1,130	477	808
30	1,470	27,200	2,960	6,360	---	6,110	1,860	2,230	1,900	1,080	457	740
31	1,290	---	2,670	5,500	---	5,860	---	2,530	---	1,040	602	---
Total	41,783	508,117	291,860	100,660	148,340	249,980	110,620	61,360	56,150	52,790	26,479	37,096
Mean	1,348	16,940	9,415	3,247	5,298	8,064	3,687	1,979	1,872	1,703	854	1,237
Max	3,880	72,000	27,100	6,360	14,100	12,400	6,610	5,900	3,170	2,810	1,650	2,410
Min	504	742	2,670	1,930	2,840	4,140	1,860	1,040	1,090	1,040	261	602
Ac-ft	82,880	1,008,000	578,900	199,700	294,200	495,800	219,400	121,700	111,400	104,700	52,520	73,580

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2005, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	2,269	2,719	2,427	2,517	3,029	2,868	3,033	3,958	4,601	2,652	1,352	1,849
Max	14,590	16,940	15,060	21,810	35,520	21,550	13,730	27,300	30,910	15,010	3,916	9,394
(WY)	(1999)	(2005)	(1992)	(1992)	(1992)	(1992)	(1977)	(1957)	(1987)	(1997)	(1945)	(1961)
Min	296	220	253	224	268	328	566	825	838	706	406	436
(WY)	(1957)	(1957)	(1990)	(1964)	(1967)	(1952)	(1951)	(1962)	(1948)	(1967)	(1964)	(1954)

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SUMMARY STATISTICS

	Calendar Year 2004		Water Year 2005		Water Years 1939 - 2005	
Annual total	1,625,601		1,685,235			
Annual mean	4,442		4,617		2,768	
Highest annual mean					11,120	1992
Lowest annual mean					615	1964
Highest daily mean	72,000	Nov 26	72,000	Nov 26	90,600	Jul 3, 1940
Lowest daily mean	501	Jan 5	261	Aug 27	42	Aug 22, 1964
Annual seven-day minimum	529	Jan 1	408	Aug 25	110	Dec 11, 1956
Maximum peak flow			73,200	Nov 26	100,000	Jul 3, 1940
Maximum peak stage			48.32	Nov 26	48.99	Jul 3, 1940
Annual runoff (ac-ft)	3,224,000		3,343,000		2,005,000	
10 percent exceeds	10,900		9,080		5,540	
50 percent exceeds	1,420		2,080		1,330	
90 percent exceeds	724		910		479	

