Water-Data Report 2012

08162000 Colorado River at Wharton, TX

Lower Colorado Basin
Lower Colorado Subbasin

LOCATION.--Lat 29°18′32″, long 96°06′13″ referenced to North American Datum of 1927, Wharton County, TX, 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 mi^2 of which 11,403 mi^2 probably is noncontributing.

SURFACE-WATER 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.

PERIOD OF RECORD, Water-Quality.--
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.

PERIOD OF DAILY RECORD, Water-Quality.--
SPECIFIC CONDUCTANCE: Apr. 1944 to Sept. 1992.
WATER TEMPERATURE: Oct. 1945 to Sept 1948, Mar. 1950 to Sept. 1992.

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 including those for estimated daily discharges. 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. Some records listed in the "Period of Record" for surface water and water quality may not be available electronically.

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 ft^3/s), from rating curve defined by current-meter measurements below 145,000 ft^3/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 ft^3/s).

Suggested citation: U.S. Geological Survey, 2013, Water-resources data for the United States, Water Year 2012: U.S. Geological Survey Water-Data Report WDR-US-2012, site 08162000, accessed at http://wdr.water.usgs.gov/wy2012/pdfs/08162000.2012.pdf

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	204	260	378	513	1,920	945	2,820	393	115	144	193	155
2	188	242	346	504	1,580	868	2,020	379	92	178	163	141
3	174	232	391	498	1,350	804	1,580	352	78	176	134	125
4	177	234	429	488	1,250	744	1,330	311	70	161	104	109
5	222	232	394	481	1,230	712	1,240	308	72	178	90	100
6	233	222	355	458	1,140	693	1,200	300	60	210	119	87
7	227	223	329	408	3,630	659	1,130	264	70	160	118	75
8	290	222	359	362	2,880	632	1,050	249	293	124	110	69
9	415	218	440	536	1,670	641	966	267	292	106	112	63
10	494	225	520	1,950	1,260	748	943	317	320	122	98	57
11	456	224	746	1,370	1,080	1,880	853	699	317	314	92	53
12	580	220	644	787	966	7,970	730	1,590	273	570	92	57
13	542	212	558	561	1,070	13,200	679	2,000	233	3,760	95	70
14	454	210	524	425	933	7,390	682	3,840	157	3,310	87	66
15	373	210	469	438	953	4,260	680	3,440	155	2,090	84	94
16	655	217	414	462	1,010	2,780	831	2,540	150	1,460	86	118
17	860	227	406	400	972	2,100	725	4,680	155	991	79	160
18	769	248	392	356	1,800	1,700	582	4,200	130	685	73	205
19	667	240	391	325	11,900	1,420	592	2,470	112	1,890	81	232
20	578	226	450	305	14,800	1,520	590	1,770	105	2,850	74	291
21	509	232	524	290	9,710	6,590	655	1,150	96	1,490	81	485
22	489	243	722	279	5,350	21,500	724	844	111	962	78	732
23	478	231	615	270	3,170	22,000	730	653	127	669	222	564
24	463	233	591	264	2,300	10,200	686	482	107	490	527	387
25	449	242	638	e329	1,810	4,830	674	358	87	396	389	294
26	430	273	772	4,400	1,510	3,430	636	306	68	334	295	234
27	404	251	1,190	14,800	1,290	2,710	621	264	77	301	254	203
28	371	269	1,000	22,000	1,150	2,240	540	227	73	277	221	211
29	340	320	802	10,500	1,030	1,900	504	166	86	255	203	249
30	313	410	688	3,730	---	1,650	465	144	104	235	187	522
31	286	---	590	2,490	---	1,950	---	132	---	215	173	---
Total	13,090	7,248	17,067	70,979	80,714	130,666	27,458	35,095	4,185	25,103	4,714	6,208
Mean	422	242	551	2,290	2,783	4,215	915	1,132	140	810	152	207
Max	860	410	1,190	22,000	14,800	22,000	2,820	4,680	320	3,760	527	732
Min	174	210	329	264	933	632	465	132	60	106	73	53
Ac-ft	25,960	14,380	33,850	140,800	160,100	259,200	54,460	69,610	8,300	49,790	9,350	12,310

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2012, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	2,169	2,552	2,269	2,426	2,888	2,766	2,893	3,716	4,340	2,808	1,347	1,800
Max	14,590	16,940	15,060	21,810	35,520	21,550	13,730	27,300	30,910	24,420	5,928	9,394
(WY)	(1999)	(2005)	(1992)	(1992)	(1992)	(1992)	(1977)	(1957)	(1987)	(2007)	(2007)	(1961)
Min	296	220	253	224	268	328	403	740	140	495	152	207
(WY)	(1957)	(1957)	(1990)	(1964)	(1967)	(1952)	(2011)	(2011)	(2012)	(2011)	(2012)	(2012)

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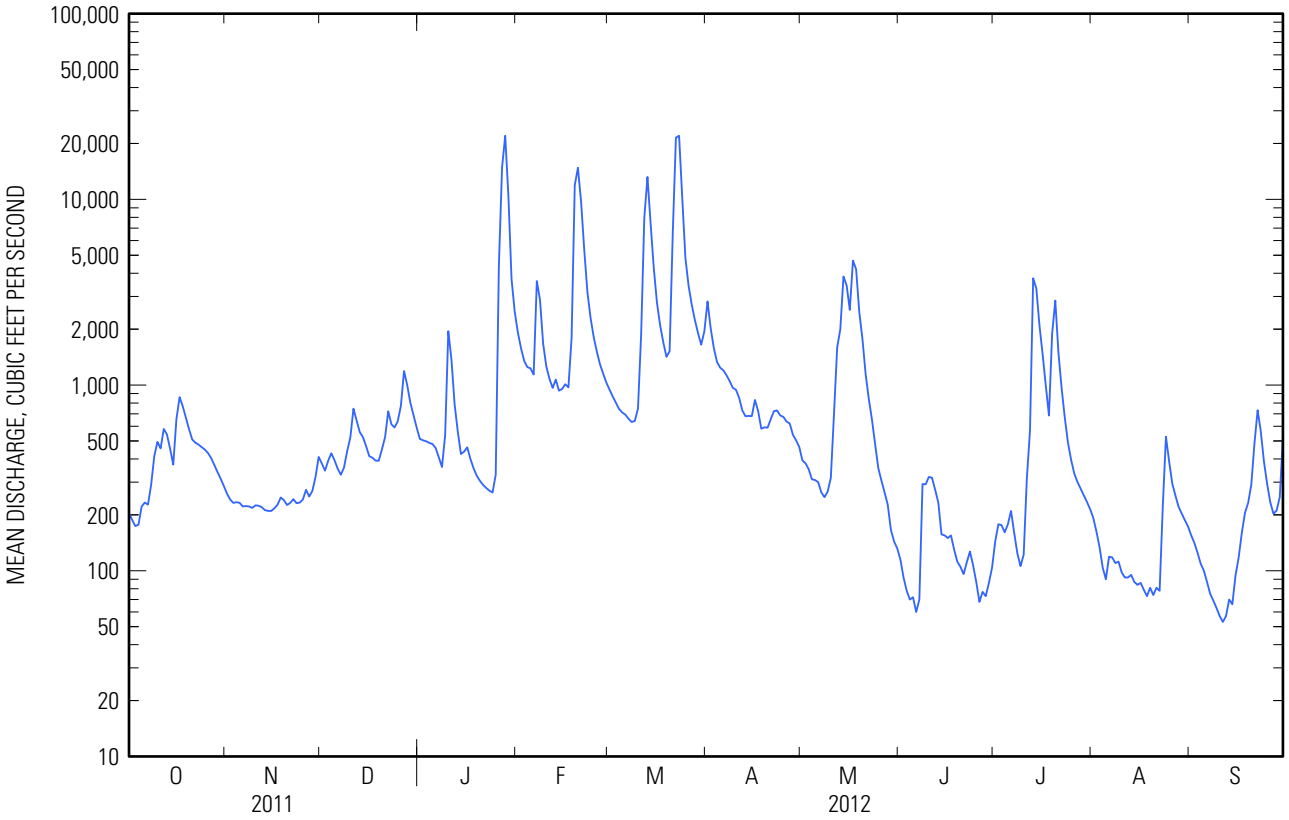
SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1939 - 2012	
Annual total	193,774		422,527			
Annual mean	531		1,154		2,660	
Highest annual mean					11,120	1992
Lowest annual mean					552	2011
Highest daily mean	2,150	May 16	22,000	Jan 28	90,600	Jul 3, 1940
Lowest daily mean	121	Apr 1	53	Sep 11	42	Aug 22, 1964
Annual seven-day minimum	195	Mar 29	62	Sep 8	62	Sep 8, 2012
Maximum peak flow			23,800	Mar 23	100,000	Jul 3, 1940
Maximum peak stage			29.32	Mar 23	48.99	Jul 3, 1940
Annual runoff (ac-ft)	384,400		838,100		1,927,000	
10 percent exceeds	757		2,260		5,360	
50 percent exceeds	510		405		1,260	
90 percent exceeds	237		99		450