Water-Data Report 2013

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. 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, 2014, Water-resources data for the United States, Water Year 2013: U.S. Geological Survey Water-Data Report WDR-US-2013, site 08162000, accessed at http://wdr.water.usgs.gov/wy2013/pdfs/08162000.2013.pdf

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	675	280	253	290	294	242	99	673	520	36	294	27
2	512	275	248	284	295	234	117	546	507	33	284	25
3	462	281	244	279	284	227	645	530	380	31	245	24
4	414	285	264	272	289	219	891	503	293	31	228	23
5	580	272	283	289	288	217	1,650	509	285	32	251	22
6	537	267	264	302	300	219	1,640	511	285	31	258	22
7	364	276	268	295	297	208	1,900	392	260	30	205	23
8	323	289	260	311	291	204	1,470	266	221	54	158	28
9	297	284	254	804	279	211	1,050	230	186	49	110	27
10	237	273	261	853	290	222	784	359	154	40	87	28
11	165	268	254	544	275	233	639	360	128	56	68	31
12	132	266	245	1,120	292	231	498	388	120	57	59	33
13	109	267	244	1,430	291	221	382	394	108	49	50	28
14	121	268	273	1,460	284	226	383	396	111	47	41	20
15	148	270	315	1,040	264	227	342	784	114	96	34	21
16	267	266	330	762	254	334	284	1,020	117	164	40	17
17	342	268	316	604	247	384	221	646	107	205	50	14
18	331	266	290	514	246	332	254	402	92	212	37	15
19	369	270	297	462	229	287	329	276	85	273	30	36
20	369	269	299	427	190	261	428	228	73	268	26	82
21	351	267	301	404	200	244	472	229	65	293	27	212
22	342	264	287	383	226	185	469	246	57	385	27	755
23	336	253	284	365	239	160	424	212	52	384	27	879
24	330	244	284	352	218	144	375	189	48	452	25	918
25	321	258	276	342	222	128	325	171	44	553	31	739
26	309	263	274	334	231	122	271	143	40	531	56	635
27	312	263	268	323	232	110	241	164	43	464	60	884
28	303	256	283	313	237	116	826	158	56	388	45	734
29	293	250	279	301	---	129	845	104	50	352	34	522
30	291	256	266	303	---	118	1,160	452	41	329	32	401
31	285	---	278	301	---	100	---	662	---	317	31	---
Total	10,227	8,034	8,542	16,063	7,284	6,495	19,414	12,143	4,642	6,242	2,950	7,225
Mean	330	268	276	518	260	210	647	392	155	201	95.2	241
Max	675	289	330	1,460	300	384	1,900	1,020	520	553	294	918
Min	109	244	244	272	190	100	99	104	40	30	25	14
Ac-ft	20,290	15,940	16,940	31,860	14,450	12,880	38,510	24,090	9,210	12,380	5,850	14,330

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	2,144	2,521	2,243	2,401	2,853	2,732	2,863	3,671	4,285	2,773	1,330	1,779
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	260	210	403	392	140	201	95.2	207
(WY)	(1957)	(1957)	(1990)	(1964)	(2013)	(2013)	(2011)	(2013)	(2012)	(2013)	(2013)	(2012)

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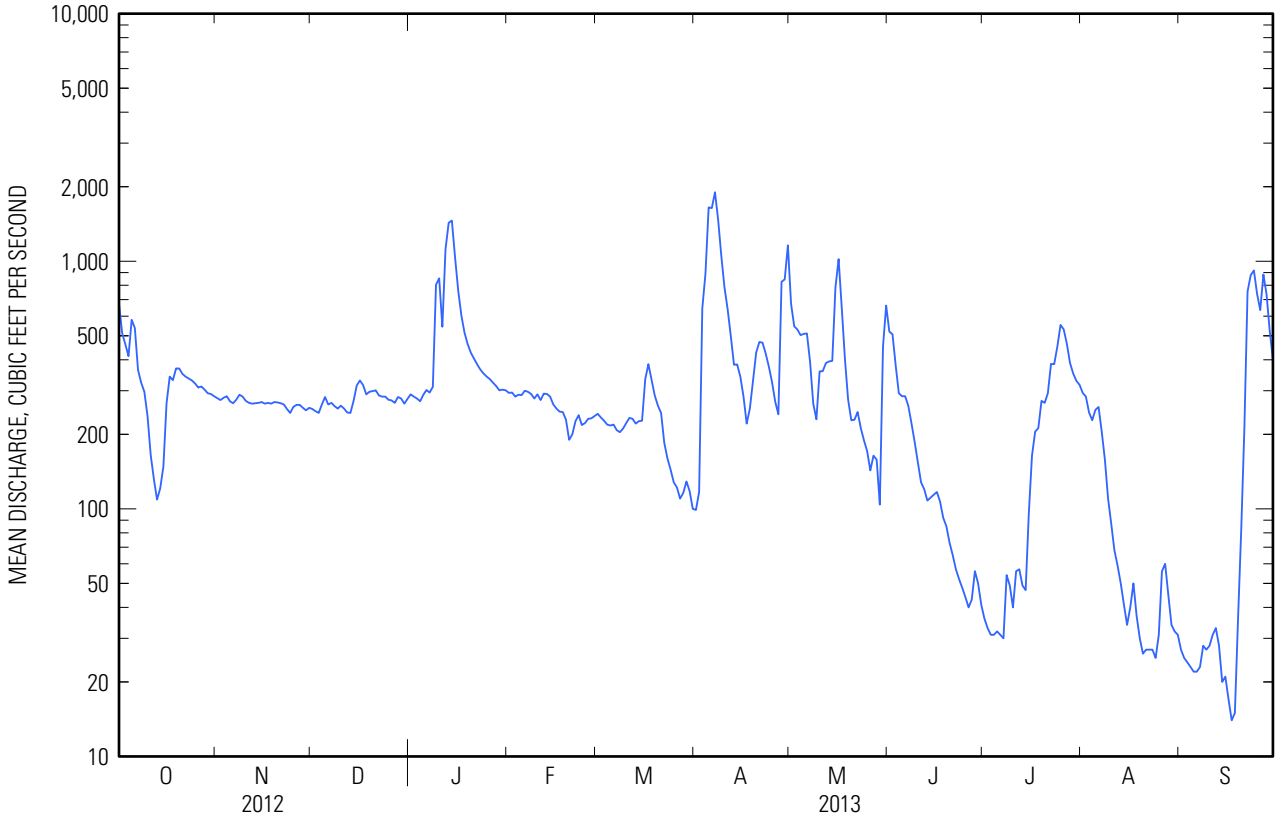
SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1939 - 2013	
Annual total	411,925		109,261			
Annual mean	1,125		299		2,629	
Highest annual mean					11,120	1992
Lowest annual mean					299	2013
Highest daily mean	22,000	Jan 28	1,900	Apr 7	90,600	Jul 3, 1940
Lowest daily mean	53	Sep 11	14	Sep 17	14	Sep 17, 2013
Annual seven-day minimum	62	Sep 8	21	Sep 12	21	Sep 12, 2013
Maximum peak flow			2,040	Apr 5	100,000	Jul 3, 1940
Maximum peak stage			11.47	Apr 5	48.99	Jul 3, 1940
Annual runoff (ac-ft)	817,100		216,700		1,904,000	
10 percent exceeds	2,260		545		5,310	
50 percent exceeds	308		267		1,240	
90 percent exceeds	99		36		430