Water-Data Report 2013

08162500 Colorado River near Bay City, TX

Lower Colorado Basin
Lower Colorado Subbasin

LOCATION.--Lat 28°58′26″, long 96°00′44″ referenced to North American Datum of 1927, Matagorda County, TX, Hydrologic Unit 12090302, on left bank, 6,300 ft downstream from upstream bridge on State Highway 35, 7,100 ft downstream from Texas and New Orleans Railroad Co. bridge, 2.8 mi west of Bay City, and at mile 32.5.

DRAINAGE AREA.--42,240 mi^2 of which 11,403 mi^2 probably is noncontributing.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--July 1940 hourly readings and annual peak discharge (provided by Corps of Engineers) published in WSP 1046, July 1940 miscellaneous discharge measurements (provided by Corps of Engineers) published in WSP 898, Apr. 1948 to current year. Records of elevation collected in this vicinity since 1946 are contained in reports of the National Weather Service.

PERIOD OF RECORD, Water-Quality.--
CHEMICAL DATA: Oct. 1974 to Sept. 1975.
BIOCHEMICAL DATA: Oct. 1974 to Sept. 1975.

REVISED RECORDS.--WDR TX-81-3: Drainage area. WDR TX-88-3: 1985.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. July 2-6, 1940, nonrecording gage at highway bridge, 6,300 ft upstream at datum 30.60 ft lower. On Feb. 19, 1992, gage was temporarily moved 6,200 ft upstream at same datum. Gage re-established on left bank 6,300 ft downstream on May 12, 1993. Radio telemeter at station. Satellite telemeter at station.

REMARKS.--Records poor including those for estimated daily discharges. Since installation of gage in Apr. 1948, at least 10% of contributing drainage area has been regulated. There are many other diversions above this station for irrigation and municipal supply. No flow at times in 1951-53, 1956 and 2002. 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 elevation since 1869, 56.1 ft Dec. 10, 1913. Flood in July 1869 probably reached about same elevation. Elevation of other floods are as follows: May 8, 1922, 55.4 ft; June 1929, 55.0 ft; June 22, 1935, 54.6 ft; Oct. 5, 1936, 52.2 ft; Aug. 2, 1938, 53.4 ft; Nov. 27, 1940, 47.6 ft. All above flood data from information by Texas and New Orleans Railroad Co. and adjusted to present site.

08162500 Colorado River near Bay City, TX—Continued

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

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	497	272	276	310	329	270	55	841	577	56	219	40
2	475	300	273	308	323	268	58	599	481	67	255	39
3	384	295	228	304	323	255	148	500	579	37	240	38
4	361	315	263	278	320	227	762	552	319	37	211	e10
5	432	236	323	299	269	231	886	535	286	38	198	37
6	662	265	252	321	314	163	1,630	528	293	38	175	36
7	498	254	293	252	363	226	1,490	492	285	e10	211	e10
8	301	238	289	304	323	237	1,540	305	213	40	152	36
9	320	307	281	385	319	239	1,140	169	213	72	141	12
10	220	298	257	1,510	322	244	816	216	186	38	116	e10
11	82	291	284	755	319	252	631	483	123	74	65	34
12	77	224	257	634	300	256	440	391	108	86	97	35
13	98	242	236	1,230	266	196	359	379	88	87	62	35
14	104	287	276	1,410	313	247	230	359	120	31	21	e10
15	49	249	313	1,210	302	249	245	283	127	58	56	34
16	54	287	349	886	281	260	192	825	125	97	73	34
17	66	284	342	641	270	421	120	719	101	195	78	34
18	146	285	264	579	244	311	107	511	120	185	42	34
19	138	240	287	514	230	185	268	368	113	235	69	e10
20	254	287	313	470	221	270	379	254	63	298	58	79
21	273	238	323	444	188	265	474	161	80	280	e10	157
22	283	286	288	425	225	212	446	147	95	295	44	362
23	352	281	308	408	273	151	368	145	90	395	42	684
24	358	267	306	342	270	128	328	179	88	399	e10	750
25	369	264	306	385	264	54	247	174	46	451	40	712
26	325	220	300	375	261	105	212	153	82	537	40	672
27	353	269	251	364	209	97	160	129	80	502	19	687
28	314	257	301	328	260	51	408	112	82	436	e10	802
29	304	243	300	319	---	93	764	47	50	299	65	667
30	448	276	298	266	---	106	1,050	24	89	324	54	509
31	318	---	265	331	---	90	---	447	---	276	e10	---
Total	8,915	8,057	8,902	16,587	7,901	6,359	15,953	11,027	5,302	5,973	2,883	6,609
Mean	288	269	287	535	282	205	532	356	177	193	93.0	220
Max	662	315	349	1,510	363	421	1,630	841	579	537	255	802
Min	49	220	228	252	188	51	55	24	46	10	10	10
Ac-ft	17,680	15,980	17,660	32,900	15,670	12,610	31,640	21,870	10,520	11,850	5,720	13,110

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	2,313	2,589	2,283	2,477	3,062	2,723	2,585	3,384	3,953	2,131	860	1,686
Max	16,110	19,720	16,200	25,780	42,200	25,780	13,410	27,750	30,360	24,830	6,019	11,160
(WY)	(1999)	(2005)	(1992)	(1992)	(1992)	(1992)	(1977)	(1957)	(1987)	(2007)	(2007)	(1961)
Min	254	226	287	249	158	172	77.3	218	48.5	1.00	93.0	93.9
(WY)	(1990)	(1957)	(2013)	(1957)	(2009)	(2009)	(2011)	(2011)	(2009)	(1967)	(2013)	(1966)

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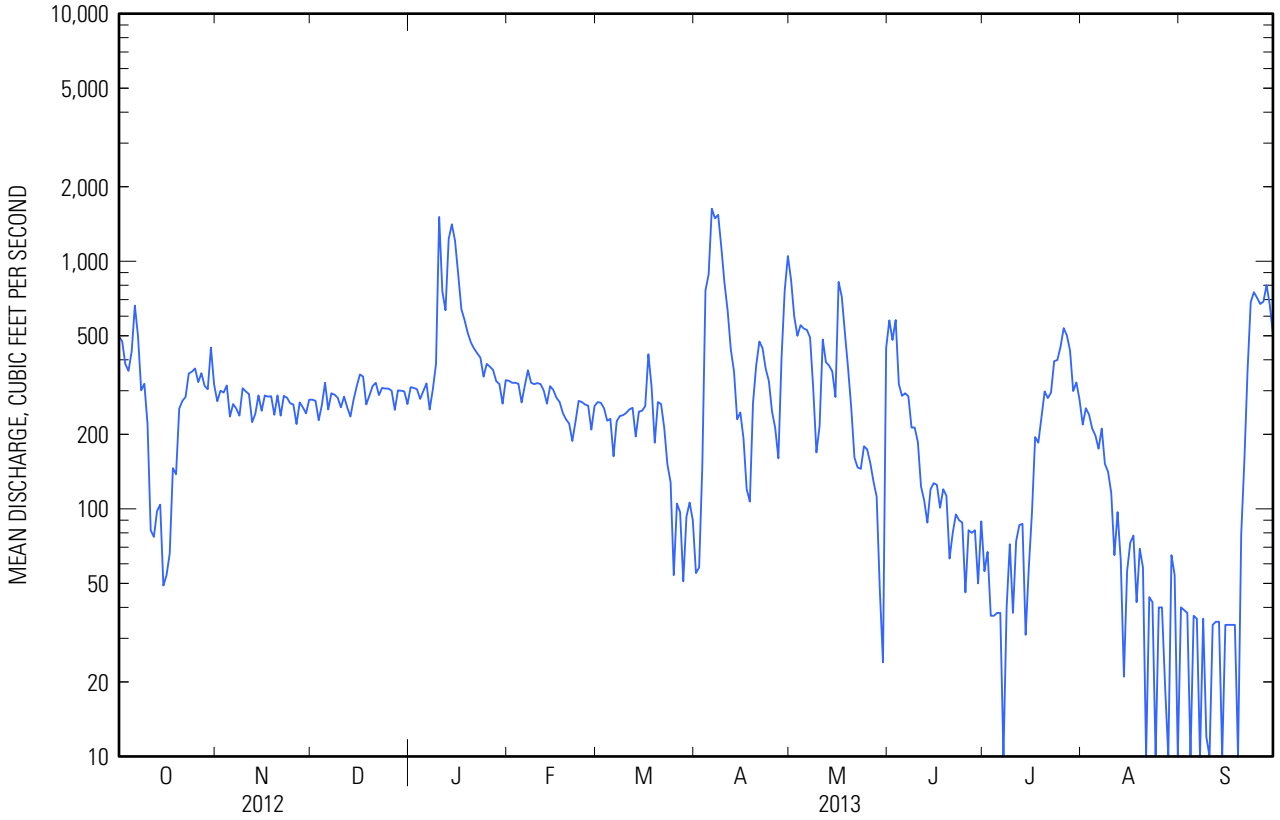
SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1948 - 2013	
Annual total	415,460		104,468			
Annual mean	1,135		286		2,508	
Highest annual mean					14,270	1992
Lowest annual mean					286	2013
Highest daily mean	22,400	Mar 23	1,630	Apr 6	79,300	Oct 23, 1998
Lowest daily mean	10	Jun 5	10	Jul 7	0.00	Jun 1, 1951
Annual seven-day minimum	54	Jun 24	22	Sep 4	0.44	Oct 4, 1969
Maximum peak flow			9,510	Jan 10	84,100	Jun 26, 1960
Maximum peak stage			14.36	Jan 10	46.40	Jun 26, 1960
Annual runoff (ac-ft)	824,100		207,200		1,817,000	
10 percent exceeds	2,390		531		5,590	
50 percent exceeds	340		264		871	
90 percent exceeds	92		41		222