Water-Data Report 2008

08158000 Colorado River at Austin, TX

Middle Colorado-Llano Basin
Austin-Travis Lakes Subbasin

LOCATION.--Lat 30°14′40″, long 97°41′39″ referenced to North American Datum of 1927, Travis County, TX, Hydrologic Unit 12090205, on right bank, 1,000 ft upstream from upstream bridge on U.S. Highway 183 in Austin, 1.4 mi downstream from Longhorn Dam, and at mile 290.3.

DRAINAGE AREA.--39,009 mi^2 of which 11,403 mi^2 probably is noncontributing.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Feb. 1898 to current year. Records of daily discharge for Dec. 13-26, 1914, and Feb. 9-17, 1915, published in WSP 408, have been found unreliable and should not be used.

PERIOD OF RECORD, Water-Quality.--
CHEMICAL DATA: Oct. 1947 to Aug. 1993.
BIOCHEMICAL DATA: Feb. 1968 to Aug. 1993.
BIOLOGICAL DATA: Jan. 1974 to Aug. 1993.
SEDIMENT DATA: Jan. 1974 to Aug. 1993.
RADIOCHEMICAL DATA: Jan. to July 1981.
TAXONOMIC DATA: July 1974 to Sept. 1981.

SPECIFIC CONDUCTANCE: Oct. 1947 to Sept. 1991.
WATER TEMPERATURE: Oct. 1947 to Sept. 1991.

REVISED RECORDS.--WSP 508: 1915(m). WSP 528: 1900(M), 1918(m). WSP 548: 1901-16. WSP 1342: Drainage area. WSP 1562: 1908, 1929(M), 1936.

GAGE.--Water-stage recorder. Datum of gage is 402.27 ft above NGVD of 1929. Prior to June 19, 1939, all records collected at or near Congress Avenue bridge 3.9 mi upstream at datum 19.6 ft higher; prior to June 18, 1915, nonrecording gages, recording gages thereafter; June 20, 1939, to Oct. 16, 1963, at site 1,000 ft downstream from present site at datum 5.0 ft higher. Satellite telemeter at station.

COOPERATION.--Lower Colorado River Authority provides operation and maintenance of the gage and verification of stage-discharge relation at low stages. U.S. Geological Survey maintains stage-discharge relation at medium to high stages, computes and publishes streamflow record.

REMARKS.--Records fair. Since installation of gage in 1898, at least 10% of contributing drainage area has been regulated. The city of Austin diverts water for municipal use upstream from station and returns wastewater effluent downstream. There are many other diversions above Lake Buchanan for irrigation, municipal supplies, 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 1833, 51 ft. July 7, 1869, discharge 550,000 ft^3/s, present site and datum (adjusted to present site on basis of record for flood of June 15, 1935), determined from information concerning stage at former site furnished by Dean T.U. Taylor.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 3,970 ft^3/s, July 10, with a corresponding gage height of 6.41 ft. However,the maximum gage height of 6.49 ft occurred on Jan. 23.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	705	277	259	238	265	427	863	804	1,910	1,960	1,140	1,290
2	609	277	262	348	334	423	825	836	1,900	1,980	1,130	1,070
3	575	255	200	325	358	595	1,090	1,240	1,630	1,940	1,100	1,160
4	550	272	255	312	359	507	1,300	826	2,110	1,840	1,140	1,270
5	420	287	292	316	327	457	1,430	1,030	2,090	1,920	1,120	1,290
6	409	261	279	307	474	446	1,160	1,010	2,160	1,890	1,130	1,270
7	443	281	259	326	279	467	1,220	1,030	2,090	1,910	1,060	1,890
8	412	266	258	337	370	438	1,270	1,180	2,070	1,970	1,170	1,500
9	412	209	257	379	349	446	1,220	1,120	2,100	1,550	1,120	1,140
10	403	282	272	339	453	766	1,230	1,200	2,060	1,500	1,040	1,180
11	423	229	195	295	407	504	1,170	1,290	2,100	1,130	1,040	624
12	343	264	310	334	430	478	843	1,270	2,070	1,090	1,240	343
13	343	271	254	291	428	472	639	1,240	2,070	1,090	1,180	1,140
14	338	262	194	296	408	451	894	1,650	2,120	1,280	1,090	1,790
15	346	236	305	295	440	445	799	1,550	2,060	1,210	1,060	1,770
16	344	266	238	313	315	448	856	1,400	2,080	1,170	1,050	1,640
17	335	276	188	289	295	443	953	1,130	2,090	1,120	1,060	1,210
18	324	259	279	285	281	652	1,210	1,490	2,190	1,200	1,120	1,230
19	346	246	229	308	234	563	913	1,310	2,070	1,180	1,380	1,260
20	318	280	259	337	396	414	999	1,410	2,040	1,190	1,090	1,240
21	340	276	183	330	394	548	988	1,290	2,030	1,160	1,230	1,300
22	336	226	285	384	366	429	916	1,920	2,050	1,200	846	1,260
23	346	274	202	362	413	401	615	1,880	2,000	1,130	892	1,270
24	338	381	264	322	373	443	628	1,900	2,040	1,150	945	1,320
25	330	334	182	265	360	568	713	1,840	2,030	1,050	1,070	1,250
26	426	367	265	218	365	441	967	1,900	2,050	1,020	976	1,300
27	385	288	175	309	386	592	1,750	1,850	2,040	1,060	1,060	1,300
28	373	275	263	146	413	656	916	1,790	1,990	1,140	1,180	1,250
29	305	264	175	207	432	904	952	1,770	1,950	1,120	1,100	1,300
30	326	283	258	257	---	776	946	1,910	1,950	1,060	1,220	1,230
31	292	---	248	276	---	815	---	1,940	---	1,060	1,020	---
Total	12,195	8,224	7,544	9,346	10,704	16,415	30,275	44,006	61,140	42,270	33,999	38,087
Mean	393	274	243	301	369	530	1,009	1,420	2,038	1,364	1,097	1,270
Max	705	381	310	384	474	904	1,750	1,940	2,190	1,980	1,380	1,890
Min	292	209	175	146	234	401	615	804	1,630	1,020	846	343
Ac-ft	24,190	16,310	14,960	18,540	21,230	32,560	60,050	87,290	121,300	83,840	67,440	75,550

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1898 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,876	1,491	1,414	1,193	1,435	1,533	2,562	3,972	3,771	2,892	1,786	2,483
Max	20,080	11,050	23,800	15,080	25,890	13,640	21,800	30,710	31,940	36,110	12,310	42,630
(WY)	(1931)	(1919)	(1914)	(1992)	(1992)	(1992)	(1900)	(1922)	(1935)	(1938)	(1906)	(1936)
Min	57.5	38.7	43.9	46.2	49.7	55.0	145	964	238	256	70.3	156
(WY)	(1935)	(1990)	(1964)	(1967)	(1964)	(1964)	(1907)	(1921)	(1910)	(1933)	(1917)	(1907)

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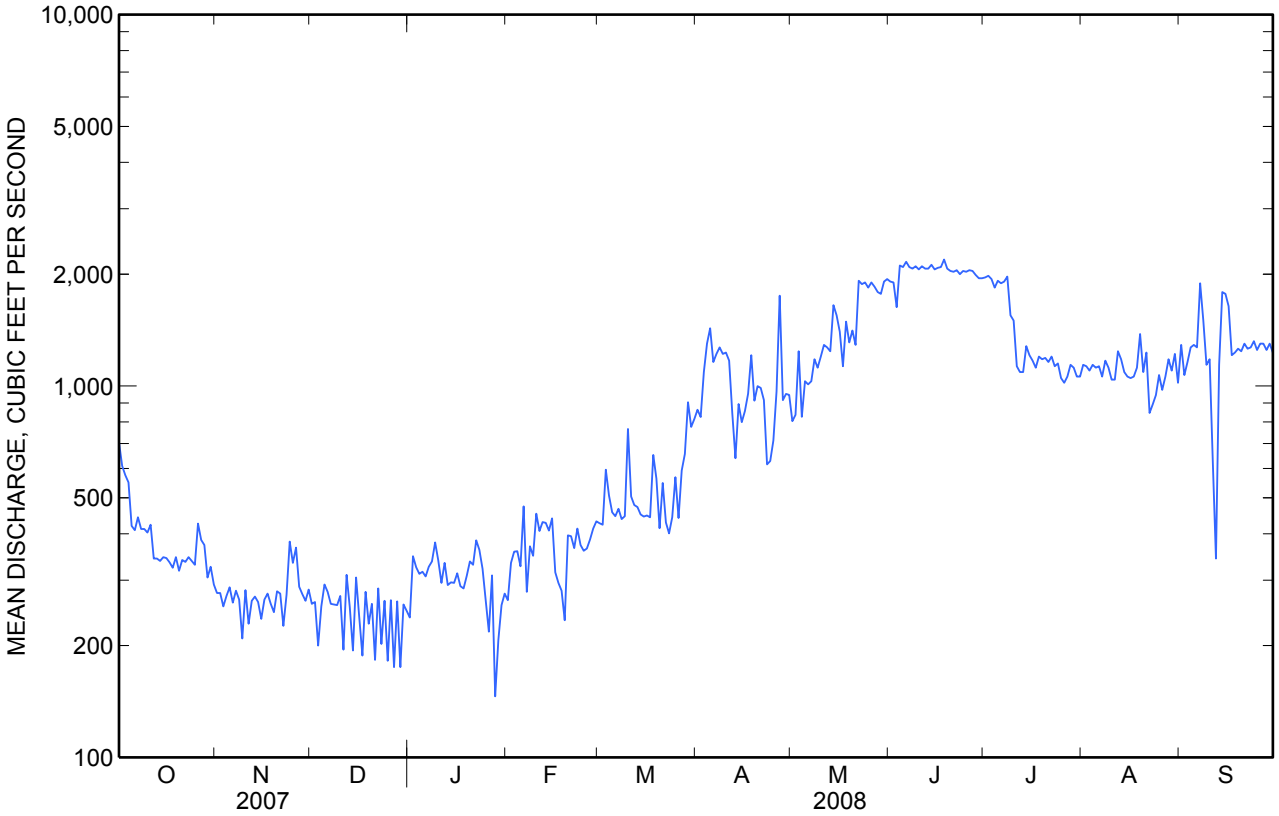
SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1898 - 2008	
Annual total	1,092,976		314,205			
Annual mean	2,994		858		2,206	
Highest annual mean					7,535	1914
Lowest annual mean					590	1917
Highest daily mean	26,700	Jun 28	2,190	Jun 18	323,000	Jun 15, 1935
Lowest daily mean	112	Jan 3	146	Jan 28	0.00	Sep 29, 1914
Annual seven-day minimum	146	Jan 6	218	Dec 23	18	Oct 25, 1990
Maximum peak flow			3,970	Jul 10	481,000	Jun 15, 1935
Maximum peak stage			6.49	Jan 23	[g]41.20	Jun 15, 1935
Annual runoff (ac-ft)	2,168,000		623,200		1,598,000	
10 percent exceeds	5,730		1,910		3,840	
50 percent exceeds	367		680		1,130	
90 percent exceeds	197		263		178	

[g] From floodmark at site and datum then in use.