Water-Data Report 2010

09402500 COLORADO RIVER NEAR GRAND CANYON, AZ

Lower Colorado-Lake Mead Basin
Lower Colorado-Marble Canyon Subbasin

LOCATION.--Lat 36°06′05″, long 112°05′08″ referenced to North American Datum of 1927, in sec.5, T.31 N., R.3 E., Coconino County, AZ, Hydrologic Unit 15010001, in Grand Canyon National Park, on left bank 0.2 mi upstream from Kaibab Bridge, 0.4 mi upstream from Bright Angel Creek, 4.5 mi northeast of village of Grand Canyon, 26 mi downstream from Little Colorado River, and 267 mi upstream from Hoover Dam.

DRAINAGE AREA.--141,600 mi^2 of which 3,959 mi^2 probably is noncontributing, in Great Divide basin in southern Wyoming.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Oct. 1922 to current year. Prior to 1944, published as "Colorado River at Bright Angel Creek, near Grand Canyon." Gage-height records collected 1.5 mi downstream 1908-1913, published in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 2,418.7 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Flow completely regulated by Lake Powell, 104 mi upstream, since Mar. 13, 1963. (See elsewhere in this report.) Many diversions above station for irrigation, municipal, and industrial uses.

EXTREMES FOR PERIOD OF RECORD.--1922-62: Maximum discharge, 127,000 ft^3/s, July 2, 1927, gage height, 29.25 ft; minimum, 700 ft^3/s Dec. 28, 1924, gage height, -0.70 ft. 1963-2001: Maximum discharge, 96,200 ft^3/s, June 29, 1983, gage height, 26.26 ft; minimum, 850 ft^3/s, Jan. 26, 1963, gage height, -0.55 ft, result of closing coffer dam at Glen Canyon Dam.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1884, 300,000 ft^3/s about July 8, 1884 (computed on basis of flood studies at Lees Ferry). Crest discharge of flood of June 19, 1921, was 220,000 ft^3/s, gage height, 37.5 ft from floodmarks, from rating curve extended above 120,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 21,400 ft^3/s, Aug. 7, gage height, 12.14 ft; minimum daily discharge, 8,500 ft^3/s, Sept. 10.

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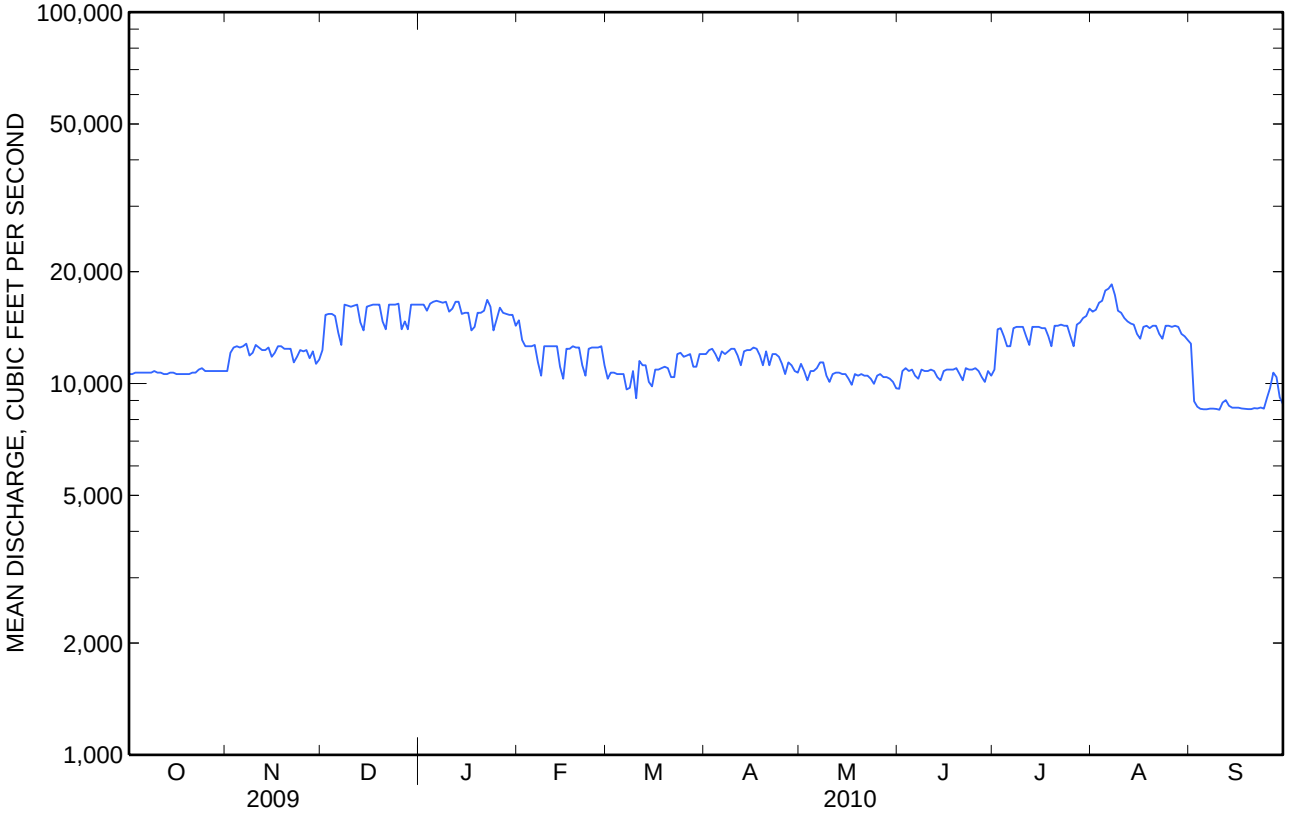
DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	10,600	10,800	12,300	16,300	14,800	10,300	12,000	11,300	9,680	10,900	15,600	12,800
2	10,600	12,100	15,300	16,300	13,100	10,700	12,300	10,800	10,800	14,000	15,800	8,960
3	10,700	12,500	15,400	15,700	12,600	10,700	12,400	10,200	11,000	14,100	16,500	8,660
4	10,700	12,600	15,400	16,400	12,600	10,600	12,000	10,800	10,800	13,400	16,700	8,550
5	10,700	12,500	15,200	16,600	12,600	10,600	11,500	10,800	10,900	12,600	17,800	8,520
6	10,700	12,600	13,700	16,700	12,700	10,600	12,200	11,000	10,500	12,600	18,000	8,520
7	10,700	12,800	12,700	16,600	11,400	9,640	12,000	11,400	10,300	14,100	18,500	8,560
8	10,700	11,900	16,300	16,500	10,500	9,730	12,200	11,400	10,900	14,200	17,300	8,560
9	10,800	12,100	16,200	16,600	12,600	10,800	12,400	10,500	10,800	14,200	15,700	8,540
10	10,700	12,700	16,100	15,600	12,600	9,130	12,400	10,100	10,800	14,200	15,500	8,500
11	10,700	12,500	16,200	15,900	12,600	11,500	11,900	10,600	10,900	13,400	15,000	8,890
12	10,600	12,300	16,300	16,600	12,600	11,200	11,200	10,700	10,800	12,700	14,700	9,020
13	10,600	12,300	14,600	16,600	12,600	11,200	12,200	10,700	10,400	14,200	14,500	8,710
14	10,700	12,500	13,900	15,400	11,100	10,100	12,300	10,600	10,200	14,200	14,400	8,610
15	10,700	11,800	16,100	15,500	10,300	9,820	12,300	10,600	10,800	14,200	13,600	8,610
16	10,600	12,100	16,200	15,500	12,400	10,900	12,500	10,300	10,900	14,100	13,200	8,610
17	10,600	12,600	16,300	13,900	12,400	10,900	12,400	9,920	10,900	14,100	14,200	8,570
18	10,600	12,600	16,300	14,200	12,600	11,000	11,900	10,600	10,900	13,400	14,300	8,550
19	10,600	12,400	16,300	15,500	12,500	11,100	11,200	10,500	11,000	12,600	14,100	8,530
20	10,600	12,400	14,700	15,500	12,500	11,000	12,200	10,600	10,600	14,300	14,300	8,530
21	10,700	12,400	14,000	15,700	11,200	10,400	11,200	10,500	10,200	14,300	14,300	8,580
22	10,700	11,400	16,300	16,800	10,500	10,400	12,000	10,500	11,000	14,400	13,600	8,570
23	10,900	11,800	16,300	16,100	12,400	12,000	12,000	10,300	10,900	14,300	13,200	8,620
24	11,000	12,300	16,300	13,900	12,500	12,100	11,800	9,980	10,900	14,300	14,300	8,560
25	10,800	12,200	16,400	14,900	12,500	11,800	11,300	10,500	11,000	13,400	14,300	9,160
26	10,800	12,300	14,000	16,000	12,500	11,900	10,600	10,600	10,800	12,600	14,200	9,740
27	10,800	11,700	14,700	15,500	12,600	12,000	11,400	10,400	10,400	14,400	14,300	10,700
28	10,800	12,200	14,000	15,400	11,200	11,100	11,200	10,400	10,100	14,600	14,200	10,400
29	10,800	11,300	16,300	15,300	---	11,100	10,800	10,300	10,800	15,000	13,600	9,180
30	10,800	11,600	16,300	15,300	---	12,000	10,700	10,100	10,500	15,200	13,400	8,810
31	10,800	---	16,300	14,300	---	12,000	---	9,710	---	15,900	13,100	---
Total	332,100	365,300	476,400	487,100	342,500	338,320	354,500	326,710	320,480	429,900	462,200	269,120
Mean	10,710	12,180	15,370	15,710	12,230	10,910	11,820	10,540	10,680	13,870	14,910	8,971
Max	11,000	12,800	16,400	16,800	14,800	12,100	12,500	11,400	11,000	15,900	18,500	12,800
Min	10,600	10,800	12,300	13,900	10,300	9,130	10,600	9,710	9,680	10,900	13,100	8,500
Ac-ft	658,700	724,600	944,900	966,200	679,300	671,100	703,200	648,000	635,700	852,700	916,800	533,800
Cfsm	0.08	0.09	0.11	0.11	0.09	0.08	0.09	0.08	0.08	0.10	0.11	0.07

WTR YR 2010 TOTAL 4504630 MEAN 12340 MAX 18500 MIN 8500 AC-FT 8935000 CFSM 0.09

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