

Water-Data Report 2011

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 mi², of which 3,959 mi² probably is noncontributing, in the 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 ft³/s, July 2, 1927, gage height, 29.25 ft; minimum, 700 ft³/s Dec. 28, 1924, gage height, -0.70 ft. 1963-2001: Maximum discharge, 96,200 ft³/s, June 29, 1983, gage height, 26.26 ft; minimum, 850 ft³/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 ft³/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 ft³/s, gage height, 37.5 ft from floodmarks, from rating curve extended above 120,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 26,700 ft³/s, July 9, gage height, 13.78 ft; minimum daily discharge, 8,410 ft³/s, Oct. 27.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	8,650	8,460	14,800	14,400	17,900	16,600	19,300	16,300	23,200	25,400	25,200	18,300
2	8,540	14,000	14,600	14,500	18,100	16,600	19,200	15,300	23,700	25,300	25,000	16,300
3	8,520	14,500	14,600	14,600	18,200	16,600	19,500	15,200	23,400	25,100	25,200	16,300
4	8,720	14,500	14,800	14,900	18,400	16,500	19,500	15,200	22,900	21,400	23,800	16,300
5	9,090	14,600	14,600	14,800	18,600	16,500	17,000	15,300	23,100	21,600	25,100	16,300
6	11,400	14,600	14,000	14,900	17,700	16,500	17,000	16,000	22,900	25,200	25,000	16,400
7	12,100	14,000	14,600	14,900	17,300	16,500	16,900	15,900	22,200	26,000	25,000	16,200
8	9,770	13,200	14,700	15,000	19,100	16,500	16,900	15,900	22,200	26,300	25,000	16,200
9	9,010	14,300	14,600	15,300	19,000	16,600	16,900	15,900	22,500	26,300	25,100	16,200
10	8,700	14,600	14,500	16,700	19,100	16,800	16,900	15,900	22,500	26,300	25,500	16,400
11	8,590	14,700	14,600	17,800	18,900	16,700	16,900	15,900	22,700	26,200	25,500	16,600
12	8,630	14,600	14,600	17,900	18,900	16,700	16,600	15,900	22,800	25,500	25,500	16,900
13	8,640	14,700	14,100	18,000	18,700	16,900	16,400	15,400	23,600	24,900	25,300	17,500
14	8,670	14,000	14,700	17,900	18,700	16,800	16,400	16,600	23,700	24,800	25,400	17,100
15	8,670	13,500	14,700	17,900	18,900	16,700	16,500	22,400	23,500	24,700	25,500	17,900
16	8,620	14,700	14,700	17,200	18,800	16,900	16,500	22,500	23,600	24,700	25,500	17,200
17	8,510	14,700	14,700	17,400	19,000	17,000	16,500	22,600	23,800	24,700	25,400	17,600
18	8,550	14,800	14,700	17,900	18,900	17,000	16,500	22,700	24,000	24,700	25,400	17,800
19	8,530	14,600	14,400	18,000	18,800	17,100	16,500	23,200	24,300	24,300	25,400	17,700
20	8,560	14,700	14,000	18,000	18,700	19,300	15,100	23,200	24,300	24,700	25,500	17,000
21	8,500	14,000	14,700	18,000	18,700	19,200	15,900	23,200	24,200	24,900	25,500	16,600
22	8,550	13,400	15,500	17,900	19,000	19,300	16,600	23,200	24,200	24,900	25,500	16,500
23	8,480	14,800	14,900	17,000	16,700	19,400	16,500	23,100	24,600	24,900	25,500	16,500
24	8,480	14,800	15,300	17,300	16,500	19,200	16,500	23,000	24,900	25,000	25,500	16,500
25	8,510	14,800	14,700	18,000	16,500	19,300	16,500	22,700	24,900	24,900	25,500	16,500
26	8,500	13,400	14,100	18,000	16,500	19,300	16,500	23,000	24,900	24,800	25,400	16,500
27	8,410	14,700	14,100	18,000	16,600	19,300	16,500	23,000	24,900	24,900	25,400	16,500
28	8,480	14,000	14,700	18,000	16,600	19,300	16,500	22,900	25,200	24,900	25,500	16,500
29	8,510	13,500	14,700	17,900	---	19,200	16,400	22,900	25,400	25,400	24,600	16,500
30	8,490	14,700	14,900	17,100	---	19,200	16,400	23,300	25,400	25,200	22,100	16,500
31	8,440	---	14,600	17,300	---	19,200	---	23,300	---	25,200	20,400	---
Total	273,820	423,860	453,200	522,500	508,800	548,700	507,300	610,900	713,500	773,100	775,200	503,300
Mean	8,833	14,130	14,620	16,850	18,170	17,700	16,910	19,710	23,780	24,940	25,010	16,780
Max	12,100	14,800	15,500	18,000	19,100	19,400	19,500	23,300	25,400	26,300	25,500	18,300
Min	8,410	8,460	14,000	14,400	16,500	16,500	15,100	15,200	22,200	21,400	20,400	16,200
Med	8,550	14,600	14,700	17,400	18,700	16,900	16,500	22,500	23,700	24,900	25,400	16,500
Ac-ft	543,100	840,700	898,900	1,036,000	1,009,000	1,088,000	1,006,000	1,212,000	1,415,000	1,533,000	1,538,000	998,300

	Calendar Year 2010	Water Year 2011
Total	4,481,710	6,614,180
Mean	12,280	18,120
Max	18,500	26,300
Min	8,410	8,410
Med	12,200	16,900
Ac-ft	8,889,000	13,120,000

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