



Figure 2. Comparison of discharge at three long-term representative gaging stations during 1960 water year with median discharge for period 1931-60.

MISSOURI RIVER MAIN STEM

4860. Missouri River at Sioux City, Iowa

Location.--Lat 42°29'10", long 96°24'45", in NW¹SE¹ sec.16, T.29 N., R.9 E., sixth principal meridian, on right bank on upstream side of bridge on U. S. Highway 77 at Sioux City, 2.0 miles downstream from Big Sioux River.

Drainage area.--314,600 sq mi, approximately.

Records available.--October 1897 to September 1960 in reports of Geological Survey.

Monthly discharge only for some periods, published in WSP 1310. Gage-height records collected in this vicinity September 1878 to December 1899 are contained in reports of Missouri River Commission and since July 1889 are contained in reports of U. S. Weather Bureau.

Gage.--Water-stage recorder. Datum of gage is 1,076.96 ft above mean sea level, datum of 1929. Sept. 2, 1878, to Dec. 31, 1905, staff, cable, and chain gages at various locations within 1.7 miles of present site and at various datums. Jan. 1, 1906, to Feb. 14, 1935, chain gage at present site and datum.

Average discharge.--63 years, 32,660 cfs (23,640,000 acre-ft per year).

Extremes.--Maximum discharge during year, 101,000 cfs Apr. 3 (gage height, 10.52 ft); minimum daily, 6,800 cfs Jan. 20; minimum gage height not determined.
1928-31, 1938-60: Maximum discharge, 441,000 cfs Apr. 14, 1952; maximum gage height, 24.28 ft Apr. 14, 1952; minimum discharge, 2,500 cfs Dec. 29, 1941; minimum gage height observed, -3.34 ft Dec. 27, 1946.

Remarks.--Records good except those for periods of ice effect, which are fair. Flow partly regulated by upstream main stem reservoirs. Discharge measurements generally made three times a month during winter and six times a month during rest of year.

Revisions (water years).--WSP 716: 1929-30. WSP 876: Drainage area.

Discharge, in cubic feet per second, water year October 1959 to September 1960

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	27,800	27,600	8,500	9,500	8,600	8,000	52,600	24,600	21,300	23,200	29,400	26,400
2	27,600	24,600	8,500	9,500	8,600	8,000	78,200	24,800	21,400	22,400	29,800	29,400
3	28,100	21,800	9,000	9,800	8,600	8,000	35,100	24,800	21,400	22,000	29,600	30,600
4	27,100	19,500	9,200	10,200	9,000	7,800	89,100	26,800	21,400	22,800	29,400	30,900
5	27,100	17,800	9,000	10,800	9,000	7,800	79,400	26,200	21,100	24,400	30,600	30,400
6	27,100	14,400	8,800	11,200	9,000	9,000	69,800	26,800	21,300	25,200	33,900	30,600
7	27,600	12,100	8,800	11,600	9,000	11,000	62,000	24,200	21,400	26,000	32,100	30,100
8	28,400	10,800	8,800	11,000	9,200	11,000	57,100	21,100	24,400	27,100	29,600	29,800
9	27,800	10,200	8,800	10,200	9,400	10,000	53,500	22,800	27,600	27,400	29,100	30,400
10	27,100	8,500	8,600	10,000	9,400	8,500	50,800	24,000	23,400	27,600	28,400	28,800
11	27,100	8,900	8,600	10,000	9,200	8,500	45,800	24,200	26,800	27,600	28,400	27,600
12	27,400	8,900	8,560	9,200	9,000	8,400	40,500	24,000	23,000	22,900	28,400	27,400
13	27,600	8,800	8,560	8,600	9,000	8,400	38,900	23,600	22,600	29,400	28,600	27,800
14	27,600	8,700	8,560	8,600	9,000	8,300	37,700	23,800	23,000	25,400	29,100	29,400
15	28,100	7,000	8,800	8,600	9,000	8,200	36,500	24,800	22,600	25,000	29,400	30,400
16	28,100	7,200	9,180	8,000	9,000	8,000	35,100	26,800	24,200	25,600	29,800	30,900
17	28,100	7,600	9,550	8,000	9,000	8,500	33,000	29,100	25,000	26,600	30,100	30,400
18	27,800	8,500	9,300	8,000	8,600	8,000	29,800	28,200	22,200	27,800	30,900	30,600
19	28,100	9,500	9,420	7,600	8,400	9,500	25,600	25,600	22,000	28,800	31,800	30,100
20	28,800	11,500	9,420	6,800	8,400	9,000	23,000	25,000	23,600	28,400	31,800	29,800
21	28,800	11,200	9,550	7,600	8,400	9,000	21,800	26,800	24,400	27,800	31,200	30,100
22	29,100	10,500	9,550	8,000	8,600	9,000	24,000	26,200	21,600	28,600	31,200	30,100
23	28,800	9,600	9,550	8,200	8,600	8,800	24,200	24,400	21,600	29,400	31,200	30,100
24	27,600	9,200	9,550	8,800	8,600	8,800	24,200	23,000	21,800	29,800	31,500	29,400
25	27,100	8,800	9,600	9,000	8,600	8,800	24,000	21,800	22,400	29,600	32,400	27,400
26	27,800	8,600	9,800	9,200	8,400	8,800	23,600	22,000	24,000	29,600	30,100	26,800
27	27,400	8,500	9,920	9,400	8,400	13,000	23,400	20,800	25,400	29,600	29,100	27,100
28	27,400	8,500	10,200	9,000	8,200	20,000	23,800	20,000	22,000	29,600	34,200	27,400
29	28,100	8,400	9,680	8,600	8,200	30,000	24,600	20,900	25,200	29,400	36,800	27,400
30	28,600	8,500	9,800	8,600	8,600	65,000	25,000	21,100	24,000	29,100	35,500	27,100
31	29,100	-----	9,500	8,600	-----	57,100	-----	21,100	-----	29,100	25,000	-----
Total	864,200	346,000	284,810	281,800	254,400	413,200	41,272.1	746,300	698,100	843,600	946,400	874,700
Mean	27,890	11,530	9,187	9,090	8,772	13,330	42,400	24,070	23,270	27,220	30,590	29,160
Ac-ft	1,714	686,300	564,900	558,900	504,600	819,600	2,523	1,460	1,385	1,674	1,681	1,735

Calendar year 1959: Max 33,000 Min 7,000 Mean 20,460 Ac-ft 14,830,000
 Water year 1959-60: Max 95,100 Min 6,800 Mean 21,390 Ac-ft 15,530,000
 Peak discharge (base, 80,000 cfs).--Mar. 30 (6 p.m.) 92,400 cfs (9.96 ft); Apr. 3 (7 p.m.) 101,000 cfs (10.52 ft).

* Expressed in thousands.
 a No gage-height record; discharge estimated on basis of weather records and records for other Missouri River stations.

g Computed from telemark readings made four times daily.

Note.--Stage-discharge relation affected by ice Nov. 15 to Dec. 5, Dec. 30 to Mar. 30.

