

MINNESOTA RIVER BASIN--Continued

05325000 MINNESOTA RIVER AT MANKATO, MN

LOCATION.--Lat 44°10'08", long 94°00'11", in SE¹/₄SW¹/₄ sec. 7, T. 108 N., R. 26 W., Blue Earth County, Hydrologic Unit 07020007, on right bank 300 ft downstream from Memorial bridge in Mankato, 2.0 mi downstream from Blue Earth River and at mile 106.2 upstream from Mississippi River.

DRAINAGE AREA.--14,900 mi² (approximately).

PERIOD OF RECORD.--May 1903 to current year (no winter records 1904, 1906-10, 1918-29). Monthly discharge only for some periods, published in WSP 1308. Published as "near Mankato": 1903-21.

REVISED RECORDS.--WSP 875: 1917. WSP 955: Drainage area. WSP 1085: 1929. WSP 1238: 1903, 1908, 1919. WSP 1508: 1916(M), 1918(M), 1926(M), 1928, 1930, 1932(M), 1938(M). WDR-MN-76-1: 1881(M).

GAGE.--Water-stage recorder. Datum of gage is 747.92 ft above sea level. Prior to Oct. 19, 1921, nonrecording gage, at site 1.8 mi upstream at datum 6.4 ft higher. Mar. 15, 1922 to Nov. 30, 1924, nonrecording gage, and Dec. 1, 1924 to May 24, 1971, recorder at site 0.2 mi upstream at present datum. May 25, 1971 to Aug. 14, 1977, recorder at site 0.5 mi upstream at present datum. Aug. 14, 1977 to July 27, 1978, nonrecording gage; and from July 28, 1978 to Sept. 30, 1993, recording gage at site 0.7 mi upstream of present site.

REMARKS.--Records fair except those for estimated daily discharges, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage, 29.9 ft, Apr. 26, 1881, near present site and datum, from floodmark (discharge, 110,000 ft³/s).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	638	5800	4250	e1800	e1700	3140	5500	11400	10500	10500	4890	1940
2	672	5540	4190	e1700	e1700	3440	5570	10800	10200	9930	4450	2210
3	686	4510	4110	e1700	e1700	3730	5600	10200	9830	10800	4160	2180
4	667	4200	4090	e1700	e1700	3780	5500	9660	9450	12500	4090	2080
5	758	3900	4020	e1600	e1700	3830	5720	9220	9170	12200	4100	1960
6	822	3630	3930	e1600	e1700	3760	7750	8960	9000	11800	3910	1810
7	810	3450	3920	e1600	e1600	3880	10200	8890	8980	10800	3660	1700
8	971	3320	3860	e1500	e1600	3570	11400	8990	9810	10500	3450	1650
9	1130	3270	3760	e1500	e1600	3200	14500	9300	10200	9980	4030	1610
10	1170	3520	3610	e1500	e1600	3360	17900	9650	10700	9080	4220	1610
11	1200	4160	3530	e1500	e1700	3450	22200	9940	13700	8270	3590	1600
12	1390	4910	3470	e1500	e1800	3430	23500	10500	17300	7350	3540	1570
13	1490	5370	3420	e1500	e2100	3460	23700	11900	19400	6960	3460	1550
14	1440	5380	3280	e1500	e3000	3440	23200	13000	20400	6520	3380	1550
15	1600	5170	3250	e1500	3670	3580	22400	13800	19700	6030	3500	1550
16	1830	4860	3180	e1500	3770	3990	22200	14600	17900	5400	3420	1490
17	3120	4660	e3000	e1600	4060	5470	22100	15200	16200	4710	3100	1450
18	4160	4570	e2800	e1600	4140	6400	21600	15000	14800	4340	2900	1420
19	4880	4440	e2500	e1600	4120	7430	20800	14500	13700	4640	2760	1410
20	5110	4310	e2400	e1600	4050	8080	19900	14600	12600	6530	2520	1380
21	5180	4380	e2300	e1600	3890	8000	18500	16200	11700	8020	2300	1360
22	4780	4530	e2200	e1700	3630	7400	16900	16600	11100	9790	2170	1370
23	4020	4470	e2200	e1700	3280	6770	16000	17200	10800	10900	2070	1350
24	3560	4470	e2100	e1700	3160	6320	15900	17300	10300	11400	1960	1320
25	3290	4490	e2100	e1700	3130	5980	16100	16500	9990	11000	1900	1270
26	3040	4370	e2100	e1700	2940	5770	16100	15200	9690	10100	1880	1260
27	3150	4340	e2100	e1700	2950	5660	15600	14100	9680	8700	1890	1250
28	3480	4290	e2000	e1700	3030	5640	14400	13200	10600	7720	1920	1210
29	4690	4270	e2000	e1700	---	5540	13200	12500	10900	6630	1940	1120
30	5480	4370	e1900	e1700	---	5450	12100	11600	10900	6100	1920	1030
31	5800	---	e1800	e1700	---	5470	---	11000	---	5290	1920	---
TOTAL	81014	132950	93370	50200	75020	152420	466040	391510	369200	264490	95000	46260
MEAN	2613	4432	3012	1619	2679	4917	15530	12630	12310	8532	3065	1542
MAX	5800	5800	4250	1800	4140	8080	23700	17300	20400	12500	4890	2210
MIN	638	3270	1800	1500	1600	3140	5500	8890	8980	4340	1880	1030
AC-FT	160700	263700	185200	99570	148800	302300	924400	776600	732300	524600	188400	91760
CFSM	.18	.30	.20	.11	.18	.33	1.04	.85	.83	.57	.21	.10
IN.	.20	.33	.23	.13	.19	.38	1.16	.98	.92	.66	.24	.12

e Estimated

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 1999, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1648	1591	1049	651	803	4598	9482	5846	6157	4578	2372	1655
MAX	14600	8569	4770	3009	4505	18230	46150	22540	34230	33130	23520	11070
(WY)	1969	1996	1983	1992	1983	1983	1997	1993	1993	1993	1993	1993
MIN	66.1	83.5	80.9	61.5	58.4	132	609	101	194	58.3	37.4	56.6
(WY)	1934	1934	1934	1940	1940	1934	1931	1934	1934	1934	1934	1934

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1903 - 1999
ANNUAL TOTAL	1916484	2217474	
ANNUAL MEAN	5251	6075	3527 ^a
HIGHEST ANNUAL MEAN			14890
LOWEST ANNUAL MEAN			136
HIGHEST DAILY MEAN	28200	Apr 3	92700
LOWEST DAILY MEAN	505	Sep 25	31
ANNUAL SEVEN-DAY MINIMUM	535	Sep 22	33
INSTANTANEOUS PEAK FLOW		24200	94100
INSTANTANEOUS PEAK STAGE		16.16	30.11
INSTANTANEOUS LOW FLOW		634	26 ^b
ANNUAL RUNOFF (AC-FT)	3801000	4398000	2555000
ANNUAL RUNOFF (CFSM)	.35	.41	.24
ANNUAL RUNOFF (INCHES)	4.78	5.54	3.22
10 PERCENT EXCEEDS	11400	14500	9220
50 PERCENT EXCEEDS	4110	4050	1290
90 PERCENT EXCEEDS	994	1500	190

a Median of annual mean discharges is 2860 ft³/s.
 b Minimum observed.



