

05292000 MINNESOTA RIVER AT ORTONVILLE, MN

LOCATION.--Lat 45°17'44", long 96°26'38", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 16, T.121 N., R.46 W., Big Stone County, Hydrologic Unit 07020001, on left bank 400 ft downstream from bridge on U.S. Highway 12 and 1,300 ft downstream from dam at outlet of Big Stone Lake, at Ortonville.

DRAINAGE AREA.--1,160 mi² (approximately).

PERIOD OF RECORD.--February 1938 to current year.

REVISED RECORDS.--WSP 895: 1939. WSP 1508: 1942 (yearly mean).

GAGE.--Water-stage recorder. Datum of gage is 956.38 ft above sea level (NGVD of 1929). Prior to Mar. 31, 1939, nonrecording gage on downstream side of dam 1,300 ft upstream at datum 1.31 ft higher.

REMARKS.--Records good. Affected by regulation of Big Stone Lake.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	217	167	65	51	37	21	21	82	182	576	36	33
2	316	225	65	54	37	21	21	79	95	496	36	82
3	326	220	64	51	39	21	21	76	83	682	36	128
4	201	224	66	51	29	21	21	58	167	734	35	127
5	105	224	63	48	22	22	22	45	330	717	34	128
6	105	223	61	41	21	22	22	46	321	647	34	131
7	105	223	64	41	21	e22	21	46	441	604	33	131
8	106	192	62	39	21	22	21	48	724	637	33	130
9	104	192	63	40	21	22	21	49	736	611	30	129
10	103	225	65	39	21	21	21	50	778	577	28	126
11	103	212	62	38	21	21	23	49	793	616	28	128
12	104	184	e64	43	21	22	19	48	889	662	27	131
13	107	145	e64	46	21	22	33	49	1,080	651	25	118
14	104	127	63	40	21	22	78	50	1,970	623	25	111
15	108	128	62	37	21	22	79	48	2,570	625	26	111
16	106	99	62	37	21	22	78	46	2,440	546	31	111
17	103	77	62	34	21	21	78	46	2,180	510	32	110
18	101	75	62	32	21	21	91	57	1,850	539	35	112
19	102	73	62	34	21	21	108	74	1,660	298	37	114
20	102	74	62	34	21	22	104	70	1,550	132	37	148
21	100	70	62	38	21	21	101	68	1,370	37	38	170
22	102	70	61	48	21	22	102	71	1,160	37	38	165
23	106	71	60	37	21	22	92	132	1,060	37	37	159
24	103	68	57	41	21	22	89	171	1,040	37	37	160
25	103	68	57	41	21	21	92	191	783	38	38	162
26	102	68	54	41	21	22	86	264	592	38	39	160
27	102	69	51	35	21	22	82	260	733	37	38	159
28	103	65	51	37	21	22	79	256	664	37	38	164
29	104	65	48	43	---	22	79	255	e572	37	38	157
30	109	65	51	41	---	22	80	253	786	37	38	172
31	104	---	52	40	---	21	---	249	---	36	36	---
TOTAL	3,866	3,988	1,867	1,272	647	670	1,785	3,286	29,599	11,891	1,053	3,967
MEAN	125	133	60.2	41.0	23.1	21.6	59.5	106	987	384	34.0	132
MAX	326	225	66	54	39	22	108	264	2,570	734	39	172
MIN	100	65	48	32	21	21	19	45	83	36	25	33
AC-FT	7,670	7,910	3,700	2,520	1,280	1,330	3,540	6,520	58,710	23,590	2,090	7,870
CFSM	0.11	0.11	0.05	0.04	0.02	0.02	0.05	0.09	0.85	0.33	0.03	0.11
IN.	0.12	0.13	0.06	0.04	0.02	0.02	0.06	0.11	0.95	0.38	0.03	0.13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2005, BY WATER YEAR (WY)

MEAN	32.6	25.9	23.2	22.8	33.8	193	506	270	199	154	72.5	35.6
MAX	441	269	194	164	273	1,519	4,109	904	1,034	1,781	1,299	250
(WY)	(1996)	(1996)	(1943)	(1943)	(1998)	(1994)	(1997)	(2001)	(1962)	(1993)	(1993)	(1942)
MIN	0.20	0.20	0.20	0.17	0.16	1.14	1.27	0.91	1.30	1.11	0.25	0.18
(WY)	(1939)	(1939)	(1939)	(1940)	(1940)	(1941)	(1941)	(1941)	(1977)	(1977)	(1959)	(1988)

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SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1938 - 2005	
ANNUAL TOTAL	15,956.2		63,891		a132	
ANNUAL MEAN	43.6		175		514	
HIGHEST ANNUAL MEAN					1997	
LOWEST ANNUAL MEAN					2.39	
HIGHEST DAILY MEAN	326	Oct 3	2,570	Jun 15	5,010	Apr 10, 1997
LOWEST DAILY MEAN	1.7	Apr 23	19	Apr 12	0.00	Dec 13, 1940
ANNUAL SEVEN-DAY MINIMUM	2.1	Apr 19	21	Feb 6	0.08	Sep 12, 1988
MAXIMUM PEAK FLOW			b2,600	Jun 15	5,070	Apr 10, 1997
MAXIMUM PEAK STAGE			8.76	Jun 15	12.92	Apr 13, 1952
INSTANTANEOUS LOW FLOW			c8.5	Apr 13	0.00	Dec 13, 1940
ANNUAL RUNOFF (AC-FT)	31,650		126,700		95,650	
ANNUAL RUNOFF (CFSM)	0.038		0.151		0.114	
ANNUAL RUNOFF (INCHES)	0.51		2.05		1.55	
10 PERCENT EXCEEDS	106		574		340	
50 PERCENT EXCEEDS	15		63		22	
90 PERCENT EXCEEDS	5.6		21		1.2	

- a Median of annual mean discharges is 88 ft³/s.
- b Due in part to regulation.
- c Due to regulation.
- e Estimated.

