UPPER MISSISSIPPI RIVER MAIN STEM

05457000 CEDAR RIVER NEAR AUSTIN, MN

LOCATION.--Lat 4338'11", long 9258'26", in NE *1* / *4* SE *1* / *4* sec. 15, T.102 N., R.18 W., Mower County, Hydrologic Unit 07080201, on left bank 200 ft upstream from abandoned powerhouse, 500 ft downstream from highway bridge, 1.1 mi downstream from Turtle Creek, and 1.1 mi south of Austin.
DRAINAGE AREA.--399 mi *2* (revised).
PERIOD OF RECORD.--May 1909 to September 1914, October 1944 to current year.
REVISED RECORDS.--WSP 1145: 1945, 1948.
GAGE.--Water-stage recorder. Datum of gage is 1,162.10 ft above mean sea level. May 1909 to April 1912, nonrecording gage in tailwater of power plant 200 ft downstream at datum 3.1 ft lower. May 1912 to September 1914, nonrecording gage on highway bridge 500 ft downstream at datum 1.1 ft lower.
REMARKS.--Records good except those for estimated daily discharges, which are fair.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft *3* /s and maximum (*):

Date	Time	Discharge (ft *3* /s)	Gage height (ft)	Date	Time	Discharge (ft *3* /s)	Gage height (ft)
Apr. 01	2100	2560	8.16	June 28	2230	*4370	*11.11
June 25	0430	2200	7.50				

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93	112	97	75	70	434	2420	282	186	1300	93	245
2	94	109	99	73	68	384	2320	270	178	938	87	207
3	94	109	104	79	67	360	1690	260	164	795	101	183
4	90	105	95	77	68	345	1280	242	148	784	174	163
5	85	102	80	85	68	324	1020	234	154	701	290	143

6	90	100	94	86	67	311	851	218	143	600	230	129
7	90	102	93	82	66	295	777	228	131	589	228	119
8	95	100	93	79	65	295	762	317	123	899	197	111
9	99	103	93	72	69	226	717	425	165	1220	195	104
10	88	103	93	e60	71	166	619	432	149	871	166	99
11	86	101	92	e56	72	209	538	384	158	593	144	96
12	162	91	87	e52	70	212	481	347	169	456	127	94
13	229	95	80	e50	72	212	471	312	177	384	117	89
14	284	109	84	e54	70	205	435	276	182	330	111	88
15	249	102	87	e56	75	219	412	273	182	311	102	87
16	215	86	91	e58	113	196	644	280	170	284	94	85
17	191	98	84	e64	272	194	791	264	155	251	98	83
18	176	99	88	e62	659	193	679	244	196	227	91	81
19	166	94	89	e64	839	190	572	233	264	222	89	82
20	149	98	82	66	681	176	521	213	357	220	216	117
21	139	97	72	65	534	194	468	202	1250	227	355	99
22	131	99	86	65	452	216	416	190	1130	206	244	90
23	126	87	86	66	548	278	377	185	760	183	180	92
24	127	92	85	65	616	332	351	216	1400	167	153	110
25	121	97	76	63	526	399	329	273	2090	151	134	101
26	111	101	76	65	486	720	353	287	1440	138	117	100
27	110	99	72	68	473	964	344	277	1000	130	195	97
28	108	105	76	69	470	1580	316	259	3340	121	937	94
29	105	105	76	68	---	2230	302	235	3800	112	830	116
30	106	99	76	68	---	2290	293	210	2080	109	466	109
31	106	---	69	69	---	2030	---	215	---	99	306	---
TOTAL	4115	2999	2655	2081	7707	16379	21549	8283	21841	13618	6867	3413
MEAN	133	100	85.6	67.1	275	528	718	267	728	439	222	114
MAX	284	112	104	86	839	2290	2420	432	3800	1300	937	245

MIN	85	86	69	50	65	166	293	185	123	99	87	81
AC-FT	8160	5950	5270	4130	15290	32490	42740	16430	43320	27010	13620	6770
CFSM	.31	.24	.20	.16	.65	1.24	1.69	.63	1.71	1.03	.52	.27
IN.	.36	.26	.23	.18	.67	1.43	1.89	.73	1.91	1.19	.60	.30

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 1998, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	163	159	107	74.9	107	488	512	300	292	253	185	148
MAX	884	997	431	261	701	1428	2011	1222	1624	1456	1720	734
(WY)	1974	1910	1992	1973	1984	1973	1993	1991	1993	1978	1993	1993
MIN	37.3	35.7	26.6	26.5	25.0	53.3	52.9	67.9	48.9	22.6	32.3	30.9
(WY)	1959	1959	1913	1913	1913	1968	1911	1910	1950	1911	1948	1911

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1909 - 1998		
ANNUAL TOTAL	114221		111507				
ANNUAL MEAN	313		305		233a		
HIGHEST ANNUAL MEAN					824		1993
LOWEST ANNUAL MEAN					58.1		1977
HIGHEST DAILY MEAN	4260	Mar 22	3800	Jun 29	8720	Mar 29	1962
LOWEST DAILY MEAN	69	Dec 31	50	Jan 13	.00b	Jan 15	1911
ANNUAL SEVEN-DAY MINIMUM	74	Dec 25	55	Jan 10	13	Sep 1	1912
INSTANTANEOUS PEAK FLOW			4370	Jun 28	12400	Jul 17	1978
INSTANTANEOUS PEAK STAGE			11.11	Jun 28	20.35c	Jul 17	1978
INSTANTANEOUS LOW FLOW			50d	Jan 13	.00	Jan 15	1911

ANNUAL RUNOFF (AC-FT)	226600		221200		168700		
ANNUAL RUNOFF (CFSM)	.74		.72		.55		
ANNUAL RUNOFF (INCHES)	10.00		9.76		7.44		
10 PERCENT EXCEEDS	640		707		483		
50 PERCENT EXCEEDS	154		151		95		
90 PERCENT EXCEEDS	92		72		44		

a Median of annual mean discharges is 223 ft *3* /s.
b Occurred on several days in 1911, result of regulation.
c From floodmark.
d Estimated minimum daily, backwater from ice.