05275000 ELK RIVER NEAR BIG LAKE, MN

LOCATION.--Lat 45°20'02", long 93°40'00", in NE¼SW¼ sec. 23, T.33 N., R.27 W., Sherburne County, Hydrologic Unit 07010203, on right bank at upstream side of County Highway 15 bridge, 4 mi east of Big Lake and 4 mi downstream from St. Francis River.

DRAINAGE AREA.--559 mi^2.

PERIOD OF RECORD.--April 1911 to September 1917, April to September 1931, April to November 1932, March to November 1933, March 1934 to September 1987, October 1990 to current year.

REVISED RECORDS.--WSP 895: 1939. WSP 1308: 1912(M), 1915-17(M).

GAGE.--Water-stage recorder. Datum of gage is 899.60 ft above sea level (NGVD of 1929). April 1911 to Sept. 30, 1917, April 1, 1931 to July 26, 1934, nonrecording gage at same site and datum.

REMARKS.--Records good except those for periods of estimated daily discharge, which are fair to poor.

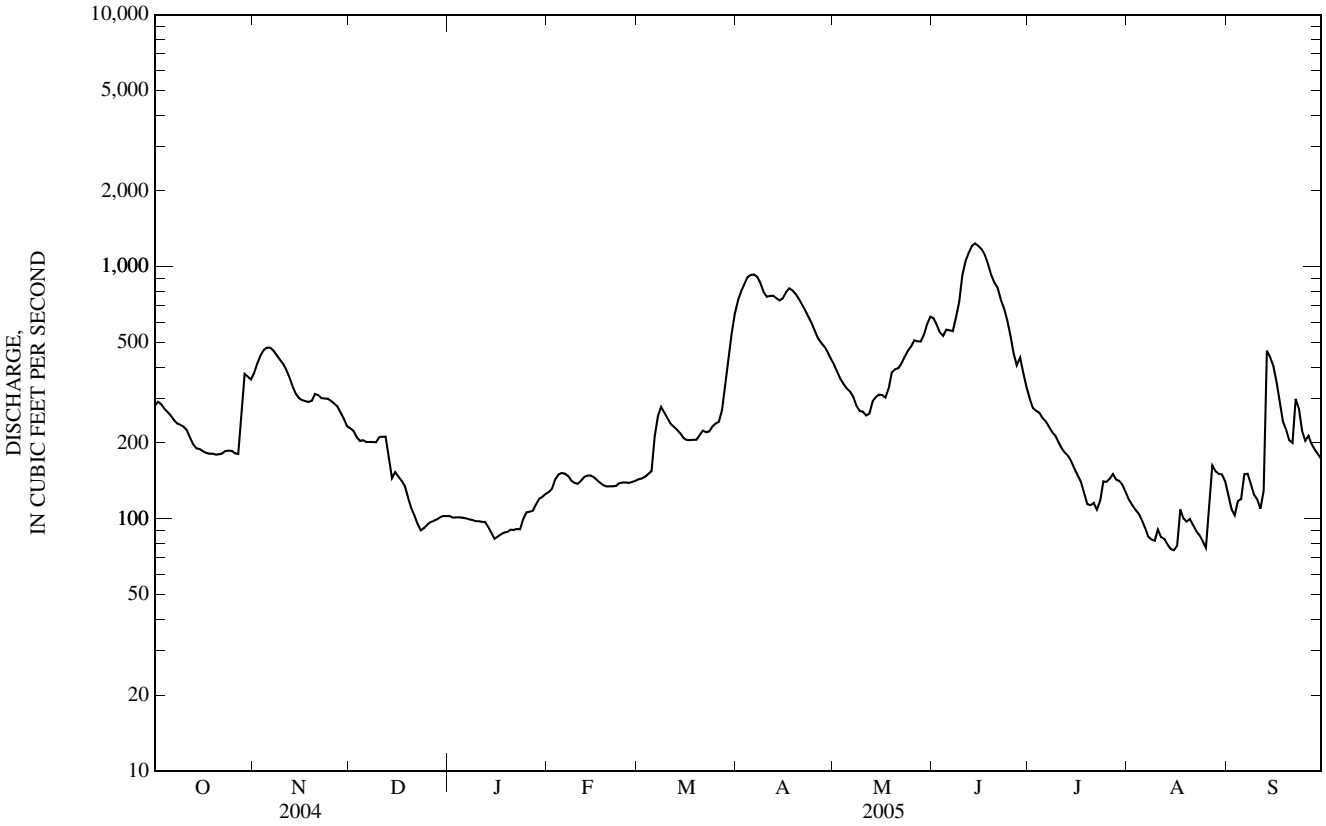
DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	281	379	e229	e103	e128	e144	e735	408	625	300	119	124
2	291	414	e223	e101	e132	e145	800	382	589	275	114	110
3	285	445	e211	e101	e144	e147	853	358	548	268	109	104
4	273	469	e204	e101	e150	e151	912	342	532	264	105	118
5	265	478	205	e101	e152	e155	928	328	563	251	99	120
6	257	478	202	e101	e151	e213	932	319	560	244	92	150
7	246	465	202	e100	e148	e255	912	305	556	232	85	151
8	239	446	202	e99	e142	e278	862	280	630	221	83	138
9	236	429	201	e98	e139	e264	794	268	727	214	82	125
10	232	413	211	e98	e138	e251	760	266	929	202	91	120
11	225	391	212	e97	e142	e238	766	257	1,050	190	85	110
12	210	365	212	e97	e147	e232	768	262	1,140	183	83	130
13	197	336	e175	e93	e148	e226	750	293	1,210	178	79	464
14	191	313	e145	e88	e149	e218	736	304	1,240	169	76	439
15	189	301	e153	e83	e146	e209	751	311	1,210	158	75	405
16	186	296	e147	e85	e142	e205	793	310	1,170	149	78	351
17	183	293	e142	e87	e139	e205	821	303	1,120	140	109	292
18	181	291	e135	e88	e136	e206	807	328	1,030	127	100	244
19	181	294	e122	e89	e134	e206	779	381	930	114	98	227
20	180	313	e111	e91	e135	e215	743	392	867	113	100	205
21	180	310	e103	e90	e135	e224	705	395	826	116	94	200
22	182	301	e96	e91	e135	e221	669	413	742	109	89	299
23	186	300	e90	e91	e139	e222	632	438	686	118	86	274
24	187	300	e92	e100	e140	e233	596	464	615	141	82	224
25	186	294	e95	e106	e140	e239	555	483	535	140	77	204
26	182	287	e97	e107	e139	e243	519	511	453	144	116	214
27	181	279	e98	e108	e140	e271	498	506	407	151	163	198
28	251	263	e100	e114	e141	e350	482	506	436	143	154	188
29	375	249	e101	e120	---	e441	457	538	378	141	151	181
30	366	e233	e103	e123	---	e544	430	592	333	136	150	173
31	357	---	e103	e126	---	e654	---	634	---	128	141	---
TOTAL	7,161	10,425	4,722	3,077	3,951	7,805	21,745	11,877	22,637	5,459	3,165	6,282
MEAN	231	348	152	99.3	141	252	725	383	755	176	102	209
MAX	375	478	229	126	152	654	932	634	1,240	300	163	464
MIN	180	233	90	83	128	144	430	257	333	109	75	104
AC-FT	14,200	20,680	9,370	6,100	7,840	15,480	43,130	23,560	44,900	10,830	6,280	12,460
CFSM	0.41	0.62	0.27	0.18	0.25	0.45	1.30	0.69	1.35	0.32	0.18	0.37
IN.	0.48	0.69	0.31	0.20	0.26	0.52	1.45	0.79	1.51	0.36	0.21	0.42

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 2005, BY WATER YEAR (WY)

MEAN	210	213	149	111	117	296	662	443	348	273	183	205
MAX	778	794	410	290	392	1,125	1,823	1,620	1,647	1,026	926	1,050
(WY)	(1985)	(1972)	(1966)	(1979)	(1984)	(1966)	(1969)	(1986)	(1984)	(1978)	(1972)	(1986)
MIN	32.7	56.3	44.1	38.4	29.8	58.8	75.5	37.5	20.5	8.94	8.74	23.4
(WY)	(1934)	(1935)	(1935)	(1935)	(1936)	(1934)	(1934)	(1934)	(1934)	(1934)	(1934)	(1932)

05275000 ELK RIVER NEAR BIG LAKE, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1911 - 2005	
ANNUAL TOTAL	94,439		108,306			
ANNUAL MEAN	258		297		a277	
HIGHEST ANNUAL MEAN					669	1986
LOWEST ANNUAL MEAN					88.0	1935
HIGHEST DAILY MEAN	1,110	Jun 6	1,240	Jun 14	7,170	Apr 16, 1965
LOWEST DAILY MEAN	50	Jan 30	75	Aug 15	4.0	Aug 1, 1934
ANNUAL SEVEN-DAY MINIMUM	54	Jan 28	81	Aug 10	4.5	Jul 27, 1934
MAXIMUM PEAK FLOW			1,250	Jun 14	7,360	Apr 16, 1965
MAXIMUM PEAK STAGE			4.19	Jun 14	10.86	Apr 16, 1965
INSTANTANEOUS LOW FLOW			73	Aug 16, 26	3.6	Jul 31, 1934
ANNUAL RUNOFF (AC-FT)	187,300		214,800		200,800	
ANNUAL RUNOFF (CFSM)	0.462		0.531		0.496	
ANNUAL RUNOFF (INCHES)	6.28		7.21		6.74	
10 PERCENT EXCEEDS	470		676		579	
50 PERCENT EXCEEDS	204		211		170	
90 PERCENT EXCEEDS	77		98		72	

a Median of annual mean discharges is 260 ft^3/s.
e Estimated.