

05287890 ELM CREEK NEAR CHAMPLIN, MN

LOCATION.--Lat 45°09'48", long 93°26'11", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 35, T.120 N., R.22 W., Hennepin County, Hydrologic Unit 07010206, on left bank, 33 ft downstream from bridge on Elm Creek Road, 2.5 mi southwest of Champlin.

DRAINAGE AREA.--86.0 mi².

PERIOD OF RECORD.--October 1978 to current year.

REVISED RECORD.--WDR-MN-02-1: Maximum discharge; 1982, 85, 86, 94, 96, 97, and 99.

GAGE.--Water-stage recorder. Datum of gage is 850.70 ft above sea level (NGVD of 1929). Prior to March 16, 1979, nonrecording gage at present site and datum.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	94	e17	e5.4	e2.0	e0.82	46	74	e62	538	11	1.9
2	51	91	e15	e5.2	e1.7	e0.82	45	64	e52	471	10	1.9
3	48	90	e13	e5.0	e1.5	e0.83	42	54	e44	422	9.0	2.1
4	63	88	e12	e5.0	e1.4	e0.84	38	44	e40	377	8.2	2.0
5	91	85	e12	e5.0	e1.4	e0.83	33	45	e42	337	7.7	e1.9
6	128	83	e11	e4.9	e1.4	e0.80	33	47	39	301	7.4	1.9
7	174	81	e9.5	e4.9	e1.4	e0.78	30	46	43	264	6.9	e1.9
8	215	79	e8.8	e4.7	e1.6	e0.76	26	e42	40	227	6.2	e1.6
9	247	77	e9.0	e4.5	e1.8	e0.74	22	e64	39	186	5.7	1.4
10	261	75	e9.6	e3.7	e2.0	e0.76	21	e81	40	156	4.9	1.4
11	256	71	e9.8	e3.6	e2.4	e0.78	19	e123	38	135	4.5	1.9
12	249	64	e9.6	e3.3	e2.5	e0.82	17	e154	36	117	4.0	7.4
13	234	59	e9.6	e3.2	e2.5	e0.82	16	e171	35	99	3.9	e7.9
14	223	54	e9.6	e3.1	e1.5	e1.0	15	e205	34	87	3.7	e5.0
15	205	48	e9.4	e3.0	e1.3	e8.0	15	e212	30	80	3.1	e3.6
16	184	42	e9.4	e2.9	e1.3	e35	41	e203	26	71	3.1	e3.0
17	164	38	e9.4	e2.8	e1.2	55	85	e188	22	63	2.9	e2.8
18	149	35	e9.6	e2.7	e1.1	60	95	e159	20	55	2.7	e2.8
19	132	33	e9.8	e2.6	e1.0	64	127	e159	17	48	2.7	e3.2
20	118	30	e8.8	e2.3	e1.0	83	165	e221	14	42	3.1	e2.9
21	105	28	e8.6	e1.8	e1.0	94	206	e243	14	37	3.0	e2.6
22	98	e26	e8.6	e1.4	e0.99	96	219	e271	15	34	2.7	e2.2
23	93	e24	e8.8	e1.3	e0.98	93	214	e273	11	30	2.2	e1.9
24	87	e23	e8.8	e1.3	e0.93	86	193	e245	9.8	26	2.2	e1.7
25	87	e21	e8.4	e1.4	e0.87	78	162	e204	163	23	2.2	e1.6
26	95	e20	e7.8	e1.4	e0.86	70	141	e160	391	21	2.3	1.6
27	101	e19	e7.4	e1.4	e0.85	61	125	e134	543	19	2.1	1.7
28	104	e18	e6.8	e1.4	e0.84	57	111	e115	637	17	2.2	1.6
29	103	e18	e6.8	e1.4	---	54	99	e99	651	15	2.2	1.4
30	100	e17	e6.8	e1.4	---	51	86	e85	612	13	2.0	1.5
31	96	---	e6.9	e1.5	---	48	---	e73	---	12	1.9	---
TOTAL	4,315	1,531	297.6	93.5	39.32	1,104.40	2,487	4,258	3,759.8	4,323	135.7	76.3
MEAN	139	51.0	9.60	3.02	1.40	35.6	82.9	137	125	139	4.38	2.54
MAX	261	94	17	5.4	2.5	96	219	273	651	538	11	7.9
MIN	48	17	6.8	1.3	0.84	0.74	15	42	9.8	12	1.9	1.4
AC-FT	8,560	3,040	590	185	78	2,190	4,930	8,450	7,460	8,570	269	151
CFSM	1.62	0.59	0.11	0.04	0.02	0.41	0.96	1.60	1.46	1.62	0.05	0.03
IN.	1.87	0.66	0.13	0.04	0.02	0.48	1.08	1.84	1.63	1.87	0.06	0.03

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2003, BY WATER YEAR (WY)

MEAN	31.7	21.9	11.5	5.35	9.69	63.6	108	73.0	48.9	42.0	33.0	29.4
MAX	240	67.4	41.3	22.0	99.1	185	414	203	156	157	151	170
(WY)	(1986)	(1994)	(1992)	(1992)	(1984)	(1985)	(2001)	(2002)	(2002)	(1993)	(2002)	(1991)
MIN	1.13	1.03	0.92	0.74	0.91	3.86	5.31	3.54	1.34	0.76	1.44	1.08
(WY)	(1990)	(1990)	(1990)	(1991)	(1990)	(2001)	(1987)	(2000)	(1988)	(1988)	(1989)	(1988)

05287890 ELM CREEK NEAR CHAMPLIN, MN—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1979 - 2003	
ANNUAL TOTAL	35,224.46		22,420.62		39.9	
ANNUAL MEAN	96.5		61.4		82.2	
HIGHEST ANNUAL MEAN					4.54	2002
LOWEST ANNUAL MEAN					815	1988
HIGHEST DAILY MEAN	531	May 11	651	Jun 29	815	Apr 25, 2001
LOWEST DAILY MEAN	0.84	Feb 11	0.74	Mar 9	0.31	Jun 30, 1988
ANNUAL SEVEN-DAY MINIMUM	0.86	Feb 8	0.78	Mar 6	0.35	Jun 26, 1988
MAXIMUM PEAK FLOW			695	Jun 28	875	Apr 25, 2001
MAXIMUM PEAK STAGE			9.69	Jun 28	10.02	Apr 25, 2001
INSTANTANEOUS LOW FLOW					0.29	Jul 9, 1989
ANNUAL RUNOFF (AC-FT)	69,870		44,470		28,900	
ANNUAL RUNOFF (CFSM)	1.12		0.71		0.46	
ANNUAL RUNOFF (INCHES)	15.24		9.70		6.30	
10 PERCENT EXCEEDS	237		185		111	
50 PERCENT EXCEEDS	71		18		12	
90 PERCENT EXCEEDS	3.0		1.4		1.9	

e Estimated.

