

Elm Creek USGS Gauging Station Flow Data

U.S. DEPARTMENT OF THE INTERIOR - U.S. GEOLOGICAL SURVEY - WATER RESOURCES
Station No 05287890 Elm Creek Nr Champlin, MN Source Agency USGS State 27 County 053

WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
Daily Mean Values Discharge, cubic feet per second

<u>DAY</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>
1	1.4	1.7	2.0	2.2	e0.68	2.9	57	25	270	37	11	e1.5
2	1.4	1.7	1.9	2.3	e0.80	6.2	52	22	325	32	10	e1.5
3	1.6	1.7	1.9	e2.3	e0.72	6.2	43	19	346	29	9.4	e1.5
4	1.6	1.9	2.0	e2.1	e0.66	6.5	36	17	333	40	e8.8	e1.5
5	1.4	2.1	2.0	e1.6	e0.80	4.3	30	14	320	50	e8.2	e2.0
6	1.3	1.9	2.0	e0.70	e0.84	3.5	26	13	299	52	e7.4	e3.0
7	1.4	1.7	2.1	e0.72	e0.80	e4.2	22	11	267	61	e7.4	e4.0
8	1.5	1.7	2.2	e0.72	e0.76	e5.0	20	9.2	234	69	e6.6	e4.8
9	1.7	1.7	e2.2	e0.73	e0.82	6.9	18	9.2	225	71	e6.0	e5.6
10	2.2	1.9	e2.2	e0.74	e0.76	11	16	11	220	70	e5.6	e6.2
11	4.2	2.2	e2.1	e0.76	e0.80	e9.0	14	11	212	82	e5.0	e7.0
12	4.3	2.2	e2.1	e0.72	e0.76	e9.4	12	11	251	105	e4.7	e7.4
13	3.7	2.0	e2.0	e0.70	e0.80	e10	10	13	271	113	e4.5	e7.8
14	3.0	1.8	2.0	e0.70	e0.74	e12	9.7	12	276	115	e4.0	e8.0
15	2.5	1.9	2.2	e0.68	e0.70	e14	8.9	11	268	116	e3.7	e10
16	2.8	1.9	2.3	e0.68	e0.94	e13	7.8	12	252	112	e3.7	e14
17	3.4	1.9	2.4	e0.74	e1.3	e12	6.6	22	233	101	e3.6	e15
18	2.9	1.7	2.1	e0.62	1.7	e13	7.3	31	198	88	e3.2	e15
19	2.4	1.7	2.1	e0.64	1.7	e17	18	34	173	77	e2.6	e14
20	2.2	1.7	2.1	e0.80	1.8	e21	20	38	149	67	2.5	e14
21	2.2	1.7	2.1	e1.2	1.6	e24	30	37	128	57	2.4	15
22	2.2	1.9	2.1	e0.66	1.8	e25	37	36	110	49	e2.4	24
23	2.1	2.1	e2.0	e0.68	1.8	e28	39	42	95	41	e2.3	36
24	2.0	2.1	e2.1	e0.72	1.8	e31	38	70	83	33	e2.2	39
25	2.0	2.1	e2.0	e0.76	1.9	34	42	81	74	27	e2.1	38
26	2.0	2.1	2.0	e0.80	1.9	35	44	88	67	23	e2.0	37
27	1.6	2.1	2.3	e0.70	1.9	35	40	102	60	20	e1.9	33
28	1.6	e1.9	2.6	e0.60	2.0	52	37	107	54	18	e1.8	27
29	1.7	e1.8	2.5	e0.50	2.0	61	33	116	48	16	e1.8	24
30	1.9	1.9	2.4	e0.50	---	63	28	157	42	14	e1.7	22
31	1.9	---	2.5	e0.56	---	61	---	218	---	12	e1.6	---

Statistics for Water Year October 2003 to September 2004

TOTAL	68.1	56.7	66.5	28.83	35.58	636.1	802.3	1,399.4	5,883	1,797	140.1	438.8
MEAN	2.20	1.89	2.15	0.93	1.23	20.5	26.7	45.1	196	58.0	4.52	14.6
MAX	4.3	2.2	2.6	2.3	2.0	63	57	218	346	116	11	39
MIN	1.3	1.7	1.9	0.50	0.66	2.9	6.6	9.2	42	12	1.6	1.5
AC-FT	135	112	132	57	71	1,260	1,590	2,780	11,670	3,560	278	870
CFSM	0.03	0.02	0.02	0.01	0.01	0.24	0.31	0.52	2.28	0.67	0.05	0.17
IN.	0.03	0.02	0.03	0.01	0.02	0.28	0.35	0.61	2.54	0.78	0.06	0.19

Statistics of monthly mean data for water years 1979-2004 by Water Year

MEAN	30.5	21.2	11.2	5.18	9.36	61.9	104	71.9	54.6	42.6	31.9	28.8
MAX	240	67.4	41.3	22.0	99.1	185	414	203	196	157	151	170
(WY)	(1986)	(1994)	(1992)	(1992)	(1984)	(1985)	(2001)	(2002)	(2004)	(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)



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Summary Statistics	<u>2003 Calendar Year</u>		<u>2004 Water Year</u>		<u>Water Years 1979-2004</u>	
ANNUAL TOTAL	16,468.32		11,352.41			
ANNUAL MEAN	45.1		31.0		39.6	
HIGHEST ANNUAL MEAN					82.2	2002
LOWEST ANNUAL MEAN					4.54	1988
HIGHEST DAILY MEAN	651	Jun 29	346	Jun 3	815	Apr 25, 2001
LOWEST DAILY MEAN	0.74	Mar 9	a0.50	Jan 29,30	0.31	Jun 30, 1988
ANNUAL SEVEN-DAY MINIMUM	0.78	Mar 6	0.62	Jan 26	0.35	Jun 26, 1988
MAXIMUM PEAK FLOW			350	Jun 3	875	Apr 25, 2001
MAXIMUM PEAK STAGE			8.85	Jun 3	10.02	Apr 25, 2001
INSTANTANEOUS LOW FLOW			b0.50	Jan 29	0.29	Jul 9, 1989
ANNUAL RUNOFF (AC-FT)	32,660		22,520		28,650	
ANNUAL RUNOFF (CFSM)	0.525		0.361		0.460	
ANNUAL RUNOFF (INCHES)	7.12		4.91		6.25	
10 PERCENT EXCEEDS	155		84		110	
50 PERCENT EXCEEDS	3.0		4.8		12	
90 PERCENT EXCEEDS	1.4		0.80		1.8	

a=Backwater from ice; b=Daily-mean discharge, backwater from ice; e=Estimated

