05078770 JUDICIAL DITCH 66 NEAR MARCOUX CORNERS, MN

LOCATION.--Lat 47°46'55", long 96°19'53", in SW¼NW¼ sec. 29, T.150 N., R.44 W., Red lake County, Hydrologic Unit 09020303, at culvert on township road, 1.5 miles north of U.S. Highway 2, 3.4 miles northwest of Marcoux Corners.

DRAINAGE AREA.--14.2 mi^2.

PERIOD OF RECORD.--September 2002 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,040.84 ft above sea level (NAVD 1988).

REMARKS.--Records fair except those for estimated daily discharges, and discharges less that 1.0 ft^3/s, which are poor.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e0.19	e0.63	e0.71	e0.09	e0.07	e0.26	e22	0.57	35	0.90	1.7	2.8
2	e0.19	e0.60	e0.75	e0.08	e0.07	e0.24	e21	0.53	24	2.5	1.8	2.1
3	e0.18	e0.57	e0.78	e0.07	e0.07	e0.21	19	0.74	15	0.96	1.5	1.6
4	e0.18	e0.54	e0.82	e0.06	e0.07	e0.20	17	0.80	22	0.96	0.94	1.5
5	e0.17	e0.50	e0.85	e0.06	e0.07	e0.19	13	0.94	14	1.0	0.91	1.9
6	e0.17	e0.48	e0.87	e0.06	e0.07	e0.19	11	0.78	8.7	1.9	0.91	23
7	e0.17	e0.46	e0.89	e0.06	e0.07	e0.19	17	0.79	6.0	2.0	1.1	38
8	e0.16	e0.44	e0.90	e0.06	e0.07	e0.19	10	0.80	4.6	1.8	1.1	23
9	e0.16	e0.46	e0.88	e0.06	e0.07	e0.22	7.4	1.0	3.7	2.5	2.1	12
10	e0.16	e0.52	e0.65	e0.06	e0.07	e0.27	5.9	1.0	3.2	1.7	2.6	7.2
11	e0.64	e0.61	e0.34	e0.06	e0.07	e0.29	4.7	3.2	2.7	2.2	2.1	e4.3
12	e0.53	e0.68	e0.24	e0.06	e0.07	e0.30	4.0	57	2.5	2.0	1.7	e2.5
13	e0.50	e0.58	e0.24	e0.06	e0.07	e0.31	3.5	33	2.3	1.9	1.6	e1.6
14	e0.49	e0.67	e0.24	e0.07	e0.07	e0.31	3.2	20	2.2	1.6	1.4	0.85
15	e0.49	e0.80	e0.24	e0.07	e0.07	e0.33	3.1	12	2.1	2.1	1.4	1.0
16	e0.48	e1.0	e0.25	e0.07	e0.08	e0.37	2.7	9.3	1.8	1.9	1.2	2.2
17	e0.47	e1.2	e0.25	e0.07	e0.08	e0.40	2.2	6.5	1.8	1.7	1.2	2.3
18	e0.46	e1.2	e0.25	e0.07	e0.09	e0.42	2.2	4.9	1.5	1.6	1.2	1.7
19	e0.46	e1.1	e0.26	e0.07	e0.10	e0.70	2.0	6.8	1.4	1.2	1.0	1.2
20	e0.45	e1.1	e0.26	e0.07	e0.11	e1.0	2.0	6.4	1.6	1.2	0.90	5.2
21	e0.45	e1.0	e0.26	e0.07	e0.12	e1.0	1.8	4.3	1.4	1.2	0.82	31
22	e0.44	e0.90	e0.26	e0.07	e0.13	e0.98	1.6	3.8	1.2	1.1	0.82	22
23	e0.43	e0.74	e0.26	e0.07	e0.14	e1.0	1.3	3.3	1.2	1.1	0.80	21
24	e0.42	e0.62	e0.26	e0.07	e0.15	e1.2	1.2	3.0	1.3	1.1	1.1	37
25	e0.41	e0.60	e0.26	e0.07	e0.17	e1.7	0.98	5.1	1.2	1.1	1.1	27
26	e0.41	e0.60	e0.27	e0.07	e0.18	e39	0.92	5.0	1.1	1.1	36	15
27	e0.47	e0.61	e0.31	e0.07	e0.20	e36	0.91	3.6	1.0	1.2	17	8.3
28	e0.54	e0.62	e0.25	e0.07	e0.23	e50	0.83	2.8	0.95	2.1	8.3	5.0
29	e0.64	e0.64	e0.15	e0.07	e0.27	e33	0.66	5.1	0.90	2.0	5.3	3.7
30	e0.70	e0.67	e0.13	e0.07	---	e26	0.65	51	0.88	1.6	5.8	3.2
31	e0.66	---	e0.11	e0.07	---	e24	---	51	---	1.6	4.4	---
TOTAL	12.27	21.14	13.19	2.10	3.10	220.47	183.75	305.05	167.23	48.82	109.80	309.15
MEAN	0.40	0.70	0.43	0.07	0.11	7.11	6.12	9.84	5.57	1.57	3.54	10.3
MAX	0.70	1.2	0.90	0.09	0.27	50	22	57	35	2.5	36	38
MIN	0.16	0.44	0.11	0.06	0.07	0.19	0.65	0.53	0.88	0.90	0.80	0.85
AC-FT	24	42	26	4.2	6.1	437	364	605	332	97	218	613
CFSM	0.03	0.05	0.03	0.00	0.01	0.50	0.43	0.69	0.39	0.11	0.25	0.73
IN.	0.03	0.06	0.03	0.01	0.01	0.58	0.48	0.80	0.44	0.13	0.29	0.81

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2004, BY WATER YEAR (WY)

MEAN	1.07	1.19	0.68	0.40	0.23	4.96	4.21	7.20	6.80	2.00	1.84	5.27
MAX	1.75	1.68	0.93	0.73	0.35	7.11	6.13	9.84	8.03	2.43	3.54	10.3
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2004)	(2004)	(2004)	(2003)	(2003)	(2004)	(2004)
MIN	0.40	0.70	0.43	0.07	0.11	2.80	2.30	4.55	5.57	1.57	0.13	0.23
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2003)	(2003)	(2003)	(2004)	(2004)	(2003)	(2003)

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SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2000 - 2004	
ANNUAL TOTAL	703.41		1,396.07			
ANNUAL MEAN	1.93		3.81		2.99	
HIGHEST ANNUAL MEAN					3.81	2004
LOWEST ANNUAL MEAN					2.17	2003
HIGHEST DAILY MEAN	40	Jun 23	57	May 12	57	May 12, 2004
LOWEST DAILY MEAN	0.02	Sep 5	0.06	Jan 4-13	0.02	Sep 5, 2003
ANNUAL SEVEN-DAY MINIMUM	0.04	Aug 30	0.06	Jan 4	0.04	Aug 30, 2003
MAXIMUM PEAK FLOW			a67	May 12	a67	May 12, 2004
MAXIMUM PEAK STAGE			b7.06	Mar 26	b7.06	Mar 26, 2004
INSTANTANEOUS LOW FLOW			c0.06	Jan 4	0.00	Sep 3, 2003
ANNUAL RUNOFF (AC-FT)	1,400		2,770		2,170	
ANNUAL RUNOFF (CFSM)	0.136		0.269		0.211	
ANNUAL RUNOFF (INCHES)	1.84		3.66		2.86	
10 PERCENT EXCEEDS	4.7		10		5.8	
50 PERCENT EXCEEDS	0.63		0.90		1.0	
90 PERCENT EXCEEDS	0.11		0.07		0.08	

a Gage height, 4.08 ft; also occurred May 30, gage height, 4.09 ft.
b Backwater from ice.
c Estimated, daily-mean.
e Estimated.