

05078730 COUNTY DITCH 140 NEAR BENOIT, MN

LOCATION.--Lat 47°41'15", long 96°22'22", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 36, T.149 N., R.45 W., Polk County, Hydrologic Unit 09020303, at culvert on field access road, 1.0 mile south of County Highway 45, 1.4 miles southeast of Benoit.

DRAINAGE AREA.--11.8 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Datum of gage is 1,035.59 ft above sea level (NAVD of 1988).

REMARKS.--Records fair except those for estimated daily discharges and discharges less than 1.0 ft<sup>3</sup>/s, which are poor.

REVISIONS.--Revised maximum discharge for 2003 water year and daily-mean discharges for selected days in June 2003, as follows: maximum discharge, 66 ft<sup>3</sup>/s, June 25; daily-mean discharges, June 24, 25 ft<sup>3</sup>/s; June 25, 64 ft<sup>3</sup>/s; June 26, 57 ft<sup>3</sup>/s; June 27, 50 ft<sup>3</sup>/s; June 28, 42 ft<sup>3</sup>/s.

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	0.00	0.03	e0.09	e0.03	e0.00	e0.03	16	0.46	28	e0.16	0.11	0.83
2	0.00	0.03	e0.11	e0.02	e0.00	e0.02	12	0.37	21	e0.22	0.09	0.86
3	0.00	e0.00	e0.12	e0.02	e0.00	e0.01	10	0.46	16	e0.40	0.06	0.75
4	0.00	e0.00	e0.13	e0.01	e0.00	e0.00	8.6	0.28	12	e0.53	0.04	0.63
5	0.00	e0.00	e0.14	e0.01	e0.00	e0.00	7.7	0.29	9.7	e0.41	0.03	0.93
6	0.00	e0.00	e0.15	e0.00	e0.00	e0.00	6.6	0.16	8.0	e0.80	0.03	3.6
7	0.00	e0.00	0.16	e0.00	e0.00	e0.00	5.9	0.07	7.0	e1.5	0.04	7.6
8	0.00	e0.00	0.17	e0.00	e0.00	e0.01	5.5	0.10	e5.5	e1.3	0.03	7.4
9	0.00	e0.00	0.15	e0.00	e0.00	e0.03	5.1	0.09	e4.0	e1.1	0.03	6.0
10	0.00	e0.01	0.10	e0.00	e0.00	e0.05	4.6	0.12	e3.2	e0.99	0.03	5.0
11	0.19	e0.01	e0.05	e0.00	e0.00	e0.01	4.2	0.51	e2.4	e1.1	0.03	4.1
12	0.11	e0.02	e0.05	e0.00	e0.00	e0.00	3.9	19	e1.8	e0.77	0.03	3.6
13	0.04	e0.02	e0.06	e0.00	e0.00	e0.02	3.7	29	e1.5	e0.97	0.03	3.2
14	0.03	e0.02	e0.07	e0.00	e0.00	e0.03	3.5	27	e1.3	e0.76	0.02	2.5
15	0.02	e0.10	e0.07	e0.00	e0.00	e0.02	3.3	21	e1.1	e0.80	0.02	2.2
16	0.02	e0.17	e0.07	e0.00	e0.00	e0.01	3.0	15	e0.96	e0.85	0.02	2.3
17	0.01	e0.27	e0.08	e0.00	e0.00	e0.01	2.9	11	e0.85	e0.78	0.02	2.0
18	0.01	e0.30	e0.09	e0.00	e0.00	e0.01	2.7	9.1	e0.76	e0.81	0.02	1.8
19	0.01	e0.26	e0.11	e0.00	e0.00	e0.01	2.5	7.6	e0.66	e0.73	0.02	1.8
20	0.00	e0.22	e0.14	e0.00	e0.00	e0.10	2.4	6.3	e0.58	e0.58	0.01	3.2
21	0.00	e0.19	e0.16	e0.00	e0.00	e0.06	2.2	5.4	e0.49	e0.53	0.02	4.7
22	0.02	e0.13	e0.11	e0.00	e0.00	e0.04	2.0	4.6	e0.39	e0.33	0.00	4.8
23	0.01	e0.10	e0.09	e0.00	e0.00	e0.10	1.8	4.0	e0.55	e0.23	0.00	6.4
24	0.01	e0.08	e0.08	e0.00	e0.00	e1.5	1.8	3.7	e0.66	e0.28	0.02	10
25	0.00	e0.08	e0.08	e0.00	e0.00	e14	1.4	4.2	e0.57	e0.26	0.02	8.7
26	0.00	e0.08	e0.09	e0.00	e0.01	e11	1.1	4.2	e0.43	e0.22	0.57	7.2
27	0.03	e0.08	e0.12	e0.00	e0.03	e25	1.2	3.8	e0.36	e0.19	1.2	5.8
28	0.09	e0.08	e0.09	e0.00	e0.04	e39	0.90	3.4	e0.30	e0.15	1.1	4.9
29	0.03	e0.08	e0.06	e0.00	e0.04	e33	0.61	3.6	e0.25	0.18	1.1	4.3
30	0.04	e0.09	e0.05	e0.00	---	e30	0.57	21	e0.20	0.17	1.2	3.8
31	0.03	---	e0.04	e0.00	---	e22	---	31	---	0.13	0.94	---
TOTAL	0.70	2.45	3.08	0.09	0.12	176.07	127.68	236.81	130.51	18.23	6.88	120.90
MEAN	0.02	0.08	0.10	0.00	0.00	5.68	4.26	7.64	4.35	0.59	0.22	4.03
MAX	0.19	0.30	0.17	0.03	0.04	39	16	31	28	1.5	1.2	10
MIN	0.00	0.00	0.04	0.00	0.00	0.00	0.57	0.07	0.20	0.13	0.00	0.63
AC-FT	1.4	4.9	6.1	0.2	0.2	349	253	470	259	36	14	240
CFSM	0.00	0.01	0.01	0.00	0.00	0.48	0.36	0.65	0.37	0.05	0.02	0.34
IN.	0.00	0.01	0.01	0.00	0.00	0.56	0.40	0.75	0.41	0.06	0.02	0.38

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2004, BY WATER YEAR (WY)

MEAN	0.05	0.10	0.06	0.00	0.00	4.00	2.61	4.62	7.69	2.19	0.25	2.18
MAX	0.08	0.12	0.10	0.00	0.00	5.68	4.26	7.64	11.0	3.79	0.27	4.03
(WY)	(2003)	(2003)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2003)	(2003)	(2003)	(2004)
MIN	0.02	0.08	0.03	0.00	0.00	2.32	0.96	1.60	4.35	0.59	0.22	0.34
(WY)	(2004)	(2004)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2004)	(2004)	(2004)	(2003)

05078730 COUNTY DITCH 140 NEAR BENOIT, MN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2002 - 2004	
ANNUAL TOTAL	623.59		823.52		1.98	
ANNUAL MEAN	1.71		2.25		2.25 2004	
HIGHEST ANNUAL MEAN					1.71 2003	
LOWEST ANNUAL MEAN					64 Jun 25, 2003	
HIGHEST DAILY MEAN	64	Jun 25	39	Mar 28	64 Jun 25, 2003	
LOWEST DAILY MEAN	0.00	Jan 1	a0.00	Oct 1	b0.00 Dec 26, 2002	
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00 Dec 26, 2002	
MAXIMUM PEAK FLOW			c39	Mar 28	66 Jun 25, 2003	
MAXIMUM PEAK STAGE			d4.18	Mar 24	4.85 Jun 25, 2003	
INSTANTANEOUS LOW FLOW			0.00	Oct 1	b0.00 Dec 26, 2002	
ANNUAL RUNOFF (AC-FT)	1,240		1,630		1,430	
ANNUAL RUNOFF (CFSM)	0.145		0.191		0.168	
ANNUAL RUNOFF (INCHES)	1.97		2.60		2.28	
10 PERCENT EXCEEDS	3.5		6.3		5.0	
50 PERCENT EXCEEDS	0.07		0.11		0.09	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

- a Many days.
- b Many days, several years.
- c Estimated, daily-mean discharge.
- d Backwater from ice.
- e Estimated.

