

05078730 COUNTY DITCH 140 NEAR BENOIT, MN

LOCATION.--Lat 47°41'15", long 96°22'22", in NW¹/₄NW¹/₄ 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 mi².

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

REVISED RECORDS.--WDR MN-04-1:2003.

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 ft³/s, which are 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	3.2	73	e1.7	e0.25	e0.00	e0.00	e38	3.6	4.5	9.3	0.07	0.88
2	2.9	65	e1.6	e0.23	e0.00	e0.00	e34	3.4	3.9	7.5	0.02	0.71
3	2.2	58	e1.5	e0.22	e0.00	e0.00	32	3.2	3.5	6.7	0.11	0.69
4	1.9	50	e1.4	e0.20	e0.00	e0.00	30	3.1	3.4	5.8	0.13	0.68
5	1.9	43	e1.3	e0.19	e0.00	e0.00	25	2.9	12	4.8	0.05	1.3
6	1.4	36	e1.3	e0.18	e0.00	e0.00	21	2.6	19	4.3	0.00	5.3
7	1.7	31	e1.2	e0.17	e0.00	e0.00	19	2.7	18	3.7	0.00	2.8
8	1.4	25	e1.1	e0.16	e0.00	e0.00	17	2.6	32	3.2	0.01	2.5
9	1.1	20	e1.1	e0.15	e0.00	e0.00	15	3.0	27	2.8	0.00	3.4
10	1.2	16	e1.0	e0.14	e0.00	e0.00	13	2.8	17	2.4	0.00	5.1
11	0.92	14	e0.97	e0.13	e0.00	e0.00	16	2.6	23	2.1	0.01	3.5
12	0.66	12	e0.92	e0.12	e0.00	e0.00	25	2.5	56	1.7	0.01	3.0
13	0.63	e10	e0.89	e0.10	e0.00	e0.00	33	2.6	48	1.5	0.00	2.7
14	0.69	10	e0.85	e0.09	e0.00	e0.00	31	2.6	55	1.3	0.00	2.4
15	0.89	9.4	e0.82	e0.08	e0.00	e0.00	26	2.8	51	0.95	0.00	2.2
16	1.4	8.9	e0.77	e0.07	e0.00	e0.00	21	2.8	44	0.75	0.00	1.8
17	1.5	8.5	e0.74	e0.06	e0.00	e0.00	18	2.9	38	0.68	1.0	1.8
18	0.94	8.1	e0.70	e0.05	e0.00	e0.00	15	2.9	33	0.50	0.81	1.7
19	1.0	7.7	e0.65	e0.04	e0.00	e0.00	12	2.6	26	0.45	4.6	1.6
20	0.97	7.5	e0.60	e0.03	e0.00	e0.00	11	2.6	18	0.41	2.3	1.6
21	1.1	7.2	e0.55	e0.03	e0.00	e0.01	9.3	3.1	13	0.32	1.6	1.4
22	1.2	e6.4	e0.51	e0.03	e0.00	e0.09	7.9	2.8	11	0.35	1.9	1.3
23	2.6	e5.5	e0.47	e0.02	e0.00	e0.65	7.0	2.8	8.9	0.33	1.5	1.2
24	3.8	e4.6	e0.43	e0.02	e0.00	e1.0	6.3	2.9	7.5	0.29	1.3	1.0
25	4.7	e4.0	e0.40	e0.02	e0.00	e0.50	5.7	3.4	6.1	0.28	1.5	0.98
26	4.5	e3.3	e0.37	e0.01	e0.00	e1.0	5.1	3.6	5.4	0.25	1.9	0.95
27	4.3	e2.8	e0.34	e0.01	e0.00	e5.0	4.7	3.9	5.1	0.23	1.5	0.90
28	4.8	e2.4	e0.32	e0.01	e0.00	e33	4.4	4.6	4.6	0.22	1.4	0.72
29	23	e2.1	e0.30	e0.01	---	e41	4.1	5.6	4.9	0.21	1.3	0.74
30	88	e1.9	e0.28	e0.01	---	e44	3.8	5.8	7.6	0.20	1.2	0.64
31	84	---	e0.26	e0.01	---	e41	---	5.2	---	0.16	1.1	---
TOTAL	250.50	553.3	25.34	2.84	0.00	167.25	510.3	100.5	606.4	63.68	25.32	55.49
MEAN	8.08	18.4	0.82	0.09	0.00	5.40	17.0	3.24	20.2	2.05	0.82	1.85
MAX	88	73	1.7	0.25	0.00	44	38	5.8	56	9.3	4.6	5.3
MIN	0.63	1.9	0.26	0.01	0.00	0.00	3.8	2.5	3.4	0.16	0.00	0.64
AC-FT	497	1,100	50	5.6	0.00	332	1,010	199	1,200	126	50	110
CFSM	0.68	1.56	0.07	0.01	0.00	0.46	1.44	0.27	1.71	0.17	0.07	0.16
IN.	0.79	1.74	0.08	0.01	0.00	0.53	1.61	0.32	1.91	0.20	0.08	0.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2005, BY WATER YEAR (WY)

MEAN	2.73	6.21	0.31	0.03	0.00	4.47	7.41	4.16	11.9	2.14	0.44	2.07
MAX	8.08	18.4	0.82	0.09	0.00	5.68	17.0	7.64	20.2	3.79	0.82	4.03
(WY)	(2005)	(2005)	(2005)	(2005)	(2004)	(2004)	(2005)	(2004)	(2005)	(2003)	(2005)	(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 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 2002 - 2005	
ANNUAL TOTAL	1,646.43		2,360.92		3.48	
ANNUAL MEAN	4.50		6.47		6.47	
HIGHEST ANNUAL MEAN					1.71	2005
LOWEST ANNUAL MEAN					88	2003
HIGHEST DAILY MEAN	88	Oct 30	88	Oct 30	88	Oct 30, 2004
LOWEST DAILY MEAN	0.00	Jan 6	a0.00	Feb 1	b0.00	Dec 26, 2002
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 6	0.00	Feb 1	0.00	Dec 26, 2002
MAXIMUM PEAK FLOW			99		99	Oct 30, 2004
MAXIMUM PEAK STAGE			6.15		6.15	Oct 30, 2004
INSTANTANEOUS LOW FLOW			a0.00		b0.00	Dec 26, 2002
ANNUAL RUNOFF (AC-FT)	3,270		4,680		2,520	
ANNUAL RUNOFF (CFSM)	0.381		0.548		0.295	
ANNUAL RUNOFF (INCHES)	5.19		7.44		4.00	
10 PERCENT EXCEEDS	10		21		8.0	
50 PERCENT EXCEEDS	0.85		1.4		0.20	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a Many days.
 b Many days, several years.
 c Estimated.

