

STREAMS TRIBUTARY TO LAKE ERIE

04177720 FISH CREEK AT HAMILTON, IN

LOCATION.--Lat 41°31'55", long 84°54'12", in SE¹/₄SW¹/₄ sec.34, T.36 N., R.14 E., Steuben County, Hydrologic Unit 04100003, (HAMILTON, IN quadrangle), on left bank 6 ft upstream from bridge on County Road 775 South, 0.5 mi downstream from Hamilton Lake outlet, and 0.5 mi southeast of Hamilton.

DRAINAGE AREA.--37.5 mi².

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 876.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except 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	2.5	3.3	6.3	14	e6.2	e7.2	37	23	9.7	3.4	80	44
2	2.1	2.9	e6.0	12	e7.4	e7.0	31	25	7.9	3.3	537	231
3	2.3	2.4	e5.6	11	8.6	e6.8	27	20	8.5	2.8	406	205
4	3.0	3.3	e5.2	9.4	16	e7.0	35	17	8.1	3.1	236	126
5	3.8	3.6	e5.1	9.1	e13	12	131	90	7.6	8.3	156	81
6	2.5	4.9	e5.0	9.6	e10	12	92	90	6.0	12	104	57
7	2.3	4.2	e5.0	8.7	e9.0	10	68	58	7.1	28	74	43
8	1.7	4.0	e4.9	8.4	e8.0	20	54	44	7.4	38	56	34
9	1.8	3.7	e4.7	8.5	e7.4	48	49	134	7.6	58	42	27
10	1.8	9.9	e4.7	8.1	e6.8	34	43	211	6.1	44	33	22
11	2.0	11	4.9	e6.6	e6.4	25	36	175	8.8	33	28	19
12	2.1	8.0	5.0	e5.8	e6.0	30	31	164	27	24	27	16
13	2.5	6.8	5.3	e5.7	e5.8	104	25	122	30	18	29	14
14	2.0	6.4	5.6	e5.6	e5.6	129	22	82	21	14	24	14
15	2.5	7.3	5.8	e5.5	e5.5	91	20	73	16	12	21	21
16	2.4	6.2	5.7	e5.5	e5.4	74	18	60	13	10	18	16
17	2.0	5.6	5.4	e5.6	e5.3	62	16	49	35	7.7	14	13
18	2.3	4.2	6.4	e5.5	e5.4	53	16	40	44	6.7	11	11
19	4.4	6.7	13	e5.5	e5.6	46	15	33	30	5.4	9.3	10
20	3.1	6.4	20	e5.6	5.9	49	15	31	21	4.2	8.1	8.1
21	2.7	8.7	16	e5.8	6.4	59	15	25	15	19	7.9	7.2
22	2.7	16	13	e6.0	8.4	46	14	20	12	38	16	18
23	2.2	10	10	e5.8	13	36	11	18	9.8	45	11	22
24	2.3	9.1	8.0	e5.4	e10	31	10	16	8.0	30	8.5	20
25	3.1	8.6	13	e5.2	e9.3	34	9.6	15	6.9	22	7.2	37
26	4.3	7.6	11	e5.2	e8.4	33	9.5	14	6.3	16	8.7	33
27	3.5	6.9	9.6	e5.3	e7.9	27	8.5	13	4.5	33	9.5	127
28	3.1	6.2	8.7	e5.3	e7.6	29	8.3	12	3.8	76	7.0	96
29	3.6	6.1	8.1	e5.4	---	88	7.6	12	4.1	61	8.4	64
30	3.4	6.9	9.1	e5.5	---	62	13	9.8	3.8	46	8.3	47
31	3.1	---	16	e5.6	---	43	---	13	---	35	6.3	---
TOTAL	83.1	196.9	252.1	216.2	220.3	1,315.0	887.5	1,708.8	396.0	756.9	2,012.2	1,483.3
MEAN	2.68	6.56	8.13	6.97	7.87	42.4	29.6	55.1	13.2	24.4	64.9	49.4
MAX	4.4	16	20	14	16	129	131	211	44	76	537	231
MIN	1.7	2.4	4.7	5.2	5.3	6.8	7.6	9.8	3.8	2.8	6.3	7.2
CFSM	0.07	0.18	0.22	0.19	0.21	1.13	0.79	1.47	0.35	0.65	1.73	1.32
IN.	0.08	0.20	0.25	0.21	0.22	1.30	0.88	1.70	0.39	0.75	2.00	1.47

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2003, BY WATER YEAR (WY)

MEAN	14.3	27.1	36.2	36.9	49.1	68.1	61.2	40.8	29.7	15.0	14.2	12.0
MAX	76.8	117	91.3	161	130	219	112	174	118	64.3	64.9	49.4
(WY)	(2002)	(1993)	(1991)	(1993)	(2001)	(1982)	(1978)	(1996)	(1981)	(1992)	(2003)	(2003)
MIN	2.14	2.46	4.69	5.96	7.84	21.6	18.7	8.24	2.05	2.02	1.89	1.88
(WY)	(1995)	(1972)	(2000)	(1977)	(1979)	(2000)	(1971)	(1985)	(1988)	(1988)	(1970)	(1988)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

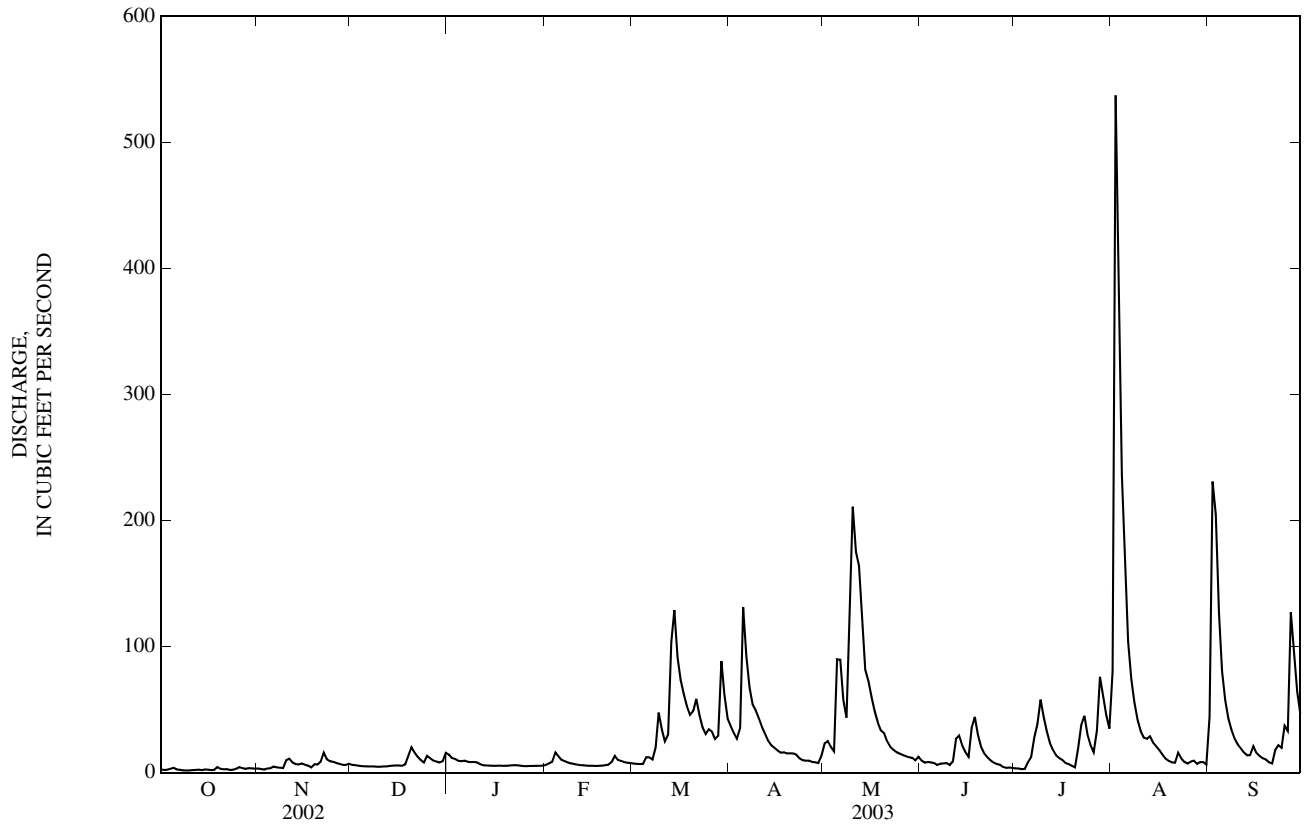
FOR 2003 WATER YEAR

WATER YEARS 1970 - 2003

ANNUAL TOTAL	10,794.9	9,528.3	
ANNUAL MEAN	29.6	26.1	33.6
HIGHEST ANNUAL MEAN			54.7
LOWEST ANNUAL MEAN			17.8
HIGHEST DAILY MEAN	448	537	1,220
LOWEST DAILY MEAN	1.4	1.7	0.52
ANNUAL SEVEN-DAY MINIMUM	1.6	2.0	0.82
MAXIMUM PEAK FLOW		581	1,510
MAXIMUM PEAK STAGE		9.37	14.49
ANNUAL RUNOFF (CFSM)	0.79	0.70	0.90
ANNUAL RUNOFF (INCHES)	10.71	9.45	12.18
10 PERCENT EXCEEDS	69	59	79
50 PERCENT EXCEEDS	12	9.9	16
90 PERCENT EXCEEDS	2.3	3.6	3.0

e Estimated

04177720 FISH CREEK AT HAMILTON, IN—Continued



STREAMS TRIBUTARY TO LAKE ERIE

04177810 FISH CREEK NEAR ARTIC, IN

LOCATION.--Lat 41°27'54", long 84°48'53", in NE¼SE¼ sec. 29, T.35 N., R.15 E., DeKalb County, Hydrologic Unit 04100003, (BUTLER EAST, IN-OH quadrangle), on right bank 3 ft upstream from bridge on County Road 79, 0.6 mi south of Artic, 0.8 mi upstream from Indiana-Ohio state line and 3.8 mi north-northeast of Butler, IN.

DRAINAGE AREA.--98 mi² (approx.).

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--April 1998 to current year.

GAGE.--Water-stage recorder. Datum of gage is 832.96 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except 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	6.2	8.6	18	e21	e8.4	e13	112	58	36	11	53	48
2	6.0	e8.3	e16	e16	e9.9	e13	93	68	34	11	431	272
3	5.9	e8.0	e14	e14	e14	e12	79	60	31	10	813	517
4	6.1	e9.0	e12	e13	e27	e16	86	50	30	10	582	389
5	6.6	e10	e10	e12	e28	e21	332	224	29	14	325	193
6	7.7	e11	e8.8	e11	e23	e18	365	305	28	21	209	123
7	7.2	e14	e8.0	e12	e20	e17	266	216	26	45	143	89
8	7.0	e13	e7.4	e11	e17	e25	178	135	26	97	109	69
9	6.4	e12	e7.0	e10	e15	e170	148	292	26	163	86	55
10	6.1	22	e6.8	e11	e13	e130	129	609	26	127	67	44
11	6.1	34	e6.4	e10	e13	e110	110	716	25	82	53	37
12	6.1	29	e6.8	e9.2	e12	e90	93	535	45	65	47	32
13	6.4	25	e7.0	e8.4	e12	e110	78	421	81	49	59	27
14	6.4	22	e7.2	e8.0	e11	e470	66	319	69	34	48	25
15	6.6	21	e7.5	e7.4	e10	448	57	222	e50	26	38	27
16	6.5	22	e7.7	e7.4	e10	288	50	199	e38	22	33	30
17	6.8	21	e7.3	e7.6	e9.6	223	45	172	e58	19	28	25
18	6.7	20	e9.0	e7.2	e9.3	179	42	139	e112	16	23	22
19	7.8	19	e15	e7.2	e9.6	138	40	115	e126	14	20	20
20	9.8	20	e22	e7.6	e10	128	38	99	e66	12	17	18
21	8.6	22	e26	e7.8	e11	171	36	89	e45	15	16	16
22	8.0	26	e18	e8.2	e12	151	36	77	e35	45	18	24
23	7.9	32	e14	e7.8	e17	115	33	66	e28	81	22	46
24	7.8	27	e11	e7.2	e22	91	29	59	e22	55	18	56
25	7.9	25	e14	e6.8	e19	85	27	54	e18	36	15	126
26	8.7	23	e17	e6.8	e16	94	26	49	15	26	14	97
27	10	20	e14	e7.0	e15	80	25	45	14	26	15	268
28	9.9	19	e12	e7.0	e14	68	23	42	12	145	15	325
29	9.6	18	e10	e7.2	---	179	23	40	12	183	13	227
30	9.2	18	e12	e7.2	---	221	30	37	12	104	15	136
31	9.4	---	e17	e7.6	---	155	---	35	---	70	14	---
TOTAL	231.4	578.9	368.9	291.6	407.8	4,029	2,695	5,547	1,175	1,634	3,359	3,383
MEAN	7.46	19.3	11.9	9.41	14.6	130	89.8	179	39.2	52.7	108	113
MAX	10	34	26	21	28	470	365	716	126	183	813	517
MIN	5.9	8.0	6.4	6.8	8.4	12	23	35	12	10	13	16
CFSM	0.08	0.20	0.12	0.10	0.15	1.33	0.92	1.83	0.40	0.54	1.11	1.15
IN.	0.09	0.22	0.14	0.11	0.15	1.53	1.02	2.11	0.45	0.62	1.28	1.28

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2003, BY WATER YEAR (WY)

MEAN	66.3	42.5	63.7	67.8	152	125	185	129	82.5	27.4	46.5	34.0
MAX	260	82.4	187	189	384	178	306	222	221	52.7	110	113
(WY)	(2002)	(2002)	(2002)	(1999)	(2001)	(2002)	(1999)	(2002)	(2000)	(2003)	(1998)	(2003)
MIN	5.73	7.33	11.9	9.41	14.6	66.8	89.8	61.2	25.6	14.2	7.82	4.32
(WY)	(2000)	(2000)	(2003)	(2003)	(2003)	(2000)	(2003)	(1998)	(1998)	(1999)	(1999)	(1999)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

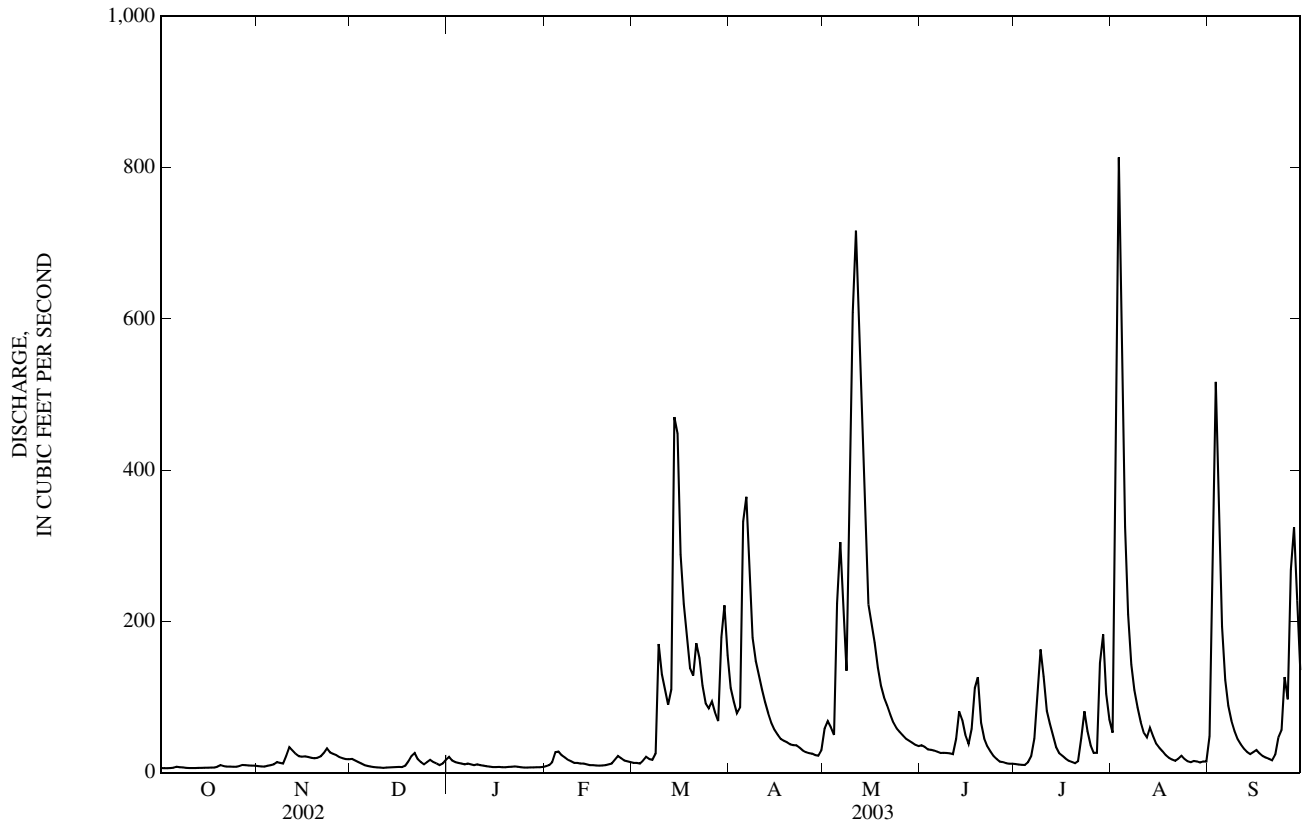
FOR 2003 WATER YEAR

WATER YEARS 1998 - 2003

ANNUAL TOTAL	31,849.6	23,700.6	
ANNUAL MEAN	87.3	64.9	85.9
HIGHEST ANNUAL MEAN			129
LOWEST ANNUAL MEAN			62.9
HIGHEST DAILY MEAN	1,360	813	1,360
LOWEST DAILY MEAN	5.9	5.9	3.6
ANNUAL SEVEN-DAY MINIMUM	6.3	6.3	3.8
MAXIMUM PEAK FLOW		845	1,690
MAXIMUM PEAK STAGE		9.72	11.60
ANNUAL RUNOFF (CFSM)	0.89	0.66	0.88
ANNUAL RUNOFF (INCHES)	12.09	9.00	11.91
10 PERCENT EXCEEDS	226	171	222
50 PERCENT EXCEEDS	26	23	34
90 PERCENT EXCEEDS	7.0	7.5	7.7

e Estimated

STREAMS TRIBUTARY TO LAKE ERIE
04177810 FISH CREEK NEAR ARTIC, IN—Continued



STREAMS TRIBUTARY TO LAKE ERIE

04177810 FISH CREEK NEAR ARTIC, IN—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY)
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Day	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)
OCTOBER									
1	6.2	75	1.2	8.6	76	1.8	18	154	7.6
2	6.0	85	1.4	e8.3	41	0.91	e16	142	6.1
3	5.9	96	1.5	e8.0	89	1.9	e14	128	4.9
4	6.1	98	1.6	e9.0	81	2.0	e12	115	3.7
5	6.6	96	1.7	e10	42	1.1	e10	101	2.7
6	7.7	156	3.3	e11	35	1.0	e8.8	88	2.1
7	7.2	111	2.1	e14	65	2.4	e8.0	74	1.6
8	7.0	178	3.3	e13	114	4.0	e7.4	61	1.2
9	6.4	96	1.7	e12	107	3.5	e7.0	47	0.89
10	6.1	112	1.9	22	120	7.2	e6.8	34	0.62
11	6.1	84	1.4	34	113	10	e6.4	22	0.38
12	6.1	75	1.2	29	96	7.5	e6.8	20	0.37
13	6.4	66	1.1	25	77	5.2	e7.0	20	0.38
14	6.4	118	2.0	22	63	3.7	e7.2	20	0.39
15	6.6	57	1.0	21	66	3.7	e7.5	20	0.40
16	6.5	98	1.7	22	72	4.2	e7.7	20	0.42
17	6.8	131	2.4	21	76	4.2	e7.3	20	0.39
18	6.7	106	1.9	20	71	3.7	e9.0	20	0.49
19	7.8	106	2.2	19	106	5.5	e15	20	0.81
20	9.8	114	3.0	20	52	2.8	e22	20	1.2
21	8.6	88	2.1	22	78	4.6	e26	20	1.4
22	8.0	95	2.1	26	107	7.6	e18	20	0.98
23	7.9	57	1.2	32	110	9.6	e14	20	0.76
24	7.8	83	1.7	27	81	5.9	e11	20	0.60
25	7.9	98	2.1	25	72	4.8	e14	20	0.75
26	8.7	50	1.2	23	81	5.0	e17	20	0.92
27	10	71	1.9	20	97	5.4	e14	20	0.76
28	9.9	97	2.6	19	92	4.8	e12	20	0.65
29	9.6	85	2.2	18	128	6.2	e10	20	0.54
30	9.2	73	1.8	18	157	7.5	e12	20	0.65
31	9.4	55	1.4	---	---	---	e17	20	0.92
TOTAL	231.4	---	57.9	578.9	---	137.71	368.9	---	45.57
JANUARY									
1	e21	20	1.1	e8.4	20	0.45	e13	20	0.70
2	e16	20	0.87	e9.9	20	0.53	e13	20	0.70
3	e14	20	0.76	e14	20	0.75	e12	20	0.65
4	e13	20	0.70	e27	20	1.5	e16	20	0.86
5	e12	20	0.65	e28	20	1.5	e21	20	1.1
6	e11	20	0.59	e23	20	1.2	e18	20	0.97
7	e12	20	0.65	e20	20	1.1	e17	20	0.92
8	e11	20	0.59	e17	20	0.92	e25	27	1.9
9	e10	20	0.54	e15	20	0.81	e170	66	30
10	e11	20	0.59	e13	20	0.70	e130	35	12
11	e10	20	0.54	e13	20	0.70	e110	23	6.9
12	e9.2	20	0.50	e12	20	0.65	e90	17	4.1
13	e8.4	20	0.45	e12	20	0.65	e110	28	8.4
14	e8.0	20	0.43	e11	20	0.59	e470	124	157
15	e7.4	20	0.40	e10	20	0.54	448	84	103
16	e7.4	20	0.40	e10	20	0.54	288	36	29
17	e7.6	20	0.41	e9.6	20	0.52	223	23	14
18	e7.2	20	0.39	e9.3	20	0.50	179	13	6.2
19	e7.2	20	0.39	e9.6	20	0.52	138	9	3.5
20	e7.6	20	0.41	e10	20	0.54	128	14	5.1
21	e7.8	20	0.42	e11	20	0.59	171	37	17
22	e8.2	20	0.44	e12	20	0.65	151	19	7.6
23	e7.8	20	0.42	e17	20	0.92	115	21	6.6
24	e7.2	20	0.39	e22	20	1.2	91	14	3.4
25	e6.8	20	0.37	e19	20	1.0	85	21	4.8
26	e6.8	20	0.37	e16	20	0.87	94	15	3.7
27	e7.0	20	0.38	e15	20	0.81	80	13	2.9
28	e7.0	20	0.38	e14	20	0.76	68	13	2.4
29	e7.2	20	0.39	---	---	---	179	58	28
30	e7.2	20	0.39	---	---	---	221	38	23
31	e7.6	20	0.41	---	---	---	155	23	9.8
TOTAL	291.6	---	15.72	407.8	---	22.01	4,029	---	496.20
NOVEMBER									
DECEMBER									

04177810 FISH CREEK NEAR ARTIC, IN—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY)—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Day	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)
1	112	20	6.0	58	81	13	36	55	5.4
2	93	26	6.6	68	40	7.3	34	43	4.0
3	79	37	7.8	60	32	5.2	31	56	4.7
4	86	44	13	50	29	3.9	30	54	4.5
5	332	128	111	224	188	108	29	45	3.5
6	365	56	55	305	54	45	28	46	3.5
7	266	30	23	216	34	20	26	44	3.1
8	178	21	10	135	29	10	26	44	3.1
9	148	16	6.3	292	137	117	26	47	3.3
10	129	20	6.8	609	92	147	26	41	2.8
11	110	30	9.0	716	42	84	25	42	2.8
12	93	34	8.5	535	27	40	45	59	7.6
13	78	50	11	421	24	27	81	61	13
14	66	46	8.2	319	34	29	69	51	9.5
15	57	48	7.3	222	25	15	e50	60	8.1
16	50	47	6.3	199	26	14	e38	47	4.8
17	45	54	6.5	172	24	11	e58	54	8.4
18	42	42	4.7	139	25	9.3	e112	73	22
19	40	49	5.3	115	26	8.1	e126	53	18
20	38	43	4.3	99	32	8.6	e66	49	8.9
21	36	43	4.2	89	26	6.2	e45	43	5.3
22	36	35	3.4	77	32	6.6	e35	47	4.4
23	33	39	3.4	66	27	4.8	e28	58	4.4
24	29	39	3.1	59	32	5.1	e22	40	2.4
25	27	44	3.2	54	31	4.5	e18	52	2.5
26	26	46	3.2	49	43	5.7	15	44	1.7
27	25	35	2.4	45	63	7.7	14	40	1.5
28	23	33	2.1	42	55	6.3	12	35	1.2
29	23	43	2.6	40	51	5.4	12	28	0.92
30	30	58	6.2	37	49	4.9	12	40	1.3
31	---	---	---	35	64	6.0	---	---	---
TOTAL	2,695	---	350.4	5,547	---	785.6	1,175	---	166.62

STREAMS TRIBUTARY TO LAKE ERIE
04177810 FISH CREEK NEAR ARTIC, IN—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY)—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Day	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	JULY			AUGUST			SEPTEMBER		
				Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)
1	11	46	1.4	53	45	6.4	48	63	9.8			
2	11	32	0.93	431	111	112	272	117	82			
3	10	38	1.1	813	27	59	517	34	46			
4	10	28	0.77	582	15	24	389	30	31			
5	14	37	1.4	325	22	19	193	42	22			
6	21	42	2.4	209	29	16	123	44	14			
7	45	72	9.6	143	34	13	89	56	14			
8	97	101	28	109	32	9.3	69	43	7.9			
9	163	89	39	86	30	7.0	55	60	9.1			
10	127	49	17	67	30	5.5	44	24	2.9			
11	82	42	9.3	53	30	4.3	37	22	2.2			
12	65	38	6.7	47	34	4.3	32	23	2.0			
13	49	38	5.0	59	45	7.3	27	18	1.4			
14	34	42	3.8	48	38	5.0	25	16	1.1			
15	26	30	2.1	38	29	3.0	27	18	1.3			
16	22	26	1.6	33	27	2.3	30	16	1.3			
17	19	29	1.4	28	31	2.3	25	12	0.84			
18	16	29	1.2	23	42	2.6	22	15	0.89			
19	14	25	0.96	20	38	2.0	20	15	0.78			
20	12	33	1.1	17	58	2.7	18	10	0.51			
21	15	37	1.5	16	57	2.4	16	10	0.44			
22	45	68	9.4	18	76	3.7	24	29	2.1			
23	81	74	16	22	37	2.2	46	32	3.9			
24	55	52	7.7	18	51	2.5	56	38	9.5			
25	36	52	5.2	15	37	1.5	126	114	41			
26	26	39	2.7	14	44	1.6	97	49	13			
27	26	50	3.6	15	21	0.89	268	103	72			
28	145	127	53	15	29	1.2	325	48	42			
29	183	85	43	13	23	0.84	227	32	20			
30	104	49	14	15	15	0.60	136	19	6.8			
31	70	44	8.3	14	18	0.69	---	---	---			
TOTAL	1,634	---	299.16	3,359	---	325.12	3,383	---	461.76			
YEAR	23,700.6	3,163.77										

e Estimated

04178000 ST. JOSEPH RIVER NEAR NEWVILLE, IN

LOCATION.--Lat 41°23'08", long 84°48'06", in SW¼SW¼ sec.18, T.5 N., R.1 E., Defiance County, Ohio, Hydrologic Unit 04100003, (BUTLER EAST, IN-OH quadrangle), on left downstream side at bridge on Ohio State Highway 249, 3.5 mi northeast of Newville, 6.5 mi northwest of Hicksville, OH, and at mile 42.3.

DRAINAGE AREA.--610 mi².

PERIOD OF RECORD.--October 1946 to current year. Monthly discharge only for some periods, published in WSP 1307.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 795.40 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 22, 1947, nonrecording gage at same site and datum.

REMARKS.--Records fair except 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	52	e46	66	279	e62	e62	890	283	209	81	228	598
2	51	e48	65	216	e65	e60	798	349	212	79	945	1,260
3	46	e47	61	e137	e70	e60	635	346	211	75	1,480	1,600
4	47	e47	61	e120	172	e61	565	320	193	73	1,830	1,660
5	50	e47	60	e110	e150	e68	1,400	910	180	98	1,870	1,380
6	47	e50	56	e105	e130	e88	1,600	1,400	170	147	1,470	799
7	48	e55	56	e100	e110	e100	1,500	1,270	164	191	1,120	489
8	49	e52	55	e90	e100	e130	1,400	1,020	157	388	859	359
9	48	e54	51	e100	e88	e300	1,350	1,200	152	788	638	322
10	47	e73	54	e130	e80	e450	1,270	1,890	146	803	508	250
11	46	e98	52	e120	e74	e370	1,060	2,260	142	527	404	206
12	44	e80	51	e100	e72	e340	825	2,530	184	351	393	178
13	43	e70	50	e85	e70	1,000	658	2,470	245	301	359	156
14	44	e58	50	e76	e68	1,390	536	2,240	267	237	286	139
15	47	e70	51	e70	e64	1,410	447	1,870	258	184	264	136
16	44	e64	52	e67	e61	1,440	393	1,540	222	151	233	135
17	45	e62	51	e65	e63	1,400	363	1,280	228	130	199	133
18	44	e61	57	e63	e65	1,310	332	1,020	394	114	178	123
19	47	e60	61	e61	e67	1,220	300	813	331	102	162	114
20	47	e63	92	e60	e71	1,160	279	654	253	93	146	106
21	47	69	100	e60	e69	1,260	266	547	200	102	129	101
22	46	101	107	e60	e72	1,160	261	475	168	124	121	128
23	47	93	105	e59	e79	989	253	419	145	234	123	215
24	50	93	e90	e58	e74	867	243	373	130	221	118	269
25	50	88	e80	e58	e72	729	224	337	117	171	106	837
26	53	81	e70	e57	e70	629	207	308	107	135	100	892
27	51	76	e64	e58	e68	561	194	285	101	133	99	1,240
28	51	72	e60	e58	e65	497	183	263	96	376	91	1,470
29	e50	69	e70	e59	---	849	171	243	93	692	104	1,380
30	e47	69	87	e60	---	999	166	230	86	480	107	1,190
31	e45	---	276	e61	---	944	---	220	---	283	92	---
TOTAL	1,473	2,016	2,261	2,802	2,271	21,903	18,769	29,365	5,561	7,864	14,762	17,865
MEAN	47.5	67.2	72.9	90.4	81.1	707	626	947	185	254	476	596
MAX	53	101	276	279	172	1,440	1,600	2,530	394	803	1,870	1,660
MIN	43	46	50	57	61	60	166	220	86	73	91	101
CFSM	0.08	0.11	0.12	0.15	0.13	1.16	1.03	1.55	0.30	0.42	0.78	0.98
IN.	0.09	0.12	0.14	0.17	0.14	1.34	1.14	1.79	0.34	0.48	0.90	1.09

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2003, BY WATER YEAR (WY)

MEAN	200	370	579	649	859	1,180	1,068	656	418	237	157	146
MAX	1,537	1,756	2,085	2,545	2,302	3,512	3,102	2,499	1,864	1,045	921	671
(WY)	(2002)	(1993)	(1968)	(1950)	(1976)	(1982)	(1950)	(1956)	(1989)	(1951)	(1998)	(1997)
MIN	21.0	30.5	31.1	38.3	41.4	312	321	148	51.4	32.2	29.1	20.3
(WY)	(1964)	(1965)	(1964)	(1963)	(1963)	(1964)	(1971)	(1988)	(1988)	(1988)	(1967)	(1963)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

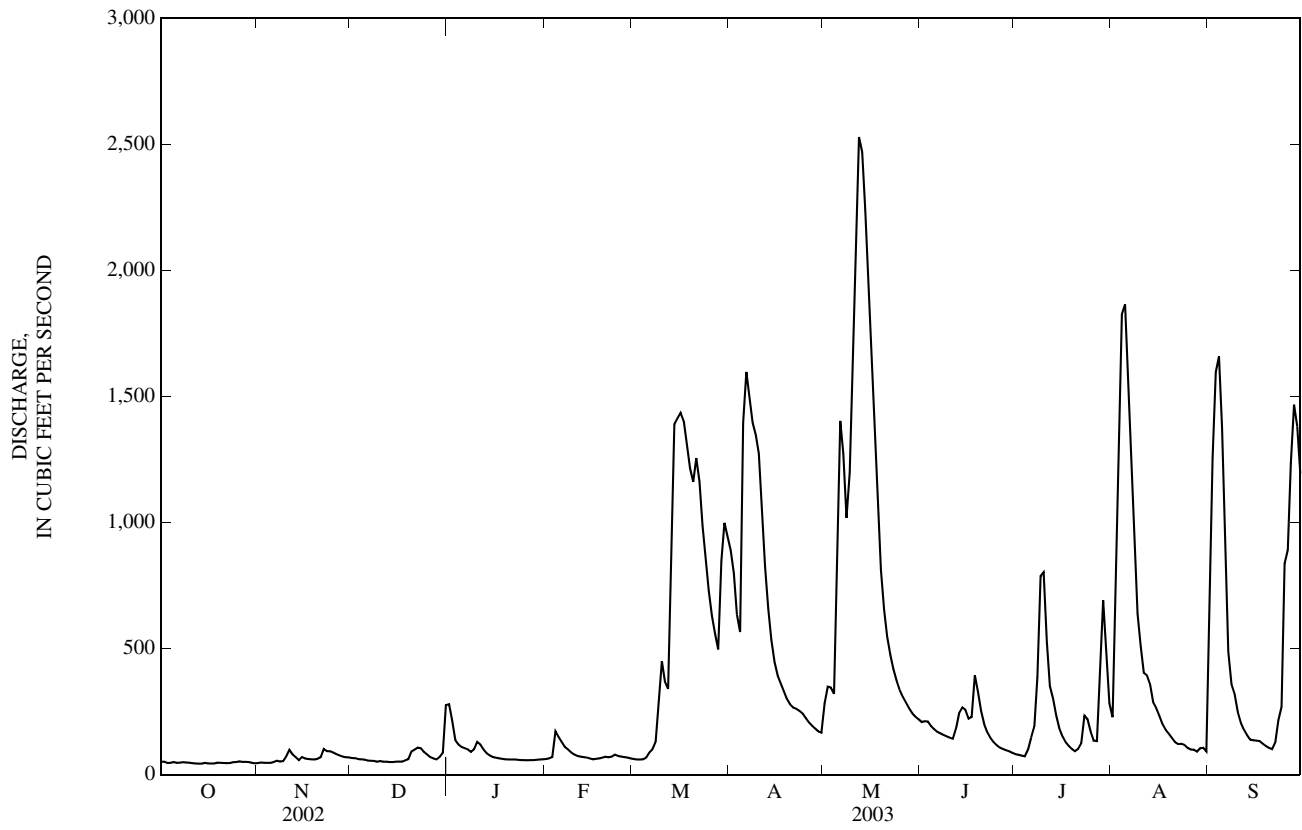
FOR 2003 WATER YEAR

WATER YEARS 1947 - 2003

ANNUAL TOTAL	193,964	126,912		
ANNUAL MEAN	531	348		540
HIGHEST ANNUAL MEAN				1,008
LOWEST ANNUAL MEAN				132
HIGHEST DAILY MEAN	6,200	May 15	2,530	May 12
LOWEST DAILY MEAN	28	Sep 14	43	Oct 13
ANNUAL SEVEN-DAY MINIMUM	29	Sep 12	44	Oct 12
MAXIMUM PEAK FLOW			2,580	May 12
MAXIMUM PEAK STAGE			12.64	May 12
ANNUAL RUNOFF (CFSM)	0.87		0.57	
ANNUAL RUNOFF (INCHES)	11.83		7.74	
10 PERCENT EXCEEDS	1,720		1,170	1,480
50 PERCENT EXCEEDS	162		130	237
90 PERCENT EXCEEDS	47		51	50

STREAMS TRIBUTARY TO LAKE ERIE

04178000 ST. JOSEPH RIVER NEAR NEWVILLE, IN—Continued



04179520 CEDAR CREEK AT 18TH STREET AT AUBURN, IN

LOCATION.--Lat 41°21'36", long 85°02'57", in NW¼SE¼ sec.32, T.34 N., R.13 E., Dekalb County, Hydrologic Unit 04100003, (AUBURN, IN quadrangle), on top of right upstream wingwall of the bridge on 18th Street, 0.3 mi east of downtown Auburn, 1.46 mi above John Diehl Ditch and at mile 20.94.

DRAINAGE AREA.--87.3 mi².

PERIOD OF RECORD.--September 2001 to current year.

GAGE.--Water-stage recorder. Datum of gage is 844.02 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except 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	e5.0	8.5	12	66	8.6	9.4	109	107	36	16	58	275
2	e4.7	7.7	11	40	10	9.3	87	97	33	15	422	497
3	e4.6	6.9	7.5	31	16	8.7	72	73	35	14	294	336
4	8.1	7.1	6.1	25	80	11	116	61	33	26	190	215
5	5.2	10	5.8	22	e30	21	572	420	31	33	186	139
6	5.2	10	5.6	20	e28	28	337	329	28	28	134	94
7	4.8	8.8	4.8	18	e20	28	230	192	27	100	92	73
8	4.2	8.7	5.1	18	14	64	186	132	27	163	70	59
9	3.9	8.1	4.9	22	13	236	168	533	26	294	61	50
10	4.1	32	4.8	26	12	133	134	841	24	170	49	42
11	4.2	21	5.1	18	11	79	107	476	24	101	43	37
12	3.8	13	5.2	17	10	122	88	512	88	69	37	32
13	4.1	11	5.4	15	9.1	461	74	340	96	50	39	28
14	4.0	11	5.4	14	8.5	439	65	232	68	40	42	26
15	4.3	12	5.6	12	8.3	270	60	213	51	35	37	27
16	4.3	9.2	6.5	11	7.0	202	55	178	40	30	32	24
17	4.7	9.8	6.0	11	7.8	164	50	146	60	26	27	22
18	5.8	10	8.7	8.9	7.8	132	47	119	77	23	24	20
19	9.9	12	27	8.9	8.3	107	44	100	79	20	22	18
20	4.3	11	58	9.3	9.0	132	41	90	52	18	20	17
21	3.8	16	37	8.7	12	203	40	78	38	52	19	16
22	3.8	27	25	8.2	17	134	38	68	32	149	21	45
23	4.0	16	17	7.1	18	95	34	60	28	183	18	52
24	4.0	13	15	7.0	16	75	32	55	25	98	16	60
25	6.4	12	10	6.6	12	82	31	51	23	63	16	194
26	6.4	11	15	7.0	11	86	30	46	22	43	24	123
27	5.5	9.0	12	6.8	9.6	68	28	42	21	133	19	424
28	5.5	7.4	11	6.9	9.5	83	26	40	19	210	17	265
29	17	7.3	12	7.3	---	356	25	38	19	109	37	164
30	13	9.9	28	7.5	---	221	37	36	17	70	24	112
31	9.7	---	117	7.4	---	141	---	41	---	50	24	---
TOTAL	178.3	356.4	499.5	493.6	423.5	4,200.4	2,963	5,746	1,179	2,431	2,114	3,486
MEAN	5.75	11.9	16.1	15.9	15.1	135	98.8	185	39.3	78.4	68.2	116
MAX	17	32	117	66	80	461	572	841	96	294	422	497
MIN	3.8	6.9	4.8	6.6	7.0	8.7	25	36	17	14	16	16
CFSM	0.06	0.13	0.18	0.18	0.17	1.50	1.09	2.05	0.44	0.87	0.76	1.29
IN.	0.07	0.15	0.21	0.20	0.17	1.73	1.22	2.37	0.49	1.00	0.87	1.44

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2003, BY WATER YEAR (WY)

	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003
MEAN	133	46.0	91.9	40.8	86.5	148	149	171	38.2	48.5	39.5	61.8
MAX	260	80.2	168	65.8	158	160	200	185	39.3	78.4	68.2	116
(WY)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2003)	(2003)	(2003)	(2003)	(2003)
MIN	5.75	11.9	16.1	15.9	15.1	135	98.8	156	37.2	18.6	10.9	7.36
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2002)	(2002)	(2002)	(2002)

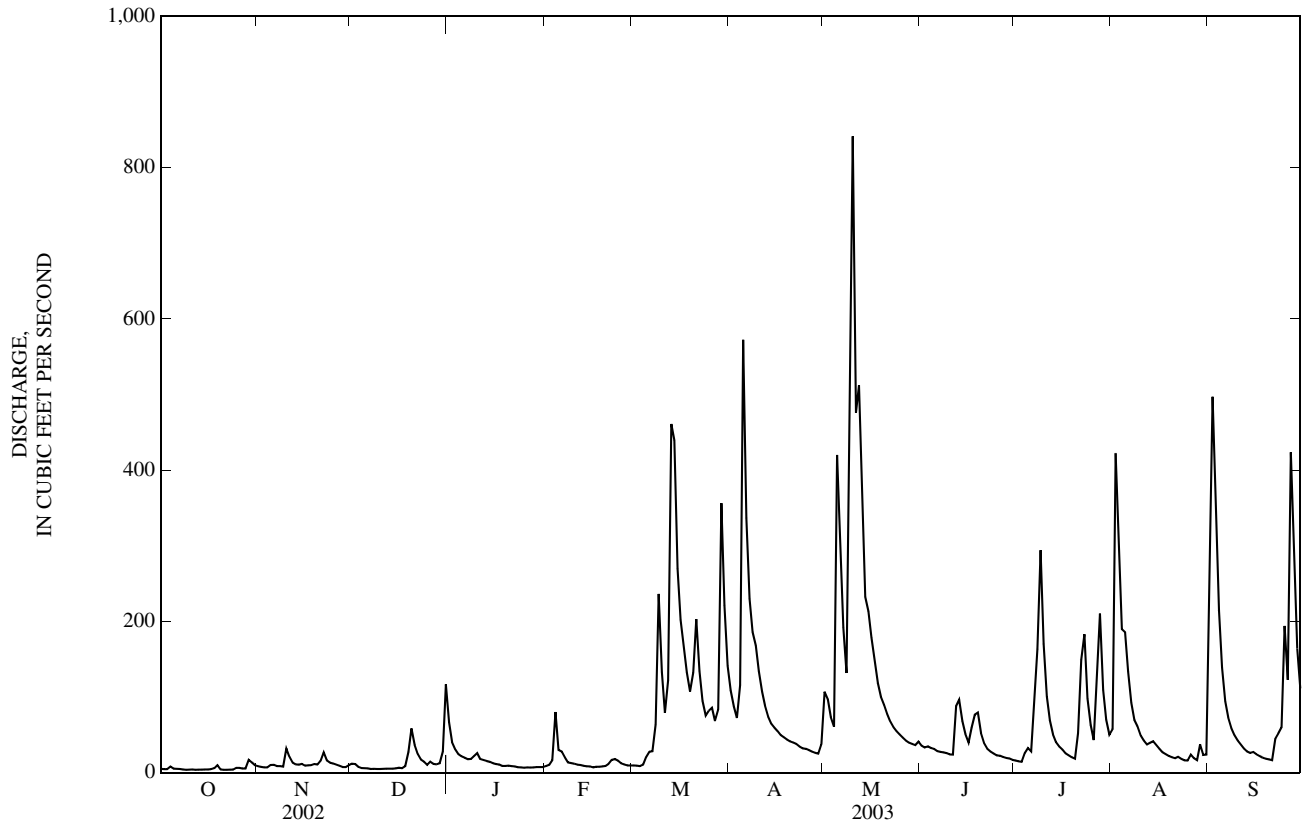
SUMMARY STATISTICS

	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 2001 - 2003	
ANNUAL TOTAL	25,534.8		24,070.7			
ANNUAL MEAN	70.0		65.9		88.0	
HIGHEST ANNUAL MEAN					110	2002
LOWEST ANNUAL MEAN					65.9	2003
HIGHEST DAILY MEAN	934	Feb 1	841	May 10	934	Feb 1, 2002
LOWEST DAILY MEAN	3.8	Oct 12	3.8	Oct 12	3.8	Oct 12, 2002
ANNUAL SEVEN-DAY MINIMUM	4.0	Oct 8	4.0	Oct 8	4.0	Oct 8, 2002
MAXIMUM PEAK FLOW			1,170	May 10	1,170	May 10, 2003
MAXIMUM PEAK STAGE			8.23	May 10	8.23	May 10, 2003
ANNUAL RUNOFF (CFSM)	0.78		0.73		0.98	
ANNUAL RUNOFF (INCHES)	10.53		9.93		13.26	
10 PERCENT EXCEEDS	161		180		227	
50 PERCENT EXCEEDS	27		26		41	
90 PERCENT EXCEEDS	5.6		6.1		7.1	

e Estimated

STREAMS TRIBUTARY TO LAKE ERIE

04179520 CEDAR CREEK AT 18TH STREET AT AUBURN, IN—Continued



04180000 CEDAR CREEK NEAR CEDARVILLE, IN

LOCATION.--Lat 41°13'08", long 85°04'35", in NW¼NW¼ sec.19, T.32 N., R.13 E., Allen County, Hydrologic Unit 04100003, (CEDARVILLE, IN quadrangle), on left bank at downstream side of bridge on Tonkle Road, 3 mi northwest of Cedarville, 5.8 mi upstream from mouth, and 10 mi south of Auburn.

DRAINAGE AREA.--270 mi².

PERIOD OF RECORD.--October 1946 to current year.

REVISED RECORDS.--WSP 1912: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 780.09 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 4, 1947, nonrecording gage at same site and datum.

REMARKS.--Records fair except 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	30	36	43	248	e45	e42	504	263	114	32	179	1,370
2	27	33	42	151	e52	e41	397	323	99	29	853	2,620
3	27	31	e41	109	61	e41	318	246	99	25	979	2,220
4	28	30	e39	96	277	e41	334	182	95	29	672	1,190
5	43	34	38	79	e170	62	1,600	1,190	89	153	884	769
6	30	47	38	73	e160	88	1,430	1,500	81	99	558	515
7	29	40	35	62	e120	85	920	834	77	275	352	366
8	30	37	34	67	e90	100	902	573	73	441	251	277
9	28	36	e34	73	e68	693	718	1,460	70	713	195	219
10	28	80	e33	93	e61	507	583	2,870	64	528	159	177
11	27	130	33	e84	e58	369	474	2,730	64	307	132	145
12	26	77	33	e77	e53	305	381	1,890	167	201	124	120
13	25	58	33	e68	e50	1,010	315	1,490	324	138	132	101
14	23	48	34	e60	e46	1,490	259	938	264	101	119	87
15	26	45	33	e57	e44	923	231	917	195	81	102	87
16	25	45	33	e54	e40	709	208	796	143	70	86	78
17	25	39	34	e52	e43	584	181	585	164	58	70	64
18	28	38	36	e50	e44	488	174	456	265	48	58	54
19	55	41	64	e50	45	402	158	369	199	41	51	47
20	46	45	150	e52	44	410	144	318	154	34	45	41
21	34	43	148	e50	45	707	140	273	108	458	41	37
22	33	90	97	e45	e52	520	135	233	85	572	70	140
23	30	81	71	e42	e60	368	122	201	69	765	61	272
24	27	61	59	e40	e52	294	111	175	61	468	45	171
25	30	53	68	e38	e48	267	105	154	52	267	38	670
26	47	50	56	e39	e46	298	105	134	46	171	51	506
27	36	47	52	e37	e43	252	94	120	44	171	160	1,340
28	31	43	45	e38	e42	222	87	110	41	1,120	79	1,150
29	32	40	42	e40	---	1,070	84	102	38	626	114	677
30	45	41	45	e42	---	993	83	92	35	348	177	438
31	40	---	233	e41	---	697	---	111	---	227	99	---
TOTAL	991	1,519	1,776	2,107	1,959	14,078	11,297	21,635	3,379	8,596	6,936	15,948
MEAN	32.0	50.6	57.3	68.0	70.0	454	377	698	113	277	224	532
MAX	55	130	233	248	277	1,490	1,600	2,870	324	1,120	979	2,620
MIN	23	30	33	37	40	41	83	92	35	25	38	37
CFSM	0.12	0.19	0.21	0.25	0.26	1.68	1.39	2.58	0.42	1.03	0.83	1.97
IN.	0.14	0.21	0.24	0.29	0.27	1.94	1.56	2.98	0.47	1.18	0.96	2.20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2003, BY WATER YEAR (WY)

	MEAN	121	181	278	313	400	504	471	293	213	123	87.7	93.8
MAX	814	936	908	1,393	1,290	1,724	1,130	947	1,046	515	331	532	
(WY)	(2002)	(1993)	(1967)	(1950)	(1959)	(1982)	(1950)	(1956)	(1981)	(1986)	(1997)	(2003)	
MIN	19.8	24.0	24.7	25.9	28.5	146	139	68.6	44.0	35.1	22.0	20.9	
(WY)	(1965)	(1965)	(1964)	(1963)	(1963)	(1957)	(1971)	(1958)	(1988)	(1953)	(1964)	(1964)	

SUMMARY STATISTICS

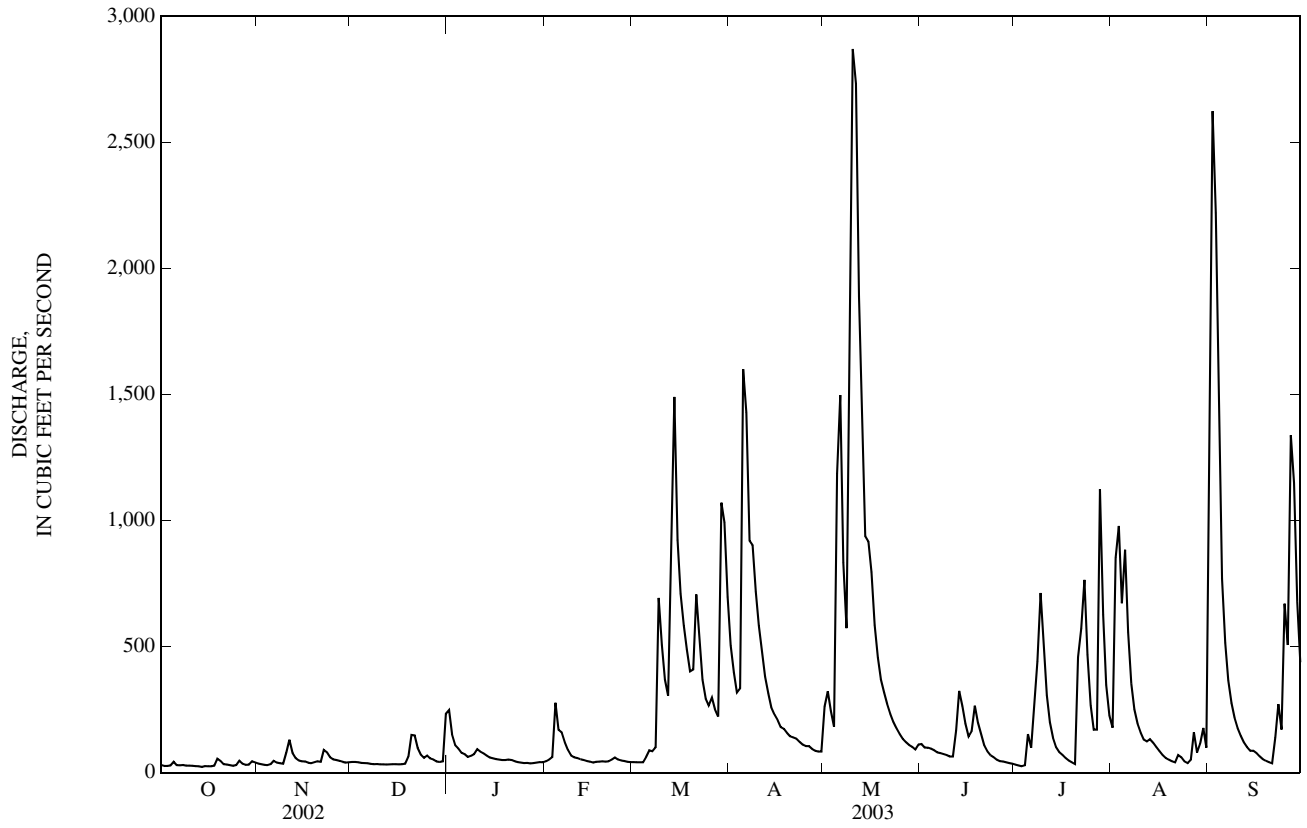
FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1947 - 2003

ANNUAL TOTAL	85,700	90,221	
ANNUAL MEAN	235	247	256
HIGHEST ANNUAL MEAN			485
LOWEST ANNUAL MEAN			85.3
HIGHEST DAILY MEAN	2,700	Feb 1	5,220
LOWEST DAILY MEAN	21	Sep 15	13
ANNUAL SEVEN-DAY MINIMUM	23	Sep 9	18
MAXIMUM PEAK FLOW			5,580
MAXIMUM PEAK STAGE		8.86	13.38
ANNUAL RUNOFF (CFSM)	0.87	0.92	0.95
ANNUAL RUNOFF (INCHES)	11.81	12.43	12.88
10 PERCENT EXCEEDS	562	701	601
50 PERCENT EXCEEDS	87	84	115
90 PERCENT EXCEEDS	30	34	32

STREAMS TRIBUTARY TO LAKE ERIE
04180000 CEDAR CREEK NEAR CEDARVILLE, IN—Continued



04180500 ST. JOSEPH RIVER NEAR FORT WAYNE, IN

LOCATION.--Lat 41°10'41", long 85°03'19", in NW¼NE¼ sec.3, T.31 N., R.13 E., Allen County, Hydrologic Unit 04100003, (CEDARVILLE, IN quadrangle), on left bank 0.8 mi downstream from Ely Run, 1.3 mi upstream from Mayhew Road, 8.0 mi northeast of the Fort Wayne Court House, and at mile 10.71.

DRAINAGE AREA.--1,060 mi².

PERIOD OF RECORD.--October 1983 to current year. July 1941 to September 1955 gage located 1.3 mi downstream at Ely Bridge.

GAGE.--Water-stage recorder. Datum of gage is 754.00 ft above National Geodetic Vertical Datum of 1929 (levels by State of Indiana).

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow regulated by Cedarville Reservoir and some flow diverted into storage of Hurshtown Reservoir.

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	42	93	132	978	e124	e122	1,460	405	407	184	783	2,320
2	35	95	e130	540	e130	e120	1,280	694	379	187	3,820	5,670
3	81	95	e128	326	e140	e119	1,160	751	372	179	3,040	4,840
4	121	94	e126	237	e350	e119	1,050	464	366	176	2,900	3,550
5	126	95	e123	e230	e540	e140	3,850	3,150	345	301	3,590	2,960
6	95	103	121	e215	e400	e180	3,830	3,920	311	397	3,020	2,110
7	89	111	112	e200	e310	e210	3,040	2,630	264	581	1,990	1,260
8	105	106	107	176	e250	e260	3,060	2,090	321	786	1,430	854
9	116	108	101	195	e200	e900	2,330	4,660	347	1,690	1,320	835
10	89	155	102	258	e180	e1,200	2,120	6,230	287	1,610	778	710
11	84	318	104	e240	e160	e1,000	1,890	6,210	253	1,170	714	493
12	82	291	103	e200	e150	913	1,460	5,200	439	708	756	437
13	94	178	101	e170	e140	2,740	1,120	4,850	801	549	723	453
14	106	117	102	e150	e140	3,580	923	4,070	661	466	578	365
15	94	158	102	e140	e130	3,040	788	3,590	489	400	400	419
16	97	153	102	e134	e120	2,790	663	3,290	556	310	505	352
17	95	149	101	e130	e125	2,500	636	2,460	469	285	460	307
18	98	126	108	e125	e130	2,230	574	1,890	600	263	317	352
19	94	120	190	e122	135	2,000	492	1,570	742	235	305	295
20	112	130	233	e120	146	1,880	529	1,160	558	195	365	230
21	94	131	298	e120	134	2,530	383	1,110	364	1,130	304	243
22	90	217	262	e119	e150	2,300	475	872	360	956	302	401
23	88	216	224	e118	e160	1,600	376	726	321	1,350	247	757
24	84	218	e180	e117	e150	1,500	340	723	260	996	241	576
25	90	202	e170	e116	e143	1,170	435	678	236	627	285	1,580
26	111	170	e150	e115	e137	1,090	355	570	233	389	283	1,950
27	106	140	e130	e115	e133	918	321	460	230	306	406	3,390
28	99	139	e120	e116	e130	839	317	493	197	1,710	298	3,150
29	100	134	e140	e118	---	2,400	314	473	198	1,410	248	2,520
30	96	136	179	e119	---	2,470	305	401	193	1,340	360	2,140
31	91	---	523	e120	---	1,870	---	416	---	653	306	---
TOTAL	2,904	4,498	4,804	6,179	5,137	44,730	35,876	66,206	11,559	21,539	31,074	45,519
MEAN	93.7	150	155	199	183	1,443	1,196	2,136	385	695	1,002	1,517
MAX	126	318	523	978	540	3,580	3,850	6,230	801	1,710	3,820	5,670
MIN	35	93	101	115	120	119	305	401	193	176	241	230
CFSM	0.09	0.14	0.15	0.19	0.17	1.36	1.13	2.01	0.36	0.66	0.95	1.43
IN.	0.10	0.16	0.17	0.22	0.18	1.57	1.26	2.32	0.41	0.76	1.09	1.60

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2003, BY WATER YEAR (WY)

MEAN	587	903	1,134	1,314	1,643	1,847	1,826	1,196	964	464	393	412
MAX	2,797	3,330	2,421	4,615	3,728	3,612	3,071	3,675	2,915	1,413	1,157	1,517
(WY)	(2002)	(1993)	(1991)	(1993)	(2001)	(1985)	(1999)	(1996)	(1989)	(1986)	(1998)	(2003)
MIN	78.6	98.8	155	145	183	689	607	272	153	122	111	81.5
(WY)	(1995)	(2000)	(2003)	(2000)	(2003)	(2000)	(1986)	(1988)	(1988)	(1988)	(2002)	(1994)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

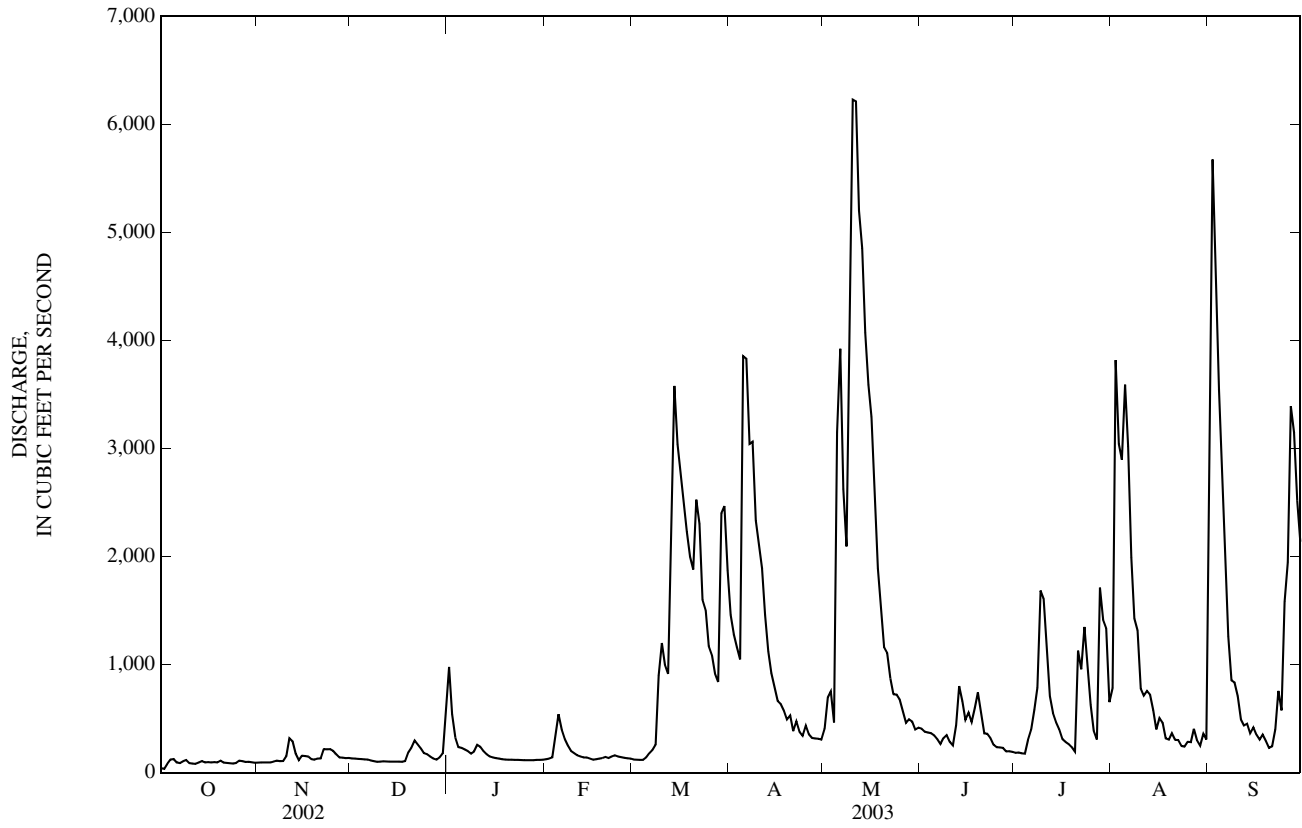
WATER YEARS 1984 - 2003

ANNUAL TOTAL	323,283	280,025	
ANNUAL MEAN	886	767	1,053
HIGHEST ANNUAL MEAN			1,532
LOWEST ANNUAL MEAN			642
HIGHEST DAILY MEAN	7,010	Feb 1	13,100
LOWEST DAILY MEAN	35	Oct 2	35
ANNUAL SEVEN-DAY MINIMUM	45	Sep 13	45
MAXIMUM PEAK FLOW			13,400
MAXIMUM PEAK STAGE			18.40
ANNUAL RUNOFF (CFSM)	0.84		0.99
ANNUAL RUNOFF (INCHES)	11.35		13.50
10 PERCENT EXCEEDS	2,890		2,700
50 PERCENT EXCEEDS	317		500
90 PERCENT EXCEEDS	88		139

e Estimated

STREAMS TRIBUTARY TO LAKE ERIE

04180500 ST. JOSEPH RIVER NEAR FORT WAYNE, IN—Continued



04181500 ST. MARYS RIVER AT DECATUR, IN

LOCATION.--Lat 40°50'55", long 84°56'16", in SW¹/₄SW¹/₄ sec.27, T.28 N., R.14 E., Adams County, Hydrologic Unit 04100004, (DECATUR, IN quadrangle), on left downstream side of bridge on U.S. Highway 27, 0.5 mi upstream from Holthouse Ditch, 1.3 mi north of Decatur, and at mile 29.1.

DRAINAGE AREA.--621 mi².

PERIOD OF RECORD.--October 1946 to current year. Monthly discharge only for some periods, published in WSP 1307. Gage-height records collected at site 0.5 mi upstream January 1932 to November 1954, and at present site thereafter are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1174: 1948. WSP 1337: 1947. WSP 1627: 1950. WSP 1912: 1955, drainage area.

GAGE.--Water-stage recorder. Datum of gage is 760.44 ft above National Geodetic Vertical Datum of 1929. Prior to July 27, 1948, nonrecording gage at same site and datum.

REMARKS.--Records fair, except for estimated daily discharges, which are poor. Flow regulated by Grand Lake. Slight diversion from or into Wabash River Basin and into Miami and Erie Canal.

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	80	26	91	2,820	e58	e230	539	120	176	886	252	517
2	57	20	69	1,840	e59	e215	419	1,070	182	808	3,000	3,180
3	37	17	64	1,440	e90	e200	320	1,240	225	439	4,250	3,650
4	29	18	65	1,480	1,220	e190	566	813	399	484	5,640	3,150
5	26	22	63	1,340	1,100	e230	3,820	2,830	533	4,230	6,500	2,950
6	22	23	57	934	753	612	3,050	3,840	534	5,730	5,960	2,420
7	18	19	48	505	e520	837	2,330	2,760	417	11,000	4,580	1,420
8	15	39	45	343	e380	868	2,800	3,480	291	14,300	3,210	666
9	e12	41	39	726	e270	2,260	2,060	5,100	225	14,800	2,010	296
10	e11	177	38	1,340	e210	2,800	1,590	6,980	187	13,800	977	177
11	e10	905	38	902	e160	2,420	1,300	7,230	162	11,800	486	132
12	e9.8	572	36	739	e120	2,690	945	6,690	476	9,230	303	110
13	e12	339	41	536	e100	3,880	597	5,500	1,600	6,610	254	94
14	e11	268	48	e326	e90	4,250	388	4,650	3,950	4,530	188	85
15	e10	182	56	e300	e78	4,290	297	3,920	3,820	2,930	174	87
16	e9.8	126	55	e220	e70	4,140	251	2,890	3,400	1,290	164	84
17	e9.6	97	47	e180	e65	3,910	218	1,740	3,630	600	138	77
18	e9.4	82	97	e150	61	3,440	194	1,260	5,050	337	116	73
19	e12	74	947	e130	58	2,630	173	1,080	4,690	241	99	71
20	e13	69	1,940	e110	59	2,010	157	778	3,610	194	86	69
21	e12	64	1,300	e98	68	1,790	144	493	2,440	770	76	66
22	12	69	847	e88	204	1,700	128	332	1,710	1,440	71	463
23	11	70	726	e80	714	1,310	123	266	1,140	1,780	65	1,040
24	11	80	517	e72	e580	1,330	117	224	586	1,970	62	376
25	17	101	289	e68	e500	1,320	117	195	286	1,840	58	1,590
26	17	115	e160	e65	e400	1,040	127	176	194	1,660	63	1,120
27	21	125	e120	e63	e350	655	115	153	191	1,220	64	4,030
28	18	131	e110	e61	e300	490	108	138	172	839	64	4,560
29	21	125	e120	e60	---	905	110	133	180	386	79	3,810
30	21	111	e140	e59	---	827	99	128	171	237	81	2,680
31	31	---	2,240	e59	---	600	---	140	---	185	87	---
TOTAL	605.6	4,107	10,453	17,134	8,637	54,069	23,202	66,349	40,627	116,566	39,157	39,043
MEAN	19.5	137	337	553	308	1,744	773	2,140	1,354	3,760	1,263	1,301
MAX	80	905	2,240	2,820	1,220	4,290	3,820	7,230	5,050	14,800	6,500	4,560
MIN	9.4	17	36	59	58	190	99	120	162	185	58	66
CFSM	0.03	0.22	0.54	0.89	0.50	2.81	1.25	3.45	2.18	6.06	2.03	2.10
IN.	0.04	0.25	0.63	1.03	0.52	3.24	1.39	3.97	2.43	6.98	2.35	2.34

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2003, BY WATER YEAR (WY)

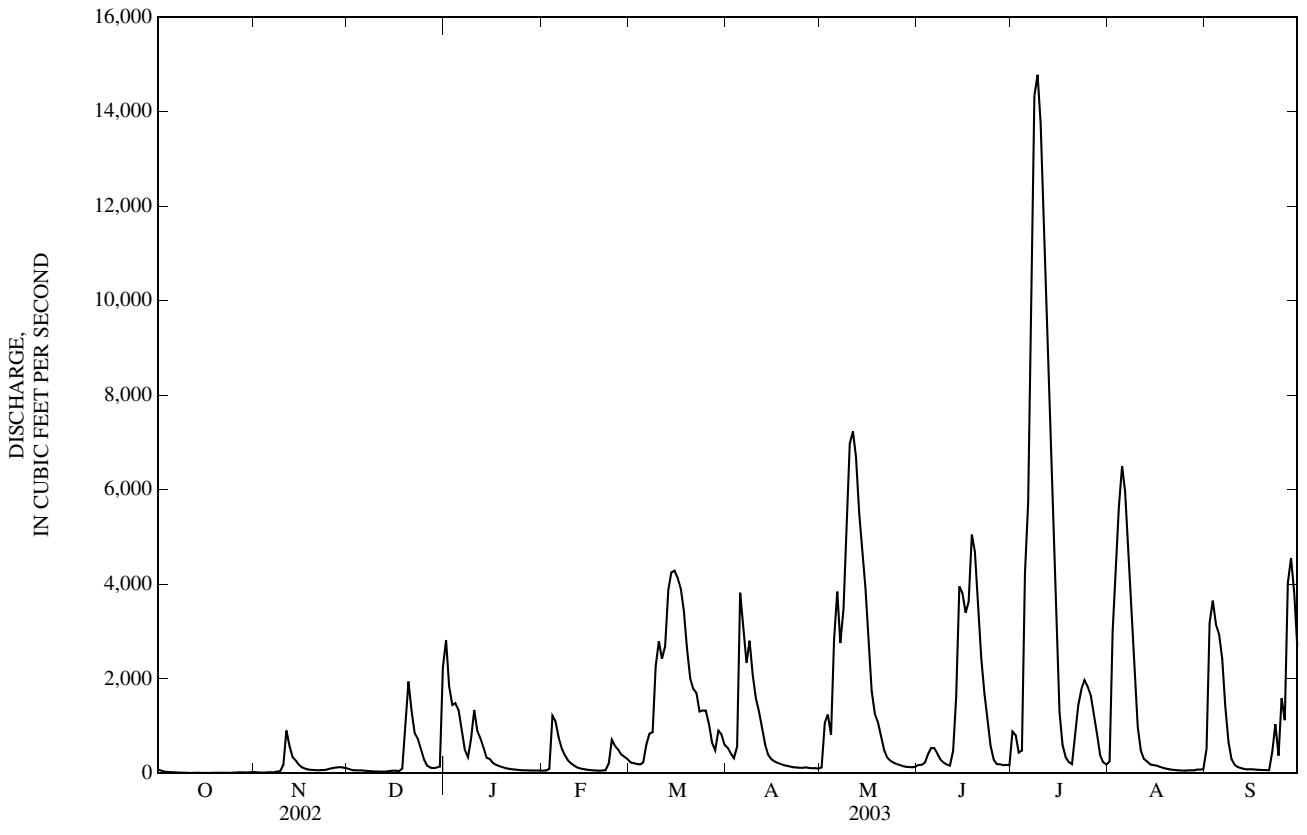
MEAN	140	299	558	716	872	1,087	953	527	463	379	158	127
MAX	1,250	1,988	2,079	3,834	2,546	3,263	3,409	2,140	2,075	3,760	1,263	1,301
(WY)	(2002)	(1993)	(1991)	(1950)	(1950)	(1978)	(1957)	(2003)	(1981)	(2003)	(2003)	(2003)
MIN	7.52	13.7	12.8	21.0	30.5	125	79.3	55.6	28.1	20.6	15.5	12.6
(WY)	(1964)	(1965)	(1964)	(1961)	(1964)	(1981)	(1966)	(1988)	(1988)	(1965)	(1963)	(1963)

STREAMS TRIBUTARY TO LAKE ERIE

04181500 ST. MARYS RIVER AT DECATUR, IN—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1947 - 2003	
ANNUAL TOTAL	164,537.6		419,949.6			
ANNUAL MEAN	451		1,151		518	
HIGHEST ANNUAL MEAN					1,151	2003
LOWEST ANNUAL MEAN					140	1966
HIGHEST DAILY MEAN	5,330	Mar 31	14,800	Jul 9	14,800	Jul 9, 2003
LOWEST DAILY MEAN	9.4	Oct 18	9.4	Oct 18	5.4	Oct 18, 1960
ANNUAL SEVEN-DAY MINIMUM	10	Oct 12	10	Oct 12	6.2	Oct 12, 1963
MAXIMUM PEAK FLOW			15,000	Jul 9	15,000	Jul 9, 2003
MAXIMUM PEAK STAGE			26.92	Jul 9	26.92	Jul 9, 2003
ANNUAL RUNOFF (CFSM)	0.73		1.85		0.83	
ANNUAL RUNOFF (INCHES)	9.86		25.16		11.33	
10 PERCENT EXCEEDS	1,360		3,710		1,510	
50 PERCENT EXCEEDS	100		230		130	
90 PERCENT EXCEEDS	24		37		23	

e Estimated



04182000 ST. MARYS RIVER NEAR FORT WAYNE, IN

LOCATION.--Lat 40°59'16", long 85°06'43", in A. LaFontaine Reserve, T.29 N., R.12 E., Allen County, Hydrologic Unit 04100004, (POE, IN quadrangle), on left bank 130 ft downstream from Anthony Boulevard Extension, 0.8 mi downstream from Houk Ditch, 5 mi south of Fort Wayne, and 10.8 mi upstream from mouth.

DRAINAGE AREA.--762 mi².

PERIOD OF RECORD.--October 1930 to current year. Monthly discharge only for some periods, published in WSP 1307. Fragmentary gage-height records for period November 1924 to October 1927 are available from the District Office.

REVISED RECORDS.--WSP 974: 1942. WSP 1337: 1933, 1947. WSP 1912: 1954, 1955, 1960, drainage area. WDR IN- 82-1: 1973, 1974, 1978, 1979.

GAGE.--Water-stage recorder. Datum of gage is 748.97 ft above National Geodetic Vertical Datum of 1929 (levels by State of Indiana, Department of Natural Resources). Prior to Apr. 13, 1939, nonrecording gage on upstream highway bridge at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. The flow is sometimes regulated by Grand Lake. Slight diversion from or into Wabash River Basin and into Miami and Erie Canal. During extreme floods, some water bypasses gage and flows through Houk Ditch and Paul Trier Ditch into the Maumee River. Period of record computations do not include 1934 water year.

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	83	35	111	2,990	e73	e275	634	108	156	380	294	667
2	89	39	111	2,220	e74	e250	527	506	182	1,010	3,120	2,750
3	63	32	87	1,490	e110	e240	400	1,340	206	583	3,960	3,770
4	44	29	e70	1,440	1,080	e230	560	933	304	421	4,910	3,470
5	37	25	e72	1,380	1,700	e300	4,170	3,230	452	3,730	6,160	3,030
6	34	29	e68	1,070	988	602	4,110	4,280	519	5,480	6,890	2,710
7	27	38	e64	654	e730	1,100	2,750	3,450	455	9,090	6,300	1,870
8	21	33	e56	403	e520	1,220	3,150	3,470	340	12,900	4,510	1,020
9	15	38	e50	493	e400	2,460	2,470	5,970	254	14,800	2,620	516
10	12	79	e47	1,350	e300	3,390	1,790	7,760	202	14,800	1,460	287
11	11	769	e43	1,070	e240	3,260	1,450	8,300	170	14,000	784	190
12	14	781	e42	791	e200	3,390	1,110	8,410	363	12,100	490	142
13	14	426	e43	673	e170	5,040	757	7,310	1,300	9,870	395	115
14	13	311	e51	e520	e140	5,440	497	5,860	3,670	7,200	324	100
15	12	237	e57	e430	e120	5,590	364	4,770	4,060	4,420	261	100
16	11	163	e61	e290	e100	4,880	296	3,460	3,530	1,990	253	100
17	11	119	e56	e250	e88	4,430	253	2,100	3,240	964	228	90
18	11	95	e68	e210	e80	3,950	221	1,360	4,130	564	193	79
19	13	83	428	e180	e73	3,150	197	1,140	4,990	386	163	73
20	13	76	1,880	e150	e84	2,340	175	954	4,310	300	140	72
21	14	72	1,600	e130	e110	2,000	166	637	2,850	1,140	125	69
22	12	73	952	e120	e200	1,900	149	420	1,870	1,760	115	138
23	12	80	763	e110	e480	1,460	131	317	1,300	1,800	104	1,160
24	12	84	614	e100	e740	1,330	121	267	775	2,060	97	714
25	14	95	397	e90	e600	1,370	116	227	399	1,920	91	1,230
26	21	111	239	e84	e470	1,180	127	202	239	1,790	131	1,660
27	31	123	e150	e79	e390	815	129	179	190	1,450	126	3,650
28	25	128	e125	e77	e340	565	116	158	190	1,140	83	4,760
29	27	134	e137	e75	---	1,090	111	146	173	674	82	4,610
30	26	125	e150	e74	---	1,100	110	139	181	391	117	3,380
31	33	---	1,770	e73	---	732	---	149	---	281	101	---
TOTAL	775	4,462	10,362	19,066	10,600	65,079	27,157	77,552	41,000	129,394	44,627	42,522
MEAN	25.0	149	334	615	379	2,099	905	2,502	1,367	4,174	1,440	1,417
MAX	89	781	1,880	2,990	1,700	5,590	4,170	8,410	4,990	14,800	6,890	4,760
MIN	11	25	42	73	73	230	110	108	156	281	82	69
CFSM	0.03	0.20	0.44	0.81	0.50	2.76	1.19	3.28	1.79	5.48	1.89	1.86
IN.	0.04	0.22	0.51	0.93	0.52	3.18	1.33	3.79	2.00	6.32	2.18	2.08

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2003, BY WATER YEAR (WY)

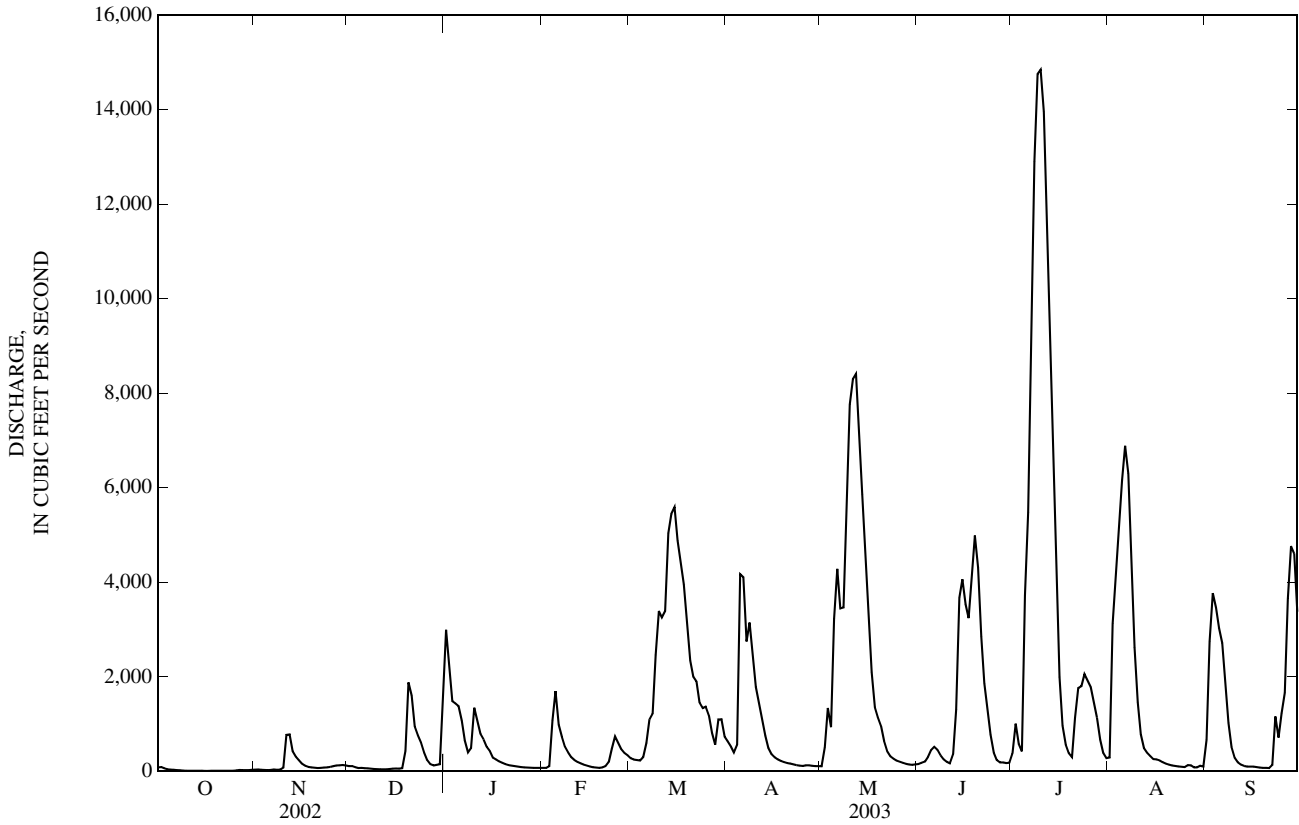
MEAN	164	322	624	855	1,030	1,316	1,147	675	538	398	177	132
MAX	1,595	2,612	2,349	4,897	3,404	4,070	4,119	3,866	2,545	4,174	1,440	1,453
(WY)	(2002)	(1973)	(1978)	(1950)	(1959)	(1978)	(1957)	(1943)	(1981)	(2003)	(2003)	(1992)
MIN	8.28	16.9	16.7	21.3	45.4	87.0	90.7	59.9	34.3	11.9	13.9	11.6
(WY)	(1964)	(1965)	(1964)	(1977)	(1964)	(1941)	(1946)	(1931)	(1988)	(1936)	(1932)	(1944)

STREAMS TRIBUTARY TO LAKE ERIE

04182000 ST. MARYS RIVER NEAR FORT WAYNE, IN—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1931 - 2003	
ANNUAL TOTAL	202,238		472,596		623	
ANNUAL MEAN	554		1,295		174	
HIGHEST ANNUAL MEAN					1,295	2003
LOWEST ANNUAL MEAN					174	1966
HIGHEST DAILY MEAN	6,500	Apr 1	14,800	Jul 9	14,800	Jul 9, 2003
LOWEST DAILY MEAN	11	Oct 11	11	Oct 11	3.4	Oct 19, 1934
ANNUAL SEVEN-DAY MINIMUM	12	Oct 14	12	Oct 14	4.9	Oct 15, 1934
MAXIMUM PEAK FLOW			16,000	Jul 9	16,000	Jul 9, 2003
MAXIMUM PEAK STAGE			21.20	Jul 9	21.20	Jul 9, 2003
ANNUAL RUNOFF (CFSM)	0.73		1.70		0.82	
ANNUAL RUNOFF (INCHES)	9.87		23.07		11.11	
10 PERCENT EXCEEDS	1,590		4,000		1,800	
50 PERCENT EXCEEDS	125		300		151	
90 PERCENT EXCEEDS	32		41		25	

e Estimated



04182900 MAUMEE RIVER AT FORT WAYNE, IN

LOCATION.--Lat 41°04'55", long 85°06'53", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 1, T.30 N., R.12 E., Allen County, Hydrologic Unit 04100005, (FORT WAYNE EAST, IN quadrangle), on left bank at downstream side of Hosey Dam, 250 ft upstream of Anthony Boulevard, 1.2 mi below confluence of St. Joseph and St. Mary's Rivers and 1.5 mi upstream of Highway 930.

DRAINAGE AREA.--1,926 mi².

PERIOD OF RECORD.--October 1997 to current year.

GAGE.--Water-stage recorder. Datum of gage 730.07 ft above National Geodetic Vertical Datum of 1929. Prior to December 12, 1962, nonrecording gage on downstream side of bridge at same datum. Dec. 12, 1962 to Aug. 13, 1997 water-stage recorder at site 310 ft downstream at same datum.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 21.24 ft, July 10, 2003; minimum gage height, 0.75 ft, Sept. 29, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 21.24 ft, July 10; minimum gage height, 0.81 ft, Oct. 22.

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.20	1.05	1.42	8.03	1.31	2.18	5.10	2.90	2.24	2.45	8.80	10.51
2	1.23	1.06	1.40	5.96	1.38	1.96	4.78	4.57	2.30	3.12	12.24	14.33
3	1.13	1.05	1.28	4.78	2.00	---	4.22	5.20	2.45	2.48	11.72	13.32
4	1.48	1.01	1.30	4.67	4.11	---	7.96	3.97	2.68	6.42	13.15	11.21
5	1.43	1.17	1.30	4.51	4.20	2.03	14.48	14.62	2.62	10.31	14.84	10.11
6	1.15	1.10	1.33	3.76	3.02	2.37	12.64	13.21	3.26	12.34	14.65	8.47
7	1.02	1.12	1.32	2.72	2.77	3.17	11.24	11.00	2.04	16.54	12.75	5.69
8	0.99	1.08	1.27	2.34	2.35	4.75	10.96	10.11	2.37	19.10	9.49	4.60
9	1.14	1.10	1.23	2.93	2.09	7.13	8.87	18.29	2.33	21.10	7.57	3.61
10	1.11	3.34	1.24	4.72	1.85	7.36	7.91	18.62	2.19	20.95	4.72	2.96
11	1.08	3.77	1.22	3.66	1.72	6.86	6.91	18.80	1.82	20.06	3.82	2.15
12	0.97	3.07	1.23	3.05	1.63	7.52	6.00	18.08	4.02	18.35	3.56	1.97
13	0.88	2.04	1.24	2.55	1.60	12.86	4.64	16.85	7.93	15.94	3.26	2.54
14	1.08	1.78	1.25	2.10	1.55	13.23	3.99	15.00	9.35	12.40	2.90	2.47
15	0.93	1.72	1.29	1.80	1.48	13.59	3.47	13.61	8.87	8.46	2.13	1.71
16	0.96	1.57	1.28	1.75	1.44	12.64	3.18	11.30	8.35	5.08	2.46	2.27
17	0.98	1.47	1.34	1.76	1.42	11.79	3.01	8.53	8.20	3.33	2.45	1.68
18	1.28	1.37	1.49	2.48	1.36	10.62	2.75	6.62	9.49	2.69	1.67	1.77
19	1.48	1.34	3.08	2.07	1.39	9.53	2.56	6.05	10.46	2.18	1.88	1.87
20	1.00	1.34	5.71	2.24	1.44	9.66	2.55	5.13	9.06	1.96	2.13	1.28
21	0.91	1.46	4.62	1.46	1.47	9.11	2.11	4.78	6.56	9.02	1.72	1.73
22	0.85	1.62	3.42	1.57	2.17	8.23	2.47	3.31	5.27	7.69	1.81	3.69
23	0.95	1.57	3.07	2.08	2.29	6.14	1.91	3.35	4.30	7.78	1.65	5.36
24	0.94	1.54	2.62	2.06	2.49	6.74	2.01	3.23	2.96	6.66	1.37	4.44
25	1.33	1.52	2.03	1.31	2.55	5.95	2.25	3.12	2.24	5.97	1.87	7.96
26	1.13	1.53	1.79	1.49	2.56	5.56	1.98	2.77	2.01	5.22	2.81	8.40
27	1.14	1.48	1.74	1.99	2.59	4.55	1.97	2.98	1.88	5.37	2.17	13.32
28	1.06	1.48	1.70	1.30	2.49	5.93	1.92	2.38	1.95	7.31	1.30	12.70
29	1.07	1.48	1.73	1.27	---	8.81	1.92	2.61	1.86	5.08	2.22	11.62
30	1.05	1.46	2.40	1.28	---	---	2.03	1.53	1.88	4.78	2.15	9.47
31	1.06	---	7.45	1.29	---	6.21	---	2.27	---	2.55	1.77	---
TOTAL	34.01	47.69	64.79	84.98	58.72	---	147.79	254.79	132.94	272.69	157.03	183.21
MEAN	1.10	1.59	2.09	2.74	2.10	---	4.93	8.22	4.43	8.80	5.07	6.11
MAX	1.48	3.77	7.45	8.03	4.20	---	14.48	18.80	10.46	21.10	14.84	14.33
MIN	0.85	1.01	1.22	1.27	1.31	---	1.91	1.53	1.82	1.96	1.30	1.28

STREAMS TRIBUTARY TO LAKE ERIE

04183000 MAUMEE RIVER AT NEW HAVEN, IN

LOCATION.--Lat 41°05'06", long 85°01'20", in SE¹/₄NE¹/₄ sec.2, T.30 N., R.13 E., Allen County, Hydrologic Unit 04100005, (FORT WAYNE EAST, IN quadrangle), on left bank 600 ft upstream from bridge on Landin Road, 1,400 ft upstream from the Norfolk and Western Railroad bridge, 1.1 mi northwest of New Haven, 2.8 mi upstream from Sixmile Creek and at mile 129.0.

DRAINAGE AREA.--1,967 mi².

PERIOD OF RECORD.--December 1946 to September 1956 (high-water records only), October 1956 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 724.51 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 7, 1956, nonrecording gage, Sept. 7, 1956 to Sept. 14, 1965, water-stage recorder at site 500 ft downstream at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by hydro-powerplant on the St. Joseph River 10.3 mi upstream from station. Flow slightly regulated by upstream reservoirs.

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	153	138	258	4,300	e170	e470	2,580	683	671	400	1,400	4,260
2	158	137	232	3,530	e176	e440	2,080	1,170	685	1,260	8,230	9,080
3	148	141	196	2,290	e230	e420	1,900	2,340	790	1,010	8,000	9,720
4	153	141	171	1,940	1,170	e410	2,140	1,850	806	1,500	7,810	7,980
5	257	147	177	1,900	1,860	517	8,190	7,490	943	5,050	9,360	6,460
6	210	176	178	1,700	1,340	603	9,530	9,850	1,000	6,620	10,300	5,240
7	121	143	179	1,260	e1,000	956	7,310	7,700	990	11,200	9,110	3,810
8	96	152	174	833	e700	1,360	7,260	6,460	799	13,800	7,160	2,100
9	94	146	154	844	e560	2,660	5,840	10,900	675	17,700	4,650	1,570
10	146	668	153	1,670	e440	3,660	4,450	15,200	676	19,300	2,880	1,160
11	114	1,270	153	1,740	e370	3,440	3,850	15,400	552	18,700	1,750	809
12	117	1,480	148	e1,150	e310	3,440	3,010	15,200	1,150	16,800	1,340	441
13	95	948	157	e800	e280	6,290	2,410	14,000	2,530	13,800	1,310	499
14	94	529	157	e600	e260	8,600	1,710	11,900	4,950	10,300	1,090	445
15	126	448	163	e450	e240	8,820	1,510	10,300	5,090	6,520	773	828
16	109	391	168	e400	e230	8,780	1,260	8,490	4,830	3,360	659	381
17	104	320	159	e350	e224	7,850	1,170	5,840	4,260	1,640	718	385
18	103	262	215	e310	e220	7,200	1,080	4,050	4,820	1,090	590	290
19	334	236	427	e280	219	5,870	901	3,100	6,090	773	343	340
20	195	223	2,150	e260	233	4,970	873	3,040	5,640	536	441	298
21	121	222	2,390	e240	261	5,220	782	2,060	3,970	6,650	459	155
22	92	390	1,630	e230	470	4,780	668	1,850	2,720	4,080	328	1,010
23	104	363	1,260	e220	633	3,740	776	1,340	2,090	3,710	353	1,850
24	113	340	1,080	e210	e740	3,080	496	1,270	1,470	3,500	251	1,760
25	147	321	759	e200	e680	2,980	631	1,210	873	2,820	228	2,720
26	217	306	522	e190	e620	2,590	667	1,090	603	2,470	1,070	4,030
27	162	298	e380	e186	e560	2,200	526	587	482	2,250	883	7,530
28	152	285	e340	e182	e520	1,870	516	988	446	2,860	427	8,720
29	145	280	e360	e177	---	4,070	499	765	454	2,630	419	7,780
30	152	279	e470	e172	---	4,410	514	753	438	1,950	484	6,260
31	140	---	2,110	e170	---	3,030	---	752	---	1,370	489	---
TOTAL	4,472	11,180	17,070	28,784	14,716	114,726	75,129	167,628	61,493	185,649	83,305	97,911
MEAN	144	373	551	929	526	3,701	2,504	5,407	2,050	5,989	2,687	3,264
MAX	334	1,480	2,390	4,300	1,860	8,820	9,530	15,400	6,090	19,300	10,300	9,720
MIN	92	137	148	170	170	410	496	587	438	400	228	155
CFSM	0.07	0.19	0.28	0.47	0.27	1.88	1.27	2.75	1.04	3.04	1.37	1.66
IN.	0.08	0.21	0.32	0.54	0.28	2.17	1.42	3.17	1.16	3.51	1.58	1.85

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2003, BY WATER YEAR (WY)

MEAN	630	1,210	2,056	1,931	2,701	3,682	3,440	2,019	1,656	1,104	616	577
MAX	5,219	6,523	6,292	7,203	7,649	11,460	7,955	6,914	6,480	5,989	2,687	3,264
(WY)	(2002)	(1993)	(1968)	(1993)	(1976)	(1982)	(1957)	(1996)	(1981)	(2003)	(2003)	(2003)
MIN	62.3	102	96.4	119	161	1,181	789	382	122	197	99.1	91.2
(WY)	(1964)	(1965)	(1964)	(1963)	(1964)	(1981)	(1971)	(1988)	(1988)	(1964)	(1962)	(1963)

04183000 MAUMEE RIVER AT NEW HAVEN, IN—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1957 - 2003	
ANNUAL TOTAL	612,911		862,063		1,796	
ANNUAL MEAN	1,679		2,362		2,975	
HIGHEST ANNUAL MEAN					1993	
LOWEST ANNUAL MEAN					669	
HIGHEST DAILY MEAN	13,300	Feb 2	19,300	Jul 10	26,300	Mar 17, 1982
LOWEST DAILY MEAN	88	Aug 29	92	Oct 22	48	Oct 6, 1963
ANNUAL SEVEN-DAY MINIMUM	103	Sep 4	107	Oct 12	55	Oct 4, 1963
MAXIMUM PEAK FLOW			19,400	Jul 10	26,600	Mar 17, 1982
MAXIMUM PEAK STAGE			21.57	Jul 10	25.49	Mar 17, 1982
ANNUAL RUNOFF (CF5M)	0.85		1.20		0.91	
ANNUAL RUNOFF (INCHES)	11.59		16.30		12.40	
10 PERCENT EXCEEDS	5,110		7,510		4,890	
50 PERCENT EXCEEDS	591		782		777	
90 PERCENT EXCEEDS	123		155		156	

e Estimated

