

04232034 IRONDEQUOIT CREEK AT RAILROAD MILLS NEAR FISHERS, NY

Southeastern Lake Ontario Basin
Irondequoit-Ninemile Subbasin

LOCATION.--Lat 43°01'40", long 77°28'42" referenced to North American Datum of 1927, Ontario County, NY, Hydrologic Unit 04140101, on right bank 90 ft upstream from bridge on Railroad Mills Road, 1.5 mi northwest of Fishers, and 4.0 mi southwest of Fairport.

DRAINAGE AREA.--39.2 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--July 1991 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 450 ft above NGVD of 1929, from topographic map.

COOPERATION.--Discharge measurements were provided by the Monroe County Environmental Health Laboratory at Rochester, N.Y.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Unpublished water-quality records for prior years are available in files of Monroe County Department of Health. Telephone gage-height telemeter at station. Several measurements of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 1,000 ft³/s, Jan. 8, 1998, gage height 10.40 ft, from rating curve extended above 420 ft³/s; minimum discharge, 6.8 ft³/s, Aug. 21, 1995, gage height, 3.96 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct 21	0515	380	7.37
Oct 28	1645	316	6.99
Nov 17	0815	536	8.20
Dec 2	0215	590	8.46
Mar 14	0645	607	8.54
Apr 17	0600	*643	*8.71

Minimum discharge, 11 ft³/s, part or all of each day Aug. 6, 15-17, Sept. 7, 8, 24-27; minimum gage height, 4.05 ft, Aug. 16, 17.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	50	43	276	50	e31	36	63	46	20	14	14	13
2	42	40	330	46	e29	78	82	47	20	15	13	12
3	31	36	77	40	e28	124	59	42	22	14	13	12
4	30	35	54	38	e27	95	56	40	53	15	12	12
5	42	34	46	47	e26	65	53	38	38	19	12	12
6	33	31	42	199	e25	e45	47	35	31	19	12	12
7	30	30	43	100	e25	e41	44	34	27	16	12	11
8	27	33	37	105	e24	e38	44	33	29	15	14	12
9	26	32	36	76	e24	e39	42	32	34	15	13	20
10	26	29	37	53	e23	40	41	32	26	14	13	23
11	25	31	39	43	e23	74	40	33	23	16	13	17
12	27	59	37	50	e22	103	68	30	34	16	12	18
13	25	48	36	78	e22	206	67	28	32	19	12	15
14	23	62	34	79	e22	497	50	28	25	16	12	14
15	23	55	e33	167	e21	373	64	29	21	17	11	14
16	22	121	32	169	e21	116	262	45	18	15	11	14
17	35	408	32	e63	e21	67	537	39	18	14	11	14
18	53	118	34	e50	e20	65	220	32	17	16	12	13
19	41	69	32	e45	e22	61	98	30	22	22	12	13
20	158	56	30	e43	32	62	68	28	29	43	12	12
21	218	49	30	e42	37	68	57	28	23	23	16	12
22	63	43	41	43	40	127	51	26	22	18	16	12
23	49	41	99	43	41	119	56	25	19	17	19	12
24	42	38	55	42	e39	102	74	24	18	19	24	12
25	39	37	47	41	e38	174	70	23	18	17	32	12
26	35	36	163	e38	37	115	81	22	17	16	17	11
27	34	33	97	e37	37	189	73	22	16	17	15	17
28	227	32	57	e36	36	88	82	22	15	28	14	25
29	137	32	47	e34	---	62	66	21	15	21	13	19
30	55	32	44	e33	---	55	54	21	14	17	13	17
31	44	---	43	e32	---	50	---	21	---	16	14	---
Total	1,712	1,743	2,040	1,962	793	3,374	2,669	956	716	559	439	432
Mean	55.2	58.1	65.8	63.3	28.3	109	89.0	30.8	23.9	18.0	14.2	14.4
Max	227	408	330	199	41	497	537	47	53	43	32	25
Min	22	29	30	32	20	36	40	21	14	14	11	11
Cfsm	1.41	1.48	1.68	1.61	0.72	2.78	2.27	0.79	0.61	0.46	0.36	0.37
In.	1.62	1.65	1.94	1.86	0.75	3.20	2.53	0.91	0.68	0.53	0.42	0.41

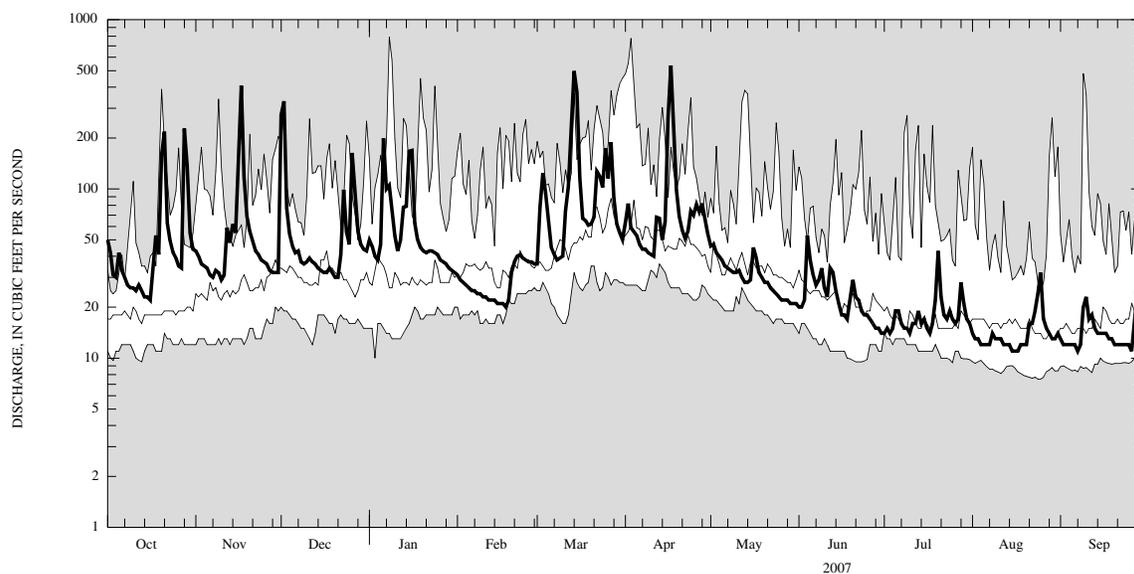
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	25.4	36.0	41.7	47.0	43.6	71.0	70.4	40.6	28.4	23.0	19.3	21.3
Max	55.2	67.5	73.0	112	69.7	109	143	69.0	56.5	52.5	58.0	59.3
(WY)	(2007)	(1993)	(1997)	(1998)	(1998)	(2007)	(1993)	(2002)	(1996)	(1992)	(1992)	(2004)
Min	12.5	15.3	20.7	20.8	27.8	41.1	27.4	20.2	12.3	12.1	9.03	9.92
(WY)	(2002)	(2002)	(1999)	(2002)	(1995)	(2002)	(1995)	(1995)	(1995)	(2001)	(1995)	(1995)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1991 - 2007	
Annual total	15,217		17,395			
Annual mean	41.7		47.7		39.1	
Highest annual mean					53.5	1993
Lowest annual mean					24.7	1995
Highest daily mean	408	Nov 17	537	Apr 17	790	Jan 8, 1998
Lowest daily mean	12	Jul 9	11	Aug 15	7.5	Aug 24, 1995
Annual seven-day minimum	14	Aug 21	12	Aug 12	7.6	Aug 20, 1995
Annual runoff (cfsm)	1.06		1.22		0.997	
Annual runoff (inches)	14.44		16.51		13.54	
10 percent exceeds	63		82		72	
50 percent exceeds	32		32		27	
90 percent exceeds	16		13		13	



CURRENT WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
 SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

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WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1992 to current year.

CHEMICAL DATA: Water years 1992 to 2003 (e), 2004-05 (d), 2006 (c), 2007 (d).

NUTRIENT DATA: Water years 1992 to 2003 (e), 2004-05 (d), 2006 (c), 2007 (d).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: February 1995 to current year.

INSTRUMENTATION.--Automatic water sampler since July 1991. Water temperature recorder since February 1995 provides 15-minute-interval readings.

COOPERATION.--Water-quality samples were collected and analyzed by the Monroe County Environmental Health Laboratory at Rochester, NY.

REMARKS.--Prior to 1994 water year, data published in "Water Resources of Monroe County New York, Water Years 1989-93", U.S. Geological Survey Open-File Report 97-587.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURES: Maximum, 23.5°C, July 20, 2006; minimum, 0.0°C, on many days during winter period.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 19.0°C, August 3, 4, 25; minimum, 0.0°C, on many days during winter period.

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TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	13.5	12.0	12.5	---	---	---	---	---	---	5.5	4.5	5.0
2	14.0	12.0	13.0	---	---	---	---	---	---	5.5	4.0	4.5
3	14.0	12.5	13.0	---	---	---	---	---	---	4.5	3.0	4.0
4	14.0	13.0	13.5	---	---	---	---	---	---	6.0	4.0	5.0
5	14.0	12.5	13.0	---	---	---	---	---	---	8.0	6.0	7.0
6	---	---	---	---	---	---	---	---	---	8.5	8.0	8.5
7	---	---	---	---	---	---	---	---	---	8.0	6.0	7.0
8	---	---	---	---	---	---	---	---	---	6.0	5.0	6.0
9	---	---	---	---	---	---	---	---	---	5.0	3.5	4.0
10	---	---	---	---	---	---	---	---	---	3.5	2.0	3.0
11	---	---	---	---	---	---	---	---	---	3.0	1.5	2.5
12	---	---	---	---	---	---	---	---	---	5.0	3.0	4.0
13	---	---	---	---	---	---	---	---	---	5.5	4.0	5.0
14	---	---	---	---	---	---	---	---	---	4.0	3.0	3.0
15	---	---	---	---	---	---	---	---	---	3.0	1.5	2.5
16	---	---	---	---	---	---	7.0	6.0	6.5	1.5	0.5	1.0
17	---	---	---	---	---	---	7.5	5.5	6.5	1.5	0.5	1.0
18	---	---	---	---	---	---	7.5	7.0	7.5	2.0	0.5	1.0
19	---	---	---	---	---	---	7.0	5.5	6.0	3.0	2.0	2.0
20	---	---	---	---	---	---	5.5	4.0	4.5	2.0	0.5	1.0
21	---	---	---	---	---	---	5.5	5.0	5.5	1.0	0.0	0.5
22	---	---	---	---	---	---	5.5	4.5	5.0	2.0	1.0	1.5
23	---	---	---	---	---	---	6.0	5.5	6.0	2.5	1.5	2.0
24	---	---	---	---	---	---	6.0	6.0	6.0	2.5	2.0	2.5
25	---	---	---	---	---	---	6.0	5.0	5.5	2.0	0.0	1.5
26	---	---	---	---	---	---	5.5	4.0	4.5	0.5	0.0	0.5
27	---	---	---	---	---	---	4.0	3.5	4.0	2.0	0.5	1.5
28	---	---	---	---	---	---	4.5	3.0	3.5	2.0	1.5	2.0
29	---	---	---	---	---	---	4.5	3.5	4.0	1.5	0.5	1.0
30	---	---	---	---	---	---	4.0	3.5	3.5	2.0	0.5	1.0
31	---	---	---	---	---	---	4.5	3.5	4.0	2.0	1.0	1.5
Month	---	---	---	---	---	---	---	---	---	8.5	0.0	3.0

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TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	2.5	1.0	1.5	3.0	1.5	2.0	7.5	7.0	7.0	13.0	11.0	11.5
2	2.5	2.0	2.5	2.5	2.0	2.5	8.5	7.0	7.5	13.0	10.0	11.5
3	2.0	0.5	1.0	2.5	1.5	1.5	9.5	7.5	8.5	13.0	10.5	12.0
4	0.5	0.0	0.5	2.0	1.5	1.5	9.0	8.0	8.5	13.5	10.5	12.0
5	0.5	0.0	0.5	2.0	1.0	1.5	8.0	5.5	6.5	13.5	11.0	12.0
6	0.0	0.0	0.0	1.0	1.0	1.0	5.5	4.5	5.0	13.0	10.5	12.0
7	0.0	0.0	0.0	1.5	1.0	1.0	4.5	3.5	4.0	13.5	10.0	12.0
8	0.5	0.0	0.5	2.0	1.0	1.5	4.5	3.5	4.0	14.5	11.0	13.0
9	1.0	0.5	0.5	2.5	1.0	1.5	5.0	3.5	4.0	15.5	13.0	14.5
10	2.0	0.5	1.0	3.0	2.0	2.5	6.5	4.0	5.0	15.5	14.0	14.5
11	2.0	1.0	1.5	3.0	2.0	2.5	7.0	4.5	6.0	16.0	13.5	15.0
12	2.0	1.5	2.0	3.0	1.5	2.0	7.5	6.0	6.5	16.0	13.5	14.5
13	2.0	0.5	1.0	3.0	1.0	2.0	7.0	6.0	6.5	13.5	11.5	12.5
14	0.5	0.5	0.5	4.5	0.5	2.5	7.0	5.5	6.0	14.0	11.0	12.5
15	0.5	0.5	0.5	4.5	3.0	4.0	6.5	5.5	6.0	15.0	12.5	14.0
16	1.0	0.5	0.5	3.0	2.0	2.5	5.5	2.0	3.0	15.0	13.0	14.0
17	2.0	0.5	1.0	2.5	2.0	2.0	4.5	2.5	3.0	13.0	12.0	12.5
18	2.0	1.5	1.5	3.0	2.0	2.5	7.5	4.5	5.5	12.5	11.0	11.5
19	1.5	1.0	1.0	3.0	2.5	2.5	8.5	6.0	7.0	13.5	10.5	12.0
20	3.0	1.5	2.5	3.5	2.5	3.0	9.5	7.5	8.0	13.5	12.0	12.5
21	3.5	2.5	3.0	3.5	2.5	3.0	11.0	8.5	9.5	13.0	11.0	12.0
22	3.0	2.0	2.5	5.5	3.5	4.0	12.0	9.5	10.5	13.0	11.0	12.0
23	2.5	1.5	2.0	6.5	5.5	6.0	12.5	10.5	11.5	15.0	12.0	13.5
24	2.0	1.0	1.5	6.0	5.0	5.5	12.5	11.5	12.0	16.5	14.0	15.0
25	2.0	1.0	1.5	6.5	4.5	5.5	12.0	10.0	11.0	17.0	15.0	16.0
26	2.5	1.5	2.0	9.0	6.5	7.0	10.5	9.0	9.5	17.0	15.5	16.0
27	2.5	2.0	2.5	11.0	9.0	10.0	12.5	10.0	11.0	16.0	14.5	15.0
28	3.0	2.0	2.5	10.5	8.0	9.5	12.0	11.0	11.5	16.0	14.5	15.0
29	---	---	---	9.0	6.0	7.5	13.0	10.5	11.5	15.5	14.0	15.0
30	---	---	---	8.0	6.0	7.0	14.0	12.0	13.0	16.0	14.0	15.0
31	---	---	---	8.0	6.0	7.0	---	---	---	16.5	15.0	15.5
Month	3.5	0.0	1.3	11.0	0.5	3.7	14.0	2.0	7.6	17.0	10.0	13.4

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TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	16.0	15.5	15.5	16.0	15.0	15.5	18.0	16.5	17.5	16.5	15.5	16.0
2	17.0	15.5	16.0	15.5	14.5	15.0	18.5	17.0	18.0	15.5	14.0	15.0
3	17.0	16.0	16.5	15.5	14.5	15.0	19.0	17.5	18.5	15.0	14.0	15.0
4	16.5	16.0	16.0	15.5	14.5	15.0	19.0	17.5	18.5	15.0	14.5	15.0
5	16.5	14.5	16.0	15.0	14.5	14.5	18.0	16.5	17.5	15.5	14.5	15.0
6	15.0	13.0	13.5	16.5	15.0	15.5	18.0	17.0	17.5	16.5	15.0	15.5
7	15.0	12.5	13.5	17.0	15.5	16.0	18.0	17.5	17.5	17.5	16.0	17.0
8	16.5	14.5	15.5	17.0	16.0	16.5	18.5	17.0	17.5	18.0	17.5	17.5
9	16.5	15.5	16.0	18.5	16.5	17.5	18.5	17.5	18.0	17.5	16.5	17.0
10	16.0	14.5	15.5	18.5	17.5	18.0	17.5	17.0	17.0	16.5	16.0	16.5
11	16.0	14.5	15.5	18.5	17.5	18.0	17.5	16.5	17.0	16.5	15.5	16.0
12	17.5	15.0	16.0	17.5	16.0	17.0	18.0	16.5	17.5	15.5	14.5	15.0
13	18.5	17.0	17.5	17.0	16.0	16.5	18.0	17.0	17.5	15.0	14.0	14.5
14	18.0	16.5	17.5	16.0	15.5	15.5	17.5	16.0	16.5	15.0	14.0	14.5
15	17.5	16.0	16.5	16.5	15.5	16.0	17.0	16.0	16.5	15.0	14.0	14.5
16	16.5	15.5	16.0	16.5	15.5	16.0	17.5	16.5	17.0	14.0	13.0	13.0
17	17.0	16.0	16.5	16.0	15.5	16.0	17.5	16.0	16.5	13.0	12.0	12.5
18	17.5	16.0	16.5	16.5	15.5	16.0	16.5	15.0	15.5	13.0	12.0	12.5
19	17.5	16.5	17.0	16.5	16.0	16.0	15.5	14.5	15.0	13.5	12.5	13.0
20	17.0	16.5	17.0	17.0	16.0	16.5	15.5	14.5	14.5	14.5	13.5	14.0
21	16.5	15.5	16.0	17.0	15.5	16.0	14.5	14.0	14.5	14.5	14.0	14.5
22	16.0	15.0	15.5	16.5	15.5	16.0	15.0	14.5	14.5	15.5	14.5	15.0
23	15.5	14.0	15.0	16.5	15.5	15.5	16.0	15.0	15.5	15.5	14.0	14.5
24	16.0	14.5	15.5	16.0	15.0	15.5	18.0	16.0	16.5	14.0	13.0	13.5
25	17.0	15.5	16.0	17.0	15.5	16.0	19.0	18.0	18.5	15.0	13.5	14.0
26	17.5	16.0	17.0	17.5	16.0	16.5	18.5	17.5	18.0	16.0	15.0	15.5
27	18.5	17.0	18.0	17.5	16.5	17.0	17.5	16.5	17.0	16.0	15.5	16.0
28	18.5	18.0	18.0	17.5	16.5	17.0	17.0	16.0	16.5	15.5	15.0	15.0
29	18.0	17.0	17.5	18.0	17.0	17.5	17.5	16.5	17.0	15.0	14.0	14.5
30	17.0	15.5	16.0	18.0	16.5	17.0	17.5	16.5	17.0	14.0	13.0	13.5
31	---	---	---	17.5	16.5	17.0	16.5	15.5	16.0	---	---	---
Month	18.5	12.5	16.1	18.5	14.5	16.2	19.0	14.0	16.8	18.0	12.0	14.8

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

[Remark codes: <, less than.]

Date	Begin time	End time	Dis-charge, cfs (00060)	Chlor-ide, water, fltrd, mg/L (00940)	Residue total non-filter-able, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate + nitrite water unfltrd mg/L as N (00630)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, unfltrd mg/L (00665)
Oct										
20-24	0845	1145	118	76.7	102	.99	.030	.341	.010	.220
Dec										
01-02	0512	0812	179	55.2	149	.89	.025	.522	.022	.300
Dec										
02-06	0912	0912	79	74.5	38	.50	<.010	.891	.015	.086
Jan										
05-11	2141	0841	102	81.9	78	.69	<.010	.806	.013	.148
Jan										
13-18	0858	0858	111	91.6	48	.67	<.010	.853	.013	.089
Mar										
02-07	0927	1126	84	129	46	.66	<.010	1.22	.008	.086
Mar										
16-21	0900	0900	68	140	30	.47	.028	1.20	.004	.050
Mar										
21-28	2240	2140	131	94.6	68	.68	.175	.795	.017	.127
Apr										
15-18	1739	1139	346	96.4	152	1.0	<.010	.770	.011	.248
Apr										
18-19	1145	2045	126	97.4	80	.59	<.010	.795	.008	.246
May										
04-07	1140	1039	37	117	--	.39	<.010	1.34	.008	.059
Jul										
19-23	1305	1405	27	114	58	.67	<.010	1.16	.009	.121
Aug										
17-20	1145	0845	12	125	29	.70	.267	1.40	.042	.073