U.S. Department of the Interior
U.S. Geological Survey

Water Resources Data New York Water Year 2002

Volume 3. Western New York

By J.F. Hornlein, C.O. Szabo, D.A. Sherwood, S.K. McInnes

Water-Data Report NY-02-3

In cooperation with the State of New York and with other agencies

U.S. DEPARTMENT OF THE INTERIOR

GALE A. NORTON, Secretary

U.S. GEOLOGICAL SURVEY

Charles G. Groat, Director

For information on the water program in New York write to
District Chief, Water Resources Division
U.S. Geological Survey
425 Jordan Road
Troy, New York 12180-8349

or access the USGS on the world wide web:
http://www.usgs.gov or http://wwwdnyalb.er.usgs.gov
or http://ny.usgs.gov

2002

NEW YORK DISTRICT
OFFICE LOCATIONS AND ADDRESSES

District Office:
U. S. Geological Survey
Water Resources Division
425 Jordan Road
Troy, NY 12180-8349
(518) 285-5600
FAX (518) 285-5601

Ithaca Subdistrict Office:
U. S. Geological Survey
Water Resources Division
30 Brown Road
Ithaca, NY 14850
(607) 266-0217
FAX (607) 266-0521

Coram Subdistrict Office:
U. S. Geological Survey
Water Resources Division
2045 Route 112, Bldg. 4
Coram, NY 11727
(516) 736-4283
FAX (516) 736-4283

Potsdam Field Office:
U. S. Geological Survey
Water Resources Division
22 Depot Street, Box U
Potsdam, NY 13676
(315) 265-4410
FAX (315) 265-2166

PREFACE

This volume of the annual hydrologic data report of New York is one of a series of annual reports that document hydrologic data gathered from the U. S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources. Hydrologic data for New York are contained in three volumes:

Volume 1. Eastern New York excluding Long Island
Volume 2. Long Island
Volume 3. Western New York

In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data:

D. A. Eckhardt	W. M. Kappel	J. E. Manzer	J. P. Marion
R. L. Mulks	M. J. Welsh	H. J. Zajd Jr.	

This report was prepared in cooperation with the State of New York and with other agencies under the general supervision of L. Grady Moore, District Chief, New York.

REPORT DOCUMENTATION PAGE

Form Approved OMB No. 0704-0188

1. AGENCY USE ONLY *(Leave blank)*	2. REPORT DATE	3. REPORT TYPE AND DATES COVERED
	June 2003	Annual: 1 October 2001 to 30 September 2002

4. TITLE AND SUBTITLE
Water Resources Data - New York, Water Year 2002
Volume 3. Western New York

5. FUNDING NUMBERS

6. AUTHOR(S)
J. F. Hornlein, C. O. Szabo, D. A. Sherwood, S. K. McInnes

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
U. S. Geological Survey, Water Resources Division
30 Brown Road
Ithaca, New York 14850

8. PERFORMING ORGANIZATION REPORT NUMBER
USGS-WDR-NY-02-3

9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)
U. S. Geological Survey, Water Resources Division
425 Jordan Road
Troy, New York 12180

10. SPONSORING / MONITORING AGENCY REPORT NUMBER

11. SUPPLEMENTARY NOTES
Prepared in cooperation with the State of New York and other agencies

12a. DISTRIBUTION / AVAILABILITY STATEMENT
No restriction on distribution.
This report may be purchased from:
National Technical Information Service, Springfield, VA 22161

12b. DISTRIBUTION CODE

13. ABSTRACT *(Maximum 200 words)*
Water resources data for the 2002 water year for New York consist of records of stage, discharge, and water quality of streams; stage and contents of lakes and reservoirs; water levels and water quality of ground-water wells; and quantity and chemical quality of precipitation. This volume contains records for water discharge at 70 gaging stations; stage only at 15 gaging stations; stage and contents at 6 gaging stations; water quality at 12 gaging stations, 24 wells, and 22 partial record stations; water levels at 21 observation wells; daily precipation totals at 2 sites, and chemical quality of precipitation at 2 sites. Also included are data for 41 crest-stage partial record stations. Locations of these sites are shown on figure 1. Additional water data were collected at various sites not involved in the systematic data collection program and are published as miscellaneous measurements. These data together with the data in Volumes 1 and 2 represent that part of the National Water Data System operated by the U. S. Geological Survey and cooperating State, local, and Federal agencies in New York.

14. SUBJECT TERMS
*New York, *Hydrologic data, *Surface Water, *Ground Water, *Water Quality, *Streamflow, Flow rates, Gaging stations, Lakes, Reservoirs, Chemical analysis, Sediments, Water analysis, Water temperature, Water levels, Water wells, Data collection sites.

15. NUMBER OF PAGES
336

16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT
UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	UL

CONTENTS

CONTENTS--Continued

ILLUSTRATIONS

TABLES

SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

NOTE.--Data for partial-record stations and miscellaneous sites for both surface-water discharge and quality are published in separate sections of the data report. See reference at the end of this list for page numbers for these sections.

[Letters after station name designate type of data collected: (d) discharge, (c) chemical, (b) biological, (m) microbiological, (n) nutrient, (p) pesticide, (pr) precipitation, (t) water temperature, (s) sediment, (e) elevation, gage heights, or contents]

SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME--Continued

SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME--Continued

* * * * * * * *

CREST-STAGE PARTIAL RECORD STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

* * * * * * * *

* * * * * * * *

CREST-STAGE PARTIAL RECORD STATIONS, IN DOWNSTREAM ORDER,
FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME--Continued

* * * * * * * *

* * * * * * * *

GROUND-WATER WELLS, BY COUNTY, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

GROUND-WATER LEVELS

* * * * * * * *

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

The following continuous-record surface-water discharge or stage-only stations (gaging stations) in New York have been discontinued. Daily streamflow or stage records were collected and published for the period of record, expressed in water years, shown for each station. Those stations with an asterisk (*) after the station number are currently operated as crest-stage partial-record stations.

[Letters after station name designate type of data collected: (d) discharge, (e) elevation (stage only)]

Discontinued surface-water discharge or stage-only stations

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
SUSQUEHANNA RIVER BASIN			
Canadarago Lake at Schuyler Lake, NY (e)	01496450	65.0	1969-79
Oaks Creek at Index, NY (d)	01496500	102.0	1930-32, 1937-95
Cherry Valley Creek at Westville, NY (d)	01497000	81.4	1930-31, 1938-41
Susquehanna River at Colliersville, NY (d)	01497500	349.0	1907-09, 1924-68
Charlotte Creek at Davenport Center, NY (d)	01498000	164.0	1938-56
Charlotte Creek at West Davenport, NY (d)	01498500	167.0	1938-76
Otego Creek near Oneonta, NY (d)	01499000	108.0	1940-68
Flax Island Creek near Otego, NY (d)	01499050	4.22	1966-68
East Branch Handsome Brook at Franklin, NY (d)	01499470	9.12	1966-68
Susquehanna River at Unadilla, NY (d)	01500500 *	982.0	1938-95
Unadilla River near New Berlin, NY (d)	01501000	199.0	1924-68
Mill Brook at New Berlin, NY (d)	01501015	4.64	1974-81‡
Sage Brook near South New Berlin, NY (d)	01501500	0.61	1932-68
Butternut Creek at Morris, NY (d)	01502000	59.7	1938-95
Chenango River at Sherburne, NY (d)	01505000 *	263.0	1938-95
Canasawacta Creek near South Plymouth, NY (d)	01505500	57.9	1945-75
Chenango River at Greene, NY (d)	01507000 *	593.0	1937-70
Red Brook at Smithville Flats, NY (d)	01507470	7.06	1966-68
Genegantslet Creek at Smithville Flats, NY (d)	01507500	82.3	1938–70
Muller Gulf Creek near Cuyler, NY (d)	01507975	2.67	1966-68
Shackham Brook near Truxton, NY (d)	01508000	3.16	1932-68
Albright Creek at East Homer, NY (d)	01508500	6.81	1938-68
West Branch Tioughnioga River at Homer, NY (d)	01508803	71.5	1967-68, 1973-86
Otter Creek at mouth at Cortland, NY (d)	01508962	14.3	1976-77
Gridley Creek above East Virgil, NY (d)	01509150	10.4	1974-81
Dudley Creek at Lisle, NY (d)	01509500	30.0	1938-40
Otselic River near Upper Lisle, NY (d)	01510500	217.0	1937-69
Tioughnioga River at Itaska, NY (d)	01511500 *	730.0	1930-67
Susquehanna River at Vestal, NY (d)	01513500 *	3,941.0	1937-67
East Branch Nanticoke Creek above Glen Aubrey, NY (d)	01513719	12.8	1976-78
East Branch Nanticoke Creek at Glen Aubrey, NY (d)	01513720	15.4	1976
Nanticoke Creek at Union Center, NY (d)	01513790	90.7	1975-78
Pumpelly Creek at Owego, NY (d)	01513840	8.59	1966-68
Owego Creek near Owego, NY (d)	01514000 *	185.0	1930-79
Dean Creek at Spencer, NY (d)	01514500	8.03	1954-60
Cayuta Creek near Alpine, NY (d)	01515500	17.6	1930-31

‡ No winter record.

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS--Continued

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
SUSQUEHANNA RIVER BASIN--Continued			
Tioga River at Lindley, NY (d)	01520500 *	771.0	1930-95
Canisteo River at Hornell, NY (d)	01522000	93.7	1938-43
Karr Valley Creek at Almond, NY (d)	01522500	27.4	1937-68 1973-86
Canacadea Creek at Hornell, NY (d)	01524000	58.5	1925-29, 1938-40, 1942-44
Bennett Creek at Canisteo, NY (d)	01525000	95.3	1938-47
Canisteo River at West Cameron, NY (d)	01525500 *	340.0	1930-31, 1937-70
Tuscarora Creek Tributary near Woodhull, NY (d)	01525750	9.43	1966-68
Tuscarora Creek near South Addison, NY (d)	01526000	114.0	1937-70
Mulholland Creek near Erwins, NY (d)	01526495	5.06	1966-68
Kirkwood Creek near Atlanta, NY (d)	01526980	4.65	1966-68
Cohocton River at Cohocton, NY (d)	01527000	52.2	1951-82
Switzer Creek near Cohocton, NY (d)	01527050	3.45	1979-81
Fivemile Creek near Kanona, NY (d)	01528000	66.8	1937-95
Diversion from Waneta Lake to Keuka Lake at Keuka, NY (d)	01528700	45.5	1967-96
Mud Creek near Savona, NY (d)	01529000	76.6	1918-20, 1937-82
Newtown Creek at Breesport, NY (d)	01530380	20.6	1975-79‡
ALLEGHENY RIVER BASIN			
Olean Creek near Olean, NY (d)	03010800	198.0	1958-68‡,
Great Valley Creek near Salamanca, NY (d)	03011000	137.0	1951-68
Quaker Run near Quaker Bridge, NY (d)	03011550	28.5	1963-64‡
Conewango Creek below South Dayton, NY (d)	03012834	63.3	1975-78‡
Conewango Creek at Waterboro, NY (d)	03013000	290.0	1938-93
Ball Creek at Stow, NY (d)	03013800 *	9.06	1974
Chautauqua Lake at Celeron, NY (e)	03013980	189.0	1973
Chautauqua Lake near Mayville, NY (e)	03013990	189.0	1950-77
STREAMS TRIBUTARY TO LAKE ERIE			
Cattaraugus Creek near Arcade, NY (d)	04213410	79.0	1963-68
Franks Creek near West Valley, NY (d)	04213440	.28	1976-80
Franks Creek Tributary No. 4 near West Valley, NY (d)	04213441	.12	1976
Franks Creek Trib. No. 2 to Tributary No. 4 near West Valley, NY (d)	04213442	.002	1976-77
Franks Creek Trib. No. 3 to Tributary No. 4 near West Valley, NY (d)	04213443	.004	1976-77
Buttermilk Creek near Springville, NY (d)	04213450	30.0	1962-68
South Branch Cattaraugus Creek near Cattaraugus, NY (d)	04213492	70.4	1969, 1980-82
Cattaraugus Creek at Versailles, NY (d)	04214000	466.0	1915-23
Cattaraugus Creek below Irving, NY (e)	0421402001	554	1985-93
Eighteenmile Creek at North Boston, NY (d)	04214200	37.2	1963-68
Buffalo Creek near Wales Hollow, NY (d)	04214400	76.9	1963-68

‡ No winter record.

DISCONTINUED SURFACE-WATER DISCHARGE OR
STAGE-ONLY STATIONS--Continued

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
ST. LAWRENCE MAINSTEM			
Black Rock Canal at Porter Avenue, Buffalo, NY (e)	04216052	263,700.0	1984-94
STREAMS TRIBUTARY TO NIAGARA RIVER			
Scajaquada Creek at Buffalo, NY (d)	04216200	15.4	1957-94
Little Tonawanda Creek at Linden, NY (d)	04216500 *	22.1	1912-19, 1920-68, 1977-92
Tonawanda Creek near Alabama, NY (d)	04217500	231.0	1956-89
Murder Creek near Akron, NY (d)	04217750	58.8	1983-99
Black Creek near Swormville, NY (d)	04218190	12.9	1978-80
Ellicott Creek at Milgrove, NY (d)	04218450	40.8	1963-68
Ellicott Creek at Williamsville, NY (d)	04218500	76.2	1956-73
Donner Brook near Lockport, NY (d)	04218592	3.84	1978-79‡
STREAMS TRIBUTARY TO LAKE ONTARIO			
Oak Orchard Creek near Elba, NY (d)	04219930	21.9	1974-79‡
Manning Muckland Creek near Barre Center, NY (d)	04219940	5.80	1974-79‡
West Creek near Hilton, NY (d)	04220250 *	31.0	1957-64
Dyke Creek near Andover, NY (d)	04220470	38.0	1964-68
Dyke Creek at Wellsville, NY (d)	04220500	72.1	1955-60
Genesee River at Scio, NY (d)	04221500	308.0	1916-72
Van Campen Creek at Friendship, NY (d)	04221600	45.9	1964-68
Angelica Creek at Transit Bridge, NY (d)	04221720	86.7	1964-68
Genesee River at Belfast, NY (d)	04221820	644.0	1964-67
Caneadea Creek at Caneadea, NY (d)	04222000	62.0	1949-68
Lost Nation Brook near Centerville, NY (d)	04222500	1.21	1934-35
East Koy Creek at East Koy, NY (d)	04222900	46.5	1964-68
Genesee River at St. Helena, NY (d)	04223500	1,019.0	1947-50
Canaseraga Creek near Canaseraga, NY (d)	04224650	58.4	1964-68
Canaseraga Creek near Dansville, NY (d)	04225000	152.0	1919-68 , 1970-77
Canaseraga Creek at Cumminsville, NY (d)	04225005	155.0	1910-13, 1915-17, 1918-19
Canaseraga Creek at Groveland, NY (d)	04225500	180.0	1915-20 , 1956-64
Keshequa Creek at Craig Colony, Sonyea, NY (d)	04226000	68.3	1917-32, 1975-78
Keshequa Creek near Sonyea, NY (d)	04226500	68.4	1915-17
Keshequa Creek at mouth at Sonyea, NY (d)	0422660005	69.0	1911-14
Conesus Creek near Lakeville, NY (d)	04228000	72.0	1920-34
Honeoye Lake near Honeoye, NY (e)	04228845	41.0	1962-63,
Springwater Creek at Springwater, NY (d)	04228900	10.1	1964-68
Genesee River below Erie Canal at Rochester, NY (d)	04231500	2,457.0	1904-05, 1905-18
Irondequoit Creek near Pittsford, NY (d)	04232040	44.4	1980-91
			1965-95

‡ No winter record.

DISCONTINUED SURFACE-WATER DISCHARGE OR
STAGE-ONLY STATIONS--Continued

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
STREAMS TRIBUTARY TO LAKE ONTARIO--continued			
Thomas Creek at Fairport, NY (d)	04232046	28.5	1980-90
Irondequoit Creek at Linden Avenue, East Rochester, NY (d)	04232047	101.0	1973-89
Irondequoit Creek at Wetland Narrows at Rochester, NY (d)	0423205023	144.0	1981-84
Sterling Creek at Sterling, NY (d)	04232100	44.4	1957-95
Catharine Creek at Montour Falls, NY (d)	04232200 *	41.1	1975-78‡
Keuka Inlet (Keuka Lake) at Hammondsport, NY (e)	04232450	182.0	1960-96
Kendig Creek near MacDougall, NY (d)	04232630 *	13.8	1965-68
Dryden Lake Inlet near Harford, NY (d)	04233678	2.73	1973-74
Virgil Creek at Freeville, NY (d)	04233700	40.3	1973-76
Salmon Creek at Ludlowville, NY (d)	04234018	81.7	1965-68
Canoga Creek at Canoga, NY (d)	04234055	3.20	1965-68
Mud Creek at East Victor, NY (d)	04234200 *	64.2	1958-68
Red Creek near Walworth, NY (d)	04234270	23.8	1965-69
Flint Creek at Potter, NY (d)	04235150	31.0	1964-68 , 1971-79
Flint Creek at Phelps, NY (d)	04235250	102.0	1960-95
Clyde River at Lock 26 Clyde, NY (d)	04235271	845.0	1935-67
Black Brook at Tyre, NY (d)	04235276	19.0	1985-95
Owasco Inlet at Moravia, NY (d)	04235300	106.0	1960-68
Owasco Outlet near Auburn, NY (d)	04235500	206.0	1913-98
Grout Brook Trib. southeast of Fair Haven, NY (d)	04235820	0.27	1996-99
Skaneateles Lake at Skaneateles, NY (e)	04236000	72.7	1968-95
Skaneateles Creek at Willow Glen, NY (d)	04236500	75.8	1895-1908
Onondaga Creek Trib. #6 above main mudboil depression area (d)	04237944	0.32	1991-94
Onondaga Reservoir near Nedrow, NY (e)	04238500	67.7	1949-98
Onondaga Creek at Syracuse, NY (d)	04239500	95.0	1940-49
Onondaga Creek at Temple Street Syracuse, NY (d)	04240000	104.0	1949-51
Spafford Creek at Bromley Road near Spafford, NY (d)	04240145	3.14	1982-84
Spafford Creek at Sawmill Road near Spafford, NY (d)	04240150	8.06	1982-83, 1986
Rice Brook at Rice Grove, NY (d)	0424015305	2.64	1982-83
Willow Brook at Lader Point, NY (d)	0424016205	3.73	1982-83
Amber Brook at Amber, NY (d)	0424016825	3.75	1982-83
Van Benthuysen Brook near Amber, NY (d)	0424016975	5.84	1982-83
Ninemile Creek at Camillus, NY (d)	04240200	84.3	1958-82, 1988-98
West Branch Fish Creek at Blossvale, NY (d)	04241200	204.0	1966-68
East Branch Fish Creek at Fish Creek near Constableville, NY (d)	04241500	74.3	1924-32
East Branch Fish Creek at Taberg, NY (d)	04242500	188.0	1923-95
Chittenango Creek near Chittenango, NY (d)	04244000	66.3	1950-68
Limestone Creek at Fayetteville, NY (d)	04245000	85.5	1940-86
Butternut Creek at Jamesville, NY (d)	04245200 *	32.2	1958-99
Butternut Creek below Dewitt, NY (d)	04245250	58.6	1964-66
Scriba Creek near Constantia, NY (d)	04245840 *	38.4	1966-68
Oneida River at Caughdenoy, NY (d)	04246500	1,382.0	1948-98
Lake Ontario at Oswego, NY (e)	04249010	295,800.0	1860-1995

‡ No winter record.

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

The following stations were discontinued as continuous-record surface-water-quality stations. Daily records of temperature, specific conductance, or sediment were collected and published for the record shown for each station.

[Type of record: Temp. (temperature), S.C. (specific conductance), Sed. (sediment).]

Discontinued continuous-record surface-water-quality stations

Station name	Station number	Drainage area (mi^2)	Type of record	Period of record (water years)
SUSQUEHANNA RIVER BASIN				
Unadilla River at Rockdale, NY	01502500	520.0	Temp.	1957
Susquehanna River at Conklin, NY	01503000	2,232.0	Temp.	1955
Chenango River at Greene, NY	01507000	593.0	Temp.	1957
Tioughnioga River at Cortland, NY	01509000	292.0	Temp. S.C.	1956-92
Susquehanna River at Johnson City, NY	01513110	3,891.0	Temp.	1956-92
Susquehanna River at Vestal, NY	01513500	3,941.0	Temp.	1961-62, 1966, 1968
Tioga River at Lindley, NY	01520500	771.0	Temp. Sed., S.C.	1975-81, 1975-77
Canisteo River at West Cameron, NY	01525500	340.0	Temp.	1957
Cohocton River at Cohocton, NY	01527000	52.2	Sed.	1980
Switzer Creek near Cohocton, NY	01527050	3.46	Sed.	1979-80
ALLEGHENY RIVER BASIN				
Allegheny River at Red House, NY	03011500	1,690.0	Temp.	1954-56
STREAMS TRIBUTARY TO LAKE ERIE				
Cattaraugus Creek at Gowanda, NY	04213500	436.0	Temp., S.C.	1978-81
Buffalo Creek at Gardenville, NY	04214500	142.0	Temp.	1962
STREAMS TRIBUTARY TO NIAGARA RIVER				
Tonawanda Creek at Batavia, NY	04217000	171.0	Temp., S.C	1978-81
Erie (barge) Canal at Lock 35 at Lockport, NY	04218600	--	Temp.	1962
Erie (barge) Canal (west of Genesee River) at Rochester, NY	04218700	--	Temp.	1962
Niagara River at Niagara Falls, NY	04219350	--	Temp.	1959
Niagara River at Fort Niagara, NY	04219640	265,000.0	Temp., S.C.	1973-80
STREAMS TRIBUTARY TO LAKE ONTARIO				
Genesee River at Wellsville, NY	04221000	288.0	Sed.	1975-77
Genesee River at Scio, NY	04221500	308.0	Temp.	1955
Van Campen Creek at Friendship, NY	04221600	45.9	Temp.	1964-67
Genesee River at Portageville, NY	04223000	984.0	Sed.	1975-77
Canaseraga Creek at Canaseraga, NY	04224650	58.4	Temp.	1964-67
Canaseraga Creek at Groveland, NY	04225500	180.0	Temp.	1961
Canaseraga Creek at Shakers Crossing, NY	04227000	335.0	Sed.	1975-77
Genesee River at Mount Morris, NY	04227500	1,424.0	Temp., Sed.	1955-56, 1975-77
Genesee River at Avon, NY	04228500	1,673.0	Sed.	1975-77
Oatka Creek at Garbutt, NY	04230500	200.0	Temp., Sed.	1960-61, 1975-77
Black Creek at Churchville, NY	04231000	130.0	Temp.	1962
Genesee River at Rochester, NY	04232000	2,467.0	Temp., Sed.	1955-71, 1975-77
Cayuga Lake Trib. No. 6 at Interlaken, NY	04234035	--	Temp.	1965
Canoga Creek at Canoga, NY	04234055	3.20	Temp.	1965

DISCONTINUED SURFACE-WATER-QUALITY STATIONS--Continued

Station name	Station number	Drainage area (mi^2)	Type of record	Period of record (water years)
STREAMS TRIBUTARY TO LAKE ONTARIO--continued				
Grout Brook Trib. southeast of Fair Haven, NY	04235820	0.27	Temp.	1996-99
Seneca River at Baldwinsville, NY	04237500	3,138.0	Temp.	1958-75
Spafford Creek at Bromley Road nr Spafford, NY	04240145	3.14	Sed.	1981-83
Spafford Creek at Sawmill Road nr Spafford, NY	04240150	8.06	Sed.	1981-83
Rice Brook at Rice Grove, NY	0424015305	2.44	Sed.	1981-83
Willow Brook at Lader Point, NY	0424016205	3.73	Sed.	1981-83
Amber Brook at Amber, NY	0424016825	3.69	Sed.	1981-83
Van Benthuysen Brook near Amber, NY	0424016975	5.84	Sed.	1981-83
East Branch Fish Creek at Taberg, NY	04242500	188.0	Temp., S.C.	1966-67
Butternut Creek near Jamesville, NY	04245200	32.2	Temp., S.C.	1966-67
Chittenango Creek at Bridgeport, NY	04245500	--	Temp.	1967-69
Scriba Creek near Constantia, NY	04245840	38.4	Temp., S.C.	1966-67
Oneida River at Caughdenoy, NY	04246500	1,382.0	Temp.	1958
Oswego River at Lock 7, Oswego, NY	04249000	5,100.0	Temp., S.C.	1975-81

DISCONTINUED CREST-STAGE PARTIAL RECORD STATIONS

The following crest-stage partial-record stations in western New York were discontinued. Only maximum discharges and/or gage heights were collected for the period of documented record, expressed in water years, shown for each station. The period of documented record may include peaks prior to and after gaged record. Those stations with an asterisk (*) after the station number are also discontinued continuous-record surface-water stations (see previous listing) and those with a double asterisk (**) after the station number are current continuous-record surface-water stations.

Discontinued crest-stage partial record stations

Station name	Station number	Drainage area (mi^2)	Period of documented record (water years)
SUSQUEHANNA RIVER BASIN			
Ocquionis Creek at Richfield Springs, NY	01496363	20.0	1975-77
Mink Creek at Richfield Springs, NY	01496370	10.4	1969-86
Hyder Creek near Richfield Springs, NY	01496390	9.52	1975-77
Herkimer Creek at Schuyler Lake, NY	01496448	12.0	1976-77
Susquehanna River Trib. near Milford, NY	01496630	3.52	1976
Susquehanna River at Colliersville, NY	01497500 *	349.0	1971-72
Schnevus Creek at Schnevus, NY	01497800	54.2	1963-76
Susquehanna River southwest of Oneonta, NY	01498620	678.0	1988-91
Otego Creek near Oneonta, NY	01499000 *	108.0	1969-75
Unadilla River near New Berlin, NY	01501000 *	199.0	1970-72
Mill Brook at New Berlin, NY	01501015 *	4.64	1982-86
Wharton Creek Trib. near Edmeston, NY	01501140	2.02	1976-86
Unadille River at Rockdale, NY	01502500**	520.0	1929-33, 1937-2000
Susquehanna River at Afton, NY	01502701	1716.0	1972, 1977, 1979-90, 1996
Ouaquaga Creek near Belden, NY	01502714	3.37	1975-86
Susquehanna River at Tompkins St. at Binghamton, NY	01503495	2265.0	1988-90
Electric Light Stream near Morrisville, NY	01503960	7.21	1976-86
Cold Brook near North Norwich, NY	01505017	5.80	1975-86
Cold Brook at North Norwich, NY	01505018	5.90	1975-79
Canasawacta Creek near South Plymouth, NY	01505500	57.9	1977
Albright Creek at East Homer, NY	01508500 *	6.81	1969-76
West Branch Tioughnioga River at Homer, NY	01508803 *	71.5	1987-92
Otter creek Trib. at State Hwy 222 near Cortland, NY	01508946	2.85	1976-86
Page Brook Trib. near Page Brook, NY	01512515	2.07	1976-78
Nanticoke Creek Trib. at Nanticoke, NY	01513712	1.70	1975-86
Nanticoke Creek at Union Center, NY	01513790 *	90.7	1956, 1963-64, 1966-68, 1970-74
Susquehanna River near Waverly, NY	01515000**	4,773.0	1937-2000
Karr Valley Creek at Almond, NY	01522500 *	27.4	1971-73
Tuscarora Creek above South Addison, NY	01525981**	102.0	1989-2000
Tuscarora Creek near South Addison, NY	01526000 *	114.0	1971-72
Cohocton River at Cohocton, NY	01527000 *	52.2	1982-99
ALLEGHENY RIVER BASIN			
Johnson Creek near Franklinville, NY	03010743	5.25	1977-78, 1982-86

DISCONTINUED CREST-STAGE PARTIAL RECORD STATIONS--Continued

Station name	Station number	Drainage area (mi^2)	Period of documented record (water years)
ALLEGHENY RIVER BASIN--Continued			
Olean Creek near Olean, NY	03010800 *	198.0	1970-95
Great Valley Creek Trib. near Great Valley, NY	03010997	3.91	1977-78
Great Valley Creek near Salamanca, NY	03011000 *	137.0	1977-92
West Branch Conewango Creek Trib. near Hamlet, NY	03012837	6.84	1977-81
Conewango Creek at Waterboro, NY	03013000 *	290.0	1994
STREAMS TRIBUTARY TO LAKE ERIE			
Walnut Creek Trib. near Arcade, NY	04213399	1.02	1979, 1981-86
Franks Creek Tributary No. 4 near West Valley, NY	04213441	.12	1976
South Branch Cattaraugus Creek near Otto, NY	04213490	25.1	1963-99
Delaware Creek near Angola, NY	04214040	8.32	1963-86
Eighteenmile Creek at North Boston, NY	04214200 *	37.2	1971-76
Smoke Creek at Lackawanna, NY	04214250	14.3	1955, 1963-68, 1970-74, 1976
South Branch Smoke Creek at Lackawanna, NY	04214260	13.0	1953, 1955, 1967-76
Buffalo Creek near Wales Hollow, NY	04214400 *	76.9	1970-74
Hunter Creek at Colegrave, NY	04214410	14.0	1964-86
Little Buffalo Creek near East Lancaster, NY	04214980	24.0	1963, 1966-73, 1976-80
West Branch Cazenovia Creek near East Aurora, NY	04215250	58.7	1963, 1965-68, 1970
East Branch Cazenovia Creek at South Wales, NY	04215350	38.1	1963, 1966-70
STREAMS TRIBUTARY TO NIAGARA RIVER			
Tonawanda Creek near Johnsonburg, NY	04216400	23.7	1962-86
Little Tonawanda Creek Trib. near Batavia, NY	04216875	1.02	1976-86
Murder Creek at Pembroke, NY	04217700	43.6	1962-72, 1974-86
Fourmile Creek near Youngstown, NY	04219645	4.88	1970-73, 1976-80, 1982-86
STREAMS TRIBUTARY TO LAKE ONTARIO			
Eighteenmile Creek Trib. near Lockport, NY	04219738	2.53	1977-86
Johnson Creek Trib. near Lyndonville, NY	04219905	4.95	1970, 1972-73, 1977-79
Oak Orchard Creek at Barryville Rd. near Elba, NY	04219922	6.48	1976-86
Oak Orchard Creek near Elba, NY	04219925	7.49	1976-78Oak
Orchard Creek at Medina, NY	04220150	157.0	1962-70, 1972, 1975-76

DISCONTINUED CREST-STAGE PARTIAL RECORD STATIONS--Continued

Station name	Station number	Drainage area (mi^2)	Period of documented record (water years)
STREAMS TRIBUTARY TO LAKE ONTARIO--continued			
West Creek near Hamlin, NY	04220245	4.56	1978-81, 1983-86
Quig Hollow Brook near Andover, NY	04220455	4.24	1964-72
Genesee River at Transit Bridge near Angelica, NY	04221725	579.0	1975-76
Black Creek at Hyde Flats Road at Black Creek, NY	04221769	10.7	1978-93
Wiscoy Creek at Bliss, NY	04222600	22.0	1962-86
Sugar Creek near Ossian, NY	04224700	10.0	1964-86
Sugar Creek near Canaseraga, NY	04224740	16.9	1977
Stony Brook at Stony Brook State Park, NY	04224848	21.4	1977
Mill Creek at Patchinville, NY	04224900	4.22	1964-86
Mill Creek at Dansville, NY	04224978	35.9	1977
Canaseraga Creek at Groveland, NY	04225500 *	180.0	1975-77
Bradner Creek near Dansville, NY	04225600	9.68	1976
Keshequa Creek at Nunda, NY	04225915	32.7	1975-77
Keshequa Creek at Tuscarora, NY	04225950	58.5	1976-77
Little Conesus Creek near South Lima, NY	04228370	7.38	1975-76
Little Conesus Creek near East Avon, NY	04228380	8.02	1975-76
Springwater Creek at Springwater, NY	04228900 *	10.1	1970-72
Oatka Creek at Rock Glen, NY	04230320	14.5	1977
Oatka Creek at Pearl Creek, NY	04230400	78.4	1975-76
Pearl Creek at Pearl Creek, NY	04230410	10.8	1975-77
Oatka Creek near Pavillion Center, NY	04230423	110.0	1975-77
Mud Creek near LeRoy, NY	04230470	10.2	1975-76
Hotel Creek at Griffin Road near Churchville, NY	04231040	4.57	1976-86
Irondequoit Creek near Pittsford, NY	04232040 *	44.4	1962-63, 1965-66, 1968-70, 1972
Irondequoit Creek at Bushnell Basin, NY	04232042	52.6	1962-64, 1966, 1968-70
Mill Creek Trib. near Webster, NY	042320527	R2.12	1971-72, 1976-86
Second Creek Trib. at Alton, NY	04232071	1.07	1970, 1973, 1976-86
Red Creek Trib. No. 16 near Red Creek, NY	04232087	2.90	1969, 1976-86
Hector Falls Creek at Burdett, NY	04232406	11.8	1971-74
Sugar Creek at Guyanoga, NY	04232460	28.9	1966-2000
Sixmile Creek near Ithaca, NY	04233310	42.0	1967-69, 1971-73, 1976-86
Webster Brook at Summer Hill, NY	04233624	2.59	1975

DISCONTINUED CREST-STAGE PARTIAL RECORD STATIONS--Continued

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
STREAMS TRIBUTARY TO LAKE ONTARIO--continued			
Fall Creek Trib. No. 7 at Stevens Corners, NY	04233632	0.52	1975-76
Fall Creek at Freeville, NY	04233648	55.9	1975
Virgil Creek at Mill Street, Dryden, NY	04233676	20.7	1966-70, 1972, 1975-86
Dryden Lake Inlet near Harford, NY	04233678 *	2.73	1975-76
Virgil Creek at Freeville, NY	04233700 *	40.3	1976-86
Salmon Creek at Ludlowville, NY	04234018 *	81.7	1971-72
Cayuga Lake Trib. No. 8 near Jacksonville, NY	042340202	1.36	1977-86
Yawger Creek Trib. near Auburn, NY	042340588	1.76	1976-86
Ganargua Creek above Macedon, NY	04234250	104.0	1965-69
Marbletown Creek Trib. near Newark, NY	04234363	0.58	1976-86
West River near Middlesex, NY	04234400	29.3	1965-72, 1975-77
Black Brook at Tyre, NY	04235276 *	19.0	1966-73, 1975-84
Owasco Inlet at Moravia, NY	04235300 *	106.0	1970
Canada Creek Trib. near Lee Center, NY	04242795	1.34	1977-86
Chittenango Creek near Chittenango, NY	04244000 *	66.3	1978
Limestone Creek at Fayetteville, NY	04245000 *	85.5	1987-95
Negro Brook near Bridgeport, NY	04245405	1.53	1976-79
Wine Creek at Oswego, NY	04249011	3.11	1976-78

INTRODUCTION

Water resources data for the 2002 water year for New York consist of records of stage, discharge, and water quality of streams; stage and contents of lakes and reservoirs; ground-water levels and water quality; and precipitation quality. This volume contains records for water discharge at 70 gaging stations; stage only at 15 gaging stations; stage and contents at 6 gaging stations; water quality at 12 gaging stations, 24 wells, and 22 partial-record stations; water levels at 21 observation wells; daily precipitation totals at 2 sites, and chemical quality of precipitation at 2 sites. Also included are data for 41 crest-stage partial-record stations. Locations of these sites are shown on figure 1. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as measurements made at miscellaneous sites. Surface-water, ground-water, and water-quality data at all sites are listed in Eastern Standard Time (EST), unless otherwise noted. These data together with the data in Volumes 1 and 2 represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State, local, and Federal agencies in New York.

Records of discharge and stage of streams, and contents or stage of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961–65 and 1966–70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 in a series of water-supply papers entitled "Ground Water Levels in the United States." Water-supply papers may be consulted in the libraries of the principal cities in the United States or may be purchased from the Distribution Branch, U.S. Geological Survey, 604 South Pickett Street, Alexandria, VA 22304.

For water years 1961 through 1970, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1970 were similarly released either in separate reports or in conjunction with streamflow records.

Streamflow and water-quality data beginning with the 1971 water year, and ground-water data beginning with the 1975 water year are published only in reports on a State-boundary basis. Beginning with the 1975 water year, these Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report NY–02–3." These water-data reports are for sale, in paper copy or in microfiche, by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the District Chief at the address given on the back of the title page or by telephone (518) 285–5600.

COOPERATION

The U.S. Geological Survey and organizations of the State of New York and other agencies have had cooperative agreements for the systematic collection of water records since 1900. Organizations that assisted in collecting data included in Volume 3, water year 2002, through cooperative agreement with the Survey are:

New York State Department of Environmental Conservation
New York State Department of Transportation
New York State Thruway Authority
County of Chautauqua, Planning Department
County of Monroe, Department of Health
County of Monroe, Division of Engineering
County of Monroe, Water Authority
County of Onondaga, Department of Water Environment Protection
County of Onondaga, Water Authority Commission
County of Onondaga, Soil and Water Conservation District
City of Auburn
City of Ithaca
Town of Amherst, Erie County
Town of Cheektowaga, Erie County
Irondequoit Bay Pure Waters District
Village of Victor

Assistance in the form of funds for collecting records at gaging stations published in this report was also given by the U.S. Army Corps of Engineers, National Weather Service, Onondaga Lake Management Conference, and U.S. Environmental Protection Agency.

The following organizations aided in collecting records:

Municipalities of Batavia, Canandaigua, Jamestown, Lancaster, Oneida, Rochester, Syracuse; Cornell University; New York State Electric and Gas Corporation; Niagara Mohawk Power Corporation (Orion Power New York); Rochester Gas and Electric Corporation.

Organizations that supplied data are acknowledged in station descriptions.

SUMMARY OF HYDROLOGIC CONDITIONS[1]

Surface Water

Streamflow in western New York during the 2002 water year was characterized by below-average annual mean discharges at most index sites (table 1). The greatest departures from normal occurred during October and November (table 2), when monthly mean discharges averaged 59 and 32 percent of the normal monthly discharges, respectively, and during May and June (table 3), when monthly mean discharges averaged 213 and 345 percent of the normal monthly discharges, respectively. Departures from the median discharges at two index stations—Susquehanna River at Conklin and Allegheny River at Salamanca—are shown in figures 1 and 2.

The 2002 water year began with variable amounts of precipitation and warmer-than-normal air temperatures. Streamflow during October 2001 was normal throughout the Great Lakes and Western Plateau and was deficient (lowest 25 percent of the record) further to the east. November was warm and dry throughout western New York and was the third-warmest and the second-driest November in 107 years of record. Streamflow at all index sites decreased sharply, and streamflow at all sites was in the deficient range. Monthly mean discharges of the Susquehanna River at Conklin and the Unadilla River at Rockdale were the third-lowest on record for November, and the monthly mean for the Genesee River at Wellsville was its fourth-lowest on record for November.

December air temperatures were the warmest on record for the month. The Statewide December average of 33.8°F degrees was 8.3° F warmer than normal. Precipitation during the month throughout western New York was near normal. A massive lake-effect snowstorm hit the Lake Erie and Lake Ontario snowbelts from December 24 through the end of the month. Buffalo recorded 81.6 inches of snow from that storm and had a total of 82.7 inches for the month. The previous record total December snowfall at Buffalo was 64.8 inches in December 1985. Streamflow in western New York either remained deficient or increased to normal for the month.

Air temperatures in January 2002 remained well above normal for the month (8.8° F), and precipitation was slightly below normal. Streamflow decreased throughout the State and ranged from normal to deficient. Streamflow at the Susquehanna River at Conklin was in the deficient range for the sixth consecutive month. February temperatures in western New York remained above normal. Precipitation varied across the western part of the State but averaged slightly above normal. Streamflow increased and was in the normal to excessive range (upper 25 percent of the record) at all index sites.

March was warmer than normal, and precipitation was near normal. Streamflow throughout the western part of the State decreased and was in the normal-to-deficient range at all index sites. April was the ninth consecutive warmer-than-normal month. Air temperatures reached new record daily highs and were in the mid-to-upper 80’s at Binghamton, Ithaca, Rochester, and Syracuse on April 16 and 17. Precipitation was near normal, and streamflow remained in the normal-to-deficient range at all index sites

May 2002 ended the string of consecutive warmer-than-normal months. Air temperatures across the State averaged 3.5° F cooler than normal. May precipitation throughout much of western New York was well above normal . Streamflow increased into the excessive range at all index sites. Oneida Creek at Oneida had its third-highest monthly mean discharge on record, and Tonawanda Creek at Batavia had its fourth-highest monthly mean discharge on record for May.

June brought the return of warmer-than-normal temperatures to western New York. Precipitation throughout the State averaged 5.43 inches, which was 135 percent of the normal. The Great Lakes was the only climate division to report a precipitation deficit for the month (92 percent of normal). Streamflow increased throughout much of the State and remained excessive at all index sites. The Genesee River at Wellsville, Fall Creek near Ithaca, and Oneida Creek at Oneida had their second-highest monthly mean discharges on record for June, and Chenango River near Chenango Forks and Oatka Creek at Garbutt had their fourth-highest monthly mean discharges on record for June.

July brought warm, dry weather to the western part of the State. The Statewide average precipitation was only 2.02 inches (53 percent of normal) and made July 2002 the second-driest July on record. The below-normal precipitation caused streamflow to decrease to normal throughout much of the western part of the State. The warmer and drier-than-normal conditions continued during August. In response, streamflow either remained normal or decreased to deficient at all index sites. Precipitation during September varied widely throughout western New York. Streamflow at index sites ranged from deficient to excessive for the month.

[1]Climatological data used in this summary are from monthly weather summaries published by the Northeast Regional Climate Center, Cornell University, Ithaca, N.Y.

Table 1.--Mean discharges for selected streams for water year 2002 and mean annual discharges for the period of record.
[Locations are shown in fig. 4. Discharges are in cubic feet per second.]

Station no.	Name	Period of record	Mean annual discharge for period of record	Mean discharge for 2002 water year	Percent difference
01502500	Unadilla River at Rockdale	1930-33, 37-95, 2001	841	675	- 19.7
01503000	Susquehanna River at Conklin	1913–2001	3,581	2,783	- 22.3
01512500	Chenango River near Chenango Forks	1913–2001	2,416	2,196	- 9.1
01531000	Chemung River at Chemung	1906–13, 1915–2001	2,558	2,148	- 16.0
03011020	Allegheny River at Salamanca	1904–2001	2,769	2,773	+ 0.1
04213500	Cattaraugus Creek at Gownada	1940-97, 2001	747	799	+ 7.0
04217000	Tonawanda Creek at Batavia	1944–2001	213	233	+ 9.4
04221000	Genesee River at Wellsville	1955-58, 1973-2001	385	358	- 7.0
04230500	Oatka Creek at Garbutt	1946-2001	216	201	- 6.9
04234000	Fall Creek near Ithaca	1926–2001	186	169	- 9.1
04243500	Oneida Creek at Oneida	1950–2001	166	169	+ 1.8

Table 2.--Monthly mean discharge for water year 2002 at selected sites, as percentage of period-of-record monthly median discharge.
[Locations are shown in fig. 4.]

Station no.	Name	Period of record	Monthly mean discharge, as percentage of monthly median discharge	
			Oct	Nov
01502500	Unadilla River at Rockdale	1930-33, 1937-95, 2001	28	15
01503000	Susquehanna River at Conklin	1913–2001	29	13
01512500	Chenango River near Chenango Forks	1913–2001	44	28
01531000	Chemung River at Chemung	1906–13, 1915–2001	60	25
03011020	Allegheny River at Salamanca	1904–2001	77	50
04213500	Cattaraugus Creek at Gowanda	1940-97, 2001	95	46
04217000	Tonawanda Creek at Batavia	1944–2001	76	38
04221000	Genesee River at Wellsville	1955-58, 1973-2001	58	28
04230500	Oatka Creek at Garbutt	1946-2001	62	31
04234000	Fall Creek near Ithaca	1925–2001	63	38
04243500	Oneida Creek at Oneida	1950–2001	62	43

Table 3.--Monthly mean discharge for water year 2002 at selected sites, as percentage of period of record monthly median discharge.
[Locations are shown in fig. 4.]

Station no.	Name	Period of record	Monthly mean discharge, as percentage of monthly median discharge	
			May	June
01502500	Unadilla River at Rockdale	1930-33, 1937-95, 2001	178	308
01503000	Susquehanna River at Conklin	1913–2001	182	329
01512500	Chenango River near Chenango Forks	1913–2001	191	372
01531000	Chemung River at Chemung	1906–13, 1915–2001	185	447
03011020	Allegheny River at Salamanca	1904–2001	192	346
04213500	Cattaraugus Creek at Gowanda	1940-97, 2001	218	196
04217000	Tonawanda Creek at Batavia	1944–2001	289	255
04221000	Genesee River at Wellsville	1955-58, 1973-2001	194	485
04230500	Oatka Creek at Garbutt	1946-2001	228	320
04234000	Fall Creek near Ithaca	1925–2001	203	321
04243500	Oneida Creek at Oneida	1950–2001	284	416

Water Quality

Samples of atmospheric deposition, ground water, and surface water were collected at several sites throughout Monroe County for chemical analysis. (Locations are shown in fig. 5). Analyses indicated no significant changes from previous years. Concentrations of all constituents monitored were within the historical range of the period of record for each station. Sites are periodically added to, or dropped from, this monitoring network, which currently emphasizes the Irondequoit Creek basin but is being expanded to other parts of Monroe County. Constituent concentrations were used with streamflow data to calculate long-term trends in concentration and constituent loadings, which are used by county managers to assess environmental effects of land-use changes and water-resource-management practices. Water samples were analyzed by the Monroe County Environmental Health Laboratory in Rochester, N.Y.

Suspended-sediment samples from the Tully Valley mud-boil/depression area (MDA) for the 2002 water year indicated a nearly constant sediment loading to Onondaga Creek at a rate of about 0.8 tons per day. The loading rate from the MDA has been nearly constant over the past several years, but mudboil activity downstream from the remediation project has increased and a separate containment system was installed during the summer of 2001. The discharge of sediment and water to Onondaga Creek from this newer area varied, but usually had a similar, or slightly higher sediment concentration than that measured at the MDA.

Quarterly water-quality analyses of depressurizing wells and springs along Onondaga Creek from the headwaters to Onondaga Lake during the 2002 water year indicated that mineralized discharges from the southern Tully Valley segment of the Onondaga Creek basin (Tully Moraine to U.S. Route 20) continued to add halite, gypsum, and sulfate loads to the Creek. Discharge from springs further north of Route 20 did not have the degree of mineralization seen in the Tully Valley, except for salt springs near Onondaga Lake which had much higher salt concentrations.

Water samples were collected for pesticide analyses from selected lakes, reservoirs, and wells that serve as sources of drinking water throughout upstate New York, as part of the Statewide Pesticide Monitoring Project in cooperation with the New York State Department of Environmental Conservation. More than 25 samples from 6 surface-water and 2 ground-water sites in western New York were analyzed for 60 pesticides or degradates in water year 2002. The analytical detection limits ranged from 0.001 to 0.05 µg/L. Trace levels of a few pesticides—mainly atrazine, metolachlor, and their degradates—were detected at several sites, but the concentrations did not exceed any Federal or New York State standards for drinking water.

Ground Water

Ground-water levels in shallow, unconfined aquifers in western New York typically show a seasonal pattern—a sharp rise during the spring in response to aquifer recharge from precipitation, and a gradual decline from summer through early fall. Aquifer recharge varies locally and seasonally and is affected by many factors, including the timing and amount of precipitation, the soil-moisture content, the amount of local runoff, and the rate of evapotranspiration. Evapotranspiration consists of physical evaporation, transpiration by vegetation, and ground-water evapotranspiration. Typically, recharge is greatest during the late fall and from early to mid-spring, when transpiration is minimal, and the ground is not frozen and allows infiltration. Water levels rise during the spring and typically exceed those reached in the preceding fall, mainly as a result of recharge from the melting snowpack. Water levels decline during the late spring and summer, when plant growth and rising water temperatures increase the rate of evapotranspiration and, thus, reduce the rate of recharge. Storms of sufficient intensity and duration provide minor recharge to shallow aquifers during summer. Precipitation in New York is (on average) fairly evenly distributed from month to month; thus, the annual summer decline in ground-water levels is due primarily to a reduction in recharge from increased evapotranspiration.

Water levels in confined aquifers generally are less responsive to individual storms than those in unconfined aquifers; the response in confined aquifers is generally subdued and delayed because their hydraulic connection to the overlying unconfined aquifers is indirect.

The minimum, maximum, median long-term monthly, and current water levels at three observation wells during the 2002 water year are plotted in the hydrographs in figure 3. The hydrograph for well Ct-121 in Cattaraugus County (western New York) illustrates the water-level fluctuations under natural (nonpumping) conditions in a representative confined sand and gravel aquifer; the hydrograph for well Og-23 in Otsego County (central New York) illustrates seasonal water-level fluctuations under natural conditions in a shallow, unconfined till aquifer and the hydrograph for well Cm-46 in Chemung County (south-central New York) illustrates water-level fluctuations under natural conditions in an unconfined sand aquifer.

Water levels under confined conditions at well Ct-121 were below the median throughout the entire water year except for part of June, when they were at the median. Water levels at well Og-23 were below the median from October through January, above the median in February and March, below the median in April, above the median in May and June, below the median in July and August, and above the median in September. Water levels at well Cm-46 were below the median at the beginning of the water year, then fluctuated around the median during December, then declined to below the median in January. From February through the first 2 weeks of May, water levels again fluctuated above and below the median, then were well above the median from the latter part of May through the first 2 weeks of July, then below the median through September. Water levels at this well were affected by water-level changes in Newtown Creek.

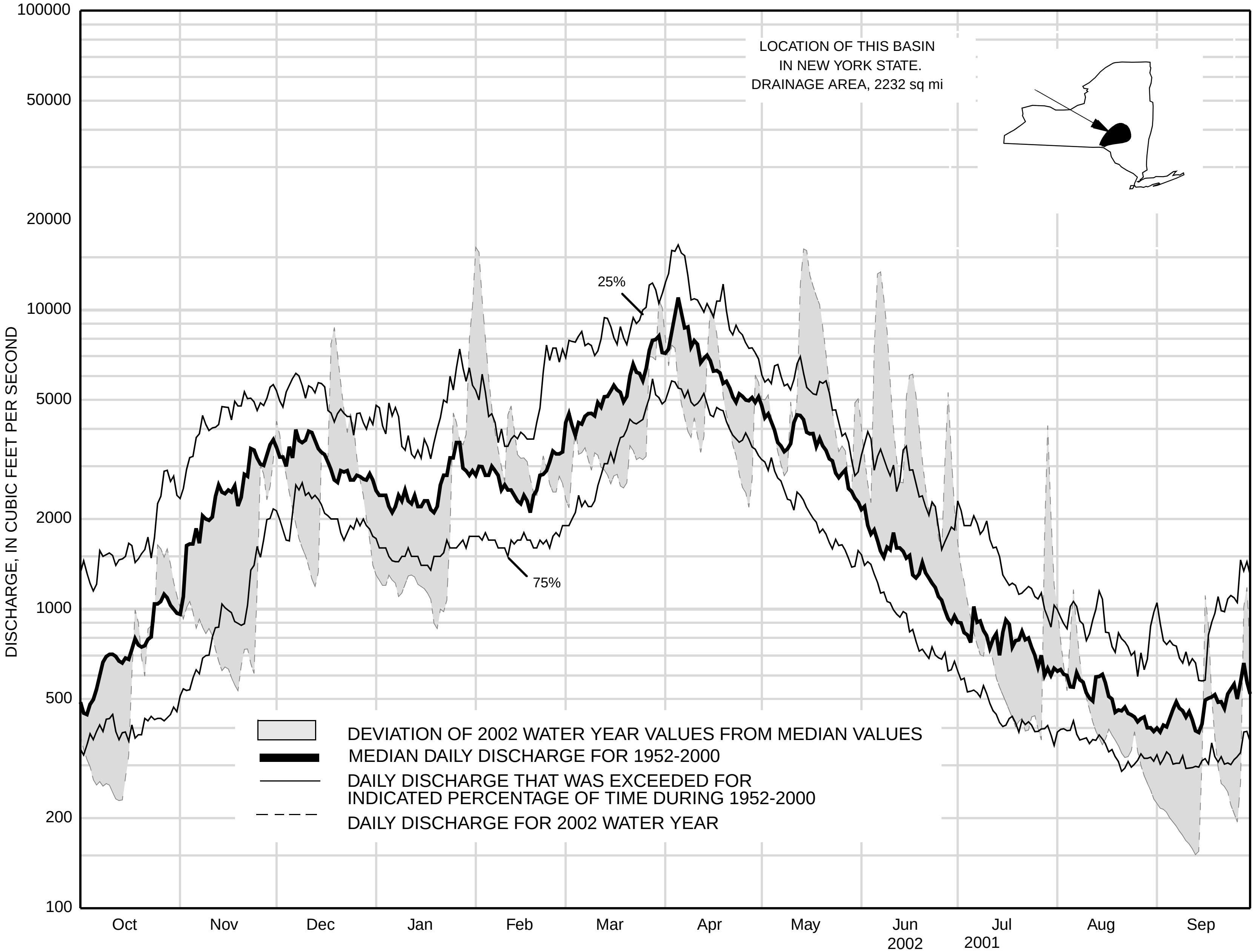


Figure 1.-- Hydrographic Comparisons, Susquehanna River at Conklin

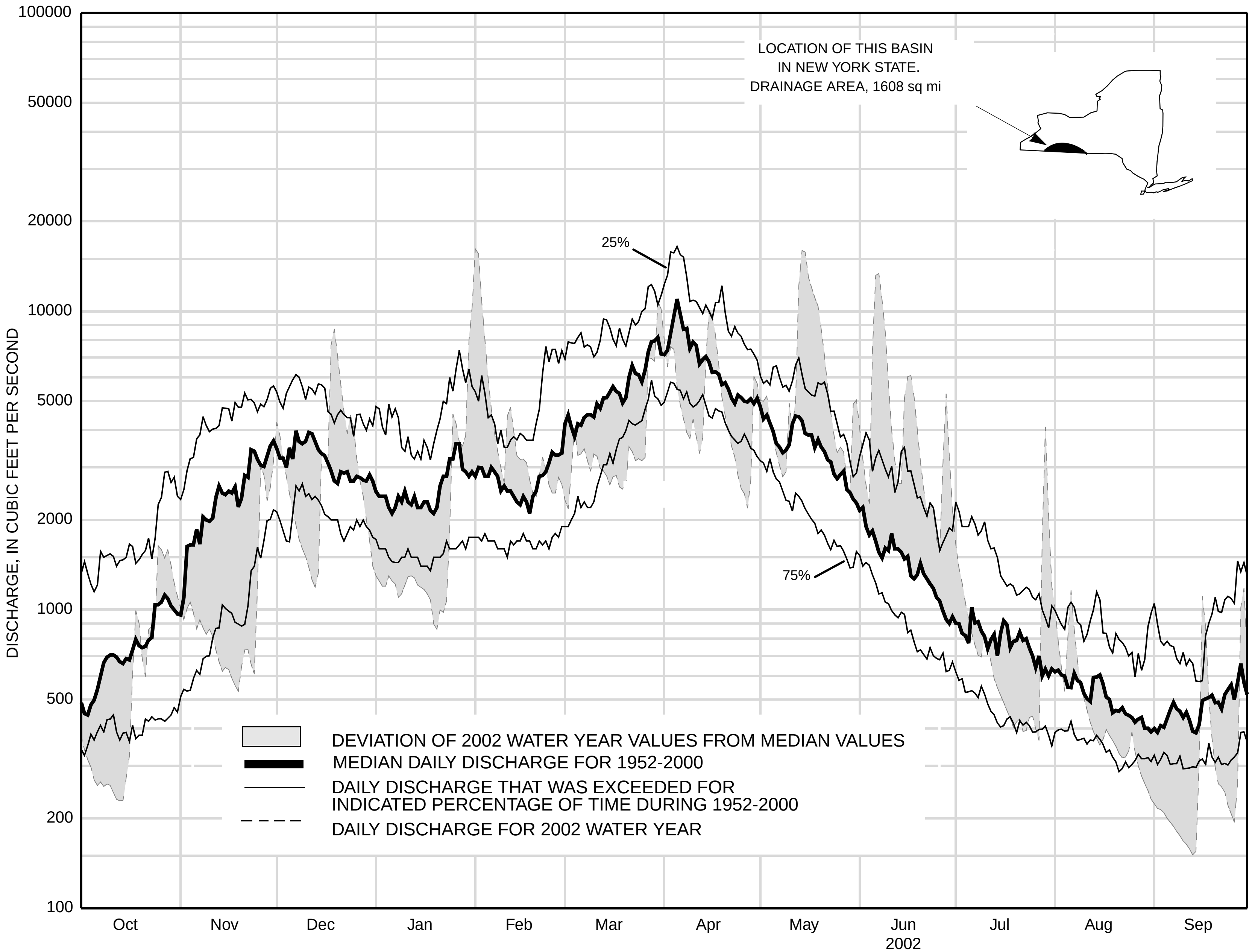


Figure 2.-- Hydrographic Comparisons, Allegheny River at Salamanca

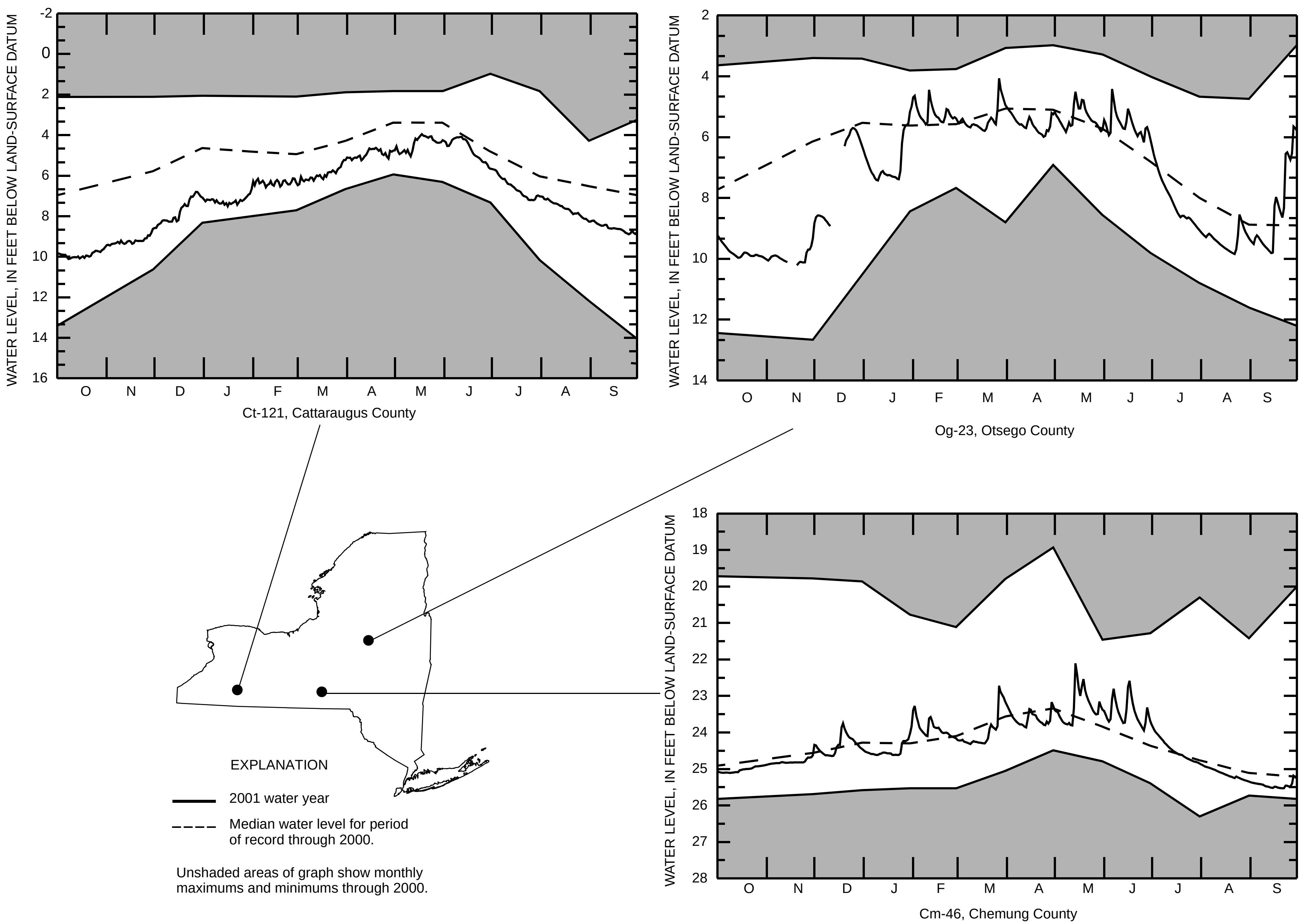


Figure 3.-Comparison of ground-water levels at selected observation wells in New York during 2002 water year with median levels for period of record.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Benchmark Network is a network of 50 sites in small drainage basins around the country whose purpose is to provide consistent data on the streamflow representative of undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by human activities. At 10 of these sites, water-quality information is being gathered on major ions and nutrients, primarily to assess the effects of acid deposition on stream chemistry. Additional information on the Hydrologic Benchmark Program can be found at http://water.usgs.gov/hbn/.

National Stream-Quality Accounting Network (NASQAN) monitors the water quality of large rivers within the Nation's largest river basins. From 1995 through 1999, a network of approximately 40 stations was operated in the Mississippi, Columbia, Colorado, and Rio Grande basins. For the period 2000 through 2004, sampling was reduced to a few index stations on the Colorado and Columbia so that a network of 5 stations could be implemented on the Yukon River. Samples are collected with sufficient frequency that the flux of a wide range of constituents can be estimated. The objective of NASQAN is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used (1) to describe the long-term trends and changes in concentration and transport of these constituents; (2) to test findings of the National Water-Quality Assessment Program (NAWQA); (3) to characterize processes unique to large-river systems such as storage and re-mobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals. Additional information about the NASQAN Program can be found at http://water.usgs.gov/nasqan/.

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) provides continuous measurement and assessment of the chemical constituents in precipitation throughout the United States. As the lead federal agency, the USGS works together with over 100 organizations to provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 225 precipitation chemistry monitoring sites. This long-term, nationally consistent monitoring program, coupled with ecosystem research, provides critical information toward a national scorecard to evaluate the effectiveness of ongoing and future regulations intended to reduce atmospheric emissions and subsequent impacts to the Nation's land and water resources. Reports and other information on the NADP/NTN Program, as well as all data from the individual sites, can be found at http://bqs.usgs.gov/acidrain/.

The National Water-Quality Assessment (NAWQA) Program of the U.S. Geological Survey is a long-term program with goals to describe the status and trends of water-quality conditions for a large, representative part of the Nation's ground- and surface-water resources; provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

Assessment activities are being conducted in 59 study units (major watersheds and aquifer systems) that represent a wide range of environmental settings nationwide and that account for a large percentage of the Nation's water use. A wide array of chemical constituents will be measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for decision making by water-resources managers and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

Communication and coordination between USGS personnel and other local, State, and federal interests are critical components of the NAWQA Program. Each study unit has a local liaison committee consisting of representatives from key federal, State, and local water resources agencies, Indian nations, and universities in the study unit. Liaison committees typically meet semiannually to discuss their information needs, monitoring plans and progress, desired information products, and opportunities to collaborate efforts among the agencies. Additional information about the NAWQA Program can be found at http://water.usgs.gov/nawqa/

EXPLANATION OF THE RECORDS

The surface-water and ground-water data published in this report are for the water year that began October 1, 2001, and ended September 30, 2002. A calendar of the water year is provided on the inside of the front cover. The data include discharge or stage of streams and canals, surface area, stage, and contents of lakes or reservoirs, surface-water quality, and ground-water levels. The locations of the stations and wells where data were collected are shown in figure 5. The following provide an explanation of how the data were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

Each surface-water station and well in this report is assigned a unique identification number. This number is unique in that it applies specifically to a given station and to no other. The number is usually assigned when a station is first established and is retained for that station indefinitely. The systems used by the U.S. Geological Survey to assign identification numbers for surface-water stations and for ground-water well sites differ, but both are based on geographic location. The "downstream order" system is used for surface-water stations and the "latitude-longitude" system is used for wells.

Downstream Order System

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary that enters between two main-stream stations is listed between them. A similar order is followed on listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is situated with respect to the stream to which it is immediately tributary is indicated by an indention in a list of stations in the front of the report. Each indention represents one rank. This downstream order and system of indention show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

The station-identification number is assigned according to downstream order. In assigning station numbers, no distinction is made between partial-record stations, miscellaneous sites, and other stations; therefore, the station number for a partial-record station or a miscellaneous site indicates downstream-order position in a list made up of all types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station, such as 01502500, includes the 2-digit Part number “01” plus the 6-digit downstream order number “502500.” The Part number designates the major river basin. Part numbers used in this report and their corresponding river basins are: “01,” the North Atlantic Slope basin; “03,” the Ohio River basin; and “04,” the St. Lawrence River basin. In a few instances where no gaps were left in the 8-digit numbering sequence, one or two digits were added (making a 9-or 10-digit station number) and (or) a latitude-longitude number was used to identify intermediate stations.

Latitude-Longitude System

The well-identification number is based on the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the wells within a 1-second grid. See figure below.

Records of Stage and Water Discharge

Records of stage and water discharge may be complete or partial. Complete records of discharge are those obtained using a continuous stage-recording device through which either instantaneous or mean daily discharges may be computed for any time, or any period of time, during the period of record. Complete records of lake or reservoir content, similarly, are those for which stage or content may be computed or estimated with reasonable accuracy for any time, or period of time. They may be obtained using a continuous stage-recording device, but need not be. Because daily mean discharges and end-of-day contents commonly are published for such stations, they are referred to as “daily stations.” Periods of record for discontinued continuous-record surface-water stations are given in a table following the "Contents" section of this report.

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles such as “Crest-stage partial records,” or “Low-flow partial records.” Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow seepage studies, may be considered as partial records, but they are presented separately in this report. Locations of all complete-record stations for which data are given in this report are shown in figure 5.

Data Collection and Computation

The data collected at stream-gaging stations consist of records of stage, measurements of discharge throughout a range of stages, and notations regarding factors that may affect the relationship between stage and discharge. These data, together with supplemental information, such as weather records, are used to compute daily discharges. The data collected at a lake or reservoir station consist of records of stage and notations regarding factors that may affect the relationship between stage and lake content. These data are used with stage-area and stage-capacity curves or tables to compute water-surface areas and lake storage.

Records of stage are obtained from direct readings on a non-recording gage, analog recorders that trace continuous graphs of stage, digital recorders that punch stage values on paper tapes at selected time intervals, or with data-collection platforms (DCP) that electronically record and then transmit the data via satellite to

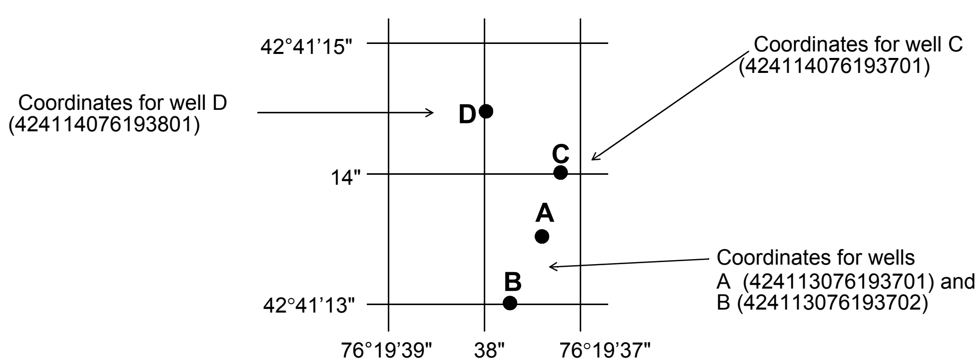


Figure 4. System for numbering wells (latitude and longitude)

ground receiving stations. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water Resources Investigations (TWRI's), Book 3, Chapter A1 through A19 and Book 8, Chapters A2 and B2. The methods are consistent with the American Society for Testing and Materials (ASTM) standards and generally follow the standards of the International Organization for Standards (ISO).

For stream-gaging stations, results of individual discharge measurements are plotted against corresponding stages to develop stage-discharge relation curves. From these curves, rating tables that indicate the approximate discharge for any stage within the range of measurements are prepared. If it is necessary to express discharge greater than measured, the rating curves are extended on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting.

Daily mean discharges are computed by applying the instantaneous stages (gage heights) to the stage-discharge curves or rating tables and averaging these discharges for each day. Monthly and yearly mean discharges are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes of the personnel making the measurements and observers are applied to the gage heights before the discharges are determined from the curves or tables. This shifting-control method also is used if the stage-discharge relation is changed temporarily because of aquatic growth or debris on the control.

At some gaging stations, acoustic velocity meter (AVM) systems are used to compute discharge. The AVM system measures the stream's velocity at one or more paths in the cross section. Coefficients are developed to relate this path velocity to the mean velocity in the cross section. Because the AVM sensors are fixed in position, the adjustment coefficients generally vary with stage. Cross-sectional area curves are developed to relate stage, recorded as noted above, to cross section area. Discharge is computed by multiplying path velocity by the appropriate stage related coefficient and area.

At some stream-gaging stations the stage-discharge relation is affected by the backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method, in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

At some stream-gaging stations, formation of ice in the winter may so obscure the stage-discharge relation that daily mean discharges must be estimated on the basis of gage-height record, occasional water discharge measurements, and other information such as temperature and precipitation records, notes by gage observers and hydrographers, and records of discharge for other stations in the same or nearby basins for comparable periods.

For computing lake or reservoir contents, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents are computed. If the stage-capacity curve changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations there are periods when no gage-height record is obtained, or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated from recorded range in stage, previous and following records, discharge measurements, weather records, and comparison with other station records in the same or nearby basins. Likewise daily contents may be estimated from operator's logs, previous and following records, inflow-outflow studies, and other information. Information explaining how estimated daily-discharge values are identified in station records is included in the next two sections, "Data Presentation" (REMARKS paragraph) and "Identifying Estimated Daily Discharge."

Data Presentation

Streamflow data in this report are presented in a new format that is considerably different from the format in data reports prior to the 1992 water year. The major changes are that statistical characteristics of discharge now appear in tabular summaries following the water-year data table. These changes represent the results of a pilot program to reformat the annual water-data report to meet current user needs and data preferences.

The records published for each continuous-record surface-water discharge station (gaging station) now consist of four parts, the manuscript or station description; the data table of daily mean values of discharge for the current water year with summary data; a tabular statistical summary of monthly mean flow data for a designated period, by water year; and a summary statistics table that includes statistical data of annual, daily, and instantaneous flows as well as data pertaining to annual runoff, 7-day low-flow minimums, and flow duration.

Station manuscript

The manuscript provides, under various headings, descriptive information, such as station location; period of record; extremes; historical extremes outside the period of record; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments to follow clarify information presented under the various headings of the station description.

LOCATION.--Information on locations is obtained from the most accurate maps available. The location of the gage with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given. River mileages, given for some stations, is that determined and used by the U.S. Army Corps of Engineers or other agencies.

DRAINAGE AREA.--Drainage areas are measured using the most accurate maps available. Because the type of maps available varies from one drainage basin to another, the accuracy of drainage areas likewise varies. Drainage areas are updated as better maps become available.

PERIOD OF RECORD.--Identifies the period for which there are published records for the station or for an equivalent station. An equivalent station is one that was in operation at a time that the present station was not, and whose location was such that records from it can reasonably be considered equivalent with records from the present station.

REVISED RECORDS.--Published records, because of new information, occasionally are found to be incorrect, and revisions are printed in later reports. Listed under this heading are all the reports in which revisions have been published for the station and the water years to which the revisions apply. If a revision did not include daily, monthly, or annual figures of discharge, that fact is noted after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the most recently revised figure was first published is given

GAGE.--The type of gage in current use, the datum of the current gage referred to sea level (see DEFINITION OF TERMS), and a condensed history of the types, locations, and datums of previous gages are given under this heading.

REMARKS.--All periods of estimated daily-discharge record will either be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily-discharge table. (See next section, “Identifying Estimated Daily Discharge.”) If a remarks statement is used to identify estimated record, the paragraph will begin with this information presented at the first entry. The paragraph is also used to present information relative to the accuracy of the records, to special methods of computation, to conditions that affect natural flow at the station and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

COOPERATION.--Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

EXTREMES FOR PERIOD OF RECORD.--Extremes may include maximum and minimum stages and maximum and minimum discharges or content. Unless otherwise qualified, the maximum discharge or content is the instantaneous maximum corresponding to the highest stage that occured. The highest stage may have been obtained from a graphic or electronic data logger, a crest-stage gage, or by direct observation of a nonrecording gage. If the maximum stage did not occur on the same day as the maximum discharge or content, it is given separately. Similarly, the minimum is the instantaneous minimum discharge, unless otherwise qualified, and was determined and is reported in the same manner as the maximum.

EXTREMES OUTSIDE PERIOD OF RECORD.--Included here is information concerning major floods or unusually low flows that occurred outside the stated period of record. The information may or may not have been obtained by the U.S. Geological Survey.

EXTREMES FOR CURRENT YEAR.--For stations meeting certain criteria, all peak discharges and stages occurring during the water year and greater than a selected base discharge are presented under this heading. All peaks greater than the base discharge are listed with the maximum for the year footnoted by an asterisk (*). The base discharge, which is given in the heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for canals, ditches, drains, or streams for which the peaks are subject to substantial control by man. The time of occurence for peaks is expressed in 24-hour Eastern Standard Time (EST), at all sites unless otherwise noted.

REVISIONS.--If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because, for these stations, there would be no current or, possibly, future station manuscript published to document the revision in a "Revised Records" entry, users of data for these stations who obtained the record from previously published data reports may wish to contact the District Office to determine if the published records were ever revised after the station was discontinued. Of course, if the data were obtained by computer retrieval, the data is always accompanied by revision of the corresponding data in computer storage.

Manuscript information for lake or reservoir stations differs from that for stream stations in the nature of the “Remarks” and in the inclusion of a skeleton stage-capacity table when daily stages are given.

Headings for AVERAGE DISCHARGE have been deleted and the information contained in this paragraph is now presented in the tabular summaries following the discharge table or in the REMARKS paragraph, as appropriate. No changes have been made to the data presentations of lake contents.

<u>Data table of daily mean values</u>

The daily table of discharge records for stream-gaging stations gives mean discharge for each day of the water year. In the monthly summary for the table, the line headed "TOTAL" gives the sum of the daily figures for each month; the line headed "MEAN" gives the average flow in cubic feet per second for the month; and the lines headed "MAX" and "MIN" give the maximum and minimum daily mean discharges, respectively, for each month. Discharge for the month also is usually expressed in cubic feet per second per square mile (line headed "CFSM"); or in inches (line headed "IN."); or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches or in acre-feet may be omitted if there is extensive regulation or diversion or if the drainage area includes large noncontributing areas. At some stations monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversion data or reservoir contents are given. These figures are identified by a symbol and corresponding footnote.

<u>Statistics of monthly mean data</u>

A tabular summary of the mean (line headed "MEAN"), maximum (line headed "MAX"), and minimum (line headed "MIN") or monthly mean flows for each month for a designated period is provided below the mean values table. The water years of the first occurrence of the maximum and minimum monthly flows are provided immediately below those figures. The designated period will be expressed as "FOR WATER YEARS ____-____, BY WATER YEAR (WY)," and will list the first and last water years of the range of years selected from the PERIOD OF RECORD paragraph in the station manuscript. It will consist of all of the partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unles a break in the station record is indicated in the manuscript.

Summary statistics

A table titled "SUMMARY STATISTICS" follows the statistics of monthly mean data tabulation. This table consists of four columns, with the first column containing the line headings of the statistics being reported. The table provides a statistical summary of yearly, daily, and instantaneous flows, not only for the current water year, but also for the previous calendar year and for the designated period, as appropriate. The designated period selected, "WATER YEARS ____-____," will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript. All of the calculations for the statistical characteristics designated ANNUAL (See line headings below.), except for the "ANNUAL 7-DAY MINIMUM" statistic, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

The date or water year, as appropriate, of the first occurrence of each statistic reporting extreme values of discharge is provided adjacent to the statistic. In some instances, these extremes may occur on more than one date or year. Repeated occurrences may be noted in the manuscript. Because the designated period may not be the same as the station period of record published in the manuscript, occasionally the dates of occurrence listed for the daily and instantaneous extremes in the designated-period column may not be within the selected water years listed in the heading. When this occurs, it will be noted in the REMARKS paragraph or in footnotes. Selected streamflow duration curve statistics and runoff data are also given. Runoff data maya be omitted if there is extensive regulation or diversion of flow in the drainage basin.The following summary statistics data, as appropriate, are provided with each continuous record of discharge. Comments to follow clarify information presented under the various line headings of the summary statistics table.

ANNUAL TOTAL.--The sum of the daily mean values of discharge for the year. At some stations the annual total discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes.

ANNUAL MEAN.--The arithmetic mean of the individual daily mean discharges for the year noted or for the designated period. At some stations, the yearly mean discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes.

HIGHEST ANNUAL MEAN.--The maximum annual mean discharge occurring for the designated period.

LOWEST ANNUAL MEAN.--The minimum annual mean discharge occurring for the designated period.

HIGHEST DAILY MEAN.--The maximum daily mean discharge for the year or for the designated period.

LOWEST DAILY MEAN.--The minimum daily mean discharge for the year or for the designated period.

ANNUAL 7-DAY MINIMUM.--The lowest mean discharge for 7 consecutive days for a calendar year or a water year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climatic year (April 1-March 31). The data shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day 10-year low-flow statistic.)

ANNUAL RUNOFF.--Indicates the total quantity of water in runoff for a drainage area for the year. Data reports may use any of the following units of measurement in presenting annual runoff data:

Acre-foot (AC-FT) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming the runoff is distributed uniformly in time and area.

Inches (INCHES) indicates the depth to which the drainage area would be covered if all of the runoff for a given time period were uniformly distributed on it.

10 PERCENT EXCEEDS.--The discharge that has been exceeded 10 percent of the time for the designated period.

50 PERCENT EXCEEDS.--The discharge that has been exceeded 50 percent of the time for the designated period.

90 PERCENT EXCEEDS.--The discharge that has been exceeded 90 percent of the time for the designated period.

Hydrographs

Hydrographs of daily mean flows at water-discharge stations follow the summary statistics tabulation. These hydrographs show the current water year daily mean discharges and their relation to the maximum, minimum, and median of record (see years used for statistical summary) through the previous water year for sites with more than 5 years of record. The hydrograph for sites with 5 years or less will only show daily mean discharges for the current water year. A log scale is used for all hydrographs and therefore, zero daily flows are plotted as 0.001 ft^3/s.

Information published for partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in a table of annual maximum stage and discharge at crest-stage stations. The table of partial-record stations is followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are caslled measurements at miscellaneous sites.

Identifying Estimated Daily Discharge

Estimated daily-discharge values published in the water-discharge tables of annual State data reports are identified either by flagging individual daily values with the letter symbol "e" and printing a table footnote, "e Estimated," or by listing the dates of the estimated record in the REMARKS paragraph of the station description.

Accuracy of the Records

The accuracy of streamflow records depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretations of records.

The accuracy attributed to the records is indicated under "REMARKS." "Excellent" means that about 95 percent of the daily discharges are within 5 percent of the true discharge; "good," within 10 percent; and "fair," within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy. Different accuracies may be attributed to different parts of a given record.

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for discharges of less than 1 ft^3/s; to tenths between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures above 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharge figures listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other Records Available

Information used in the preparation of records in this report, such as discharge measurement notes, water temperature measurements, gage-height records, and rating tables is on file in the Ithaca subdistrict office. Also most gaging-station records are available in computer-readable form and many statistical analyses are available. Information on the availability of unpublished data or statistical analyses may be obtained from the district office.

Records of Surface-Water Quality

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because interpretation of records of surface-water quality nearly always requires corresponding discharge data. Records of surface-water quality in this report may involve a variety of types of data and measurement frequencies. Locations of all surface-water-quality stations for which data are given in this report are shown in figure 5.

Historical and current dissolved trace-element concentrations are reported herein for water that was collected, processed, and analyzed by using either ultraclean or other than ultraclean techniques. If ultraclean techniques were used, then those concentrations are reported in nanograms per liter. If other than ultraclean techniques were used, then those concentrations are reported in micrograms per liter and could reflect contamination introduced during some phase of the procedure.

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing-record station is a site where data are collected on a regularly scheduled basis. Frequency may be once or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A miscellaneous sampling site is a location other than a continuing or partial-record station, where random samples are collected to give better areal coverage to define water-quality conditions in the river basin. Locations of surface-water quality stations are shown on figure 5.

Note that "continuing-record" differs from "continuous recording," which refers to a continuous graph or a series of discrete values recorded at predetermined intervals. Some water-quality data may be obtained through continuous recordings (i.e. temperature); however, most data are obtained only monthly or less frequently.

Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the location of the water quality sampling site differs significantly from that of the nearby surface-water station, the continuing-record water-quality site is given its own station number and name in the regular downstream order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites. Data for precipitation-quality stations appear next. The table of ground-water quality data follow the ground-water level records. Data for quality of ground water are listed alphabetically by County, and are identified by well number.

On-site Measurements and Sample Collection

In obtaining water-quality data, a major concern is that the data obtained represent the in situ quality of the water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made onsite when the samples are taken. To assure that measurements made in the laboratory also represent the in situ water, carefully prescribed procedures need to be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for on-site measurements and for collecting, treating, and shipping samples are given publications on Techniques of Water-Resources Investigations, "Book 1, Chap. D2; Book 3, Chap. A1, A3, and A4; Book 9, Chap. A1-A9. These references are listed in the PUBLICATIONS ON TECHNIQUES OF WATER RESOURCES INVESTIGATIONS section of this report. These methods are consistent with ASTM standards and generally follow ISO standards. Also, detailed information on collecting, treating, and shipping samples may be obtained from the Geological Survey District office.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load. All samples obtained for the National Stream Quality Accounting Network (see DEFINITION OF TERMS) are obtained from at least several verticals. Whether samples are obtained from the centroid of flow or from several verticals, depends on flow conditions and other factors which must be evaluated by the collector.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

Water Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at the time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, either mean temperatures and/or maximum and minimum temperatures for each day are published. Water temperatures measured at the time of water-discharge measurements are on file in the Ithaca subdistrict office.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentrations in the cross sections. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow and in predicting long-term sediment-discharge characteristics of the stream.

For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

Methods used in the computation of sediment records are described in the TWRI Book 3, Chapters C1 and C3. These methods are consistent with ASTM standards and generally follow ISO standards.

In addition to the records of instantaneous suspended-sediment discharge, the percentage of suspended sediment finer than 0.062 mm are reported at continuing-record sites.

Laboratory Measurements

Sediment samples, samples for biochemical-oxygen demand (BOD), samples for indicator bacteria, and daily samples for specific conductance are analyzed locally. All other samples are analyzed in the Geological Survey laboratories in Arvada, Colo. Methods used to analyze sediment samples and to compute sediment records are described in the TWRI, Book 5, Chapter C1. Methods used by the U. S. Geological Survey laboratories are given in the TWRI Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, A4 and A5. These methods are consistent with ASTM standards and generally follow ISO standards.

Data Presentation

For continuing-record stations, information pertinent to the history of station operation, including station location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily preceeds the data tables. If the location is identical to that of the discharge gaging station, neither the LOCATION nor the DRAINAGE AREA statements are repeated. Following is a list of headings and a discussion of the information provided under each heading.

LOCATION.--Information on locations is obtained from the most accurate maps available. The location of the gage with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given. River mileages, given for some stations, is that determined and used by the U.S. Army Corps of Engineers or other agencies.

DRAINAGE AREA.--Drainage areas are measured using the most accurate maps available. Because the type of maps available varies from one drainage area to another, the accuracy of drainage areas likewise varies. Drainage areas are updated as better maps become available.

PERIOD OF RECORD.--This indicates the period for which there are published water-quality records for the station. The periods are shown separately for records of parameters measured daily or continuously and those measured less than daily. For those measured daily or continuously, periods of record are given for the parameters individually.

INSTRUMENTATION.--Information on instrumentation is given only if a water-quality monitor, temperature recorder, sediment pumping sampler, or other sampling device is in operation at a station. REMARKS.--Remarks provide added information pertinent to the collection, analysis, or computation of the records.

COOPERATION.--Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

EXTREMES.--Maximums and minimums are given only for parameters measured daily or more frequently. None are given for parameters measured weekly or less frequently, because the true maximum or minimum may not have been sampled. Extremes, when given, are provided for both the period of record and for the current water year.

REVISIONS.--If errors in published water-quality records are discovered after publication, appropriate updates are made in the U. S. Geological Survey's distributed data system, NWIS, and subsequently to its web-based National data system, NWISWeb [http://water.usgs.gov/nwis/nwis]. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U. S. Geological Survey water-quality data are encouraged to obtain all required data from NWIS or NWISWeb to insure the most recent updates. Updates to NWISWeb are currently made on an annual basis.

The surface-water-quality records for miscellaneous sampling sites are published in a separate table following the table of discharge measurements at miscellaneous sites. No descriptive statements are given for these records. Each station is published with its own station number and name in the regular downstream-order sequence.

Remark Codes

The following remark codes may appear with the water-quality data in this report:

PRINTED OUTPUT	REMARK
E	Estimated value
>	Actual value is known to be greater than the value shown
<	Actual value is known to be less than the value shown
M	Presence of material verified, but not quantified
N	Presumptive evidence of presence of material
U	Material specifically analyzed for, but not detected
A	Value is an average
V	Analyte was detected in both the environmental sample and the associated blanks
S	Most probable value

Water Quality-Control Data

Data generated from quality-control (QC) samples are a requisite for evaluating the quality of the sampling and processing techniques as well as data from the actual samples themselves. Without QC data, environmental sample data cannot be adequately interpreted because the errors associated with the sample data are unknown. The various types of QC samples collected by this district are described in the following section. Procedures have been established for the storage of water-quality-control data within the USGS. These procedures allow for storage of all derived QC data and are identified so that they can be related to corresponding environmental samples.

Blank Samples

Blank samples are collected and analyzed to ensure that environmental samples have not been contaminated by the overall data-collection process. The blank solution used to develop specific types of blank samples is a solution that is free of the analytes of interest. Any measured value signal in a blank samples for an analyte (a specific component measured in a chemical analysis) that was absent in the blank solution is believed to be due to contamination. There are many types of blank samples possible, each designed to segregate a different part of the overall data-collection process. The types of blank samples collected in this district are:

Source solution blank – a blank solution that is transferred to a sample bottle in an area of the office laboratory with an atmosphere that is relatively clean and protected with respect to target analytes.

Ambient blank – a blank solution that is put in the same type of bottle used for an environmental sample, kept with the set of sample bottles before sample collection, and opened at the site and exposed to the ambient conditions.

Field blank - a blank solution that is subjected to all aspects of sample collection, field processing preservation, transportation, and laboratory handling as an environmental sample.

Trip blank - a blank solution that is put in the same type of bottle used for an environmental sample and kept with the set of sample bottles before and after sample collection.

Equipment blank - a blank solution that is processed through all equipment used for collecting and processing an environmental sample (similar to a field blank but normally done in the more controlled conditions of the office).

Sampler blank – a blank solution that is poured or pumped through the same field sampler used for collecting an environmental sample.

Pump blank – a blank solution that is processed through the same pump-and-tubing system used for an environmental sample.

Standpipe blank – a blank solution that is poured from the containment vessel (stand-pipe) before the pump is inserted to obtain the pump blank.

Filter blank – a blank solution that is filtered in the same manner and through the same filter apparatus used for an environmental sample.

Splitter blank - a blank solution that is mixed and separated using a field splitter in the same manner and through the same apparatus used for an environmental sample.

Preservation blank – a blank solution that is treated with the sampler preservatives used for an environmental sample.

Canister blank – a blank solution that is taken directly from a stainless steel canister just before the VOC sampler is submerged to obtain a field blank sample.

Reference Samples

Reference material is a solution or material prepared by a laboratory whose composition is certified for one or more properties so that it can be used to assess a measurement method. Samples of reference material are submitted for analysis to ensure that an analytical method is accurate for the known properties of the reference material. Generally, the selected reference material properties are similar to the environmental sample properties.

Replicate Samples

Replicate samples are a set of environmental samples collected in a manner such that the samples are thought to be essentially identical in composition. Replicate is the general case for which a duplicate is the special case consisting of two samples. Replicate samples are collected and analyzed to establish the amount of variability in the data contributed by some part of the collection and analytical process. There are many types of replicate samples possible, each of which may yield slightly different results in a dynamic hydrologic setting, such as a flowing stream. The types of replicate samples collected in this district are:

Concurrent sample – a type of replicate sample in which the samples are collected simultaneously with two or more samplers or by using one sampler and alternating collection of samples into two or more compositing containers.

Sequential sample – a type of replicate sample in which the samples are collected one after the other, typically over a short time.

Split sample – a type of replicate sample in which a sample is split into subsamples contemporaneous in time and space.

Spike Samples

Spike samples are samples to which known quantities of a solution with one or more well-established analyte concentrations have been added. These samples are analyzed to determine the extent of matrix interference or degradation on the analyte concentration during sample processing and analysis.

Concurrent sample – a type of spike sample that is collected at the same time with the same sampling and compositing devices then spiked with the same spike solution containing laboratory-certified concentrations of selected analytes.

Split sample – a type of spike sample in which a sample is split into subsamples contemporaneous in time and space then spiked with the same spike solution containing laboratory-certified concentrations of selected analytes.

Dissolved Trace-Element Concentrations

Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter (µg/L) level. Recent evidence, mostly from large rivers, indicates that actual dissolved-phase concentrations for a number of trace elements are within the range of 10's and 100's of nanograms per liter (ng/L). Data above the µg/L level should be viewed with caution. Such data may actually represent elevated environmental concentrations from natural or human causes; however, these data could reflect contamination introduced during sampling, processing, or analysis. To confidently produce dissolved trace-element data with insignificant contamination, the U.S. Geological Survey began using new trace-element protocols at some stations in water year 1994. Full implementation of the protocols will take place during the 1995 water year

Change in National Trends Network Procedures

Sample handling procedures at all National Trends Network stations were changed substantially on January 11, 1994, in order to reduce contamination from the sample shipping container. The data for samples before and after that date are different and not directly comparable. A tabular summary of the differences based on a special intercomparison study, is available from the NADP/NTN Coordination Office, Colorado State University, Fort Collins, CO 80523 (Telephone: 303-491-5643).

Categories of Water-Quality Data

There is a broad range of water-quality parameters available for most stations whose record exceeds more than a few years operation. Sampling schedules are often intermittent for certain types of data, with analyses available for some but not all years within a station's period of record. An accurate description of the variety of data available is shown by grouping similar parameters into a few general categories, which are listed in the "PERIOD OF RECORD" paragraph. Each category of data is followed by a notation of the water year(s) for which data is available and a letter code describing the frequency of sampling (see following section, "Frequency-of-Sampling Notation").

The "PERIOD OF RECORD" paragraph lists the following categories of data to describe information available.

CHEMICAL DATA: Usually includes most of the "major ions," and may often include some of the following physical properties: specific conductance, pH, temperature, color, turbidity, dissolved oxygen.

MINOR ELEMENT DATA: Comprises the "heavy metals" and some of the "alkaline earth" groups. Determinations usually include some but not all of the following: Al, As, Ba, Cd, Cr, Co, Cu, Hg, Li, Ni, Pb, Se, Sn, Sr, Zn.

RADIOCHEMICAL DATA: The determinations of the concentration of individual radioactive elements, such as radium 226, cobalt 60, strontium 90, and tritium. This category also includes the gross measurement of radioactivity (alpha, beta, gamma) without regard to the radiochemical species that produce the radioactivity.

PESTICIDE DATA: The organic compounds (insecticides and herbicides) used to control insects and plants. Routinely, the analyses searches for traces of between 12 to 22 compounds.

ORGANIC DATA: Organic data (other than pesticides) such as OC, PCB, PCN.

NUTRIENT DATA: Constituents containing nitrogen or phosphorus. Results usually include several of the following: nitrite plus nitrate, phosphorus, ammonia nitrogen, organic nitrogen, ammonia plus organic nitrogen (Kjeldahl nitrogen).

BIOLOGICAL DATA: The identification and concentration of microscopic plant organisms (phytoplankton, periphyton), or enteric bacteria (total coliform, fecal coliform, or fecal streptococcal) living in aquatic habitats.

SEDIMENT DATA: Suspended-sediment concentration, suspended-sediment discharge, and particle-size data for discrete samples.

Frequency-of-Sampling Notation

The categories of data given in the "PERIOD OF RECORD" paragraph are followed by the water year(s) for which that kind of data was collected. The amount of data available is specified by the following letter codes:

(a) 1 or 2 samples per year.
(b) 3 to 5 samples per year.
(c) 6 to 9 samples per year.
(d) 10 to 20 samples per year.
(e) more than 20 samples per year.

Thus, "CHEMICAL DATA: 1972-74(c), 1977-82(a).", shows there are at least six analyses each year for the first three years of record, no data for this category in 1975 and 1976, and 1 or 2 samples for each of the six additional years.

Records of Ground-Water Levels

Ground-water level data consist of water-level measurements made in observation wells. Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local number that is provided for local needs. (See figure 4.)

Ground-water records are presented by county, in alphabetical order. Locations of observation wells are shown on figure 5.

Data Collection and Computation

Water-level measurements are made in many types of wells, under varying conditions of access and at different temperatures, hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Water-level records are from direct measurements using a steel tape, from the punched tape of a water-stage recorder, or from an electronic data recorder. Water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well. If known, the altitude of the land-surface datum above sea level (see DEFINITION OF TERMS) is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported as mean daily values; then monthly and yearly means are computed from the daily figures. Water levels in wells not equipped with recording gages are measured periodically, usually weekly, with a weighted tape.

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error in determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot.

Data Presentation

Each well record consists of three parts, the station description, the data table of water levels observed during the current water year, and a graph of the water levels for the current water year or other selected period. The description of the well is presented first through use of descriptive headings preceding the tabular data. The comments to follow clarify information presented under the various headings of the well description.

LOCATION.--Provides (immediately below the well-identification number) the latitude and longitude (in degrees, minutes, and seconds); the hydrologic unit number (see DEFINITION OF TERMS); the distance and direction from a geographic point of reference; and the owner’s name.

AQUIFER.--Identifies by name (if a name exists) and geologic age the aquifer(s) open to the well.

WELL CHARACTERISTICS.--Describes the depth, diameter, casing depth and/or screened interval, method of construction, and use of the well and additional information such as casing breaks, collapsed screen, and other changes since construction.

INSTRUMENTATION.--Describes frequency of measurements and the collection method used, allowing the user to better evaluate the reported water-level extremes by knowing whether they are based on weekly, monthly, or some other frequency of measurement.

DATUM.--Describes both the measuring point and the land-surface elevation at the well. The measuring point is described physically (such as top of collar, notch in top of casing, plug in pump base and so on), and in relation to land surface (such as 1.3 ft above land-surface datum). The elevation of the land-surface datum is described in feet above (or below) sea level; it is reported with a precision depending on the method of determination.

REMARKS.--Describes factors that may influence the water level in a well or the measurement of the water level. It should identify wells that also are water-quality observation wells, and may be used to acknowledge the assistance of local (non-Survey) observers.

PERIOD OF RECORD.--Identifies the period for which there are published records for the observation well or for an equivalent

EXTREMES FOR PERIOD OF RECORD.--Indicates the highest and lowest water levels of the period of published record, with respect to land-surface datum, and the dates of their occurrence.

A table of water levels follows the station description for each well. Water levels are reported in feet above or below land-surface datum. For wells not equipped with continuous-stage recorders, the table lists the water levels and measurement dates. For wells equipped with recorders, mean daily values are published, with missing records indicated by dashes in place of the water level. Because mean daily values are published for wells with recorders, the extremes may be values that are not listed in the table.

A hydrograph of water levels follows the data table for each well. The current year and the previous 9 years of record are plotted in feet above or below land-surface datum. If the period of record is less than 10 years, the water levels for the entire record are plotted. Because all values are not plotted for wells with continuous-stage recorders, some extreme values may not appear on the plot.

Records of Ground-Water Quality

Records of ground-water quality in this report differ from other types of records in that for most sampling sites they consist of only one set of measurements for the water year. The quality of ground water ordinarilyt changes only slowly; therefore, for most general purposes one annual sampling, or only a few samples taken at infrequent intervals during the year, is sufficient. Frequent measurement of the same constituents is not necessary unless one is concerned with a particular problem, such as monitoring for trends in nitrate concentration. In the special cases where the quality of ground water may change more rapidly, more frequent measurements are made to identify the nature of the changes.

Data Collection and Computation

The records of ground-water quality in this report were obtained mostly as part of a special study of a specific area. Consequently, a number of chemical analyses are presented for one county, but none are presented for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality Statewide. Such a view can be attained only by considering records for this year in context with similar records obtained for these and other counties in earlier years.

Most methods for collecting and analyzing water samples are described in the U. S. Geological Survey TWRI publications referred to in the "On-site Measurements and Sample Collection" and the "Laboratory Measurements" sections in this data report. In addition, the TWRI Book 1, Chapter D2, describes guidelines for the collection and field analysis of ground-water samples for selected unstable constituents. The values reported in this report represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. These methods are consistent with ASTM standards and generally follow ISO standards. All samples were obtained by trained personnel. The wells sampled were pumped long enough to assure that the water collected came directly from the aquifer and had not stood for a long time in the well casing where it would have been exposed to the atmosphere and to the material, possibly metal, comprising the casings.

Data Presentation

The records of ground-water quality are published in a section titled QUALITY OF GROUND WATER immediately following the ground-water-level records. Data for quality of ground water are listed alphabetically by County, and are identified by well number. The prime identification number for wells sampled is the 15-digit number derived from the latitude-longitude locations. No descriptive statements are given for ground-water quality records; however, the well number, date of sampling, and other pertinent data are given in the table containing the chemical analyses of the ground water. The REMARKS codes listed for the surface-water-quality records are also applicable to ground-water-quality records.

ACCESS TO USGS WATER DATA

The USGS provides near real-time stage and discharge data for many of the gaging stations equipped with the necessary telemetry and historic daily-mean and peak-flow discharge data for most current or discontinued gaging stations through the world wide web (WWW). These data may be accessed at

http://www.water.usgs.gov

Some water-quality and ground-water data also are available through the WWW. In addition, data can be provided in various machine-readable formats on magnetic tape or 3-1/2 inch floppy disk. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each of the Water Resources Division District Offices (See address on the back of the title page.).

DEFINITION OF TERMS

Specialized technical terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. Definitions of common terms such as algae, water level, and precipitation are given in standard dictionaries. Not all terms defined in this alphabetical list apply to every State. See also table for converting inch/pound units to International System (SI) units on the inside of the back cover.

Acid neutralizing capacity (ANC) is the equivalent sum of all bases or base-producing materials, solutes plus particulates, in an aqueous system that can be titrated with acid to an equivalence point. This term designates titration of an "unfiltered" sample (formerly reported as alkalinity).

Acre-foot (AC-FT, acre-ft) is a unit of volume, commonly used to measure quantities of water used or stored, equivalent to the volume of water required to cover 1 acre to a depth of 1 foot and equivalent to 43,560 cubic feet, 325,851 gallons, or 1,233 cubic meters. (See also "Annual runoff")

Adenosine triphosphate (ATP) is an organic, phosphate-rich compound important in the transfer of energy in organisms. Its central role in living cells makes ATP an excellent indicator of the presence of living material in water. A measurement of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter.

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample. (See also "Biomass" and "Dry weight")

Alkalinity is the capacity of solutes in an aqueous system to neutralize acid. This term designates titration of a "filtered" sample.

Annual runoff is the total quantity of water that is discharged ("runs off") from a drainage basin in a year. Data reports may present annual runoff data as volumes in acre-feet, as discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches.

Annual 7-day minimum is the lowest mean value for any 7-consecutive-day period in a year. Annual 7-day minimum values are reported herein for the calendar year and the water year (October 1 through September 30). Most low-flow frequency analyses use a climatic year (April 1-March 31), which tends to prevent the low-flow period from being artificially split between adjacent years. The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day, 10-year low-flow statistic.)

Aroclor is the registered trademark for a group of polychlorinated biphenyls that were manufactured by the Monsanto Company prior to 1976. Aroclors are assigned specific 4-digit reference numbers dependent upon molecular type and degree of substitution of the biphenyl ring hydrogen atoms by chlorine atoms. The first two digits of a numbered aroclor represent the molecular type, and the last two digits represent the percentage weight of the hydrogen-substituted chlorine.

Artificial substrate is a device that is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is collected. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multiplate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection. (See also "Substrate")

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500 ×C for 1 hour. Ash mass of zooplankton and phytoplankton is expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square meter (g/m^2). (See also "Biomass" and "Dry mass")

Aspect is the direction toward which a slope faces with respect to the compass.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, whereas others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Bankfull stage, as used in this report, is the stage at which a stream first overflows its natural banks formed by floods with 1- to 3-year recurrence intervals.

Base discharge (for peak discharge) is a discharge value, determined for selected stations, above which peak discharge data are published. The base discharge at each station is selected so that an average of about three peak flows per year will be published. (See also "Peak flow")

Base flow is sustained flow of a stream in the absence of direct runoff. It includes natural and human-induced streamflows. Natural base flow is sustained largely by ground-water discharge.

Bedload is material in transport that is supported primarily by the streambed. In this report, bedload is considered to consist of particles in transit from the bed to an elevation equal to the top of the bedload sampler nozzle (ranging from 0.25 to 0.5 foot) that are retained in the bedload sampler. A sample collected with a pressure-differential bedload sampler also may contain a component of the suspended load.

Bedload discharge (tons per day) is the rate of sediment moving as bedload, reported as dry weight, that passes through a cross section in a given time. NOTE: Bedload discharge values in this report may include a component of the suspended-sediment discharge. A correction may be necessary when computing the total sediment discharge by summing the bedload discharge and the suspended-sediment discharge. (See also "Bedload," "Dry weight," "Sediment," and "Suspended-sediment discharge")

Bed material is the sediment mixture of which a stream-bed, lake, pond, reservoir, or estuary bottom is composed. (See also "Bedload" and "Sediment")

Benthic organisms are the group of organisms inhabiting the bottom of an aquatic environment. They include a number of types of organisms, such as bacteria, fungi, insect larvae and nymphs, snails, clams, and crayfish. They are useful as indicators of water quality.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as mass per unit area or volume of habitat.

Biomass pigment ratio is an indicator of the total proportion of periphyton that are autotrophic (plants). This is also called the Autotrophic Index.

Blue-green algae (*Cyanophyta*) are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water. Concentrations are expressed as a number of cells per milliliter (cells/mL) of sample. (See also "Phytoplankton")

Bottom material (See "Bed material")

Bulk electrical conductivity is the combined electrical conductivity of all material within a doughnut-shaped volume surrounding an induction probe. Bulk conductivity is affected by different physical and chemical properties of the material including the dissolved solids content of the pore water and lithology and porosity of the rock.

Cells/volume refers to the number of cells of any organism that is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample volume, and are generally reported as cells or units per milliliter (mL) or liter (L).

Cells volume (biovolume) determination is one of several common methods used to estimate biomass of algae in aquatic systems. Cell members of algae are frequently used in aquatic surveys as an indicator of algal production. However, cell numbers alone cannot represent true biomass because of considerable cell-size variation among the algal species. Cell volume (mm^3) is determined by obtaining critical cell measurements or cell dimensions (for example, length, width, height, or radius) for 20 to 50 cells of each important species to obtain an average biovolume per cell. Cells are categorized according to the correspondence of their cellular shape to the nearest geometric solid or combinations of simple solids (for example, spheres, cones, or cylinders). Representative formulae used to compute biovolume are as follows:

$$\text{sphere } 4/3\ \pi r^3 \quad \text{cone } 1/3\ \pi r^2 h \quad \text{cylinder } \pi r^2 h.$$

pi (π) is the ratio of the circumference to the diameter of a circle; pi = 3.14159….

From cell volume, total algal biomass expressed as biovolume (mm^3/mL) is thus determined by multiplying the number of cells of a given species by its average cell volume and then summing these volumes for all species.

Cfs-day (See "Cubic foot per second-day")

Channel bars, as used in this report, are the lowest prominent geomorphic features higher than the channel bed.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with BOD or with carbonaceous organic pollution from sewage or industrial wastes. [See also "Biochemical oxygen demand (BOD)"]

Clostridium perfringens *(C. perfringens)* is a spore-forming bacterium that is common in the feces of human and other warm-blooded animals. Clostridial spores are being used experimentally as an indicator of past fecal contamination and presence of microorganisms that are resistant to disinfection and environmental stresses. (See also "Bacteria")

Coliphages are viruses that infect and replicate in coliform bacteria. They are indicative of sewage contamination of water and of the survival and transport of viruses in the environment.

Color unit is produced by 1 milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Confined aquifer is a term used to describe an aquifer containing water between two relatively impermeable bound-aries. The water level in a well tapping a confined aquifer stands above the top of the confined aquifer and can be higher or lower than the water table that may be present in the material above it. In some cases, the water level can rise above the ground surface, yielding a flowing well.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Continuous-record station is a site where data are collected with sufficient frequency to define daily mean values and variations within a day.

Control designates a feature in the channel that physically affects the water-surface elevation and thereby determines the stage-discharge relation at the gage. This feature may be a constriction of the channel, a bedrock outcrop, a gravel bar, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure, as used in this report, is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of saltwater.

Cubic foot per second (CFS, ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point in 1 second. It is equivalent to approximately 7.48 gallons per second or approximately 449 gallons per minute, or 0.02832 cubic meters per second. The term "second-foot" sometimes is used synonymously with "cubic foot per second" but is now obsolete.

Cubic foot per second-day (CFS-DAY, Cfs-day, $[(ft^3/s)/d]$) is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, 1.98347 acre-feet, 646,317 gallons, or 2,446.6 cubic meters. The daily mean discharges reported in the daily value data tables are numerically equal to the daily volumes in cfs-days, and the totals also represent volumes in cfs-days.

Cubic foot per second per square mile [CFSM, $(ft^3/s)/mi^2$] is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming the runoff is distributed uniformly in time and area. (See also "Annual runoff")

Daily mean suspended-sediment concentration is the time-weighted concentration of suspended sediment passing a stream cross section during a 24-hour day. (See also "Sediment" and "Suspended-sediment concentration")

Daily-record station is a site where data are collected with sufficient frequency to develop a record of one or more data values per day. The frequency of data collection can range from continuous recording to periodic sample or data collection on a daily or near-daily basis.

Data collection platform (DCP) is an electronic instrument that collects, processes, and stores data from various sensors, and transmits the data by satellite data relay, line-of-sight radio, and/or landline telemetry.

Data logger is a microprocessor-based data acquisition system designed specifically to acquire, process, and store data. Data are usually downloaded from onsite data loggers for entry into office data systems.

Datum is a surface or point relative to which measurements of height and/or horizontal position are reported. A vertical datum is a horizontal surface used as the zero point for measurements of gage height, stage, or elevation; a horizontal datum is a reference for positions given in terms of latitude-longitude, State Plane coordinates, or UTM coordinates. (See also “Gage datum,” “Land-surface datum,” “National Geodetic Vertical Datum of 1929,” and “North American Vertical Datum of 1988”)

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample. (See also “Phytoplankton”)

Diel is of or pertaining to a 24-hour period of time; a regular daily cycle.

Discharge, or **flow**, is the rate that matter passes through a cross section of a stream channel or other water body per unit of time. The term commonly refers to the volume of water (including, unless otherwise stated, any sediment or other constituents suspended or dissolved in the water) that passes a cross section in a stream channel, canal, pipeline, etc., within a given period of time (cubic feet per second). Discharge also can apply to the rate at which constituents, such as suspended sediment, bedload, and dissolved or suspended chemicals, pass through a cross section, in which cases the quantity is expressed as the mass of constituent that passes the cross section in a given period of time (tons per day).

Dissolved refers to that material in a representative water sample that passes through a 0.45-micrometer membrane filter. This is a convenient operational definition used by Federal and State agencies that collect water-quality data. Determinations of “dissolved” constituent concentrations are made on sample water that has been filtered.

Dissolved oxygen (DO) is the molecular oxygen (oxygen gas) dissolved in water. The concentration in water is a function of atmospheric pressure, temperature, and dissolved-solids concentration of the water. The ability of water to retain oxygen decreases with increasing temperature or dissolved-solids concentration. Photosynthesis and respiration by plants commonly cause diurnal variations in dissolved-oxygen concentration in water from some streams.

Dissolved-solids concentration in water is the quantity of dissolved material in a sample of water. It is determined either analytically by the “residue-on-evaporation” method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. In the mathematical calculation, the bicarbonate value, in milligrams per liter, is multiplied by 0.4926 to convert it to carbonate. Alternatively, alkalinity concentration (as mg/L $CaCO_3$) can be converted to carbonate concentration by multiplying by 0.60.

Diversity index (H) (Shannon index) is a numerical expression of evenness of distribution of aquatic organisms. The formula for diversity index is:

$$\bar{d} = -\sum_{i \approx 1}^{s} \frac{n_i}{n} \log_2 \frac{n_i}{n} ,$$

where n_i is the number of individuals per taxon, n is the total number of individuals, and s is the total number of taxa in the sample of the community. Index values range from zero, when all the organisms in the sample are the same, to some positive number, when some or all of the organisms in the sample are different.

Drainage area of a stream at a specific location is that area upstream from the location, measured in a horizontal plane, that has a common outlet at the site for its surface runoff from precipitation that normally drains by gravity into a stream. Drainage areas given herein include all closed basins, or noncontributing areas, within the area unless otherwise specified.

Drainage basin is a part of the Earth’s surface that contains a drainage system with a common outlet for its surface runoff. (See “Drainage area”)

Dry mass refers to the mass of residue present after drying in an oven at 105 ×C, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry-mass values are expressed in the same units as ash mass. (See also “Ash mass,” “Biomass,” and “Wet mass”)

Dry weight refers to the weight of animal tissue after it has been dried in an oven at 65 °C until a constant weight is achieved. Dry weight represents total organic and inorganic matter in the tissue. (See also “Wet weight”)

Embeddedness is the degree to which gravel-sized and larger particles are surrounded or enclosed by finer-sized particles. (See also “Substrate embeddedness class”)

Enterococcus bacteria are commonly found in the feces of humans and other warmblooded animals. Although some strains are ubiquitous and not related to fecal pollution, the presence of enterococci in water is an indication of fecal pollution and the possible presence of enteric pathogens. Enterococcus bacteria are those bacteria that produce pink to red colonies with black or reddish-brown precipitate after incubation at 41 ×C on mE agar (nutrient medium for bacterial growth) and subsequent transfer to EIA medium. Enterococci include *Streptococcus feacalis, Streptococcus feacium, Streptococcus avium,* and their variants. (See also “Bacteria”)

EPT Index is the total number of distinct taxa within the insect orders Ephemeroptera, Plecoptera, and Trichoptera. This index summarizes the taxa richness within the aquatic insects that are generally considered pollution sensitive; the index usually decreases with pollution.

Escherichia coli *(E. coli)* are bacteria present in the intestine and feces of warmblooded animals. *E. coli* are a member species of the fecal coliform group of indicator bacteria. In the laboratory, they are defined as those bacteria that produce yellow or yellow-brown colonies on a filter pad saturated with urea substrate broth after primary culturing for 22 to 24 hours at 44.5 °C on mTEC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also “Bacteria”)

Estimated (E) concentration value is reported when an analyte is detected and all criteria for a positive result are met. If the concentration is less than the method detection limit (MDL), an 'E' code will be reported with the value. If the analyte is qualitatively identified as present, but the quantitative determination is substantially more uncertain, the National Water Quality Laboratory will identify the result with an 'E' code even though the measured value is greater than the MDL. A value reported with an 'E' code should be used with caution. When no analyte is detected in a sample, the default reporting value is the MDL preceded by a less than sign (<).

Euglenoids (*Euglenophyta*) are a group of algae that are usually free-swimming and rarely creeping. They have the ability to grow either photosynthetically in the light or heterotrophically in the dark. (See also "Phytoplankton")

Extractable organic halides (EOX) are organic compounds that contain halogen atoms such as chlorine. These organic compounds are semivolatile and extractable by ethyl acetate from air-dried streambed sediment. The ethyl acetate extract is combusted, and the concentration is determined by microcoulometric determination of the halides formed. The concentration is reported as micrograms of chlorine per gram of the dry weight of the streambed sediment.

Fecal coliform bacteria are present in the intestines or feces of warmblooded animals. They often are used as indicators of the sanitary quality of the water. In the laboratory, they are defined as all organisms that produce blue colonies within 24 hours when incubated at 44.5 ×C plus or minus 0.2 ×C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also "Bacteria")

Fecal streptococcal bacteria are present in the intestines of warmblooded animals and are ubiquitous in the environment. They are characterized as gram-positive, cocci bacteria that are capable of growth in brain-heart infusion broth. In the laboratory, they are defined as all the organisms that produce red or pink colonies within 48 hours at 35 ×C plus or minus 1.0 ×C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also "Bacteria")

Fire algae (*Pyrrhophyta*) are free-swimming unicells characterized by a red pigment spot. (See also "Phytoplankton")

Flow-duration percentiles are values on a scale of 100 that indicate the percentage of time for which a flow is not exceeded. For example, the 90th percentile of river flow is greater than or equal to 90 percent of all recorded flow rates.

Gage datum is a horizontal surface used as a zero point for measurement of stage or gage height. This surface usually is located slightly below the lowest point of the stream bottom such that the gage height is usually slightly greater than the maximum depth of water. Because the gage datum itself is not an actual physical object, the datum usually is defined by specifying the elevations of permanent reference marks such as bridge abutments and survey monuments, and the gage is set to agree with the reference marks. Gage datum is a local datum that is maintained independently of any national geodetic datum. However, if the elevation of the gage datum relative to the national datum (North American Vertical Datum of 1988 or National Geodetic Vertical Datum of 1929) has been determined, then the gage readings can be converted to elevations above the national datum by adding the elevation of the gage datum to the gage reading.

Gage height (G.H.) is the water-surface elevation, in feet above the gage datum. If the water surface is below the gage datum, the gage height is negative. Gage height often is used interchangeably with the more general term "stage," although gage height is more appropriate when used in reference to a reading on a gage.

Gage values are values that are recorded, transmitted, and/or computed from a gaging station. Gage values typically are collected at 5-, 15-, or 30-minute intervals.

Gaging station is a site on a stream, canal, lake, or reservoir where systematic observations of stage, discharge, or other hydrologic data are obtained.

Gas chromatography/flame ionization detector (GC/FID) is a laboratory analytical method used as a screening technique for semivolatile organic compounds that are extractable from water in methylene chloride.

Geomorphic channel units, as used in this report, are fluvial geomorphic descriptors of channel shape and stream velocity. Pools, riffles, and runs are types of geomorphic channel units considered for National Water-Quality Assessment (NAWQA) Program habitat sampling.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algae mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample. (See also "Phytoplankton")

Habitat, as used in this report, includes all nonliving (physical) aspects of the aquatic ecosystem, although living components like aquatic macrophytes and riparian vegetation also are usually included. Measurements of habitat are typically made over a wider geographic scale than are measurements of species distribution.

Habitat quality index is the qualitative description (level 1) of instream habitat and riparian conditions surrounding the reach sampled. Scores range from 0 to 100 percent with higher scores indicative of desirable habitat conditions for aquatic life. Index only applicable to wadable streams.

Hardness of water is a physical-chemical characteristic that commonly is recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations (primarily calcium and magnesium) and is expressed as the equivalent concentration of calcium carbonate ($CaCO_3$).

High tide is the maximum height reached by each rising tide. The high-high and low-high tides are the higher and lower of the two high tides, respectively, of each tidal day. *See NOAA web site: http://www.co-ops.nos.noaa.gov/tideglos.html*

Hilsenhoff's Biotic Index (HBI) is an indicator of organic pollution that uses tolerance values to weight taxa abundances; usually increases with pollution. It is calculated as follows:

$$HBI = sum\frac{(n)(a)}{N},$$

where n is the number of individuals of each taxon, a is the tolerance value of each taxon, and N is the total number of organisms in the sample.

Horizontal datum (See "Datum")

Hydrologic index stations referred to in this report are continuous-record gaging stations that have been selected as representative of streamflow patterns for their respective regions. Station locations are shown on index maps.

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as defined by the former Office of Water Data Coordination and delineated on the State Hydrologic Unit Maps by the USGS. Each hydrologic unit is identified by an 8-digit number.

Inch (IN., in.), as used in this report, refers to the depth to which the drainage area would be covered with water if all of the runoff for a given time period were uniformly distributed on it. (See also "Annual runoff")

Instantaneous discharge is the discharge at a particular instant of time. (See also "Discharge")

Island, as used in this report, is a mid-channel bar that has permanent woody vegetation, is flooded once a year on average, and remains stable except during large flood events.

Laboratory reporting level (LRL) is generally equal to twice the yearly determined long-term method detection level (LT-MDL). The LRL controls false negative error. The probability of falsely reporting a nondetection for a sample that contained an analyte at a concentration equal to or greater than the LRL is predicted to be less than or equal to 1 percent. The value of the LRL will be reported with a "less than" (<) remark code for samples in which the analyte was not detected. The National Water Quality Laboratory (NWQL) collects quality-control data from selected analytical methods on a continuing basis to determine LT-MDLs and to establish LRLs. These values are reevaluated annually on the basis of the most current quality-control data and, therefore, may change. [Note: In several previous NWQL documents (NWQL Technical Memorandum 98.07, 1998), the LRL was called the nondetection value or NDV—a term that is no longer used.]

Land-surface datum (lsd) is a datum plane that is approximately at land surface at each ground-water observation well.

Latent heat flux (often used interchangeably with latent heat-flux density) is the amount of heat energy that converts water from liquid to vapor (evaporation) or from vapor to liquid (condensation) across a specified cross-sectional area per unit time. Usually expressed in watts per square meter.

Light-attenuation coefficient, also known as the extinction coefficient, is a measure of water clarity. Light is attenuated according to the Lambert-Beer equation:

$$I = I_o e^{-\lambda L} \quad ,$$

where I_o is the source light intensity, I is the light intensity at length L (in meters) from the source, l is the light-attenuation coefficient, and e is the base of the natural logarithm. The light-attenuation coefficient is defined as

$$\lambda = -\frac{1}{L}\log_e \frac{I}{I_o} \quad .$$

Lipid is any one of a family of compounds that are insoluble in water and that make up one of the principal components of living cells. Lipids include fats, oils, waxes, and steroids. Many environmental contaminants such as organochlorine pesticides are lipophilic.

Long-term method detection level (LT-MDL) is a detection level derived by determining the standard deviation of a minimum of 24 method detection limit (MDL) spike sample measurements over an extended period of time. LT-MDL data are collected on a continuous basis to assess year-to-year variations in the LT-MDL. The LT-MDL controls false positive error. The chance of falsely reporting a concentration at or greater than the LT-MDL for a sample that did not contain the analyte is predicted to be less than or equal to 1 percent.

Low tide is the minimum height reached by each falling tide. The high-low and low-low tides are the higher and lower of the two low tides, respectively, of each tidal day. *See NOAA web site: http://www.co-ops.nos.noaa.gov/tideglos.html*

Macrophytes are the macroscopic plants in the aquatic environment. The most common macrophytes are the rooted vascular plants that usually are arranged in zones in aquatic ecosystems and restricted in the area by the extent of illumination through the water and sediment deposition along the shoreline.

Mean concentration of suspended sediment (Daily mean suspended-sediment concentration) is the time-weighted concentration of suspended sediment passing a stream cross section during a given time period. (See also "Daily mean suspended-sediment concentration" and "Suspended-sediment concentration")

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period. (See also "Discharge")

Mean high or **low tide** is the average of all high or low tides, respectively, over a specific period.

Mean sea level is a local tidal datum. It is the arithmetic mean of hourly heights observed over the National Tidal Datum Epoch. Shorter series are specified in the name; for example, monthly mean sea level and yearly mean sea level. In order that they may be recovered when needed, such datums are referenced to fixed points known as benchmarks. (See also "Datum")

Measuring point (MP) is an arbitrary permanent reference point from which the distance to water surface in a well is measured to obtain water level.

Membrane filter is a thin microporous material of specific pore size used to filter bacteria, algae, and other very small particles from water.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This developmental process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-adult or egg-nymph-adult.

Method detection limit (MDL) is the minimum concentration of a substance that can be measured and reported with 99-percent confidence that the analyte concentration is greater than zero. It is determined from the analysis of a sample in a given matrix containing the analyte. At the MDL concentration, the risk of a false positive is predicted to be less than or equal to 1 percent.

Methylene blue active substances (MBAS) are apparent detergents. The determination depends on the formation of a blue color when methylene blue dye reacts with synthetic anionic detergent compounds.

Micrograms per gram (UG/G, mg/g) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the element per unit mass (gram) of material analyzed.

Micrograms per kilogram (UG/KG, mg/kg) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the constituent per unit mass (kilogram) of the material analyzed. One microgram per kilogram is equivalent to 1 part per billion.

Micrograms per liter (UG/L, mg/L) is a unit expressing the concentration of chemical constituents in water as mass (micrograms) of constituent per unit volume (liter) of water. One thousand micrograms per liter is equivalent to 1 milligram per liter. One microgram per liter is equivalent to 1 part per billion.

Microsiemens per centimeter (US/CM, mS/cm) is a unit expressing the amount of electrical conductivity of a solution as measured between opposite faces of a centimeter cube of solution at a specified temperature. Siemens is the International System of Units nomenclature. It is synonymous with mhos and is the reciprocal of resistance in ohms.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in water as the mass (milligrams) of constituent per unit volume (liter) of water. Concentration of suspended sediment also is expressed in milligrams per liter and is based on the mass of dry sediment per liter of water-sediment mixture.

Minimum reporting level (MRL) is the smallest measured concentration of a constituent that may be reliably reported by using a given analytical method.

Miscellaneous site, miscellaneous station, or miscellaneous sampling site is a site where streamflow, sediment, and/or water-quality data or water-quality or sediment samples are collected once, or more often on a random or discontinuous basis to provide better areal coverage for defining hydrologic and water-quality conditions over a broad area in a river basin.

Most probable number (MPN) is an index of the number of coliform bacteria that, more probably than any other number, would give the results shown by the laboratory examination; it is not an actual enumeration. MPN is determined from the distribution of gas-positive cultures among multiple inoculated tubes.

Multiple-plate samplers are artificial substrates of known surface area used for obtaining benthic invertebrate samples. They consist of a series of spaced, hardboard plates on an eyebolt.

Nanograms per liter (NG/L, ng/L) is a unit expressing the concentration of chemical constituents in solution as mass (nanograms) of solute per unit volume (liter) of water. One million nanograms per liter is equivalent to 1 milligram per liter.

National Geodetic Vertical Datum of 1929 (NGVD of 1929) is a fixed reference adopted as a standard geodetic datum for elevations determined by leveling. It was formerly called “Sea Level Datum of 1929” or “mean sea level.” Although the datum was derived from the mean sea level at 26 tide stations**,** it does not necessarily represent local mean sea level at any particular place. *See NOAA web site: http://www.ngs.noaa.gov/faq.shtml#WhatVD29VD88* (See “North American Vertical Datum of 1988”)

Natural substrate refers to any naturally occurring immersed or submersed solid surface, such as a rock or tree, upon which an organism lives. (See also “Substrate”)

Nekton are the consumers in the aquatic environment and consist of large free-swimming organisms that are capable of sustained, directed mobility.

Nephelometric turbidity unit (NTU) is the measurement for reporting turbidity that is based on use of a standard suspension of formazin. Turbidity measured in NTU uses nephelometric methods that depend on passing specific light of a specific wavelength through the sample.

North American Vertical Datum of 1988 (NAVD 1988) is a fixed reference adopted as the official civilian vertical datum for elevations determined by Federal surveying and mapping activities in the United States. This datum was established in 1991 by minimum-constraint adjustment of the Canadian**,** Mexican, and United States first-order terrestrial leveling networks.

Open or **screened interval** is the length of unscreened opening or of well screen through which water enters a well, in feet below land surface.

Organic carbon (OC) is a measure of organic matter present in aqueous solution, suspension, or bottom sediment. May be reported as dissolved organic carbon (DOC), particulate organic carbon (POC), or total organic carbon (TOC).

Organic mass or **volatile mass** of a living substance is the difference between the dry mass and ash mass and represents the actual mass of the living matter. Organic mass is expressed in the same units as for ash mass and dry mass. (See also “Ash mass,” “Biomass,” and “Dry mass”)

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meter (m^2), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliter (mL) or liter (L). Numbers of planktonic organisms can be expressed in these terms.

Organochlorine compounds are any chemicals that contain carbon and chlorine. Organochlorine compounds that are important in investigations of water, sediment, and biological quality include certain pesticides and industrial compounds.

Parameter code is a 5-digit number used in the USGS computerized data system, National Water Information System (NWIS), to uniquely identify a specific constituent or property.

Partial-record station is a site where discrete measurements of one or more hydrologic parameters are obtained over a period of time without continuous data being recorded or computed. A common example is a crest-stage gage partial-record station at which only peak stages and flows are recorded.

Particle size is the diameter, in millimeters (mm), of a particle determined by sieve or sedimentation methods. The sedimentation method utilizes the principle of Stokes law to calculate sediment particle sizes. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube, sedigraph) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification, as used in this report, agrees with the recommendation made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay	>0.00024 - 0.004	Sedimentation
Silt	>0.004 - 0.062	Sedimentation
Sand	>0.062 - 2.0	Sedimentation/sieve
Gravel	>2.0 - 64.0	Sieve
Cobble	>64 - 256	Manual measurement
Boulder	>256	Manual measurement

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. For the sedimentation method, most of the organic matter is removed, and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native water analysis.

Peak flow (peak stage) is an instantaneous local maximum value in the continuous time series of streamflows or stages, preceded by a period of increasing values and followed by a period of decreasing values. Several peak values ordinarily occur in a year. The maximum peak value in a year is called the annual peak; peaks lower than the annual peak are called secondary peaks. Occasionally, the annual peak may not be the maximum value for the year; in such cases, the maximum value occurs at midnight at the beginning or end of the year, on the recession from or rise toward a higher peak in the adjoining year. If values are recorded at a discrete series of times, the peak recorded value may be taken as an approximation of the true peak, which may occur between the recording instants. If the values are recorded with finite precision, a sequence of equal recorded values may occur at the peak; in this case, the first value is taken as the peak.

Percent composition or **percent of total** is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, weight, mass, or volume.

Percent shading is a measure of the amount of sunlight potentially reaching the stream. A clinometer is used to measure left and right bank canopy angles. These values are added together, divided by 180, and multiplied by 100 to compute percentage of shade.

Periodic-record station is a site where stage, discharge, sediment, chemical, physical, or other hydrologic measurements are made one or more times during a year but at a frequency insufficient to develop a daily record.

Periphyton is the assemblage of microorganisms attached to and living upon submerged solid surfaces. Although primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton are useful indicators of water quality.

Pesticides are chemical compounds used to control undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides.

pH of water is the negative logarithm of the hydrogen-ion activity. Solutions with pH less than 7.0 standard units are termed “acidic,” and solutions with a pH greater than 7.0 are termed “basic.” Solutions with a pH of 7.0 are neutral. The presence and concentration of many dissolved chemical constituents found in water are affected, in part, by the hydrogen-ion activity of water. Biological processes including growth, distribution of organisms, and toxicity of the water to organisms also are affected, in part, by the hydrogen-ion activity of water.

Phytoplankton is the plant part of the plankton. They are usually microscopic, and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment and commonly are known as algae. (See also “Plankton”)

Picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactive nuclide represented by a curie (Ci). A curie is the quantity of radioactive nuclide that yields 3.7×10^{10} radioactive disintegrations per second (dps). A picocurie yields 0.037 dps, or 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers. Concentrations are expressed as a number of cells per milliliter (cells/mL) of sample.

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Polychlorinated naphthalenes (PCNs) are industrial chemicals that are mixtures of chlorinated naphthalene compounds. They have properties and applications similar to polychlorinated biphenyls (PCBs) and have been identified in commercial PCB preparations.

Pool, as used in this report, is a small part of a stream reach with little velocity, commonly with water deeper than surrounding areas.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photo-synthetic and chemosynthetic activity of producer organisms (chiefly, green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated (carbon method) by the plants.

Primary productivity (carbon method) is expressed as milligrams of carbon per area per unit time [mg C/(m^2/time)] for periphyton and macrophytes or per volume [mg C/(m^3/time)] for phytoplankton. The carbon method defines the amount of carbon dioxide consumed as measured by radioactive carbon (carbon-14). The carbon-14 method is of greater sensitivity than the oxygen light and dark bottle method and is preferred for use with unenriched water samples. Unit time may be either the hour or day, depending on the incubation period. (See also “Primary productivity”)

Primary productivity (oxygen method) is expressed as milligrams of oxygen per area per unit time [mg O/(m^2/time)] for periphyton and macrophytes or per volume [mg O/(m^3/time)] for phytoplankton. The oxygen method defines production and respiration rates as estimated from changes in the measured dissolved-oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period. (See also “Primary productivity”)

Radioisotopes are isotopic forms of elements that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus; for example, ordinary chlorine is a mixture of isotopes having atomic weights of 35 and 37, and the natural mixture has an atomic weight of about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron. There are 275 isotopes of the 81 stable elements, in addition to more than 800 radioactive isotopes.

Reach, as used in this report, is a length of stream that is chosen to represent a uniform set of physical, chemical, and biological conditions within a segment. It is the principal sampling unit for collecting physical, chemical, and biological data.

Recoverable from bed (bottom) material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results. (See also “Bed material”)

Recurrence interval, also referred to as return period, is the average time, usually expressed in years, between occurrences of hydrologic events of a specified type (such as exceedances of a specified high flow or nonexceedance of a specified low flow). The terms “return period” and “recurrence interval” do not imply regular cyclic occurrence. The actual times between occurrences vary randomly, with most of the times being less than the average and a few being substantially greater than the average. For example, the 100-year flood is the flow rate that is exceeded by the annual maximum peak flow at intervals whose average length is 100 years (that is, once in 100 years, on average); almost two-thirds of all exceedances of the 100-year flood occur less than 100 years after the previous exceedance, half occur less than 70 years after the previous exceedance, and about one-eighth occur more than 200 years after the previous exceedance. Similarly, the 7-day, 10-year low flow ($7Q_{10}$) is the flow rate below which the annual minimum 7-day-mean flow dips at intervals whose average length is 10 years (that is, once in 10 years, on average); almost two-thirds of the nonexceedances of the $7Q_{10}$ occur less than 10 years after the previous nonexceedance, half occur less than 7 years after, and about one-eighth occur more than 20 years after the previous nonexceedance. The recurrence interval for annual events is the reciprocal of the annual probability of occurrence. Thus, the 100-year flood has a 1-percent chance of being exceeded by the maximum peak flow in any year, and there is a 10-percent chance in any year that the annual minimum 7-day-mean flow will be less than the $7Q_{10}$.

Replicate samples are a group of samples collected in a manner such that the samples are thought to be essentially identical in composition.

Return period (See “Recurrence interval”)

Riffle, as used in this report, is a shallow part of the stream where water flows swiftly over completely or partially submerged obstructions to produce surface agitation.

River mileage is the curvilinear distance, in miles, measured upstream from the mouth along the meandering path of a stream channel in accordance with Bulletin No. 14 (October 1968) of the Water Resources Council and typically is used to denote location along a river.

Run, as used in this report, is a relatively shallow part of a stream with moderate velocity and little or no surface turbulence.

Runoff is the quantity of water that is discharged (“runs off”) from a drainage basin during a given time period. Runoff data may be presented as volumes in acre-feet, as mean discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches. (See also “Annual runoff”)

Sea level, as used in this report, refers to one of the two commonly used national vertical datums (NGVD 1929 or NAVD 1988). See separate entries for definitions of these datums.

Sediment is solid material that originates mostly from disintegrated rocks; when transported by, suspended in, or deposited from water, it is referred to as “fluvial sediment.” Sediment includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are affected by environmental and land-use factors. Some major factors are topography, soil characteristics, land cover, and depth and intensity of pre-cipitation.

Sensible heat flux (often used interchangeably with latent sensible heat-flux density) is the amount of heat energy that moves by turbulent transport through the air across a specified cross-sectional area per unit time and goes to heating (cooling) the air. Usually expressed in watts per square meter.

Seven-day, 10-year low flow ($7Q_{10}$) is the discharge below which the annual 7-day minimum flow falls in 1 year out of 10 on the long-term average. The recurrence interval of the $7Q_{10}$ is 10 years; the chance that the annual 7-day minimum flow will be less than the $7Q_{10}$ is 10 percent in any given year. (See also “Annual 7-day minimum” and “Recurrence interval”)

Shelves, as used in this report, are streambank features extending nearly horizontally from the flood plain to the lower limit of persistent woody vegetation.

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions within soil and is an index of sodium or alkali hazard to the soil. Sodium hazard in water is an index that can be used to evaluate the suitability of water for irrigating crops.

Soil heat flux (often used interchangeably with soil heat-flux density) is the amount of heat energy that moves by conduction across a specified cross-sectional area of soil per unit time and goes to heating (or cooling) the soil. Usually expressed in watts per square meter.

Soil-water content is the water lost from the soil upon drying to constant mass at 105 ×C; expressed either as mass of water per unit mass of dry soil or as the volume of water per unit bulk volume of soil.

Specific electrical conductance (conductivity) is a measure of the capacity of water (or other media) to conduct an electrical current. It is expressed in microsiemens per centimeter at 25 ×C. Specific electrical conductance is a function of the types and quantity of dissolved substances in water and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is from 55 to 75 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stable isotope ratio (per MIL) is a unit expressing the ratio of the abundance of two radioactive isotopes. Isotope ratios are used in hydrologic studies to determine the age or source of specific water, to evaluate mixing of different water, as an aid in determining reaction rates, and other chemical or hydrologic processes.

Stage (See "Gage height")

Stage-discharge relation is the relation between the water-surface elevation, termed stage (gage height), and the volume of water flowing in a channel per unit time.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lives.

Substrate embeddedness class is a visual estimate of riffle streambed substrate larger than gravel that is surrounded or covered by fine sediment (<2mm, sand or finer). Below are the class categories expressed as the percentage covered by fine sediment:

0	no gravel or larger substrate	3	26-50 percent
1	> 75 percent	4	5-25 percent
2	51-75 percent	5	< 5 percent

Surface area of a lake is that area (acres) encompassed by the boundary of the lake as shown on USGS topographic maps, or other available maps or photographs. Because surface area changes with lake stage, surface areas listed in this report represent those determined for the stage at the time the maps or photographs were obtained.

Surficial bed material is the upper surface (0.1 to 0.2 foot) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. It is defined operationally as the material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative suspended water-sediment sample that is retained on a 0.45-micrometer membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results. Determinations of "suspended, recoverable" constituents are made either by directly analyzing the suspended mate-rial collected on the filter or, more commonly, by difference, on the basis of determinations of (1) dissolved and (2) total recoverable concentrations of the constituent. (See also "Suspended")

Suspended sediment is the sediment maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid. (See also "Sediment")

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 foot above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L). The analytical technique uses the mass of all of the sediment and the net weight of the water-sediment mixture in a sample to compute the suspended-sediment concentration. (See also "Sediment" and "Suspended sediment")

Suspended-sediment discharge (tons/d) is the rate of sediment transport, as measured by dry mass or volume, that passes a cross section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft^3/s) x 0.0027. (See also "Sediment," "Suspended sediment," and "Suspended-sediment concentration")

Suspended-sediment load is a general term that refers to a given characteristic of the material in suspension that passes a point during a specified period of time. The term needs to be qualified, such as "annual suspended-sediment load" or "sand-size suspended-sediment load," and so on. It is not synonymous with either suspended-sediment discharge or concentration. (See also "Sediment")

Suspended, total is the total amount of a given constituent in the part of a water-sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. Knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total." Determinations of "suspended, total" constituents are made either by directly analyzing portions of the suspended material collected on the filter or, more commonly, by difference, on the basis of determinations of (1) dissolved and (2) total concentrations of the constituent. (See also "Suspended")

Suspended solids, total residue at 105 °C concentration is the concentration of inorganic and organic material retained on a filter, expressed as milligrams of dry material per liter of water (mg/L). An aliquot of the sample is used for this analysis.

Synoptic studies are short-term investigations of specific water-quality conditions during selected seasonal or hydro-logic periods to provide improved spatial resolution for critical water-quality conditions. For the period and conditions sampled, they assess the spatial distribution of selected water-quality conditions in relation to causative factors, such as land use and contaminant sources.

Taxa (Species) richness is the number of species (taxa) present in a defined area or sampling unit.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchial scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, *Hexagenia limbata,* is the following:

Kingdom:	Animal
Phylum:	Arthropoda
Class:	Insecta
Order:	Ephemeroptera
Family:	Ephemeridae
Genus:	*Hexagenia*
Species:	*Hexagenia limbata*

Thalweg is the line formed by connecting points of minimum streambed elevation (deepest part of the channel).

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term "temperature recorder" is used in the table descriptions and refers to any instrument that records temperature whether on a chart, a tape, or any other medium.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water resulting from the mixing of flow proportionally to the duration of the concentration.

Tons per acre-foot (T/acre-ft) is the dry mass (tons) of a constituent per unit volume (acre-foot) of water. It is computed by multiplying the concentration of the constituent, in milligrams per liter, by 0.00136.

Tons per day (T/DAY, tons/d) is a common chemical or sediment discharge unit. It is the quantity of a substance in solution, in suspension, or as bedload that passes a stream section during a 24-hour period. It is equivalent to 2,000 pounds per day, or 0.9072 metric tons per day.

Total is the amount of a given constituent in a representative whole-water (unfiltered) sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determined at least 95 percent of the constituent in the sample.)

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. This group includes coliforms that inhabit the intestine of warmblooded animals and those that inhabit soils. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria that ferment lactose with gas formation within 48 hours at 35 ×C. In the laboratory, these bacteria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35 ×C plus or minus 1.0 ×C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 milliliters of sample. (See also "Bacteria")

Total discharge is the quantity of a given constituent, measured as dry mass or volume, that passes a stream cross section per unit of time. When referring to constituents other than water, this term needs to be qualified, such as "total sediment discharge," "total chloride discharge," and so on.

Total in bottom material is the amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material."

Total length (fish) is the straight-line distance from the anterior point of a fish specimen's snout, with the mouth closed, to the posterior end of the caudal (tail) fin, with the lobes of the caudal fin squeezed together.

Total load refers to all of a constituent in transport. When referring to sediment, it includes suspended load plus bed load.

Total organism count is the number of organisms collected and enumerated in any particular sample. (See also "Organism count/volume")

Total recoverable is the amount of a given constituent in a whole-water sample after a sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data for whole-water samples, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures may produce different analytical results.

Total sediment discharge is the mass of suspended-sediment plus bed-load transport, measured as dry weight, that passes a cross section in a given time. It is a rate and is reported as tons per day. (See also "Bedload," "Bedload discharge," "Sediment," "Suspended sediment," and "Suspended-sediment concentration")

Total sediment load or **total load** is the sediment in transport as bedload and suspended-sediment load. The term may be qualified, such as "annual suspended-sediment load" or "sand-size suspended-sediment load," and so on. It differs from total sediment discharge in that load refers to the material, whereas discharge refers to the quantity of material, expressed in units of mass per unit time. (See also "Sediment," "Suspended-sediment load," and "Total load")

Transect, as used in this report, is a line across a stream perpendicular to the flow and along which measurements are taken, so that morphological and flow characteristics along the line are described from bank to bank. Unlike a cross section, no attempt is made to determine known elevation points along the line.

Turbidity is the reduction in the transparency of a solution due to the presence of suspended and some dissolved substances. The measurement technique records the collective optical properties of the solution that cause light to be scattered and attenuated rather than transmitted in straight lines; the higher the intensity of scattered or attenuated light, the higher the value of the turbidity. Turbidity is expressed in nephelometric turbidity units (NTU). Depending on the method used, the turbidity units as NTU can be defined as the intensity of light of a specified wavelength scattered or attenuated by suspended particles or absorbed at a method specified angle, usually 90 degrees, from the path of the incident light. Currently approved methods for the measurement of turbidity in the USGS include those that conform to U.S. EPA Method 180.1, ASTM D1889-00, and ISO 7027. Measurements of turbidity by these different methods and different instruments are unlikely to yield equivalent values.

Ultraviolet (UV) absorbance (absorption) at 254 or 280 nanometers is a measure of the aggregate concentration of the mixture of UV absorbing organic materials dissolved in the analyzed water, such as lignin, tannin, humic substances, and various aromatic compounds. UV absorbance (absorption) at 254 or 280 nanometers is measured in UV absorption units per centimeter of pathlength of UV light through a sample.

Unconfined aquifer is an aquifer whose upper surface is a water table free to fluctuate under atmospheric pressure. (See “Water-table aquifer”)

Vertical datum (See “Datum”)

Volatile organic compounds (VOCs) are organic compounds that can be isolated from the water phase of a sample by purging the water sample with inert gas, such as helium, and subsequently analyzed by gas chromatography. Many VOCs are human-made chemicals that are used and produced in the manufacture of paints, adhesives, petroleum products, pharmaceuticals, and refrigerants. They are often components of fuels, solvents, hydraulic fluids, paint thinners, and dry cleaning agents commonly used in urban settings. VOC contamination of drinking-water supplies is a human health concern because many are toxic and are known or suspected human carcinogens.

Water table is that surface in a ground-water body at which the water pressure is equal to the atmospheric pressure.

Water-table aquifer is an unconfined aquifer within which the water table is found.

Water year in USGS reports dealing with surface-water supply is the 12-month period October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 2002, is called the “2002 water year.”

WDR is used as an abbreviation for “Water-Data Report” in the REVISED RECORDS paragraph to refer to State annual hydrologic-data reports. (WRD was used as an abbreviation for “Water-Resources Data” in reports published prior to 1976.)

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

Wet mass is the mass of living matter plus contained water. (See also “Biomass” and “Dry mass”)

Wet weight refers to the weight of animal tissue or other substance including its contained water. (See also “Dry weight”)

WSP is used as an acronym for “Water-Supply Paper” in reference to previously published reports.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column and often are large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers. (See also “Plankton”)

BIBLIOGRAPHY

Selected Recent Water-Related U.S. Geological Survey Reports Relevant to Western New York

Clark, R.N., Green, R.O., Swayze, G.A., Hoefen, T.M., Livo, K.E., Pavi, B., Sarcher, C., Boardman, J. and Vance, J.S., 2001, Images of the World Trade Center site show thermal hot spots on September 16 and 23, 2001: U.S. Geological Survey Open-File Report 01-405.

Clark, Roger, Meeker, Greg, Plumlee, Geoff, and Swayze, Gregg, 2002, USGS environmental studies of the World Trade Center area, New York City, after September 11, 2001: U.S. Geological Survey Fact Sheet 0050-02, 4 p.

Daniels, R.A., Riva-Murray, Karen, Halliwell, D.B., Vana-Miller, D.L., and Bilger, M.D., 2002, An index of biological integrity for northern mid-Atlantic slope drainages: Transactions of the American Fisheries Society, v. 131, p. 1044-1060.

Kappel, W.M., and Landre, B.F., 2000 (revised 2002), Managing the water resources of the Oswego River Basin in central New York: U.S. Geological Survey Fact Sheet 180-99, 6 p.

Komor, S.C., 2002, Ground-water age dating in community wells in Oswego County, New York: U.S. Geological Survey Open-File Report 01-232, 16 p.

Lawrence, G.B., 2002, Persistent episodic acidification of streams linked to acid rain effects on soil: Atmospheric Environment, v. 36, no. 10, p. 1589-1598.

Lumia, D.S., and Linsey, K.S., 2002, New York Water-Use Program and Data, 1995: U.S. Geological Survey Fact Sheet 014-02, 6 p.

Moran, M.J., Lapham, W.W., Rowe, B.L., and Zogorski, J.S., 2002, Occurrence and status of volatile organic compounds in ground water from rural, untreated, self-supplied domestic wells in the United States, 1986-99: U.S. Geological Survey Water-Resources Investigations Report 02-4085, 51 p.

Myers, D.N., Chambers, M.J., Dawson, V.K., and others, 2002, Strategic vision for the U.S. Geological Survey in the Great Lakes-St. Lawrence region, 2001-2010: U.S. Geological Survey Open-File Report 02-193, 16 p.

Myers, D.N., 2002, USGS capabilities for interdisciplinary investigations in coastal and nearshore ecosystems of the Great Lakes: U.S. Geological Survey Fact Sheet 055-02, 6 p.

Pair, D.L. and Kappel, W.M., 2002, Geomorphic studies of landslides in the Tully Valley, New York--Implications for public policy and planning: Geomorphology, v. 47, nos. 2-4, p. 125-135.

Phillips, P.J., Eckhardt, D.A., Freehafer, D.A., Wall, G.R., and Ingleston, H.H., 2002, Regional patterns of pesticide concentrations in surface waters of New York in 1997: Journal of the American Water Resources Association, v. 38, no. 3, p. 731-745.

Riva-Murray, Karen, Bode, R.W., Phillips, P.J., and Wall, G.L., 2001, Impact source determation with biomonitoring data in New York State--concordance with environmental data: Northeastern Naturalist, v. 9, no. 2, p. 127-162.

Robertson, D.M., Saad, D.A., and Wieben, A.M., 2001, An alternative regionalization scheme for defining nutrient criteria for rivers and streams: U.S. Geological Survey Water-Resources Investigations Report 01-4073, 57 p.

Yager, R.M., 2001, Estimating Sedimentation Rates in Cayuga Lake, New York, from Sediment Profiles of CS-137 and PB-210 Activity: Proceedings of a Symposium on Environmental Research in the Cayuga Lake Watershed, October 12, 1999, Cornell University, May 2001, p. 210.

Yager, R.M., [2002], Simulated transport and biodegradation of chlorinated ethenes in a fractured dolomite aquifer near Niagara Falls, New York: U.S. Geological Survey Water-Resources Investigations Report 00-4275, 55 p.

Yager, R M., and Fountain, J.C., 2001, Effect of natural gas exsolution on specific storage in a confined aquifer undergoing water level decline: Journal of Ground Water, v. 39, no. 4, p. 517-525.

TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS OF THE U.S. GEOLOGICAL SURVEY

The USGS publishes a series of manuals titled the "Techniques of Water-Resources Investigations" that describe procedures for planning and conducting specialized work in water-resources investigations. The material in these manuals is grouped under major subject headings called books and is further divided into sections and chapters. For example, section A of book 3 (Applications of Hydraulics) pertains to surface water. Each chapter then is limited to a narrow field of the section subject matter. This publication format permits flexibility when revision or printing is required.

Manuals in the Techniques of Water-Resources Investigations series, which are listed below, are available online at http://water.usgs.gov/pubs/twri/. Printed copies are available for sale from the USGS, Information Services, Box 25286, Federal Center, Denver, Colorado 80225 (an authorized agent of the Superintendent of Documents, Government Printing Office). Please telephone "1-888-ASK-USGS" for current prices, and refer to the title, book number, section number, chapter number, and mention the "U.S. Geological Survey Techniques of Water-Resources Investigations." Other products can be viewed online at http://www.usgs.gov/sales.html, or ordered by telephone or by FAX to (303)236-4693. Order forms for FAX requests are available online at http://mac.usgs.gov/isb/pubs/forms/. Prepayment by major credit card or by a check or money order payable to the "U.S. Geological Survey" is required.

Book 1. Collection of Water Data by Direct Measurement

Section D. Water Quality

1–D1. *Water temperature—Influential factors, field measurement, and data presentation*, by H.H. Stevens, Jr., J.F. Ficke, and G.F. Smoot: USGS–TWRI book 1, chap. D1. 1975. 65 p.

1–D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W.W. Wood: USGS–TWRI book 1, chap. D2. 1976. 24 p.

Book 2. Collection of Environmental Data

Section D. Surface Geophysical Methods

2–D1. *Application of surface geophysics to ground-water investigations,* by A.A.R. Zohdy, G.P. Eaton, and D.R. Mabey: USGS–TWRI book 2, chap. D1. 1974. 116 p.

2–D2. *Application of seismic-refraction techniques to hydrologic studies,* by F.P. Haeni: USGS–TWRI book 2, chap. D2. 1988. 86 p.

Section E. Subsurface Geophysical Methods

2–E1. *Application of borehole geophysics to water-resources investigations,* by W.S. Keys and L.M. MacCary: USGS–TWRI book 2, chap. E1. 1971. 126 p.

2–E2. *Borehole geophysics applied to ground-water investigations,* by W.S. Keys: USGS–TWRI book 2, chap. E2. 1990. 150 p.

Section F. Drilling and Sampling Methods

2–F1. *Application of drilling, coring, and sampling techniques to test holes and wells*, by Eugene Shuter and W.E. Teasdale: USGS–TWRI book 2, chap. F1. 1989. 97 p.

Book 3. Applications of Hydraulics

Section A. Surface-Water Techniques

3–A1. *General field and office procedures for indirect discharge measurements,* by M.A. Benson and Tate Dalrymple: USGS–TWRI book 3, chap. A1. 1967. 30 p.

3–A2. *Measurement of peak discharge by the slope-area method,* by Tate Dalrymple and M.A. Benson: USGS–TWRI book 3, chap. A2. 1967. 12 p.

3–A3. *Measurement of peak discharge at culverts by indirect methods,* by G.L. Bodhaine: USGS–TWRI book 3, chap. A3. 1968. 60 p.

3–A4. *Measurement of peak discharge at width contractions by indirect methods,* by H.F. Matthai: USGS-TWRI book 3, chap. A4. 1967. 44 p.

3–A5. *Measurement of peak discharge at dams by indirect methods,* by Harry Hulsing: USGS–TWRI book 3, chap. A5. 1967. 29 p.

3–A6. *General procedure for gaging streams,* by R.W. Carter and Jacob Davidian: USGS–TWRI book 3, chap. A6. 1968. 13 p.

3–A7. *Stage measurement at gaging stations,* by T.J. Buchanan and W.P. Somers: USGS–TWRI book 3, chap. A7. 1968. 28 p.

3–A8. *Discharge measurements at gaging stations,* by T.J. Buchanan and W.P. Somers: USGS–TWRI book 3, chap. A8. 1969. 65 p.

3–A9. *Measurement of time of travel in streams by dye tracing,* by F.A. Kilpatrick and J.F. Wilson, Jr.: USGS–TWRI book 3, chap. A9. 1989. 27 p.

3–Al0. *Discharge ratings at gaging stations,* by E.J. Kennedy: USGS–TWRI book 3, chap. A10. 1984. 59 p.

3–A11. *Measurement of discharge by the moving-boat method,* by G.F. Smoot and C.E. Novak: USGS–TWRI book 3, chap. A11. 1969. 22 p.

3–A12. *Fluorometric procedures for dye tracing*, Revised, by J.F. Wilson, Jr., E.D. Cobb, and F.A. Kilpatrick: USGS–TWRI book 3, chap. A12. 1986. 34 p.

3–A13. *Computation of continuous records of streamflow*, by E.J. Kennedy: USGS–TWRI book 3, chap. A13. 1983. 53 p.

3–A14. *Use of flumes in measuring discharge,* by F.A. Kilpatrick and V.R. Schneider: USGS–TWRI book 3, chap. A14. 1983. 46 p.

3–A15. *Computation of water-surface profiles in open channels,* by Jacob Davidian: USGS–TWRI book 3, chap. A15. 1984. 48 p.

3–A16. *Measurement of discharge using tracers*, by F.A. Kilpatrick and E.D. Cobb: USGS–TWRI book 3, chap. A16. 1985. 52 p.

3–A17. *Acoustic velocity meter systems,* by Antonius Laenen: USGS–TWRI book 3, chap. A17. 1985. 38 p.

3–A18. *Determination of stream reaeration coefficients by use of tracers,* by F.A. Kilpatrick, R.E. Rathbun, Nobuhiro Yotsukura, G.W. Parker, and L.L. DeLong: USGS–TWRI book 3, chap. A18. 1989. 52 p.

3–A19. *Levels at streamflow gaging stations*, by E.J. Kennedy: USGS–TWRI book 3, chap. A19. 1990. 31 p.

3–A20. *Simulation of soluble waste transport and buildup in surface waters using tracers*, by F.A. Kilpatrick: USGS–TWRI book 3, chap. A20. 1993. 38 p.

3–A21 *Stream-gaging cableways,* by C. Russell Wagner: USGS–TWRI book 3, chap. A21. 1995. 56 p.

Section B. Ground-Water Techniques

3–B1. *Aquifer-test design, observation, and data analysis,* by R.W. Stallman: USGS–TWRI book 3, chap. B1. 1971. 26 p.

3–B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G.D. Bennett: USGS–TWRI book 3, chap. B2. 1976. 172 p.

3–B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J.E. Reed: USGS–TWRI book 3, chap. B3. 1980. 106 p.

3–B4. *Regression modeling of ground-water flow,* by R.L. Cooley and R.L. Naff: USGS–TWRI book 3, chap. B4. 1990. 232 p.

3–B4. *Supplement 1***.** *Regression modeling of ground-water flow—Modifications to the computer code for nonlinear regression solution of steady-state ground-water flow problems,* by R.L. Cooley: USGS–TWRI book 3, chap. B4. 1993. 8 p.

3–B5. *Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems—An introduction*, by O.L. Franke, T.E. Reilly, and G.D. Bennett: USGS–TWRI book 3, chap. B5. 1987. 15 p.

3–B6. *The principle of superposition and its application in ground-water hydraulics,* by T.E. Reilly, O.L. Franke, and G.D. Bennett: USGS–TWRI book 3, chap. B6. 1987. 28 p.

3–B7. *Analytical solutions for one-, two-, and three-dimensional solute transport in ground-water systems with uniform flow,* by E.J. Wexler: USGS–TWRI book 3, chap. B7. 1992. 190 p.

3–B8. *System and boundary conceptualization in ground-water flow simulation,* by T.E. Reilly: USGS–TWRI book 3, chap. B8. 2001. 29 p.

Section C. Sedimentation and Erosion Techniques

3–C1. *Fluvial sediment concepts,* by H.P. Guy: USGS–TWRI book 3, chap. C1. 1970. 55 p.

3–C2. *Field methods for measurement of fluvial sediment*, by T.K. Edwards and G.D. Glysson: USGS–TWRI book 3, chap. C2. 1999. 89 p.

3–C3. *Computation of fluvial-sediment discharge,* by George Porterfield: USGS–TWRI book 3, chap. C3. 1972. 66 p.

Book 4. Hydrologic Analysis and Interpretation

Section A. Statistical Analysis

4–A1. *Some statistical tools in hydrology*, by H.C. Riggs: USGS–TWRI book 4, chap. A1. 1968. 39 p.

4–A2. *Frequency curves,* by H.C. Riggs: USGS–TWRI book 4, chap. A2. 1968. 15 p.

4–A3. *Statistical methods in water resources*, by D.R. Helsel and R.M. Hirsch: USGS–TWRI book 4, chap. A3. 1991. Available only online at http://water.usgs.gov/pubs/twri/twri4a3/. (Accessed August 30, 2002.)

Section B. Surface Water

4–B1. *Low-flow investigations,* by H.C. Riggs: USGS–TWRI book 4, chap. B1. 1972. 18 p.

4–B2. *Storage analyses for water supply*, by H.C. Riggs and C.H. Hardison: USGS–TWRI book 4, chap. B2. 1973. 20 p.

4–B3. *Regional analyses of streamflow characteristics,* by H.C. Riggs: USGS–TWRI book 4, chap. B3. 1973. 15 p.

Section D. Interrelated Phases of the Hydrologic Cycle

4–D1. *Computation of rate and volume of stream depletion by wells*, by C.T. Jenkins: USGS–TWRI book 4, chap. D1. 1970. 17 p.

Book 5. Laboratory Analysis

Section A. Water Analysis

5–A1. *Methods for determination of inorganic substances in water and fluvial sediments,* by M.J. Fishman and L.C. Friedman, editors: USGS–TWRI book 5, chap. A1. 1989. 545 p.

5–A2. *Determination of minor elements in water by emission spectroscopy,* by P.R. Barnett and E.C. Mallory, Jr.: USGS–TWRI book 5, chap. A2. 1971. 31 p.

5–A3. *Methods for the determination of organic substances in water and fluvial sediments*, edited by R.L. Wershaw, M.J. Fishman, R.R. Grabbe, and L.E. Lowe: USGS–TWRI book 5, chap. A3. 1987. 80 p.

5–A4. *Methods for collection and analysis of aquatic biological and microbiological samples,* by L.J. Britton and P.E. Greeson, editors: USGS–TWRI book 5, chap. A4. 1989. 363 p.

5–A5. *Methods for determination of radioactive substances in water and fluvial sediments,* by L.L. Thatcher, V.J. Janzer, and K.W. Edwards: USGS–TWRI book 5, chap. A5. 1977. 95 p.

5–A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sediments,* by L.C. Friedman and D.E. Erdmann: USGS–TWRI book 5, chap. A6. 1982. 181 p.Section C. Sediment Analysis

5–C1. *Laboratory theory and methods for sediment analysis*, by H.P. Guy: USGS–TWRI book 5, chap. C1. 1969. 58 p.

Book 6. Modeling Techniques

Section A. Ground Water

6–A1. *A modular three-dimensional finite-difference ground-water flow model*, by M.G. McDonald and A.W. Harbaugh: USGS–TWRI book 6, chap. A1. 1988. 586 p.

6–A2. *Documentation of a computer program to simulate aquifer-system compaction using the modular finite-difference ground-water flow model,* by S.A. Leake and D.E. Prudic: USGS–TWRI book 6, chap. A2. 1991. 68 p.

6–A3. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 1: Model Description and User's Manual,* by L.J. Torak: USGS–TWRI book 6, chap. A3. 1993. 136 p.

6–A4. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 2: Derivation of finite-element equations and comparisons with analytical solutions,* by R.L. Cooley: USGS–TWRI book 6, chap. A4. 1992. 108 p.

6–A5. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 3: Design philosophy and programming details,* by L.J. Torak: USGS–TWRI book 6, chap. A5. 1993. 243 p.

6–A6. *A coupled surface-water and ground-water flow model (MODBRANCH) for simulation of stream-aquifer interaction*, by Eric D. Swain and Eliezer J. Wexler: USGS–TWRI book 6, chap. A6. 1996. 125 p.

6–A7. *User's guide to SEAWAT: A computer program for simulation of three-dimensional variable-density ground-water flow*, by Weixing Guo and Christian D. Langevin: USGS–TWRI book 6, chap. A7. 2002. 77 p.

Book 7. Automated Data Processing and Computations

Section C. Computer Programs

7–C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments,* by P.C. Trescott, G.F. Pinder, and S.P. Larson: USGS–TWRI book 7, chap. C1. 1976. 116 p.

7–C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L.F. Konikow and J.D. Bredehoeft: USGS–TWRI book 7, chap. C2. 1978. 90 p.

7–C3. *A model for simulation of flow in singular and interconnected channels,* by R.W. Schaffranek, R.A. Baltzer, and D.E. Goldberg: USGS–TWRI book 7, chap. C3. 1981. 110 p.

Book 8. Instrumentation

Section A. Instruments for Measurement of Water Level

8–A1. *Methods of measuring water levels in deep wells,* by M.S. Garber and F.C. Koopman: USGS–TWRI book 8, chap. A1. 1968. 23 p.

8–A2. *Installation and service manual for U.S. Geological Survey manometers*, by J.D. Craig: USGS–TWRI book 8, chap. A2. 1983. 57 p.

Section B. Instruments for Measurement of Discharge

8–B2. *Calibration and maintenance of vertical-axis type current meters,* by G.F. Smoot and C.E. Novak: USGS–TWRI book 8, chap. B2. 1968. 15 p.

Book 9. Handbooks for Water-Resources Investigations

Section A. National Field Manual for the Collection of Water-Quality Data

9–A1. *National field manual for the collection of water-quality data: Preparations for water sampling*, by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A1. 1998. 47 p.

9–A2. *National field manual for the collection of water-quality data: Selection of equipment for water sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A2. 1998. 94 p.

9–A3. *National field manual for the collection of water-quality data: Cleaning of equipment for water sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A3. 1998. 75 p.

9–A4. *National field manual for the collection of water-quality data: Collection of water samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A4. 1999. 156 p.

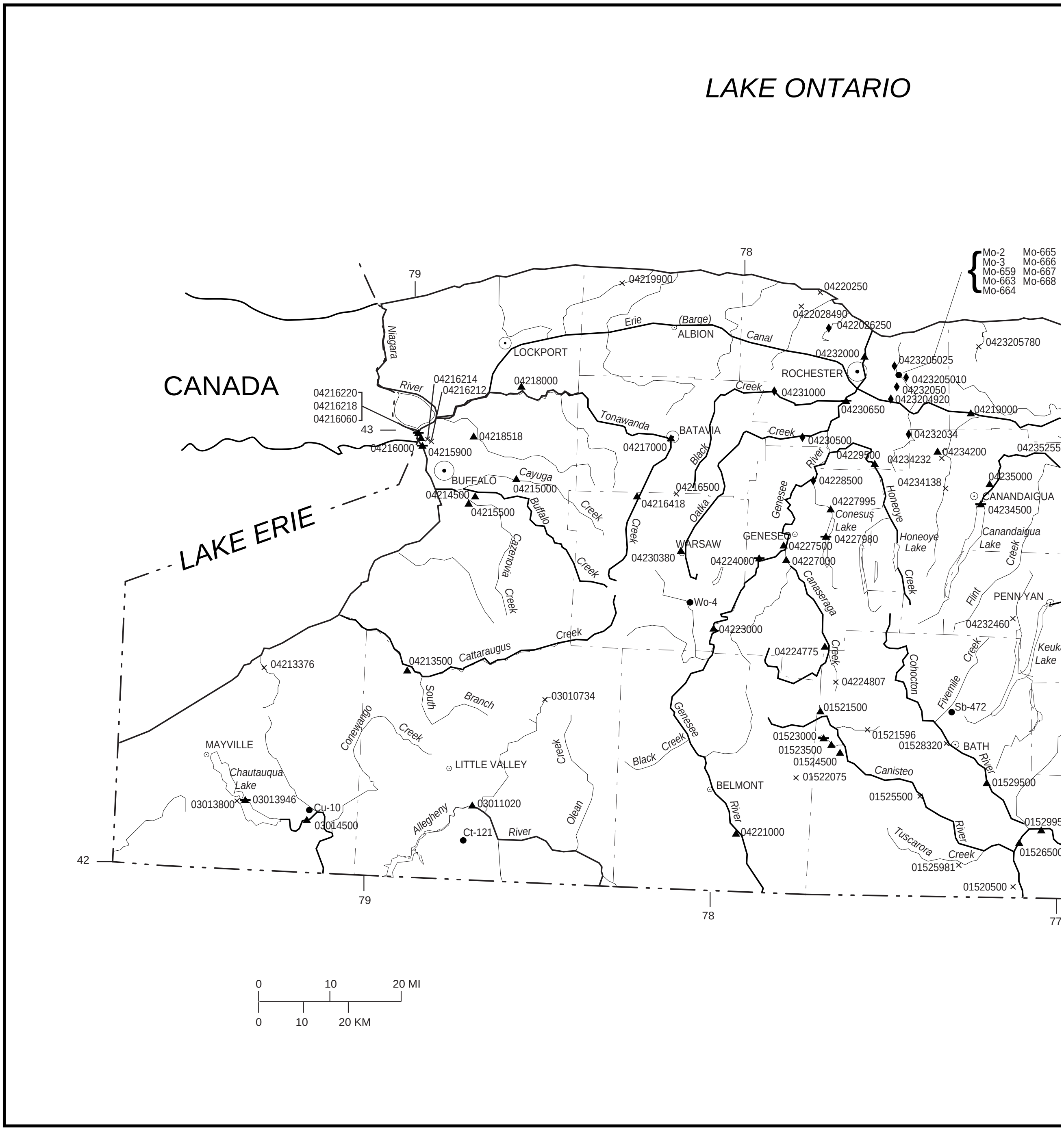
9–A5. *National field manual for the collection of water-quality data: Processing of water samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A5. 1999, 149 p.

9–A6. *National field manual for the collection of water-quality data: Field measurements*, edited by F.D. Wilde and D.B. Radtke: USGS–TWRI book 9, chap. A6. 1998. Variously paginated.

9–A7. *National field manual for the collection of water-quality data: Biological indicators*, edited by D.N. Myers and F.D. Wilde: USGS–TWRI book 9, chap. A7. 1997 and 1999. Variously paginated.

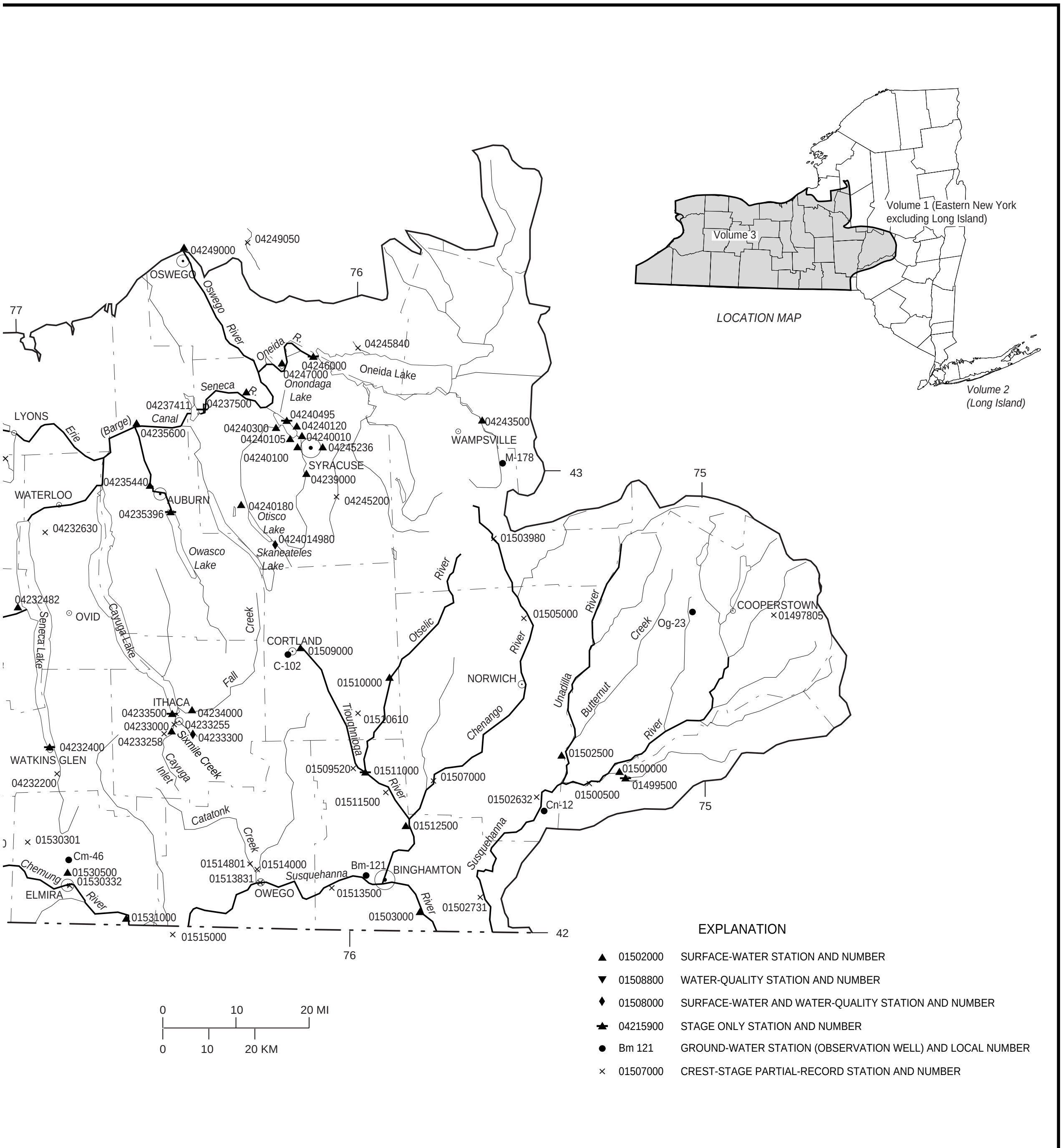
9–A8. *National field manual for the collection of water-quality data: Bottom-material samples*, by D.B. Radtke: USGS–TWRI book 9, chap. A8. 1998. 48 p.

9–A9. *National field manual for the collection of water-quality data: Safety in field activities*, by S.L. Lane and R.G. Fay: USGS–TWRI book 9, chap. A9. 1998. 60 p.

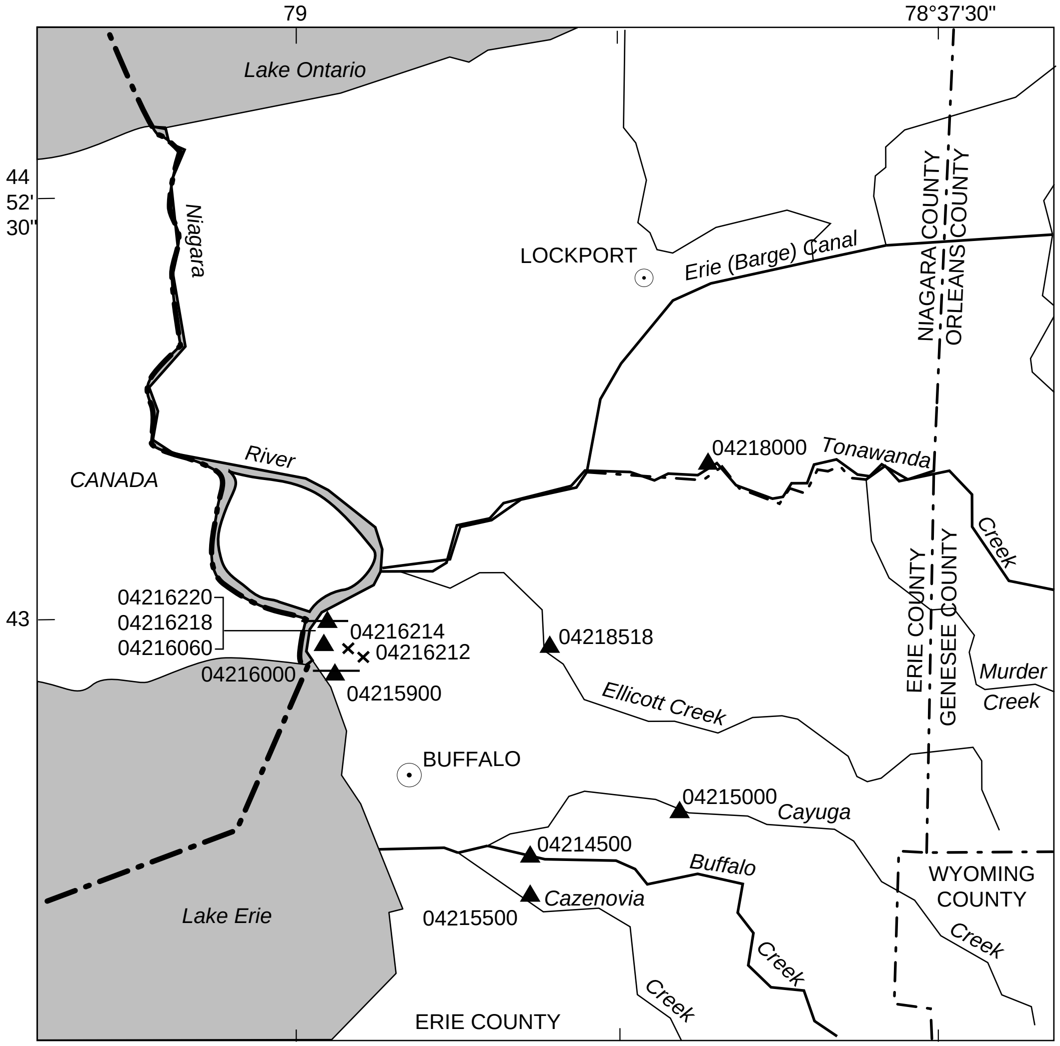


Base from U.S. Geological Survey digital data, 1:2,000,000, 1972.
Albers Equal-Area Conic projection
Standard parallels 29 30' and 45 30', central meridian -96 00'.

FIGURE 5. LOCATION OF GAGING STATIONS AND



OBSERVATION WELLS IN WESTERN NEW YORK



Base from U.S. Geological Survey digital data, 1:2,000,000, 1972.
Albers Equal-Area Conic projection
Standard parallels 29 30' and 45 30', central meridian -96 00'.

EXPLANATION

04215500 SURFACE-WATER STATION AND NUMBER

04215900 STAGE ONLY STATION AND NUMBER

04216214 CREST-STAGE PARTIAL-RECORD STATION AND NUMBER

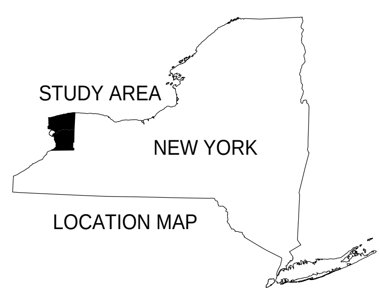


FIGURE 6. LOCATION OF GAGING STATIONS AND OBSERVATION WELLS IN ERIE AND NIAGARA COUNTIES, NY.

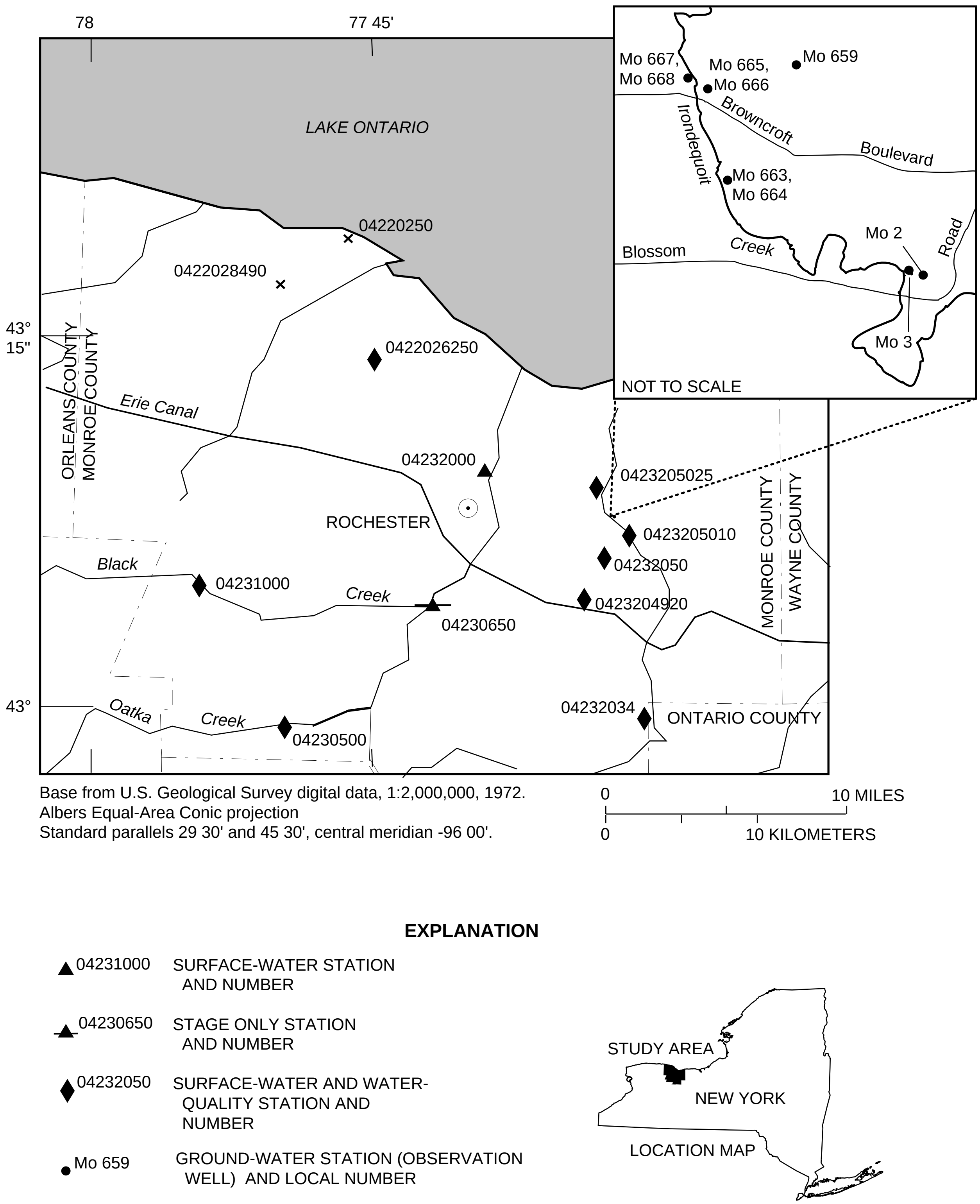
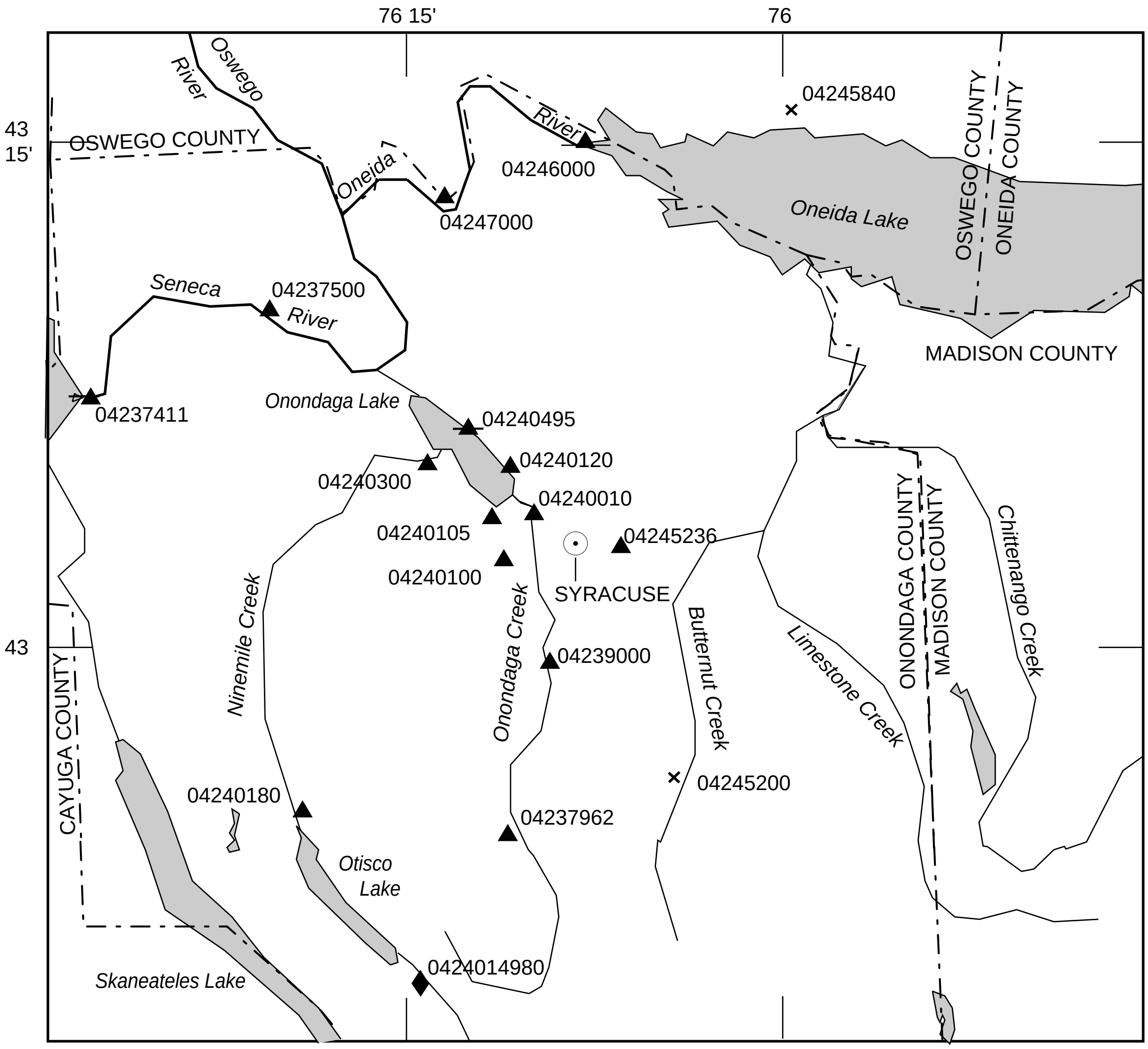


FIGURE 7 . LOCATION OF GAGING STATIONS AND OBSERVATION WELLS IN MONROE COUNTY, NY.



Base from U.S. Geological Survey digital data, 1:2,000,000, 1972.
Albers Equal-Area Conic projection
Standard parallels 29 30' and 45 30', central meridian -96 00'.

0 5 MILES
0 5 KILOMETERS

EXPLANATION

▲ 04245200 SURFACE-WATER STATION AND NUMBER

04240495 STAGE ONLY STATION AND NUMBER

× 04245840 CREST-STAGE PARTIAL-RECORD STATION AND NUMBER

◆ 0424014980 SURFACE-WATER AND WATER-QUALITY STATION AND NUMBER

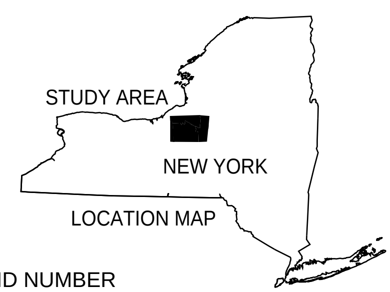


FIGURE 8. LOCATION OF GAGING STATIONS AND OBSERVATION WELLS IN ONONDAGA COUNTY, NY.

THIS IS A BLANK PAGE

01500000 OULEOUT CREEK AT EAST SIDNEY, NY

LOCATION.--Lat 42°20'00", long 75°14'07", Delaware County, Hydrologic Unit 02050101, on right bank 0.2 mi downstream from bridge on County Highway 44, 0.4 mi downstream from East Sidney Dam, at East Sidney, and 3.5 mi upstream from mouth.
DRAINAGE AREA.--103 mi^2.
PERIOD OF RECORD.--August 1940 to current year.
REVISED RECORDS.--WSP 2103: Drainage area.
GAGE.--Water-stage recorder. Datum of gage is 1,086.23 ft above NGVD of 1929. Prior to June 13, 1947, water-stage recorder at site 0.5 mi upstream at datum 27.30 ft higher.
REMARKS.--Records good except those for estimated daily discharges, which are fair. Since November 1949, flow regulated by East Sidney Lake (see station 01499500). Satellite gage-height telemeter at station. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,250 ft^3/s, Dec. 30, 1942, gage height, 7.62 ft, site and datum then in use, from rating curve extended above 4,000 ft^3/s; minimum daily discharge, 1.2 cfs, gage height, 0.32 ft, Aug. 13, 14, 17, 1949, result of construction, minimum instantaneous discharge not determined. Maximum discharge since construction of East Sidney Reservoir in 1950, 4,000 ft^3/s, Apr. 7, 1960, gage height, 6.19 ft.
EXTREMES OUTSIDE PERIOD OF RECORD.--A discharge of 16,700 ft^3/s, in July 1935, was determined by computation of flow over dam and from floodmarks.
EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,970 ft^3/s, Mar. 29, gage height, 4.64 ft; minimum discharge, 6.9 ft^3/s, Aug. 13, gage height, 0.95 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	16	31	33	620	133	512	421	295	156	23	16
2	13	14	46	23	629	133	476	370	248	123	23	16
3	13	13	53	28	478	118	328	308	192	76	24	16
4	13	13	60	32	438	147	298	256	179	67	25	16
5	13	13	65	32	311	139	253	204	180	67	25	16
6	14	13	e65	32	237	138	225	143	310	47	20	16
7	14	13	e63	32	176	139	208	141	410	37	13	16
8	14	13	54	47	171	138	163	162	1040	37	13	16
9	15	13	56	55	179	121	152	164	711	37	13	16
10	14	13	59	41	179	113	156	185	413	48	13	16
11	13	13	59	34	664	114	176	170	256	42	13	16
12	12	13	58	34	640	130	182	194	239	38	13	16
13	12	13	57	34	421	137	145	281	204	29	13	16
14	12	13	57	34	338	137	130	635	192	25	14	15
15	13	13	57	33	308	119	137	707	227	25	14	15
16	13	13	56	33	265	111	132	485	500	25	14	15
17	13	13	48	33	219	111	93	466	540	16	14	15
18	13	13	97	33	189	111	97	649	363	13	14	15
19	13	13	151	33	161	111	86	742	267	22	14	15
20	13	13	132	33	151	111	81	461	204	30	15	15
21	13	13	114	33	186	111	83	382	188	26	15	15
22	13	13	98	33	218	124	84	365	144	26	15	44
23	13	13	76	33	194	144	84	297	369	15	15	230
24	14	13	67	66	160	144	83	224	274	11	15	124
25	15	13	68	194	141	144	81	211	156	19	15	53
26	15	13	69	218	130	355	117	173	219	23	16	35
27	15	14	66	195	133	393	129	155	402	23	16	82
28	15	21	51	201	133	708	129	797	186	18	16	81
29	15	26	47	208	---	1700	296	893	121	15	16	70
30	15	24	47	533	---	1510	407	529	145	21	16	69
31	15	---	47	577	---	731	---	353	---	23	16	---
TOTAL	419	427	2074	2980	8069	8575	5523	11523	9174	1180	501	1116
MEAN	13.5	14.2	66.9	96.1	288	277	184	372	306	38.1	16.2	37.2
MAX	15	26	151	577	664	1700	512	893	1040	156	25	230
MIN	11	13	31	23	130	111	81	141	121	11	13	15

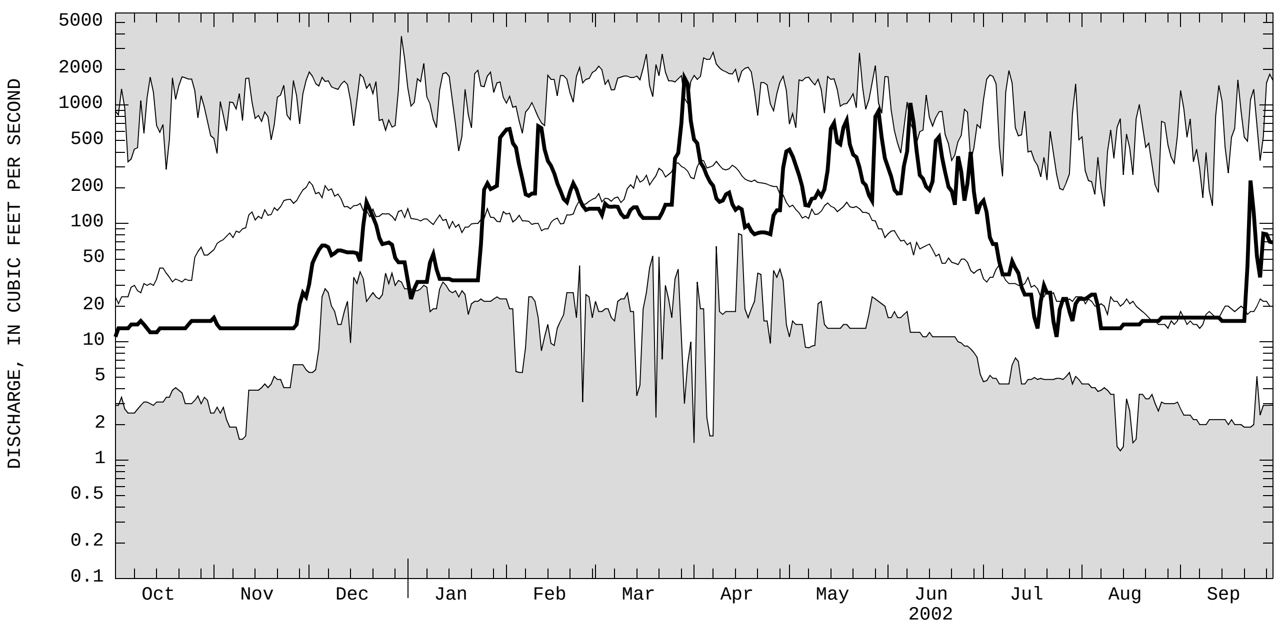
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	93.2	177	224	192	209	335	392	184	103	56.5	39.2	56.1
MAX	618	411	531	517	604	690	1117	483	370	305	200	408
(WY)	1978	1997	1997	1996	1981	1977	1993	1983	1968	1973	1994	1977
MIN	3.35	4.46	45.0	28.3	33.3	86.2	118	35.4	16.2	6.95	3.86	2.45
(WY)	1965	1965	1961	1961	1980	1960	1985	1987	1964	1965	1964	1964

e Estimated

01500000 OULEOUT CREEK AT EAST SIDNEY, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1950 - 2002	
ANNUAL TOTAL	40547.8		51561			
ANNUAL MEAN	111		141		171	
HIGHEST ANNUAL MEAN					242	1960
LOWEST ANNUAL MEAN					77.9	1965
HIGHEST DAILY MEAN	2090	Apr 18	1700	Mar 29	2800	Apr 7 1960
LOWEST DAILY MEAN	9.4	Sep 29	11	Oct 1	1.4	Apr 1 1989
ANNUAL SEVEN-DAY MINIMUM	9.8	Sep 24	13	Oct 11	1.8	Nov 5 1973
10 PERCENT EXCEEDS	222		375		407	
50 PERCENT EXCEEDS	45		60		85	
90 PERCENT EXCEEDS	13		13		12	



2002 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.

01502500 UNADILLA RIVER AT ROCKDALE, NY

LOCATION.--Lat 42°22'40", long 75°24'23", Chenango County, Hydrologic Unit 02050101, on right bank 400 ft downstream from Chenango-Otsego County highway bridge at Rockdale, and 0.7 mi downstream from Kent Brook.
DRAINAGE AREA.--520 mi^2.
PERIOD OF RECORD.--November 1929 to September 1933, January 1937 to March 1995. Annual maximum, water years 1996-2000. October 2000 to current year.
REVISED RECORDS.--WDR NY 1974: 1973 (P).
GAGE.--Water-stage recorder. Datum of gage is 992.25 ft above NGVD of 1929. Prior to Sept. 30, 1933, nonrecording gage at bridge 400 ft upstream at datum 0.73 ft higher.
REMARKS.--Records good except those for estimated daily discharges, which are fair. Telephone and satellite gage-height telemeters at station. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,400 ft^3/s, Dec. 31, 1942, gage height, 12.98 ft; minimum instantaneous discharge not determined.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,700 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 27	1630	*5,740	*8.51	No other peak greater than base discharge.			

Minimum discharge, 58 ft^3/s, Oct. 8, 14, Sept. 13, 14, 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	78	308	e250	1940	1050	2290	1680	1070	473	122	80
2	77	76	310	e230	3100	951	2090	1440	821	415	117	76
3	72	81	256	e220	1960	1050	1800	1400	644	369	113	73
4	68	83	209	e220	e1550	1530	1640	1210	550	329	106	82
5	64	91	186	221	e1200	1110	1410	1040	658	301	112	96
6	63	93	173	212	e1050	982	1260	926	4600	284	120	100
7	61	93	162	218	e950	975	1120	884	4220	271	118	87
8	59	89	154	e210	966	906	1020	848	2060	251	108	77
9	63	88	152	e220	866	900	983	966	1500	237	102	72
10	63	88	148	222	846	1180	1100	1300	1220	233	98	68
11	61	89	143	223	3890	1290	952	990	1030	218	94	67
12	61	88	141	237	3230	1030	e830	886	919	201	91	62
13	61	87	145	241	2080	962	787	1810	850	189	87	60
14	60	86	172	231	e1400	906	1090	4320	940	179	86	58
15	67	84	281	219	e1300	841	1940	3970	1490	170	82	62
16	68	86	325	219	e1250	806	1750	2370	2110	161	84	93
17	78	83	296	213	1220	784	1330	2100	1620	153	86	316
18	82	82	497	e210	1040	724	1140	2580	1180	149	86	215
19	84	80	699	e240	887	764	1020	2890	956	173	86	143
20	79	84	595	e220	897	837	916	2080	798	170	89	115
21	74	86	532	e220	1190	916	847	1720	689	167	83	99
22	75	97	476	e220	1610	975	784	1500	612	155	81	127
23	75	100	411	215	1390	831	786	1310	863	152	82	308
24	83	97	446	269	1100	816	727	1150	742	160	98	477
25	82	104	491	622	1040	791	698	1080	550	167	156	305
26	81	138	429	716	1030	1350	908	986	499	155	194	207
27	80	156	e300	604	1300	5290	891	891	734	147	136	202
28	79	151	e300	626	1360	3890	902	1060	889	140	104	737
29	77	155	e290	698	---	2720	1650	787	775	149	93	942
30	81	218	e280	1250	---	2760	1560	702	560	137	86	554
31	79	---	e270	1760	---	2710	---	736	---	127	82	---
TOTAL	2239	3011	9577	11676	41642	42627	36221	47612	36149	6582	3182	5960
MEAN	72.2	100	309	377	1487	1375	1207	1536	1205	212	103	199
MAX	84	218	699	1760	3890	5290	2290	4320	4600	473	194	942
MIN	59	76	141	210	846	724	698	702	499	127	81	58
CFSM	0.14	0.19	0.59	0.72	2.86	2.64	2.32	2.95	2.32	0.41	0.20	0.38
IN.	0.16	0.22	0.69	0.84	2.98	3.05	2.59	3.41	2.59	0.47	0.23	0.43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2002, BY WATER YEAR (WY)

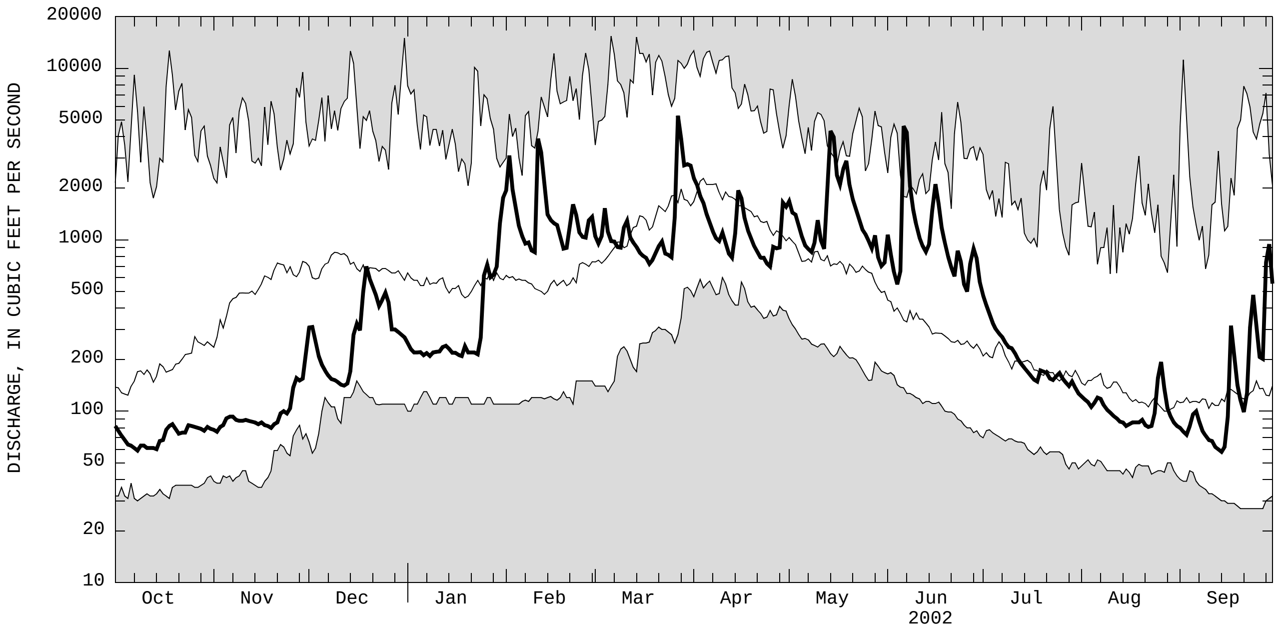
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	431	773	964	849	984	1768	2063	955	527	288	197	277
MAX	2944	2223	2104	1931	2858	4181	5395	2264	1710	1209	836	2067
(WY)	1978	1960	1973	1952	1981	1977	1940	1943	1972	1947	1992	1977
MIN	34.6	51.6	148	115	174	568	465	278	128	65.4	54.0	34.2
(WY)	1965	1965	1931	1931	1980	1941	1946	1985	1964	1962	1964	1964

e Estimated

SUSQUEHANNA RIVER BASIN

01502500 UNADILLA RIVER AT ROCKDALE, NY

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1930 - 2002	
ANNUAL TOTAL	218546		246478			
ANNUAL MEAN	599		675		841	
HIGHEST ANNUAL MEAN					1294	1943
LOWEST ANNUAL MEAN					447	1965
HIGHEST DAILY MEAN	11200	Apr 10	5290	Mar 27	15400	Mar 6 1979
LOWEST DAILY MEAN	53	Sep 19	58	Sep 14	27	Sep 20 1964
ANNUAL SEVEN-DAY MINIMUM	59	Sep 14	61	Oct 8	27	Sep 20 1964
ANNUAL RUNOFF (CFSM)	1.15		1.30		1.62	
ANNUAL RUNOFF (INCHES)	15.63		17.63		21.97	
10 PERCENT EXCEEDS	1150		1550		1970	
50 PERCENT EXCEEDS	296		300		450	
90 PERCENT EXCEEDS	70		80		96	



2002 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.

01503000 SUSQUEHANNA RIVER AT CONKLIN, NY

LOCATION.--Lat 42°02'07", long 75°48'12", Broome County, Hydrologic Unit 02050101, on left bank at abutment of former highway bridge, 500 ft upstream from bridge on County Highway 304 at Conklin, 0.7 mi downstream from Little Snake Creek, and 3.5 mi downstream from Pennsylvania-New York State line.
DRAINAGE AREA.--2,232 mi^2.
PERIOD OF RECORD.--November 1912 to current year.
REVISED RECORDS.--WSP 1672: 1918(M, P). WSP 2103: Drainage area. WDR NY-81-3: 1918 (M, P).
GAGE.--Water-stage recorder. Datum of gage is 841.04 ft above NGVD of 1929. Prior to Oct. 4, 1914, nonrecording gage at same site and datum.
REMARKS.--Records good except those for estimated daily discharges, which are fair. Minor regulation by upstream lakes and reservoirs. Telephone and satellite gage-height telemeters at station. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 61,600 ft^3/s, Mar. 18, 1936, gage height, 20.14 ft; maximum gage height, 20.83 ft, Mar. 22, 1948; minimum discharge, 85 ft^3/s, Oct. 14, 1964, gage height 1.30 ft.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 18,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 27	1700	*23,700	*12.09	Jun. 7	0730	20,300	11.12

Minimum discharge, 199 ft^3/s, Sept. 15, gage height, 1.68 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	495	307	948	e920	7930	3900	10400	6900	5310	2020	420	277
2	423	308	978	e900	10200	3300	9080	7170	4620	1790	395	266
3	375	308	1000	e850	9780	3250	7900	6700	3670	1610	385	266
4	346	305	946	e820	6910	3470	7010	5800	2960	1420	373	262
5	329	319	840	e810	5780	4000	6370	5070	3020	1280	371	273
6	315	339	777	e800	4860	3360	5610	4390	8910	1160	375	333
7	302	332	706	e820	4220	3060	5050	3960	19600	1080	370	354
8	290	336	654	e820	3770	3020	4570	3780	14600	993	398	321
9	276	337	660	e800	3560	2870	4180	3610	9340	940	366	287
10	269	323	643	839	3400	2930	4290	4140	6770	891	339	260
11	261	316	608	871	8960	3240	4330	4390	5440	834	321	240
12	254	312	611	867	13200	3390	3830	3960	4590	794	309	228
13	253	303	659	e860	9600	3070	3460	6880	4240	708	302	213
14	252	299	778	e850	6860	2960	3510	13500	4030	672	295	207
15	292	295	1010	863	5490	2870	4700	15600	5020	632	286	207
16	323	296	1150	e820	5370	2880	6410	12100	7520	593	276	222
17	348	292	1350	e800	5070	2750	5520	8940	9210	558	273	226
18	365	287	4390	e760	4560	2490	4580	11700	6720	535	268	248
19	359	282	3900	e800	3950	2600	4140	13400	5220	521	267	427
20	356	295	3240	e720	3540	2660	3750	11400	4210	555	275	413
21	351	303	2660	e780	3720	3180	3370	8660	3460	732	268	341
22	341	286	2220	867	4300	3580	3160	7270	2950	614	255	378
23	331	292	1920	e820	4920	3430	2910	6320	2630	567	260	781
24	364	298	1810	974	4390	3150	2790	5510	3270	547	274	1080
25	400	321	1740	1970	3740	2940	2640	4860	2870	507	308	1470
26	370	656	1720	e2800	3520	6670	2840	4430	2640	524	323	1040
27	353	616	e1450	e3080	3540	21600	3280	4030	2530	507	366	858
28	350	605	e1150	2910	3950	21400	4460	4160	3200	490	401	1050
29	332	604	e1050	3090	---	15900	6990	5400	3000	474	357	1300
30	317	631	e1050	4630	---	13000	7380	4500	2590	453	324	1990
31	313	---	e950	6850	---	12000	---	5320	---	443	296	---
TOTAL	10305	10803	43568	45361	159090	168920	148510	213850	164140	25444	10096	15818
MEAN	332	360	1405	1463	5682	5449	4950	6898	5471	821	326	527
MAX	495	656	4390	6850	13200	21600	10400	15600	19600	2020	420	1990
MIN	252	282	608	720	3400	2490	2640	3610	2530	443	255	207
CFSM	0.15	0.16	0.63	0.66	2.55	2.44	2.22	3.09	2.45	0.37	0.15	0.24
IN.	0.17	0.18	0.73	0.76	2.65	2.82	2.48	3.56	2.74	0.42	0.17	0.26

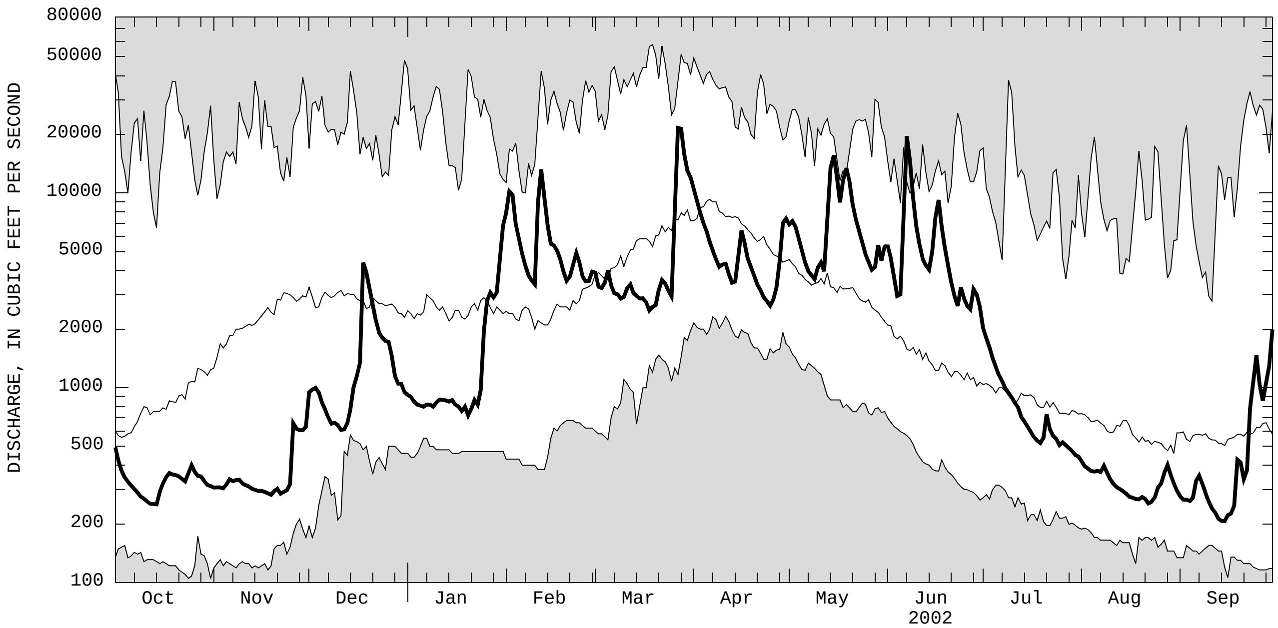
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1817	3307	3915	3905	3960	7524	8437	4248	2258	1419	971	1156
MAX	12860	9281	10680	10110	11150	18540	21340	10590	8122	7929	5033	8783
(WY)	1978	1928	1997	1913	1981	1936	1940	1943	1917	1915	1915	1977
MIN	130	140	641	476	724	2808	2000	1300	476	267	171	142
(WY)	1965	1965	1931	1931	1980	1965	1946	1985	1999	1936	1964	1964

e Estimated

01503000 SUSQUEHANNA RIVER AT CONKLIN, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1913 - 2002	
ANNUAL TOTAL	870324		1015905			
ANNUAL MEAN	2384		2783		3572	
HIGHEST ANNUAL MEAN					5667	1928
LOWEST ANNUAL MEAN					1690	1965
HIGHEST DAILY MEAN	28100	Apr 11	21600	Mar 27	57800	Mar 19 1936
LOWEST DAILY MEAN	201	Sep 20	207	Sep 14	105	Oct 24 1964
ANNUAL SEVEN-DAY MINIMUM	221	Sep 7	220	Sep 11	114	Oct 19 1964
ANNUAL RUNOFF (CFSM)	1.07		1.25		1.60	
ANNUAL RUNOFF (INCHES)	14.51		16.93		21.74	
10 PERCENT EXCEEDS	5570		6870		8390	
50 PERCENT EXCEEDS	1170		1050		2000	
90 PERCENT EXCEEDS	281		292		420	



2002 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.

01509000 TIOUGHNIOGA RIVER AT CORTLAND, NY

LOCATION.--Lat 42°36'10", long 76°09'35", Cortland County, Hydrologic Unit 02050102, on right bank at east end of Elm Street at Cortland, 0.4 mi downstream from confluence of East and West Branches.
DRAINAGE AREA.--292 mi^2, including 14.0 mi^2, the flow from which may be diverted into De Ruyter Reservoir in Oswego River basin.
PERIOD OF RECORD.--May 1938 to current year.
REVISED RECORDS.--WSP 2103: Drainage area. WDR NY 1974: 1973.
GAGE.--Water-stage recorder. Datum of gage is 1,084.92 ft above NGVD of 1929. Prior to Oct. 1, 1939, water-stage recorder at datum 4.00 ft higher; Oct. 1, 1939 to Sept. 30, 1963, water-stage recorder at datum 3.00 ft higher.
REMARKS.--Records good except those for estimated daily discharges, which are fair. Diurnal fluctuation at low and medium flow caused by powerplants in mills on West Branch. Slight diversion from East Branch for operation of Erie (Barge) Canal. Slight diversion from Gate House Pond on West Branch 17 mi upstream from station into Onondaga Creek basin (St. Lawrence River basin) for manufacturing purposes by Linden Chlorine Process Co. Telephone and satellite gage-height telemeters at station. Several measurements of temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft^3/s, Mar. 5, 1964, gage height, 12.49 ft; maximum gage height, 13.82 ft, Apr. 5, 1950; minimum discharge, 9.8 ft^3/s, Sept. 20, 1939, Sept. 29, 1959.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 2	1315	*3,380	*7.58				

Minimum discharge, 50 ft^3/s, Sept. 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	141	111	887	e320	2270	e640	1080	938	563	287	118	75
2	128	117	708	e300	3220	e580	1000	840	448	264	112	71
3	118	124	550	287	2120	e750	920	812	362	246	109	71
4	109	127	465	285	1450	e930	861	703	325	228	106	69
5	104	149	413	277	1070	e640	755	616	465	219	105	66
6	103	143	385	270	927	e620	679	555	954	206	104	68
7	100	139	335	277	804	621	605	570	782	194	98	64
8	96	129	304	251	730	571	566	565	578	181	94	62
9	93	136	291	257	660	579	578	704	465	171	90	61
10	91	143	279	262	644	788	676	683	396	168	87	59
11	91	134	260	295	1960	692	561	561	350	159	84	55
12	86	129	253	295	1590	628	489	639	341	148	81	55
13	82	126	261	287	1230	576	604	1500	342	142	78	55
14	83	119	285	271	e870	535	1450	2910	761	136	77	52
15	92	115	396	260	e840	483	2520	2960	1400	132	74	97
16	101	116	365	262	780	432	2120	1980	1560	127	74	319
17	103	113	378	256	762	390	1430	1820	1250	122	75	206
18	110	109	795	253	e640	394	1110	1920	974	119	74	133
19	108	107	945	e235	e570	436	928	1830	748	118	75	110
20	100	114	886	e260	590	443	822	1420	611	120	77	97
21	96	125	833	e260	792	506	725	1160	519	115	74	92
22	105	127	719	251	1040	519	657	986	445	111	72	97
23	119	135	646	251	854	456	630	847	569	114	71	262
24	114	123	721	336	699	455	561	746	460	161	109	251
25	111	132	673	599	689	431	560	684	378	133	137	169
26	110	226	568	520	679	522	637	606	345	120	116	132
27	123	240	466	486	829	1440	539	538	456	115	101	177
28	126	224	443	518	736	1210	567	476	542	114	92	1090
29	126	355	e400	604	---	1140	922	432	400	173	87	701
30	137	553	e380	1090	---	1380	861	428	323	162	81	400
31	114	---	e360	1260	---	1230	---	432	---	129	78	---
TOTAL	3320	4740	15650	11635	30045	21017	26413	31861	18112	4934	2810	5216
MEAN	107	158	505	375	1073	678	880	1028	604	159	90.6	174
MAX	141	553	945	1260	3220	1440	2520	2960	1560	287	137	1090
MIN	82	107	253	235	570	390	489	428	323	111	71	52
CFSM	0.37	0.54	1.73	1.29	3.67	2.32	3.02	3.52	2.07	0.55	0.31	0.60
IN.	0.42	0.60	1.99	1.48	3.83	2.68	3.36	4.06	2.31	0.63	0.36	0.66

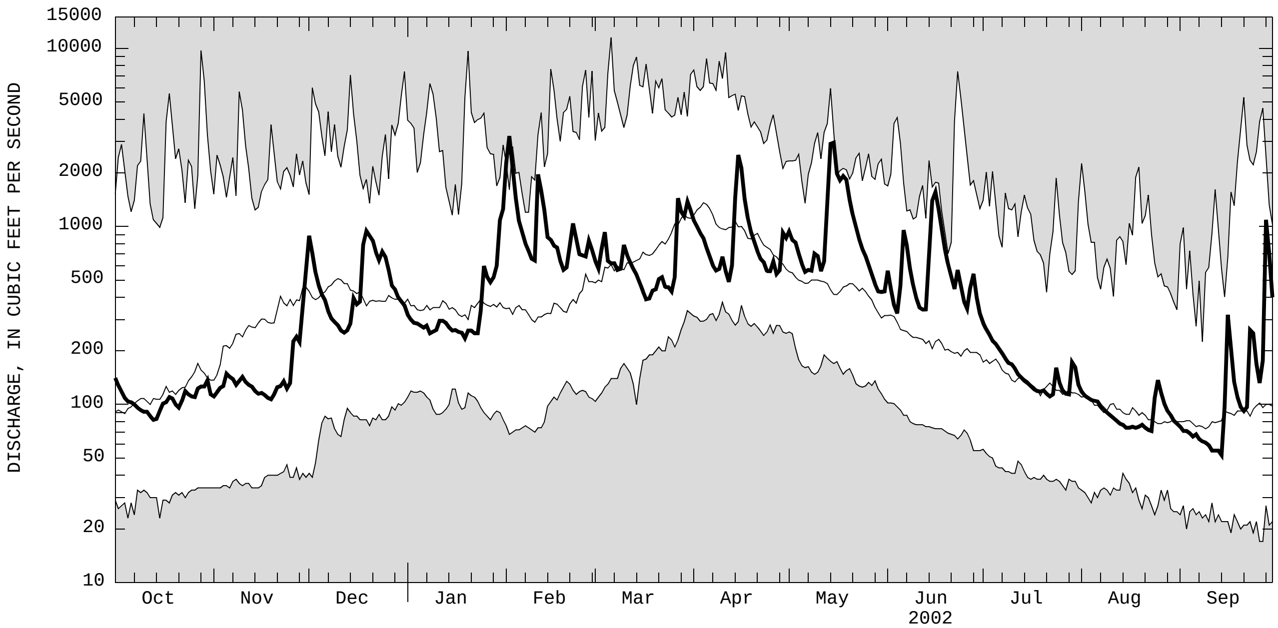
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	243	419	566	523	567	1038	1254	584	335	183	129	152
MAX	1553	1119	1537	1415	1469	2432	3487	1539	1674	539	480	1125
(WY)	1978	1969	1997	1998	1976	1945	1993	2000	1972	1976	1992	1977
MIN	33.2	44.3	86.7	112	127	359	305	205	77.7	43.5	34.6	23.8
(WY)	1965	1965	1961	1961	1963	1941	1946	1999	1999	1962	1939	1939

e Estimated

01509000 TIOUGHNIOGA RIVER AT CORTLAND, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1938 - 2002	
ANNUAL TOTAL	162261		175753			
ANNUAL MEAN	445		482		498	
HIGHEST ANNUAL MEAN					723	1943
LOWEST ANNUAL MEAN					303	1965
HIGHEST DAILY MEAN	7160	Apr 9	3220	Feb 2	11500	Mar 6 1979
LOWEST DAILY MEAN	66	Sep 16	52	Sep 14	17	Sep 26 1959
ANNUAL SEVEN-DAY MINIMUM	67	Sep 15	57	Sep 8	21	Sep 19 1939
ANNUAL RUNOFF (CFSM)	1.52		1.65		1.71	
ANNUAL RUNOFF (INCHES)	20.67		22.39		23.18	
10 PERCENT EXCEEDS	897		992		1110	
50 PERCENT EXCEEDS	210		341		283	
90 PERCENT EXCEEDS	86		91		70	



2002 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.

01510000 OTSELIC RIVER AT CINCINNATUS, NY

LOCATION.--Lat 42°32'28", long 75°54'00", Cortland County, Hydrologic Unit 02050102, on right bank 150 ft upstream from Mead Brook, and 300 ft downstream from bridge on County Highway 159 at Cincinnatus.
DRAINAGE AREA.--147 mi^2.
PERIOD OF RECORD.--June 1938 to September 164, October 1969 to current year.
REVISED RECORDS.--WSP 2103: Drainage area.>
GAGE.--Water-stage recorder. Datum of gage is 1,031.67 ft above NGVD of 1929.
REMARKS.--Records good except those for esimated daily discharges, which are fair. Telephone and satellite gage-height telemeters at station. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,390 ft^3/s, Dec. 30, 1942; maximum gage height, 10.89 ft, Jan. 19, 1996, ice jam; minimum discharge, 3.8 ft^3/s, Sept. 25, 1939.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 1	1930	2,750	5.56	Sept. 28	0130	*3,220	*6.16
Apr. 15	0315	2,510	5.24				

Minimum discharge, 7.7 ft^3/s, Sept. 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	40	535	e120	1720	336	679	596	274	114	37	16
2	44	39	332	e130	1730	305	588	514	163	103	34	15
3	40	44	262	e125	866	478	516	492	135	93	32	15
4	37	48	223	127	664	526	435	392	122	85	29	18
5	35	48	202	121	507	341	369	330	331	81	31	16
6	33	52	184	118	441	338	328	283	1220	76	33	15
7	31	53	162	119	370	327	277	294	620	73	28	14
8	31	51	145	100	331	288	262	278	394	68	26	13
9	33	50	143	112	291	305	253	467	290	63	24	12
10	31	51	134	110	362	696	291	408	234	61	23	11
11	29	51	125	127	1700	456	230	299	190	56	22	10
12	28	50	116	125	823	394	200	412	185	52	21	9.9
13	28	48	137	121	625	353	232	1190	173	51	19	9.6
14	27	48	159	111	455	320	537	2050	589	48	19	8.7
15	31	48	238	108	436	286	1810	1440	1020	45	18	23
16	31	48	189	107	399	275	954	886	1210	43	18	418
17	36	48	226	104	370	236	689	961	820	40	16	109
18	40	45	523	102	e285	234	559	1150	597	38	16	69
19	38	45	508	85	e250	246	465	944	440	52	15	53
20	36	48	447	e100	e260	256	393	724	334	91	16	45
21	34	53	398	e100	463	284	335	609	265	53	15	39
22	39	55	337	103	567	281	306	515	222	45	14	63
23	50	54	305	101	414	241	287	429	298	43	15	991
24	49	54	334	198	332	237	238	372	209	58	26	292
25	46	60	291	361	335	220	274	337	160	47	53	153
26	43	113	246	266	351	445	327	281	150	40	33	117
27	43	100	197	254	584	1240	242	233	296	38	26	635
28	45	93	e200	271	425	755	297	196	201	37	22	2190
29	45	230	e180	318	---	763	556	169	150	64	20	722
30	43	335	e155	742	---	962	496	159	126	52	19	411
31	42	---	e140	701	---	748	---	164	---	43	18	---
TOTAL	1167	2102	7773	5687	16356	13172	13425	17574	11418	1853	738	6513.2
MEAN	37.6	70.1	251	183	584	425	448	567	381	59.8	23.8	217
MAX	50	335	535	742	1730	1240	1810	2050	1220	114	53	2190
MIN	27	39	116	85	250	220	200	159	122	37	14	8.7
CFSM	0.26	0.48	1.71	1.25	3.97	2.89	3.04	3.86	2.59	0.41	0.16	1.48
IN.	0.30	0.53	1.97	1.44	4.14	3.33	3.40	4.45	2.89	0.47	0.19	1.65

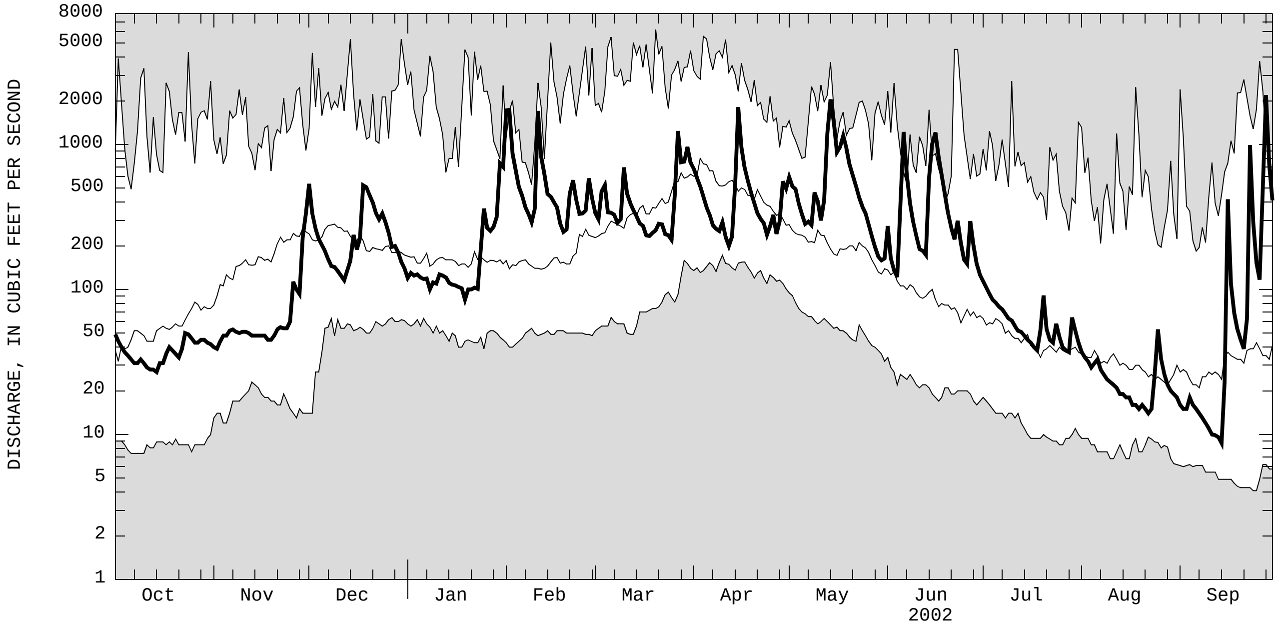
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	141	240	325	274	292	580	679	298	160	85.0	54.3	86.5
MAX	713	628	841	716	764	1302	1693	927	773	299	277	706
(WY)	1978	1960	1997	1998	1976	1945	1940	2000	1972	1976	1994	1977
MIN	9.90	23.3	66.9	55.6	63.1	178	150	80.3	24.6	12.5	8.99	5.54
(WY)	1964	1954	1961	1961	1987	1941	1946	1985	1962	1962	1964	1964

e Estimated

01510000 OTSELIC RIVER AT CINCINNATUS, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1938 - 2002	
ANNUAL TOTAL	79135		97778.2			
ANNUAL MEAN	217		268		267	
HIGHEST ANNUAL MEAN					391	1943
LOWEST ANNUAL MEAN					151	1995
HIGHEST DAILY MEAN	3700	Apr 10	2190	Sep 28	6200	Mar 20 1948
LOWEST DAILY MEAN	12	Sep 19	8.7	Sep 14	4.1	Sep 24 1939
ANNUAL SEVEN-DAY MINIMUM	13	Sep 13	11	Sep 8	4.3	Sep 19 1939
ANNUAL RUNOFF (CFSM)	1.47		1.82		1.82	
ANNUAL RUNOFF (INCHES)	20.03		24.74		24.70	
10 PERCENT EXCEEDS	460		613		612	
50 PERCENT EXCEEDS	90		160		136	
90 PERCENT EXCEEDS	23		26		23	



2002 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.

01512500 CHENANGO RIVER NEAR CHENANGO FORKS, NY

LOCATION.--Lat 42°13'05", long 75°50'55", Broome County, Hydrologic Unit 02050102, on left bank in Chenango Valley State Park, and 1.2 mi downstream from Tioughnioga River and village of Chenango Forks.
DRAINAGE AREA.--1,483 mi^2.
PERIOD OF RECORD.--November l912 to current year.
GAGE.--Water-stage recorder. Datum of gage is 871.63 ft above NGVD of 1929. Nov. 11, 1912 to Oct. 1, 1914, nonrecording gage and Oct. 2, 1914 to Aug. 2, 1936, water-stage recorder at site 300 ft upstream at same datum.
REMARKS.--Records good except those for estimated daily discharges, which are fair. Since March 1942, flood flows partly regulated by Whitney Point Lake (see station 0l5ll000). Slight diversion from upstream tributaries for operation of Erie (Barge) Canal. Telephone and satellite gage-height telemeters at station. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 96,000 ft^3/s, July 8, 1935, gage height, 20.3 ft, from floodmarks, from rating curve extended above 32,000 ft^3/s on basis of slope-area measurement of peak flow; minimum discharge, 79 ft^3/s, Sept. 3, 4, 5, 6, 1999.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 18,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jun. 6	1200	*15,500	*8.83				

Minimum discharge, 149 ft^3/s, Sept. 13, 14, 15, gage height, 2.39 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	527	430	2790	e1200	8090	2860	5530	4570	2370	1500	371	225
2	452	464	2650	e1160	11300	2500	4980	4130	2180	1250	346	219
3	406	504	2220	e1120	8770	2660	4370	3900	1740	1110	326	210
4	373	517	1980	e1100	6740	3560	3880	3370	1440	1010	304	219
5	346	544	1760	1060	e4650	3070	3280	2850	1640	891	305	204
6	325	575	1610	1040	e3750	2590	2970	2520	13700	759	296	204
7	312	560	1520	1050	e3300	2510	2690	2410	10600	727	296	206
8	296	539	1420	e990	3030	2390	2400	2410	5710	726	282	196
9	281	518	1370	993	2830	2320	2220	2710	3530	715	267	187
10	271	511	1320	1020	2770	2950	2680	3600	2850	688	258	180
11	277	511	1190	1070	10400	3360	2340	2900	2360	622	249	169
12	292	479	1160	1130	9230	3160	2040	2690	2010	547	241	158
13	292	428	1180	1130	6600	2710	1950	5930	2010	498	234	152
14	281	416	1340	1090	e4200	2340	3400	12100	2960	475	227	149
15	312	405	1910	1040	e3850	2250	7690	12000	7420	452	221	161
16	342	401	1830	1030	3740	2230	7790	8820	11700	429	202	710
17	360	397	1810	1020	3590	2150	5370	6730	8680	406	205	965
18	407	397	4730	1000	3070	2020	4300	8760	5100	397	206	795
19	417	381	4630	e930	2600	2070	3580	8990	3710	442	198	510
20	385	377	3640	e920	2480	2210	3100	6390	2940	522	206	392
21	352	388	3300	e980	2990	2610	2800	5140	2390	493	203	318
22	353	402	2810	983	4100	2860	2560	4280	1990	463	195	331
23	377	410	2460	945	3810	2560	2380	3720	2320	467	209	2090
24	425	417	2470	1210	3020	2510	2110	3220	2590	456	239	2750
25	436	425	2520	2810	2860	2460	2180	2910	2020	473	315	1090
26	437	667	2240	2820	2800	3940	2730	2640	1620	446	351	838
27	430	805	e1800	2200	3220	11300	2500	2430	3520	425	335	916
28	435	777	e1550	2290	3490	8650	2610	2370	3090	414	280	6480
29	443	968	e1400	2580	---	7220	4550	2070	2200	389	265	5540
30	441	1780	e1300	4400	---	7020	4250	1850	1740	429	250	2600
31	436	---	e1200	5650	---	6470	---	1820	---	422	234	---
TOTAL	11519	16393	65110	47961	131280	109510	105230	140230	118130	19043	8116	29164
MEAN	372	546	2100	1547	4689	3533	3508	4524	3938	614	262	972
MAX	527	1780	4730	5650	11300	11300	7790	12100	13700	1500	371	6480
MIN	271	377	1160	920	2480	2020	1950	1820	1440	389	195	149
CFSM	0.25	0.37	1.42	1.04	3.16	2.38	2.37	3.05	2.66	0.41	0.18	0.66
IN.	0.29	0.41	1.63	1.20	3.29	2.75	2.64	3.52	2.96	0.48	0.20	0.73

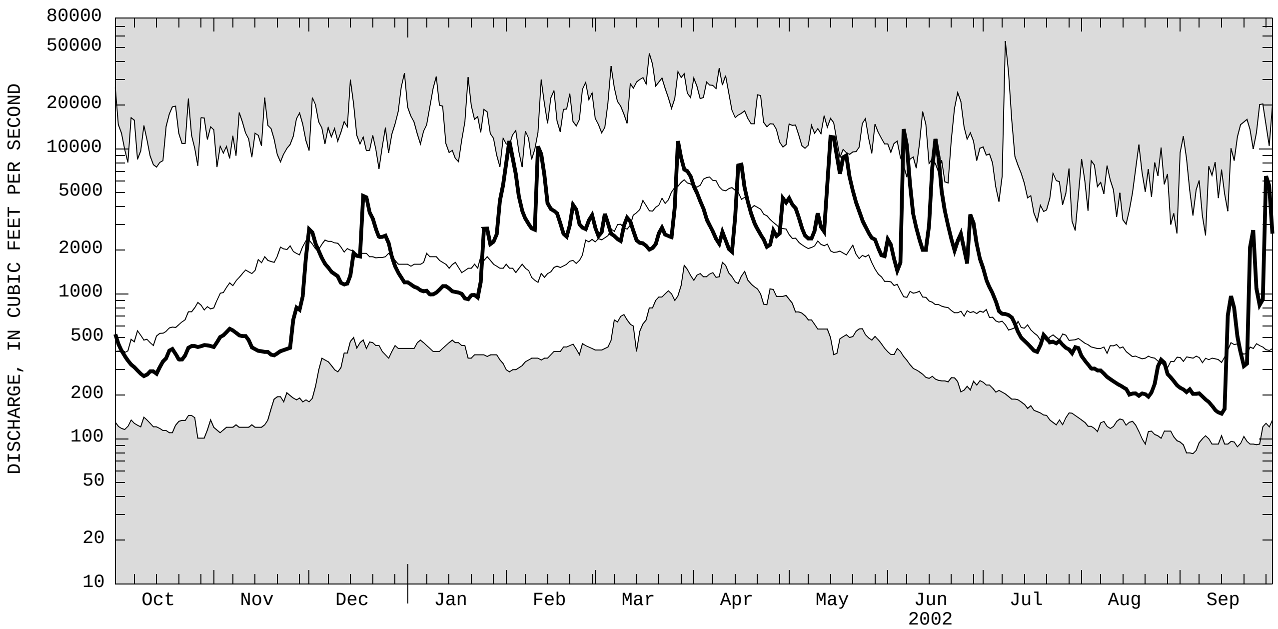
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 2002, BY WATER YEAR (WY)

MEAN	1266	2216	2712	2624	2665	5301	5735	2646	1507	916	630	765
MAX	7210	6167	7534	7361	7688	12560	15330	6836	7439	5713	3138	5766
(WY)	1978	1928	1997	1913	1976	1936	1993	2000	1917	1935	1915	1977
MIN	155	168	525	445	472	1977	1317	770	312	175	133	107
(WY)	1940	1965	1961	1961	1980	1937	1946	1985	1999	1939	1999	1939

e Estimated

01512500 CHENANGO RIVER NEAR CHENANGO FORKS, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1913 - 2002	
ANNUAL TOTAL	697541		801686			
ANNUAL MEAN	1911		2196		2414	
HIGHEST ANNUAL MEAN					3618	1943
LOWEST ANNUAL MEAN					1307	1965
HIGHEST DAILY MEAN	20800	Apr 10	13700	Jun 6	55400	Jul 8 1935
LOWEST DAILY MEAN	157	Sep 19	149	Sep 14	79	Sep 5 1999
ANNUAL SEVEN-DAY MINIMUM	166	Sep 17	165	Sep 9	86	Sep 1 1999
ANNUAL RUNOFF (CFSM)	1.29		1.48		1.63	
ANNUAL RUNOFF (INCHES)	17.50		20.11		22.11	
10 PERCENT EXCEEDS	4270		4830		5960	
50 PERCENT EXCEEDS	960		1520		1300	
90 PERCENT EXCEEDS	271		279		300	



2002 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.

01515000 SUSQUEHANNA RIVER NEAR WAVERLY, NY

LOCATION.--Lat 41°59'05", long 76°30'05", Bradford County, Pa., Hydrologic Unit 02050103, on left bank 0.2 mi upstream from Cayuta Creek, 0.4 mi upstream from bridge on East Lockhart Street at Sayre, Pa., 1 mi downstream from New York-Pennsylvania State line, and 2 mi southeast of Waverly.

DRAINAGE AREA.--4,773 mi^2.

PERIOD OF RECORD.--February 1937 to March 1995. Annual maximum, water years 1996-2000. October 2000 to current year.

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 743.96 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to November 1939, at datum 1.0 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Minor regulation by upstream lakes and reservoirs. Slight diversion from upstream tributaries for operation of Erie (Barge) Canal. Telephone and satellite gage-height telemeters at station. Several measurements of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 121,000 ft^3/s, June 23, 1972, gage height, 21.24 ft; minimum instantaneous discharge not determined.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1936 reached a stage of about 21.4 ft, from flood profile (discharge, 128,000 ft^3/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 52,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 27	2000	*45,900	*11.44				

Minimum discharge, 412 ft^3/s, Sept. 14, 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1790	941	4150	e3450	21400	10100	22600	16600	11700	6550	1100	660
2	1510	920	5730	e3150	27200	9160	19900	16400	10600	5490	1090	608
3	1280	920	5350	e3100	26200	8470	17700	16300	9320	4740	1030	572
4	1110	962	4730	e2950	20800	9050	15800	14400	7690	4210	973	538
5	955	1030	4220	e2750	16400	9830	14200	12600	7420	3880	914	528
6	732	1070	3780	2670	13300	9470	12800	11100	18300	3440	865	526
7	828	1140	3460	2580	11700	8430	11600	10100	38700	3000	831	526
8	800	1160	3200	e2600	10400	8130	10700	9630	31200	2790	801	548
9	806	1110	3070	e2550	9690	7830	9820	9470	20700	2640	793	575
10	740	1110	3010	2420	9280	7980	9810	10700	15600	2520	793	562
11	699	1090	2890	2530	22000	8950	10100	11300	12600	2300	766	513
12	681	1080	2680	2700	29100	9370	9400	10600	10600	2130	717	473
13	667	1070	2650	2790	25300	9140	8520	15000	9460	2020	681	445
14	674	1030	3120	2790	17900	8320	9060	33300	9380	1840	649	425
15	694	985	4490	2700	14400	7960	14900	36400	14800	1710	624	415
16	734	952	5320	2670	13300	7650	19700	31400	27000	1630	604	434
17	780	929	5240	2600	12800	7660	17200	23400	28500	1680	584	486
18	856	927	12300	2520	11900	7210	14100	26800	21600	1420	564	958
19	914	913	16200	2360	10400	6900	12000	31700	15700	1360	545	1210
20	945	905	12500	2080	9440	7330	10800	26700	12300	1330	538	1130
21	941	898	10500	e2100	9290	9010	9840	21300	10300	1410	538	1040
22	918	899	9130	2150	10500	10600	9010	17700	8690	1590	541	960
23	876	913	7920	2400	12000	10100	8640	15400	7680	1580	557	1150
24	868	919	7140	2660	11400	9590	7960	13600	8020	1530	608	2630
25	931	1010	7120	5630	9990	9080	7520	12100	8570	1440	678	4730
26	995	1400	6720	8330	9280	11900	8410	10900	7520	1330	684	3510
27	1010	2010	6040	8790	9240	42500	8680	10100	8210	1260	691	2900
28	990	2250	e4850	8570	9840	41600	9860	9920	10800	1140	740	4700
29	969	2270	e4350	8730	---	33900	17500	10900	9420	1120	773	10100
30	953	2360	e4400	10900	---	27300	17500	10500	7890	985	773	8490
31	941	---	e4000	16600	---	25200	---	10200	---	1060	721	---
TOTAL	28587	35173	180260	130820	414450	399720	375630	516520	420270	71125	22766	52342
MEAN	922	1172	5815	4220	14800	12890	12520	16660	14010	2294	734	1745
MAX	1790	2360	16200	16600	29100	42500	22600	36400	38700	6550	1100	10100
MIN	667	898	2650	2080	9240	6900	7520	9470	7420	985	538	415
CFSM	0.19	0.25	1.22	0.88	3.10	2.70	2.62	3.49	2.94	0.48	0.15	0.37
IN.	0.22	0.27	1.40	1.02	3.23	3.12	2.93	4.03	3.28	0.55	0.18	0.41

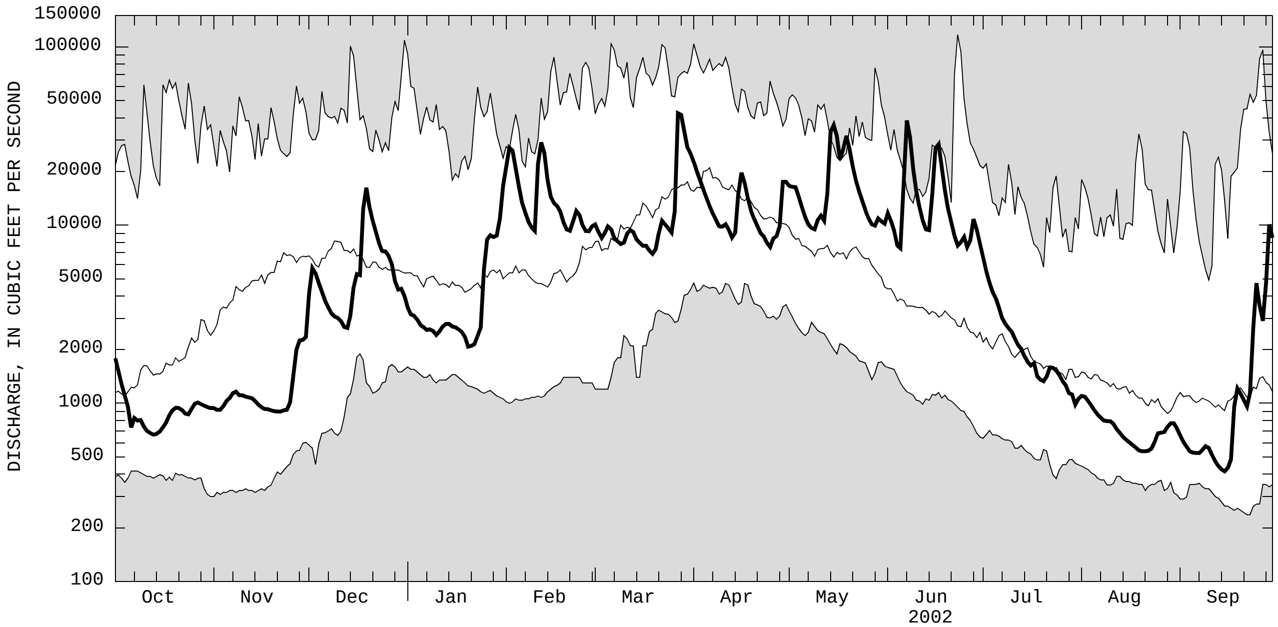
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3862	6747	8751	7493	8774	15860	18430	9160	5061	2509	1827	2457
MAX	25090	17130	19820	18670	23870	33430	46500	22140	22550	7620	8386	17800
(WY)	1978	1973	1973	1979	1976	1945	1993	1943	1972	1947	1994	1977
MIN	392	382	1835	1319	1472	6763	3962	2418	1155	589	384	326
(WY)	1965	1965	1965	1961	1980	1941	1946	1985	1939	1962	1964	1964

e Estimated

01515000 SUSQUEHANNA RIVER NEAR WAVERLY, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1937 - 2002	
ANNUAL TOTAL	2248387		2647663			
ANNUAL MEAN	6160		7254		7578	
HIGHEST ANNUAL MEAN					11490	1978
LOWEST ANNUAL MEAN					3745	1965
HIGHEST DAILY MEAN	54600	Apr 11	42500	Mar 27	117000	Jun 23 1972
LOWEST DAILY MEAN	419	Sep 22	415	Sep 15	237	Sep 22 1964
ANNUAL SEVEN-DAY MINIMUM	455	Sep 18	456	Sep 11	248	Sep 17 1964
MAXIMUM PEAK FLOW					121000	Jun 23 1972
MAXIMUM PEAK STAGE					21.24	Jun 23 1972
ANNUAL RUNOFF (CFSM)	1.29		1.52		1.59	
ANNUAL RUNOFF (INCHES)	17.52		20.64		21.57	
10 PERCENT EXCEEDS	14700		16800		18000	
50 PERCENT EXCEEDS	3300		4350		4200	
90 PERCENT EXCEEDS	665		697		835	



2002 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.

01521500 CANISTEO RIVER AT ARKPORT, NY

LOCATION.--Lat 42°23'45", long 77°42'42", Steuben County, Hydrologic Unit 02050104, on left bank 0.2 mi downstream from Arkport Dam, and 0.9 mi west of Arkport.
DRAINAGE AREA.--30.6 mi^2.
PERIOD OF RECORD.--January 1937 to current year.
REVISED RECORDS.--WSP 1552: 1952-57. WSP 2103: Drainage area.
GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,202.85 ft above NGVD of 1929.
REMARKS.--Records good except those for estimated daily discharges, which are fair. Since March 1940, flows above 500 ft^3/s controlled by detention in Arkport Reservoir. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge prior to construction of Arkport Reservoir in 1940, 2,000 ft^3/s, Mar. 5, 1938, Feb. 20, 1939; maximum gage height, 5.63 ft, Feb. 19, 1939 (ice jam); practically no flow July 30, 1938, Sept. 30, 1939 (result of construction operations). Maximum discharge since construction of Arkport Reservoir in 1940, 1,740 ft^3/s, Feb. 11, 1966.
EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 8, 1935, reached a discharge of 4,820 ft^3/s, on basis of slope-area measurement.
EXTREMES FOR CURRENT YEAR.--Maximum discharge, 596 ft^3/s, June 27, gage height, 2.89 ft; minimum discharge not determined.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e2.0	4.9	86	e7.5	554	21	59	52	75	14	2.4	1.1
2	e1.8	4.7	44	e7.5	166	e20	49	54	39	10	2.1	1.1
3	e1.8	5.5	30	e7.5	61	47	197	45	27	8.1	1.8	1.4
4	e1.7	5.6	21	7.5	42	e46	88	33	23	6.7	1.6	1.4
5	e1.7	5.1	15	7.4	e32	e44	58	27	92	5.4	1.6	1.2
6	e1.9	4.6	12	7.4	e28	42	47	23	119	4.7	1.5	1.2
7	e1.8	4.2	9.9	e7.5	e24	50	39	22	58	4.3	1.4	1.1
8	e1.8	3.9	8.2	e7.5	24	44	34	20	34	3.8	1.4	1.0
9	e1.7	4.4	7.7	7.6	24	45	34	43	24	3.6	1.4	0.95
10	e1.6	4.3	7.0	10	27	87	36	58	18	4.1	1.3	0.95
11	e1.7	4.3	6.5	19	105	50	28	30	13	3.3	1.3	1.0
12	1.8	4.1	6.3	19	55	46	24	143	11	2.7	1.2	1.1
13	2.0	3.7	6.9	18	e40	46	112	359	13	2.5	1.2	1.1
14	2.0	3.6	21	e14	e38	39	235	426	17	2.4	1.2	1.3
15	2.7	3.4	111	14	32	32	231	120	75	2.2	1.4	32
16	2.7	3.4	40	13	39	42	80	65	73	2.0	e1.3	29
17	4.6	3.4	47	12	38	36	53	96	41	1.8	e1.3	6.9
18	7.2	3.4	200	e10	e30	33	41	202	23	2.6	e1.4	3.8
19	5.4	3.3	76	e9.0	e28	31	33	96	16	2.8	e1.8	2.8
20	4.1	4.0	48	e11	39	54	33	62	11	2.5	e1.6	2.3
21	4.9	4.8	37	10	56	71	31	48	8.7	2.1	e1.5	2.0
22	23	4.5	28	9.6	51	45	33	38	7.4	2.0	e2.0	1.9
23	11	4.1	24	11	35	40	33	30	6.7	2.4	e1.8	1.8
24	7.9	3.8	34	111	28	42	26	26	5.6	2.3	e2.5	1.6
25	9.4	55	24	96	27	40	24	25	5.1	2.0	e2.0	1.5
26	11	59	e15	49	27	111	24	55	90	2.0	e1.5	1.7
27	11	29	e13	42	32	222	20	31	491	1.9	e1.2	8.4
28	11	19	12	50	e25	116	105	23	87	6.0	e1.1	20
29	8.3	64	e9.0	67	---	137	137	40	36	8.0	e1.2	7.3
30	6.8	78	e8.0	327	---	215	75	313	21	3.8	1.2	4.4
31	5.8	---	e8.0	239	---	82	---	139	---	2.9	1.2	---
TOTAL	162.1	405.0	1015.5	1228.0	1707	1976	2019	2744	1560.5	124.9	47.4	143.30
MEAN	5.23	13.5	32.8	39.6	61.0	63.7	67.3	88.5	52.0	4.03	1.53	4.78
MAX	23	78	200	327	554	222	235	426	491	14	2.5	32
MIN	1.6	3.3	6.3	7.4	24	20	20	20	5.1	1.8	1.1	0.95

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 2002, BY WATER YEAR (WY)

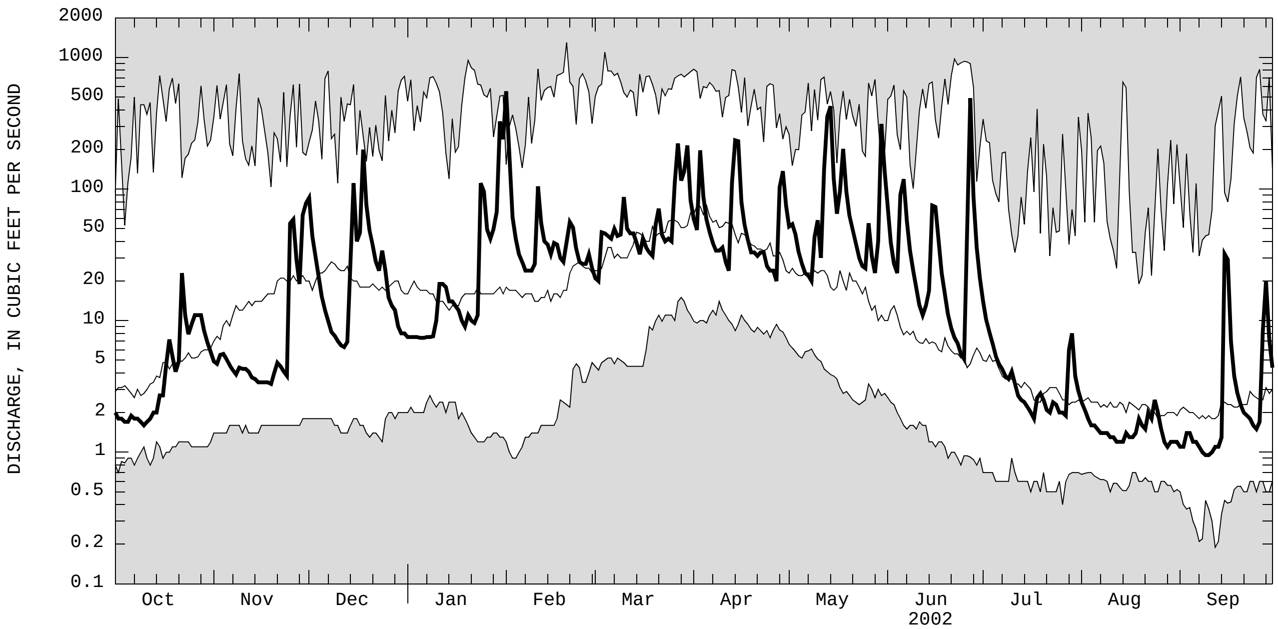
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	16.4	29.5	38.3	37.7	46.0	83.9	83.0	40.8	27.2	7.81	6.14	9.85
MAX	98.4	106	132	121	195	188	205	144	245	46.2	58.6	151
(WY)	1977	1951	1973	1998	1976	1942	1993	1943	1972	1992	1984	1977
MIN	1.09	1.62	1.67	1.85	8.28	24.9	10.9	5.81	1.57	0.82	0.67	0.59
(WY)	1942	1961	1961	1961	1958	1981	1946	1955	1955	1955	2001	1995

e Estimated

SUSQUEHANNA RIVER BASIN

01521500 CANISTEO RIVER AT ARKPORT, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1937 - 2002	
ANNUAL TOTAL	8302.95		13132.70			
ANNUAL MEAN	22.7		36.0		35.5	
HIGHEST ANNUAL MEAN					55.9	1972
LOWEST ANNUAL MEAN					20.9	1955
HIGHEST DAILY MEAN	560	Apr 9	554	Feb 1	1300	Feb 20 1939
LOWEST DAILY MEAN	0.50	Aug 24	0.95	Sep 9	0.19	Sep 12 1995
ANNUAL SEVEN-DAY MINIMUM	0.56	Aug 10	1.0	Sep 7	0.28	Sep 7 1995
10 PERCENT EXCEEDS	48		86		77	
50 PERCENT EXCEEDS	7.0		14		12	
90 PERCENT EXCEEDS	0.71		1.6		1.7	



2002 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.

01523500 CANACADEA CREEK NEAR HORNELL, NY

LOCATION.--Lat 42°20'05", long 77°41'00", Steuben County, Hydrologic Unit 02050104, on right bank 35 ft downstream from bridge on State Highway 21, 1.2 mi west of Hornell, 1.5 mi downstream from Almond Dam, and 2.0 mi upstream from mouth.
DRAINAGE AREA.--57.9 mi^2.
PERIOD OF RECORD.--October 1940 to December 1942, October 1944 to current year.
REVISED RECORDS.--WSP 2103: Drainage area. WDR NY 1971: 1969(M).
GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,185.68 ft above NGVD of 1929. Oct. 23, 1940 to Dec. 31, 1942, at site 185 ft upstream at different datum.
REMARKS.--Records fair. Since October 1948, floodflows regulated by detention in Almond Lake (see station 01523000). Occasional regulation at low flows to clear debris from gates at Almond Lake. Monthly figures for 1952-66 water years adjusted for regulation. Satellite gage-height telemeter at station. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge prior to construction of Almond Reservoir in 1949, 9,430 ft^3/s, May 17, 1945, gage height, 5.14 ft, from rating curve extended above 3,400 ft^3/s; maximum gage height, 6.65 ft, June 3, 1947; minimum discharge, 3.4 ft^3/s, Oct. 2, 1941. Maximum discharge since construction of Almond Reservoir in 1949, 5,880 ft^3/s, June 23, 1972, gage height 6.14 ft; minimum discharge, 0.5 ft^3/s, May 29, 1965.
EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 8, 1935, reached a stage of 16.61 ft, from floodmarks, discharge, 21,000 ft^3/s, on basis of slope-area measurement of peak flow.
EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,020 ft^3/s, June 28, gage height, 2.84 ft; minimum discharge, 0.9 ft^3/s, Aug. 5, 6, 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	6.7	77	17	679	44	87	110	96	40	12	5.0
2	5.1	6.4	68	17	459	35	85	110	54	23	9.0	4.1
3	4.6	7.0	55	15	233	60	223	104	21	18	8.6	4.2
4	4.4	7.0	43	13	107	102	203	73	34	7.6	3.9	11
5	4.2	6.9	28	13	55	71	91	44	130	5.5	1.0	9.2
6	3.7	5.8	22	13	47	50	88	44	265	5.5	0.90	7.0
7	3.4	5.3	15	13	47	91	65	44	173	5.6	7.0	6.5
8	3.8	e4.9	11	13	47	110	51	44	88	10	11	5.6
9	3.7	e4.8	12	13	47	71	49	64	54	15	10	5.6
10	4.0	e4.4	14	19	41	49	54	85	47	19	11	5.6
11	5.3	e4.6	14	22	152	72	53	90	40	19	11	5.6
12	5.6	e4.2	14	26	179	104	30	275	38	17	11	4.8
13	5.6	e4.2	14	28	82	104	45	594	22	8.8	8.0	4.8
14	5.8	e13	15	20	46	67	340	580	30	8.5	7.1	5.6
15	12	21	77	14	34	49	428	227	239	9.2	7.5	6.2
16	16	21	110	21	61	73	126	101	281	8.6	7.5	16
17	16	15	84	20	69	85	92	84	109	7.9	7.5	20
18	16	10	240	16	53	47	96	312	44	8.3	7.4	17
19	16	5.3	200	16	45	49	75	225	44	8.8	7.4	9.7
20	11	3.9	83	16	65	94	66	68	38	14	7.2	6.0
21	3.1	8.3	56	16	75	156	66	49	36	21	6.1	6.0
22	13	11	47	16	91	87	66	54	29	21	6.3	5.4
23	18	11	46	16	73	73	66	54	22	13	5.0	5.2
24	18	9.7	45	183	51	65	65	56	19	9.2	9.9	8.7
25	18	9.9	45	253	45	60	53	55	19	9.2	14	7.0
26	18	9.7	36	100	45	172	33	61	68	9.2	14	11
27	22	17	22	48	61	380	27	54	484	9.2	8.0	53
28	23	45	16	92	51	200	142	43	926	9.3	5.6	49
29	23	74	17	96	---	194	263	34	450	15	4.4	16
30	23	55	17	444	---	358	135	385	55	21	4.6	13
31	13	---	17	400	---	243	---	232	---	21	5.2	---
TOTAL	343.1	412.0	1560	2009	3040	3415	3263	4355	3955	417.4	239.10	333.8
MEAN	11.1	13.7	50.3	64.8	109	110	109	140	132	13.5	7.71	11.1
MAX	23	74	240	444	679	380	428	594	926	40	14	53
MIN	3.1	3.9	11	13	34	35	27	34	19	5.5	0.90	4.1

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2002, BY WATER YEAR (WY)

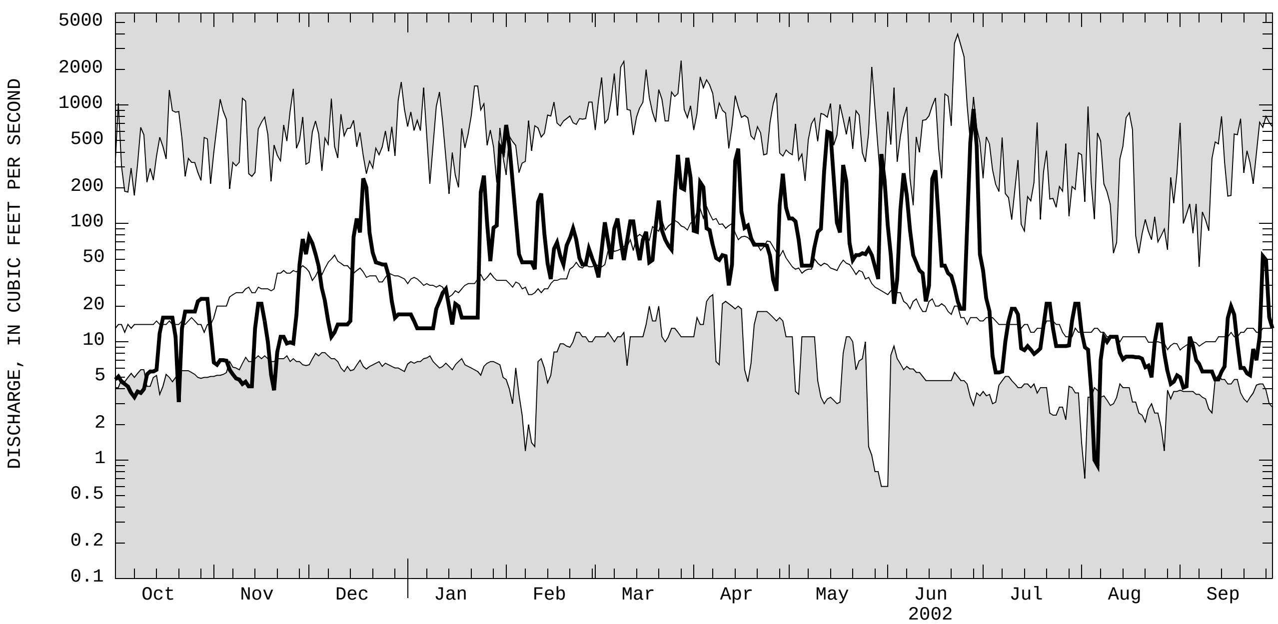
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	33.6	58.6	69.9	68.8	82.3	143	146	71.6	58.0	22.5	18.7	25.2
MAX	139	193	218	215	278	306	470	215	547	111	128	198
(WY)	1977	1951	1973	1996	1976	1956	1993	1984	1972	1972	1984	1977
MIN	7.07	9.16	7.13	6.55	17.7	33.4	46.0	15.5	5.24	4.63	5.13	6.09
(WY)	1950	1961	1961	1961	1980	1969	1955	1955	1965	1965	1965	1955

e Estimated

SUSQUEHANNA RIVER BASIN

01523500 CANACADEA CREEK NEAR HORNELL, NY

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1949 - 2002	
ANNUAL TOTAL	15791.3		23342.40			
ANNUAL MEAN	43.3		64.0		66.3	
HIGHEST ANNUAL MEAN					110	1972
LOWEST ANNUAL MEAN					36.9	1965
HIGHEST DAILY MEAN	1040	Apr 9	926	Jun 28	3970	Jun 23 1972
LOWEST DAILY MEAN	3.1	Sep 22	0.90	Aug 6	0.60	May 30 1965
ANNUAL SEVEN-DAY MINIMUM	3.9	Oct 4	3.9	Oct 4	0.83	May 26 1965
10 PERCENT EXCEEDS	88		162		146	
50 PERCENT EXCEEDS	16		22		27	
90 PERCENT EXCEEDS	5.9		5.5		8.1	



2002 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.

01524500 CANISTEO RIVER BELOW CANACADEA CREEK, AT HORNELL, NY

LOCATION.--Lat 42°18'50", long 77°39'05", Steuben County, Hydrologic Unit 02050104, on right bank 235 ft upstream from Erie Railroad bridge in Hornell, 0.3 mi upstream from Crosby Creek, and 1.5 mi downstream from Canacadea Creek.
DRAINAGE AREA.--158 mi^2.
PERIOD OF RECORD.--August 1942 to current year.
REVISED RECORD--WDR NY-86-3: 1971 (including minimum daily).
GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,131.32 ft above NGVD of 1929.
REMARKS.--Records good except those for estimated daily discharges, which are fair. Diversion from Carrington Creek, a tributary upstream from station, by City of Hornell for municipal supply; effluent from wastewater treatment plant enters river downstream from gage. Since Nov. 1939, flood flows regulated by Arkport Reservoir (see station 01521000), and, since October 1948, by Almond Lake (see station 01523000); normal regulation occasionally sufficient to affect figures of monthly runoff. Telephone and satellite gage-height telemeters at station. Several measurements of water temperature were made during the year.
COOPERATION.--Records of diversion from Carrington Creek furnished by City of Hornell.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge prior to construction of Almond Reservoir in 1949, 9,340 ft^3/s, May 26, 1943, gage height 13.30 ft, from rating curve extended above 7,600 ft^3/s on the basis of critical-depth measurement of peak flow; minimum discharge, 9.3 ft^3/s, Mar. 4, 1947. Maximum discharge since construction of Almond Reservoir, 9,560 ft^3/s, June 23, 1972, gage height, 13.45 ft, from floodmark, from rating curve extended above 7,600 ft^3/s on the basis of critical-depth measurement of peak flow; minimum discharge, 7.4 ft^3/s, Sept. 13, 14, 1955.
EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,280 ft^3/s, June 27, gage height, 4.98 ft; minimum discharge, 15 ft^3/s, Oct. 5, Sept. 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	24	134	e34	1550	100	259	243	319	130	36	19
2	17	25	111	e33	920	96	231	247	184	107	29	18
3	17	25	88	e32	414	150	510	223	130	86	28	20
4	16	25	71	31	237	207	416	169	125	60	22	23
5	16	25	53	31	e130	141	244	123	311	50	19	22
6	18	24	44	32	e120	134	219	113	542	45	18	20
7	16	23	39	32	117	195	177	112	354	44	21	19
8	16	23	36	e32	114	194	148	106	204	47	25	19
9	16	23	36	32	125	162	150	160	133	54	26	18
10	16	22	35	41	113	219	154	223	114	80	25	18
11	17	22	35	55	335	170	142	171	97	56	24	17
12	16	22	33	59	305	198	109	470	91	51	26	17
13	17	21	32	60	181	197	194	1470	82	40	23	16
14	18	25	42	48	e115	152	739	1800	101	38	20	18
15	21	32	180	43	115	122	1010	702	498	37	21	51
16	25	32	164	47	148	159	378	360	500	35	21	107
17	24	28	140	46	164	163	261	365	247	33	20	45
18	27	25	454	e38	125	128	224	840	129	35	21	34
19	27	23	322	e34	111	122	181	584	109	40	21	28
20	25	21	161	e36	136	195	164	290	91	45	22	23
21	23	23	119	e35	180	338	157	224	79	49	20	22
22	43	26	96	39	203	215	154	202	68	49	23	21
23	39	26	89	53	167	184	153	179	58	50	22	21
24	36	25	96	256	120	173	139	164	53	40	26	21
25	36	45	88	388	113	162	123	156	50	35	29	23
26	36	73	e65	182	110	343	106	218	325	33	29	22
27	38	50	e45	111	127	918	90	167	1820	32	24	84
28	39	69	e38	150	109	506	280	129	1260	47	21	111
29	40	110	e35	170	---	516	561	126	634	60	20	42
30	37	99	e35	754	---	739	311	1010	171	50	19	33
31	30	---	e35	693	---	485	---	572	---	45	19	---
TOTAL	780	1036	2951	3627	6704	7783	7984	11918	8879	1603	720	952
MEAN	25.2	34.5	95.2	117	239	251	266	384	296	51.7	23.2	31.7
MAX	43	110	454	754	1550	918	1010	1800	1820	130	36	111
MIN	16	21	32	31	109	96	90	106	50	32	18	16

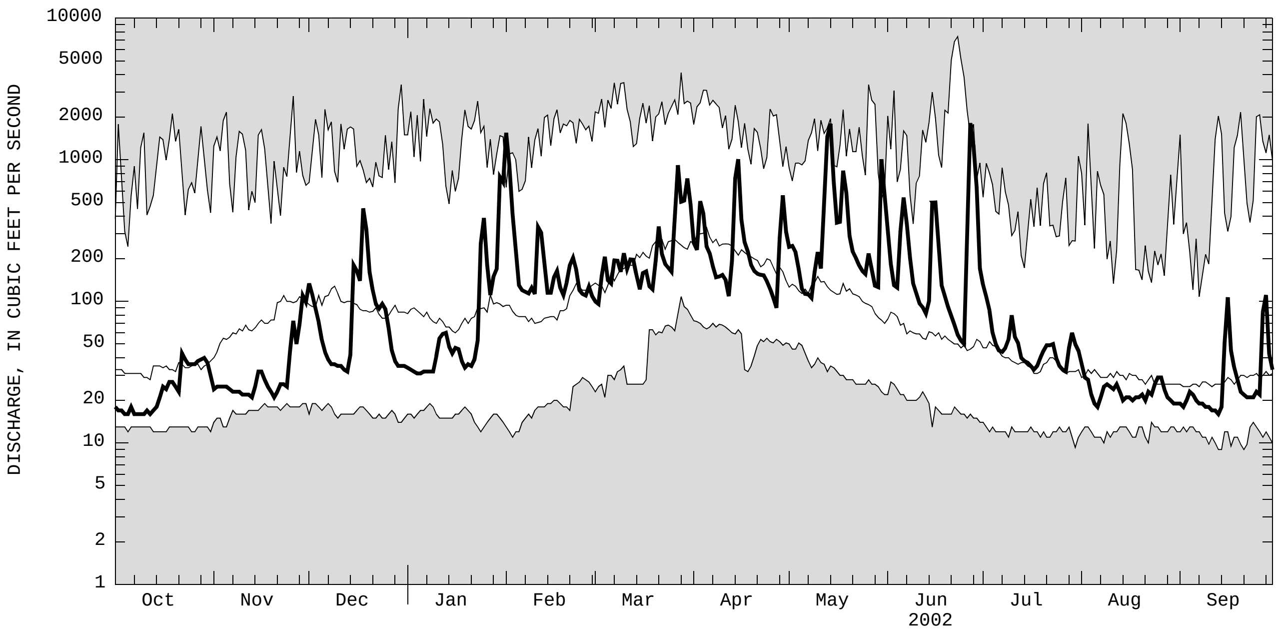
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	76.3	126	157	158	189	351	346	198	143	55.4	46.3	58.4
MAX	304	455	551	499	722	826	877	696	1226	249	303	498
(WY)	1977	1951	1973	1998	1976	1945	1993	1943	1972	1972	1984	1977
MIN	13.5	17.9	16.6	15.6	35.6	111	66.6	42.4	20.1	13.8	13.2	11.7
(WY)	1965	1965	1961	1961	1963	1969	1946	1955	1955	1955	1965	1955

e Estimated

01524500 CANISTEO RIVER BELOW CANACADEA CREEK, AT HORNELL, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1942 - 2002	
ANNUAL TOTAL	38298		54937			
ANNUAL MEAN	105		151		158	
HIGHEST ANNUAL MEAN					255	1972
LOWEST ANNUAL MEAN					79.8	1965
HIGHEST DAILY MEAN	2480	Apr 8	1820	Jun 27	7440	Jun 23 1972
LOWEST DAILY MEAN	13	Aug 14	16	Oct 4	9.0	Sep 13 1955
ANNUAL SEVEN-DAY MINIMUM	14	Aug 11	16	Oct 4	10	Sep 8 1955
10 PERCENT EXCEEDS	207		340		349	
50 PERCENT EXCEEDS	41		60		69	
90 PERCENT EXCEEDS	16		21		22	



2002 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.

01525981 TUSCARORA CREEK ABOVE SOUTH ADDISON, NY

LOCATION.--Lat 42°04'20", long 77°17'57", Steuben County, Hydrologic Unit 02050104, on right bank 500 ft downstream from bridge on State Highway 417, 200 ft upstream from Elk Creek, and 1.7 mi southwest of South Addison.
DRAINAGE AREA.--102 mi^2.
PERIOD OF RECORD.--Annual maximum, water years 1989-2000. October 2000 to current year.
REVISED RECORD.--WDR NY-01-3: 1991 (M).
GAGE.--Water-stage recorder. Datum of gage is 1,079.00 ft above NGVD of 1929.
REMARKS.--Records good except those for estimated daily discharges, which are poor. Telephone and satellite gage-height telemeters at station. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,800 ft^3/s, Oct. 23, 1990, gage height, 10.96 ft, maximum gage height, 13.49 ft, Jan. 19, 1996 (ice jam); minimum instantaneous discharge, 0.17 ft^3/s, Aug. 15, 16, 2001, gage height 1.52 ft.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,600 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 15	1300	*2,500	*6.16				

Minimum discharge, 0.19 ft^3/s, Sept. 26, gage height, 1.53 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e4.0	e6.5	e60	16	488	e46	150	122	42	38	3.9	0.47
2	e3.0	e6.0	e30	13	202	e42	121	180	32	30	2.4	0.47
3	e2.8	e8.5	e20	13	117	e60	117	127	27	25	1.4	0.47
4	e2.4	e7.5	e16	14	e90	e65	102	92	25	19	0.84	0.45
5	e2.0	e6.0	e14	14	e65	e55	85	74	587	16	9.3	0.46
6	e2.4	e5.5	e12	13	e60	e50	78	63	1410	13	11	0.46
7	e2.8	e5.0	e11	15	e55	54	68	62	410	12	5.2	0.46
8	e2.6	e5.0	e10	15	e44	48	63	54	166	11	2.7	0.43
9	e2.4	e5.2	e11	14	40	47	62	73	98	10	1.5	0.41
10	e2.2	e5.2	e10	15	41	69	75	77	65	11	1.0	0.38
11	e2.1	e4.5	e9.0	18	213	e54	58	52	50	8.9	0.62	0.34
12	e1.8	e4.2	e8.5	e20	122	52	51	124	40	6.7	0.47	0.32
13	e1.8	e4.2	e9.0	e20	e95	50	72	470	37	5.3	0.44	0.29
14	e2.2	e4.0	e18	e19	e75	48	228	592	463	4.4	0.38	0.26
15	e4.5	e4.0	e70	18	e80	44	518	257	1240	3.7	0.36	16
16	e5.5	e4.0	e38	e17	69	54	165	148	650	2.7	0.34	e4.0
17	e9.5	e3.6	e55	17	71	53	119	124	291	1.9	0.31	e2.0
18	e10	e3.4	e300	e16	e60	52	93	648	148	3.1	0.29	e0.80
19	e7.5	e3.2	132	15	e60	64	76	272	95	5.8	0.28	e0.50
20	e6.0	e4.5	89	16	57	77	69	161	65	9.4	0.30	e0.36
21	e5.5	e5.5	71	15	79	152	67	126	48	6.8	0.31	e0.34
22	e7.0	e5.0	57	e14	87	113	70	101	39	4.5	0.63	e0.32
23	e7.5	e4.5	49	e14	e62	89	68	81	33	4.1	1.5	e0.28
24	e10	e4.0	49	23	e50	90	54	66	28	4.5	0.91	0.24
25	e13	e19	e44	e100	51	85	50	58	25	3.7	0.99	0.23
26	e13	e40	e34	e60	51	273	54	70	22	2.8	0.62	0.20
27	e12	e30	e32	e55	62	720	44	54	420	2.4	0.47	4.8
28	e11	e20	e28	e55	e50	458	251	45	348	5.3	0.42	17
29	e9.5	e20	25	e58	---	379	310	55	92	7.6	0.45	5.1
30	e8.5	e40	21	139	---	320	162	49	53	6.8	0.46	1.6
31	e7.0	---	19	144	---	185	---	51	---	7.0	0.44	---
TOTAL	181.5	288.0	1351.5	995	2596	3948	3500	4528	7049	292.4	50.23	59.44
MEAN	5.85	9.60	43.6	32.1	92.7	127	117	146	235	9.43	1.62	1.98
MAX	13	40	300	144	488	720	518	648	1410	38	11	17
MIN	1.8	3.2	8.5	13	40	42	44	45	22	1.9	0.28	0.20
CFSM	0.06	0.10	0.43	0.32	0.92	1.26	1.16	1.45	2.33	0.09	0.02	0.02
IN.	0.07	0.11	0.50	0.37	0.96	1.45	1.29	1.67	2.60	0.11	0.02	0.02

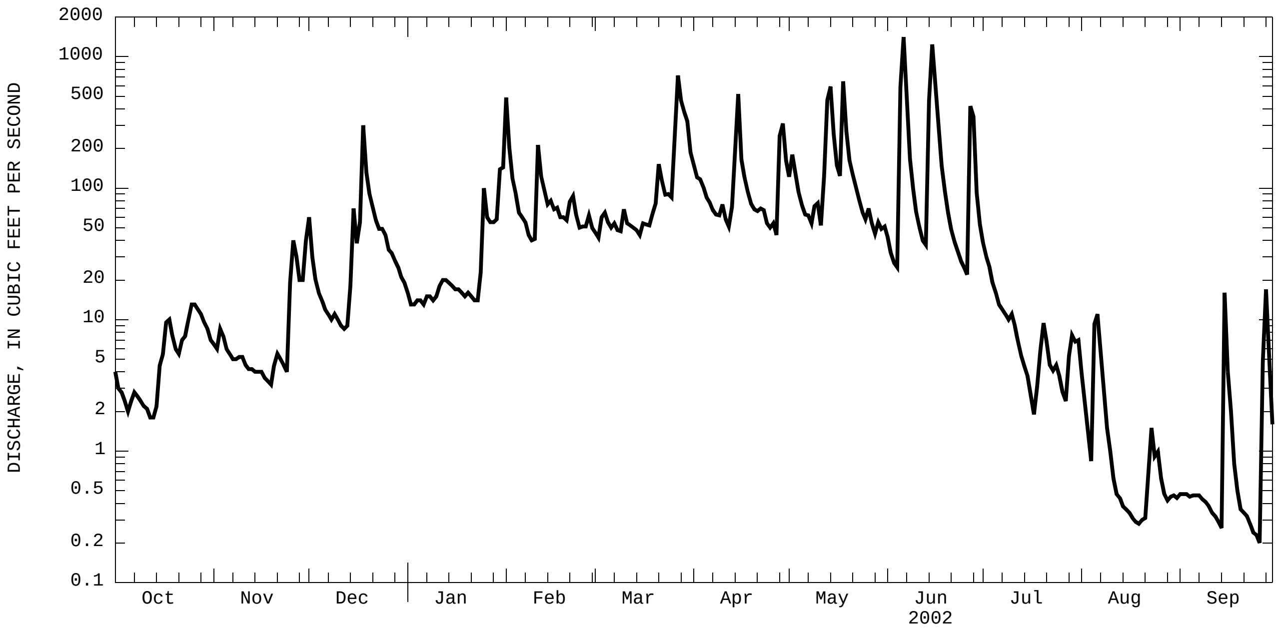
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	24.1	19.3	51.3	25.0	77.6	140	285	84.5	134	5.37	1.24	3.34
MAX	42.4	29.1	58.9	32.1	92.7	152	454	146	235	9.43	1.62	4.70
(WY)	2001	2001	2001	2002	2002	2001	2001	2002	2002	2002	2002	2001
MIN	5.85	9.60	43.6	17.8	62.4	127	117	22.9	32.4	1.30	0.87	1.98
(WY)	2002	2002	2002	2001	2001	2002	2002	2001	2001	2001	2001	2002

e Estimated

01525981 TUSCARORA CREEK ABOVE SOUTH ADDISON, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 2001 - 2002	
ANNUAL TOTAL	24346.13		24839.07			
ANNUAL MEAN	66.7		68.1		70.4	
HIGHEST ANNUAL MEAN					72.7	2001
LOWEST ANNUAL MEAN					68.1	2002
HIGHEST DAILY MEAN	1940	Apr 7	1410	Jun 6	1940	Apr 7 2001
LOWEST DAILY MEAN	0.19	Aug 15	0.20	Sep 26	0.19	Aug 15 2001
ANNUAL SEVEN-DAY MINIMUM	0.21	Aug 13	0.28	Sep 20	0.21	Aug 13 2001
ANNUAL RUNOFF (CFSM)	0.66		0.67		0.70	
ANNUAL RUNOFF (INCHES)	8.97		9.15		9.47	
10 PERCENT EXCEEDS	148		148		150	
50 PERCENT EXCEEDS	12		20		18	
90 PERCENT EXCEEDS	0.59		0.49		0.58	



2002 WATER YEAR DAILY MEAN DISCHARGE.

01526500 TIOGA RIVER NEAR ERWINS, NY

LOCATION.--Lat 42°07'16", long 77°07'46", Steuben County, Hydrologic Unit 02050104, on right bank 20 ft downstream from bridge on Mulholland Road, 1.1 mi northeast of Erwins, and 1.1 mi downstream from Canisteo River.

DRAINAGE AREA.--1,377 mi^2.

PERIOD OF RECORD.--July 1918 to current year.

REVISED RECORDS.--WSP 891: 1935-38. WSP 1672: 1919(M), 1927(M), 1929(M). WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 931.24 ft above NGVD of 1929. Prior to June 21, 1931, nonrecording gage on highway bridge at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. High flows regulated by upstream reservoirs. Since March 1979, flood flows regulated by Tioga Lake; normal regulation occasionally sufficient to affect figures of monthly runofff. Telephone and satellite gage-height telemeters at station. Several measurements of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, prior to construction of Tioga Reservoir in 1979, 190,000 ft^3/s, June 23, 1972, from rating curve extended above 90,000 ft^3/s, on basis of computation of peak flow at Lindley and Canisteo River at Erwins, 7.2 mi and 2.0 mi upstream, respectively, adjusted for flow from intervening area, gage height, 26.74 ft, from floodmarks; minimum discharge, 18 ft^3/s, Sept. 2, 3, 1939; minimum gage height, 0.40 ft, Sept. 8, 9, 1954, July 23, Aug. 10, 11, 1955. Maximum discharge since construction of Tioga Reservoir in 1979, 45,600 ft^3/s, Jan. 19, 1996, gage height 16.98 ft; minimum discharge, 52 ft^3/s, Oct. 1, 2, 6, 1980, gage height, 0.53 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,800 ft^3/s, June 6, gage height, 9.57 ft; minimum discharge, 83 ft^3/s, Sept. 12, 13, 14, 15, gage height, 0.34 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	308	173	1220	e410	e4600	748	2910	2690	1410	796	188	110
2	226	164	1310	e400	e4500	743	2320	2660	1050	630	176	107
3	203	161	913	e380	2670	855	2170	2760	831	e570	160	102
4	197	160	643	e320	1870	1140	2380	1930	671	e500	142	97
5	190	160	594	291	e1350	906	1730	1620	3250	e400	139	97
6	190	157	571	310	e1080	804	e1450	1410	12800	e350	149	96
7	187	153	505	e320	e1050	944	e1350	1370	12100	e300	149	97
8	164	152	454	e320	927	942	e1280	1280	8660	e270	134	91
9	152	152	471	337	922	873	1190	1320	3560	256	125	90
10	150	151	483	342	905	980	1190	1820	2220	296	125	89
11	150	150	384	344	2830	999	1160	1410	1710	290	125	88
12	150	148	334	e330	2520	988	983	1940	1380	255	123	85
13	150	147	355	e330	e1750	1010	977	7290	1100	240	120	84
14	150	146	425	e320	e1300	958	2360	11800	1950	224	117	83
15	163	145	913	e330	1160	852	6290	7070	6860	210	115	96
16	157	148	1240	338	1380	875	3670	3950	7470	182	115	136
17	169	153	1070	e340	1380	985	2470	3130	4230	166	113	197
18	178	151	2600	e330	1210	986	e2070	6970	2930	160	112	141
19	214	149	3110	e280	1070	948	1750	6790	2100	177	111	120
20	215	150	1810	e270	994	993	1520	3980	1600	189	111	109
21	210	136	1500	e310	1140	1600	1360	2870	1190	196	112	101
22	211	132	1210	321	1370	1610	1370	2520	1060	181	111	96
23	212	132	1070	355	1270	1290	1290	2140	921	196	116	105
24	248	132	920	387	1050	1290	1090	1820	777	198	118	89
25	236	159	831	1470	894	1270	968	1560	643	201	122	86
26	232	257	618	1440	856	1750	999	1530	649	193	120	87
27	229	465	520	976	908	7450	919	1430	2750	184	120	159
28	196	514	e520	e900	861	5550	1520	1310	3930	170	119	341
29	197	581	e480	e1000	---	4850	5670	1290	2380	214	117	556
30	196	711	e440	e1700	---	4800	3600	1690	1180	271	115	345
31	182	---	e420	e3300	---	3970	---	2170	---	215	113	---
TOTAL	6012	6289	27934	18801	43817	53959	60006	93520	93362	8680	3932	4080
MEAN	194	210	901	606	1565	1741	2000	3017	3112	280	127	136
MAX	308	711	3110	3300	4600	7450	6290	11800	12800	796	188	556
MIN	150	132	334	270	856	743	919	1280	643	160	111	83

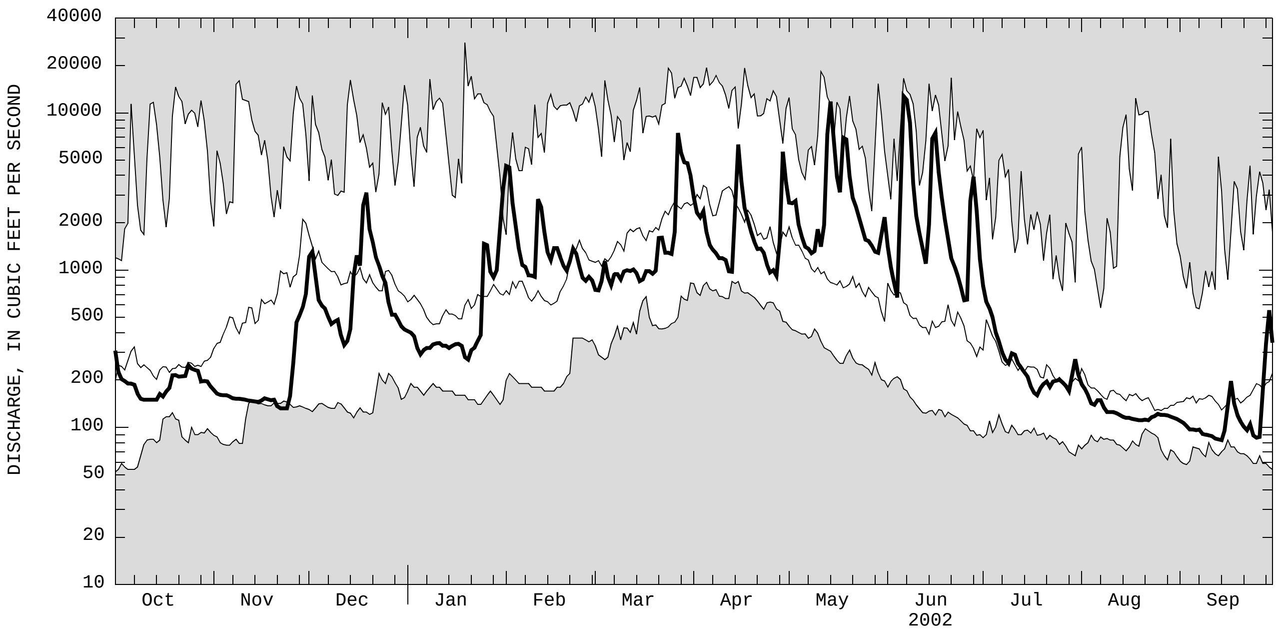
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	680	1176	1426	1330	1778	2677	3488	1771	1226	463	417	333
MAX	4160	4401	3545	4870	4219	5737	11970	4689	4579	1169	3257	1156
(WY)	1991	1997	1997	1996	1981	1994	1993	1989	1989	1998	1994	1992
MIN	96.5	139	155	165	340	843	1320	371	142	95.9	102	72.0
(WY)	1992	1999	1999	1981	1980	1981	1981	1985	1999	1991	2001	1980

e Estimated

01526500 TIOGA RIVER NEAR ERWINS, NY

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1980 - 2002	
ANNUAL TOTAL	329804		420392			
ANNUAL MEAN	904		1152		1392	
HIGHEST ANNUAL MEAN					2192	1984
LOWEST ANNUAL MEAN					786	1999
HIGHEST DAILY MEAN	17300	Apr 8	12800	Jun 6	28000	Jan 19 1996
LOWEST DAILY MEAN	71	Aug 15	83	Sep 14	52	Oct 1 1980
ANNUAL SEVEN-DAY MINIMUM	79	Aug 10	87	Sep 8	55	Sep 30 1980
10 PERCENT EXCEEDS	2160		2710		3300	
50 PERCENT EXCEEDS	322		520		580	
90 PERCENT EXCEEDS	120		119		131	



2002 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.

01527500 COHOCTON RIVER AT AVOCA, NY

LOCATION.--Lat 42°23'52", long 77°25'04", Steuben County, Hydrologic Unit 02050105, on left bank just downstream from bridge on State Highway 415, 0.2 mi north of Avoca, 1.6 mi upstream from Goff Creek, and 6.4 mi north of Bath.
DRAINAGE AREA.--152 mi^2.
PERIOD OF RECORD.--May 1938 to September 1945; June 1996 to September 1997; June 2001 to current year.
GAGE.--Water-stage recorder. Datum of gage is 1,182.75 ft above NGVD of 1929. May 16, 1938 to Sept. 30, 1945, at site 4,200 ft downstream at datum 2.75 ft higher.
REMARKS.--Records good except those for estimated daily discharges, which are fair. Telephone and satellite gage-height telemeters at station. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,880 ft^3/s Mar. 17, 1942, gage height, 8.88 ft, site and datum then in use, minimum discharge, 6.5 ft^3/s, Sept. 28, 1941.
EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 23, 1972 reached a discharge of 13,300 ft^3/s on basis of contracted opening measurement of peak flow.
EXTREMES FOR CURRENT PERIOD.--July 2001 to September 2001: Maximum discharge, 126 ft^3/s, July 26, gage height, 2.40 ft; minimum discharge, 9.6 ft^3/s, Sept. 23, 24.

October 2001 to September 2002: Maximum discharge, 1,220 ft^3/s, May 30, gage height, 3.97 ft; minimum discharge, 14 ft^3/s, Oct 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	37	19	20
2	---	---	---	---	---	---	---	---	---	37	18	19
3	---	---	---	---	---	---	---	---	---	39	18	18
4	---	---	---	---	---	---	---	---	---	39	18	17
5	---	---	---	---	---	---	---	---	---	55	17	15
6	---	---	---	---	---	---	---	---	---	44	16	14
7	---	---	---	---	---	---	---	---	---	39	15	13
8	---	---	---	---	---	---	---	---	---	41	15	13
9	---	---	---	---	---	---	---	---	---	38	14	13
10	---	---	---	---	---	---	---	---	---	34	15	12
11	---	---	---	---	---	---	---	---	---	34	14	12
12	---	---	---	---	---	---	---	---	---	34	13	11
13	---	---	---	---	---	---	---	---	---	31	13	12
14	---	---	---	---	---	---	---	---	---	30	13	13
15	---	---	---	---	---	---	---	---	---	28	12	12
16	---	---	---	---	---	---	---	---	---	27	12	11
17	---	---	---	---	---	---	---	---	---	29	15	12
18	---	---	---	---	---	---	---	---	---	29	14	12
19	---	---	---	---	---	---	---	---	---	27	19	11
20	---	---	---	---	---	---	---	---	---	25	24	11
21	---	---	---	---	---	---	---	---	---	24	22	12
22	---	---	---	---	---	---	---	---	---	24	20	11
23	---	---	---	---	---	---	---	---	---	24	17	11
24	---	---	---	---	---	---	---	---	---	26	16	17
25	---	---	---	---	---	---	---	---	---	23	14	83
26	---	---	---	---	---	---	---	---	---	34	e14	55
27	---	---	---	---	---	---	---	---	---	22	28	37
28	---	---	---	---	---	---	---	---	---	20	30	28
29	---	---	---	---	---	---	---	---	---	19	25	30
30	---	---	---	---	---	---	---	---	---	19	20	29
31	---	---	---	---	---	---	---	---	---	20	18	---
TOTAL	---	---	---	---	---	---	---	---	---	952	538	584
MEAN	---	---	---	---	---	---	---	---	---	30.7	17.4	19.5
MAX	---	---	---	---	---	---	---	---	---	55	30	83
MIN	---	---	---	---	---	---	---	---	---	19	12	11
CFSM	---	---	---	---	---	---	---	---	---	0.20	0.11	0.13
IN.	---	---	---	---	---	---	---	---	---	0.23	0.13	0.14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	64.7	114	153	128	174	460	486	269	134	76.7	42.2	68.9
MAX	233	394	397	280	417	997	1143	746	211	187	95.4	231
(WY)	1997	1997	1997	1943	1939	1945	1940	1943	1945	1942	1942	1945
MIN	15.2	19.2	34.5	43.8	68.4	206	242	84.1	38.9	25.8	17.4	13.5
(WY)	1942	1942	1942	1942	1942	1998	1997	1941	1939	1941	2001	1941

e Estimated

01527500 COHOCTON RIVER AT AVOCA, NY--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	22	101	e54	732	134	427	269	617	118	57	30
2	22	29	73	e54	676	130	370	284	432	107	49	29
3	18	26	59	e54	500	160	403	259	317	100	45	28
4	17	28	49	e54	392	163	344	229	266	101	42	29
5	16	28	46	53	e290	e120	313	209	321	96	46	30
6	16	24	43	51	e250	155	293	194	335	86	46	26
7	16	22	39	e50	224	155	267	198	265	78	40	24
8	16	21	37	e50	200	144	248	185	218	74	38	23
9	18	22	39	49	177	142	241	217	189	73	36	22
10	17	22	38	53	169	178	231	223	167	74	34	22
11	16	23	36	64	238	152	205	184	156	66	33	22
12	15	25	35	63	190	153	188	271	169	61	32	20
13	15	24	37	61	e170	156	246	608	151	59	42	20
14	19	24	45	e55	e165	154	379	916	199	54	43	23
15	17	22	95	56	162	145	518	792	499	52	37	129
16	19	21	83	53	170	152	458	678	552	50	36	163
17	20	20	80	50	168	140	420	640	422	48	34	69
18	20	20	212	48	148	140	408	724	330	48	31	48
19	20	20	191	e46	138	138	361	608	262	70	30	40
20	19	24	162	e54	149	156	338	532	215	66	34	34
21	24	23	141	51	166	200	298	461	183	54	32	32
22	e34	24	121	46	174	185	281	391	162	58	32	32
23	e30	22	109	47	159	177	254	334	162	97	55	30
24	e28	21	105	66	149	184	224	297	138	84	102	29
25	e27	27	92	101	150	183	220	269	126	65	82	29
26	26	37	e75	96	153	259	213	292	151	56	56	28
27	28	38	e70	99	158	519	187	237	557	53	42	72
28	28	34	e70	113	145	461	254	207	234	68	38	125
29	27	49	e65	132	---	481	321	194	164	95	36	73
30	26	69	e60	278	---	555	286	795	134	71	35	54
31	24	---	e58	e300	---	489	---	679	---	67	34	---
TOTAL	663	811	2466	2401	6562	6660	9196	12376	8093	2249	1329	1335
MEAN	21.4	27.0	79.5	77.5	234	215	307	399	270	72.5	42.9	44.5
MAX	34	69	212	300	732	555	518	916	617	118	102	163
MIN	15	20	35	46	138	120	187	184	126	48	30	20
CFSM	0.14	0.18	0.52	0.51	1.54	1.41	2.02	2.63	1.77	0.48	0.28	0.29
IN.	0.16	0.20	0.60	0.59	1.61	1.63	2.25	3.03	1.98	0.55	0.33	0.33

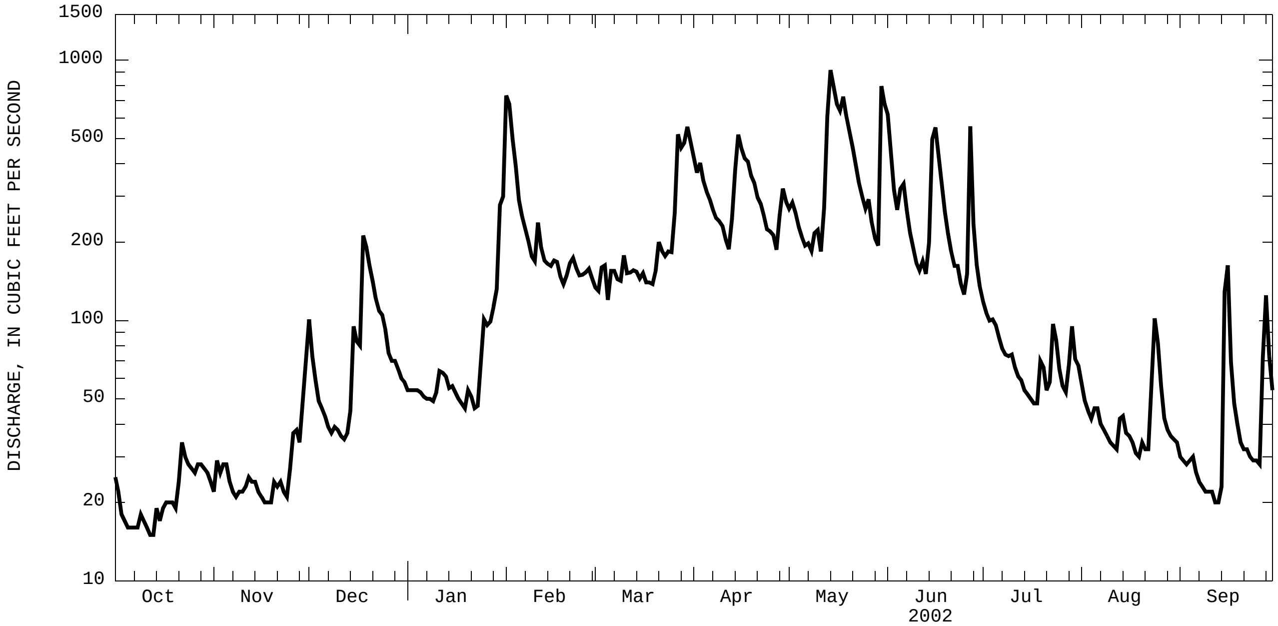
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	60.4	105	145	123	180	436	466	284	148	76.3	42.2	66.8
MAX	233	394	397	280	417	997	1143	746	270	187	95.4	231
(WY)	1997	1997	1997	1943	1939	1945	1940	1943	2002	1942	1942	1945
MIN	15.2	19.2	34.5	43.8	68.4	206	242	84.1	38.9	25.8	17.4	13.5
(WY)	1942	1942	1942	1942	1942	1998	1997	1941	1939	1941	2001	1941

e Estimated

SUMMARY STATISTICS	FOR 2002 WATER YEAR		WATER YEARS 1938 - 2002	
ANNUAL TOTAL	54141			
ANNUAL MEAN	148		180	
HIGHEST ANNUAL MEAN			245	1943
LOWEST ANNUAL MEAN			141	1941
HIGHEST DAILY MEAN	916	May 14	3450	Mar 17 1942
LOWEST DAILY MEAN	15	Oct 12	10	Sep 26 1941
ANNUAL SEVEN-DAY MINIMUM	16	Oct 7	11	Sep 23 1941
MAXIMUM PEAK FLOW			3880	Mar 17 1942
MAXIMUM PEAK STAGE			8.88	Mar 17 1942
INSTANTANEOUS LOW FLOW			26	Sep 3 1996
ANNUAL RUNOFF (CFSM)	0.98		1.19	
ANNUAL RUNOFF (INCHES)	13.25		16.13	
10 PERCENT EXCEEDS	351		440	
50 PERCENT EXCEEDS	80		83	
90 PERCENT EXCEEDS	23		24	

01527500 COHOCTON RIVER AT AVOCA, NY--Continued



2002 WATER YEAR DAILY MEAN DISCHARGE.

SUSQUEHANNA RIVER BASIN

01529500 COHOCTON RIVER NEAR CAMPBELL, NY

LOCATION.--Lat 42°15'09", long 77°13'01", Steuben County, Hydrologic Unit 02050105, on left bank just downstream from bridge on town road at junction with County Highway 125, 1.9 mi upstream from Michigan Creek, and 2.0 mi north of Campbell.
DRAINAGE AREA.--470 mi^2.
PERIOD OF RECORD.--July 1918 to current year.
REVISED RECORDS.--WSP 891: 1935. WSP 1302: 1919-20(M), 1927-28(M), 1928-38 (monthly runoff). WSP 2103: Drainage area.
GAGE.--Water-stage recorder. Datum of gage is 1,016.34 ft above NGVD of 1929. Prior to Mar. 5, 1937, nonrecording gage on highway bridge.
REMARKS.--Records good except those for estimated daily discharges, which are fair. During each year since March 1931, a large part of flow from 45.5 mi^2 of drainage area upstream from Lake Lamoka on Mud Creek, a tributary upstream from this station, has been diverted into Keuka Lake (Oswego River basin), for power development. Telephone and satellite gage-height telemeters at station. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 41,100 ft^3/s, July 8, 1935, gage height, 11.6 ft, from floodmark, from rating curve extended above 24,200 ft^3/s on basis of velocity-area and slope-area measurements of peak flow; minimum discharge, 8 ft^3/s, Sept. 6, 7, 1934.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jun. 27	0530	*4,670	*4.92	No other peak greater than base discharge.			

Minimum discharge, 30 ft^3/s, Sept. 14, 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	43	198	e95	2410	303	1150	751	1320	317	116	47
2	50	45	160	e95	2320	298	965	759	874	279	96	43
3	46	49	126	e95	1420	361	1010	766	675	244	84	43
4	41	48	103	e95	1030	442	955	649	466	219	76	41
5	38	50	92	e95	667	326	827	578	566	219	76	40
6	39	46	87	98	e600	348	695	534	975	192	83	39
7	38	45	81	99	e560	370	590	496	725	178	76	37
8	38	43	87	e90	568	341	541	454	497	166	69	35
9	39	43	143	e90	517	326	528	519	398	159	63	33
10	38	43	155	e100	491	404	574	577	346	160	60	31
11	35	43	139	e120	846	377	482	441	315	145	57	31
12	35	43	135	e120	697	368	421	580	337	131	54	31
13	34	45	136	e110	587	363	573	1980	346	126	56	31
14	35	44	151	e100	446	400	1420	3550	560	120	62	30
15	39	44	271	e110	453	432	2640	2730	1230	112	60	41
16	38	42	274	111	443	457	1610	1990	1430	107	58	300
17	41	41	247	105	453	462	1200	1690	981	103	54	134
18	41	39	593	99	372	449	1120	2210	720	97	50	88
19	41	39	605	75	340	453	935	1910	576	113	47	68
20	40	44	440	e90	368	466	827	1410	428	134	54	58
21	40	45	366	e100	404	736	773	1120	355	111	51	55
22	58	44	283	e95	458	684	709	894	318	100	49	54
23	64	44	228	e90	403	548	599	759	315	129	63	48
24	62	43	213	123	350	540	507	623	280	150	85	42
25	56	51	e190	270	343	519	464	558	261	121	139	40
26	50	73	e140	259	341	668	484	559	343	103	95	39
27	49	74	e120	242	359	2190	413	497	2590	97	71	58
28	49	68	e130	266	332	1870	642	423	903	102	60	205
29	49	88	e120	296	---	1790	1290	384	509	159	58	135
30	47	118	e105	616	---	1780	882	1220	372	141	56	104
31	45	---	e105	868	---	1410	---	1130	---	114	51	---
TOTAL	1371	1527	6223	5217	18578	20481	25826	32741	20011	4648	2129	1981
MEAN	44.2	50.9	201	168	664	661	861	1056	667	150	68.7	66.0
MAX	64	118	605	868	2410	2190	2640	3550	2590	317	139	300
MIN	34	39	81	75	332	298	413	384	261	97	47	30
CFSM	0.09	0.11	0.43	0.36	1.41	1.41	1.83	2.25	1.42	0.32	0.15	0.14
IN.	0.11	0.12	0.49	0.41	1.47	1.62	2.04	2.59	1.58	0.37	0.17	0.16

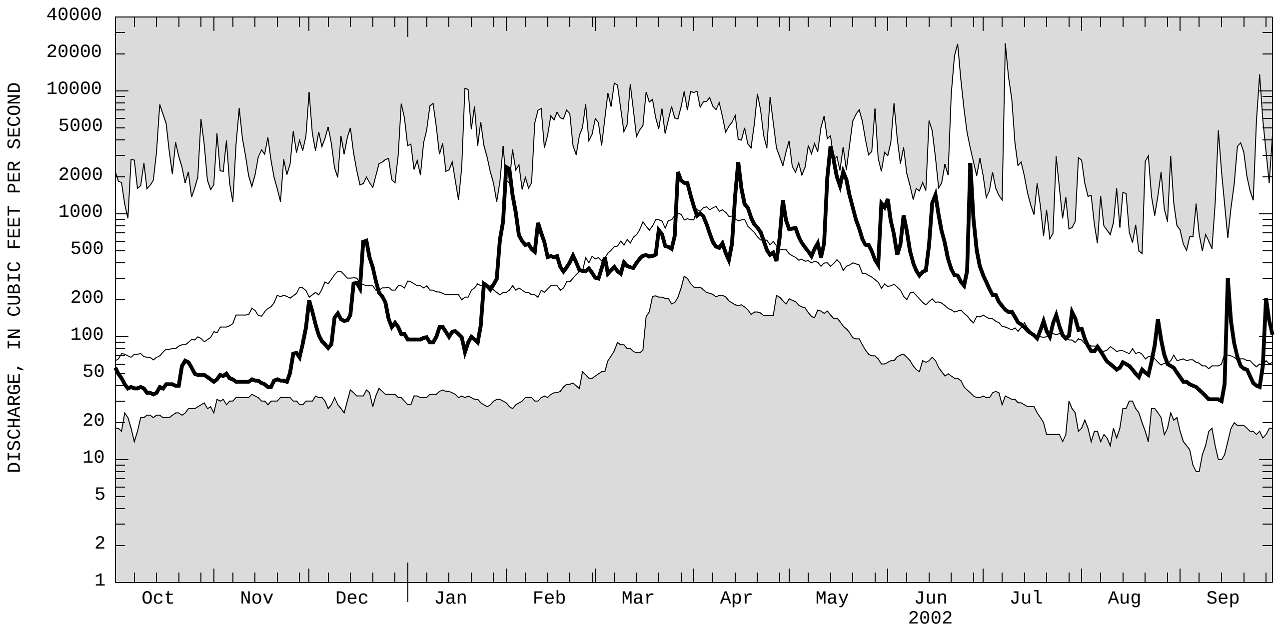
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1918 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	187	331	422	416	496	1099	1136	610	343	182	119	133
MAX	1284	1611	1861	1586	2059	3793	3579	2074	3167	2278	649	1204
(WY)	1956	1928	1928	1998	1976	1936	1993	1919	1972	1935	1992	1977
MIN	25.7	33.0	42.5	32.5	75.1	312	201	143	59.2	31.1	25.0	15.5
(WY)	1942	1942	1961	1961	1920	1965	1946	1934	1955	1955	1934	1934

e Estimated

01529500 COHOCTON RIVER NEAR CAMPBELL, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1918 - 2002	
ANNUAL TOTAL	116253		140733			
ANNUAL MEAN	319		386		456	
HIGHEST ANNUAL MEAN					766	1956
LOWEST ANNUAL MEAN					210	1965
HIGHEST DAILY MEAN	8080	Apr 9	3550	May 14	24400	Jul 8 1935
LOWEST DAILY MEAN	26	Sep 22	30	Sep 14	8.0	Sep 6 1934
ANNUAL SEVEN-DAY MINIMUM	27	Sep 17	32	Sep 8	11	Sep 3 1934
ANNUAL RUNOFF (CFSM)	0.68		0.82		0.97	
ANNUAL RUNOFF (INCHES)	9.20		11.14		13.17	
10 PERCENT EXCEEDS	612		943		1100	
50 PERCENT EXCEEDS	110		159		206	
90 PERCENT EXCEEDS	36		42		50	



2002 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.

01529950 CHEMUNG RIVER AT CORNING, NY

LOCATION.--Lat 42°08'47", long 77°03'28", Steuben County, Hydrologic Unit 02050105, on right bank adjacent to Corning Glass Works power plant, 0.2 mi upstream from bridge on State Highway 414 (Centerway St.) at Corning, and 1.7 mi downstream from Cohocton River.
DRAINAGE AREA.--2,006 mi^2.
PERIOD OF RECORD.--Occasional discharge measurements water years 1941, 1968-69. October 1974 to current year.
REVISED RECORDS.--WDR NY-78-1: 1976, 1977(M). WDR NY-83-3: 1982(M).
GAGE.--Water-stage recorder. Datum of gage is 900.00 ft above NGVD of 1929.
REMARKS.--Records good except those for estimated daily discharges, which are fair. High flows significantly regulated by upstream reservoirs. During each year a large part of flow from 45.5 mi^2 of drainage area is diverted upstream from Lake Lamoka on Mud Creek, an upstream tributary, into Keuka Lake (Oswego River basin) for power development. Telephone and satellite gage-height telemeters at station. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 127,000 ft^3/s, Sept. 26, 1975, gage height, 32.46 ft; minimum discharge, 210 ft^3/s, Aug. 1978. Maximum discharge since construction of Tioga Reservoir in 1979, about 61,000 ft^3/s, Jan. 19, 1996; minimum discharge, 95 ft^3/s, Sept. 9, 10, 23, 24, 1991, gage height, 14.30 ft.
EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 23, 1972, reached a stage of 40.71 ft, from floodmark; discharge 228,000 ft^3/s, from peak flows determined at upstream and downstream stations adjusted for drainage area and channel storage.
EXTREMES FOR CURRENT YEAR.--Maximum discharge, 18,000 ft^3/s, May 14, gage height, 21.08 ft; minimum discharge, 132 ft^3/s, Sept. 11, 12, 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	473	234	1570	e550	7470	1140	4580	3890	3010	1320	344	163
2	371	223	1610	e540	7730	1130	3720	3840	2170	1050	301	159
3	312	222	1180	e520	4590	1310	3510	3960	1680	919	260	160
4	293	225	797	e460	3300	1710	3670	2950	1280	785	221	160
5	282	207	715	e430	e2500	1320	2870	2520	4890	703	233	155
6	272	203	678	e450	e1950	1240	2440	2210	15900	601	244	158
7	255	204	601	e460	e1800	1390	2200	2140	13900	536	234	157
8	e230	209	547	e460	1680	1370	2020	2010	10300	507	198	153
9	e220	202	601	e470	1610	1280	1920	2060	4680	493	185	151
10	e205	203	652	e490	1560	1440	2000	2680	3100	534	180	150
11	e200	202	548	e520	3930	1480	1850	2090	2380	515	177	139
12	187	198	499	e550	3610	1430	1580	2530	1900	467	174	134
13	184	190	514	e540	e2600	1440	1640	9620	1600	445	170	135
14	186	194	574	537	e1900	1420	3930	16500	2560	418	173	138
15	204	196	1130	523	e1750	1370	9430	10800	8950	390	175	154
16	202	194	1580	501	2050	1400	5770	6540	9990	347	173	402
17	212	200	1350	503	2070	1540	4060	5250	5770	318	171	399
18	222	197	3360	491	1780	1550	3780	9750	4010	297	167	278
19	268	194	4180	e430	1560	1540	3160	9730	2960	322	166	222
20	273	192	2580	e400	1510	1590	2760	6010	2270	361	174	189
21	269	182	2090	e450	1690	2660	2510	4510	1680	370	172	173
22	269	172	1670	e470	2030	2740	2410	3870	1500	332	176	169
23	270	176	1440	e480	1850	2220	2200	3280	1350	360	183	177
24	328	179	1260	513	1550	2160	1850	2790	1200	416	204	162
25	345	222	1160	1730	1370	e2200	1660	2440	1010	388	245	156
26	325	320	875	1810	1320	e3300	1700	2330	997	360	219	157
27	315	575	e720	1300	1390	e12000	1530	2220	6000	330	196	268
28	275	611	e720	1220	1310	8080	2460	2400	5820	311	179	531
29	273	681	e650	1360	---	7290	8120	1990	3390	386	174	804
30	272	858	e590	2430	---	7210	5080	2880	1890	474	170	545
31	259	---	e570	4600	---	5970	---	3550	---	382	166	---
TOTAL	8251	8065	37011	26188	69460	83920	96410	139340	128137	15437	6204	6898
MEAN	266	269	1194	845	2481	2707	3214	4495	4271	498	200	230
MAX	473	858	4180	4600	7730	12000	9430	16500	15900	1320	344	804
MIN	184	172	499	400	1310	1130	1530	1990	997	297	166	134

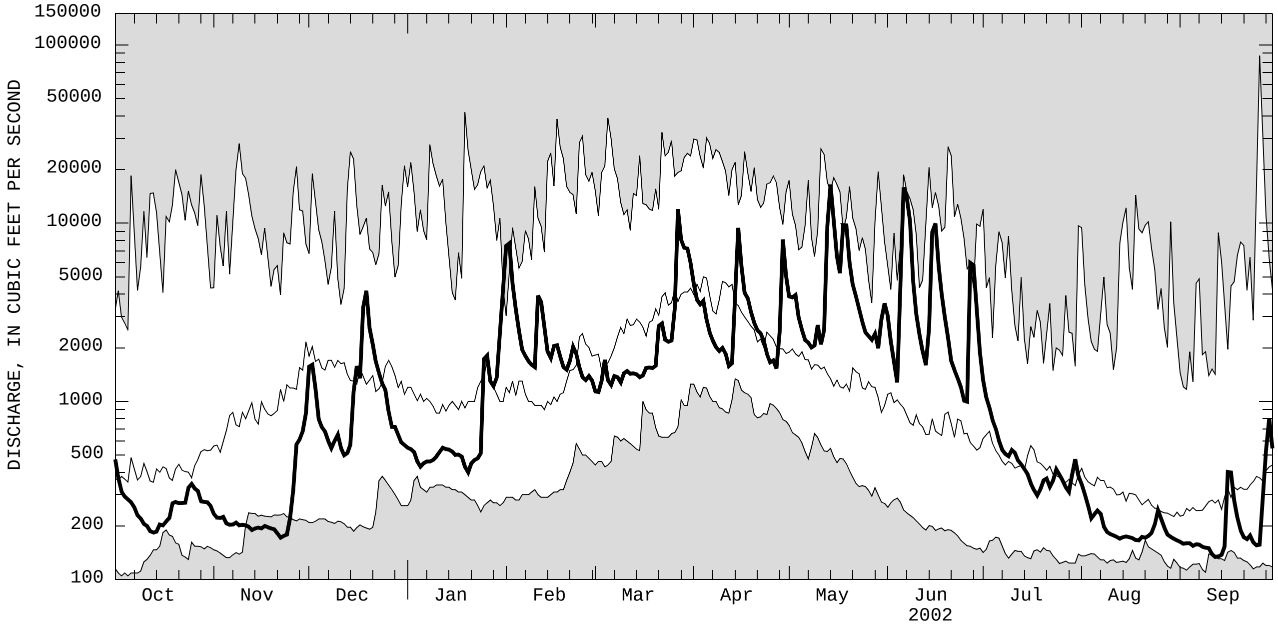
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2002, BY WATER YEAR (WY)

MEAN	1147	1723	2170	2125	2673	4239	4758	2569	1685	711	593	810
MAX	5478	6124	5297	6879	7993	9533	16150	6692	5835	2057	3388	5569
(WY)	1991	1997	1997	1996	1976	1979	1993	1989	1989	1998	1994	1975
MIN	157	226	240	328	537	1284	1599	549	214	173	153	141
(WY)	1992	1999	1999	1981	1980	1981	1981	1985	1999	1991	1999	1991

e Estimated

01529950 CHEMUNG RIVER AT CORNING, NY

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1975 - 2002	
ANNUAL TOTAL	499297		625321			
ANNUAL MEAN	1368		1713		2094	
HIGHEST ANNUAL MEAN					3284	1978
LOWEST ANNUAL MEAN					1203	1999
HIGHEST DAILY MEAN	25900	Apr 8	16500	May 14	87100	Sep 26 1975
LOWEST DAILY MEAN	125	Aug 12	134	Sep 12	105	Oct 3 1980
ANNUAL SEVEN-DAY MINIMUM	128	Aug 9	143	Sep 8	108	Oct 2 1980
10 PERCENT EXCEEDS	3280		3980		4920	
50 PERCENT EXCEEDS	499		703		950	
90 PERCENT EXCEEDS	166		177		225	



2002 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.

01530500 NEWTOWN CREEK AT ELMIRA, NY

LOCATION.--Lat 42°06'16", long 76°47'54", Chemung County, Hydrologic Unit 02050105, on left bank 200 ft downstream from bridge on Linden Place in Elmira, and 1.5 mi upstream from mouth.
DRAINAGE AREA.--77.5 mi^2.
PERIOD OF RECORD.--May 1938 to current year.
REVISED RECORDS.--WSP 1502: 1956. WSP 2103: Drainage area. WDR NY 1974: 1973.
GAGE.--Water-stage recorder. Datum of gage is 838.35 ft above NGVD of 1929.
REMARKS.--Records good except those for estimated daily discharges, which are fair. Diurnal fluctuation at low flow caused by numerous industrial operations upstream. Since August 1989, high flows regulated by detention in upstream reservoir. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 4,000 ft^3/s, June 23, 1972 (backwater from Chemung River), maximum gage height, 19.28 ft, June 23, 1972, from floodmarks (backwater from Chemung River). Maximum discharge since construction of upstream reservoir in August 1989, 3,810 ft^3/s, Jan. 19, 1996, gage height 16.98 ft. Minimum instantaneous discharge not determined.
EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,200 ft^3/s, May 13, gage height 9.91 ft; minimum discharge, 5.5 ft^3/s, Sept. 19, 20, 21, gage height 4.13 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.6	7.9	113	15	457	34	140	120	90	46	13	11
2	9.0	8.1	57	13	249	31	117	124	65	40	12	11
3	10	9.1	39	13	141	39	98	108	51	35	13	10
4	12	8.1	29	13	109	44	83	82	45	30	12	9.7
5	11	8.8	25	12	e76	31	72	69	87	28	13	9.3
6	11	7.9	21	13	71	32	65	61	387	25	12	9.2
7	11	7.9	18	14	63	30	59	61	245	23	12	9.1
8	9.4	8.1	16	12	60	28	55	61	128	23	12	9.1
9	7.5	8.1	18	13	56	27	54	62	92	21	12	9.0
10	9.2	8.3	19	14	56	46	66	72	73	21	12	9.0
11	9.4	7.8	16	16	306	42	55	54	62	19	11	8.4
12	12	8.4	15	18	144	36	46	71	53	19	12	6.9
13	11	7.3	18	19	113	34	52	385	46	18	12	8.9
14	11	7.4	31	19	e75	32	133	851	82	17	12	8.6
15	12	7.3	73	17	82	30	230	314	217	15	13	10
16	7.9	7.3	55	16	89	32	128	176	531	16	12	12
17	8.0	7.3	53	16	92	33	98	133	280	15	12	10
18	7.8	8.1	273	15	70	37	124	428	147	15	11	7.7
19	8.4	8.5	147	12	59	51	95	243	103	18	12	7.5
20	7.6	8.0	97	14	59	71	78	155	79	16	12	8.0
21	7.7	7.6	76	e14	69	137	71	124	65	15	12	8.2
22	9.1	7.7	61	14	70	138	67	103	56	15	14	7.8
23	8.3	7.6	52	14	60	93	65	86	51	15	12	11
24	10	7.6	54	27	50	89	56	74	45	14	12	8.0
25	8.8	12	49	107	46	82	64	63	39	14	12	8.0
26	7.7	12	38	71	44	216	87	63	36	14	11	7.9
27	7.5	16	29	66	44	678	63	60	174	14	11	19
28	8.0	13	26	72	39	294	139	116	158	14	11	13
29	8.5	13	22	77	---	252	281	182	77	13	12	8.1
30	8.1	24	18	160	---	217	151	100	56	14	11	7.8
31	7.9	---	16	161	---	160	---	91	---	13	11	---
TOTAL	285.4	280.2	1574	1077	2849	3096	2892	4692	3620	615	371	283.2
MEAN	9.21	9.34	50.8	34.7	102	99.9	96.4	151	121	19.8	12.0	9.44
MAX	12	24	273	161	457	678	281	851	531	46	14	19
MIN	7.5	7.3	15	12	39	27	46	54	36	13	11	6.9

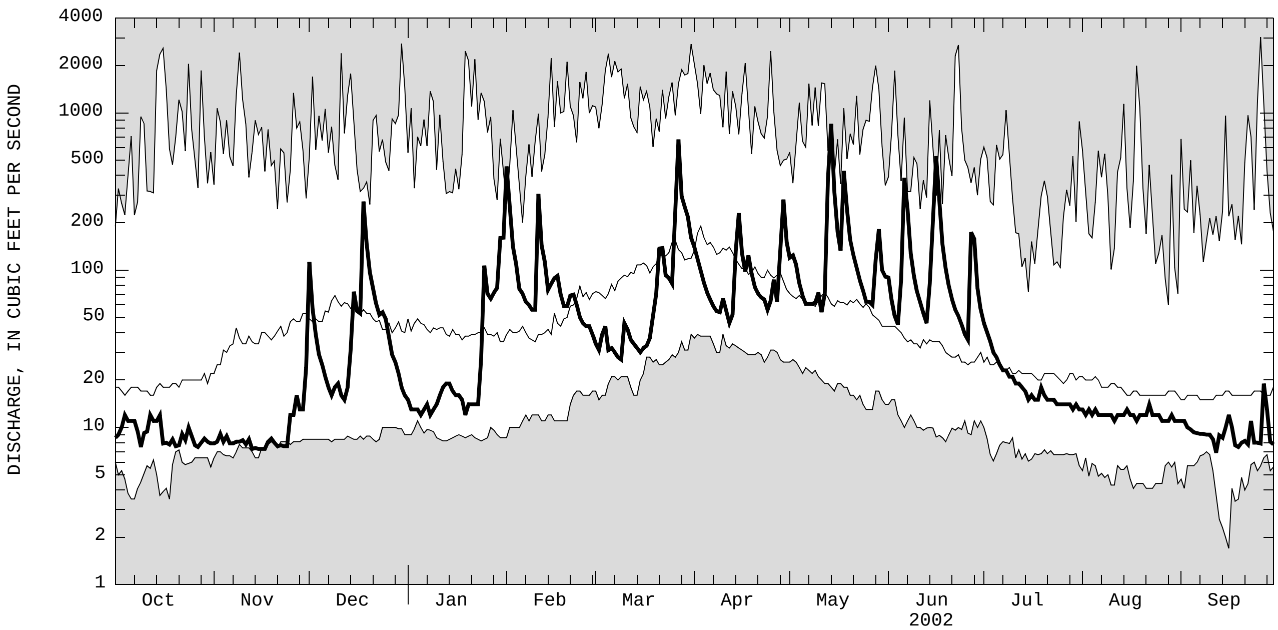
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	50.2	84.0	88.5	99.2	100	166	210	91.2	62.5	34.7	32.6	24.2
MAX	183	295	248	269	205	310	747	249	142	105	171	108
(WY)	1991	1997	1997	1996	1990	1994	1993	1996	1996	1992	1994	1992
MIN	9.21	9.34	11.8	12.6	23.2	63.5	87.5	22.0	11.1	7.30	7.25	8.28
(WY)	2002	2002	1999	2001	1993	1990	1997	2001	1999	1991	1991	1991

e Estimated

01530500 NEWTOWN CREEK AT ELMIRA, NY

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1990 - 2002	
ANNUAL TOTAL	17430.5		21634.8			
ANNUAL MEAN	47.8		59.3		86.7	
HIGHEST ANNUAL MEAN					133	1993
LOWEST ANNUAL MEAN					46.9	2001
HIGHEST DAILY MEAN	957	Mar 30	851	May 14	2470	Jan 19 1996
LOWEST DAILY MEAN	5.7	Sep 2	6.9	Sep 12	4.9	Aug 3 1991
ANNUAL SEVEN-DAY MINIMUM	7.5	Nov 11	7.5	Nov 11	6.0	Aug 12 1991
10 PERCENT EXCEEDS	90		138		181	
50 PERCENT EXCEEDS	15		25		38	
90 PERCENT EXCEEDS	8.0		8.1		9.9	



2002 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.

01531000 CHEMUNG RIVER AT CHEMUNG, NY

LOCATION.--Lat 42°00'08", long 76°38'06", Chemung County, Hydrologic Unit 02050105, on right bank 100 ft upstream from bridge on State Highway 427, 0.7 mi southwest of Chemung, and 10.0 mi upstream from mouth.
DRAINAGE AREA.--2,506 mi^2.
PERIOD OF RECORD.--September 1903 to current year (gage heights only for some winter periods).
REVISED RECORDS.--WSP 891: 1935-39. WSP 1432: 1904, 1907, 1915. WSP 2103: Drainage area. WDR NY 1974: 1973.
GAGE.--Water-stage recorder. Datum of gage is 778.63 ft above NGVD of 1929 (levels by Corps of Engineers). Prior to Jan. 10, 1930, nonrecording gage on highway bridge 60 ft upstream at same datum.
REMARKS.--Records good except those for estimated daily discharges, which are fair. High flows significantly regulated by upstream reservoirs. During each year a large part of flow from 45.5 mi^2 of drainage area is diverted upstream from Lake Lamoka on Mud Creek, an upstream tributary, into Keuka Lake (Oswego River basin) for power development. Telephone and satellite gage-height telemeters at station. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 189,000 ft^3/s, June 23, 1972, gage height, 31.62 ft, from floodmark, from rating curve extended above 65,000 ft^3/s, on basis of slope-area and velocity-area studies at gage height 19.57 ft, and slope-area and contracted opening measurements at gage heights 23.97 and 31.62 ft; minimum discharge, 49 ft^3/s, Aug. 14, 1911, gage height, 1.47 ft. Maximum discharge since construction of Tioga Reservoir in 1979, 77,800 ft^3/s, Jan. 20, 1996, gage height 19.71 ft; minimum discharge, 104 ft^3/s, Sept. 3, 1991, gage height, 2.82 ft.
EXTREMES FOR CURRENT YEAR.--Maximum discharge, 23,600 ft^3/s, June 6, gage height, 11.40 ft; minimum discharge, 146 ft^3/s, Sept. 13, gage height, 2.74 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	555	317	1540	e600	7270	1520	6210	5110	3720	1880	401	206
2	483	305	1830	e590	10500	1410	4870	4730	2990	1480	377	198
3	409	299	1530	e580	6410	1470	4290	5160	2280	1240	350	194
4	372	297	1160	e510	4380	1880	4340	3900	1830	1070	321	191
5	358	297	951	e500	e3200	1860	3740	3290	3330	941	306	183
6	339	288	870	e520	e2500	1550	3160	2870	18500	838	303	176
7	327	278	814	e530	e2300	1570	2810	2710	18900	735	299	174
8	315	277	738	e530	2220	1690	2580	2650	13600	675	291	171
9	297	275	719	e540	2040	1600	2440	2500	6860	634	266	170
10	284	269	786	600	1960	1630	2450	3220	4120	621	253	168
11	279	265	778	639	4340	1870	2400	2940	3170	623	246	160
12	272	265	687	675	5300	1710	2100	2730	2620	592	240	153
13	271	265	654	681	3790	1740	1960	8460	2200	544	236	151
14	271	265	730	656	2880	1740	3610	22000	2400	518	232	151
15	297	265	1100	620	2470	1710	9560	16000	7280	490	233	157
16	293	265	1770	605	2630	1650	8050	9190	14000	457	239	196
17	297	265	1770	592	2750	1790	5190	6740	8370	422	229	348
18	297	265	3310	584	2480	1860	4970	9740	5550	402	218	350
19	297	265	5720	520	2110	1910	4290	14900	4230	402	214	283
20	319	265	3700	e450	1960	2000	3590	8370	3240	421	228	243
21	324	265	2820	e500	2070	2990	3170	6080	2490	425	223	221
22	327	260	2340	e510	2390	3670	2970	5020	2090	415	225	221
23	329	253	1920	560	2420	3030	2850	4240	1840	396	245	241
24	360	253	1730	620	2100	2780	2460	3660	1660	414	247	215
25	383	278	1570	1280	1810	2730	2180	3180	1390	428	260	195
26	372	381	1310	2530	1670	3550	2260	2820	1280	415	277	185
27	357	467	989	1910	1700	13800	2070	2910	4470	398	264	240
28	352	622	e800	1650	1710	11700	2540	2970	7990	395	247	429
29	331	689	e700	1680	---	9720	9400	2950	4500	381	234	592
30	324	800	e650	2400	---	9090	7300	2710	2910	443	227	658
31	324	---	e620	4940	---	7920	---	4330	---	473	215	---
TOTAL	10415	9820	46606	30102	89360	105140	119810	178080	159810	19568	8146	7220
MEAN	336	327	1503	971	3191	3392	3994	5745	5327	631	263	241
MAX	555	800	5720	4940	10500	13800	9560	22000	18900	1880	401	658
MIN	271	253	620	450	1670	1410	1960	2500	1280	381	214	151

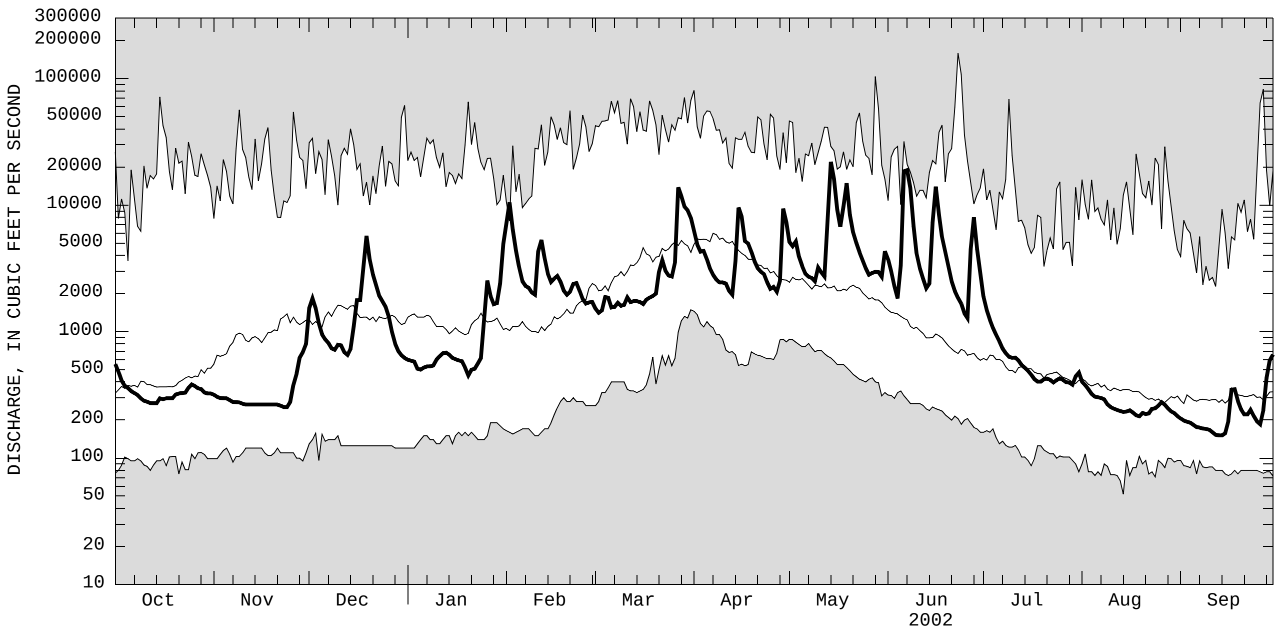
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1245	2147	2676	2461	3213	4917	6534	3393	2165	951	804	631
MAX	6774	8107	6688	8569	7695	9919	21600	8901	7418	2772	5001	2572
(WY)	1991	1997	1997	1996	1981	1994	1993	1996	1989	1998	1994	1992
MIN	199	266	282	459	631	1750	2214	696	280	196	161	169
(WY)	1992	1999	1999	1981	1980	1981	1981	1985	1999	1991	1999	1991

e Estimated

01531000 CHEMUNG RIVER AT CHEMUNG, NY

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1980 - 2002	
ANNUAL TOTAL	615790		784077			
ANNUAL MEAN	1687		2148		2587	
HIGHEST ANNUAL MEAN					4126	1984
LOWEST ANNUAL MEAN					1513	1999
HIGHEST DAILY MEAN	32000	Apr 9	22000	May 14	65400	Jan 20 1996
LOWEST DAILY MEAN	133	Aug 15	151	Sep 13	113	Sep 3 1991
ANNUAL SEVEN-DAY MINIMUM	142	Aug 10	159	Sep 9	125	Sep 1 1991
10 PERCENT EXCEEDS	3720		5060		5990	
50 PERCENT EXCEEDS	621		814		1150	
90 PERCENT EXCEEDS	186		241		271	



2002 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.

LAKES AND RESERVOIRS IN SUSQUEHANNA RIVER BASIN

01499500 EAST SIDNEY LAKE.--Lat 42°19’40", long 75°13’42", Delaware County, Hydrologic Unit 02050101, at East Sidney Dam, on Ouleout Creek, 0.3 mi upstream from bridge on County Highway 44 at East Sidney, 4.4 mi upstream from mouth, and 4.5 mi east of Unadilla. DRAINAGE AREA, 103 mi^2. PERIOD OF RECORD, November 1949 to September 1952 (monthend elevations and contents), October 1952 to September 1985 (mean daily elevations and monthend contents), October 1986 to current year (monthend elevations and contents). Prior to October 1970, published as "East Sidney Reservoir at East Sidney". REVISED RECORDS, WSP 2103: Drainage area. GAGE, water-stage recorder. Datum of gage is NGVD of 1929. Prior to Oct. 1, 1979, at datum 0.05 ft lower.

REMARKS.--Lake is formed by concrete dam and rockfill dike, completed by Corps of Engineers in June 1950; regulation of outflow began in November 1949; first used for flood regulation on Mar. 28, 1950. Usable capacity, 33,550 acre-ft between elevations 1,115.0 ft (sill of conduits) and 1,203.0 ft (crest of spillway). Dead storage 56 acre-ft. Discharge is controlled by the operation of five gates. Water is stored during high flows and released when downstream conditions warrant. Lake is used for flood control and recreation. Telephone gage-height telemeter and satellite gage-height and precipitation telemeter at station.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 25,690 acre-ft, Apr. 3, 1993, elevation, 1,195.10 ft; minimum 56 acre-ft, Aug. 31, 1953, Sept. 7–26, Nov. 4, 1964, elevation, 1,115.0 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 6,561 acre-ft, Mar. 28, elevation, 1,161.98 ft; minimum, 1,592 acre-ft, Apr. 8, elevation, 1,139.69 ft.

01511000 WHITNEY POINT LAKE.--Lat 42°20’34", long 75°57’57", Broome County, Hydrologic Unit 02050102, on left bank at control-gate structure for Whitney Point Dam on Otselic River, 0.3 mi upstream from spillway, 0.9 mi upstream from mouth, and 1.0 mi north of Whitney Point. DRAINAGE AREA, 257 mi^2. PERIOD OF RECORD, October 1942 to September 1985 (mean daily elevations and monthend contents), October 1985 to current year (monthend elevations and contents). REVISED RECORDS, WSP 2103: Drainage area. GAGE, water-stage recorder. Datum of gage is NGVD of 1929 (levels by Corps of Engineers). Prior to October 1970, published as "Whitney Point Reservoir at Whitney Point".

REMARKS.--Lake is formed by earthfill dam with concrete spillway, completed by Corps of Engineers in 1942 for flood control; first used for flood regulation on Mar. 9, 1942. Usable capacity 86,440 acre-ft between elevations 950.0 ft (sill of gates) and 1,010.0 ft (crest of spillway). Dead storage, 28 acre-ft. Figures given herein represent total contents. Discharge is controlled by operation of three gates. Water is stored during high flows and released when downstream conditions warrant. Lake is used for flood control and recreation. Telephone gage-height telemeter and satellite gage-height and precipitation telemeter at station.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 71,440 acre-ft, Mar. 23, 1948, elevation 1,005.0 ft; minimum, 36 acre-ft, Sept. 2–4, 1953, elevation, 950.4 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 15,978 acre-ft, June 6, 7, elevation, 975.51 ft; minimum, 5,014 acre-ft, Mar. 13, elevation, 965.79 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (equlivalent in cfs)	Elevation (feet)	Contents (acre-feet)	Change in contents (equivalent in cfs)
	01499500 East Sidney Lake			01511000 Whitney Point Lake		
Sept. 30	1,148.36	2,958	--	973.16	12,888	--
Oct. 31	1,147.10	2,723	- 3.8	973.47	13,282	+ 6.4
Nov. 30	1,147.03	2,710	- 0.2	973.32	13,091	- 3.2
Dec. 31	1,140.26	1,664	- 17.0	966.13	5,343	- 126
CAL YR 2001	--	--	- 0	--	--	- 0.1
Jan. 31	1,140.55	1,701	+ 0.6	967.27	6,471	+ 18.4
Feb. 28	1,140.76	1,729	+ 0.5	966.21	5,421	- 18.9
Mar. 31	1,142.97	2,040	+ 5.1	966.22	5,431	+ 0.2
Apr. 30	1,150.75	3,439	+ 23.5	973.29	13,053	+ 128
May 31	1,149.99	3,279	- 2.6	973.07	12,773	- 4.6
June 30	1,151.06	3,505	+ 3.8	973.12	12,837	+ 1.1
July 31	1,151.23	3,543	+ 0.6	973.16	12,888	+ 0.8
Aug. 31	1,149.88	3,257	- 4.6	973.25	13,002	+ 1.8
Sept. 30	1,150.81	3,452	+ 3.3	973.43	13,231	+ 3.8
WTR YR 2002	--	--	+ 0.7	--	--	+ 0.5

LAKES AND RESERVOIRS IN SUSQUEHANNA RIVER BASIN--Continued

01517900 TIOGA LAKE.--Lat 41°53'57", long 77°08'21", Tioga County, Hydrologic Unit 02050104, at Tioga Dam on Tioga River, 0.8 mi south of Tioga, and 1.7 mi upstream from Crooked Creek. DRAINAGE AREA, 280 mi^2. PERIOD OF RECORD, November 1979 to current year. GAGE, water-stage recorder. Datum of gage is NGVD of 1929 (levels by U.S. Army Corps of Engineers).

REMARKS.--Reservoir is formed by rolled earth and rockfill dam. Flood flows are routed to Hammond Lake through a connecting channel with weir at elevation 1,101.0 ft and to Hammond Dam spillway with crest at elevation 1,131.0 ft. Storage began in November 1979. Capacity at elevation l,l31.0 ft is 62,000 acre-ft. Recreation lake elevation is 1,081.0 ft, capacity 9,500 acre-ft. Reservoir is used for flood control and recreation. Figures given herein represent total contents. Flow is regulated by two service gates and low-flow by-pass system. U.S. Army Corps of Engineers telephone gage-height and satellite gage-height telemeter at station.

COOPERATION.--Records provided by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 50,090 acre-ft, Apr. 3, 1993, elevation, 1,123.21 ft; minimum, 2,210 acre-ft, Oct. 25, 1980, elevation, 1,060.05 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 13,810 acre-ft, June 7, elevation, 1,088.78 ft; minimum, 9,220 acre ft, May 20, elevation, 1,080.38 ft.

01518498 HAMMOND LAKE.--Lat 41°53'56", long 77°08'52", Tioga County, Hydrologic Unit 02050104, at Hammond Dam on Crooked Creek, 3.0 mi upstream from mouth, and 0.8 mi southwest of Tioga. DRAINAGE AREA, 122 mi^2. PERIOD OF RECORD, November 1979 to current year. GAGE, water-stage recorder. Datum of gage is NGVD of 1929 (levels by U.S. Army Corps of Engineers).

REMARKS.--Reservoir is formed by rolled earth and rockfill dam with concrete chute spillway with uncontrolled weir at elevation l,l31.0 ft. Storage began in November 1979. Capacity at elevation 1,131.0 ft is 63,000 acre-ft. Recreation lake elevation is l,086.0 ft, capacity 8,850 acre-ft. Reservoir is used for flood control and recreation. Figures given herein represent total contents. Flow is regulated by two gates through a connecting channel that discharges into Tioga Lake, and a low-flow outlet to Crooked Creek. U.S. Army Corps of Engineers telephone gage-height and satellite gage-height telemeter at station.

COOPERATION.--Records provided by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 50,650 acre-ft, Apr.3, 1993, elevation, 1,123.55 ft; minimum, 2,430 acre-ft, Oct. 24, 1980, elevation, 1,074.00 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 11,840 acre-ft, June 7, elevation, 1,090.24 ft; minimum, 7,560 acre-ft, Sept. 26, elevation, 1,084.16 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

Date	Elevation (feet)	Contents (acre-(feet)	Change in contents (equlivalent in cfs)	Elevation (feet)	Contents (acre-(feet)	Change in contents (equivalent in cfs)
	01517900 Tioga Lake			01518498 Hammond Lake		
Sept. 30	1,080.88	9,450	--	1,086.49	9,150	--
Oct. 31	1,081.86	9,920	+ 7.6	1,086.83	9,360	+ 3.4
Nov. 30	1,083.03	10,510	+ 9.9	1,087.54	9,860	+ 8.4
Dec. 31	1,083.36	10,680	+ 2.8	1,087.42	9,770	- 1.5
CAL YR 2001..........	--	--	+ 0.4	--	--	0
Jan. 31	1,082.38	10,180	- 8.1	1,087.38	9,740	- 0.5
Feb. 29	1,082.30	10,140	- 0.7	1,087.51	9,840	+ 1.8
Mar. 31	1,081.74	9,860	- 4.6	1,086.53	9,170	- 10.9
Apr. 30	1,081.34	9,670	- 3.2	1,086.42	9,110	- 1.0
May 31	1,081.06	9,530	- 2.3	1,086.51	9,160	+ 0.8
June 30	1,081.47	9,730	+ 3.4	1,086.53	9,170	+ 0.2
July 31	1,081.52	9,760	+ 0.5	1,086.15	8,940	- 3.7
Aug. 31	1,081.27	9,630	- 2.1	1,084.95	8,070	- 14.1
Sept. 30	1,081.10	9,550	- 1.3	1,084.60	7,840	- 3.9
WTR YR 2002..........	--	--	+ 0.1	--	--	- 1.8

LAKES AND RESERVOIRS IN SUSQUEHANNA RIVER BASIN--Continued

01519995 COWANESQUE LAKE.--Lat 41°59’05", long 77°09’05", Tioga County, Hydrologic Unit 02050104, at Cowanesque Dam on Cowanesque River, 1.8 mi southwest of Lawrenceville, and 2.5 mi upstream from mouth. DRAINAGE AREA, 298 mi^2. PERIOD OF RECORD, December 1979 to current year. GAGE, water-stage recorder. Datum of gage is NGVD of 1929 (levels by U.S. Army Corps of Engineers).

REMARKS.--Reservoir is formed by rolled earth and rockfill dam with concrete chute spillway with uncontrolled weir at elevation 1,117.0 ft. Storage began in December 1979. Capacity at elevation 1,117.0 ft is 89,110 acre-ft. Recreation lake elevation is 1,045.0 ft, capacity 7,330 acre-ft. Reservoir is used for flood control and recreation. Figures given herein represent total contents. Flow is regulated by two service gates and low-flow by-pass system. U.S. Army Corps of Engineers telephone gage-height and satellite gage-height and precipitation telemeter at station.

COOPERATION.--Records provided by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 84,560 acre-ft, Apr. 2, 1993, elevation, 1,114.78 ft; minimum, 65 acre-ft, June 23, 1980, elevation, 1,011.50 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 39,960 acre-ft, June 6, elevation, 1,086.47 ft; minimum, 31,790 acre-ft, Sept. 26, elevation, 1,079.26 ft.

01523000 ALMOND LAKE NEAR ALMOND, NY.--Lat 42°20’56", long 77°42’10", Steuben County, Hydrologic Unit 02050104, at Almond Dam on Canacadea Creek, 2.0 mi northeast of Almond, and 3.0 mi upstream from mouth. DRAINAGE AREA, 55.8 mi^2. PERIOD OF RECORD, July 1949 to September 1952 (monthly elevations and contents), October 1952 to September 1985 (mean daily elevations and monthend contents), October 1985 to current year (monthend elevations and contents). Prior to October 1970, published as "Almond Reservoir near Almond". REVISED RECORDS, WSP 2103: Drainage area. GAGE, Water-stage recorder. Datum of gage is NGVD of 1929 (levels by Corps of Engineers).

REMARKS.--Lake is formed by earthfill dam with concrete spillway, completed by Corps of Engineers in June 1949 for flood control; first used for flood regulation on Mar. 28, 1950. Usable capacity, 14,800 acre-ft between elevations 1,229.0 ft (sill of gates) and 1,300.0 ft (crest of spillway). No dead storage. Figures given herein represent usable contents. Discharge is controlled by the operation of three gates. Water is stored during high flows and released when downstream conditions warrant. Lake is used for flood control and recreation. Telephone gage-height telemeter and satellite gage-height and precipitation telemeter at station.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 14,100 acre-ft, June 23, 1972, elevation, 1,298.58 ft; no contents for many days each year 1949–65.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 4,365 acre-ft, June 27, elevation, 1,272.48 ft; minimum, 1,667 acre-ft, May 20, elevation, 1,259.45 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Elevation (feet)	Contents (acre-(feet)	Change in contents (equlivalent in cfs)	Elevation (feet)	Contents (acre-(feet)	Change in contents (equivalent in cfs)
	01519995 Cowanesque Lake			01523000 Almond Lake		
Sept. 30	1,080.27	32,870	--	1,260.05	1,758	--
Oct. 31	1,080.46	33,060	+ 3.1	1,260.08	1,763	+ 0.1
Nov. 30	1,080.35	32,950	- 1.8	1,260.67	1,857	+ 1.6
Dec. 31	1,080.31	32,910	- 0.7	1,260.18	1,779	- 1.3
CAL YR 2001..........	--	--	0	--	--	0
Jan. 31	1,080.22	32,820	- 1.5	1,262.25	2,125	+ 5.6
Feb. 28	1,080.24	32,840	+ 0.4	1,260.28	1,795	- 5.9
Mar. 31	1,080.12	32,720	- 2.0	1,259.92	1,738	- 0.9
Apr. 30	1,080.43	33,030	+ 5.2	1,260.36	1,808	+ 1.2
May 31	1,080.18	32,780	- 4.1	1,260.61	1,848	+ 0.6
June 30	1,080.43	33,030	+ 4.2	1,260.19	1,780	- 1.1
July 31	1,080.78	33,380	+ 5.7	1,260.24	1,788	+ 0.1
Aug. 31	1,080.14	32,740	- 10.4	1,260.30	1,798	+ 0.2
Sept. 30	1,079.44	31,980	- 12.8	1,259.85	1,727	- 1.2
WTR YR 2002..........	--	--	- 1.2	--	--	0

03011020 ALLEGHENY RIVER AT SALAMANCA, NY

LOCATION.--Lat 42°09'23", long 78°42'56", Cattaraugus County, Hydrologic Unit 05010001, on left bank 230 ft upstream from Main Street bridge in Salamanca, 1.3 mi downstream from Great Valley Creek, and 1.6 mi upstream from Little Valley Creek.
DRAINAGE AREA.--1,608 mi^2.
PERIOD OF RECORD.--September 1903 to current year. Monthly discharge only for some periods, published in WSP 1305. Prior to October 1964, published as "at Red House."
REVISED RECORDS.--WSP 1385: 1907, 1909-12, 1913(M), 1914-15, 1916-17(M), 1925, 1927. WSP 1907: Drainage area.
GAGE.--Water-stage recorder. Datum of gage is 1,358.00 ft above NGVD of 1929 (Corps of Engineers bench mark). Prior to Sept. 3, 1917, nonrecording gage and Sept. 4, 1917 to Sept. 30, 1964, water-stage recorder at site 7.5 mi downstream at different datum. Oct. 1, 1964 to Sept. 30, 1967, at present site at datum 0.04 ft lower.
REMARKS.--Records good except those for estimated daily discharges, which are fair. U.S. Army Corps of Engineers telephone gage-height telemeter and satellite gage-height and precipitation telemeter at station. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 73,000 ft^3/s, June 23, 1972, gage height, 24.01 ft, from floodmarks; minimum instantaneous discharge not determined.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 17,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 1	1700	*18,200	*10.34	No other peak greater than base discharge.			

Minimum discharge, 151 ft^3/s, Sept. 12, 13, 14, gage height, 2.58 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	376	1010	4250	e1300	16200	2330	8000	5020	4040	1660	1010	224
2	339	927	3820	e1250	15600	2180	6510	5000	3190	1380	783	216
3	314	1010	3200	e1200	10800	2960	7620	5200	2610	1230	641	214
4	297	1060	2800	e1200	8020	4060	7460	4340	2270	1060	533	209
5	269	975	2450	e1300	5920	3290	5610	3770	7410	936	813	200
6	258	863	2160	e1250	4700	3330	4860	3350	13200	834	1160	194
7	265	926	1920	1220	3900	3460	4360	3040	13400	760	856	188
8	256	869	1720	e1100	3390	3160	3930	2790	10900	704	675	181
9	261	828	1600	1130	2980	2910	3750	2900	8490	696	567	175
10	258	861	1510	1210	2670	3330	4360	4920	5690	831	506	168
11	244	817	1390	1290	4460	3270	3800	4070	3990	758	462	164
12	232	734	1260	1300	4770	2980	3340	5040	3150	668	419	158
13	229	669	1190	1280	3960	2920	3780	12200	2660	588	391	151
14	230	622	1330	1210	3280	2810	6990	16000	2640	548	371	155
15	274	640	3370	1190	3190	2620	10100	15800	5120	516	352	309
16	324	631	3290	1170	3200	2790	9650	13000	6040	488	368	1110
17	607	590	3220	1130	3110	2820	8290	12000	6090	459	397	878
18	994	558	7720	1080	2720	2580	6600	11100	5170	433	379	512
19	900	533	8740	897	2450	2540	5160	10400	3990	404	365	372
20	689	643	7040	860	2400	2640	4480	8710	3120	421	349	297
21	597	733	5700	e1000	2820	3520	4020	7110	2530	431	330	261
22	857	735	4600	e980	3250	3390	3530	5570	2120	391	319	255
23	880	657	3890	1070	2960	3160	3250	4560	2230	394	321	245
24	903	609	4500	1860	2620	3210	2820	3840	2200	436	336	221
25	1640	1210	4090	4520	2460	3160	2550	3360	1730	440	389	207
26	1590	3040	e3200	4200	2460	3240	2450	3510	1570	398	334	194
27	1490	2820	e2700	3650	2780	6990	2190	3380	3100	365	300	262
28	1590	2320	e2400	3540	2630	6950	2720	2700	5290	1750	277	1020
29	1410	2570	e2000	3830	---	6800	6050	2440	3260	4100	262	1180
30	1230	3150	e1700	7970	---	10800	5740	4890	2150	2050	248	693
31	1110	---	e1400	10300	---	10200	---	5040	---	1200	232	---
TOTAL	20913	33610	100160	66487	129700	120400	153970	195050	139350	27329	14745	10613
MEAN	675	1120	3231	2145	4632	3884	5132	6292	4645	882	476	354
MAX	1640	3150	8740	10300	16200	10800	10100	16000	13400	4100	1160	1180
MIN	229	533	1190	860	2400	2180	2190	2440	1570	365	232	151
CFSM	0.42	0.70	2.01	1.33	2.88	2.42	3.19	3.91	2.89	0.55	0.30	0.22
IN.	0.48	0.78	2.32	1.54	3.00	2.79	3.56	4.51	3.22	0.63	0.34	0.25

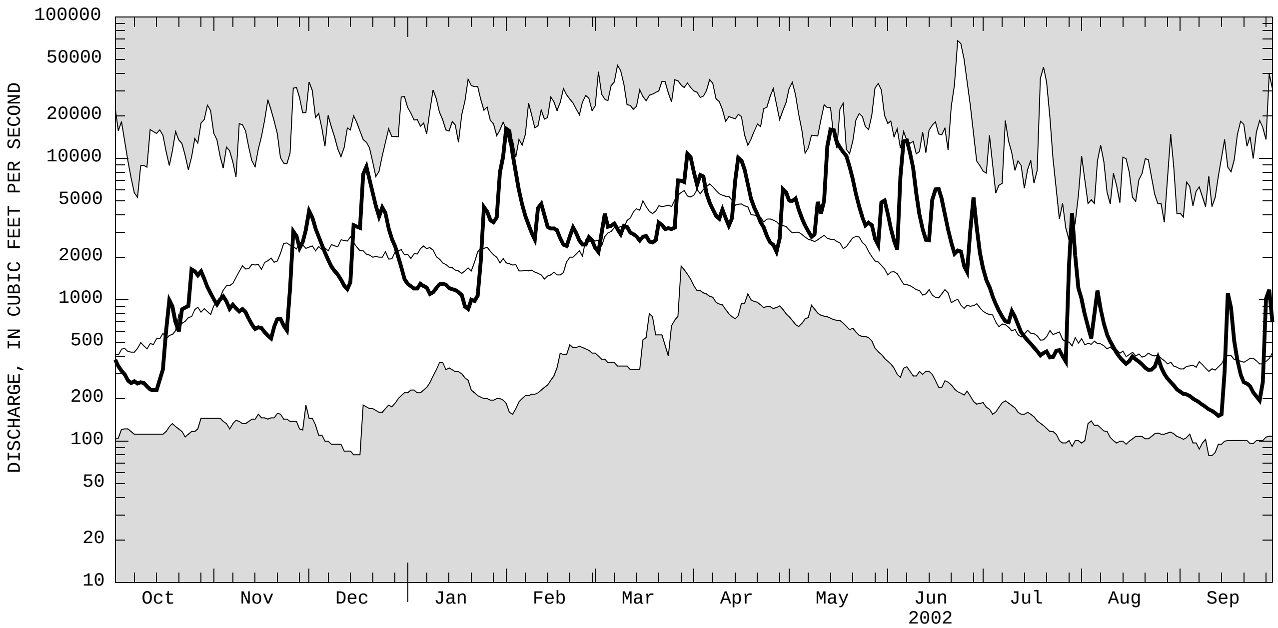
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1330	2508	3072	3324	3197	5898	5827	3469	2025	1082	713	821
MAX	5801	8605	9147	10200	9683	14850	15540	9574	11520	6074	3882	7477
(WY)	1991	1928	1928	1913	1976	1936	1940	1943	1972	1942	1977	1977
MIN	124	146	189	255	550	1983	970	796	299	150	119	118
(WY)	1931	1931	1961	1961	1905	1937	1946	1985	1934	1934	1930	1932

e Estimated

03011020 ALLEGHENY RIVER AT SALAMANCA, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1904 - 2002	
ANNUAL TOTAL	670660		1012327			
ANNUAL MEAN	1837		2773		2769	
HIGHEST ANNUAL MEAN					4174	1916
LOWEST ANNUAL MEAN					1777	1999
HIGHEST DAILY MEAN	14400	Apr 10	16200	Feb 1	67900	Jun 23 1972
LOWEST DAILY MEAN	138	Aug 17	151	Sep 13	79	Sep 10 1971
ANNUAL SEVEN-DAY MINIMUM	144	Aug 14	165	Sep 8	84	Dec 11 1908
ANNUAL RUNOFF (CFSM)	1.14		1.72		1.72	
ANNUAL RUNOFF (INCHES)	15.52		23.42		23.39	
10 PERCENT EXCEEDS	4720		6550		6700	
50 PERCENT EXCEEDS	958		2000		1500	
90 PERCENT EXCEEDS	227		289		287	



2002 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.

03013946 CHAUTAUQUA LAKE AT BEMUS POINT, NY

LOCATION.--Lat 42°09'23", long 79°23'39", Chautauqua County, Hydrologic Unit 05010002, 6 ft east of lake shore, 30 ft south of the intersection of Pauline Avenue and Lakeside Avenue, and 950 ft southeast of the ferry landing at Bemus Point.
DRAINAGE AREA.--189 mi^2.
PERIOD OF RECORD.--October 1972 to September 1973; November 1974 to current year.
GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. Prior to Nov. 1974 at site 950 ft northwest at same datum.
REMARKS.--Lake regulated for flood control by Warner Dam. Area of water surface, 20.98 mi^2. Telephone gage-height telemeter at station.
EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,311.23 ft, Mar. 5, 1976; minimum, 1,306.20 ft, Dec. 16, 1998.
EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,309.65 ft, May 17, 18; minimum elevation, 1,306.60 ft, Dec. 14.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1307.48	1307.75	1306.99	1307.31	1308.53	1307.76	1308.58	1308.37	1308.48	1308.30	1308.24	1307.62
2	1307.47	1307.71	1306.99	1307.27	1308.82	1307.70	1308.56	1308.35	1308.39	1308.29	1308.21	1307.59
3	1307.46	1307.69	1306.96	1307.22	1308.77	1307.76	1308.78	1308.32	1308.36	1308.27	1308.17	1307.58
4	1307.45	1307.65	1306.93	1307.17	1308.73	1307.84	1308.84	1308.28	1308.35	1308.25	1308.12	1307.57
5	1307.45	1307.59	1306.90	1307.13	1308.65	1307.81	1308.80	1308.27	1308.54	1308.23	1308.09	1307.54
6	1307.50	1307.54	1306.87	1307.10	1308.56	1307.78	1308.76	1308.27	1308.58	1308.19	1308.05	1307.52
7	1307.50	1307.49	1306.84	1307.09	1308.47	1307.77	1308.70	1308.28	1308.51	1308.17	1308.01	1307.50
8	1307.49	1307.44	1306.81	1307.05	1308.39	1307.77	1308.66	1308.28	1308.44	1308.15	1307.98	1307.48
9	1307.47	1307.41	1306.77	1307.01	1308.31	1307.80	1308.66	1308.32	1308.38	1308.15	1307.95	1307.47
10	1307.46	1307.37	1306.73	1306.98	1308.25	1307.90	1308.67	1308.37	1308.31	1308.15	1307.93	1307.45
11	1307.45	1307.32	1306.69	1306.95	1308.28	1307.92	1308.64	1308.37	1308.28	1308.11	1307.91	1307.43
12	1307.45	1307.26	1306.65	1306.93	1308.23	1307.90	1308.58	1308.55	1308.26	1308.09	1307.89	1307.38
13	1307.45	1307.21	1306.63	1306.92	1308.19	1307.91	1308.61	1308.95	1308.26	1308.07	1307.88	1307.36
14	1307.46	1307.17	1306.65	1306.92	1308.11	1307.92	1308.74	1309.35	1308.26	1308.05	1307.86	1307.37
15	1307.46	1307.13	1306.77	1306.92	1308.04	1307.91	1308.90	1309.53	1308.30	1308.03	1307.87	1307.44
16	1307.46	1307.09	1306.79	1306.93	1308.00	1307.94	1308.89	1309.48	1308.34	1308.01	1307.89	1307.54
17	1307.48	1307.04	1306.86	1306.93	1307.97	1307.93	1308.85	1309.61	1308.34	1307.99	1307.90	1307.54
18	1307.49	1307.00	1307.15	1306.93	1307.92	1307.91	1308.79	1309.62	1308.34	1307.98	1307.89	1307.52
19	1307.48	1306.95	1307.25	1306.92	1307.86	1307.87	1308.72	1309.55	1308.34	1307.96	1307.87	1307.51
20	1307.48	1306.98	1307.31	1306.91	1307.83	1307.89	1308.68	1309.44	1308.33	1307.95	1307.85	1307.50
21	1307.50	1306.95	1307.34	1306.89	1307.89	1307.94	1308.64	1309.34	1308.32	1307.93	1307.82	1307.50
22	1307.55	1306.91	1307.35	1306.88	1307.95	1307.92	1308.58	1309.23	1308.31	1307.95	1307.80	1307.48
23	1307.57	1306.87	1307.40	1306.86	1307.93	1307.91	1308.51	1309.12	1308.30	1308.02	1307.80	1307.47
24	1307.59	1306.84	1307.55	1306.92	1307.90	1307.89	1308.44	1309.01	1308.30	1308.01	1307.80	1307.45
25	1307.60	1306.88	1307.55	1307.02	1307.87	1307.89	1308.37	1308.90	1308.29	1307.98	1307.78	1307.43
26	1307.63	1306.91	1307.51	1307.06	1307.85	1307.91	1308.30	1308.89	1308.28	1307.97	1307.76	1307.41
27	1307.70	1306.89	1307.46	1307.09	1307.84	1308.02	1308.23	1308.81	1308.32	1307.97	1307.74	1307.47
28	1307.73	1306.87	1307.41	1307.13	1307.82	1308.05	1308.24	1308.70	1308.34	1308.14	1307.71	1307.56
29	1307.74	1306.90	1307.38	1307.21	---	1308.12	1308.38	1308.61	1308.32	1308.29	1307.69	1307.55
30	1307.76	1306.95	1307.38	1307.60	---	1308.51	1308.39	1308.57	1308.31	1308.30	1307.67	1307.54
31	1307.77	---	1307.34	1307.94	---	1308.59	---	1308.54	---	1308.28	1307.64	---
MEAN	1307.53	1307.19	1307.07	1307.07	1308.18	1307.93	1308.62	1308.82	1308.35	1308.10	1307.90	1307.49
MAX	1307.77	1307.75	1307.55	1307.94	1308.82	1308.59	1308.90	1309.62	1308.58	1308.30	1308.24	1307.62
MIN	1307.45	1306.84	1306.63	1306.86	1307.82	1307.70	1308.23	1308.27	1308.26	1307.93	1307.64	1307.36

CAL YR 2001 MEAN 1307.68 MAX 1308.52 MIN 1306.63
WTR YR 2002 MEAN 1307.85 MAX 1309.62 MIN 1306.63

03014500 CHADAKOIN RIVER AT FALCONER, NY

LOCATION.--Lat 42°06'45", long 79°12'15", Chautauqua County, Hydrologic Unit 05010002, on left bank 10 ft downstream from South Dow Street Bridge in Falconer, 1.8 mi upstream from mouth, and 6 mi downstream from Chautauqua Lake.
DRAINAGE AREA.--194 mi^2.
PERIOD OF RECORD.--November 1934 to current year.
REVISED RECORDS.--WSP 803: 1936(M). WDR NY-98-3: 1997 (M).
GAGE.--Water-stage recorder, crest-stage gages, and concrete control. Datum of gage is 1,256.41 ft above NGVD of 1929.
REMARKS.--No estimated daily discharges. Records good. Flow regulated by Chautauqua Lake. Diurnal fluctuation caused by mills upstream from station. Monthly figures for 1951-66 water years adjusted for regulation. Telephone gage-height telemeter at station. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,250 ft^3/s, Sept. 14, 1979, gage height, 4.93 ft; minimum discharge, 2.5 ft^3/s, Sept. 18, 1995; minimum gage height, 0.05 ft, Oct. 3, 2001.
EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,200 ft^3/s, May 18, gage height, 2.87 ft; minimum discharge, 3.9 ft^3/s, Oct. 3, gage height, 0.05 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

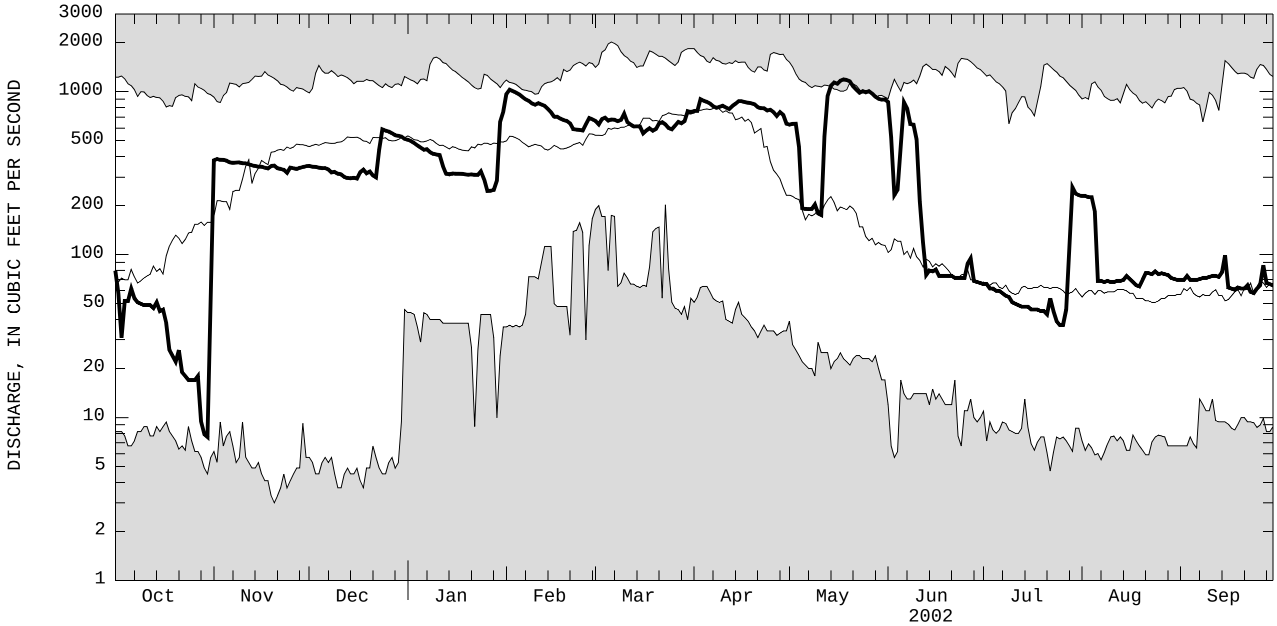
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80	380	350	507	968	662	763	629	866	66	229	70
2	58	387	347	498	1030	631	762	635	525	66	229	70
3	31	382	345	485	1010	679	902	636	233	62	225	74
4	52	381	342	469	990	693	882	459	251	62	225	70
5	52	378	339	454	964	666	867	193	466	60	183	70
6	62	369	340	441	931	676	847	191	861	60	69	70
7	54	366	334	444	899	673	816	190	789	58	69	71
8	51	368	320	426	880	660	798	191	633	56	68	72
9	50	369	322	416	848	671	809	203	628	55	69	72
10	49	364	314	412	832	735	821	179	509	51	68	73
11	49	364	311	408	852	652	802	175	212	50	68	74
12	49	359	300	351	835	630	783	532	119	49	69	74
13	47	354	295	314	820	612	818	948	75	48	69	73
14	51	350	294	311	786	614	844	1090	80	48	70	78
15	45	347	296	315	748	612	876	1140	79	48	74	99
16	46	347	293	314	701	555	875	1120	81	46	71	63
17	38	342	321	314	703	579	863	1170	74	46	68	62
18	26	338	333	313	684	597	855	1190	74	46	65	61
19	24	350	316	311	670	577	850	1180	74	45	64	63
20	22	352	324	310	662	592	839	1160	74	45	70	62
21	26	339	306	311	640	641	805	1080	74	43	77	62
22	19	336	298	309	589	650	793	1030	72	54	77	65
23	18	332	441	309	586	630	792	987	72	45	76	59
24	17	318	587	325	582	598	767	1010	72	39	79	58
25	17	343	577	290	579	587	776	991	72	37	76	62
26	17	339	570	246	633	619	750	1010	88	37	77	65
27	18	336	556	247	690	653	711	975	95	46	76	86
28	9.4	341	541	250	678	640	750	932	69	126	75	67
29	7.9	345	537	286	---	660	722	905	68	259	72	66
30	7.6	349	532	656	---	760	637	896	67	237	71	65
31	84	---	514	759	---	752	---	898	---	232	70	---
TOTAL	1176.9	10625	11895	11801	21790	19956	24175	23925	7452	2222	2948	2076
MEAN	38.0	354	384	381	778	644	806	772	248	71.7	95.1	69.2
MAX	84	387	587	759	1030	760	902	1190	866	259	229	99
MIN	7.6	318	293	246	579	555	637	175	67	37	64	58

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	209	378	501	516	523	678	631	309	208	116	106	148
MAX	751	997	997	1120	989	1358	1305	974	852	729	540	705
(WY)	1946	1986	1951	1998	1990	1976	1947	1943	1986	1986	1977	1977
MIN	8.12	5.69	6.38	36.3	195	282	53.1	58.5	15.1	8.55	7.44	17.8
(WY)	1964	1961	1961	1961	1963	1983	1946	1941	1954	1954	1954	1941

03014500 CHADAKOIN RIVER AT FALCONER, NY

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1935 - 2002	
ANNUAL TOTAL	103807.9		140041.9			
ANNUAL MEAN	284		384		361	
HIGHEST ANNUAL MEAN					527	1986
LOWEST ANNUAL MEAN					222	1999
HIGHEST DAILY MEAN	850	Apr 10	1190	May 18	2020	Mar 6 1976
LOWEST DAILY MEAN	7.6	Oct 30	7.6	Oct 30	3.0	Nov 20 1960
ANNUAL SEVEN-DAY MINIMUM	13	Oct 24	13	Oct 24	3.7	Nov 18 1960
10 PERCENT EXCEEDS	622		853		828	
50 PERCENT EXCEEDS	316		324		285	
90 PERCENT EXCEEDS	30		50		36	



2002 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.

LAKES IN ALLEGHENY RIVER BASIN

03013946 CHAUTAUQUA LAKE AT BEMUS POINT, NY (see station for daily mean elevation).

04213500 CATTARAUGUS CREEK AT GOWANDA, NY

LOCATION.--Lat 42°27'50", long 78°56'07", Erie County, Hydrologic Unit 04120102, on right bank 380 ft downstream from bridge on State Highways 39 and 62 at Gowanda, 4.2 mi downstream from South Branch, and 17.8 mi upstream from mouth.
DRAINAGE AREA.--436 mi^2.
PERIOD OF RECORD.--November 1939 to March 1998, October 1999 to current year.
REVISED RECORDS.--WSP 1912; WDR NY-82-3: Drainage area. WDR NY 1971: 1956(M). WDR NY 1974: 1940-42 (M, P).
GAGE.--Water-stage recorder. Datum of gage is 738.85 ft above NGVD of 1929.
REMARKS.--Records good except those for estimated daily discharges, which are fair. Diurnal fluctuation at low and medium flow caused by powerplant 20 mi upstream from station. Telephone and satellite gage-height telemeters at station. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 34,600 ft^3/s, Mar. 7, 1956, gage height, 14.03 ft, present datum; minimum discharge, about 6 ft^3/s, Aug. 21, 1941, result of regulation; minimum gage height, 0.90 ft, Oct. 26, 1951.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 1	1300	*12,600	*8.29	Mar. 30	0730	8,700	7.09

Minimum discharge, 95 ft^3/s, Oct. 4, 5, gage height, 1.19 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	115	284	883	e440	10900	784	e2000	1090	1410	374	e260	121
2	109	261	629	425	3910	732	e1800	997	846	332	e220	118
3	104	369	474	e480	1960	1810	e4300	964	665	302	e194	122
4	98	328	393	e480	1450	1530	2420	775	641	279	e180	132
5	97	273	351	460	1110	1020	1620	676	1370	258	e170	123
6	185	241	319	457	1020	1050	1390	613	1250	244	e160	113
7	186	222	305	459	910	1310	1260	625	967	234	149	107
8	174	211	278	e420	852	1340	1160	629	705	226	144	104
9	140	238	261	426	848	1660	1270	1020	597	269	139	102
10	125	226	246	492	891	2090	1460	1550	524	314	135	101
11	116	206	234	725	1470	1300	1070	815	479	236	132	124
12	112	191	221	687	1060	1180	904	1470	446	213	138	106
13	111	182	234	651	865	1330	1390	3330	479	203	138	101
14	113	175	325	561	691	1400	2910	5160	481	196	129	115
15	187	179	2060	611	742	1120	3530	2710	828	189	134	250
16	165	173	908	611	861	1540	1730	1540	1300	181	162	785
17	430	168	1130	570	892	1180	1270	3350	868	175	195	335
18	486	161	3590	529	697	990	1050	2400	585	168	211	209
19	273	164	1700	474	687	904	959	1760	468	171	173	167
20	203	397	1160	497	839	1050	1010	1270	401	186	288	157
21	225	334	969	502	1730	1480	956	1070	361	170	180	141
22	635	260	790	473	1530	1030	940	914	342	187	172	136
23	391	228	930	513	1030	931	917	797	327	270	248	153
24	305	206	1780	1950	851	917	780	732	305	245	297	128
25	346	555	971	1950	882	906	759	776	293	187	255	120
26	436	819	655	1210	983	1020	736	1060	309	191	182	118
27	815	495	536	1040	1260	2640	646	820	1080	230	156	270
28	655	409	513	1320	886	e1500	996	649	1370	e600	145	500
29	466	635	e420	2100	---	e2300	2250	594	740	e900	135	269
30	431	865	e370	5260	---	6020	1430	2130	464	e530	128	194
31	345	---	e390	5180	---	e2200	---	1950	---	e340	126	---
TOTAL	8579	9455	24025	31953	41807	46264	44913	44236	20901	8600	5475	5521
MEAN	277	315	775	1031	1493	1492	1497	1427	697	277	177	184
MAX	815	865	3590	5260	10900	6020	4300	5160	1410	900	297	785
MIN	97	161	221	420	687	732	646	594	293	168	126	101
CFSM	0.63	0.72	1.78	2.36	3.42	3.42	3.43	3.27	1.60	0.64	0.41	0.42
IN.	0.73	0.81	2.05	2.73	3.57	3.95	3.83	3.77	1.78	0.73	0.47	0.47

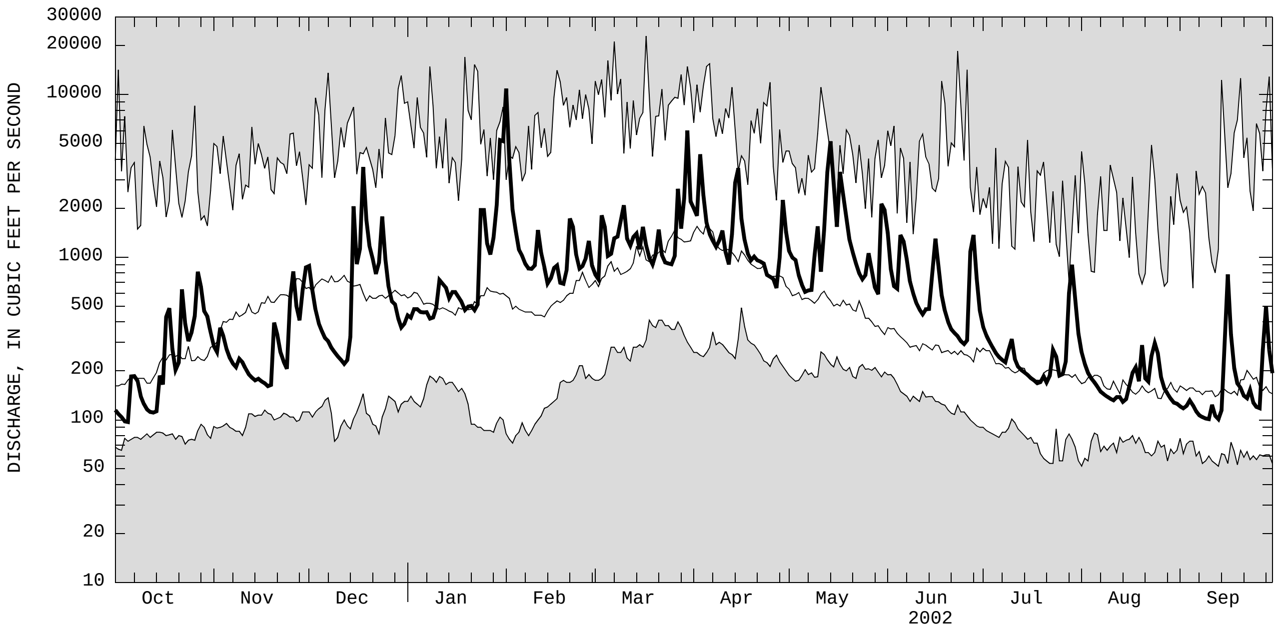
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	407	713	949	850	959	1572	1453	745	501	297	247	316
MAX	1573	1772	2089	2305	2819	3824	3686	1948	1436	867	1225	2423
(WY)	1946	1986	1991	1998	1976	1945	1947	1943	1989	1986	1977	1977
MIN	81.8	118	111	136	222	790	279	283	143	78.3	79.5	85.8
(WY)	1964	1961	1961	1961	1963	2001	1946	1941	1955	1955	1941	1960

e Estimated

04213500 CATTARAUGUS CREEK AT GOWANDA, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1940 - 2002	
ANNUAL TOTAL	204946		291729			
ANNUAL MEAN	561		799		748	
HIGHEST ANNUAL MEAN					1030	1977
LOWEST ANNUAL MEAN					532	1995
HIGHEST DAILY MEAN	7440	Feb 10	10900	Feb 1	22900	Mar 17 1942
LOWEST DAILY MEAN	76	Aug 15	97	Oct 5	52	Sep 13 1945
ANNUAL SEVEN-DAY MINIMUM	79	Aug 10	106	Sep 7	57	Sep 7 1945
ANNUAL RUNOFF (CFSM)	1.29		1.83		1.72	
ANNUAL RUNOFF (INCHES)	17.49		24.89		23.31	
10 PERCENT EXCEEDS	1130		1640		1600	
50 PERCENT EXCEEDS	346		500		423	
90 PERCENT EXCEEDS	100		138		126	



2002 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.

04214500 BUFFALO CREEK AT GARDENVILLE, NY

LOCATION.--Lat 42°51'17", long 78°45'19", Erie County, Hydrologic Unit 04120103, on left bank 300 ft downstream from bridge on Union Road in Gardenville, 2.0 mi upstream from Cayuga Creek, and 10.1 mi upstream from mouth.
DRAINAGE AREA.--142 mi^2.
PERIOD OF RECORD.--October 1938 to current year.
REVISED RECORDS.--WSP 1337: 1939-52. WSP 1912; WDR NY-82-3: Drainage area. WDR NY-78-1: 1939-l976 (P).
GAGE.--Water-stage recorder. Datum of gage is 603.65 ft above NGVD of 1929. Prior to Sept. 26, 1968, water-stage recorder at site 400 ft downstream at same datum.
REMARKS.--Records fair except those for estimated daily discharges, which are poor. Telephone and satellite gage-height telemeters at station. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,300 ft^3/s, Mar. 1, 1955, Mar. 7, 1956; maximum gage height 14.34 ft, Mar. 21, 1978 (ice jam); minimum discharge, 0.2 ft^3/s, Sept. 1, 1964.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,750 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 1	1530	*8,180	*8.17	Apr. 3	0830	4,200	5.98

Minimum discharge, 7.1 ft^3/s, Sept. 12, 13, 14, 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	43	343	e120	5900	e200	338	264	431	e46	22	e12
2	18	48	178	e105	1220	e220	391	283	208	e42	18	e11
3	17	74	116	e120	e500	e800	2290	324	146	39	16	e11
4	16	69	88	e115	e400	e380	562	206	138	36	15	e14
5	18	50	73	e115	e270	e180	377	158	672	33	15	e13
6	75	41	69	e110	333	e230	320	136	390	30	15	e11
7	43	36	65	e125	302	e300	271	144	267	27	14	e9.5
8	27	35	59	e110	292	e850	240	152	165	24	14	e8.5
9	18	40	58	e140	312	e1200	257	476	126	37	13	e7.5
10	19	36	50	e350	431	e1100	306	660	104	30	13	e7.5
11	18	34	47	e600	781	386	210	229	90	25	e12	e14
12	19	31	47	e340	388	377	184	459	80	20	e12	e8.5
13	19	28	48	e300	292	450	472	1410	91	19	e12	7.3
14	19	28	128	e250	e190	459	1140	2320	140	20	e12	7.5
15	50	34	975	e230	e230	337	1120	756	338	19	e15	17
16	52	39	324	e240	e450	378	394	369	282	18	19	93
17	51	35	395	e225	e440	275	281	1040	196	17	19	50
18	100	31	972	e200	e220	244	226	604	144	16	15	26
19	53	36	415	e150	e220	235	257	413	102	16	17	18
20	47	97	322	e170	e510	333	231	286	78	16	16	16
21	69	92	281	e160	e1100	526	209	256	73	16	15	14
22	114	57	201	e170	e700	318	180	205	69	16	25	14
23	78	45	193	e300	e350	247	189	170	64	117	31	18
24	53	39	791	e1400	e270	253	152	162	e60	40	42	16
25	66	146	302	895	e320	261	144	181	e57	23	47	15
26	669	178	187	430	e360	267	151	360	e60	18	31	14
27	301	99	e145	364	e340	1050	122	212	e200	18	e20	86
28	161	86	e130	459	e220	463	446	144	e125	55	e18	196
29	89	222	e135	618	---	476	895	120	e84	86	e16	65
30	61	374	e125	1330	---	1070	392	721	e58	42	e14	40
31	51	---	e115	858	---	444	---	696	---	33	e13	---
TOTAL	2412	2203	7377	11099	17341	14309	12747	13916	5038	994	576	840.3
MEAN	77.8	73.4	238	358	619	462	425	449	168	32.1	18.6	28.0
MAX	669	374	975	1400	5900	1200	2290	2320	672	117	47	196
MIN	16	28	47	105	190	180	122	120	57	16	12	7.3
CFSM	0.55	0.52	1.68	2.52	4.36	3.25	2.99	3.16	1.18	0.23	0.13	0.20
IN.	0.63	0.58	1.93	2.91	4.54	3.75	3.34	3.65	1.32	0.26	0.15	0.22

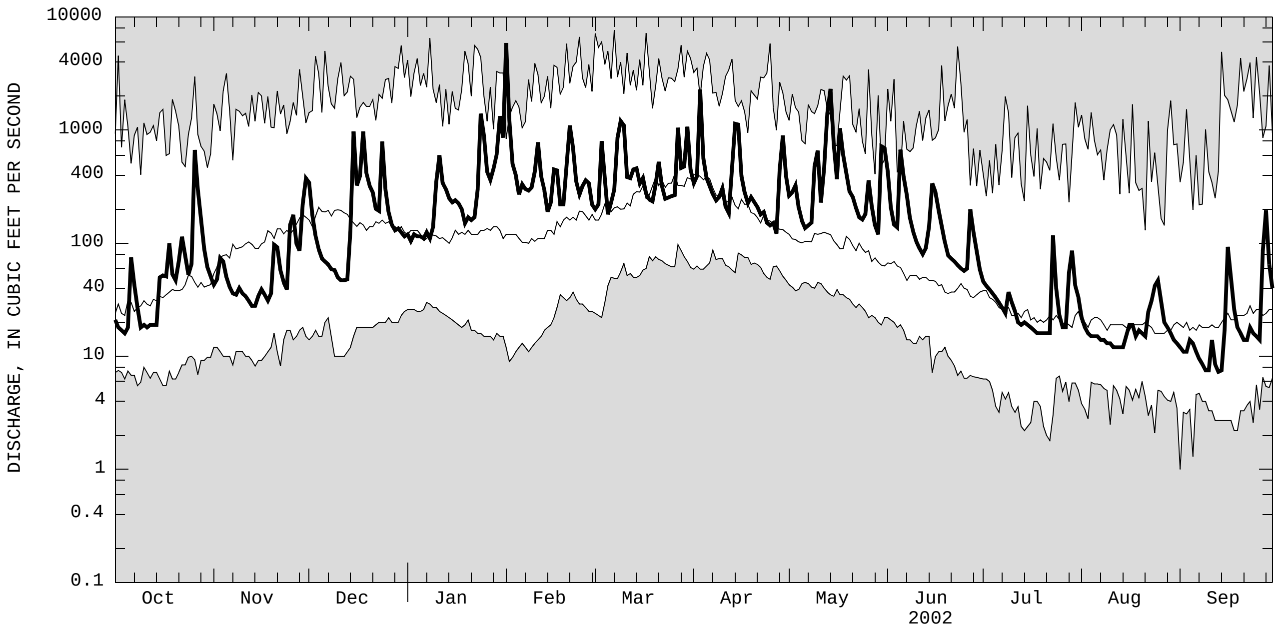
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	91.5	199	286	259	308	487	376	179	104	51.0	46.1	72.4
MAX	381	686	706	725	835	1048	950	495	531	354	376	827
(WY)	1987	1986	1991	1998	1976	1942	1947	1984	1989	1992	1992	1977
MIN	9.32	18.2	17.4	27.4	40.2	197	68.8	38.5	15.6	6.89	10.8	6.25
(WY)	1965	1961	1961	1961	1963	1981	1946	1941	1955	1955	1966	1964

e Estimated

04214500 BUFFALO CREEK AT GARDENVILLE, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1939 - 2002	
ANNUAL TOTAL	57652.0		88852.3			
ANNUAL MEAN	158		243		204	
HIGHEST ANNUAL MEAN					301	1977
LOWEST ANNUAL MEAN					119	1999
HIGHEST DAILY MEAN	3900	Feb 10	5900	Feb 1	7650	Mar 7 1956
LOWEST DAILY MEAN	5.0	Aug 12	7.3	Sep 13	1.0	Sep 1 1964
ANNUAL SEVEN-DAY MINIMUM	5.4	Aug 10	8.7	Sep 8	2.6	Sep 13 1964
ANNUAL RUNOFF (CFSM)	1.11		1.71		1.44	
ANNUAL RUNOFF (INCHES)	15.10		23.28		19.55	
10 PERCENT EXCEEDS	366		516		460	
50 PERCENT EXCEEDS	69		125		88	
90 PERCENT EXCEEDS	14		16		15	



2002 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.

04215000 CAYUGA CREEK NEAR LANCASTER, NY

LOCATION.--Lat 42°53'24", long 78°38'43", Erie County, Hydrologic Unit 04120103, on right bank 150 ft upstream from low dam in Como Lake Park, 700 ft downstream from bridge on Bowen Road, 800 ft downstream from Little Buffalo Creek, 2.0 mi southeast of Lancaster, and 8.7 mi upstream from mouth.
DRAINAGE AREA.--96.4 mi^2.
PERIOD OF RECORD.--September 1938 to September 1968. October 1971 to April 1974 (peak discharges only). May 1974 to current year.
REVISED RECORDS.--WDR NY-82-3: Drainage area.
GAGE.--Water-stage recorder and low concrete dam as control. Datum of gage is 672.02 ft above NGVD of 1929.
REMARKS.--Records good except those for estimated daily discharges, which are fair. Since August 1962, undetermined amount of flow diverted by Lancaster Country Club for irrigation upstream from station. Concrete dam configuration modified in September 1974 resulting in a lower point of zero flow. Telephone and satellite gage-height telemeters at station. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,440 ft^3/s, Sept. 14, 1979, gage height, 10.48 ft; maximum gage height 13.35 ft, Jan. 23, 1999 (ice jam); practically no flow part of Aug. 8, 9, 1939, when stop logs were installed in the dam.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 1	1500	*6,450	*8.84	May 13	2000	3,270	7.02
Apr. 3	0630	3,230	7.01				

Minimum discharge, 1.5 ft^3/s, Sept. 10, gage height, 2.50 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	22	236	e68	3900	e130	234	179	228	15	8.2	3.0
2	3.6	22	131	e60	913	e140	392	230	101	15	6.3	2.7
3	3.0	51	85	e68	336	541	1650	271	66	15	5.4	3.2
4	2.3	41	61	e66	240	251	406	146	57	14	4.5	6.0
5	2.5	30	51	e66	e180	e120	257	107	214	13	3.8	4.8
6	25	23	45	e64	207	e150	215	85	161	12	3.4	3.3
7	23	20	41	e70	171	197	178	94	113	12	3.0	2.5
8	9.6	18	36	e64	155	567	154	102	66	11	2.7	2.0
9	6.2	21	33	e80	176	811	166	469	49	13	2.5	1.7
10	4.7	21	30	e420	321	728	164	504	40	15	2.3	1.7
11	4.0	18	28	670	606	e250	126	148	34	12	2.1	5.3
12	3.7	16	25	385	260	288	99	612	30	10	1.9	4.0
13	4.0	15	28	298	e175	321	475	1570	33	7.6	2.1	2.9
14	3.0	14	66	169	e130	254	916	1910	63	5.1	2.5	2.3
15	9.3	18	622	267	150	185	781	588	105	4.2	2.2	4.1
16	14	34	213	247	316	217	277	259	91	3.9	10	19
17	18	28	332	174	302	156	179	806	63	3.5	8.6	13
18	16	22	697	131	e150	152	138	455	71	3.3	6.1	7.4
19	13	21	279	e100	e145	145	155	269	43	3.6	4.6	5.3
20	9.3	88	210	e105	340	262	141	177	30	3.9	5.6	4.6
21	13	64	164	99	777	356	117	147	24	3.4	5.0	4.4
22	73	42	117	96	447	212	106	123	22	2.8	5.3	3.6
23	36	31	113	159	226	173	111	101	21	66	28	3.7
24	25	26	405	e1050	172	172	85	98	18	30	27	5.9
25	21	97	170	623	209	193	86	114	17	12	26	4.1
26	517	118	e105	282	233	217	90	250	18	9.2	12	3.4
27	214	63	e55	237	226	738	67	129	84	8.9	7.7	54
28	84	56	e55	272	e140	312	363	82	50	23	5.4	133
29	45	197	e80	294	---	301	693	63	28	30	4.5	28
30	33	304	e70	644	---	990	279	139	19	17	4.0	15
31	25	---	e66	e400	---	291	---	419	---	11	3.4	---
TOTAL	1264.9	1541	4649	7728	11603	9820	9100	10646	1959	405.4	216.1	353.9
MEAN	40.8	51.4	150	249	414	317	303	343	65.3	13.1	6.97	11.8
MAX	517	304	697	1050	3900	990	1650	1910	228	66	28	133
MIN	2.3	14	25	60	130	120	67	63	17	2.8	1.9	1.7
CFSM	0.42	0.53	1.56	2.59	4.30	3.29	3.15	3.56	0.68	0.14	0.07	0.12
IN.	0.49	0.59	1.79	2.98	4.48	3.79	3.51	4.11	0.76	0.16	0.08	0.14

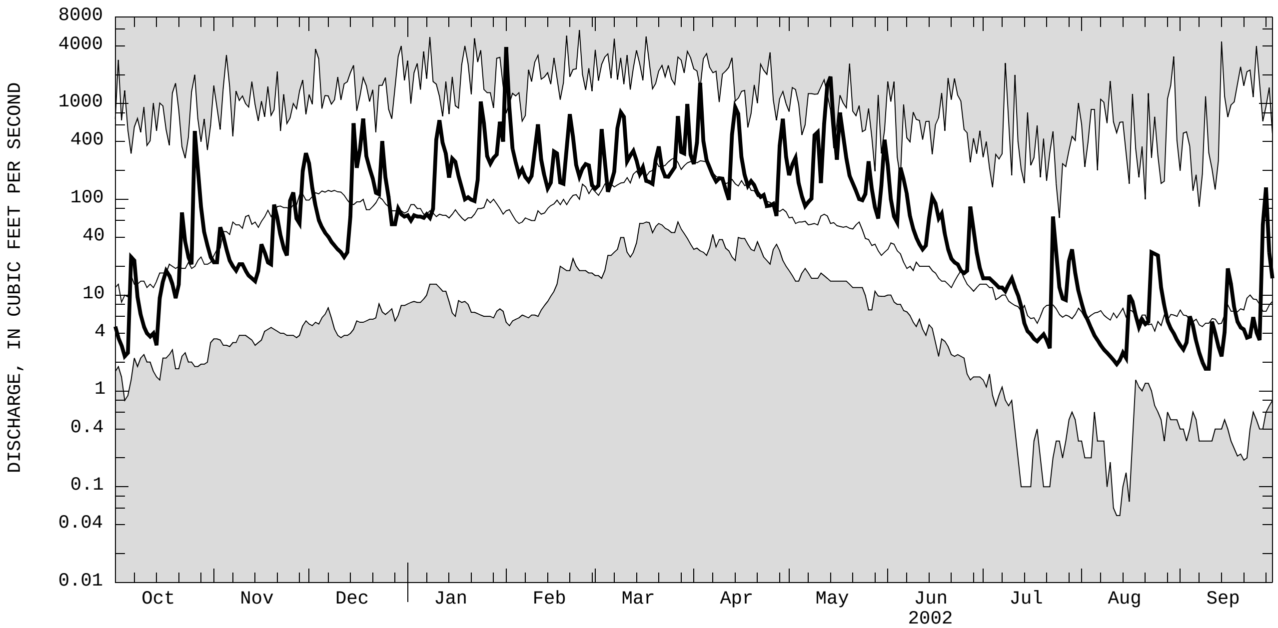
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	59.0	127	185	178	217	337	250	110	55.5	24.4	30.0	47.1
MAX	252	601	505	543	457	680	623	343	338	166	323	572
(WY)	1987	1986	1978	1998	1976	1942	1940	2002	1989	1998	1977	1977
MIN	2.90	4.34	5.60	9.85	25.1	146	36.5	18.7	5.88	1.06	1.87	0.80
(WY)	1967	1961	1961	1961	1963	1981	1946	1941	1955	1955	1939	1960

e Estimated

04215000 CAYUGA CREEK NEAR LANCASTER, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1939 - 2002	
ANNUAL TOTAL	39378.45		59286.3			
ANNUAL MEAN	108		162		135	
HIGHEST ANNUAL MEAN					206	1956
LOWEST ANNUAL MEAN					78.5	1962
HIGHEST DAILY MEAN	2730	Feb 10	3900	Feb 1	5830	Feb 24 1985
LOWEST DAILY MEAN	0.05	Aug 12	1.7	Sep 9	0.05	Aug 12 2001
ANNUAL SEVEN-DAY MINIMUM	0.09	Aug 10	2.2	Aug 9	0.09	Aug 10 2001
ANNUAL RUNOFF (CFSM)	1.12		1.68		1.40	
ANNUAL RUNOFF (INCHES)	15.20		22.88		18.97	
10 PERCENT EXCEEDS	253		395		310	
50 PERCENT EXCEEDS	33		66		48	
90 PERCENT EXCEEDS	2.3		3.9		3.9	



2002 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.

04215500 CAZENOVIA CREEK AT EBENEZER, NY

LOCATION.--Lat 42°49'47", long 78°46'31", Erie County, Hydrologic Unit 04120103, on right bank 30 ft upstream from bridge on Ridge Road in Ebenezer, 4.0 mi upstream from mouth, and 5.0 mi southeast of Buffalo.
DRAINAGE AREA.--135 mi^2.
PERIOD OF RECORD.--June 1940 to current year.
REVISED RECORDS.--WSP 1912: Drainage area. WDR NY 1973: 1972 (M). WDR NY-82-3: Drainage area.
GAGE.--Water-stage recorder. Datum of gage is 604.86 ft above NGVD of 1929. Prior to Apr. 4, 1955, at datum 2.00 ft higher. Apr. 4 to Oct. 12, 1955, nonrecording gage at temporary site 1.3 mi downstream at different datum.
REMARKS.--Records good except those for estimated daily discharges, which are poor. Telephone gage-height telemeter at station. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,500 ft^3/s, Mar. 1, 1955, gage height, 15.82 ft, present datum; minimum discharge, 2.6 ft^3/s, Nov. 7, 1953; minimum gage height, 1.76 ft, Sept. 15, 1991.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 1	1215	*10,300	*12.36	May 13	2330	4,290	7.99
Apr. 3	0615	5,160	8.73				

Minimum discharge, 7.0 ft^3/s, Sept. 10, gage height, 1.91 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	65	481	e150	7390	e200	388	254	389	59	38	11
2	15	71	228	e130	1530	e190	526	320	185	50	29	11
3	13	166	146	e140	565	919	2860	304	141	44	23	11
4	12	113	103	e140	387	460	695	187	165	40	20	11
5	15	78	89	e140	e260	e200	401	152	603	36	17	11
6	103	64	82	e135	e240	e250	321	135	304	33	20	10
7	67	55	77	e150	e220	363	286	152	205	31	19	8.8
8	33	53	70	e140	206	874	254	156	147	29	14	8.1
9	23	56	65	e180	221	1530	323	844	121	32	12	7.6
10	18	54	60	e700	375	1460	392	739	105	33	12	10
11	16	48	61	e1000	887	493	217	220	95	31	11	19
12	15	43	53	e500	e360	423	178	743	86	26	11	9.3
13	15	40	55	e400	e250	480	738	2090	91	23	11	8.3
14	16	38	164	e320	e180	549	1260	2940	116	22	12	7.9
15	57	49	1470	e290	e195	448	1320	871	298	21	27	26
16	52	55	341	e280	359	597	438	395	408	20	40	111
17	119	47	566	260	344	305	276	1790	213	18	26	67
18	179	42	1400	201	e190	260	210	856	163	16	38	34
19	68	49	463	e195	e180	248	212	480	115	16	28	24
20	46	233	395	e220	407	426	187	330	92	16	30	17
21	136	138	310	e215	1300	578	178	288	82	16	25	14
22	156	84	211	e210	700	316	161	208	75	21	35	15
23	90	67	368	e330	341	235	168	174	67	141	34	27
24	70	57	1370	1600	250	233	141	171	59	56	68	22
25	124	180	355	1050	317	223	144	191	54	30	60	15
26	744	210	203	482	501	325	151	560	102	24	32	12
27	382	108	e180	390	501	1180	125	225	295	32	23	141
28	231	106	e165	571	254	508	747	158	166	129	17	238
29	136	339	e170	950	---	628	1140	133	99	110	14	66
30	111	456	e160	2090	---	2070	427	651	70	72	12	38
31	82	---	e140	1650	---	550	---	884	---	65	12	---
TOTAL	3161	3164	10001	15209	18910	17521	14864	17601	5111	1292	770	1011.0
MEAN	102	105	323	491	675	565	495	568	170	41.7	24.8	33.7
MAX	744	456	1470	2090	7390	2070	2860	2940	603	141	68	238
MIN	12	38	53	130	180	190	125	133	54	16	11	7.6
CFSM	0.76	0.78	2.39	3.63	5.00	4.19	3.67	4.21	1.26	0.31	0.18	0.25
IN.	0.87	0.87	2.76	4.19	5.21	4.83	4.10	4.85	1.41	0.36	0.21	0.28

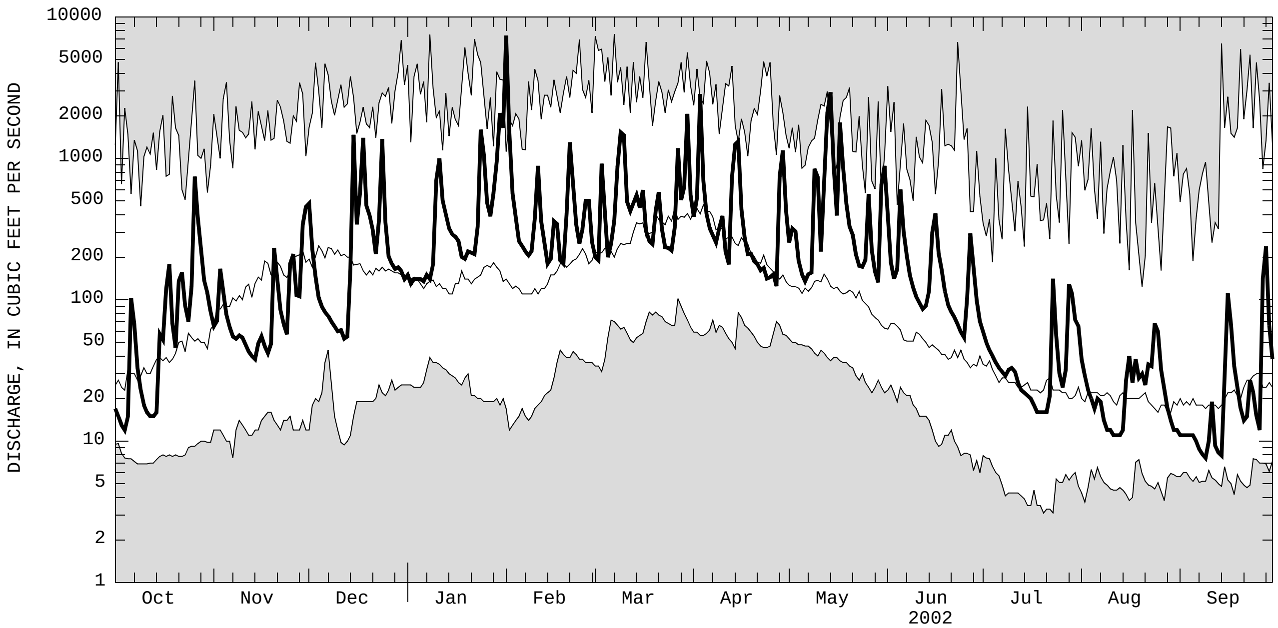
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	111	245	343	307	344	543	421	206	111	52.5	49.7	81.8
MAX	410	705	868	816	859	1062	1005	585	473	381	371	978
(WY)	1946	1986	1991	1998	1976	1945	1947	1984	1989	1992	1977	1977
MIN	9.76	16.2	20.4	37.8	55.8	216	79.9	43.6	17.5	6.11	9.62	7.93
(WY)	1954	1961	1961	1961	1963	1981	1946	1941	1955	1955	1966	1960

e Estimated

04215500 CAZENOVIA CREEK AT EBENEZER, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1940 - 2002	
ANNUAL TOTAL	71139.2		108615.0			
ANNUAL MEAN	195		298		234	
HIGHEST ANNUAL MEAN					332	1977
LOWEST ANNUAL MEAN					145	1999
HIGHEST DAILY MEAN	4280	Feb 10	7390	Feb 1	7560	Mar 7 1956
LOWEST DAILY MEAN	6.5	Aug 12	7.6	Sep 9	3.1	Jul 20 1955
ANNUAL SEVEN-DAY MINIMUM	6.8	Aug 10	9.5	Sep 4	3.5	Jul 17 1955
ANNUAL RUNOFF (CFSM)	1.44		2.20		1.73	
ANNUAL RUNOFF (INCHES)	19.60		29.93		23.56	
10 PERCENT EXCEEDS	457		700		545	
50 PERCENT EXCEEDS	80		150		99	
90 PERCENT EXCEEDS	12		16		15	



2002 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.

04215900 LAKE ERIE AT BUFFALO, NY

LOCATION.--Lat 42°52'39", long 78°53'26", Erie County, Hydrologic Unit 04120200, near outer end of Buffalo River South Pier, at Buffalo.
DRAINAGE AREA.--263,700 mi^2.
PERIOD OF RECORD.--January 1860 to current year. Records prior to October 1960 in files of Lake Survey Center.
REVISED RECORDS.--WDR NY-75-1: 1974.
GAGE.--Water-stage recorder. Elevations are in feet International Great Lakes Datum (IGLD) of 1985. Prior to Oct. 1, 1991, elevations are in feet (IGLD) of 1955, 0.67 ft lower. Prior to Feb. 5, 1899, nonrecording gages.
COOPERATION.--Records furnished by U.S. Department of Commerce, NOAA-NOS, Oceanographic Products and Services Division, Silver Spring, Maryland.
EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 580.65 ft, datum then in use, Dec. 2, 1985; minimum elevation, 564.17 ft, datum then in use, Mar. 10, 1964.
EXTREMES FOR CURRENT YEAR.--Maximum elevation, 578.68 ft, Mar. 10; minimum elevation, 568.02 ft, Dec. 14.

ELEVATION (FEET IGLD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	570.37	570.39	571.25	570.72	571.84	571.25	571.44	571.49	572.12	571.85	571.56	570.97
2	570.26	570.52	570.40	570.71	571.01	570.61	570.97	571.82	572.03	571.89	571.68	571.08
3	570.41	570.37	570.50	570.69	571.43	572.08	571.65	572.01	571.68	571.91	571.37	571.24
4	570.54	570.51	570.38	571.49	571.22	571.80	571.38	571.57	571.76	571.92	571.50	571.25
5	569.75	570.22	570.38	571.16	571.66	571.38	571.32	571.55	571.98	571.63	571.54	570.93
6	571.21	570.39	570.75	570.39	571.12	570.87	571.32	571.59	571.79	571.68	571.09	570.86
7	570.57	570.39	570.34	570.36	571.08	570.44	571.17	571.62	571.82	571.74	571.24	570.94
8	570.04	570.69	569.93	571.37	570.98	570.75	571.16	570.98	571.86	571.73	571.23	570.92
9	570.25	570.58	570.41	571.10	570.48	571.90	571.48	571.90	571.91	571.83	571.29	570.94
10	570.23	570.78	570.35	570.64	570.78	574.02	571.29	572.22	571.83	571.21	571.29	571.12
11	570.23	570.12	570.22	570.91	570.90	571.03	571.17	571.44	572.05	571.39	571.34	571.00
12	570.02	570.25	570.17	570.96	571.98	570.87	571.40	571.38	571.99	571.53	571.39	570.95
13	570.11	570.21	570.51	571.18	570.96	570.82	571.42	571.78	571.84	571.55	571.33	571.08
14	570.70	570.38	569.67	570.22	571.11	570.58	571.41	572.32	571.95	571.58	571.40	570.94
15	570.91	570.35	570.34	571.60	571.01	570.85	571.51	572.04	572.20	571.79	571.39	570.90
16	570.64	570.29	570.20	570.57	571.12	570.77	571.52	572.17	572.35	571.63	571.65	570.97
17	571.62	570.02	570.31	571.24	570.90	570.27	571.58	571.88	572.14	571.70	571.44	570.93
18	570.35	570.18	570.98	571.02	570.67	571.10	571.54	571.90	571.85	571.66	571.64	570.80
19	570.63	570.54	570.80	570.40	570.64	570.65	571.61	571.98	571.73	571.57	571.32	570.93
20	570.27	570.48	572.12	570.96	570.74	570.90	571.56	571.90	571.80	571.45	571.17	570.92
21	570.38	570.71	570.73	571.04	571.32	571.44	570.97	572.06	571.83	571.52	571.10	571.37
22	570.18	570.21	570.33	570.61	571.02	572.11	571.43	571.90	571.80	571.61	571.39	571.11
23	570.36	570.05	571.14	570.39	570.77	572.20	571.72	571.91	571.91	571.57	570.83	570.90
24	570.26	569.93	571.95	570.42	570.78	570.85	571.40	572.00	571.78	571.07	571.31	571.01
25	573.26	570.52	571.37	570.97	570.84	569.89	572.02	571.65	571.83	571.24	571.21	570.61
26	572.80	570.16	571.18	570.84	571.50	570.45	571.58	572.03	571.96	571.47	571.21	570.74
27	570.51	570.05	571.70	570.45	572.29	571.20	571.21	571.84	572.05	571.50	570.68	570.68
28	570.38	570.04	571.53	570.33	---	570.96	571.60	571.81	571.94	571.72	570.68	570.72
29	570.67	569.81	571.29	570.26	---	570.88	571.82	571.86	571.84	571.74	571.01	570.90
30	569.71	570.46	572.14	570.22	---	571.33	571.85	571.82	571.80	571.78	570.99	570.96
31	570.22	---	571.59	569.62	---	571.02	---	571.95	---	571.67	570.88	---
MEAN	570.58	570.32	570.81	570.74	---	571.14	571.45	571.82	571.91	571.62	571.26	570.96
MAX	573.26	570.78	572.14	571.60	---	574.02	572.02	572.32	572.35	571.92	571.68	571.37
MIN	569.71	569.81	569.67	569.62	---	569.89	570.97	570.98	571.68	571.07	570.68	570.61

CAL YR 2001 MEAN 570.65 MAX 573.26 MIN 569.54

04216000 NIAGARA RIVER AT BUFFALO, NY

LOCATION.--Lat 42°52'40", long 78°55'00", Erie County, Hydrologic Unit 04120104, at head of Niagara River at Buffalo, and 34.3 mi upstream from mouth.
DRAINAGE AREA.--263,700 mi^2.
PERIOD OF RECORD.--January 1860 to September 1960 (monthly discharges only published in WSP 1912), October 1960 to current year. Records of January 1926 to September 1960 daily discharges available in files of U.S. Department of Commerce and U.S. Geological Survey.
REVISED RECORDS.--WSP 1912: 1862(M), 1955 (M), 1936 (M), WDR NY-77-1: Drainage area.
GAGE.--Discharge determined from several powerplants at Niagara Falls and discharge over the falls. Discharge before 1926 determined from records of Corps of Engineers gages at Buffalo and Cleveland.
REMARKS.--Records do not include water diverted from Lake Michigan by Illinois and Michigan Canal during period of its operation prior to 1910 and by Chicago Sanitary and Ship Canal, which began operation in 1900, and from Lake Erie by Welland and New York State Canals before 1918. Records include water diverted into Lake Superior from Hudson Bay drainage by the Long Lake project, which began operation in July 1939, and by the Ogoki project, which began operation in July 1943. Figures of monthly mean discharge for 1860 to 1960 and daily discharge for 1961 to 1965, published in WSP 1912, are the official records of the U.S. Lake Survey, and have been coordinated with and concurred by the counterpart Canadian agencies, as have been the extremes for period of record through December 1976 and records October 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 347,000 ft^3/s, Dec. 2, 1985, result of high, storm-generated Lake Erie level; minimum daily, 90,000 ft^3/s, Jan. 13, 1964, Aug. 29, 1984. Maximum monthly mean discharge, 268,400 ft^3/s, June 1986; minimum monthly mean, 116,200 ft^3/s, February 1936. Maximum and minimum instantaneous discharge not determined.
EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 276,000 ft^3/s, Mar. 10; minimum daily discharge, 165,000 ft^3/s, Oct. 5. Maximum and minimum instantaneous discharge not determined.
COOPERATION.--Records of daily discharge furnished by Detroit District Corps of Engineers and Canada Department of the Environment.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

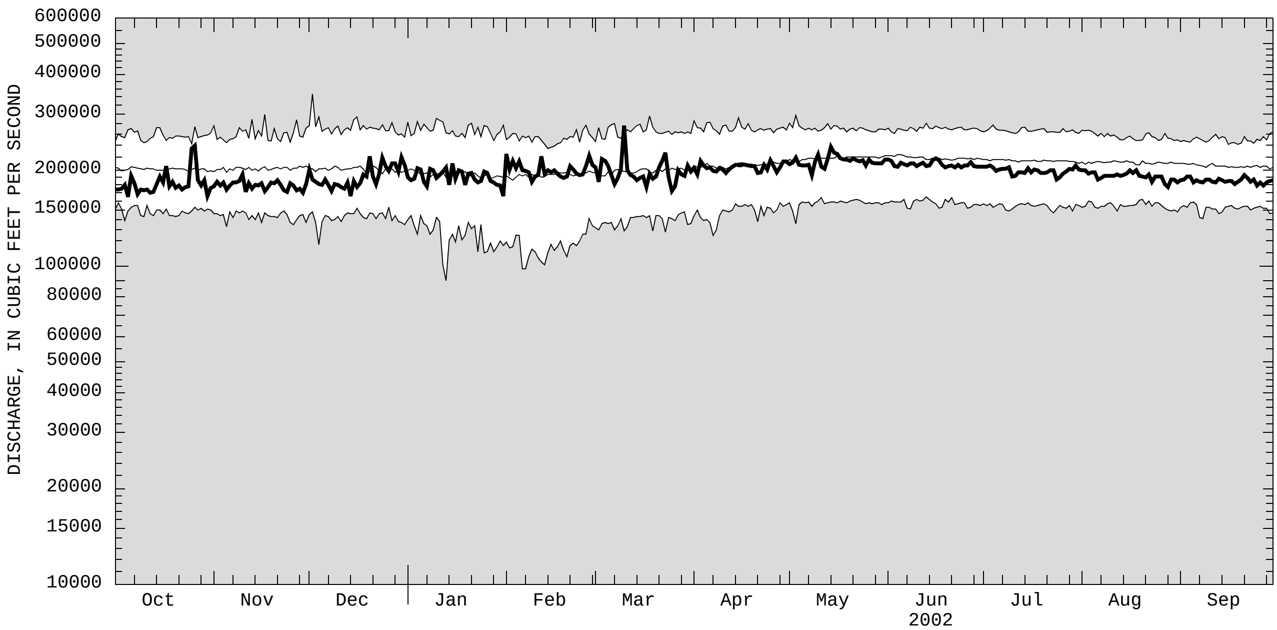
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	174000	178000	201000	190000	225000	204000	203000	209000	216000	205000	200000	186000
2	174000	184000	187000	186000	201000	184000	194000	211000	214000	205000	200000	187000
3	175000	179000	184000	188000	214000	217000	214000	219000	206000	207000	195000	191000
4	180000	183000	181000	203000	203000	214000	207000	208000	205000	204000	197000	191000
5	165000	174000	180000	201000	213000	206000	203000	207000	211000	199000	197000	183000
6	192000	179000	187000	184000	200000	193000	204000	207000	209000	201000	187000	186000
7	182000	183000	180000	178000	199000	181000	199000	208000	207000	202000	189000	184000
8	168000	183000	172000	202000	197000	189000	198000	193000	210000	202000	192000	183000
9	174000	185000	181000	200000	184000	202000	203000	212000	210000	204000	192000	187000
10	173000	194000	180000	189000	191000	276000	201000	224000	206000	191000	192000	187000
11	174000	171000	177000	193000	193000	200000	196000	205000	209000	192000	192000	184000
12	170000	182000	175000	198000	221000	193000	201000	202000	211000	197000	194000	183000
13	171000	175000	183000	204000	195000	191000	205000	217000	206000	197000	192000	188000
14	181000	180000	166000	180000	200000	186000	208000	237000	207000	196000	193000	186000
15	191000	179000	185000	210000	197000	189000	208000	227000	215000	203000	195000	184000
16	183000	182000	177000	188000	200000	191000	209000	225000	218000	197000	200000	185000
17	206000	172000	182000	200000	195000	177000	208000	218000	215000	201000	196000	185000
18	178000	177000	194000	198000	191000	195000	207000	216000	208000	200000	200000	181000
19	184000	183000	191000	180000	189000	188000	206000	216000	204000	196000	192000	184000
20	176000	182000	221000	195000	191000	191000	206000	214000	206000	196000	191000	187000
21	179000	186000	191000	196000	206000	204000	196000	218000	207000	197000	190000	193000
22	174000	180000	181000	187000	201000	214000	197000	215000	204000	200000	194000	189000
23	177000	173000	195000	183000	195000	227000	208000	213000	208000	200000	184000	184000
24	178000	171000	219000	185000	193000	190000	201000	215000	204000	187000	191000	187000
25	234000	182000	206000	198000	194000	172000	215000	207000	207000	190000	191000	179000
26	239000	179000	199000	196000	206000	178000	206000	216000	207000	195000	191000	183000
27	186000	173000	210000	185000	222000	200000	197000	211000	212000	198000	181000	179000
28	179000	175000	210000	183000	208000	194000	204000	210000	206000	202000	177000	183000
29	186000	170000	198000	180000	---	192000	213000	210000	205000	201000	187000	185000
30	166000	181000	220000	179000	---	207000	213000	210000	205000	207000	187000	186000
31	176000	---	208000	166000	---	198000	---	216000	---	201000	183000	---
TOTAL	5645000	5375000	5921000	5905000	5624000	6143000	6130000	6616000	6258000	6173000	5942000	5560000
MEAN	182100	179200	191000	190500	200900	198200	204300	213400	208600	199100	191700	185300
MAX	239000	194000	221000	210000	225000	276000	215000	237000	218000	207000	200000	193000
MIN	165000	170000	166000	166000	184000	172000	194000	193000	204000	187000	177000	179000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	200600	200700	201300	195500	193100	199200	208000	216500	216100	212200	208300	203900
MAX	254000	248000	260900	254000	241600	255500	264200	264700	268400	265200	253500	243700
(WY)	1987	1987	1986	1987	1987	1986	1985	1974	1986	1986	1986	1986
MIN	152700	148100	149800	138500	116200	142700	152000	159100	158000	154100	155000	153900
(WY)	1935	1935	1965	1964	1936	1934	1935	1934	1934	1934	1934	1934

04216000 NIAGARA RIVER AT BUFFALO, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1926 - 2002	
ANNUAL TOTAL	66729000		71292000			
ANNUAL MEAN	182800		195300		205100	
HIGHEST ANNUAL MEAN					249600	1986
LOWEST ANNUAL MEAN					155300	1934
HIGHEST DAILY MEAN	239000	Oct 26	276000	Mar 10	347000	Dec 2 1985
LOWEST DAILY MEAN	158000	Sep 14	165000	Oct 5	90000	Jan 13 1964
ANNUAL SEVEN-DAY MINIMUM	167000	Sep 13	173000	Oct 8	105000	Feb 6 1936
10 PERCENT EXCEEDS	194000		213000		239000	
50 PERCENT EXCEEDS	182000		195000		206000	
90 PERCENT EXCEEDS	172000		178000		171000	



2002 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.

04216060 NIAGARA RIVER AT ANDERSON PARK, BUFFALO, NY

LOCATION.--Lat 42°54'53", long 78°54'12", Erie County, Hydrologic Unit 04120104, at Anderson Park (Broderick Park) dock at foot of Ferry Street on Squaw Island, Buffalo, 0.6 mi downstream from Peace Bridge.
DRAINAGE AREA.--263,700 mi^2.
PERIOD OF RECORD.--October 1984 to current year. Prior to October 1987, published as "at Bird Island."
GAGE.--Water-stage recorder. Datum of gage is International Great Lakes Datum (IGLD) of 1985. Prior to Oct. 1, 1991, datum of gage was International Great Lakes Datum (IGLD) of 1955, 0.67 ft lower.
EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 572.05, ft, datum then in use, Dec. 2, 1985; minimum, 563.45 ft, Jan. 14, 1999.
EXTREMES FOR CURRENT YEAR.--Maximum elevation, 569.26 ft, Feb. 1; minimum elevation, 564.01 ft, Jan. 31.

ELEVATION (FEET IGLD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	565.76	565.74	---	---	566.57	565.90	565.74	566.07	566.21	566.26	566.38	565.90
2	565.85	565.74	---	---	566.12	565.63	565.58	566.14	566.14	566.35	566.47	566.05
3	565.96	565.39	---	---	566.31	566.45	565.96	566.23	565.88	566.38	566.16	566.16
4	565.90	565.52	---	---	565.95	565.93	565.65	566.01	565.97	566.41	566.21	566.01
5	565.26	565.18	---	---	566.14	565.75	565.62	565.92	566.27	565.91	566.37	565.83
6	566.06	565.27	---	---	566.00	565.86	565.73	566.07	566.02	565.94	565.83	565.81
7	565.70	565.50	---	---	565.99	565.49	565.67	565.99	566.08	566.01	565.98	565.98
8	565.35	565.70	---	---	565.81	565.69	565.96	565.49	566.09	566.21	566.04	565.99
9	565.67	565.48	---	---	565.47	565.83	566.06	566.16	566.12	566.30	566.11	566.01
10	565.87	565.82	---	---	565.75	565.40	565.74	566.22	566.19	565.88	566.17	566.14
11	565.78	565.16	---	---	565.45	564.84	565.86	565.90	566.40	565.90	566.25	565.92
12	565.72	565.15	---	---	566.34	565.43	565.80	565.96	566.26	566.04	566.26	565.81
13	565.76	565.30	---	---	565.53	565.69	565.68	566.23	566.16	566.14	566.35	566.02
14	565.93	565.59	---	---	565.70	565.45	565.91	566.49	566.26	566.06	566.42	565.92
15	566.08	565.63	---	---	565.88	565.53	566.03	566.35	566.30	566.20	566.22	565.96
16	565.89	565.46	---	---	565.79	565.10	566.07	566.53	566.31	566.05	566.37	565.89
17	566.46	565.04	---	---	565.49	564.86	566.06	566.08	566.21	566.21	566.35	565.89
18	565.88	565.29	---	---	565.25	565.33	565.99	565.98	566.14	566.18	566.44	565.95
19	566.07	565.57	---	---	565.55	565.21	566.12	565.97	566.11	566.11	566.09	566.17
20	565.79	565.30	---	---	565.81	565.43	565.86	565.98	566.08	566.16	566.02	566.22
21	565.86	565.49	---	---	565.80	565.69	565.39	566.13	565.96	566.13	566.02	566.22
22	565.71	565.37	---	---	565.51	566.07	565.61	566.20	565.95	566.27	566.14	566.01
23	565.86	565.25	---	---	565.28	566.47	565.96	566.34	566.09	566.11	565.87	565.78
24	565.75	565.18	---	---	565.47	565.64	565.95	566.24	566.01	565.73	566.13	565.92
25	567.29	565.43	---	---	565.72	564.89	566.15	566.03	566.17	565.89	566.07	565.71
26	567.52	565.13	---	565.72	565.94	565.32	565.88	566.17	566.29	566.10	566.10	565.85
27	566.14	565.14	---	565.56	566.47	565.69	565.79	566.16	566.37	566.18	565.79	565.83
28	565.87	564.96	---	565.50	566.00	565.63	566.16	566.19	566.18	566.30	565.77	565.82
29	566.08	---	---	565.34	---	565.74	566.06	566.16	566.11	566.39	565.90	565.83
30	565.44	---	---	565.07	---	565.69	566.27	566.07	566.18	566.40	565.94	566.05
31	565.69	---	---	564.72	---	565.57	---	566.28	---	566.34	565.91	---
MEAN	565.93	---	---	---	565.82	565.59	565.88	566.12	566.15	566.15	566.13	565.96
MAX	567.52	---	---	---	566.57	566.47	566.27	566.53	566.40	566.41	566.47	566.22
MIN	565.26	---	---	---	565.25	564.84	565.39	565.49	565.88	565.73	565.77	565.71

04216218 BLACK ROCK CANAL AT BLACK ROCK LOCK, BUFFALO, NY

LOCATION.--Lat 42°56'01", long 78°54'18", Erie County, Hydrologic Unit 04120104, at Black Rock Lock adjacent to U.S. Army Corps of Engineers installation at foot of Hamilton Street, Buffalo and 0.2 mi downstream from International railroad bridge.
DRAINAGE AREA.--263,700 mi^2.
PERIOD OF RECORD.--October 1984 to March 1997, November 1998 to current year.
GAGE.--Water stage recorder. Datum of gage is International Great Lakes Datum (IGLD) of 1985. Prior to Oct. 1, 1991, datum of gage was International Great Lakes Datum (IGLD) of 1955, 0.67 ft lower.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 575.95 ft, datum then in use, Dec. 2, 1985; minimum daily, 569.15 ft, datum then in use, Oct. 19, 1989.
EXTREMES FOR CURRENT YEAR.--Maximum daily elevation, 573.78 ft, Mar. 10, but may have been higher during period of no gage-height record Nov. 29 to Jan. 24; minimum daily elevation, 569.54 ft, Jan. 31.

ELEVATION (FEET IGLD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	570.32	---	---	571.71	571.18	571.36	571.42	571.98	571.79	571.48	570.90
2	570.17	570.45	---	---	570.92	570.54	570.90	571.75	571.86	571.82	571.59	571.00
3	570.34	570.28	---	---	571.36	571.98	571.57	571.91	571.52	571.85	571.28	571.17
4	570.45	570.42	---	---	571.09	571.70	571.30	571.48	571.57	571.84	571.42	571.17
5	569.65	570.12	---	---	571.56	571.29	571.24	571.47	571.81	571.54	571.44	570.85
6	571.11	570.31	---	---	571.04	570.78	571.23	571.50	---	571.59	570.99	570.79
7	570.43	570.31	---	---	571.00	570.37	571.09	571.52	---	571.68	571.15	570.86
8	569.95	570.63	---	---	570.90	570.67	571.09	570.87	---	571.65	571.15	570.85
9	570.17	570.47	---	---	570.37	571.80	571.40	571.85	---	571.76	571.21	570.87
10	570.16	570.69	---	---	570.70	573.78	571.21	572.14	---	571.14	571.21	571.06
11	570.16	570.03	---	---	570.79	570.95	571.09	571.32	571.97	571.29	571.27	570.89
12	569.94	570.16	---	---	571.94	570.79	571.33	571.28	571.94	571.46	571.31	570.88
13	570.03	570.14	---	---	570.87	570.75	571.32	571.68	571.77	571.46	571.27	571.02
14	570.63	570.31	---	---	571.05	570.48	571.32	572.17	571.87	571.50	571.34	570.88
15	570.81	570.29	---	---	570.95	570.77	571.42	571.95	572.17	571.73	571.30	570.82
16	570.58	570.20	---	---	571.04	570.66	571.45	572.07	572.27	571.55	571.58	570.89
17	571.51	569.93	---	---	570.79	570.18	571.51	571.77	572.07	---	571.35	570.85
18	570.26	570.10	---	---	570.59	571.02	571.47	571.76	571.78	---	571.56	570.72
19	570.56	570.47	---	---	570.57	570.57	571.52	571.87	571.67	---	571.24	570.85
20	570.19	570.37	---	---	570.68	570.83	571.49	571.78	571.73	---	571.08	570.85
21	570.29	570.65	---	---	571.24	571.36	570.91	571.94	571.77	---	571.02	571.27
22	570.08	570.14	---	---	570.92	572.02	571.36	571.78	571.73	---	571.31	571.01
23	570.28	569.97	---	---	570.69	572.14	571.66	571.79	571.87	---	570.76	570.83
24	570.19	569.85	---	---	570.70	570.77	571.34	571.87	571.71	---	571.22	570.94
25	573.13	570.48	---	570.92	570.76	569.79	571.95	571.53	571.77	---	571.13	570.54
26	572.65	570.08	---	570.77	571.44	570.36	571.51	571.90	571.89	---	571.13	570.67
27	570.40	569.98	---	570.38	572.17	571.12	571.14	571.71	572.02	---	570.60	570.58
28	570.30	569.95	---	570.26	571.44	570.89	571.53	571.66	571.87	---	570.61	570.63
29	570.59	---	---	570.17	---	570.81	571.74	571.73	571.77	---	570.94	570.83
30	569.62	---	---	570.14	---	571.26	571.77	571.74	571.74	---	570.91	570.91
31	570.16	---	---	569.54	---	570.95	---	571.97	---	571.60	570.80	---
MEAN	---	---	---	---	571.05	571.05	571.37	571.72	---	---	571.18	570.88
MAX	---	---	---	---	572.17	573.78	571.95	572.17	---	---	571.59	571.27
MIN	---	---	---	---	570.37	569.79	570.90	570.87	---	---	570.60	570.54

04216220 NIAGARA RIVER AT BLACK ROCK LOCK, BUFFALO, NY

LOCATION.--Lat. 42°56'02", long 78°54'17", Erie County, Hydrologic Unit 04120104, at Black Rock Lock adjacent to U.S. Army Corps of Engineers installation at foot of Hamilton Street, Buffalo and 0.2 mi downstream from International railroad bridge.
DRAINAGE AREA.--263,700 mi^2.
PERIOD OF RECORD.--October 1984 to March 1997, November 1998 to current year.
GAGE.--Water-stage recorder. Datum of gage is International Great Lakes Datum (IGLD) of 1985. Prior to Oct. 1, 1991, datum of gage was International Great Lakes Datum (IGLD) of 1955, 0.67 ft lower.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 568.80 ft, datum then in use, Jan. 21, 1985, but may have been higher during period of no gage height record Nov. 11 to Dec. 10, 1984; minimum daily, 561.92 ft, Jan. 14, 1999.
EXTREMES FOR CURRENT YEAR.--Maximum daily elevation, 566.50 ft, Oct. 25, 26, but may have been higher during period of no gage height record Mar. 5 to June 11; minimum daily elevation, 563.77 ft, Jan. 8, but may have been lower during periods of no gage height height record Oct. 1-12 and Jan. 13-29.

ELEVATION (FEET IGLD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	564.61	565.32	564.67	565.68	---	---	---	---	565.40	565.71	565.46
2	---	564.73	564.69	564.62	565.08	---	---	---	---	565.48	565.79	565.54
3	---	564.66	564.67	564.56	565.17	565.50	---	---	---	565.46	565.66	565.67
4	---	564.83	564.55	564.53	565.06	565.42	---	---	---	565.52	565.73	565.66
5	---	564.62	564.56	564.76	565.37	---	---	---	---	565.39	565.82	565.51
6	---	564.68	564.86	564.48	564.88	---	---	---	---	565.39	565.53	565.46
7	---	564.68	564.61	563.80	564.81	---	---	---	---	565.47	565.66	565.48
8	---	564.84	564.22	563.77	564.79	---	---	---	---	565.48	565.58	565.50
9	---	564.84	564.49	564.56	564.47	---	---	---	---	565.55	565.61	565.47
10	---	564.90	564.46	564.44	564.65	---	---	---	---	565.16	565.59	565.58
11	---	564.47	564.43	564.30	564.74	---	---	---	---	565.32	565.65	565.63
12	---	564.45	564.30	564.43	565.43	---	---	---	565.59	565.38	565.65	565.56
13	564.75	564.38	564.65	---	564.82	---	---	---	565.43	565.42	565.64	565.67
14	565.12	564.60	564.06	---	564.87	---	---	---	565.55	565.45	565.75	565.48
15	565.32	564.55	564.56	---	564.77	---	---	---	565.70	565.64	565.71	565.50
16	565.04	564.52	564.30	---	564.80	---	---	---	565.78	565.50	565.88	565.52
17	565.76	564.29	564.48	---	564.76	---	---	---	565.61	565.62	565.74	565.51
18	564.96	564.44	564.97	---	564.54	---	---	---	565.43	565.58	565.90	565.43
19	565.02	564.66	564.87	---	564.56	---	---	---	565.34	565.56	565.74	565.48
20	564.81	564.72	565.65	---	564.62	---	---	---	565.39	565.54	565.54	565.45
21	564.90	564.77	564.74	---	564.97	---	---	---	565.34	565.57	565.49	565.79
22	564.75	564.52	564.45	---	564.83	---	---	---	565.35	565.63	565.69	565.56
23	564.81	564.34	564.85	---	564.63	---	---	---	565.43	565.63	565.35	565.52
24	564.70	564.22	565.41	---	---	---	---	---	565.28	565.30	565.68	565.61
25	566.50	564.63	565.10	---	---	---	---	---	565.38	565.42	565.67	565.30
26	566.50	564.52	564.92	---	564.99	---	---	---	565.43	565.62	565.63	565.32
27	565.02	564.34	565.26	---	565.60	---	---	---	565.52	565.60	565.30	565.33
28	564.82	564.41	565.21	---	565.11	---	---	---	565.43	565.82	565.34	565.41
29	564.99	564.16	564.99	---	---	---	---	---	565.43	565.84	565.58	565.47
30	564.42	564.54	565.52	564.41	---	---	---	---	565.35	565.94	565.53	565.48
31	564.60	---	565.22	563.99	---	---	---	---	---	565.82	565.43	---
MEAN	---	564.56	564.79	---	---	---	---	---	---	565.53	565.63	565.51
MAX	---	564.90	565.65	---	---	---	---	---	---	565.94	565.90	565.79
MIN	---	564.16	564.06	---	---	---	---	---	---	565.16	565.30	565.30

04216418 TONAWANDA CREEK AT ATTICA, NY

LOCATION.--Lat 42°51'50", long 78°17'02", Wyoming County, Hydrologic Unit 04120104, on right bank behind Village Hall and fire station, 150 ft downstream from bridge on State Highway 238 (Main Street) at Attica, and 0.4 mi upstream from Tannery Creek.
DRAINAGE AREA.--76.9 mi^2.
PERIOD OF RECORD.--October 1977 to current year.
REVISED RECORDS.--WDR NY-79-1: 1978 (M). WDR NY-82-3: Drainage area.
GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 954.63 ft above NGVD of 1929.
REMARKS.--No estimated daily discharges. Records fair. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,400 ft^3/s, July 8, 1998, gage height, 12.71 ft, from high-water mark, from rating curve extended above 4,800 ft^3/s; minimum discharge, 3.1 ft^3/s, Aug. 26, Sept. 7, 1995; minimum gage height, 3.27 ft, Oct. 4, 2001, Sept. 13, 2002.
EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, about 6,000 ft^3/s, June 23, 1972, gage height, about 12.0 ft, from information supplied by Village of Attica.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,900 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 1	1130	*2,500	*7.21	Apr. 3	0530	2,340	7.04

Minimum discharge, 6.6 ft^3/s, Oct. 4, Sept. 13, gage height, 3.27 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	21	111	e54	1750	124	212	162	257	29	16	11
2	9.5	20	65	e54	630	121	319	196	152	26	15	11
3	9.0	30	46	e52	259	400	1110	211	113	24	13	14
4	8.1	26	37	e52	186	200	340	140	118	22	12	12
5	8.5	21	32	e51	144	138	249	114	454	21	12	10
6	18	17	29	e51	136	147	215	100	271	20	12	9.4
7	22	16	27	e54	114	170	183	110	174	19	11	9.1
8	13	16	25	e56	100	420	166	118	122	18	11	8.7
9	12	16	24	63	101	545	184	261	97	18	11	8.1
10	11	16	23	144	194	642	179	231	80	22	11	8.5
11	11	16	22	188	377	284	137	126	69	18	9.1	11
12	11	15	19	141	e180	233	116	328	67	17	8.7	10
13	13	15	23	128	e120	286	268	796	74	16	12	9.2
14	12	15	41	103	e110	272	588	1110	169	16	13	9.3
15	15	16	298	e94	e110	220	510	448	314	15	12	16
16	17	17	113	e84	152	251	242	252	183	14	16	50
17	25	15	169	e78	138	151	177	462	135	13	15	22
18	34	13	389	e72	98	142	143	391	109	13	18	16
19	20	14	173	e68	103	124	142	255	80	13	14	13
20	16	28	141	e70	223	192	131	193	64	14	15	12
21	19	27	120	e70	547	190	117	167	53	13	14	12
22	38	20	95	e70	279	123	113	140	48	13	14	12
23	26	17	126	110	162	106	110	121	44	31	25	14
24	20	16	255	e700	132	102	95	116	40	26	29	14
25	22	44	115	e400	162	98	93	122	39	17	27	12
26	42	66	76	276	255	163	88	181	38	16	16	12
27	63	37	e66	244	230	434	77	121	116	18	14	43
28	46	33	e62	265	142	259	296	95	73	36	12	74
29	33	80	e58	355	---	290	392	90	44	35	12	27
30	30	102	e56	666	---	674	225	526	36	25	12	19
31	25	---	e56	392	---	264	---	523	---	20	11	---
TOTAL	660.1	805	2892	5205	7134	7765	7217	8206	3633	618	442.8	509.3
MEAN	21.3	26.8	93.3	168	255	250	241	265	121	19.9	14.3	17.0
MAX	63	102	389	700	1750	674	1110	1110	454	36	29	74
MIN	8.1	13	19	51	98	98	77	90	36	13	8.7	8.1
CFSM	0.28	0.35	1.21	2.18	3.31	3.26	3.13	3.44	1.57	0.26	0.19	0.22
IN.	0.32	0.39	1.40	2.52	3.45	3.76	3.49	3.97	1.76	0.30	0.21	0.25

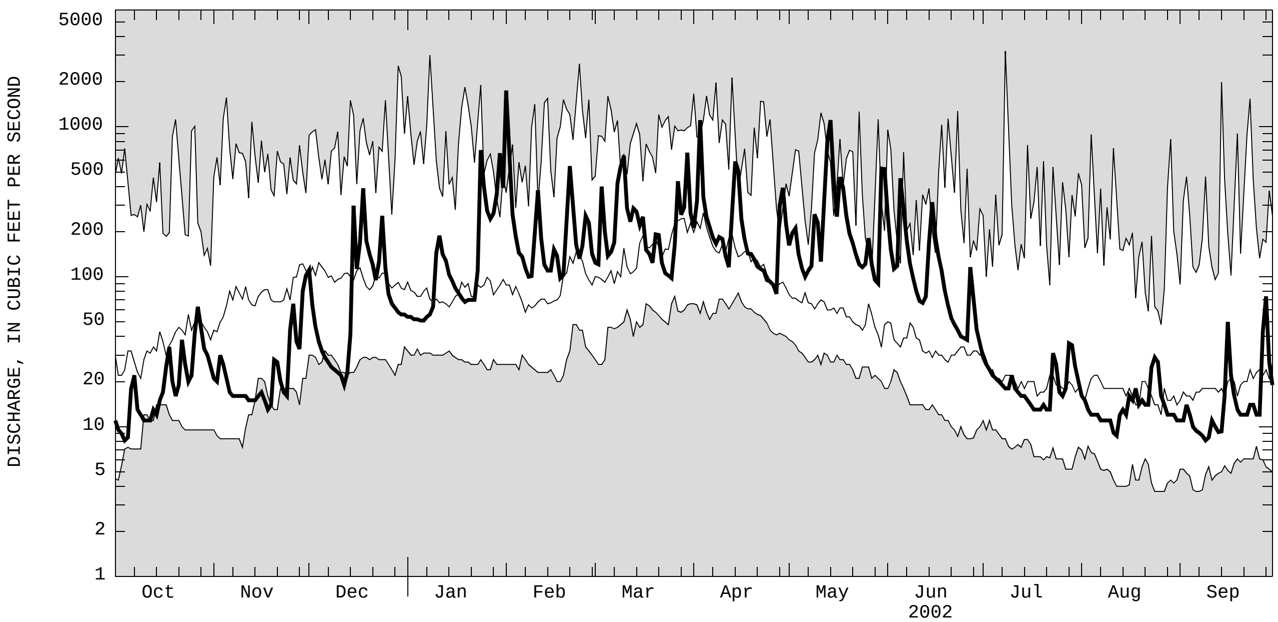
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	65.0	117	150	143	154	223	215	109	64.3	41.3	33.1	46.4
MAX	182	353	329	361	293	459	366	265	278	221	192	172
(WY)	1987	1986	1978	1998	1981	1979	1978	2002	1989	1998	1992	2000
MIN	10.8	16.6	34.5	41.5	34.4	122	73.1	36.4	16.5	10.1	7.28	6.19
(WY)	1992	1992	1990	1994	1980	1981	1995	1995	1999	1983	1991	1995

e Estimated

04216418 TONAWANDA CREEK AT ATTICA, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1978 - 2002	
ANNUAL TOTAL	33748.8		45087.2			
ANNUAL MEAN	92.5		124		113	
HIGHEST ANNUAL MEAN					157	1978
LOWEST ANNUAL MEAN					72.8	1995
HIGHEST DAILY MEAN	1970	Apr 8	1750	Feb 1	3200	Jul 8 1998
LOWEST DAILY MEAN	4.0	Aug 12	8.1	Oct 4	3.7	Aug 24 1995
ANNUAL SEVEN-DAY MINIMUM	4.2	Aug 10	9.2	Sep 7	3.9	Aug 23 1995
ANNUAL RUNOFF (CFSM)	1.20		1.61		1.47	
ANNUAL RUNOFF (INCHES)	16.33		21.81		19.98	
10 PERCENT EXCEEDS	187		285		250	
50 PERCENT EXCEEDS	41		64		61	
90 PERCENT EXCEEDS	8.6		12		14	



2002 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.

04217000 TONAWANDA CREEK AT BATAVIA, NY

LOCATION.--Lat 42°59'51", long 78°11'20", Genesee County, Hydrologic Unit 04120104, on right bank 150 ft downstream from municipal dam, 500 ft upstream from bridge on Walnut Street in Batavia, and 5.0 mi downstream from Little Tonawanda Creek.
DRAINAGE AREA.--171 mi^2.
PERIOD OF RECORD.--July 1944 to current year.
REVISED RECORDS.--WSP 1627: 1956-57. WSP 1912: Drainage area.
GAGE.--Water-stage recorder, crest stage gage, and concrete control. Datum of gage is 876.33 ft above NGVD of 1929.
REMARKS.--Records good except those for estimated daily discharges, which are fair. Diversion upstream from station by city of Batavia for municipal supply; sewage, which may include water from municipal and industrial wells upstream from gage, enters creek downstream from gage. Telephone and satellite gage-height telemeters at station. Several measurements of water temperature were made during the year.
COOPERATION.--City of Batavia maintains records of diversion.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,200 ft^3/s, Mar. 31, 1960, gage height, 12.70 ft; maximum gage height, 13.85 ft, Apr. 6, 1947; minimum discharge, 0.4 ft^3/s, Aug. 5, 6, 7, 1955; minimum gage height, 0.59 ft, July 26, 27, 1948.
EXTREMES OUTSIDE PERIOD OF RECORD.--From records of city of Batavia, maximum stage, 14.5 ft, in March 1942.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 2	1300	*4,040	*10.14	May 14	2130	2,460	7.29
Apr. 4	0200	2,370	7.10				

Minimum discharge, 8.0 ft^3/s, Sept. 10, 11, gage height, 1.32 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	40	216	e80	954	266	559	420	648	53	26	13
2	16	37	162	e80	3550	230	430	323	395	47	21	12
3	13	42	108	e88	2140	384	1200	448	222	43	18	12
4	11	53	85	92	881	542	1810	340	167	40	16	22
5	11	45	72	90	447	294	844	239	340	38	15	16
6	20	38	65	90	390	290	552	198	523	35	13	12
7	30	35	60	94	334	348	455	182	373	32	13	12
8	25	33	54	83	293	328	374	202	225	32	12	11
9	18	33	52	100	281	682	341	267	166	30	12	10
10	15	34	49	171	300	924	363	534	132	32	11	9.4
11	13	33	46	395	643	790	292	323	110	34	11	9.9
12	13	30	43	321	632	552	241	244	93	29	9.9	12
13	14	29	43	263	403	512	250	703	101	27	9.4	10
14	13	27	51	197	276	521	700	1860	147	25	11	8.9
15	16	28	357	e180	270	440	1100	2000	419	24	14	11
16	22	34	323	e150	345	412	972	1050	364	22	13	33
17	25	36	203	e120	419	374	492	665	252	19	17	54
18	42	33	554	e110	276	295	331	760	209	17	15	28
19	40	31	520	e98	244	288	270	730	155	19	18	19
20	27	40	286	144	293	267	259	487	113	18	16	16
21	24	62	249	142	595	513	228	351	88	19	15	13
22	46	50	192	127	818	412	200	280	74	17	15	13
23	51	42	162	130	546	313	205	232	68	47	17	13
24	36	38	355	465	338	295	184	198	61	69	29	14
25	31	38	269	861	329	300	164	202	57	35	38	15
26	64	109	167	598	372	266	168	256	59	25	29	13
27	118	88	108	367	472	625	143	259	105	23	18	21
28	86	65	108	364	330	722	184	180	134	30	15	112
29	63	94	e96	444	---	550	661	146	88	54	14	68
30	50	233	e88	624	---	659	673	318	61	41	13	35
31	46	---	e88	819	---	979	---	556	---	32	13	---
TOTAL	1019	1530	5231	7887	17171	14373	14645	14953	5949	1008	507.3	648.2
MEAN	32.9	51.0	169	254	613	464	488	482	198	32.5	16.4	21.6
MAX	118	233	554	861	3550	979	1810	2000	648	69	38	112
MIN	11	27	43	80	244	230	143	146	57	17	9.4	8.9
CFSM	0.19	0.30	0.99	1.49	3.59	2.71	2.85	2.82	1.16	0.19	0.10	0.13
IN.	0.22	0.33	1.14	1.72	3.74	3.13	3.19	3.25	1.29	0.22	0.11	0.14

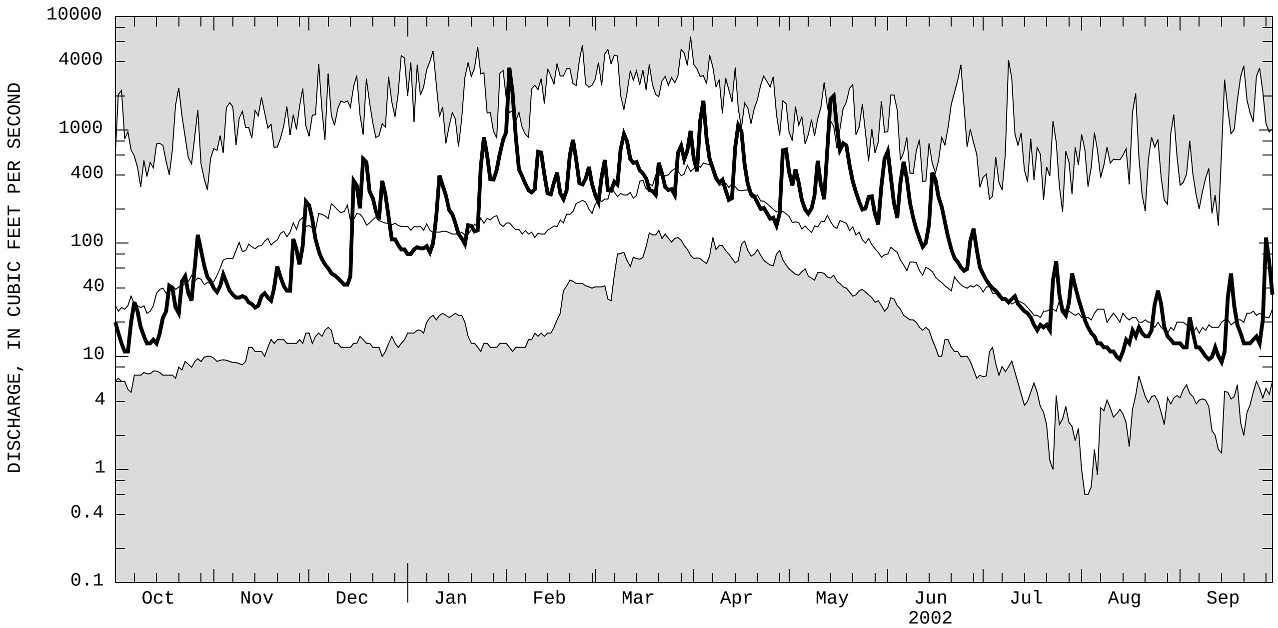
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	83.3	169	259	266	320	528	457	208	108	57.3	48.0	64.0
MAX	344	653	718	812	903	1206	1100	544	722	415	451	873
(WY)	1946	1986	1978	1998	1976	1945	1947	1984	1989	1998	1977	1977
MIN	9.03	15.3	13.6	17.5	50.9	244	82.1	65.8	20.1	6.17	7.91	5.63
(WY)	1965	1961	1961	1961	1963	1965	1946	1995	1965	1955	1944	1955

e Estimated

04217000 TONAWANDA CREEK AT BATAVIA, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1944 - 2002	
ANNUAL TOTAL	65514.2		84921.5			
ANNUAL MEAN	179		233		213	
HIGHEST ANNUAL MEAN					311	1976
LOWEST ANNUAL MEAN					124	1965
HIGHEST DAILY MEAN	2790	Apr 9	3550	Feb 2	6660	Mar 31 1960
LOWEST DAILY MEAN	4.5	Aug 16	8.9	Sep 14	0.60	Aug 2 1955
ANNUAL SEVEN-DAY MINIMUM	5.5	Aug 11	10	Sep 8	1.1	Jul 31 1955
ANNUAL RUNOFF (CFSM)	1.05		1.36		1.25	
ANNUAL RUNOFF (INCHES)	14.25		18.47		16.96	
10 PERCENT EXCEEDS	386		557		509	
50 PERCENT EXCEEDS	71		101		98	
90 PERCENT EXCEEDS	10		14		15	



2002 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.

04218000 TONAWANDA CREEK AT RAPIDS, NY

LOCATION.--Lat 43°05'35", long 78°38'11", Niagara County, Hydrologic Unit 04120104, on right bank at downstream side of bridge on Rapids Road at Rapids, 4.6 mi east of Pendleton, 4.9 mi downstream from Beeman Creek, and 5.9 mi upstream from Mud Creek.
DRAINAGE AREA.--349 mi^2, includes 0.76 mi^2 in Mud Creek from which flow is diverted into Black Creek.
PERIOD OF RECORD.--August 1955 to September 1965, March 1978 to September 1979 (seasonal gage-height records only), October 1979 to current year.
REVISED RECORDS.--WDR NY-82-3: Drainage area.
GAGE.--Water-stage recorder. Datum of gage is 571.19 ft above NGVD of 1929.
REMARKS.--Records fair. Telephone gage-height telemeter at station. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,280 ft^3/s, Apr. 1, 1960, gage height, 16.96 ft (does not include about 4,300 ft^3/s bypassing the gage, as estimated and reported by the Buffalo District Corps of Engineers); minimum discharge, 4.5 ft^3/s, July 28, 1983, gage height, 0.91 ft.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 4	1600	*4,040	*11.86	May 16	1500	3,150	10.27

Minimum discharge, 9.8 ft^3/s, Sept. 13, 14, gage height, 0.99 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	95	431	e230	1630	670	1500	1250	803	120	68	19
2	36	85	441	e220	2330	545	1350	987	906	96	53	16
3	31	79	370	e220	2650	747	1610	825	666	85	44	15
4	27	79	266	e230	3890	935	1870	833	401	77	36	15
5	27	77	194	244	e2950	958	2300	686	329	68	31	15
6	50	86	161	238	e1900	667	2020	506	452	61	28	15
7	60	78	141	239	e1250	561	1410	408	698	57	26	18
8	51	70	127	244	933	602	1060	371	557	52	23	19
9	40	66	114	247	756	855	874	448	376	48	20	15
10	43	62	106	326	749	1260	768	740	282	46	18	13
11	37	59	99	629	1000	1460	700	900	234	43	19	13
12	32	57	94	1030	1210	1390	609	747	201	40	19	11
13	28	56	90	1060	1290	1180	686	1130	180	42	22	11
14	27	56	92	770	1010	1040	1290	2200	176	42	22	10
15	27	56	195	575	686	973	1500	2620	229	37	21	12
16	33	52	481	600	698	843	1790	3070	464	34	22	16
17	41	49	631	555	962	723	1790	2610	523	34	28	19
18	56	51	618	e470	978	675	1290	1800	518	32	38	27
19	63	59	902	e400	745	599	829	1460	412	31	30	50
20	66	65	977	e300	666	581	638	1310	301	30	30	40
21	72	73	621	e310	974	687	554	1040	227	28	31	31
22	63	80	479	316	1270	926	488	709	181	28	30	26
23	77	103	390	291	1450	842	440	560	154	37	27	23
24	81	90	349	526	1260	637	413	466	136	46	28	19
25	90	82	464	1070	866	605	389	409	126	77	32	18
26	89	103	482	1330	702	590	365	410	115	85	33	18
27	208	125	e320	1220	721	634	344	478	114	63	39	23
28	247	173	e210	786	798	1040	344	505	144	55	42	41
29	244	164	e210	634	---	1250	616	386	193	55	33	62
30	169	256	e230	727	---	1400	1120	323	162	68	27	101
31	120	---	e230	1010	---	1430	---	422	---	82	22	---
TOTAL	2277	2586	10515	17047	36324	27305	30957	30609	10260	1699	942	731
MEAN	73.5	86.2	339	550	1297	881	1032	987	342	54.8	30.4	24.4
MAX	247	256	977	1330	3890	1460	2300	3070	906	120	68	101
MIN	27	49	90	220	666	545	344	323	114	28	18	10
CFSM	0.21	0.25	0.97	1.58	3.72	2.52	2.96	2.83	0.98	0.16	0.09	0.07
IN.	0.24	0.28	1.12	1.82	3.87	2.91	3.30	3.26	1.09	0.18	0.10	0.08

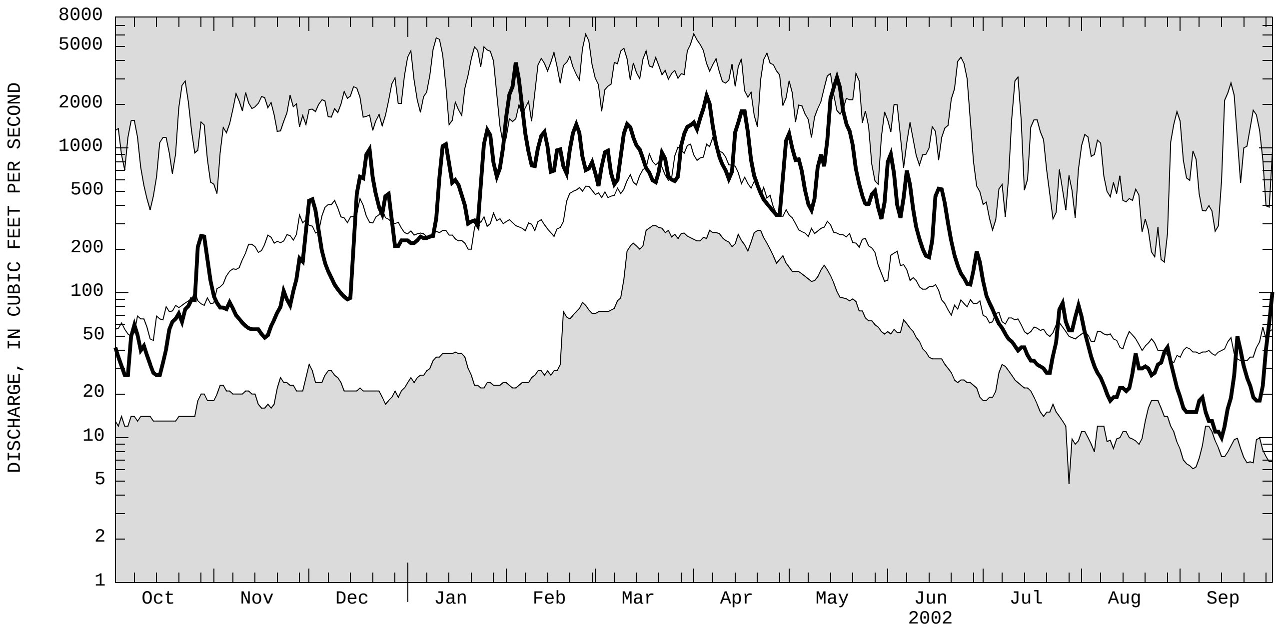
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	151	310	480	540	675	943	906	424	215	100	83.1	93.9
MAX	642	1239	1116	1581	1363	1650	1534	1046	1372	511	601	614
(WY)	1987	1986	1987	1998	1981	1956	1960	1956	1989	1998	1992	1992
MIN	14.8	25.7	23.3	29.4	103	452	334	144	45.6	26.1	15.9	10.0
(WY)	1965	1961	1961	1961	1963	1981	1995	1993	1965	1991	1991	1991

e Estimated

04218000 TONAWANDA CREEK AT RAPIDS, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1955 - 2002	
ANNUAL TOTAL	125779.0		171252			
ANNUAL MEAN	345		469		409	
HIGHEST ANNUAL MEAN					565	1998
LOWEST ANNUAL MEAN					255	1965
HIGHEST DAILY MEAN	3550	Feb 12	3890	Feb 4	6130	Apr 1 1960
LOWEST DAILY MEAN	9.0	Aug 19	10	Sep 14	4.8	Jul 28 1983
ANNUAL SEVEN-DAY MINIMUM	10	Aug 14	12	Sep 9	6.8	Sep 1 1991
ANNUAL RUNOFF (CFSM)	0.99		1.34		1.17	
ANNUAL RUNOFF (INCHES)	13.41		18.25		15.91	
10 PERCENT EXCEEDS	994		1250		1060	
50 PERCENT EXCEEDS	143		230		195	
90 PERCENT EXCEEDS	20		27		31	



2002 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.

04218518 ELLICOTT CREEK BELOW WILLIAMSVILLE, NY

LOCATION.--Lat 42°58'40", long 78°45'50", Erie County, Hydrologic Unit 04120104, on right bank 15 ft upstream from bridge on State Highway 324 (Sheridan Drive), 0.8 mi upstream from sewage treatment plant, 1.4 mi northwest of Williamsville, and 10.8 mi upstream from mouth.
DRAINAGE AREA.--81.6 mi^2.
PERIOD OF RECORD.--October 1972 to current year.
REVISED RECORDS.--WDR NY-82-3: Drainage area.
GAGE.--Water-stage recorder. Datum of gage is 586.41 ft above NGVD of 1929.
REMARKS.--Records good except those for estimated daily discharges, which are fair. Regulation by seasonal manipulation of dam at Island Park 2.4 mi upstream by Village of Williamsville and by intermittent pumping from stone quarries into stream upstream from station. Records at medium and high flows may be comparable with those obtained at station 04218500 between October 1955 and September 1972. Telephone gage-height telemeter at station. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,640 ft^3/s, Feb. 25, 1985, gage height, 11.19 ft; no flow for part of July 27, 1976, gage height, 0.73 ft, result of pipeline construction.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 2	1730	*2,020	*7.83	May 14	2030	1,590	6.81
Apr. 4	0030	1,180	5.75				

Minimum discharge, 4.6 ft^3/s, Sept. 30, gage height, 1.50 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	40	379	e120	898	152	270	240	218	35	30	13
2	23	62	266	e120	1770	152	300	204	138	33	26	13
3	22	87	142	e120	846	335	815	254	92	33	27	13
4	23	92	108	123	323	377	854	220	81	24	27	14
5	45	71	90	121	e185	194	345	147	91	24	25	14
6	150	60	80	124	184	149	251	121	118	23	20	13
7	63	51	69	130	183	155	202	111	112	24	22	13
8	46	52	63	128	169	187	174	114	89	23	21	13
9	35	47	54	135	174	450	166	174	71	23	18	13
10	33	49	50	226	238	492	163	334	61	23	20	14
11	40	47	50	431	406	367	142	245	54	24	21	19
12	38	44	50	510	379	241	125	217	48	26	21	15
13	37	41	53	413	286	273	250	797	47	27	26	15
14	38	35	93	291	182	245	576	1430	56	27	22	15
15	35	42	312	266	171	186	711	1110	93	27	26	19
16	48	32	386	349	236	169	460	409	99	26	26	15
17	60	37	251	298	359	158	227	360	85	24	27	14
18	52	31	403	e200	255	144	167	472	76	35	25	16
19	45	41	416	e140	183	150	153	315	74	36	25	15
20	40	77	242	144	217	146	139	201	59	33	25	15
21	55	110	183	132	486	251	124	148	51	25	19	12
22	53	67	139	127	544	241	110	125	47	25	22	13
23	86	49	116	144	337	169	106	107	43	69	22	17
24	61	41	141	424	211	150	106	93	40	48	20	15
25	68	74	e170	706	192	166	102	104	40	40	18	15
26	223	175	e130	419	209	160	99	154	39	30	21	15
27	501	131	e100	296	209	276	97	186	41	28	25	83
28	265	102	e90	258	171	361	140	114	48	44	24	44
29	91	172	e110	233	---	269	507	87	41	42	23	46
30	62	389	e130	279	---	494	417	81	36	55	21	22
31	49	---	e120	401	---	525	---	120	---	36	14	---
TOTAL	2413	2348	4986	7808	10003	7784	8298	8794	2188	992	709	573
MEAN	77.8	78.3	161	252	357	251	277	284	72.9	32.0	22.9	19.1
MAX	501	389	416	706	1770	525	854	1430	218	69	30	83
MIN	22	31	50	120	169	144	97	81	36	23	14	12
CFSM	0.95	0.96	1.97	3.09	4.38	3.08	3.39	3.48	0.89	0.39	0.28	0.23
IN.	1.10	1.07	2.27	3.56	4.56	3.55	3.78	4.01	1.00	0.45	0.32	0.26

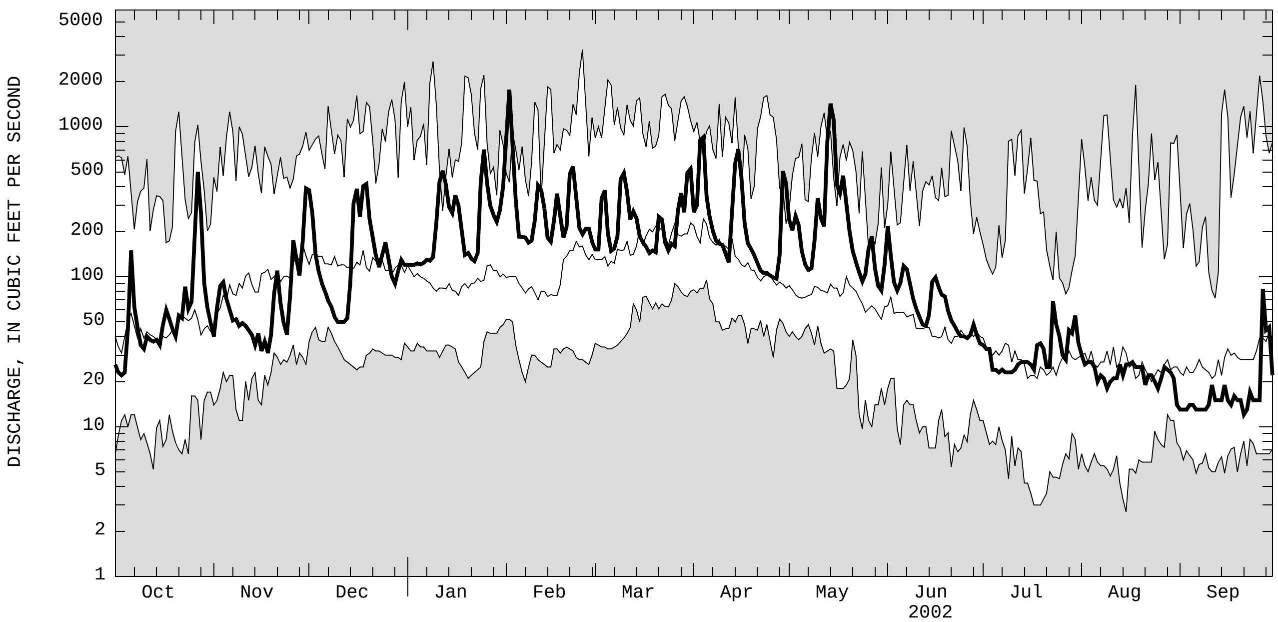
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	72.7	140	194	172	193	268	209	121	77.4	43.6	54.5	65.8
MAX	196	342	441	426	377	519	363	284	275	144	397	425
(WY)	1997	1986	1978	1998	1990	1977	1996	2002	1989	1976	1977	1977
MIN	11.2	27.1	40.6	39.2	56.0	119	94.8	47.5	24.2	11.8	13.5	9.76
(WY)	1975	1979	1990	1977	1980	1981	1995	1977	1988	1978	1974	1973

e Estimated

04218518 ELLICOTT CREEK BELOW WILLIAMSVILLE, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1973 - 2002	
ANNUAL TOTAL	39360.6		56896			
ANNUAL MEAN	108		156		134	
HIGHEST ANNUAL MEAN					177	1977
LOWEST ANNUAL MEAN					91.2	1999
HIGHEST DAILY MEAN	1460	Feb 10	1770	Feb 2	3280	Feb 25 1985
LOWEST DAILY MEAN	7.5	Sep 15	12	Sep 21	2.7	Aug 15 1978
ANNUAL SEVEN-DAY MINIMUM	7.7	Sep 13	13	Sep 1	3.6	Jul 15 1978
ANNUAL RUNOFF (CFSM)	1.32		1.91		1.64	
ANNUAL RUNOFF (INCHES)	17.94		25.94		22.31	
10 PERCENT EXCEEDS	248		378		300	
50 PERCENT EXCEEDS	67		97		74	
90 PERCENT EXCEEDS	14		21		18	



2002 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.

04219000 ERIE (BARGE) CANAL AT LOCK 30, MACEDON, NY

LOCATION.--Lat 43°04'20", long 77°17'45", Wayne County, Hydrologic Unit 04140201, on left bank in Macedon, 500 ft downstream from headgate in old Erie Canal, 700 ft downstream from bridge on State Highway 350, 0.2 mi downstream from Lock 30, and 2.6 mi upstream from Ganargua Creek.

PERIOD OF RECORD.--November 1919 to December 1920, October 1950 to September 1977, October 1977 to current year (navigation seasons only). Prior to October 1956, published as "Barge Canal at Lock 30, Macedon."

REVISED RECORDS.--WSP 1237: 1951

GAGE.--Water-stage recorder. Datum of gage is 447.58 ft above NGVD of 1929. Nov. 1, 1919 to Dec. 28, 1920, nonrecording gage at same site at different datum.

REMARKS.--Records good. This record represents net diversion from Niagara River basin into Oswego River basin through Erie (Barge) Canal. During the non-navigation period, when the pool upstream from Lock 30 is drained, discharge consists of leakage through guard gates, runoff from small areas tributary to canal upstream from station, or diversion for use downstream in the Canal system.

COOPERATION.--Records of gate openings, lockages, lock-valve openings, and elevations of water surface in Erie (Barge) Canal upstream and downstream from Lock 30 furnished by New York State Canal Corporation.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 874 ft^3/s, Dec. 3, 1969, maximum instantaneous discharge not determined; no significant flow at times in many years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	267	223	---	---	---	---	---	28	187	199	281	288
2	263	232	---	---	---	---	---	30	158	211	272	282
3	e257	232	---	---	---	---	---	75	160	230	282	265
4	e262	235	---	---	---	---	---	114	153	265	282	274
5	e254	227	---	---	---	---	---	150	162	266	268	281
6	e254	225	---	---	---	---	---	179	162	264	274	267
7	e257	158	---	---	---	---	---	177	165	269	282	280
8	e259	89	---	---	---	---	---	182	180	249	278	270
9	e262	80	---	---	---	---	---	179	192	243	278	272
10	e257	77	---	---	---	---	---	186	170	263	277	266
11	e259	76	---	---	---	---	---	179	166	271	282	265
12	271	75	---	---	---	---	---	179	168	279	274	277
13	274	113	---	---	---	---	---	191	157	277	267	260
14	252	142	---	---	---	---	---	218	171	275	279	269
15	228	115	---	---	---	---	---	234	175	273	281	264
16	228	66	---	---	---	---	---	192	174	286	267	260
17	227	---	---	---	---	---	---	178	168	272	267	266
18	226	---	---	---	---	---	---	145	161	279	272	260
19	227	---	---	---	---	---	---	134	158	274	271	269
20	230	---	---	---	---	---	---	133	165	278	286	273
21	236	---	---	---	---	---	---	142	164	282	290	271
22	252	---	---	---	---	---	---	137	174	289	269	264
23	248	---	---	---	---	---	---	133	185	277	269	265
24	245	---	---	---	---	---	---	142	169	274	275	278
25	238	---	---	---	---	---	---	146	167	304	273	273
26	230	---	---	---	---	---	---	137	180	289	267	262
27	205	---	---	---	---	---	---	151	177	281	269	259
28	186	---	---	---	---	---	38	143	188	272	270	275
29	189	---	---	---	---	---	44	145	201	276	270	252
30	208	---	---	---	---	---	44	181	195	278	287	254
31	213	---	---	---	---	---	---	207	---	283	280	---
TOTAL	7464	---	---	---	---	---	---	4747	5152	8328	8539	8061
MEAN	241	---	---	---	---	---	---	153	172	269	275	269
MAX	274	---	---	---	---	---	---	234	201	304	290	288
MIN	186	---	---	---	---	---	---	28	153	199	267	252

e Estimated

0422026250 NORTHRUP CREEK AT NORTH GREECE, NY

LOCATION.--Lat 43°15'13", long 77°43'33", Monroe County, Hydrologic Unit 04130001, on right bank 75 ft downstream from bridge on State Highway 18 (Latta Road), 0.5 mi west of North Greece, and 5.1 mi upstream from mouth.
DRAINAGE AREA.--10.1 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1989 to current year.
REVISED RECORDS.--WDR NY-2001-3: Drainage area.
GAGE.--Water-stage recorder. Elevation of gage is 306 ft above NGVD of 1929, from topographic map.
REMARKS.--Records fair except those for estimated daily discharges, which are poor. Discharge includes undetermined diversion from Erie (Barge) Canal upstream from station. Unpublished water-quality records for prior years are available in files of Monroe County Department of Health.
COOPERATION.--Discharge measurements were provided by the Monroe County Environmental Health Laboratory at Rochester, N.Y.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 573 ft^3/s, Apr. 22, 1991, gage height, 3.89 ft; maximum gage height, 4.90 ft, Jan. 24, 1999 (ice jam); minimum discharge, 0.39 ft^3/s, Aug. 19, 1993, gage height 0.46 ft.
EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 758 ft^3/s, May 17, 1974, from rating curve extended above 15 ft^3/s on basis of contracted-opening measurement of peak flow.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr. 13	2015	222	2.63	May 30	0630	*447	*3.48
May 13	2145	350	3.15				

Minimum discharge, 2.1 ft^3/s, Oct. 30, gage height, 0.71 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.6	2.6	11	e8.0	91	9.0	13	17	26	8.6	6.0	5.3
2	6.2	2.7	7.3	e7.4	45	8.8	28	19	17	7.8	6.0	5.4
3	6.1	2.9	6.0	e10	20	14	77	19	13	6.9	5.8	5.6
4	6.0	3.0	5.3	e10	e17	10	24	15	13	6.9	5.8	5.4
5	6.2	3.4	5.0	e9.4	e17	e9.4	17	15	14	6.5	5.6	5.3
6	12	3.1	5.4	e9.6	e16	7.9	17	14	14	6.2	5.5	5.3
7	5.6	4.9	5.3	e10	e14	9.2	16	13	12	6.3	5.4	5.3
8	5.1	7.5	5.0	11	12	13	14	12	11	6.4	5.3	5.2
9	5.1	9.4	4.8	11	14	18	15	19	10	9.2	5.3	5.2
10	4.9	12	4.6	11	19	26	12	20	9.0	7.9	5.5	5.2
11	4.9	9.2	4.4	8.5	27	14	10	13	8.6	7.3	5.6	5.4
12	5.1	7.3	4.3	7.7	e16	13	8.9	17	11	7.1	5.3	5.2
13	5.1	6.3	4.7	7.2	e14	12	78	141	9.9	7.0	5.4	4.9
14	5.1	6.2	7.9	6.4	e15	11	71	168	39	6.9	5.3	5.2
15	5.9	5.4	23	6.2	12	9.6	51	41	48	6.7	5.8	6.4
16	4.9	5.1	12	6.3	18	10	22	23	34	6.6	6.0	6.5
17	6.0	4.7	17	6.5	19	9.7	16	20	19	6.5	5.8	5.6
18	5.0	4.3	26	e6.4	e14	10	12	18	14	6.5	5.7	5.5
19	4.7	4.3	17	e7.0	11	9.8	10	15	11	6.8	5.5	5.4
20	4.4	5.2	12	e7.0	14	16	8.9	13	9.8	6.5	5.8	5.5
21	4.8	4.6	10	e6.2	17	19	8.3	12	8.9	6.3	5.1	5.5
22	5.9	4.4	8.6	5.3	14	14	9.1	11	9.2	6.6	5.5	5.5
23	4.3	4.2	8.5	5.7	11	13	9.5	11	9.4	7.7	5.7	5.7
24	4.3	4.5	9.4	11	9.8	15	7.8	10	8.9	6.4	6.3	5.4
25	4.6	7.5	8.0	13	9.9	15	9.2	9.8	8.6	5.8	5.8	5.5
26	18	6.5	7.0	9.6	9.2	24	9.0	12	8.3	6.1	5.6	5.6
27	6.3	4.8	e7.0	7.9	9.1	58	7.3	10	9.1	6.8	5.3	13
28	3.7	4.8	e6.6	7.4	9.6	23	39	9.7	22	7.6	5.4	7.9
29	3.1	15	e6.4	7.0	---	17	42	23	11	6.7	5.5	6.0
30	2.8	16	e7.8	9.1	---	20	21	191	9.2	7.3	5.7	6.0
31	2.6	---	e8.0	11	---	14	---	38	---	6.1	5.5	---
TOTAL	175.3	181.8	275.3	259.8	514.6	472.4	683.0	969.5	447.9	214.0	173.8	174.9
MEAN	5.65	6.06	8.88	8.38	18.4	15.2	22.8	31.3	14.9	6.90	5.61	5.83
MAX	18	16	26	13	91	58	78	191	48	9.2	6.3	13
MIN	2.6	2.6	4.3	5.3	9.1	7.9	7.3	9.7	8.3	5.8	5.1	4.9

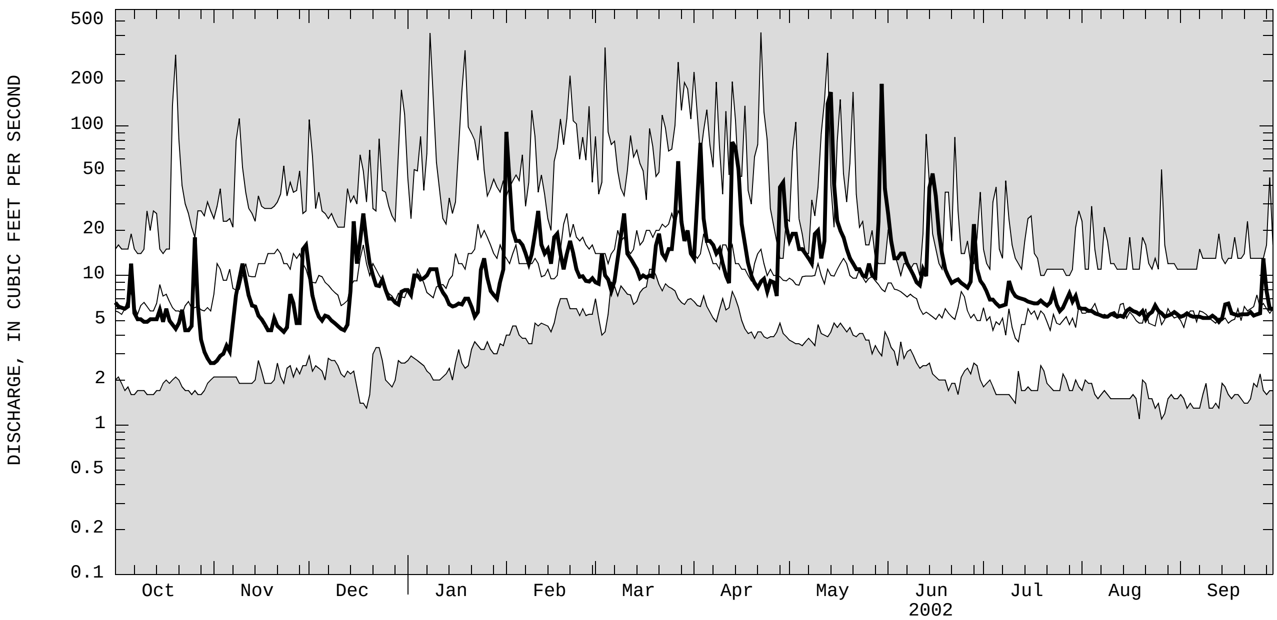
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	8.71	12.1	12.4	18.1	20.7	25.5	21.4	15.5	8.27	6.17	5.94	6.21
MAX	30.9	26.4	23.7	45.6	38.9	40.7	31.7	31.3	16.8	13.5	11.8	12.7
(WY)	1997	1997	1997	1998	1990	1993	1991	2002	1996	1998	1999	1999
MIN	1.83	2.49	3.00	6.39	7.82	15.2	5.27	4.77	3.06	1.96	1.60	1.92
(WY)	1995	1992	1999	2000	1993	2002	1995	1993	1991	1993	1993	1994

e Estimated

0422026250 NORTHRUP CREEK AT NORTH GREECE, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1990 - 2002	
ANNUAL TOTAL	4149.8		4542.3			
ANNUAL MEAN	11.4		12.4		13.4	
HIGHEST ANNUAL MEAN					18.7	1998
LOWEST ANNUAL MEAN					7.33	1995
HIGHEST DAILY MEAN	127	Feb 9	191	May 30	420	Apr 22 1991
LOWEST DAILY MEAN	2.6	Oct 31	2.6	Oct 31	1.1	Aug 19 1993
ANNUAL SEVEN-DAY MINIMUM	2.8	Oct 29	2.8	Oct 29	1.4	Aug 22 1993
10 PERCENT EXCEEDS	20		19		25	
50 PERCENT EXCEEDS	7.5		8.0		8.5	
90 PERCENT EXCEEDS	5.0		5.0		2.9	



2002 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.

0422026250 NORTHRUP CREEK AT NORTH GREECE, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- Water years 1989 to current year.
CHEMICAL DATA: Water years 1989 (a), 1990 to current year (e).
NUTRIENT DATA: Water years 1989 (a), 1990 to current year (e).
PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: November 1994 to current year.
INSTRUMENTATION.--Automatic water sampler since October 1989. Water temperature recorder since November 1994 provides 15-minute-interval readings.
COOPERATION.--Water-quality samples were collected and analyzed by the Monroe County Environmental Health Laboratory at Rochester, N.Y.
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. The non-daily water-quality records for this site were collected and reported in local standard time.
EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 28.0°C, July 5, 1999; minimum, 0°C, on many days during winter period.
EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 26.0°C, July 2, 3; minimum, 0°C, on many days during winter period.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	14.5	12.0	13.5	11.0	8.5	9.5	9.0	8.5	9.0	0.0	0.0	0.0
2	16.5	14.5	15.5	13.5	11.0	12.5	8.5	6.5	8.0	0.0	0.0	0.0
3	17.5	15.5	16.5	13.0	10.5	11.5	7.0	5.5	6.5	0.0	0.0	0.0
4	17.5	17.0	17.0	11.0	9.5	10.0	8.5	5.5	7.0	0.0	0.0	0.0
5	17.0	14.5	15.5	9.5	7.5	8.0	10.5	8.5	10.0	0.0	0.0	0.0
6	14.5	11.5	13.0	8.0	7.0	7.5	11.0	8.0	10.0	0.0	0.0	0.0
7	11.5	9.0	10.0	10.0	8.0	9.0	8.0	5.0	6.5	0.0	0.0	0.0
8	9.5	8.5	9.0	11.0	8.5	9.5	5.0	3.5	4.0	0.0	0.0	0.0
9	10.5	8.0	9.5	10.0	7.5	8.5	4.5	3.5	4.0	0.0	0.0	0.0
10	13.5	10.5	12.0	8.5	7.0	8.0	3.5	2.5	3.0	2.0	0.0	0.5
11	15.0	13.5	14.5	8.0	5.5	7.0	3.5	2.0	3.0	3.0	2.0	2.5
12	16.0	15.0	15.5	6.5	5.5	6.0	4.5	2.0	3.0	3.5	2.0	2.5
13	17.5	15.5	16.5	7.0	5.0	6.0	8.0	4.5	6.5	3.0	1.5	2.0
14	17.5	16.5	17.0	9.0	7.0	8.0	8.0	5.0	7.0	1.5	0.5	1.0
15	16.5	14.0	15.0	11.5	9.0	10.5	5.0	3.5	4.0	2.5	1.5	2.0
16	14.0	12.5	13.5	11.5	9.5	11.0	4.0	3.0	3.5	2.0	1.0	1.5
17	12.5	9.0	11.0	9.5	6.5	8.0	5.0	3.5	4.5	1.5	1.0	1.0
18	10.0	8.5	9.0	8.0	5.5	7.0	5.0	5.0	5.0	1.0	0.0	0.0
19	11.5	9.0	10.5	10.0	7.0	8.5	5.0	4.5	4.5	0.0	0.0	0.0
20	12.5	11.0	12.0	9.0	6.0	7.0	5.0	3.5	4.5	0.0	0.0	0.0
21	13.0	11.5	12.5	6.0	5.0	5.5	3.5	2.5	3.0	0.0	0.0	0.0
22	13.0	11.5	12.0	6.5	5.0	5.5	2.5	1.5	2.0	1.0	0.0	0.5
23	14.0	11.5	13.0	7.0	5.0	6.0	3.5	2.0	2.5	4.0	1.0	2.0
24	15.5	14.0	15.0	10.0	5.5	7.5	3.5	2.0	3.0	4.0	2.5	3.5
25	15.5	11.0	13.5	12.0	10.0	11.5	2.0	1.0	1.5	2.5	1.5	2.0
26	11.0	8.0	9.0	11.0	9.0	10.0	1.0	0.0	0.5	3.5	2.0	2.5
27	8.0	7.5	8.0	9.5	8.5	9.0	0.5	0.0	0.0	4.0	2.0	3.0
28	8.0	7.0	7.5	9.5	7.5	8.5	0.0	0.0	0.0	5.5	3.0	4.0
29	9.0	6.5	8.0	8.0	7.0	7.5	0.0	0.0	0.0	5.0	4.0	4.5
30	9.0	7.0	8.0	9.0	8.0	8.5	0.0	0.0	0.0	4.0	2.0	2.5
31	8.5	7.0	7.5	---	---	---	0.0	0.0	0.0	2.0	0.0	0.5
MONTH	17.5	6.5	12.3	13.5	5.0	8.4	11.0	0.0	4.1	5.5	0.0	1.2

0422026250 NORTHRUP CREEK AT NORTH GREECE, NY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1.5	0.0	0.5	2.5	0.0	1.0	8.0	6.0	7.0	12.5	7.0	10.0
2	1.0	0.0	0.5	4.0	0.5	2.5	6.0	4.5	5.0	11.5	9.5	10.5
3	1.5	0.0	1.0	5.5	3.0	4.5	5.5	4.5	5.5	10.5	7.5	9.0
4	1.5	0.0	0.5	3.0	0.0	1.0	5.5	3.0	4.5	14.0	8.0	11.0
5	0.5	0.0	0.0	0.0	0.0	0.0	5.5	3.0	4.5	15.0	9.5	12.5
6	0.0	0.0	0.0	1.5	0.0	0.5	6.5	2.5	4.5	16.0	12.5	14.5
7	0.5	0.0	0.0	2.5	1.5	2.0	5.5	2.5	4.5	16.5	14.5	15.5
8	3.0	0.5	2.0	6.0	1.5	3.5	8.5	5.5	7.0	14.5	12.0	12.5
9	3.0	1.5	2.0	10.0	5.5	7.5	11.5	8.5	10.0	15.0	11.5	13.5
10	4.0	1.5	2.5	7.0	1.0	3.5	11.5	7.5	9.5	15.5	12.5	14.0
11	3.5	0.0	1.0	3.0	0.0	1.5	14.0	8.0	10.5	14.0	10.5	12.5
12	1.5	0.0	0.5	5.0	2.5	3.5	14.0	10.5	12.5	12.5	10.5	11.5
13	1.0	0.0	0.0	6.0	3.0	4.5	13.0	10.5	12.0	10.5	9.0	9.5
14	0.5	0.0	0.0	7.5	4.5	5.5	13.5	10.5	12.0	9.5	8.5	9.0
15	2.5	0.5	1.5	7.5	4.5	6.0	17.0	12.0	14.5	13.5	8.0	10.5
16	3.5	2.5	3.0	7.0	4.0	6.0	21.0	14.5	17.5	14.5	11.0	12.5
17	2.5	0.5	1.5	4.5	2.5	3.5	22.0	17.0	19.5	14.0	11.0	12.0
18	1.0	0.0	0.5	4.5	4.0	4.0	22.0	18.0	20.0	11.5	10.0	10.5
19	2.5	0.0	1.5	5.0	3.5	4.0	21.5	18.0	19.5	10.5	9.0	9.5
20	4.5	2.5	3.5	4.5	3.5	4.0	18.0	13.0	15.5	10.5	8.5	9.5
21	4.5	4.0	4.5	4.5	1.0	3.5	13.0	9.5	11.0	12.0	8.5	10.5
22	4.0	2.0	3.0	2.0	0.0	1.0	9.5	6.5	7.5	14.0	9.5	11.5
23	2.5	0.5	1.5	2.5	0.0	1.0	11.0	5.5	8.0	16.5	11.5	14.0
24	4.5	1.0	2.5	4.0	0.5	2.5	13.0	7.5	10.0	15.5	13.5	15.0
25	6.5	3.5	5.0	3.0	1.0	2.0	10.5	9.0	10.0	14.0	11.5	13.0
26	6.5	4.0	5.5	1.5	1.0	1.0	10.0	7.5	8.5	16.0	13.5	14.5
27	4.0	0.0	2.5	4.0	1.0	2.5	11.5	6.5	9.0	17.0	13.0	15.0
28	1.5	0.0	0.5	6.5	1.5	4.0	10.0	7.5	8.5	18.0	14.5	16.0
29	---	---	---	8.0	4.5	6.0	7.5	6.5	7.0	19.0	16.0	18.0
30	---	---	---	11.0	6.5	8.5	10.0	7.0	8.0	20.5	16.5	18.5
31	---	---	---	9.5	6.0	8.0	---	---	---	20.0	18.5	19.0
MONTH	6.5	0.0	1.7	11.0	0.0	3.5	22.0	2.5	10.1	20.5	7.0	12.7

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	20.0	17.0	18.5	24.5	22.0	23.0	25.5	23.0	24.0	21.5	19.5	20.5
2	19.0	16.5	17.5	26.0	23.5	24.5	25.5	23.5	24.5	21.5	19.5	20.5
3	16.5	14.0	15.0	26.0	24.0	25.0	23.5	21.5	22.5	22.5	20.5	21.5
4	16.0	13.5	14.5	25.5	23.0	24.5	23.0	20.5	22.0	22.0	20.5	21.0
5	19.5	16.0	17.5	23.0	20.5	21.5	23.5	22.0	23.0	20.5	18.5	20.0
6	18.5	15.5	17.0	21.0	19.0	20.0	22.0	19.0	19.5	19.5	17.5	18.5
7	17.0	14.0	15.5	21.5	19.0	20.5	20.0	18.0	19.0	21.0	18.0	19.5
8	19.0	15.0	17.0	23.5	20.5	22.0	20.0	18.0	19.0	22.0	19.5	20.5
9	20.0	18.5	19.5	22.5	21.5	22.0	20.5	18.0	19.0	22.5	20.0	21.5
10	19.5	17.5	18.5	21.5	19.0	20.0	21.5	18.5	20.0	23.0	20.5	22.0
11	22.0	18.5	20.0	19.5	17.5	18.5	22.5	20.0	21.5	22.0	18.0	19.5
12	21.5	17.5	19.5	20.0	17.0	18.5	23.5	21.0	22.5	18.0	16.5	17.5
13	19.0	16.5	18.0	21.5	18.5	20.0	24.5	22.5	23.5	19.5	17.0	18.5
14	18.5	17.0	17.5	22.0	19.0	20.5	24.5	23.0	23.5	20.0	18.5	19.0
15	17.0	16.0	16.5	23.0	20.5	21.5	24.5	23.0	23.5	21.0	20.0	20.5
16	16.5	15.5	16.0	22.5	20.5	21.5	24.5	23.0	24.0	20.0	19.0	19.5
17	17.0	15.0	16.0	24.0	21.0	22.5	25.0	23.5	24.0	19.5	18.0	19.0
18	18.0	15.0	16.5	23.5	22.0	23.0	24.0	22.5	23.5	20.0	18.0	19.0
19	19.0	15.5	17.0	22.5	21.0	21.5	22.5	20.5	21.0	21.5	19.0	20.0
20	20.0	16.5	18.5	22.5	20.0	21.0	22.0	20.0	21.0	22.5	21.0	22.0
21	21.5	19.0	20.5	22.0	19.0	21.0	21.0	18.5	20.0	22.5	21.0	22.0
22	21.0	20.5	21.0	24.0	21.5	23.0	21.5	20.5	21.0	21.0	19.5	20.5
23	23.0	20.0	21.5	23.5	21.5	22.5	21.5	20.5	21.0	19.5	16.5	18.0
24	22.5	19.5	20.5	21.5	18.5	20.0	21.0	20.5	20.5	17.5	15.5	16.5
25	22.5	19.0	20.5	20.0	17.5	19.0	21.0	19.5	20.0	16.5	15.0	16.0
26	23.5	21.5	22.5	21.0	20.0	20.5	21.5	19.0	20.0	18.0	16.0	17.0
27	23.0	21.5	22.5	22.0	20.0	21.0	21.0	19.5	20.0	17.5	16.5	17.0
28	22.5	20.0	21.5	23.5	21.5	22.5	19.5	18.0	19.0	17.0	15.5	16.5
29	22.5	20.5	21.5	25.0	23.0	24.0	19.5	18.0	19.0	16.5	14.0	15.5
30	23.5	21.0	22.0	24.5	23.0	24.0	19.5	17.0	18.5	18.5	16.0	17.5
31	---	---	---	25.0	22.5	23.5	21.0	18.0	19.5	---	---	---
MONTH	23.5	13.5	18.7	26.0	17.0	21.7	25.5	17.0	21.3	23.0	14.0	19.2

0422026250 NORTHRUP CREEK AT NORTH GREECE, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	Ending time	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	TUR-BID-ITY (NTU) (00076)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
OCT													
05-06	1525	1025	11	35	74	97	40	9	.02	.64	2.6	.120	.250
06-09	1125	1025	6.1	18	69	62	--	--	.04	.57	2.2	.110	.200
NOV													
21-25	1045	0845	4.5	3.4	112	129	--	--	.02	.56	2.3	.075	.120
25-26	0945	0945	8.5	7.0	101	117	--	--	.02	.57	2.1	.098	.160
26-28	1045	1545	4.9	3.4	111	118	--	--	.02	.49	2.2	.114	.160
28-29	1645	0945	7.3	6.4	125	116	--	--	.06	.59	2.7	.140	.190
29-30	1030	0130	20	6.3	103	85	--	--	.12	.97	1.8	.118	.220
NOV 30-													
DEC 03	0230	0930	11	3.6	126	87	--	--	.05	.74	2.0	.110	.150
14-15	1135	0635	16	32	117	82	--	--	.13	.78	2.3	.180	.340
15-17	0735	1035	15	12	128	72	--	--	.15	1.0	1.5	.106	.200
17-20	1120	1020	20	13	121	77	--	--	.14	.91	1.8	.094	.160
JAN 31-													
FEB 01	1130	1829	53	81	139	62	--	--	.23	1.9	2.1	.080	.470
01-04	1930	1030	37	43	154	54	--	--	.14	1.1	2.1	.048	.213
10-11	1100	1000	27	16	159	58	--	--	.21	.93	2.0	.011	.149
11-15	1135	1034	19	8.4	185	60	--	--	.23	.85	2.5	.043	.094
MAR													
09-10	1840	0540	25	34	158	57	50	10	.13	1.2	1.6	.022	.173
10-11	0640	0940	21	15	198	57	--	--	.12	.95	1.6	.020	.091
18-20	1040	0940	10	2.7	183	66	--	--	.11	.83	2.5	.011	.060
20-20	1040	2140	20	14	169	63	--	--	.13	1.2	2.2	.016	.123
20-21	2240	0940	22	12	145	53	--	--	.17	1.1	1.6	.019	.096
21-25	1035	0934	15	5.7	211	61	--	--	.14	.86	2.0	.018	.063
26-27	1045	0344	47	35	179	50	73	14	.15	1.4	1.7	.016	.177
27-28	0445	0944	42	31	141	48	42	9	.13	1.0	1.5	.021	.136
MAR 28-													
APR 01	1050	0949	17	5.2	174	55	--	--	.04	.79	2.0	.013	.076
02-03	1050	0349	57	72	112	40	116	24	.11	2.0	1.6	.020	.361
03-04	0450	0949	55	54	92	38	76	13	.09	1.4	1.4	.023	.248
13-13	1005	2105	107	79	95	37	--	--	.05	2.2	1.5	.049	.709
13-14	2205	1705	86	100	78	35	--	--	.07	1.8	1.1	.042	.300
15-18	0955	0854	22	27	105	39	--	--	.03	1.3	1.6	.064	.164
18-22	0945	0844	9.5	14	171	54	--	--	.02	.95	2.0	.103	.172
MAY													
13-13	1015	2115	195	200	55	26	294	46	.07	2.3	.75	.057	.704
13-16	2210	0910	99	60	64	30	88	15	.05	1.3	1.2	.047	.233
16-20	1125	0925	18	12	86	43	--	--	.03	.99	3.4	.057	.127
29-30	1535	0834	187	170	44	27	272	47	.18	2.1	1.1	.079	.768
30-31	0935	0834	77	76	55	30	85	18	.03	1.3	1.2	.079	.357
MAY 31-													
JUN 03	1125	0925	24	39	38	75	44	9	.03	1.2	1.6	.090	.238
12-12	0405	1505	11	29	89	55	36	8	<.01	1.2	2.9	.200	.304
12-13	1605	0904	12	38	82	49	41	10	.03	1.2	2.2	.170	.312
14-15	0255	1755	41	93	60	32	123	23	.02	1.7	1.2	.108	.442
15-17	1855	0955	35	71	59	31	93	18	.03	1.5	1.3	.078	.337
17-20	1040	0840	13	27	94	53	--	--	<.01	1.0	2.1	.120	.247
27-28	0950	0849	15	54	84	52	78	17	<.01	1.6	2.0	.157	.179
JUN 28-													
JUL 01	0950	0849	12	42	85	50	54	12	<.01	1.2	1.7	.149	.157
AUG													
01-05	1010	0909	5.9	16	61	66	--	--	<.01	.81	2.0	.171	.241
SEP													
14-15	1400	0900	5.5	10	42	50	--	--	<.10	.64	1.9	.109	.187
15-16	1000	0859	7.0	19	39	42	--	--	<.10	.72	1.8	.117	.216
16-19	1050	0949	5.6	12	45	46	--	--	<.10	.52	1.6	.111	.186
27-27	0615	2115	14	52	42	51	112	18	<.01	.82	1.6	.118	.360
27-30	2215	0915	7.2	22	47	52	--	--	.01	.76	1.5	.116	.242

04221000 GENESEE RIVER AT WELLSVILLE, NY

LOCATION.--Lat 42°07'20", long 77°57'27", Allegany County, Hydrologic Unit 04130002, on left bank 35 ft upstream from concrete weir at Wellsville, 0.5 mi upstream from bridge on State Highway 17, 0.6 mi upstream from Crowner Brook and sewage treatment plant, 0.6 mi downstream from Dyke Creek, and 140.9 mi upstream from mouth.
DRAINAGE AREA.--288 mi^2.
PERIOD OF RECORD.--August 1955 to September 1958, October 1972 to current year. Records for June 1916 to September 1972, published as Genesee River at Scio (station 04221500) at site 5.2 mi downstream, are not equivalent because of difference in drainage areas.
REVISED RECORDS.--WDR NY-82-3: Drainage area.
GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,470.00 ft above NGVD of 1929. October 1957 to September 1958, nonrecording gage at site 0.4 mi upstream at datum 3.00 ft higher. August 1955 to September 1957, at same site at datum 8.00 ft higher.
REMARKS.--Records good except those for estimated daily discharges, which are fair. Telephone and satellite gage-height telemeters at station. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,700 ft^3/s, Jan. 19, 1996, gage height, 16.13 ft; minimum instantaneous discharge not determined.
EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since June 1916, 38,500 ft^3/s, June 23, 1972, gage height, 20.7 ft, present datum, from floodmark, on basis of contracted-opening measurement of peak flow 0.5 mi downstream.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,600 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jun. 6	0730	*5,330	*9.06	No other peak greater than base discharge.			

Minimum discharge, 14 ft^3/s, Sept. 12, 13, gage height, 4.21 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	67	470	e150	2120	266	915	630	315	315	61	26
2	43	64	289	e140	1280	253	768	794	250	264	55	24
3	40	74	240	e130	915	414	924	637	214	224	52	23
4	37	70	209	129	754	411	724	528	208	196	47	23
5	35	62	187	123	589	303	608	472	2500	173	182	22
6	37	59	170	121	512	336	557	421	4570	149	108	22
7	39	56	152	122	453	345	493	406	2400	134	69	21
8	39	54	139	116	407	316	455	362	1310	121	62	20
9	38	55	141	114	362	302	497	462	925	127	56	18
10	36	54	133	121	384	447	532	484	697	157	51	18
11	36	52	121	139	1150	348	411	344	555	113	47	17
12	31	48	112	129	624	353	366	722	458	96	43	16
13	32	49	120	126	518	347	553	1490	404	87	40	16
14	35	45	170	113	424	327	1230	2260	999	82	35	17
15	55	45	462	113	446	307	2150	1450	1740	76	36	21
16	57	45	274	108	459	384	1170	1050	1280	70	39	29
17	82	44	352	106	432	336	923	1040	962	64	39	25
18	92	43	1240	99	353	326	764	1720	718	61	37	22
19	71	41	793	e80	332	332	652	1270	577	64	34	21
20	64	50	615	e90	354	397	599	981	472	75	42	21
21	61	54	522	102	449	526	527	842	396	61	36	20
22	69	51	431	98	453	409	501	706	337	55	41	20
23	70	48	387	99	363	407	447	598	302	75	55	18
24	122	46	409	402	326	427	374	518	258	86	47	18
25	122	140	327	693	321	417	359	461	252	61	43	17
26	99	264	259	447	331	622	345	555	318	57	37	17
27	93	154	e220	422	363	1380	294	405	1430	56	32	55
28	91	136	e210	445	297	995	700	339	1360	183	31	132
29	81	187	e200	481	---	1160	1100	322	534	171	31	55
30	75	286	e180	1200	---	1440	726	511	391	88	30	41
31	70	---	e160	1140	---	1020	---	381	---	70	28	---
TOTAL	1899	2443	9694	7898	15771	15653	20664	23161	27132	3611	1546	815
MEAN	61.3	81.4	313	255	563	505	689	747	904	116	49.9	27.2
MAX	122	286	1240	1200	2120	1440	2150	2260	4570	315	182	132
MIN	31	41	112	80	297	253	294	322	208	55	28	16
CFSM	0.21	0.28	1.09	0.88	1.96	1.75	2.39	2.59	3.14	0.40	0.17	0.09
IN.	0.25	0.32	1.25	1.02	2.04	2.02	2.67	2.99	3.50	0.47	0.20	0.11

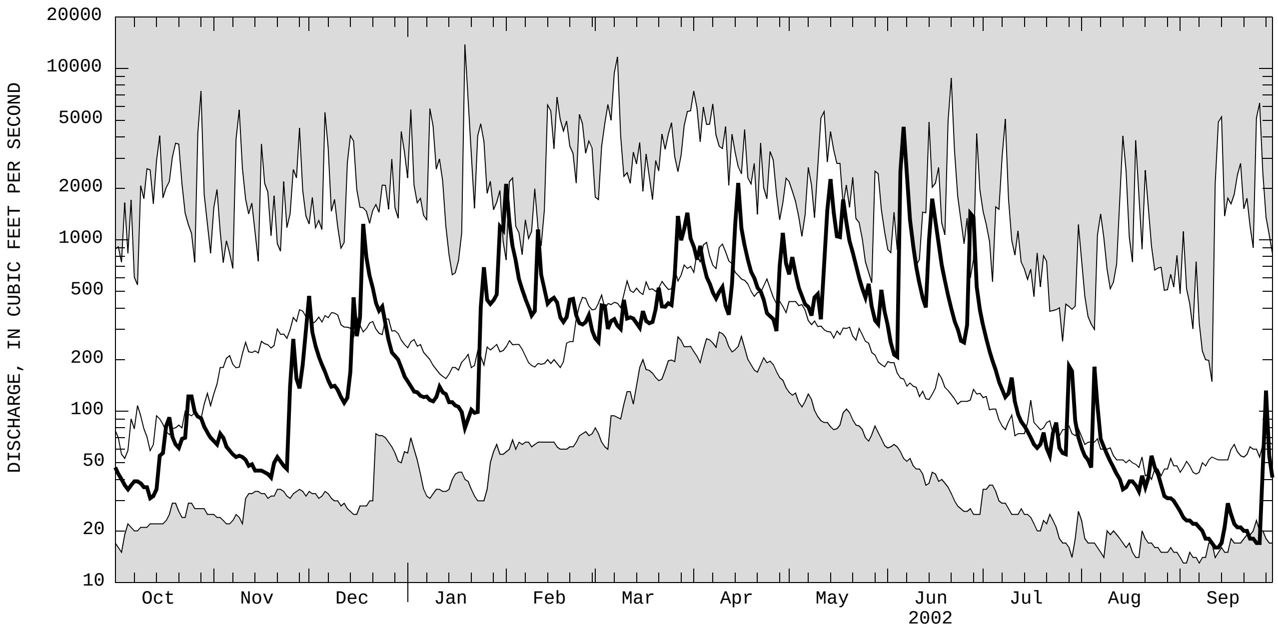
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	220	344	438	379	470	743	855	456	296	153	114	160
MAX	784	1001	1016	1263	1443	1689	1925	1208	1269	656	666	1246
(WY)	1991	1997	1973	1996	1976	1956	1958	1996	1989	1977	1994	1977
MIN	25.0	32.6	50.5	52.1	94.4	320	361	113	45.3	27.5	23.0	18.8
(WY)	1958	1999	1999	1981	1958	1981	1976	1985	1991	1993	1999	1995

e Estimated

04221000 GENESEE RIVER AT WELLSVILLE, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1956 - 2002	
ANNUAL TOTAL	89586		130287			
ANNUAL MEAN	245		357		385	
HIGHEST ANNUAL MEAN					564	1956
LOWEST ANNUAL MEAN					210	1999
HIGHEST DAILY MEAN	4190	Apr 7	4570	Jun 6	13800	Jan 19 1996
LOWEST DAILY MEAN	16	Aug 15	16	Sep 12	13	Sep 2 1991
ANNUAL SEVEN-DAY MINIMUM	18	Aug 12	17	Sep 8	15	Sep 3 1995
ANNUAL RUNOFF (CFSM)	0.85		1.24		1.34	
ANNUAL RUNOFF (INCHES)	11.57		16.83		18.14	
10 PERCENT EXCEEDS	561		918		874	
50 PERCENT EXCEEDS	107		196		200	
90 PERCENT EXCEEDS	29		35		39	



2002 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.

04223000 GENESEE RIVER AT PORTAGEVILLE, NY

LOCATION.--Lat 42°34'13", long 78°02'33", Wyoming County, Hydrologic Unit 04130002, on left bank at Portageville, 500 ft downstream from bridge on State Highway 436, 800 ft upstream from abandoned railroad bridge piers, 0.9 mi upstream from Upper Falls, and 89.8 mi upstream from mouth.

DRAINAGE AREA.--984 mi^2.

PERIOD OF RECORD.--August 1908 to current year. Prior to December 1945, published as "at St. Helena". Records published for both sites December 1945 to September 1950.

REVISED RECORDS.--WSP 264: 1908. WSP 564: 1916(M). WSP 2112; WDR NY-82-3: Drainage area. WDR NY 1972: 1950(M), 1951(M), 1956(M), 1959(M), 1964(M), 1967(M).

GAGE.--Water-stage recorder. Datum of gage is 1,080.00 ft above NGVD of 1929 (levels by Corps of Engineers). Prior to Aug. 24, 1911, nonrecording gage and Aug. 24, 1911 to Sept. 30, 1946, water-stage recorder at site 8 mi downstream at different datum. Oct. 1, 1946 to June 21, 1972, water-stage recorder at site 1,200 ft downstream at datum 2.60 ft higher (destroyed by flood of June 1972). July 12, 1972 to May 18, 1973, nonrecording gage at site 500 ft upstream at datum 11.48 ft higher.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Since July 1928, some seasonal regulation by Rushford Lake. Diurnal fluctuation at low flow caused by powerplant. Monthly figures of discharge and runoff 1952 to 1966 water years adjusted for change in contents in Rushford Lake. Telephone gage-height telemeter and satellite gage-height and precipitation telemeter at station. Several measurements of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 90,000 ft^3/s, June 23, 1972, gage height, 35.25 ft, site and datum then in use, from high-water mark, from rating curve extended above 25,000 ft^3/s on basis of contracted-opening measurement of 71,000 ft^3/s, 0.4 mi upstream and contracted-opening measurement of 98,200 ft^3/s, 0.7 mi downstream from gage; minimum discharge, 18 ft^3/s, Oct. 5, 17, 1913, gage height, 1.70 ft, site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 15,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 1	1400	*16,000	*15.89	No other peak greater than base discharge.			

Minimum discharge, 73 ft^3/s, Sept. 13, 14, gage height, 8.03 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	184	705	1540	e500	13300	1290	2930	2140	2410	977	228	102
2	165	576	1120	e460	6910	939	2400	1950	1540	826	196	97
3	149	291	833	e500	3630	1400	5530	2160	1130	728	174	105
4	142	289	687	e540	2760	1870	3800	1620	933	577	162	125
5	142	272	596	e530	1950	e1460	2610	1270	3800	503	153	99
6	144	250	533	497	e1840	e1260	2210	1150	7830	444	227	90
7	146	233	487	503	1540	1690	1890	1120	5770	397	227	88
8	145	222	443	e480	1280	1680	1700	1060	3380	346	175	86
9	144	218	424	e500	1190	1560	1650	1330	2320	337	153	84
10	e130	215	417	514	1130	2450	1940	2360	1780	425	142	81
11	e120	211	403	691	3130	1900	1590	1440	1420	397	134	78
12	e120	204	378	722	2900	1550	1320	2130	1210	312	126	77
13	e115	198	373	691	2110	1620	2010	6290	1130	278	122	74
14	e120	191	426	605	1240	1570	4870	8890	1050	251	119	76
15	e180	189	2220	593	1320	1310	6950	5590	3180	232	112	156
16	587	184	1490	567	1520	1520	3810	3530	3900	212	132	1200
17	673	177	1180	544	1570	1550	2670	3860	2580	199	123	382
18	760	171	4320	507	1360	1300	2160	4770	1830	188	121	193
19	722	169	3500	e400	1370	1280	1940	4430	1380	193	117	151
20	679	190	2260	e420	1270	1430	1670	2860	1100	204	141	132
21	667	212	1890	e540	1870	2410	1790	2410	947	202	125	118
22	782	215	1560	e520	2280	1750	1610	2030	856	189	118	110
23	492	209	1320	494	1710	1480	1680	1770	732	239	137	102
24	429	198	1740	1270	1190	1590	1230	1540	663	266	186	101
25	753	252	1570	3130	1140	1590	1110	1450	619	233	255	96
26	831	972	1150	1900	1170	1670	1180	1800	677	206	154	94
27	858	748	e900	1560	1390	5290	1040	1720	4940	200	132	159
28	862	556	e880	1690	1280	3520	1520	1250	6210	252	122	616
29	809	743	e840	2000	---	3940	4650	1060	2150	466	116	416
30	772	1090	e800	5210	---	6140	2730	4900	1320	467	111	270
31	743	---	e700	5550	---	4050	---	3590	---	329	105	---
TOTAL	13565	10350	36980	34628	65350	64059	74190	83470	68787	11075	4645	5558
MEAN	438	345	1193	1117	2334	2066	2473	2693	2293	357	150	185
MAX	862	1090	4320	5550	13300	6140	6950	8890	7830	977	255	1200
MIN	115	169	373	400	1130	939	1040	1060	619	188	105	74
CFSM	0.44	0.35	1.21	1.14	2.37	2.10	2.51	2.74	2.33	0.36	0.15	0.19
IN.	0.51	0.39	1.40	1.31	2.47	2.42	2.80	3.16	2.60	0.42	0.18	0.21

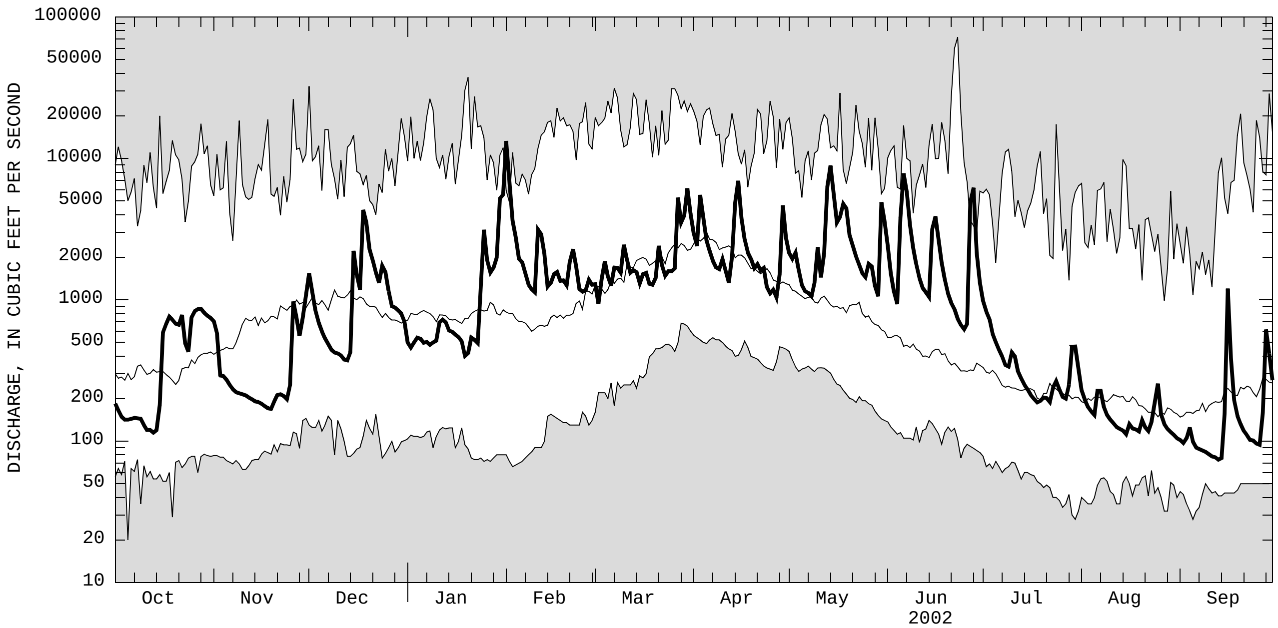
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1908 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	641	1075	1332	1411	1474	2864	2779	1514	903	444	321	406
MAX	3320	4201	4314	4795	5838	7360	7780	4826	7006	1876	1875	4949
(WY)	1918	1928	1928	1913	1976	1936	1940	1919	1972	1915	1977	1977
MIN	74.1	110	160	100	229	945	450	294	118	64.8	64.5	50.1
(WY)	1965	1965	1909	1961	1920	1937	1946	1934	1934	1934	1934	1913

e Estimated

04223000 GENESEE RIVER AT PORTAGEVILLE, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1908 - 2002	
ANNUAL TOTAL	307471		472657			
ANNUAL MEAN	842		1295		1262	
HIGHEST ANNUAL MEAN					2038	1916
LOWEST ANNUAL MEAN					766	1962
HIGHEST DAILY MEAN	14500	Apr 8	13300	Feb 1	72000	Jun 23 1972
LOWEST DAILY MEAN	55	Aug 16	74	Sep 13	20	Oct 5 1913
ANNUAL SEVEN-DAY MINIMUM	59	Aug 12	79	Sep 8	34	Jul 25 1934
ANNUAL RUNOFF (CFSM)	0.86		1.32		1.28	
ANNUAL RUNOFF (INCHES)	11.62		17.87		17.43	
10 PERCENT EXCEEDS	1810		3130		2900	
50 PERCENT EXCEEDS	480		782		605	
90 PERCENT EXCEEDS	90		126		135	



2002 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.

04224000 MOUNT MORRIS LAKE NEAR MOUNT MORRIS, NY

LOCATION.--Lat 42°44'00", long 77°54'40", Livingston County, Hydrologic Unit 04130002, at Mount Morris Dam on Genesee River, 2.0 mi northwest of Mount Morris, 5.0 mi upstream from Canaseraga Creek, and 69.3 mi upstream from mouth.
DRAINAGE AREA.--1,080 mi^2.
PERIOD OF RECORD.--January 1952 to current year. Prior to October 1970, published as "Mount Morris Reservoir near Mount Morris."
REVISED RECORDS.--WSP 1437: 1955. WSP 2112; WDR NY-82-3: Drainage area.
GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Apr. 8, 1952, reference point at same site and datum.
REMARKS.--Lake is formed by a concrete gravity-type dam with overflow spillway, completed by U. S. Army Corps of Engineers in 1951 for flood control; first used for flood regulation on Nov. 24, 1951. Usable capacity, 336,800 acre-ft between elevation 585.0 ft, sill of conduits, and 760.0 ft, crest of spillway. Dead storage, 609 acre-ft. Discharge is controlled by the operation of nine gates. Water is stored during high flows and released when downstream conditions warrant.
COOPERATION.--Capacity table provided by U.S. Army Corps of Engineers.
EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 755.46 ft, June 25, 1972, contents, 322,600 acre-ft; minimum, 584.06 ft, Aug. 30, 1991, contents, 446.4 acre-ft.
EXTREMES FOR CURRENT YEAR.--Maximum elevation, 661.13 ft, Feb. 4, contents, 80,400 acre-ft; minimum recorded elevation, 584.83 ft, Oct. 14, contents 580 acre-ft, but may have been lower during periods of no gage height record.

Capacity table (elevation, in feet, and usable contents, in acre-feet)

(Furnished by U. S. Army Corps of Engineers in 1953)

584.00	436	605.00	8,250	660.00	78,200
586.00	782	610.00	11,600	680.00	119,800
588.00	1,210	620.00	19,800	700.00	166,300
590.00	1,730	630.00	30,500	730.00	245,200
595.00	3,410	640.00	43,700	750.00	305,100
600.00	5,610				

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	586.78	590.16	---	---	639.51	596.61	641.07	641.13	623.37	592.55	589.24	588.58
2	586.58	589.94	---	---	---	594.36	640.36	642.80	622.46	590.55	589.23	588.53
3	586.45	587.89	---	---	659.66	595.03	644.16	644.17	619.70	590.14	589.21	588.49
4	586.29	587.51	590.43	---	660.91	602.37	650.50	642.96	615.44	589.40	589.16	588.46
5	586.19	587.44	589.80	591.02	659.72	601.83	653.41	640.84	613.65	589.34	589.09	588.42
6	586.28	587.26	589.38	590.65	657.02	600.24	653.88	638.24	626.36	589.33	589.03	588.40
7	586.33	587.12	589.05	590.54	653.39	599.91	650.85	634.57	636.63	589.32	589.09	588.37
8	586.31	587.01	588.76	589.87	649.35	602.48	647.26	630.47	638.25	589.31	589.06	588.33
9	586.27	586.96	588.61	589.97	645.01	602.02	646.18	626.11	636.96	589.31	588.95	588.28
10	586.24	586.93	588.50	590.57	640.28	604.02	643.31	623.15	634.21	589.31	588.90	588.25
11	586.19	586.91	588.45	---	635.40	609.53	638.66	620.27	629.87	589.30	588.81	588.23
12	586.16	586.86	588.28	---	633.59	608.59	633.37	614.65	624.36	589.30	588.77	588.20
13	586.15	586.80	588.20	---	630.52	606.15	628.35	620.27	617.21	589.29	588.92	588.15
14	586.12	586.74	588.26	---	625.62	604.47	628.22	637.05	608.18	589.26	588.93	588.11
15	586.16	586.73	---	591.53	619.02	600.81	635.24	648.25	611.67	589.24	588.82	588.16
16	---	586.68	---	591.38	610.88	597.24	640.75	651.86	622.44	589.21	588.84	593.92
17	---	586.64	---	591.10	598.80	601.15	640.11	652.05	626.67	589.17	588.87	590.72
18	---	586.59	---	590.86	---	598.05	637.31	652.16	625.58	589.09	588.85	589.25
19	---	586.56	---	---	---	596.64	634.57	653.64	621.52	589.05	588.78	589.14
20	---	586.63	620.99	---	---	596.52	635.24	652.80	615.56	589.02	588.74	588.97
21	---	---	620.03	---	---	605.13	637.54	650.14	605.35	588.99	588.73	588.81
22	---	---	617.93	---	608.07	608.52	639.49	---	592.09	588.94	588.69	588.66
23	---	---	614.62	590.65	609.83	606.79	639.79	---	591.07	589.02	588.94	588.54
24	---	---	611.11	---	606.61	604.35	636.75	---	590.67	589.15	589.06	588.44
25	---	---	609.25	---	598.74	603.01	631.78	630.17	590.36	593.37	589.19	588.38
26	---	---	604.37	---	595.17	601.01	627.17	623.21	590.21	598.44	589.19	588.36
27	---	---	---	---	596.06	613.97	626.75	616.15	605.93	590.40	589.03	588.43
28	---	---	---	---	595.86	623.90	628.33	605.88	620.64	590.54	588.87	590.83
29	---	---	---	---	---	627.41	633.82	592.77	620.51	592.11	588.76	590.64
30	---	---	---	---	---	633.31	638.59	608.47	611.00	591.79	588.69	589.36
31	590.41	---	---	---	---	639.46	---	620.90	---	589.58	588.63	---
MEAN	---	---	---	---	---	605.96	638.76	---	616.26	590.09	588.94	588.91
MAX	---	---	---	---	---	639.46	653.88	---	638.25	598.44	589.24	593.92
MIN	---	---	---	---	---	594.36	626.75	---	590.21	588.94	588.63	588.11

04224775 CANASERAGA CREEK ABOVE DANSVILLE, NY

LOCATION.--Lat 42°32'08", long 77°42'16", Livingston County, Hydrologic Unit 04130002, on right bank on Poags Hole Road, 0.7 mi upstream from Stony Brook, and 1.7 mi south of Dansville.
DRAINAGE AREA.--88.9 mi^2.
PERIOD OF RECORD.--August 1974 to current year.
REVISED RECORDS.--WDR NY-82-3: Drainage area. WDR NY-91-3: 1984, 1986(P).
GAGE.--Water-stage recorder. Datum of gage is 715.60 ft above NGVD of 1929.
REMARKS.--Records fair. Satellite gage-height and precipitation telemeter at station. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,340 ft^3/s, Jan. 19, 1996, gage height, 8.50 ft, from rating curve extended above 2,700 ft^3/s; minimum discharge, 6.5 ft^3/s, Aug. 17, 18, 1999.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 1	1330	*1,890	*3.36	No other peak greater than base discharge.			

Minimum discharge, 6.8 ft^3/s, Sept. 12, 13, 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	11	92	e19	1300	57	169	149	190	37	16	9.4
2	8.2	11	57	e22	572	55	146	142	128	31	15	8.9
3	7.9	11	40	e28	195	95	530	125	97	26	14	9.4
4	7.7	11	29	e26	136	105	274	102	90	22	13	9.5
5	7.7	10	24	23	e96	63	186	88	202	20	13	8.8
6	9.5	11	21	21	e94	86	157	78	252	19	12	8.4
7	8.1	10	20	21	80	106	134	79	171	17	12	8.0
8	8.5	9.9	19	e21	72	88	122	73	123	17	12	7.9
9	8.3	9.9	19	21	66	85	117	113	97	17	11	7.7
10	8.2	9.8	19	27	64	154	118	156	77	24	11	7.5
11	8.2	9.9	18	48	155	108	96	99	64	17	11	7.4
12	8.3	9.7	17	52	113	104	83	187	67	16	11	7.2
13	8.3	9.7	18	51	91	107	207	448	67	16	12	7.1
14	8.5	9.6	24	39	59	97	549	706	65	15	11	8.8
15	9.2	9.5	211	41	79	85	565	320	169	14	12	18
16	9.0	9.5	114	36	98	111	243	182	207	13	11	70
17	10	9.3	95	32	102	97	180	213	129	12	11	24
18	11	9.4	296	25	73	89	149	390	88	52	10	16
19	11	9.2	191	21	70	84	129	232	66	74	11	13
20	10	9.6	131	28	95	115	127	177	52	43	12	12
21	11	9.8	96	23	132	170	118	153	41	19	12	11
22	18	9.9	68	19	128	125	116	127	35	17	11	12
23	16	9.5	54	18	98	113	113	106	42	20	14	11
24	13	9.5	66	101	80	117	93	94	28	22	18	9.8
25	13	35	51	158	79	116	85	92	24	17	17	10
26	14	69	e30	88	77	180	83	116	30	15	13	9.9
27	16	32	e30	68	90	483	71	87	229	15	12	23
28	16	23	e26	82	70	263	148	71	141	20	12	56
29	14	52	e22	101	---	312	260	72	68	25	11	26
30	13	71	e20	387	---	503	181	280	48	22	11	19
31	11	---	e19	356	---	229	---	250	---	18	10	---
TOTAL	331.0	520.7	1937	2003	4364	4502	5549	5507	3087	712	382	456.7
MEAN	10.7	17.4	62.5	64.6	156	145	185	178	103	23.0	12.3	15.2
MAX	18	71	296	387	1300	503	565	706	252	74	18	70
MIN	7.7	9.2	17	18	59	55	71	71	24	12	10	7.1
CFSM	0.12	0.20	0.70	0.73	1.75	1.63	2.08	2.00	1.16	0.26	0.14	0.17
IN.	0.14	0.22	0.81	0.84	1.83	1.88	2.32	2.30	1.29	0.30	0.16	0.19

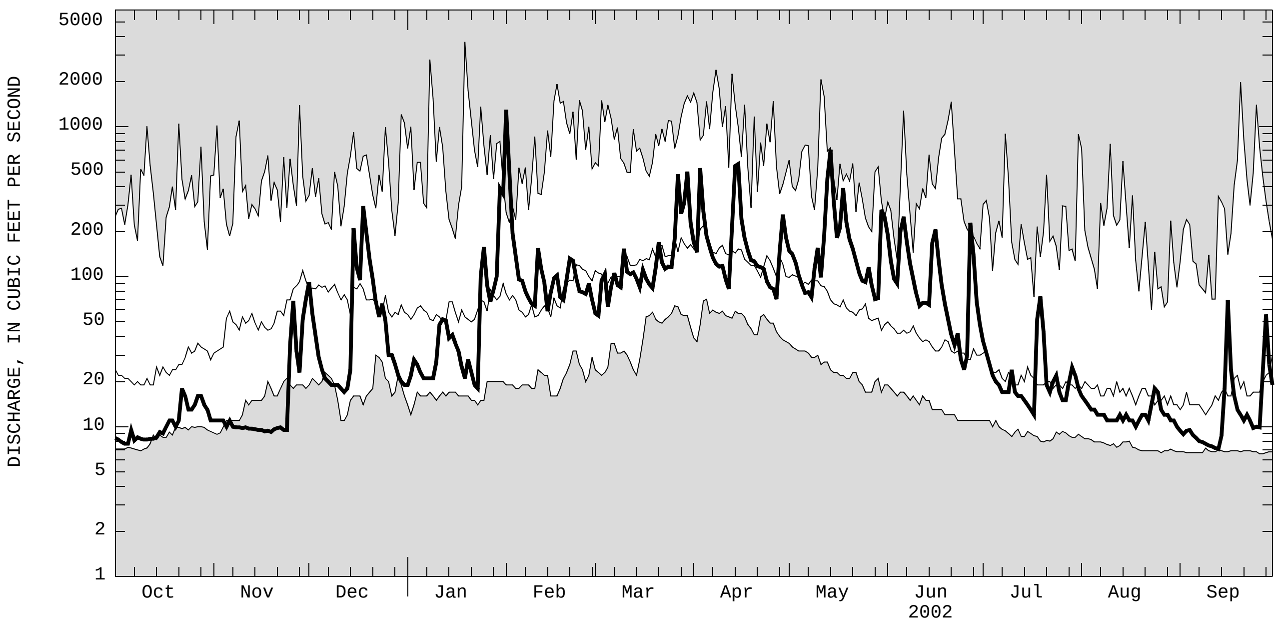
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	52.3	85.9	105	109	135	194	213	117	67.2	36.8	30.5	39.0
MAX	175	194	252	411	432	419	519	327	270	128	115	331
(WY)	1991	1993	1978	1996	1976	1979	1993	1996	1989	1992	2000	1977
MIN	10.7	17.4	21.6	24.4	31.4	70.6	81.8	26.2	16.8	10.8	7.52	6.83
(WY)	2002	2002	1999	1984	1980	1984	1981	1985	1991	1985	1985	1995

e Estimated

04224775 CANASERAGA CREEK ABOVE DANSVILLE, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1974 - 2002	
ANNUAL TOTAL	25652.7		29351.4			
ANNUAL MEAN	70.3		80.4		98.1	
HIGHEST ANNUAL MEAN					154	1996
LOWEST ANNUAL MEAN					64.1	1999
HIGHEST DAILY MEAN	2400	Apr 8	1300	Feb 1	3680	Jan 19 1996
LOWEST DAILY MEAN	7.4	Sep 6	7.1	Sep 13	6.6	Sep 26 1995
ANNUAL SEVEN-DAY MINIMUM	7.5	Sep 13	7.5	Sep 7	6.7	Sep 2 1995
ANNUAL RUNOFF (CFSM)	0.79		0.90		1.10	
ANNUAL RUNOFF (INCHES)	10.73		12.28		15.00	
10 PERCENT EXCEEDS	144		181		211	
50 PERCENT EXCEEDS	23		36		50	
90 PERCENT EXCEEDS	8.3		9.5		13	



2002 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.

04227000 CANASERAGA CREEK AT SHAKERS CROSSING, NY

LOCATION.--Lat 42°44'13", long 77°50'27", Livingston County, Hydrologic Unit 04130002, on right bank 100 ft upstream from bridge on State Highway 408 at Shakers Crossing, 1.4 mi upstream from mouth, and 1.5 mi northeast of Mount Morris.
DRAINAGE AREA.--335 mi^2.
PERIOD OF RECORD.--July 1915 to September 1922 (gage height only), November 1958 to September 1970, October 1974 to current year.
REVISED RECORDS.--WDR NY-82-3: Drainage area.
GAGE.--Water-stage recorder and concrete control. Datum of gage is 545.52 ft above NGVD of 1929. Prior to July 1981 at site 250 ft east on left bank of old filled-in channel at same datum,and prior to November 1958 at site 250 ft east and 40 ft north at datum 5.52 ft lower. April 1968 to September 1970, and since October 1974, auxiliary water-stage recorder 0.6 mi downstream from base gage.
REMARKS.--No estimated daily values. Records good. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,510 ft^3/s, Jan. 19, 1996, gage height 13.01 ft; maximum gage height 23.62 ft, present datum, May 17, 1916 (backwater from Genesee River); minimum discharge, 4.3 ft^3/s, Aug. 19, 1970, gage height, 2.26 ft, result of temporary regulation.
EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 23, 1972 reached an estimated discharge of 11,200 ft^3/s from U. S. Army Corps of Engineers publication (Tropical Storm Agnes, June 1972).
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 1	1530	*3,380	*10.60	No other peak greater than base discharge.			

Minimum discharge, 25 ft^3/s, Oct. 14, gage height, 3.44 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

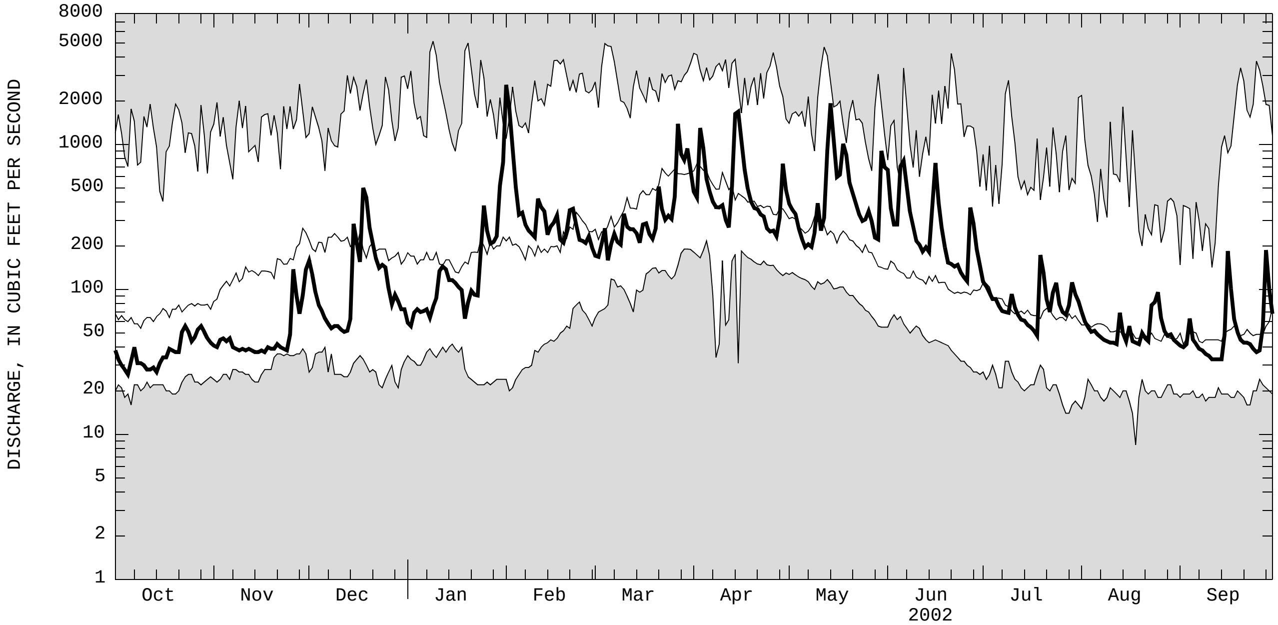
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	41	158	59	2580	171	472	391	668	113	70	41
2	33	40	126	56	1770	168	429	355	365	105	60	40
3	30	45	95	69	904	207	1300	331	280	95	55	42
4	28	46	78	73	512	264	938	264	280	86	51	63
5	26	44	71	70	328	159	573	224	706	86	52	45
6	32	46	63	71	339	206	473	196	775	77	49	42
7	40	40	58	73	280	243	403	205	516	71	47	39
8	31	39	54	64	255	213	370	197	341	70	45	38
9	31	38	56	76	243	204	368	247	268	69	44	36
10	30	39	56	87	230	333	381	394	217	93	43	35
11	28	38	53	134	423	271	303	255	204	75	43	33
12	28	39	51	144	370	260	268	313	183	67	42	33
13	29	38	52	138	346	260	515	910	196	62	69	33
14	27	37	63	116	239	245	1630	1920	182	61	50	33
15	31	37	284	116	273	210	1690	1010	395	57	44	49
16	34	38	210	111	291	281	1070	598	746	55	56	184
17	34	37	155	104	325	286	672	621	397	52	44	101
18	39	40	503	99	221	242	491	1010	266	48	43	62
19	38	39	429	63	210	224	403	844	196	173	42	51
20	37	39	267	82	251	265	365	542	153	130	50	45
21	37	42	206	98	352	513	358	459	150	85	46	43
22	51	40	164	92	360	357	329	390	144	70	44	43
23	56	39	141	91	278	303	319	329	148	96	78	42
24	51	38	148	176	220	323	264	297	131	111	82	39
25	44	49	142	379	217	306	251	305	121	79	96	37
26	47	138	101	252	209	436	255	347	114	70	63	38
27	53	91	79	207	233	1390	233	293	368	67	52	55
28	56	68	92	213	195	854	313	228	285	78	48	187
29	51	91	83	234	---	779	738	222	190	112	49	101
30	46	138	73	521	---	940	481	903	145	93	45	68
31	43	---	73	754	---	656	---	697	---	83	43	---
TOTAL	1179	1534	4184	4822	12454	11569	16655	15297	9130	2589	1645	1698
MEAN	38.0	51.1	135	156	445	373	555	493	304	83.5	53.1	56.6
MAX	56	138	503	754	2580	1390	1690	1920	775	173	96	187
MIN	26	37	51	56	195	159	233	196	114	48	42	33
CFSM	0.11	0.15	0.40	0.46	1.33	1.11	1.66	1.47	0.91	0.25	0.16	0.17
IN.	0.13	0.17	0.46	0.54	1.38	1.28	1.85	1.70	1.01	0.29	0.18	0.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	147	220	299	316	408	646	666	350	206	109	84.7	105
MAX	601	647	906	1181	1452	1575	1537	1081	913	454	297	1162
(WY)	1978	1993	1978	1998	1976	1979	1993	1996	1989	1992	1992	1977
MIN	24.4	31.3	29.9	30.9	74.6	209	231	109	48.1	22.9	19.9	22.6
(WY)	1965	1965	1961	1961	1963	1965	1995	1995	1965	1965	1965	1965

04227000 CANASERAGA CREEK AT SHAKERS CROSSING, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1959 - 2002	
ANNUAL TOTAL	74291		82756			
ANNUAL MEAN	204		227		296	
HIGHEST ANNUAL MEAN					464	1998
LOWEST ANNUAL MEAN					137	1965
HIGHEST DAILY MEAN	3630	Apr 9	2580	Feb 1	5150	Jan 9 1998
LOWEST DAILY MEAN	19	Aug 12	26	Oct 5	8.5	Aug 18 1970
ANNUAL SEVEN-DAY MINIMUM	21	Aug 8	29	Oct 8	15	Jul 26 1965
ANNUAL RUNOFF (CFSM)	0.61		0.68		0.88	
ANNUAL RUNOFF (INCHES)	8.25		9.19		12.02	
10 PERCENT EXCEEDS	438		507		700	
50 PERCENT EXCEEDS	79		113		147	
90 PERCENT EXCEEDS	28		39		40	



2002 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.

04227500 GENESEE RIVER NEAR MOUNT MORRIS, NY

LOCATION.--Lat 42°46'00", long 77°50'21", Livingston County, Hydrologic Unit 04130002, on right bank 100 ft north of Jones Bridge Road, 0.8 mi downstream from Canaseraga Creek, 2.8 mi northeast of Mount Morris, and 63.0 mi upstream from mouth.
DRAINAGE AREA.--1,424 mi^2.
PERIOD OF RECORD.--May 1903 to April 1906, August 1908 to April 1914, July 1915 to current year. Prior to 1968, published as "at Jones Bridge."
REVISED RECORDS.--WSP 1277: 1952. WSP 1387: 1913. WSP 1437: 1955. WSP 2112; WDR NY-82-3: Drainage area. WDR NY-78-1: 1974-77 (M, m). WDR NY-01-3: 1991, 1992, 1996-2000 (M).
GAGE.--Water-stage recorder. Datum of gage is 540.12 ft above NGVD of 1929. Prior to Sept. 11, 1915, nonrecording gage on bridge at datum 2.85 ft lower.
REMARKS.--Records good except those for estimated daily discharges, which are fair. Diurnal fluctuation at low flow caused by powerplant. Flow regulated to some extent by Rushford Lake since July 1928, and at high flows since November 1951 by Mount Morris Lake (see station 04224000). Monthly figures of discharge and runoff 1952 to 1966 water years adjusted for change in contents in Rushford Lake and Mount Morris Lake. Telephone and satellite gage-height telemeters at station. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55,100 ft^3/s, May 17, 1916, gage height, 25.44 ft; maximum gage height, 25.80 ft, Mar. 13, 1920 (ice jam); minimum discharge, 18 ft^3/s, Aug. 29, 1909. Maximum discharge since construction of Mt. Morris Reservoir in November 1951, 17,800 ft^3/s, June 23, 1972, gage height, 24.50 ft, minimum discharge, 12 ft^3/s, July 23, 1955, gage height, 0.22 ft, partially obstructed intake.
EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,250 ft^3/s, May 22, gage height, 10.92 ft; minimum discharge, 100 ft^3/s, Sept. 13, 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	214	667	1710	e540	4610	1720	3730	1290	3510	2080	335	145
2	190	634	1630	e460	3310	1280	3310	1240	3100	1110	272	140
3	171	369	1020	e480	2570	1370	2420	2320	2910	935	241	138
4	154	279	772	e510	3430	2130	2060	3560	2760	758	220	182
5	142	270	641	528	4410	2030	1660	3490	3170	644	209	162
6	151	252	557	513	5250	2010	3940	3650	3610	572	197	135
7	166	231	499	e480	5540	1980	5770	4020	4100	516	294	124
8	157	218	452	e460	5390	2080	4600	3880	4310	478	240	121
9	151	210	429	e470	5220	2060	3420	3780	4190	431	208	118
10	148	208	409	536	5270	2260	5080	3810	4350	454	191	116
11	145	205	402	658	5560	2450	5710	3580	4450	508	180	110
12	143	199	378	821	4920	2400	5080	3390	4210	445	178	106
13	143	194	363	783	4740	2310	4620	3440	3910	387	197	105
14	138	187	388	697	4410	2230	5730	3200	2630	364	176	104
15	143	186	1790	659	4150	2030	4520	1990	1550	347	164	141
16	402	185	2410	636	3760	1860	4400	3430	2290	332	183	1130
17	608	181	1360	600	2940	2100	5160	4600	2730	314	177	674
18	732	176	2370	e570	1820	1900	5240	5420	3490	298	168	339
19	726	173	3000	e510	1940	1710	3660	5510	3580	351	160	231
20	681	176	2870	e460	1680	1700	1300	5440	3310	379	179	195
21	655	198	2790	e520	1910	2500	588	5860	2850	345	190	173
22	734	207	2680	e550	2220	2480	917	6210	1230	318	168	158
23	717	211	2540	515	2500	2370	2990	5990	932	338	211	147
24	374	202	2410	885	2330	2290	4380	5700	821	394	227	136
25	625	220	2340	2430	1960	2210	4600	5410	744	279	320	131
26	806	812	2120	2520	1540	2240	3210	5090	699	294	279	128
27	864	1000	e1380	2410	1710	3790	1140	4350	2730	317	200	166
28	877	644	e950	2310	1610	3570	526	3430	4660	293	179	606
29	831	623	e940	2280	---	3340	1870	1520	4730	403	171	612
30	759	1260	e900	2770	---	3280	1420	3500	4190	573	160	403
31	714	---	e740	3280	---	3110	---	3810	---	448	151	---
TOTAL	13461	10577	43240	31841	96700	70790	103051	121910	91746	15705	6425	7176
MEAN	434	353	1395	1027	3454	2284	3435	3933	3058	507	207	239
MAX	877	1260	3000	3280	5560	3790	5770	6210	4730	2080	335	1130
MIN	138	173	363	460	1540	1280	526	1240	699	279	151	104

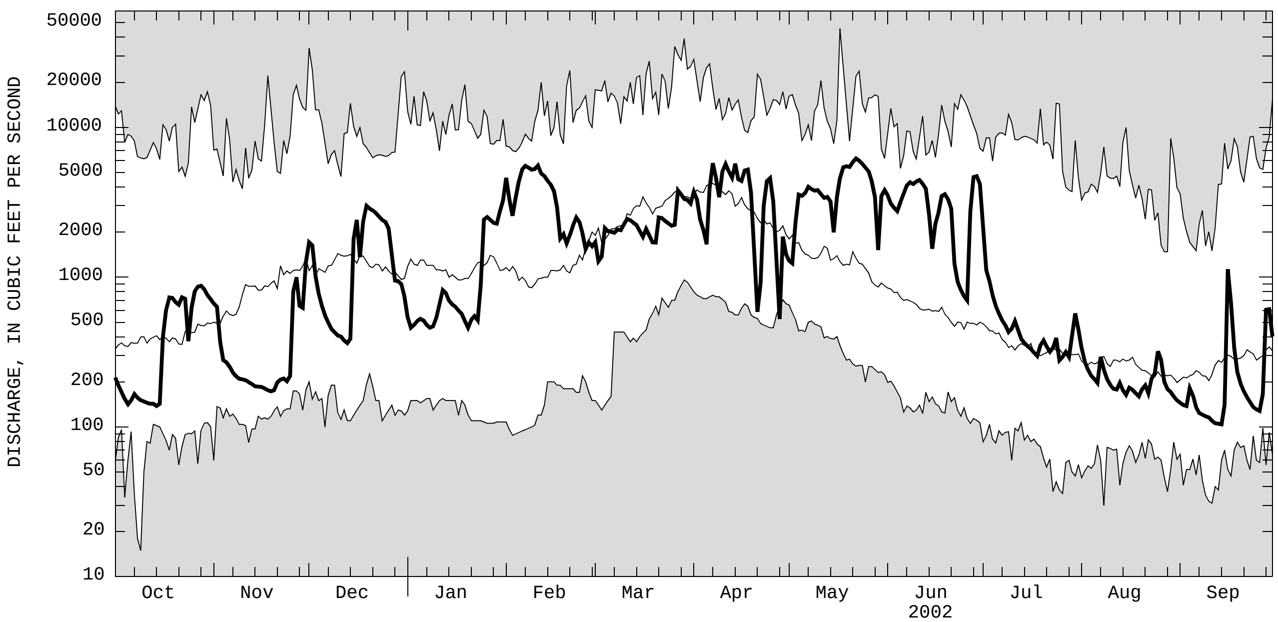
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	941	1425	1991	1807	2068	3705	4096	2143	1234	723	453	530
MAX	4743	3720	5369	5659	5106	7755	7270	5677	4305	6801	2205	4130
(WY)	1978	1968	1973	1998	1990	1976	1978	1996	1989	1972	1977	1977
MIN	107	152	280	135	383	1365	1464	477	191	87.6	116	99.2
(WY)	1961	1965	1961	1961	1958	1960	1995	1955	1955	1955	2001	1995

e Estimated

04227500 GENESEE RIVER NEAR MOUNT MORRIS, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1952 - 2002	
ANNUAL TOTAL	424531		612622			
ANNUAL MEAN	1163		1678		1757	
HIGHEST ANNUAL MEAN					2601	1984
LOWEST ANNUAL MEAN					1057	1965
HIGHEST DAILY MEAN	7230	Apr 17	6210	May 22	16500	Jun 24 1972
LOWEST DAILY MEAN	74	Aug 12	104	Sep 14	15	Oct 9 1980
ANNUAL SEVEN-DAY MINIMUM	78	Aug 10	111	Sep 8	57	Jul 27 1955
10 PERCENT EXCEEDS	3450		4390		4710	
50 PERCENT EXCEEDS	560		821		945	
90 PERCENT EXCEEDS	118		167		184	



2002 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.

04227980 CONESUS LAKE NEAR LAKEVILLE, NY

LOCATION.--Lat 42°47'39", long 77°43'15", Livingston County, Hydrologic Unit 04130003, on west shore of Conesus Lake at Geneseo Water Works pumping station, 300 ft east of State Highway 256, and 3.0 mi south of Lakeville.
DRAINAGE AREA.--69.8 mi^2.
PERIOD OF RECORD.--July 1963 to current year. Since 1930 in files of village of Geneseo.
REVISED RECORDS.--WSP 2112; WDR NY-82-3: Drainage area.
GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. To convert elevations to adjustment of 1988, subtract 0.53 ft. Oct. 1, 1970 to Sept. 30, 1975, at datum 800.00 ft higher. Prior to Oct. 1, 1970, nonrecording gage at site 200 ft downstream at datum 796.59 ft higher.
REMARKS.--Lake elevation regulated by gates at outlet. Area of water surface, 5.08 mi^2. Daily average of about 2 ft^3/s diverted from lake for water supply for Avon, Geneseo, and Lakeville Water District.
EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 822.50 ft, at present datum, June 24, 1972; minimum elevation, 816.11 ft, Dec. 22, 24, 1988.
EXTREMES FOR CURRENT YEAR.--Maximum elevation, 819.29 ft, Apr. 15, 16; minimum elevation, 816.37 ft, Nov. 25.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	817.05	816.67	816.50	816.62	817.28	818.48	818.60	818.83	818.89	818.65	818.07	817.50
2	817.04	816.66	816.49	816.62	817.58	818.48	818.59	818.87	818.81	818.64	818.05	817.48
3	817.03	816.66	816.48	816.61	817.70	818.50	818.66	818.90	818.76	818.62	818.03	817.48
4	817.01	816.65	816.47	816.60	817.78	818.51	818.66	818.90	818.77	818.59	818.01	817.48
5	817.00	816.63	816.46	816.59	817.84	818.51	818.63	818.90	818.90	818.56	817.98	817.45
6	817.01	816.61	816.45	816.59	817.87	818.52	818.65	818.90	818.88	818.53	817.94	817.43
7	816.98	816.60	816.44	816.62	817.90	818.54	818.70	818.91	818.83	818.50	817.90	817.41
8	816.96	816.59	816.43	816.62	817.93	818.55	818.74	818.91	818.83	818.47	817.87	817.39
9	816.93	816.58	816.44	816.62	817.95	818.57	818.78	818.94	818.83	818.46	817.84	817.37
10	816.91	816.56	816.43	816.62	817.99	818.62	818.81	818.90	818.82	818.43	817.82	817.35
11	816.89	816.54	816.41	816.63	818.06	818.63	818.83	818.83	818.81	818.40	817.79	817.33
12	816.89	816.52	816.41	816.64	818.11	818.64	818.84	818.81	818.82	818.37	817.77	817.30
13	816.88	816.51	816.40	816.64	818.14	818.65	818.89	818.86	818.81	818.34	817.76	817.27
14	816.89	816.49	816.42	816.64	818.16	818.65	819.05	818.99	818.84	818.32	817.74	817.26
15	816.88	816.49	816.47	816.65	818.18	818.67	819.26	818.97	818.90	818.30	817.73	817.28
16	816.87	816.49	816.47	816.65	818.21	818.70	819.26	818.87	818.85	818.28	817.73	817.32
17	816.85	816.48	816.49	816.66	818.24	818.72	819.21	818.77	818.75	818.25	817.72	817.31
18	816.83	816.46	816.57	816.67	818.26	818.74	819.12	818.70	818.71	818.23	817.73	817.29
19	816.81	816.46	816.60	816.67	818.28	818.76	819.02	818.63	818.71	818.21	817.70	817.28
20	816.79	816.46	816.62	816.67	818.30	818.80	818.92	818.63	818.72	818.19	817.69	817.26
21	816.79	816.44	816.63	816.67	818.34	818.86	818.80	818.67	818.73	818.17	817.67	817.25
22	816.82	816.42	816.64	816.67	818.37	818.89	818.69	818.71	818.72	818.15	817.65	817.23
23	816.81	816.41	816.65	816.67	818.39	818.92	818.60	818.74	818.72	818.16	817.66	817.22
24	816.80	816.41	816.65	816.69	818.41	818.94	818.59	818.76	818.71	818.15	817.68	817.20
25	816.80	816.43	816.65	816.74	818.42	818.96	818.60	818.79	818.71	818.13	817.67	817.17
26	816.78	816.44	816.65	816.75	818.44	819.01	818.60	818.83	818.70	818.11	817.65	817.16
27	816.76	816.44	816.64	816.76	818.46	819.13	818.60	818.85	818.71	818.09	817.62	817.20
28	816.75	816.44	816.64	816.78	818.47	819.12	818.65	818.86	818.70	818.10	817.60	817.26
29	816.72	816.47	816.64	816.79	---	819.04	818.76	818.89	818.68	818.10	817.57	817.24
30	816.70	816.48	816.64	816.85	---	818.90	818.80	819.12	818.66	818.11	817.55	817.23
31	816.69	---	816.63	816.96	---	818.74	---	819.01	---	818.09	817.53	---
MEAN	816.87	816.52	816.53	816.68	818.11	818.73	818.80	818.85	818.78	818.31	817.77	817.31
MAX	817.05	816.67	816.65	816.96	818.47	819.13	819.26	819.12	818.90	818.65	818.07	817.50
MIN	816.69	816.41	816.40	816.59	817.28	818.48	818.59	818.63	818.66	818.09	817.53	817.16

CAL YR 2001 MEAN 817.81 MAX 820.00 MIN 816.40
WTR YR 2002 MEAN 817.77 MAX 819.26 MIN 816.40

04227995 CONESUS CREEK NEAR LAKEVILLE, NY

LOCATION.--Lat 42°51'20", long 77°43'00", Livingston County, Hydrologic Unit 04130003, on right bank 100 ft upstream from bridge on West Lake Road (State Highway 256), 1.5 mi downstream from Lakeville, and 10.7 mi upstream from mouth.
DRAINAGE AREA.--69.8 mi^2.
PERIOD OF RECORD.--April 1996 to current year.
GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 810 ft above NGVD of 1929, from topographic map.
REMARKS.--No estimated daily discharges. Records good. Flow regulated by Conesus Lake (see station 04227980). Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,030 ft^3/s, May 12, 1996, gage height, 5.55 ft; minimum discharge, 3.9 ft^3/s, June 13, 1998, gage height, 0.36 ft.
EXTREMES FOR CURRENT YEAR.--Maximum discharge, 589 ft^3/s, May 30, gage height, 4.06 ft; minimum discharge, 5.9 ft^3/s, June 21, gage height, 0.44 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

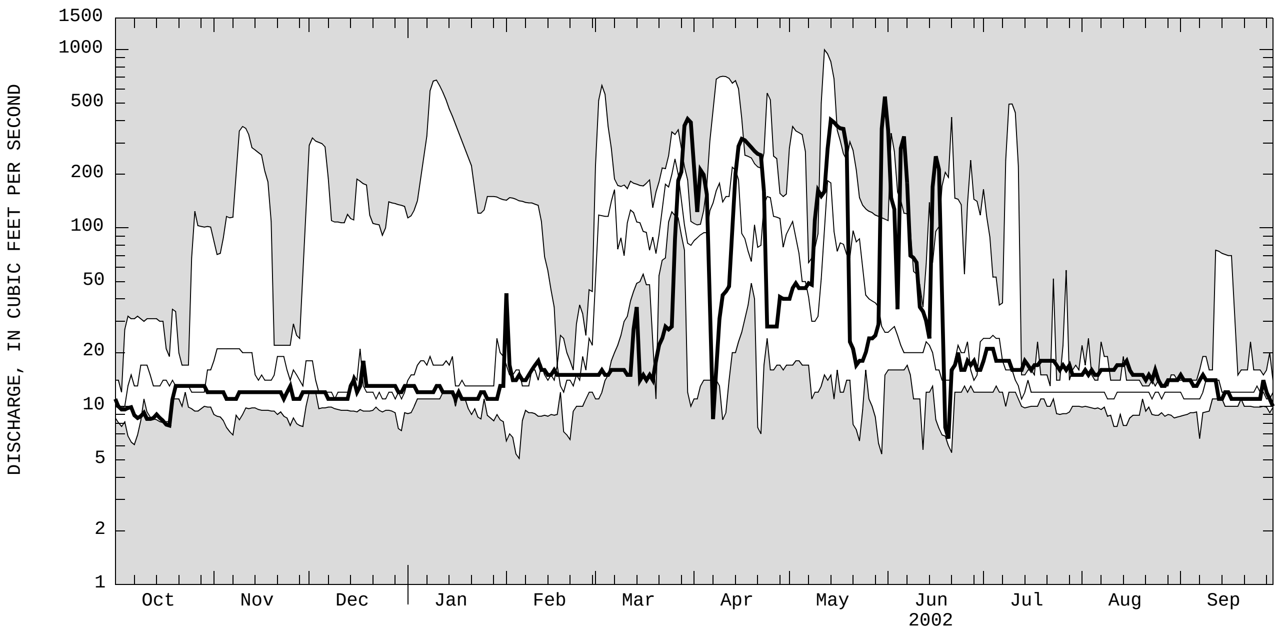
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	12	12	13	43	15	215	40	354	18	15	15
2	10	12	12	13	17	15	123	46	147	21	16	14
3	9.6	12	12	13	14	16	212	49	127	21	15	14
4	9.6	12	12	12	14	15	199	46	35	21	16	14
5	9.8	11	12	12	15	15	154	46	281	18	15	13
6	9.9	11	12	12	14	16	47	46	326	18	15	13
7	8.9	11	11	12	14	16	8.5	49	179	18	16	14
8	8.6	11	11	12	15	16	17	48	70	18	16	15
9	8.8	12	11	12	16	16	31	111	68	18	16	14
10	9.2	12	11	13	17	16	42	162	64	16	16	14
11	8.5	12	11	13	18	15	44	151	36	16	16	14
12	8.5	12	11	12	16	15	47	160	34	16	17	14
13	8.6	12	11	12	16	27	88	279	30	16	17	11
14	9.0	12	13	12	15	36	201	404	24	18	17	11
15	8.6	12	14	12	15	14	287	391	170	17	18	12
16	8.3	12	12	11	16	15	316	373	252	16	16	12
17	7.9	12	13	12	15	14	310	362	212	17	15	11
18	7.8	12	18	11	15	15	296	359	56	17	15	11
19	11	12	13	11	15	14	283	285	7.6	18	15	11
20	13	12	13	11	15	18	270	23	6.6	18	15	11
21	13	12	13	11	15	22	260	21	16	18	14	11
22	13	12	13	11	15	24	256	17	17	18	15	11
23	13	11	13	11	15	28	160	18	20	18	14	11
24	13	12	13	12	15	27	28	18	16	17	16	11
25	13	13	13	12	15	28	28	20	16	16	14	11
26	13	11	13	11	15	87	28	24	18	17	13	11
27	13	11	13	11	15	185	28	24	17	16	13	14
28	13	11	13	11	15	207	41	25	18	17	14	12
29	13	12	12	11	---	374	40	29	16	15	14	11
30	12	12	12	13	---	408	40	360	16	15	14	10
31	12	---	13	13	---	391	---	545	---	15	14	---
TOTAL	327.6	353	386	368	455	2120	4099.5	4531	2649.2	538	472	371
MEAN	10.6	11.8	12.5	11.9	16.2	68.4	137	146	88.3	17.4	15.2	12.4
MAX	13	13	18	13	43	408	316	545	354	21	18	15
MIN	7.8	11	11	11	14	14	8.5	17	6.6	15	13	10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	17.3	36.9	48.3	67.2	24.8	119	147	110	51.6	26.4	12.4	14.4
MAX	32.4	142	140	276	71.7	197	225	254	88.3	85.6	15.2	23.7
(WY)	1997	1997	1997	1998	1999	1998	2001	1996	2002	1998	2002	1996
MIN	10.6	9.86	10.1	11.9	12.6	66.6	93.1	24.8	13.1	11.3	9.62	11.2
(WY)	2002	2001	1999	2002	1997	2000	1997	2001	1999	1999	1999	2001

04227995 CONESUS CREEK NEAR LAKEVILLE, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1996 - 2002	
ANNUAL TOTAL	15192.2		16670.3			
ANNUAL MEAN	41.6		45.7		54.1	
HIGHEST ANNUAL MEAN					82.1	1998
LOWEST ANNUAL MEAN					39.1	1999
HIGHEST DAILY MEAN	709	Apr 10	545	May 31	997	May 12 1996
LOWEST DAILY MEAN	7.0	Apr 22	6.6	Jun 20	5.1	Feb 5 1998
ANNUAL SEVEN-DAY MINIMUM	8.4	Oct 12	8.4	Oct 12	6.7	Jan 31 1998
10 PERCENT EXCEEDS	91		156		147	
50 PERCENT EXCEEDS	13		15		15	
90 PERCENT EXCEEDS	11		11		9.8	



2002 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.

04228500 GENESEE RIVER AT AVON, NY

LOCATION.--Lat 42°55'04", long 77°45'27", Livingston County, Hydrologic Unit 04130003, on right bank 250 ft downstream from bridge on U.S. Highway 20 (State Highway 5), 0.3 mi west of Avon, 0.8 mi downstream from Conesus Creek, and 35.6 mi upstream from mouth.

DRAINAGE AREA.--1,673 mi^2.

PERIOD OF RECORD.--August 1955 to current year.

REVISED RECORDS.--WSP 2112; WDR NY-82-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 500.11 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Diurnal fluctuation at low flow caused by powerplant. Flow regulated to some extent by Rushford Lake, at high flows by Mount Morris Lake (see station 04224000), and by Conesus Lake (see station 04227980). Monthly figures of discharge and runoff August 1955 to September 1965 adjusted for change in contents in Rushford Lake and Mount Morris Lake. Telephone gage-height telemeter and satellite gage-height and precipitation telemeter at station. Several measurements of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,500 ft^3/s, June 25, 1972, gage height 40.67 ft; minimum discharge, 47 ft^3/s, Oct. 10-11, 1980, gage height, 13.70 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,610 ft^3/s, Apr. 15, gage height, 28.49 ft; minimum discharge, 125 ft^3/s, Sept. 13, 14, 15, gage height, 13.97 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	276	815	1350	e730	4310	1680	3400	1710	4430	3180	477	177
2	245	775	1680	e660	5540	1640	4040	1590	3500	1470	360	170
3	219	697	1340	e600	3560	1410	3480	1740	3030	1120	303	166
4	202	402	1010	e580	3040	1750	3270	3100	2720	976	272	172
5	188	348	840	e600	3870	2030	2380	3400	3270	809	252	202
6	186	330	732	e610	4640	1970	2700	3320	4120	713	240	181
7	188	308	651	e580	5310	1960	4810	3730	4150	641	246	160
8	198	286	588	e560	5340	2020	5620	3820	4300	578	317	150
9	187	273	544	e570	5210	2100	3460	3780	4190	523	265	147
10	185	264	514	e620	5110	2130	4260	3870	4070	488	235	143
11	182	261	495	e780	5670	2310	5390	3720	4290	566	219	142
12	179	256	478	e980	5290	2370	5410	3500	4150	539	208	135
13	177	250	455	e960	4900	2340	4670	4190	3890	445	211	128
14	180	245	458	e900	4530	2280	5510	5790	3470	398	220	125
15	180	241	764	e840	4250	2150	6290	4110	2280	370	205	127
16	188	239	2280	e800	3960	1930	5030	3300	2850	345	207	294
17	562	235	1810	e760	3540	1960	5230	4420	2680	320	211	1120
18	738	230	1670	e720	2430	2000	5520	5450	3150	305	204	559
19	828	227	2630	e660	1940	1820	5130	6090	3470	311	192	327
20	806	221	2710	e600	1900	1740	2790	5490	3270	386	188	248
21	774	224	2610	e640	1910	2120	1390	5560	2920	364	204	217
22	791	238	2510	e680	2060	2450	1080	5990	2130	326	208	196
23	890	244	2410	e740	2320	2360	1880	5990	1280	373	203	182
24	669	244	2310	730	2350	2280	3530	5720	1080	410	248	173
25	494	258	2230	1610	2170	2200	4360	5410	969	417	280	162
26	826	326	2130	2300	1800	2160	4140	5100	898	255	348	158
27	937	1070	1740	2280	1680	3650	2210	4700	1170	449	273	181
28	968	910	1240	2180	1780	4160	1090	3750	3690	369	217	307
29	968	726	e1070	2110	---	3900	1980	2570	4480	407	200	739
30	908	942	e880	2200	---	3590	2130	2640	4250	584	193	567
31	854	---	e800	2930	---	3590	---	4560	---	639	184	---
TOTAL	15173	12085	42929	32510	100410	72050	112180	128110	94147	19076	7590	7755
MEAN	489	403	1385	1049	3586	2324	3739	4133	3138	615	245	258
MAX	968	1070	2710	2930	5670	4160	6290	6090	4480	3180	477	1120
MIN	177	221	455	560	1680	1410	1080	1590	898	255	184	125

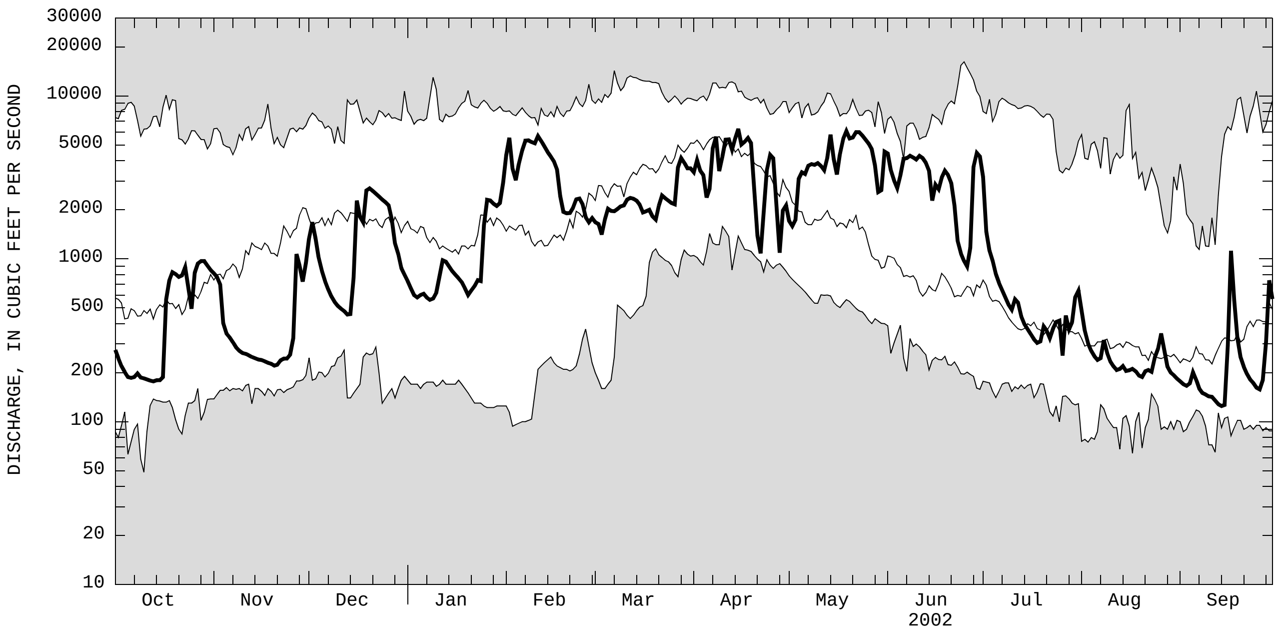
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1033	1565	2215	2022	2343	4050	4544	2369	1364	819	507	577
MAX	5146	3756	5942	6715	6036	8916	7846	6516	4906	7032	2408	4569
(WY)	1978	1997	1973	1998	1990	1956	1993	1996	1989	1972	1992	1977
MIN	145	182	325	155	397	1813	1672	613	281	172	142	111
(WY)	1964	1965	1961	1961	1958	1960	1995	1985	1999	1962	1965	1955

e Estimated

04228500 GENESEE RIVER AT AVON, NY

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1955 - 2002	
ANNUAL TOTAL	484142		644015			
ANNUAL MEAN	1326		1764		1948	
HIGHEST ANNUAL MEAN					2846	1978
LOWEST ANNUAL MEAN					1130	1965
HIGHEST DAILY MEAN	7290	Apr 18	6290	Apr 15	16200	Jun 25 1972
LOWEST DAILY MEAN	101	Aug 13	125	Sep 14	49	Oct 10 1980
ANNUAL SEVEN-DAY MINIMUM	105	Aug 10	135	Sep 9	88	Aug 1 1955
10 PERCENT EXCEEDS	3830		4380		5290	
50 PERCENT EXCEEDS	680		968		1090	
90 PERCENT EXCEEDS	155		199		221	



2002 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.

04229500 HONEOYE CREEK AT HONEOYE FALLS, NY

LOCATION.--Lat 42°57'26", long 77°35'21", Monroe County, Hydrologic Unit 04130003, on right bank 25 ft downstream from bridge on State Highway 65 at Honeoye Falls, and 15.3 mi upstream from mouth.
DRAINAGE AREA.--196 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1945 to September 1970, October 1972 to current year.
REVISED RECORDS.--WDR NY-82-3: Drainage area.
GAGE.--Water-stage recorder. Datum of gage is 610.00 ft above NGVD of 1929. Prior to Sept. 30, 1970, water-stage recorder at same site at datum 609.76 ft above NGVD of 1929.
REMARKS.--Records good except those for estimated daily discharges, which are fair. Outlet of Honeoye Lake not controlled. Some diversion from, and regulation of Hemlock and Canadice Lakes for water supply of city of Rochester. Diurnal fluctuation at low flow caused by mills upstream from station. Prior to 1967 water year, published monthly figures adjusted for change in contents in, and diversion from, Hemlock and Canadice Lakes. During low-water periods the village of Honeoye Falls pumps water from two deep wells with maximum pumping capacity of 600 gal/min (1.33 ft^3/s). This pumped water enters creek upstream from gage. Satellite gage-height telemeter at station. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,630 ft^3/s, Mar. 28, 1950, gage height, 6.42 ft, datum then in use; minimum discharge, no flow, Aug. 12, 15, 2001.
EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 23, 1972, reached a stage of about 6.3 ft, present datum; discharge, about 6,600 ft^3/s, from rating curve extended above 2,700 ft^3/s.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 2	0600	*1,330	*3.36	May 14	1100	1,290	3.31

Minimum discharge, 0.09 ft^3/s, Sept. 13, 14, 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	2.7	22	e30	506	e70	188	169	370	29	2.0	0.48
2	1.8	2.9	18	e28	1240	e70	175	155	211	25	1.5	0.45
3	1.6	3.2	15	e28	730	87	588	189	129	21	1.1	0.41
4	1.3	2.9	12	e30	440	e80	711	158	98	18	0.85	0.36
5	1.0	2.8	9.9	e32	287	e60	418	118	231	15	0.74	0.32
6	1.8	3.0	8.5	40	e230	83	338	98	384	12	0.59	0.28
7	1.3	3.2	8.7	39	e200	103	298	94	297	9.4	0.54	0.20
8	1.1	3.2	8.8	39	175	103	245	108	184	7.3	0.50	0.18
9	0.82	3.2	7.1	44	166	111	219	122	135	6.2	0.45	0.16
10	0.76	2.9	6.3	46	159	136	238	161	104	5.1	0.37	0.18
11	0.70	3.0	6.8	81	240	129	207	126	82	4.1	0.25	0.29
12	0.63	2.9	6.9	84	204	125	170	126	69	3.7	0.20	0.13
13	0.61	3.0	7.1	71	e180	113	183	482	62	3.2	0.18	0.11
14	0.59	3.3	9.6	55	e120	104	690	1130	72	2.6	0.18	0.09
15	0.67	3.2	36	55	145	94	967	860	139	2.1	0.25	0.47
16	0.64	3.2	52	48	161	94	635	462	328	1.7	0.53	0.44
17	0.90	3.0	40	46	164	102	373	376	206	1.4	0.46	0.55
18	0.79	2.9	89	40	115	99	278	469	137	1.3	0.39	0.55
19	0.82	3.1	125	e34	104	100	220	527	97	1.2	0.36	0.45
20	0.74	3.4	106	e40	126	98	182	352	73	1.2	0.37	0.32
21	1.7	3.1	84	42	119	162	151	260	57	1.1	0.37	0.26
22	1.9	3.6	75	35	127	158	129	210	49	1.3	0.51	0.22
23	1.9	3.9	68	35	121	132	116	173	44	6.8	0.36	0.20
24	2.8	3.7	70	46	98	136	105	146	40	3.4	0.49	0.15
25	4.4	6.0	74	73	100	127	93	130	36	1.9	0.46	0.14
26	4.3	5.5	57	81	94	143	92	126	33	2.6	0.47	0.12
27	3.8	12	e40	71	94	756	80	122	38	2.3	0.47	3.5
28	3.5	11	e42	63	90	469	87	102	44	3.6	0.45	4.3
29	3.3	13	e36	59	---	270	243	88	43	3.7	0.51	1.4
30	3.2	19	e34	66	---	237	217	348	35	4.2	0.52	1.8
31	2.9	---	e32	97	---	234	---	421	---	2.8	0.51	---
TOTAL	54.57	141.8	1206.7	1578	6535	4785	8636	8408	3827	204.2	16.93	18.51
MEAN	1.76	4.73	38.9	50.9	233	154	288	271	128	6.59	0.55	0.62
MAX	4.4	19	125	97	1240	756	967	1130	384	29	2.0	4.3
MIN	0.59	2.7	6.3	28	90	60	80	88	33	1.1	0.18	0.09

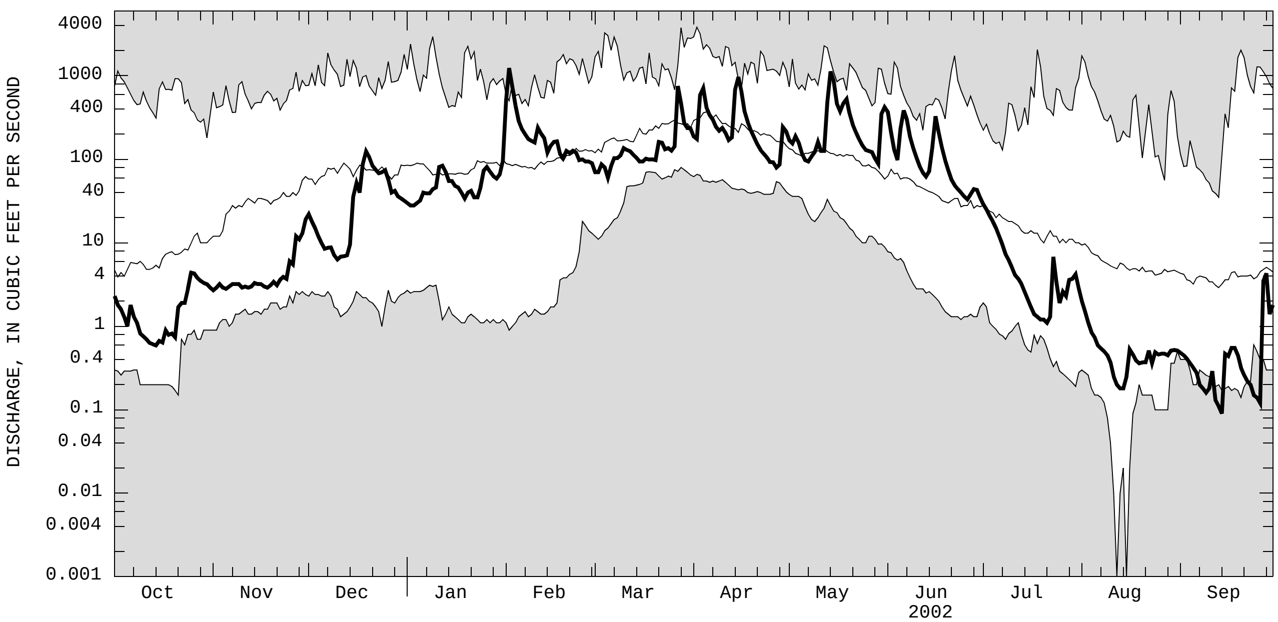
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	40.3	74.0	126	131	165	295	330	175	76.9	31.7	21.6	20.4
MAX	443	345	493	486	664	685	1146	608	344	377	336	538
(WY)	1978	1978	1946	1998	1976	1976	1993	1996	1989	1992	1992	1977
MIN	0.45	2.06	2.04	2.15	10.3	107	50.0	23.7	3.19	0.94	0.24	0.62
(WY)	1964	1961	1961	1961	1958	1965	1946	1995	1995	2001	2001	2002

e Estimated

04229500 HONEOYE CREEK AT HONEOYE FALLS, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1946 - 2002	
ANNUAL TOTAL	29942.38		35411.71			
ANNUAL MEAN	82.0		97.0		124	
HIGHEST ANNUAL MEAN					238	1993
LOWEST ANNUAL MEAN					46.4	1965
HIGHEST DAILY MEAN	1700	Apr 9	1240	Feb 2	3820	Apr 2 1993
LOWEST DAILY MEAN	0.00	Aug 12	0.09	Sep 14	0.00	Aug 12 2001
ANNUAL SEVEN-DAY MINIMUM	0.01	Aug 10	0.16	Sep 8	0.01	Aug 10 2001
10 PERCENT EXCEEDS	248		239		325	
50 PERCENT EXCEEDS	12		38		52	
90 PERCENT EXCEEDS	0.28		0.46		2.3	



2002 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.
ZERO FLOWS ARE PLOTTED AS 0.001 DISCHARGE, WHICH MAY INCLUDE THE LOWEST DAILY MEAN FOR PERIOD OF RECORD.

04229500 HONEOYE CREEK AT HONEOYE FALLS, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954, 1998 to current year.
CHEMICAL DATA: Water years 1954 (a), 1998 to current year (e).
NUTRIENT DATA: Water years 1954 (a), 1998 to current year (e).
INSTRUMENTATION.--Automatic water sampler since March 1998.
COOPERATION.--Water-quality samples were collected and analyzed by the Monroe County Environmental Health Laboratory at Rochester, N.Y.
REMARKS.--Water-quality records for this site were collected and reported in local standard time.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	Ending time	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	TUR-BID-ITY (NTU) (00076)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
OCT													
05...	0805	--	1.1	4.2	41	22	--	--	<.01	.24	<.02	.009	.030
09...	0845	--	.83	3.4	46	21	--	--	<.01	.31	<.02	.009	.030
15...	0905	--	.68	3.3	51	21	--	--	<.01	.36	<.02	.013	.035
18-21	0920	0820	.80	6.4	49	22	--	--	<.01	.14	.04	.011	.045
22-25	0850	0750	2.5	8.0	46	20	--	--	<.01	.50	.03	.016	.055
25-29	0835	0835	3.9	3.0	40	19	--	--	<.01	.38	<.02	.024	.040
OCT 29-NOV 01	1040	0840	3.0	2.2	39	21	--	--	.01	.17	<.02	.015	.030
01-05	0925	0825	2.9	4.3	44	27	--	--	.06	.22	.02	.013	.035
05-09	0935	0835	3.1	2.5	44	32	--	--	.02	.31	.02	.014	.025
09-13	0920	0820	3.0	1.7	52	49	--	--	.02	.24	.03	.010	.020
13-15	0915	0815	3.2	2.1	41	49	--	--	<.01	.26	.02	.008	.025
21-22	1035	1735	3.4	3.2	50	83	--	--	<.01	.29	<.02	.006	.020
26-26	1005	1805	4.8	4.7	59	86	--	--	<.01	.18	.03	.008	.025
26-29	1905	0905	11	7.3	47	75	--	--	.03	.37	<.03	.009	.035
29-30	0935	1635	15	5.1	62	87	--	--	.10	.60	.11	.026	.060
NOV 30-DEC 03	1735	0835	20	7.6	58	86	--	--	.02	.37	.06	.014	.050
03-06	0955	0855	11	5.1	59	92	--	--	<.01	.14	.02	.007	.025
06-10	0855	0755	8.1	3.4	68	91	--	--	<.01	.32	<.02	.007	.025
13...	0925	--	7.2	3.7	65	85	--	--	<.01	.11	<.02	.004	.015
13-14	0940	1240	6.9	3.6	63	85	--	--	<.01	.25	.03	.006	.030
14-15	1340	2040	27	21	74	83	--	--	<.01	.13	.19	.012	.070
15-17	2140	0840	50	19	70	94	--	--	<.01	.34	.18	.008	.060
17-18	1020	2120	65	38	56	68	29	<6	<.01	.81	.62	.011	.095
18-20	2220	0920	123	63	57	70	34	<6	<.01	1.1	.94	.015	.130
27-31	0915	0815	37	7.2	39	55	--	--	<.01	.59	.27	.007	.030
27...	0925	--	40	6.0	38	59	--	--	.02	<.10	.35	.005	.020
DEC 31-JAN 03	0910	0810	30	6.0	47	60	--	--	<.01	.10	.28	.004	.025
03-07	0935	0835	34	4.5	38	47	--	--	<.01	<.10	.18	.003	.015
07-10	0920	0820	41	4.1	53	51	--	--	<.01	.31	.20	.004	.020
10-14	0935	0835	73	11	64	60	--	--	<.01	.40	.60	.008	.035
14-18	0945	0845	49	6.7	58	53	--	--	<.01	.46	.67	.006	.020
18-22	0915	0815	38	4.0	61	54	--	--	<.01	.28	.40	.004	.015
22-24	0925	0825	36	4.0	53	48	--	--	<.01	.51	.25	.004	.020
24-26	0925	1225	69	7.5	54	47	--	--	<.01	.31	.33	.004	.035
26-28	1325	0825	72	10	72	58	--	--	<.01	.32	.55	.004	.030
28-31	0925	0925	66	7.9	61	43	--	--	<.01	.36	.27	.004	.020
JAN 31-FEB 02	0955	1654	636	200	62	29	--	--	<.01	.63	.78	.013	.290
02-04	1755	0855	747	84	41	25	--	--	.01	.64	.99	.012	.128
04-07	0945	0945	286	16	44	37	--	--	<.01	.43	.64	.008	.061
21-25	0925	0824	115	9.3	47	34	--	--	<.01	.32	.52	.005	.034
25-28	0905	0804	95	7.9	45	31	--	--	<.01	.29	.24	<.003	.031
FEB 28-MAR 04	0925	0824	78	5.7	46	31	--	--	<.01	.48	.19	.003	.025
04-06	0925	0225	68	7.7	47	33	--	--	<.01	.32	.23	.004	.036
07-10	0940	1640	111	12	55	35	--	--	<.01	.32	.28	<.003	.030
11-14	0925	0824	117	8.3	55	32	--	--	<.01	.40	.28	.003	.027
14-18	0955	0854	98	10	51	31	--	--	<.01	.39	.19	<.003	.034
18-20	0935	1135	98	6.1	56	32	--	--	<.01	.42	.16	<.003	.030
20-21	1235	0834	119	8.8	52	33	--	--	<.01	.38	.23	<.003	.026
21-22	1005	0105	173	18	59	33	--	--	<.01	.42	.24	<.003	.043
22-25	0205	0905	140	8.6	57	31	--	--	<.01	.31	.20	<.003	.029
25-26	0935	1134	122	5.4	54	30	--	--	<.01	.31	.26	<.003	.020
APR													
01-04	0940	0839	396	48	38	22	39	6	<.01	.55	.34	.005	.103
11-12	0910	1109	188	19	58	36	--	--	.03	.79	.27	.003	.050
12-14	1210	0810	256	81	62	39	168	17	.02	1.3	.44	.007	.300
15-18	0900	0759	578	62	36	23	64	7	<.01	.65	.36	.007	.123
18-22	0900	0759	193	22	29	18	--	--	.01	.60	.12	.007	.077
22-25	0835	0734	112	7.1	30	19	--	--	.02	.47	.08	.009	.036
25-28	0825	1525	85	7.3	31	19	--	--	.03	.36	.03	.005	.036
28-29	1625	0725	160	32	35	20	34	6	<.01	.54	.07	.006	.085
29-29	0825	1925	259	64	33	19	54	8	<.01	.65	.21	.007	.159

04229500 HONEOYE CREEK AT HONEOYE FALLS, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	Ending time	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	TUR-BID-ITY (NTU) (00076)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
APR 29-MAY 02	2025	0725	192	20	32	18	--	--	<.01	.65	.17	.006	.056
02-05	0845	0744	165	15	40	23	--	--	<.01	.39	.13	.005	.051
06-09	0905	0804	101	12	44	23	--	--	<.01	.57	.07	.005	.049
09-12	0845	0744	135	16	36	19	--	--	<.01	.59	.05	.005	.047
12-13	0845	0744	220	26	35	19	--	--	.01	.56	.12	.007	.089
13-14	0815	1314	800	140	30	14	--	--	.02	.99	.56	.012	.279
14-16	1415	0715	876	83	24	13	--	--	<.01	.73	.64	.011	.196
16-20	0930	0829	445	32	28	16	--	--	.01	.52	.29	.009	.096
24-28	0815	0714	127	13	22	14	--	--	<.01	.50	.05	.005	.033
28-31	0835	0935	227	52	26	15	51	10	<.01	.73	.12	.006	.152
MAY 31-JUN 03	1005	0805	292	49	26	14	46	6	.02	.82	.26	.013	.141
03-04	0850	2250	107	14	27	14	--	--	.01	.62	.09	.009	.069
04-05	2350	1949	187	39	29	15	40	<6	<.01	.69	.16	.009	.117
05-06	2050	0750	400	170	25	13	--	--	.01	1.1	.38	.012	.392
06-10	0820	0719	228	36	27	14	40	7	.01	.70	.23	.015	.128
10-13	0805	0704	80	14	27	13	--	--	<.01	.61	.07	.008	.064
13-14	0840	0739	62	15	33	17	--	--	<.01	.68	.16	.011	.079
14-16	0840	0740	149	40	28	12	--	--	.02	.84	.20	.013	.129
16-17	0840	0739	300	91	32	13	--	--	.01	1.1	.43	.023	.267
17-20	0940	0740	126	21	34	17	--	--	.02	.75	.40	.018	.089
20-24	0840	0739	52	11	29	12	--	--	.02	.62	.05	.009	.057
24-27	0845	0144	35	10	31	14	--	--	.02	.63	.12	.007	.052
27-27	0840	2340	42	42	26	11	--	--	.02	1.0	.14	.018	.154
JUN 28-JUL 01	0040	0740	40	11	30	11	--	--	.01	.74	.11	.013	.067
01-05	0905	0804	22	13	30	13	--	--	.03	.74	.09	.014	.061
05-08	0830	0729	11	11	35	31	--	--	.05	.77	.21	.018	.069
08-11	0935	0834	5.8	4.7	33	27	--	--	.01	.77	.19	.018	.049
11-15	0910	0809	3.2	7.2	32	27	--	--	.03	.79	.08	.016	.051
15-18	0835	0734	1.7	9.2	40	27	--	--	.02	.70	.06	.019	.034
18-22	0815	0714	1.2	7.4	48	42	--	--	.02	.62	.10	.018	.053
22-25	0905	0804	4.0	11	51	33	--	--	.02	.82	.17	.025	.075
25-29	0855	0754	2.7	6.8	44	29	11	<5	.02	.63	.09	.019	.055
JUL 29-AUG 01	0915	0814	3.5	6.4	34	17	13	<5	.02	.76	.10	.019	.056
01-05	0845	0744	1.3	6.8	38	22	--	--	.02	.68	.12	.023	.069
05-08	0825	0724	.59	5.7	46	26	--	--	.02	.80	.12	.020	.068
08-12	0825	0724	.37	6.6	49	28	--	--	.03	.78	.13	.027	.078
12-15	0840	0739	.18	9.1	68	47	--	--	.02	.72	.20	.026	.072
15-19	0840	0739	.43	10	60	31	--	--	.04	.77	.23	.035	.077
19-22	0905	0804	.37	9.1	64	38	--	--	.04	.74	.20	.027	.076
22-26	0725	0624	.46	9.4	59	28	--	--	.03	.88	.19	.027	.080
26-30	0905	0804	.48	8.2	51	26	--	--	.01	.74	.11	.019	.062
AUG 30-SEP 03	0820	0719	.49	8.9	47	30	--	--	<.01	.76	.10	.017	.076
03-05	0805	0705	.37	9.1	44	29	--	--	.02	1.0	.08	.015	.062
05-09	0815	0714	.23	5.7	90	50	--	--	.04	.73	.11	.017	.096
09-12	1105	0805	.21	8.7	59	31	--	--	.05	1.1	.15	.024	.100
12-16	0840	0739	.24	6.3	61	35	--	--	.03	.79	.14	.021	.083
16-19	0815	0714	.50	5.7	43	16	--	--	.01	.72	.10	.020	.075
19-23	0835	0734	.29	6.5	54	20	--	--	.02	.68	.06	.015	.066
23-26	0745	0644	.15	5.7	60	28	--	--	.02	.64	.05	.013	.066
26-27	0850	0350	.12	3.8	68	33	--	--	.02	.54	.06	.011	.059
27-27	0450	1950	4.1	13	56	27	--	--	.02	.76	.23	.040	.130
27-30	2050	0750	2.8	6.6	45	17	--	--	<.01	.56	.09	.020	.070
SEP 30-OCT 03	0825	0724	1.9	3.9	30	17	--	--	.02	.66	.08	.011	.054

04230380 OATKA CREEK AT WARSAW, NY

LOCATION.--Lat 42°44'39", long 78°08'16", Wyoming County, Hydrologic Unit 04130003, on right bank 400 ft downstream from bridge on Court Street, Warsaw.
DRAINAGE AREA.--39.1 mi^2.
PERIOD OF RECORD.--December 1963 to current year.
REVISED RECORDS.--WSP 2112; WDR NY-82-3: Drainage area.
GAGE.--Water-stage recorder. Datum of gage is 987.15 ft above NGVD of 1929 (levels by Corps of Engineers).
REMARKS.--Records fair. Telephone gage-height telemeter and satellite gage-height and precipitation telemeter at station. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,110 ft^3/s, July 8, 1998, gage height 9.90 ft; minimum discharge, 0.90 ft^3/s, Aug. 1, 1965.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 690 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 1	1400	*1,980	*6.40	May 30	0400	1,490	5.39
Apr. 3	0445	1,130	4.56	Jun. 14	2300	1,320	5.01

Minimum discharge, 2.7 ft^3/s, Sept. 9, 10, 11, 12, 13, 14, 25.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	11	33	e21	1200	69	111	70	109	15	5.8	3.5
2	5.2	11	22	e21	276	66	161	76	62	14	5.6	3.5
3	4.9	14	17	e22	137	154	535	82	48	13	4.8	4.0
4	4.1	13	16	22	100	89	143	58	57	12	4.4	4.8
5	4.2	11	14	22	81	73	99	49	237	11	4.4	3.7
6	11	9.6	19	23	80	87	81	44	150	11	4.1	3.4
7	8.4	9.4	16	23	73	98	71	52	89	10	4.1	3.3
8	5.9	9.0	13	23	70	118	65	53	63	9.9	4.0	3.1
9	5.6	11	17	25	73	150	71	106	51	10	3.9	2.9
10	5.2	10	11	40	113	183	66	87	44	12	3.7	2.9
11	5.0	10	10	50	173	107	55	52	39	10	3.6	3.0
12	5.1	9.4	9.2	42	e90	105	50	122	38	9.1	3.4	2.9
13	5.1	8.4	11	39	73	133	81	283	40	8.9	5.2	2.9
14	5.3	8.5	38	33	e68	119	213	481	186	8.4	4.0	2.9
15	7.5	9.9	104	34	66	100	223	187	274	8.4	3.7	18
16	7.4	10	32	33	84	104	104	99	99	7.8	4.9	25
17	18	9.5	46	33	80	78	79	184	64	7.5	6.2	6.0
18	14	8.7	133	e30	e64	79	67	172	49	7.1	4.6	4.5
19	8.7	9.5	54	e28	63	72	63	105	39	7.6	4.0	4.0
20	7.0	15	48	e28	84	116	62	80	32	7.9	5.7	3.6
21	11	13	45	28	177	112	57	67	27	7.2	4.2	3.7
22	19	11	37	28	113	83	57	56	25	7.5	8.1	3.4
23	13	10	40	43	81	79	56	48	23	17	11	3.4
24	11	9.7	67	e240	70	79	50	47	21	7.9	17	3.0
25	12	25	37	159	79	81	49	47	20	5.8	8.4	3.4
26	20	22	e25	83	104	134	46	56	20	8.1	5.2	3.3
27	27	16	e22	77	96	230	42	42	26	7.2	4.4	26
28	18	15	e21	113	73	156	205	36	23	23	4.1	23
29	15	33	e21	160	---	158	191	70	17	13	4.1	7.8
30	13	35	e21	360	---	273	100	618	16	12	4.0	5.3
31	11	---	e20	217	---	133	---	224	---	7.3	3.7	---
TOTAL	313.8	397.6	1019.2	2100	3841	3618	3253	3753	1988	316.6	164.3	190.2
MEAN	10.1	13.3	32.9	67.7	137	117	108	121	66.3	10.2	5.30	6.34
MAX	27	35	133	360	1200	273	535	618	274	23	17	26
MIN	4.1	8.4	9.2	21	63	66	42	36	16	5.8	3.4	2.9
CFSM	0.26	0.34	0.84	1.73	3.51	2.98	2.77	3.10	1.69	0.26	0.14	0.16
IN.	0.30	0.38	0.97	2.00	3.65	3.44	3.09	3.57	1.89	0.30	0.16	0.18

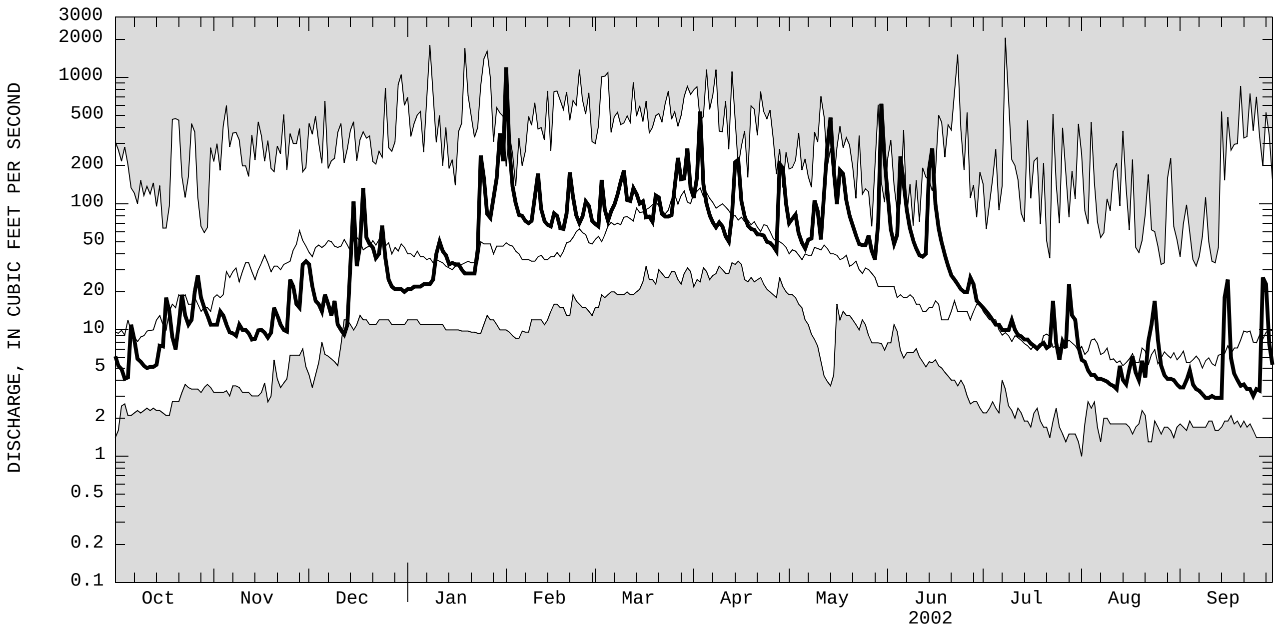
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	24.5	49.1	66.6	68.9	78.7	122	112	53.3	31.7	19.2	13.3	18.7
MAX	76.7	131	130	234	235	228	185	129	165	145	86.8	166
(WY)	1978	1986	1978	1979	1976	1979	1996	1984	1989	1998	1992	1977
MIN	2.76	5.09	17.2	15.1	22.5	49.2	33.2	16.9	6.36	2.52	2.36	1.81
(WY)	1965	1965	1965	1981	1980	1981	1995	1995	1965	1965	1965	1964

e Estimated

04230380 OATKA CREEK AT WARSAW, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1964 - 2002	
ANNUAL TOTAL	14453.0		20954.7			
ANNUAL MEAN	39.6		57.4		54.9	
HIGHEST ANNUAL MEAN					83.3	1998
LOWEST ANNUAL MEAN					29.6	1965
HIGHEST DAILY MEAN	1150	Apr 8	1200	Feb 1	2050	Jul 8 1998
LOWEST DAILY MEAN	1.8	Aug 10	2.9	Sep 9	1.0	Aug 1 1965
ANNUAL SEVEN-DAY MINIMUM	1.8	Aug 9	2.9	Sep 8	1.4	Jul 26 1965
ANNUAL RUNOFF (CFSM)	1.01		1.47		1.40	
ANNUAL RUNOFF (INCHES)	13.75		19.94		19.08	
10 PERCENT EXCEEDS	74		133		122	
50 PERCENT EXCEEDS	20		25		29	
90 PERCENT EXCEEDS	3.3		4.2		5.1	



2002 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.

04230500 OATKA CREEK AT GARBUTT, NY

LOCATION.--Lat 43°00'36", long 77°47'30", Monroe County, Hydrologic Unit 04130003, on right bank 40 ft downstream from bridge on Union Street in Garbutt, 1.5 mi west of Scottsville, and 4.2 mi upstream from mouth.
DRAINAGE AREA.--200 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1945 to current year.
REVISED RECORDS.--WSP 2112; WDR NY-82-3: Drainage area. WDR NY 1971: 1960(M). WDR NY 1993: 1991. WDR NY 1997: 1996 (P).
GAGE.--Water-stage recorder. Datum of gage is 560.86 ft above NGVD of 1929.
REMARKS.--Records good except those for estimated daily discharges, which are fair. Telephone gage-height telemeter and satellite gage-height and precipitation telemeter at station. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,050 ft^3/s, Mar. 31, 1960, gage height, 8.64 ft; minimum discharge, 3.3 ft^3/s, Sept. 11, 12, 1958; minimum gage height, 1.88 ft, June 19, 1959, result of regulation.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 3	0430	*2,080	*5.77	No other peak greater than base discharge.			

Minimum discharge, 20 ft^3/s, Oct. 4, gage height, 2.16 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	26	40	66	671	232	490	579	695	117	55	34
2	23	26	53	64	1490	214	398	408	671	109	52	33
3	23	28	53	64	1780	227	709	390	453	103	50	33
4	22	27	43	64	902	297	994	376	294	98	49	33
5	22	27	38	66	e460	281	923	317	303	96	48	33
6	27	27	34	66	e360	228	580	280	464	92	47	32
7	26	27	33	66	e320	262	441	258	566	88	47	32
8	25	27	32	63	300	307	385	254	485	85	46	31
9	25	27	31	66	279	356	356	301	320	83	45	31
10	24	27	34	73	290	414	340	389	243	79	44	31
11	24	27	31	147	424	399	323	371	203	78	44	31
12	26	27	31	181	461	402	294	315	180	76	43	30
13	24	26	33	168	440	382	295	530	167	75	43	30
14	23	27	34	144	e330	376	448	1270	222	73	42	30
15	23	26	48	121	e290	362	603	1300	399	71	42	32
16	25	27	147	117	306	323	628	1130	477	69	42	34
17	25	25	140	116	345	304	570	806	577	68	41	31
18	27	26	129	107	338	275	395	633	463	67	40	30
19	26	26	236	84	277	253	328	626	304	66	39	30
20	26	26	214	81	269	253	297	570	227	65	39	29
21	26	28	140	99	314	331	276	458	186	63	39	29
22	33	27	125	92	400	362	262	382	162	61	39	29
23	27	26	113	92	396	304	248	344	149	69	38	29
24	24	26	103	109	341	286	239	318	138	60	38	28
25	25	28	146	292	248	285	221	296	130	58	37	29
26	28	28	e120	367	276	287	210	301	128	57	35	28
27	28	27	e80	366	295	464	199	294	134	58	35	38
28	27	27	e74	254	297	524	233	283	165	63	34	38
29	26	32	e70	231	---	529	496	261	164	58	34	30
30	26	35	e66	277	---	480	623	319	130	58	34	29
31	27	---	62	343	---	469	---	465	---	59	33	---
TOTAL	787	816	2533	4446	12899	10468	12804	14824	9199	2322	1294	937
MEAN	25.4	27.2	81.7	143	461	338	427	478	307	74.9	41.7	31.2
MAX	33	35	236	367	1780	529	994	1300	695	117	55	38
MIN	22	25	31	63	248	214	199	254	128	57	33	28
CFSM	0.13	0.14	0.41	0.72	2.30	1.69	2.13	2.39	1.53	0.37	0.21	0.16
IN.	0.15	0.15	0.47	0.83	2.40	1.95	2.38	2.76	1.71	0.43	0.24	0.17

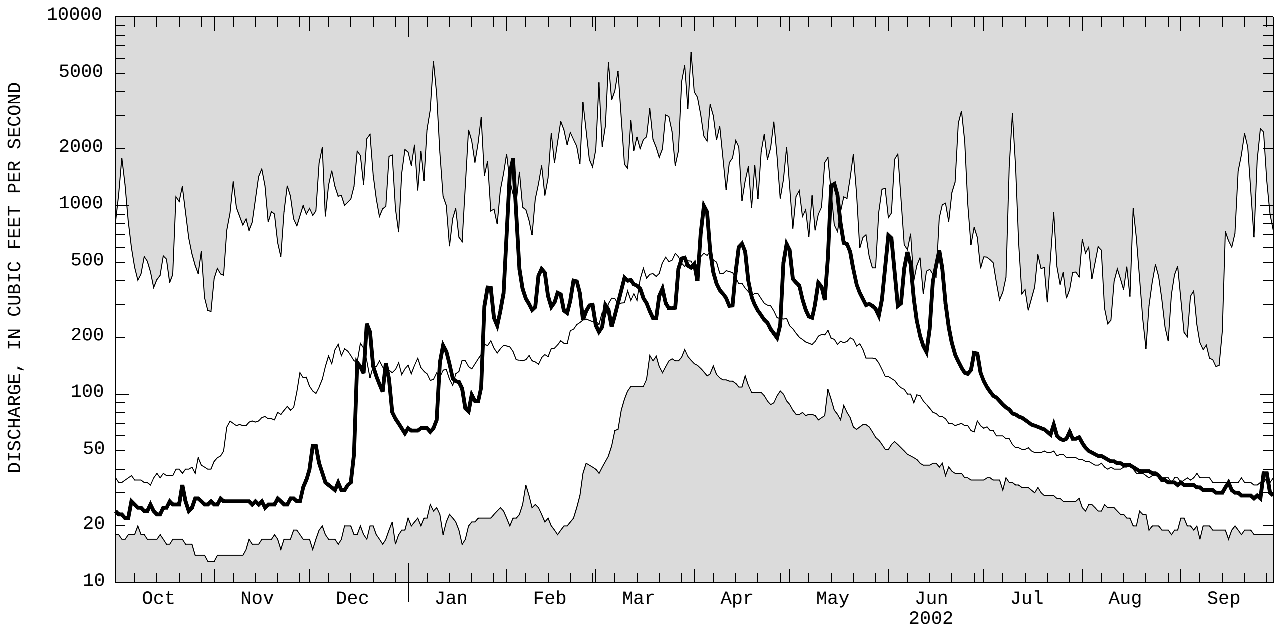
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	76.4	137	218	236	301	541	502	251	137	76.7	57.5	60.0
MAX	400	567	798	881	868	1048	1069	581	760	355	294	748
(WY)	1978	1986	1978	1998	1976	1956	1947	1984	1989	1998	1992	1977
MIN	18.0	17.2	20.1	22.9	33.4	244	117	99.7	45.6	31.8	22.5	19.2
(WY)	1966	1965	1961	1961	1958	1965	1946	1995	1949	1965	1965	1965

e Estimated

04230500 OATKA CREEK AT GARBUTT, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1946 - 2002	
ANNUAL TOTAL	60646		73329			
ANNUAL MEAN	166		201		215	
HIGHEST ANNUAL MEAN					371	1978
LOWEST ANNUAL MEAN					117	1965
HIGHEST DAILY MEAN	2640	Apr 9	1780	Feb 3	6500	Mar 31 1960
LOWEST DAILY MEAN	21	Sep 10	22	Oct 4	13	Oct 30 1966
ANNUAL SEVEN-DAY MINIMUM	21	Sep 14	24	Oct 1	14	Oct 26 1966
ANNUAL RUNOFF (CFSM)	0.83		1.00		1.08	
ANNUAL RUNOFF (INCHES)	11.28		13.64		14.64	
10 PERCENT EXCEEDS	444		463		510	
50 PERCENT EXCEEDS	70		96		108	
90 PERCENT EXCEEDS	25		27		30	



2002 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.

04230500 OATKA CREEK AT GARBUTT, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954, 1962, 1971, 1975 to 1977, 1989-90, 1997 to current year.
CHEMICAL DATA: Water years 1954 (a), 1962 (a), 1971 (a), 1975 (b), 1976-77 (e), 1989 (c), 1990 (d), 1997 to current year (e).
NUTRIENT DATA: Water years 1954 (a), 1962 (a), 1971 (a), 1975 (b), 1976-77 (e), 1989 (c), 1990 (d), 1997 to current year (e).
SEDIMENT DATA: Water years 1975 to 1977 (e), 1989 (c), 1990 (d), 1991 (a).
PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1959 to March 1961.
SUSPENDED SEDIMENT DISCHARGE: 1975 to September 1977.
INSTRUMENTATION.--Automatic water sampler since July 1997.
COOPERATION.--Water-quality samples were collected and analyzed by the Monroe County Environmental Health Laboratory at Rochester, N.Y.
REMARKS.--Water-quality records for this site were collected and reported in local standard time.
EXTREMES FOR PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT CONCENTRATION: Maximum daily mean, 282 mg/L, Aug. 17, 1997, minimum daily mean, 0 mg/L, Apr. 14, 1975.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 2,980 tons, Mar. 5, 1976, minimum daily, 0 ton, Apr, 14, 1975.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	Ending time	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	TUR-BID-ITY (NTU) (00076)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
OCT													
01-05	0915	0815	23	1.3	64	546	--	--	<.01	.30	1.0	.005	.020
05-09	0850	0750	25	2.3	68	544	5	<3	<.01	<.10	1.1	.005	.020
09-11	0935	0835	24	1.7	59	520	<3	<3	<.01	<.10	1.1	.005	.015
11-15	0915	0815	24	3.2	62	555	5	<3	<.01	N.23	1.0	.004	.020
15-18	0935	0835	25	2.0	59	544	<3	<3	<.01	.25	.92	.006	.020
18-22	1010	0910	26	2.7	66	528	4	<3	<.01	<.10	.92	.005	.020
22-25	0940	0840	27	2.2	64	569	6	<3	<.01	.30	.89	.006	.020
25-29	0920	0920	27	1.7	59	545	<3	<3	<.01	.18	.87	.006	.015
OCT 29-													
NOV 01	1130	0930	26	1.9	63	562	<3	<3	<.01	.20	.98	.007	.020
01-05	1020	0920	27	3.5	59	533	4	<3	.01	<.10	.93	.003	.020
05-09	1035	0935	27	2.1	67	542	4	<3	<.01	.17	.90	.004	.015
09-13	1005	0905	27	35	62	554	3	<3	.03	<.10	.95	.007	.015
13-15	1020	0920	26	2.6	58	533	4	<3	.02	.11	.95	.004	.015
15-19	0955	0855	26	2.7	59	532	--	--	<.01	<.10	.98	.004	.020
21-25	1120	1020	27	1.5	57	519	--	--	<.01	.41	.93	.005	.015
26-29	1055	0955	27	2.6	69	571	--	--	<.01	<.10	1.0	.010	.020
DEC													
03...	1040	--	54	1.0	66	382	<3	<3	<.01	<.10	1.1	.009	.020
06-10	1035	0935	32	2.5	74	504	--	--	<.01	.23	1.1	.008	.025
06...	1040	--	34	1.0	68	449	<3	<3	<.01	<.10	1.1	.009	.015
10-13	1055	0955	32	2.2	70	535	3	<3	<.01	.12	1.1	.006	.020
13-14	1015	1315	32	2.3	69	511	<3	<3	<.01	.12	1.1	.007	.020
14-16	1415	1715	74	17	70	499	31	6	<.01	.39	1.1	.008	.065
16-17	1815	0915	173	21	78	193	36	8	.01	.63	1.7	.014	.100
17-19	1105	1905	162	17	71	208	24	7	.02	.83	1.6	.015	.075
19-20	2005	1005	250	20	78	170	33	10	.02	<.10	2.4	.017	.090
27...	0955	--	80	3.5	74	268	--	--	.02	<.10	2.1	.016	.030
27-31	1005	0905	71	2.6	66	359	--	--	<.01	.45	1.9	.015	.035
DEC 31-													
JAN 03	0945	0845	64	2.9	79	394	<6	<6	.01	.10	1.9	.010	.025
03-07	1020	0920	65	3.3	73	349	4	<3	<.01	.39	1.9	.008	.025
07-10	1005	0905	65	3.1	82	338	4	<3	<.01	.43	1.8	.009	.025
10-14	1005	0905	151	7.4	108	214	12	3	.01	.43	2.0	.012	.045
14-18	1035	0935	120	4.4	84	233	--	--	<.01	.48	2.2	.011	.035
18-22	0945	0845	91	3.6	81	292	<6	<6	<.01	.26	2.1	.010	.025
22-23	1005	2205	90	2.3	86	270	4	<3	<.01	.53	2.1	.008	.025
25-26	1010	2110	350	27	83	115	35	<5	.03	.71	3.3	.014	.100
26-28	2210	0910	347	20	71	125	23	<3	<.01	.65	2.9	.016	.075
FEB													
04-07	1025	0924	496	20	66	118	--	--	<.01	.70	3.6	.017	.094
07-11	1010	0909	301	5.5	70	173	--	--	.02	.41	3.8	.012	.069
11-15	1125	1024	400	11	65	120	--	--	.01	.44	3.9	.017	.062
15-19	1100	0909	322	4.0	61	145	--	--	.02	.40	3.6	.010	.045
19-21	0950	0850	271	4.2	73	166	--	--	<.01	.37	3.8	.011	.026
21-25	1025	0924	364	7.0	62	125	9	<5	<.01	.38	3.3	.010	.045
25-28	0950	0849	430	3.9	58	159	6	<6	<.01	.36	3.2	.008	.056
FEB 28-													
MAR 04	1010	0909	239	2.6	62	164	4	<3	<.01	.39	3.2	.006	.025
04-07	1005	0904	264	4.0	71	145	6	<3	.02	.46	2.9	.005	.033
07-11	1035	0934	352	9.1	66	116	8	<3	<.01	.45	2.8	.005	.038
11-14	1005	0904	390	11	58	111	8	<3	<.01	.53	2.6	.004	.029
14-18	1035	0934	332	2.7	56	124	6	<5	<.01	.40	2.7	<.003	.021
18-21	1010	0909	262	5.4	58	141	4	<3	<.01	.36	2.6	<.003	.017
21-22	1045	0545	356	3.6	62	113	5	5	<.01	.43	2.6	<.003	.024
22-25	0645	0945	308	3.2	59	126	4	4	<.01	.37	2.6	<.003	.026
25-26	1010	2110	284	2.0	64	147	4	<3	<.01	.30	2.9	<.003	.014
26-27	2210	1509	420	7.6	66	127	10	3	<.01	.56	2.9	.003	.024
27-28	1610	0610	513	15	65	95	16	3	<.01	.65	3.1	.004	.053

N presumptive evidence of presence of material

04230500 OATKA CREEK AT GARBUTT, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	Ending time	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	TUR-BID-ITY (NTU) (00076)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
MAR 28-APR 01	0910	0809	500	8.9	56	88	51	<6	.01	.50	2.5	.003	.046
01-02	1010	1810	435	4.8	52	98	8	<3	<.01	.53	2.4	.004	.056
02-04	1910	0910	701	41	58	87	43	9	.04	.75	2.8	.009	.125
04-08	1020	0819	693	24	71	131	25	4	.02	.61	2.9	.009	.102
08-11	0855	0754	353	3.6	62	129	--	--	.01	.43	3.1	.006	.028
11-13	0850	1150	297	6.3	69	144	9	<3	<.01	.67	2.8	.007	.034
13-15	1250	0350	417	12	82	132	18	4	.02	.90	2.5	.008	.058
18-18	0940	0940	405	5.5	50	114	64	7	.01	.63	2.2	.013	.037
25-28	0910	0010	208	7.5	56	171	13	<3	.05	.59	2.6	.007	.056
28-29	0110	0809	279	8.8	54	173	--	--	.02	.55	2.5	.006	.035
29-30	0855	1955	586	40	51	83	40	8	.03	.90	2.0	.011	.126
APR 30-MAY 02	2055	0755	555	26	40	80	25	6	.01	.71	1.7	.009	.086
02-06	0925	0824	359	8.6	49	118	13	3	<.01	.49	2.0	.006	.043
06-09	0940	0839	263	4.8	57	169	6	<3	<.01	.43	2.1	.005	.036
09-12	0915	1215	355	8.5	64	124	15	<3	<.01	.58	1.9	.004	.043
12-13	1315	0415	332	8.5	53	151	15	3	.01	.55	1.9	.005	.041
13-14	0905	1104	860	58	45	80	75	12	.03	1.2	1.7	.014	.191
14-16	1205	0805	1300	43	38	62	52	8	.02	.92	2.0	.024	.125
16-20	1040	0840	731	17	46	85	24	4	.01	.77	2.0	.018	.078
20-24	0925	0725	414	7.1	48	124	10	<3	.02	.44	2.5	.010	.034
24-28	0855	0754	299	5.7	49	150	7	<3	<.01	.49	2.4	.006	.021
28-31	0915	1015	307	5.3	50	150	51	4	<.01	.56	2.2	.005	.038
MAY 31-JUN 03	1035	0835	629	36	32	64	50	10	.03	1.1	1.4	.019	.165
03-06	0925	0824	337	12	41	126	18	4	<.01	.56	1.9	.020	.062
06-10	0905	0805	460	26	40	96	33	6	<.01	.80	1.9	.021	.096
10-13	0835	0734	198	11	46	171	15	3	<.01	.58	2.1	.014	.039
13-14	0920	0020	164	7.9	55	180	12	<7	<.01	.52	2.3	.034	.048
16-17	0920	0819	513	75	41	77	82	14	.02	1.5	2.1	.043	.024
17-20	1025	0924	403	31	39	103	42	8	.01	.80	1.8	.029	.134
20-24	0935	0834	171	10	50	188	14	4	<.01	.50	2.2	.017	.060
26-27	0015	0815	129	7.9	59	250	10	<3	<.01	.45	2.4	.010	.043
27-29	0915	0015	154	11	54	229	16	<3	<.01	.56	2.3	.014	.051
JUN 29-JUL 01	0115	0814	142	5.3	57	222	11	4	<.01	.47	2.3	.011	.036
01-05	1030	0830	105	4.2	48	237	17	<8	.03	.49	1.8	.006	.035
05-08	0900	0759	91	5.9	52	295	44	<6	.02	.49	2.3	.004	.030
08-11	1020	0919	81	1.9	54	311	10	<3	<.01	.53	2.3	.004	.023
11-15	0955	0854	75	5.6	54	317	13	3	.02	.47	2.4	.004	.031
15-18	0910	0809	69	4.8	54	353	11	<3	<.01	.39	2.2	.007	.034
18-22	0850	0749	65	4.6	66	374	10	<3	<.01	.47	2.4	.005	.040
22-25	0940	0839	63	4.9	61	365	12	3	<.01	.50	2.2	.006	.031
25-29	0935	0834	59	5.8	56	354	11	<3	<.01	.47	2.0	.006	.027
JUL 29-AUG 01	0950	0849	58	4.7	59	375	15	4	.02	.51	2.0	.009	.035
01-05	0915	0814	50	5.1	59	370	11	<3	.01	.42	2.0	.007	.033
05-08	0905	0705	47	4.7	60	391	9	<3	.02	.46	2.0	.005	.034
08-12	0750	0649	44	5.3	59	382	9	<3	.03	.52	2.0	.008	.040
12-15	0910	0809	43	6.1	60	409	10	<3	<.01	.44	1.9	.005	.036
15-19	0935	0834	41	2.5	56	386	17	5	<.01	.47	1.8	.006	.024
19-22	0940	0839	39	4.9	57	400	63	13	.02	.44	1.9	.005	.029
22-26	0910	0709	38	5.1	61	398	8	<3	.05	.37	1.9	.008	.410
26-30	0925	0824	34	4.0	71	427	8	<6	<.01	.42	1.8	.004	.022
AUG 30-SEP 03	0855	0754	33	5.5	58	429	13	<3	<.01	.42	1.8	.005	.035
03-05	0835	0735	33	15	60	395	9	<3	<.01	.40	1.6	.006	.028
05-09	0845	0744	32	3.8	62	462	8	<3	<.01	.33	1.9	.007	.040
09-12	1020	0919	31	3.9	66	437	9	<3	<.01	.46	1.8	.007	.033
12-16	0940	0839	31	3.1	59	397	7	<3	<.01	.36	1.7	.006	.024
16-19	0855	0754	31	5.1	61	464	7	<3	<.01	.41	1.7	.007	.022
19-23	0905	0804	29	9.6	65	451	24	6	<.01	.63	1.5	.007	.061
23-26	0820	0719	29	2.8	59	435	8	<3	<.01	.36	1.6	.006	.036
26-27	0940	0440	28	2.6	61	458	11	<3	<.01	.36	1.6	.004	.034
27-27	0540	2040	39	3.6	59	455	8	<3	<.01	.28	1.6	.007	.028
27-30	2140	0840	34	3.6	58	461	9	<3	<.01	.35	1.6	.007	.039
SEP 30-OCT 03	0855	0754	29	2.8	60	454	--	<3	<.10	.42	1.5	.007	--

04230650 GENESEE RIVER AT BALLANTYNE BRIDGE, NEAR MORTIMER, NY

LOCATION.--Lat 43°05'32", long 77°40'50", Monroe County, Hydrologic Unit 04130003, on right bank 400 ft upstream from Ballantyne Bridge on State Highway 252, 1.6 mi west of Mortimer, and 2.8 mi upstream from Erie (Barge) Canal.
DRAINAGE AREA.--2,210 mi^2.
PERIOD OF RECORD.--October 1973 to current year.
REVISED RECORD.--WDR NY-82-3: Drainage area.
GAGE.--Water-stage recorder. Datum of gage is 500.00 ft above NGVD of 1929.
REMARKS.--River regulated for operation of Erie (Barge) Canal, downstream powerplants, and at high stages by Mount Morris Lake (see station 04224000). Satellite gage-height telemeter at station.
EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 20.57 ft, Jan. 10, 1998; minimum recorded, 8.20 ft, Nov. 9, 1979, but may have been lower as a result of extreme regulation.
EXTREMES FOR CURRENT YEAR.--Maximum elevation, 14.86 ft, May 14; minimum elevation, 9.84 ft, Apr. 23.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.66	11.70	12.06	11.71	12.58	11.93	12.68	11.09	13.29	12.41	11.85	11.89
2	11.64	11.69	12.04	11.78	14.05	11.92	12.41	11.25	12.78	12.01	11.70	11.81
3	11.56	11.67	11.87	11.67	13.27	11.81	12.28	12.20	12.57	11.90	11.61	11.73
4	11.57	11.59	11.73	11.67	12.78	12.00	12.55	12.53	12.25	11.91	11.63	11.66
5	11.57	11.45	11.82	11.83	12.93	12.22	11.99	12.70	12.40	11.86	11.71	11.66
6	11.68	11.16	11.92	11.80	13.09	12.08	11.55	12.56	13.00	11.72	11.73	11.66
7	11.68	11.07	11.94	11.80	13.30	12.09	13.04	12.68	12.99	11.75	11.69	11.84
8	11.57	10.90	12.01	11.75	13.19	12.17	13.52	12.74	13.00	11.77	11.77	11.96
9	11.51	10.79	12.04	11.80	13.17	12.27	12.68	12.66	12.80	11.79	11.86	11.95
10	11.54	10.90	11.90	11.82	13.06	12.20	12.84	12.71	12.70	11.85	11.88	11.75
11	11.56	10.92	11.91	11.90	13.44	12.29	13.31	12.69	12.75	11.83	11.87	11.66
12	11.57	10.91	11.86	11.93	13.41	12.22	13.26	12.53	12.71	11.73	11.84	11.61
13	11.56	10.93	11.90	11.81	13.24	12.40	12.99	12.92	12.66	11.85	11.82	11.60
14	11.53	10.99	11.90	11.79	13.08	12.24	13.46	14.43	12.57	11.74	11.82	11.61
15	11.62	11.00	12.04	11.81	12.84	12.26	14.28	14.10	12.28	11.81	11.85	11.69
16	11.54	10.99	12.30	11.86	12.68	12.07	13.74	13.33	12.59	11.81	11.89	11.77
17	11.64	10.99	12.02	11.78	12.51	11.99	13.64	13.62	12.52	11.76	11.80	11.88
18	11.64	10.97	11.96	11.72	12.31	12.05	13.53	13.77	12.67	11.61	11.76	11.80
19	11.64	10.96	12.27	11.68	12.11	11.91	13.25	14.07	12.66	11.68	11.70	11.71
20	11.67	10.97	12.20	11.81	12.21	12.00	11.76	13.72	12.45	11.69	11.70	11.79
21	11.65	10.96	12.18	11.89	12.19	12.21	10.99	13.57	12.31	11.80	11.61	11.64
22	11.59	10.99	12.14	11.94	12.29	12.38	10.27	13.69	12.13	11.85	11.59	11.68
23	11.63	11.02	12.17	11.87	12.40	12.26	10.94	13.65	11.78	11.89	11.57	11.74
24	11.66	11.03	12.04	11.80	12.31	12.10	12.49	13.47	11.88	11.72	11.61	11.75
25	11.58	11.07	12.16	12.08	12.10	12.03	12.83	13.32	11.93	11.68	11.66	11.76
26	11.70	11.17	12.05	12.30	11.95	12.13	12.92	13.21	11.81	11.61	11.78	11.62
27	11.68	11.85	11.88	12.30	11.96	12.81	11.93	13.02	11.84	11.73	11.86	11.60
28	11.70	12.01	11.76	12.17	12.06	13.15	11.11	12.70	12.60	11.91	11.71	11.65
29	11.69	11.94	11.70	12.11	---	13.02	11.07	12.40	12.90	11.80	11.58	11.94
30	11.68	12.03	11.58	12.15	---	12.73	11.40	12.43	12.78	11.81	11.73	11.78
31	11.69	---	11.67	12.35	---	12.70	---	13.23	---	11.86	11.90	---
MEAN	11.62	11.22	11.97	11.89	12.73	12.25	12.49	13.00	12.52	11.81	11.74	11.74
MAX	11.70	12.03	12.30	12.35	14.05	13.15	14.28	14.43	13.29	12.41	11.90	11.96
MIN	11.51	10.79	11.58	11.67	11.95	11.81	10.27	11.09	11.78	11.61	11.57	11.60

CAL YR 2001 MEAN 11.75 MAX 14.96 MIN 10.79
WTR YR 2002 MEAN 12.08 MAX 14.43 MIN 10.27

04231000 BLACK CREEK AT CHURCHVILLE, NY

LOCATION.--Lat 43°06'02", long 77°52'57", Monroe County, Hydrologic Unit 04130003, on right bank at east end of Carrol Street in Churchville, 100 ft downstream from mainline tracks of Penn Central Transportation Co., and 0.3 mi downstream from Black Creek Dam.
DRAINAGE AREA.--130 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1945 to current year.
REVISED RECORDS.--WDR NY-82-3: Drainage area. WDR NY-2000-3: 1998 (M), 1999 (M).
GAGE.--Water-stage recorder. Datum of gage is 551.88 ft above NGVD of 1929.
REMARKS.--Records good except those for estimated daily discharges, which are fair. Prior to May 1952, small diversion by Penn Central Transportation Co. and slight regulation by pumping operations upstream from station. Telephone gage-height telemeter and satellite gage-height and precipitation telemeter at station. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,880 ft^3/s, Mar. 31, 1960, gage height, 9.44 ft; minimum discharge, 0.17 ft^3/s, Aug. 12, 2001; minimum gage height, 0.93 ft, Aug. 5, 6, 7, Sept. 15, 1959.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 3	1730	1,090	5.17	Apr. 16	0100	981	4.89
Apr. 4	1500	820	4.47	May 15	1000	*1,380	*5.85

Minimum discharge, 1.5 ft^3/s, Sept. 14, gage height, 1.10 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.8	19	94	32	e230	115	264	335	468	50	16	2.6
2	7.1	18	72	30	e450	108	225	251	341	40	13	2.4
3	6.2	16	50	29	951	e120	419	240	209	35	11	2.3
4	4.8	17	38	30	792	136	759	224	148	30	9.2	2.1
5	3.9	16	32	31	380	e90	624	173	141	27	8.0	1.9
6	13	16	29	33	e250	e80	380	136	157	25	6.5	1.8
7	18	15	26	36	211	92	288	125	161	23	5.4	1.9
8	14	16	24	34	187	103	236	121	138	22	3.9	2.0
9	11	15	23	37	166	e160	209	140	108	21	4.5	1.9
10	9.1	16	22	52	190	e260	187	192	89	21	5.6	1.9
11	8.1	14	20	99	256	287	159	199	87	19	5.9	2.3
12	5.8	13	19	132	313	231	134	179	81	16	5.2	1.7
13	6.0	13	21	114	e330	204	178	383	73	14	4.2	1.7
14	7.5	13	27	84	231	191	435	991	114	12	3.4	1.6
15	5.8	13	69	68	189	165	812	1330	216	11	4.3	3.3
16	5.0	12	122	65	199	137	866	951	282	12	10	6.2
17	8.4	12	120	65	268	116	522	530	301	11	11	6.2
18	7.1	13	149	60	259	107	321	382	243	8.6	8.1	5.5
19	9.4	13	190	39	203	105	224	334	181	9.3	6.6	4.9
20	8.5	14	175	45	180	115	170	294	132	10	6.8	4.7
21	9.7	15	113	42	228	153	135	229	86	9.7	6.3	4.9
22	8.7	15	83	39	276	192	120	180	67	8.9	6.4	4.8
23	12	15	70	41	265	165	113	149	60	21	6.6	4.4
24	13	13	73	60	197	139	107	128	54	23	6.7	3.9
25	15	19	84	115	155	144	102	118	50	20	6.6	3.4
26	40	23	70	158	146	159	103	121	48	18	6.2	3.4
27	74	24	48	116	139	264	98	132	52	22	4.9	17
28	76	22	48	84	126	349	138	124	93	25	3.9	17
29	44	34	40	70	---	351	295	129	98	24	3.8	14
30	29	71	40	73	---	263	417	392	68	23	3.5	11
31	23	---	37	105	---	274	---	563	---	20	3.0	---
TOTAL	511.9	545	2028	2018	7767	5375	9040	9775	4346	631.5	206.5	142.7
MEAN	16.5	18.2	65.4	65.1	277	173	301	315	145	20.4	6.66	4.76
MAX	76	71	190	158	951	351	866	1330	468	50	16	17
MIN	3.9	12	19	29	126	80	98	118	48	8.6	3.0	1.6
CFSM	0.13	0.14	0.50	0.50	2.13	1.33	2.32	2.43	1.11	0.16	0.05	0.04
IN.	0.15	0.16	0.58	0.58	2.22	1.54	2.59	2.80	1.24	0.18	0.06	0.04

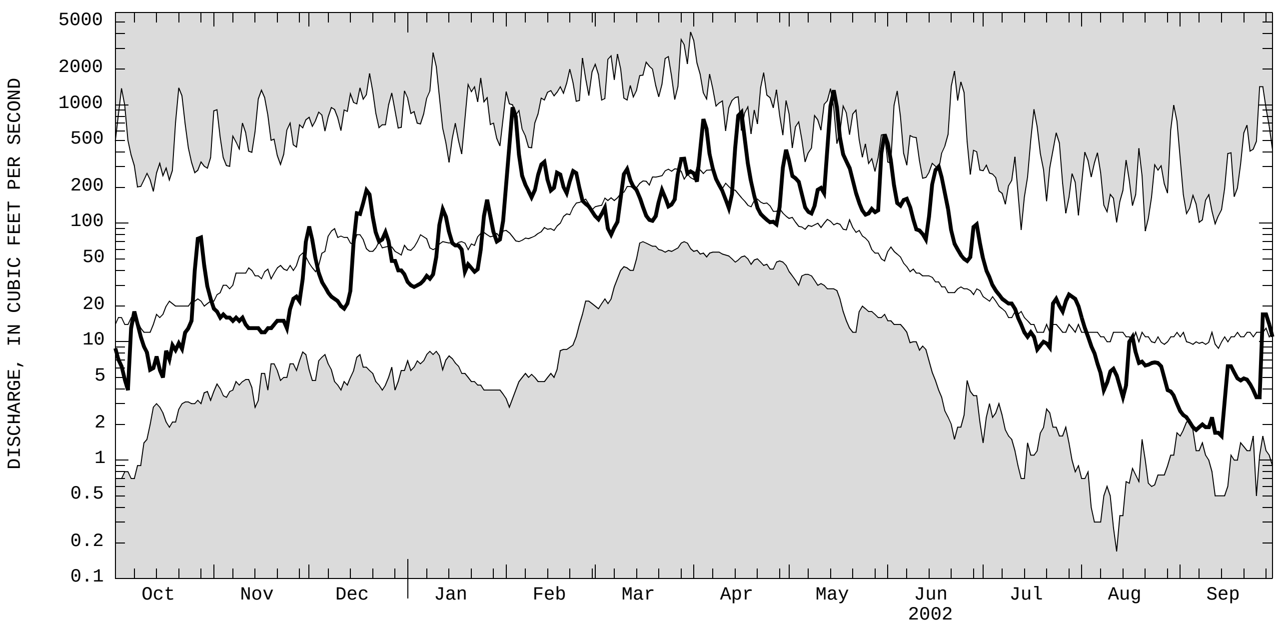
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	40.2	75.8	122	129	188	326	253	129	64.5	26.9	21.6	25.2
MAX	235	405	497	484	460	664	497	325	348	143	201	284
(WY)	1946	1971	1978	1998	1981	1971	1947	1956	1989	1992	1992	1977
MIN	2.61	6.07	5.68	6.15	15.4	122	51.6	38.1	10.7	3.75	2.35	1.66
(WY)	1964	1965	1961	1961	1958	1989	1946	1949	1949	1965	2001	1959

e Estimated

04231000 BLACK CREEK AT CHURCHVILLE, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1946 - 2002	
ANNUAL TOTAL	32315.05		42386.6			
ANNUAL MEAN	88.5		116		116	
HIGHEST ANNUAL MEAN					207	1978
LOWEST ANNUAL MEAN					52.3	1953
HIGHEST DAILY MEAN	939	Mar 23	1330	May 15	4120	Mar 31 1960
LOWEST DAILY MEAN	0.17	Aug 12	1.6	Sep 14	0.17	Aug 12 2001
ANNUAL SEVEN-DAY MINIMUM	0.63	Aug 7	1.9	Sep 8	0.47	Aug 3 1959
ANNUAL RUNOFF (CFSM)	0.68		0.89		0.90	
ANNUAL RUNOFF (INCHES)	9.25		12.13		12.17	
10 PERCENT EXCEEDS	261		278		289	
50 PERCENT EXCEEDS	37		50		48	
90 PERCENT EXCEEDS	2.8		5.1		6.8	



2002 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.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954, 1956, 1961, 1962, 1965 to 1976, 1998 to current year.
CHEMICAL DATA: Water years 1954 (a), 1956 (a), 1961 (b), 1962 (e), 1965 (a), 1966 to 1974 (d), 1975-76 (e), 1998 to current year (e).
NUTRIENT DATA: Water years 1954 (a), 1956 (a), 1961 (b), 1962 (e), 1965 (a), 1966 to 1974 (d), 1975-76 (e), 1998 to current year (e).
SEDIMENT DATA: Water years 1975-76 (e)
PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1961 to September 1962.
INSTRUMENTATION.--Automatic water sampler since April 1998.
COOPERATION.--Water-quality samples were collected and analyzed by the Monroe County Environmental Health Laboratory at Rochester, N.Y.
REMARKS.--Water-quality records for this site were collected and reported in local standard time.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	Ending time	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	TUR-BID-ITY (NTU) (00076)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
OCT													
01-05	0945	0845	6.1	2.7	89	577	--	--	.05	.72	.27	.004	.065
05-07	0920	0020	9.6	5.4	88	628	--	--	.12	.63	.41	.006	.070
07-09	0120	0820	15	4.7	88	626	--	--	.06	.56	.47	.006	.070
09-11	1010	0910	9.4	4.0	80	594	--	--	.02	.61	.48	.003	.050
11-15	0945	0845	6.7	5.1	79	654	--	--	.04	.68	.53	<.003	.050
15-18	1010	0910	6.3	7.6	80	600	--	--	.05	.49	.46	.004	.060
18-22	1050	0950	9.0	6.3	88	639	--	--	.03	.65	.40	.004	.050
22-25	1010	0910	12	5.2	78	680	--	--	.02	.73	.35	.004	.055
25-28	1350	0150	50	9.4	71	684	--	--	.04	.73	.43	.022	.070
28-29	0250	0950	66	9.4	76	638	--	--	.02	.84	1.2	.035	.065
OCT 29-													
NOV 01	1220	1020	27	8.4	82	486	--	--	.04	.51	2.4	.028	.065
01-05	1105	1005	17	8.2	85	536	--	--	.12	.80	2.0	.019	.060
05-09	1055	0955	16	6.5	93	584	--	--	.12	.55	1.5	.000	.040
09-13	1035	0935	14	3.4	94	624	--	--	.14	.72	1.1	.021	.040
13-15	1050	0950	13	4.7	82	602	--	--	.08	.37	.82	.018	.040
15-19	1025	0925	12	6.3	86	641	--	--	.09	.76	.79	.016	.045
21-25	1205	1105	15	6.0	87	658	--	--	.07	.66	.75	.014	.040
26-28	1125	1325	23	10	94	685	--	--	.08	.63	.76	.016	.055
28-29	1425	1025	26	9.5	91	697	--	--	.11	.70	.81	.019	.060
NOV 29-													
DEC 01	1050	0950	67	8.1	82	615	--	--	.06	.59	.84	.026	.065
01-03	1050	0950	74	8.0	83	482	--	--	.03	.74	2.0	.022	.070
03-06	1105	1005	37	5.4	90	428	--	--	.03	.60	2.2	.020	.045
06-10	1105	1005	24	14	93	462	--	--	.05	.83	1.9	.017	.045
10-13	1115	1015	20	5.6	89	486	--	--	.04	.65	1.6	.018	.040
13-14	1045	1345	21	6.5	91	486	--	--	.03	.49	1.5	.018	.040
14-16	1445	0945	73	10	84	474	--	--	.03	.38	1.5	.019	.060
16-17	1045	0945	123	13	76	440	--	--	<.01	.42	1.5	.017	.060
17-20	1135	0135	160	14	81	299	--	--	.01	.77	2.4	.017	.070
20-20	0235	1035	192	14	82	286	--	--	<.01	.85	3.1	.020	.080
27...	1025	--	36	5.4	76	276	--	--	.02	.41	3.2	.015	.035
27-31	1035	0935	43	3.2	72	312	--	--	<.01	.54	3.0	.015	.030
DEC 31-													
JAN 03	1020	0920	32	3.0	83	349	--	--	<.01	.82	3.0	.013	.030
03-07	1045	0945	31	2.0	85	371	--	--	<.01	.47	2.9	.014	.030
07-10	1035	0935	37	2.4	88	357	--	--	<.01	.70	2.7	.015	.030
10-14	1035	0935	104	3.9	75	268	--	--	<.01	.71	2.3	.016	.040
14-18	1110	1010	67	3.3	74	253	--	--	<.01	.58	2.5	.012	.025
18-22	1105	0905	44	2.3	86	306	--	--	<.01	.50	2.5	.012	.025
22-24	1035	0935	42	1.8	88	311	--	--	<.01	.50	2.6	.013	.025
24-26	1025	1325	115	4.6	72	290	--	--	<.01	.54	2.5	.011	.020
26-28	1425	0925	120	6.6	69	209	--	--	<.01	.64	1.4	.012	.035
FEB													
04-07	1050	0949	388	7.0	52	147	--	--	<.01	.61	3.0	.019	.050
07-11	1040	1140	193	2.8	189	66	--	--	<.01	.53	3.1	.011	.025
11-12	1155	2255	294	7.5	60	132	116	34	.03	.29	3.1	.011	.027
21-25	1045	0944	236	4.8	64	150	--	--	.02	.61	2.4	.005	.039
25-28	1015	0914	142	3.5	62	174	--	--	<.01	.52	2.3	.005	.031
FEB 28-													
MAR 04	1035	0934	118	3.0	61	188	--	--	<.01	.33	2.5	.005	.022
04-07	1035	0934	95	4.8	74	193	--	--	.02	.63	2.4	.006	.034
07-08	1055	0555	92	3.5	67	197	--	--	<.01	.51	2.7	.006	.030
08-11	0655	0955	196	10	63	177	--	--	<.01	.56	2.2	.004	.042
14-14	1105	1205	193	5.4	63	159	--	--	<.01	.66	2.1	.005	.021
18-18	1105	1205	108	2.0	63	182	--	--	.01	.58	2.1	.004	.017
25-25	1035	1135	141	2.9	76	172	--	--	<.01	.50	2.2	.004	.017
26-28	1015	1114	252	4.9	56	138	--	--	<.01	.48	1.7	.004	.027
28-29	1135	0235	371	7.1	59	138	--	--	<.01	.70	1.9	<.003	.031

04231000 BLACK CREEK AT CHURCHVILLE, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	Ending time	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	TUR-BID-ITY (NTU) (00076)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
MAR 29- APR 01	0335	1035	291	7.3	59	139	--	--	.01	.59	1.9	<.003	.028
01-02	1040	1239	228	5.7	59	131	--	--	.01	.72	1.8	<.003	.028
02-04	1340	0940	441	13	59	128	--	--	<.01	.69	1.7	.004	.041
04-08	1050	0849	467	14	76	154	--	--	.01	.69	2.1	.005	.210
08-11	0855	0754	201	5.8	62	139	--	--	<.01	.72	2.3	.004	.030
11-13	0920	1220	138	6.7	55	137	--	--	<.01	.79	1.8	<.003	.029
13-15	1320	0819	441	16	86	123	--	--	.02	1.1	1.4	.006	.056
15-18	1010	0909	684	21	42	92	--	--	<.01	.81	1.1	.008	.064
18-22	1010	0909	188	5.9	50	120	--	--	.03	.86	1.1	.011	.057
22-25	0940	0839	111	3.5	56	157	--	--	.01	.79	1.8	.009	.036
29-30	0935	1434	367	10	48	148	--	--	.02	.67	1.3	.009	.042
APR 30- MAY 02	1535	0835	337	7.9	47	123	--	--	.01	.70	1.2	.008	.040
02-06	0950	0849	211	6.0	51	132	--	--	.02	.66	1.2	.005	.039
06-09	1005	0904	125	9.2	61	170	--	--	<.01	.67	1.3	.004	.042
15-16	1315	1015	1210	35	32	72	--	--	.02	.95	1.2	.017	.100
16-20	1110	0910	462	12	41	97	--	--	.03	.83	1.4	.014	.059
20-24	0955	0854	196	6.7	56	129	--	--	--	.72	1.9	.009	.029
24-28	0915	0814	124	11	60	168	--	--	.02	.74	1.9	.010	.042
28-30	0940	0040	130	15	56	178	--	--	<.01	.73	1.6	.006	.048
30-31	0140	1040	452	33	39	119	38	11	.04	.98	1.0	.014	.126
MAY 31- JUN 03	1055	0855	414	25	36	106	--	--	.03	1.2	.81	.023	.121
03-06	0945	0844	155	14	44	134	--	--	.03	.91	1.2	.021	.084
06-10	0925	0824	136	14	50	163	--	--	.03	.84	1.4	.017	.068
10-13	0905	0804	84	33	52	180	44	10	.04	1.1	1.3	.020	.124
13-14	0945	0445	75	47	56	179	--	--	.04	1.3	1.1	.027	.161
14-17	0545	0845	225	41	50	173	--	--	.04	1.3	1.4	.033	.179
17-20	1050	0949	218	48	51	138	--	--	.02	1.7	1.4	.038	.202
24-27	0915	0814	50	7.8	64	209	--	--	.06	.97	1.1	.015	.058
27-29	0945	0845	84	14	59	229	--	--	.05	.96	1.2	.026	.081
JUN 29- JUL 01	0945	0845	73	22	59	225	--	--	.02	1.1	1.1	.023	.121
01-05	1100	0900	36	18	83	214	--	--	.04	1.1	.79	.023	.089
05-08	0930	0829	24	7.4	84	243	--	--	.05	.93	.74	.014	.060
08-11	1055	0954	21	3.3	63	259	--	--	.04	.88	.64	.015	.055
11-15	1025	0924	14	7.3	40	170	--	--	.05	.85	.72	.017	.069
15-18	0940	0839	9.6	5.4	69	323	--	--	.04	.68	.46	.022	.054
18-22	0920	0819	9.5	4.2	79	331	--	--	.05	.63	.37	.017	.051
22-25	0955	0854	19	5.0	74	331	--	--	.07	.89	.35	.016	.053
25-29	1005	0904	22	5.3	73	368	12	<10	.04	.74	.59	.020	.060
JUL 29- AUG 01	1015	0914	21	6.0	74	388	11	<5	.03	.68	.53	.014	.055
01-05	0945	0844	11	4.7	52	249	--	--	.03	.75	.42	.011	.059
05-08	0940	0640	6.1	4.8	76	406	--	--	.04	.75	.32	.010	.060
15-15	0950	0950	3.6	3.0	81	373	--	--	.07	.68	.18	.028	.061
19-22	1010	0909	6.5	10	77	350	--	--	.03	1.1	.16	.014	.089
22-26	0925	0724	6.6	4.3	77	358	--	--	.05	.64	.18	.023	.046
26-30	0955	0854	4.4	8.6	86	400	--	--	<.01	.90	.16	.012	.052
AUG 30- SEP 03	0925	0824	2.8	3.2	84	437	--	--	.03	.56	.20	.015	.047
03-05	0910	0810	2.2	15	85	450	--	--	.02	.60	.23	.012	.042
05-09	0915	0814	1.9	2.2	86	443	--	--	.02	.53	.19	.014	.064
09-12	0950	0849	2.0	5.7	85	431	--	--	.03	.64	.24	.013	.049
12-16	1010	0909	2.6	3.0	78	380	--	--	.03	.58	.14	.014	.046
16-19	0920	0819	5.8	2.5	89	455	--	--	.02	.69	.14	.007	.042
19-23	0935	0834	4.8	2.9	85	451	--	--	.02	.65	.16	.006	.045
23-26	0855	0754	3.7	2.6	80	433	--	--	.03	.58	.12	.008	.041
26-27	1005	0505	3.6	2.8	81	465	--	--	.02	.63	.35	.009	.034
27-27	0605	1705	15	8.8	79	423	--	--	.03	.68	.15	.010	.054
27-30	1805	0905	16	4.4	80	447	--	--	.15	.73	.15	.007	.058
SEP 30- OCT 03	0935	0834	9.9	3.5	79	490	--	--	.03	.79	.24	.008	.056

04232000 GENESEE RIVER AT ROCHESTER, NY

LOCATION.--Lat 43°10'50", long 77°37'40", Monroe County, Hydrologic Unit 04130003, on right bank 40 ft downstream from Rochester Gas and Electric Corporation plant, 5,100 ft upstream from bridge on Driving Park Avenue in Rochester, and 6.4 mi upstream from mouth.

DRAINAGE AREA.--2,467 mi^2.

PERIOD OF RECORD.--April 1904 to September 1918, December 1919 to current year. Published as "at Driving Park Avenue," 1919-68.

REVISED RECORDS.--WSP 1912; WDR NY-82-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 244.24 ft above NGVD of 1929 (245.00 ft, Barge Canal datum). April 1904 to December 1910, nonrecording gage and December 1910 to September 1918, water-stage recorder at site 5 mi upstream at datum 506.85 ft, Barge Canal datum. December 1919 to Apr. 4, 1927, water-stage recorder in plant 5, and Apr. 4, 1927 to June 19, 1956, at present site at datum 5.76 ft higher than present datum. June 20, 1956 to Sept. 30, 1969, at present site at datum 2.76 ft higher than present datum. Oct. 1, 1969 to Sept. 30, 1985, at present site at datum 2.00 ft higher than present datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Extensive diurnal fluctuation caused by powerplants upstream from station. New York State Erie (Barge) Canal crosses river 5.4 mi upstream from station. Water diverted by the canal from Lake Erie is discharged into river from the west, the canal again diverting a smaller amount of water from river to the east. Additional regulation is provided by Rushford Lake, Mount Morris Lake (see station 04224000), and Conesus Lake (see station 04227980).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48,300 ft^3/s, Mar. 30, 1916, gage height 15.3 ft, site and datum then in use; maximum at present site, 34,400 ft^3/s, Mar. 19, 1942; maximum gage height, 17.08 ft, Apr. 2, 1940, datum then in use; minimum discharge, less than 10 ft^3/s, occurred during low-water periods in some years when power plant was shut down.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge on Mar. 18, 1865, was about 54,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,900 ft^3/s, May 14, gage height, 10.96 ft, result of regulation; minimum daily discharge, 265 ft^3/s, Nov. 13; minimum instantaneous discharge not determined.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e525	945	1430	893	5700	2250	4880	2590	7620	4890	e818	e495
2	e507	955	1770	772	9490	2240	5320	2160	6270	2260	e806	511
3	e427	1010	1540	763	7570	1870	5690	3090	4900	e1780	e625	585
4	e394	763	1060	690	5720	2130	6030	4150	4330	e1310	e455	e493
5	e367	673	850	798	5720	2540	5380	4740	4500	e1320	e443	e496
6	e407	405	736	847	6080	2600	4240	4540	6230	e1180	e401	e372
7	e400	387	690	776	6700	2570	5890	4880	6330	e1030	e395	e291
8	e516	376	552	697	6710	2690	6980	4990	6230	e1010	e398	e338
9	e448	348	622	728	6490	2940	5260	5250	5880	e984	e420	475
10	e383	292	592	797	6350	3250	5150	5360	5450	e775	e435	505
11	e380	308	516	977	7150	3470	6380	5250	5710	e876	e419	e478
12	e406	297	464	1340	7140	3590	6490	4970	5750	e762	e385	e355
13	e385	265	490	1450	6550	3390	5970	6370	5360	e733	e401	e360
14	e389	276	488	1250	5900	3380	7060	9830	5350	e689	e364	e361
15	e413	274	885	1150	5480	3100	8900	9150	4440	e631	e383	e365
16	e469	280	2530	1020	5150	2810	7820	7170	5130	e639	e397	545
17	e667	271	2430	1090	4710	2650	7390	7360	5150	e695	e497	1100
18	890	275	2010	959	3920	2750	7160	7930	5050	e737	e445	992
19	927	280	3310	654	2760	2490	6680	9070	5240	e519	e423	580
20	926	273	3640	694	2790	2300	4760	8440	4870	e605	e413	566
21	1050	275	3310	784	2760	2850	2620	7870	4390	e536	e478	561
22	951	270	3120	848	3090	3660	1990	7360	3440	e574	e487	436
23	938	298	2910	933	3390	3510	1930	7300	e2170	e785	e497	412
24	915	283	2730	903	3470	3310	4020	7670	e1530	e838	e504	424
25	748	294	2510	1710	3060	3080	4840	7160	e1710	e791	e525	443
26	1020	344	2450	2990	2570	3080	4890	6950	e1530	e667	e502	474
27	1240	652	2040	3060	2270	5220	3330	6320	e1590	e568	e567	749
28	1220	975	1370	2800	2430	6480	1900	5370	4560	e835	620	593
29	1240	873	1100	2660	---	5810	2770	4370	6050	e811	e477	818
30	994	889	933	2670	---	5410	3370	3910	5580	e912	e306	915
31	912	---	923	3750	---	5080	---	5920	---	e921	e281	---
TOTAL	21454	14106	50001	41453	141120	102500	155090	187490	142340	31663	14567	16088
MEAN	692	470	1613	1337	5040	3306	5170	6048	4745	1021	470	536
MAX	1240	1010	3640	3750	9490	6480	8900	9830	7620	4890	818	1100
MIN	367	265	464	654	2270	1870	1900	2160	1530	519	281	291

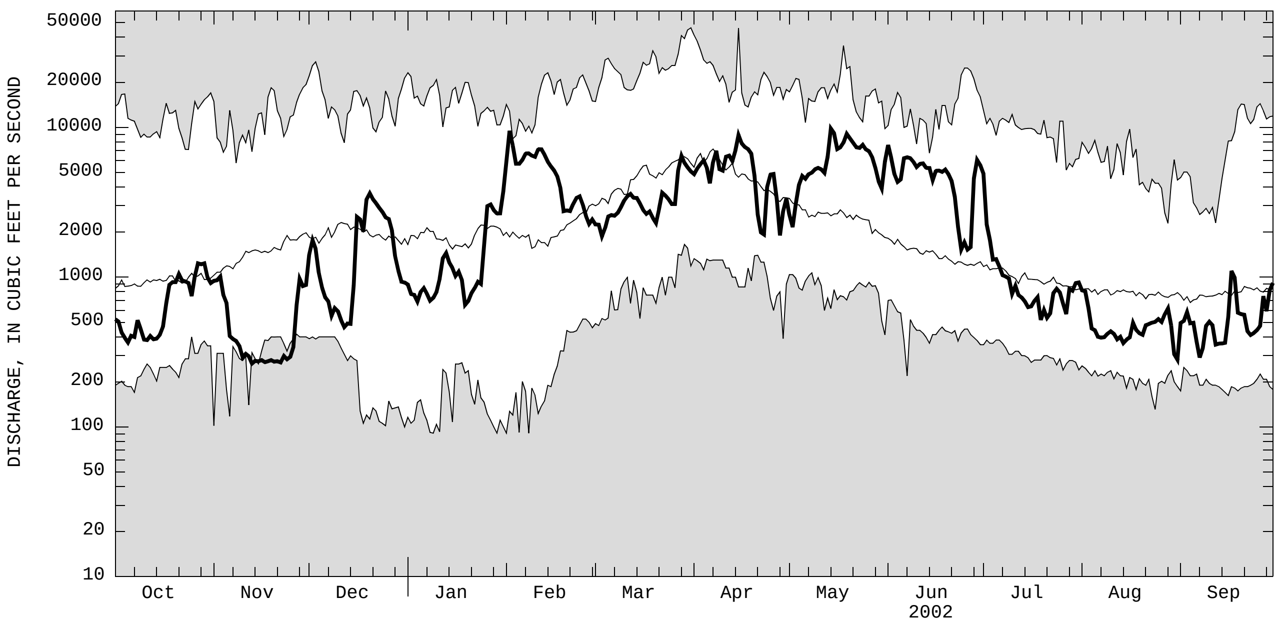
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1450	2111	2742	2853	3241	6153	5986	3539	2088	1303	962	988
MAX	7095	7383	9973	8830	9157	14300	14160	10230	7311	8524	3927	6722
(WY)	1978	1928	1928	1913	1925	1945	1940	1943	1972	1972	1992	1977
MIN	338	436	502	152	560	2213	1561	1140	479	350	229	199
(WY)	1914	1910	1910	1961	1920	1937	1946	1915	1915	1913	1913	1913

e Estimated

04232000 GENESEE RIVER AT ROCHESTER, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1904 - 2002	
ANNUAL TOTAL	682681		917872			
ANNUAL MEAN	1870		2515		2800	
HIGHEST ANNUAL MEAN					4426	1978
LOWEST ANNUAL MEAN					1663	1999
HIGHEST DAILY MEAN	11900	Apr 9	9830	May 14	46300	Mar 31 1916
LOWEST DAILY MEAN	216	Sep 13	265	Nov 13	91	Jan 9 1961
ANNUAL SEVEN-DAY MINIMUM	248	Sep 10	274	Nov 13	104	Jan 26 1961
10 PERCENT EXCEEDS	5820		6290		6810	
50 PERCENT EXCEEDS	890		1240		1580	
90 PERCENT EXCEEDS	281		388		592	



2002 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.

04232034 IRONDEQUOIT CREEK AT RAILROAD MILLS NEAR FISHERS, NY

LOCATION.--Lat 43°01'40", long 77°28'42", Ontario County, 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 mi^2.

WATER-DISCHARGE 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.
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.
COOPERATION.--Discharge measurements were provided by the Monroe County Environmental Health Laboratory at Rochester, N.Y.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 1,000 ft^3/s, Jan. 8, 1998, gage height 10.40 ft; minimum discharge, 6.8 ft^3/s, Aug. 21, 1995, gage height, 3.96 ft.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 2	0115	301	6.95	May 14	1200	*430	*7.74

Minimum discharge, 8.2 ft^3/s, Sept. 8, 9, 10, 11, gage height, 4.06 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	12	29	17	166	25	33	48	73	19	14	9.6
2	13	13	22	16	214	25	43	58	36	32	13	9.4
3	12	15	19	16	60	28	196	57	29	25	12	9.0
4	11	13	18	17	43	26	86	37	28	17	12	8.9
5	11	12	17	17	e35	e26	51	31	77	15	11	9.0
6	14	12	17	18	33	29	48	28	79	15	11	9.1
7	13	12	16	19	31	32	43	35	52	14	11	9.0
8	12	12	16	18	32	33	38	46	35	14	11	8.9
9	12	13	20	19	40	39	38	56	27	14	10	8.7
10	12	12	21	26	42	48	37	50	24	15	10	8.8
11	12	13	19	30	75	35	35	33	22	13	9.8	8.9
12	11	13	18	27	50	36	30	47	23	13	9.7	9.2
13	12	12	26	25	44	37	57	163	25	13	9.6	9.2
14	11	13	32	22	35	32	132	364	51	13	9.5	9.2
15	12	13	71	21	33	28	192	142	92	12	9.9	12
16	12	13	40	21	45	32	68	63	125	12	16	17
17	13	13	34	20	50	31	45	89	48	12	14	12
18	12	12	72	19	35	30	37	96	45	12	13	11
19	12	13	44	17	31	28	34	69	29	12	11	10
20	12	16	32	17	35	41	51	47	24	12	11	10
21	14	15	28	18	39	68	38	40	21	11	11	9.6
22	18	13	25	18	39	42	32	44	20	13	11	9.7
23	14	13	24	19	33	37	31	34	20	29	11	9.5
24	12	13	24	23	29	39	28	31	18	21	12	9.4
25	12	23	22	26	29	34	28	30	17	15	12	9.3
26	12	23	20	23	28	49	28	32	16	15	11	9.5
27	13	18	20	20	28	177	26	29	28	15	10	38
28	12	17	e19	20	26	60	51	26	72	21	10	36
29	12	34	19	21	---	45	96	45	34	23	10	17
30	12	34	e18	25	---	44	59	170	22	28	10	14
31	12	---	17	30	---	37	---	98	---	16	9.6	---
TOTAL	386	460	819	645	1380	1273	1711	2138	1212	511	346.1	360.9
MEAN	12.5	15.3	26.4	20.8	49.3	41.1	57.0	69.0	40.4	16.5	11.2	12.0
MAX	18	34	72	30	214	177	196	364	125	32	16	38
MIN	11	12	16	16	26	25	26	26	16	11	9.5	8.7
CFSM	0.32	0.39	0.67	0.53	1.26	1.05	1.45	1.76	1.03	0.42	0.28	0.31
IN.	0.37	0.44	0.78	0.61	1.31	1.21	1.62	2.03	1.15	0.48	0.33	0.34

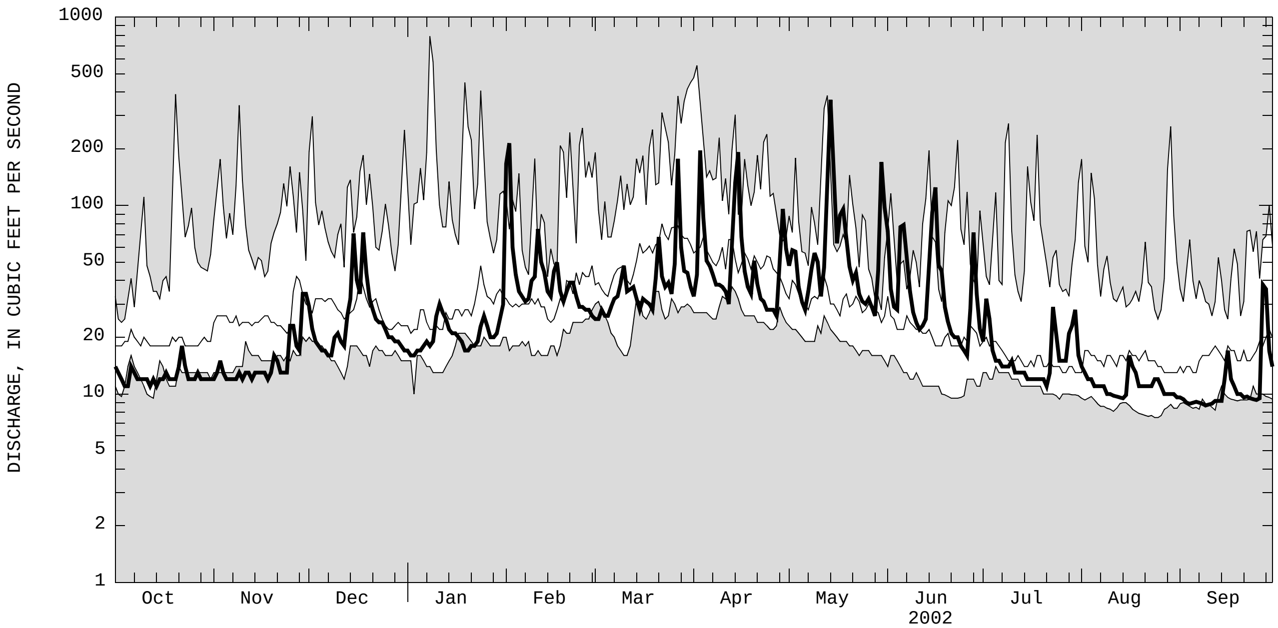
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	23.5	33.2	36.6	45.0	44.6	68.3	66.4	40.8	28.4	22.1	18.8	18.5
MAX	53.7	67.5	73.0	112	69.7	98.0	143	69.0	56.5	52.5	58.0	35.8
(WY)	1997	1993	1997	1998	1998	1993	1993	2002	1996	1992	1992	1992
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

e Estimated

04232034 IRONDEQUOIT CREEK AT RAILROAD MILLS NEAR FISHERS, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1991 - 2002	
ANNUAL TOTAL	10875.0		11242.0			
ANNUAL MEAN	29.8		30.8		37.3	
HIGHEST ANNUAL MEAN					53.5	1993
LOWEST ANNUAL MEAN					24.7	1995
HIGHEST DAILY MEAN	217	Mar 23	364	May 14	790	Jan 8 1998
LOWEST DAILY MEAN	8.1	Aug 11	8.7	Sep 9	7.5	Aug 24 1995
ANNUAL SEVEN-DAY MINIMUM	8.5	Aug 6	8.9	Sep 4	7.6	Aug 20 1995
ANNUAL RUNOFF (CFSM)	0.76		0.79		0.95	
ANNUAL RUNOFF (INCHES)	10.32		10.67		12.93	
10 PERCENT EXCEEDS	70		51		70	
50 PERCENT EXCEEDS	19		21		25	
90 PERCENT EXCEEDS	9.9		11		13	



2002 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.

04232034 IRONDEQUOIT CREEK AT RAILROAD MILLS NEAR FISHERS, NY,--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- Water years 1992 to current year.
CHEMICAL DATA: Water years 1992 to current year (e).
NUTRIENT DATA: Water years 1992 to current year (e).
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, N.Y.
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. The non-daily water-quality records for this site were collected and reported in local standard time.
EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURES: Maximum, 23.5°C, July 3, 2002; minimum 0°C, many days during winter period.
EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 23.5°C, July 3; minimum 0°C, Jan. 31, Feb. 1, 2.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	11.5	9.5	10.5	10.0	8.5	9.0	9.0	9.0	9.0	2.0	1.5	2.0
2	13.0	11.0	12.0	11.5	10.0	11.0	9.0	8.0	8.5	2.0	1.5	1.5
3	14.0	12.0	13.0	11.5	10.5	11.0	8.0	7.0	7.5	2.5	2.0	2.0
4	15.0	13.5	14.0	10.5	10.0	10.0	7.5	7.0	7.0	3.0	2.5	2.5
5	14.5	13.0	14.0	10.0	8.5	9.0	9.0	7.5	8.5	3.5	3.0	3.0
6	13.0	11.0	12.5	9.0	8.0	8.5	9.5	9.0	9.5	3.5	3.5	3.5
7	11.0	9.0	10.0	9.0	8.5	9.0	9.0	7.5	8.0	3.5	2.5	3.0
8	9.0	8.0	8.5	9.5	8.5	9.0	7.5	6.0	6.5	2.5	2.0	2.5
9	9.0	7.0	8.0	9.5	8.5	9.0	6.0	5.5	6.0	3.5	2.5	3.0
10	10.5	8.5	9.5	8.5	7.5	8.0	5.5	5.0	5.0	4.0	3.5	4.0
11	12.0	10.5	11.5	8.5	7.5	8.0	5.0	4.5	5.0	4.0	3.5	4.0
12	13.0	12.0	12.5	7.5	6.5	7.0	5.5	4.5	5.0	4.0	3.5	3.5
13	14.5	12.5	13.5	7.0	6.0	6.5	7.0	5.5	6.0	4.0	3.5	3.5
14	15.0	14.0	14.5	8.5	7.0	7.5	7.0	7.0	7.0	3.5	3.0	3.5
15	14.5	12.5	13.5	10.0	8.5	9.5	7.0	5.5	6.0	4.0	3.5	3.5
16	13.0	11.5	12.0	11.0	10.0	10.5	5.5	5.0	5.0	4.0	3.5	3.5
17	11.5	9.5	10.5	10.0	8.0	9.0	5.5	5.0	5.5	3.5	3.5	3.5
18	10.0	8.5	9.0	8.0	7.0	7.5	6.0	5.5	5.5	3.5	2.5	3.0
19	10.5	8.5	9.5	8.5	7.5	8.0	5.5	5.5	5.5	2.5	2.0	2.5
20	12.0	10.5	11.0	8.5	7.5	8.0	5.5	5.0	5.5	2.5	2.0	2.5
21	12.0	10.5	11.0	7.5	6.5	7.0	5.0	4.5	5.0	3.0	2.5	2.5
22	12.0	11.5	11.5	7.0	6.5	6.5	4.5	4.0	4.5	3.5	3.0	3.0
23	12.5	11.0	11.5	7.0	6.0	6.5	4.5	4.0	4.0	5.0	3.5	4.0
24	13.5	12.5	13.0	7.5	6.0	6.5	5.0	4.5	4.5	5.0	4.0	4.5
25	13.0	12.0	13.0	10.0	7.5	9.0	4.5	4.0	4.0	4.0	3.0	3.5
26	12.0	10.0	11.0	10.0	9.5	9.5	4.0	3.0	3.5	4.0	2.5	3.5
27	10.0	9.0	9.0	9.5	9.0	9.0	3.0	2.5	2.5	4.5	3.0	4.0
28	9.0	8.5	8.5	9.0	8.5	9.0	3.0	2.5	2.5	5.5	3.5	4.5
29	9.0	7.5	8.0	8.5	8.0	8.5	2.5	2.0	2.5	5.5	4.5	5.0
30	9.5	8.5	9.0	9.0	8.5	9.0	2.5	1.5	2.0	5.0	3.0	3.5
31	8.5	8.0	8.5	---	---	---	2.0	1.5	2.0	3.0	0.0	1.0
MONTH	15.0	7.0	11.1	11.5	6.0	8.5	9.5	1.5	5.4	5.5	0.0	3.2

04232034 IRONDEQUOIT CREEK AT RAILROAD MILLS NEAR FISHERS, NY,--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1.5	0.0	1.0	3.5	2.5	3.0	8.5	7.0	7.5	11.5	7.5	9.5
2	1.0	0.0	0.5	4.5	2.5	3.0	7.0	5.5	6.0	11.0	10.0	10.5
3	2.0	0.5	1.5	5.5	4.5	5.0	6.0	5.5	5.5	10.5	9.5	10.0
4	2.0	1.0	2.0	4.5	2.5	3.5	5.5	4.0	5.0	12.5	8.5	10.5
5	1.5	0.5	1.0	2.5	1.5	2.0	5.0	4.0	4.5	14.0	9.5	12.0
6	2.5	1.0	1.5	4.0	2.0	3.0	7.0	3.5	5.0	15.0	11.5	13.5
7	3.0	1.0	2.0	3.5	3.0	3.5	6.5	3.5	5.0	15.5	13.5	14.5
8	4.0	2.5	3.0	6.0	3.0	4.0	9.0	6.0	7.5	14.5	12.5	14.0
9	3.5	3.0	3.5	8.0	5.5	6.5	11.0	8.5	10.0	14.0	12.0	13.0
10	4.0	2.5	3.5	8.0	3.5	5.5	11.5	8.5	10.0	16.0	12.5	14.0
11	4.0	1.5	2.5	3.5	2.0	3.0	13.0	8.0	10.5	14.5	11.0	13.0
12	2.0	1.0	1.5	4.5	3.5	4.0	14.0	10.0	12.0	13.0	11.0	11.5
13	2.0	1.5	1.5	5.5	3.5	4.5	13.5	11.5	12.5	11.5	10.0	11.0
14	2.0	1.0	1.5	6.5	5.0	5.5	13.0	11.5	12.0	10.0	9.5	9.5
15	4.0	2.0	2.5	7.5	5.5	6.5	16.5	13.0	14.5	12.5	8.5	10.5
16	4.0	3.5	3.5	7.5	6.0	7.0	19.5	14.5	17.0	13.0	11.5	12.0
17	3.5	2.5	3.0	6.0	4.5	5.0	20.5	16.0	18.0	13.0	12.0	12.5
18	2.5	1.5	2.0	5.5	5.0	5.0	20.5	16.5	18.5	12.0	10.5	11.0
19	3.5	1.5	2.5	5.5	5.0	5.0	20.0	16.5	18.0	10.5	10.0	10.5
20	4.5	3.5	3.5	5.5	5.0	5.0	17.5	14.0	16.0	11.0	9.5	10.0
21	5.0	4.5	4.5	5.0	4.0	4.5	14.0	10.5	12.0	11.0	9.5	10.0
22	4.5	3.5	4.0	4.0	2.5	3.5	10.5	8.0	9.0	13.0	9.5	11.0
23	3.5	2.5	3.0	4.0	2.5	3.0	11.0	6.5	9.0	14.5	11.0	12.5
24	4.5	2.5	3.5	4.5	3.5	4.0	12.5	7.5	10.0	14.5	13.0	13.5
25	5.5	4.0	4.5	4.5	3.5	4.0	12.0	9.5	10.0	14.0	11.5	13.0
26	6.0	5.0	5.5	4.0	3.5	3.5	10.0	8.0	9.0	14.5	13.0	14.0
27	5.5	3.5	4.5	3.5	2.0	3.0	11.0	7.5	9.5	15.5	12.5	14.0
28	3.5	2.5	3.0	6.5	2.5	4.0	11.0	9.0	10.0	16.0	14.0	15.0
29	---	---	---	8.0	4.5	6.0	10.0	8.0	9.0	17.5	15.0	16.5
30	---	---	---	10.5	7.5	8.5	9.5	7.5	8.5	19.5	17.0	18.0
31	---	---	---	9.5	6.5	8.5	---	---	---	19.5	18.5	19.0
MONTH	6.0	0.0	2.7	10.5	1.5	4.6	20.5	3.5	10.4	19.5	7.5	12.6

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	18.5	17.0	18.0	20.0	18.0	19.0	21.0	18.5	20.0	17.0	14.5	16.0
2	18.0	16.5	17.0	23.0	19.0	21.0	21.0	18.5	20.0	17.0	15.0	16.0
3	16.5	14.5	15.5	23.5	21.0	22.0	20.5	18.0	19.0	17.0	15.5	16.0
4	15.0	13.5	14.0	22.5	20.5	21.5	19.0	16.5	18.0	17.0	15.5	16.5
5	18.0	14.0	15.5	20.5	18.0	19.0	19.5	17.5	18.5	16.5	14.5	15.5
6	18.0	16.0	17.0	18.0	16.5	17.5	18.5	16.0	17.0	15.5	13.0	14.5
7	17.0	15.0	16.0	18.5	16.0	17.0	17.5	15.0	16.0	16.0	13.5	14.5
8	17.5	14.5	16.0	19.0	16.5	18.0	17.0	14.0	15.5	17.0	14.0	15.5
9	18.0	16.0	17.0	18.5	17.0	17.5	17.5	14.0	16.0	17.0	14.5	16.0
10	18.0	16.0	17.0	18.0	16.0	17.0	18.0	14.5	16.0	17.5	15.0	16.0
11	19.0	16.5	18.0	17.0	15.0	16.0	18.5	15.5	17.0	16.5	14.5	16.0
12	19.0	16.5	17.5	17.0	14.5	15.5	18.5	16.0	17.5	14.5	13.0	14.0
13	17.0	15.5	16.5	17.5	15.0	16.5	19.5	16.5	18.0	15.0	12.5	14.0
14	16.5	16.0	16.5	18.0	15.5	17.0	19.5	17.0	18.5	14.5	13.5	14.0
15	16.5	16.0	16.5	18.5	16.5	17.5	19.5	18.0	18.5	15.0	14.0	14.5
16	16.5	16.0	16.0	18.5	16.5	17.5	20.5	17.5	19.0	16.0	15.0	15.0
17	16.0	15.0	15.5	19.0	17.0	18.0	20.5	18.5	19.0	15.5	13.5	14.5
18	17.0	14.5	15.5	19.0	18.0	18.5	20.5	18.0	19.0	15.0	14.0	14.5
19	17.0	14.5	16.0	18.0	17.0	17.5	18.5	16.5	17.0	16.5	14.5	15.5
20	18.0	15.0	16.5	19.0	16.0	17.5	18.5	16.0	17.0	17.5	16.0	16.5
21	18.5	16.0	17.5	18.5	15.5	17.0	17.5	14.5	16.0	17.5	16.5	17.0
22	18.5	17.0	17.5	20.0	17.0	18.0	16.5	15.5	16.0	17.0	16.0	16.5
23	19.5	17.0	18.0	19.5	17.0	18.5	18.5	16.0	17.0	16.0	14.0	15.5
24	19.5	17.5	18.5	18.5	16.5	17.5	17.0	16.0	16.5	14.0	12.5	13.5
25	19.0	17.0	18.0	17.0	14.5	16.0	17.0	15.0	16.0	13.5	12.5	13.0
26	19.0	17.5	18.5	17.0	16.0	16.5	17.0	14.5	16.0	14.0	13.0	13.5
27	19.0	18.0	18.5	18.0	16.0	17.0	17.5	15.5	16.0	15.0	13.5	14.0
28	20.5	18.5	19.5	19.5	16.5	18.0	15.5	13.5	14.5	15.0	13.5	14.5
29	20.0	18.5	19.0	20.5	18.5	19.5	15.0	14.0	14.5	13.5	11.5	12.5
30	20.0	17.5	19.0	22.0	19.5	20.5	16.0	13.0	14.5	14.5	12.5	13.5
31	---	---	---	21.0	18.5	20.0	16.5	14.0	15.0	---	---	---
MONTH	20.5	13.5	17.1	23.5	14.5	18.0	21.0	13.0	17.0	17.5	11.5	14.9

04232034 IRONDEQUOIT CREEK AT RAILROAD MILLS NEAR FISHERS, NY,--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	Ending time	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	TUR-BID-ITY (NTU) (00076)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
OCT													
09-11	0740	0740	12	3.4	107	356	--	--	<.01	<.10	1.2	.011	.030
21-21	1250	1950	13	6.3	101	362	--	--	<.01	.21	1.0	.005	.020
21-22	2050	0650	22	13	98	335	--	--	<.01	<.10	1.0	.006	.040
22-25	0745	0645	15	7.7	96	323	--	--	<.01	.44	.86	.011	.035
NOV													
29...	0840	--	43	26	116	297	--	--	.01	.63	1.0	.010	.085
DEC													
14-15	1640	1140	70	96	99	201	155	31	<.01	.39	.92	.012	.250
15-17	1240	0740	47	44	94	198	64	12	<.01	.48	1.3	.011	.110
17-18	0940	1140	53	24	111	221	--	--	<.01	.95	1.3	.010	.070
18-20	1240	0840	54	44	101	187	58	11	<.01	1.2	1.8	.010	.100
JAN 31- FEB 02	1725	0024	134	200	206	159	--	--	<.01	1.0	1.4	.005	.360
02-04	0125	0425	122	73	76	101	--	--	.01	.89	1.4	.006	.153
04-07	0855	0754	37	9.1	121	195	--	--	<.01	.38	1.4	.008	.033
07-11	0845	0744	38	12	116	205	--	--	<.01	.54	1.3	.005	.045
11-15	0940	0839	38	25	124	159	--	--	<.01	.53	1.4	.007	.074
MAR													
08-10	1245	1145	42	3.6	117	182	--	--	<.01	.27	.90	.005	.014
10-11	1245	0745	46	5.6	130	163	--	--	<.01	.30	.83	.004	.017
11-14	0825	0724	37	4.6	122	181	--	--	<.01	.31	.94	.005	.011
14-18	0905	0804	30	2.0	102	187	--	--	<.01	.26	.89	.004	.021
18-20	0855	0455	29	1.8	112	204	--	--	<.01	.25	1.0	.004	.011
20-21	0555	0754	62	14	123	187	--	--	<.01	.44	1.0	.005	.046
21-25	0905	0804	44	6.6	118	155	--	--	<.01	.30	.96	.005	.023
26-27	0905	1104	130	34	138	166	--	--	<.01	.62	1.1	.005	.088
27-28	1205	0804	120	47	90	85	--	--	<.01	.73	1.1	.005	.111
MAR 28- APR 01	1005	0904	45	7.4	325	66	--	--	<.01	.37	1.0	.004	.034
02-03	1505	1704	142	27	112	146	--	--	<.01	.58	1.0	.007	.068
03-04	1805	0805	150	53	71	70	42	10	<.01	.71	.90	.007	.119
04-08	0850	0649	54	9.7	84	117	--	--	.01	.37	.86	.005	.026
13-15	1145	0644	130	49	103	129	66	14	<.01	3.5	.82	.006	.113
15-18	0815	0714	85	24	85	112	26	6	<.01	.58	.76	.007	.069
MAY													
12-13	0755	0255	70	12	104	188	--	--	<.01	.50	.95	.007	.033
13-13	0355	0655	124	39	106	130	59	102	<.01	1.0	.74	.008	.109
13-14	1045	0944	241	35	54	62	--	--	.03	.73	.73	.008	.074
14-16	1045	0645	191	44	63	73	--	--	<.01	1.0	.65	.007	.119
16-20	0745	0644	84	16	76	103	--	--	<.01	.58	.70	.007	.046
20-24	0725	0624	42	5.7	96	158	--	--	<.01	.32	1.1	.007	.021
JUN													
05-05	0210	1310	74	22	88	182	--	--	<.01	.63	1.1	.007	.064
05-06	1410	0709	96	51	76	121	62	16	<.01	.89	.99	.006	.138
06-10	0750	0649	46	18	82	148	--	--	<.01	.60	1.0	.010	.049
14-16	0340	0640	87	70	84	139	--	--	<.01	1.3	1.3	.009	.179
16-17	0740	0639	110	140	62	81	--	--	<.01	2.6	1.1	.009	.430
17-20	0740	0639	39	89	100	165	--	--	<.01	1.4	1.1	.015	.233
JUL													
15-18	0725	0624	12	4.3	105	317	--	--	<.01	<.10	1.5	.013	.030
22-23	1325	0925	16	46	110	324	86	13	<.01	.80	1.4	.010	.105
23-25	1025	0125	27	39	92	218	65	13	<.01	.70	1.0	.010	.094
SEP													
15-16	0350	0650	15	12	103	336	--	--	.02	.31	1.4	.095	.037
16-19	0735	0634	13	15	110	329	--	--	.01	.40	1.3	.011	.062
27-27	0355	1855	36	26	100	352	--	--	.01	.66	1.3	.009	.129
27-30	1955	0655	29	37	88	236	131	26	.01	1.1	.85	.008	.195
SEP 30- OCT 02	0755	2154	12	11	105	346	--	--	<.10	.52	1.3	.010	.090

0423204920 EAST BRANCH ALLEN CREEK AT PITTSFORD, NY

LOCATION.--Lat 43°06'11", long 77°32'01", Monroe County, Hydrologic Unit 04140101, on left bank 25 ft upstream from culvert of abandoned Conrail railroad, 0.2 mi downstream from State Highway 31, 0.7 mi northwest of Pittsford and 1.8 mi upstream from mouth.
DRAINAGE AREA.--9.50 mi^2, flow from 2.54 mi^2 noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1990 to current year.
REVISED RECORDS.--WDR NY-92-3: Drainage area. WDR NY-2000-3: 1998.
GAGE.--Water-stage recorder. Datum of gage is 400.00 ft above NGVD of 1929.
REMARKS.--No estimated daily discharges. Records poor. Unpublished water-quality records for prior years are available in files of Monroe County Department of Health. Discharge includes undetermined diversion from Erie (Barge) Canal upstream from station. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 459 ft^3/s, July 8, 1998, gage height 9.03 ft, from rating curve extended above 210 ft^3/s; minimum daily discharge, 0.55 ft^3/s, Nov. 25, 1999; minimum instantaneous discharge not determined.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 1	1930	*110	*3.80				

Minimum discharge, 0.80 ft^3/s, Sept. 30, gage height, 0.91 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

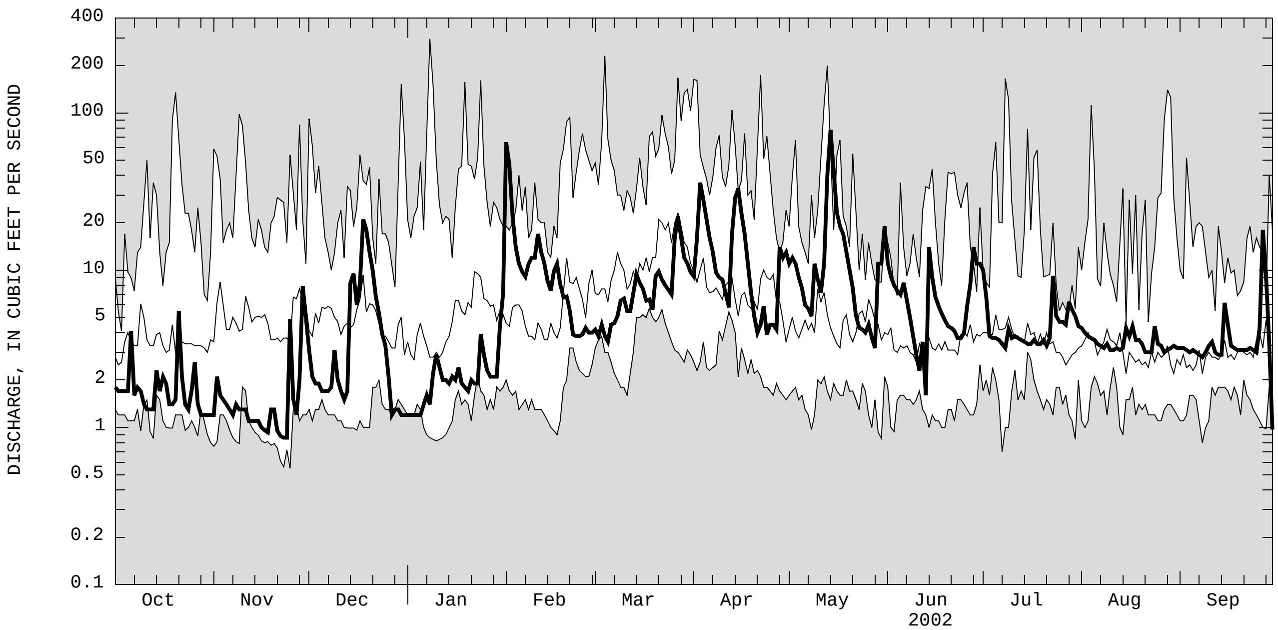
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	1.2	3.1	1.2	65	4.2	9.1	11	11	10	4.3	3.2
2	1.7	2.1	2.1	1.2	47	3.8	16	12	9.1	6.7	4.0	3.2
3	1.7	1.6	1.9	1.2	22	4.5	36	11	8.0	3.8	3.8	3.1
4	1.7	1.5	1.9	1.2	14	3.8	28	9.0	7.4	3.7	3.7	3.0
5	1.7	1.4	1.7	1.2	11	3.5	21	7.7	7.0	3.7	3.6	3.1
6	4.1	1.3	1.7	1.4	9.8	4.5	16	6.0	8.3	3.6	3.4	3.0
7	1.6	1.2	1.7	1.6	9.1	4.6	13	5.7	6.4	3.4	3.3	2.9
8	1.8	1.4	1.8	1.4	11	5.1	9.7	5.1	5.0	3.2	3.2	2.8
9	1.7	1.3	3.1	2.2	12	6.4	9.0	11	3.8	4.2	3.4	3.0
10	1.4	1.3	2.0	2.9	12	6.6	8.7	8.7	2.9	3.7	3.1	3.3
11	1.3	1.3	1.7	2.4	17	5.5	7.1	7.2	2.3	3.8	3.1	3.5
12	1.3	1.1	1.5	2.0	13	5.5	5.8	11	3.5	3.7	3.2	3.0
13	1.3	1.1	1.7	2.0	11	7.1	17	40	1.6	3.6	3.1	2.9
14	2.3	1.1	8.3	1.9	8.5	9.4	29	78	14	3.5	3.2	2.9
15	1.7	1.1	9.5	2.1	7.4	8.3	33	41	9.0	3.4	4.3	6.2
16	2.1	1.0	6.0	2.0	9.9	7.6	23	23	6.7	3.4	3.8	4.5
17	1.9	0.96	8.3	2.4	11	6.4	17	19	5.9	3.6	4.4	3.3
18	1.4	0.93	21	1.9	8.1	6.5	11	17	5.3	3.4	3.6	3.2
19	1.4	1.3	18	1.8	6.7	5.6	7.2	13	4.8	3.4	3.6	3.1
20	1.5	1.3	13	1.7	6.8	9.2	5.1	10	4.4	3.6	3.4	3.1
21	5.5	0.95	9.9	2.0	5.5	9.8	4.0	7.7	4.3	3.3	3.0	3.1
22	2.1	0.88	6.8	1.9	3.9	8.7	4.5	5.1	4.1	3.7	3.0	3.1
23	1.4	0.86	5.3	1.9	3.8	8.0	5.9	4.3	3.7	9.2	3.0	3.2
24	1.3	0.86	3.9	3.9	3.8	7.5	3.9	4.2	3.7	5.1	4.4	3.1
25	1.7	4.9	3.3	2.9	3.9	7.0	4.5	4.0	4.0	4.7	3.4	3.0
26	2.6	1.5	2.1	2.3	4.3	16	4.5	4.5	5.9	4.7	3.3	4.3
27	1.4	1.2	1.2	2.1	4.0	22	4.2	3.7	8.1	4.5	3.0	18
28	1.2	2.0	1.3	2.1	4.0	16	14	3.2	14	6.3	3.1	9.4
29	1.2	7.9	1.3	2.1	---	12	12	11	11	5.6	3.2	3.4
30	1.2	4.9	1.2	4.4	---	11	13	11	11	5.1	3.3	0.97
31	1.2	---	1.2	7.1	---	9.7	---	19	---	4.4	3.2	---
TOTAL	56.2	51.44	147.5	68.4	345.5	245.8	392.2	424.1	196.2	138.0	107.4	117.87
MEAN	1.81	1.71	4.76	2.21	12.3	7.93	13.1	13.7	6.54	4.45	3.46	3.93
MAX	5.5	7.9	21	7.1	65	22	36	78	14	10	4.4	18
MIN	1.2	0.86	1.2	1.2	3.8	3.5	3.9	3.2	1.6	3.2	3.0	0.97

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	5.60	7.17	7.99	9.84	10.4	18.1	13.8	8.76	5.61	5.88	5.54	4.28
MAX	16.9	16.3	18.1	28.5	19.4	26.7	23.8	20.4	14.6	18.5	21.7	6.76
(WY)	1997	1997	1991	1998	2000	1991	2000	1996	1996	1998	1992	1992
MIN	1.81	1.43	1.89	2.21	3.60	7.93	3.32	2.39	1.95	2.95	2.97	2.22
(WY)	2002	1999	1999	2002	1993	2002	1995	1993	2001	1997	1991	1995

0423204920 EAST BRANCH ALLEN CREEK AT PITTSFORD, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1990 - 2002	
ANNUAL TOTAL	2204.94		2290.61			
ANNUAL MEAN	6.04		6.28		8.55	
HIGHEST ANNUAL MEAN					11.0	1998
LOWEST ANNUAL MEAN					5.28	1995
HIGHEST DAILY MEAN	74	Mar 23	78	May 14	295	Jan 8 1998
LOWEST DAILY MEAN	0.86	Nov 23	0.86	Nov 23	0.55	Nov 25 1999
ANNUAL SEVEN-DAY MINIMUM	1.0	Nov 18	1.0	Nov 18	0.68	Nov 19 1999
10 PERCENT EXCEEDS	15		12		18	
50 PERCENT EXCEEDS	3.0		3.8		4.2	
90 PERCENT EXCEEDS	1.3		1.3		1.6	



2002 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.

0423204920 EAST BRANCH ALLEN CREEK AT PITTSFORD, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- Water years 1990 to current year.
CHEMICAL DATA: Water years 1990 to current year (e).
NUTRIENT DATA: Water years 1990 to current year (e).
PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: November 1994 to current year.
INSTRUMENTATION.--Automatic water sampler since 1990. Water-temperature recorder since November 1994 provides 15-minute-interval readings.
COOPERATION.--Water-quality samples were collected and analyzed by the Monroe County Environmental Health Laboratory at Rochester, N.Y.
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. The non-daily water-quality records for this site were collected and reported in local standard time.
EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 27.5°C, July 15, 1997, July 5, 31, 1999; minimum, 0°C, on many days during winter period.
EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 26.5°C, Aug. 1, 2; minimum, 0°C, Jan. 19, 31, Feb. 13, Mar. 4, 5.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	14.5	11.0	13.0	11.0	8.5	9.5	10.0	9.0	9.5	1.0	0.5	0.5
2	16.5	14.0	15.0	14.0	11.0	12.5	9.0	6.5	8.5	1.0	0.5	0.5
3	17.5	14.5	16.0	13.0	10.5	11.5	8.0	5.0	7.0	1.0	0.5	0.5
4	17.5	16.0	16.5	11.5	9.5	10.5	9.5	5.5	7.5	1.0	0.5	1.0
5	16.5	14.5	15.5	10.0	8.0	8.5	11.0	9.5	10.0	2.0	1.0	1.5
6	15.0	11.5	13.0	9.0	7.5	8.0	10.5	7.5	10.0	3.0	2.0	2.0
7	11.5	9.5	10.5	10.0	8.0	9.0	7.5	6.0	7.0	2.0	0.5	1.5
8	10.5	8.0	9.0	11.5	8.0	9.5	6.0	4.0	5.0	1.5	0.5	1.0
9	11.0	7.5	9.0	10.5	7.5	8.5	6.0	4.5	5.0	3.5	1.0	2.0
10	13.5	10.0	11.5	9.0	7.0	8.0	5.5	3.0	4.5	4.5	3.0	4.0
11	15.0	12.5	13.5	9.0	6.0	7.5	5.5	3.5	4.5	4.0	3.0	3.5
12	15.0	14.5	15.0	7.0	5.5	6.0	6.0	2.5	4.5	4.5	3.0	3.5
13	17.0	14.5	15.5	7.5	5.0	6.0	8.5	6.0	7.5	4.0	2.5	3.0
14	17.0	15.5	16.5	9.5	7.0	8.5	8.5	5.5	7.5	3.0	1.5	2.5
15	15.5	12.5	14.0	11.5	9.5	10.5	6.0	5.0	5.5	3.5	3.0	3.5
16	14.0	12.0	12.5	12.0	9.5	11.5	5.5	4.5	5.0	3.0	2.0	2.5
17	12.0	9.0	10.5	9.5	7.0	8.0	6.0	5.0	5.5	3.5	2.0	2.5
18	10.5	8.0	9.0	8.5	5.5	7.0	6.0	5.0	5.5	2.0	0.5	1.5
19	11.5	8.0	10.0	10.5	7.0	8.5	5.5	5.0	5.0	1.5	0.0	0.5
20	13.0	11.0	11.5	9.5	6.5	7.5	5.0	4.5	5.0	2.0	0.5	1.0
21	16.5	10.5	12.5	7.0	5.5	6.5	4.5	3.5	4.0	3.0	1.0	1.5
22	13.0	11.0	12.0	7.5	5.5	6.5	4.0	3.0	3.5	3.5	1.5	2.5
23	14.0	11.0	12.5	7.0	5.0	6.0	5.0	3.0	4.0	5.0	2.5	3.5
24	15.5	14.0	14.5	9.5	5.0	6.5	4.5	2.5	3.5	5.0	3.5	4.5
25	14.5	11.0	13.5	13.5	9.5	11.0	2.5	2.0	2.0	4.0	2.0	3.0
26	11.0	9.0	10.0	11.0	9.0	10.0	2.5	1.0	1.5	4.5	2.5	3.0
27	9.0	8.0	8.5	10.0	8.5	9.5	1.5	0.5	1.0	5.5	2.0	3.5
28	8.5	7.5	8.0	9.5	8.0	9.0	2.0	0.5	1.0	6.0	3.0	4.5
29	9.5	6.5	8.0	9.5	7.0	8.5	1.5	0.5	1.0	5.0	4.0	4.5
30	9.5	7.5	9.0	11.5	9.0	9.5	1.0	0.5	0.5	4.0	2.5	3.0
31	9.0	7.0	8.0	---	---	---	1.0	0.5	0.5	2.5	0.0	1.0
MONTH	17.5	6.5	12.0	14.0	5.0	8.7	11.0	0.5	4.9	6.0	0.0	2.4

0423204920 EAST BRANCH ALLEN CREEK AT PITTSFORD, NY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	2.5	1.0	1.5	3.5	1.0	2.0	8.0	6.5	7.0	12.5	7.5	9.5
2	1.5	1.0	1.0	5.0	0.5	3.0	6.5	6.0	6.0	11.5	10.0	10.5
3	2.0	1.0	1.5	5.5	2.0	4.5	6.5	5.0	6.0	11.0	9.0	9.5
4	2.0	0.5	1.0	2.0	0.0	1.5	6.0	4.5	5.0	14.0	8.0	10.5
5	2.0	0.5	1.0	1.5	0.0	0.5	5.5	4.0	4.5	16.0	9.5	12.5
6	2.5	0.5	1.5	4.0	0.5	2.0	7.0	3.5	5.0	17.0	13.0	15.0
7	3.0	0.5	2.0	3.0	2.0	2.5	6.5	4.0	5.5	17.5	14.0	15.5
8	4.0	2.0	2.5	7.0	2.5	4.5	8.5	6.0	7.0	15.0	12.5	13.5
9	3.5	2.0	2.5	9.0	5.5	7.0	12.0	8.0	9.5	16.0	12.0	13.5
10	4.5	2.5	3.5	6.5	1.5	3.5	12.5	8.0	9.5	16.5	12.5	14.0
11	4.0	1.0	2.0	5.0	1.0	2.5	14.5	8.5	11.0	16.0	11.0	13.0
12	2.5	1.0	2.0	5.5	3.0	4.0	15.5	10.5	13.0	13.0	11.5	12.0
13	2.0	0.0	1.0	6.5	2.5	4.5	13.5	11.5	13.0	11.5	10.0	10.5
14	2.5	0.5	1.5	7.0	4.0	5.0	13.0	11.5	12.0	10.0	9.5	10.0
15	4.0	1.5	2.5	7.5	4.5	6.0	15.0	12.0	13.5	11.0	9.5	10.0
16	4.0	2.5	3.0	7.0	4.5	6.0	18.0	13.5	15.5	13.0	10.5	11.5
17	3.0	1.5	2.0	6.5	3.5	5.0	21.0	15.5	18.0	12.5	11.5	12.0
18	3.5	0.5	1.5	5.5	4.5	5.0	22.5	18.0	19.5	11.5	10.5	11.0
19	4.0	1.0	2.5	5.5	4.0	4.5	22.0	17.5	19.5	11.0	10.0	10.5
20	4.5	3.5	4.0	5.5	4.0	4.5	17.5	12.5	15.5	11.0	9.5	10.0
21	5.0	4.0	4.5	5.5	2.0	4.0	13.0	9.5	11.5	12.0	9.0	10.5
22	4.0	2.0	3.5	4.0	1.0	2.5	9.5	7.5	8.5	14.5	9.0	11.5
23	3.5	1.5	2.0	3.5	1.0	2.0	12.0	6.5	9.0	17.0	10.5	13.5
24	6.0	1.0	3.5	5.0	2.0	3.0	14.5	7.5	11.0	16.0	13.5	15.0
25	7.0	3.0	5.0	4.5	2.0	3.0	11.0	9.0	10.0	16.0	11.5	14.0
26	6.5	4.0	5.0	3.5	2.5	2.5	10.5	7.5	9.0	17.0	14.0	15.0
27	4.0	0.5	3.0	3.5	2.5	3.0	13.5	6.5	9.5	18.5	13.0	15.5
28	3.5	0.5	2.0	5.0	2.0	3.5	11.5	8.0	9.5	19.0	14.0	16.5
29	---	---	---	6.0	3.5	5.0	9.5	8.0	8.5	22.0	15.5	18.0
30	---	---	---	8.0	5.5	6.5	10.0	8.0	9.0	19.5	17.5	18.5
31	---	---	---	9.0	5.5	7.0	---	---	---	19.5	18.0	18.5
MONTH	7.0	0.0	2.4	9.0	0.0	3.9	22.5	3.5	10.4	22.0	7.5	12.9

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	20.0	17.5	18.5	25.0	23.0	24.0	26.5	24.0	25.0	22.5	20.5	21.5
2	19.0	17.0	18.0	25.5	24.0	24.5	26.5	25.0	25.5	23.0	20.5	21.5
3	18.5	16.0	17.0	25.5	23.5	24.5	25.5	23.5	24.5	23.5	21.0	22.5
4	17.0	15.5	16.5	25.5	23.5	24.5	25.5	22.5	24.0	23.0	21.0	22.0
5	20.0	17.0	18.5	23.5	21.5	22.5	25.5	24.0	25.0	21.5	20.0	21.0
6	19.0	16.5	17.5	23.0	21.0	22.0	24.0	22.0	22.5	21.5	18.5	20.0
7	18.5	15.0	16.5	23.5	20.5	22.0	23.0	21.5	22.0	22.5	19.0	21.0
8	20.5	15.5	17.5	24.5	21.5	23.0	22.5	20.5	21.5	23.5	20.5	21.5
9	21.0	18.5	19.5	23.5	22.0	22.5	23.0	20.5	21.5	23.5	20.5	22.0
10	21.0	17.0	19.0	22.5	21.0	22.0	24.0	20.5	22.0	23.5	21.0	22.0
11	22.5	18.5	20.5	22.5	20.0	21.0	24.5	21.5	23.0	22.5	19.5	21.0
12	21.5	18.0	19.5	23.0	19.5	21.0	25.0	22.0	23.5	20.5	18.5	19.5
13	19.5	17.5	18.5	23.5	20.0	21.5	25.5	23.0	24.0	21.5	19.0	20.0
14	19.0	17.5	18.0	24.0	20.5	22.5	26.0	23.5	24.5	21.0	19.0	20.0
15	18.0	17.0	17.5	24.0	21.5	23.0	25.5	24.0	24.5	21.0	20.5	20.5
16	17.0	16.5	16.5	24.0	21.5	23.0	25.5	23.5	24.5	20.5	19.5	20.0
17	17.0	15.5	16.5	25.5	22.5	24.0	26.0	24.0	25.0	20.5	19.0	19.5
18	18.0	15.0	16.5	25.0	23.5	24.0	25.5	23.5	24.5	20.5	18.5	19.5
19	19.0	15.5	17.0	23.5	22.5	23.0	23.5	22.0	23.0	21.5	19.0	20.5
20	20.0	16.0	18.0	24.0	22.0	23.0	23.5	22.0	23.0	22.5	20.5	21.5
21	21.0	17.5	19.0	24.5	21.0	22.5	23.5	20.5	22.0	22.0	21.0	21.5
22	20.0	18.5	19.5	25.0	23.0	24.0	23.5	22.0	22.5	21.5	20.0	21.0
23	22.0	19.0	20.5	24.5	22.5	23.0	23.5	22.0	22.5	20.5	18.5	19.5
24	21.0	20.0	20.5	23.0	21.5	22.0	22.5	21.5	22.0	19.5	17.0	18.0
25	23.0	19.5	21.0	23.0	20.5	21.5	23.0	21.0	22.0	19.0	17.0	18.0
26	24.0	21.0	22.0	23.0	21.5	22.5	23.0	20.0	21.5	19.5	17.5	18.5
27	23.0	21.5	22.0	24.0	22.0	23.0	22.5	20.5	21.5	18.5	17.0	17.5
28	22.5	20.5	21.5	24.5	22.5	23.0	21.5	19.0	20.5	17.5	16.5	17.0
29	23.0	21.0	22.0	26.0	23.5	24.5	21.0	20.0	20.5	17.5	15.0	16.0
30	24.0	21.5	22.5	25.0	23.5	24.5	21.5	18.5	20.0	18.0	16.0	17.0
31	---	---	---	26.0	23.5	24.5	22.5	19.5	21.0	---	---	---
MONTH	24.0	15.0	18.9	26.0	19.5	23.0	26.5	18.5	22.9	23.5	15.0	20.0

0423204920 EAST BRANCH ALLEN CREEK AT PITTSFORD, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	Ending time	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	TUR-BID-ITY (NTU) (00076)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
OCT													
05-06	2205	0305	3.7	16	123	175	--	--	.06	.36	.50	.024	.090
06-08	0405	0605	2.4	6.5	117	88	--	--	<.01	.41	.38	.018	.050
21-22	1210	0610	7.1	15	98	155	--	--	.02	.49	.31	.023	.075
22-25	0710	0310	1.5	2.6	133	205	--	--	<.01	.44	.22	.025	.045
NOV													
21-25	0835	0735	.88	2.0	191	167	--	--	.02	.51	.15	.010	.030
28-29	1715	0715	6.0	12	105	106	--	--	.07	.54	.54	.018	.065
NOV 29-													
DEC 03	0805	0705	4.0	5.2	137	106	--	--	.02	.48	.45	.017	.050
14-14	1210	2310	15	37	102	77	61	13	.05	.69	.48	.014	.150
15-17	0010	0710	7.5	26	132	77	25	6	.04	.55	.63	.019	.090
17-20	0805	0705	17	31	143	67	--	--	.05	.76	.99	.020	.130
JAN													
07-08	0805	1905	1.5	11	631	170	--	--	.06	.99	1.1	.008	.055
07...	0810	--	1.8	45	1820	150	334	10	.18	.85	1.1	.007	.080
08-10	2005	0105	2.2	13	570	153	--	--	.09	.89	1.0	.004	.055
JAN 31-													
FEB 01	0835	1135	20	48	512	77	--	--	.05	1.0	.77	.007	.130
11-11	0835	0935	17	16	239	71	--	--	.03	.62	2.0	.015	.073
MAR													
09-09	1605	2305	7.8	78	301	87	200	31	.03	1.2	.98	<.003	.262
10-11	0005	0805	6.4	16	448	90	--	--	.01	.57	1.0	<.003	.051
11-13	0850	1550	5.5	8.6	302	88	--	--	<.01	.51	1.2	<.003	.033
13-14	1650	0650	10	12	275	69	--	--	<.01	.60	1.4	<.003	.048
14-18	0805	0704	7.7	5.2	250	71	--	--	<.01	.65	1.4	<.003	.027
18-20	0805	0705	5.8	6.0	236	80	--	--	<.01	.49	1.3	<.003	.032
20-20	0805	1304	9.4	24	188	76	--	--	.03	.55	1.1	.004	.062
20-21	1405	0704	11	16	200	79	--	--	<.01	.54	.94	.005	.050
21-25	0820	0719	8.2	11	245	63	--	--	<.01	.54	1.3	<.003	.052
25-26	0810	0709	6.8	6.0	67	166	--	--	<.01	.62	1.4	<.003	.047
26-26	0810	1910	14	30	312	69	--	--	.04	.76	1.2	.004	.090
26-28	2010	0710	22	51	176	54	--	--	<.01	.76	1.2	.009	.147
MAR 28-													
APR 01	0820	0719	12	21	178	105	--	--	.01	.61	1.6	.005	.078
01-02	0810	0710	8.8	10	177	63	--	--	.01	.57	1.6	.004	.046
02-03	0810	0410	24	25	155	59	--	--	.03	.78	1.4	.005	.082
03-04	0510	0709	34	55	119	44	57	10	.23	.98	1.2	.010	.193
04-08	0815	0614	18	26	150	54	--	--	.02	.72	1.7	.007	.089
08-11	0705	0604	8.9	8.1	168	64	--	--	.02	.61	1.5	.004	.038
13-13	0715	1815	20	47	141	62	102	20	.05	1.4	.89	.005	.175
13-15	1915	0615	29	61	110	47	64	11	.02	1.2	.97	.009	.168
15-18	0750	0649	22	39	111	38	41	7	.02	.98	1.2	.011	.136
MAY													
09-09	0055	0554	15	42	107	84	99	20	.08	.35	.67	.011	.175
09-12	0720	0619	8.2	9.4	135	78	--	--	.02	.64	.65	.006	.050
12-12	0720	2220	12	44	111	78	49	12	.04	1.4	.55	.009	.146
12-13	2320	0620	15	17	103	65	--	--	.04	.74	.53	.011	.081
13-14	1005	0604	64	98	69	37	138	22	.03	1.6	.52	.014	.280
14-16	0705	0605	53	78	70	29	--	--	.03	1.7	1.0	.022	.248
16-19	0710	1410	18	17	105	52	--	--	.02	.81	1.3	.016	.088
20-24	0650	0549	6.4	4.9	103	68	--	--	<.01	.71	1.2	.011	.039
JUN													
14-14	0305	2205	16	62	79	59	--	--	.08	1.4	.67	.025	.249
14-17	2305	0604	7.8	32	103	67	--	--	.04	1.1	.76	.027	.136
17-20	0705	0604	5.2	16	146	94	--	--	.03	.68	1.1	.033	.085
27-28	1455	0555	15	48	82	70	69	15	.06	1.1	1.2	.027	.164
JUN 28-													
JUL 01	0655	0554	12	39	105	57	53	10	.03	1.1	.85	.035	.171
23-23	0050	0850	9.9	26	61	114	--	--	.04	.77	.65	.026	.126
23-25	0950	0550	5.9	25	80	97	--	--	<.01	.63	.45	.029	.100
25-29	0705	0604	5.0	15	77	135	--	--	<.01	.59	.51	.039	.102
SEP													
27-27	0325	1825	21	19	73	124	--	--	.02	.93	.19	.028	.172
27-30	1925	0625	6.8	19	63	55	--	--	.03	.91	.31	.024	.153

04232050 ALLEN CREEK NEAR ROCHESTER, NY

LOCATION.--Lat 43°07'49", long 77°31'08", Monroe County, Hydrologic Unit 04140101, on right bank 525 ft downstream from Penn Central Transportation Co. bridge, near Rochester, and about 1.3 mi upstream from Irondequoit Creek.
DRAINAGE AREA.--30.1 mi^2, flow from 3.5 mi^2 noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1959 to current year.
REVISED RECORDS.--WDR NY 1974: 1972(M), 1973(M, P). WDR NY-76-1: 1960-75 (M, P), 1960-63, 1972-74.
GAGE.--Water-stage recorder and concrete control. Datum of gage is 323.54 ft above NGVD of 1929.
REMARKS.--Records fair. Unpublished water-quality records for prior years are available in files of Monroe County Department of Health. Discharge prior to January 1980 included undetermined diversion (maximum 20 ft^3/s) from Erie (Barge) Canal upstream from station. January 1980 to present, diversion reduced to a maximum of 3 ft^3/s for use by several golf courses adjacent to stream. Telephone gage-height telemeter at station. Several measurements of water temperature were made during the year.
COOPERATION.--Many discharge measurements were provided by the Monroe County Health Laboratory at Rochester, N.Y.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,280 ft^3/s, May 17, 1974, gage height, 7.42 ft, from rating curve extended above 1,000 ft^3/s on basis of contracted-opening measurement of peak discharge and step-backwater analysis; minimum daily discharge, 1.7 ft^3/s, Jan. 24, 1963; minimum instantaneous discharge not determined.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 450 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 1	1715	479	3.96	Sept. 27	1715	491	3.82
May 14	0100	*644	*4.11				

Minimum discharge, 2.2 ft^3/s, Aug. 11, gage height, 2.09 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	8.7	24	6.9	298	13	23	24	46	14	7.1	3.5
2	10	11	15	6.6	124	12	44	37	28	11	5.3	3.3
3	9.7	16	11	6.4	42	17	138	25	21	7.8	4.5	5.6
4	9.4	9.8	9.4	8.8	30	13	53	20	21	7.4	4.4	4.2
5	9.2	10	8.9	8.9	24	11	33	17	27	6.5	4.2	3.6
6	27	7.6	7.4	e7.4	22	15	30	15	33	7.1	4.6	3.4
7	9.8	4.4	6.8	e9.0	21	17	26	17	18	5.7	3.8	3.0
8	8.4	4.9	6.6	e7.6	24	18	23	14	14	5.2	3.3	3.1
9	8.2	6.6	12	9.9	27	22	25	44	12	12	3.9	3.4
10	7.4	4.6	10	20	31	29	23	24	9.2	8.6	3.4	3.4
11	7.1	6.3	8.1	15	45	19	19	16	8.3	7.4	2.9	5.6
12	7.0	4.8	7.0	12	e29	19	16	38	16	6.5	3.2	4.2
13	7.0	4.3	8.8	11	e26	19	98	253	11	5.2	3.8	3.8
14	6.7	4.6	41	9.5	21	19	99	414	122	5.3	3.3	3.6
15	15	4.1	83	9.9	20	17	92	163	106	5.2	7.7	15
16	9.5	4.0	23	10	26	17	38	64	50	4.6	12	20
17	15	3.6	33	11	28	14	27	53	26	4.4	7.8	7.1
18	10	3.4	70	10	22	18	22	55	18	4.1	7.5	5.8
19	8.2	3.6	35	8.3	19	15	17	37	14	5.5	5.5	5.5
20	7.4	10	25	7.8	20	35	14	29	12	5.5	6.3	4.9
21	32	5.3	21	8.6	21	30	11	23	10	4.7	3.9	4.3
22	21	3.8	16	9.1	17	24	12	18	9.7	4.9	3.4	5.2
23	13	3.5	15	8.3	15	21	13	16	9.3	43	4.8	4.7
24	12	3.5	16	17	14	20	11	15	7.5	11	8.1	5.3
25	15	31	13	17	14	18	14	13	12	8.5	7.4	3.9
26	24	14	e10	12	15	77	12	23	28	8.8	5.8	5.7
27	15	8.0	e8.0	10	14	110	10	14	26	8.3	3.9	165
28	12	9.9	e8.0	9.6	13	35	79	12	72	20	3.5	52
29	9.8	56	e8.0	9.5	---	27	51	99	22	12	4.5	16
30	9.5	37	e7.0	21	---	28	32	107	17	14	4.0	9.6
31	9.0	---	e7.0	31	---	23	---	131	---	8.7	3.8	---
TOTAL	375.3	304.3	574.0	349.1	1022	772	1105	1830	826.0	282.9	157.6	383.7
MEAN	12.1	10.1	18.5	11.3	36.5	24.9	36.8	59.0	27.5	9.13	5.08	12.8
MAX	32	56	83	31	298	110	138	414	122	43	12	165
MIN	6.7	3.4	6.6	6.4	13	11	10	12	7.5	4.1	2.9	3.0

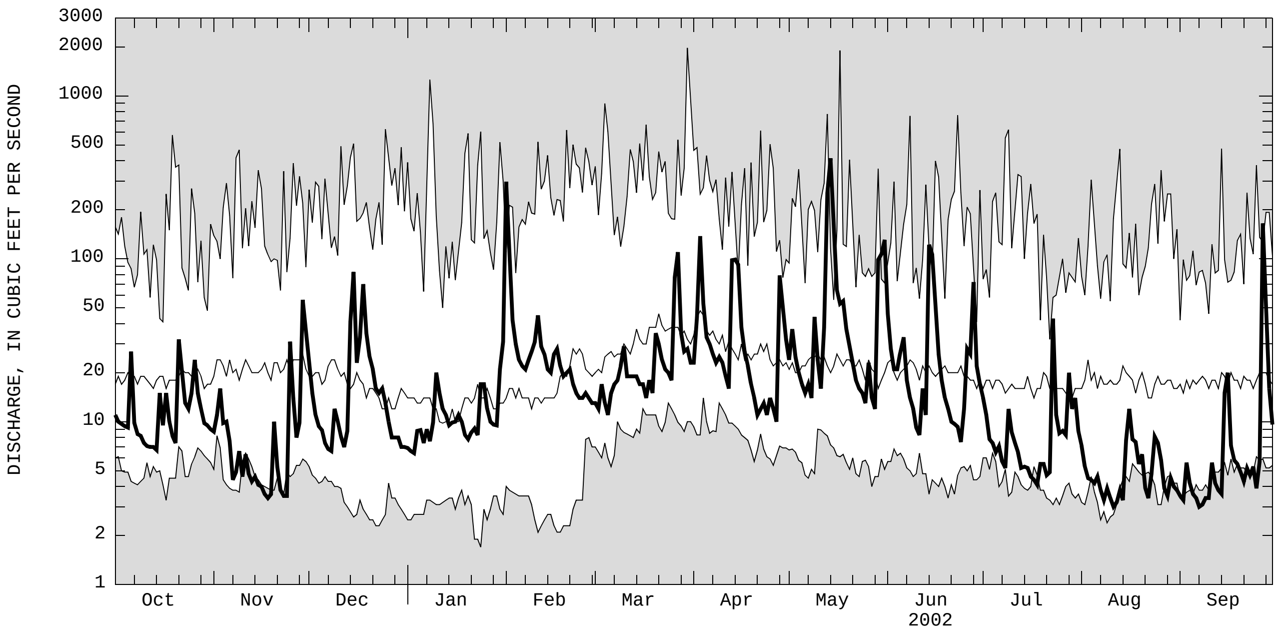
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	24.4	29.8	29.7	25.0	34.9	56.4	45.2	32.9	27.0	22.2	23.6	22.4
MAX	74.8	102	89.7	108	94.9	131	80.7	103	78.4	79.7	50.7	60.5
(WY)	1978	1973	1978	1998	1981	1960	1969	1974	1972	1998	1992	1977
MIN	7.99	7.42	4.80	4.40	10.4	22.6	11.2	8.94	8.58	6.29	5.08	6.07
(WY)	1962	1961	1961	1963	1989	1981	1995	1995	2001	2001	2002	1961

e Estimated

04232050 ALLEN CREEK NEAR ROCHESTER, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1960 - 2002	
ANNUAL TOTAL	7769.0		7981.9			
ANNUAL MEAN	21.3		21.9		30.9	
HIGHEST ANNUAL MEAN					50.6	1978
LOWEST ANNUAL MEAN					16.1	1995
HIGHEST DAILY MEAN	301	Mar 23	414	May 14	1970	Mar 30 1960
LOWEST DAILY MEAN	2.4	Aug 9	2.9	Aug 11	1.7	Jan 24 1963
ANNUAL SEVEN-DAY MINIMUM	2.8	Aug 6	3.4	Aug 8	2.3	Feb 15 1962
10 PERCENT EXCEEDS	55		39		56	
50 PERCENT EXCEEDS	9.9		12		19	
90 PERCENT EXCEEDS	4.3		4.2		7.3	



2002 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.

04232050 ALLEN CREEK NEAR ROCHESTER, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1971-72, 1979-81, 1983 to current year.
CHEMICAL DATA: Water years 1971-72 (a), 1979 (a), 1980 (d), 1981 (e), 1983 to current year (e).
NUTRIENT DATA: Water years 1971-72 (a), 1979 (a), 1980 (d), 1981 (e), 1983 to current year (e).
PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: November 1994 to current year.
INSTRUMENTATION.--Automatic water sampler since October 1983. Water temperature recorder since November 1994 provides 15-minute-interval readings.
COOPERATION.--Water-quality samples were collected and analyzed by the Monroe County Environmental Health Laboratory at Rochester, N.Y.
REMARKS.--Records for October 1983 to September 1993 are published in "Water Resources of Monroe County New York, Water Years 1984-88", U.S. Geological Survey Open-File Report 93-370, and in "Water Resources of Monroe County New York, Water Years 1989-93", U.S. Geological Survey Open-File Report 97-587. Prior to October 1983, unpublished records are available in the files of the U.S. Geological Survey. The non-daily water-quality records for this site were collected and reported in local standard time.
EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 26.5°C, July 5, 1999; minimum, 0°C, many days during winter period.
EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded mean, 23.5°C, Aug. 2; minimum recorded, 0°C, several days during winter period.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	15.0	11.5	13.5	11.5	9.0	10.5	10.5	9.5	10.0	2.5	1.0	1.5
2	16.0	13.5	14.5	13.0	11.0	12.0	10.0	8.0	9.0	2.5	0.5	1.5
3	17.0	13.5	15.5	12.0	10.5	11.5	9.0	6.5	8.0	3.0	1.0	2.0
4	17.0	15.0	16.0	12.0	10.0	10.5	10.0	7.0	8.5	4.5	2.0	3.0
5	16.0	14.0	15.0	10.5	9.0	9.5	11.5	9.5	10.5	4.5	3.0	3.5
6	14.5	11.5	13.5	10.0	8.5	9.0	11.0	8.5	10.5	4.5	3.5	4.0
7	12.0	10.5	11.5	10.5	8.5	9.5	8.5	7.0	7.5	3.5	2.0	3.0
8	12.0	9.5	10.5	11.5	8.5	10.0	7.0	5.0	6.0	3.5	1.5	2.5
9	12.0	8.5	10.5	10.0	8.0	9.0	7.5	5.5	6.5	5.5	2.5	4.0
10	13.5	10.5	12.0	9.5	7.5	8.5	7.0	5.0	6.0	5.0	3.5	4.0
11	15.0	12.0	13.5	8.5	6.5	8.0	7.0	4.5	5.5	5.0	4.0	4.5
12	15.0	13.5	14.5	8.0	6.0	7.0	7.0	4.5	5.5	5.5	4.0	4.5
13	16.5	13.5	15.0	8.5	5.5	7.0	9.5	6.5	8.0	5.0	3.5	4.0
14	16.0	15.0	15.5	10.0	7.5	9.0	9.5	6.0	8.5	4.5	3.0	3.5
15	15.0	12.5	14.0	12.0	10.0	11.0	6.0	5.0	5.5	5.0	4.0	4.5
16	14.5	12.0	13.0	12.5	9.5	11.5	6.0	5.0	5.5	4.5	3.5	4.0
17	13.0	10.5	11.5	9.5	7.5	8.5	6.5	5.5	6.0	4.0	3.0	3.5
18	12.0	9.5	10.5	9.5	6.0	7.5	6.5	6.0	6.5	3.5	2.0	2.5
19	12.5	9.5	11.0	10.5	7.0	9.0	6.5	5.5	6.0	3.0	1.0	2.0
20	13.5	11.0	12.0	9.5	7.5	8.5	6.0	5.0	5.5	3.5	1.5	2.5
21	15.0	10.5	12.5	8.5	6.5	7.5	5.5	4.0	5.0	3.5	2.0	3.0
22	13.5	12.0	12.5	9.0	6.5	7.5	5.0	4.0	4.5	4.5	3.5	4.0
23	14.0	11.5	13.0	8.5	5.5	7.0	6.0	4.0	5.0	6.0	3.5	5.0
24	15.0	13.0	14.0	10.0	5.5	7.5	6.0	4.0	5.0	6.0	4.0	5.5
25	14.0	11.5	13.0	13.0	10.0	11.5	4.5	3.5	4.0	4.5	3.0	4.0
26	11.5	9.5	10.5	11.5	10.0	11.0	4.0	2.5	3.5	5.5	3.5	4.5
27	10.0	9.0	9.5	10.5	9.5	10.0	3.0	2.0	2.5	6.0	3.5	4.5
28	9.5	8.5	9.0	10.5	9.0	9.5	3.5	2.0	3.0	7.0	4.5	5.5
29	11.0	8.0	9.5	9.0	7.5	8.5	3.5	2.0	2.5	6.0	5.0	5.5
30	10.5	8.5	9.5	10.5	9.0	9.5	2.0	0.5	1.5	5.0	3.5	4.0
31	10.0	8.5	9.0	---	---	---	2.5	1.0	1.5	3.5	0.0	2.0
MONTH	17.0	8.0	12.4	13.0	5.5	9.2	11.5	0.5	5.9	7.0	0.0	3.6

04232050 ALLEN CREEK NEAR ROCHESTER, NY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	2.5	1.0	1.5	4.0	1.5	3.0	8.0	6.5	7.0	12.5	7.5	10.0
2	2.5	1.0	1.5	5.5	2.0	4.0	6.5	5.5	6.0	11.0	9.5	10.0
3	3.0	1.5	2.0	6.0	3.5	5.5	6.5	5.0	6.0	11.0	8.5	9.5
4	2.0	0.5	1.5	3.5	1.0	2.5	6.0	4.0	5.0	13.5	8.0	10.5
5	2.0	0.0	1.0	3.5	0.0	2.0	5.5	4.0	5.0	14.5	9.0	12.0
6	3.0	1.0	2.0	5.0	1.5	3.0	7.5	3.5	5.0	15.0	11.5	13.5
7	4.0	1.0	2.5	4.0	2.5	3.0	7.0	3.5	5.5	15.5	13.0	14.0
8	4.5	2.5	3.5	7.0	3.0	5.0	8.5	6.0	7.0	13.5	11.5	12.5
9	4.0	2.5	3.5	9.5	6.0	8.0	11.0	8.0	9.5	14.0	11.5	13.0
10	5.0	2.5	4.0	7.5	2.0	4.5	11.0	8.0	9.5	15.5	12.5	13.5
11	4.5	1.0	2.5	4.5	1.0	3.0	13.0	7.5	10.0	14.0	10.5	12.5
12	3.0	1.0	2.0	5.5	3.5	4.5	14.0	9.5	11.5	12.5	11.0	11.5
13	2.5	1.0	1.5	6.5	3.5	5.0	12.5	11.5	12.0	11.0	10.0	10.5
14	3.0	0.0	1.5	7.5	4.5	6.0	13.0	11.0	12.0	10.5	9.5	10.0
15	4.5	2.0	3.0	8.0	4.5	6.5	15.5	12.0	13.5	13.0	9.0	11.0
16	4.5	3.5	4.0	7.5	4.5	6.0	18.5	13.0	15.5	13.5	10.5	12.0
17	4.0	2.0	3.0	6.0	3.0	4.5	20.0	14.5	17.0	13.0	11.0	12.0
18	3.5	0.5	2.0	5.5	5.0	5.5	19.5	15.5	17.5	11.5	10.0	10.5
19	4.0	1.0	2.5	6.0	4.5	5.0	19.0	15.5	17.0	10.5	9.5	10.0
20	5.0	4.0	4.5	5.5	4.5	5.0	15.5	12.0	14.0	11.0	9.0	9.5
21	5.5	4.5	5.0	5.5	2.5	4.5	12.0	9.5	10.5	12.0	8.5	10.0
22	5.0	3.0	4.0	4.0	1.0	2.5	10.0	8.0	8.5	14.5	9.0	11.5
23	4.0	2.5	3.0	4.0	1.5	2.5	12.0	7.0	9.5	16.0	10.0	13.0
24	6.0	2.5	4.0	5.5	2.5	4.0	13.5	7.5	10.5	14.5	12.0	13.0
25	7.0	4.0	5.5	4.5	2.5	3.5	11.0	9.0	10.0	15.5	10.0	13.0
26	6.5	5.0	6.0	4.0	2.5	3.0	11.0	8.0	9.0	16.0	13.0	14.0
27	5.0	2.0	4.0	4.0	2.5	3.0	12.0	7.0	9.5	17.0	11.5	14.0
28	4.5	1.5	3.0	6.5	2.5	4.5	10.0	8.5	9.5	17.5	13.0	15.0
29	---	---	---	7.5	4.0	6.0	9.5	8.0	8.5	---	---	17.0
30	---	---	---	10.0	6.5	8.0	10.0	7.5	8.5	---	---	18.5
31	---	---	---	9.0	5.5	7.5	---	---	---	---	---	18.5
MONTH	7.0	0.0	3.0	10.0	0.0	4.5	20.0	3.5	10.0	---	---	12.4

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	18.0	---	---	22.0	---	---	23.0	---	---	19.5
2	---	---	17.0	---	---	23.0	---	---	23.5	---	---	19.5
3	---	---	15.0	---	---	22.5	---	---	22.0	---	---	20.0
4	---	---	14.0	---	---	22.5	---	---	21.5	---	---	20.0
5	---	---	17.0	---	---	19.5	---	---	22.0	---	---	19.0
6	---	---	16.0	---	---	19.5	---	---	19.5	---	---	17.5
7	---	---	15.5	---	---	19.5	---	---	19.0	---	---	18.5
8	---	---	16.0	---	---	20.5	---	---	18.5	---	---	19.5
9	---	---	17.0	---	---	20.0	---	---	19.0	---	---	20.0
10	---	---	17.0	---	---	19.0	---	---	19.5	---	---	20.5
11	---	---	18.5	---	---	18.5	---	---	20.5	---	---	19.0
12	---	---	17.5	---	---	18.5	---	---	21.5	---	---	17.0
13	---	---	17.0	---	---	19.0	---	---	22.0	---	---	17.5
14	---	---	17.5	---	---	20.0	---	---	22.5	---	---	18.0
15	---	---	17.0	---	---	21.0	---	---	23.0	---	---	19.0
16	---	---	16.5	---	---	20.5	---	---	22.0	---	---	18.5
17	---	---	15.5	---	---	21.5	---	---	22.5	---	---	17.5
18	---	---	15.5	---	---	21.5	---	---	22.0	---	---	18.0
19	---	---	16.5	---	---	20.5	---	---	20.5	---	---	19.0
20	---	---	17.5	---	---	20.5	---	---	20.5	---	---	20.5
21	---	---	18.5	---	---	20.0	---	---	19.5	---	---	20.5
22	---	---	18.5	---	---	21.5	---	---	19.5	---	---	19.5
23	---	---	19.5	---	---	21.0	---	---	20.0	---	---	17.5
24	---	---	19.0	---	---	19.0	---	---	19.5	---	---	16.0
25	---	---	19.0	---	---	19.0	---	---	19.0	---	---	15.5
26	---	---	20.0	---	---	19.5	---	---	19.5	---	---	16.5
27	---	---	20.5	---	---	20.5	---	---	19.5	---	---	16.5
28	---	---	21.0	---	---	21.0	---	---	18.0	---	---	17.0
29	---	---	20.5	---	---	22.0	---	---	18.0	---	---	16.0
30	---	---	21.0	---	---	22.5	---	---	17.5	---	---	16.5
31	---	---	---	---	---	22.5	---	---	19.0	---	---	---
MONTH	---	---	17.6	---	---	20.6	---	---	20.4	---	---	18.3

04232050 ALLEN CREEK NEAR ROCHESTER, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	Ending time	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	TUR-BID-ITY (NTU) (00076)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
OCT													
06-06	0010	1110	35	30	140	83	43	10	.02	.64	.82	.020	.130
06-09	1210	0710	11	9.3	149	209	--	--	<.01	.44	.71	.015	.065
21-22	1155	0655	46	43	87	56	59	13	.01	<.10	.54	.030	.170
22-25	0735	0635	14	5.3	150	72	--	--	<.01	.52	.43	.018	.050
NOV													
21-25	0855	0655	3.8	2.1	219	89	--	--	<.01	.41	.48	.010	.025
25-26	0755	0755	35	32	110	45	--	--	<.01	.92	.37	.028	.150
26-28	0830	0730	9.4	6.5	182	68	--	--	<.01	.48	.49	.020	.060
28-29	0830	0730	18	9.8	186	69	--	--	.01	.63	.57	.023	.075
NOV 29-													
DEC 03	0835	0735	31	6.1	153	58	--	--	<.01	.62	.64	.019	.085
03-06	0815	0715	9.4	9.0	228	89	--	--	<.01	.40	.74	.022	.050
14-15	1435	0935	117	24	175	67	--	--	.03	.58	.68	.016	.130
15-17	1035	0835	29	35	143	50	45	9	<.01	.66	.67	.016	.140
17-20	0845	0745	47	16	146	57	--	--	.02	.96	.85	.014	.080
JAN													
09-10	1140	0740	16	98	870	111	105	36	.02	3.6	.99	.005	.360
10-14	0825	0725	14	4.0	548	82	--	--	<.01	.46	.92	.006	.030
29-30	2335	1035	18	5.3	468	88	--	--	.03	.50	.94	.005	.030
30-31	1135	0735	21	7.8	819	73	--	--	.04	.47	.92	.005	.030
JAN 31-													
FEB 01	0915	2015	182	68	705	49	--	--	.06	.61	.76	.008	.200
01-02	2115	1615	181	53	271	47	--	--	.05	.97	1.30	.023	.165
04-07	0850	0749	24	16	538	81	--	--	.01	.64	1.9	.017	.088
10-11	1235	0735	45	15	347	70	--	--	.02	.80	1.2	.011	.081
11-15	0900	0759	27	9.5	460	65	--	--	.02	.52	1.6	.008	.052
MAR													
11-14	0845	0744	19	5.7	477	77	--	--	<.01	.55	.93	<.003	.031
20-20	0235	1934	35	8.6	352	73	--	--	<.01	.60	1.1	.003	.051
20-21	2035	0735	37	31	272	55	34	<10	<.01	.74	.70	.005	.093
21-25	0825	0724	23	8.0	547	71	--	--	<.01	.52	1.0	.003	.038
26-27	1135	0135	149	93	458	59	203	38	.04	1.8	.84	.008	.348
27-28	0235	0734	78	46	281	45	<1	<1	.01	.93	.82	.006	.149
MAR 28-													
APR 01	0840	0739	26	10	315	104	--	--	<.01	.59	1.2	.004	.054
02-03	1135	0735	120	51	218	51	84	16	.04	1.1	.95	.006	.178
03-04	0835	0735	87	51	202	55	63	11	.01	.90	.91	.006	.165
13-13	0340	1840	68	30	252	67	66	13	.03	1.1	1.1	.006	.120
13-15	1940	0640	126	64	172	44	94	17	.02	1.4	.64	.010	.196
15-18	0730	0629	40	20	187	46	--	--	.01	.90	.94	.011	.118
18-22	0725	0624	15	7.7	256	64	--	--	<.01	.64	1.1	.007	.047
MAY													
08-09	2235	0635	45	15	198	63	--	--	.05	1.0	.89	.012	.107
09-13	0735	0634	32	14	170	50	--	--	.02	.68	.66	.007	.053
13-14	0750	0049	347	91	94	28	--	--	<.01	1.5	.48	.017	.305
14-16	0150	0650	253	41	115	31	--	--	.02	.95	.79	.019	.164
16-20	0740	0639	48	9.7	154	50	--	--	.01	.79	1.1	.015	.059
20-24	0750	0649	20	3.4	203	72	--	--	.02	.63	1.3	.011	.034
JUN													
05-06	2235	0635	30	13	136	52	--	--	.04	.79	1.0	.016	.086
06-10	0745	0644	17	6.2	182	67	--	--	.01	.65	1.1	.022	.060
13-15	2345	0245	125	72	96	39	--	--	.07	1.3	.88	.029	.285
15-17	0345	0645	65	38	104	37	--	--	.03	1.0	.68	.024	.151
17-20	0745	0644	18	10	181	62	--	--	.02	.70	1.1	.029	.079
27-28	1520	0620	65	57	110	46	93	21	.04	1.4	.97	.029	.245
JUN 28-													
JUL 01	0720	0619	28	25	133	48	--	--	.03	.94	2.0	.033	.113
01-05	0735	0634	9.5	12	186	72	--	--	.02	.75	1.0	.039	.097
23-23	0420	1520	71	69	95	70	117	23	.02	1.7	.76	.026	.258
23-25	1620	0620	13	16	72	72	--	--	.01	.93	.77	.031	.092
AUG													
01-05	0730	0629	5.1	6.2	161	92	--	--	.01	.63	.77	.036	.076
15-15	0740	1840	6.2	18	135	107	--	--	<.01	.96	.70	.029	.104
15-19	1940	0639	9.2	13	109	85	--	--	<.01	.63	.73	.030	.079
SEP													
14-16	1540	0640	15	24	97	93	--	--	<.01	.75	.69	.023	.158
16-19	0735	0634	8.5	7.9	105	82	--	--	<.01	.49	.69	.025	.079
27-28	1540	1840	158	23	91	90	--	--	.01	1.0	.55	.023	.238
28-30	1940	0640	16	30	109	59	64	11	<.01	.88	.56	.018	.181

0423205010 IRONDEQUOIT CREEK ABOVE BLOSSOM ROAD, ROCHESTER, NY

LOCATION.--Lat 43°08'42", long 77°30'44", Monroe County, Hydrologic Unit 04140101, on right bank 4,000 ft upstream from bridge on Blossom Road, 1.8 mi east of Rochester, 1.7 mi downstream from Allen Creek, and 4.4 mi upstream from mouth.
DRAINAGE AREA.--142 mi^2., flow from 7.78 mi^2. noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional discharge measurements water years 1977-80. December 1980 to current year.
GAGE.--Water-stage recorder. Datum of gage is 247.87 ft above NGVD of 1929 (levels by Corps of Engineers). Prior to Oct. 1, 1991, at site 0.8 mi downstream at datum 1.56 ft lower.
REMARKS.--Records good except those for estimated daily discharges, which are fair. Discharge includes undetermined diversion from Erie (Barge) Canal. 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.
COOPERATION.--Discharge measurements were provided by the Monroe County Environmental Health Laboratory at Rochester, N.Y.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,300 ft^3/s, Jan. 8, 1998, gage height, 9.95 ft; minimum discharge, 25 ft^3/s, Sept. 8, 9, 10, 14, 2002, gage height, 2.14 ft.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 1	1915	979	8.18	May 14	1545	*1,090	*8.41

Minimum discharge, 25 ft^3/s, Sept. 8, 9, 10, 14, gage height, 2.14 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	40	131	e40	652	91	126	202	300	83	e46	30
2	47	43	80	e36	733	88	168	254	176	81	e40	28
3	43	63	63	e38	381	103	500	217	128	77	36	30
4	41	49	55	e44	232	94	391	153	117	64	35	28
5	41	40	51	e46	e160	83	238	122	149	55	34	27
6	85	31	48	49	e144	98	196	107	195	53	33	27
7	50	29	46	54	129	108	169	113	143	51	33	27
8	44	28	45	49	131	108	146	116	109	49	32	26
9	42	30	57	53	148	129	149	207	93	68	32	25
10	41	28	60	85	161	175	142	171	83	59	31	26
11	39	30	52	83	264	132	101	122	79	51	30	29
12	39	29	50	75	203	121	81	168	96	47	30	28
13	40	28	57	68	174	121	211	537	87	45	31	27
14	39	30	103	60	131	116	434	1020	353	43	30	26
15	49	29	289	59	126	102	565	752	494	41	37	53
16	44	29	153	58	156	100	328	375	431	39	54	67
17	57	28	145	59	196	96	213	314	296	38	57	41
18	45	28	260	58	151	100	159	300	200	37	52	33
19	43	29	207	49	131	95	130	247	152	39	37	31
20	46	41	135	49	133	152	123	176	120	40	36	30
21	93	77	109	50	140	201	113	147	101	38	33	28
22	95	75	88	51	135	149	103	131	92	38	31	29
23	66	51	81	51	120	124	94	120	86	128	34	28
24	63	41	83	75	107	119	85	108	80	81	39	28
25	50	112	72	87	102	111	96	100	78	51	38	27
26	66	87	64	72	101	193	93	113	102	46	35	29
27	51	57	e54	64	100	467	87	97	128	46	32	264
28	44	58	e52	59	93	281	222	89	257	e85	31	218
29	42	177	e48	59	---	178	313	e230	143	e65	31	72
30	41	153	e42	91	---	165	213	e440	95	e75	31	50
31	40	---	e42	119	---	139	---	446	---	e56	30	---
TOTAL	1578	1570	2822	1890	5434	4339	5989	7694	4963	1769	1111	1412
MEAN	50.9	52.3	91.0	61.0	194	140	200	248	165	57.1	35.8	47.1
MAX	95	177	289	119	733	467	565	1020	494	128	57	264
MIN	39	28	42	36	93	83	81	89	78	37	30	25
CFSM	0.38	0.39	0.68	0.45	1.45	1.04	1.49	1.85	1.23	0.43	0.27	0.35
IN.	0.44	0.44	0.78	0.52	1.51	1.20	1.66	2.13	1.38	0.49	0.31	0.39

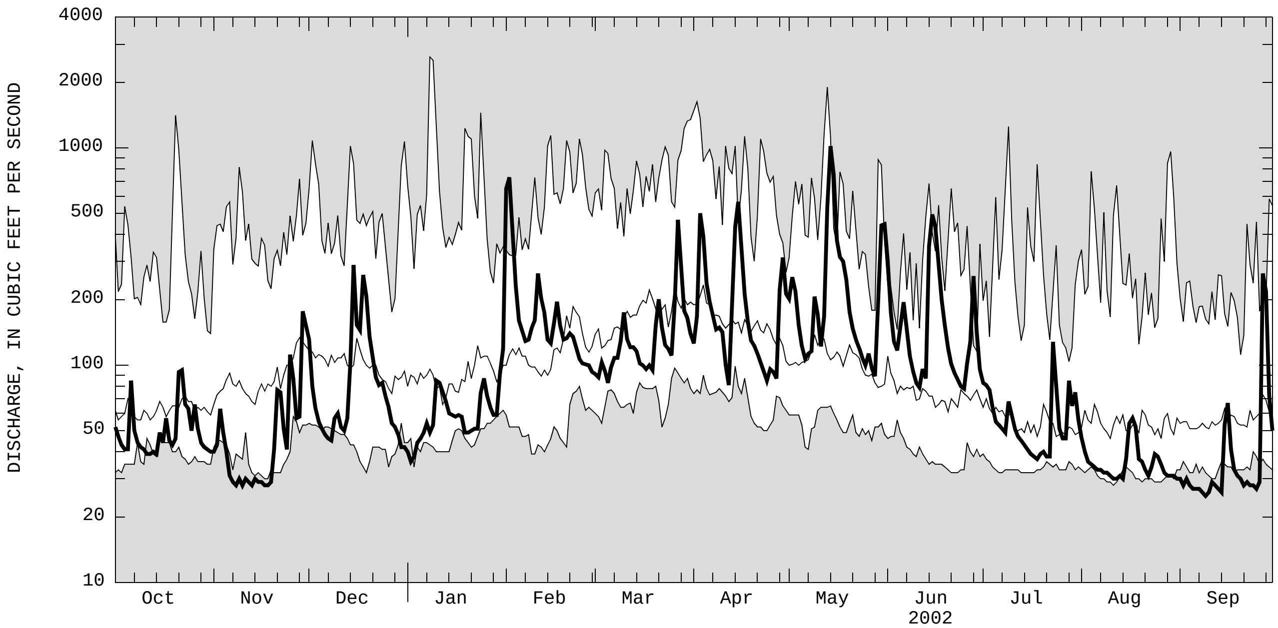
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	86.6	114	135	141	173	223	222	149	98.2	73.1	76.6	71.3
MAX	191	224	253	446	347	348	468	292	186	194	253	132
(WY)	1997	1986	1997	1998	1981	1993	1993	1984	1989	1998	1992	1992
MIN	39.5	52.3	49.5	60.8	67.1	122	82.8	62.1	46.9	42.2	35.8	39.8
(WY)	1983	2002	1990	1989	1989	1988	1995	1995	1988	1983	2002	1995

e Estimated

0423205010 IRONDEQUOIT CREEK ABOVE BLOSSOM ROAD, ROCHESTER, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1981 - 2002	
ANNUAL TOTAL	40809		40571			
ANNUAL MEAN	112		111		131	
HIGHEST ANNUAL MEAN					182	1993
LOWEST ANNUAL MEAN					80.1	1995
HIGHEST DAILY MEAN	926	Mar 23	1020	May 14	2620	Jan 8 1998
LOWEST DAILY MEAN	28	Aug 11	25	Sep 9	25	Sep 9 2002
ANNUAL SEVEN-DAY MINIMUM	29	Nov 12	27	Sep 4	27	Sep 4 2002
ANNUAL RUNOFF (CFSM)	0.83		0.83		0.98	
ANNUAL RUNOFF (INCHES)	11.31		11.24		13.25	
10 PERCENT EXCEEDS	261		217		257	
50 PERCENT EXCEEDS	67		77		86	
90 PERCENT EXCEEDS	34		30		44	



2002 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.

0423205010 IRONDEQUOIT CREEK ABOVE BLOSSOM ROAD, ROCHESTER, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1980-81, 1983 to current year.
CHEMICAL DATA: Water years 1980-81, 1983 to current year (e).
NUTRIENT DATA: Water years 1980-81, 1983 to current year (e).
PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: November 1994 to September 2001.
INSTRUMENTATION.--Automatic water sampler since October 1983.
COOPERATION.--Water-quality samples were collected and analyzed by the Monroe County Environmental Health Laboratory at Rochester, N.Y.
REMARKS.--Records for October 1983 to September 1993 are published in "Water Resources of Monroe County New York, Water Years 1984-88", U.S. Geological Survey Open-File Report 93-370 and in "Water Resources of Monroe County New York, Water Years 1989-93", U.S. Geological Survey Open-File Report 97-587. Prior to October 1983, unpublished records are available in the files of the U.S. Geological Survey. The non-daily water-quality records for this site were collected and reported in local standard time.
EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 27.0°C, July 5, 6, 1999; minimum 0.0°C, many days during winter period.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	Ending time	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	TUR-BID-ITY (NTU) (00076)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)
OCT													
01-05	0755	0655	45	8.4	--	--	150	220	--	--	<.01	.36	.84
05-05	0850	2350	41	10	--	--	129	182	--	--	<.01	.32	.89
06-09	0050	0750	50	14	--	--	74	97	--	--	<.01	.34	.85
09-11	0810	0710	41	4.0	--	--	144	220	--	--	<.01	.35	.90
11-15	0815	0715	40	9.1	--	--	140	234	--	--	<.01	.35	.79
15-18	0815	0715	50	7.9	--	--	130	216	--	--	<.01	.24	.55
18-21	0815	1115	45	7.1	--	--	132	238	--	--	<.01	.28	.68
21-22	1215	0715	135	44	--	--	92	129	92	15	.01	<.10	.55
22-25	0800	0700	67	11	--	--	115	163	--	--	<.01	<.10	.45
25-29	0750	0750	52	6.9	--	--	135	182	--	--	<.01	.60	.52
OCT 29-													
NOV 01	0855	0755	41	6.6	--	--	145	235	--	--	<.01	<.10	.71
01-05	0850	0750	49	7.2	--	--	143	227	--	--	<.01	.45	.61
05-09	0855	0755	30	6.3	--	--	146	235	--	--	.02	<.10	.59
09-13	0850	0750	29	6.3	--	--	158	255	--	--	.02	<.10	.64
13-15	0900	0800	29	5.1	--	--	750	230	--	--	<.01	.39	.68
15...	0950	--	29	2.3	--	--	166	250	--	--	.01	.26	.66
21-25	0915	0715	62	9.1	--	--	160	201	--	--	<.01	.46	.67
25-26	0815	0815	134	39	--	--	113	151	--	--	<.01	.82	.58
26-28	0855	1355	63	8.1	--	--	142	188	--	--	<.01	.32	.65
28-29	1455	0755	77	8.1	--	--	146	180	--	--	<.01	.36	.75
NOV 29-													
DEC 03	0855	0755	132	7.0	--	--	117	131	--	--	<.01	.52	.67
03-06	0840	0740	54	2.7	--	--	166	213	--	--	<.01	.32	.88
06-10	0905	0805	50	5.3	--	--	170	240	--	--	<.01	.32	.98
10-13	0905	0805	52	4.9	--	--	161	213	--	--	<.01	.36	.92
13-14	0810	1110	61	5.4	1300	241	156	214	8	2	<.01	.33	.91
14-15	1210	0710	240	90	949	189	116	158	185	29	<.01	.66	.80
15-16	0810	0710	226	50	949	179	116	119	67	11	<.02	.78	.74
17-20	0915	0815	208	29	--	--	129	127	--	--	<.01	.99	1.1
20-24	0845	0745	98	8.7	--	--	150	169	--	--	<.01	.19	1.3
24-27	0805	0705	70	6.3	--	--	152	184	--	--	<.01	.26	1.3
27-31	0855	0755	53	4.1	--	--	194	218	--	--	<.01	.60	1.3
DEC 31-													
JAN 03	0845	0745	46	4.2	--	--	186	233	--	--	<.01	.40	1.4
03-07	0855	0755	48	4.6	--	--	173	217	--	--	<.01	.31	1.3
07-10	0910	0810	56	4.0	--	--	291	206	--	--	<.01	.55	1.2
10-14	0850	0750	76	3.9	--	--	268	194	--	--	<.01	.38	1.1
14-18	0850	0750	59	3.8	--	--	216	211	--	--	<.01	.49	1.1
18-22	0840	0740	51	3.5	--	--	272	223	--	--	<.01	.55	1.1
22-24	0900	0800	51	3.0	--	--	249	212	--	--	<.01	.32	1.1
24-28	0905	0805	75	5.3	--	--	228	188	--	--	<.01	.40	1.1
28-31	0900	0800	73	4.6	--	--	242	180	--	--	<.01	.35	.94
JAN 31-													
FEB 01	0950	2050	417	98	--	--	442	113	--	--	<.01	1.5	.98
01-03	2150	1250	686	78	--	--	152	86	--	--	.01	.93	1.5
04-07	0915	0814	168	14	--	--	250	141	--	--	.01	.56	1.7
07-10	0900	1200	138	6.3	--	--	249	156	--	--	<.01	.49	1.5
10-11	1300	0800	217	14	--	--	235	137	--	--	<.01	.59	1.4
11-15	0940	0839	179	15	--	--	245	124	--	--	<.01	.50	1.6
15-19	0850	0749	158	7.3	--	--	230	137	--	--	<.01	.51	1.4
19-21	0850	0750	132	4.9	--	--	202	141	--	--	<.01	.43	1.4
21-25	0855	0754	122	5.3	--	--	185	152	--	--	<.01	.51	1.3
25-28	0855	0754	100	5.0	--	--	190	159	--	--	<.01	.70	1.1

0423205010 IRONDEQUOIT CREEK ABOVE BLOSSOM ROAD, ROCHESTER, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
OCT			
01-05	.020	.070	--
05-05	.020	.060	--
06-09	.020	.075	--
09-11	.020	.055	--
11-15	.017	.050	--
15-18	.015	.065	--
18-21	.015	.040	--
21-22	.016	.150	--
22-25	.016	.065	--
25-29	.033	.055	--
OCT 29- NOV 01	.020	.060	--
01-05	.014	.045	--
05-09	.014	.040	--
09-13	.013	.035	--
13-15	.011	.040	--
15...	.009	.070	--
21-25	.009	.045	--
25-26	.012	.150	--
26-28	.014	.075	--
28-29	.014	.055	--
NOV 29- DEC 03	.016	.090	--
03-06	.018	.050	--
06-10	.015	.042	--
10-13	.012	.035	--
13-14	.011	.035	5
14-15	.011	.380	60
15-16	.014	.160	25
17-20	.013	.100	--
20-24	.014	.050	--
24-27	.011	.035	--
27-31	.011	.030	--
DEC 31- JAN 03	.008	.025	--
03-07	.007	.025	--
07-10	.007	.025	--
10-14	.008	.030	--
14-18	.007	.020	--
18-22	.007	.025	--
22-24	.008	.025	--
24-28	.006	.025	--
28-31	.005	.020	--
JAN 31- FEB 01	.007	.270	--
01-03	.010	.191	--
04-07	.010	.066	--
07-10	.008	.040	--
10-11	.008	.070	--
11-15	.008	.058	--
15-19	.007	.047	--
19-21	.007	.026	--
21-25	.008	.044	--
25-28	.005	.039	--

0423205010 IRONDEQUOIT CREEK ABOVE BLOSSOM ROAD, ROCHESTER, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	Ending time	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	TUR-BID-ITY (NTU) (00076)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)
FEB 28-MAR 04	0905	0804	94	5.0	--	--	266	166	--	--	<.01	.40	1.1
04-07	0850	0749	93	5.3	--	--	281	167	--	--	<.01	.42	1.2
07-11	0905	0804	134	9.4	--	--	303	139	--	--	<.01	.44	.99
11-14	0910	0809	122	7.1	--	--	242	138	--	--	<.01	.59	.96
14-18	0915	0814	101	6.3	--	--	193	149	--	--	<.01	.47	1.1
18-20	0855	0455	97	3.7	--	--	195	145	--	--	<.01	.55	1.0
20-20	0555	1955	156	9.0	--	--	198	133	--	--	<.01	.65	1.1
20-21	2055	0755	215	.4	--	--	180	101	--	--	<.01	.74	.90
21-25	0850	0749	140	15	--	--	241	124	--	--	<.01	.56	1.1
25-26	0900	1059	106	6.7	--	--	212	146	--	--	<.01	.50	1.1
26-27	1200	0200	322	66	--	--	276	104	143	25	.02	1.2	1.0
27-28	0300	0759	424	110	--	--	190	81	185	28	<.01	1.1	.99
MAR 28-APR 01	0905	0804	171	16	--	--	165	104	--	--	.07	.57	1.1
01-02	0915	1114	123	7.1	--	--	166	126	--	--	<.01	.61	1.2
02-03	1215	0815	327	43	--	--	158	95	80	14	<.01	.88	1.0
03-04	0915	0815	493	120	--	--	135	71	--	--	<.01	1.4	.90
04-08	0855	0654	221	26	--	--	157	95	--	--	<.01	.69	1.2
08-11	0830	0729	143	8.4	--	--	170	121	--	--	.02	.46	1.1
11-13	0805	0304	84	6.6	--	--	162	126	--	--	<.01	.76	1.1
13-15	0405	0705	384	100	--	--	140	94	165	23	<.01	1.4	.87
15-18	0755	0654	320	58	--	--	125	79	85	12	<.01	.99	.90
18-22	0745	0644	126	17	--	--	136	109	--	--	<.01	.71	.81
22-25	0740	0639	92	6.5	--	--	155	129	--	--	<.01	.55	.97
25-27	0805	2305	93	6.8	--	--	154	130	--	--	<.01	.49	1.0
28-29	0005	0704	252	50	--	--	152	117	97	17	.03	1.1	.92
APR 29-MAY 02	0805	0704	227	32	--	--	129	91	40	8	<.01	.81	.70
02-06	0810	0709	179	24	--	--	129	101	--	--	.01	.73	.74
06-08	0800	2159	112	9.5	--	--	159	146	--	--	<.01	.58	.83
08-09	2300	0700	183	31	--	--	145	143	60	11	<.01	1.00	.95
09-12	0755	0255	160	41	--	--	132	106	--	--	<.01	1.2	.74
12-13	0355	0655	211	39	--	--	124	98	--	--	<.01	1.0	.74
13-14	0810	1610	836	190	496	164	83	52	400	51	.03	2.6	.73
14-15	1710	2209	829	150	526	180	81	54	296	37	<.01	1.8	.83
16-20	0810	0709	288	57	--	222	106	82	82	16	<.01	1.2	.92
20-24	0810	0709	137	14	--	--	131	120	--	--	<.01	.90	1.1
24-28	0805	0704	103	8.7	--	--	143	144	--	--	<.01	.64	1.1
28-29	0750	0949	82	26	--	--	136	134	--	--	<.01	.69	.88
29-31	1050	0650	365	28	--	--	103	91	--	--	<.01	1.2	.79
MAY 31-JUN 03	0925	0725	277	65	--	--	94	75	102	16	.01	1.2	.80
03-05	0800	0400	119	19	--	--	130	118	--	--	<.01	.75	1.0
05-06	0500	0659	178	36	--	--	124	126	54	10	<.01	.79	1.1
06-10	0810	0709	125	33	--	--	114	104	48	9	<.01	.80	.90
10-13	0800	0659	87	18	--	--	135	142	--	--	<.01	.71	1.1
13-13	0810	2310	86	16	--	--	131	142	--	--	<.01	.64	1.1
14-15	0010	1110	401	100	721	169	90	88	195	20	<.01	.90	.99
15-17	1210	0709	437	120	667	169	79	62	203	25	<.01	1.7	1.0
17-20	0805	0704	192	42	--	--	105	88	--	--	<.01	.93	1.0
20-21	0725	1825	109	30	--	--	117	115	--	--	.02	1.0	1.1
24-27	0825	0724	89	41	--	--	137	151	55	12	<.01	1.1	1.2
27-28	0750	0649	171	71	--	--	101	98	--	--	.01	1.4	1.0
JUN 28-JUL 01	0750	0649	147	81	--	--	105	95	112	20	<.01	1.4	.96
01-05	0755	0654	74	29	--	--	143	161	--	--	<.01	.77	1.1
05-08	0745	0644	52	18	--	--	134	167	--	--	.01	.62	1.0
08-11	0750	0649	59	9.7	--	--	127	168	--	--	<.01	.73	1.1
11-15	0750	0649	46	14	--	--	139	193	--	--	<.01	.53	1.1
15-18	0805	0704	39	11	--	--	151	226	--	--	<.01	.30	.98
18-22	0755	0654	39	10	--	--	123	181	--	--	<.01	.24	.77
22-23	0755	0054	39	8.0	--	--	143	211	--	--	<.01	.42	.86
23-23	0155	1555	126	46	--	--	126	207	88	15	<.01	.92	1.1
23-25	1655	0655	88	47	--	--	101	151	76	12	.01	.93	.83
25-29	0815	0714	50	16	--	--	133	178	--	--	<.01	.58	.89

0423205010 IRONDEQUOIT CREEK ABOVE BLOSSOM ROAD, ROCHESTER, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
FEB 28-MAR 04	.006	.026	--
04-07	.004	.037	--
07-11	.004	.039	--
11-14	.004	.039	--
14-18	.003	.023	--
18-20	.004	.034	--
20-20	.004	.071	--
20-21	.003	.100	--
21-25	.006	.070	--
25-26	.005	.022	--
26-27	.004	.208	--
27-28	.006	.346	--
MAR 28-APR 01	.004	.056	--
01-02	.004	.038	--
02-03	.004	.132	--
03-04	.006	.335	--
04-08	.006	.126	--
08-11	.006	.046	--
11-13	.007	.038	--
13-15	.007	.297	--
15-18	.015	.181	--
18-22	.011	.074	--
22-25	.009	.070	--
25-27	.005	.034	--
28-29	.006	.165	--
APR 29-MAY 02	.006	.088	--
02-06	.006	.081	--
06-08	.006	.047	--
08-09	.007	.099	--
09-12	.008	.153	--
12-13	.007	.133	--
13-14	.013	.631	108
14-15	.013	.459	74
16-20	.016	.183	30
20-24	.012	.041	--
24-28	.010	.047	--
28-29	.013	.080	17
29-31	.013	.269	51
MAY 31-JUN 03	.018	.175	33
03-05	.015	.074	--
05-06	.016	.125	--
06-10	.020	.115	--
10-13	.021	.071	--
13-13	.022	.083	--
14-15	.026	.362	83
15-17	.028	.355	56
17-20	.035	.161	--
20-21	.033	.130	--
24-27	.029	.152	--
27-28	.030	.308	--
JUN 28-JUL 01	.037	.147	--
01-05	.037	.140	--
05-08	.031	.093	--
08-11	.026	.082	--
11-15	.024	.066	--
15-18	.021	.049	--
18-22	.014	.079	--
22-23	.018	.045	--
23-23	.018	.147	--
23-25	.021	.156	--
25-29	.023	.075	--

0423205010 IRONDEQUOIT CREEK ABOVE BLOSSOM ROAD, ROCHESTER, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	Ending time	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	TUR-BID-ITY (NTU) (00076)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)
JUL 29-													
AUG 01	0755	0654	50	19	--	--	119	165	--	--	<.01	.62	.85
01-05	0755	0654	36	7.2	--	--	145	213	--	--	<.01	.41	.94
05-08	0750	0649	33	8.6	--	--	149	224	--	--	.01	.48	.84
08-12	0750	0649	31	4.4	--	--	149	251	--	--	<.01	.35	.92
12-15	0750	0649	30	6.0	--	--	147	238	--	--	<.01	.36	.78
15-19	0800	0659	51	14	--	--	120	197	--	--	.01	.44	.82
19-22	0800	0659	35	7.7	--	--	139	208	--	--	<.02	.75	.88
22-26	0720	0619	36	11	--	--	142	239	--	--	<.01	.39	.94
26-30	0810	0709	32	10	--	--	148	240	--	--	<.01	.36	.94
AUG 30-													
SEP 03	0745	0644	29	8.5	--	--	148	250	--	--	<.01	.34	.93
03-05	0800	0700	28	8.4	--	--	158	246	--	--	.01	.38	.91
05-09	0800	0659	26	5.8	--	--	145	250	--	--	<.01	.38	.92
09-12	0730	0629	27	7.6	--	--	145	234	--	--	<.01	.45	.89
12-14	0755	2255	27	6.3	--	--	140	237	--	--	<.01	.34	.88
14-16	2355	0654	56	15	--	--	117	202	--	--	<.10	.53	.95
16-19	0800	0659	43	11	--	--	124	205	--	--	<.01	.42	.81
19-23	0750	0649	30	7.5	--	--	150	241	--	--	<.10	.39	.82
23-26	0745	0644	28	5.8	--	--	141	252	--	--	<.01	.32	.91
26-27	0800	0300	30	6.0	--	--	143	245	--	--	<.01	.38	.84
27-27	0400	1900	202	48	--	--	108	183	236	32	.01	1.1	.75
27-30	2000	0700	167	55	--	--	100	111	116	19	.01	.88	.58
SEP 30-													
OCT 03	0800	0659	38	7.0	--	--	138	198	--	--	.01	.41	.75

Date	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
JUL 29-			
AUG 01	.027	.075	--
01-05	.024	.058	--
05-08	.019	.052	--
08-12	.016	.046	--
12-15	.017	.052	--
15-19	.020	.060	--
19-22	.022	.058	--
22-26	.021	.062	--
26-30	.019	.047	--
AUG 30-			
SEP 03	.016	.063	--
03-05	.018	.055	--
05-09	.015	.075	--
09-12	.015	.060	--
12-14	.015	.060	--
14-16	.018	.089	--
16-19	.019	.065	--
19-23	.018	.051	--
23-26	.018	.052	--
26-27	.016	.055	--
27-27	.016	.369	--
27-30	.021	.259	--
SEP 30-			
OCT 03	.020	.059	--

0423205025 IRONDEQUOIT CREEK AT EMPIRE BOULEVARD, ROCHESTER, NY

LOCATION.--Lat 43°10'34", long 77°31'37", Monroe County, Hydrologic Unit 04140101, on right bank 25 ft upstream from bridge on Empire Boulevard (Route 404), 200 ft upstream from mouth at south end of Irondequoit Bay, and 1.5 mi east of Rochester.
DRAINAGE AREA.--151 mi^2, flow from 7.78 mi^2 noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1990 to current year.
GAGE.--Doppler velocity meter, water-stage recorder, and crest-stage gage. Datum of gage is 242.66 ft above NGVD of 1929 (levels by Corps of Engineers).
REMARKS.--Records poor. Records affected by backwater from Irondequoit Bay. Discharge includes undetermined diversion from Erie (Barge) Canal. Undetermined discharge (usually less than 5 percent of the total flow) bypasses gage through culvert 900 ft west of main channel. Unpublished gage-height record for March 1989 to May 1990 is available in files of U.S. Geological Survey. Unpublished water-quality records are available in files of Monroe County Department of Health. Telephone gage-height telemeter at station.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,400 ft^3/s, Jan. 9, 1999, maximum gage height, 6.64 ft, Apr. 23, 1993 (backwater from Irondequoit Bay); minimum daily discharge, 20 ft^3/s, Aug. 5, 2002; minimum instantaneous discharge not determined.
EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 904 ft^3/s, May 14; minimum daily discharge, 20 ft^3/s, Aug. 5; maximum and minimum instantaneous discharges not determined.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e56	e40	166	e36	385	82	129	200	e300	e70	40	24
2	e50	e45	84	e32	607	79	160	245	e180	e66	35	25
3	e46	e64	e66	31	407	95	454	232	e130	e64	34	22
4	e44	e54	e58	35	211	87	446	162	e115	e55	38	25
5	e42	e44	e54	39	119	73	276	126	e140	48	20	31
6	84	e34	e50	36	125	78	208	104	e190	46	43	26
7	e54	e32	e48	50	119	96	186	105	e140	41	40	23
8	e46	e30	e46	53	125	101	154	117	e100	40	31	26
9	e44	e32	e56	51	124	127	146	204	e85	49	30	27
10	e42	e30	e62	77	123	173	153	171	e80	54	26	26
11	e42	e32	e56	84	211	134	111	123	e75	49	28	24
12	e40	e30	e52	76	200	122	66	152	e90	38	27	35
13	e42	e30	e56	66	154	e120	151	380	e80	41	24	25
14	e40	e31	e90	58	124	119	405	904	e290	36	22	21
15	e50	e31	e300	58	118	111	528	877	e460	27	30	45
16	e46	e31	e170	63	140	105	400	455	e420	38	47	74
17	e58	e30	e150	56	181	100	232	294	e300	27	46	43
18	e48	e30	e250	59	136	101	169	277	e200	30	45	33
19	e44	e30	e220	39	113	97	130	252	e140	34	36	27
20	e46	e40	e150	35	111	144	122	181	e110	36	38	26
21	e70	e75	e120	47	143	215	118	143	e90	32	33	24
22	121	80	e95	49	130	183	105	114	e80	34	27	25
23	e70	e54	e85	55	110	138	92	109	e70	84	37	28
24	e65	e42	e88	63	94	125	83	89	e68	94	34	25
25	e52	100	e75	95	91	116	97	110	e66	46	34	27
26	e66	121	e66	79	93	161	86	97	e80	39	31	25
27	e54	e60	e56	65	93	470	87	83	e100	35	31	152
28	e46	e55	e52	60	97	346	175	70	e240	69	29	298
29	e44	186	e46	52	---	217	331	152	e140	58	28	92
30	e42	176	e40	87	---	187	226	382	e85	59	30	54
31	e40	---	e38	91	---	153	---	e440	---	46	30	---
TOTAL	1634	1669	2945	1777	4684	4455	6026	7350	4644	1485	1024	1358
MEAN	52.7	55.6	95.0	57.3	167	144	201	237	155	47.9	33.0	45.3
MAX	121	186	300	95	607	470	528	904	460	94	47	298
MIN	40	30	38	31	91	73	66	70	66	27	20	21

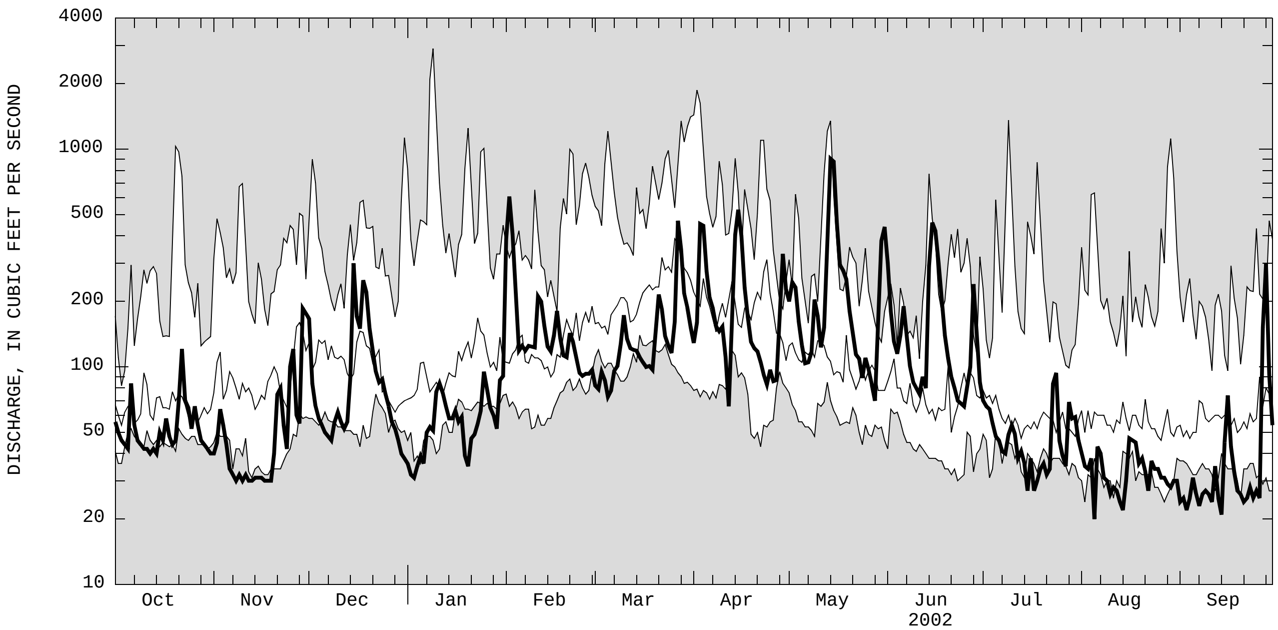
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	89.2	111	137	166	170	268	237	141	100	79.5	79.2	72.9
MAX	187	208	247	442	226	351	481	254	172	201	262	132
(WY)	1997	1993	1997	1998	2001	1993	1993	2000	2000	1998	1992	1992
MIN	52.2	55.6	66.2	57.3	85.6	144	82.0	63.8	49.9	47.1	33.0	38.1
(WY)	1995	2002	1999	2002	1995	2002	1995	1995	1995	2001	2002	1995

e Estimated

0423205025 IRONDEQUOIT CREEK AT EMPIRE BOULEVARD, ROCHESTER, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1990 - 2002	
ANNUAL TOTAL	43395		39051			
ANNUAL MEAN	119		107		138	
HIGHEST ANNUAL MEAN					183	1993
LOWEST ANNUAL MEAN					80.3	1995
HIGHEST DAILY MEAN	988	Mar 24	904	May 14	2900	Jan 9 1998
LOWEST DAILY MEAN	28	Aug 13	20	Aug 5	20	Aug 5 2002
ANNUAL SEVEN-DAY MINIMUM	30	Nov 12	25	Sep 1	25	Sep 1 2002
10 PERCENT EXCEEDS	286		216		276	
50 PERCENT EXCEEDS	70		70		90	
90 PERCENT EXCEEDS	36		30		45	



2002 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.

0423205025 IRONDEQUOIT CREEK AT EMPIRE BOULEVARD, ROCHESTER, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1989 to current year.
CHEMICAL DATA: Water years 1989 to current year (e).
NUTRIENT DATA: Water years 1989 to current year (e).
PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: November 1994 to current year.
INSTRUMENTATION. --Automatic water sampler since September 1989. Water-temperature recorder since November 1994 provides 15-minute-interval readings; since July 2000, provides 5-minute-interval readings.
COOPERATION.--Water-quality samples were collected and analyzed by the Monroe County Environmental Health Laboratory at Rochester, N.Y.
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. The non-daily water-quality records for this site were collected and reported in local standard time.
EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum recorded, 29.0℃, July 15, 1995, Aug. 9, 2001; minimum recorded, 0℃, on many days during winter period.
EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded, 27.5℃, Aug. 2; minimum recorded, 0℃, several days during winter period.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	15.5	11.5	13.5	10.0	7.5	8.5	9.5	9.0	9.5	---	---	---
2	17.5	12.5	14.5	12.0	9.5	11.0	9.5	8.0	9.0	---	---	---
3	18.0	13.5	16.0	11.5	10.5	11.0	8.0	6.5	7.0	0.0	0.0	0.0
4	18.0	14.5	16.5	11.5	9.5	10.5	8.0	6.0	7.0	0.5	0.0	0.0
5	16.5	14.5	15.5	10.0	8.0	8.5	10.0	8.0	9.0	1.5	0.0	0.5
6	14.5	12.0	13.5	9.5	7.0	8.0	10.0	8.5	9.5	2.0	1.5	2.0
7	12.0	10.0	11.0	9.5	8.0	8.5	8.5	7.0	8.0	2.0	1.0	1.5
8	11.5	9.0	10.0	10.5	8.0	9.0	7.0	5.0	5.5	1.0	0.0	0.5
9	10.5	8.0	9.0	9.5	7.5	8.5	5.5	4.5	5.0	2.5	0.5	1.5
10	13.0	9.0	10.5	9.0	6.5	7.5	5.0	3.5	4.5	4.0	2.0	3.0
11	13.5	11.0	12.5	8.0	6.0	7.0	---	---	---	4.0	3.0	3.5
12	14.5	13.0	14.0	7.5	5.0	6.0	---	---	---	4.0	3.0	3.5
13	18.0	13.5	15.5	7.5	4.5	6.0	---	---	---	3.5	2.5	3.0
14	16.0	15.0	15.5	8.5	6.5	7.0	---	---	---	2.5	2.0	2.0
15	15.5	13.0	14.5	10.5	8.5	9.5	---	---	---	3.0	2.5	3.0
16	14.0	12.0	13.0	12.5	10.0	10.5	---	---	---	3.0	2.0	2.5
17	12.0	9.5	10.5	10.5	8.0	9.5	---	---	---	2.5	1.5	2.0
18	11.5	8.0	10.0	9.0	6.5	7.5	---	---	---	2.0	0.5	1.5
19	10.5	8.5	9.5	9.5	6.5	8.0	---	---	---	0.5	0.0	0.5
20	13.5	10.0	11.0	9.0	6.5	7.5	---	---	---	1.0	0.0	0.5
21	12.5	10.0	11.5	7.5	5.5	6.5	---	---	---	1.5	0.5	1.0
22	14.0	12.0	12.5	8.5	7.0	7.5	---	---	---	3.5	1.0	2.0
23	13.5	11.0	12.0	8.5	6.5	7.5	---	---	---	4.0	2.0	3.0
24	15.0	13.0	13.5	9.0	6.0	7.5	---	---	---	4.5	4.0	4.0
25	14.0	11.5	13.0	11.5	9.0	10.5	---	---	---	4.5	3.0	3.5
26	11.5	9.0	10.5	11.5	10.0	10.5	---	---	---	4.5	2.5	3.0
27	9.0	7.5	8.5	10.0	9.0	9.5	---	---	---	5.0	2.5	3.5
28	8.0	7.0	7.5	9.5	8.5	9.0	---	---	---	5.5	3.0	4.0
29	9.0	6.5	7.5	8.5	8.0	8.5	---	---	---	5.0	4.0	4.5
30	10.5	7.5	8.5	9.5	8.5	9.0	---	---	---	4.5	3.0	3.5
31	8.0	7.0	7.5	---	---	---	---	---	---	3.0	0.5	1.5
MONTH	18.0	6.5	11.9	12.5	4.5	8.5	---	---	---	---	---	---

0423205025 IRONDEQUOIT CREEK AT EMPIRE BOULEVARD, ROCHESTER, NY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	2.0	0.5	1.0	3.0	0.5	1.5	9.0	7.0	8.0	12.0	8.0	10.0
2	0.5	0.0	0.5	4.5	1.5	3.0	7.0	6.0	6.5	11.0	10.5	10.5
3	1.0	0.5	1.0	6.0	4.0	5.0	6.0	5.5	6.0	11.0	9.5	10.0
4	1.0	0.0	0.5	4.0	0.5	2.5	5.5	4.5	5.0	13.0	9.0	11.0
5	0.0	0.0	0.0	1.5	0.0	0.5	5.0	4.0	4.5	14.5	11.0	12.5
6	1.5	0.0	0.5	3.0	1.0	2.0	7.0	3.5	5.0	15.5	13.5	14.5
7	2.5	0.5	1.5	3.0	2.5	3.0	6.0	4.0	5.0	16.5	15.0	15.5
8	4.0	2.0	3.0	6.0	2.5	4.0	8.0	5.5	6.5	15.5	14.0	14.5
9	4.0	2.5	3.5	9.5	6.0	7.5	10.5	8.0	9.5	14.5	13.0	13.5
10	4.0	2.5	3.0	8.0	3.0	5.5	11.5	9.0	10.0	15.5	13.0	14.5
11	4.0	1.0	2.5	4.0	1.5	3.0	13.5	9.0	11.0	15.0	13.0	14.0
12	1.5	0.5	1.0	---	---	---	14.5	11.0	13.0	14.0	11.5	12.5
13	1.5	0.5	1.0	---	---	---	14.0	12.0	13.5	11.5	10.0	11.0
14	1.5	0.0	0.5	8.0	5.0	6.5	12.5	11.5	12.0	10.0	9.5	10.0
15	3.0	1.0	2.0	7.5	6.0	6.5	14.5	12.5	13.5	12.5	9.0	10.5
16	4.0	3.0	3.5	7.5	5.5	7.0	18.5	14.0	16.0	13.5	11.0	12.5
17	4.0	1.5	3.0	6.0	4.0	5.0	20.5	16.5	18.5	13.5	12.0	12.5
18	2.5	0.5	1.5	5.5	4.5	5.0	21.5	18.5	20.0	12.5	11.0	11.5
19	2.5	0.5	1.5	5.5	4.5	5.0	21.0	18.5	20.0	11.0	9.5	10.5
20	3.5	2.5	3.0	5.0	4.5	4.5	19.5	15.0	17.5	11.0	9.0	10.0
21	4.5	3.5	4.0	5.0	3.5	4.5	15.0	12.0	13.0	11.5	9.5	10.5
22	4.5	3.0	4.0	3.5	1.5	2.5	12.0	8.5	10.0	13.5	10.0	11.5
23	3.5	2.0	2.5	3.0	1.0	2.0	11.0	7.5	9.0	15.5	12.0	14.0
24	5.0	1.5	3.0	5.0	2.0	3.5	12.5	9.0	10.5	15.5	14.5	15.0
25	6.5	3.5	4.5	4.5	3.0	4.0	12.0	10.5	11.0	16.0	13.5	14.5
26	6.0	4.5	5.5	3.0	2.5	3.0	11.0	9.5	10.0	17.0	15.0	15.5
27	4.5	2.5	3.5	3.5	2.5	3.0	11.5	9.0	10.5	18.0	14.5	16.0
28	3.0	1.0	2.0	5.5	2.0	4.0	11.5	10.0	10.5	19.0	16.0	17.5
29	---	---	---	7.5	4.5	5.5	10.0	8.5	9.0	20.0	17.5	18.5
30	---	---	---	10.0	7.0	8.5	9.5	8.0	9.0	20.0	18.5	19.0
31	---	---	---	9.5	7.5	8.5	---	---	---	20.0	19.0	19.5
MONTH	6.5	0.0	2.2	---	---	---	21.5	3.5	10.8	20.0	8.0	13.3

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	20.5	18.0	19.5	24.5	22.5	23.0	27.0	24.0	25.5	23.0	19.5	21.5
2	20.5	18.5	19.5	25.5	23.0	24.5	27.5	25.0	26.0	23.5	20.0	21.5
3	18.5	17.0	17.5	26.5	24.0	25.0	27.0	24.0	25.5	23.5	21.0	22.0
4	17.0	15.5	16.0	27.0	24.5	25.5	26.0	23.5	24.5	23.5	20.5	22.0
5	19.0	15.5	17.0	25.5	23.5	24.0	26.5	23.5	25.0	22.0	20.0	21.0
6	18.0	17.0	17.5	23.5	22.0	22.5	25.0	22.0	23.0	22.0	18.5	20.0
7	18.5	15.5	17.0	23.5	21.0	22.0	23.0	20.5	21.5	23.0	18.5	20.5
8	19.5	16.5	18.0	24.5	21.5	22.5	23.5	20.5	21.5	24.0	19.5	21.5
9	20.5	18.5	19.5	23.0	22.0	22.5	23.5	20.0	21.5	24.0	20.0	22.0
10	21.5	19.0	20.0	23.0	21.0	22.0	24.0	20.0	22.0	24.5	20.5	22.0
11	23.0	20.0	21.5	23.0	20.5	21.5	24.5	21.0	22.5	22.0	19.0	21.0
12	22.5	19.5	21.0	22.5	20.0	21.0	25.0	22.0	23.0	21.0	17.0	19.0
13	21.0	18.5	19.5	23.0	20.0	21.0	26.0	22.5	24.0	21.0	17.0	19.0
14	20.0	17.5	18.5	23.5	20.5	22.0	26.0	23.5	25.0	19.5	18.0	19.0
15	17.5	17.0	17.5	24.0	21.5	22.5	26.5	24.5	25.0	19.5	18.5	19.0
16	17.0	16.5	17.0	24.5	22.0	23.0	26.0	23.0	25.0	21.5	18.5	19.5
17	17.5	16.0	16.5	25.5	22.5	24.0	26.5	24.0	25.0	21.5	17.0	19.0
18	18.5	16.0	17.0	25.5	23.0	24.0	25.5	23.0	24.5	21.0	17.0	19.0
19	19.5	16.5	18.0	24.0	23.0	23.5	24.5	22.5	23.0	22.5	17.5	20.0
20	21.0	18.0	19.5	25.0	22.0	23.0	24.5	21.5	23.0	24.0	19.0	21.5
21	22.0	19.5	21.0	25.0	21.5	23.0	24.0	20.5	22.5	22.5	20.5	21.0
22	22.0	21.0	21.5	25.0	22.5	24.0	22.5	21.0	21.5	22.5	19.0	20.5
23	23.5	21.0	22.0	24.0	22.0	23.0	23.5	20.5	21.5	20.5	18.0	19.0
24	23.5	22.0	22.5	22.5	20.5	21.5	22.0	20.5	21.5	19.5	15.5	17.5
25	23.5	21.0	22.0	22.0	19.5	20.5	23.0	19.5	21.0	18.0	15.0	16.5
26	24.0	22.0	23.0	22.0	20.0	21.0	23.5	19.5	21.5	18.0	15.0	16.5
27	24.0	22.5	23.0	23.0	20.5	21.5	23.0	20.5	21.5	16.5	15.5	16.0
28	23.5	21.5	22.5	24.0	21.5	22.5	21.0	19.5	20.5	17.5	15.0	16.5
29	23.0	21.0	22.0	25.5	22.5	24.0	19.5	18.5	19.0	18.0	14.0	15.5
30	23.5	21.5	22.5	26.0	23.5	24.5	21.5	17.0	19.0	19.0	15.0	17.0
31	---	---	---	26.5	23.5	25.0	23.0	18.5	20.5	---	---	---
MONTH	24.0	15.5	19.6	27.0	19.5	22.9	27.5	17.0	22.8	24.5	14.0	19.5

0423205025 IRONDEQUOIT CREEK AT EMPIRE BOULEVARD, ROCHESTER, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	Ending time	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	TUR-BID-ITY (NTU) (00076)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)
OCT													
01-05	0840	0740	48	10	--	--	158	215	--	--	<.01	.57	.75
05-06	0945	0445	53	18	--	--	130	168	--	--	<.01	.43	.74
06-07	0545	0045	82	19	--	--	133	174	--	--	.01	.53	.80
07-09	0145	0845	49	11	--	--	141	202	--	--	<.01	.37	.75
09-11	0855	0755	43	5.3	--	--	142	208	--	--	.01	<.10	.83
11-15	0855	0755	42	14	--	--	146	210	--	--	.01	.45	.70
15-18	0905	0805	57	13	--	--	136	186	--	--	.01	.39	.51
18-21	0945	1245	50	11	--	--	136	208	--	--	<.01	.39	.52
21-22	1345	0745	93	25	--	--	106	160	--	--	<.01	.44	.54
22-25	0845	0745	77	13	--	--	109	161	--	--	<.01	.66	.44
25-29	0845	0845	54	12	--	--	119	151	--	--	.03	.51	.42
OCT 29-													
NOV 01	1010	0910	41	9.3	--	--	146	210	--	--	<.01	.48	.58
01-05	0940	0840	51	11	--	--	143	223	--	--	.02	.56	.59
05-09	0945	0845	34	7.4	--	--	151	217	--	--	.02	<.10	.50
09-13	0930	0830	31	7.8	--	--	158	222	--	--	.04	.44	.55
13-15	0945	0845	31	7.1	--	--	156	233	--	--	.02	<.10	.61
15-19	0930	0830	30	9.7	--	--	160	234	--	--	<.01	.38	.61
19-21	1040	0940	46	4.7	--	--	152	205	--	--	<.01	.67	.60
21-25	0955	0755	65	7.1	--	--	160	187	--	--	<.01	.38	.61
25-26	0855	0855	146	24	--	--	121	154	--	--	<.01	.91	.60
26-28	0945	1745	74	12	--	--	137	175	--	--	.01	.45	.69
28-29	1845	0845	139	12	--	--	139	157	--	--	.02	.46	.67
NOV 29-													
DEC 03	0940	0840	151	7.6	--	--	119	128	--	--	.02	.59	.74
03-06	0930	0830	57	6.1	--	--	162	204	--	--	.01	.45	.87
06-10	1025	0925	51	7.7	--	--	172	221	--	--	<.01	.40	.94
10-13	1015	0915	56	9.5	--	--	168	66	--	--	<.01	.47	.94
13-14	0920	1220	71	6.4	1300	247	160	204	13	3	<.01	.29	.93
14-15	1320	1220	200	67	996	191	118	143	118	17	<.01	.39	.78
15-17	1320	0820	200	47	907	176	113	109	73	11	<.01	.82	.70
17-20	0955	0855	207	28	--	--	129	121	--	--	.01	.71	1.1
20-24	0940	0840	106	11	--	--	152	164	--	--	.01	<.10	1.4
24-27	0920	0720	73	8.2	--	--	153	171	--	--	.02	.47	1.3
27-31	0935	0835	47	6.7	--	--	194	212	--	--	<.01	.60	1.3
DEC 31-													
JAN 03	0945	0845	34	7.3	--	--	193	212	--	--	.01	.36	1.3
03-07	0945	0845	36	5.9	--	--	167	204	--	--	<.01	.57	1.2
07-10	1005	0905	55	6.0	--	--	269	196	--	--	<.01	.54	1.1
10-14	0945	0845	74	6.3	--	--	281	186	--	--	<.01	.43	1.1
14-18	0935	0835	59	7.1	--	--	215	201	--	--	.01	.37	1.1
18-22	0925	0820	44	6.5	--	--	267	208	--	--	<.01	.54	1.1
24-28	1000	0900	77	7.0	--	--	228	180	--	--	.01	.42	1.0
28-31	0945	0845	69	5.9	--	--	227	178	--	--	<.01	.46	.86
JAN 31-													
FEB 02	1020	0120	296	70	--	--	378	94	--	--	.02	1.1	.82
02-04	0220	0919	458	90	--	--	165	67	--	--	.02	1.2	1.2
04-07	1005	0904	136	22	--	--	246	132	--	--	.02	.67	3.2
07-10	0950	1650	126	8.2	--	--	253	147	--	--	.02	.50	1.5
10-11	1750	0850	153	9.1	--	--	232	140	--	--	<.01	.51	1.4
11-15	1030	0929	164	15	--	--	249	118	--	--	.01	.52	1.5
15-19	0950	0849	144	7.6	--	--	242	138	--	--	<.01	.49	1.4
19-21	0945	0845	115	6.8	--	--	205	131	--	--	<.01	.49	1.3
21-25	0930	0829	115	5.7	--	--	181	138	--	--	<.01	.48	1.2
25-28	0945	0844	94	5.5	--	--	192	156	--	--	<.01	.51	1.1
FEB 28-													
MAR 04	1010	0909	87	5.5	--	--	260	160	--	--	<.01	.45	1.1
04-07	0935	0834	80	4.9	--	--	266	165	--	--	<.01	.46	1.1
07-11	0945	0844	130	<1.0	--	--	327	139	--	--	<.01	.49	1.0
11-14	1000	0859	131	7.4	--	--	269	138	--	--	<.01	.56	.91
14-18	0950	0849	107	8.5	--	--	200	143	--	--	<.01	.61	.95
18-20	0935	0835	99	.2	--	--	202	141	--	--	<.01	.58	.99
20-21	0935	0834	199	.2	--	--	197	123	--	--	<.01	.65	.98
21-25	0935	0834	153	12	--	--	240	118	--	--	<.01	.54	1.0
25-26	0940	1439	116	7.2	--	--	232	144	--	--	<.01	.61	.99
26-27	1540	0540	330	34	--	--	268	116	54	11	<.01	.85	1.00
27-28	0640	0839	454	80	--	--	184	71	104	19	<.01	1.2	.89
MAR 28-													
APR 01	0950	0849	198	23	--	--	166	101	--	--	<.01	.64	1.1
01-02	0955	1454	129	21	--	--	137	112	--	--	<.01	.69	.96
02-03	1555	1155	328	33	--	--	170	101	54	10	.01	.79	1.0
03-04	1255	0855	501	88	--	--	134	65	117	20	<.01	1.1	.84
04-08	0940	0739	248	30	--	--	158	88	--	--	.02	.69	1.0
08-11	0740	0639	148	27	--	--	184	117	--	--	.01	.77	1.1
11-13	0900	0800	76	38	--	--	170	128	147	10	.01	1.2	1.1
13-15	0900	0800	359	82	--	--	141	92	120	20	.02	1.2	.92
15-18	0840	0739	348	65	--	--	126	75	94	15	<.01	1.1	.75
18-22	0840	0739	127	38	--	--	149	115	55	10	.02	.97	.81
22-24	0830	0730	95	14	--	--	145	113	--	--	.03	.69	.95
25-27	0845	2345	91	22	--	--	159	123	--	--	<.01	.75	.93
28-29	0045	0744	223	35	--	--	139	104	--	--	<.01	.74	.82

0423205025 IRONDEQUOIT CREEK AT EMPIRE BOULEVARD, ROCHESTER, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
OCT			
01-05	.021	.085	--
05-06	.017	.085	--
06-07	.024	.095	--
07-09	.017	.070	--
09-11	.018	.065	--
11-15	.014	.075	--
15-18	.014	.085	--
18-21	.013	.065	--
21-22	.013	.110	--
22-25	.014	.095	--
25-29	.045	.085	--
OCT 29-NOV 01	.016	.075	--
01-05	.012	.075	--
05-09	.013	.050	--
09-13	.013	.050	--
13-15	.011	.050	--
15-19	.010	.060	--
19-21	.009	.075	--
21-25	.009	.060	--
25-26	.011	.120	--
26-28	.016	.090	--
28-29	.014	.095	--
NOV 29-DEC 03	.021	.110	--
03-06	.022	.075	--
06-10	.018	.065	--
10-13	.014	.055	--
13-14	.013	.060	10
14-15	.013	.250	40
15-17	.013	.180	25
17-20	.016	.110	--
20-24	.015	.070	--
24-27	.013	.055	--
27-31	.012	.050	--
DEC 31-JAN 03	.011	.040	--
03-07	.009	.035	--
07-10	.008	.040	--
10-14	.010	.040	--
14-18	.008	.035	--
18-22	.007	.030	--
24-28	.008	.045	--
28-31	.007	.040	--
JAN 31-FEB 02	.006	.200	--
02-04	.010	.260	--
04-07	.011	.112	--
07-10	.049	.051	--
10-11	.008	.055	--
11-15	.009	.061	--
15-19	.008	.045	--
19-21	.006	.040	--
21-25	.006	.039	--
25-28	.006	.045	--
FEB 28-MAR 04	.006	.039	--
04-07	.006	.034	--
07-11	.003	.046	--
11-14	.004	.039	--
14-18	<.003	.044	--
18-20	.004	.038	--
20-21	.005	.060	--
21-25	.005	.042	--
25-26	.005	.040	--
26-27	.006	.120	--
27-28	.008	.217	--
MAR 28-APR 01	.005	.082	--
01-02	.005	.091	--
02-03	.006	.116	--
03-04	.006	.259	--
04-08	.006	.098	--
08-11	.006	.101	--
11-13	.008	.117	--
13-15	.008	.258	--
15-18	.010	.220	--
18-22	.014	.147	--
22-24	.014	.070	--
25-27	.008	.096	--
28-29	.008	.115	--

0423205025 IRONDEQUOIT CREEK AT EMPIRE BOULEVARD, ROCHESTER, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	Ending time	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	TUR-BID-ITY (NTU) (00076)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)
APR 29- MAY 02	0905	0804	234	24	--	--	131	89	--	--	<.01	.70	.69
02-06	0850	0749	184	27	--	--	141	101	--	--	<.01	.78	.71
06-08	0835	2234	107	31	--	--	165	140	50	9	.01	.74	.74
08-09	2335	0735	185	27	--	--	165	154	--	--	<.01	.76	.78
09-12	0835	0335	160	30	--	--	130	103	--	--	.01	.84	.70
12-13	0435	0735	182	29	--	--	140	109	--	--	.01	.86	.65
13-14	0855	1955	699	63	--	166	91	57	102	17	.01	1.1	.61
14-16	2055	0755	826	59	--	172	77	46	88	13	.02	.87	.67
16-20	0850	0749	285	25	--	221	104	78	36	8	<.01	.87	.82
20-24	0910	0809	129	18	--	--	130	110	--	--	.02	.72	.92
24-28	0905	0804	92	20	--	--	145	132	--	--	<.01	.70	.88
28-29	0830	1029	66	23	--	--	146	141	--	--	<.01	.71	.78
29-30	1130	0429	295	43	--	--	128	117	61	14	.01	.94	.76
30-31	0530	0729	398	59	--	--	80	62	72	16	.02	1.1	.58
MAY 31- JUN 03	1010	0810	267	41	--	--	90	65	57	57	.02	.96	.57
03-05	0850	0450	123	26	--	--	120	101	--	--	.01	.87	.74
05-06	0550	0749	155	24	--	--	131	113	--	--	.01	.76	.86
06-10	0915	0814	119	25	--	--	118	103	--	--	.01	.81	.78
10-13	0845	0744	75	20	--	--	138	128	--	--	.02	.81	.84
13-13	0850	2350	80	22	--	--	134	129	--	--	.02	.84	.98
14-15	0050	1150	447	51	775	180	93	85	68	11	.03	.94	.83
15-17	1250	0749	408	49	659	174	75	56	71	12	.01	.99	.82
17-20	0915	0814	191	16	--	--	100	81	--	--	.01	.94	.85
20-24	0825	0724	84	35	--	--	125	113	43	10	.01	.93	.92
24-27	0915	0814	75	27	--	--	143	149	--	--	<.01	.97	.93
27-28	0845	1145	162	39	--	--	119	116	49	11	.02	1.0	.87
JUN 28- JUL 01	1245	0745	128	38	--	--	104	90	48	10	.01	1.1	.74
01-05	0900	0759	62	26	--	--	144	144	--	--	.03	.84	.79
05-08	0825	0724	45	19	--	--	139	148	--	--	.02	.75	.72
08-11	0920	0819	48	12	--	--	132	154	--	--	<.01	.78	.76
11-15	0830	0729	40	14	--	--	140	176	--	--	.01	.61	.80
15-18	0935	0834	30	15	--	--	157	203	--	--	<.01	.42	.65
18-22	0850	0749	34	24	--	--	144	235	--	--	<.01	.55	.89
22-22	0900	2300	33	23	--	--	151	208	--	--	.01	.64	.59
23-23	0000	1400	48	22	--	--	121	164	--	--	.04	.69	.55
23-25	1500	0800	94	32	--	--	112	156	50	9	.02	.94	.68
25-29	0900	0759	49	29	--	--	134	163	--	--	.01	.83	.68
JUL 29- AUG 01	0850	0749	52	31	--	--	120	159	49	<10	.02	.90	.69
01-05	0850	0749	36	31	--	--	146	184	--	--	.01	.85	.61
05-08	0835	0734	34	23	--	--	155	211	--	--	<.01	.93	.51
08-12	0830	0729	29	20	--	--	153	219	--	--	<.01	.70	.57
12-15	0835	0734	25	25	--	--	159	233	--	--	<.01	.65	.57
15-19	0850	0749	43	28	--	--	132	201	--	--	<.01	.79	.65
19-22	0900	0759	35	34	--	--	135	190	--	--	.02	.87	.67
26-30	0940	0839	30	24	--	--	145	240	--	--	<.01	.75	.70
AUG 30- SEP 03	0840	0739	27	20	--	--	155	244	--	--	<.01	.62	.73
03-05	0835	0735	23	22	--	--	160	244	--	--	<.01	.75	.73
05-09	0845	0744	27	23	--	--	153	243	--	--	<.01	.77	.73
09-12	0810	0709	28	20	--	--	156	245	--	--	<.01	.72	.69
12-14	0830	2330	25	16	--	--	147	233	--	--	<.10	.66	.67
15-16	0030	0729	53	18	--	--	140	225	--	--	<.10	.68	.72
16-19	0830	0729	44	17	--	--	123	193	--	--	<.01	.67	.74
19-23	0915	0814	25	14	--	--	149	248	--	--	<.10	.59	.69
23-26	0830	0729	27	16	--	--	148	238	--	--	<.01	.56	.72
26-27	0920	0420	24	11	--	--	139	227	--	--	.01	.46	.66
27-27	0520	2020	128	24	--	--	138	218	--	--	.01	1.0	.72
28-30	2120	0820	90	80	--	--	90	111	178	26	.58	1.3	.58
SEP 30- OCT 03	0840	0739	39	15	--	--	141	181	--	--	.01	.82	.67

0423205025 IRONDEQUOIT CREEK AT EMPIRE BOULEVARD, ROCHESTER, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
APR 29-			
MAY 02	.007	.093	--
02-06	.007	.100	--
06-08	.009	.106	--
08-09	.009	.103	--
09-12	.009	.113	--
MAY			
12-13	.010	.122	--
13-14	.012	.204	29
14-16	.012	.186	23
16-20	.013	.094	18
20-24	.012	.078	--
24-28	.011	.081	--
28-29	.011	.105	19
29-30	.011	.145	31
30-31	.012	.173	32
MAY 31-			
JUN 03	.018	.143	24
03-05	.017	.116	--
05-06	.016	.113	--
06-10	.021	.106	--
10-13	.024	.102	--
13-13	.026	.111	--
14-15	.027	.205	33
15-17	.028	.195	31
17-20	.035	.142	--
20-24	.038	.146	--
24-27	.034	.141	--
27-28	.040	.170	--
JUN 28-			
JUL 01	.043	.165	--
01-05	.043	.160	--
05-08	.043	.134	--
08-11	.367	.109	--
11-15	.034	.090	--
15-18	.031	.087	--
18-22	.023	.124	--
22-22	.029	.112	--
23-23	.025	.097	--
23-25	.027	.135	--
25-29	.034	.140	--
JUL 29-			
AUG 01	.035	.139	--
01-05	.036	.151	--
05-08	.026	.136	--
08-12	.025	.138	--
12-15	.022	.139	--
15-19	.026	.127	--
19-22	.026	.171	--
26-30	.022	.155	--
AUG 30-			
SEP 03	.018	.124	--
03-05	.020	.109	--
05-09	.016	.136	--
09-12	.016	.107	--
12-14	.015	.108	--
15-16	.016	.105	--
16-19	.018	.103	--
19-23	.020	.081	--
23-26	.018	.099	--
26-27	.015	.108	--
27-27	.015	.228	--
28-30	.023	.351	--
SEP 30-			
OCT 03	.024	.154	--

04232400 SENECA LAKE AT WATKINS GLEN, NY

LOCATION.--Lat 42°23'00", long 76°52'05", Schuyler County, Hydrologic Unit 04140201, on east bank about 300 ft from lake on shorter of two boat slips at Watkins Glen.
DRAINAGE AREA.--704 mi^2.
PERIOD OF RECORD.--October 1956 to current year.
REVISED RECORDS.--WSP 2112: Drainage area.
GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929 (1.59 ft Barge Canal datum). To convert elevations to NAVD adjustment of 1988, subtract 0.62 ft. Prior to Oct. 1, 1975, at datum 438.41 ft higher.
REMARKS.--Area of water surface, 67.6 mi^2. Diversion from Susquehanna River basin enters lake through Keuka Lake Outlet at Dresden. Lake elevation regulated by taintor gates on Seneca River at Lock 4, Waterloo, for operation of Erie (Barge) Canal and power generation by New York State Electric and Gas Corp.
EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 448.95 ft, April 26, 27, 1993; minimum elevation, 442.64 ft, Mar. 14, 1978.
EXTREMES FOR CURRENT YEAR.--Maximum elevation, 446.10 ft, May 15, 17; minimum elevation, 443.67 ft, Nov. 24, 25.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	444.33	443.93	443.85	443.90	443.95	443.89	444.45	445.63	445.78	445.50	445.03	444.64
2	444.32	443.93	443.87	443.88	444.08	443.85	444.49	445.66	445.76	445.50	445.03	444.59
3	444.28	444.00	443.82	443.88	444.08	443.88	444.54	445.67	445.69	445.48	445.03	444.59
4	444.28	443.99	443.81	443.86	444.12	443.89	444.59	445.67	445.60	445.48	445.01	444.62
5	444.32	443.99	443.83	443.85	444.09	443.83	444.61	445.68	445.57	445.54	444.99	444.65
6	444.29	443.97	443.85	443.86	444.08	443.83	444.65	445.66	445.63	445.50	445.10	444.58
7	444.30	443.92	443.86	443.93	444.06	443.82	444.64	445.68	445.63	445.45	445.00	444.56
8	444.28	443.87	443.85	443.86	444.07	443.77	444.66	445.69	445.52	445.45	444.96	444.53
9	444.17	443.90	443.87	443.85	444.07	443.74	444.70	445.64	445.49	445.39	444.90	444.53
10	444.12	443.87	443.84	443.87	444.03	443.78	444.76	445.68	445.49	445.46	444.85	444.52
11	444.15	443.89	443.84	443.88	444.16	443.78	444.76	445.67	445.45	445.41	444.83	444.59
12	444.15	443.86	443.80	443.86	444.08	443.78	444.75	445.69	445.43	445.31	444.82	444.53
13	444.17	443.81	443.81	443.88	444.13	443.78	444.85	445.82	445.41	445.26	444.83	444.39
14	444.10	443.77	443.85	443.87	444.06	443.81	444.98	446.02	445.42	445.23	444.79	444.42
15	444.14	443.78	443.91	443.87	444.04	443.80	445.13	446.08	445.46	445.23	444.80	444.41
16	444.16	443.82	443.89	443.88	444.06	443.86	445.19	446.03	445.53	445.24	444.79	444.57
17	444.09	443.80	443.87	443.87	444.10	443.84	445.23	446.03	445.59	445.19	444.79	444.51
18	444.15	443.76	443.97	443.86	444.09	443.82	445.27	446.05	445.59	445.16	444.79	444.51
19	444.06	443.72	443.98	443.85	444.05	443.86	445.29	446.04	445.57	445.19	444.81	444.45
20	444.06	443.77	443.99	443.84	444.03	443.88	445.33	446.00	445.51	445.16	444.81	444.43
21	444.08	443.75	444.02	443.83	444.03	443.94	445.35	445.94	445.48	445.15	444.78	444.46
22	444.09	443.72	444.00	443.81	444.03	443.95	445.37	445.88	445.48	445.08	444.69	444.48
23	444.08	443.69	443.96	443.77	444.02	443.95	445.38	445.80	445.49	445.14	444.82	444.51
24	444.08	443.68	443.97	443.80	444.00	443.98	445.38	445.79	445.50	445.19	444.77	444.46
25	444.09	443.70	443.96	443.78	443.97	444.01	445.39	445.80	445.49	445.11	444.84	444.47
26	444.04	443.74	443.96	443.76	443.96	444.03	445.43	445.82	445.44	445.02	444.77	444.43
27	444.06	443.73	443.95	443.77	443.95	444.19	445.44	445.84	445.46	444.98	444.80	444.46
28	444.08	443.76	443.93	443.76	443.93	444.26	445.48	445.84	445.52	445.05	444.77	444.63
29	444.01	443.76	443.92	443.77	---	444.30	445.58	445.83	445.52	445.03	444.70	444.52
30	444.03	443.80	443.90	443.81	---	444.36	445.59	445.84	445.48	445.09	444.73	444.49
31	444.00	---	443.89	443.85	---	444.41	---	445.80	---	445.07	444.67	---
MEAN	444.15	443.82	443.90	443.84	444.05	443.93	445.04	445.82	445.53	445.26	444.85	444.52
MAX	444.33	444.00	444.02	443.93	444.16	444.41	445.59	446.08	445.78	445.54	445.10	444.65
MIN	444.00	443.68	443.80	443.76	443.93	443.74	444.45	445.63	445.41	444.98	444.67	444.39

CAL YR 2001 MEAN 444.46 MAX 446.50 MIN 443.43
WTR YR 2002 MEAN 444.56 MAX 446.08 MIN 443.68

04232482 KEUKA LAKE OUTLET AT DRESDEN, NY

LOCATION.--Lat 42°40'49", long 76°57'15", Yates County, Hydrologic Unit 04140201, on right bank at upstream side of bridge on Milo Street in Dresden, and 0.4 mi upstream from mouth.
DRAINAGE AREA.--207 mi^2.
PERIOD OF RECORD.--April 1965 to current year.
REVISED RECORD.--WDR NY-86-3: 1984 (P).
GAGE.--Water-stage recorder. Datum of gage is 445.35 ft above NGVD of 1929. Prior to Sept. 6, 1991 at datum 0.68 ft lower, and prior to Oct. 1, 1982, at datum 1.32 ft higher.
REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow regulated by village of Penn Yan. During each year a large part of flow from 45.5 mi^2 of Mud Creek drainage area (Susquehanna River basin) is diverted into Keuka Lake (Oswego River basin) for power development. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,000 ft^3/s, Jun. 22, 1972, gage height 8.37 ft, datum then in use, from rating curve extended above 730 ft^3/s on basis of contracted-opening measurement at Mays Mill, adjusted for intervening area; minimum discharge, 3.2 ft^3/s, part or all of each day, Sept. 6-10, 1982, gage height, 1.47 ft.
EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,170 ft^3/s, May 15, gage height, 4.29 ft; minimum discharge, 5.6 ft^3/s, Mar. 11.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	16	19	e15	80	8.0	342	173	38	352	21	21
2	25	22	17	e18	52	7.8	332	176	36	347	21	21
3	25	14	16	e19	e34	8.7	339	175	34	341	21	21
4	25	14	15	17	29	7.3	331	170	47	335	21	21
5	25	14	15	14	e32	7.4	326	162	99	326	21	20
6	257	13	15	11	28	7.1	321	166	74	320	57	20
7	298	12	15	11	26	7.1	312	171	50	314	29	19
8	17	11	14	e12	24	6.8	305	169	43	155	22	19
9	15	11	14	36	22	6.8	300	179	40	25	21	19
10	15	11	14	127	23	8.2	294	175	38	24	21	19
11	15	11	14	86	e28	6.6	289	168	37	23	21	19
12	15	11	14	101	e28	6.5	290	166	37	23	21	19
13	15	11	14	101	e22	6.5	535	209	37	23	21	18
14	16	10	16	98	e24	6.6	586	542	183	22	21	19
15	17	10	19	98	e18	6.3	310	926	641	22	21	23
16	16	9.7	14	97	19	7.6	181	1120	834	22	21	23
17	16	9.3	15	96	17	6.7	173	901	642	22	21	19
18	16	9.3	29	95	e16	7.4	169	896	377	23	21	19
19	16	10	18	e98	e16	6.9	166	965	185	24	21	18
20	16	19	15	e92	14	9.4	165	946	38	23	22	19
21	17	18	14	94	14	14	165	916	37	23	21	65
22	18	17	13	93	13	11	166	888	36	24	21	19
23	18	17	12	93	12	9.7	164	867	36	26	21	18
24	18	17	12	92	11	9.6	162	831	33	23	24	18
25	17	20	11	72	11	9.0	162	793	196	23	21	18
26	17	18	e13	21	10	26	159	769	351	23	21	19
27	17	18	e13	21	9.1	146	156	735	359	23	21	28
28	16	18	e10	21	8.3	372	175	707	344	23	21	23
29	16	23	e10	20	---	357	181	382	340	22	21	20
30	16	21	e12	23	---	356	176	42	354	21	21	19
31	16	---	e11	26	---	351	---	40	---	21	21	---
TOTAL	1071	435.3	453	1818	640.4	1807.0	7732	15525	5596	3018	700	643
MEAN	34.5	14.5	14.6	58.6	22.9	58.3	258	501	187	97.4	22.6	21.4
MAX	298	23	29	127	80	372	586	1120	834	352	57	65
MIN	15	9.3	10	11	8.3	6.3	156	40	33	21	21	18

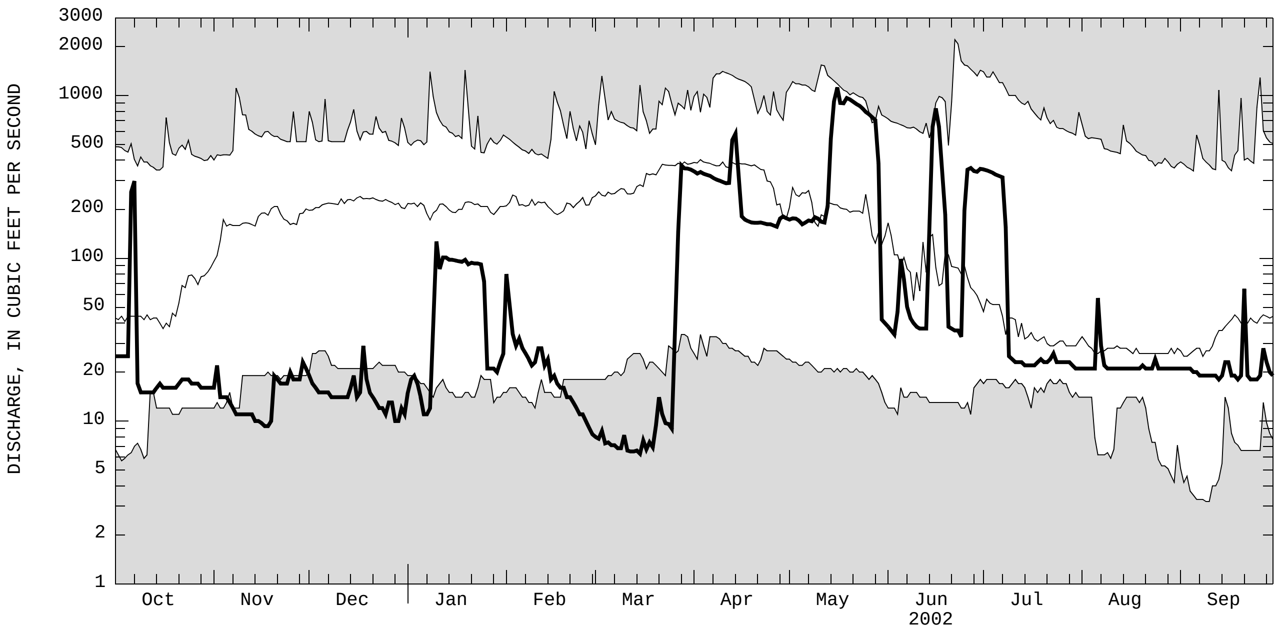
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	108	179	223	200	201	296	331	271	182	107	80.0	78.5
MAX	404	534	532	523	421	601	831	1003	676	892	450	256
(WY)	1978	1978	1978	1998	1978	1976	2001	1996	1972	1972	1972	1987
MIN	14.6	14.5	14.6	18.3	19.2	31.8	34.9	22.2	17.2	21.1	13.7	7.14
(WY)	1989	2002	2002	1966	1967	1989	1995	1988	1980	1985	1983	1982

e Estimated

04232482 KEUKA LAKE OUTLET AT DRESDEN, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1965 - 2002	
ANNUAL TOTAL	43907.3		39438.7			
ANNUAL MEAN	120		108		190	
HIGHEST ANNUAL MEAN					362	1978
LOWEST ANNUAL MEAN					81.1	1981
HIGHEST DAILY MEAN	1410	Apr 10	1120	May 16	2200	Jun 22 1972
LOWEST DAILY MEAN	9.3	Nov 17	6.3	Mar 15	3.2	Sep 9 1982
ANNUAL SEVEN-DAY MINIMUM	9.9	Nov 13	6.7	Mar 11	3.4	Sep 4 1982
10 PERCENT EXCEEDS	348		337		444	
50 PERCENT EXCEEDS	25		21		123	
90 PERCENT EXCEEDS	14		11		21	



2002 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.

04233000 CAYUGA INLET NEAR ITHACA, NY

LOCATION.--Lat 42°23'35", long 76°32'43", Tompkins County, Hydrologic Unit 04140201, on left bank 0.8 mi upstream from Enfield (formerly Butternut) Creek, and 5.0 mi south of Ithaca.
DRAINAGE AREA.--35.2 mi^2.
PERIOD OF RECORD.--March 1937 to current year.
REVISED RECORDS.--WSP 2112: Drainage area. WDR NY 1974: 1973.
GAGE.--Water-stage recorder and concrete control. Datum of gage is 437.16 ft above NGVD of 1929 (levels by Corps of Engineers).
REMARKS.--Records fair. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,800 ft^3/s, Jun. 23, 1972, gage height, 8.10 ft, from rating curve extended above 1,600 ft^3/s on basis of slope-area measurements at gage heights 5.5 ft and 7.58 ft; minimum discharge, 1.7 ft^3/s, July 22, 1955.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 13	1645	*877	*3.30	No other peak greater than base discharge.			

Minimum instantaneous discharge not determined.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	5.6	44	15	119	27	61	45	35	24	e5.4	e3.2
2	5.4	5.6	29	e15	86	26	53	45	29	24	e5.0	e3.2
3	4.9	6.4	24	e14	66	32	48	40	26	19	e4.8	e3.1
4	4.6	5.9	21	15	55	30	44	35	26	18	e4.4	e3.0
5	4.5	7.3	19	15	44	25	41	32	49	18	e7.4	e2.9
6	5.2	7.0	18	15	43	27	39	30	116	16	e5.6	e2.8
7	5.2	6.5	17	16	41	26	36	35	60	14	e5.0	e2.6
8	4.9	6.2	16	15	38	25	34	33	42	13	e4.8	e2.4
9	4.9	6.1	18	15	36	24	36	35	35	13	e4.6	e2.3
10	4.8	5.9	17	16	44	32	37	35	40	13	e4.2	e2.3
11	4.7	5.9	17	18	89	26	32	26	35	11	e4.0	e2.4
12	4.6	5.8	16	19	e55	25	29	39	31	10	e3.8	e2.3
13	4.6	5.8	17	18	47	25	41	252	29	e10	e3.6	e2.6
14	4.6	5.9	22	17	42	24	58	256	57	e9.5	e3.4	e2.6
15	8.1	5.9	30	17	43	24	76	159	79	e9.5	e3.6	3.9
16	6.1	5.7	25	17	44	26	54	111	84	e9.0	e3.8	29
17	7.5	5.4	29	16	43	24	47	91	52	e8.0	e4.2	7.7
18	6.7	5.3	66	15	36	26	42	232	41	e7.5	e4.2	5.4
19	6.1	5.3	48	14	34	27	38	136	35	14	e4.0	4.8
20	5.7	5.7	39	16	34	38	37	95	30	12	e5.0	4.5
21	5.5	5.7	33	16	40	47	35	81	26	e8.5	e4.4	5.1
22	6.4	5.5	29	15	42	41	35	70	24	e7.5	e4.6	5.4
23	6.0	5.5	27	16	36	38	32	61	23	e8.5	6.8	12
24	7.7	5.4	28	29	32	37	29	55	21	e7.5	6.7	6.0
25	7.0	15	25	36	31	36	35	49	20	e6.6	5.8	5.1
26	6.5	23	21	29	31	89	34	49	37	e6.5	e4.6	4.9
27	6.0	18	19	29	32	134	28	43	127	e6.5	e3.9	26
28	6.1	15	19	32	29	84	52	54	45	e7.5	e3.7	30
29	5.9	23	18	36	---	76	65	56	31	e7.0	e3.8	13
30	5.7	33	17	68	---	73	49	46	26	e6.5	e3.8	8.6
31	5.7	---	17	67	---	63	---	42	---	e5.8	e3.4	---
TOTAL	177.4	268.3	785	691	1312	1257	1277	2368	1311	350.9	142.3	209.1
MEAN	5.72	8.94	25.3	22.3	46.9	40.5	42.6	76.4	43.7	11.3	4.59	6.97
MAX	8.1	33	66	68	119	134	76	256	127	24	7.4	30
MIN	4.5	5.3	16	14	29	24	28	26	20	5.8	3.4	2.3
CFSM	0.16	0.25	0.72	0.63	1.33	1.15	1.21	2.17	1.24	0.32	0.13	0.20
IN.	0.19	0.28	0.83	0.73	1.39	1.33	1.35	2.50	1.39	0.37	0.15	0.22

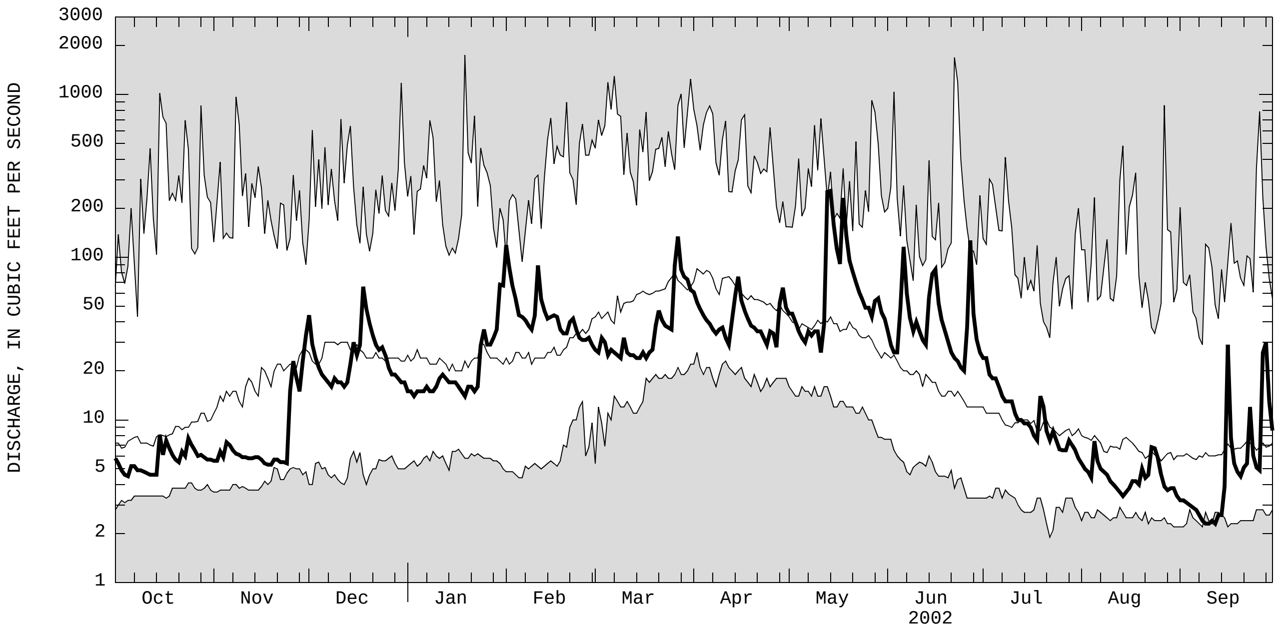
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	19.7	30.7	39.1	37.1	47.7	87.7	86.7	51.4	27.4	14.6	11.5	11.5
MAX	106	112	118	131	113	182	310	132	162	57.4	66.2	61.0
(WY)	1956	1997	1973	1998	1976	1945	1993	1984	1972	1972	1942	1975
MIN	3.76	4.56	6.09	6.32	11.8	25.0	21.8	15.7	5.47	3.77	3.24	2.98
(WY)	1965	1965	1961	1961	1980	1965	1946	2001	1955	1955	1966	1964

e Estimated

04233000 CAYUGA INLET NEAR ITHACA, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1937 - 2002	
ANNUAL TOTAL	7649.6		10149.0			
ANNUAL MEAN	21.0		27.8		38.6	
HIGHEST ANNUAL MEAN					61.7	1978
LOWEST ANNUAL MEAN					15.3	1965
HIGHEST DAILY MEAN	270	Apr 8	256	May 14	1750	Jan 19 1996
LOWEST DAILY MEAN	2.5	Aug 9	2.3	Sep 9	1.9	Jul 22 1955
ANNUAL SEVEN-DAY MINIMUM	2.6	Aug 6	2.4	Sep 7	2.2	Aug 28 1939
ANNUAL RUNOFF (CFSM)	0.60		0.79		1.10	
ANNUAL RUNOFF (INCHES)	8.08		10.73		14.89	
10 PERCENT EXCEEDS	41		55		84	
50 PERCENT EXCEEDS	11		20		20	
90 PERCENT EXCEEDS	3.7		4.6		5.3	



2002 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.

04233300 SIXMILE CREEK AT BETHEL GROVE, NY

LOCATION.--Lat 42°24'11", long 76°26'07", Tompkins County, Hydrologic Unit 04140201, on left bank at bridge on German Cross Road, 3.4 mi southeast of Ithaca.

DRAINAGE AREA.--39.0 mi^2.

PERIOD OF RECORD.--March 1995 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 700 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Telephone gage-height telemeter at station. Several measurements of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,200 ft^3/s, Jan. 19, 1996, gage height, 9.78 ft; minimum discharge, 1.5 ft^3/s, Aug. 2, 1995.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 13	1930	*1,190	*4.71	No other peak greater than base discharge.			

Minimum discharge, 3.2 ft^3/s, Sept. 12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	9.1	110	e32	354	42	102	78	52	32	7.2	5.2
2	11	9.3	66	e30	177	39	80	79	37	28	6.7	5.0
3	11	12	54	e30	108	56	71	69	31	25	6.3	4.9
4	9.3	11	47	30	89	48	62	61	30	22	6.0	4.7
5	8.9	18	42	29	78	e38	57	55	113	21	7.1	4.8
6	10	21	39	28	e65	40	54	51	364	19	6.3	4.5
7	9.8	17	35	30	61	39	48	64	123	18	6.0	4.3
8	8.7	14	32	e28	59	37	47	64	71	15	5.7	4.0
9	8.1	14	36	29	54	37	49	64	52	15	5.3	3.8
10	7.9	12	34	29	101	42	61	57	41	15	5.4	3.8
11	7.6	12	31	33	383	e32	47	48	34	12	5.2	4.1
12	7.7	12	30	33	130	34	44	86	37	12	4.9	3.8
13	8.1	11	35	33	94	33	60	380	34	11	4.7	4.0
14	8.0	11	41	29	e74	32	95	510	179	11	4.6	4.0
15	18	11	61	29	e70	30	187	250	228	11	4.7	5.1
16	11	11	45	29	73	33	97	162	389	10	4.8	29
17	14	10	66	28	67	30	83	161	172	9.2	4.8	9.8
18	13	9.7	239	26	56	32	71	352	102	8.8	5.7	6.5
19	11	9.6	125	e27	53	34	64	208	69	19	4.7	5.7
20	9.6	14	95	e30	55	49	60	161	53	16	5.4	5.7
21	9.5	12	80	e32	68	62	54	132	43	11	4.9	6.0
22	13	11	67	28	69	54	54	102	38	9.7	5.0	6.8
23	12	10	60	28	56	48	53	84	45	10	9.1	21
24	16	9.9	67	64	50	48	46	75	35	10	10	9.6
25	15	31	54	76	50	46	58	68	37	9.0	10	7.4
26	11	47	47	59	49	154	59	66	33	8.4	6.4	6.7
27	11	28	e44	59	51	220	48	55	211	8.1	5.6	43
28	12	24	e40	64	44	116	86	57	85	9.3	5.3	57
29	10	50	e38	75	---	117	110	49	48	9.4	5.5	18
30	9.7	80	e36	147	---	148	86	46	39	11	5.8	13
31	8.9	---	e34	121	---	109	---	50	---	8.0	5.5	---
TOTAL	332.8	551.6	1830	1345	2638	1879	2093	3744	2825	433.9	184.6	311.2
MEAN	10.7	18.4	59.0	43.4	94.2	60.6	69.8	121	94.2	14.0	5.95	10.4
MAX	18	80	239	147	383	220	187	510	389	32	10	57
MIN	7.6	9.1	30	26	44	30	44	46	30	8.0	4.6	3.8
CFSM	0.27	0.47	1.50	1.10	2.40	1.54	1.78	3.07	2.40	0.36	0.15	0.26
IN.	0.32	0.52	1.73	1.27	2.50	1.78	1.98	3.54	2.67	0.41	0.17	0.29

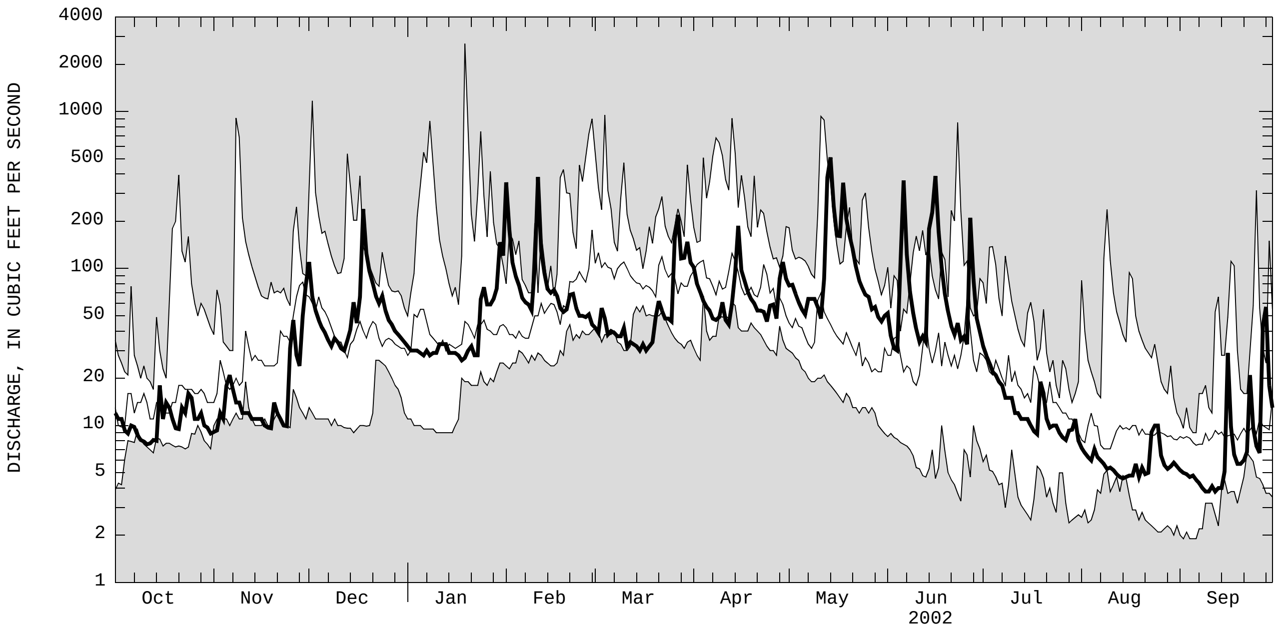
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	21.8	44.3	61.9	82.8	91.1	105	110	77.1	49.9	20.1	12.9	14.0
MAX	52.9	125	184	186	134	174	197	165	94.2	40.2	47.4	27.3
(WY)	1997	1997	1997	1996	2000	1998	2001	1996	2002	1996	1996	1996
MIN	9.19	11.5	14.8	26.5	51.8	60.6	51.5	19.5	6.77	4.10	3.93	4.38
(WY)	1998	1999	1999	2001	2001	2002	1995	1999	1999	1999	1999	1995

e Estimated

04233300 SIXMILE CREEK AT BETHEL GROVE, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1995 - 2002	
ANNUAL TOTAL	17631.4		18168.1			
ANNUAL MEAN	48.3		49.8		59.4	
HIGHEST ANNUAL MEAN					81.3	1996
LOWEST ANNUAL MEAN					38.1	1999
HIGHEST DAILY MEAN	851	Jun 23	510	May 14	2700	Jan 19 1996
LOWEST DAILY MEAN	4.8	Aug 15	3.8	Sep 9	1.9	Sep 2 1999
ANNUAL SEVEN-DAY MINIMUM	5.4	Aug 10	3.9	Sep 8	2.0	Aug 31 1999
ANNUAL RUNOFF (CFSM)	1.23		1.27		1.51	
ANNUAL RUNOFF (INCHES)	16.69		17.20		20.53	
10 PERCENT EXCEEDS	80		102		123	
50 PERCENT EXCEEDS	23		33		32	
90 PERCENT EXCEEDS	7.6		5.8		8.1	



2002 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.

04233300 SIXMILE CREEK AT BETHEL GROVE, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1996 to current year.
PERIOD OF DAILY RECORD.--
SUSPENDED-SOLIDS CONCENTRATION: October 1996 to September 1998.
SUSPENDED-SOLIDS DISCHARGE: October 1996 to September 1998.
SUSPENDED-SEDIMENT CONCENTRATION: December 1998 to September 1999.
SUSPENDED-SEDIMENT DISCHARGE: December 1998 to September 1999.
INSTRUMENTATION.--Automatic water sampler since 1995.
COOPERATION.--Water-quality samples were collected and analyzed by personnel from the City of Ithaca Environmental Laboratories. Records of daily suspended sediment (mg/L) furnished by the City of Ithaca Environmental Laboratories.
EXTREMES FOR PERIOD OF RECORD.--
SUSPENDED-SOLIDS CONCENTRATION: Maximum daily mean 1,480 mg/L on Nov. 8, 1996; minimum daily mean 1 mg/L on many days during the 1998 water year.
SUSPENDED-SOLIDS DISCHARGE: Maximum daily mean 7,050 tons on Nov. 8, 1996; minimum daily mean 0.02 tons on several days in October 1997 and September 1998.
SUSPENDED-SEDIMENT CONCENTRATION: Maximum daily mean 1,680 mg/L on Mar. 4, 1999; minimum daily mean 3 mg/L Apr. 28 to May 2.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily mean 6,800 tons on Mar. 4, 1999; minimum daily mean 0.13 tons Aug. 26, 1999.
EXTREMES FOR CURRENT YEAR.--
SUSPENDED-SEDIMENT CONCENTRATION: Maximum daily mean during period December to September, 1,680 mg/L onMar. 4, 1999; minimum daily mean 3 mg/L Apr. 28 to May 2.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily mean during period December to September, 6,080 tons onMar. 4, 1999; minimum daily mean 0.13 tons Aug. 26, 1999.

SEDIMENT, SUSPENDED CONCENTRATION (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	79	412	113	404	55	64	84	39	38	46	53
2	89	83	176	107	264	55	61	80	40	40	48	54
3	86	87	134	100	202	55	59	76	46	43	45	55
4	82	92	120	95	146	56	58	71	71	46	41	55
5	80	122	107	93	114	55	56	67	235	47	37	57
6	79	128	94	91	86	53	53	66	212	43	33	59
7	79	117	80	90	63	46	49	74	61	39	30	58
8	78	106	79	88	45	41	48	81	49	35	31	56
9	77	99	104	84	46	43	54	83	38	36	32	55
10	77	97	117	78	149	46	58	83	29	37	33	54
11	76	95	85	73	382	48	54	81	31	37	35	53
12	75	92	57	68	203	46	66	134	33	38	36	52
13	75	90	65	63	158	46	126	897	35	39	37	51
14	82	88	79	58	143	52	146	216	194	39	38	51
15	109	88	94	53	133	56	205	75	330	40	39	62
16	83	87	108	49	127	51	114	78	719	40	40	136
17	93	87	134	52	122	45	89	196	274	41	41	89
18	93	86	289	56	117	43	83	570	131	43	42	53
19	85	86	188	60	112	54	79	456	35	45	45	52
20	80	85	113	66	107	65	76	332	28	43	51	53
21	86	84	72	71	101	71	72	252	28	41	57	54
22	92	83	113	77	94	74	69	176	27	41	58	61
23	89	82	160	90	81	71	68	99	26	46	59	69
24	106	81	193	127	67	67	69	41	25	50	60	62
25	103	180	162	153	59	64	74	37	21	48	61	65
26	88	255	128	137	73	198	79	38	40	46	61	68
27	86	189	123	116	84	151	84	38	480	44	55	220
28	87	124	123	106	70	110	137	38	80	42	50	185
29	84	131	122	179	---	99	114	39	64	40	51	88
30	80	344	121	365	---	110	88	39	49	42	52	70
31	77	---	119	344	---	85	---	39	---	44	53	---
MEAN	85	115	131	107	134	68	82	150	116	42	45	72
MAX	109	344	412	365	404	198	205	897	719	50	61	220
MIN	75	79	57	49	45	41	48	37	21	35	30	51

04233300 SIXMILE CREEK AT BETHEL GROVE, NY--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	2.0	130	11	360	6.3	17	18	5.5	3.3	0.91	0.75
2	2.8	2.1	32	10	130	5.7	13	17	3.9	3.0	0.87	0.73
3	2.5	2.9	19	9.8	59	8.4	11	14	3.9	2.9	0.76	0.72
4	2.1	2.8	15	7.8	35	7.3	9.8	12	5.8	2.7	0.66	0.70
5	1.9	6.1	12	7.1	24	6.2	8.7	10	180	2.7	0.70	0.75
6	2.2	7.3	9.8	6.8	17	5.6	7.8	9.2	250	2.2	0.57	0.71
7	2.1	5.3	7.6	7.3	10	4.8	6.4	13	20	1.8	0.49	0.66
8	1.8	4.0	6.9	8.3	7.1	4.1	6.0	14	9.5	1.4	0.48	0.62
9	1.7	3.6	10	6.6	6.7	4.3	7.1	14	5.3	1.4	0.46	0.58
10	1.6	3.3	11	6.0	110	5.2	9.6	13	3.2	1.5	0.48	0.56
11	1.6	3.2	7.4	6.6	490	4.5	6.9	11	2.8	1.3	0.48	0.58
12	1.5	2.9	4.7	6.2	71	4.2	7.8	40	3.3	1.2	0.48	0.54
13	1.6	2.7	6.1	5.6	40	4.1	21	1600	3.2	1.2	0.47	0.56
14	1.8	2.6	8.9	4.5	29	4.6	39	360	160	1.2	0.47	0.55
15	5.2	2.7	15	4.1	26	4.6	130	51	290	1.2	0.50	0.96
16	2.4	2.6	13	3.8	25	4.6	30	34	810	1.1	0.52	11
17	3.4	2.5	25	3.9	22	3.6	20	88	130	1.0	0.54	2.4
18	3.2	2.3	200	3.9	18	3.7	16	640	37	1.0	0.65	0.94
19	2.5	2.2	65	5.7	16	4.9	14	260	6.7	2.3	0.57	0.81
20	2.1	3.2	29	6.5	16	8.7	12	140	4.0	1.8	0.75	0.82
21	2.2	2.8	16	6.4	19	12	11	90	3.2	1.2	0.75	0.87
22	3.2	2.5	20	5.8	18	11	10	49	2.8	1.1	0.78	1.2
23	2.9	2.3	26	6.7	12	9.2	9.7	23	3.2	1.3	1.5	3.9
24	4.7	2.2	35	23	9.1	8.7	8.5	8.3	2.4	1.4	1.7	1.6
25	4.1	22	24	32	8.0	7.9	12	6.9	2.1	1.2	1.7	1.3
26	2.7	33	16	22	9.7	160	12	6.7	6.8	1.0	1.0	1.2
27	2.6	14	17	19	12	97	11	5.6	490	0.96	0.84	42
28	2.7	8.0	13	18	8.3	35	42	5.9	19	1.1	0.72	34
29	2.4	18	13	37	---	32	37	5.1	8.4	1.0	0.75	4.3
30	2.1	96	13	150	---	44	20	4.8	5.2	1.2	0.81	2.3
31	1.8	---	13	120	---	25	---	5.3	---	0.94	0.77	---
TOTAL	77.8	267.1	833.4	571.4	1607.9	547.2	566.3	3568.8	2477.2	48.60	23.13	118.61
MEAN	2.5	8.9	26.9	18.4	57.4	17.7	18.9	115	82.6	1.6	0.75	4.0
MAX	5.2	96.0	200	150	490	160	130	1600	810	3.3	1.7	42.0
MIN	1.5	2.0	4.7	3.8	6.7	3.6	6.0	4.8	2.1	0.94	0.46	0.54

04233500 CAYUGA INLET (CAYUGA LAKE) AT ITHACA, NY

(Formerly published as Cayuga Lake at Ithaca)

LOCATION.--Lat 42°26'45", long 76°30'45", Tompkins County, Hydrologic Unit 04140201, on left bank of natural channel 40 ft upstream from flood-control channel of Cayuga Inlet, at north end of Taughannock Boulevard, and 1.0 mi upstream from mouth of Inlet, at Ithaca.
DRAINAGE AREA.--Cayuga Inlet 143 mi^2; Cayuga Lake at mouth 1,564 mi^2; Cayuga Lake portion 785 mi^2.
PERIOD OF RECORD.--August 1905 to December 1909, August 1956 to current year in reports of Geological Survey. January 1910 to September 1925 in reports of State Engineer and Surveyor.
REVISED RECORDS.--WSP 2112: Drainage area.
GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929 (1.43 ft Barge Canal datum). To convert elevations to NAVD adjustment of 1988, subtract 0.62 ft. Prior to September 1925, non-recording gage at several sites within 1 mi of present site. Prior to October 1968, at datum 378.57 ft higher. October 1968 to September 1975, at datum 376.57 ft higher.
REMARKS.--Lake elevation regulated at Mud Lock by New York State Thruway Authority. Area of water surface, 66.9 mi^2. Seneca River (Cayuga and Seneca Canal) enters lake 0.5 mi upstream from Mud Lock and is included in second drainage area given above. Telephone gage-height telemeter at station.
EXTREMES FOR PERIOD OF RECORD.--(1905-25 and since 1956): Maximum elevation, 386.46 ft, April 26, 1993; minimum elevation not determined; minimum daily elevation, 377.64 ft, present datum, Mar. 28, 1960.
EXTREMES FOR CURRENT YEAR.--Maximum recorded elevation, 383.68 ft, May 31, but may have been higher during period of no gage height record, Apr. 19 to May 29; minimum elevation, 379.15 ft, Mar. 2.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	382.40	381.80	380.39	379.39	380.24	379.44	380.69	---	383.28	382.54	382.67	382.37
2	382.38	381.77	380.36	379.37	380.44	379.36	380.66	---	---	382.53	382.65	382.36
3	382.33	381.79	380.25	379.38	380.38	379.43	380.75	---	383.22	382.50	382.68	382.36
4	382.20	381.70	380.22	379.38	380.44	379.47	380.81	---	383.07	---	382.62	382.42
5	382.19	381.71	380.19	379.37	380.42	379.40	380.82	---	383.05	---	382.67	382.42
6	382.18	381.63	380.15	379.40	380.39	379.46	380.86	---	383.19	---	382.76	382.35
7	382.17	381.53	380.12	379.50	380.36	379.51	380.83	---	383.18	---	382.63	382.32
8	382.12	381.42	380.02	379.41	380.36	379.48	380.84	---	383.07	382.45	382.61	382.30
9	381.97	381.42	379.96	379.41	380.27	379.46	380.92	---	382.97	382.46	382.54	382.30
10	382.03	381.28	379.82	379.45	380.08	379.61	381.05	---	382.87	382.60	382.51	382.30
11	382.04	381.23	379.78	379.48	380.35	379.62	381.04	---	382.79	382.55	382.50	382.47
12	382.01	381.10	379.65	379.46	380.14	379.62	381.00	---	382.77	382.51	382.50	382.28
13	382.06	380.95	379.63	379.50	380.23	379.62	381.15	---	382.77	382.50	382.48	382.22
14	381.98	380.88	379.66	379.48	380.09	379.68	381.33	---	382.83	382.50	382.45	382.19
15	382.16	380.85	379.70	379.51	380.03	379.66	381.57	---	383.00	382.53	382.48	382.25
16	382.23	380.85	379.59	379.53	380.03	379.79	381.71	---	383.22	382.59	382.46	382.42
17	382.36	380.78	379.51	379.51	380.03	379.73	381.80	---	383.30	382.52	382.49	382.36
18	382.57	380.70	379.67	379.54	379.92	379.70	381.88	---	383.26	382.58	382.49	382.36
19	382.39	380.63	379.65	379.52	379.80	379.80	---	---	383.20	382.60	382.52	382.28
20	382.28	380.69	379.67	379.53	379.74	379.79	---	---	383.11	382.61	382.52	382.29
21	382.26	380.61	379.70	379.55	379.75	379.93	---	---	383.03	382.56	382.46	382.32
22	382.28	380.56	379.60	379.60	379.74	379.95	---	---	382.93	382.53	382.40	382.37
23	382.25	380.49	379.47	379.60	379.71	379.95	---	---	382.81	382.65	382.53	382.43
24	382.25	380.43	379.46	379.71	379.59	380.01	---	---	382.74	382.68	382.49	382.38
25	382.15	380.39	379.45	379.77	379.50	380.07	---	---	382.65	382.60	382.59	382.39
26	382.11	380.47	379.43	379.79	379.50	380.11	---	---	382.58	382.46	382.50	382.34
27	382.16	380.40	379.38	379.82	379.52	380.39	---	---	---	382.56	382.57	382.40
28	382.13	380.40	379.36	379.85	379.49	380.47	---	---	382.75	382.58	382.49	382.59
29	382.05	380.33	379.39	379.91	---	380.50	---	---	382.66	382.62	382.46	382.45
30	382.04	380.34	379.37	380.00	---	380.61	---	383.32	382.52	382.69	382.48	382.42
31	381.89	---	379.37	380.03	---	380.65	---	383.30	---	382.66	382.42	---
MEAN	382.18	380.97	379.74	379.57	380.02	379.82	---	---	---	---	382.54	382.36
MAX	382.57	381.80	380.39	380.03	380.44	380.65	---	---	---	---	382.76	382.59
MIN	381.89	380.33	379.36	379.37	379.49	379.36	---	---	---	---	382.40	382.19

04234000 FALL CREEK NEAR ITHACA, NY

LOCATION.--Lat 42°27'12", long 76°28'23", Tompkins County, Hydrologic Unit 04140201, on left bank in Forest Home, 0.2 mi east of Ithaca, 0.5 mi upstream from Cornell University dam, and 2.2 mi upstream from mouth.
DRAINAGE AREA.--126 mi^2.
PERIOD OF RECORD.--July 1908 to June 1909 (gage heights only), February 1925 to current year.
REVISED RECORDS.--WSP 874: 1935-38. WSP 1912: Drainage area.
GAGE.--Water-stage recorder and concrete control. Datum of gage is 795.13 ft above NGVD of 1929. July 1908 to June 1909, nonrecording gage at bridge 1.2 mi downstream at different datum.
REMARKS.--Records good except those for estimated daily discharges, which are fair. Diversion from point about 1 mi upstream from station by Cornell University for water supply and at several sites for irrigation purposes. Records of diversion from Fall Creek are in files of Cornell University. Telephone gage-height telemeter at station. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,500 ft^3/s, July 8, 1935, gage height, 9.52 ft, from average of computed flow over each of four dams; maximum gage height, 11.16 ft, Feb. 21, 1971 (ice jam); minimum discharge, 2.1 ft^3/s, Sept. 6, 7, 1999, gage height, 0.12 ft.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,900 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 13	2100	*2,570	*4.17	No other peak greater than base discharge.			

Minimum discharge, 3.6 ft^3/s, Sept. 6, gage height, 0.16 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	35	372	e72	820	150	281	313	220	132	32	21
2	34	34	211	e78	865	144	270	238	133	117	30	18
3	30	51	150	e85	427	196	245	235	111	105	29	17
4	28	54	127	93	359	217	237	185	103	96	28	16
5	25	58	117	94	e250	136	209	160	243	104	28	14
6	25	73	106	89	e240	144	199	143	1130	91	26	13
7	28	61	97	91	221	150	173	174	472	87	24	14
8	25	50	90	86	219	142	166	179	231	80	23	14
9	24	46	92	95	205	143	176	234	170	76	22	13
10	24	45	95	98	195	213	331	216	138	76	22	12
11	22	43	90	119	762	164	204	153	115	66	21	12
12	21	40	84	119	e390	153	167	224	112	63	19	11
13	22	38	90	114	e310	147	197	1230	127	60	18	10
14	22	37	113	99	e210	140	720	1890	442	57	e18	11
15	35	37	179	93	e230	128	949	975	808	54	e17	16
16	38	37	142	96	243	137	502	543	1210	49	17	293
17	39	36	151	90	249	134	352	545	556	45	17	100
18	40	36	628	88	e185	130	277	902	350	41	18	50
19	37	35	443	e50	e170	142	230	670	260	52	17	34
20	33	43	284	e88	197	163	205	430	204	50	23	28
21	32	50	236	94	234	228	199	352	176	43	22	27
22	53	45	194	93	299	205	179	303	154	39	22	33
23	55	41	181	91	232	176	183	259	234	39	26	166
24	47	38	214	183	182	189	161	230	235	52	34	96
25	48	52	183	323	188	179	180	232	175	41	88	57
26	41	136	140	198	182	290	252	198	153	37	46	41
27	37	102	101	176	195	829	176	180	560	41	30	65
28	41	82	e100	177	171	385	207	167	307	43	e25	517
29	41	167	e95	190	---	347	424	161	194	44	e24	183
30	37	193	e80	356	---	350	295	180	154	39	24	103
31	35	---	e78	362	---	297	---	185	---	36	22	---
TOTAL	1057	1795	5263	4080	8430	6548	8346	12086	9477	1955	812	2005
MEAN	34.1	59.8	170	132	301	211	278	390	316	63.1	26.2	66.8
MAX	55	193	628	362	865	829	949	1890	1210	132	88	517
MIN	21	34	78	50	170	128	161	143	103	36	17	10
CFSM	0.27	0.47	1.35	1.04	2.39	1.68	2.21	3.09	2.51	0.50	0.21	0.53
IN.	0.31	0.53	1.55	1.20	2.49	1.93	2.46	3.57	2.80	0.58	0.24	0.59

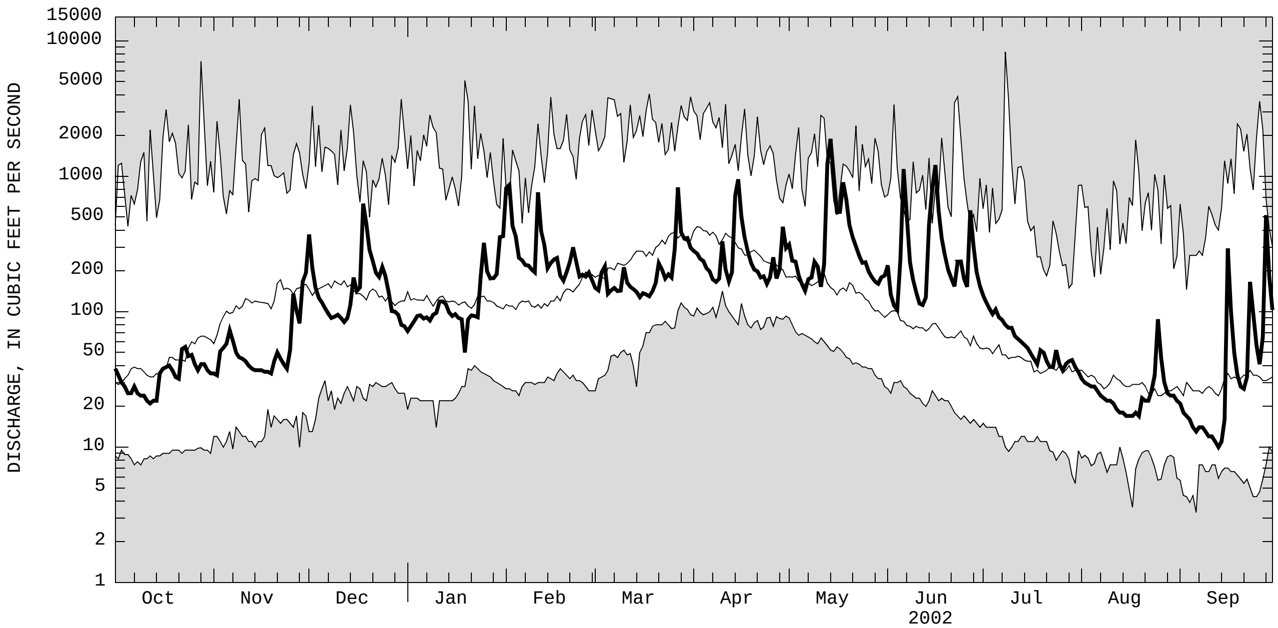
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	101	175	205	191	220	408	411	213	122	71.3	50.5	64.0
MAX	594	497	555	575	595	1037	1313	532	615	608	269	561
(WY)	1982	1928	1997	1998	1981	1936	1993	1996	1972	1935	1994	1977
MIN	9.57	16.5	31.9	38.4	44.1	160	100	62.0	25.6	14.9	8.93	7.09
(WY)	1965	1965	1961	1961	1934	1965	1946	1934	1999	1999	1965	1964

e Estimated

04234000 FALL CREEK NEAR ITHACA, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1925 - 2002	
ANNUAL TOTAL	53494		61854			
ANNUAL MEAN	147		169		186	
HIGHEST ANNUAL MEAN					271	1978
LOWEST ANNUAL MEAN					83.6	1965
HIGHEST DAILY MEAN	1920	Apr 9	1890	May 14	8280	Jul 8 1935
LOWEST DAILY MEAN	10	Sep 20	10	Sep 13	3.3	Sep 6 1999
ANNUAL SEVEN-DAY MINIMUM	12	Sep 17	12	Sep 8	4.6	Aug 31 1999
ANNUAL RUNOFF (CFSM)	1.16		1.34		1.48	
ANNUAL RUNOFF (INCHES)	15.79		18.26		20.05	
10 PERCENT EXCEEDS	288		350		416	
50 PERCENT EXCEEDS	70		115		100	
90 PERCENT EXCEEDS	20		24		23	



2002 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.

04234232 GREAT BROOK BELOW VICTOR, NY

LOCATION.--Lat 42°58'41", long 77°23'47", Ontario County, Hydrologic Unit 04140201, on right bank 0.1 mi upstream from State Highway 96, at east boundary line of village of Victor, and 0.5 mi upstream from mouth.
DRAINAGE AREA.--16.8 mi^2.
PERIOD OF RECORD.--November 1993 to current year.
REVISED RECORDS.--WDR NY-96-3: 1994-95 (M). WDR NY-98-3: 1994-97.
GAGE.--Water-stage recorder and double V-notch sharp-crested weir as control. Elevation of gage is 560 ft above NGVD of 1929, from topographic map.
REMARKS.--Records fair. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 837 ft^3/s, Jan. 8, 1998, gage height, 7.09 ft; minimum discharge 0.83 ft^3/s, Aug. 3, 1999, gage height, 1.22 ft.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 250 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 1	1800	294	4.69	May 14	0045	288	4.66
Apr. 14	2230	*317	*4.82	May 30	0400	254	4.46

Minimum discharge, 0.91 ft^3/s, Sept. 10, gage height, 1.27 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e2.6	e3.0	5.5	2.6	142	6.4	10	15	21	3.4	1.8	1.0
2	e2.4	4.1	3.8	2.5	44	5.9	20	28	10	2.8	1.6	1.0
3	e2.2	e6.0	3.3	2.5	17	8.3	77	19	7.5	2.4	1.6	1.00
4	e2.1	e4.5	3.0	2.7	12	6.8	27	11	7.5	2.1	1.5	0.99
5	e2.0	e4.4	2.8	2.8	9.6	5.0	18	8.2	39	2.0	1.5	1.00
6	e4.5	e4.0	e2.7	3.2	8.3	7.0	18	7.1	22	1.9	1.5	1.00
7	e2.5	e2.2	2.5	e3.5	7.7	9.2	16	13	13	1.8	1.3	0.99
8	e2.1	e2.4	2.3	e3.2	8.2	10	13	11	8.4	1.7	1.2	0.96
9	e2.0	e3.0	4.0	4.3	10	14	13	23	6.6	1.7	1.3	0.94
10	e1.8	e2.3	4.1	7.6	16	17	10	16	5.7	1.8	1.2	0.94
11	e1.8	e2.8	3.6	9.4	36	10	8.6	7.9	4.7	1.5	1.1	1.2
12	e1.7	e2.4	3.2	7.0	e16	10	8.0	28	6.6	1.4	1.1	1.1
13	e1.7	e2.1	3.9	6.0	e12	10	26	113	6.4	1.4	1.2	1.1
14	e1.6	e2.2	11	4.6	9.2	8.6	79	167	40	1.3	1.2	1.1
15	e2.0	e1.9	29	4.5	8.8	7.6	91	46	68	1.3	1.2	3.4
16	e1.8	2.0	9.3	4.4	16	8.8	24	21	57	1.3	3.0	4.2
17	e2.4	1.9	10	4.4	18	7.4	15	28	19	1.3	4.1	2.1
18	e2.0	1.8	41	e3.4	10	8.4	10	41	11	1.2	2.3	1.7
19	e2.0	e2.0	15	e3.0	8.7	7.5	8.5	23	8.0	1.2	1.5	1.5
20	e1.8	3.7	8.5	3.3	10	18	6.8	16	6.4	1.2	1.4	1.4
21	e4.5	2.6	6.4	3.5	13	22	6.0	12	5.2	1.2	1.3	1.3
22	e5.0	2.1	6.4	3.7	14	13	6.5	9.6	4.6	2.6	1.2	1.3
23	e2.8	1.9	5.7	4.1	8.8	10	6.8	8.3	4.2	14	1.4	1.4
24	e2.4	1.9	5.6	6.0	7.3	9.3	5.6	7.6	3.8	5.1	2.0	1.4
25	e3.2	5.8	4.6	7.5	7.4	8.5	6.7	6.9	3.5	2.1	1.8	1.3
26	e6.0	4.5	3.8	5.9	7.5	41	6.2	9.3	3.3	2.1	1.4	1.3
27	e5.0	3.4	3.4	4.7	8.0	72	5.2	6.3	9.8	1.8	1.3	17
28	e4.0	3.7	3.4	4.6	6.9	21	36	5.3	16	6.1	1.2	9.7
29	e3.5	13	3.3	4.6	---	15	35	8.1	6.6	6.1	1.2	3.1
30	e3.4	7.5	2.9	9.1	---	16	18	121	4.3	4.3	1.2	2.3
31	e3.2	---	2.9	15	---	10	---	38	---	2.2	1.1	---
TOTAL	86.0	105.1	216.9	153.6	492.4	423.7	630.9	874.6	429.1	82.3	47.7	68.72
MEAN	2.77	3.50	7.00	4.95	17.6	13.7	21.0	28.2	14.3	2.65	1.54	2.29
MAX	6.0	13	41	15	142	72	91	167	68	14	4.1	17
MIN	1.6	1.8	2.3	2.5	6.9	5.0	5.2	5.3	3.3	1.2	1.1	0.94
CFSM	0.17	0.21	0.42	0.29	1.05	0.81	1.25	1.68	0.85	0.16	0.09	0.14
IN.	0.19	0.23	0.48	0.34	1.09	0.94	1.40	1.94	0.95	0.18	0.11	0.15

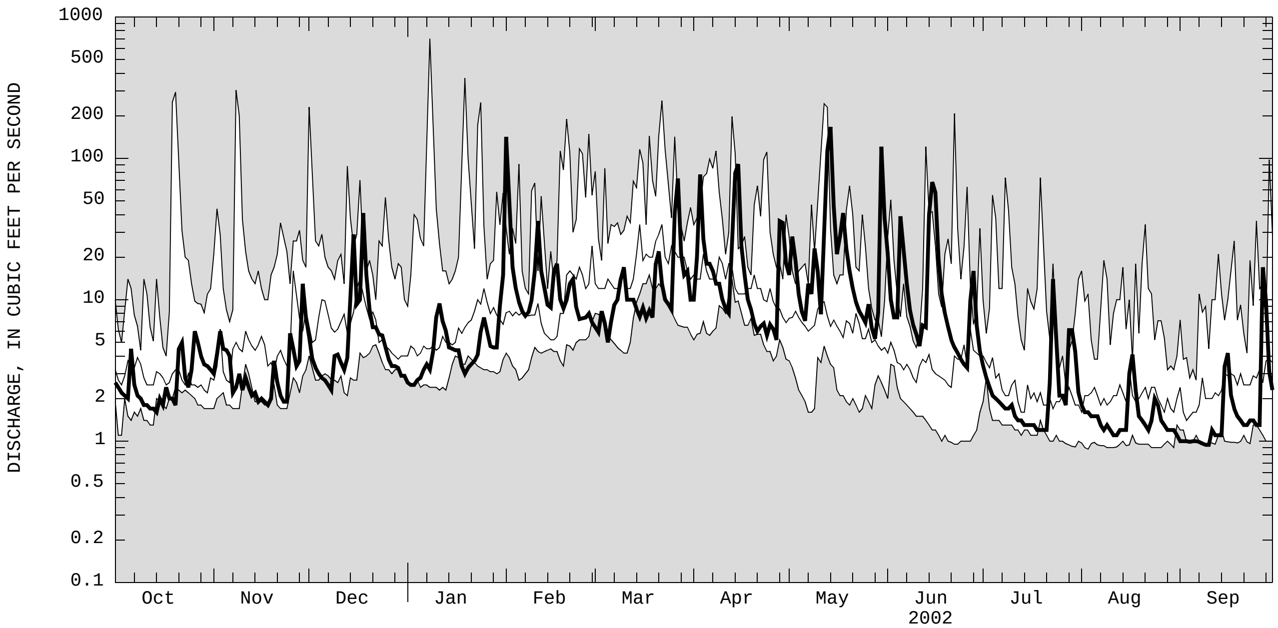
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	6.62	9.12	10.1	16.0	16.6	23.4	19.6	12.7	8.08	4.11	2.96	3.77
MAX	27.1	28.3	28.0	49.7	25.2	42.4	30.2	28.2	15.9	12.6	5.65	7.66
(WY)	1997	1997	1997	1998	1998	1994	1996	2002	1996	1998	1994	1997
MIN	2.74	3.31	3.42	4.95	8.70	13.0	7.19	2.80	1.53	1.60	1.20	1.22
(WY)	1999	1999	1999	2002	1995	2000	1995	1995	1995	1999	1995	1995

e Estimated

04234232 GREAT BROOK BELOW VICTOR, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1994 - 2002	
ANNUAL TOTAL	3233.78		3611.02			
ANNUAL MEAN	8.86		9.89		10.9	
HIGHEST ANNUAL MEAN					15.6	1998
LOWEST ANNUAL MEAN					6.01	1995
HIGHEST DAILY MEAN	113	Apr 8	167	May 14	702	Jan 8 1998
LOWEST DAILY MEAN	0.90	Aug 9	0.94	Sep 9	0.88	Aug 3 1999
ANNUAL SEVEN-DAY MINIMUM	0.92	Aug 6	0.97	Sep 4	0.92	Aug 6 2001
ANNUAL RUNOFF (CFSM)	0.53		0.59		0.65	
ANNUAL RUNOFF (INCHES)	7.16		8.00		8.85	
10 PERCENT EXCEEDS	23		19		21	
50 PERCENT EXCEEDS	3.6		4.6		5.0	
90 PERCENT EXCEEDS	1.1		1.3		1.5	



2002 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.

04234500 CANANDAIGUA LAKE AT CANANDAIGUA, NY

LOCATION.--Lat 42°53'30", long 77°17'22", Ontario County, Hydrologic Unit 04140201, at comfort station in middle of city pier at northern end of Canandaigua Lake, 1 mi southeast of Canandaigua.
DRAINAGE AREA.--184 mi^2.
PERIOD OF RECORD.--November 1939 to current year. December 1927 to November 1939, records for site on west side of E. T. Waldorf's boathouse collected by, and in files of, city of Canandaigua.
REVISED RECORDS.--WSP 2112: Drainage area. WDR NY 1971: 1970. WDR NY-86-3: 1985.
GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. To convert elevations to NAVD adjustment of 1988, subtract 0.50 ft. June 26, 1946 to Sept. 30, 1975, at datum 681.17 ft higher, and prior to June 26, 1946, nonrecording gage at E. T. Waldorf's boathouse at same datum.
REMARKS.--Lake elevation regulated by one gate on West outlet, which is a 1.5 mi long canal, and by two gates on East outlet, which is the natural outlet. Sill elevations of West and East outflow structures are 684.37 ft and 684.94 ft, respectively. Water diverted for municipal supply for villages of Newark, Palmyra, and Gorham. Records of diversion in files of city of Canandaigua. Area of water surface, 16.6 mi^2.
EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 692.11 ft, present datum, June 24, 1972; minimum daily, 685.62 ft, present datum, Jan. 30, 1942.
EXTREMES FOR CURRENT YEAR.--Maximum elevation, 688.96 ft, May 31; minimum elevation, 686.53 ft, Nov. 19, Jan. 24, 30.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	687.29	686.87	686.73	686.72	686.97	687.59	688.48	688.71	688.72	688.54	688.11	687.61
2	687.28	686.85	686.72	686.71	687.15	687.64	688.51	688.71	688.62	688.52	688.09	687.57
3	687.29	686.84	686.72	686.70	687.24	687.61	688.57	688.68	688.55	688.50	688.06	687.57
4	687.26	686.82	686.70	686.69	687.27	687.61	688.59	688.64	688.57	688.49	688.05	687.52
5	687.22	686.80	686.70	686.67	687.30	687.61	688.57	688.60	688.64	688.44	688.02	687.48
6	687.23	686.79	686.69	686.67	687.31	687.61	688.53	688.59	688.67	688.42	687.95	687.47
7	687.19	686.77	686.66	686.67	687.32	687.63	688.51	688.60	688.70	688.41	687.93	687.46
8	687.16	686.77	686.66	686.69	687.32	687.66	688.49	688.61	688.71	688.40	687.90	687.44
9	687.17	686.75	686.67	686.68	687.34	687.70	688.46	688.71	688.70	688.37	687.89	687.42
10	687.13	686.74	686.68	686.67	687.40	687.72	688.47	688.66	688.68	688.31	687.88	687.41
11	687.11	686.72	686.65	686.67	687.38	687.72	688.52	688.60	688.68	688.30	687.85	687.34
12	687.09	686.71	686.68	686.68	687.46	687.73	688.56	688.60	688.66	688.30	687.84	687.34
13	687.09	686.72	686.66	686.66	687.43	687.74	688.55	688.64	688.64	688.28	687.83	687.32
14	687.20	686.69	686.65	686.66	687.46	687.73	688.67	688.75	688.68	688.26	687.83	687.32
15	687.07	686.69	686.72	686.66	687.47	687.74	688.79	688.79	688.75	688.25	687.81	687.30
16	687.09	686.67	686.72	686.65	687.47	687.75	688.79	688.79	688.77	688.22	687.80	687.34
17	687.05	686.66	686.74	686.66	687.48	687.79	688.76	688.75	688.73	688.21	687.80	687.33
18	687.01	686.65	686.80	686.65	687.49	687.82	688.72	688.76	688.67	688.19	687.81	687.32
19	687.02	686.66	686.84	686.64	687.50	687.81	688.67	688.76	688.61	688.17	687.78	687.33
20	686.97	686.65	686.85	686.63	687.53	687.85	688.62	688.72	688.57	688.15	687.77	687.31
21	686.98	686.65	686.84	686.64	687.52	687.89	688.61	688.66	688.56	688.15	687.76	687.27
22	687.00	686.63	686.84	686.62	687.54	687.93	688.61	688.61	688.55	688.15	687.76	687.25
23	687.03	686.61	686.87	686.63	687.55	687.95	688.61	688.62	688.55	688.15	687.73	687.23
24	686.99	686.64	686.85	686.61	687.56	687.95	688.61	688.63	688.51	688.14	687.74	687.21
25	687.01	686.67	686.83	686.65	687.59	687.96	688.64	688.63	688.52	688.14	687.74	687.18
26	686.99	686.63	686.82	686.64	687.58	688.04	688.62	688.65	688.54	688.16	687.72	687.17
27	686.93	686.64	686.81	686.63	687.59	688.21	688.62	688.65	688.55	688.11	687.68	687.19
28	686.92	686.63	686.80	686.64	687.58	688.29	688.68	688.64	688.55	688.14	687.67	687.24
29	686.90	686.70	686.78	686.63	---	688.36	688.75	688.66	688.55	688.14	687.65	687.24
30	686.86	686.71	686.77	686.68	---	688.41	688.74	688.76	688.54	688.13	687.62	687.24
31	686.89	---	686.75	686.78	---	688.44	---	688.78	---	688.12	687.61	---
MEAN	687.08	686.71	686.75	686.66	687.42	687.85	688.61	688.68	688.62	688.27	687.83	687.35
MAX	687.29	686.87	686.87	686.78	687.59	688.44	688.79	688.79	688.77	688.54	688.11	687.61
MIN	686.86	686.61	686.65	686.61	686.97	687.59	688.46	688.59	688.51	688.11	687.61	687.17

CAL YR 2001 MEAN 687.71 MAX 689.58 MIN 686.61
WTR YR 2002 MEAN 687.65 MAX 688.79 MIN 686.61

04235000 CANANDAIGUA OUTLET AT CHAPIN, NY

LOCATION.--Lat 42°55'05", long 77°13'59", Ontario County, Hydrologic Unit 04140201, on right bank at Chapin, 25 ft upstream from bridge on State Highway 488, and 4.1 mi downstream from Canandaigua Lake.
DRAINAGE AREA.--195 mi^2.
PERIOD OF RECORD.--November 1939 to current year. Prior to October 1964, published as "Canandaigua Lake Outlet."
REVISED RECORDS.--WSP 2112: Drainage area.
GAGE.--Water-stage recorder. Datum of gage is 671.44 ft above NGVD of 1929. Prior to June 25, 1974, at site 0.1 mi upstream at datum 676.90 ft above NGVD of 1929.
REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow regulated by Canandaigua Lake (see station 04234500), from which water is diverted for municipal supply by villages of Newark, Palmyra, and Gorham. Monthly runoff adjusted for change in contents in Canandaigua Lake from October 1945 to September 1966. Telephone gage-height telemeter at station. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,710 ft^3/s, June 24, 1972, gage height, 11.08 ft, present datum, at site then in use; minimum discharge, 4.4 ft^3/s, Sept. 24, 1991.
EXTREMES FOR CURRENT YEAR.--Maximum discharge, 852 ft^3/s, May 14, gage height, 5.60 ft; minimum discharge, 25 ft^3/s, Jan. 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	44	49	e52	185	58	44	401	716	44	46	42
2	42	44	44	e58	112	59	165	415	673	44	46	43
3	43	44	44	e42	66	59	627	405	470	46	47	42
4	40	43	43	43	58	57	548	387	121	55	46	42
5	37	44	43	43	55	58	509	376	83	54	46	41
6	49	43	43	38	58	59	496	275	76	44	45	42
7	48	43	42	43	58	63	478	67	102	43	44	44
8	46	42	39	44	60	63	468	62	153	44	42	44
9	46	42	42	45	61	64	373	153	151	58	42	44
10	46	41	43	50	62	68	59	394	145	48	42	44
11	45	41	42	50	68	60	46	380	142	43	42	45
12	45	41	42	49	63	60	77	398	145	41	44	44
13	45	41	46	43	65	59	190	562	146	36	45	44
14	46	42	51	45	61	59	388	830	180	40	44	45
15	44	41	72	44	61	58	734	779	384	43	44	46
16	43	41	49	43	62	47	749	759	602	48	44	48
17	40	40	49	44	63	46	719	756	553	48	43	45
18	38	40	85	43	59	48	690	776	522	48	44	44
19	45	41	61	e44	60	47	657	756	500	49	44	45
20	46	42	52	e42	61	70	442	727	378	47	43	44
21	47	41	49	43	62	76	158	700	151	47	43	44
22	49	40	48	42	62	54	154	540	137	48	44	44
23	47	40	48	40	60	52	154	162	134	53	44	44
24	47	40	47	43	60	52	153	152	111	48	46	43
25	40	50	45	44	60	48	120	151	61	47	42	43
26	39	43	44	43	60	68	62	153	56	50	41	43
27	42	41	44	42	60	139	60	153	56	47	41	50
28	42	41	44	37	59	57	76	152	50	53	41	49
29	43	53	44	40	---	48	229	156	45	49	43	43
30	44	49	e50	50	---	47	405	314	44	47	43	43
31	44	---	e48	56	---	44	---	604	---	46	42	---
TOTAL	1361	1278	1492	1385	1881	1847	10030	12895	7087	1458	1353	1324
MEAN	43.9	42.6	48.1	44.7	67.2	59.6	334	416	236	47.0	43.6	44.1
MAX	49	53	85	58	185	139	749	830	716	58	47	50
MIN	37	40	39	37	55	44	44	62	44	36	41	41

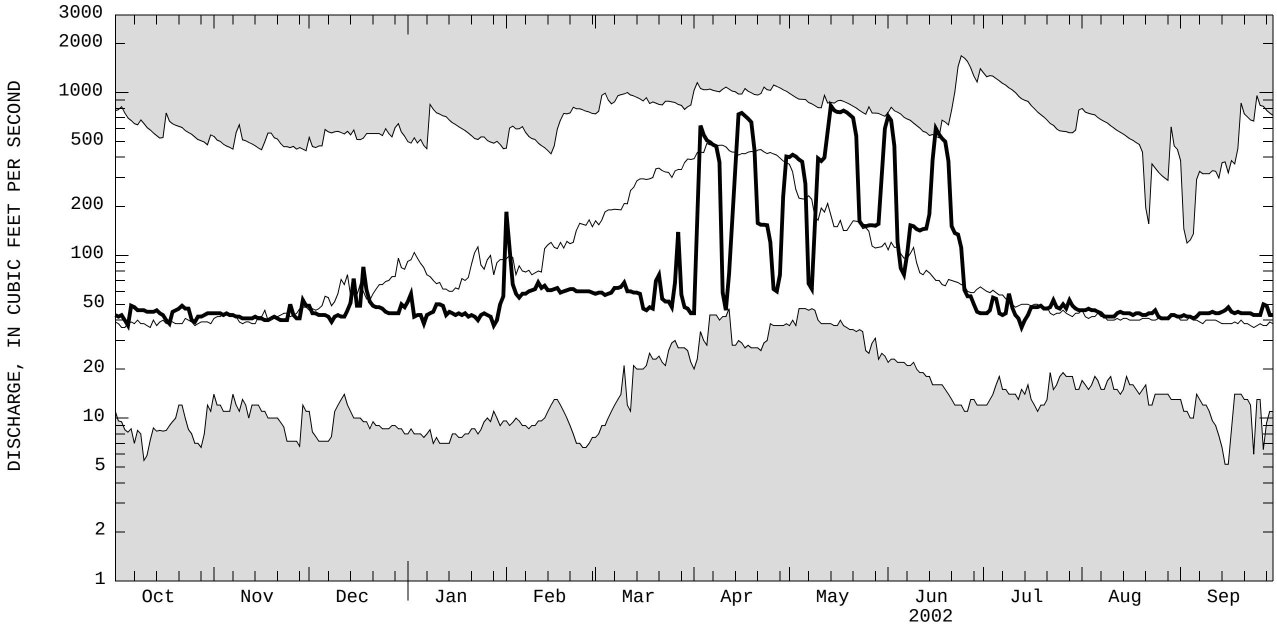
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	74.8	93.7	129	145	158	286	400	266	147	87.7	61.0	51.6
MAX	613	419	521	522	518	748	1036	725	566	852	483	363
(WY)	1978	1978	1973	1998	1976	1976	1993	1943	1972	1972	1992	1977
MIN	13.0	12.9	11.1	8.38	9.47	28.9	61.4	46.7	20.7	17.3	16.2	13.3
(WY)	1992	1964	1967	1967	1967	1967	1946	1995	1955	1963	1991	1991

e Estimated

04235000 CANANDAIGUA OUTLET AT CHAPIN, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1940 - 2002	
ANNUAL TOTAL	47162		43391			
ANNUAL MEAN	129		119		157	
HIGHEST ANNUAL MEAN					302	1993
LOWEST ANNUAL MEAN					57.7	1965
HIGHEST DAILY MEAN	967	Apr 12	830	May 14	1680	Jun 24 1972
LOWEST DAILY MEAN	37	Oct 5	36	Jul 13	5.2	Sep 15 1948
ANNUAL SEVEN-DAY MINIMUM	41	Nov 17	41	Nov 17	7.1	Feb 23 1967
10 PERCENT EXCEEDS	362		390		449	
50 PERCENT EXCEEDS	51		48		62	
90 PERCENT EXCEEDS	42		42		26	



2002 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.

04235396 OWASCO LAKE NEAR AUBURN, NY

LOCATION.--Lat 42°54'14", long 76°32'22", Cayuga County, Hydrologic Unit 04140201, on right bank near downstream side of bridge in Emerson Park, 0.2 mi south of city limits of Auburn, and 1.0 mi upstream from State dam.
DRAINAGE AREA.--205 mi^2.
PERIOD OF RECORD.--October 1967 to current year. Records since 1912 collected by, and in files of, city of Auburn.
GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. To convert elevations to adjustment of 1988, subtract 0.49 ft. Prior to May 1, 1982, nonrecording gage read once daily by employees of city of Auburn Water Division at same site and datum from reference mark at elevation 718.59 ft above NGVD of 1929.
REMARKS.--Lake elevation regulated by gates on outlet at State dam. Area of water surface, 10.6 mi^2. Telephone gage-height telemeter at station.
COOPERATION.--Records furnished by city of Auburn until April 30, 1982.
EXTREMES FOR PERIOD OF RECORD.--Maximum observed elevation, 716.48 ft, June 25, 1972; minimum observed elevation, 708.45 ft, Mar. 22, 23, 1993.
EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum observed elevation since l9l2, 7l6.9l ft, Mar. 23, l936, Apr. 9, l940.
EXTREMES FOR CURRENT YEAR.--Maximum elevation, 713.22 ft, Apr. 15; minimum elevation, 710.52 ft, Jan. 15.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	711.35	710.92	711.42	711.75	711.78	711.51	---	712.80	712.51	712.60	712.43	711.70
2	711.33	710.92	711.52	711.67	712.18	711.46	---	712.84	712.40	712.64	712.40	711.68
3	711.32	710.94	711.59	---	712.34	711.38	---	712.82	712.45	712.64	712.39	711.65
4	711.29	710.94	711.62	---	712.38	711.38	712.82	712.83	712.56	712.65	712.36	711.61
5	711.27	710.94	711.66	---	712.39	711.45	712.87	712.81	712.62	712.63	712.32	711.57
6	711.25	710.95	711.70	711.33	712.32	711.45	712.87	712.79	712.76	712.63	712.26	711.54
7	711.21	710.95	711.72	711.26	712.23	711.45	712.87	712.78	712.84	712.63	712.24	711.53
8	711.18	710.96	711.74	---	712.15	711.47	712.87	712.76	712.86	712.63	712.22	711.51
9	711.17	710.94	711.78	711.11	712.10	711.50	712.86	712.87	712.83	712.62	712.19	711.48
10	711.13	710.94	711.81	711.01	712.09	711.48	712.90	712.71	712.80	712.59	712.17	711.46
11	711.10	710.92	711.82	710.94	712.17	711.50	712.93	712.61	712.78	712.58	712.15	711.36
12	711.07	710.91	711.85	710.87	712.27	711.51	712.92	712.46	712.74	712.58	712.12	711.35
13	711.06	710.92	711.86	710.78	712.20	711.50	712.83	712.52	712.77	712.57	712.14	711.32
14	711.08	710.91	711.88	710.71	712.16	711.48	713.01	712.28	712.74	712.55	712.10	711.31
15	711.04	710.91	711.97	710.67	712.10	711.47	712.99	712.06	712.76	712.53	712.05	711.31
16	711.05	710.91	712.02	710.70	712.01	711.41	712.91	711.83	712.90	712.48	712.02	711.37
17	711.02	710.91	712.08	710.70	711.94	711.40	712.83	711.69	712.46	712.48	712.01	711.38
18	710.99	710.91	712.22	710.71	711.90	711.39	712.71	711.61	712.10	712.46	712.02	711.37
19	710.98	710.91	712.40	710.73	711.82	711.34	712.82	711.53	712.36	712.46	711.98	711.36
20	710.96	710.91	712.47	710.74	711.79	711.35	712.90	712.15	712.45	712.44	711.96	711.35
21	710.96	710.93	712.47	710.76	711.82	711.36	712.83	712.55	712.46	712.44	711.93	711.32
22	711.00	710.92	712.45	710.76	711.83	711.43	712.78	712.63	712.53	712.44	711.93	711.32
23	711.02	710.92	712.42	710.78	711.82	711.52	712.71	712.60	712.57	712.45	711.87	711.37
24	711.00	710.93	712.36	710.79	711.79	711.56	712.64	712.54	712.60	712.45	711.88	711.36
25	711.01	710.97	712.32	710.91	711.75	711.60	712.61	712.49	712.64	712.45	711.89	711.34
26	710.99	711.00	712.27	710.98	711.68	711.68	712.61	712.58	712.66	712.47	711.86	711.34
27	710.95	711.04	712.19	711.04	711.63	711.95	712.63	712.71	712.68	712.40	711.82	711.38
28	710.96	711.06	712.12	711.10	711.57	712.19	712.66	712.75	712.64	712.43	711.82	711.50
29	710.95	711.16	712.03	711.16	---	712.34	712.71	712.80	712.62	712.44	711.78	711.53
30	710.92	711.23	711.94	711.29	---	712.42	712.77	712.61	712.57	712.43	711.75	711.54
31	710.94	---	711.85	711.51	---	712.48	---	712.46	---	712.43	711.73	---
MEAN	711.08	710.96	711.99	---	712.01	711.59	---	712.50	712.62	712.52	712.06	711.44
MAX	711.35	711.23	712.47	---	712.39	712.48	---	712.87	712.90	712.65	712.43	711.70
MIN	710.92	710.91	711.42	---	711.57	711.34	---	711.53	712.10	712.40	711.73	711.31

CAL YR 2001 MEAN 711.58 MAX 713.27 MIN 709.02

04235440 OWASCO OUTLET AT GENESEE STREET, AUBURN, NY

LOCATION.--Lat 42°55'56", long 76°33'55", Cayuga County, Hydrologic Unit 04140201, on left bank in city of Auburn combined sewer overflow building, approximately 200 ft upstream from Genesee Street, and 2.5 mi downstream from State Dam at outlet of Owasco Lake.
DRAINAGE AREA.--207 mi^2.
PERIOD OF RECORD.--October 1998 to current year. Records for November 1912 to September 1966, published as "Owasco Lake Outlet" and October 1966 to September 1998, published as "Owasco Outlet near Auburn" (station 04235500) at site 2.6 mi downstream, are not equivalent because of regulation between sites.
GAGE.--Water-stage recorder. Elevation of gage is 670 ft above NGVD of 1929, from topographic map.
REMARKS.--No estimated daily discharges. Records good. Diurnal fluctuation caused by mills in Auburn; regulation at State Dam at outlet of lake. Telephone gage-height telemeter at station. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,630 ft^3/s, May 15, 2002, gage height, 5.73 ft; minimum discharge, 1.6 ft^3/s, Mar. 30, 31, July 22, 1999.
EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,630 ft^3/s, May 15, gage height, 5.73 ft; minimum discharge, 2.0 ft^3/s, Jan. 4, May 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

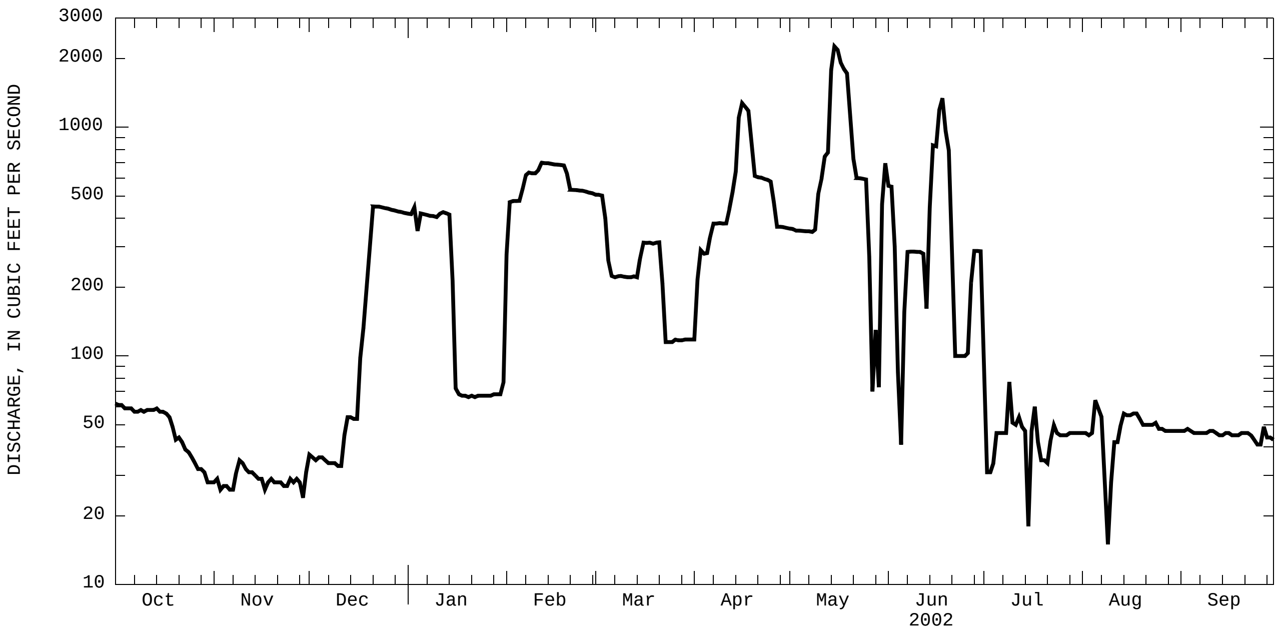
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	28	37	419	278	507	118	361	555	106	46	47
2	61	29	36	417	471	507	216	359	550	31	46	47
3	61	26	35	447	476	503	290	353	301	31	45	48
4	59	27	36	352	476	400	280	353	85	34	46	47
5	59	27	36	420	477	260	282	352	41	46	64	46
6	59	26	35	417	538	224	333	351	156	46	59	46
7	57	26	34	414	617	221	379	351	285	46	54	46
8	57	31	34	410	634	223	379	349	286	46	31	46
9	58	35	34	409	629	224	381	357	286	77	15	46
10	57	34	33	405	629	222	379	516	285	51	28	47
11	58	32	33	419	651	221	380	599	285	50	42	47
12	58	31	45	426	700	221	440	747	280	54	42	46
13	58	31	54	421	697	223	521	777	161	49	50	45
14	59	30	54	415	697	221	640	1780	448	47	56	45
15	57	29	53	213	692	270	1110	2260	834	18	55	46
16	57	29	53	72	688	313	1280	2180	827	47	55	46
17	56	26	98	68	687	312	1230	1920	1200	60	56	45
18	54	28	133	67	684	313	1180	1800	1340	42	56	45
19	49	29	202	67	681	310	832	1720	964	35	53	45
20	43	28	313	66	624	313	612	1140	793	35	50	46
21	44	28	451	67	533	314	604	727	345	34	50	46
22	42	28	450	66	532	207	602	600	100	43	50	46
23	39	27	450	67	531	115	595	599	100	50	50	45
24	38	27	446	67	529	115	590	596	100	46	51	43
25	36	29	443	67	528	115	580	592	100	45	48	41
26	34	28	440	67	524	118	470	271	103	45	48	41
27	32	29	435	67	518	117	367	70	209	45	47	49
28	32	28	432	68	514	117	367	130	288	46	47	44
29	31	24	428	68	---	118	366	73	288	46	47	44
30	28	31	426	68	---	118	363	461	287	46	47	43
31	28	---	422	77	---	118	---	696	---	46	47	---
TOTAL	1523	861	6211	7093	16235	7580	16166	23440	11882	1443	1481	1364
MEAN	49.1	28.7	200	229	580	245	539	756	396	46.5	47.8	45.5
MAX	62	35	451	447	700	507	1280	2260	1340	106	64	49
MIN	28	24	33	66	278	115	118	70	41	18	15	41

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	93.1	77.7	235	234	374	505	561	383	241	57.2	53.9	73.6
MAX	201	121	495	296	580	610	779	756	399	69.6	61.9	166
(WY)	2001	1999	2000	2000	2002	1999	2000	2002	2000	2000	2001	2000
MIN	39.0	28.7	64.0	177	278	245	211	88.1	67.4	45.5	43.8	40.2
(WY)	2000	2002	1999	2001	2001	2002	1999	2001	1999	1999	1999	1999

04235440 OWASCO OUTLET AT GENESEE STREET, AUBURN, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1998 - 2002	
ANNUAL TOTAL	73193		95279			
ANNUAL MEAN	201		261		240	
HIGHEST ANNUAL MEAN					322	2000
LOWEST ANNUAL MEAN					162	1999
HIGHEST DAILY MEAN	1930	Apr 10	2260	May 15	2260	May 15 2002
LOWEST DAILY MEAN	24	Nov 29	15	Aug 9	11	Mar 31 1999
ANNUAL SEVEN-DAY MINIMUM	27	Nov 1	27	Nov 1	23	Mar 30 1999
10 PERCENT EXCEEDS	450		620		599	
50 PERCENT EXCEEDS	72		70		82	
90 PERCENT EXCEEDS	34		32		39	



2002 WATER YEAR DAILY MEAN DISCHARGE.

04235600 SENECA RIVER NEAR PORT BYRON, NY

LOCATION.--Lat 43°04'43", long 76°38'45", Cayuga County, Hydrologic Unit 04140201, on right bank , 50 ft upstream of Rt. 38 bridge, 3.0 mi north of Port Byron, and 10.1 mi upstream from Cross Lake.
DRAINAGE AREA.-- 2,815 mi^2.
PERIOD OF RECORD.--August 1996 to current year.
GAGE.--Acoustic velocity meter, water-stage recorder, and crest-stage gage. Elevation of gage is 375 ft above NGVD of 1929, from topographic map.
REMARKS.--Records good except those for estimated daily discharges, which are fair. A large amount of natural storage and some artificial regulation is afforded by many large lakes and the Erie (Barge) Canal system in the river basin. Seneca River basin receives water from Erie (Barge) Canal through lock 32 near Pittsford. During part of the year, entire flow from 45.5 mi^2 of Mud Creek drainage area may be diverted from Chemung River basin into Keuka Lake in Oswego River basin. Telephone and satellite gage-height telemeters at station. Several measurements of water temperature were made during the year.
COOPERATION.--Records of gate openings, lockages, and elevations of water surface in Erie (Barge) Canal above and below Lock 24 & 25, furnished by New York State Thruway Authority, Office of Canals.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 13,600 ft^3/s, Jan. 11, 1998; minimum daily discharge, 258 ft^3/s, Jan. 22, 2002. Maximum and minimun instantaneous discharges not determined.
EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 8,710 ft^3/s, May 16; minimum daily discharge, 258 ft^3/s, Jan. 22. Maximum and minimun instantaneous discharges not determined.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1960	1690	2110	591	2930	2440	1590	2920	7600	3040	731	650
2	1910	1930	2040	523	5070	2090	1600	2560	7070	2120	748	685
3	1710	2120	2080	398	5470	2130	2410	2410	6660	1920	792	619
4	1690	2150	2020	498	4830	1990	3690	2320	e6200	1860	772	581
5	1390	2060	2010	660	4290	1630	3640	2120	5830	1610	719	614
6	1110	2040	2030	763	3790	1440	3090	1640	5790	1060	726	679
7	989	2030	2120	790	3840	1420	2710	1770	6020	908	787	686
8	916	2160	2400	701	4140	1310	2360	1820	5970	962	776	682
9	802	2270	2400	715	4350	1230	2210	2460	5790	820	736	644
10	627	2460	2400	738	4560	1140	2020	4140	5210	836	717	575
11	634	2470	2130	760	4490	1310	1690	4750	4470	889	703	547
12	e600	2500	1830	869	4810	1460	1440	4940	4020	882	696	617
13	e580	2390	1830	883	4740	1410	1590	5620	3270	764	643	639
14	e560	1690	1820	873	4610	1260	2860	7710	3210	713	605	551
15	469	1530	1850	771	4450	1310	5000	8680	5770	697	631	544
16	429	1550	1990	613	4300	1260	5850	8710	6870	723	667	670
17	426	1350	2320	600	4320	1310	5590	8410	7590	810	672	652
18	389	1430	2710	552	4610	1360	4520	8010	7390	664	666	678
19	401	1720	2920	505	4680	1300	e3600	7780	6710	687	694	595
20	403	1890	3120	353	4350	1380	e2700	7490	6030	756	754	568
21	352	1720	3230	287	4290	1470	e1900	6670	5750	699	758	602
22	385	1460	2940	258	4230	1680	e1300	6450	5150	606	664	569
23	453	1360	2710	268	3980	1510	e1500	6670	4950	768	737	579
24	383	1290	2220	388	3920	1360	1680	6590	4820	838	619	647
25	435	1260	1940	414	3780	1280	1580	6740	4040	821	717	711
26	550	1550	1940	430	3470	1390	1380	6820	3050	740	739	790
27	539	1910	1560	733	3550	2550	1170	6700	2870	737	687	1230
28	599	1920	1130	1090	3190	3750	1220	6630	3560	614	723	1470
29	863	1980	933	1100	---	3140	1380	6550	3660	731	711	1270
30	1120	1990	743	1260	---	2230	1650	7240	3740	811	750	1270
31	1440	---	633	1560	---	1670	---	7760	---	715	749	---
TOTAL	25114	55870	64109	20944	119040	52210	74920	171080	159060	30801	22089	21614
MEAN	810	1862	2068	676	4251	1684	2497	5519	5302	994	713	720
MAX	1960	2500	3230	1560	5470	3750	5850	8710	7600	3040	792	1470
MIN	352	1260	633	258	2930	1140	1170	1640	2870	606	605	544

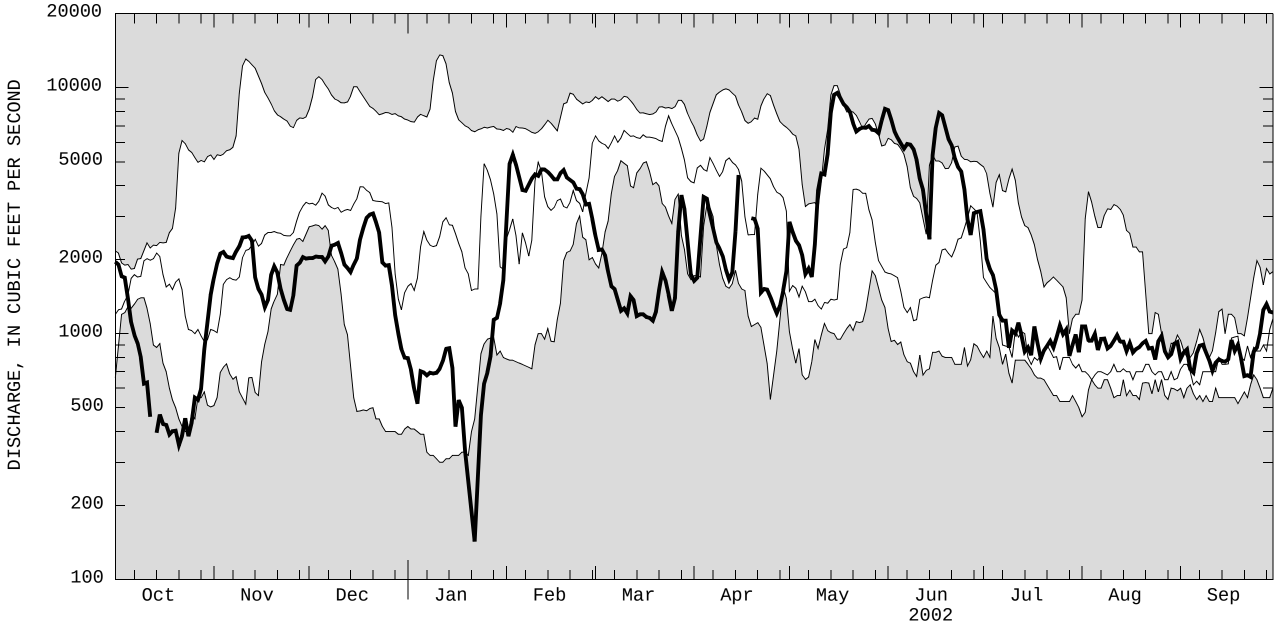
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1601	3063	3650	3072	3955	5304	4188	3433	2873	1308	932	820
MAX	3013	8247	8876	7671	7590	8483	7416	6274	5302	2634	2181	1126
(WY)	1997	1997	1997	1998	1998	1998	2001	2000	2002	1998	2000	2000
MIN	810	1287	1186	676	2134	1684	2126	1234	998	786	602	611
(WY)	2002	2000	1999	2002	1997	2002	1997	1999	1999	2001	2001	1998

e Estimated

04235600 SENECA RIVER NEAR PORT BYRON, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1997 - 2002	
ANNUAL TOTAL	813761		816851			
ANNUAL MEAN	2229		2238		2843	
HIGHEST ANNUAL MEAN					3873	1998
LOWEST ANNUAL MEAN					1840	1999
HIGHEST DAILY MEAN	9900	Apr 11	8710	May 16	13600	Jan 11 1998
LOWEST DAILY MEAN	352	Oct 21	258	Jan 22	258	Jan 22 2002
ANNUAL SEVEN-DAY MINIMUM	395	Oct 18	343	Jan 20	310	Jan 8 1999
10 PERCENT EXCEEDS	5340		5600		6820	
50 PERCENT EXCEEDS	1440		1550		1830	
90 PERCENT EXCEEDS	560		593		650	



2002 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.

04237411 SENECA RIVER, MOUTH AT STATE DITCH, NEAR JORDAN, NY

LOCATION.--Lat 43°06'54", long 76°26'21", Onondaga County, Hydrologic Unit 04140201, on right bank 700 ft downstream from Bridge on Plainville Road, 1.2 mi north of Jack's Reef.
DRAINAGE AREA.-- 3,093 mi^2.
PERIOD OF RECORD.--April 1996 to current year.
GAGE.--Water-stage recorder. Elevation of gage is 380 ft above NGVD of 1929, from topographic map.
REMARKS.--A large amount of natural storage and some artificial regulation is afforded by many large lakes and the Erie (Barge) Canal system in the river basin. Seneca River basin receives water from Erie (Barge) Canal through Lock 32 near Pittsford. During part of year, entire flow from 45.5 mi^2 of Mud Creek drainage area may be diverted from Chemung River basin into Keuka Lake in Oswego River basin.
EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 6.31 ft, Jan. 12, 1998; minimum gage height, 0.18 ft, Sept. 28, 2002.
EXTREMES FOR CURRENT YEAR.--Maximum gage height, 4.56 ft, May 17; minimum gage height, 0.18 ft, Sept. 28.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.16	1.33	1.44	0.90	1.52	1.14	1.18	1.42	4.03	1.62	1.45	1.22
2	1.43	1.39	1.42	0.99	1.94	1.19	1.29	1.49	3.98	1.43	1.37	1.23
3	1.47	1.39	1.39	1.23	2.39	1.26	1.47	1.16	3.69	1.27	1.29	1.12
4	1.46	1.26	1.36	1.45	2.44	1.26	1.38	0.89	3.46	1.24	1.22	1.23
5	1.39	1.17	1.33	1.49	2.24	1.15	1.36	1.13	3.27	1.23	1.22	1.32
6	1.20	1.14	1.29	1.34	1.94	0.92	1.21	1.19	3.08	1.25	1.26	1.38
7	1.18	1.11	1.23	1.23	1.67	0.81	1.12	1.15	3.02	1.12	1.29	1.40
8	1.08	1.11	1.30	1.12	1.56	0.82	1.11	1.11	2.99	1.02	1.30	1.26
9	1.04	1.19	1.42	1.04	1.60	0.99	1.08	1.16	2.96	1.30	1.29	1.13
10	1.10	1.36	1.46	0.99	1.73	1.25	1.14	1.60	2.84	1.43	1.29	1.04
11	1.14	1.46	1.35	1.00	1.93	1.35	1.24	1.94	2.50	1.27	1.29	1.15
12	1.03	1.42	1.17	1.04	2.05	1.45	1.22	2.02	2.11	1.16	1.31	1.23
13	1.00	1.37	1.19	1.11	2.12	1.26	1.18	2.48	1.72	1.15	1.32	1.31
14	0.98	1.18	1.21	1.15	2.08	1.16	1.48	3.40	1.69	1.29	1.33	1.37
15	1.01	0.92	1.33	1.22	2.01	1.15	1.71	4.16	2.57	1.40	1.34	1.44
16	0.97	1.14	1.42	1.14	1.94	1.20	2.24	4.43	3.32	1.35	1.35	1.45
17	1.00	1.20	1.53	1.04	1.91	1.24	2.42	4.54	3.82	1.18	1.36	1.25
18	1.01	1.24	1.64	0.92	1.87	1.27	2.26	4.49	4.05	1.13	1.38	1.13
19	1.05	1.36	1.66	0.89	2.00	1.27	1.85	4.35	3.95	1.25	1.36	1.05
20	1.09	1.49	1.50	0.80	1.95	1.20	1.28	4.19	3.65	1.32	1.36	1.03
21	1.13	1.32	1.40	0.89	1.89	1.29	0.87	3.93	3.36	1.30	1.34	1.17
22	1.22	1.11	1.28	0.97	1.84	1.29	0.88	3.63	3.06	1.42	1.36	1.30
23	1.29	1.01	1.23	1.08	1.71	1.07	1.13	3.48	2.73	1.50	1.37	1.42
24	1.32	1.03	1.37	1.22	1.56	0.98	1.19	3.45	2.50	1.53	1.40	1.43
25	1.30	1.08	1.40	1.31	1.46	0.96	1.23	3.43	2.21	1.40	1.41	1.28
26	1.23	1.17	1.33	1.14	1.45	0.96	1.29	3.47	1.75	1.26	1.39	0.92
27	1.12	1.37	1.27	1.00	1.32	1.45	1.19	3.43	1.32	1.20	1.37	0.30
28	1.02	1.41	1.07	1.05	1.19	1.73	1.12	3.36	1.42	1.26	1.36	0.41
29	1.03	1.37	0.97	1.22	---	1.53	1.30	3.32	1.59	1.42	1.36	0.91
30	1.27	1.38	0.94	1.32	---	1.12	1.35	3.45	1.66	1.44	1.36	1.28
31	1.46	---	0.92	1.44	---	0.98	---	3.81	---	1.52	1.31	---
MEAN	1.17	1.25	1.32	1.12	1.83	1.18	1.36	2.81	2.81	1.31	1.34	1.17
MAX	1.47	1.49	1.66	1.49	2.44	1.73	2.42	4.54	4.05	1.62	1.45	1.45
MIN	0.97	0.92	0.92	0.80	1.19	0.81	0.87	0.89	1.32	1.02	1.22	0.30

CAL YR 2001 MEAN 1.59 MAX 5.21 MIN 0.78
WTR YR 2002 MEAN 1.55 MAX 4.54 MIN 0.30

04237500 SENECA RIVER AT BALDWINSVILLE, NY

LOCATION.--Lat 43°09'25", long 76°19'55", Onondaga County, Hydrologic Unit 04140201, on left bank 200 ft downstream from bridge on State Highways 31 and 48 in Baldwinsville, and 400 ft downstream from navigation dam at Lock 24 of New York State Erie (Barge) Canal.
DRAINAGE AREA.--3,138 mi^2.
PERIOD OF RECORD.--November 1949 to current year in reports of Geological Survey. November 1898 to December 1908, prior to construction of Erie (Barge) Canal, not equivalent to later records at same site because of extensive development of Erie (Barge) Canal system. January 1909 to September 1925 (gage heights only) in reports of State Engineer and Surveyor.
REVISED RECORDS.--WDR NY-78-1: Drainage area.
GAGE.--Water-stage recorder. Datum of gage is 361.38 ft above NGVD of 1929 (362.60 ft Erie (Barge) Canal Datum). Prior to Dec. 31, 1908, nonrecording gage at same site at different datum. Auxiliary water-stage recorder 1,500 ft downstream from base gage at same datum.
REMARKS.--No estimated daily discharges. Records good. Discharge from 1898 to 1908 determined on basis of head on dam, flow through 10 mills nearby, lockages at Oswego Canal lock, estimated leakage of dam, wheel gates, flumes, and penstocks; not adjusted for inflow from Lake Erie through Erie (Barge) Canal. Discharge, since November 1949, computed by using fall as determined by auxiliary water-stage recorder. Published discharge represents the total flow at Baldwinsville and includes flow in Erie (Barge) Canal. A large amount of natural storage and some artificial regulation is afforded by many large lakes and the Erie (Barge) Canal system in the river basin. Large diurnal fluctuations at low and medium flows caused by powerplants upstream from station. Seneca River basin receives water from Erie (Barge) Canal through Lock 32 near Pittsford. During part of year, entire flow from 45.5 mi^2 of Mud Creek drainage area may be diverted from Chemung River basin into Keuka Lake in Oswego River basin. Telephone and satellite gage-height telemeters at station. Several measurements of water temperature were made during the year.
COOPERATION.--Records of lockages at Lock 24 furnished by New York State Thruway Authority, Office of Canals.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 18,100 ft^3/s, Apr. 27, 1993, maximum gage height, 9.63 ft, Apr. 26, 27, 1993; minimum daily discharge, 34 ft^3/s, Sept. 17, 1985, result of extreme regulation. Maximum and minimum instantaneous discharge not determined.
EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 9,800 ft^3/s, May 17; maximum gage height, 5.09 ft, May 17; minimum daily discharge, 299 ft^3/s, Sept. 21. Maximum and minimum instantaneous discharge not determined.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

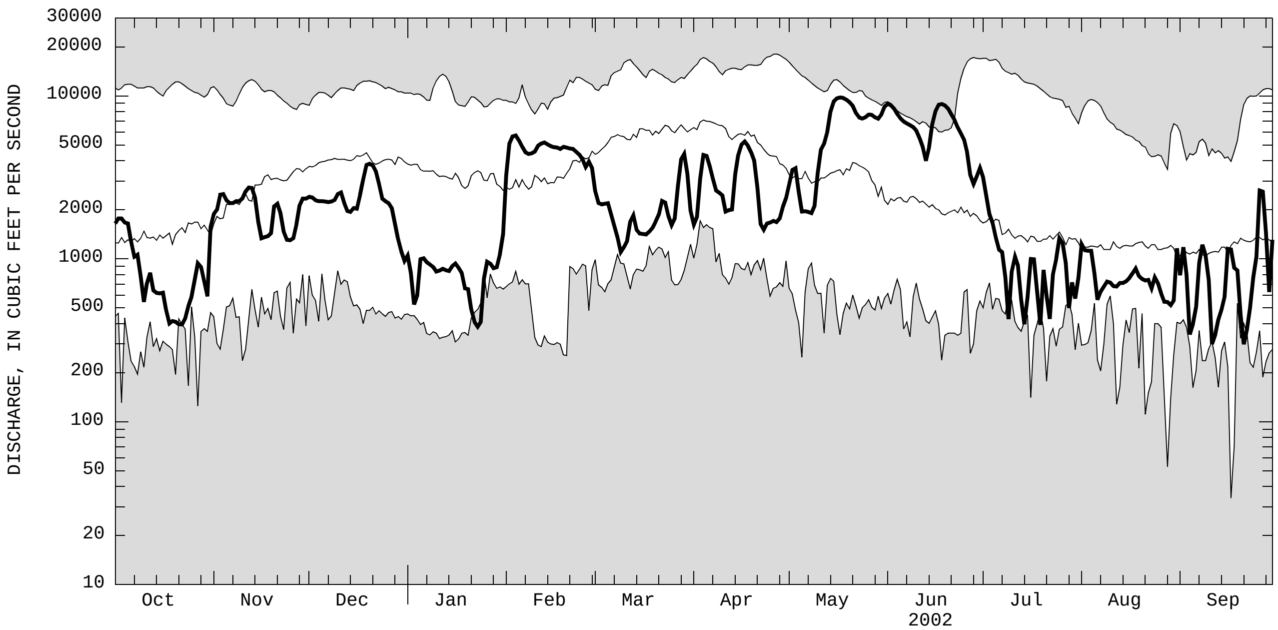
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1650	1890	2400	1050	3230	2590	1620	2880	8940	3160	1230	794
2	1770	2010	2380	821	5090	2200	1810	3510	8770	2420	1130	1180
3	1770	2480	2290	525	5650	2160	3110	3600	8350	1870	1120	799
4	1670	2500	2260	598	5730	2180	4350	2590	7740	1660	1120	344
5	1650	2290	2260	996	5330	2200	4290	1950	7280	1350	815	399
6	1270	2200	2250	1010	4880	1860	3720	1960	6970	1140	562	508
7	1030	2200	2230	953	4520	1580	3100	1940	6790	1100	630	941
8	1060	2260	2250	924	4400	1350	2630	1910	6620	773	676	1220
9	780	2260	2300	894	4450	1100	2550	2110	6440	427	726	1050
10	544	2350	2500	836	4560	1180	2450	3370	6130	841	715	741
11	710	2600	2560	847	4940	1290	1950	4690	5530	1030	679	300
12	821	2740	2210	869	5100	1700	1990	5110	4870	906	676	342
13	640	2720	1970	851	5190	1850	2010	6050	4000	561	711	426
14	617	2370	1940	843	5050	1510	3300	8070	4840	397	710	491
15	614	1690	2050	904	4920	1430	4360	9270	6730	583	728	588
16	620	1340	2030	936	4840	1420	5030	9690	8080	999	762	1150
17	482	1360	2460	882	4820	1410	5260	9800	8840	993	814	1140
18	401	1380	3090	818	4730	1470	4960	9730	8930	603	873	881
19	416	1440	3770	660	4870	1550	4520	9490	8750	394	785	847
20	411	2100	3840	652	4820	1700	3990	9150	8350	855	752	455
21	396	2180	3740	487	4760	1870	2730	8680	7700	591	737	299
22	395	1900	3440	410	4730	2270	1630	7840	7140	428	744	370
23	432	1470	2870	383	4540	2220	1510	7380	6420	810	660	500
24	514	1310	2340	410	4360	1830	1650	7270	5880	1000	771	765
25	588	1300	2260	755	4100	1610	1670	7400	5380	1340	709	1030
26	752	1340	2200	961	3670	1770	1710	7680	4500	1250	614	2630
27	938	1640	2050	934	3950	2810	1680	7650	3260	940	545	2590
28	891	2120	1640	878	3610	4090	1770	7400	2880	499	543	1430
29	721	2340	1310	890	---	4400	2090	7250	3200	717	520	626
30	589	2340	1110	1070	---	3330	2370	7700	3610	570	555	1310
31	1580	---	972	1420	---	1960	---	8620	---	765	1160	---
TOTAL	26722	60120	72972	25467	130840	61890	85810	191740	192920	30972	23772	26146
MEAN	862	2004	2354	822	4673	1996	2860	6185	6431	999	767	872
MAX	1770	2740	3840	1420	5730	4400	5260	9800	8940	3160	1230	2630
MIN	395	1300	972	383	3230	1100	1510	1910	2880	394	520	299

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2146	3321	4335	3857	3926	5832	5947	4029	2704	1909	1508	1414
MAX	11020	9491	10330	8807	8313	11650	15610	9778	6456	12100	6214	4760
(WY)	1978	1978	1978	1978	1976	1956	1993	1996	1972	1972	1992	1977
MIN	572	675	778	805	965	1606	1317	719	592	621	576	421
(WY)	1986	1958	1961	1954	1980	1965	1981	1995	1995	1985	2001	1995

04237500 SENECA RIVER AT BALDWINSVILLE, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1950 - 2002	
ANNUAL TOTAL	931930		929371			
ANNUAL MEAN	2553		2546		3404	
HIGHEST ANNUAL MEAN					5998	1978
LOWEST ANNUAL MEAN					1357	1965
HIGHEST DAILY MEAN	11200	Apr 13	9800	May 17	18100	Apr 27 1993
LOWEST DAILY MEAN	395	Oct 22	299	Sep 21	34	Sep 17 1985
ANNUAL SEVEN-DAY MINIMUM	419	Oct 17	419	Oct 17	283	Sep 23 1988
10 PERCENT EXCEEDS	6340		6250		7610	
50 PERCENT EXCEEDS	1640		1770		2310	
90 PERCENT EXCEEDS	616		567		829	



2002 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.

04237946 ONONDAGA CREEK TRIBUTARY NO. 6 BELOW MAIN MUDBOIL DEPRESSION AREA AT TULLY, NY

LOCATION.--Lat 42°51'18", long 76°08'24", Onondaga County, Hydrologic Unit 04140201, on right side of 9-in flume, 250 ft downstream from main depression area, about 2,100 ft east of Tully Farms Road, 1,500 ft south of Otisco Road, 400 ft upstream from mouth and 4.2 mi northwest of Tully.
below main mudboil depression area
DRAINAGE AREA.--0.32 mi^2 (0.70 mi^2 diverted to Trib. No. 5 on June 12, 1992).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1991 to June 1999, October 1999 to current year.
REVISED RECORD.--WDR NY-93-3: 1992 (M).
GAGE.--Water stage recorder and flume. Elevation of gage is 560 ft above NGVD of 1929, from topographic map.
REMARKS.--Records poor. Flow may include inflow from depressurizing wells, some originating outside the basin.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 45 ft^3/s, Mar. 27, 1992, gage height, 2.08 ft; maximum gage height, 2.90 ft, Jan. 19, 1996; no flow part of each day, July 29, 1993, June 20, 1994, result of dam construction.
EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, about 3.6 ft^3/s, Jan. 9; minimum daily discharge, 0.21 ft^3/s, Sept. 8, 9, 10. Maximum and minimum instantaneous discharges not determined.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.43	0.44	1.2	0.59	2.7	0.78	1.0	e1.0	e0.90	0.67	e0.40	0.25
2	0.39	0.47	0.74	0.58	1.8	0.78	1.0	e1.0	e0.75	0.64	e0.36	0.24
3	0.33	0.50	0.64	0.58	1.5	0.86	1.2	e1.0	e0.70	0.65	e0.34	0.24
4	0.32	0.46	0.61	0.57	1.3	0.77	1.1	e0.95	e0.65	0.74	e0.32	0.25
5	0.33	0.48	0.65	0.58	1.1	0.75	1.0	e0.90	e0.75	0.69	e0.40	0.24
6	0.37	0.45	0.63	0.58	1.1	0.83	1.0	e0.90	e0.80	e0.60	e0.36	0.23
7	0.32	0.43	0.57	0.58	1.0	0.80	0.95	e0.90	e0.70	e0.55	e0.34	0.22
8	0.34	0.43	0.53	0.60	0.96	0.76	0.95	e0.85	e0.65	e0.50	e0.32	0.21
9	0.34	0.46	0.59	e3.6	0.87	0.69	1.2	e1.0	e0.60	e0.50	e0.30	0.21
10	0.33	0.44	0.53	e1.2	1.2	1.0	1.1	e0.90	e0.60	e0.55	e0.32	0.21
11	0.33	0.41	0.53	0.93	2.2	0.85	0.93	e0.80	e0.55	e0.45	e0.30	0.24
12	0.34	0.39	0.52	0.79	1.5	0.88	0.81	e1.2	e0.60	e0.40	e0.32	0.23
13	0.39	0.36	0.62	0.66	1.4	0.87	1.7	e2.0	e0.55	e0.42	e0.30	0.23
14	0.39	0.32	0.64	0.65	1.2	0.80	2.3	e2.9	e2.0	e0.40	e0.30	0.25
15	0.46	0.35	0.71	0.74	1.1	0.75	3.3	e2.1	e1.5	e0.38	e0.34	0.32
16	0.38	0.32	0.68	0.86	1.2	0.79	e2.2	e1.6	e1.3	e0.38	e0.32	0.33
17	0.41	0.31	0.67	0.78	1.1	0.74	e1.9	e1.8	e1.0	e0.36	e0.32	0.24
18	0.37	0.33	0.66	0.67	1.0	0.78	e1.7	e2.0	e0.90	e0.34	e0.40	0.23
19	0.37	0.35	0.72	0.65	0.99	0.76	e1.5	e1.7	e0.80	e0.32	e0.30	0.23
20	0.41	0.44	0.73	0.66	1.0	0.90	e1.3	e1.4	e0.75	e0.32	e0.30	0.22
21	0.49	0.38	0.71	0.67	1.1	0.91	e1.1	e1.3	e0.70	e0.32	0.25	0.23
22	0.52	0.37	0.70	0.70	1.2	0.84	e1.0	e1.2	e0.65	e0.30	0.24	0.27
23	0.44	0.35	0.68	0.77	1.1	0.88	e1.0	e1.1	e0.85	e0.60	0.25	0.38
24	0.43	0.37	0.67	1.0	1.0	0.87	e0.95	e1.0	e0.65	e0.50	0.56	0.24
25	0.42	0.65	0.66	0.87	0.98	0.81	e1.0	e0.90	e0.60	e0.40	0.32	0.23
26	0.39	0.66	0.66	0.76	0.88	1.4	e0.95	e0.88	e0.55	e0.40	0.28	0.25
27	0.45	0.52	0.66	0.76	0.85	1.7	e0.90	e0.84	e0.80	e0.40	0.27	0.64
28	0.42	0.53	0.64	0.74	0.81	1.3	e1.1	e0.82	e0.70	e0.60	0.27	0.45
29	0.41	0.80	0.62	0.68	---	1.2	e1.2	e0.80	0.70	e0.80	0.29	0.28
30	0.42	1.0	0.60	0.92	---	1.0	e1.1	e0.82	0.68	e0.50	0.28	0.26
31	0.41	---	0.59	0.91	---	0.98	---	e1.0	---	e0.45	0.27	---
TOTAL	12.15	13.77	20.36	25.63	34.14	28.03	38.44	37.56	23.93	15.13	9.94	8.05
MEAN	0.39	0.46	0.66	0.83	1.22	0.90	1.28	1.21	0.80	0.49	0.32	0.27
MAX	0.52	1.0	1.2	3.6	2.7	1.7	3.3	2.9	2.0	0.80	0.56	0.64
MIN	0.32	0.31	0.52	0.57	0.81	0.69	0.81	0.80	0.55	0.30	0.24	0.21
CFSM	1.22	1.43	2.05	2.58	3.81	2.83	4.00	3.79	2.49	1.53	1.00	0.84
IN.	1.41	1.60	2.37	2.98	3.97	3.26	4.47	4.37	2.78	1.76	1.16	0.94

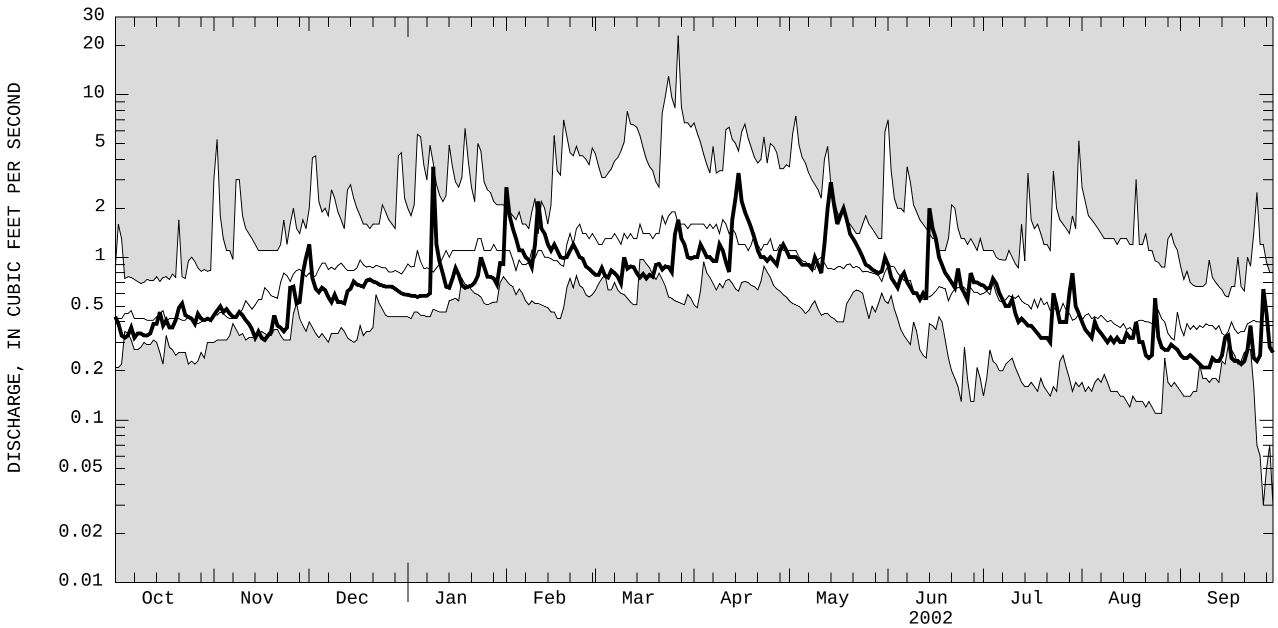
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	0.45	0.70	0.96	1.27	1.32	1.93	1.79	1.12	0.78	0.60	0.48	0.40
MAX	0.78	1.24	1.90	2.82	3.05	5.20	4.49	2.56	1.76	1.47	1.32	0.77
(WY)	1993	1997	1992	1992	1992	1992	1992	1992	1992	1992	1992	1992
MIN	0.29	0.35	0.39	0.63	0.66	0.90	0.73	0.51	0.31	0.21	0.15	0.23
(WY)	1994	1999	1999	2001	1995	2002	1999	1999	1999	1999	1999	1999

e Estimated

04237946 ONONDAGA CREEK TRIBUTARY NO. 6 BELOW MAIN MUDBOIL DEPRESSION AREA AT TULLY, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1992 - 2002	
ANNUAL TOTAL	267.33		267.13			
ANNUAL MEAN	0.73		0.73		0.98	
HIGHEST ANNUAL MEAN					2.20	1992
LOWEST ANNUAL MEAN					0.57	1999
HIGHEST DAILY MEAN	6.0	Mar 30	3.6	Jan 9	23	Mar 27 1992
LOWEST DAILY MEAN	0.26	Aug 30	0.21	Sep 8	0.03	Sep 27 1996
ANNUAL SEVEN-DAY MINIMUM	0.29	Aug 24	0.22	Sep 6	0.07	Sep 24 1996
ANNUAL RUNOFF (CFSM)	2.29		2.29		3.07	
ANNUAL RUNOFF (INCHES)	31.08		31.05		41.67	
10 PERCENT EXCEEDS	1.4		1.2		1.8	
50 PERCENT EXCEEDS	0.56		0.65		0.73	
90 PERCENT EXCEEDS	0.32		0.30		0.32	



2002 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.

04237946 ONONDAGA CREEK TRIBUTARY NO. 6 BELOW MAIN MUDBOIL DEPRESSION AREA AT TULLY, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1991 to current year.
CHEMICAL DATA: Water years 1991 (c), 1992 to current year (b).
SEDIMENT DATA: Water years 1991 (c), 1992 to current year (e).
PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT CONCENTRATION: October 1991 to June 1999, October 1999 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1991 to June 1999, October 1999 to current year.
REMARKS.--The non-daily water-quality records for this site were collected and reported in local standard time.
EXTREMES FOR PERIOD OF RECORD.--
SUSPENDED-SEDIMENT CONCENTRATION: Maximum daily mean, 27,200 mg/L, Oct. 1, 1991; minimum daily mean, 22 mg/L, Aug.19, 1993.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily mean, 148 tons, Mar.11, 1992; minimum daily mean, 0.02 tons, on many days during August and September 1993.
EXTREMES FOR CURRENT PERIOD.--
SUSPENDED-SEDIMENT CONCENTRATION: Maximum daily mean, 648 mg/L, Sept. 26; minimum daily mean, 102 mg/L, Apr. 15.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily mean, 1.4 tons, Feb. 1, 3; minimum daily mean, 0.29 tons, Sept. 8.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)
NOV													
15...	0745	.36	7.6	69	7.4	6300	9.0	700	163	69.9	4.07	1010	194
FEB													
15...	0745	1.1	13.9	102	7.5	3630	1.7	470	116	43.2	2.50	506	188
MAY													
16...	0630	1.8	10.1	88	7.7	2350	9.1	380	102	31.3	2.07	321	200
AUG													
30...	0700	.29	7.6	81	7.6	9080	14.2	880	195	95.9	4.41	1620	176

Date	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
NOV										
15...	237	3.24	1780	9.6	243	3720	<50	69.0	345	.34
FEB										
15...	229	1.46	928	6.1	128	1930	E10	61.4	473	1.4
MAY										
16...	244	.82	556	5.1	86.9	1310	13	40.5	127	.62
AUG										
30...	215	4.41	2820	9.5	356	5490	66	116	321	.25

04237946 ONONDAGA CREEK TRIBUTARY NO. 6 BELOW MAIN MUDBOIL DEPRESSION AREA AT TULLY, NY--Continued

SEDIMENT, SUSPENDED CONCENTRATION (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	365	366	312	568	186	461	326	305	383	516	531	510
2	373	365	430	574	276	456	331	306	421	520	534	513
3	367	360	462	570	337	432	289	312	440	520	527	508
4	373	372	478	580	368	456	313	322	453	495	525	511
5	369	374	466	579	398	461	315	333	431	509	516	528
6	364	382	481	574	424	434	320	334	422	537	520	525
7	357	387	503	574	416	442	337	335	452	552	513	524
8	361	391	514	573	446	451	335	344	469	566	519	516
9	362	391	505	130	470	466	294	317	482	567	515	525
10	355	405	527	399	391	376	304	338	489	551	509	529
11	353	409	528	468	222	416	336	361	505	576	510	553
12	350	413	534	513	315	407	361	295	497	581	508	554
13	350	430	510	551	349	408	216	187	513	580	505	562
14	350	427	506	560	384	425	161	122	226	590	503	575
15	338	436	493	526	391	433	102	179	293	586	505	585
16	346	447	501	494	389	420	162	227	334	576	498	588
17	347	451	512	517	400	433	192	211	400	583	500	574
18	347	457	512	551	420	417	210	188	427	582	489	579
19	349	454	498	559	421	423	231	226	457	585	497	597
20	345	445	498	555	414	384	265	259	474	578	496	600
21	337	461	511	551	410	380	299	288	490	580	498	605
22	334	474	516	543	382	394	303	310	508	577	482	612
23	346	472	525	515	405	383	311	320	449	508	498	605
24	349	478	527	445	410	383	320	341	511	534	450	614
25	353	427	533	487	414	392	299	365	528	554	501	638
26	360	424	533	519	439	274	320	372	545	551	495	648
27	352	467	539	520	444	231	331	384	471	548	498	541
28	355	467	543	527	455	286	287	391	502	493	507	606
29	361	404	557	542	---	312	280	399	503	432	501	645
30	367	353	560	466	---	334	307	398	508	514	497	644
31	370	---	564	468	---	341	---	348	---	524	511	---
MEAN	355	420	506	516	385	397	282	304	453	547	505	570
MAX	373	478	564	580	470	466	361	399	545	590	534	648
MIN	334	353	312	130	186	231	102	122	226	432	450	508

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.42	0.43	1.0	0.90	1.4	0.97	0.88	0.82	0.93	0.93	0.57	0.34
2	0.39	0.46	0.86	0.90	1.3	0.96	0.89	0.83	0.85	0.90	0.52	0.33
3	0.33	0.49	0.80	0.89	1.4	1.0	0.94	0.84	0.83	0.91	0.48	0.33
4	0.32	0.46	0.79	0.89	1.3	0.95	0.93	0.83	0.80	0.99	0.45	0.34
5	0.33	0.48	0.82	0.91	1.2	0.93	0.85	0.81	0.87	0.95	0.56	0.34
6	0.36	0.46	0.82	0.90	1.3	0.97	0.86	0.81	0.91	0.87	0.51	0.33
7	0.31	0.45	0.77	0.90	1.1	0.95	0.86	0.81	0.85	0.82	0.47	0.31
8	0.33	0.45	0.74	0.93	1.2	0.93	0.86	0.80	0.82	0.76	0.45	0.29
9	0.33	0.49	0.80	1.3	1.1	0.87	0.95	0.86	0.78	0.77	0.42	0.30
10	0.32	0.48	0.75	1.3	1.3	1.0	0.90	0.82	0.79	0.82	0.44	0.30
11	0.31	0.45	0.76	1.2	1.3	0.95	0.84	0.78	0.75	0.70	0.41	0.36
12	0.32	0.43	0.75	1.1	1.3	0.97	0.79	0.96	0.81	0.63	0.44	0.34
13	0.37	0.42	0.85	0.98	1.3	0.96	0.99	1.0	0.76	0.66	0.41	0.35
14	0.37	0.37	0.87	0.98	1.2	0.92	1.0	0.96	1.2	0.64	0.41	0.39
15	0.42	0.41	0.95	1.1	1.2	0.88	0.91	1.0	1.2	0.60	0.46	0.51
16	0.35	0.39	0.92	1.1	1.3	0.90	0.96	0.98	1.2	0.59	0.43	0.52
17	0.38	0.38	0.93	1.1	1.2	0.87	0.98	1.0	1.1	0.57	0.43	0.37
18	0.35	0.41	0.91	1.0	1.1	0.88	0.96	1.0	1.0	0.53	0.53	0.36
19	0.35	0.43	0.97	0.98	1.1	0.87	0.94	1.0	0.99	0.51	0.40	0.37
20	0.38	0.53	0.98	0.99	1.1	0.93	0.93	0.98	0.96	0.50	0.40	0.36
21	0.45	0.47	0.98	1.0	1.2	0.93	0.89	1.0	0.93	0.50	0.34	0.38
22	0.47	0.47	0.98	1.0	1.2	0.89	0.82	1.0	0.89	0.47	0.31	0.45
23	0.41	0.45	0.96	1.1	1.2	0.91	0.84	0.95	1.0	0.82	0.34	0.62
24	0.41	0.48	0.95	1.2	1.1	0.90	0.82	0.92	0.90	0.72	0.68	0.40
25	0.40	0.75	0.95	1.1	1.1	0.86	0.81	0.89	0.86	0.60	0.43	0.40
26	0.38	0.76	0.95	1.1	1.0	1.0	0.82	0.88	0.81	0.60	0.37	0.44
27	0.43	0.66	0.96	1.1	1.0	1.1	0.80	0.87	1.0	0.59	0.36	0.93
28	0.40	0.67	0.94	1.1	1.0	1.0	0.85	0.87	0.95	0.80	0.37	0.74
29	0.40	0.87	0.93	1.0	---	1.0	0.91	0.86	0.95	0.93	0.39	0.49
30	0.42	0.95	0.91	1.2	---	0.90	0.83	0.88	0.93	0.69	0.38	0.45
31	0.41	---	0.90	1.1	---	0.90	---	0.94	---	0.64	0.37	---
TOTAL	11.62	15.40	27.45	32.35	33.5	29.05	26.61	27.95	27.62	22.01	13.53	12.44
MEAN	0.37	0.51	0.89	1.0	1.2	0.94	0.89	0.90	0.92	0.71	0.44	0.41
MAX	0.47	0.95	1.0	1.3	1.4	1.1	1.0	1.0	1.2	0.99	0.68	0.93
MIN	0.31	0.37	0.74	0.89	1.0	0.86	0.79	0.78	0.75	0.47	0.31	0.29

04237946 ONONDAGA CREEK TRIBUTARY NO. 6 BELOW MAIN MUDBOIL DEPRESSION AREA AT TULLY, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
DEC					
18...	1700	.70	96	335	.63
JAN					
11...	1700	1.0	95	522	1.4
FEB					
02...	1630	1.8	90	289	1.4
15...	0745	1.1	83	473	1.4
MAR					
02...	1700	.79	97	478	1.0
APR					
28...	1900	1.1	97	396	1.2

04237962 ONONDAGA CREEK NEAR CARDIFF, SYRACUSE, NY

LOCATION.--Lat 42°54'00", long 76°10'10", Onondaga County, Hydrologic Unit 04140201, on left bank 10 ft upstream from bridge on State Highway 20, 0.7 mi west of Tully Farms road, and 4.2 mi upstream from Onondaga Reservoir.
DRAINAGE AREA.--33.9 mi^2.
PERIOD OF RECORD.--October 2001 to September 2002.
GAGE.--Doppler velocity meter, water-stage recorder, and crest-stage gage. Elevation of gage is 500 ft above NGVD of 1929, from topographic map.
REMARKS.--Records good except those for estimated daily discharges, which are fair. Telephone and satellite gage-height and precipitation telemeters at station.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 473 ft^3/s, Apr. 15, 2002, maximum gage height, 4.66 ft, Apr. 15, 2002; minimum daily discharge, 3.8 ft^3/s, Sept. 14, 2002. Maximum and minimum instantaneous discharge not determined.
EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 473 ft^3/s, Apr. 15, maximum gage height, 4.66 ft, Apr. 15; minimum daily discharge, 3.8 ft^3/s, Sept. 14. Maximum and minimum instantaneous discharge not determined.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e17	20	152	28	373	63	90	93	71	23	12	5.2
2	e16	20	73	33	225	63	88	92	53	22	11	4.8
3	e15	32	57	33	139	86	120	90	44	22	11	5.2
4	e14	24	50	32	116	72	94	79	41	24	9.9	5.4
5	e13	24	49	32	100	56	84	73	53	24	13	5.1
6	e18	24	45	32	90	68	82	71	61	20	11	4.9
7	e16	21	40	35	84	68	74	75	45	18	11	4.0
8	e14	20	33	30	85	66	75	67	39	17	11	4.3
9	e13	22	35	39	78	70	93	88	36	17	10	4.7
10	e12	21	34	47	98	108	101	72	33	19	10	3.9
11	e12	20	31	53	266	67	81	59	30	15	8.5	4.6
12	14	18	27	47	132	67	78	99	35	14	9.6	4.0
13	13	17	33	44	108	65	183	228	32	14	9.0	4.2
14	12	19	39	36	93	64	280	285	231	14	9.2	3.8
15	28	21	64	42	91	61	473	190	136	13	9.8	7.7
16	18	21	41	47	99	68	223	129	116	13	9.2	11
17	20	18	45	41	91	56	177	151	76	12	9.5	5.8
18	18	16	119	37	76	58	156	193	60	11	12	4.9
19	14	16	117	31	73	56	138	131	53	11	8.3	5.1
20	15	22	86	32	83	67	116	104	48	11	11	5.0
21	22	21	79	33	103	75	102	94	45	11	7.1	4.9
22	49	17	64	34	106	63	94	88	41	9.8	6.9	5.4
23	27	15	61	40	81	61	89	83	49	31	7.5	12
24	23	15	92	71	73	65	82	78	38	17	23	5.3
25	23	42	66	74	78	61	96	71	33	13	13	4.8
26	18	59	54	59	77	108	86	68	32	12	8.4	5.0
27	23	37	45	56	81	170	73	62	49	11	7.2	17
28	26	36	44	63	69	103	109	62	40	32	5.5	40
29	21	71	41	69	---	98	121	58	28	51	5.9	16
30	21	113	35	113	---	96	98	62	26	18	5.4	13
31	18	---	32	88	---	87	---	94	---	14	5.7	---
TOTAL	583	842	1783	1451	3168	2336	3756	3189	1674	553.8	301.6	227.0
MEAN	18.8	28.1	57.5	46.8	113	75.4	125	103	55.8	17.9	9.73	7.57
MAX	49	113	152	113	373	170	473	285	231	51	23	40
MIN	12	15	27	28	69	56	73	58	26	9.8	5.4	3.8

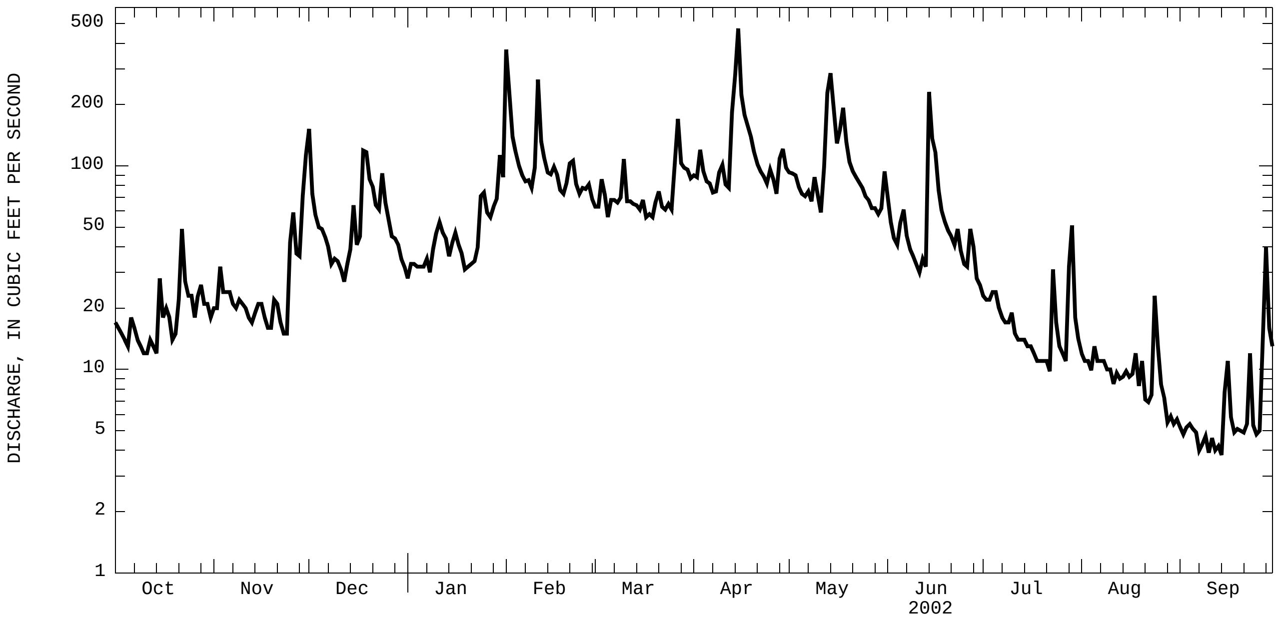
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	18.8	28.1	57.5	46.8	113	75.4	125	103	55.8	17.9	9.73	7.57
MAX	18.8	28.1	57.5	46.8	113	75.4	125	103	55.8	17.9	9.73	7.57
(WY)	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002
MIN	18.8	28.1	57.5	46.8	113	75.4	125	103	55.8	17.9	9.73	7.57
(WY)	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002	2002

e Estimated

04237962 ONONDAGA CREEK NEAR CARDIFF, SYRACUSE, NY--Continued

SUMMARY STATISTICS	FOR 2002 WATER YEAR	
ANNUAL TOTAL	19864.4	
ANNUAL MEAN	54.4	
HIGHEST DAILY MEAN	473	Apr 15
LOWEST DAILY MEAN	3.8	Sep 14
ANNUAL SEVEN-DAY MINIMUM	4.2	Sep 8
10 PERCENT EXCEEDS	107	
50 PERCENT EXCEEDS	40	
90 PERCENT EXCEEDS	9.1	



2002 WATER YEAR DAILY MEAN DISCHARGE.

04239000 ONONDAGA CREEK AT DORWIN AVENUE, SYRACUSE, NY

LOCATION.--Lat 42°59'00", long 76°09'04", Onondaga County, Hydrologic Unit 04140201, on left bank 550 ft upstream from bridge on Dorwin Avenue, at Syracuse, and 4.0 mi downstream from Onondaga Reservoir.
DRAINAGE AREA.--88.5 mi^2.
PERIOD OF RECORD.--May l951 to current year.
REVISED RECORDS.--WSP 2112: Drainage area.
GAGE.--Water-stage recorder and concrete control. Datum of gage is 414.19 ft above NGVD of 1929.
REMARKS.--Records good except those for estimated daily discharges, which are fair. High flows regulated by Onondaga Reservoir. Telephone and satellite gage-height telemeters at station. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,260 ft^3/s, July 3, 1974, gage height, 6.48 ft; minimum discharge not determined; minimum gage height, 1.15 ft, Sept. 16, 1959.
EXTREMES FOR CURRENT YEAR.--Maximum discharge, 776 ft^3/s, Feb. 1, gage height, 3.86 ft; minimum discharge, 12 ft^3/s, Sept. 13, gage height, 1.35 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	34	315	e80	515	131	172	232	221	75	36	18
2	32	35	159	e80	639	127	184	221	175	69	33	17
3	30	52	119	76	470	158	247	205	123	64	30	17
4	28	47	107	75	263	161	237	172	112	60	29	17
5	27	47	107	74	202	118	189	148	162	63	32	17
6	30	47	86	77	191	131	175	135	191	58	29	17
7	32	44	78	81	176	142	156	138	160	55	29	17
8	30	40	72	73	175	131	147	131	118	51	28	16
9	28	41	77	81	162	127	160	169	103	50	27	15
10	27	41	76	94	161	177	211	158	95	56	25	15
11	26	44	71	123	424	135	165	126	87	47	24	15
12	25	41	66	120	339	129	141	156	89	44	23	17
13	25	39	69	113	253	123	226	356	94	40	22	14
14	24	52	78	98	e180	119	463	665	319	38	20	17
15	34	72	143	98	186	112	631	644	530	36	20	18
16	32	49	112	119	205	123	515	450	499	36	21	35
17	32	48	104	108	212	116	368	378	363	35	20	24
18	33	37	253	99	e160	116	268	416	254	35	24	20
19	30	33	356	81	e150	118	216	400	166	35	21	18
20	29	41	243	e80	169	123	188	308	135	36	22	17
21	33	49	211	84	190	157	170	254	118	34	21	19
22	66	42	168	84	212	140	168	219	108	32	20	18
23	47	38	149	88	178	127	166	192	139	50	23	40
24	41	40	197	146	150	133	145	175	103	53	41	32
25	38	53	170	180	152	128	155	168	89	42	46	25
26	35	110	138	143	146	188	182	155	83	37	29	21
27	38	73	114	127	158	405	149	143	116	36	25	37
28	45	71	107	127	143	313	178	140	140	45	23	95
29	39	116	104	133	---	223	245	138	116	128	22	46
30	36	176	e95	199	---	189	247	161	85	61	21	33
31	34	---	e85	191	---	164	---	192	---	44	19	---
TOTAL	1041	1652	4229	3332	6561	4784	6864	7545	5093	1545	805	727
MEAN	33.6	55.1	136	107	234	154	229	243	170	49.8	26.0	24.2
MAX	66	176	356	199	639	405	631	665	530	128	46	95
MIN	24	33	66	73	143	112	141	126	83	32	19	14

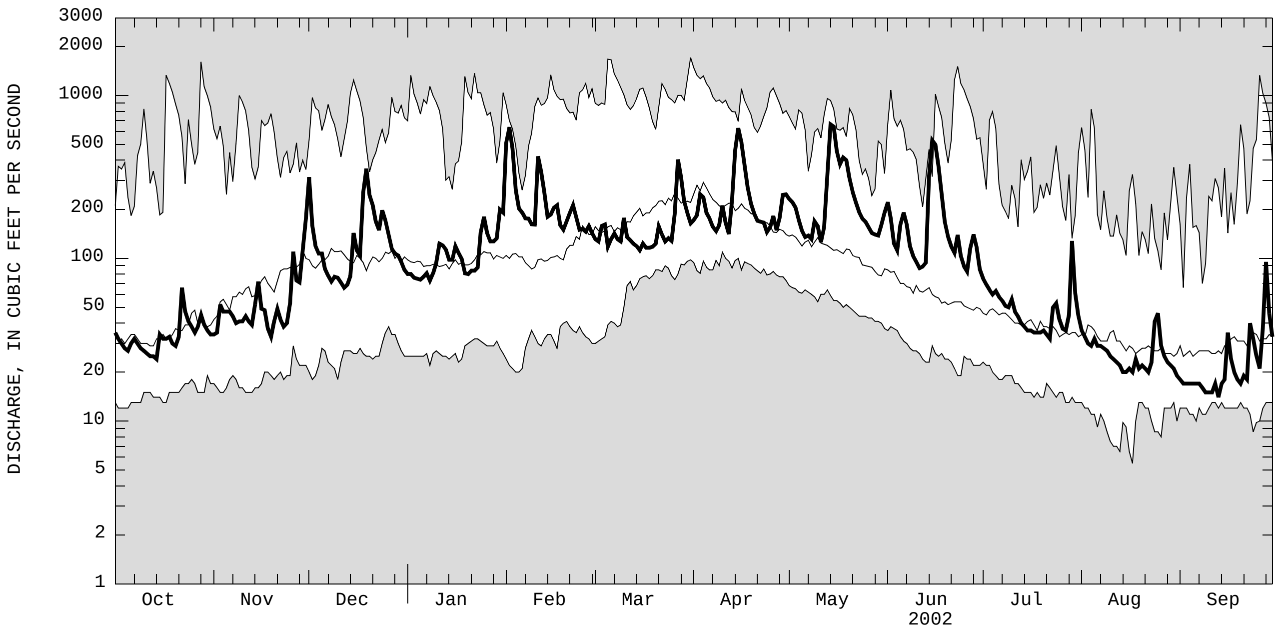
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	62.3	103	139	137	169	260	266	143	93.7	57.8	39.9	43.3
MAX	328	312	365	355	390	535	758	330	563	166	125	216
(WY)	1978	1969	1973	1998	1990	1979	1993	2000	1972	1992	1992	1975
MIN	15.3	19.3	31.7	33.7	40.8	93.3	112	58.1	28.1	19.5	10.7	13.2
(WY)	1965	1965	1961	1961	1963	1983	1981	1995	1999	1962	1965	1964

e Estimated

04239000 ONONDAGA CREEK AT DORWIN AVENUE, SYRACUSE, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1951 - 2002	
ANNUAL TOTAL	42399		44178			
ANNUAL MEAN	116		121		126	
HIGHEST ANNUAL MEAN					198	1978
LOWEST ANNUAL MEAN					58.8	1965
HIGHEST DAILY MEAN	939	Apr 9	665	May 14	1710	Mar 31 1960
LOWEST DAILY MEAN	15	Sep 20	14	Sep 13	5.5	Aug 17 1965
ANNUAL SEVEN-DAY MINIMUM	17	Sep 16	16	Sep 7	7.4	Aug 11 1965
10 PERCENT EXCEEDS	244		234		259	
50 PERCENT EXCEEDS	67		98		80	
90 PERCENT EXCEEDS	24		24		24	



2002 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.

04240010 ONONDAGA CREEK AT SPENCER STREET, SYRACUSE, NY

LOCATION.--Lat 43°03'27", long 76°09'46", Onondaga County, Hydrologic Unit 04140201, on right bank 250 ft upstream from bridge on Spencer Street in Syracuse, 1,000 ft upstream from Erie (Barge) Canal terminal, and 1.0 mi upstream from mouth.
DRAINAGE AREA.--110 mi^2.
PERIOD OF RECORD.--Occasional discharge measurements, water years 1958-70. September 1970 to current year.
REVISED RECORDS.--WDR NY 1972: 1971(M). WDR NY 1975: 1972(M), 1974(M). WDR NY-81-3: Drainage area. WDR NY-89-3: 1971-72(M), 1974-80(M), 1982-84(M), 1986(M), 1988(M).
GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 362.29 ft above NGVD of 1929.
REMARKS.--Records good except those for estimated daily discharges, which are fair. High flows regulated by Onondaga Reservoir. Flow may be affected by backwater from Onondaga Lake at times when the lake elevation exceeds 365.00 ft. Telephone and satellite gage-height telemeters at station. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,050 ft^3/s, July 3, 1974, gage height, 8.73 ft, from rating curve extended above 1,600 ft^3/s on basis of runoff comparisons with nearby stations; minimum, 20 ft^3/s, Sept. 26, 1985, gage height, 2.16 ft.
EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,580 ft^3/s, June 27, gage height, 6.54 ft; minimum discharge, 33 ft^3/s, Sept. 13, gage height, 2.36 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	56	364	e105	593	175	226	304	276	119	63	40
2	51	84	194	114	670	169	247	300	225	110	61	40
3	49	74	151	113	530	202	320	271	169	102	57	39
4	46	70	134	109	325	209	306	233	155	97	67	39
5	44	67	138	105	252	160	248	205	235	99	62	39
6	49	69	114	109	240	172	228	188	247	94	55	39
7	52	66	105	113	221	185	208	190	210	91	54	39
8	48	63	99	104	219	175	197	181	164	86	53	38
9	46	64	103	112	207	e170	227	252	145	86	53	37
10	45	64	102	122	208	e210	273	214	137	89	51	37
11	44	66	96	155	479	179	219	176	130	80	49	37
12	42	64	91	154	401	171	192	238	132	75	49	38
13	42	63	92	147	311	164	312	500	134	73	47	35
14	43	70	120	131	233	159	571	770	563	73	46	38
15	52	105	170	131	236	150	738	739	630	71	46	51
16	53	75	140	153	255	162	619	561	582	67	46	55
17	50	75	135	142	264	156	457	482	445	65	49	45
18	51	64	296	134	219	156	344	525	327	65	48	40
19	48	59	423	113	204	157	282	498	228	67	46	38
20	47	64	286	e110	218	166	248	395	188	65	46	37
21	87	69	252	118	244	204	225	331	168	63	46	38
22	85	63	206	117	270	183	220	293	154	61	57	129
23	69	59	187	120	232	168	219	257	188	104	46	65
24	61	61	233	178	198	175	196	234	150	88	105	49
25	59	89	209	218	200	170	215	224	135	69	73	42
26	56	138	176	181	193	309	245	210	130	65	52	39
27	59	103	151	164	206	509	202	193	281	62	47	114
28	65	101	144	163	189	397	267	186	195	87	46	110
29	60	151	140	169	---	291	319	186	165	150	44	64
30	56	231	127	233	---	247	317	298	131	89	43	51
31	55	---	e115	234	---	217	---	286	---	71	42	---
TOTAL	1668	2447	5293	4371	8017	6317	8887	9920	7019	2583	1649	1502
MEAN	53.8	81.6	171	141	286	204	296	320	234	83.3	53.2	50.1
MAX	87	231	423	234	670	509	738	770	630	150	105	129
MIN	42	56	91	104	189	150	192	176	130	61	42	35

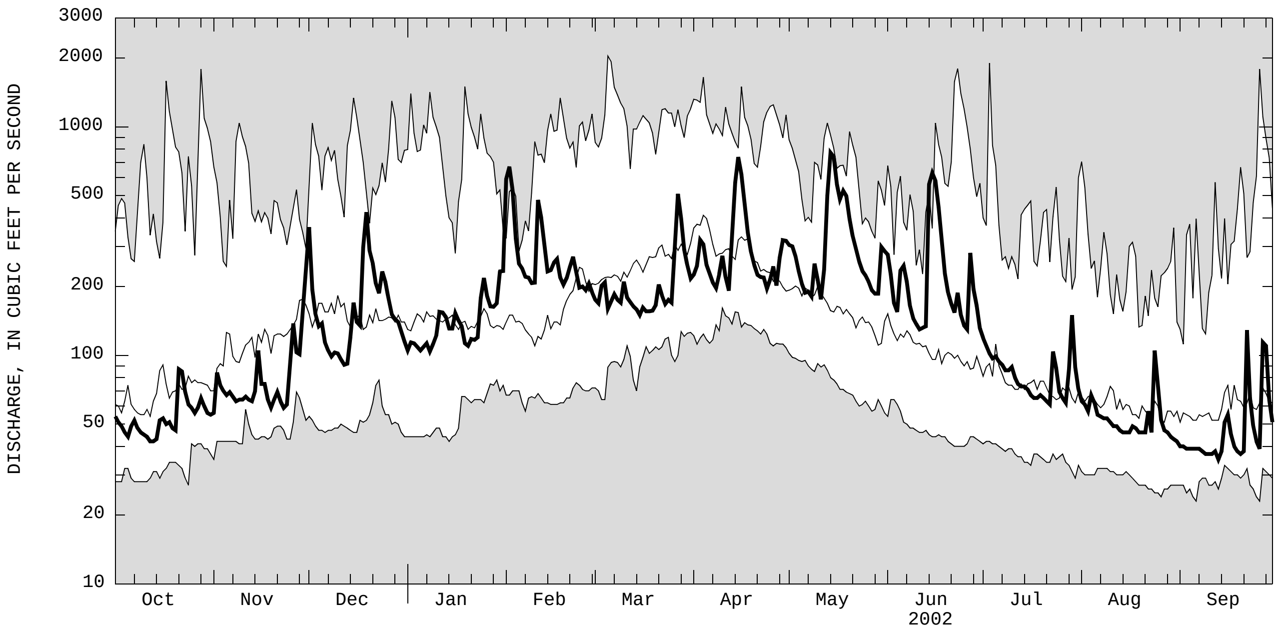
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	107	151	194	187	219	323	353	205	144	99.7	74.6	83.6
MAX	424	324	452	425	457	653	935	390	617	237	171	275
(WY)	1978	1978	1973	1998	1976	1979	1993	2000	1972	1974	1992	1975
MIN	39.2	48.9	53.9	73.6	70.4	123	153	78.8	49.3	39.6	30.4	36.2
(WY)	1984	1999	1999	1981	1980	1983	1995	1995	1995	1995	1999	1995

e Estimated

04240010 ONONDAGA CREEK AT SPENCER STREET, SYRACUSE, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1970 - 2002	
ANNUAL TOTAL	55385		59673			
ANNUAL MEAN	152		163		178	
HIGHEST ANNUAL MEAN					273	1976
LOWEST ANNUAL MEAN					100	1995
HIGHEST DAILY MEAN	1030	Apr 8	770	May 14	2040	Mar 5 1979
LOWEST DAILY MEAN	33	Aug 15	35	Sep 13	23	Sep 26 1985
ANNUAL SEVEN-DAY MINIMUM	34	Aug 10	37	Sep 8	26	Aug 31 1999
10 PERCENT EXCEEDS	308		305		355	
50 PERCENT EXCEEDS	98		134		124	
90 PERCENT EXCEEDS	41		46		48	



2002 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.

04240100 HARBOR BROOK AT SYRACUSE, NY

LOCATION.--Lat 43°02'09", long 76°10'55", Onondaga County, Hydrologic Unit 04140201, on left bank 160 ft upstream from bridge on Holden Street at Syracuse, 220 ft downstream from gated outlet of Velasko Road Detention Basin, and 2.6 mi upstream from mouth.
DRAINAGE AREA.--10.0 mi^2.
PERIOD OF RECORD.--June 1959 to current year.
REVISED RECORDS.--WSP 2112: Drainage area. WDR NY-82-3: 1981 (M), WDR-NY-88-3: 1986-87 (M).
GAGE.--Water-stage recorder. Datum of gage is 391.16 ft above NGVD of 1929. Prior to Sept. 30, l978, at site 1,660 ft upstream and Oct. 1, 1978 to May 31, 1980, at site 1,800 ft upstream at datum 3.63 ft higher.
REMARKS.--Records fair. Flow includes some sewage and storm sewer inflow, some originating outside the basin. Flows can be regulated at detention basin by Onondaga County. Telephone and satellite gage-height telemeters at station. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 726 ft^3/s, July 3, 1974, gage height, 8.34 ft, datum then in use, from rating curve extended above 180 ft^3/s on basis of slope-area measurements of peak flow; no flow for part of each day July 14, 16, 18, 1997, Aug. 20, 26, 1998, Sept. 11, 14, 1998, result of regulation for maintenance work in the channel.
EXTREMES FOR CURRENT YEAR.--Maximum discharge, 177 ft^3/s, June 14, gage height, 3.36 ft; minimum discharge, 3.1 ft^3/s, Aug. 22, gage height, 0.95 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e4.2	e4.3	6.5	4.6	47	7.3	10	18	15	9.1	5.2	3.9
2	e4.2	7.9	4.5	4.6	20	7.4	13	19	12	8.7	5.2	3.8
3	e4.2	4.9	4.3	4.7	12	8.7	19	15	10	8.3	5.1	3.8
4	e4.0	4.4	e4.2	4.8	9.5	7.0	12	13	10	7.9	5.4	3.9
5	e4.0	4.3	e4.2	5.0	7.2	6.1	10	12	18	7.7	6.1	3.9
6	e5.0	4.2	4.1	5.1	7.2	6.5	9.7	11	16	7.6	e5.0	3.8
7	e4.8	4.1	4.1	5.1	7.5	6.7	8.9	12	11	7.4	e4.6	3.7
8	e4.4	4.2	4.1	5.1	8.2	6.4	8.6	11	9.8	7.3	e4.6	3.6
9	e4.2	4.3	4.4	4.9	7.6	6.5	14	19	9.5	7.6	e4.4	3.6
10	e4.2	4.2	4.2	5.2	12	7.0	12	12	9.1	7.6	e4.4	3.5
11	e4.1	4.2	4.1	6.1	24	5.9	9.3	11	8.7	7.0	e4.4	3.6
12	e4.1	4.0	4.2	5.5	10	5.7	8.8	23	9.3	6.8	e4.4	3.5
13	e4.0	3.9	4.3	5.2	8.5	6.0	18	45	8.4	6.5	e4.4	3.5
14	e4.1	3.9	8.2	5.0	7.5	6.1	23	43	74	6.3	e4.4	3.6
15	e5.2	3.9	7.2	5.4	7.8	5.8	26	26	35	6.3	e4.4	6.4
16	e4.6	3.9	4.5	5.0	11	6.3	14	21	24	6.4	e4.6	5.2
17	e4.5	4.0	5.3	4.8	11	5.5	12	27	21	6.4	e5.4	3.7
18	e4.3	4.0	23	4.4	8.2	5.8	11	30	16	6.4	e4.4	3.8
19	e4.3	4.0	18	4.3	8.4	5.4	10	21	13	6.7	e4.6	3.7
20	e4.3	5.5	8.4	4.1	10	7.4	10	19	12	6.5	4.3	3.8
21	e8.4	4.3	7.4	4.0	10	6.9	9.9	18	11	6.3	4.0	3.7
22	e5.2	4.1	5.7	3.9	10	5.8	10	16	11	6.4	6.3	7.8
23	e4.5	4.1	5.5	4.0	8.2	5.9	9.9	15	10	11	4.2	5.8
24	e4.5	4.0	9.2	7.2	7.9	6.1	9.7	15	9.9	e6.4	11	3.7
25	e4.4	6.6	5.6	5.3	8.3	6.0	14	13	9.6	e6.2	4.4	3.6
26	e4.3	4.2	5.0	4.3	7.9	26	14	13	9.7	e6.0	4.2	3.5
27	e4.8	4.0	5.0	4.1	8.1	26	10	11	37	e5.8	4.1	14
28	e4.3	4.4	4.8	4.1	7.5	12	22	10	18	e9.5	4.0	5.3
29	e4.3	6.7	4.8	4.1	---	9.7	20	10	10	6.2	4.1	4.1
30	e4.3	7.3	4.7	5.8	---	8.5	20	31	9.6	5.5	4.0	3.9
31	e4.3	---	4.6	4.8	---	7.5	---	23	---	5.3	3.9	---
TOTAL	140.0	137.8	194.1	150.5	312.5	249.9	398.8	583	477.6	219.1	149.5	133.7
MEAN	4.52	4.59	6.26	4.85	11.2	8.06	13.3	18.8	15.9	7.07	4.82	4.46
MAX	8.4	7.9	23	7.2	47	26	26	45	74	11	11	14
MIN	4.0	3.9	4.1	3.9	7.2	5.4	8.6	10	8.4	5.3	3.9	3.5

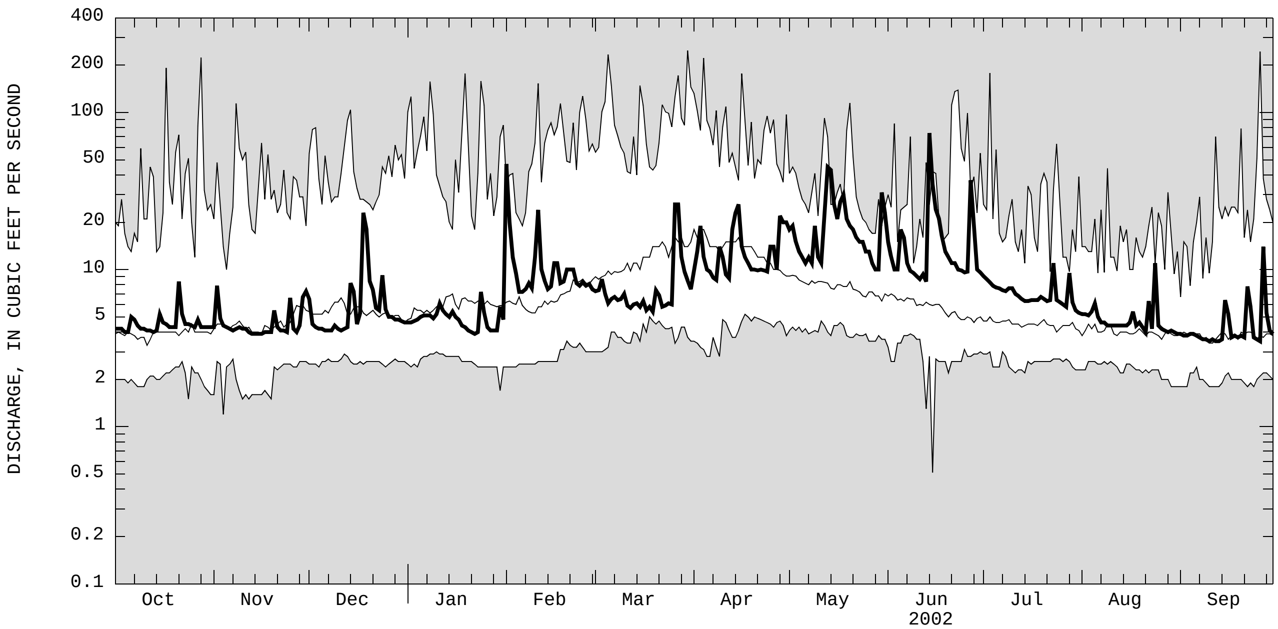
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	5.60	6.58	8.06	8.61	10.6	16.9	17.5	9.95	7.37	5.87	4.72	4.99
MAX	21.7	21.6	26.0	27.9	33.5	39.6	59.4	22.6	32.2	13.5	11.4	20.7
(WY)	1978	1969	1978	1998	1976	1979	1993	1976	1972	1974	1990	1975
MIN	2.24	2.74	2.76	3.07	3.48	5.14	5.07	4.35	3.55	2.81	2.55	2.35
(WY)	1967	1967	1962	1961	1963	1983	1967	1995	1995	1965	1965	1959

e Estimated

04240100 HARBOR BROOK AT SYRACUSE, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1959 - 2002	
ANNUAL TOTAL	3248.6		3146.5			
ANNUAL MEAN	8.90		8.62		8.89	
HIGHEST ANNUAL MEAN					15.7	1976
LOWEST ANNUAL MEAN					4.53	1967
HIGHEST DAILY MEAN	103	Apr 8	74	Jun 14	248	Mar 30 1960
LOWEST DAILY MEAN	3.4	Aug 26	3.5	Sep 10	0.51	Jun 15 1984
ANNUAL SEVEN-DAY MINIMUM	3.7	Aug 21	3.6	Sep 8	1.6	Nov 10 1988
10 PERCENT EXCEEDS	19		17		17	
50 PERCENT EXCEEDS	5.2		6.2		5.6	
90 PERCENT EXCEEDS	3.9		4.0		3.2	



2002 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.

04240105 HARBOR BROOK AT HIAWATHA BOULEVARD, SYRACUSE, NY

LOCATION.--Lat 43°03'22", long 76°11'07", Onondaga County, Hydrologic Unit 04140201, on left bank 250 ft downstream from culvert on Hiawatha Boulevard, in Syracuse, and 0.5 mi upstream from mouth.

DRAINAGE AREA.--12.1 mi^2.

PERIOD OF RECORD.--Occasional discharge measurements, water years 1958-70. October 1970 to current year.

REVISED RECORDS.--WDR NY-76-1: 1971-75 (P). WDR NY-2001-3: Drainage area.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 365.86 ft above NGVD of 1929.

REMARKS.--No estimated daily discharges. Records fair. Flow includes some sewage and storm sewer inflow, some originating outside the basin. Flow can be regulated at Velasko Road Detention Basin 2.1 mi upstream. Telephone and satellite gage-height telemeters at station. Several measurements of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 824 ft^3/s, July 3, 1974, gage height, 7.91 ft, from rating curve extended above 190 ft^3/s on basis of step-backwater computations; maximum gage height, 8.15 ft, Sept. 26, 1975 (backwater from debris jam); no flow for part of each day Oct. 26, 27, 1987, result of regulation for maintenance work in the channel.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 413 ft^3/s, June 27, gage height, 5.81 ft; minimum, 2.4 ft^3/s, Sept. 6, gage height, 1.84 ft, minimum gage height 1.79 ft, Sept. 8, 9, 10, 11, 19, 20, 21, 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

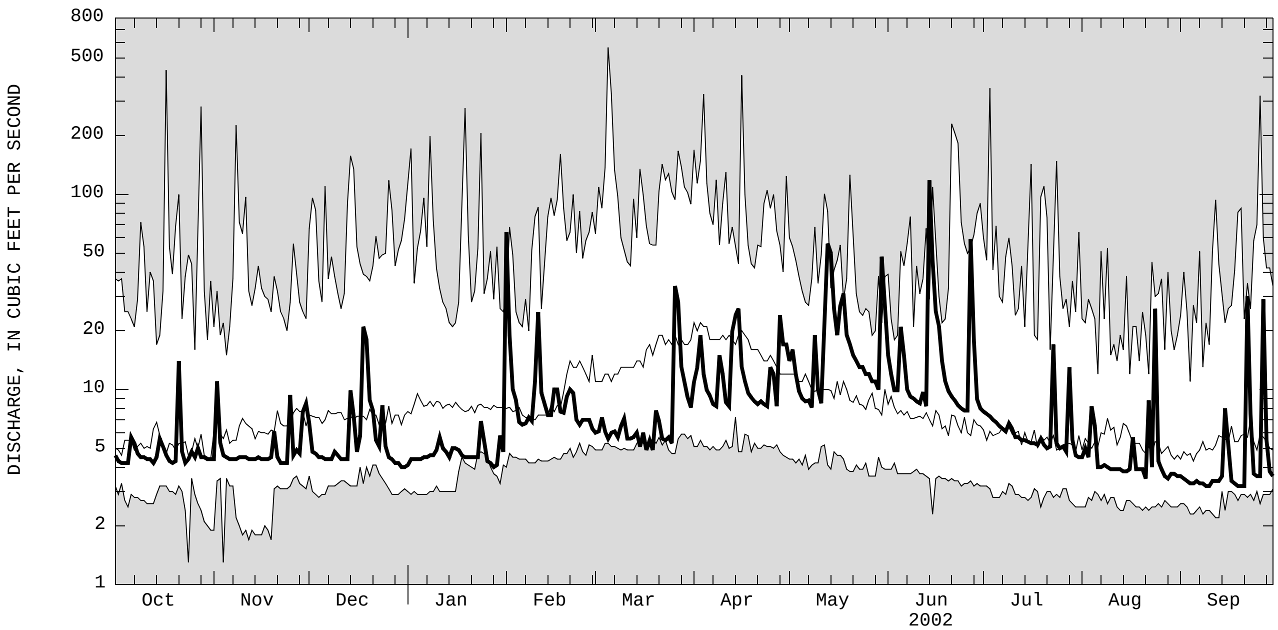
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	4.4	6.7	4.1	64	6.0	11	14	15	7.7	4.5	3.6
2	4.3	11	4.8	4.4	19	6.1	13	16	12	7.5	5.0	3.5
3	4.2	5.3	4.7	4.4	10	7.2	19	12	9.9	7.3	4.5	3.4
4	4.2	4.6	4.5	4.4	8.8	6.1	12	9.8	9.9	7.0	8.2	3.3
5	4.2	4.5	4.5	4.4	6.8	5.6	9.9	9.0	21	6.8	6.5	3.3
6	5.7	4.4	4.4	4.5	6.6	6.0	9.3	8.7	15	6.5	4.0	3.4
7	5.3	4.4	4.4	4.5	6.7	6.1	8.4	8.8	10	6.3	4.0	3.3
8	4.7	4.4	4.4	4.6	7.2	5.7	8.2	8.1	9.2	6.1	4.1	3.3
9	4.5	4.5	4.8	4.6	6.9	6.5	15	19	9.0	6.7	4.0	3.2
10	4.5	4.5	4.6	4.9	11	7.1	12	9.9	8.7	6.3	3.9	3.2
11	4.4	4.5	4.4	5.7	25	5.6	8.6	8.5	8.5	5.7	3.9	3.4
12	4.4	4.4	4.4	5.0	9.6	5.6	8.2	23	9.7	5.7	3.9	3.4
13	4.2	4.4	4.4	4.8	8.4	5.7	20	56	8.2	5.5	3.9	3.4
14	4.5	4.4	9.9	4.5	7.4	6.0	24	50	118	5.5	3.8	3.6
15	5.6	4.5	7.3	5.0	7.4	5.1	26	26	46	5.4	3.8	8.0
16	5.1	4.4	4.8	5.0	10	6.0	13	19	25	5.3	3.9	5.4
17	4.6	4.4	5.8	4.9	10	4.9	11	27	21	5.3	5.7	3.4
18	4.3	4.4	21	4.6	7.7	5.5	9.6	31	14	5.2	3.9	3.3
19	4.2	4.5	18	4.5	7.6	4.9	9.1	19	11	5.6	3.9	3.2
20	4.3	6.1	8.8	4.5	9.2	7.8	8.7	17	9.8	5.2	3.9	3.2
21	14	4.5	7.8	4.5	10	6.9	8.4	15	9.2	5.0	3.5	3.2
22	4.8	4.2	5.5	4.5	9.6	5.6	8.7	14	8.8	5.1	8.8	30
23	4.2	4.2	5.1	4.5	7.0	5.5	8.4	13	8.3	17	4.0	7.5
24	4.4	4.2	8.3	6.9	6.6	5.7	8.2	13	8.0	5.3	26	3.7
25	4.8	9.4	5.1	5.5	7.0	5.3	13	12	7.8	5.0	4.3	3.6
26	4.5	4.6	4.5	4.3	7.0	34	12	12	7.8	5.1	3.9	3.6
27	5.0	4.9	4.4	4.2	7.0	28	8.2	11	59	4.8	3.6	29
28	4.5	4.7	4.2	4.0	6.3	13	24	11	18	13	3.5	5.5
29	4.5	7.7	4.2	4.1	---	11	17	10	8.9	5.5	3.7	3.8
30	4.4	8.5	4.0	5.8	---	9.1	17	48	8.0	4.6	3.7	3.6
31	4.4	---	4.0	4.8	---	8.1	---	27	---	4.5	3.6	---
TOTAL	151.3	154.9	193.7	146.4	309.8	251.7	380.9	577.8	534.7	197.5	157.9	167.3
MEAN	4.88	5.16	6.25	4.72	11.1	8.12	12.7	18.6	17.8	6.37	5.09	5.58
MAX	14	11	21	6.9	64	34	26	56	118	17	26	30
MIN	4.2	4.2	4.0	4.0	6.3	4.9	8.2	8.1	7.8	4.5	3.5	3.2

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	8.16	8.91	11.1	11.7	13.1	21.6	22.4	12.9	10.6	8.90	6.74	7.72
MAX	34.0	26.6	35.8	31.0	38.4	68.8	68.8	27.9	51.9	25.4	12.0	28.7
(WY)	1978	1978	1978	1973	1976	1979	1993	1976	1972	1974	1972	1975
MIN	3.44	3.68	3.54	4.43	4.99	6.04	6.09	4.80	3.79	3.44	3.08	3.70
(WY)	1998	1999	1999	1983	1995	1983	1981	1981	1995	1995	1999	1997

04240105 HARBOR BROOK AT HIAWATHA BOULEVARD, SYRACUSE, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1971 - 2002	
ANNUAL TOTAL	3631.8		3223.9			
ANNUAL MEAN	9.95		8.83		12.0	
HIGHEST ANNUAL MEAN					21.3	1973
LOWEST ANNUAL MEAN					5.54	1995
HIGHEST DAILY MEAN	119	Apr 8	118	Jun 14	567	Mar 5 1979
LOWEST DAILY MEAN	3.3	Aug 18	3.2	Sep 9	1.3	Nov 4 1988
ANNUAL SEVEN-DAY MINIMUM	3.6	Aug 21	3.3	Sep 4	1.8	Nov 10 1988
INSTANTANEOUS LOW FLOW					0.00	Oct 26 1987
10 PERCENT EXCEEDS	20		17		23	
50 PERCENT EXCEEDS	5.5		5.6		7.5	
90 PERCENT EXCEEDS	4.1		3.9		3.9	



2002 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.

04240120 LEY CREEK AT PARK STREET, SYRACUSE, NY

LOCATION.--Lat 43°04'38", long 76°10'14", Onondaga County, Hydrologic Unit 04140201, on left bank 0.2 mi upstream from bridge on Park Street, and 0.4 mi upstream from mouth.
DRAINAGE AREA.--25.5 mi^2.
PERIOD OF RECORD.--Occasional discharge measurements water years 1959-72. December 1972 to current year.
REVISED RECORDS.--WDR NY 76-1: 1975 (M). WDR NY-2001-3: Drainage area.
GAGE.--Water-stage recorder, crest-stage gage, and, since July 9, 1984, steel "I" beam control. Datum of gage is 362.76 ft above NGVD of 1929. Prior to Oct. 1, 1978, at same site at datum 0.08 ft higher.
REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow may be affected by backwater from Onondaga Lake at times when the lake elevation exceeds 364.0 ft. Telephone and satellite gage-height telemeters at station. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,310 ft^3/s, Sept. 26, 1975, gage height, 6.17 ft, datum then in use, from rating curve extended above 530 ft^3/s; maximum gage height, 7.02 ft, Apr. 26, 1993 (backwater from Onondaga Lake); minimum discharge not determined; minimum gage height, 0.28 ft, Feb. 6-8, 1977.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 450 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 26	2330	457	3.27	Jun. 14	1600	*809	*4.52
May 13	2000	510	3.45				

Minimum discharge, 6.4 ft^3/s, Aug. 14, gage height, 0.94 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	18	79	14	195	26	46	65	e40	18	7.5	8.2
2	13	47	45	13	134	23	53	94	e30	17	12	8.1
3	12	67	31	12	76	29	97	71	e25	16	7.7	12
4	9.8	27	24	13	49	28	65	44	e25	15	7.8	15
5	9.4	28	21	13	37	21	46	31	51	14	36	8.3
6	22	23	19	15	35	24	37	26	e50	14	9.9	8.0
7	15	20	18	17	33	27	29	29	35	13	8.4	8.0
8	15	19	16	13	36	27	28	25	24	12	8.1	8.0
9	11	20	23	16	38	25	67	112	20	62	7.7	7.9
10	11	17	21	23	50	45	64	82	19	29	7.4	7.9
11	11	17	20	24	135	27	41	42	19	16	7.0	9.3
12	12	16	17	26	69	24	32	110	26	13	7.2	7.7
13	14	16	18	24	50	23	121	287	19	12	7.2	7.4
14	14	15	51	21	35	20	176	e210	440	11	6.7	7.7
15	28	14	103	24	31	19	195	e110	e110	11	6.8	28
16	13	15	47	32	41	31	86	e80	e60	11	7.4	39
17	22	11	51	30	54	21	52	e110	e50	10	14	11
18	18	10	173	25	40	35	38	e120	e35	10	12	9.4
19	13	11	127	19	33	37	31	e65	e30	11	7.9	8.8
20	11	50	70	17	32	82	25	e50	e26	11	8.5	8.5
21	46	27	79	17	47	87	22	e40	e24	9.5	7.9	8.5
22	49	21	52	18	61	60	24	32	e22	9.9	23	21
23	20	17	38	20	41	43	22	27	22	28	21	102
24	18	15	56	33	28	42	20	31	19	14	150	18
25	20	46	38	34	27	41	52	27	17	10	31	12
26	14	35	30	29	28	149	63	e30	17	13	13	10
27	34	25	23	23	35	239	36	30	84	11	10	121
28	18	28	20	20	30	102	112	23	68	14	9.5	94
29	14	90	18	18	---	57	138	20	27	22	9.3	27
30	14	86	16	44	---	44	94	123	21	10	9.1	17
31	15	---	15	30	---	35	---	e70	---	7.9	8.6	---
TOTAL	549.2	851	1359	677	1500	1493	1912	2216	1455	475.3	489.6	658.7
MEAN	17.7	28.4	43.8	21.8	53.6	48.2	63.7	71.5	48.5	15.3	15.8	22.0
MAX	49	90	173	44	195	239	195	287	440	62	150	121
MIN	9.4	10	15	12	27	19	20	20	17	7.9	6.7	7.4
CFSM	0.69	1.11	1.72	0.86	2.10	1.89	2.50	2.80	1.90	0.60	0.62	0.86
IN.	0.80	1.24	1.98	0.99	2.19	2.18	2.79	3.23	2.12	0.69	0.71	0.96

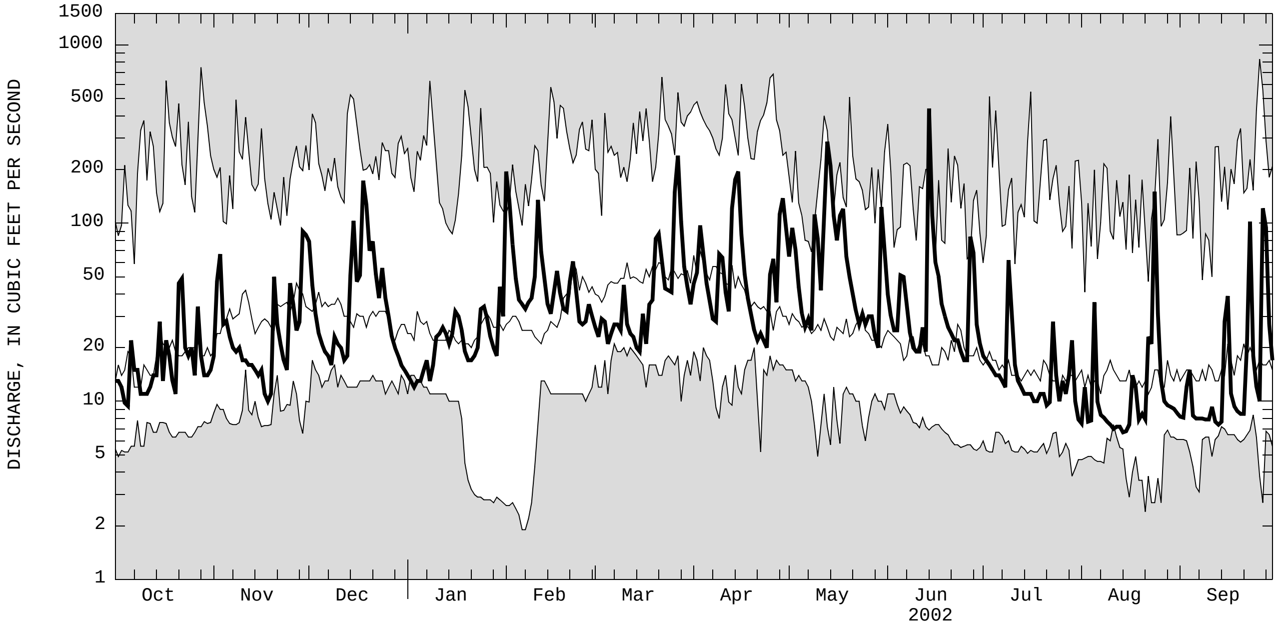
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	33.5	46.2	51.8	41.8	51.8	73.8	72.7	41.0	31.3	26.3	22.4	29.4
MAX	129	102	145	107	125	154	334	94.8	71.4	61.6	46.7	99.1
(WY)	1978	1978	1978	1998	1976	1978	1993	1996	1973	1992	1976	1975
MIN	7.01	17.3	18.5	11.0	16.1	25.0	22.5	12.7	11.8	10.6	8.22	9.07
(WY)	1983	1979	1989	1977	1993	1981	1981	1987	1995	1995	1987	1994

e Estimated

04240120 LEY CREEK AT PARK STREET, SYRACUSE, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1973 - 2002	
ANNUAL TOTAL	15239.6		13635.8			
ANNUAL MEAN	41.8		37.4		42.9	
HIGHEST ANNUAL MEAN					69.8	1978
LOWEST ANNUAL MEAN					24.8	1995
HIGHEST DAILY MEAN	476	Mar 22	440	Jun 14	831	Sep 26 1975
LOWEST DAILY MEAN	4.5	Aug 8	6.7	Aug 14	1.9	Feb 6 1977
ANNUAL SEVEN-DAY MINIMUM	4.7	Aug 2	7.1	Aug 10	2.3	Feb 2 1977
ANNUAL RUNOFF (CFSM)	1.64		1.47		1.68	
ANNUAL RUNOFF (INCHES)	22.23		19.89		22.86	
10 PERCENT EXCEEDS	99		83		92	
50 PERCENT EXCEEDS	22		24		24	
90 PERCENT EXCEEDS	7.8		9.4		9.9	



2002 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.

0424014980 SPAFFORD CREEK TRIBUTARY NEAR SAWMILL ROAD, NEAR SPAFFORD, NY

LOCATION.--Lat 42°49'35", long 76°13'56", Onondaga County, Hydrologic Unit 04140201, on right bank, 200 ft behind farmers house, 500 ft upstream from Spafford Creek, and approximately 0.4 mi south of Sawmill Road.
DRAINAGE AREA.--0.11 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1997 to current year.
GAGE.--Water-stage recorder, V-notch sharp-crested compound weir, and crest-stage gage. Elevation of gage is 820 ft above NGVD of 1929, from topographic map.
REMARKS.--No estimated daily discharges. Records fair. Telephone gage-height and precipitation telemeter at station. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 0.50 ft^3/s, Jan. 12, 1998; minimum daily discharge, 0.005 ft^3/s, Dec. 10, 11, 14, 15, 1998. Maximum and minimum instantaneous discharge not determined.
EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 0.23 ft^3/s, Mar. 27; minimum daily discharge, 0.008 ft^3/s, Sept. 13, 30. Maximum and minimum instantaneous discharge not determined.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.016	0.020	0.11	0.13	0.22	0.13	0.16	0.13	0.12	0.027	0.023	0.012
2	0.015	0.024	0.11	0.14	0.17	0.13	0.16	0.13	0.11	0.030	0.022	0.016
3	0.014	0.024	0.099	0.13	0.17	0.13	0.18	0.12	0.093	0.036	0.029	0.018
4	0.015	0.024	0.091	0.13	0.16	0.12	0.17	0.11	0.089	0.035	0.031	0.017
5	0.018	0.024	0.091	0.12	0.16	0.11	0.17	0.11	0.082	0.045	0.025	0.011
6	0.012	0.021	0.10	0.12	0.16	0.11	0.17	0.095	0.082	0.037	0.018	0.011
7	0.013	0.021	0.10	0.12	0.16	0.11	0.16	0.11	0.072	0.028	0.012	0.012
8	0.014	0.021	0.11	0.11	0.16	0.10	0.15	0.11	0.066	0.023	0.017	0.013
9	0.011	0.016	0.11	0.11	0.16	0.11	0.16	0.10	0.061	0.019	0.019	0.010
10	0.012	0.017	0.11	0.12	0.19	0.12	0.16	0.090	0.054	0.016	0.017	0.009
11	0.010	0.020	0.12	0.13	0.21	0.11	0.16	0.077	0.052	0.014	0.018	0.009
12	0.010	0.017	0.13	0.13	0.17	0.11	0.16	0.092	0.054	0.015	0.015	0.009
13	0.009	0.016	0.12	0.13	0.17	0.11	0.18	0.16	0.054	0.014	0.015	0.008
14	0.011	0.016	0.13	0.13	0.17	0.12	0.16	0.18	0.16	0.014	0.017	0.017
15	0.014	0.015	0.11	0.13	0.16	0.11	0.17	0.15	0.12	0.012	0.020	0.021
16	0.013	0.016	0.12	0.13	0.16	0.11	0.16	0.15	0.12	0.012	0.016	0.020
17	0.016	0.016	0.13	0.13	0.16	0.11	0.15	0.18	0.11	0.011	0.011	0.014
18	0.013	0.014	0.17	0.12	0.15	0.11	0.16	0.20	0.087	0.011	0.011	0.018
19	0.015	0.016	0.16	0.12	0.14	0.11	0.16	0.17	0.086	0.011	0.009	0.052
20	0.013	0.020	0.15	0.12	0.16	0.12	0.15	0.16	0.075	0.013	0.012	0.046
21	0.022	0.017	0.15	0.11	0.14	0.12	0.14	0.16	0.065	0.014	0.010	0.031
22	0.021	0.019	0.15	0.11	0.13	0.12	0.14	0.18	0.059	0.015	0.011	0.037
23	0.020	0.016	0.15	0.13	0.13	0.13	0.13	0.18	0.054	0.024	0.014	0.037
24	0.021	0.016	0.16	0.14	0.13	0.14	0.13	0.15	0.042	0.016	0.039	0.031
25	0.022	0.049	0.15	0.13	0.13	0.12	0.13	0.16	0.036	0.014	0.029	0.029
26	0.022	0.046	0.17	0.13	0.14	0.20	0.14	0.16	0.034	0.017	0.013	0.015
27	0.028	0.057	0.16	0.14	0.14	0.23	0.14	0.17	0.034	0.022	0.015	0.047
28	0.023	0.074	0.14	0.14	0.13	0.17	0.15	0.18	0.033	0.042	0.013	0.017
29	0.021	0.090	0.14	0.14	---	0.16	0.12	0.15	0.032	0.033	0.014	0.009
30	0.020	0.13	0.13	0.17	---	0.16	0.13	0.14	0.026	0.026	0.016	0.008
31	0.019	---	0.13	0.17	---	0.16	---	0.13	---	0.023	0.016	---
TOTAL	0.503	0.892	4.001	4.01	4.43	4.00	4.60	4.384	2.162	0.669	0.547	0.604
MEAN	0.016	0.030	0.13	0.13	0.16	0.13	0.15	0.14	0.072	0.022	0.018	0.020
MAX	0.028	0.13	0.17	0.17	0.22	0.23	0.18	0.20	0.16	0.045	0.039	0.052
MIN	0.009	0.014	0.091	0.11	0.13	0.10	0.12	0.077	0.026	0.011	0.009	0.008

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	0.013	0.020	0.058	0.094	0.12	0.14	0.14	0.094	0.052	0.035	0.018	0.020
MAX	0.015	0.030	0.13	0.18	0.16	0.16	0.15	0.15	0.12	0.066	0.022	0.030
(WY)	2002	2002	2002	1998	2002	2001	2002	2000	2000	1998	2000	1999
MIN	0.010	0.011	0.011	0.042	0.10	0.13	0.12	0.052	0.013	0.012	0.011	0.013
(WY)	1998	1999	1999	2001	2001	1998	1998	2001	1999	1999	1999	1998

0424014980 SPAFFORD CREEK TRIBUTARY NEAR SAWMILL ROAD, NEAR SPAFFORD, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1998 - 2002
ANNUAL TOTAL	22.710	30.790	
ANNUAL MEAN	0.062	0.084	0.066
HIGHEST ANNUAL MEAN			0.084 2002
LOWEST ANNUAL MEAN			0.047 1999
HIGHEST DAILY MEAN	0.28 Mar 30	0.23 Mar 27	0.50 Jan 12 1998
LOWEST DAILY MEAN	0.010 Jun 14	0.008 Sep 13	0.005 Dec 10 1998

2002 WATER YEAR DAILY MEAN DISCHARGE.

0424014980 SPAFFORD CREEK TRIBUTARY NEAR SAWMILL ROAD, NEAR SPAFFORD, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1999 to current year.
PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1999 to current year.
INSTRUMENTATION.--Water temperature recorder since October 1999.
EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURES: Maximum, 26.0°C, Aug. 12, 2002; minimum 1.0°C, Jan. 23, Feb. 2, 9, 18, 2000.
EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 26.0°C, Aug. 12; minimum 3.5°C, Feb. 28.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	15.0	9.0	11.5	12.5	8.0	10.0	10.5	10.0	10.5	6.0	4.5	5.0
2	17.0	11.0	13.0	14.5	10.0	12.0	10.5	9.0	10.0	6.5	5.5	5.5
3	17.0	12.5	14.5	12.5	10.0	11.5	10.0	8.5	9.5	6.5	5.0	6.0
4	17.0	13.5	15.0	12.5	9.5	10.5	10.5	8.5	9.5	6.5	5.5	6.0
5	17.0	13.5	15.0	10.0	7.5	8.5	11.0	10.0	10.5	6.5	5.5	6.0
6	14.5	10.5	13.0	10.0	7.0	8.0	10.5	9.0	10.5	6.0	5.5	6.0
7	11.0	8.5	9.5	10.0	7.0	8.5	9.5	8.5	9.0	6.0	4.5	5.0
8	10.5	7.5	8.5	10.5	6.0	8.0	8.5	6.5	7.5	6.0	4.5	5.0
9	10.5	6.5	8.5	9.5	6.5	7.5	8.0	6.5	7.5	6.0	4.5	5.5
10	13.5	8.5	11.0	10.0	6.5	8.0	9.0	5.5	7.0	6.5	6.0	6.0
11	17.5	10.5	13.5	8.5	6.0	7.0	9.5	6.0	7.0	6.0	5.5	6.0
12	16.0	12.5	14.0	7.5	5.0	6.0	8.5	5.5	6.5	7.0	5.0	6.0
13	19.0	13.5	16.0	9.5	5.0	7.0	9.5	7.0	8.5	5.5	4.5	5.5
14	17.5	13.5	15.5	9.5	7.0	8.0	9.0	8.5	9.0	6.0	5.0	5.0
15	15.0	10.5	13.0	12.5	9.0	10.5	8.5	6.0	7.0	6.5	5.0	5.5
16	14.5	8.5	11.0	12.0	7.5	10.5	8.0	6.5	7.0	6.0	4.5	5.0
17	11.0	7.5	9.0	9.0	5.5	7.0	8.0	6.0	6.5	5.5	4.0	5.0
18	11.5	7.0	8.5	10.5	6.0	8.0	8.0	7.0	7.5	5.0	4.0	5.0
19	11.5	6.5	9.0	11.5	8.0	9.5	8.5	7.0	7.5	5.0	4.0	4.5
20	14.0	9.5	11.0	9.5	6.5	7.5	8.5	6.5	7.5	6.0	4.0	5.0
21	14.0	8.5	11.0	8.5	6.5	7.0	7.0	6.0	6.5	5.0	4.0	4.5
22	13.5	10.5	12.0	9.0	6.0	7.0	8.5	6.5	7.0	6.5	4.5	5.5
23	13.0	10.0	11.5	8.5	6.0	7.0	7.0	5.5	6.5	6.0	4.5	5.0
24	14.0	13.0	13.5	10.0	6.5	8.0	7.5	6.5	7.0	6.0	5.0	5.5
25	13.5	11.0	13.0	11.5	9.5	10.5	7.5	6.5	7.0	6.0	4.5	5.5
26	11.0	8.5	9.5	10.0	9.5	10.0	7.0	6.0	6.5	6.5	4.5	5.5
27	9.0	8.0	8.5	10.0	9.0	9.5	7.0	5.5	6.0	7.0	5.0	5.5
28	9.5	7.0	8.5	10.0	9.5	10.0	7.0	6.0	6.0	7.0	5.5	6.0
29	10.5	6.0	8.5	10.0	9.5	9.5	7.0	5.0	6.0	6.5	5.5	6.0
30	11.0	7.0	9.0	11.5	10.0	10.5	6.5	5.0	5.5	6.0	5.5	5.5
31	8.5	6.5	7.0	---	---	---	7.0	5.0	5.5	5.5	5.0	5.0
MONTH	19.0	6.0	11.4	14.5	5.0	8.8	11.0	5.0	7.6	7.0	4.0	5.4

0424014980 SPAFFORD CREEK TRIBUTARY NEAR SAWMILL ROAD, NEAR SPAFFORD, NY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	6.0	4.5	5.5	6.0	4.0	5.0	7.0	6.0	6.5	11.5	6.5	9.0
2	6.0	4.5	5.0	6.5	4.5	5.5	7.0	5.5	6.0	10.0	8.5	9.0
3	6.0	4.0	5.0	7.0	5.0	6.0	7.0	5.5	6.5	9.5	7.5	8.5
4	6.0	4.0	5.0	5.5	4.0	5.0	7.0	5.0	6.0	12.0	7.0	9.5
5	5.5	4.0	4.5	6.0	4.0	5.0	7.0	5.0	6.0	12.5	8.0	10.0
6	6.5	4.0	5.5	7.0	4.5	5.5	8.5	5.0	6.5	12.5	9.0	10.5
7	7.0	5.0	5.5	6.0	4.5	5.5	8.0	4.5	6.0	12.5	10.0	11.0
8	7.0	5.0	6.0	7.5	5.0	6.0	8.0	5.5	6.5	12.5	9.5	11.0
9	7.0	5.0	6.0	9.0	6.0	7.5	9.0	7.0	8.0	11.5	10.0	10.5
10	6.0	4.5	5.5	7.5	4.5	6.0	10.5	6.5	8.0	13.5	9.0	11.0
11	6.0	4.0	5.0	7.0	4.0	5.5	10.5	6.0	8.0	12.5	8.5	10.5
12	5.5	4.0	4.5	6.5	5.0	5.5	11.0	6.0	8.5	10.5	9.0	10.0
13	5.0	4.0	4.5	6.5	5.0	6.0	9.5	8.5	9.0	10.0	9.5	10.0
14	5.5	4.0	4.5	8.0	5.5	6.5	11.0	8.0	9.5	10.0	9.0	9.5
15	5.5	4.0	5.0	7.5	6.0	6.5	12.0	9.0	10.0	11.5	9.0	10.0
16	6.0	5.0	5.5	7.0	5.5	6.5	13.0	9.0	10.5	10.5	9.0	10.0
17	5.5	4.5	5.0	7.5	5.0	6.0	13.0	9.5	11.0	10.5	9.5	10.0
18	6.0	4.5	5.0	5.5	4.5	5.5	13.0	9.5	11.0	10.0	9.0	9.5
19	6.5	4.5	5.0	7.0	5.0	6.0	13.0	10.0	11.0	10.5	8.5	9.5
20	6.0	5.0	5.5	6.0	5.0	5.5	11.5	9.0	10.5	10.0	8.0	9.0
21	6.5	5.5	6.0	7.0	4.0	5.5	10.5	7.5	9.0	10.5	8.0	9.0
22	6.0	5.0	5.5	6.5	4.0	5.0	9.0	7.0	8.0	11.5	8.0	9.5
23	6.0	4.0	5.0	7.0	4.0	5.5	11.0	6.5	8.5	12.0	9.0	10.0
24	8.0	3.5	5.5	7.5	5.0	6.0	12.0	6.5	9.0	10.5	9.5	10.0
25	7.0	4.5	5.5	7.0	5.0	6.0	9.5	8.0	8.5	11.5	8.5	10.0
26	8.0	5.0	6.5	5.5	5.0	5.0	10.0	7.0	8.5	12.0	10.0	11.0
27	7.0	4.5	5.5	5.5	5.0	5.0	11.0	6.5	8.5	12.5	9.5	10.5
28	6.5	3.5	5.0	8.0	4.5	6.0	10.5	8.0	9.0	12.0	10.0	11.0
29	---	---	---	8.0	5.0	6.5	9.5	7.0	8.0	13.0	11.0	11.5
30	---	---	---	9.5	6.5	7.5	9.0	6.5	8.0	13.0	11.0	12.0
31	---	---	---	9.0	5.5	7.0	---	---	---	13.0	11.5	12.0
MONTH	8.0	3.5	5.3	9.5	4.0	5.9	13.0	4.5	8.3	13.5	6.5	10.1

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	13.5	11.0	12.0	15.5	14.0	14.5	23.5	16.5	19.5	19.0	14.5	16.0
2	13.0	11.0	12.0	16.0	14.5	15.0	23.0	18.0	20.0	19.5	14.5	16.0
3	13.0	10.0	11.5	18.0	15.0	16.0	22.5	16.0	19.0	20.0	15.0	17.0
4	12.0	10.0	11.0	16.5	15.0	16.0	22.5	16.5	19.0	19.0	15.0	16.5
5	13.5	12.0	12.5	15.5	14.5	15.0	21.5	17.5	19.0	19.0	14.5	16.5
6	12.5	11.5	12.0	16.0	14.0	15.0	18.0	15.5	17.0	18.0	13.5	15.5
7	14.0	11.0	12.5	17.0	14.0	15.5	21.5	14.0	17.0	18.5	14.0	16.0
8	14.5	11.5	12.5	17.5	14.5	16.0	22.0	13.5	17.0	19.0	15.0	16.5
9	14.0	12.5	13.0	16.0	14.5	15.5	23.0	13.5	18.0	20.0	14.5	17.0
10	14.5	12.0	13.0	21.5	12.5	16.0	24.5	15.0	19.0	20.0	15.0	17.0
11	15.5	12.5	13.5	21.5	11.0	15.5	25.5	16.0	20.0	17.5	13.5	16.0
12	14.0	13.0	13.5	22.5	11.0	16.0	26.0	16.5	20.0	17.5	13.0	14.5
13	14.0	13.0	13.5	22.0	12.5	16.5	22.5	18.0	19.5	19.5	13.0	15.5
14	13.5	13.0	13.0	21.5	14.5	17.0	20.5	17.5	19.0	17.0	14.5	16.0
15	13.5	12.5	13.0	21.0	14.5	17.0	19.0	17.0	17.5	19.0	17.0	18.0
16	13.5	12.5	13.0	21.0	14.0	17.0	20.5	17.0	18.0	18.5	15.5	17.0
17	13.5	12.0	12.5	22.0	14.5	17.5	20.5	16.5	18.0	25.0	14.5	18.0
18	14.0	12.0	12.5	21.5	15.5	18.0	20.0	16.0	18.0	21.0	13.0	16.5
19	14.0	11.5	13.0	19.5	15.0	17.0	20.0	15.0	17.0	23.5	14.0	18.0
20	14.5	12.0	13.0	22.0	14.5	17.5	20.5	14.0	16.5	24.5	16.5	19.5
21	15.5	13.0	14.0	21.5	14.0	17.5	20.5	13.5	16.0	21.0	16.5	18.0
22	15.0	13.5	14.0	23.5	17.0	19.0	18.5	14.5	16.0	22.5	15.0	18.5
23	16.5	14.0	15.0	19.0	15.5	17.5	20.0	15.0	16.5	19.5	13.5	16.5
24	18.0	14.5	16.0	18.5	14.0	16.0	18.0	15.0	16.5	21.5	12.0	15.5
25	20.5	15.5	17.5	21.0	13.5	16.5	19.5	14.5	16.5	19.0	12.5	15.5
26	20.0	16.0	18.0	19.0	15.0	16.0	20.0	14.5	16.5	17.5	13.5	14.5
27	16.0	14.5	15.0	20.0	15.5	17.0	19.0	14.5	16.0	17.0	13.0	15.0
28	14.5	14.0	14.0	21.0	16.5	18.0	18.0	14.0	15.5	20.0	13.0	16.0
29	15.0	13.5	14.0	21.5	17.0	18.5	17.5	14.5	15.5	20.5	11.0	15.0
30	15.0	14.0	14.5	23.5	17.5	20.0	19.5	14.0	16.0	22.0	13.5	16.5
31	---	---	---	24.0	16.5	19.5	19.5	14.0	16.0	---	---	---
MONTH	20.5	10.0	13.5	24.0	11.0	16.7	26.0	13.5	17.6	25.0	11.0	16.5
YEAR	26.0	3.5	10.6									

0424014980 SPAFFORD CREEK TRIBUTARY NEAR SAWMILL ROAD, NEAR SPAFFORD, NY--Continued

QUANTITY OF PRECIPITATION

PERIOD OF RECORD.--February 1998 to current year.
PERIOD OF DAILY RECORD.--February 1998 to current year.
INSTRUMENTATION.--Tipping bucket rain gage since February 1998. Receiving funnel is heated to facilitate melting of snow. Tips of the rain gage bucket are recorded and accumulated at 15 minute intervals on an electronic data logger.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 3.31 inches, Sept. 24, 2001.
EXTREMES FOR CURRENT YEAR.-- Maximum daily precipitation, 1.91 inches, June 14.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.35	0.00	0.21	0.00	0.00	0.00	0.00	0.00
2	0.00	0.34	0.00	0.00	0.00	0.00	0.22	0.15	0.03	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.25	0.26	0.08	0.00	0.00	0.00	0.14
4	0.00	0.05	0.01	0.00	0.00	0.00	0.00	0.00	0.24	0.14	0.14	0.01
5	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.00	0.00	0.00
6	0.26	0.02	0.00	0.00	0.00	0.05	0.00	0.12	0.21	0.00	0.00	0.00
7	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00
8	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00
9	0.00	0.02	0.14	0.01	0.00	0.40	0.33	0.53	0.00	0.02	0.00	0.00
10	0.00	0.02	0.00	0.00	0.83	0.00	0.00	0.00	0.00	0.07	0.00	0.00
11	0.00	0.02	0.00	0.06	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.07
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65	0.44	0.00	0.00	0.00
13	0.00	0.00	0.13	0.03	0.00	0.00	1.15	1.12	0.00	0.00	0.00	0.00
14	0.54	0.08	0.43	0.00	0.00	0.00	0.78	0.58	1.91	0.00	0.00	0.18
15	0.03	0.05	0.00	0.22	0.00	0.00	0.03	0.00	0.41	0.00	0.00	0.70
16	0.24	0.00	0.00	0.00	0.08	0.18	0.00	0.18	0.05	0.00	0.01	0.08
17	0.11	0.00	0.27	0.00	0.00	0.00	0.00	0.23	0.03	0.00	0.46	0.01
18	0.00	0.00	0.41	0.01	0.00	0.04	0.00	0.56	0.00	0.00	0.02	0.00
19	0.00	0.24	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.00
20	0.17	0.14	0.17	0.00	0.09	0.29	0.02	0.00	0.00	0.00	0.10	0.00
21	0.60	0.01	0.00	0.03	0.24	0.02	0.00	0.00	0.00	0.00	0.00	0.05
22	0.01	0.00	0.00	0.00	0.01	0.00	0.06	0.00	0.00	0.05	0.00	0.79
23	0.00	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.09	1.11	0.00	0.01
24	0.02	0.00	0.00	0.09	0.00	0.00	0.00	0.09	0.00	0.00	1.18	0.00
25	0.04	0.96	0.00	0.00	0.00	0.02	0.36	0.00	0.00	0.00	0.00	0.00
26	0.03	0.00	0.00	0.00	0.13	0.81	0.00	0.00	0.34	0.00	0.01	0.00
27	0.23	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.01	0.00	1.53
28	0.00	0.29	0.00	0.00	0.00	0.00	0.69	0.00	0.07	1.25	0.00	0.01
29	0.00	0.21	0.00	0.13	---	0.00	0.00	0.09	0.00	0.00	0.00	0.00
30	0.00	0.84	0.00	0.30	---	0.03	0.28	0.05	0.00	0.03	0.00	0.00
31	0.00	---	0.00	0.78	---	0.01	---	0.32	---	0.00	0.00	---
TOTAL	2.30	3.58	1.77	1.66	1.85	2.10	4.39	4.91	4.22	2.68	2.14	3.58
MAX	0.60	0.96	0.43	0.78	0.83	0.81	1.15	1.12	1.91	1.25	1.18	1.53

04240180 NINEMILE CREEK NEAR MARIETTA, NY

LOCATION.--Lat 42°55'15", long 76°19'47", Onondaga County, Hydrologic Unit 04140201, on right bank 25 ft upstream from bridge on Schuyler Road, 0.9 mi north of Marietta, and 1.8 mi downstream from Otisco Lake.
DRAINAGE AREA.--45.1 mi^2.
PERIOD OF RECORD.--Occasional low-flow measurements, water years 1955, 1963. June 1964 to current year.
REVISED RECORDS.--WDR NY l971: 1966(M), 1968, 1969. WDR NY-82-3: Drainage area.
GAGE.--Water-stage recorder. Datum of gage is 748.25 ft above NGVD of 1929.
REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow regulated by Otisco Lake from which water is diverted by the Onondaga County Water Authority for water supply. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,030 ft^3/s, June 23, 1972, gage height, 8.65 ft; minimum discharge, 0.58 ft^3/s, July 16, 17, 18, 19, 20, 1999.
EXTREMES FOR CURRENT YEAR.--Maximum discharge, 249 ft^3/s, Apr. 15, gage height, 4.40 ft; minimum discharge not determined.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

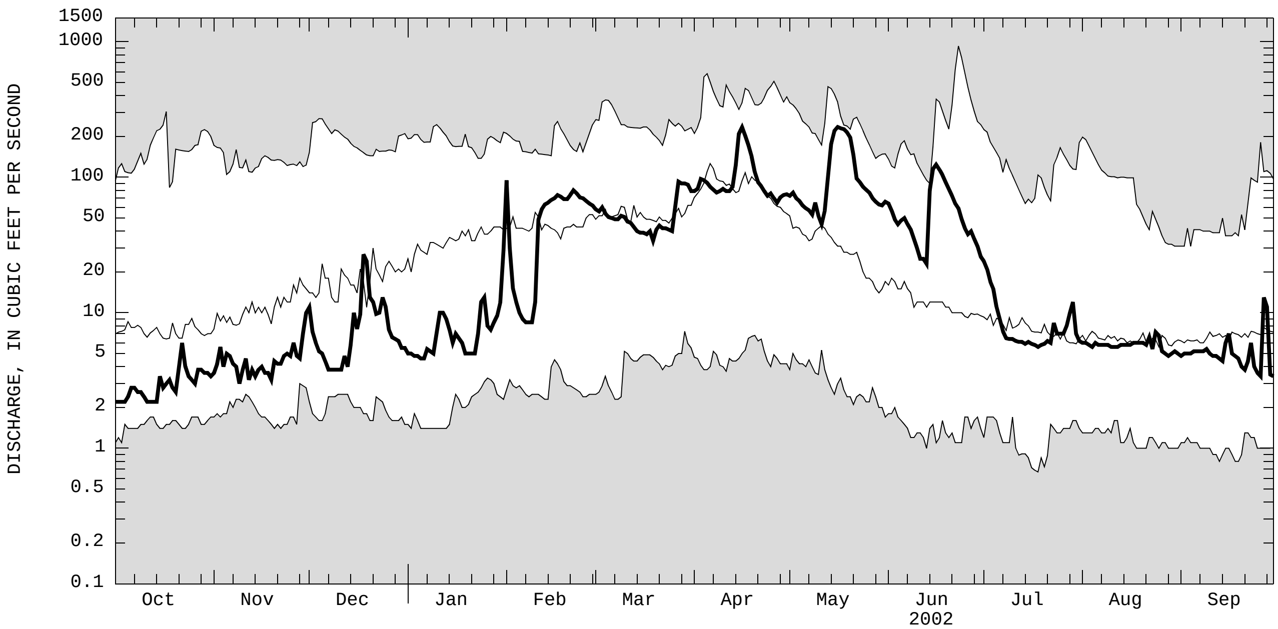
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e2.2	e3.6	e11	e5.0	e95	58	79	73	64	24	e6.0	e4.8
2	e2.2	e4.2	e7.2	e5.0	e30	56	82	77	57	21	e6.0	e5.0
3	e2.2	e5.6	e6.0	e4.8	e15	60	97	70	49	17	e5.8	e5.0
4	e2.2	e4.0	e5.2	e4.8	e12	54	95	67	45	15	e5.6	e5.0
5	e2.4	e5.0	e5.0	e4.6	e10	51	91	62	48	11	e6.0	e5.2
6	e2.8	e4.8	e4.4	e4.6	e9.0	50	85	59	50	9.0	e5.8	e5.2
7	e2.8	e4.2	e3.8	e5.4	e8.5	49	81	57	45	7.3	e5.8	e5.2
8	e2.6	e4.0	e3.8	e5.2	e8.5	49	77	53	41	6.5	e5.8	e5.2
9	e2.6	e3.0	e3.8	e5.0	e8.5	52	79	65	35	6.4	e5.8	e5.4
10	e2.4	e3.8	e3.8	e7.0	12	51	82	52	30	6.4	e5.6	e5.0
11	e2.2	e4.6	e3.8	e10	49	47	79	45	25	6.2	e5.6	e4.8
12	e2.2	e3.2	e4.8	e10	58	46	79	57	25	6.1	e5.6	e4.8
13	e2.2	e3.8	e4.0	e9.0	63	43	85	105	23	6.1	e5.8	e4.6
14	e2.2	e3.4	e5.8	e7.5	65	40	123	177	80	5.9	e5.8	e4.4
15	e3.4	e3.8	e10	e6.0	68	39	209	220	115	6.1	e5.8	e6.0
16	e2.8	e4.0	e7.6	e7.0	70	39	234	235	124	5.9	e5.8	e7.0
17	e3.0	e3.6	e9.8	e6.5	74	38	202	230	114	5.8	e6.0	e5.0
18	e3.2	e3.6	e27	e6.0	72	40	172	227	104	5.6	e6.0	e4.8
19	e2.8	e3.2	e24	e5.0	69	34	142	215	92	5.8	e6.0	e4.6
20	e2.6	e4.4	e13	e5.0	69	41	109	197	82	5.9	e6.0	e4.0
21	e4.0	e4.2	e12	e5.0	74	44	92	146	73	6.2	e5.8	e3.8
22	e6.0	e4.2	e9.8	e5.0	80	42	86	98	64	e6.0	e6.6	e4.4
23	e4.0	e4.8	e10	e7.0	76	42	79	92	59	e8.4	e5.4	e6.0
24	e3.4	e5.0	e13	e12	71	41	73	85	49	e7.0	7.2	e4.0
25	e3.2	e4.8	e11	e13	70	40	76	81	42	e7.0	e6.8	e3.6
26	e3.0	e6.0	e7.5	e8.0	67	61	70	77	38	e7.0	e5.2	e3.4
27	e3.8	e4.8	e6.6	e7.5	64	93	65	70	40	e8.0	e5.0	e13
28	e3.8	e4.6	e6.4	e8.5	62	90	71	66	35	e10	e4.8	e11
29	e3.6	e7.0	e6.2	e9.5	---	90	74	63	31	12	e5.0	3.5
30	e3.6	e10	e5.5	e12	---	88	75	62	26	e7.0	e5.2	3.4
31	e3.4	---	e5.5	e29	---	79	---	66	---	e6.2	e5.0	---
TOTAL	92.8	135.2	257.3	239.9	1429.5	1647	3043	3249	1705	267.8	178.6	157.1
MEAN	2.99	4.51	8.30	7.74	51.1	53.1	101	105	56.8	8.64	5.76	5.24
MAX	6.0	10	27	29	95	93	234	235	124	24	7.2	13
MIN	2.2	3.0	3.8	4.6	8.5	34	65	45	23	5.6	4.8	3.4

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	21.4	29.1	41.2	49.1	52.7	66.8	101	50.9	28.5	16.5	10.7	10.9
MAX	147	125	160	157	143	180	352	151	278	74.0	76.2	36.2
(WY)	1978	1978	1997	1973	1990	1998	1993	2000	1972	1972	1992	1989
MIN	1.52	2.47	2.90	2.75	3.10	5.23	5.80	3.24	1.45	1.65	1.28	1.16
(WY)	1967	1967	1999	1981	1967	1965	1965	1965	1999	1981	1966	1966

e Estimated

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1964 - 2002	
ANNUAL TOTAL	9092.9		12402.2			
ANNUAL MEAN	24.9		34.0		39.8	
HIGHEST ANNUAL MEAN					76.3	1976
LOWEST ANNUAL MEAN					3.95	1965
HIGHEST DAILY MEAN	330	Apr 10	235	May 16	931	Jun 23 1972
LOWEST DAILY MEAN	1.1	Sep 19	2.2	Oct 1	0.67	Jul 18 1999
ANNUAL SEVEN-DAY MINIMUM	1.2	Sep 14	2.3	Oct 8	0.77	Jul 15 1999
10 PERCENT EXCEEDS	109		83		106	
50 PERCENT EXCEEDS	5.5		8.0		15	
90 PERCENT EXCEEDS	2.1		3.6		3.2	



2002 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.

04240300 NINEMILE CREEK AT LAKELAND, NY

LOCATION.--Lat 43°04'51", long 76°13'36", Onondaga County, Hydrologic Unit 04140201, on left bank 30 ft downstream from bridge on State Highway 48, 0.6 mi downstream from Geddes Brook, and 0.7 mi upstream from mouth.
DRAINAGE AREA.--115 mi^2.
PERIOD OF RECORD.--Occasional measurements, water years 1959-70. November 1970 to September 1973, July 1975 to current year.
REVISED RECORDS.--WDR NY-83-3: 1972 (M), 1976 (M), 1979 (M), 1982 (M). WDR NY 1997: 1976, 1977, 1978, 1979, 1980, 1981.
GAGE.--Doppler velocity meter, water-stage recorder, and crest-stage gage. Datum of gage is 360.67 ft above NGVD of 1929.
REMARKS.--No estimated daily discharges. Records good. Flow regulated by Otisco Lake from which water is diverted by Onondaga County Water Authority for water supply. Flow affected by backwater from Onondaga Lake whenever lake level exceeds about 362 ft msl. High lake levels affected the entire 2002 water year. Estimated water-discharge data is based on records for Ninemile Creek at Camillus (04240200) (not published) and Onondaga Lake at Liverpool (04240495). Telephone and satellite gage-height telemeters at station. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,110 ft^3/s, June 23, 1972; maximum gage height, 9.63 ft, Apr. 27, 1993, (backwater from Onondaga Lake); minimum daily discharge, about 13 ft^3/s, Aug. 18, 1985. Maximum and minimum instantaneous discharges not determined.
EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 778 ft^3/s, May 14; maximum gage height, 5.32 ft, May 14, (backwater from Onondaga Lake); minimum daily discharge, 35 ft^3/s, Sept. 20, 26. Maximum and minimum instantaneous discharges not determined.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

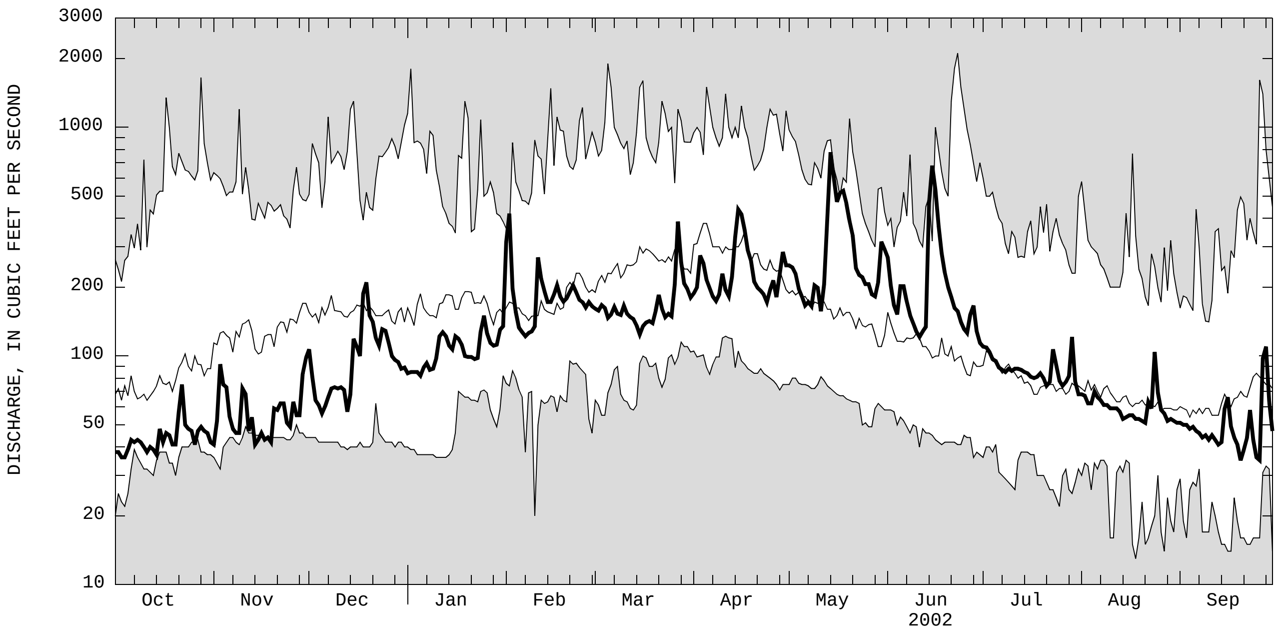
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	41	107	84	314	161	188	249	270	110	68	51
2	38	52	81	85	420	158	200	244	203	109	67	50
3	36	92	64	85	197	167	275	229	166	104	62	50
4	36	75	61	85	156	162	255	197	152	97	62	48
5	39	73	56	82	133	147	215	182	202	95	70	49
6	43	54	60	89	127	152	198	166	202	89	66	47
7	42	48	66	93	122	164	182	172	172	87	64	46
8	43	46	72	87	126	153	174	165	151	85	61	44
9	42	46	73	88	128	151	186	204	139	88	61	45
10	40	72	72	98	135	166	229	199	128	86	59	43
11	38	68	73	122	270	153	194	157	121	88	59	45
12	40	47	71	127	217	148	182	206	128	88	59	43
13	39	54	57	122	192	145	222	442	134	87	57	41
14	37	41	68	111	172	136	332	778	467	85	53	42
15	48	43	119	107	172	124	438	599	680	84	54	59
16	42	46	110	122	186	135	417	472	533	81	55	66
17	46	43	100	119	204	140	356	517	370	80	55	49
18	45	44	188	112	182	142	289	528	281	81	53	44
19	41	42	210	100	173	139	260	465	230	84	53	41
20	41	59	150	99	179	158	211	388	200	80	52	35
21	57	58	141	99	191	185	199	335	181	74	51	39
22	75	62	120	97	204	161	193	242	162	77	63	44
23	50	62	111	98	190	148	186	226	157	107	59	58
24	48	51	131	129	176	153	172	221	141	91	104	43
25	47	49	129	150	172	149	195	206	131	78	69	36
26	41	63	114	125	163	205	214	206	126	74	58	35
27	47	55	100	114	172	387	181	186	152	77	56	98
28	49	55	96	111	165	258	225	182	166	82	52	110
29	47	84	94	112	---	207	285	211	128	121	53	63
30	46	98	88	130	---	196	249	316	114	77	52	47
31	42	---	89	135	---	180	---	293	---	68	51	---
TOTAL	1363	1723	3071	3317	5238	5230	7102	9183	6387	2714	1858	1511
MEAN	44.0	57.4	99.1	107	187	169	237	296	213	87.5	59.9	50.4
MAX	75	98	210	150	420	387	438	778	680	121	104	110
MIN	36	41	56	82	122	124	172	157	114	68	51	35

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	118	159	200	199	222	308	336	208	146	102	84.9	88.8
MAX	506	439	623	492	549	586	807	385	676	289	216	308
(WY)	1978	1978	1973	1973	1990	1979	1993	1983	1972	1972	1992	1975
MIN	40.9	45.0	42.7	81.8	86.0	112	100	69.1	47.7	40.5	28.6	33.0
(WY)	1998	1999	1999	1984	1989	1983	1995	1995	1999	1999	1985	1985

04240300 NINEMILE CREEK AT LAKELAND, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1971 - 2002	
ANNUAL TOTAL	46504		48697			
ANNUAL MEAN	127		133		177	
HIGHEST ANNUAL MEAN					310	1973
LOWEST ANNUAL MEAN					91.2	1995
HIGHEST DAILY MEAN	847	Mar 22	778	May 14	2110	Jun 23 1972
LOWEST DAILY MEAN	31	Sep 16	35	Sep 20	13	Aug 18 1985
ANNUAL SEVEN-DAY MINIMUM	32	Sep 15	39	Oct 1	16	Sep 20 1985
10 PERCENT EXCEEDS	335		229		359	
50 PERCENT EXCEEDS	78		107		128	
90 PERCENT EXCEEDS	38		44		50	



2002 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.

04240495 ONONDAGA LAKE AT LIVERPOOL, NY

LOCATION.--Lat 43°06'01", long 76°12'34", Onondaga County, Hydrologic Unit 04140201, on north shore of Onondaga Lake at Onondaga Park Marina basin, 200 ft southwest of Onondaga Lake Parkway, and 1.9 mi upstream from outlet of lake.
DRAINAGE AREA.--285 mi^2.
PERIOD OF RECORD.--October 1970 to current year. Elevation records, at Barge Canal datum, since February 1927 collected by, and in files of, New York State Department of Transportation at Syracuse.
GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. To convert elevations to NAVD adjustment of 1988, subtract 0.59 ft.
REMARKS.--Lake elevation regulated by operation of Erie (Barge) Canal. Area of water surface, 4.60 mi^2. Telephone and satellite gage-height telemeters at station.
EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 369.78 ft, Apr. 26, 27, 1993; minimum elevation, 361.54 ft, Mar. 13, 1978.
EXTREMES FOR CURRENT YEAR.--Maximum elevation, 364.85 ft, May 16; minimum elevation, 362.68 ft, June 14.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	363.21	363.23	363.42	363.08	363.46	363.32	363.20	363.49	364.31	363.47	363.10	363.07
2	363.25	363.20	363.41	363.08	363.94	363.21	363.30	363.54	364.06	363.21	363.06	363.02
3	363.25	363.33	363.33	362.90	363.88	363.18	363.48	363.54	364.16	363.16	363.10	363.10
4	363.16	363.27	363.32	362.94	363.86	363.21	363.73	363.43	364.03	363.11	363.15	362.91
5	363.07	---	363.34	363.10	363.73	363.25	363.69	363.22	363.94	363.07	363.13	362.86
6	363.04	---	363.35	363.06	363.69	363.20	363.56	363.21	364.00	363.07	363.00	362.88
7	363.01	363.20	363.34	363.04	363.60	363.05	363.48	363.19	363.91	363.04	363.02	362.95
8	363.08	363.28	363.35	363.01	363.58	363.12	363.32	363.13	363.73	363.01	363.04	363.09
9	363.01	363.27	363.36	363.01	363.59	363.03	363.42	363.17	363.61	363.00	363.06	363.02
10	362.89	---	363.34	362.97	363.58	363.10	363.43	363.41	363.50	363.09	363.03	363.06
11	362.92	---	363.36	363.00	363.81	363.14	363.31	363.68	363.33	363.08	363.00	362.98
12	363.05	---	363.32	363.00	363.75	363.23	363.28	363.81	363.09	363.02	363.00	362.93
13	363.01	---	363.29	363.01	363.79	363.28	363.31	364.08	362.88	363.03	362.99	362.92
14	362.98	---	363.26	362.97	363.69	363.21	363.54	364.56	363.49	363.00	362.99	362.95
15	363.02	363.18	363.37	363.02	363.66	363.24	363.51	364.68	364.35	363.04	363.01	363.05
16	363.00	363.13	363.30	363.04	363.68	363.25	363.64	364.79	364.46	363.15	362.98	363.12
17	363.02	363.10	363.36	362.99	363.70	363.21	363.56	364.78	364.46	363.12	363.02	363.08
18	---	363.11	363.54	362.97	363.65	363.24	363.50	364.76	364.20	363.07	363.08	363.05
19	---	363.13	363.61	362.91	363.64	363.23	363.54	364.64	364.07	363.03	363.05	363.07
20	---	363.17	363.57	362.98	363.64	363.30	363.34	364.38	364.16	363.09	363.03	363.03
21	---	363.19	363.55	362.88	363.64	363.34	363.31	364.08	364.05	363.13	363.05	363.00
22	363.23	363.18	363.51	362.79	363.67	363.42	363.26	363.71	364.06	363.02	363.06	363.03
23	363.14	363.09	363.39	362.75	363.61	363.36	363.23	363.49	363.95	363.06	363.02	363.11
24	363.11	363.07	363.35	362.78	363.53	363.35	363.26	363.40	363.82	363.06	363.13	363.14
25	363.17	363.05	363.28	362.96	363.54	363.30	363.26	363.74	363.73	363.11	363.01	363.25
26	363.20	363.13	363.29	363.09	363.44	363.40	363.30	363.99	363.64	363.06	363.00	363.18
27	363.26	363.15	363.24	363.09	363.51	363.59	363.28	364.04	363.53	363.07	362.98	363.13
28	363.20	363.27	363.18	363.04	363.53	363.69	363.34	363.85	363.33	363.05	363.04	363.25
29	363.13	363.38	363.14	363.03	---	363.66	363.43	363.75	363.53	363.01	363.00	363.07
30	362.99	363.38	363.08	363.10	---	363.51	363.44	364.02	363.62	363.00	362.99	363.09
31	363.11	---	362.96	363.17	---	363.33	---	364.30	---	362.98	363.08	---
MEAN	---	---	363.34	362.99	363.66	363.29	363.41	363.87	363.83	363.08	363.04	363.05
MAX	---	---	363.61	363.17	363.94	363.69	363.73	364.79	364.46	363.47	363.15	363.25
MIN	---	---	362.96	362.75	363.44	363.03	363.20	363.13	362.88	362.98	362.98	362.86

04243500 ONEIDA CREEK AT ONEIDA, NY

LOCATION.--Lat 43°05'51", long 75°38'22", Oneida County, Hydrologic Unit 04140202, on right bank 70 ft upstream from bridge on Sconondoa Street at Oneida, and 500 ft downstream from Sconondoa Creek.
DRAINAGE AREA.--113 mi^2.
PERIOD OF RECORD.--October 1949 to current year.
REVISED RECORDS.--WSP 2112: Drainage area. WDR NY-78-1: 1951, 1956, 1958, 1961, 1963, 1964, 1972, 1976 (P). WDR NY-83-3: 1950 (M), 1977 (M), 1979 (M).
GAGE.--Water-stage recorder. Datum of gage is 409.33 ft above NGVD of 1929.
REMARKS.--Records good except those for estimated daily discharges, which are fair. Occasional regulation by small mills upstream from station. Telephone and satellite gage-height telemeters at station. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,110 ft^3/s, Oct. 9, 1976, gage height, 15.01 ft; minimum discharge, 9.5 ft^3/s, Sept. 6, 7, 1999; minimum gage height, 1.30 ft, Aug. 3, 6, 1955, Aug. 17, 1964.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,900 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 27	0100	1,930	7.85	Apr. 15	0430	*1,950	*7.90

Minimum discharge, 19 ft^3/s, Sept. 9, 14, gage height, 1.73 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	45	215	e85	839	201	319	395	259	76	30	28
2	45	48	126	e80	798	182	313	383	168	69	30	27
3	42	87	99	85	386	239	462	341	134	67	31	26
4	37	67	86	e70	296	255	356	255	114	61	29	27
5	35	64	81	79	e220	187	274	217	205	62	50	24
6	35	60	76	81	222	181	241	193	359	59	37	26
7	35	54	70	e70	e180	191	209	183	219	57	33	23
8	35	52	67	e70	e185	182	199	185	153	47	31	22
9	38	53	70	e72	207	182	238	287	126	49	30	21
10	35	52	70	106	260	299	311	272	107	69	28	21
11	33	49	69	144	1120	203	216	192	94	53	27	24
12	32	48	67	150	468	193	187	297	99	48	25	23
13	32	48	73	140	e300	182	381	872	101	46	25	21
14	32	47	85	117	e230	171	770	1290	205	43	24	20
15	42	47	169	114	229	158	1260	712	449	42	23	29
16	41	47	111	134	277	159	548	430	304	41	25	69
17	45	45	116	122	289	145	367	482	206	40	30	38
18	46	47	350	113	e170	155	301	663	150	40	32	29
19	41	46	309	e82	e150	220	252	500	125	45	27	26
20	38	64	217	e86	198	311	220	350	108	47	32	24
21	44	73	195	e80	329	362	200	292	96	41	27	24
22	76	60	160	95	393	267	198	253	89	41	48	28
23	55	55	141	104	278	224	199	223	97	59	69	122
24	48	52	214	256	216	237	173	208	84	63	256	50
25	48	53	173	283	210	238	199	201	76	47	116	35
26	46	63	139	197	210	523	287	175	71	44	54	31
27	41	60	118	169	315	1110	226	160	200	43	44	81
28	48	65	e100	164	239	498	311	147	214	43	38	203
29	45	140	e95	166	---	413	562	133	107	43	33	69
30	43	152	e90	327	---	369	422	168	87	39	33	50
31	41	---	e90	267	---	300	---	327	---	35	30	---
TOTAL	1300	1843	4041	4108	9214	8537	10201	10786	4806	1559	1347	1241
MEAN	41.9	61.4	130	133	329	275	340	348	160	50.3	43.5	41.4
MAX	76	152	350	327	1120	1110	1260	1290	449	76	256	203
MIN	32	45	67	70	150	145	173	133	71	35	23	20
CFSM	0.37	0.54	1.15	1.17	2.91	2.44	3.01	3.08	1.42	0.45	0.38	0.37
IN.	0.43	0.61	1.33	1.35	3.03	2.81	3.36	3.55	1.58	0.51	0.44	0.41

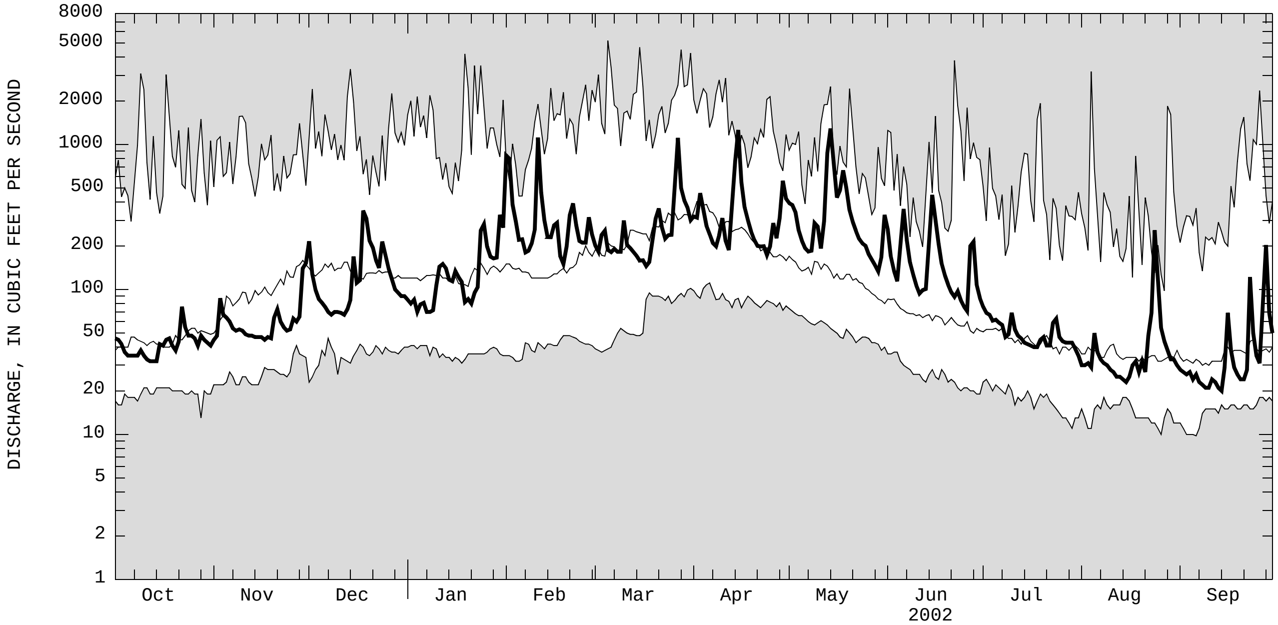
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	85.4	147	188	194	224	363	345	171	105	65.6	51.8	60.7
MAX	472	382	481	452	589	781	915	495	539	225	253	297
(WY)	1978	1973	1974	1998	1976	1977	1993	2000	1972	1951	1976	1977
MIN	21.5	30.5	39.6	38.9	50.5	131	109	61.0	28.4	23.2	14.8	18.0
(WY)	1964	1965	1961	1981	1980	1981	1981	1995	1999	1962	1999	1964

e Estimated

04243500 ONEIDA CREEK AT ONEIDA, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1950 - 2002	
ANNUAL TOTAL	61570		58983			
ANNUAL MEAN	169		162		166	
HIGHEST ANNUAL MEAN					284	1976
LOWEST ANNUAL MEAN					89.7	1988
HIGHEST DAILY MEAN	2790	Apr 9	1290	May 14	5210	Mar 5 1979
LOWEST DAILY MEAN	25	Sep 17	20	Sep 14	9.8	Sep 6 1999
ANNUAL SEVEN-DAY MINIMUM	26	Sep 12	22	Sep 8	11	Sep 1 1999
ANNUAL RUNOFF (CFSM)	1.49		1.43		1.47	
ANNUAL RUNOFF (INCHES)	20.27		19.42		20.00	
10 PERCENT EXCEEDS	311		328		358	
50 PERCENT EXCEEDS	87		99		95	
90 PERCENT EXCEEDS	34		31		30	



2002 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.

04245236 MEADOW BROOK AT HURLBURT ROAD, SYRACUSE, NY

LOCATION.--Lat 43°02'30", long 76°06'02", Onondaga County, Hydrologic Unit 04140202, on right bank 170 ft downstream from culvert at intersection of Hurlburt Road and Meadowbrook Drive, and 2.3 mi upstream from mouth.
DRAINAGE AREA.--3.06 mi^2.
PERIOD OF RECORD.--December 1970 to March 1973, April 1973 to September 1978 (annual maximum only), October 1978 to current year.
CORRECTIONS.--The maximum discharge for the period of record is 418 ft^3/s, July 3, 1974, gage height 6.51 ft; the previously published figure was not the maximum.
REVISED RECORDS.--WDR NY-75-1: 1974 (M). WDR NY-78-1: 1977 (M). WDR-NY-90-3: 1971-89 (P). WDR NY-2001-3: Drainage area.
GAGE.--Water-stage recorder, crest-stage gage, and artificial control. Datum of gage is 511.50 ft above NGVD of 1929.
REMARKS.--Records fair. Flow includes storm sewer inflow, some originating outside the basin. Several measurements of water temperature were made during the year.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 418 ft^3/s, July 3, 1974, gage height 6.51 ft, from rating curve extended above 62 ft^3/s on basis of computation of peak flow through culvert at gage height 6.36 ft; minimum discharge, 0.02 ft^3/s, Sept. 11, 1972, Aug. 24, 1990.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 30	0430	105	3.04	Sept. 22	2045	126	3.33
Jun. 27	1545	*184	*4.05				

Minimum discharge, 0.40 ft^3/s, Sept. 8, gage height, 1.10 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.69	0.85	2.7	0.96	14	1.4	2.5	1.9	2.9	1.0	0.86	0.65
2	0.70	3.0	0.90	0.76	2.6	1.3	3.1	3.2	2.7	1.0	0.99	0.67
3	0.73	1.8	0.80	0.76	1.3	2.3	3.4	1.7	1.8	0.99	0.83	0.67
4	0.76	0.94	0.80	0.76	1.2	1.6	1.6	1.4	2.0	1.00	1.8	0.64
5	0.76	1.00	0.73	0.76	1.2	1.2	1.4	1.3	4.6	0.97	1.5	0.70
6	1.4	0.90	0.79	0.87	1.3	1.6	1.5	1.3	4.4	0.98	0.91	0.69
7	1.2	0.86	0.81	0.97	1.3	1.4	1.3	1.6	2.0	0.95	0.92	0.61
8	0.97	0.86	0.81	0.81	1.3	1.3	1.2	1.3	1.9	0.95	0.93	0.61
9	0.83	0.90	1.3	0.86	1.3	1.6	3.7	4.5	1.7	1.3	0.96	0.61
10	0.80	0.87	0.91	1.2	3.1	1.8	1.9	1.7	1.6	1.1	0.98	e0.60
11	0.81	0.86	0.84	1.1	4.9	1.2	1.3	1.3	1.6	0.92	0.97	e0.62
12	0.83	0.86	0.83	0.99	1.7	1.2	1.3	6.2	2.0	0.93	0.98	e0.62
13	0.85	0.84	0.90	0.92	1.4	1.2	9.0	14	1.5	0.93	0.98	e0.62
14	1.2	0.85	3.7	0.84	1.2	1.2	7.8	7.4	25	0.93	0.92	e0.66
15	1.5	0.94	2.3	1.1	1.2	1.2	5.6	2.8	9.4	0.92	0.93	e2.6
16	1.1	0.91	0.88	1.1	1.5	1.9	2.1	2.4	3.7	0.87	1.0	e1.9
17	1.1	0.84	1.8	1.1	1.6	1.1	1.8	3.9	2.6	0.94	1.9	e0.75
18	0.86	0.84	7.4	0.91	1.3	1.6	1.6	5.1	1.7	0.93	1.1	e0.62
19	0.86	0.87	1.9	0.85	1.2	1.2	1.5	2.2	1.4	1.2	0.93	e0.60
20	0.93	1.9	1.3	0.84	1.2	2.7	1.3	1.9	1.4	0.97	0.90	e0.60
21	4.0	1.2	1.8	0.90	2.3	2.1	1.3	1.8	1.5	0.92	0.80	e0.60
22	1.8	0.93	1.1	0.88	1.9	1.6	1.4	1.8	1.5	0.94	2.3	e8.0
23	0.89	0.88	1.2	0.88	1.3	1.5	1.5	1.8	1.5	4.3	1.2	4.5
24	1.0	0.84	1.9	1.1	1.2	1.4	1.1	2.2	1.4	1.1	7.1	0.72
25	0.97	3.3	1.0	0.95	1.2	1.2	3.1	1.9	1.5	0.92	1.2	0.59
26	0.87	1.3	0.84	0.84	1.6	13	2.3	2.0	2.1	0.90	0.83	0.55
27	1.2	0.95	0.78	0.83	1.6	5.2	1.2	1.8	13	0.92	0.81	9.7
28	0.86	1.2	0.78	0.81	1.7	2.0	6.4	1.9	3.2	1.9	0.68	2.6
29	0.76	3.4	0.78	0.82	---	1.6	3.1	2.2	1.2	1.6	0.64	0.76
30	0.76	8.0	0.74	2.1	---	1.6	2.9	13	1.1	0.92	0.65	0.66
31	0.80	---	0.93	1.4	---	1.4	---	7.7	---	0.87	0.65	---
TOTAL	32.79	43.69	44.25	29.97	58.6	62.6	79.2	105.2	103.9	35.07	38.15	44.72
MEAN	1.06	1.46	1.43	0.97	2.09	2.02	2.64	3.39	3.46	1.13	1.23	1.49
MAX	4.0	8.0	7.4	2.1	14	13	9.0	14	25	4.3	7.1	9.7
MIN	0.69	0.84	0.73	0.76	1.2	1.1	1.1	1.3	1.1	0.87	0.64	0.55

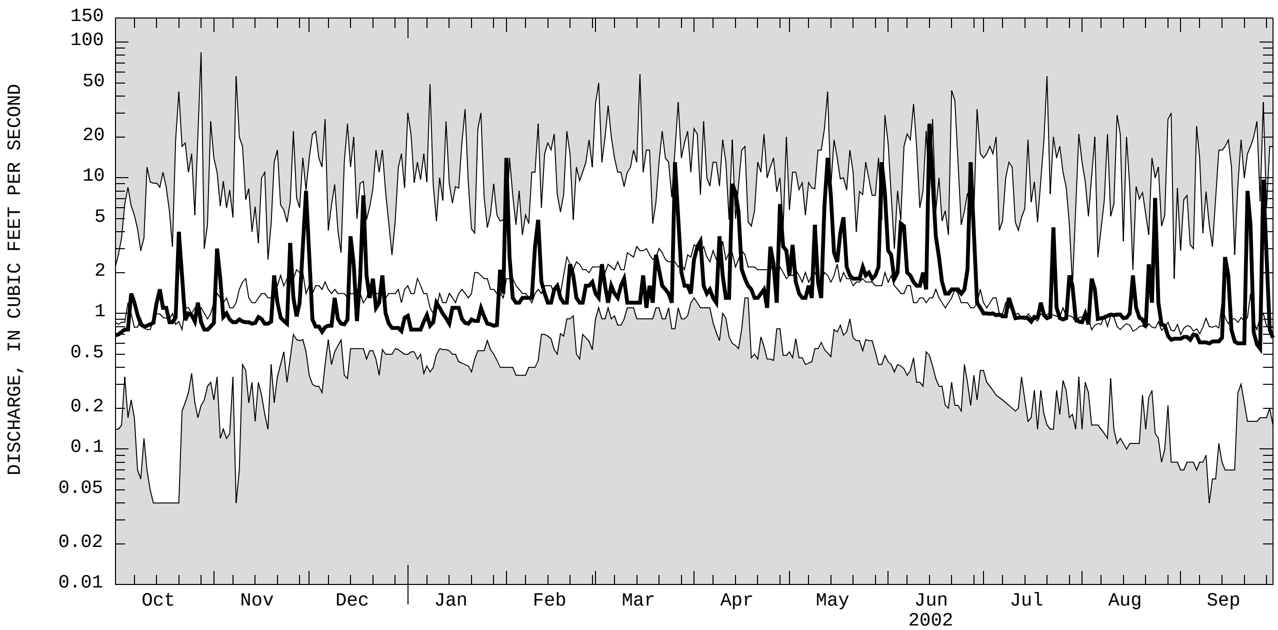
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1.60	2.02	2.09	2.11	2.45	3.64	3.14	2.60	2.30	1.77	1.41	1.64
MAX	4.73	4.46	4.66	5.56	4.38	6.93	7.51	5.56	6.12	5.04	5.16	3.03
(WY)	1982	1997	1991	1998	1990	1972	1993	2000	1972	1988	1990	1989
MIN	0.19	0.71	1.04	0.67	1.12	1.38	1.34	1.08	0.86	0.48	0.32	0.31
(WY)	1972	1979	1971	1981	1993	1981	1981	1971	1981	1980	1971	1971

e Estimated

04245236 MEADOW BROOK AT HURLBURT ROAD, SYRACUSE, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1971 - 2002	
ANNUAL TOTAL	711.79		678.14			
ANNUAL MEAN	1.95		1.86		2.25	
HIGHEST ANNUAL MEAN					3.27	1990
LOWEST ANNUAL MEAN					1.27	1981
HIGHEST DAILY MEAN	26	Sep 25	25	Jun 14	84	Oct 28 1981
LOWEST DAILY MEAN	0.68	Sep 4	0.55	Sep 26	0.04	Oct 13 1971
ANNUAL SEVEN-DAY MINIMUM	0.72	Sep 2	0.61	Sep 7	0.04	Oct 13 1971
10 PERCENT EXCEEDS	3.4		3.2		4.0	
50 PERCENT EXCEEDS	1.2		1.2		1.4	
90 PERCENT EXCEEDS	0.84		0.76		0.60	



2002 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.

04246000 ONEIDA LAKE AT BREWERTON, NY

LOCATION.--Lat 43°14'25", long 76°08'30", Onondaga County, Hydrologic Unit 04140202, at west end of Oneida Lake, 100 ft west of bridge on U.S. Highway 11, at Brewerton.
DRAINAGE AREA.--1,382 mi^2, at dam at Caughdenoy.
PERIOD OF RECORD.--November 1951 to current year. April 1904 to September 1925 in reports of State Engineer and Surveyor, published as "Oneida River at Brewerton."
REVISED RECORDS.--WSP 2112: Drainage area.
GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929 (1.01 ft Barge Canal datum). November 1951 to September 1975, at datum 360.99 ft higher.
REMARKS.--Lake elevation regulated by taintor-gate dam on Oneida River at Caughdenoy and gates on Oneida Canal and Erie (Barge) Canal. Lake volume at elevation 369 ft NGVD of 1929, 1.135 million acre-ft. Area of water surface, 79.8 mi^2; axes, 20.9 mi by 5.5 mi; shoreline length, 54.7 mi.
EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 373.14 ft, Apr. 24,1993; minimum daily, 366.12 ft, Feb. 11, 1984.
EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 29, 1936, reached a water surface elevation of 373.5 ft, from Corps of Engineers report "Flood Plain Information, Oneida Creek, New York."
EXTREMES FOR CURRENT YEAR.--Maximum elevation, 370.87 ft, May 18; minimum elevation, 366.90 ft, Feb. 1.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	369.85	---	369.26	367.95	367.57	368.36	369.07	369.70	369.75	369.82	369.78	369.90
2	369.80	---	369.32	367.93	367.80	368.41	369.31	369.79	369.72	369.81	369.77	369.87
3	369.75	---	369.33	367.88	367.96	368.28	369.25	369.46	369.74	369.79	369.77	369.84
4	---	---	369.27	367.86	368.02	368.28	369.32	369.72	369.74	369.76	369.77	369.77
5	---	---	369.18	367.81	368.06	368.35	369.45	369.68	369.60	369.72	369.75	369.79
6	---	---	369.03	367.78	368.09	368.39	369.40	369.64	369.56	369.70	369.74	369.82
7	---	---	368.95	367.73	368.08	368.38	369.42	369.62	369.55	369.71	369.70	369.83
8	---	---	368.94	367.71	368.06	368.38	369.36	369.69	369.60	369.75	369.71	369.83
9	---	---	368.82	367.66	368.08	368.35	369.29	369.92	369.59	369.76	369.70	369.81
10	---	---	368.74	367.61	368.07	368.00	369.41	369.77	369.64	369.75	369.71	369.81
11	---	---	368.64	367.57	368.10	368.50	369.59	369.87	369.66	369.75	369.70	369.68
12	---	---	368.68	367.59	368.23	368.63	369.60	370.05	369.69	369.78	369.70	369.75
13	---	---	368.50	367.50	368.25	368.69	369.65	370.21	369.79	369.78	369.69	369.73
14	---	---	368.42	367.60	368.32	368.62	369.96	370.21	370.06	369.79	369.71	369.78
15	---	---	368.38	367.53	368.31	368.68	370.31	370.55	370.04	369.75	369.68	369.77
16	---	---	368.45	367.53	368.29	368.56	370.51	370.74	369.87	369.75	369.66	369.79
17	---	---	368.53	367.52	368.27	368.69	370.59	370.75	369.87	369.75	369.71	369.81
18	---	---	368.37	367.47	368.28	368.79	370.61	370.76	369.88	369.75	369.70	369.84
19	---	---	368.50	367.52	368.26	368.66	370.52	370.73	369.81	369.77	369.70	369.86
20	---	---	368.39	367.49	368.24	368.79	370.43	370.67	369.76	369.76	369.68	369.83
21	---	---	368.48	367.46	368.23	368.62	370.32	370.54	369.76	369.79	369.71	369.83
22	---	---	368.56	367.44	368.29	368.66	370.28	370.46	369.77	369.76	369.70	369.83
23	---	---	368.65	367.43	368.36	368.69	370.03	370.37	369.78	369.77	369.77	369.88
24	---	---	368.44	367.40	368.40	368.74	369.96	370.22	369.79	369.79	369.98	369.92
25	---	---	368.42	367.42	368.39	368.72	369.85	370.15	369.83	369.83	369.88	369.86
26	---	---	368.39	367.44	368.36	368.96	369.68	370.00	369.81	369.85	369.91	369.78
27	---	---	368.29	367.47	368.32	368.82	369.72	369.95	369.83	369.78	369.89	369.75
28	---	---	368.22	367.47	368.33	368.97	369.96	369.85	369.88	369.78	369.96	369.64
29	---	---	368.09	367.46	---	369.08	369.63	369.79	369.91	369.77	369.92	369.72
30	---	369.24	367.94	367.49	---	369.02	369.72	369.76	369.86	369.72	369.83	369.71
31	---	---	367.95	367.66	---	369.14	---	369.73	---	369.77	369.88	---
MEAN	---	---	368.62	367.59	368.18	368.62	369.81	370.08	369.77	369.77	369.77	369.80
MAX	---	---	369.33	367.95	368.40	369.14	370.61	370.76	370.06	369.85	369.98	369.92
MIN	---	---	367.94	367.40	367.57	368.00	369.07	369.46	369.55	369.70	369.66	369.64

04247000 ONEIDA RIVER NEAR EUCLID, NY

LOCATION.--Lat 43°12'18", long 76°13'05", Oswego County, Hydrologic Unit 04140202, on right bank, 50 ft downstream of Morgan Road bridge, 9.2 mi downstream from Oneida Lake, 1.3 mi north of Euclid, and 7.7 mi upstream from mouth at Three Rivers.
DRAINAGE AREA.-- 1,439 mi^2.
PERIOD OF RECORD.--November 1996 to current year. Records for September 1902 to December 1909, published as "Oneida River near Eucild", and January 1910 to December 1912 and October 1947 to September 1998, published as "Oneida River at Caughdenoy" (station 04246500) at site 7.6 mi upstream, are not equivalent because of regulation between sites.
GAGE.--Acoustic velocity meter, water-stage recorder, and crest-stage gage. Elevation of gage is 370 ft above NGVD of 1929, from topographic map.
REMARKS.--Records fair except those for estimated daily discharges, which are poor. Considerable seasonal regulation by operation of gates in Oneida and Erie (Barge) Canals with a large amount of natural storage in Oneida Lake. Water may be diverted into or received from Mohawk River basin through summit level of Erie (Barge) Canal between New London and Utica. Nearly all of flow from 14 mi^2 of Tioughnioga River basin may be diverted into De Ruyter Reservoir, in Oswego River basin. Telephone and satellite gage-height telemeters at station. Several measurements of water temperature were made during the year.
COOPERATION.--Records of gate openings, lockages, and elevations of water surface in Erie (Barge) Canal above and below Lock 23, furnished by New York State Thruway Authority, Office of Canals.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 9,380 ft^3/s, Apr. 15, 16, 2001; minimum daily discharge, 130 ft^3/s, June 9, 1999. Maximum and minimun instantaneous discharges not determined.
EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 7,280 ft^3/s, Apr. 17; minimum daily discharge, about 264 ft^3/s, July 31. Maximum and minimun instantaneous discharges not determined.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3590	1010	4450	2650	2640	3570	4690	5560	4910	2210	e270	542
2	2890	1040	4550	2960	2990	3590	5020	5720	4770	1250	316	396
3	2840	1390	4590	2930	3160	3480	5130	5020	4970	1280	293	431
4	2230	1730	4470	2870	3150	3400	5110	5150	e4980	1300	397	352
5	1360	1700	4570	2800	3280	3530	5260	5000	4660	1160	387	339
6	1070	1730	4500	2810	3260	3550	5180	4070	4420	664	370	340
7	1050	1980	4340	2700	3190	3520	5230	2980	3190	408	e300	352
8	1030	2200	4280	2690	3130	3560	5110	1890	1940	326	e360	374
9	647	2740	4140	2620	3140	3670	4590	1360	1270	327	e360	359
10	353	3160	4020	2500	3160	3240	4390	2700	913	334	387	320
11	382	3040	3850	2460	3340	3730	4720	3760	560	374	e400	273
12	408	3040	3890	2500	3500	3940	4830	3830	399	345	318	340
13	399	3080	3700	2430	3440	4050	4950	5330	379	402	e350	337
14	464	2680	3510	2450	3570	3900	5770	6760	e2600	379	e380	360
15	394	2420	3540	2430	3510	3970	e6700	6960	e6700	358	e440	365
16	416	1990	3640	2430	3500	3780	7170	7260	6250	e290	e380	359
17	399	1720	3750	2480	3510	3960	7280	7250	6270	326	395	376
18	344	1720	3700	2420	3500	4190	7200	7260	6190	e290	e370	350
19	831	1580	3890	2430	3390	3960	7050	7150	5870	358	e310	390
20	1530	1150	3730	2410	3380	4230	6780	7080	4610	339	e290	431
21	2110	1150	3800	2370	3460	4190	6510	6870	1760	455	382	444
22	e3000	1150	3890	2340	3580	4160	6430	6700	1220	409	395	378
23	4220	1090	4000	2320	3590	4170	5980	6560	1280	422	383	619
24	e3500	1090	3720	2320	3600	4200	5860	6160	1230	382	465	1260
25	4440	1170	3680	2380	3590	4130	5700	5980	1170	395	376	2240
26	4340	1140	3620	2390	3550	4500	5420	5700	1180	414	320	3570
27	4250	1780	3470	2380	3490	4700	5440	5570	1300	406	490	e4000
28	4250	2730	3350	2380	3480	4780	5920	5340	1840	462	648	e3500
29	3050	3920	3170	2350	---	4950	5490	4940	3190	371	662	2130
30	1870	4320	3000	2370	---	4750	5590	4740	3650	321	683	e1700
31	1420	---	2410	2530	---	4810	---	4770	---	e264	698	---
TOTAL	59077	60640	119220	78100	94080	124160	170500	165420	93671	17021	12575	27227
MEAN	1906	2021	3846	2519	3360	4005	5683	5336	3122	549	406	908
MAX	4440	4320	4590	2960	3600	4950	7280	7260	6700	2210	698	4000
MIN	344	1010	2410	2320	2640	3240	4390	1360	379	264	270	273

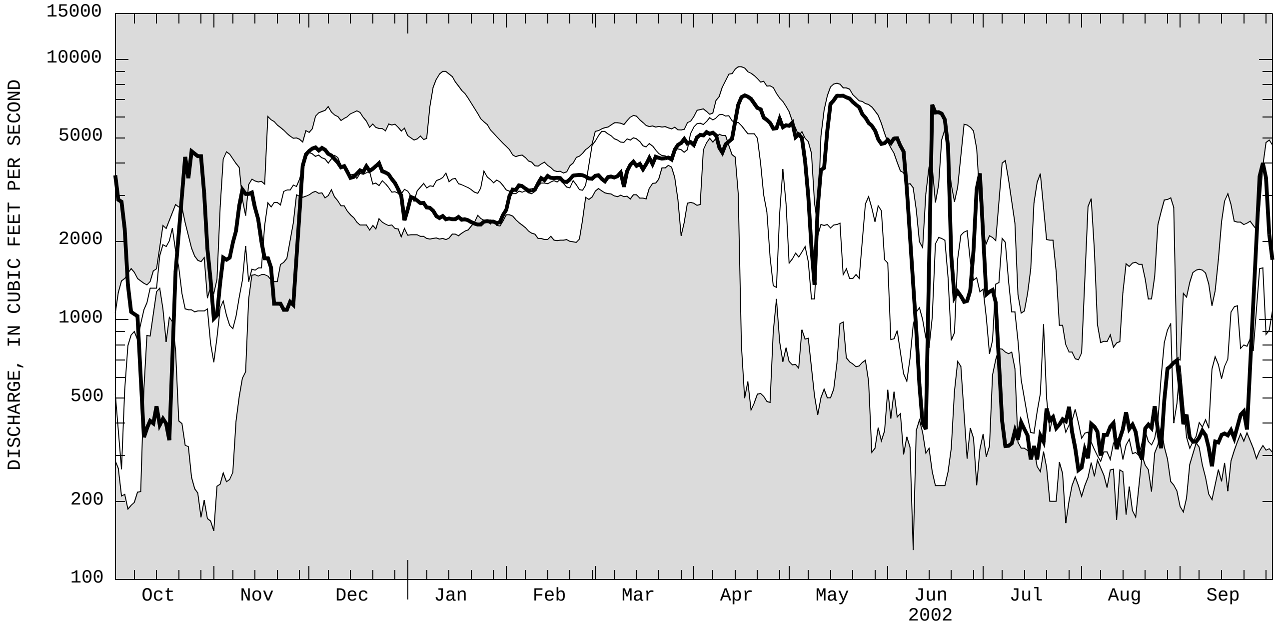
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1306	2131	3935	3575	3287	4356	5040	3048	1930	917	602	953
MAX	1906	2530	5835	6199	3934	5562	7638	5336	3122	1194	1393	1413
(WY)	2002	1998	1997	1998	1998	1998	2001	2002	2002	2000	2000	2001
MIN	688	1832	2578	2519	2443	3524	3135	1146	469	549	261	516
(WY)	1999	1999	1999	2002	2000	1999	1998	1999	1999	2002	1999	1998

e Estimated

04247000 ONEIDA RIVER NEAR EUCLID, NY

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1997 - 2002	
ANNUAL TOTAL	964996		1021691			
ANNUAL MEAN	2644		2799		2552	
HIGHEST ANNUAL MEAN					2872	2000
LOWEST ANNUAL MEAN					1839	1999
HIGHEST DAILY MEAN	9380	Apr 15	7280	Apr 17	9380	Apr 15 2001
LOWEST DAILY MEAN	252	Aug 8	264	Jul 31	130	Jun 9 1999
ANNUAL SEVEN-DAY MINIMUM	293	Aug 8	319	Jul 29	187	Oct 26 1998
10 PERCENT EXCEEDS	5240		5460		5280	
50 PERCENT EXCEEDS	2600		2870		2350	
90 PERCENT EXCEEDS	389		360		339	



2002 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.

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY

LOCATION.--Lat 43°27'06", long 76°30'20", Oswego County, Hydrologic Unit 04140203, on right bank at New York State Barge Canal (Oswego Canal) Lock 7 in Oswego, 0.8 mi upstream from mouth.
DRAINAGE AREA.--5,100 mi^2.
PERIOD OF RECORD.--October 1900 to April 1906, October 1933 to current year. Monthly discharge only for some periods, published in WSP 1307. Prior to January 1904, published as "above Minetto" or "near Minetto."January 1904 to April 1906, published as "at Battle Island." Records for April 1897 to September 1900, published in WSP 65 and for October 1927 to September 1928, published in WSP 644, have been found to be unreliable and should not be used.
REVISED RECORDS.--WDR NY 78-1: Drainage area.
GAGE.--Water-stage recorder. Datum of gage is 245.12 ft above NGVD of 1929. Prior to 1933, nonrecording gage at site about 6 mi upstream at different datum.
REMARKS.--Records good except those for estimated daily discharges, which are fair. Prior to 1933 and subsequent to 1972, flow in Oswego (Barge) Canal not included. A large amount of natural storage and some artificial regulation is afforded by the many large lakes and the Erie (Barge) and Oswego (Barge) Canal systems in the river basin.Large diurnal fluctuations at low and medium flow caused by powerplants upstream from station. Oswego River basin receives water from Erie (Barge) Canal through Lock 32 near Pittsford. Water may be diverted into or received from Mohawk River basin through Erie (Barge) Canal between New London and Utica. During part of year, entire flow from 45.5 mi^2 of Mud Creek drainage area may be diverted from Chemung River basin into Keuka Lake in Oswego River basin. Nearly all of the flow from 14 mi^2 of the Tioughnioga River basin may be diverted into De Ruyter Reservoir, in Oswego River basin. Telephone gage-height telemeter at station.
COOPERATION.--Records of lockages at Lock 7 furnished by New York State Thruway Authority, record of elevations of Lake Ontario by U.S. Army Corps of Engineers, daily discharge records for Oswego River High Dam upstream by Niagara Mohawk Power Corp.
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,500 ft^3/s, Mar. 28, 1936, includes daily mean discharge of canals; maximum gage height, 13.46 ft, Apr. 10, 1940; minimum discharge (river only), 30 ft^3/s, Nov. 6, 1944.
EXTREMES FOR CURRENT YEAR.--Maximum discharge, 21,600 ft^3/s, May 17, gage height, 9.75 ft; minimum discharge, 318 ft^3/s, Sept. 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5920	3000	7420	3140	6270	7640	7440	9430	14200	e6550	e1140	1650
2	4090	2870	7240	3800	9050	6400	7440	9960	13100	e3630	e1580	1100
3	4630	3850	7410	3750	9750	6760	9160	9880	12600	e3440	e1050	1160
4	4140	4610	6740	3060	9430	6380	10600	9140	12500	e3200	e1070	1490
5	3200	3800	6750	3100	9130	6430	10800	8020	11700	e3000	e1700	776
6	2770	4140	6980	4340	8750	6470	10300	7050	11100	e2600	e630	725
7	1540	3570	6840	3860	8380	6300	9480	5980	10400	e2210	e1110	1070
8	2070	4380	6520	3560	7810	5660	8830	4700	8340	e1630	e970	1170
9	1800	4730	6720	3470	7960	5810	8110	4220	8160	e1160	e1080	1590
10	901	5550	6550	3440	8090	4920	7910	5910	e7220	e1270	e1040	1120
11	776	5390	6430	3210	8990	5560	7910	8260	e6880	e2050	e1200	1020
12	925	6020	6270	3490	9530	6280	7480	9220	e5840	e1540	e1160	870
13	1170	5860	6120	3450	9040	6760	7870	12100	e5140	e1360	e950	806
14	987	5830	5770	3350	9280	6470	11000	17600	e7570	e970	e940	709
15	884	3900	6290	3420	8740	6080	12800	17800	16000	e1000	e1060	875
16	939	3450	6390	3680	8780	6130	13400	18600	15300	e1140	e1200	1850
17	954	2850	6450	4020	9010	6080	14300	19100	15700	e1820	e960	1410
18	787	2710	7390	3240	8860	6280	13200	18600	15500	e1480	e1200	1440
19	956	3040	8720	3290	8630	6340	12500	18100	14100	e980	e1170	1270
20	1540	2890	8400	3070	8710	6600	11900	17400	13100	e770	e1120	1130
21	2610	4020	8200	2990	8980	7600	10500	16400	8660	e1420	e980	762
22	3490	2990	8210	2930	9200	7310	8840	15400	e7820	e1110	1360	808
23	4640	2610	7850	2810	9170	7480	7750	14400	e7740	e1240	1430	1480
24	4660	2530	6980	3120	8640	6770	8260	13300	e7020	e1340	1580	1630
25	4700	2460	6850	3050	8400	6700	8090	12400	e6360	e1580	1850	3270
26	5050	2330	6470	4100	8120	6860	7990	12700	e5740	e1610	1250	5720
27	5010	3200	6240	3980	7780	9240	7760	13000	e5920	e1170	1180	6210
28	5630	4680	5830	3740	7830	10100	8380	12800	e4920	e1200	1290	5420
29	4720	6180	4360	3730	---	11000	8790	11900	e5980	e1080	1550	3170
30	2310	7050	4360	3720	---	10100	8990	11800	e6860	e1340	1360	1910
31	2360	---	3540	4870	---	8480	---	12600	---	e820	1230	---
TOTAL	86159	120490	206290	108780	242310	216990	287780	377770	291470	55710	37390	53611
MEAN	2779	4016	6655	3509	8654	7000	9593	12190	9716	1797	1206	1787
MAX	5920	7050	8720	4870	9750	11000	14300	19100	16000	6550	1850	6210
MIN	776	2330	3540	2810	6270	4920	7440	4220	4920	770	630	709

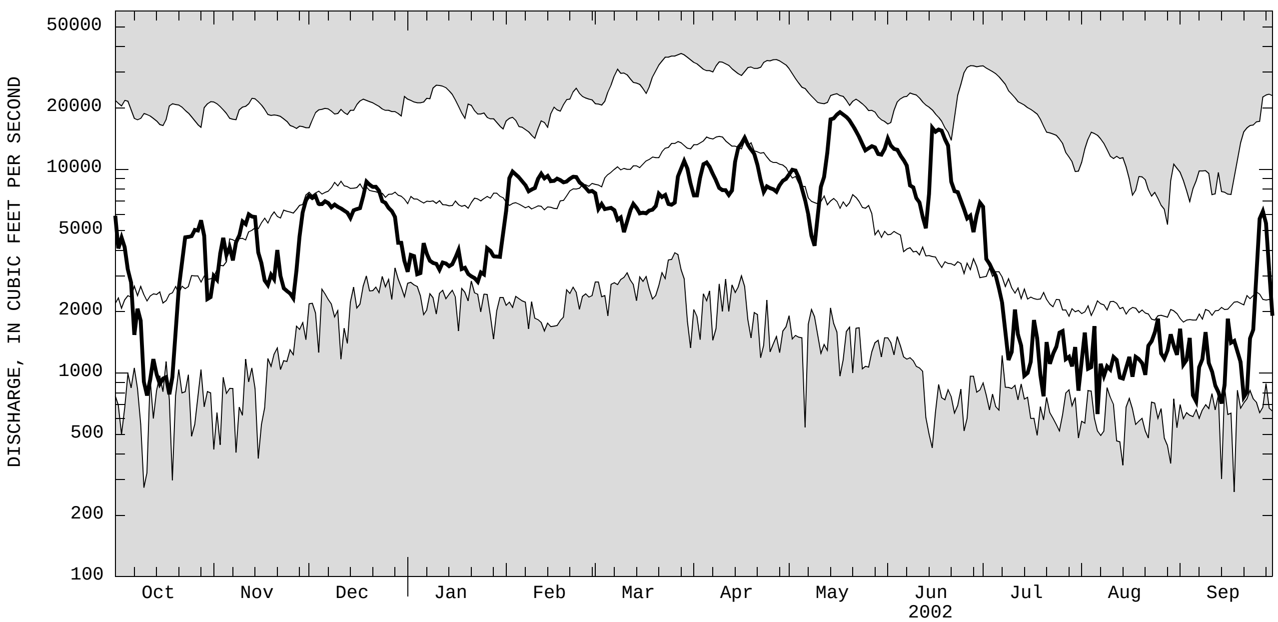
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3811	6083	8398	7834	7854	11580	13070	8243	5078	3374	2465	2646
MAX	17950	16070	17920	16970	15130	21720	30250	20350	17000	19660	8951	8702
(WY)	1978	1978	1978	1998	1976	1979	1993	1943	1947	1972	1992	1977
MIN	1173	1167	2917	2610	2547	3914	2757	1993	1383	1113	836	760
(WY)	1940	1965	1940	1963	1963	1983	1995	1995	1995	1995	1934	1995

e Estimated

04249000 OSWEGO RIVER AT LOCK 7, OSWEGO, NY--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1934 - 2002	
ANNUAL TOTAL	2059631		2084750			
ANNUAL MEAN	5643		5712		6734	
HIGHEST ANNUAL MEAN					11030	1976
LOWEST ANNUAL MEAN					3433	1965
HIGHEST DAILY MEAN	22700	Apr 13	19100	May 17	37000	Mar 28 1936
LOWEST DAILY MEAN	720	Jul 25	630	Aug 6	261	Sep 18 1985
ANNUAL SEVEN-DAY MINIMUM	940	Oct 10	940	Oct 10	697	Sep 4 1995
10 PERCENT EXCEEDS	13600		11300		14300	
50 PERCENT EXCEEDS	4410		5560		5130	
90 PERCENT EXCEEDS	1100		1090		1590	



2002 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.

LAKES AND RESERVOIRS IN STREAMS TRIBUTARY TO LAKE ONTARIO

04224000 MOUNT MORRIS LAKE NEAR MOUNT MORRIS, NY (see station for daily mean elevation, skeleton capacity table, monthly contents, and change in contents).

04227980 CONESUS LAKE NEAR LAKEVILLE, NY (see station for daily mean elevation).

04232400 SENECA LAKE AT WATKINS GLEN, NY (see station for daily mean elevation).

04233500 CAYUGA INLET (CAYUGA LAKE) AT ITHACA, NY (see station for daily mean elevation).

04234500 CANANDAIGUA LAKE AT CANANDAIGUA, NY (see station for daily mean elevation).

04235396 OWASCO LAKE NEAR AUBURN, NY (see station for daily elevation).

04240495 ONONDAGA LAKE AT LIVERPOOL, NY (see station for daily mean elevation).

04246000 ONEIDA LAKE AT BREWERTON, NY (see station for daily mean elevation).

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at crest-stage partial-record stations are presented in the following table. Discharge measurements made at low-flow partial-record sites and at miscellaneous sites and for special studies are given in separate tables.

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device that will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain, but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Maximum discharge at crest-stage partial-record stations

Station name and number	Location and drainage area	Period of record	Water year 2002 maximum: Date	Gage height (ft)	Dis-charge (ft^3/s)	Period of record maximum: Date	Gage height (ft)	Dis-charge (ft^3/s)
SUSQUEHANNA RIVER BASIN								
Little Elk Creek near Westford, NY (01497805)	Lat 42°38’01", long 74°47’45", Otsego County, Hydrologic Unit 02050101, at culvert on Greenbush Road, 1.2 mi south of Westford, and 2.2 mi upstream from mouth. Elevation of gage is 1,520 feet above NGVD of 1929, from topographic map. Drainage area is 3.73 mi^2.	1978-02	3-27-02	15.72	87	1-19-96	19.92	278
Susquehanna River at Unadilla, NY (01500500)	Lat 42°19’17", long 75°19’01", Otsego County, Hydrologic Unit 02050101, on right bank 25 ft downstream from bridge on Bridge Street at Unadilla, 1.0 mi upstream from Carrs Creek, and 1.6 mi downstream from Ouleout Creek. Datum of gage is 997.25 ft above NGVD of 1929 (Corps of Engineers benchmark). Drainage area is 982 mi^2.	1938-95‡ 1996-02	3-27-02	9.56	10,700	3-18-36 3-14-77	16.6 14.64	j31,300 23,500
Susquehanna River at Bainbridge, NY (01502632)	Lat 42°17’29", long 75°28’36", Chenango County, Hydrologic Unit 02050101, on right bank at the downstream side of bridge on State Highway 206 over the Susquehanna River, at Bainbridge. Datum of gage is 956.55 ft above NGVD of 1929. Drainage area is 1,610 mi^2.	1988-02	3-27-02	13.42	18,700	3-31-93 1-20-96	20.17 21.04	36,600 a
Susquehanna River at Windsor, NY (01502731)	Lat 42°04’28", long 75°38’17", Broome County, Hydrologic Unit 02050101, on right bank at downstream side of bridge on County Highway 315 over the Susquehanna River, at Windsor. Datum of gage is 900.00 ft above NGVD of 1929. Drainage area is 1,820 mi^2.	1988-02	3-27-02	13.48	20,100	1-20-96	a21.22	e40,000

‡ Operated as a continuous-record gaging station.
a Ice jam.
e Estimated.
j From U. S. Army Corps of Engineers.

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 2002 maximum: Date	Gage height (ft)	Discharge (ft^3/s)	Period of record maximum: Date	Gage height (ft)	Discharge (ft^3/s)
	SUSQUEHANNA RIVER BASIN--Continued							
Chenango River at Eaton, NY (01503980)	Lat 42°51'02", long 75°36'21", Madison County, Hydrologic Unit 02050102, at bridge on Landon Road at Eaton, 0.1 mi upstream from Eaton Brook, and 0.1 mi downstream from State Highway 26. Elevation of gage is 1,180 ft above mean NGVD of 1929, from topographic map. Drainage area is 24.3 mi^2.	1964-65, 1967-01	5-14-02	6.47	382	3- 6-64 1-19-96	8.12 8.51	2,350 a
Chenango River at Sherburne, NY (01505000)	Lat 42°40'43", long 75°30'39", Chenango County, Hydrologic Unit 02050102, on right bank 20 ft downstream from bridge on State Highway 80, 0.5 mi west of Sherburne, and 0.5 mi downstream from Handsome Brook. Datum of gage is 1,037.16 ft above NGVD of 1929. Drainage area is 263 mi^2.	1938-95‡, 1996-02	5-14-02	7.13	2,350	3-18-36 3- 6-79 1-19-96	k10.60 9.94 10.47	e12,500 10,400 a
Chenango River at Greene, NY (01507000)	Lat 42°19'28", long 75°46'18", Chenango County, Hydrologic Unit 02050102, on left bank 0.3 mi downstream from bridge on State Highway 206 at Greene, and 0.6 mi downstream from Birdsall Brook. Datum of gage is 892.58 ft above NGVD of 1929. Drainage area is 593 mi^2.	1937-70‡, 1971-02	6- 6-02	10.81	6,580	12-31-42	18.33	18,900
Tioughnioga River at Lisle, NY (01509520)	Lat 42°20'58", long 75°59'58", Broome County, Hydrologic Unit 02050102, on left bank 50 ft downstream from bridge on State Highway 79, at Lisle, and 2.3 mi upstream from Otselic River. Datum of gage is 956.52 ft above NGVD of 1929. Drainage area is 453 mi^2.	1988-02	2- 1-02	5.51	5,860	1-19-96 1-20-96	10.50 --	a e12,900
Merrill Creek tributary near Texas Valley, NY (01510610)	Lat 42°28'03", long 75°59'19", Cortland County, Hydrologic Unit 02050102, at bridge on town road, 0.3 mi upstream from mouth, and 1.4 mi southwest of Texas Valley. Elevation of gage is 1,150 ft above NGVD of 1929, from topographic map. Drainage area is 5.32 mi^2.	1976-81, 1983-02	4-15-02	1.33	310	1-19-96	a6.64	e1,150
Tioughnioga River at Itaska, NY (01511500)	Lat 42°17'53", long 75°54'33", Broome County, Hydrologic Unit 02050102, on right bank at Itaska, 3.8 mi downstream from Otselic River and village of Whitney Point, and 6.0 mi upstream from mouth. Datum of gage is 917.97 ft above NGVD of 1929. Drainage area is 730 mi^2.	1930-67‡, 1968-02	6-16-02	6.75	7,500	7- 8-35 2-26-61	i16.61 11.15	m61,100 22,600

‡ Operated as a continuous-record gaging station.
a Ice jam.
e Estimated.
i From floodmark.
k From National Weather Service.
m Prior to current degree of regulation.

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 2002 maximum Date	Gage height (ft)	Dis-charge (ft^3/s)	Period of record maximum Date	Gage height (ft)	Dis-charge (ft^3/s)
SUSQUEHANNA RIVER BASIN--Continued								
Susquehanna River at Vestal, NY (01513500)	Lat 42°05’27", long 76°03’23", Broome County, Hydrologic Unit 02050103, on left bank 400 ft downstream from highway bridge, at Vestal, and 800 ft upstream from Choconut Creek. Datum of gage is 799.19 ft above NGVD of 1929 (levels of U. S. Army Corps of Engineers). Drainage area is 3,941 mi^2.	1936, 1937-67‡, 1968-72, 1974-02	3-27-02	17.09	35,800	e3-18-36	e30.50	107,000
Susquehanna River at Owego, NY (01513831)	Lat 42°05’50", long 76°16’06", Tioga County, Hydrologic Unit 02050103, on right bank in pumphouse for village sewage treatment plant, 0.4 mi downstream from bridge on State Highway 96, at Owego. Datum of gage is 776.64 ft above NGVD of 1929. Drainage area is 4,216 mi^2.	1988-96, 1999-02	3-27-02	23.49	34,100	3-18-36	g	107,000
						1-20-96	32.97	81,400
Owego Creek near Owego, NY (01514000)	Lat 42°07’45", long 76°16’15", Tioga County, Hydrologic Unit 02050103, on right bank of right channel 300 ft upstream from bridge on State Highway 96, 0.5 mi upstream from Catatonk Creek, and 1.5 mi north of Owego. Datum of gage is 819.82 ft above NGVD of 1929. Drainage area is 185 mi^2.	1930-78‡, 1979-02	6-16-02	5.79	3,830	7- 8-35	i11.50	23,500
						1-19-96	11.66	a
Catatonk Creek near Owego, NY (01514801)	Lat 42°08’18", long 76°17’23", Tioga County, Hydrologic Unit 02050103, on right bank 0.4 mi downstream from bridge on County Highway 23, 1.4 mi north of Owego, and 1.2 mi upstream from mouth. Elevation of gage is 810 ft above NGVD of 1929, from topographic map. Drainage area is 151 mi^2.	1988-02	3-26-02	8.53	2,700	1-20-96	14.83	9,740
			11- 2-94	7.85	R2,150			
			12- 2-96	10.89	R4,890			
			1- 8-98	10.33	R4,360			
			1-24-99	11.61	R5,620			
			2-28-00	10.00	R4,060			
			6-23-01	9.58	R3,650			
Tioga River near Lindley, NY (01520500)	Lat 42°01’43", long 77°07’57", Steuben County, Hydrologic Unit 02050104, on left bank just downstream from bridge on County Highway 120 at Lindley, and 6 mi upstream from Canisteo River. Datum of gage is 964.50 ft above NGVD of 1929. Drainage area is 771 mi^2.	1930-95‡ 1996-02	6- 8-02	12.60	11,500	6-23-72	i26.27	m128,000
						10-23-90	13.37	13,900
						8-18-94	13.38	13,900

‡ Operated as a continuous-record gaging station.
a Ice jam.
e Estimated.
g None available.
i From floodmark.
m Prior to current degree of regulation.
R Revised.

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 2002 maximum Date	Water year 2002 maximum Gage height (ft)	Water year 2002 maximum Discharge (ft^3/s)	Period of record maximum Date	Period of record maximum Gage height (ft)	Period of record maximum Discharge (ft^3/s)
	SUSQUEHANNA RIVER BASIN--Continued							
Big Creek near Howard, NY (01521596)	Lat 42°22’01", long 77°34’33", Steuben County, Hydrologic Unit 02050104, at culvert on town road, 0.1 mi south of State Highway 70, 1.3 mi north of Butcher Corner, 3.4 mi west of Howard, and 6.2 miupstream from mouth. Elevation of gage is 810 ft above NGVD of 1929, from topographic map. Drainage area is 151 mi².	1977-02	6-27-02	15.08	1,100	1-19-96	16.23	Re1,600
			9-25-77	15.63	R392			
			1-26-78	15.69	R407			
			3- 5-79	f14.28	R117			
			11-26-79	14.18	R103			
			6-30-81	14.92	R228			
			10-28-81	15.02	R247			
			12-25-82	<13.90	c			
			5-13-84	14.44	R143			
			2-23-85	<13.90	c			
			1-20-86	14.38	R133			
			9-13-87	16.04	R490			
			7-21-88	14.64	R177			
			6-21-89	15.95	Re1,000			
			2-16-90	<13.96	Re120			
			10-13-90	14.15	Re380			
			9-22-92	14.17	542			
			4-17-93	13.55	347			
			6-14-94	14.36	612			
			1-20-95	14.04	497			
			1-19-96	16.23	e1,600			
			11- 8-96	13.16	416			
			1- 8-98	13.13	408			
			1-24-99	<12.61	e200			
			8- 1-00	13.02	379			
			4- 8-01	<12.61	c			
Canacadea Creek at Alfred, NY (01522075)	Lat 42°15’13", long 77°47’24", Steuben County, Hydrologic Unit 02050104, at culvert off Saxon Road, on Alfred University campus, at Alfred. Elevation of gage is 1720 ft above NGVD of 1929, from topographic map. Drainage area is 1.28 mi².	1999-02	5-13-02	2.41	123	6-14-00	2.58	160
Canisteo River at West Cameron, NY (01525500)	Lat 42°13’20", long 77°25’05", Steuben County, Hydrologic Unit 02050104, on right bank 250 ft downstream from bridge on County Highway 119, 0.3 mi southeast of West Cameron, and 1.7 mi north of Cameron. Datum of gage is 1,037 ft above NGVD of 1929, (levels from Corps of Engineers, datum 1912). Drainage area is 340 mi².	1930-31‡, 1937-70‡, 1971-72, 1974-02	4-15-02	10.00	4,690	6-23-72	23.48	43,000
Cohocton River at Bath, NY (01528320)	Lat 42°20’36", long 77°20’39", Steuben County, Hydrologic Unit 02050104, on left bank 150 ft upstream from bridge on Veterans Avenue at Bath, and 0.6 mi downstream from Harrisburg Hollow Creek. Datum of gage is 1,100.00 ft above NGVD of 1929. Drainage area is 316 mi².	1988-96, 1999-02	6-27-02	7.73	3,940	4- 1-93	10.18	7,000
						1-23-99	10.70	a

‡ Operated as a continuous-record gaging station.

a Ice jam.
c Discharge not determined.
e Estimated.
f Backwater.
R Revised.
< Less than.

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 2002 maximum Date	Gage height (ft)	Dis-charge (ft^3/s)	Period of record maximum Date	Gage height (ft)	Dis-charge (ft^3/s)
SUSQUEHANNA RIVER BASIN--Continued								
Cuthrie Run near Big Flats, NY (01530301)	Lat 42°10’43", long 75°55’32", Chemung County, Hydrologic Unit 02050105, at culvert on Breed Hollow Road, 0.9 mi north of intersection of Eacher Hollow Road and Breed Hollow Road, 2.3 mi north of State Highway 17, and 3.0 mi north of Big Flats. Elevation of gage is 925 ft above NGVD of 1929, from topographic map. Drainage area is 5.39 mi^2.	1976, 1979-81, 1983-02	6-16-02	15.90	441	6-19-76	18.52	800
Chemung River at Elmira, NY (01530332)	Lat 42°05’11", long 76°48’05", Chemung County, Hydrologic Unit 02050105, on right bank 350 ft upstream from bridge on Pennsylvania Avenue at the north end of George Place, 1.0 mi downstream from Hoffman Brook, at Elmira. Datum of gage is 833.65 ft above NGVD of 1929. Drainage area is 2,162 mi^2.	1988-02	5-14-02	8.16	18,300	1-20-96	i18.51	e71,000
ALLEGHENY RIVER BASIN								
Ischua Creek tributary near Machias, NY (03010734)	Lat 42°24’28", long 78°31’33", Cattaraugus County, Hydrologic Unit 05010001, at culvert on Very Road, 0.2 mi upstream from mouth, 0.7 mi north of State Highway 242, and 1.5 mi west of Machias. Elevation of gage is 1,680 ft above NGVD of 1929, from topographic map. Drainage area is 5.12 mi^2.	1978-81, 1983-02	2- 1-02	9.14	147	9-14-79	10.59	570
Ball Creek at Stow, NY (03013800)	Lat 42°09’13", long 79°24’27", Chautauqua County, Hydrologic Unit 05010002, on left bank 75 ft upstream from bridge on State Highway 394 at Stow, and 0.4 mi upstream from mouth. Elevation of gage is 1,330 ft above NGVD of 1929, from topographic map. Drainage area is 9.58 mi^2.	1955-64§, 1965, 1967-68b, 1974‡, 1975-02	2- 1-02 5- 15-02	14.98 f15.22	e665 c	9-14-79	21.88	2,000
STREAMS TRIBUTARY TO LAKE ERIE								
Canadaway Creek at Fredonia, NY (04213376)	Lat 42°27’02", long 79°21’03", Chautauqua County, Hydrologic Unit 04120101, at bridge on Van Buren Road (Matteson Street), 0.8 mi northwest of Fredonia corporate boundary, and 1.2 mi upstream from Beaver Creek. Elevation of gage is 650 ft above NGVD of 1929, from topographic map. Drainage area is 32.9 mi^2.	1962-63b, 1987-02	2- 1-02	5.64	2,790	5-19-97 8- 7-79	9.50 --	6,690 12,000

‡ Operated as a continuous-record gaging station.
§ Operated as a low-flow partial-record station.
b Miscellaneous measurements made.
c Discharge not determined.
e Estimated.
f Backwater.
i From floodmark.

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 2002 maximum: Date	Water year 2002 maximum: Gage height (ft)	Water year 2002 maximum: Discharge (ft^3/s)	Period of record maximum: Date	Period of record maximum: Gage height (ft)	Period of record maximum: Discharge (ft^3/s)
STREAMS TRIBUTARY TO NIAGARA RIVER								
Delaware Park Lake at Buffalo, NY (04216212)	Lat 42°56’03", long 78°52’28", Erie County, Hydrologic Unit 04120104, on north shore of Delaware Park Lake at downstream side of bridge on Scajaquada Expressway (SH 198), and 1.7 mi upstream from mouth of Scajaquada Creek. Datum of gage is 570.00 ft IGLD (levels by Corp of Engineers). Drainage area is 1.14 mi^2	1985-02	2- 1-02	7.44	d	6-22-87	12.48	d
Scajaquada Creek below Delaware Park Lake at Buffalo, NY (04216214)	Lat 42°56’15", long 78°53’07", Erie County, Hydrologic Unit 04120104, on left bank, 400 ft east of Grant Street (North) exit from Scajaquada Expressway (SH 198), at Buffalo. Datum of of gage is 570.00 ft IGLD (levels by Corps of Engineers). Drainage area is 25.7 mi^2.	1985-02	2- 1-02	f6.76	d	6-22-87	11.20	d
Little Tonawanda Creek at Linden, NY (04216500)	Lat 42°52’37", long 78°09’48", Genesee County, Hydrologic Unit 04120104, on right bank at upstream side of bridge on, County Highway 13A (Depot Road) in Linden and 9.3 mi upstream from mouth. Datum of gage is 1,081.62 ft above NGVD of 1929. Drainage area is 22.1 mi^2.	1913-68‡, 1970-72‡, 1977-92‡, 1993-02	2- 1-02	8.88	1,240	6-23-89	i16.99	2,900
STREAMS TRIBUTARY TO LAKE ONTARIO								
Johnson Creek near Lyndonville, NY (04219900)	Lat 43°20’21", long 78°20’55", Orleans County, Hydrologic Unit 04130001, at bridge on Woodworth Road, 3.3 mi downstream from dam at Lyndonville, and 4.4 mi upstream from mouth. Elevation of gage is 260 ft above NGVD of 1929, from topographic map. Drainage area is 95.1 mi^2.	1962-70, 1972-73, 1976-02	5-14-02	5.90	1,360	2-17-54 3-12-62	g 10.29	5,430 3,540
West Creek near Hilton, NY (04220250)	Lat 43°18’10", long 77°48’50", Monroe County, Hydrologic Unit 04130001, on right bank just downstream from bridge on Collamer Road, 0.5 mi north of Collamer, and 1.5 mi northwest of Hilton. Datum of gage is 261.53 ft above NGVD of 1929. Drainage area is 31.0 mi^2.	1958-64‡, 1971-72, 1986-02	4-13-02	4.81	186	3-30-60	10.67	1,480
Stony Brook tributary at South Dansville, NY (04224807)	Lat 42°28’16", long 77°40’21" Steuben County, Hydrologic Unit 04130002, at culvert on Willey Road, 0.6 mi upstream from mouth, and 0.9 mi west of South Dansville. Elevation of gage is 1,400 ft above NGVD of 1929, from topographic map. Drainage area is 3.15 mi^2.	1977-82, 1984-91, 1996-02	5-13-02	8.42	27	8- 3-81	15.89	790

‡ Operated as a continuous-record gaging station.
d No stage-discharge relationship defined at this site.
f Backwater.
g None available.
i From floodmark.

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 2002 maximum: Date	Gage height (ft)	Discharge (ft^3/s)	Period of record maximum: Date	Gage height (ft)	Discharge (ft^3/s)
	STREAMS TRIBUTARY TO LAKE ONTARIO--Continued							
Bear Creek at Ontario, NY (042320578)	Lat 43°13'30", long 77°17'00", Wayne County, Hydrologic Unit 04140101, at culvert on New Street in Ontario, 100 ft west of Furnaceville Road, and 4.0 mi upstream from mouth. Elevation of gage is 420 ft above NGVD of 1929, from topographic map. Drainage area is 6.74 mi^2.	1971-73, 1975-02	2- 1-02	11.84	83	1- 8-98	13.38	238
Catharine Creek at Montour Falls, NY (04232200)	Lat 42°19'42", long 76°50'39", Schuyler County, Hydrologic Unit 04140201, on left bank 12 ft downstream from bridge on Town Road, 0.4 mi south of village line of Montour Falls, and 0.6 mi upstream from diversion channel. Elevation of gage is 490 ft above NGVD of 1929, from topographic map. Drainage area is 41.1 mi^2.	1957-62§, 1964-66§, 1970§, 1976-77‡, 1987-02	6-27-02	5.64	865	11- 8-96	8.48	e4,700
Kendig Creek near MacDougall, NY (04232630)	Lat 42°50'57", long 76°53'33", Seneca County, Hydrologic Unit 04140201, at downstream side of bridge on County Highway 120, 3.0 mi north of MacDougall, 3.5 mi southwest of Waterloo, and 4.6 mi upstream from mouth. Elevation of gage is 530 ft above NGVD of 1929, from topographic map. Drainage area is 13.8 mi^2.	1966-02	4-15-02	13.93	351	7-31-92 3-15-78	n6.32 n6.72	1,000 c
Cayuga Inlet at Ithaca, NY (04233255)	Lat 42°25'38", long 76°31'19", Tompkins County, Hydrologic Unit 04140201, on upstream abutment face of flood-control weir, at east end of Burtt Place, south of Ithaca city line, 0.3 mi east of State Highway 13a, 0.9 mi downstream from Buttermilk Creek, and 2.4 mi upstream from mouth. Datum of gage is 379.97 ft above NGVD of 1929. Drainage area is 86.7 mi^2.	1971-72, 1975-02	5-14-02	8.74	2,680	1-19-96	14.67	12,500
Coy Glen Creek at Ithaca, NY (04233258)	Lat 42°25'45", long 76°31'18", Tompkins County, Hydrologic Unit 04140201, on right bank at double drop structure 200 ft upstream from mouth at Ithaca. Datum of gage is 380.00 ft above NGVD of 1929. Drainage area is 3.56 mi^2.	1983-02	5-14-02	19.33	241	1-19-96	22.23	820
Schaeffer Creek near Canandaigua, NY (04234138)	Lat 42°54'25", long 77°22'14", Ontario County, Hydrologic Unit 04140201, at culvert on McCann Road, 0.8 mi upstream from Mud Creek, 1.7 mi north of U.S. Highway 20, and 3.2 mi west of Canandaigua. Elevation of gage is 860 ft above NGVD of 1929, from topographic map. Drainage area is 7.84 mi^2.	1980-02	2- 1-02	<10.81	c	3- 5-79 4-11-90 1- 8-98	g 12.88 12.88	e520 336 336

‡ Operated as a continuous-record gaging station.
§ Operated as a low-flow partial-record station.
e Estimated.
c Discharge not determined.
g None available.
n Datum prior to Oct. 1991.
< Less than.

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 2002 maximum Date	Gage height (ft)	Discharge (ft^3/s)	Period of record maximum Date	Gage height (ft)	Discharge (ft^3/s)
			STREAMS TRIBUTARY TO LAKE ONTARIO--Continued					
Mud Creek at East Victor, NY (04234200)	Lat 42°58’28", long 77°22’58", Ontario County, Hydrologic Unit 04140201, on left bank, 25 ft downstream from bridge on State Highway 96 at East Victor, 0.3 mi upstream from Fish Creek, and 0.5 mi upstream from mouth. Elevation of gage is 580 ft above NGVD of 1929, from topographic map. Drainage area is 64.2 mi^2.	1958-68‡, 1972, 1976-02	2- 1-02	5.33	944	6-22-72 4-21-91	7.85 7.22	1,800 1,880
Canandaigua Outlet tributary near Alloway, NY (04235255)	Lat 43°00’21", long 77°00’54", Ontario County, Hydrologic Unit 04140201, at bridge on Pre-Emption Road, 0.5 mi south of Wayne-Ontario County line, 1.8 mi southwest of Alloway, and 2.9 mi upstream from mouth. Elevation of gage is 490 ft above NGVD of 1929, from topographic map. Drainage area is 2.94 mi^2.	1978-02	5-30-02	8.39	155	5-30-02	8.39	155
Butternut Creek near Jamesville, NY (04245200)	Lat 42°56’02", long 76°03’44", Onondaga County, Hydrologic Unit 04140202, on left bank, 15 ft downstream from bridge on Walberger Road, 125 ft downstream from tributary from Stebbins Gulf, 2.2 mi upstream from Jamesville Reservoir, and 4.0 mi south of Jamesville. Datum of gage is 717.93 ft above NGVD of 1929. Drainage area is 32.2 mi^2.	1955-58b, 1958-99‡, 2000-02	5-28-02	8.53	709	7- 3-74 1-19-96	7.84 a9.20	2,820 e1,850
Scriba Creek near Constantia, NY (04245840)	Lat 43°15’35" long 76°00’11", Oswego County, Hydrologic Unit 04140202, on right bank, 8 ft upstream from bridge on Cemetery Road, and about 0.8 mi north of village of Constantia. Elevation of gage is 410 ft above NGVD of 1929, from topographic map. Drainage area is 38.4 mi^2.	1966-68‡, 1969, 1971-02	5-14-02	5.16	673	9-26-75 6-22-72	7.33 7.42	1,310 1,200
Catfish Creek at New Haven, NY (04249050)	Lat 43°29’00", long 76°19’34", Oswego County, Hydrologic Unit 04140102, at bridge on State Highway 104B, at New Haven, and 1.4 mi upstream from mouth. Elevation of gage is 350 ft above NGVD of 1929, from topographic map. Drainage area is 31.7 mi^2.	1962-66, 1968-02	5-14-02	4.72	329	3-18-73	7.85	1,350

‡ Operated as a continuous-record gaging station.
a Ice jam.
b Miscellaneous measurements made.
e Estimated.

Discharge measurements made at miscellaneous sites during water year 2002

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		STREAMS TRIBUTARY TO LAKE ONTARIO				
0423201765 Irondequoit Creek at Cheese Factory Rd. near Mendon, NY	Lake Ontario	Lat 42°58’32", long 77°31’47", Cayuga County, Hydrologic Unit 04140201, about 2,100 ft upstream of the bridge on State Highway 90 in Genoa and 2.4 miles above the confluence with Salmon Creek and Little Salmon Creek.	---	---	7-25-02	0.30
0423201787 Irondequoit Creek Trib. at Cheese Factory Rd. near Mendon, NY	Irondequoit Creek	Lat 42°58’32", long 77°31’43", Onondaga County, Hydrologic Unit 04140201, about 450 ft upstream of the main mudboil Depression area, 1,325 ft east of Tully Farms road, 2,000 ft south of Otisco road, and 4.2 mi northwest of Tully.	---	---	7-25-02	0.88
04232025 Irondequoit Creek near Mendon, NY	Lake Ontario	Lat 42°59’52", long 77°30’14", Onondaga County, Hydrologic Unit 04140201, about 450 ft upstream of the main mudboil Depression area, 1,325 ft east of Tully Farms road, 2,000 ft south of Otisco road, and 4.2 mi northwest of Tully.	---	---	7-25-02	2.70
04232030 Irondequoit Creek at Fishers, NY	Lake Ontario	Lat 43°00’34", long 77°28’14", Onondaga County, Hydrologic Unit 04140201, about 450 ft upstream of the main mudboil Depression area, 1,325 ft east of Tully Farms road, 2,000 ft south of Otisco road, and 4.2 mi northwest of Tully.	34.1	---	7-25-02	10.2

ALLEGHENY RIVER BASIN

Little Valley Creek Seepage Investigation

A series of discharge measurements were made during the 2002 water year along Little Valley Creek and its tributaries, Dublin Creek and Whig Street Creek in the towns of Little Valley and Salamanca, Cattaraugus County, N.Y. Measurements were made during periods of baseflow to determine (1) the groundwater contribution to the stream and how it changes over the length of the valley and (2) whether losing-stream conditions are present in the Little Valley study area.

Little Valley Creek

September 25, 2002

Distance Upstream from Mouth	Stream	Location	Drainage Area (mi^2)	Discharge (ft^3/s)	Gain or Loss
7.7	03011027 Little Valley Creek near Little Valley, NY	Lat 42°14’35", long 78°47’03", Cattaraugus County, Hydrologic Unit 05010001, 100 ft upstream from bridge on State Highway 353.	18.4	0.61	---
5.9	03011028 Little Valley Creek at Baker Rd. near Elkdale, NY	Lat 42°13’39", long 78°45’48", Cattaraugus County, Hydrologic Unit 05010001, at bridge on State Highway 353 at Baker Rd., and 0.1 mi. upstream from confluence with Dublin Creek.	20.9	0.0	-0.61
5.8	03011029 Dublin Creek near Elkdale, NY	Lat 42°13’43", long 78°45’41", Cattaraugus County, Hydrologic Unit 05010001, 30 ft upstream from confluence with Little Valley Creek.	10.5	1.25	+1.25
5.1	03011030 Little Valley Creek at Elkdale, NY	Lat 42°13’13", long 78°45’25", Cattaraugus County, Hydrologic Unit 05010001, 70 ft upstream from bridge on State Highway 353, and 0.4 mi upstream from confluence with Whig Street Creek.	32.0	0.46	-0.79
4.7	03011031 Whig Street Creek at Elkdale, NY	Lat 42°12’56", long 78°45’15", Cattaraugus County, Hydrologic Unit 05010001, at bridge on State Highway 353, and 0.2 mi upstream from confluence with Little Valley Creek.	6.04	0.62	+0.62
3.7	03011033 Little Valley Creek near Elkdale, NY	Lat 42°12’15", long 78°45’44", Cattaraugus County, Hydrologic Unit 05010001, at bridge on Hollow Rd.	39.4	0.0	-1.08
1.0	03011035 Little Valley Creek at Salamanca, NY	Lat 42°10’34", long 78°44’55", Cattaraugus County, Hydrologic Unit 05010001, 80 ft upstream from bridge on State Highway 353.	44.6	1.83	+1.83

STREAMS TRIBUTARY TO LAKE ONTARIO

0423795620 ONONDAGA CREEK TRIBUTARY NO. 9 AT TULLY, NY

LOCATION.--Lat 42°52'29", long 76°09'04", Onondaga County, Hydrologic Unit 04140201, 35 ft west (upstream) of two, 2-ft culverts under Tully Farms Road, 10 ft east (downstream) of water intake for adjacent homes, and 1.1 mi southwest of the village of Cardiff.
DRAINAGE AREA.-- 0.56 mi^2.
PERIOD OF RECORD.--Water years 1999 to current year.
CHEMICAL DATA: Water years 1999 to current year (b).
SEDIMENT DATA: Water years 1999 to current year (b).
REMARKS.--Water-quality records for this site were collected, and reported in local standard time.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)
NOV													
15...	0930	.35	9.0	86	7.8	19900	9.7	1500	400	140	13.3	4000	138
FEB													
15...	0930	1.6	13.5	105	7.5	10000	3.9	800	208	67.0	6.28	1780	138
MAY													
16...	0815	1.8	10.3	95	7.5	6530	10.3	590	159	46.7	4.47	1130	136
AUG													
30...	0815	.53	9.7	97	7.7	14500	13.5	1200	308	100	10.4	2810	138

Date	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
NOV										
15...	168	6.6	6000	--	800	1200	<150	140	1060	1.0
FEB										
15...	168	2.83	2960	7.2	386	5760	20	52.0	444	1.9
MAY										
16...	166	1.75	1880	6.4	260	3720	E29	47.0	223	1.1
AUG										
30...	168	4.32	4760	8.0	545	8960	<100	92.0	757	1.1

E estimated.

STREAMS TRIBUTARY TO LAKE ONTARIO

430449077294201 CARTERSVILLE WASTE CHANNEL AT PITTSFORD, NY

LOCATION.--Lat 43°04'49", long 77°29'42", Hydrologic Unit 04140101, at Marsh Road, 0.1 mi south of New York State Highway 31 and 0.25 mi north of Erie Canal.

PERIOD OF RECORD.--Water years 1989 to current year.
CHEMICAL DATA: Water years 1989-91 (d), 1992 (c) 1993 (b), 1994 (d), 1995 (b), 1996-97 (a), 1998 (b), and 1999 to current year(d).
NUTRIENT DATA: Water years 1989-91 (d), 1992 (c) 1993 (b), 1994 (d), 1995 (b), 1996-97 (a), 1998 (b), 1and 1999 to current year(d).

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

REMARKS.--Records for October 1988 to September 1993 are published in "Water Resources of Monroe County New York, Water Years 1989-93 with Emphasis on Water Quality in the Irondequoit Creek Basin", U.S. Geological Survey Open-File Report 97-587. Water-quality records for this site were collected and reported in local standard time.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
OCT													
03...	0820	4.2	7.7	9.0	47	76	7	1	.05	<.10	1.3	.033	.050
17...	0735	3.6	3.2	8.9	57	93	3	<1	.02	.39	.96	.017	.030
31...	0900	4.0	2.8	10.6	48	118	1	<1	.02	N.00	.41	.013	.025
MAY													
01...	1025	1.8	7.7	10.4	46	58	8	1	.02	.28	.93	.013	.038
29...	0840	2.4	15	8.3	40	45	16	<5	.03	.47	.72	--	.041
JUN													
12...	0905	E2.5	33	6.8	37	41	42	8	.11	.94	1.0	.058	.150
26...	0840	2.3	17	7.9	36	57	20	4	.02	.39	.96	.026	.066
JUL													
10...	1110	E2.5	14	--	41	81	17	2	.02	.42	.83	.029	.057
AUG													
07...	0925	2.5	8.4	7.7	43	84	9	<2	.02	.34	.62	.024	.050
21...	0920	3.0	9.1	7.9	54	109	107	36	<.02	.35	.59	.029	.074
SEP													
04...	0905	E3.0	8.9	8.0	49	105	9	<2	.02	.30	.67	.026	.063
18...	0850	E3.0	10	9.1	45	91	13	2	<.01	.35	.58	.028	.071

E estimated.
N presumptive evidence of presence of material.

STREAMS TRIBUTARY TO LAKE ONTARIO

430526077315202 EAST BRANCH ALLEN CREEK BELOW ERIE CANAL SIPHON NEAR PITTSFORD, NY

LOCATION.--Lat 43°05'26", long 77°31'52", Hydrologic Unit 04140101, at north bank of Erie Canal, 0.5 mi west of State Highway 31.
PERIOD OF RECORD.--Water years 1985, 1987-96, 1998 to current year.
CHEMICAL DATA: Water years 1985 (b), 1987 (a), 1988 (d), 1989 (c), 1990 (d), 1991-92 (c), 1993 (a), 1994-95 (c), 1996 (a), 1998 (b), 1999 (c), 2000 to current year (b).
NUTRIENT DATA: Water years 1985 (b), 1987 (a), 1988 (d), 1989 (c), 1990 (d), 1991-92 (c), 1993 (a), 1994-95 (c), 1996 (a), 1998 (b), 1999 (c), 2000 to current year (b).
COOPERATION.--Water-quality samples were collected and analyzed by the Monroe County Environmental Health Laboratory at Rochester, N.Y.
REMARKS.--Records for October 1988 to September 1993 are published in "Water Resources of Monroe County New York, Water Years 1989-93 with Emphasis on Water Quality in the Irondequoit Creek Basin", U.S. Geological Survey Open-File Report 97-587. Prior to October 1988, unpublished records are available in the files of the U.S. Geological Survey. Water-quality records for this site were collected and reported in local standard time.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
JUL													
10...	1135	E3.0	37	--	54	71	43	5	.06	.66	.68	.023	.113
AUG													
07...	1005	3.0	12	7.1	43	82	15	<2	.07	.45	.57	.019	.064
21...	1020	E3.0	16	6.5	48	76	97	8	.05	.41	.59	.029	.073
SEP													
04...	0935	E3.0	19	7.3	45	78	7	<4	.04	.39	.64	.023	.051
18...	0940	3.0	8.1	--	47	72	12	<2	.04	.39	.53	.023	.061

E estimated.

STREAMS TRIBUTARY TO LAKE ONTARIO

430526077315203 EAST BRANCH ALLEN CREEK ERIE CANAL SIPHON NEAR PITTSFORD, NY

LOCATION.--Lat 43°05'26", long 77°31'52", Hydrologic Unit 04140101, at north bank of Erie Canal, 0.5 mi west of State Highway 31.

PERIOD OF RECORD.--Water years 1988-95, 1998 to current year.
CHEMICAL DATA: Water years 1988 (d), 1989 (c), 1990 (d), 1991-92 (c), 1993 (a), 1994 (c), 1995 (b), 1998 (b), 1999 (c), 2000 to current year (a).
NUTRIENT DATA: Water years 1988 (d), 1989 (c), 1990 (d), 1991-92 (c), 1993 (a), 1994 (c), 1995 (b), 1998 (b), 1999 (c), 2000 to current year (a).

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

REMARKS.--Records for October 1988 to September 1993 are published in "Water Resources of Monroe County New York, Water Years 1989-93 with Emphasis on Water Quality in the Irondequoit Creek Basin", U.S. Geological Survey Open-File Report 97-587. Prior to October 1988, unpublished records are available in the files of the U.S. Geological Survey. Water-quality records for this site were collected and reported in local standard time.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
JUL													
10...	1140	E2.5	31	--	42	80	39	<4	.04	.53	.78	.022	.098
AUG													
07...	1000	E2.5	9.7	7.9	42	83	14	<2	.06	.58	.56	.017	.057
21...	1015	E2.5	14	7.6	47	77	58	7	.05	.41	.59	.027	.069
SEP													
04...	0945	E2.5	6.1	7.2	57	75	7	<2	.04	.37	.65	.022	.049
18...	0945	2.5	7.3	8.9	46	71	9	<2	.04	.42	.55	.023	.052

E estimated.

STREAMS TRIBUTARY TO LAKE ONTARIO

430557077344401 ALLEN CREEK ABOVE ERIE CANAL SIPHON NEAR ROCHESTER, NY

LOCATION.--Lat 43°05'57", long 77°34'44", Hydrologic Unit 04140101, at north bank of Erie Canal, 0.01 mi east of Winton Road.
PERIOD OF RECORD.--Water years 1985 to current year.
CHEMICAL DATA: Water years 1985 (a), 1986 (b), 1987 (a), 1988 (d), 1989 (c), 1990 (d), 1991-92 (c), 1993 (b), 1994 (d), 1995 (c), 1996-97 (a), 1998 (b), 1999 (c), 2000 to current year (d).
NUTRIENT DATA: Water years 1985 (a), 1986 (b), 1987 (a), 1988 (d), 1989 (c), 1990 (d), 1991-92 (c), 1993 (b), 1994 (d), 1995 (c), 1996-97 (a), 1998 (b), 1999 (c), 2000 to current year (d).
COOPERATION.--Water-quality samples were collected and analyzed by the Monroe County Environmental Health Laboratory at Rochester, N.Y.
REMARKS.--Records for October 1988 to September 1993 are published in "Water Resources of Monroe County New York, Water Years 1989-93 with Emphasis on Water Quality in the Irondequoit Creek Basin", U.S. Geological Survey Open-File Report 97-587. Prior to October 1988, unpublished records are available in the files of the U.S. Geological Survey. Water-quality records for this site were collected and reported in local standard time.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
OCT													
03...	0940	.50	7.2	7.20	290	54	5	3	.03	.66	.17	<.003	.045
17...	0955	2.4	24	--	140	32	20	<5	.03	.43	.34	.004	.070
31...	1005	4.0	6.9	9.10	112	56	4	3	.15	N.00	.19	.003	.045
MAY													
01...	1140	--	6.3	--	339	52	6	.99	.02	.66	.26	.005	.035
29...	1010	2.7	5.2	8.4	164	50	5	<2	.03	.52	.50	--	.030
JUN													
12...	1140	--	43	6.3	211	39	51	9	.39	2.1	.98	.071	.186
26...	0955	E.50	5.8	6.5	264	46	4	<2	.04	.66	.30	.026	.061
JUL													
10...	1210	E.50	4.9	--	195	42	3	<2	.09	.89	.58	.026	.062
AUG													
07...	1035	E.50	2.4	8.3	264	52	2	<2	.04	.56	.21	.024	.054
21...	1100	E.50	2.1	8.3	183	56	3	<2	.04	.55	.21	.026	.058
SEP													
18...	1050	.50	8.8	9.4	259	48	7	6	.01	1.1	.12	.005	.077

E estimated.
N presumptuve evidence of presence of material.

STREAMS TRIBUTARY TO LAKE ONTARIO

430557077344402 ALLEN CREEK BELOW ERIE CANAL SIPHON NEAR ROCHESTER, NY

LOCATION.--Lat 43°05'57", long 77°34'44", Hydrologic Unit 04140101, at north bank of Erie Canal, 0.01 mi east of Winton Road.
PERIOD OF RECORD.--Water years 1985 to current year.
CHEMICAL DATA: Water years 1985 (a), 1986 (b), 1987 (a), 1988 (d), 1989 (c), 1990 (d), 1991-93 (c), 1994 (d), 1995 (c), 1996-97 (a), 1998 (b), 1999 (c), 2000 to current year (d).
NUTRIENT DATA: Water years 1985 (a), 1986 (b), 1987 (a), 1988 (d), 1989 (c), 1990 (d), 1991-93 (c), 1994 (d), 1995 (c), 1996-97 (a), 1998 (b), 1999 (c), 2000 to current year (d).
COOPERATION.--Water-quality samples were collected and analyzed by the Monroe County Environmental Health Laboratory at Rochester, N.Y.
REMARKS.--Records for October 1988 to September 1993 are published in "Water Resources of Monroe County New York, Water Years 1989-93 with Emphasis on Water Quality in the Irondequoit Creek Basin", U.S. Geological Survey Open-File Report 97-587. Prior to October 1988, unpublished records are available in the files of the U.S. Geological Survey. Water-quality records for this site were collected and reported in local standard time.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
OCT													
03...	0930	4.0	10	7.20	90	69	14	<2	.04	.44	.60	.025	.055
17...	0945	6.4	3.2	--	104	81	16	3	.05	.47	.65	.012	.055
31...	0950	5.0	4.7	--	74	86	3	<2	.04	N.00	.41	.013	.030
MAY													
01...	1125	--	5.5	--	263	49	5	2	.01	.60	.34	.005	.031
29...	1015	E1.5	10	7.7	43	43	10	<2	.02	.34	.93	--	.030
JUN													
12...	1135	--	39	5.8	196	36	51	10	.33	2.0	.80	.054	.184
26...	0950	1.6	9.1	7.3	151	62	10	<2	.04	.53	.74	.018	.054
JUL													
10...	1205	E1.5	12	--	107	60	13	<2	.07	.64	.63	.023	.063
AUG													
07...	1025	E1.5	8.7	7.4	85	74	11	<2	.05	.43	.47	.019	.052
21...	1050	E1.5	5.6	7.9	58	53	8	<2	.05	.41	.39	.021	.053
SEP													
04...	1010	E1.5	7.9	7.3	57	74	9	<2	.05	.37	.51	.020	.049
18...	1045	E1.5	11	8.6	171	75	12	<4	.02	.73	.26	<.003	.070

E estimated.
N presumptive evidence of presence of material.

STREAMS TRIBUTARY TO LAKE ONTARIO

430557077344403 ALLEN CREEK AT ERIE CANAL SIPHON NEAR ROCHESTER, NY

LOCATION.--Lat 43°05'57", long 77°34'44", Hydrologic Unit 04140101, at north bank of Erie Canal, 0.01 mi east of Winton Road.
PERIOD OF RECORD.--Water years 1986 to current year.
CHEMICAL DATA: Water years 1986-1987 (a), 1988 (d), 1989 (c), 1990 (d), 1991-93 (c), 1994 (d), 1995 (c), 1996 (b), 1997 (a), 1998 (b), 1999 (c), 2000 to current year (d).
NUTRIENT DATA: Water years 1986-1987 (a), 1988 (d), 1989 (c), 1990 (d), 1991-93 (c), 1994 (d), 1995 (c), 1996 (b), 1997 (a), 1998 (b), 1999 (c), 2000 to current year (d).
COOPERATION.--Water-quality samples were collected and analyzed by the Monroe County Environmental Health Laboratory at Rochester, N.Y.
REMARKS.--Records for October 1988 to September 1993 are published in "Water Resources of Monroe County New York, Water Years 1989-93 with Emphasis on Water Quality in the Irondequoit Creek Basin", U.S. Geological Survey Open-File Report 97-587. Prior to October 1988, unpublished records are available in the files of the U.S. Geological Survey. Water-quality records for this site were collected and reported in local standard time.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
OCT													
03...	0945	3.5	18	7.8	70	72	27	2	.04	.35	.68	.031	.070
17...	1000	4.0	6.3	5.8	77	156	1	<1	.06	.50	.89	.021	.050
31...	1010	1.0	4.9	8.8	54	90	4	<2	.03	N.00	.45	.016	.035
MAY													
01...	1135	--	22	--	110	70	18	3	.03	.67	.63	.017	.076
29...	1020	1.2	3.5	7.1	259	51	3	<2	.07	.73	.29	--	.026
JUN													
12...	1145	--	45	6.5	34	33	27	<2	.06	.54	.70	.023	.119
26...	1005	E1.0	11	7.9	47	74	10	<5	.04	.42	1.2	.014	.052
JUL													
10...	1215	1.0	18	--	46	78	19	2	.03	.44	.72	.020	.071
AUG													
07...	1040	E1.0	13	7.9	44	83	8	--	.06	.41	.56	.018	.065
21...	1125	E1.0	9.2	7.6	53	74	43	11	.05	.37	.60	.027	.069
SEP													
04...	1025	E1.0	14	7.2	47	77	16	<2	.03	.40	.57	.014	.062
18...	1055	E1.0	11	8.9	61	109	13	<2	.03	.41	.52	.005	.055

E estimated.
N presumptive evidence of presence of material.

STREAMS TRIBUTARY TO LAKE ONTARIO

430605077262201 FAIRPORT WASTE CHANNEL AT FAIRPORT, NY

LOCATION.--Lat 43°06'05", long 77°26'22", Hydrologic Unit 04140101, at State Street, 0.15 mi east of New York State Highway 250, and 0.05 mi north of Erie canal.
PERIOD OF RECORD.--Water years 1989 to current year.
CHEMICAL DATA: Water years 1989 (d), 1990 (c), 1991 (a), 1992-94 (c), 1995 (b), 1996-98 (a), 1999-2000 (c), 2001 to current year(d).
NUTRIENT DATA: Water years 1989 (d), 1990 (c), 1991 (a), 1992-94 (c), 1995 (b), 1996-98 (a), 1999-2000 (c), 2001 to current year(d).
COOPERATION.--Water-quality samples were collected and analyzed by the Monroe County Environmental Health Laboratory at Rochester, N.Y.
REMARKS.--Records for October 1988 to September 1993 are published in "Water Resources of Monroe County New York, Water Years 1989-93 with Emphasis on Water Quality in the Irondequoit Creek Basin", U. S. Geological Survey Open-File Report 97-587. Water-quality records for this site were collected and reported in local standard time.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
OCT													
03...	0715	3.3	49	8.4	50	81	52	<5	.09	.34	1.3	.030	.100
17...	0715	3.0	5.5	8.5	42	66	5	<2	.02	.30	.68	.019	.040
31...	0830	2.0	6.3	10.7	78	90	5	<4	.05	N.00	.49	.014	.035
MAY													
01...	0915	1.4	6.9	10.1	53	45	5	2	.04	.31	.93	.013	.030
29...	0820	1.0	9.7	7.3	44	44	8	<2	.02	.44	.66	--	.039
JUN													
12...	0825	E1.0	95	6.9	28	35	94	24	.37	1.9	.76	.100	.333
26...	0815	E1.0	13	5.6	48	50	15	<2	.08	.57	.68	.024	.078
AUG													
07...	0905	E1.0	5.1	5.6	58	126	5	<2	.07	.34	.43	.020	.049
21...	0845	E1.0	240	7.9	102	318	238	19	.05	.79	.55	.015	.448
SEP													
04...	0845	E1.0	6.0	4.6	125	417	5	<2	.04	.28	.58	.014	.041
18...	0825	E1.0	3.7	5.1	122	399	4	<2	.03	.29	.60	.012	.032

E estimated.
N presumptive evidence of presence of material.

STREAMS TRIBUTARY TO LAKE ONTARIO

431132077475301 NORTHRUP CREEK ABOVE SPENCERPORT WASTE CHANNEL AT SPENCERPORT, NY

LOCATION.--Lat 43°11'32", long 77°47'53", Monroe County, Hydrologic Unit 04140101, 300 ft north of Erie (Barge) at Canal Street and 800 ft east of State Highway 259.
PERIOD OF RECORD.--Water years 2001 to current year.
CHEMICAL DATA: Water years 2001 (c), current year (d).
NUTRIENT DATA: Water years 2001 (c), current year (d).
COOPERATION.--Water-quality samples were collected and analyzed by the Monroe County Environmental Health Laboratory at Rochester, N.Y.
REMARKS.--Water-quality records for this site were collected and reported in local standard time.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
MAY													
24...	0910	1.7	3.4	9.0	183	60	6	2	.06	.66	.72	.045	.085
JUN													
20...	0940	.50	11	8.0	163	62	12	3	.11	.65	.80	.065	.130
JUL													
03...	0745	1.0	3.8	8.1	179	52	3	<2	.12	.54	.98	.043	.090
18...	0905	.70	6.5	8.6	194	46	4	<2	.10	.36	1.1	.040	.095
31...	1005	1.0	5.1	10.0	233	44	3	<2	.07	.66	1.2	.048	.100
AUG													
17...	0845	.60	3.7	--	171	46	4	<2	.12	.54	1.1	.052	.110
29...	0910	.50	4.7	--	190	43	<2	<2	.10	.40	1.1	.043	.090
SEP													
11...	1035	.70	--	10.2	237	41	3	<3	.06	.52	1.3	.043	.100

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
OCT													
02...	0930	.50	4.6	8.7	220	63	<2	<2	.14	.52	1.1	.042	.085
16...	0905	.70	4.2	8.9	110	60	<3	<3	.10	.52	.88	.034	.080
23...	1015	.70	2.3	9.1	102	76	<2	<2	.06	.59	.54	.036	.065
MAY													
08...	1050	3.3	2.8	11.2	148	52	3	<2	.02	.85	1.3	.008	.039
22...	1040	3.2	3.5	11.0	105	44	5	<2	.05	.76	1.5	.011	.025
JUN													
05...	1025	5.5	22	8.3	82	35	22	4	.08	.96	1.3	.033	.123
19...	1025	2.5	7.8	9.5	118	40	8	<2	.04	.82	1.8	.037	.090
JUL													
03...	1020	1.1	4.1	5.8	137	46	4	<4	.04	.60	1.1	.053	.084
17...	1005	E1.3	2.6	8.3	139	51	2	<2	.05	.55	.83	.043	.062
31...	1035	E.70	2.3	8.1	141	54	2	<2	.04	.60	.64	.047	.048
AUG													
14...	1020	E.40	3.0	7.8	244	42	<2	<2	.04	.40	1.2	.033	.066
28...	1035	E.90	3.8	7.8	252	42	<2	<2	.07	.43	1.5	.039	.075
SEP													
11...	1055	E.70	4.6	8.5	166	38	3	<2	.08	.89	1.3	.037	.102
25...	1035	E.90	3.2	8.2	240	41	<2	<2	.08	.37	1.6	.037	.069

E estimated.

STREAMS TRIBUTARY TO LAKE ONTARIO

431133077474901 SPENCERPORT WASTE CHANNEL AT SPENCERPORT, NY

LOCATION.--Lat 43°11'33", long 77°47'49", Monroe County, Hydrologic Unit 04140101, 600 ft north of Erie (Barge) and 0.25 mi east of State Highway 259.
PERIOD OF RECORD.--Water years 2001 to current year.
CHEMICAL DATA: Water years 2001 (c), current year (d).
NUTRIENT DATA: Water years 2001 (c), current year (d).
COOPERATION.--Water-quality samples were collected and analyzed by the Monroe County Environmental Health Laboratory at Rochester, N.Y.
REMARKS.--Water-quality records for this site were collected and reported in local standard time.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
MAY													
24...	0850	5.5	6.3	8.4	66	84	12	<2	.06	.43	.84	.023	.050
JUN													
06...	0905	4.7	11	6.0	39	58	16	2	.06	.77	.90	.050	.110
20...	0920	4.0	14	7.5	44	72	17	2	.05	.44	.67	.040	.070
JUL													
03...	0730	5.0	13	7.7	46	82	18	<4	.04	.35	.61	.029	.065
18...	0840	4.0	17	7.1	41	53	20	2	.05	.27	.79	.047	.085
31...	0950	5.0	9.7	7.1	29	54	11	<2	.05	.33	.61	.060	.080
AUG													
17...	0833	5.0	3.6	--	24	42	9	<3	.05	.25	.63	.061	.080
29...	0855	5.0	7.0	--	38	64	8	<2	.03	.24	.67	.004	.060
SEP													
11...	1020	5.0	--	8.3	27	44	7	<3	.02	.31	.60	.036	.050

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
OCT													
02...	0910	4.7	6.2	8.6	28	50	8	1	.08	.32	.88	.050	.065
16...	0845	4.7	12	9.1	44	68	8	<5	.03	.38	.79	.031	.050
23...	0955	3.0	2.9	9.7	36	66	4	<1	<.01	.22	.96	.030	.045
MAY													
08...	1020	E4.0	11	10.0	76	88	28	<5	.11	.90	.67	.012	.088
22...	1020	E4.0	28	8.9	27	28	18	<5	.08	.77	.56	.032	.100
JUN													
05...	1010	E4.7	20	7.2	54	97	23	3	.04	.49	1.1	.028	.085
19...	1015	E4.8	13	7.9	45	80	14	<2	.06	.64	1.2	.044	.086
JUL													
03...	0950	4.2	10	5.2	34	60	13	<2	.03	.36	.96	.042	.076
17...	0950	E4.0	5.8	6.9	31	59	11	<4	.03	.39	.87	.042	.064
31...	1020	E4.2	5.6	7.8	44	126	7	<2	.04	.36	.57	.027	.025
AUG													
14...	1010	E4.2	6.8	7.3	27	45	16	<4	.04	.39	.59	.039	.070
28...	1025	E4.2	6.3	7.8	29	64	8	<2	.03	.35	.68	.039	.064
SEP													
11...	1045	E4.2	7.3	8.2	24	42	9	<2	.03	.32	.66	.034	.066
25...	1025	E4.2	7.2	7.1	25	50	10	<4	.02	.31	.62	.030	.056

E estimated.

STREAMS TRIBUTARY TO LAKE ONTARIO

431142077473401 NORTHRUP CREEK BELOW WASTE CHANNEL AT BIG RIDGE ROAD NEAR SPENCERPORT, NY

LOCATION.--Lat 43°12'16", long 77°47'09", Hydrologic Unit 04140101, 50ft south of bridge on Big Ridge Road, 0.35mi east of State Highway 259.
PERIOD OF RECORD.--Water years 2001 to current year.
CHEMICAL DATA: Water years 2001 to current year (d).
NUTRIENT DATA: Water years 2001 to current year (d).
COOPERATION.--Water-quality samples were collected and analyzed by the Monroe County Environmental Health Laboratory at Rochester, N.Y.
REMARKS.--Water-quality records for this site for water year 2002 were collected and reported in local standard time.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
MAY													
09...	0900	7.80	6.2	8.6	63	44	12	<3	.07	.33	.76	.020	.055
24...	0810	7.20	5.7	8.0	93	78	14	2	.05	.52	.81	.029	.065
JUN													
06...	0800	6.40	9.2	7.6	70	61	14	2	.09	.64	.84	.047	.095
20...	0825	4.50	13	6.9	56	72	15	2	.11	.53	.69	.050	.085
JUL													
03...	0715	6.00	14	7.3	53	81	19	<4	.06	.40	.67	.035	.070
18...	0750	4.00	11	7.1	37	54	11	<2	.07	.21	.80	.052	.075
31...	0935	6.00	6.9	6.6	30	51	10	<2	.04	.33	.57	.056	.080
AUG													
17...	0755	5.56	4.2	--	27	43	11	2	.03	.23	.68	.063	.080
29...	0800	5.50	7.0	--	35	62	11	<2	.02	.20	.67	.046	.065
SEP													
11...	0925	5.70	--	8.2	31	45	9	1	.02	.28	.67	.038	.060

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
OCT													
02...	0810	5.2	5.8	8.5	35	55	7	<2	.14	.29	.94	.052	.070
16...	0835	5.3	6.1	8.4	54	70	4	<2	.13	.30	.81	.038	.050
23...	0900	3.7	2.8	9.2	49	63	<2	<2	.01	.05	.82	.029	.040
MAY													
08...	0945	7.3	4.6	10.5	92	75	6	<2	.02	1.1	.84	.007	.060
22...	0925	7.2	15	10.0	68	36	11	<2	.18	.76	1.0	.025	.064
JUN													
05...	0925	10	23	7.6	72	53	28	5	.14	.85	1.2	.034	.107
19...	0935	7.3	10	8.9	76	61	14	2	.09	.65	1.4	.044	.070
JUL													
03...	0920	5.8	7.5	5.2	55	57	10	<2	.03	.44	.98	.046	.070
17...	0910	5.3	4.4	7.5	42	58	9	<2	.04	.39	.92	.044	.068
31...	0940	4.9	3.0	7.2	57	112	5	<2	.26	.41	.63	.052	.022
AUG													
14...	0920	4.6	4.9	7.6	31	44	7	<2	.03	.34	.64	.043	.069
28...	0925	5.1	6.0	7.3	33	65	9	<5	.02	.32	.73	.041	.067
SEP													
11...	0955	4.9	7.1	8.3	27	40	9	<2	.03	.32	.74	.038	.109
25...	0950	5.1	4.5	7.6	27	47	6	<2	.03	.41	.67	.034	.060

STREAMS TRIBUTARY TO LAKE ONTARIO

431216077470901 NORTHRUP CREEK AT OGDEN PARMA TOWNLINE ROAD NEAR SPENCERPORT, NY

LOCATION.--Lat 43°12'16", long 77°47'09", Monroe County, Hydrologic Unit 04140101, 60 ft north of bridge on Odgen Parma Townline Road and 0.55 mi east of State Highway 259.
PERIOD OF RECORD.--Water years 2001 to current year.
CHEMICAL DATA: Water years 2001, current year (d).
NUTRIENT DATA: Water years 2001, current year (d).
COOPERATION.--Water-quality samples were collected and analyzed by the Monroe County Environmental Health Laboratory at Rochester, N.Y.
REMARKS.--Water-quality records for this site were collected and reported in local standard time.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
MAY													
09...	0805	8.8	5.2	6.8	79	44	11	<2	1.8	2.0	1.2	.115	.190
24...	0720	7.9	5.6	6.9	104	76	14	2	1.0	1.8	1.3	.078	.140
JUN													
06...	0710	7.2	6.0	6.3	79	58	12	2	1.5	2.5	1.2	.112	.193
20...	0710	6.4	4.8	4.2	73	69	8	2	1.8	2.6	1.4	.190	.260
JUL													
03...	0700	7.0	5.0	5.5	58	80	9	<2	.56	.99	1.1	.100	.150
18...	0650	5.6	8.2	5.7	45	56	10	<3	N.80	.99	1.3	.150	.200
31...	0905	7.0	22	6.9	46	50	36	6	.40	1.1	2.2	.350	.360
AUG													
17...	0705	6.2	7.5	--	34	43	16	3	.07	.48	1.6	.146	.200
29...	0710	5.9	6.7	--	40	57	13	<2	.06	.55	1.3	.110	.150
SEP													
11...	0840	6.1	--	--	46	46	19	3	.17	.98	2.4	.157	.225

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
OCT													
02...	0710	5.9	10	6.6	46	56	16	4	1.7	2.4	1.3	.134	.200
16...	0810	6.0	7.4	6.8	72	66	10	<2	2.9	3.4	1.2	.233	.320
23...	0830	4.1	3.8	7.2	66	55	5	<2	3.0	3.9	1.2	.298	.370
MAY													
08...	0835	9.1	3.4	9.9	116	72	5	<2	1.5	2.6	1.2	.129	.181
22...	0815	8.3	12	8.6	91	38	10	2	1.5	2.4	1.2	.094	.173
JUN													
05...	0830	13	27	6.5	83	51	42	7	1.1	2.2	1.3	.098	.208
19...	0825	7.8	8.6	7.8	98	59	12	<2	1.1	2.0	1.6	.138	.192
JUL													
03...	0840	6.2	4.5	5.8	76	58	7	<2	.17	.73	1.8	.125	.154
17...	0825	5.5	3.6	6.7	67	60	7	<2	.08	.62	1.8	.116	.162
31...	0845	5.4	4.0	5.5	60	91	6	<2	1.4	2.1	.91	.168	.193
AUG													
14...	0835	5.7	3.9	6.7	59	46	8	<2	.08	.54	1.7	.114	.160
28...	0825	6.1	6.9	7.9	52	69	10	<2	.05	.54	1.7	.113	.148
SEP													
11...	0840	6.4	6.0	7.2	52	40	8	<2	.25	.83	2.3	.125	.171
25...	0855	5.9	4.6	7.4	47	46	6	<2	.28	.77	1.8	.133	.166

N presumptive evidence of presence of material

STREAMS TRIBUTARY TO LAKE ONTARIO

431510077363501 GENESEE RIVER AT CHARLOTTE PUMP STATION, NEAR ROCHESTER, NY

LOCATION.--Lat 43°15'10", long 77°36'35", Monroe County, Hydrologic Unit 04130003, at Charlotte, in Rochester, on west bank of the Genesee River, 1300 ft downstream of Stutson Street Bridge, 0.5 mi upstream of mouth, and 5.0 mi downstream from gaging station (04232000) at Rochester.
DRAINAGE AREA.--2,467 mi^2 at station 04232000.
PERIOD OF RECORD.--Water years 1990 to current year.
CHEMICAL DATA: 1990 to current year (e).
NUTRIENT DATA: 1990 to current year (e).
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. Water-quality records for this site were collected and reported in local standard time.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	Ending time	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	TUR-BID-ITY (NTU) (00076)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
OCT													
01-03	0945	0845	507	2.9	90	149	--	--	.14	.50	.71	.020	.040
03-05	0945	0045	391	1.8	72	126	--	--	.28	.68	.93	.026	.045
05-07	1050	0950	394	12	80	114	--	--	.27	<.10	1.0	.025	.060
07-09	1050	0850	463	6.5	80	98	--	--	.12	<.10	.89	.022	.050
09-11	0950	0850	414	4.6	70	123	--	--	.13	.47	.90	.025	.045
11-13	0920	0420	385	3.1	58	95	--	--	.14	.50	.78	.018	.030
13-15	0520	0020	387	3.4	62	132	--	--	.15	.49	.96	.020	.040
15-16	0940	1440	464	7.0	60	98	--	--	.09	.43	.82	.018	.050
16-17	1540	1840	556	8.2	61	93	--	--	.06	.45	.76	.022	.055
18-20	1040	0940	924	4.5	67	125	--	--	.15	<.10	.63	.017	.040
20-22	1040	0840	1010	5.6	68	122	--	--	.12	.51	.63	.021	.040
22-24	0910	0010	929	4.6	50	76	--	--	.06	.38	.61	.020	.035
24-25	0110	0910	870	5.5	43	72	--	--	.15	.46	.75	.021	.040
25-29	0930	0930	1100	7.8	53	83	--	--	.17	.41	.73	.038	.045
29-30	1040	2140	1090	7.3	52	105	--	--	.07	.10	.62	.023	.045
OCT 30- NOV 01	2240	0940	924	3.6	46	102	--	--	.12	.47	.57	.020	.040
01-03	1030	0930	966	5.2	49	100	--	--	.20	.54	.53	.018	.040
03-05	1030	0930	830	5.2	46	94	--	--	.12	N.00	.59	.020	.045
05-06	1020	1720	506	4.6	49	90	--	--	.07	.37	.62	.030	.030
06-08	1820	0220	386	4.0	48	88	--	--	.01	.30	.59	.020	.030
09-11	1005	0905	295	5.4	56	105	--	--	.10	.68	.77	.025	.040
11-13	1005	0905	303	3.8	52	105	--	--	.76	.99	.67	.022	.030
13-15	1010	0910	276	3.7	61	122	--	--	.53	.97	.63	.016	.055
15-17	1000	0100	274	4.7	65	136	--	--	.25	.56	.58	.021	.045
19-21	1120	1020	268	6.2	72	158	--	--	.74	1.4	.69	.014	.040
21-23	1020	0120	277	3.0	72	156	--	--	.49	.87	.73	.015	.030
23-24	0220	1420	279	3.1	90	164	--	--	.28	.64	.81	.013	.030
26-27	1020	2120	487	5.0	63	120	--	--	.18	.26	.60	.011	.030
27-29	2220	0920	914	13	79	173	--	--	.12	.40	.78	.019	.050
NOV 29- DEC 01	1005	0905	1020	3.0	69	156	--	--	.13	.28	.77	.016	.035
01-03	1005	0905	1660	5.2	55	116	--	--	.12	.35	.64	.016	.035
03-04	1015	2115	1200	--	56	112	--	--	.05	.31	.64	.017	.040
04-06	2215	0915	835	1.2	49	105	--	--	.07	.40	.66	.016	.040
06-08	1050	0950	678	7.8	51	102	--	--	.12	.37	.74	.014	.035
08-10	1050	1050	575	8.7	53	94	--	--	.20	.57	.72	.014	.035
10-11	1055	2155	553	5.7	98	108	--	--	.12	.39	.74	.015	.035
11-13	2225	0955	472	4.9	74	108	--	--	.17	.48	.73	.015	.035
13-15	1105	1005	565	16	60	114	--	--	.14	.87	.87	.014	.050
15-17	1105	0605	2090	4.2	60	119	--	--	.21	.53	.80	.015	.035
17-18	1040	0940	2090	14	60	94	--	--	.09	.57	.84	.015	.050
24-25	1030	1530	2580	13	40	68	--	--	.09	<.10	1.1	.024	.055
25-27	1930	0930	2420	17	32	56	--	--	.14	N.92	1.0	.048	.095
27-29	1010	0910	1460	23	40	65	--	--	.08	.52	1.2	.018	.055
29-31	1010	0910	968	12	39	66	--	--	.10	.47	1.1	.017	.035
DEC 31- JAN 01	1010	2110	920	5.4	44	96	--	--	.08	.30	1.2	.016	.030
01-03	2210	0910	780	5.4	44	91	--	--	.10	.25	1.2	.017	.030
03-05	1020	0920	721	4.3	48	108	--	--	.16	.39	1.3	.025	.040
05-07	1020	0920	825	6.9	84	105	--	--	.14	.40	1.4	.017	.040
09-10	0835	0935	749	3.5	101	110	--	--	.29	.88	1.4	.018	.035
10-12	1015	0915	977	2.4	79	120	--	--	.29	.67	1.5	.018	.030
12-14	1015	0915	1430	3.2	86	131	--	--	.14	.49	1.3	.016	.030
14-16	1000	0900	1130	3.7	83	122	--	--	.06	.34	1.5	.023	.030
16-18	1000	0900	1040	5.2	72	105	--	--	.12	.43	1.7	.015	.030
18-20	1005	0905	758	3.6	93	119	--	--	.15	.49	1.6	.012	.030
20-22	1005	0905	759	3.6	79	117	--	--	.10	.42	1.4	.013	.030
22-24	1020	0920	911	3.1	78	122	--	--	.06	.38	1.5	.013	.030
24-26	1025	0925	1710	4.5	72	113	--	--	.20	.68	1.4	.012	.040
26-28	1025	0925	3030	29	62	89	--	--	.05	.99	1.6	.011	.075
28-29	1010	2110	2690	50	63	58	28	<2	.05	.43	1.4	.011	.055
29-31	2210	0910	2820	31	53	58	24	<5	.11	.54	1.5	.010	.050

N presumptive evidence of presence of material

STREAMS TRIBUTARY TO LAKE ONTARIO

431510077363501 GENESEE RIVER AT CHARLOTTE PUMP STATION, NEAR ROCHESTER, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	Ending time	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	TUR-BID-ITY (NTU) (00076)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
JAN 31-FEB 01	1100	1700	4570	35	89	56	--	--	.07	.49	1.4	.011	.060
04-05	1045	2245	5600	85	67	62	--	--	.08	.64	2.8	.026	.206
07-09	1030	0130	6760	200	36	46	166	11	.07	.83	1.5	.010	.500
09-10	0230	1529	6440	250	36	47	122	8	.05	.63	1.6	.010	.369
11-13	1105	1005	7130	110	44	43	114	8	.04	.65	2.0	.013	.264
13-15	1105	1005	5990	54	44	48	43	<5	.04	.48	2.1	.013	.124
15-17	1040	1540	5130	43	51	55	--	--	.04	.44	1.8	.011	.108
19-21	1020	0920	2750	26	58	75	--	--	<.01	.49	2.1	.012	.079
21-23	0955	0855	3040	12	51	75	--	--	.11	.43	1.9	.012	.051
23-25	0955	0855	3410	23	47	70	--	--	.05	.38	1.9	.011	.069
25-26	1015	2215	2740	18	43	64	--	--	.03	.38	1.6	.009	.049
26-28	2215	0915	2310	--	46	70	--	--	.08	.50	1.7	.009	.050
FEB 28-MAR 02	1040	0940	2300	11	59	80	--	--	.08	.41	1.8	.010	.049
02-04	1040	0940	1980	12	52	75	--	--	.06	.36	1.6	.010	.045
04-07	1010	0909	2510	15	54	68	--	--	.07	.42	1.6	.009	.044
07-08	1010	1709	2620	17	55	67	--	--	.11	.38	1.0	.005	.032
08-10	1810	0109	2930	18	62	68	--	--	.08	.39	1.3	.007	.075
11-12	1030	2130	3590	24	69	67	--	--	.04	.41	1.6	.009	.059
12-14	2230	0930	3410	34	53	61	23	<10	.08	.51	1.3	.009	.080
14-16	1020	0920	3100	17	48	60	--	--	.08	.50	1.4	.008	.053
16-18	1020	0920	2700	12	48	64	--	--	.06	.46	1.4	.008	.040
18-19	1005	2105	2610	15	52	65	--	--	.05	.43	1.4	.007	.049
20-21	2205	0905	2460	12	53	65	--	--	.09	.49	1.3	.008	.053
21-23	1000	0900	3490	8.0	61	74	--	--	.07	.50	1.4	.007	.035
23-25	1000	0900	3330	18	58	62	--	--	.05	.41	1.3	.007	.047
25-26	1010	2110	3020	16	77	63	--	--	.56	.45	1.3	.008	.052
26-28	2210	0910	5500	20	86	61	--	--	.08	.48	1.3	.009	.068
28-30	1015	1015	5920	87	62	59	68	<10	.04	.64	1.8	.009	.104
MAR 30-APR 01	1015	0915	5090	58	55	51	48	<5	.03	.53	1.4	.008	.155
01-02	1020	0620	4940	51	48	50	46	<5	.04	.52	1.4	.009	.114
02-03	0720	0320	5480	58	46	43	55	6	.06	.59	1.1	.011	.141
11-13	0935	0734	6430	87	37	40	87	7	.06	.60	1.2	.013	.100
15-15	0915	1515	9090	120	44	112	398	29	.08	1.3	1.2	.020	.550
18-20	0910	0010	6830	130	32	40	119	9	.09	.86	.94	.021	.296
20-21	0110	1910	5240	42	34	48	15	<5	.09	.59	.99	.027	.121
22-23	0920	2020	1770	48	45	67	60	5	.11	.71	1.1	.021	.108
23-25	2120	0820	4150	30	48	72	30	<5	.13	.60	1.2	.019	.078
25-27	0915	0815	4740	32	29	40	38	<5	.09	.50	1.0	.018	.070
27-29	0915	0815	2320	24	34	51	--	--	.10	.48	1.1	.019	.087
29-30	0940	2040	3100	34	48	73	35	<5	.09	.54	1.2	.017	.094
APR 30-MAY 02	2140	0840	2780	47	67	68	37	<5	.13	.79	1.5	.026	.159
02-04	0925	0825	2660	20	50	70	--	--	.14	.67	1.4	.018	.079
04-06	0925	0825	4660	16	51	73	--	--	.10	.51	1.4	.017	.069
06-07	0905	2005	4700	37	38	50	36	<5	.07	.51	.90	.015	.095
07-09	2105	0805	5020	39	38	48	42	<12	.10	.54	.85	.017	.100
09-11	0900	0800	5320	29	36	44	--	--	.09	.53	.76	.019	.084
11-13	0900	0800	5090	20	41	45	--	--	.14	.59	.79	.032	.096
13-13	0930	1929	6790	96	35	42	--	--	.11	.85	.69	.028	.257
16-17	1005	1005	7090	80	50	56	--	--	.10	1.1	1.6	.033	.227
20-21	0940	0839	8070	98	35	39	91	<5	.07	.71	.94	.021	.221
24-26	0935	0734	7270	54	30	36	66	<10	.08	.63	.83	.020	.103
28-29	0905	1104	4880	47	26	39	61	7	.08	.56	.94	.018	.116
MAY 31-JUN 01	1050	2150	7190	72	41	44	98	8	.10	.88	1.2	.029	.237
01-03	2250	0849	6010	58	35	44	75	7	.13	.88	1.1	.040	.200
03-04	0920	2020	4540	50	30	44	50	<6	.12	.80	.93	.033	.147
04-06	2120	0820	4830	38	35	52	38	<6	.14	.72	.97	.032	.122
06-08	0950	0449	6340	52	39	52	57	<6	.13	.84	1.4	.037	.153
10-10	0935	1934	5470	130	26	42	118	12	.07	.94	.79	.027	.350
13-14	0935	0335	5330	90	27	36	--	--	.13	.82	.94	.030	.213
17-18	1010	0909	4970	74	44	57	--	--	.15	1.0	1.6	.051	.237
20-22	0900	0000	4560	51	29	46	56	7	.14	.65	1.0	.031	.127
22-23	0100	1600	2920	39	39	39	39	<5	.17	.65	1.0	.030	.112
24-25	0950	1750	1630	32	37	62	42	<5	.14	.64	1.1	.026	.108
25-27	1850	0250	1560	24	43	72	--	--	.20	.73	1.1	.026	.087
27-29	0925	0825	3880	65	88	53	67	<7	.15	.80	1.1	.037	.864

STREAMS TRIBUTARY TO LAKE ONTARIO

431510077363501 GENESEE RIVER AT CHARLOTTE PUMP STATION, NEAR ROCHESTER, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	Ending time	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	TUR-BID-ITY (NTU) (00076)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
JUN 29- JUL 01	0925	0825	5740	180	49	75	144	<12	.12	.91	.98	.033	.554
01-02	0940	2040	3230	100	26	37	--	--	.08	.69	.67	.026	.252
03-05	0940	0840	1460	40	34	56	--	--	.16	.69	.84	.030	.085
05-06	0855	1955	1240	24	43	67	--	--	.20	.64	1.0	.029	.092
06-08	2055	0755	1040	16	39	69	--	--	.17	.56	.97	.026	.071
08-09	0950	1750	995	19	43	72	--	--	.12	.63	.97	.022	.077
10-11	1250	0850	820	13	44	78	--	--	.17	.65	.93	.023	.051
11-13	0905	0805	793	20	46	92	--	--	.26	.78	.88	.024	.094
13-15	0905	0805	693	15	46	87	--	--	.21	.64	.82	.015	.053
15-16	1005	2105	636	10	50	88	--	--	.12	.41	.76	.011	.039
16-18	2205	0905	703	11	50	97	--	--	.12	.44	.78	.005	.035
18-20	0920	0820	603	22	67	112	--	--	.15	.63	.75	.131	.065
20-22	0920	0820	564	14	53	123	--	--	.17	.57	.74	.015	.059
22-25	0925	0824	759	9.5	56	100	--	--	.13	.55	.76	.029	.047
25-27	0940	0840	685	7.8	49	86	--	--	.14	.58	.75	.024	.049
27-29	0940	0840	751	9.7	48	88	--	--	.10	.53	.83	.029	.063
29-30	0925	2025	869	31	50	90	42	<5	.17	.73	.68	.033	.107
JUL 30- AUG 01	2125	0825	897	12	66	101	--	--	.19	.64	.76	.029	.064
01-03	0920	0020	811	8.8	56	107	--	--	.23	.76	.78	.027	.047
03-04	0120	1419	561	3.4	55	108	--	--	.20	.70	.82	.026	.045
05-06	0910	2010	419	16	70	104	--	--	.13	.59	.61	.026	.086
06-08	2110	0810	396	7.6	58	89	--	--	.24	1.0	.65	.032	.070
08-10	0900	0800	416	3.0	51	84	--	--	.34	.87	.71	.040	.068
10-12	0900	0800	418	3.2	53	103	--	--	.29	.86	.65	.034	.059
12-13	0900	2000	394	4.2	57	117	--	--	.16	.61	.58	.047	.064
13-15	2100	0800	372	4.5	57	103	--	--	.27	.70	.62	.045	.068
15-17	0930	0830	452	8.1	52	110	--	--	.35	.84	.68	.043	.072
17-19	0930	0830	457	5.5	53	89	--	--	.34	.80	.62	.060	.082
19-21	0930	1029	429	6.6	48	77	--	--	.25	.67	.62	.056	.076
22-24	0840	0740	495	16	64	93	--	--	.45	1.0	.83	.065	.128
24-26	0840	0740	514	7.4	58	117	--	--	.38	.86	.95	.074	.108
26-27	1010	0909	527	7.6	55	100	--	--	.18	.62	.80	.065	.083
AUG 30- SEP 01	0915	0815	325	18	58	107	--	--	.39	.92	.74	.030	.086
03-05	0955	0855	521	13	50	83	--	--	.39	.97	.73	.059	.123
05-07	0915	0815	398	4.7	61	106	--	--	.80	1.3	1.1	.063	.114
07-09	0915	0815	346	4.2	62	95	--	--	.88	1.4	1.1	.083	.127
09-11	0835	0735	491	7.8	61	123	--	--	.51	1.3	.88	.054	.103
12-14	0855	0755	359	9.9	50	95	--	--	.37	.99	.90	.030	.068
14-16	0855	0755	394	8.9	52	92	--	--	.41	.98	.73	.029	.078
16-17	0935	2035	916	5.3	56	106	--	--	.22	.69	.63	.028	.061
17-19	2135	0835	938	5.9	67	109	--	--	.22	.61	.72	.022	.053
19-21	1000	0100	544	5.9	76	126	--	--	.25	.67	.71	.014	.034
21-22	0200	2059	500	4.3	70	91	--	--	.30	.74	.80	.023	.049
23-24	0950	1750	420	12	69	85	--	--	.36	.80	.89	.024	.065
26-27	0950	2050	590	23	45	70	--	--	.33	.83	.97	.023	.062
SEP 30- OCT 01	0945	1444	838	11	46	109	--	--	.10	.50	.69	.019	.073

Statewide Pesticide Monitoring Project

In June, 1997, the New York State Department of Environmental Conservation and the U.S. Geological Survey (USGS) began a cooperative effort to monitor pesticides in order to assess the presence and distribution of pesticides and their residues in the waters of the State. The initial monitoring effort included a statewide survey of pesticide concentrations in surface water, particularly in areas where pesticides are used and areas where surface water provides water supply. In the 2002 water year, water samples were collected from 9 public-water-supply intake sites and 3 community-water-system well sites in western New York State and analyzed for as many as 180 pesticides or pesticide degradates. Samples were analyzed for pesticide compounds using the USGS National Water Quality Laboratory (NWQL) SH2001/2010 method (Zaugg and others, 1995), NWQL SH2060 method (Furlong and others, 2001), and the Kansas District Organic Geochemistry Laboratory LCAA method (Lee and others, 2001). The pesticide schedules include selected pesticides and metabolites that are efficiently partitioned from a water sample by solid-phase extraction and are sufficiently volatile and thermally stable for analysis by gas and liquid chromatography. Results are also reported for the determination of caffeine, although not a pesticide, as part of the SH2060 analyses. Samples were filtered through a glass-fiber membrane filter with openings that are 0.7 microns in size to remove sediment and microorganisms. Therefore, all results are for compounds dissolved in water.

The sites shown in figures 9-10 were sampled as part of the state-wide monitoring project for pesticides. The sampling network included sites in eastern New York excluding Long Island (vol. 1) and Long Island (vol. 2), as well as those reported herein for western New York (vol. 3). Pesticide data from other sites located in eastern New York and Long Island are published in their respective volumes.

Laboratory Reporting Levels

The data tables list the pesticides analyzed for, the unit of measure (micrograms per liter, ug/L), the USGS National Water Information System parameter code, and the reported values for concentration or Laboratory Reporting Levels (LRL). The LRL may vary for particular pesticide compounds; it provides a quantitative index that indicates uncertainty in the measurement of low concentrations. When an analyte is detected and all criteria for a positive result are met, the concentration is reported. If the concentration is quantified but is less than the LRL, an 'E' code will be reported with the value. If the analyte is qualitatively identified as present, but the quantitative determination is substantially more uncertain, the NWQL will identify the result with an 'E' code even though the measured value is greater than the LRL. A value reported with an 'E' code should be used with caution. When no analyte is detected in a sample, the default reporting value is the LRL preceded by a less-than sign (<).

References Cited

Furlong, E.T., Anderson, B.D., Werner, S.L., Soliven, P.P., Coffey, L.J., and Burkhardt, M.R., 2001, Methods of analysis by the U.S. Geological Survey National Water Quality Laboratory-Determination of pesticides in water by graphitized carbon-based solid-phase extraction and high-performance liquid chromatography/mass spectrometry: U.S. Geological Survey Water-Resources Investigations Report 01-4134, 73 p.

Lee, E.A., Kish, J.L., Zimmerman, L.R., and Thurman, E.M., 2001, Methods of Analysis by the U.S Geological Survey Organic Geochemistry Research Group- Update and Additions to the Determination of Chloroacetanilide Herbicide Degradation Compounds in Water Using High-Performance Liquid Chromatography/Mass Spectrometry: U.S. Geological Survey Open File Report 01-10, 17 p.

Zaugg, S.D., Sandstrom, M.W., Smith, S.G., and Fehlberg, K.M., 1995, Methods of analysis by the U.S. Geological Survey National Water Quality Laboratory - Determination of pesticides in water by C-18 solid-phase extraction and capillary-column gas chromatography with selective-ion monitoring: U.S. Geological Survey Open-File Report 95-181, 49 p.

Statewide Pesticide Monitoring Project
Monitoring at Water-Supply Intake Sites at Lakes and Reservoirs in Western New York

Raw, untreated water from 9 surface-water intake sites (fig. 9) was sampled as part of the Statewide Pesticide Monitoring Project in cooperation with New York State Department of Environmental Conservation. All samples were analyzed by the USGS for the SH2001/2010 and LCAA pesticide schedules and selected samples were also analyzed for the SH2060 schedule. Additional samples of raw water and finished water at the Leroy Reservoir intake were sampled as part of the USGS National Water Quality Assessment Program; results for the finished-water samples are not included herein. Concentrations in all samples did not exceed Federal or State maximum contaminant levels (MCLs) for drinking water for any compound.

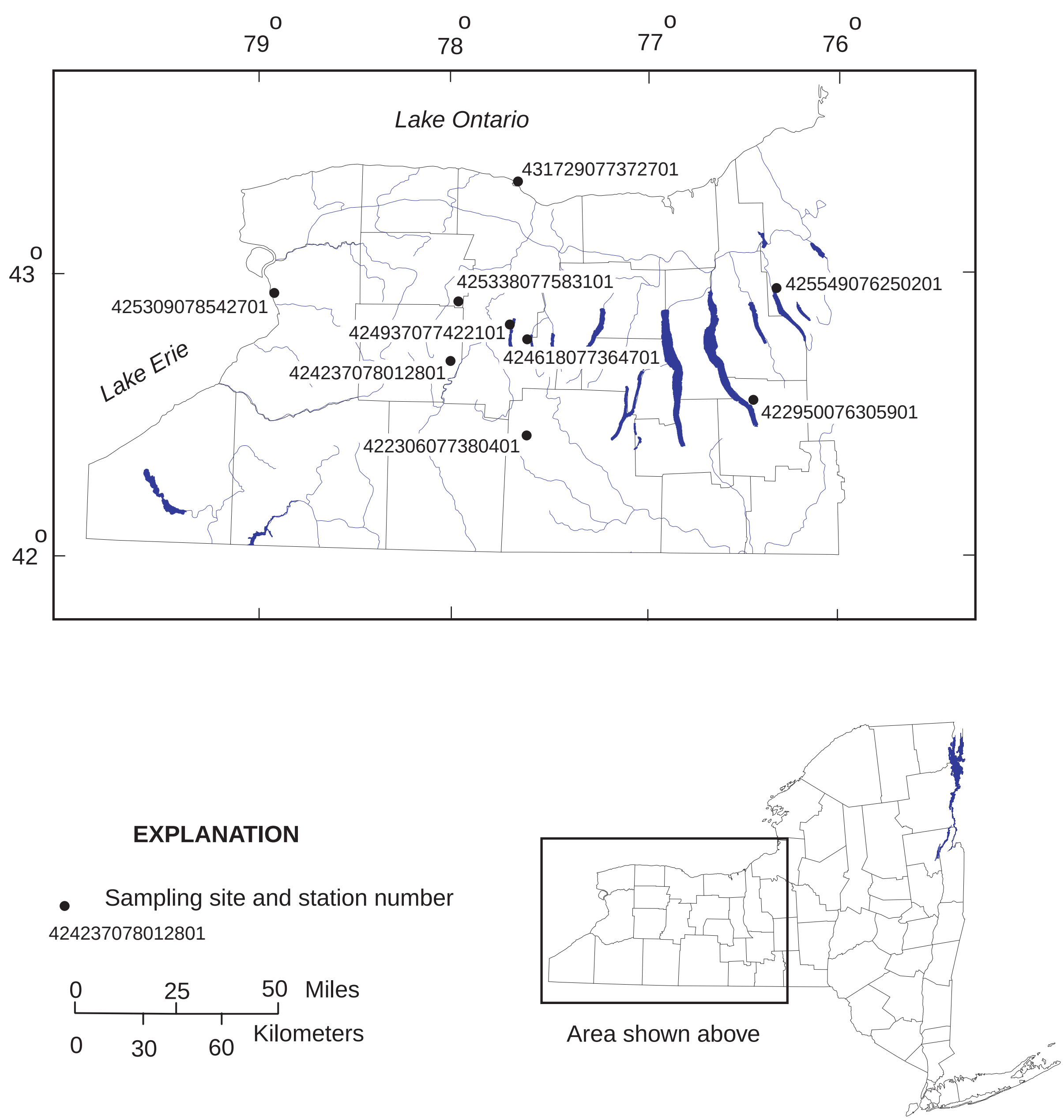


Figure 9. -- Location of public-water-supply intake sites that were sampled in western New York for pesticide analysis in water year 2001.

PESTICIDE ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	TER-BUTHYL-AZINE, WATER, DISS, REC (UG/L) (04022)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	FONOFOS WATER DISS REC (UG/L) (04095)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	P,P' DDE DISSOLV (UG/L) (34653)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	LINDANE DIS-SOLVED (UG/L) (39341)
422306077380401 HORNELL RESERVOIR 1 WATER-SUPPLY INTAKE, NY (LAT 42 23 06N LONG 077 38 04W)													
OCT 30...	1300	U	<.010	<.002	<.011	<.01	E.017	<.018	<.003	<.005	<.003	<.005	<.004
JAN 29...	1300	U	<.010	<.002	<.005	<.01	E.010	<.018	<.003	<.005	<.003	<.005	<.004
MAY 07...	1100	--	<.010	<.002	<.005	<.01	E.008	<.018	<.003	<.005	<.003	<.005	<.004
422950076305901 CAYUGA LAKE, BOLTON PT., WATER-SUPPLY INTAKE, NY (LAT 42 29 50N LONG 076 30 59W)													
OCT 29...	1130	U	<.010	<.002	E.010	<.01	E.141	E.013	<.003	<.005	<.003	<.005	<.004
JAN 28...	1130	U	<.010	<.002	.011	<.01	E.092	E.013	<.003	<.005	<.003	<.005	<.004
MAY 07...	1300	--	<.010	<.002	.010	M	E.100	E.008	<.003	<.005	<.003	<.005	<.004
JUL 23...	0900	--	<.010	<.002	.015	M	E.122	<.018	<.003	<.005	<.003	<.005	<.004
424237078012801 SILVER LAKE WATER-SUPPLY INTAKE AT PERRY, NY (LAT 42 42 37N LONG 078 01 28W)													
OCT 30...	1030	U	<.010	<.002	E.006	E.01	E.061	<.018	<.003	<.005	<.003	<.005	<.004
JAN 29...	1030	U	<.010	<.002	.006	E.01	E.045	<.018	<.003	<.005	<.003	<.005	<.004
MAY 07...	0800	--	<.010	<.002	.010	E.01	E.034	<.018	<.003	<.005	<.003	<.005	<.004
JUL 22...	1030	--	<.010	<.002	.013	E.01	E.064	<.018	<.003	<.005	<.003	<.005	<.004
424618077364701 HEMLOCK LAKE WATER-SUPPLY INTAKE, NY (LAT 42 46 18N LONG 077 36 47W)													
JAN 28...	0900	U	<.010	<.002	<.005	<.01	E.007	<.018	<.003	<.005	<.003	<.005	<.004
JUL 22...	1200	--	<.010	<.002	<.005	<.01	E.013	<.018	<.003	<.005	<.003	<.005	<.004
424937077422101 CONESUS LAKE, TOWN OF AVON PUBLIC-SUPPLY INTAKE NY (LAT 42 49 37N LONG 077 42 21W)													
OCT 30...	0930	U	<.010	<.002	.036	<.01	E.036	E.005	<.003	<.005	<.003	<.005	<.004
JAN 29...	0930	U	<.010	<.002	.035	E.01	E.029	E.006	<.003	<.005	<.003	<.005	<.004
425309078542701 CITY OF BUFFALO, LAKE ERIE INTAKE, NY (LAT 42 53 09N LONG 078 54 27W)													
OCT 29...	1230	U	<.010	<.002	E.009	<.01	E.049	E.011	<.003	<.005	<.003	<.005	<.004
JAN 28...	1200	U	<.010	<.002	.010	<.01	E.038	E.011	<.003	<.005	<.003	<.005	<.004
MAY 07...	1000	--	<.010	<.002	.014	<.01	E.036	E.009	<.003	<.005	<.003	<.005	<.004
JUL 22...	1200	--	<.010	<.002	.013	<.01	E.050	<.018	<.003	<.005	<.003	<.005	<.004
425549076250201 SKANEATELES LAKE WATER-SUPPLY INTAKE 1, NY (LAT 42 55 49N LONG 076 25 02W)													
JAN 28...	1000	U	<.010	<.002	<.005	<.01	E.047	<.018	<.003	<.005	<.003	<.005	<.004

E Estimated.
M presence of material verified but not quantified.
U Material specifically analyzed for but not detected.

PESTICIDE ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002--Continued

Date	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	MALA-THION, DIS-SOLVED (UG/L) (39532)	PARA-THION, DIS-SOLVED (UG/L) (39542)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)
422306077380401 HORNELL RESERVOIR 1 WATER-SUPPLY INTAKE, NY (LAT 42 23 06N LONG 077 38 04W)													
OCT													
30...	<.005	.024	<.027	<.007	<.005	.027	<.002	<.004	<.006	<.002	<.009	<.009	<.011
JAN													
29...	<.005	.015	<.027	<.010	<.005	.015	<.004	<.006	<.006	<.006	<.009	<.009	<.011
MAY													
07...	<.005	E.007	<.027	<.010	<.005	.009	<.004	<.006	<.006	<.006	<.009	<.009	<.011
422950076305901 CAYUGA LAKE, BOLTON PT., WATER-SUPPLY INTAKE, NY (LAT 42 29 50N LONG 076 30 59W)													
OCT													
29...	<.005	.046	<.027	<.007	<.005	.130	<.002	<.004	<.006	<.002	<.009	<.009	<.011
JAN													
28...	<.005	.050	<.027	<.010	<.005	.116	<.004	<.006	<.006	<.006	<.009	<.009	<.011
MAY													
07...	<.005	.047	<.027	<.010	<.005	.152	<.004	<.006	<.006	<.006	<.009	<.009	<.011
JUL													
23...	<.005	.074	<.027	<.010	<.005	.183	<.004	<.006	<.006	<.006	<.009	<.009	<.011
424237078012801 SILVER LAKE WATER-SUPPLY INTAKE AT PERRY, NY (LAT 42 42 37N LONG 078 01 28W)													
OCT													
30...	<.005	.018	<.027	<.007	<.005	.094	<.002	<.004	<.006	<.002	<.009	<.009	<.011
JAN													
29...	<.005	.016	<.027	<.010	<.005	.086	<.004	<.006	<.006	<.006	<.009	<.009	<.011
MAY													
07...	<.005	.016	<.027	<.010	<.005	.080	<.004	<.006	<.006	<.006	<.009	<.009	<.011
JUL													
22...	<.005	.073	<.027	<.010	<.005	.267	.017	<.006	<.006	<.006	<.009	<.009	<.011
424618077364701 HEMLOCK LAKE WATER-SUPPLY INTAKE, NY (LAT 42 46 18N LONG 077 36 47W)													
JAN													
28...	<.005	E.010	<.027	<.010	<.005	.016	<.004	<.006	<.006	<.006	<.009	<.009	<.011
JUL													
22...	<.005	.013	<.027	<.010	<.005	.022	<.004	<.006	<.006	<.006	<.009	<.009	<.011
424937077422101 CONESUS LAKE, TOWN OF AVON PUBLIC-SUPPLY INTAKE NY (LAT 42 49 37N LONG 077 42 21W)													
OCT													
30...	<.005	E.012	<.027	<.007	<.005	.069	<.002	<.004	<.006	<.002	<.009	<.009	<.011
JAN													
29...	<.005	E.011	<.027	<.010	<.005	.063	<.004	<.006	<.006	<.006	<.009	<.009	<.011
425309078542701 CITY OF BUFFALO, LAKE ERIE INTAKE, NY (LAT 42 53 09N LONG 078 54 27W)													
OCT													
29...	<.005	.017	<.027	<.007	<.005	.083	<.002	<.004	<.006	<.002	<.009	<.009	<.011
JAN													
28...	<.005	.017	<.027	<.010	<.005	.077	<.004	<.006	<.006	<.006	<.009	<.009	<.011
MAY													
07...	<.005	.016	<.027	<.010	<.005	.093	<.004	<.006	<.006	<.006	<.009	<.009	<.011
JUL													
22...	<.005	.018	<.027	<.010	<.005	.084	<.004	<.006	<.006	<.006	<.009	<.009	<.011
425549076250201 SKANEATELES LAKE WATER-SUPPLY INTAKE 1, NY (LAT 42 55 49N LONG 076 25 02W)													
JAN													
28...	<.005	E.009	<.027	<.010	<.005	.029	<.004	<.006	<.006	<.006	<.009	<.009	<.011

E Estimated.

PESTICIDE ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002--Continued

Date	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)
422306077380401 HORNELL RESERVOIR 1 WATER-SUPPLY INTAKE, NY (LAT 42 23 06N LONG 077 38 04W)													
OCT 30...	<.034	<.035	<.006	<.002	<.002	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02
JAN 29...	<.034	<.035	<.006	<.002	<.004	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02
MAY 07...	<.034	<.035	<.006	<.002	<.004	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02
422950076305901 CAYUGA LAKE, BOLTON PT., WATER-SUPPLY INTAKE, NY (LAT 42 29 50N LONG 076 30 59W)													
OCT 29...	<.034	<.035	<.006	<.002	<.002	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02
JAN 28...	<.034	<.035	<.006	<.002	<.004	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02
MAY 07...	<.034	<.035	<.006	<.002	<.004	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02
JUL 23...	<.034	<.035	<.006	<.002	<.004	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02
424237078012801 SILVER LAKE WATER-SUPPLY INTAKE AT PERRY, NY (LAT 42 42 37N LONG 078 01 28W)													
OCT 30...	<.034	<.035	<.006	<.002	<.002	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02
JAN 29...	<.034	<.035	<.006	<.002	<.004	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02
MAY 07...	<.034	<.035	<.006	<.002	<.004	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02
JUL 22...	<.034	<.035	<.006	.010	<.004	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02
424618077364701 HEMLOCK LAKE WATER-SUPPLY INTAKE, NY (LAT 42 46 18N LONG 077 36 47W)													
JAN 28...	<.034	<.035	<.006	<.002	<.004	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02
JUL 22...	<.034	<.035	<.006	.004	<.004	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02
424937077422101 CONESUS LAKE, TOWN OF AVON PUBLIC-SUPPLY INTAKE NY (LAT 42 49 37N LONG 077 42 21W)													
OCT 30...	<.034	<.035	<.006	<.002	<.002	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02
JAN 29...	<.034	<.035	<.006	<.002	<.004	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02
425309078542701 CITY OF BUFFALO, LAKE ERIE INTAKE, NY (LAT 42 53 09N LONG 078 54 27W)													
OCT 29...	<.034	<.035	<.006	<.002	<.002	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02
JAN 28...	<.034	<.035	<.006	<.002	<.004	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02
MAY 07...	<.034	<.035	<.006	<.002	<.004	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02
JUL 22...	<.034	<.035	<.006	<.002	<.004	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02
425549076250201 SKANEATELES LAKE WATER-SUPPLY INTAKE 1, NY (LAT 42 55 49N LONG 076 25 02W)													
JAN 28...	<.034	<.035	<.006	<.002	<.004	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02

PESTICIDE ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002--Continued

Date	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	ACETO-CHLOR ESA FLTRD 0.7 UM GF REC (UG/L) (61029)	ACETO-CHLOR OA FLTRD 0.7 UM GF REC (UG/L) (61030)	ALA-CHLOR ESA WAT FLT GF 0.7U REC (UG/L) (50009)
422306077380401 HORNELL RESERVOIR 1 WATER-SUPPLY INTAKE, NY (LAT 42 23 06N LONG 077 38 04W)													
OCT 30...	<.002	<.011	<.041	<.005	<.003	<.010	<.007	<.02	<.050	<.006	<.05	<.05	<.05
JAN 29...	<.002	<.011	<.041	<.005	<.003	<.022	<.007	--	<.050	<.006	<.05	<.05	<.05
MAY 07...	<.002	<.011	<.041	<.005	<.003	<.022	<.007	<.02	<.050	<.006	<.05	<.05	.14
422950076305901 CAYUGA LAKE, BOLTON PT., WATER-SUPPLY INTAKE, NY (LAT 42 29 50N LONG 076 30 59W)													
OCT 29...	<.002	<.011	<.041	<.005	<.003	<.010	<.007	<.02	<.050	<.006	<.05	<.05	<.05
JAN 28...	<.002	<.011	<.041	<.005	<.003	<.022	<.007	--	<.050	<.006	<.05	<.05	<.05
MAY 07...	<.002	<.011	<.041	<.005	<.003	<.022	<.007	<.02	<.050	<.006	<.05	<.05	<.05
JUL 23...	<.002	<.011	<.041	<.005	<.003	<.022	<.007	<.02	<.050	<.006	<.05	<.05	<.05
424237078012801 SILVER LAKE WATER-SUPPLY INTAKE AT PERRY, NY (LAT 42 42 37N LONG 078 01 28W)													
OCT 30...	<.002	<.011	<.041	<.005	<.003	<.010	<.007	<.02	<.050	<.006	<.05	<.05	.20
JAN 29...	<.002	<.011	<.041	<.005	<.003	<.022	<.007	--	<.050	<.006	<.05	<.05	.19
MAY 07...	<.002	<.011	<.041	<.005	<.003	<.022	<.007	<.02	<.050	<.006	<.05	<.05	.16
JUL 22...	<.002	<.011	<.041	<.005	<.003	<.022	<.007	<.02	<.050	<.006	<.05	<.05	.15
424618077364701 HEMLOCK LAKE WATER-SUPPLY INTAKE, NY (LAT 42 46 18N LONG 077 36 47W)													
JAN 28...	<.002	<.011	<.041	<.005	<.003	<.022	<.007	--	<.050	<.006	<.05	<.05	<.05
JUL 22...	<.002	<.011	<.041	<.005	<.003	<.022	<.007	<.02	<.050	<.006	<.05	<.05	<.05
424937077422101 CONESUS LAKE, TOWN OF AVON PUBLIC-SUPPLY INTAKE NY (LAT 42 49 37N LONG 077 42 21W)													
OCT 30...	<.002	<.011	<.041	<.005	<.003	<.010	<.007	<.02	<.050	<.006	<.05	<.05	.11
JAN 29...	<.002	<.011	<.041	<.005	<.003	<.022	<.007	--	<.050	<.006	<.05	<.05	.09
425309078542701 CITY OF BUFFALO, LAKE ERIE INTAKE, NY (LAT 42 53 09N LONG 078 54 27W)													
OCT 29...	<.002	<.011	<.041	<.005	<.003	<.010	<.007	<.02	<.050	<.006	<.05	<.05	<.05
JAN 28...	<.002	<.011	<.041	<.005	<.003	<.022	<.007	--	<.050	<.006	<.05	<.05	<.05
MAY 07...	<.002	<.011	<.041	<.005	<.003	<.022	<.007	<.02	<.050	<.006	<.05	<.05	.05
JUL 22...	<.002	<.011	<.041	<.005	<.003	<.022	<.007	<.02	<.050	<.006	<.05	<.05	<.05
425549076250201 SKANEATELES LAKE WATER-SUPPLY INTAKE 1, NY (LAT 42 55 49N LONG 076 25 02W)													
JAN 28...	<.002	<.011	<.041	<.005	<.003	<.022	<.007	--	<.050	<.006	<.05	<.05	<.05

PESTICIDE ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002--Continued

Date	ALACHLOR OA FLTRD 0.7 UM GF REC (UG/L) (61031)	DIMETHENAMID, ESA, WAT FLT (UG/L) (61951)	DIMETHENAMID OA, WATER FLT, REC (UG/L) (62482)	FLUFENACET, ESA, WAT FLT (UG/L) (61952)	FLUFENACET OA, WATER FLT, REC (UG/L) (62483)	METOLACHLOR ESA FLTRD 0.7 UM GF REC (UG/L) (61043)	METOLACHLOR OA FLTRD 0.7 UM GF REC (UG/L) (61044)
422306077380401 HORNELL RESERVOIR 1 WATER-SUPPLY INTAKE, NY (LAT 42 23 06N LONG 077 38 04W)							
OCT							
30...	<.05	<.05	<.05	<.05	<.05	.27	.05
JAN							
29...	<.05	<.05	<.05	<.05	<.05	.39	.14
MAY							
07...	<.05	<.05	<.05	<.05	<.05	.67	.18
422950076305901 CAYUGA LAKE, BOLTON PT., WATER-SUPPLY INTAKE, NY (LAT 42 29 50N LONG 076 30 59W)							
OCT							
29...	<.05	<.05	<.05	<.05	<.05	.42	.19
JAN							
28...	<.05	<.05	<.05	<.05	<.05	.50	.20
MAY							
07...	<.05	<.05	<.05	<.05	<.05	.49	.21
JUL							
23...	<.05	<.05	<.05	<.05	<.05	.46	.20
424237078012801 SILVER LAKE WATER-SUPPLY INTAKE AT PERRY, NY (LAT 42 42 37N LONG 078 01 28W)							
OCT							
30...	.05	<.05	<.05	<.05	<.05	.92	.34
JAN							
29...	<.05	<.05	<.05	<.05	<.05	.90	.37
MAY							
07...	.05	<.05	<.05	<.05	<.05	1.07	.41
JUL							
22...	<.05	<.05	<.05	<.05	<.05	1.07	.44
424618077364701 HEMLOCK LAKE WATER-SUPPLY INTAKE, NY (LAT 42 46 18N LONG 077 36 47W)							
JAN							
28...	<.05	<.05	<.05	<.05	<.05	.11	<.05
JUL							
22...	<.05	<.05	<.05	<.05	<.05	.10	<.05
424937077422101 CONESUS LAKE, TOWN OF AVON PUBLIC-SUPPLY INTAKE NY (LAT 42 49 37N LONG 077 42 21W)							
OCT							
30...	<.05	<.05	<.05	<.05	<.05	.19	.09
JAN							
29...	<.05	<.05	<.05	<.05	<.05	.19	.06
425309078542701 CITY OF BUFFALO, LAKE ERIE INTAKE, NY (LAT 42 53 09N LONG 078 54 27W)							
OCT							
29...	<.05	<.05	<.05	<.05	<.05	.08	<.05
JAN							
28...	<.05	<.05	<.05	<.05	<.05	.10	.05
MAY							
07...	<.05	<.05	<.05	<.05	<.05	.11	.07
JUL							
22...	<.05	<.05	<.05	<.05	<.05	.11	.10
425549076250201 SKANEATELES LAKE WATER-SUPPLY INTAKE 1, NY (LAT 42 55 49N LONG 076 25 02W)							
JAN							
28...	<.05	<.05	<.05	<.05	<.05	.05	<.05

PESTICIDE ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002--Continued

Date	Time	TER-BUTHYL-AZINE, WATER, DISS, REC (UG/L) (04022)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	FONOFOS WATER DISS REC (UG/L) (04095)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	P,P' DDE DISSOLV (UG/L) (34653)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	LINDANE DIS-SOLVED (UG/L) (39341)
431729077372701 MONROE COUNTY WATER AUTH. LAKE ONTARIO INTAKE, NY (LAT 43 17 29N LONG 077 37 27W)													
OCT													
29...	1400	U	<.010	<.002	E.007	<.01	E.055	.018	<.003	<.005	<.003	<.005	<.004
JAN													
28...	1400	U	<.010	<.002	.009	<.01	E.041	E.014	<.003	<.005	<.003	<.005	<.004
MAY													
07...	1200	--	<.010	<.002	.011	<.01	E.038	<.018	<.003	<.005	<.003	<.005	<.004
JUL													
22...	1300	--	<.010	<.002	.011	M	E.052	.019	<.003	<.005	<.003	<.005	<.004
425338077583101 LEROY RESERVOIR, RAW WATER SUPPLY, LEROY, NY (LAT 42 53 38N LONG 077 58 31W)													
OCT													
29...	1020	U	<.010	<.002	<.011	<.01	E.047	<.018	<.003	<.005	<.003	<.005	<.004
29...	1025	U	<.010	<.002	<.011	<.01	E.045	<.018	<.003	<.005	<.003	<.005	<.004
JAN													
28...	1000	U	<.010	<.002	<.005	<.01	E.029	<.018	<.003	<.005	<.003	<.005	<.004
MAY													
07...	0600	--	<.010	<.002	<.005	<.01	E.033	<.018	<.003	<.005	<.003	<.005	<.004
JUN													
11...	0810	--	<.010	<.002	<.005	<.01	.040	<.018	<.003	<.005	<.003	<.005	<.004
JUL													
22...	1000	--	<.010	<.002	<.005	<.01	E.081	<.018	<.003	<.005	<.003	<.005	<.004

Date	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	MALA-THION, DIS-SOLVED (UG/L) (39532)	PARA-THION, DIS-SOLVED (UG/L) (39542)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)
431729077372701 MONROE COUNTY WATER AUTH. LAKE ONTARIO INTAKE, NY (LAT 43 17 29N LONG 077 37 27W)													
OCT													
29...	<.005	.015	<.027	<.007	<.005	.079	<.002	<.004	<.006	<.002	<.009	<.009	<.011
JAN													
28...	<.005	.017	<.027	<.010	<.005	.076	<.004	<.006	<.006	<.006	<.009	<.009	<.011
MAY													
07...	<.005	.014	<.027	<.010	<.005	.092	<.004	<.006	<.006	<.006	<.009	<.009	<.011
JUL													
22...	<.005	.017	<.027	<.010	<.005	.083	<.004	<.006	<.006	<.006	<.009	<.009	<.011
425338077583101 LEROY RESERVOIR, RAW WATER SUPPLY, LEROY, NY (LAT 42 53 38N LONG 077 58 31W)													
OCT													
29...	<.005	E.008	<.027	<.007	<.005	.086	<.002	<.004	<.006	<.002	<.009	<.009	<.011
29...	<.005	E.008	<.027	<.007	<.005	.086	<.002	<.004	<.006	<.002	<.009	<.009	<.011
JAN													
28...	<.005	E.008	<.027	<.010	<.005	.061	<.004	<.006	<.006	<.006	<.009	<.009	<.011
MAY													
07...	<.005	.026	<.027	<.010	<.005	.043	<.004	<.006	<.006	<.006	<.009	<.009	<.011
JUN													
11...	<.005	.070	<.027	<.010	<.005	.077	.011	<.006	<.006	<.006	<.009	<.009	<.011
JUL													
22...	<.005	.140	<.027	<.010	<.005	.234	.013	<.006	<.006	<.006	<.009	<.009	<.011

E Estimated.
M presence of material verified but not quantified.
U Material specifically analyzed for but not detected.

PESTICIDE ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002--Continued

Date	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)
431729077372701 MONROE COUNTY WATER AUTH. LAKE ONTARIO INTAKE, NY (LAT 43 17 29N LONG 077 37 27W)													
OCT 29...	<.034	<.035	<.006	<.002	<.002	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02
JAN 28...	<.034	<.035	<.006	<.002	<.004	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02
MAY 07...	<.034	<.035	<.006	<.002	<.004	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02
JUL 22...	<.034	<.035	<.006	<.002	<.004	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02
425338077583101 LEROY RESERVOIR, RAW WATER SUPPLY, LEROY, NY (LAT 42 53 38N LONG 077 58 31W)													
OCT 29...	<.034	<.035	<.006	<.002	<.002	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02
29...	<.034	<.035	<.006	<.002	<.002	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02
JAN 28...	<.034	<.035	<.006	<.002	<.004	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02
MAY 07...	<.034	<.035	<.006	<.002	<.004	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02
JUN 11...	<.034	<.035	<.006	<.002	<.004	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02
JUL 22...	<.034	<.035	<.006	.014	<.004	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02

Date	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	ACETO- CHLOR ESA FLTRD 0.7 UM GF REC (UG/L) (61029)	ACETO- CHLOR OA FLTRD 0.7 UM GF REC (UG/L) (61030)	ALA- CHLOR ESA WAT FLT GF 0.7U REC (UG/L) (50009)
431729077372701 MONROE COUNTY WATER AUTH. LAKE ONTARIO INTAKE, NY (LAT 43 17 29N LONG 077 37 27W)													
OCT 29...	<.002	<.011	<.041	<.005	<.003	<.010	<.007	<.02	<.050	<.006	<.05	<.05	<.05
JAN 28...	<.002	<.011	<.041	<.005	<.003	<.022	<.007	--	<.050	<.006	<.05	<.05	<.05
MAY 07...	<.002	<.011	<.041	<.005	<.003	<.022	<.007	<.02	<.050	<.006	<.05	<.05	<.05
JUL 22...	<.002	<.011	<.041	<.005	<.003	<.022	<.007	<.02	<.050	<.006	<.05	<.05	.05
425338077583101 LEROY RESERVOIR, RAW WATER SUPPLY, LEROY, NY (LAT 42 53 38N LONG 077 58 31W)													
OCT 29...	<.002	<.011	<.041	<.005	<.003	<.010	<.007	<.02	<.050	<.006	<.05	<.05	.35
29...	<.002	<.011	<.041	<.005	<.003	<.010	<.007	<.02	<.050	<.006	<.05	<.05	.34
JAN 28...	<.002	<.011	<.041	<.005	<.003	<.022	<.007	--	<.050	<.006	<.05	<.05	.55
MAY 07...	<.002	<.011	<.041	<.005	<.003	<.022	<.007	<.02	<.050	<.006	<.05	<.05	2.14
JUN 11...	<.002	<.011	<.041	<.005	<.003	<.022	<.007	<.02	<.050	<.006	<.05	<.05	2.02
JUL 22...	<.002	<.011	<.041	<.005	<.003	<.022	<.007	<.02	<.050	<.006	<.05	<.05	1.49

PESTICIDE ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002--Continued

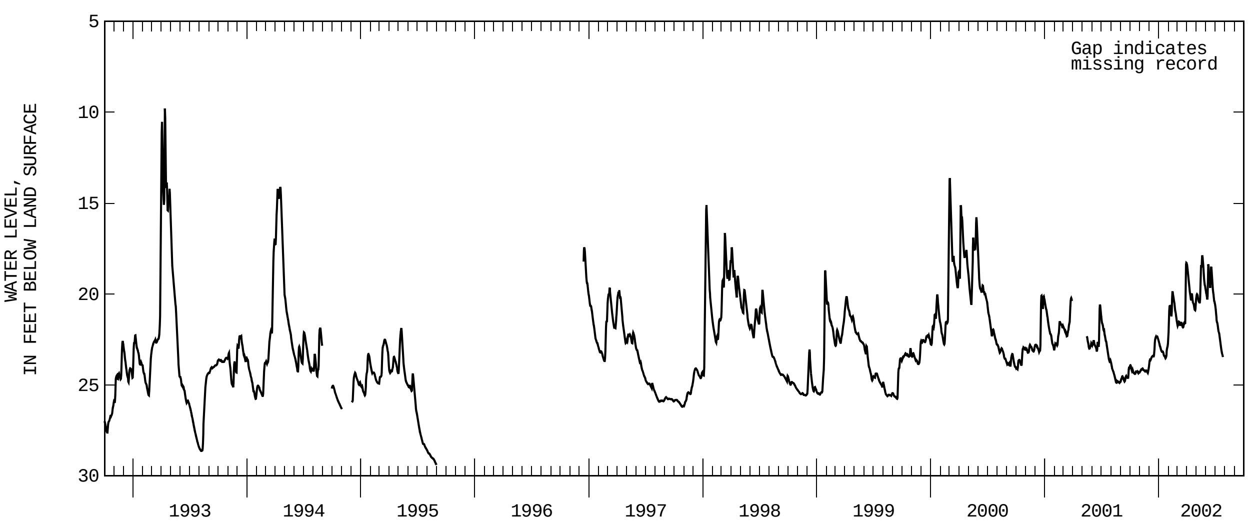
Date	ALACHLOR OA FLTRD 0.7 UM GF REC (UG/L) (61031)	DIMETHENAMID, ESA, WAT FLT (UG/L) (61951)	DIMETHENAMID OA, WATER FLT, REC (UG/L) (62482)	FLUFENACET, ESA, WAT FLT (UG/L) (61952)	FLUFENACET OA, WATER FLT, REC (UG/L) (62483)	METOLACHLOR ESA FLTRD 0.7 UM GF REC (UG/L) (61043)	METOLACHLOR OA FLTRD 0.7 UM GF REC (UG/L) (61044)
431729077372701 MONROE COUNTY WATER AUTH. LAKE ONTARIO INTAKE, NY (LAT 43 17 29N LONG 077 37 27W)							
OCT							
29...	<.05	<.05	<.05	<.05	<.05	.09	.06
JAN							
28...	<.05	<.05	<.05	<.05	<.05	.12	.06
MAY							
07...	<.05	<.05	<.05	<.05	<.05	.14	.09
JUL							
22...	<.05	<.05	<.05	<.05	<.05	.11	.08
425338077583101 LEROY RESERVOIR, RAW WATER SUPPLY, LEROY, NY (LAT 42 53 38N LONG 077 58 31W)							
OCT							
29...	.09	<.05	<.05	<.05	<.05	2.11	.92
29...	.08	<.05	<.05	<.05	<.05	1.78	.83
JAN							
28...	.21	<.05	<.05	<.05	<.05	1.82	.81
MAY							
07...	.48	<.05	<.05	<.05	<.05	4.48	1.32
JUN							
11...	.58	<.05	<.05	<.05	<.05	2.83	1.07
JUL							
22...	.29	<.05	<.05	<.05	<.05	2.91	1.03

BROOME COUNTY

420657075583501. Local number, Bm 121.
LOCATION.--Lat 42°06'57", long 75°58'35", Hydrologic Unit 02050103, at Camden and Main Streets, Johnson City. Owner: U.S. Geological Survey.
AQUIFER.--Unconfined aquifer in sand of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 inch, depth 53 ft, cased to 53 ft, open end.
INSTRUMENTATION.--Electronic data recorder--hourly; monthly measurements by USGS personnel.
DATUM.--Elevation of land-surface datum is 833.62 ft above NGVD of 1929. Measuring point: Top of shelter base, 3.42 ft above land-surface datum.
REMARKS.--Well cleaned from 46 ft to original depth on Oct. 19, 1970. Water level affected by floods of Susquehanna River and by pumping from municipal well field 1,100 ft south.
PERIOD OF RECORD.--March 1947 to August 1995, December 1996 to July 2002 (discontinued).
EXTREMES FOR PERIOD OF RECORD.--Maximum water-level depth below land surface, 33.47 ft below land-surface datum, Sept. 23, 1965; minimum water-level depth below land surface, 9.69 ft below land-surface datum, Apr. 12, 1993.
EXTREMES FOR CURRENT PERIOD.--October 2001 to July 2002: Maximum water-level depth below land surface, 24.40 ft, Oct. 16; minimum water-level depth below land surface, 17.86 ft, May 20.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.93	24.28	23.85	22.63	22.08	21.67	18.35	20.16	19.87	20.72	---	---
2	23.91	24.25	23.69	22.69	21.49	21.75	18.50	20.05	19.96	20.87	---	---
3	23.95	24.22	23.64	22.78	20.92	21.70	18.65	20.00	20.06	21.05	---	---
4	24.04	24.17	23.67	22.86	20.66	21.64	18.86	20.04	20.19	21.25	---	---
5	24.12	24.14	23.65	22.89	20.65	21.57	19.04	20.10	20.30	21.43	---	---
6	24.19	24.15	23.60	22.93	20.74	21.52	19.22	20.19	20.11	21.53	---	---
7	24.25	24.13	23.55	23.00	20.83	21.53	19.41	20.26	19.02	21.56	---	---
8	24.22	24.11	23.50	23.06	20.96	21.56	19.58	20.36	18.36	21.66	---	---
9	24.16	24.10	23.46	23.10	21.10	21.63	19.74	20.40	18.47	21.78	---	---
10	24.22	24.09	23.43	23.15	21.22	21.70	19.90	20.41	18.75	21.92	---	---
11	24.31	24.12	23.41	23.17	20.96	21.69	20.01	20.46	19.05	22.03	---	---
12	24.33	24.17	23.41	23.18	20.24	21.62	20.12	20.45	19.32	22.08	---	---
13	24.34	24.19	23.39	23.16	19.90	21.57	20.26	20.29	19.52	22.14	---	---
14	24.36	24.19	23.42	23.16	19.89	21.57	20.34	19.63	19.66	22.26	---	---
15	24.38	24.19	23.42	23.21	19.99	21.59	20.28	18.85	19.55	22.40	---	---
16	24.39	24.19	23.34	23.31	20.09	21.63	20.02	18.41	19.02	22.53	---	---
17	24.38	24.22	23.24	23.35	20.19	21.74	19.96	18.53	18.56	22.67	---	---
18	24.34	24.26	23.03	23.40	20.32	21.81	20.13	18.47	18.49	22.80	---	---
19	24.28	24.26	22.67	23.40	20.43	21.83	20.33	18.01	18.70	22.94	---	---
20	24.25	24.23	22.49	23.43	20.53	21.81	20.45	17.87	19.00	23.07	---	---
21	24.25	24.19	22.42	23.49	20.70	21.72	20.50	18.02	19.28	23.17	---	---
22	24.28	24.19	22.37	23.52	20.89	21.63	20.52	18.25	19.54	23.24	---	---
23	24.28	24.22	22.34	23.50	20.98	21.56	20.59	18.44	19.77	23.30	---	---
24	24.25	24.25	22.39	23.45	21.07	21.54	20.71	18.72	19.92	23.38	---	---
25	24.28	24.31	22.38	23.35	21.21	21.61	20.81	18.98	20.05	23.46	---	---
26	24.33	24.34	22.35	23.14	21.33	21.60	20.87	19.17	20.21	---	---	---
27	24.35	24.30	22.34	23.00	21.46	20.52	20.89	19.34	20.38	---	---	---
28	24.33	24.22	22.38	22.93	21.56	19.06	20.81	19.49	20.42	---	---	---
29	24.28	24.13	22.44	22.85	---	18.38	20.51	19.53	20.50	---	---	---
30	24.29	24.02	22.49	22.72	---	18.28	20.27	19.67	20.60	---	---	---
31	24.30	---	22.56	22.41	---	18.29	---	19.78	---	---	---	---
MEAN	24.24	24.19	23.04	23.10	20.80	21.20	19.99	19.43	19.55	---	---	---
MAX	24.39	24.34	23.85	23.52	22.08	21.83	20.89	20.46	20.60	---	---	---
MIN	23.91	24.02	22.34	22.41	19.89	18.28	18.35	17.87	18.36	---	---	---

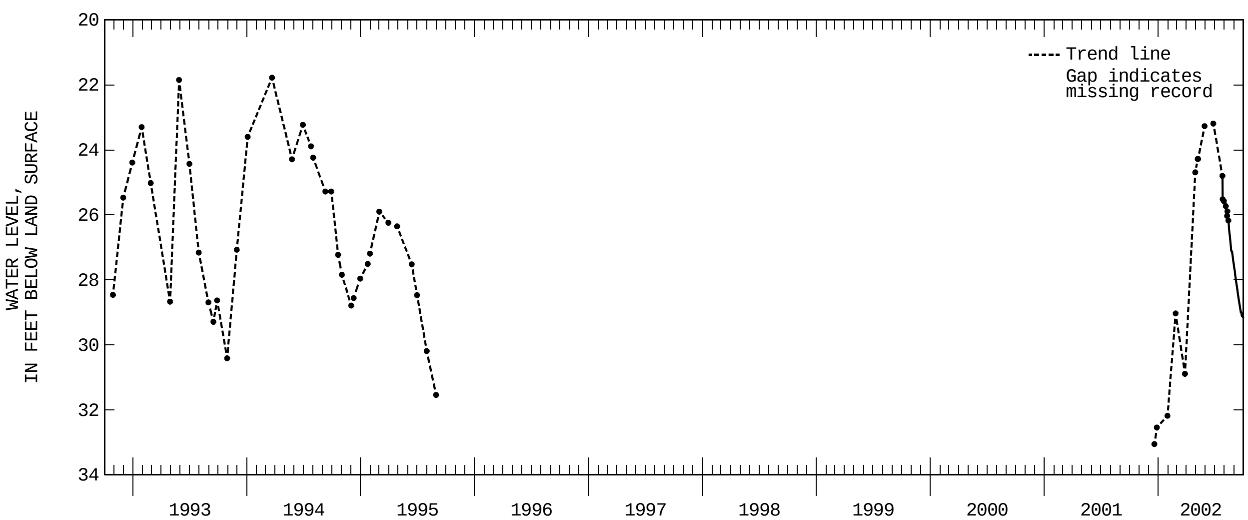


421138075511301. Local number, Bm 128.
LOCATION.--Lat 42°11'38", long 75°51'13", Hydrologic Unit 02050102, at end of Jeffery Drive, on Chenango Forks School District property at Kattelville. Owner: U.S. Geological Survey.
AQUIFER.--Unconfined aquifer in sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 inch, depth 53 ft, cased to 48.5 ft, screened 48.5 ft to 53 ft.
INSTRUMENTATION.--Electronic data recorder--hourly; monthly measurements by USGS personnel.
DATUM.--Elevation of land-surface datum is 908.58 ft above NGVD of 1929. Measuring point: Double file mark on top of coupling, 3.20 ft above land-surface datum.
REMARKS.--Water level may be affected by pumping in nearby village and school wells.
PERIOD OF RECORD.--September 1980 to August 1995 and December 2001 to September 2002. Records for September 1980 to February 1982 are unpublished and available in file of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Maximum measured water-level depth below land surface, 33.05, Dec. 19, 2001; minimum measured water-level depth below land surface, 19.17 ft, Apr. 16, 1984.
EXTREMES FOR CURRENT PERIOD.--December 2001 to September 2002: Maximum measured water-level depth below land surface, 33.05 ft, Dec. 19; minimum measured water-level depth below land surface, 23.19 ft, June 27.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	27.65
2	---	---	---	---	---	---	---	---	---	---	---	27.70
3	---	---	---	---	---	---	---	---	---	---	---	27.77
4	---	---	---	---	---	---	---	---	---	---	---	27.83
5	---	---	---	---	---	---	---	---	---	---	z25.73	27.90
6	---	---	---	---	---	---	---	---	---	---	---	27.97
7	---	---	---	---	---	---	---	z24.28	---	---	---	28.04
8	---	---	---	---	---	---	---	z24.28	---	---	---	28.11
9	---	---	---	---	---	---	---	---	---	---	z26.03	28.18
10	---	---	---	---	---	---	---	---	---	---	z25.89	28.24
11	---	---	---	---	---	---	---	---	---	---	---	28.30
12	---	---	---	---	---	---	---	---	---	---	---	28.39
13	---	---	---	---	---	---	---	---	---	---	26.17	28.45
14	---	---	---	---	---	---	---	---	---	---	26.28	28.52
15	---	---	---	---	---	---	---	---	---	---	26.38	28.58
16	---	---	---	---	---	---	---	---	---	---	26.48	28.64
17	---	---	---	---	---	---	---	---	---	---	26.58	28.70
18	---	---	---	---	---	---	---	---	---	---	26.65	28.76
19	---	---	z33.05	---	---	---	---	---	---	---	26.74	28.82
20	---	---	---	---	---	---	---	---	---	---	26.86	28.88
21	---	---	---	---	---	---	---	---	---	---	26.97	28.95
22	---	---	---	---	---	---	---	---	---	---	27.08	29.01
23	---	---	---	---	---	---	---	---	---	---	27.11	28.98
24	---	---	---	---	---	---	---	---	---	---	27.12	29.02
25	---	---	---	---	z29.03	---	---	---	---	z24.80	27.14	29.08
26	---	---	---	---	---	---	---	---	---	z25.52	27.22	29.12
27	---	---	z32.54	---	---	z30.89	---	---	z23.19	---	27.30	29.12
28	---	---	---	---	---	---	---	---	---	---	27.37	29.09
29	---	---	---	---	---	---	z24.69	z23.27	---	---	27.44	29.13
30	---	---	---	z32.18	---	---	---	---	---	z25.58	27.50	29.17
31	---	---	---	---	---	---	---	---	---	---	27.58	---
MEAN	---	---	---	---	---	---	---	---	---	---	---	28.54
MAX	---	---	---	---	---	---	---	---	---	---	---	29.17
MIN	---	---	---	---	---	---	---	---	---	---	---	27.65

z Measured by USGS personnel.



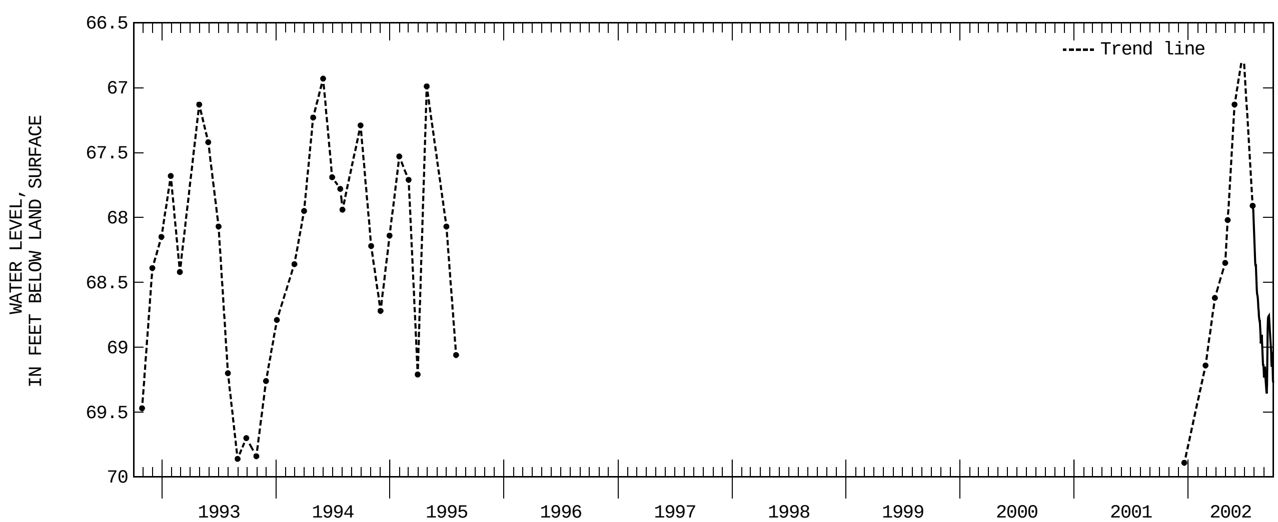
BROOME COUNTY--Continued

421157075535401. Local number, Bm 129.
LOCATION.--Lat 42°11'57", long 75°53'54", Hydrologic Unit 02050102, near Castile Creek. Owner: New York State Department of Transportation.
AQUIFER.--Shales of Middle to Upper Devonian age.
WELL CHARACTERISTICS.--Drilled water-supply well, diameter 6 inch, depth approximately 252 ft.
INSTRUMENTATION.--Electronic data recorder--hourly; monthly measurements by USGS personnel.
DATUM.--Elevation of land-surface datum is 1105.75 ft above NGVD of 1929. Measuring point: Top of coupling, 2.00 ft above land-surface datum.
REMARKS.--Well drilled by New York State Department of Transportation, originally intended as water-supply well for proposed rest area on Interstate Highway I-81.
PERIOD OF RECORD.--November 1985 to August 1995 and December 2001 to September 2002.
EXTREMES FOR PERIOD OF RECORD.--Maximum measured water-level depth below land surface, 75.83 ft, Nov. 1, 1985; minimum measured water-level depth below land surface, 66.71 ft, June 26, 2002.
EXTREMES FOR CURRENT PERIOD.--December 2001 to September 2002: Maximum measured water-level depth below land surface, 69.89 ft, Dec. 19; minimum measured water-level depth below land surface, 66.71 ft, June 26.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	68.21	69.21
2	---	---	---	---	---	---	---	---	---	---	68.26	69.15
3	---	---	---	---	---	---	---	---	---	---	68.34	69.16
4	---	---	---	---	---	---	---	---	---	---	68.37	69.18
5	---	---	---	---	---	---	---	---	---	---	68.36	69.23
6	---	---	---	---	---	---	---	---	---	---	68.43	69.27
7	---	---	---	---	---	---	---	z68.02	---	---	68.48	69.30
8	---	---	---	---	---	---	---	---	---	---	68.56	69.34
9	---	---	---	---	---	---	---	---	---	---	68.59	69.36
10	---	---	---	---	---	---	---	---	---	---	68.60	69.29
11	---	---	---	---	---	---	---	---	---	---	68.62	69.06
12	---	---	---	---	---	---	---	---	---	---	68.65	68.86
13	---	---	---	---	---	---	---	---	---	---	68.70	68.78
14	---	---	---	---	---	---	---	---	---	---	68.72	68.77
15	---	---	---	---	---	---	---	---	---	---	68.75	68.76
16	---	---	---	---	---	---	---	---	---	---	68.78	68.76
17	---	---	---	---	---	---	---	---	---	---	68.80	68.81
18	---	---	---	---	---	---	---	---	---	---	68.80	68.86
19	---	---	z69.89	---	---	---	---	---	---	---	68.85	68.90
20	---	---	---	---	---	---	---	---	---	---	68.89	68.93
21	---	---	---	---	---	---	---	---	---	---	68.97	68.97
22	---	---	---	---	---	---	---	---	---	---	68.95	69.00
23	---	---	---	---	---	---	---	---	---	---	68.97	69.04
24	---	---	---	---	---	---	---	---	---	---	68.90	69.10
25	---	---	---	---	z69.14	---	---	---	---	---	68.95	69.15
26	---	---	---	---	---	---	---	---	z66.71	z67.91	69.02	69.14
27	---	---	---	---	---	z68.62	---	---	---	67.92	69.09	69.04
28	---	---	---	---	---	---	---	---	---	67.94	69.14	69.17
29	---	---	---	---	---	---	z68.35	67.13	---	68.00	69.13	69.26
30	---	---	---	---	---	---	---	---	---	68.07	69.16	69.27
31	---	---	---	---	---	---	---	---	---	68.15	69.23	---
MEAN	---	---	---	---	---	---	---	---	---	---	68.75	69.07
MAX	---	---	---	---	---	---	---	---	---	---	69.23	69.36
MIN	---	---	---	---	---	---	---	---	---	---	68.21	68.76

z Measured by USGS personnel.

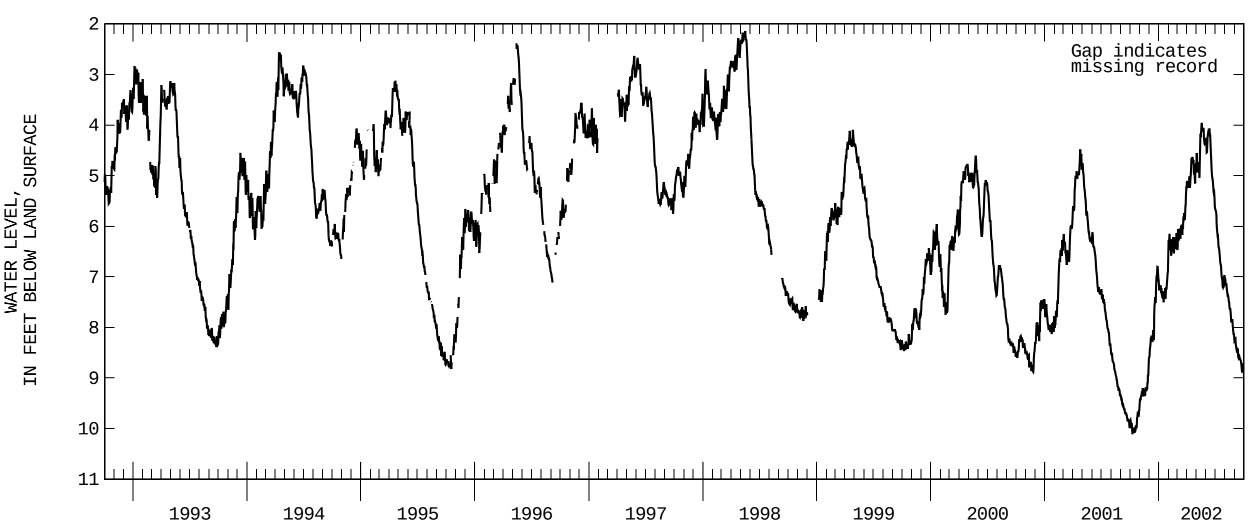


CATTARAUGUS COUNTY

420530078445201. Local number, Ct 121.
LOCATION.--Lat 42°05'30", long 78°44'52", Hydrologic Unit 05010001, near Red House. Owner: New York State Department of Environmental Conservation.
AQUIFER.--Confined aquifer in sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled unused well, diameter 6 inch, depth 53 ft, cased to 53 ft, open end.
INSTRUMENTATION.--Electronic data recorder--30 minute; monthly measurements by USGS personnel.
DATUM.--Elevation of land-surface datum is 1,467.08 ft above NGVD of 1929. Measuring point: Top of casing, 0.28 ft above land-surface datum, reset to 2.29 ft above land-surface datum, Apr. 3, 1997.
REMARKS.--Well is in a New York State owned and operated campground area. Extreme low water levels occurred from 1969 to 1979 due to the effect of pumping at the campground area. A central water system for the campground, utilizing a well about 1.5 mi from the observation well was put in operation in 1980.
PERIOD OF RECORD.--September 1950 to current year. Prior to Mar. 5, 1990, weekly float tape readings by observer.
EXTREMES FOR PERIOD OF RECORD.--Maximum measured water-level depth below land surface, 34.87 ft, Nov. 21, 1972; minimum measured water-level depth below land surface, 0.97 ft, June 26, 1989.
EXTREMES FOR CURRENT YEAR.--Maximum water-level depth below land surface, 10.13 ft, Oct. 8, 15, 16; minimum water-level depth below land surface, 3.93 ft, May 18.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.85	9.43	8.58	7.17	6.28	6.47	5.10	4.75	4.29	5.67	7.03	8.26
2	9.84	9.41	8.58	7.27	6.48	6.42	5.13	4.55	4.34	5.69	7.05	8.22
3	9.88	9.44	8.43	7.18	6.25	6.05	5.11	4.81	4.54	5.72	7.15	8.22
4	9.89	9.38	8.38	7.19	6.15	6.22	5.24	4.93	4.53	5.78	7.17	8.29
5	9.90	9.35	8.33	7.21	6.38	6.28	5.14	4.88	4.41	5.93	7.13	8.36
6	9.90	9.35	8.22	7.16	6.34	6.19	5.11	4.82	4.23	6.03	7.20	8.40
7	10.02	9.31	8.20	7.18	6.25	6.20	5.12	4.74	4.18	6.12	7.27	8.44
8	10.11	9.26	8.21	7.32	6.36	6.23	5.06	4.87	4.14	6.17	7.32	8.47
9	10.09	9.34	8.22	7.22	6.58	6.09	5.01	4.73	4.10	6.15	7.36	8.47
10	10.04	9.20	8.27	7.33	6.46	6.10	5.24	4.91	4.11	6.29	7.36	8.42
11	10.02	9.31	8.27	7.38	6.41	6.25	5.17	5.05	4.09	6.40	7.39	8.43
12	10.02	9.36	8.27	7.37	6.26	6.11	5.05	4.78	4.09	6.43	7.44	8.58
13	10.03	9.33	8.07	7.28	6.44	5.99	4.97	4.40	4.20	6.45	7.49	8.60
14	9.98	9.24	8.05	7.43	6.49	6.03	4.82	4.17	4.20	6.52	7.50	8.61
15	10.08	9.22	8.25	7.36	6.30	5.97	4.65	4.24	4.26	6.58	7.58	8.60
16	10.02	9.24	8.19	7.51	6.22	6.10	4.70	4.13	4.39	6.68	7.63	8.59
17	9.98	9.35	7.78	7.34	6.31	6.17	4.67	4.03	4.55	6.74	7.64	8.61
18	10.05	9.32	7.58	7.39	6.53	5.97	4.68	3.96	4.73	6.75	7.64	8.63
19	9.94	9.19	7.51	7.35	6.45	6.05	4.63	4.03	4.88	6.80	7.71	8.63
20	9.95	9.22	7.40	7.31	6.25	5.84	4.69	4.05	4.98	6.92	7.80	8.65
21	10.0	9.23	7.50	7.22	6.22	5.82	4.77	4.09	5.04	7.00	7.90	8.69
22	9.96	9.22	7.50	7.43	6.35	5.83	4.69	4.13	5.07	7.02	7.86	8.74
23	9.80	9.23	7.18	7.32	6.43	5.74	4.93	4.07	5.12	7.07	7.87	8.81
24	9.77	9.21	7.03	7.20	6.43	5.79	4.98	4.06	5.21	7.19	7.84	8.85
25	9.70	9.10	7.04	7.25	6.31	5.87	4.88	4.24	5.31	7.21	7.93	8.89
26	9.71	9.09	6.93	7.20	6.14	5.69	5.06	4.29	5.35	7.19	8.00	8.85
27	9.73	8.93	6.80	7.12	6.15	5.62	5.15	4.35	5.33	7.22	8.08	8.71
28	9.76	8.96	6.80	7.03	6.34	5.57	4.78	4.38	5.43	7.17	8.13	8.82
29	9.67	8.82	6.91	6.93	---	5.35	4.81	4.37	5.60	7.01	8.13	8.87
30	9.63	8.62	7.03	6.89	---	5.23	4.77	4.35	5.66	6.97	8.19	8.86
31	9.52	---	7.07	6.69	---	5.23	---	4.25	---	7.02	8.27	---
MEAN	9.90	9.22	7.76	7.23	6.34	5.95	4.94	4.43	4.68	6.58	7.61	8.59
MAX	10.11	9.44	8.58	7.51	6.58	6.47	5.24	5.05	5.66	7.22	8.27	8.89
MIN	9.52	8.62	6.80	6.69	6.14	5.23	4.63	3.96	4.09	5.67	7.03	8.22

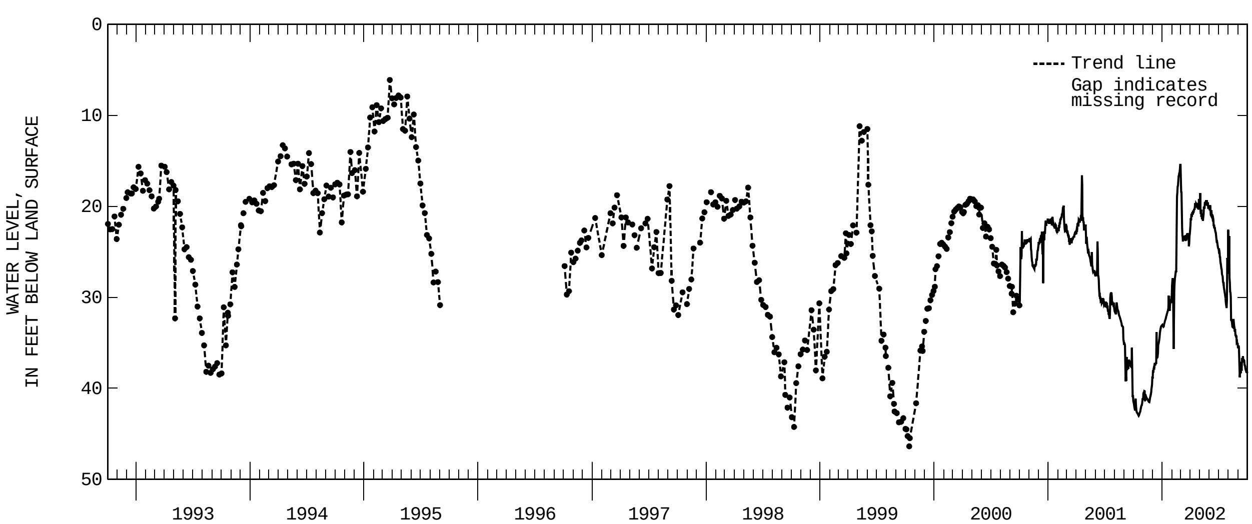


CHAUTAUQUA COUNTY

420815079121401. Local number, Cu 10.
LOCATION.--Lat 42°08'15", long 79°12'14", Hydrologic Unit 05010002, at Falconer. Owner: City of Jamestown.
AQUIFER.--Confined aquifer in sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 12 inch to 10 inch, depth 232 ft, filled in from original depth of 240 ft, diameter 12 inch from 0 ft to 130 ft, diameter 10 inch from 130 ft to 240 ft, slotted 130 ft to 144 ft, open end.
INSTRUMENTATION.--Electronic data recorder--hourly; monthly measurements by USGS personnel.
DATUM.--Elevation of land-surface datum is 1,252.52 ft above NGVD of 1929. Measuring point: Top of well casing, 5.46 ft above land-surface datum.
REMARKS.--Water level affected by pumping from municipal well field.
PERIOD OF RECORD.--November 1939 to September 1943, August 1946 to August 1995, October 1996 to current. Records for November 1939 to September 1943, August 1946 to September 1976 are unpublished and available in files of the Geological Survey. Weekly measurements by City of Jamestown personnel until Oct. 13, 1999. Prior to Dec. 14, 1978, Type F graphic recorder at same site and datum. Dec. 14, 1978 to Sept. 16, 1982, digital recorder every fifth day high water-level published. Sept. 1982 to Sept. 1987, twice-daily readings by City of Jamestown personnel, every fifth day high water-level published.
REVISED RECORD.--WDR NY-87-3: 1983-86. WDR NY-91-3: 1988-90.
EXTREMES FOR PERIOD OF RECORD.--Maximum measured water-level depth below land surface, 66.6 ft, Nov. 3, 1971; minimum measured water-level depth, 5.2 ft, above land surface, Mar. 14, 1942.
EXTREMES FOR CURRENT YEAR.--Maximum water-level depth below land surface, 44.53 ft, Oct. 9; minimum water-level depth below land surface, 9.76 ft, May 2.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

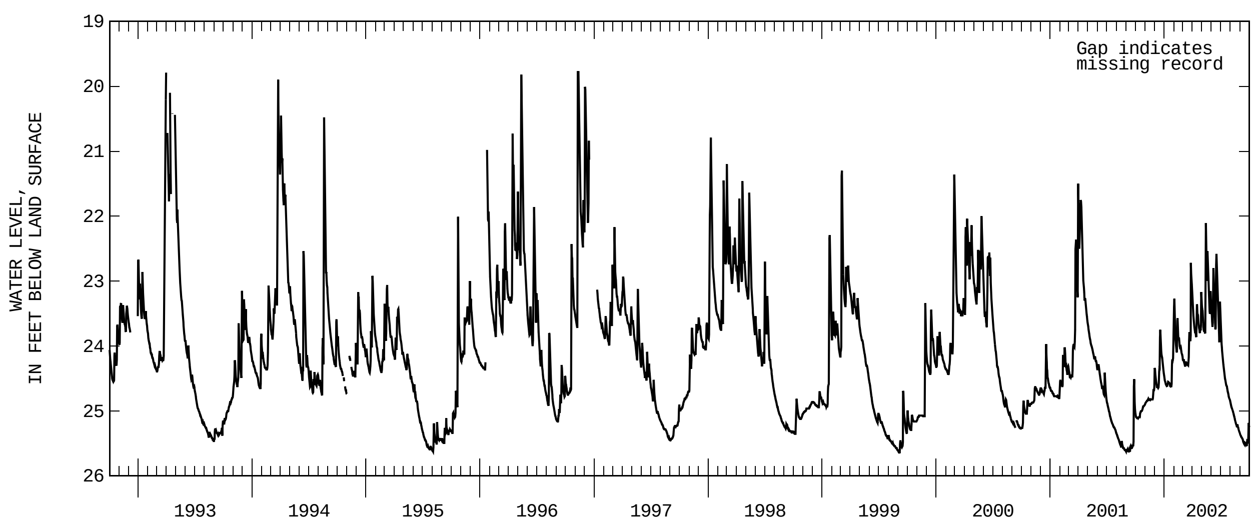
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41.54	40.58	38.95	33.03	28.71	16.97	22.10	20.07	20.17	24.94	26.59	35.50
2	41.73	40.49	38.02	33.10	28.21	18.38	21.32	18.55	20.44	24.87	27.10	35.31
3	42.01	40.47	38.29	33.19	27.90	18.47	21.53	20.50	19.86	25.12	23.26	35.58
4	42.19	40.32	37.87	33.24	28.21	20.80	20.82	20.83	20.33	25.63	27.88	36.06
5	42.35	40.33	37.71	33.20	31.66	22.40	21.16	20.36	20.92	25.52	28.32	37.37
6	42.45	41.38	37.74	33.08	35.68	23.24	20.95	21.15	21.00	26.10	29.37	38.81
7	41.14	40.64	37.35	32.96	33.59	23.27	20.62	20.78	20.41	26.27	29.46	38.33
8	41.71	41.28	37.24	32.82	29.15	23.86	20.90	21.42	21.07	26.54	29.98	37.11
9	42.19	41.25	37.49	32.67	28.39	23.60	20.46	21.28	20.92	26.82	32.56	38.35
10	42.55	41.15	37.27	32.58	27.92	23.22	20.74	21.26	20.96	26.91	32.48	37.68
11	42.62	41.01	37.24	32.46	27.65	23.46	20.64	21.59	21.33	27.46	32.61	37.84
12	42.69	41.13	37.34	32.31	27.39	23.70	20.36	21.18	21.25	27.56	32.87	38.08
13	42.76	41.15	33.82	32.14	27.08	23.62	20.33	20.88	21.43	27.66	33.23	36.68
14	42.80	41.17	35.77	32.04	27.24	23.42	20.30	20.03	22.09	28.20	33.28	36.86
15	42.91	41.22	36.64	31.91	24.60	23.43	19.96	20.11	22.14	28.41	33.17	37.16
16	42.96	41.30	36.61	31.80	20.85	23.80	19.64	20.25	22.04	28.34	33.09	36.47
17	43.03	41.39	36.46	31.66	18.92	23.14	19.79	19.54	22.44	28.95	32.37	37.02
18	42.99	41.45	36.12	31.55	18.49	23.76	20.14	19.65	22.29	29.14	32.75	36.87
19	42.85	41.52	35.12	31.41	17.82	23.52	19.70	19.46	22.64	29.37	33.15	36.91
20	42.77	41.54	35.11	31.29	17.74	23.36	19.77	19.77	22.78	29.61	33.28	36.95
21	42.70	41.35	34.91	29.83	17.20	22.99	19.85	19.31	22.85	29.83	33.77	37.42
22	42.60	41.13	34.69	31.20	16.71	23.62	19.62	19.87	23.18	30.09	33.49	37.46
23	42.39	40.93	34.36	31.13	16.62	22.95	20.01	19.31	23.56	30.58	34.16	37.60
24	42.19	40.78	33.95	31.48	16.36	23.38	19.67	19.92	23.85	30.86	34.17	37.82
25	42.04	40.62	33.68	30.94	16.26	23.44	20.26	19.62	23.84	31.08	34.41	37.97
26	41.92	40.42	33.49	30.70	15.95	23.36	19.73	19.93	24.05	31.08	34.20	38.03
27	41.86	40.11	33.34	30.35	15.44	24.39	20.36	19.54	24.32	30.30	34.96	38.19
28	41.67	39.89	33.22	30.37	15.43	24.11	19.18	20.15	24.54	25.67	34.91	38.31
29	41.35	39.61	33.14	30.63	---	23.26	19.78	20.14	24.63	25.91	35.17	38.13
30	41.11	38.72	33.10	29.89	---	23.02	19.92	19.89	24.67	27.40	35.03	38.32
31	41.31	---	33.08	30.02	---	22.59	---	20.07	---	22.58	35.60	---
MEAN	42.24	40.81	35.78	31.77	23.47	22.79	20.32	20.21	22.20	27.70	32.15	37.34
MAX	43.03	41.54	38.95	33.24	35.68	24.39	22.10	21.59	24.67	31.08	35.60	38.81
MIN	41.11	38.72	33.08	29.83	15.43	16.97	19.18	18.55	19.86	22.58	23.26	35.31



420829076484801. Local number, Cm 46.
LOCATION.--Lat 42°08'29", long 76°48'48", Hydrologic Unit 02050105, near Horseheads. Owner: Unknown.
AQUIFER.--Unconfined aquifer in sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled unused well, diameter 6 inch, depth 34 ft, cased to 34 ft, open end.
INSTRUMENTATION.--Electronic data recorder--30-minute; monthly measurements by USGS personnel.
DATUM.--Elevation of land-surface datum is 885.69 ft above NGVD of 1929. Measuring point: Top of pipe flange, 3.44 ft above land-surface datum.
REMARKS.--Water level affected by stage of Newtown Creek.
PERIOD OF RECORD.--October 1955 to October 2002(discontinued). Records for October 1955 to September 1976 are unpublished and available in files of the Geological Survey. Prior to Feb. 25, 1988, monthly measurements with chalked tape by USGS personnel.
EXTREMES FOR PERIOD OF RECORD.--Maximum measured water-level depth below land surface, 26.30 ft, July 18, 1980; minimum measured water-level depth below land surface, 18.93 ft, April 25, 1961.
EXTREMES FOR CURRENT YEAR.--Maximum water-level depth below land surface, 25.53 ft, Sept. 20, 21, 22; minimum water-level depth below land surface, 21.97 ft, May 14.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.06	24.88	24.34	24.49	23.39	24.21	23.26	23.38	23.41	23.80	24.87	25.36
2	25.08	24.87	24.35	24.53	23.27	24.22	23.35	23.43	23.51	23.89	24.90	25.37
3	25.10	24.86	24.43	24.54	23.54	24.22	23.44	23.45	23.62	23.97	24.92	25.38
4	25.10	24.86	24.48	24.56	23.69	24.20	23.53	23.55	23.70	24.02	24.94	25.39
5	25.11	24.85	24.52	24.58	23.86	24.25	23.60	23.63	23.64	24.07	24.95	25.40
6	25.10	24.85	24.56	24.59	23.93	24.26	23.66	23.71	23.08	24.12	24.96	25.41
7	25.10	24.84	24.59	24.59	23.98	24.28	23.71	23.74	22.80	24.17	24.98	25.41
8	25.10	24.84	24.63	24.61	24.03	24.30	23.75	23.77	23.08	24.22	25.00	25.42
9	25.11	24.84	24.62	24.62	24.08	24.32	23.78	23.78	23.28	24.28	25.01	25.43
10	25.10	24.82	24.63	24.61	24.10	24.27	23.78	23.74	23.44	24.32	25.03	25.46
11	25.10	24.81	24.64	24.59	23.61	24.24	23.80	23.80	23.55	24.37	25.06	25.48
12	25.09	24.82	24.65	24.58	23.57	24.26	23.84	23.81	23.65	24.41	25.07	25.48
13	25.09	24.83	24.64	24.55	23.69	24.26	23.86	23.34	23.74	24.45	25.09	25.50
14	25.09	24.83	24.56	24.55	23.84	24.27	23.64	22.11	23.73	24.49	25.11	25.51
15	25.04	24.83	24.39	24.56	23.87	24.28	23.36	22.42	23.39	24.52	25.13	25.52
16	25.03	24.82	24.34	24.57	23.88	24.29	23.38	22.77	22.75	24.54	25.14	25.49
17	25.01	24.83	24.34	24.57	23.87	24.29	23.50	23.00	22.58	24.57	25.17	25.49
18	25.01	24.82	23.87	24.58	23.93	24.30	23.51	22.73	22.95	24.60	25.19	25.51
19	25.00	24.82	23.75	24.61	23.99	24.24	23.53	22.54	23.21	24.61	25.20	25.52
20	25.00	24.82	23.89	24.62	24.02	24.17	23.62	22.82	23.39	24.62	25.21	25.53
21	25.00	24.82	24.00	24.61	24.01	23.91	23.68	22.98	23.53	24.65	25.23	25.53
22	24.99	24.82	24.08	24.62	24.00	23.79	23.72	23.11	23.64	24.68	25.25	25.53
23	24.98	24.82	24.14	24.62	24.03	23.85	23.74	23.21	23.72	24.70	25.21	25.46
24	24.95	24.82	24.16	24.58	24.07	23.89	23.79	23.30	23.79	24.72	25.23	25.46
25	24.93	24.80	24.18	24.29	24.10	23.92	23.80	23.40	23.87	24.75	25.25	25.48
26	24.93	24.73	24.23	24.23	24.12	23.83	23.70	23.46	23.94	24.77	25.27	25.48
27	24.92	24.69	24.28	24.24	24.14	22.72	23.76	23.50	23.74	24.79	25.29	25.41
28	24.92	24.69	24.33	24.22	24.16	22.89	23.68	23.49	23.31	24.80	25.30	25.18
29	24.91	24.68	24.38	24.19	---	22.97	23.17	23.16	23.51	24.81	25.32	25.22
30	24.91	24.63	24.42	24.04	---	23.05	23.27	23.28	23.68	24.82	25.33	25.25
31	24.90	---	24.45	23.83	---	23.17	---	23.38	---	24.85	25.35	---
MEAN	25.02	24.81	24.35	24.48	23.88	23.97	23.61	23.28	23.44	24.46	25.13	25.44
MAX	25.11	24.88	24.65	24.62	24.16	24.32	23.86	23.81	23.94	24.85	25.35	25.53
MIN	24.90	24.63	23.75	23.83	23.27	22.72	23.17	22.11	22.58	23.80	24.87	25.18

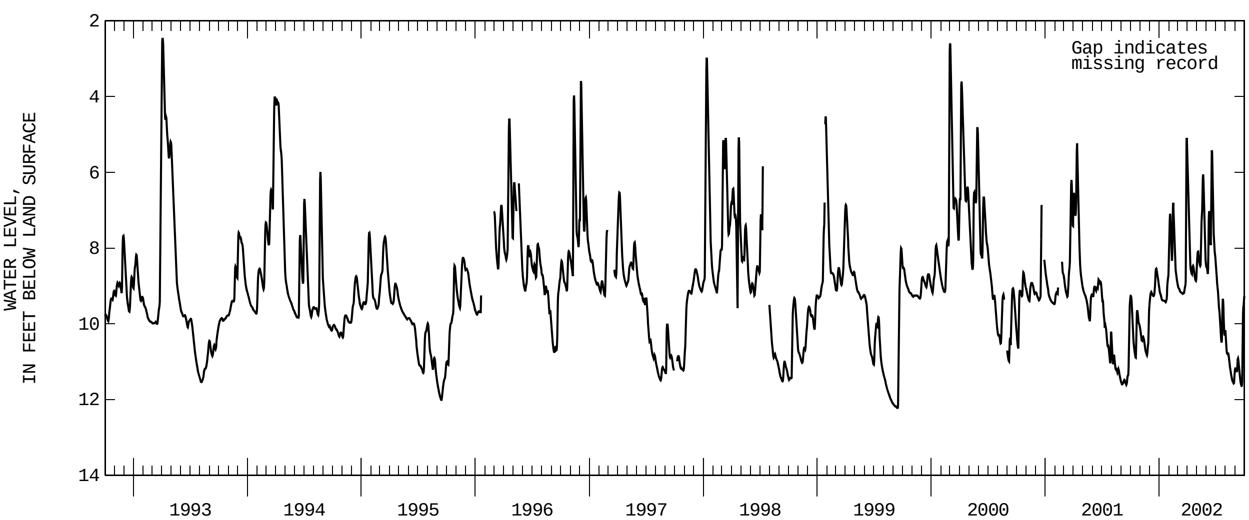


CHENANGO COUNTY

421556075281602. Local number, Cn 12.
LOCATION.--Lat 42°15'56", long 75°28'16", Hydrologic Unit 02050101, 400 ft south of intersection of County Highways 39 and 12, 0.5 mi east of Susquehanna River, and 2.0 mi south of Bainbridge. Owner: Private.
AQUIFER.--Unconfined aquifer in gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 inch, depth 13 ft, cased to 13 ft, open end.
INSTRUMENTATION.--Electronic data recorder--hourly; monthly measurements by USGS personnel.
DATUM.--Elevation of land-surface datum is 979.28 ft above NGVD of 1929. Measuring point: File mark at top of shelter base, 1.37 ft above land-surface datum.
REMARKS.--This well drilled April 1974 as a replacement for 421556075281601 (local number Cn 11), located 90 ft north, which has a period of record from October 1965 to September 1972 (unpublished).
PERIOD OF RECORD.--April 1975 to current year. Records for April 1975 to September 1976 are unpublished and available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Maximum water-level depth below land surface, 12.22 ft, Sept. 13, 14, 15, 16, 1999; minimum water-level depth below land surface, 2.45 ft, Apr. 3-4, 1993.
EXTREMES FOR CURRENT YEAR.--Maximum water-level depth below land surface, 11.66 ft, Sept. 22; minimum water-level depth below land surface, 5.04 ft, Mar. 30.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.26	10.17	9.42	9.09	8.25	8.99	5.75	8.47	8.50	8.47	10.24	11.18
2	9.27	10.24	9.33	9.15	7.77	9.02	6.25	8.28	8.51	8.59	10.39	11.18
3	9.32	10.31	9.24	9.19	7.30	9.05	6.72	8.16	8.55	8.71	10.55	11.20
4	9.41	10.38	9.20	9.21	7.09	9.07	7.14	8.10	8.61	8.82	10.67	11.21
5	9.56	10.44	9.18	9.23	7.15	9.08	7.48	8.09	8.68	8.91	10.75	11.24
6	9.75	10.45	9.16	9.25	7.36	9.09	7.76	8.14	8.53	8.99	10.78	11.27
7	9.97	10.41	9.18	9.29	7.62	9.11	8.01	8.21	7.85	9.07	10.80	11.23
8	10.19	10.36	9.20	9.33	7.89	9.13	8.21	8.30	7.26	9.17	10.79	11.07
9	10.36	10.34	9.21	9.36	8.14	9.15	8.36	8.37	7.03	9.29	10.76	10.94
10	10.48	10.34	9.24	9.38	8.34	9.16	8.48	8.42	7.10	9.45	10.80	10.91
11	10.58	10.36	9.25	9.38	8.12	9.17	8.55	8.45	7.33	9.58	10.87	10.96
12	10.66	10.40	9.26	9.38	7.43	9.18	8.59	8.47	7.61	9.64	10.93	11.05
13	10.72	10.44	9.27	9.39	6.94	9.18	8.63	8.45	7.81	9.74	11.01	11.15
14	10.78	10.50	9.26	9.39	6.80	9.19	8.68	8.20	7.92	9.89	11.07	11.25
15	10.83	10.57	9.24	9.39	6.92	9.19	8.69	7.73	7.88	10.05	11.13	11.34
16	10.88	10.63	9.17	9.39	7.16	9.20	8.63	7.30	6.95	10.20	11.19	11.41
17	10.89	10.69	9.10	9.39	7.47	9.21	8.54	7.12	5.84	10.33	11.24	11.49
18	10.80	10.73	9.00	9.39	7.78	9.20	8.47	6.97	5.42	10.44	11.29	11.54
19	10.46	10.75	8.80	9.40	8.05	9.20	8.46	6.47	5.47	10.50	11.34	11.59
20	9.94	10.78	8.63	9.42	8.27	9.19	8.49	6.14	5.82	10.42	11.39	11.62
21	9.69	10.82	8.55	9.43	8.44	9.16	8.54	6.06	6.32	9.99	11.43	11.64
22	9.64	10.83	8.54	9.41	8.58	9.12	8.61	6.22	6.88	9.52	11.47	11.64
23	9.67	10.78	8.58	9.39	8.66	9.07	8.67	6.52	7.36	9.34	11.51	11.53
24	9.76	10.68	8.63	9.36	8.73	9.02	8.73	6.90	7.63	9.41	11.52	11.30
25	9.86	10.58	8.69	9.22	8.79	8.99	8.79	7.29	7.78	9.59	11.54	10.32
26	9.96	10.52	8.74	9.05	8.85	8.86	8.83	7.62	7.94	9.83	11.56	9.75
27	9.98	10.36	8.79	8.93	8.90	7.28	8.86	7.91	8.09	10.06	11.58	9.56
28	10.00	9.94	8.85	8.84	8.95	5.89	8.87	8.14	8.17	10.25	11.57	9.52
29	10.03	9.65	8.91	8.78	---	5.20	8.82	8.30	8.24	10.31	11.45	9.39
30	10.07	9.51	8.98	8.71	---	5.09	8.65	8.41	8.34	10.22	11.29	9.27
31	10.12	---	9.04	8.53	---	5.34	---	8.48	---	10.17	11.20	---
MEAN	10.09	10.43	9.02	9.23	7.92	8.57	8.24	7.73	7.51	9.64	11.10	10.96
MAX	10.89	10.83	9.42	9.43	8.95	9.21	8.87	8.48	8.68	10.50	11.58	11.64
MIN	9.26	9.51	8.54	8.53	6.80	5.09	5.75	6.06	5.42	8.47	10.24	9.27

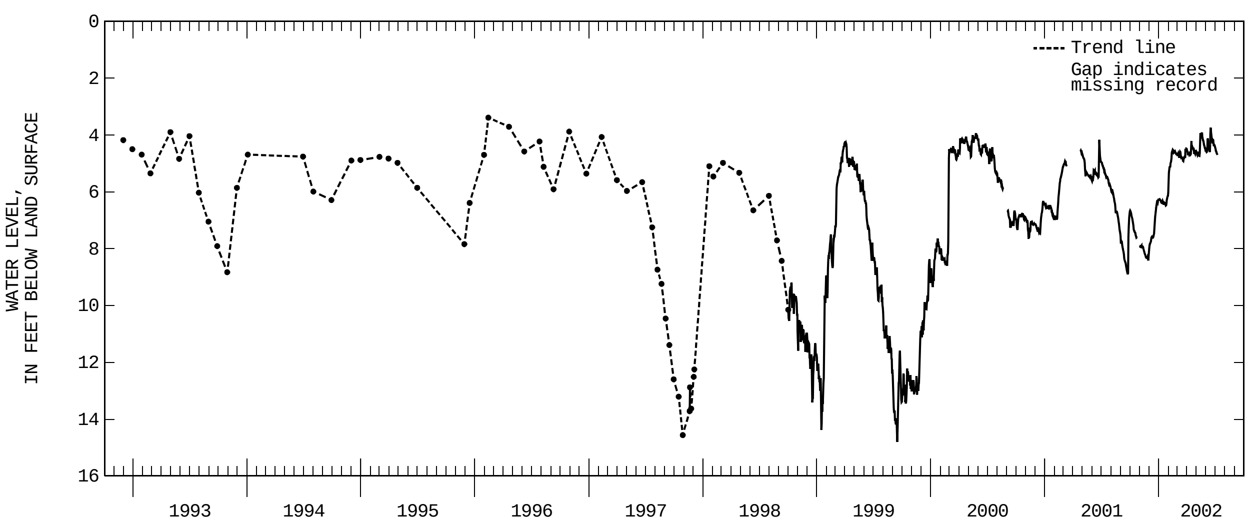


CORTLAND COUNTY

423541076114701. Local number, C 102.
LOCATION.--Lat 42°35'41", long 76°11'47", Hydrologic Unit 02050102, at Municipal Water Works, Cortland. Owner: City of Cortland.
AQUIFER.--Unconfined aquifer in gravel of Pleistocene age.
WELL CHARACTERISTICS.--Driven observation well, diameter 1.25 inch, depth 45 ft, 1.25 inch well point.
INSTRUMENTATION.--Electronic data recorder--hourly; monthly measurements by USGS personnel.
DATUM.--Elevation of land-surface datum is 1136.59 ft above NGVD of 1929. Measuring point: Top of coupling, 1.99 ft above land-surface datum.
REMARKS.--Water level is affected by pumping from nearby municipal supply wells. This well is a replacement for 423539076114801 (local number C 19), located 80 ft southwest, which had a period of record from February 1947 to May 1976.
PERIOD OF RECORD.--October 1975 to July 2002 (discontinued). Records for October 1975 to September 1977 are unpublished and available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Maximum measured water-level depth below land surface, 15.40 ft, Sept. 15, 1999; minimum measured water-level depth below land surface, 3.07 ft below land-surface datum, Sept. 25, 1977.
EXTREMES FOR CURRENT PERIOD.--October 2001 to July 2002: Maximum water-level depth below land surface, 8.98 ft, Nov. 28; minimum water-level depth below land surface, 3.68 ft, June 16.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.66	7.91	7.99	6.27	5.71	4.70	4.54	4.58	4.52	4.47	---	---
2	6.68	7.93	7.89	6.26	5.32	4.74	4.57	4.60	4.57	4.55	---	---
3	6.71	7.93	7.84	6.26	5.23	4.67	4.59	4.66	4.60	4.57	---	---
4	6.77	7.92	7.81	6.28	5.15	4.64	4.71	4.64	4.59	4.59	---	---
5	6.83	7.90	7.79	6.29	5.10	4.68	4.68	4.65	4.50	4.62	---	---
6	6.87	7.89	7.76	6.29	5.14	4.69	4.67	4.70	4.12	4.65	---	---
7	6.91	7.98	7.68	6.31	5.01	4.80	4.67	4.68	4.15	4.67	---	---
8	6.97	7.93	7.61	6.35	4.98	4.75	4.65	4.73	4.24	4.70	---	---
9	7.04	7.92	7.59	6.38	4.91	4.67	4.71	4.70	4.37	---	---	---
10	7.12	7.92	7.57	6.39	4.83	4.59	4.69	4.73	4.46	---	---	---
11	7.18	7.94	7.58	6.39	4.63	4.60	4.66	4.74	4.52	---	---	---
12	7.31	7.98	7.61	6.35	4.59	4.72	4.69	4.63	4.54	---	---	---
13	7.35	8.02	7.61	6.32	4.56	4.77	4.67	4.33	4.60	---	---	---
14	7.39	8.06	7.58	6.35	4.59	4.81	4.47	3.94	4.33	---	---	---
15	7.40	8.10	7.53	6.38	4.56	4.81	4.21	4.03	3.97	---	---	---
16	7.43	8.15	7.50	6.37	4.59	4.79	4.43	4.11	3.74	---	---	---
17	7.44	8.19	7.43	6.45	4.54	4.80	4.43	4.08	3.86	---	---	---
18	7.49	8.21	7.26	6.42	4.56	4.83	4.46	3.94	3.99	---	---	---
19	7.54	8.25	7.05	6.41	4.57	4.91	4.51	3.91	4.08	---	---	---
20	7.57	8.29	6.88	6.39	4.60	4.92	4.45	4.08	4.16	---	---	---
21	7.61	8.32	6.78	6.40	4.59	4.85	4.48	4.13	4.22	---	---	---
22	7.60	8.32	6.69	6.45	4.58	4.83	4.45	4.18	4.30	---	---	---
23	7.60	8.32	6.57	6.48	4.61	4.80	4.53	4.20	4.17	---	---	---
24	---	8.32	6.49	6.47	4.64	4.74	4.67	4.26	4.18	---	---	---
25	---	8.32	6.43	6.39	4.64	4.79	4.59	4.32	4.29	---	---	---
26	---	8.27	6.35	6.32	4.71	4.78	4.62	4.35	4.39	---	---	---
27	---	8.29	6.36	6.25	4.64	4.52	4.65	4.38	4.34	---	---	---
28	---	8.42	6.39	6.21	4.67	4.52	4.58	4.45	4.36	---	---	---
29	---	8.27	6.31	6.17	---	4.53	4.53	4.47	4.39	---	---	---
30	---	8.15	6.28	6.15	---	4.48	4.61	4.51	4.44	---	---	---
31	7.91	---	6.28	6.02	---	4.48	---	4.49	---	---	---	---
MEAN	---	8.11	7.18	6.33	4.79	4.72	4.57	4.39	4.30	---	---	---
MAX	---	8.42	7.99	6.48	5.71	4.92	4.71	4.74	4.60	---	---	---
MIN	---	7.89	6.28	6.02	4.54	4.48	4.21	3.91	3.74	---	---	---

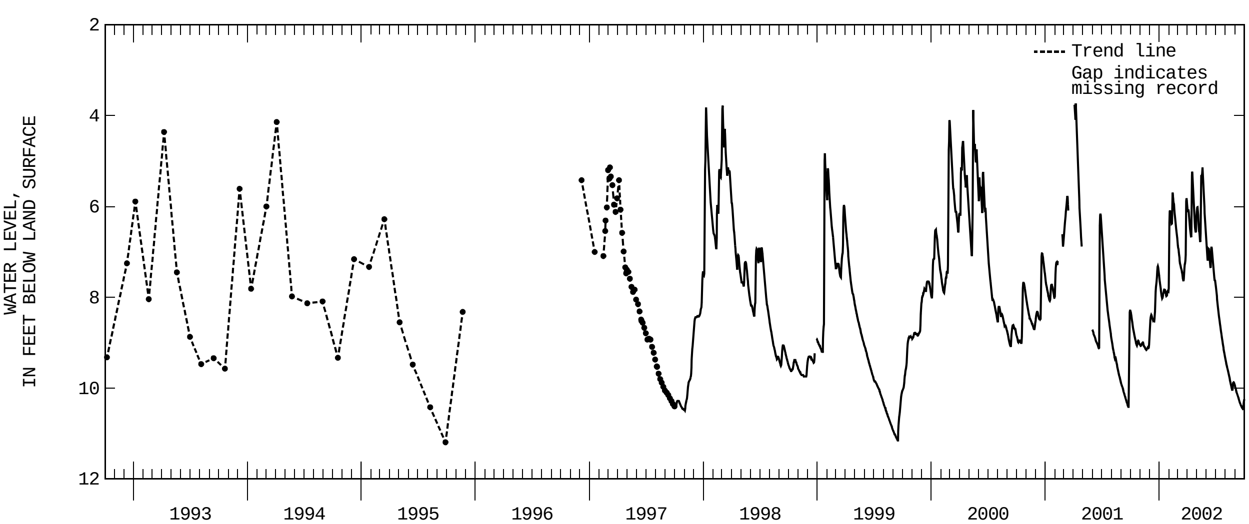


MADISON COUNTY

430056075354102. Local number, M 178.
LOCATION.--Lat 43°00'56", long 75°35'41", Hydrologic Unit 04140202, at Valley Mills. Owner: Private.
AQUIFER.--Unconfined aquifer in gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 inch, depth 15.3 ft, cased to 16 ft, open end.
INSTRUMENTATION.--Electronic data recorder--hourly; monthly measurements by USGS personnel.
DATUM.--Elevation of land-surface datum is 573.76 ft above NGVD of 1929. Measuring point: Top of flange, 3.07 ft above land-surface datum.
REMARKS.--Well drilled April 1974 as a replacement for 430056075354101 (local number M 177), located 10 ft west, which has a period of record from October 1965 to September 1973 (unpublished).
PERIOD OF RECORD.--April 1975 to August 1995, December 1996 to current year. Records for April 1975 to September 1976 are unpublished and available in files of the Geological Survey. April 1975 to May 1986, digital recorder at same site and datum. Weekly observer readings May 1986 to Dec. 1988. Electronic data recorder at same site and datum Dec. 1988 to Feb. 1991. Periodic measurements with chalked tape Feb. 1991 to Aug. 1995 and Oct. 1996 to Feb. 1997.
REVISED RECORDS.--WDR NY-91-3: 1990 water level; WDR NY-99-3: 1995 water level.
EXTREMES FOR PERIOD OF RECORD.--Maximum water-level depth below land surface, 11.19 ft, Sept. 27, 1995; minimum water-level depth below land surface, 2.60 ft below land-surface datum, Mar. 5, 1979.
EXTREMES FOR CURRENT YEAR.--Maximum water-level depth below land surface, 10.47 ft, Sept. 27; minimum water-level depth below land surface, 5.11 ft, May 19.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.31	9.05	8.78	7.60	7.41	6.86	6.04	6.08	6.86	7.78	9.37	9.98
2	8.36	9.07	8.62	7.66	6.36	6.92	6.12	6.02	6.95	7.84	9.41	10.00
3	8.40	9.07	8.50	7.71	6.11	6.93	6.09	6.02	7.06	7.90	9.44	10.03
4	8.45	9.05	8.44	7.76	6.09	7.01	6.07	6.10	7.15	7.97	9.48	10.05
5	8.50	9.03	8.41	7.81	6.15	7.07	6.13	6.19	7.19	8.05	9.51	10.08
6	8.55	9.02	8.39	7.86	6.21	7.13	6.22	6.29	7.07	8.11	9.54	10.10
7	8.61	9.01	8.40	7.91	6.25	7.20	6.32	6.40	6.93	8.18	9.57	10.12
8	8.66	9.00	8.42	7.96	6.32	7.25	6.40	6.53	6.93	8.24	9.60	10.14
9	8.70	9.02	8.45	7.99	6.38	7.28	6.49	6.55	7.00	8.30	9.63	10.16
10	8.73	9.01	8.47	8.02	6.37	7.31	6.55	6.63	7.09	8.36	9.66	10.18
11	8.77	9.04	8.50	8.01	5.94	7.35	6.60	6.74	7.16	8.42	9.69	10.20
12	8.81	9.07	8.52	7.98	5.69	7.37	6.66	6.78	7.24	8.47	9.72	10.23
13	8.85	9.08	8.51	7.92	5.76	7.39	6.68	6.59	7.33	8.53	9.75	10.25
14	8.88	9.09	8.52	7.90	5.84	7.43	6.16	5.62	7.35	8.58	9.79	10.28
15	8.92	9.09	8.53	7.86	5.90	7.46	5.33	5.32	7.16	8.63	9.82	10.30
16	8.94	9.11	8.47	7.87	5.92	7.52	5.23	5.32	6.94	8.68	9.85	10.32
17	8.96	9.13	8.40	7.84	5.96	7.58	5.31	5.37	6.89	8.74	9.88	10.34
18	9.00	9.14	8.32	7.84	6.08	7.61	5.44	5.26	6.93	8.78	9.91	10.36
19	9.02	9.15	8.10	7.84	6.16	7.64	5.57	5.14	7.00	8.83	9.94	10.38
20	9.04	9.16	7.87	7.86	6.23	7.60	5.74	5.26	7.07	8.89	9.98	10.39
21	9.06	9.15	7.77	7.88	6.31	7.47	5.91	5.41	7.15	8.93	10.01	10.40
22	9.03	9.13	7.71	7.95	6.38	7.35	6.05	5.56	7.23	8.97	10.03	10.42
23	8.99	9.12	7.65	7.97	6.45	7.28	6.21	5.69	7.31	9.03	10.05	10.42
24	8.96	9.11	7.56	7.96	6.52	7.24	6.35	5.84	7.40	9.07	9.98	10.43
25	8.95	9.10	7.42	7.96	6.58	7.19	6.46	6.00	7.49	9.11	9.88	10.45
26	8.96	9.11	7.34	7.91	6.63	7.06	6.51	6.15	7.58	9.15	9.87	10.46
27	8.99	9.09	7.32	7.88	6.69	6.24	6.57	6.29	7.63	9.18	9.87	10.46
28	9.02	9.10	7.35	7.86	6.78	5.88	6.55	6.43	7.62	9.22	9.88	10.34
29	9.03	9.05	7.41	7.86	---	5.82	6.32	6.55	7.67	9.26	9.90	10.29
30	9.04	8.93	7.47	7.87	---	5.88	6.18	6.67	7.72	9.30	9.92	10.24
31	9.05	---	7.53	7.80	---	5.98	---	6.77	---	9.34	9.95	---
MEAN	8.82	9.08	8.10	7.87	6.27	7.07	6.14	6.05	7.20	8.64	9.77	10.26
MAX	9.06	9.16	8.78	8.02	7.41	7.64	6.68	6.78	7.72	9.34	10.05	10.46
MIN	8.31	8.93	7.32	7.60	5.69	5.82	5.23	5.14	6.86	7.78	9.37	9.98



MONROE COUNTY

430855077304202. Local number Mo 2

LOCATION.--Lat 43°08'55", long 77°30'42", Hydrologic Unit 04140101, near east valley wall, north of Blossom Road, in Ellison Park. Owner: U.S. Geological Survey.

AQUIFER.--Unconfined aquifer in coarse sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 2 inch, depth 45 ft, cased to 41 ft, screened 41 to 45 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape by Monroe County Environmental Health Laboratory personnel.

DATUM.--Elevation of land-surface datum is 252.60 ft above NGVD of 1929. Measuring point: arrow at top of casing, 4.08 ft above land-surface datum.

REMARKS.--Well also sampled for water quality.

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

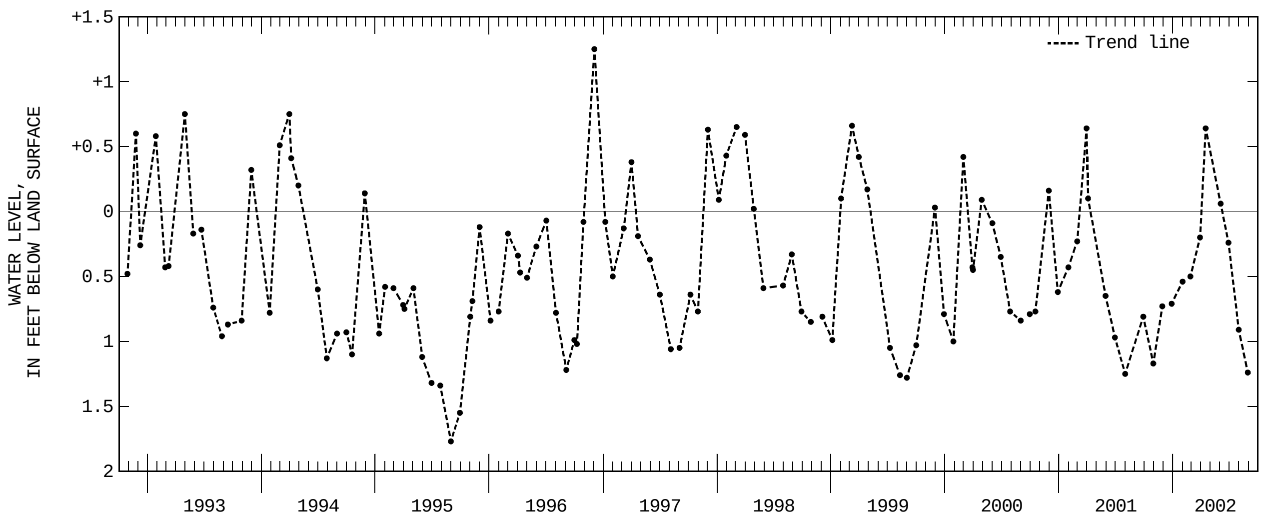
PERIOD OF RECORD.--September 1984 to August 2002 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Maximum measured water-level depth below land surface, 1.77 ft, Aug. 31, 1995; minimum measured water-level depth, 1.25 ft above land surface, Dec. 3, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum measured water-level depth below land surface, 1.24 ft, Aug. 29; minimum measured water-level depth, 0.64 ft above land surface, Apr. 16.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
(READINGS ABOVE LAND SURFACE INDICATED BY "+")

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	1.17	DEC 28	.71	FEB 26	.50	APR 16	+.64	JUN 28	.24	AUG 29	1.24
NOV 28	.73	FEB 01	.54	MAR 29	.20	JUN 03	+.06	JUL 31	.91		



MONROE COUNTY--Continued

430854077304601. Local number Mo 3

LOCATION.--Lat 43°08'54", long 77°30'46", Hydrologic Unit 04140101, on right bank of Irondequoit Creek, north of Blossom Road, in Ellison Park. Owner: U.S. Geological Survey.

AQUIFER.--Unconfined aquifer in alluvium of Holocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 2 inch, depth 16 ft, cased to 13.5 ft, screened 13.5 ft to 16 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape by Monroe County Environmental Health Laboratory personnel.

DATUM.--Elevation of land-surface datum is 253.2 ft above NGVD of 1929. Measuring point: arrow at top of casing, 3.74 ft above land-surface datum.

REMARKS.--Well also sampled for water quality.

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

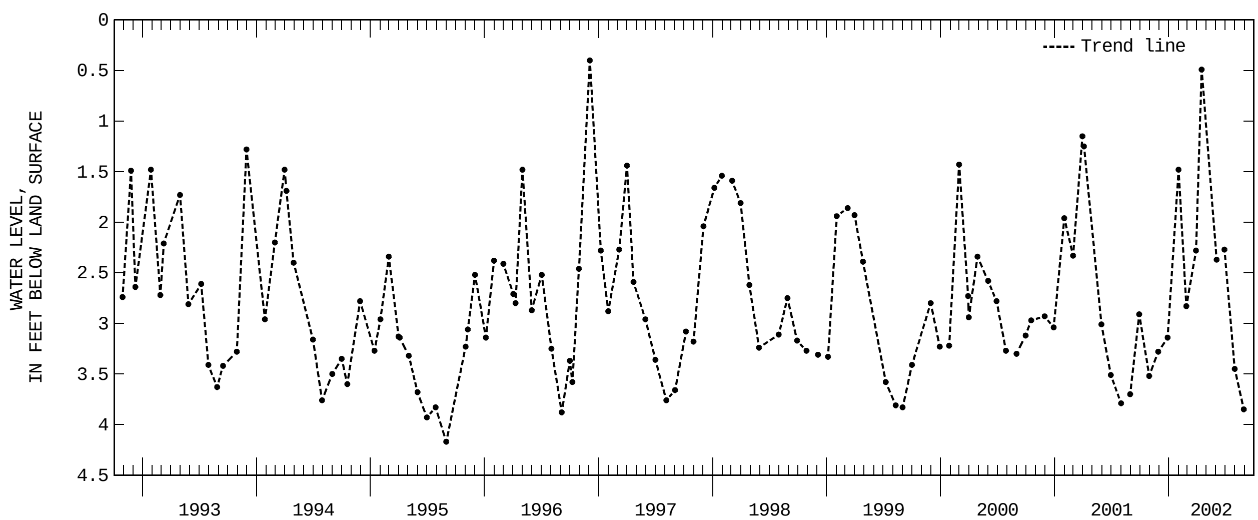
PERIOD OF RECORD.--September 1984 to August 2002 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Maximum measured water-level depth below land surface, 4.17 ft, Aug. 31, 1995; minimum measured, water-level depth, 2.03 ft, above land surface, Feb. 27, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum measured water-level depth below land surface, 3.85 ft, Aug. 29; minimum measured water-level depth below land surface, 0.49 ft, Apr. 16.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	3.52	DEC 28	3.14	FEB 26	2.83	APR 16	.49	JUN 28	2.27	AUG 29	3.85
NOV 28	3.28	FEB 01	1.48	MAR 29	2.28	JUN 03	2.37	JUL 31	3.45		



430932077311501. Local number Mo 659

LOCATION.--Lat 43°09'32", long 77°31'15", Hydrologic Unit 04140101, at top of right bank about 400 ft north east of bridge over Irondequoit Creek overflow channel at Old Browncroft Boulevard. Owner: U.S. Geological Survey.

AQUIFER.--Confined aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 inch, depth 215 ft, cased to 215 ft, perforated 80 to 90 ft and 160 to 170 ft, open-ended at 215 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape by Monroe County Environmental Health Laboratory personnel; periodic measurement by USGS personnel.

DATUM.--Elevation of land-surface datum is 266.58 ft above NGVD of 1929. Measuring point: arrow at top of casing, 1.80 ft above land-surface datum.

REMARKS.--Well also sampled for water quality.

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

PERIOD OF RECORD.--December 1986 to September 2002 (discontinued).

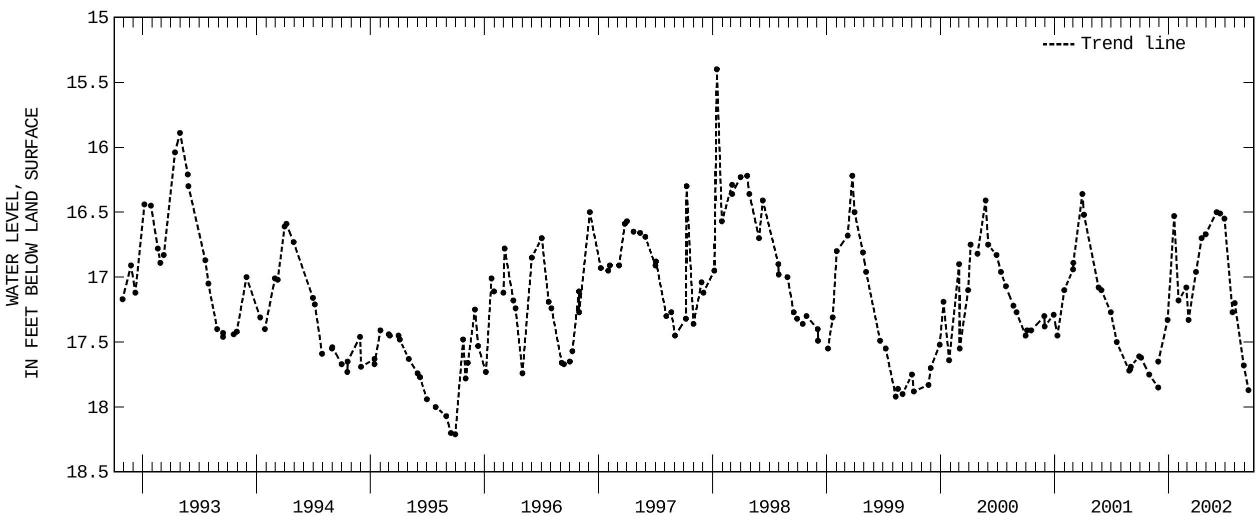
EXTREMES FOR PERIOD OF RECORD.--Maximum measured water-level depth below land surface, 18.21 ft, Sept. 29, 1995; minimum measured water-level depth below land surface, 15.40 ft, Jan. 14, 1998.

EXTREMES FOR CURRENT YEAR.--Maximum measured water-level depth below land surface, 17.87 ft, Sept. 13; minimum measured water-level depth below land surface, 16.50 ft, June 3.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	z17.62	DEC 28	17.33	FEB 26	17.08	APR 16	16.70	JUN 14	z16.51	JUL 31	17.20
30	17.75	JAN 18	z16.53	MAR 05	z17.33	29	z16.67	28	16.55	AUG 29	17.68
NOV 28	17.85	FEB 01	17.18	29	16.96	JUN 03	16.50	JUL 24	z17.27	SEP 13	z17.87
NOV 28	z17.65										

z Measured by USGS personnel.



MONROE COUNTY--Continued

430912077313301. Local number Mo 663

LOCATION.--Lat 43°09'12", long 77°31'33", Hydrologic Unit 04140101, on east bank of Irondequoit Creek about 1200 ft south of Browncroft Boulevard. Owner: U.S. Geological Survey.

AQUIFER.--Unconfined aquifer in alluvium of Holocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 2 inch, depth 10 ft, cased to 7.5 ft, screened 7.5 ft to 10 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape by Monroe County Environmental Health Laboratory personnel.

DATUM.--Elevation of land-surface datum is 251.16 ft above NGVD of 1929. Measuring point: arrow at top of casing, 3.60 ft above land-surface datum.

REMARKS.--Well also sampled for water quality.

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

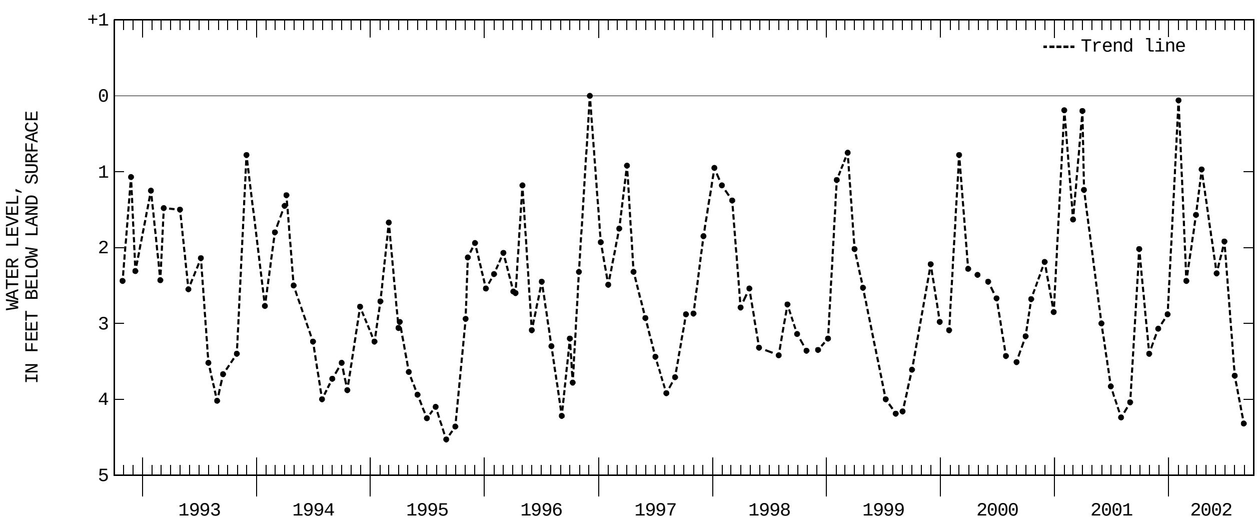
PERIOD OF RECORD.--September 1988 to August 2002 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Maximum measured water-level depth below land surface, 4.53 ft, Aug. 31, 1995; minimum measured water-level depth below land surface, 0.00 ft, Dec. 3, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum measured water-level depth below land surface, 4.32 ft, Aug. 29; minimum measured water-level depth below land surface, 0.06 ft, Feb. 1.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	3.40	DEC 28	2.88	FEB 26	2.44	APR 16	.97	JUN 28	1.92	AUG 29	4.32
NOV 28	3.07	FEB 01	.06	MAR 29	1.57	JUN 03	2.34	JUL 31	3.69		



430912077313302. Local number Mo 664

LOCATION.--Lat 43°09'12", long 77°31'33", Hydrologic Unit 04140101, on east bank of Irondequoit Creek about 1200 ft south of Browncroft Boulevard. Owner: U.S. Geological Survey.

AQUIFER.--Unconfined aquifer in alluvium of Holocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 2 inch, depth 27 ft, cased to 22 ft, screened 22 ft to 27 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape by Monroe County Environmental Health Laboratory personnel.

DATUM.--Elevation of land-surface datum is 251.18 ft above NGVD of 1929. Measuring point: arrow at top of casing, 3.20 ft above land-surface datum.

REMARKS.--Well also sampled for water quality.

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

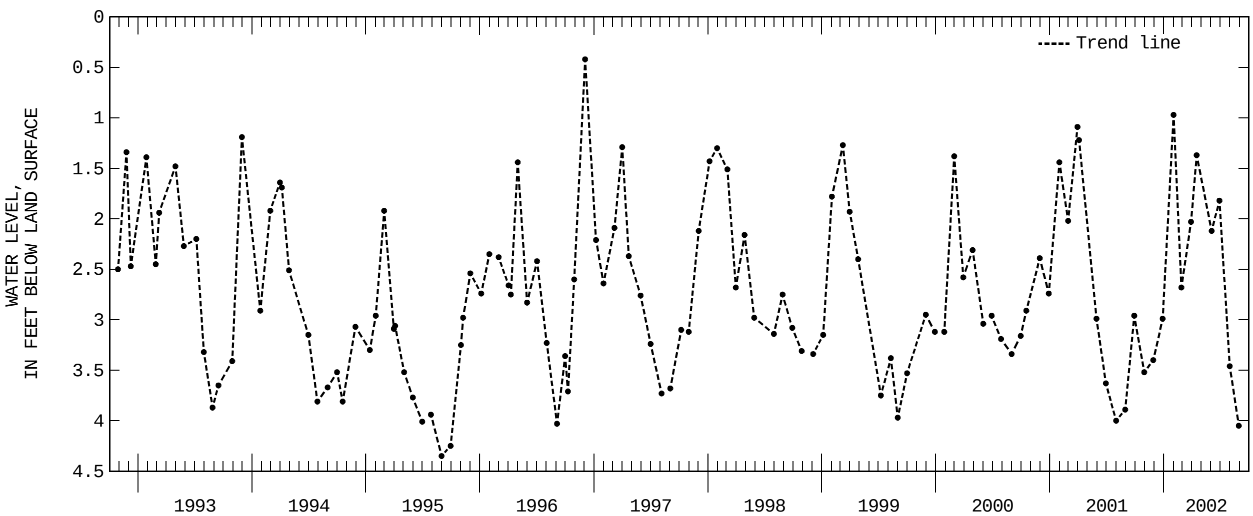
PERIOD OF RECORD.--September 1988 to August 2002 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Maximum measured water-level depth below land surface, 4.35 ft, Aug. 31, 1995; minimum measured water-level depth below land surface, 0.42 ft, Dec. 3, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum measured water-level depth below land surface, 4.05 ft, Aug. 29; minimum measured water-level depth below land surface, 0.97 ft, Feb. 1.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	3.52	DEC 28	2.99	FEB 26	2.68	APR 16	1.37	JUN 28	1.82	AUG 29	4.05
NOV 28	3.40	FEB 01	.97	MAR 29	2.03	JUN 03	2.12	JUL 31	3.46		



430928077313802. Local number Mo 665

LOCATION.--Lat 43°09'28", long 77°31'38", Hydrologic Unit 04140101, on east bank of Irondequoit Creek about 100 ft north of Browncroft Boulevard. Owner: U.S. Geological Survey.

AQUIFER.--Unconfined aquifer in alluvium of Holocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 2 inch, depth 17 ft, cased to 12 ft, screened 12 ft to 17 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape by Monroe County Environmental Health Laboratory personnel.

DATUM.--Elevation of land-surface datum is 254.14 ft above NGVD of 1929. Measuring point: arrow at top of casing, 2.45 ft above land-surface datum.

REMARKS.--Well also sampled for water quality.

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

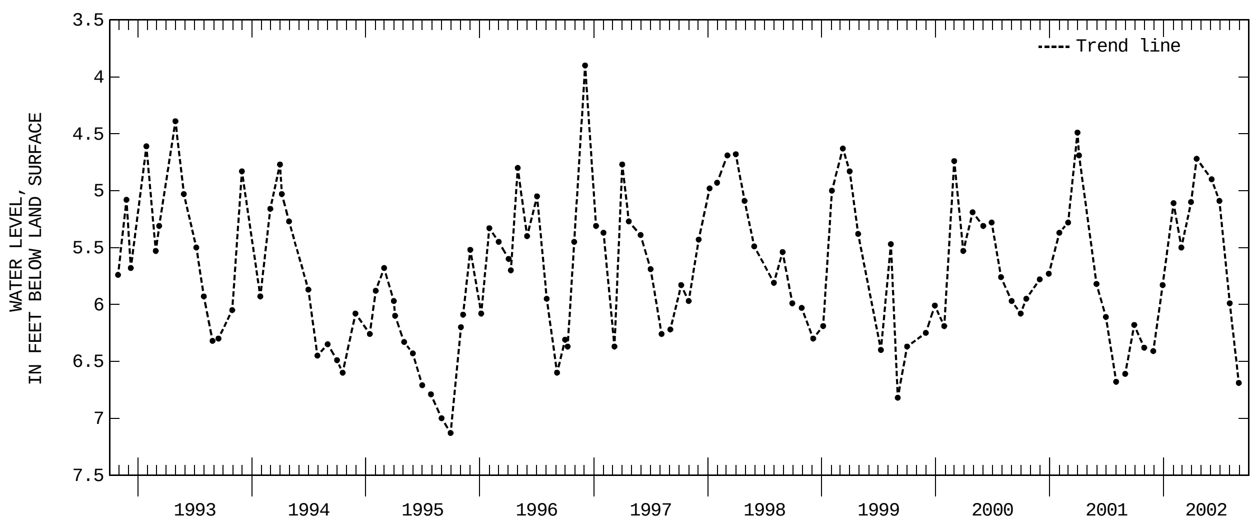
PERIOD OF RECORD.--September 1988 to August 2002 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Maximum measured water-level depth below land surface, 7.48 ft, Oct. 31, 1989; lowest measured water-level depth below land surface, 3.90 ft below land-surface datum, Dec. 3, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum measured water-level depth below land surface, 6.69 ft, Aug. 29; minimum measured water-level depth below land surface, 4.72 ft, Apr. 16.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	6.38	DEC 28	5.83	FEB 26	5.50	APR 16	4.72	JUN 28	5.09	AUG 29	6.69
NOV 28	6.41	FEB 01	5.11	MAR 29	5.10	JUN 03	4.90	JUL 31	5.99		



430928077313803. Local number Mo 666

LOCATION.--Lat 43°09'28", long 77°31'38", Hydrologic Unit 04140101, on east bank of Irondequoit Creek about 100 ft north of Browncroft Boulevard. Owner: U.S. Geological Survey.

AQUIFER.--Unconfined aquifer in alluvium of Holocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 2 inch, depth 27 ft, cased to 22 ft, screened 22 ft to 27 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape by Monroe County Environmental Health Laboratory personnel; periodic measurement by USGS personnel.

DATUM.--Elevation of land-surface datum is 254.14 ft above NGVD of 1929. Measuring point: arrow at top of casing, 3.65 ft above land-surface datum.

REMARKS.--Well also sampled for water quality.

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

PERIOD OF RECORD.--September 1988 to September 2002 (discontinued).

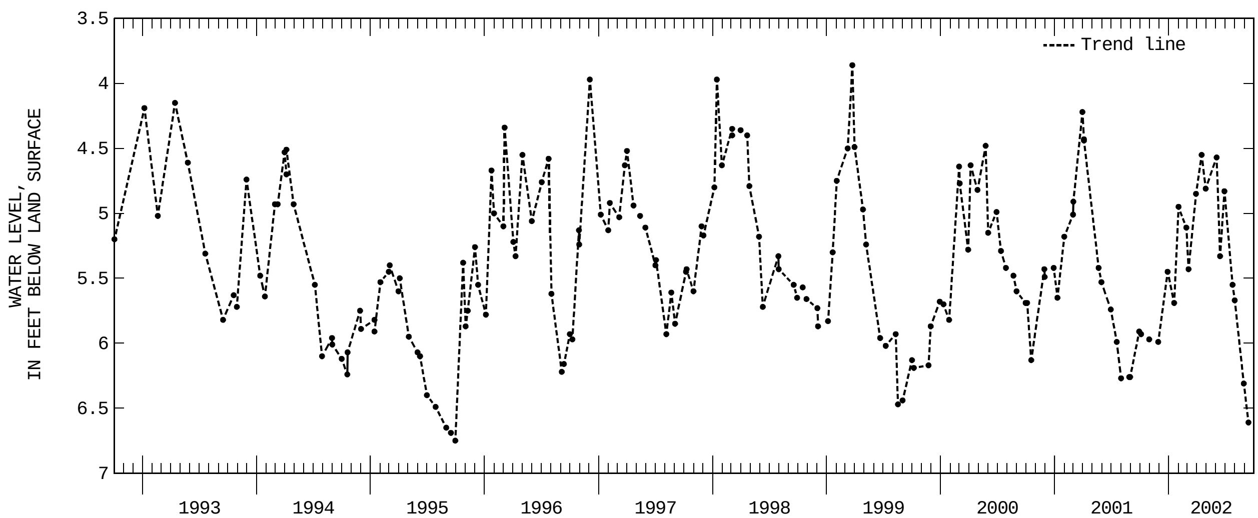
EXTREMES FOR PERIOD OF RECORD.--Maximum measured water-level depth below land surface, 6.75 ft, Sept. 29, 1995; minimum measured 3.66 ft below land-surface datum, May 6, 1992.

EXTREMES FOR CURRENT YEAR.--Maximum measured water-level depth below land surface, 6.61 ft, Sept. 13; minimum measured water-level depth below land surface, 4.55 ft, Apr. 16.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	z5.93	DEC 28	5.45	FEB 26	5.11	APR 16	4.55	JUN 14	z5.33	JUL 31	5.67
30	5.97	JAN 18	z5.69	MAR 05	z5.43	29	z4.81	28	4.83	AUG 29	6.31
NOV 28	z5.99	FEB 01	4.95	29	4.85	JUN 03	4.57	JUL 24	z5.55	SEP 13	z6.61

z Measured by USGS personnel.

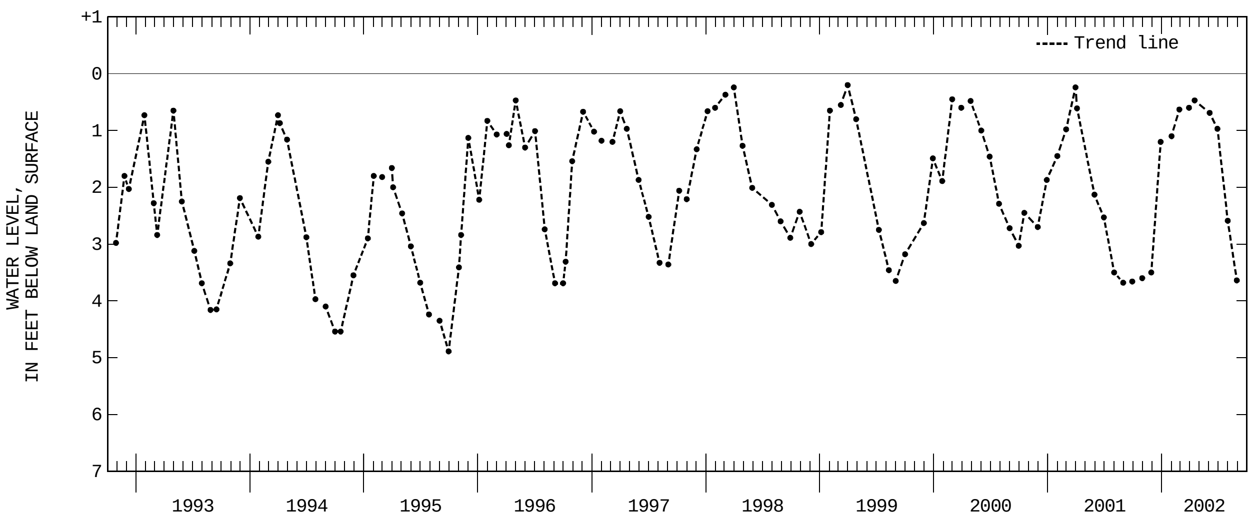


430928077314001. Local number Mo 667

LOCATION.--Lat 43°09'28", long 77°31'40", Hydrologic Unit 04140101, on west bank of Irondequoit Creek about 300 ft north of Browncroft Boulevard and 100 ft west of Irondequoit Creek. Owner: U.S. Geological Survey.
AQUIFER.--Unconfined aquifer in alluvium of Holocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 2 inch, depth 15 ft, cased to 10 ft, screened 10 ft to 15 ft.
INSTRUMENTATION.--Monthly measurement with chalked tape by Monroe County Environmental Health Laboratory personnel.
DATUM.--Elevation of land-surface datum is 255.38 ft above NGVD of 1929. Measuring point: arrow at top of casing, 2.05 ft above land-surface datum.
REMARKS.--Well also sampled for water quality.
COOPERATION.--Water-quality samples were collected and analyzed by the Monroe County Environmental Health Laboratory at Rochester, NY.
PERIOD OF RECORD.--September 1988 to August 2002 (discontinued).
EXTREMES FOR PERIOD OF RECORD.--Maximum measured water-level depth below land surface, 6.06 ft, Oct. 29, 1991; minimum measured water-level depth below land surface, 0.20 ft, Mar. 31, 1999.
EXTREMES FOR CURRENT YEAR.--Maximum measured water-level depth below land surface, 3.64 ft, Aug. 29; minimum measured water-level depth below land surface, 0.47 ft, Apr. 16.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

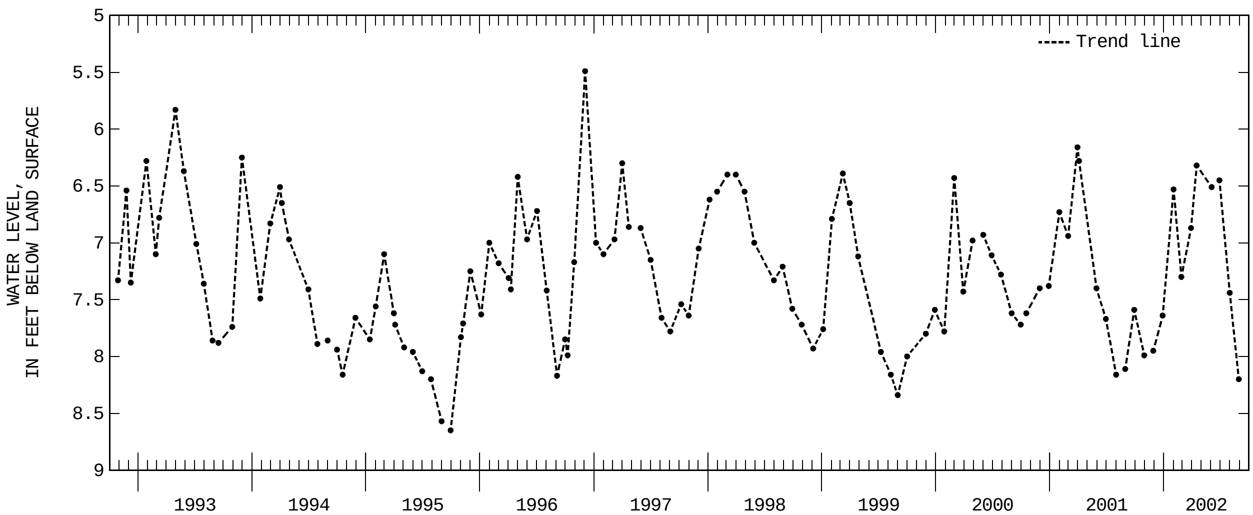
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	3.60	DEC 28	1.20	FEB 26	.63	APR 16	.47	JUN 28	.97	AUG 29	3.64
NOV 28	3.50	FEB 01	1.10	MAR 29	.60	JUN 03	.69	JUL 31	2.59		



430928077314002. Local number Mo 668
LOCATION.--Lat 43°09'28", long 77°31'40", Hydrologic Unit 04140101, on west bank of Irondequoit Creek about 300 ft north of Browncroft Boulevard and 100 ft west of Irondequoit Creek. Owner: U.S. Geological Survey.
AQUIFER.--Unconfined aquifer in alluvium of Holocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 2 inch, depth 36 ft, cased to 31 ft, screened 31 ft to 36 ft.
INSTRUMENTATION.--Monthly measurement with chalked tape by Monroe County Environmental Health Laboratory personnel.
DATUM.--Elevation of land-surface datum is 255.32 ft above NGVD of 1929. Measuring point: arrow at top of casing, 1.40 ft above land-surface datum.
REMARKS.--Well also sampled for water quality.
COOPERATION.--Water-quality samples were collected and analyzed by the Monroe County Environmental Health Laboratory at Rochester, NY.
PERIOD OF RECORD.--September 1988 to August 2002 (discontinued).
EXTREMES FOR PERIOD OF RECORD.--Maximum measured water-level depth below land surface, 8.65 ft, Sept. 29, 1995; minimum measured 5.49 ft below land-surface datum, Dec. 3, 1996.
EXTREMES FOR CURRENT YEAR.--Maximum measured water-level depth below land surface, 8.20 ft, Aug. 29; minimum measured water-level depth below land surface, 6.32 ft, Apr. 16.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	7.99	DEC 28	7.64	FEB 26	7.30	APR 16	6.32	JUN 28	6.45	AUG 29	8.20
NOV 28	7.95	FEB 01	6.53	MAR 29	6.87	JUN 03	6.51	JUL 31	7.44		

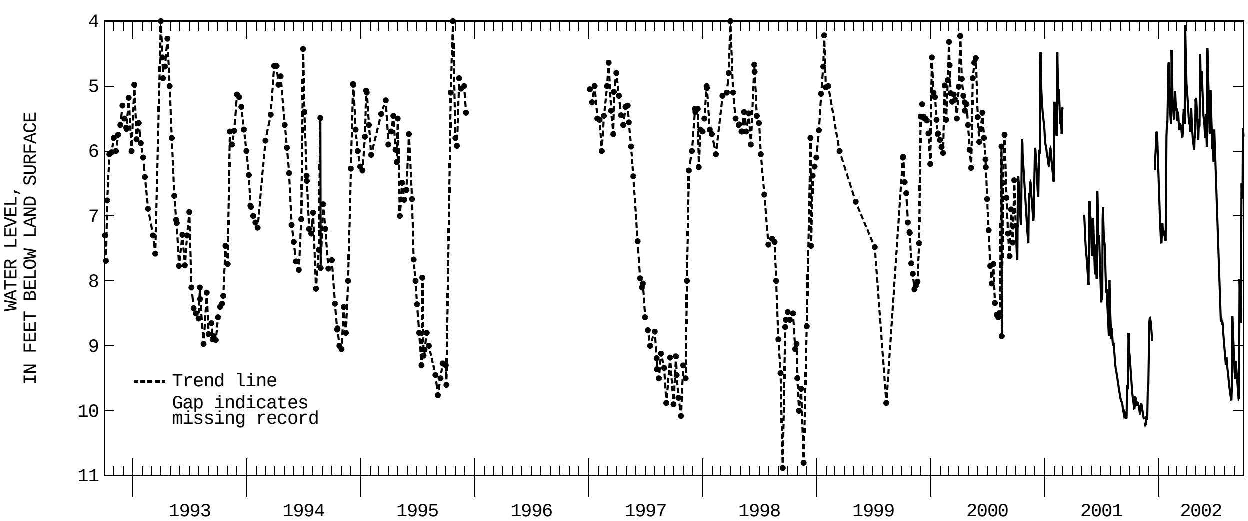


OTSEGO COUNTY

424136075025101. Local number, Og 23.
LOCATION.--Lat 42°41'36", long 75°02'51", Hydrologic Unit 02050101, at "Wild Creek Farm", 0.6 mi northeast of intersection of State Highway 205 and Kallan Road, 2.2 mi north of Hartwick, and 3.2 mi southeast of Oaksville. Owner: Private.
AQUIFER.--Till of Pleistocene age.
WELL CHARACTERISTICS.--Dug unused well, diameter 36 inch, depth 15 ft, stone-lined.
INSTRUMENTATION.--Electronic data recorder--hourly; monthly measurement by USGS personnel.
DATUM.--Elevation of land-surface datum is 1,432.44 ft above NGVD of 1929. Measuring point: Top edge of hole drilled through concrete well cover, at land-surface datum.
PERIOD OF RECORD.--May 1953 to August 1995, December 1996 to current year. Records for May 1953 to September 1976 are unpublished and available in files of the Geological Survey. Weekly measurement with chalked tape by observer Oct. 1976 to Feb. 1999.
EXTREMES FOR PERIOD OF RECORD.--Maximum measured water-level depth below land surface, 12.66 ft, Nov. 14, 1964; minimum measured water-level depth below land surface, 2.98 ft, Apr. 2, 1960, Sep. 19, 1977.
EXTREMES FOR CURRENT YEAR.--Maximum water-level depth below land surface, 10.23 ft, Nov. 19, 20; minimum water-level depth below land surface, 3.78 ft, Mar. 26.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

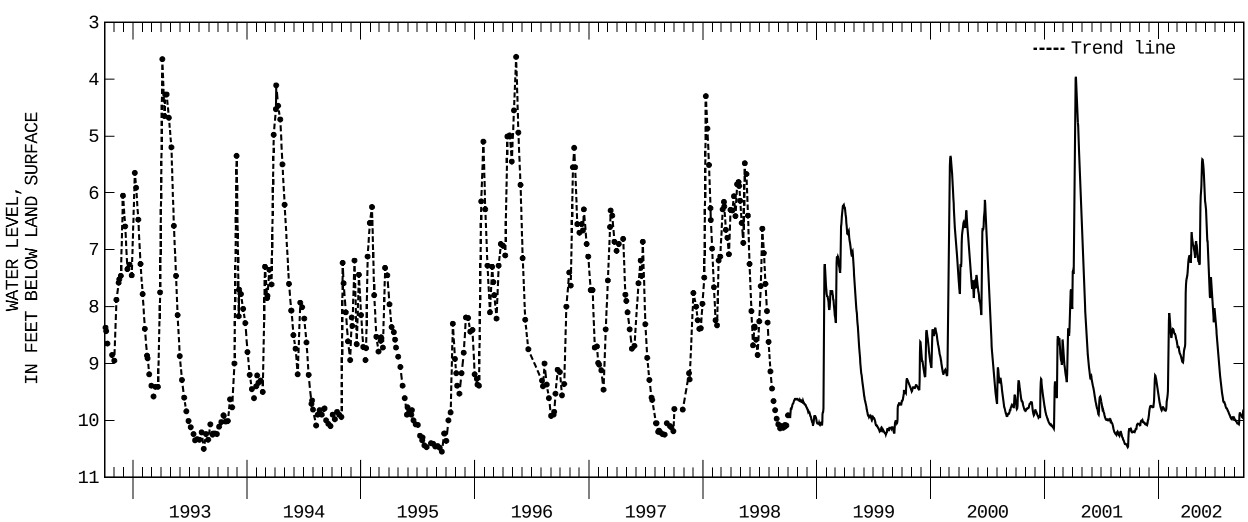
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.22	10.02	8.83	6.45	4.69	5.48	5.02	5.18	5.44	6.30	9.13	9.40
2	9.29	10.06	8.64	6.62	4.64	5.54	5.09	5.29	5.55	6.52	9.18	9.46
3	9.37	10.00	8.58	6.76	4.95	5.45	5.16	5.36	5.75	6.71	9.24	9.51
4	9.45	9.93	8.57	6.91	5.13	5.39	5.22	5.46	5.94	6.89	9.29	9.31
5	9.52	9.91	8.59	7.05	5.28	5.49	5.32	5.55	5.87	7.07	9.22	9.23
6	9.58	9.89	8.62	7.17	5.37	5.57	5.40	5.65	4.42	7.23	9.18	9.29
7	9.64	9.90	8.66	7.24	5.42	5.63	5.48	5.73	4.75	7.36	9.22	9.37
8	9.71	9.93	8.73	7.35	5.49	5.66	5.54	5.83	5.10	7.49	9.28	9.45
9	9.77	9.96	8.79	7.41	5.58	5.68	5.59	5.69	5.29	7.60	9.34	9.52
10	9.80	10.0	8.86	7.42	5.52	5.59	5.57	5.52	5.43	7.71	9.39	9.58
11	9.84	10.03	8.92	7.26	4.44	5.58	5.63	5.63	5.52	7.80	9.43	9.64
12	9.88	10.06	---	7.15	4.76	5.60	5.68	5.60	5.62	7.90	9.47	9.70
13	9.92	10.09	---	7.11	4.99	5.61	5.71	4.91	5.71	8.00	9.53	9.76
14	9.96	10.11	---	7.20	5.16	5.65	5.51	4.50	5.73	8.12	9.57	9.81
15	9.96	10.13	---	7.23	5.28	5.69	5.34	4.81	5.49	8.24	9.61	9.80
16	9.93	---	---	7.25	5.34	5.74	5.43	5.06	5.06	8.36	9.65	8.26
17	9.85	10.18	---	7.24	5.36	5.78	5.56	5.06	5.21	8.47	9.69	7.97
18	9.79	10.20	---	7.27	5.45	5.79	5.66	4.77	5.41	8.56	9.72	8.13
19	9.80	10.22	---	7.30	5.50	5.72	5.71	4.79	5.58	8.63	9.76	8.32
20	9.82	10.21	6.30	7.31	5.51	5.53	5.79	5.05	5.73	8.59	9.79	8.50
21	9.87	10.14	6.10	7.32	5.35	5.45	5.86	5.19	5.86	8.59	9.82	8.64
22	9.90	10.10	6.01	7.37	5.08	5.36	5.88	5.29	5.97	8.63	9.84	8.33
23	9.91	10.11	5.92	7.38	5.11	5.41	5.91	5.37	5.87	8.67	9.70	6.54
24	9.91	10.12	5.76	7.10	5.24	5.51	5.99	5.44	5.83	8.64	9.26	6.50
25	9.87	10.12	5.70	6.20	5.33	5.58	5.96	5.49	5.98	8.68	8.54	6.61
26	9.87	9.80	5.71	5.78	5.38	5.08	5.77	5.50	6.17	8.74	8.68	6.74
27	9.90	9.70	5.76	5.65	5.34	4.07	5.80	5.54	5.72	8.80	8.86	6.54
28	9.91	9.69	5.87	5.59	5.38	4.41	5.66	5.63	5.67	8.87	9.01	5.65
29	9.93	9.58	6.00	5.55	---	4.59	5.20	5.72	5.83	8.94	9.13	5.70
30	9.95	9.34	6.14	5.18	---	4.76	5.25	5.80	6.05	9.00	9.23	5.78
31	9.99	---	6.30	5.00	---	4.95	---	5.76	---	9.07	9.32	---
MEAN	9.78	---	---	6.80	5.22	5.40	5.56	5.36	5.58	8.07	9.36	8.37
MAX	9.99	---	---	7.42	5.58	5.79	5.99	5.83	6.17	9.07	9.84	9.81
MIN	9.22	---	---	5.00	4.44	4.07	5.02	4.50	4.42	6.30	8.54	5.65



422445077203301. Local number, Sb 472.
LOCATION.--Lat 42°24'45", long 77°20'33", Hydrologic Unit 02050105, near Kanona. Owner: Private.
AQUIFER.--Unconfined aquifer in gravel of Pleistocene age.
WELL CHARACTERISTICS.--Driven observation well, diameter 2.5 inch, depth 17 ft, filled in from original depth of 18 ft, cased to 16 ft, 1.25 inch well point (60-gauze screen 16 ft to 18 ft, damaged during well installation).
INSTRUMENTATION.--Electronic data recorder--hourly; monthly measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 1,209.78 ft above NGVD of 1929. Measuring point: Top of casing, 2.99 ft above land-surface datum.
PERIOD OF RECORD.--November 1965 to current year. Records for November 1965 to September 1976 are unpublished and available in files of the Geological Survey. Weekly measurement with chalked tape by observer Nov. 1965 to Dec. 1997.
EXTREMES FOR PERIOD OF RECORD.--Maximum measured water-level depth below land surface, 10.84 ft, Sep. 22, 1966; minimum measured water-level depth below land surface, 3.61 ft, May 12, 1996.
EXTREMES FOR CURRENT YEAR.--Maximum water-level depth below land surface, 10.22 ft, Oct. 6, 7; minimum water-level depth below land surface, 5.40 ft, May 20, 21.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.16	10.09	9.85	9.62	8.79	8.68	7.48	6.90	6.29	8.21	9.71	9.98
2	10.15	10.08	9.81	9.66	8.25	8.71	7.45	6.91	6.41	8.27	9.74	9.99
3	10.14	10.05	9.78	9.69	8.11	8.71	7.40	6.98	6.58	8.34	9.76	9.99
4	10.16	10.02	9.76	9.71	8.15	8.70	7.31	7.05	6.74	8.40	9.77	10.00
5	10.18	10.01	9.76	9.73	8.25	8.71	7.23	7.10	6.84	8.47	9.78	10.01
6	10.21	10.00	9.74	9.75	8.33	8.74	7.17	7.14	6.85	8.54	9.79	10.01
7	10.21	10.00	9.75	9.77	8.40	8.77	7.14	7.18	6.96	8.61	9.79	10.02
8	10.21	10.00	9.76	9.80	8.47	8.80	7.11	7.22	7.11	8.68	9.80	10.03
9	10.20	10.01	9.76	9.81	8.53	8.81	7.11	7.21	7.26	8.75	9.82	10.05
10	10.20	10.00	9.76	9.82	8.55	8.83	7.16	7.22	7.42	8.82	9.83	10.05
11	10.20	10.02	9.77	9.81	8.50	8.84	7.17	7.27	7.56	8.89	9.84	10.05
12	10.19	10.03	9.77	9.79	8.42	8.86	7.21	7.25	7.69	8.96	9.85	10.06
13	10.20	10.03	9.76	9.77	8.42	8.88	7.23	6.87	7.82	9.03	9.87	10.06
14	10.21	10.04	9.76	9.78	8.40	8.90	7.11	6.25	7.85	9.09	9.88	10.07
15	10.21	10.04	9.71	9.77	8.39	8.92	6.75	6.05	7.73	9.15	9.89	10.04
16	10.19	10.04	9.66	9.78	8.40	8.95	6.69	5.98	7.50	9.22	9.90	9.90
17	10.18	10.06	9.61	9.79	8.41	8.97	6.76	5.88	7.48	9.27	9.92	9.87
18	10.16	10.07	9.48	9.80	8.44	8.98	6.82	5.64	7.59	9.32	9.93	9.87
19	10.15	10.07	9.27	9.82	8.46	8.98	6.86	5.46	7.72	9.37	9.95	9.88
20	10.15	10.06	9.21	9.82	8.47	8.95	6.90	5.41	7.83	9.42	9.96	9.89
21	10.15	10.06	9.22	9.82	8.48	8.86	6.93	5.42	7.93	9.47	9.97	9.90
22	10.10	10.07	9.25	9.83	8.48	8.79	6.93	5.46	8.01	9.52	9.98	9.91
23	10.07	10.08	9.27	9.83	8.50	8.75	6.98	5.52	8.09	9.55	9.95	9.92
24	10.07	10.08	9.31	9.81	8.53	8.73	7.01	5.59	8.16	9.59	9.95	9.93
25	10.06	10.06	9.35	9.74	8.56	8.71	7.04	5.69	8.22	9.62	9.95	9.94
26	10.06	10.02	9.39	9.68	8.58	8.66	7.08	5.78	8.28	9.65	9.94	9.95
27	10.06	10.00	9.42	9.64	8.60	8.16	7.14	5.89	8.07	9.67	9.95	9.92
28	10.06	9.99	9.46	9.60	8.64	7.76	7.08	6.02	8.02	9.68	9.97	9.84
29	10.06	9.95	9.51	9.55	---	7.61	6.88	6.15	8.09	9.68	9.96	9.82
30	10.07	9.91	9.55	9.48	---	7.54	6.85	6.18	8.15	9.68	9.95	9.81
31	10.08	---	9.59	9.28	---	7.51	---	6.24	---	9.70	9.97	---
MEAN	10.15	10.03	9.58	9.73	8.45	8.64	7.07	6.35	7.54	9.12	9.88	9.96
MAX	10.21	10.09	9.85	9.83	8.79	8.98	7.48	7.27	8.28	9.70	9.98	10.07
MIN	10.06	9.91	9.21	9.28	8.11	7.51	6.69	5.41	6.29	8.21	9.71	9.81

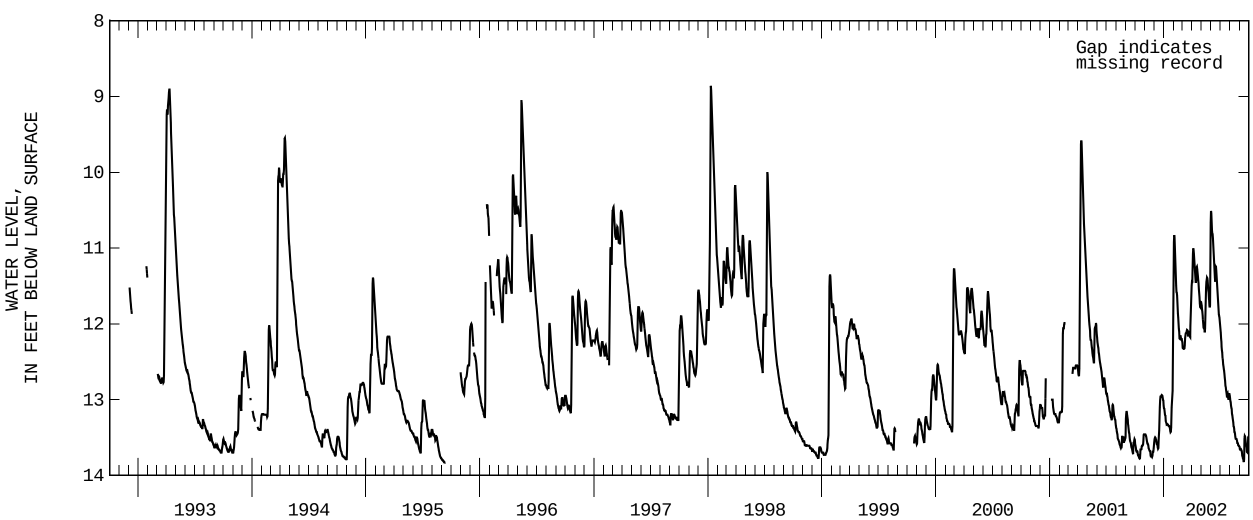


WYOMING COUNTY

423743078070802. Local number, Wo 4.
LOCATION.--Lat 42°37'43", long 78°07'08", Hydrologic Unit 04130002, near Gainesville. Owner: Letchworth Central School.
AQUIFER.--Unconfined aquifer in sand of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 inch, depth 20 ft, cased to 20 ft, open end.
INSTRUMENTATION.---Electronic data recorder--hourly; monthly measurement with chalked tape by USGS personnel.
DATUM.--Elevation of land-surface datum is 1,606.76 ft above NGVD of 1929. Measuring point: Top of casing, 2.64 ft above land-surface datum.
REMARKS.--Well drilled May 1974 as a replacement for 423743078070801 (local number Wo 2), located 25 ft southeast, which has a period of record from November 1965 to May 1974 (unpublished). Water level may be affected by periodic water-quality sampling by county health department.
PERIOD OF RECORD.--May 1974 to current year. Records for May 1974 to September 1976 are unpublished and available in files of the Geological Survey.
REVISED RECORDS.--WDR NY-91-3: 1990.
EXTREMES FOR PERIOD OF RECORD.--Maximum water-level depth below land surface, 14.00 ft, Nov. 3, 1974; minimum water-level depth below land surface, 7.89 ft, Mar. 5, 1976.
EXTREMES FOR CURRENT YEAR.--Maximum water-level depth below land surface, 13.84 ft, Sept. 14, 15; minimum water-level depth below land surface, 10.50 ft, June 1.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.59	13.46	13.56	13.12	11.75	12.24	11.44	11.74	10.51	12.06	12.98	13.65
2	13.61	13.46	13.52	13.12	10.92	12.32	11.44	11.76	10.54	12.12	13.02	13.66
3	13.63	13.46	13.51	13.16	10.83	12.32	11.28	11.81	10.67	12.20	13.03	13.66
4	13.67	13.47	13.50	13.20	10.86	12.31	11.08	11.85	10.76	12.24	13.08	13.64
5	13.68	13.49	13.51	13.21	10.97	12.32	11.00	11.90	10.81	12.30	13.11	13.66
6	13.68	13.52	13.53	13.21	11.10	12.33	11.02	11.94	10.82	12.35	13.12	13.67
7	13.68	13.53	13.53	13.28	11.22	12.33	11.07	11.99	10.87	12.38	13.19	13.67
8	13.68	13.55	13.56	13.30	11.36	12.32	11.15	12.05	10.96	12.45	13.21	13.69
9	13.71	13.58	13.59	13.31	11.49	12.28	11.21	12.06	11.04	12.48	13.24	13.74
10	13.74	13.58	13.59	13.33	11.58	12.19	11.29	12.06	11.14	12.54	13.27	13.75
11	13.74	13.59	13.60	13.33	11.59	12.16	11.35	12.06	11.22	12.56	13.30	13.77
12	13.74	13.61	13.63	13.33	11.63	12.12	11.41	12.11	11.30	12.60	13.35	13.78
13	13.76	13.64	13.65	13.33	11.72	12.12	11.46	12.06	11.38	12.63	13.36	13.80
14	13.78	13.65	13.64	13.33	11.80	12.12	11.43	11.88	11.45	12.67	13.39	13.83
15	13.78	13.66	13.52	13.34	11.86	12.10	11.30	11.66	11.35	12.71	13.43	13.79
16	13.78	13.68	13.45	13.35	11.92	12.08	11.26	11.53	11.24	12.75	13.43	13.52
17	13.71	13.68	13.41	13.35	12.00	12.09	11.25	11.45	11.25	12.81	13.46	13.48
18	13.66	13.68	13.27	13.35	12.07	12.11	11.28	11.42	11.30	12.83	13.50	13.49
19	13.66	13.73	13.10	13.36	12.10	12.15	11.33	11.39	11.39	12.87	13.52	13.53
20	13.66	13.75	13.01	13.38	12.19	12.17	11.37	11.40	11.46	12.90	13.52	13.57
21	13.66	13.75	12.96	13.41	12.20	12.12	11.42	11.43	11.53	12.93	13.52	13.60
22	13.62	13.75	12.96	13.43	12.17	12.11	11.46	11.50	11.62	12.97	13.52	13.61
23	13.61	13.75	12.96	13.42	12.15	12.11	11.54	11.56	11.69	12.93	13.54	13.64
24	13.61	13.76	12.95	13.36	12.18	12.13	11.59	11.59	11.76	12.92	13.57	13.69
25	13.61	13.75	12.94	13.23	12.20	12.17	11.65	11.67	11.82	12.95	13.57	13.70
26	13.60	13.69	12.94	13.10	12.20	12.18	11.73	11.68	11.88	12.98	13.58	13.70
27	13.55	13.69	12.95	13.04	12.20	12.03	11.78	11.76	11.90	13.00	13.60	13.66
28	13.47	13.69	12.98	12.97	12.23	11.90	11.79	11.79	11.93	12.97	13.61	13.50
29	13.46	13.66	13.00	12.88	---	11.79	11.71	11.76	11.97	12.93	13.61	13.49
30	13.46	13.61	13.01	12.63	---	11.63	11.71	11.10	12.02	12.93	13.62	13.49
31	13.46	---	13.08	12.34	---	11.49	---	10.66	---	12.95	13.62	---
MEAN	13.65	13.63	13.30	13.21	11.73	12.12	11.39	11.70	11.32	12.67	13.38	13.65
MAX	13.78	13.76	13.65	13.43	12.23	12.33	11.79	12.11	12.02	13.00	13.62	13.83
MIN	13.46	13.46	12.94	12.34	10.83	11.49	11.00	10.66	10.51	12.06	12.98	13.48



PESTICIDE ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Statewide Pesticide Monitoring Project
Monitoring at Community-Water-System Wells in Western New York

In 1999, the U.S. Geological Survey, in cooperation with the New York State Department of Environmental Conservation, began a monitoring program to determine the occurrence and trends of pesticide residues in selected community water-supply wells in western New York (fig. 10). Samples of raw, untreated water from these wells were analyzed for the pesticide compounds using the USGS SH2001/2010 and LCAA methods. Concentrations did not exceed Federal or State maximum contaminant levels (MCLs) for drinking water for any compound. Additional data on pesticide residues in selected water-supply wells are published for eastern New York excluding Long Island (vol 1.) and for Long Island (vol. 2)

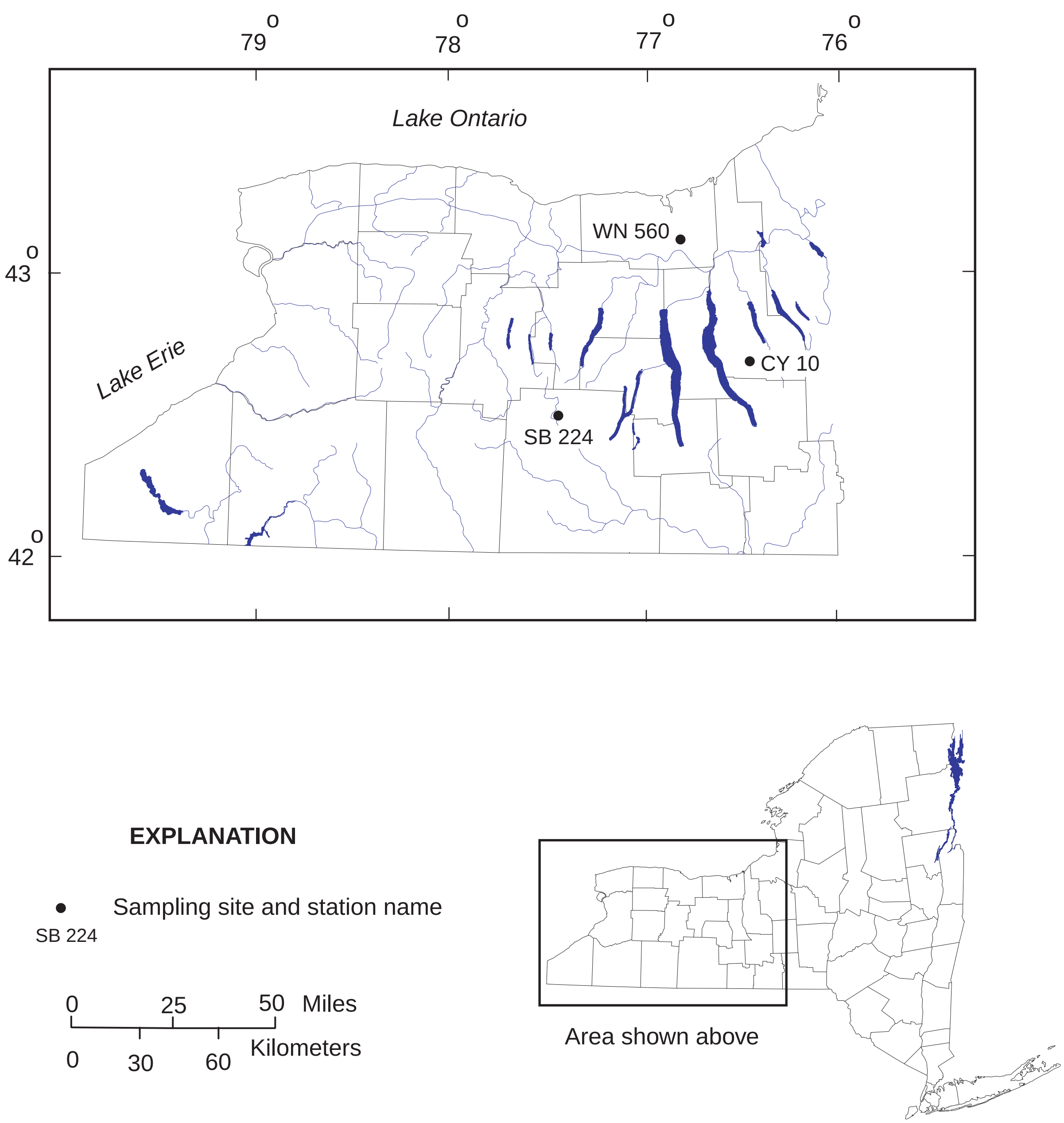


Figure 10.-- Location of community water-supply wells in western New York that were sampled in water year 2002 for pesticide analysis.

PESTICIDE ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Local ident-i-fier	Date	Time	TER-BUTHYL-AZINE, WATER, DISS, REC (UG/L) (04022)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	FONOFOS WATER DISS REC (UG/L) (04095)	ALPHA BHC DIS-SOLVED (UG/L) (34253)
				CAYUGA COUNTY							
CY 10	10-31-01	0800	U	<.010	<.002	<.011	.02	E.090	<.018	<.003	<.005
	01-28-02	1030	U	<.010	<.002	.005	E.01	E.055	<.018	<.003	<.005
	05-08-02	0700	--	<.010	<.002	E.003	.03	E.042	<.018	<.003	<.005
	09-04-02	0700	--	<.010	<.002	E.005	.02	E.087	<.018	<.003	<.005
				STEUBEN COUNTY							
SB 224	10-30-01	1200	U	<.010	<.002	<.011	.06	E.019	<.018	<.003	<.005
	01-29-02	1120	U	<.010	<.002	<.005	.06	E.015	<.018	<.003	<.005
	01-29-02	1125	U	<.010	<.002	E.004	.06	E.016	<.018	<.003	<.005
	05-07-02	0900	--	<.010	<.002	<.005	.07	E.014	<.018	<.003	<.005
	09-04-02	1000	--	<.010	<.002	E.004	.07	E.013	<.018	<.003	<.005
				WAYNE COUNTY							
WN 560	10-30-01	0730	U	<.010	<.002	<.011	<.01	E.010	<.018	<.003	<.005
	01-29-02	0800	U	<.010	<.002	<.005	<.01	E.009	<.018	<.003	<.005

Local ident-i-fier	Date	P,P' DDE DISSOLV (UG/L) (34653)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	LINDANE DIS-SOLVED (UG/L) (39341)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	MALA-THION, DIS-SOLVED (UG/L) (39532)	PARA-THION, DIS-SOLVED (UG/L) (39542)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)
					CAYUGA COUNTY						
CY 10	10-31-01	<.003	<.005	<.004	<.005	E.013	<.027	<.007	<.005	.064	<.002
	01-28-02	<.003	<.005	<.004	<.005	E.007	<.027	<.010	<.005	.060	<.004
	05-08-02	<.003	<.005	<.004	<.005	E.004	<.027	<.010	<.005	.042	<.004
	09-04-02	<.003	<.005	<.004	<.005	E.011	<.027	<.010	<.005	.086	<.004
					STEUBEN COUNTY						
SB 224	10-30-01	<.003	<.005	<.004	<.005	E.008	<.027	<.007	<.005	.032	<.002
	01-29-02	<.003	<.005	<.004	<.005	E.008	<.027	<.010	<.005	.032	<.004
	01-29-02	<.003	<.005	<.004	<.005	E.007	<.027	<.010	<.005	.033	<.004
	05-07-02	<.003	<.005	<.004	<.005	E.007	<.027	<.010	<.005	.041	<.004
	09-04-02	<.003	<.005	<.004	<.005	E.009	<.027	<.010	<.005	.038	<.004
					WAYNE COUNTY						
WN 560	10-30-01	<.003	<.005	<.004	<.005	.404	<.027	<.007	<.005	.008	<.002
	01-29-02	<.003	<.005	<.004	<.005	.283	<.027	<.010	<.005	E.005	<.004

Local ident-i-fier	Date	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)
					CAYUGA COUNTY						
CY 10	10-31-01	<.004	<.006	<.002	<.009	<.009	<.011	<.034	<.035	<.006	<.002
	01-28-02	<.006	<.006	<.006	<.009	<.009	<.011	<.034	<.035	<.006	<.002
	05-08-02	<.006	<.006	<.006	<.009	<.009	<.011	<.034	<.035	<.006	<.002
	09-04-02	<.006	<.006	<.006	<.009	<.009	<.011	<.034	<.035	<.006	<.002
					STEUBEN COUNTY						
SB 224	10-30-01	<.004	.090	<.002	<.009	<.009	<.011	<.034	<.035	<.006	<.002
	01-29-02	<.006	.083	<.006	<.009	<.009	<.011	<.034	<.035	<.006	<.002
	01-29-02	<.006	.082	<.006	<.009	<.009	<.011	<.034	<.035	<.006	<.002
	05-07-02	<.006	.130	<.006	<.009	<.009	<.011	<.034	<.035	<.006	<.002
	09-04-02	<.006	.096	<.006	<.009	<.009	<.011	<.034	<.035	<.006	<.002
					WAYNE COUNTY						
WN 560	10-30-01	<.004	<.006	<.002	<.009	<.009	<.011	<.034	<.035	<.006	<.002
	01-29-02	<.006	<.006	<.006	<.009	<.009	<.011	<.034	<.035	<.006	<.002

E Estimated.
U Material specifically analyzed for but not detected.

ANALYSES OF SAMPLES AT WATER-QUALITY PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

PESTICIDE ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002--Continued

Local ident- i- fier	Date	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)
					CAYUGA COUNTY						
CY 10	10-31-01	<.002	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02	<.002
	01-28-02	<.004	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02	<.002
	05-08-02	<.004	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02	<.002
	09-04-02	<.004	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02	<.002
					STEUBEN COUNTY						
SB 224	10-30-01	<.002	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02	<.002
	01-29-02	<.004	<.02	<.002	<.005	<.010	E.002	<.02	<.004	<.02	<.002
	01-29-02	<.004	<.02	<.002	<.005	<.010	E.002	<.02	<.004	<.02	<.002
	05-07-02	<.004	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02	<.002
	09-04-02	<.004	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02	<.002
					WAYNE COUNTY						
WN 560	10-30-01	<.002	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02	<.002
	01-29-02	<.004	<.02	<.002	<.005	<.010	<.020	<.02	<.004	<.02	<.002

Local ident- i- fier	Date	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	ACETO- CHLOR ESA FLTRD 0.7 UM GF REC (UG/L) (61029)
					CAYUGA COUNTY						
CY 10	10-31-01	<.011	<.041	<.005	<.003	<.010	<.007	<.02	<.050	<.006	<.05
	01-28-02	<.011	<.041	<.005	<.003	<.022	<.007	--	<.050	<.006	<.05
	05-08-02	<.011	<.041	<.005	<.003	<.022	<.007	<.02	<.050	<.006	<.05
	09-04-02	<.011	<.041	<.005	<.003	<.022	<.007	<.02	<.050	<.006	<.05
					STEUBEN COUNTY						
SB 224	10-30-01	<.011	<.041	<.005	<.003	<.010	<.007	<.02	<.050	<.006	<.05
	01-29-02	<.011	<.041	<.005	<.003	<.022	<.007	--	<.050	<.006	<.05
	01-29-02	<.011	<.041	<.005	<.003	<.022	<.007	--	<.050	<.006	<.05
	05-07-02	<.011	<.041	<.005	<.003	<.022	<.007	<.02	<.050	<.006	<.05
	09-04-02	<.011	<.041	<.005	<.003	<.022	<.007	<.02	<.050	<.006	<.05
					WAYNE COUNTY						
WN 560	10-30-01	<.011	<.041	<.005	<.003	<.010	<.007	<.02	<.050	<.006	<.05
	01-29-02	<.011	<.041	<.005	<.003	<.022	<.007	--	<.050	<.006	<.05

Local ident- i- fier	Date	ACETO- CHLOR OA FLTRD 0.7 UM GF REC (UG/L) (61030)	ALA- CHLOR ESA WAT FLT GF 0.7U REC (UG/L) (50009)	ALA- CHLOR OA FLTRD 0.7 UM GF REC (UG/L) (61031)	DIMETH- ENAMID, ESA, WAT FLT (UG/L) (61951)	DIMETH- ENAMID OA, WATER FLT, REC (UG/L) (62482)	FLUFEN- ACET, ESA, WAT FLT (UG/L) (61952)	FLUFE- NACET OA, WATER FLT, REC (UG/L) (62483)	METOLA- CHLOR ESA FLTRD 0.7 UM GF REC (UG/L) (61043)	METOLA- CHLOR OA FLTRD 0.7 UM GF REC (UG/L) (61044)
					CAYUGA COUNTY					
CY 10	10-31-01	<.05	<.05	<.05	<.05	<.05	<.05	<.05	1.64	.30
	01-28-02	<.05	<.05	<.05	<.05	<.05	<.05	<.05	.69	<.05
	05-08-02	<.05	<.06	<.05	<.06	<.06	<.05	<.05	.24	<.05
	09-04-02	<.05	<.05	<.05	<.05	<.05	<.05	<.05	1.06	.23
					STEUBEN COUNTY					
SB 224	10-30-01	<.05	.13	.24	<.05	<.05	<.05	<.05	.83	3.11
	01-29-02	<.05	.10	.23	<.05	<.05	<.05	<.05	.80	2.66
	01-29-02	<.05	.10	.24	<.05	<.05	<.05	<.05	.79	2.65
	05-07-02	<.05	.13	.38	<.05	<.05	<.05	<.05	.95	3.63
	09-04-02	<.05	.10	.14	<.05	<.05	<.05	<.05	.69	1.86
					WAYNE COUNTY					
WN 560	10-30-01	<.05	.07	<.05	<.05	<.05	<.05	<.05	2.91	1.02
	01-29-02	<.05	.08	<.05	<.05	<.05	<.05	<.05	2.75	.96

E Estimated.

PESTICIDE ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Local ident- i- fier	Date	Time	BRO- MACIL, WATER, DISS, REC (UG/L) (04029)	CY- CLOATE, WATER, DISS, REC (UG/L) (04031)	TER- BACIL, WATER, DISS, REC (UG/L) (04032)	DIPHEN- AMID, WATER, DISS, REC (UG/L) (04033)	DEISO- PROPYL ATRAZIN WATER, DISS, REC (UG/L) (04038)	DEETHYL DEISO- PROPYL ATRAZIN DISS, REC (UG/L) (04039)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DICAMBA WATER, FLTRD, GF 0.7U REC (UG/L) (38442)	LINURON WATER, FLTRD, GF 0.7U REC (UG/L) (38478)
				STEUBEN COUNTY							
SB 224	05-07-02	0910	<.03	<.01	<.010	<.03	M	M	E.01	<.01	<.01
	09-04-02	1010	<.03	<.01	<.010	<.03	M	<.01	E.01	<.01	<.01

Local ident- i- fier	Date	MCPA, WATER, FLTRD, GF 0.7U REC (UG/L) (38482)	MCPB, WATER, FLTRD, GF 0.7U REC (UG/L) (38487)	METHIO- CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (38501)	PRO- POXUR, WATER, FLTRD, GF 0.7U REC (UG/L) (38538)	SIDURON WATER FLTRD REC (UG/L) (38548)	BENTA- ZON, WATER, FLTRD, GF 0.7U REC (UG/L) (38711)	2,4-DB WATER, FLTRD, GF 0.7U REC (UG/L) (38746)	FLUO- METURON WATER, FLTRD, GF 0.7U REC (UG/L) (38811)	OXAMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (38866)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)
					STEUBEN COUNTY						
SB 224	05-07-02	<.02	<.01	<.008	<.008	<.02	E.01	<.02	<.03	<.01	.034
	09-04-02	<.02	<.01	<.008	<.008	<.02	<.01	<.02	<.03	<.01	.043

Local ident- i- fier	Date	2,4-D, DIS- SOLVED (UG/L) (39732)	TRI- CLOPYR, WATER, FLTRD, GF 0.7U REC (UG/L) (49235)	PRO- PHAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49236)	PIC- LORAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49291)	ORY- ZALIN, WATER, FLTRD, GF 0.7U REC (UG/L) (49292)	NORFLUR AZON, WATER, FLTRD, GF 0.7U REC (UG/L) (49293)	NEB- URON, WATER, FLTRD, GF 0.7U REC (UG/L) (49294)	METH- OMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49296)	FEN- URON, WATER, FLTRD, GF 0.7U REC (UG/L) (49297)	DIURON, WATER, FLTRD, GF 0.7U REC (UG/L) (49300)
					STEUBEN COUNTY						
SB 224	05-07-02	<.02	<.02	<.010	<.02	<.02	<.02	<.01	<.004	<.03	<.01
	09-04-02	<.02	<.02	<.010	<.02	<.02	<.02	<.01	<.004	<.03	<.01

Local ident- i- fier	Date	DINOSEB WATER, FLTRD, GF 0.7U REC (UG/L) (49301)	DICHLOR PROP, WATER, FLTRD, GF 0.7U REC (UG/L) (49302)	DACTHAL MONO- ACID, WAT,FLT GF 0.7U REC (UG/L) (49304)	CLOPYR- ALID, WATER, FLTRD, GF 0.7U REC (UG/L) (49305)	CHLORO- THALO- NIL, WAT,FLT GF 0.7U REC (UG/L) (49306)	3HYDRXY CARBO- FURAN WAT,FLT GF 0.7U REC (UG/L) (49308)	CARBO- FURAN, WATER, FLTRD, GF 0.7U REC (UG/L) (49309)	CAR- BARYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49310)	BRO- MOXYNIL WATER, FLTRD, GF 0.7U REC (UG/L) (49311)	ALDI- CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (49312)
					STEUBEN COUNTY						
SB 224	05-07-02	<.01	<.01	<.01	<.01	<.04	<.006	<.006	<.03	<.02	<.04
	09-04-02	<.01	<.01	<.01	<.01	<.04	<.006	<.006	<.03	<.02	<.04

Local ident- i- fier	Date	ALDI- CARB SULFONE WAT,FLT GF 0.7U REC (UG/L) (49313)	ALDICA- RB SUL- FOXIDE, WAT,FLT GF 0.7U REC (UG/L) (49314)	ACIFL- UORFEN WATER, FLTRD, GF 0.7U REC (UG/L) (49315)	3-KETO CARBO- FURAN WATER FLTRD REC (UG/L) (50295)	BENDIO- CARB, WATER FLTRD REC (UG/L) (50299)	BENOMYL WATER FLTRD REC (UG/L) (50300)	CAF- FEINE, WATER FLTRD REC (UG/L) (50305)	CHLORI- MURON, WATER FLTRD REC (UG/L) (50306)	SULFO- MET- RURON METHYL WTR FLT REC (UG/L) (50337)	HYDROXY ATRA- ZINE WATER FLTRD REC (UG/L) (50355)
					STEUBEN COUNTY						
SB 224	05-07-02	<.02	<.008	<.007	<2	<.03	<.004	<.010	<.010	<.009	<.008
	09-04-02	<.02	<.008	<.007	<2	<.03	<.004	E.007	<.010	<.009	<.008

Local ident- i- fier	Date	IMAZ- AQUIN WATER FLTRD REC (UG/L) (50356)	METAL- AXYL WATER FLTRD REC (UG/L) (50359)	NICOSUL FURON WATER FLTRD REC (UG/L) (50364)	IMAZE- THAPYR WATER FLTRD REC (UG/L) (50407)	2,4-D METHYL ESTER, WATER FLTRD REC (UG/L) (50470)	PROP- ICONA- ZOLE , WATER FLTRD REC (UG/L) (50471)	CHLOR- AMBEN, METHYL ESTER WATER FLTRD (UG/L) (61188)	UREA 3(4-CHLOR OPHENYL METHYL WAT FLT REC (UG/L) (61692)	BEN- SUL- FURON METHYL WAT FLT REC (UG/L) (61693)	FLUMET- SULAM WATER FLTRD REC (UG/L) (61694)
					STEUBEN COUNTY						
SB 224	05-07-02	<.02	M	<.01	<.02	<.009	<.02	<.02	<.02	<.02	<.01
	09-04-02	<.02	M	<.01	M	<.009	<.02	<.02	<.02	<.02	<.01

E Estimated.
M presence of material verified but not quantified.

PESTICIDE ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002--Continued

Local ident-i-fier	Date	IMID-ACLOP-RID WATER FLTRD REC (UG/L) (61695)	MET-SUL-FURON METHYL WAT FLT REC (UG/L) (61697)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)
STEUBEN COUNTY				
SB 224	05-07-02	<.007	<.03	<.006
	09-04-02	<.007	<.03	<.006

WATER-QUALITY DATA, WATER YEAR, OCTOBER 2001 TO SEPTEMBER 2002

MONROE COUNTY

Water quality samples were collected and analyzed by the Monroe County Environmental Health Laboratory at Rochester, N.Y. Water-quality records for theses sites were collected and reported in local standard time.

Local ident-i-fier	Station number	Date	TUR-BID-ITY (NTU) (00076)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE LAB (STAND-ARD UNITS) (00403)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2) (00405)	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
MO 2	430855077304202	10-30-01	4.5	946	.2	7.5	1.0	--	<.01	.12
		04-15-02	1.6	919	.7	7.5	--	262	.02	1.2
MO 3	430854077304601	10-30-01	.50	1350	.4	7.4	18	--	<.01	.39
		04-15-02	1.5	1340	2.3	7.4	50	233	<.01	1.6
MO 659	430932077311501	10-30-01	82	757	.5	7.5	10	--	<.01	<.10
		10-30-01	29	723	<.1	7.9	4.0	--	<.01	.17
		04-15-02	63	763	.4	6.8	30	167	<.01	.26
		04-15-02	29	694	<.1	7.0	19	149	<.01	.35
MO 663	430912077313301	10-30-01	8.9	1370	1.7	7.2	67	--	.08	2.1
		04-15-02	5.0	1030	2.1	6.7	85	399	.35	2.2
MO 664	430912077313302	10-30-01	11	31000	<.1	7.0	81	--	1.8	.35
		04-15-02	55	23100	<.1	6.8	114	182	1.8	2.3
MO 665	430928077313802	10-30-01	82	2100	.2	7.0	210	--	1.4	3.1
		04-15-02	170	2110	.2	6.1	343	843	1.4	3.6
MO 666	430928077313803	10-30-01	50	1320	<.1	7.0	206	--	7.4	10
		04-15-02	200	1500	<.1	7.0	199	523	4.2	8.6
MO 667	430928077314001	10-30-01	285	2690	.6	7.1	143	--	8.7	13
		04-15-02	390	2300	.2	6.3	286	776	7.9	8.6
MO 668	430928077314002	10-30-01	30	2490	<.1	6.9	171	--	5.5	7.9
		04-15-02	140	2520	<.1	6.4	286	663	5.5	6.2

Local ident-i-fier	Date	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)
MO 2	10-30-01	<.02	.01	<.003	<1.0	311	86	24.0	70.0	1.4
	04-15-02	.04	1.8	.006	1.0	300	84	20.5	67.8	1.4
MO 3	10-30-01	.85	.01	M	<1.0	380	100	30.0	170	2.5
	04-15-02	.63	.02	.008	<1.0	370	108	26.5	128	2.4
MO 659	10-30-01	<.02	<.01	<.003	<1.0	280	33	49.0	40.0	2.2
	10-30-01	.03	<.01	<.003	<1.0	264	27	49.0	41	2.1
	04-15-02	<.02	<.01	<.003	<1.0	460	37	45.0	43.2	2.1
	04-15-02	<.02	<.01	<.003	<1.0	240	46	46.2	41.5	2.1
MO 663	10-30-01	2.7	.14	.040	15	720	230	26.0	42.0	.10
	04-15-02	2.6	.55	.489	10	530	74	18.8	20.3	2.6
MO 664	10-30-01	<.02	.33	.200	<1.0	4550	1200	42.0	2200	24
	04-15-02	<.02	.30	.041	<1.0	4400	1410	351	2250	18
MO 665	10-30-01	<.02	.35	.010	19	700	210	42.0	220	.72
	04-15-02	.06	.50	.012	18	250	130	20.1	210	.59
MO 666	10-30-01	.03	.31	.120	8.5	634	170	47.0	86.0	5.4
	04-15-02	<.02	.33	.011	9.4	670	230	42.8	77.0	11
MO 667	10-30-01	<.02	3.2	.020	8.9	754	200	52.0	300	20
	04-15-02	<.02	1.8	.018	9.8	710	120	23.2	228	17
MO 668	10-30-01	<.02	.62	.150	8.3	607	180	62.0	260	6.7
	04-15-02	.07	.60	.104	8.4	710	113	62.8	274	7.2

M presence of material verified but not quantified.

WATER-QUALITY DATA, WATER YEAR, OCTOBER 2001 TO SEPTEMBER 2002

MONROE COUNTY--Continued

Local ident-i-fier	Date	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)
MO 2	10-30-01	139	98	210	536	--
	04-15-02	143	99	40	525	574
MO 3	10-30-01	238	101	<50	768	--
	04-15-02	241	104	20	770	750
MO 659	10-30-01	142	19	8600	374	--
	10-30-01	148	16	4600	361	--
	04-15-02	141	20	6590	363	389
	04-15-02	139	2	5390	311	368
MO 663	10-30-01	98	167	730	890	--
	04-15-02	27	23	560	630	408
MO 664	10-30-01	6870	502	23000	10100	--
	04-15-02	5910	459	16800	12200	10500
MO 665	10-30-01	247	1.5	13000	1290	--
	04-15-02	243	<.5	13400	1250	--
MO 666	10-30-01	252	16	28000	747	--
	04-15-02	86	<.5	29000	870	--
MO 667	10-30-01	540	<.5	40000	1480	--
	04-15-02	147	<.5	31200	1290	--
MO 668	10-30-01	499	<.5	27000	1370	--
	04-15-02	495	<.5	20400	1370	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

ONONDAGA COUNTY

Since 1997, water-quality data collected from depressurizing wells near the Tully Valley mudboils have been used to document the long-term quality of the water being discharged from these wells, and the impact of this water on the quality of Onondaga Creek. Water-quality records for these sites were collected and reported in local standard time.

Local ident- i- fier	Station number	Date	Time	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
OD1819	430332076094901	11-15-01	1315	142000	6.8	12.3	3.2	54	5800	1880
		02-07-02	1100	148000	6.8	9.0	--	--	5700	1810
		05-16-02	1230	142000	6.9	14.4	1.7	35	5500	1760
		08-30-02	1130	146000	7.0	15.8	1.9	36	5800	1860
OD1812	430458076110901	11-15-01	1245	21700	7.1	12.5	6.4	57	2300	791
		02-15-02	1245	22400	7.0	11.6	4.8	42	2200	754
		05-16-02	1130	20700	7.2	12.3	3.6	37	2200	724
		08-30-02	1230	21400	7.2	12.4	3.1	31	2400	816
OD1818	430213076111201	11-15-01	1200	2580	7.5	11.3	9.6	90	1100	326
		02-15-02	1145	2510	7.3	10.3	11.7	102	1000	309
		05-16-02	1045	2550	7.3	11.4	11.4	101	1000	308
		08-30-02	1100	2560	7.4	12.0	10.8	102	1000	323
OD1817	430040076093901	11-15-01	1125	1240	8.1	12.6	9.2	90	380	106
		02-15-02	1115	1100	8.0	7.8	15.2	118	320	90.6
		05-16-02	1015	988	8.0	11.8	11.1	102	320	90.0
		08-30-02	1030	1120	8.1	14.3	10.1	93	360	103
OD1816	430020076081701	11-15-01	1105	2860	7.8	11.9	12.6	100	1400	487
		02-15-02	1045	2850	7.6	10.1	12.2	106	1200	426
		05-16-02	0930	2710	7.6	11.6	10.6	98	1200	395
		08-30-02	0945	2500	7.8	13.0	10.2	96	1400	464
OD1815	425903076093101	11-15-01	1015	1370	7.6	9.3	11.5	102	530	169
		02-15-02	1000	1140	7.4	8.3	12.3	106	400	125
		05-16-02	0845	1050	7.5	9.3	11.3	99	380	117
		08-30-02	0900	1150	7.6	9.7	10.6	95	450	144
OD1813	425120076082201	11-15-01	0845	14400	7.3	10.0	8.0	77	1700	355
		02-15-02	0830	16200	7.4	2.2	13.7	106	1700	356
		05-16-02	0715	15700	7.5	11.3	9.2	89	1800	343
		08-30-02	0645	15800	7.5	13.8	7.4	75	1800	378
OD 462	425111076083801	11-15-01	0730	8200	7.7	11.5	4.5	41	820	161
		05-16-02	0615	8200	7.6	11.3	5.0	47	820	160
OD 469	425115076081801	08-30-02	0620	612	8.1	11.7	5.0	46	130	26.8
OD 471	425121076082501	02-15-02	0730	16800	7.5	11.0	3.6	10	1300	279
OD 451	425131076081803	02-15-02	0850	1210	7.8	10.2	4.6	43	260	53.5
		08-30-02	0730	1240	7.8	11.3	3.4	31	280	59.0
OD 450	425131076081901	11-15-01	0805	1950	7.6	10.9	4.2	38	360	72.8
		05-16-02	0800	2030	7.8	11.1	3.0	35	360	71.9

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

ONONDAGA COUNTY--Continued

Local ident-i-fier	Date	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
OD1819	11-15-01	270	41700	73.6	66300	4460	126	154	7.1	116000	8150
	02-07-02	276	43300	94.4	66200	4540	118	144	7.5	118000	6370
	05-16-02	265	41400	108	65600	4350	106	129	6.7	110000	9750
	08-30-02	274	40700	91.0	68000	4400	118	144	7.0	93	11300
OD1812	11-15-01	90.8	4460	29.1	6930	2160	196	239	7.2	15000	2440
	02-15-02	87.8	4260	29.4	6840	2130	200	244	7.3	15000	2360
	05-16-02	83.8	4010	28.8	6090	1970	192	234	7.2	13700	2010
	08-30-02	93.1	4460	29.5	6630	2070	212	259	7.5	14900	2500
OD1818	11-15-01	62.0	162	2.81	354	619	252	308	6.2	1700	<10
	02-15-02	57.9	158	2.55	325	589	256	312	5.7	1740	<10
	05-16-02	60.7	169	2.63	372	524	232	283	6.0	1700	<30
	08-30-02	58.6	171	2.97	367	578	276	337	6.2	1790	<10
OD1817	11-15-01	28.1	91.9	2.38	227	33.6	178	217	7.4	648	<10
	02-15-02	23.8	81.4	1.66	188	32.2	172	210	5.9	580	<10
	05-16-02	22.7	73.8	1.77	153	30.2	186	227	6.1	537	<10
	08-30-02	26.0	85.5	1.99	203	30.7	196	239	7.3	633	<10
OD1816	11-15-01	49.6	146	3.88	264	1090	214	261	6.0	2340	<30
	02-15-02	43.5	183	3.50	320	939	216	264	5.5	2180	E6
	05-16-02	41.9	182	3.18	305	823	222	271	5.5	2050	<30
	08-30-02	47.4	142	4.00	238	1020	262	320	6.3	2230	<30
OD1815	11-15-01	25.7	73.2	2.36	150	234	236	288	5.1	880	<10
	02-15-02	21.2	70.6	2.06	150	111	214	261	4.9	668	<10
	05-16-02	20.4	68.9	2.04	133	91.1	202	246	4.8	590	<10
	08-30-02	22.5	66.6	2.41	116	172	228	278	5.1	737	<10
OD1813	11-15-01	203	2380	6.75	4510	551	100	122	10.9	9000	159
	02-15-02	208	2710	6.30	5110	646	108	132	11.2	9760	478
	05-16-02	224	2770	6.90	5140	652	102	124	9.8	10200	E196
	08-30-02	215	2870	8.40	5330	663	110	134	11.3	9950	318
OD 462	11-15-01	103	1320	4.47	2550	241	104	127	9.9	5040	1360
	05-16-02	102	1390	4.07	2560	241	96	117	9.5	5080	1010
OD 469	08-30-02	14.9	103	1.82	131	15.3	104	127	10.4	433	122
OD 471	02-15-02	150	3250	7.46	5280	883	154	188	13.0	10300	2430
OD 451	02-15-02	30.2	99.2	1.38	313	10.0	78	95	10.4	644	147
	08-30-02	32.0	106	2.05	341	8.3	84	103	10.5	731	156
OD 450	11-15-01	42.0	213	2.19	543	35.1	86	105	10.2	1080	258
	05-16-02	43.3	220	1.65	569	39.5	74	90	10.0	1240	257

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

ONONDAGA COUNTY--Continued

Local ident-i-fier	Date	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)
OD1819	11-15-01	869	37.6
	02-07-02	829	41.1
	05-16-02	720	41.0
	08-30-02	716	39.2
OD1812	11-15-01	294	8.14
	02-15-02	293	10.0
	05-16-02	259	7.88
	08-30-02	310	8.25
OD1818	11-15-01	<2.0	.12
	02-15-02	E1.0	.14
	05-16-02	<5.0	.11
	08-30-02	<2.0	.12
OD1817	11-15-01	9.9	.09
	02-15-02	7.8	.09
	05-16-02	10.6	.05
	08-30-02	9.4	.07
OD1816	11-15-01	<5.0	.16
	02-15-02	E1.9	.13
	05-16-02	<5.0	.14
	08-30-02	<5.0	.17
OD1815	11-15-01	<2.0	.10
	02-15-02	<2.0	.06
	05-16-02	<2.0	.07
	08-30-02	<2.0	.06
OD1813	11-15-01	398	7.61
	02-15-02	224	7.74
	05-16-02	212	7.51
	08-30-02	124	7.59
OD 462	11-15-01	38.6	5.06
	05-16-02	35.1	4.54
OD 469	08-30-02	7.9	.73
OD 471	02-15-02	81.4	10.8
OD 451	02-15-02	26.3	.53
	08-30-02	28.0	.57
OD 450	11-15-01	30.2	.94
	05-16-02	31.2	.92

E estimated.

425129076082701 AT OTISCO ROAD NEAR TULLY, NY

LOCATION.--Lat 42°51'29", long 76°08'27", Onondaga County, Hydrologic unit 04140201, in backyard of residence on Otisco Road.
PERIOD OF RECORD.--October 1991 to June 1999, October 1999 to current year.
INSTRUMENTATION.--Tipping bucket raingage with 8.214 inch diameter receiving funnel, mounted on a pedestal in the backyard of residence. Funnel is heated to melt snow. Each tip of the raingage bucket is equivalent to .01 inch of precipitation. Tips of the raingage bucket are recorded and accumulated at hourly intervals on an electronic data logger.
REMARKS.--Rain gage is operated in conjunction with streamflow station 04237946 Onondaga Creek Tributary No. 6, below Main Mudboil Depression Area at Tully, for the Tully mudboil project.
PERIOD OF RECORD MAXIMUM.--Maximum recorded daily precipitation, 3.92 inches on November 8, 1996.
MAXIMUM FOR CURRENT PERIOD.--Maximum recorded daily precipitation, 1.51 inches on Sept. 27.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.01	0.32	0.00	0.17	0.00	0.02	---	0.00	0.00
2	0.00	0.24	0.00	0.00	0.00	0.00	0.19	0.16	0.05	---	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.18	0.27	0.02	0.00	---	0.00	0.08
4	0.00	0.07	0.01	0.00	0.02	0.01	0.00	0.00	0.25	---	0.21	0.01
5	0.00	0.08	0.00	0.03	0.00	0.00	0.03	0.00	0.27	---	0.00	0.00
6	0.22	0.01	0.00	0.18	0.00	0.11	0.04	0.08	0.18	---	0.00	0.00
7	0.07	0.00	0.00	0.06	0.00	0.01	0.00	0.01	0.00	---	0.00	0.00
8	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.09	0.00	---	0.00	0.00
9	0.00	0.04	0.20	0.00	0.00	0.42	0.52	0.29	0.00	---	0.00	0.00
10	0.00	0.00	0.00	0.00	0.76	0.01	0.00	0.00	0.00	---	0.00	0.00
11	0.00	0.03	0.00	0.07	0.06	0.00	0.00	0.00	0.00	---	0.00	0.03
12	0.01	0.01	0.00	0.00	0.08	0.00	0.00	0.52	---	---	0.00	0.00
13	0.00	0.01	0.08	0.04	0.01	0.00	0.86	0.96	---	---	0.00	0.00
14	0.38	0.08	0.50	0.00	0.00	0.00	0.88	0.52	---	---	0.03	0.18
15	0.03	0.05	0.00	0.25	0.00	0.00	0.04	0.00	---	---	0.00	0.58
16	0.17	0.00	0.00	0.02	0.04	0.16	0.00	0.14	---	---	0.01	0.05
17	0.09	0.00	0.24	0.01	0.03	0.00	0.00	0.14	---	---	0.37	0.00
18	0.00	0.00	0.77	0.05	0.00	0.04	0.00	0.50	---	---	0.01	0.00
19	0.00	0.18	0.00	0.01	0.00	0.01	0.04	0.00	---	---	0.20	0.00
20	0.13	0.15	0.36	0.00	0.07	0.22	0.02	0.00	---	---	0.01	0.00
21	0.34	0.02	0.09	0.06	0.19	0.11	0.00	0.00	---	---	0.00	0.03
22	0.01	0.00	0.00	0.00	0.02	0.01	0.06	0.00	---	---	0.01	0.66
23	0.00	0.00	0.13	0.00	0.00	0.08	0.01	0.00	---	---	0.00	0.00
24	0.02	0.00	0.00	0.10	0.00	0.01	0.00	0.09	---	---	1.07	0.00
25	0.04	0.30	0.00	0.01	0.01	0.01	0.26	0.01	---	---	0.01	0.00
26	0.02	0.00	0.00	0.00	0.12	0.62	0.01	0.00	---	---	0.00	0.00
27	0.21	0.09	0.00	0.00	0.04	0.01	0.00	0.00	---	---	0.00	1.51
28	0.01	0.20	0.01	0.00	0.01	0.00	0.62	0.00	---	---	0.00	0.01
29	0.00	0.17	0.00	0.13	---	0.00	0.03	0.13	---	---	0.00	0.00
30	0.00	0.47	0.00	0.30	---	0.02	0.14	0.02	---	---	0.00	0.00
31	0.01	---	0.00	0.75	---	0.02	---	0.50	---	0.00	0.00	---
TOTAL	1.76	2.26	2.39	2.08	1.78	2.06	4.19	4.18	---	---	1.93	3.14
MAX	0.38	0.47	0.77	0.75	0.76	0.62	0.88	0.96	---	---	1.07	1.51

CAL YR 2001 TOTAL 30.11 MAX 3.56

GENESEE RIVER BASIN

430117077350101 AT MENDON PONDS, ROCHESTER, NY

LOCATION.--Lat 43°01'17", long 77°35'01", Monroe County, Hydrologic Unit 04130003, in Mendon Ponds County Park, 200 ft east of rangers' quarters, 300 ft east of State Highway 65, and 1.7 mi south of Interstate Highway 90.

PERIOD OF RECORD.--Water years 1980 to current year.
Dustfall data: Water years 1980 to current year, monthly.
Wetfall data: Water years 1980 to current year, monthly.
Bulk data: Water years 1980 to current year, monthly.

INSTRUMENTATION.--The composite sample collector is a straight-sided polyethlyene funnel approximately 6.5 inch in diameter that drains into a Teflon receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The polyethlyene funnel is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft above ground level. Wet/dry precipitation collector used for wetfall and dustfall samples. An automatic sensor detects precipitation and activates a motor that removes the cover from the wetfall-collection vessel and covers the dustfall-collection vessel. When precipitation ceases, the cycle is reversed. The sampling vessels are polyethlyene and have a collection diameter of 11.26 inch and a capacity of about 3.4 gallons. The openings of the collectors are approximately 8 ft above ground level.

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

REMARKS.--Records for October 1983 to September 1993 are published in "Water Resources of Monroe County New York, Water Years 1984-88", U.S. Geological Survey Open-File Report 93-370 and in "Water Resources of Monroe County New York, Water Years 1989-93", U. S. Geological Survey Open-File Report 97-587. Prior to October 1983, unpublished records are available in the files of the Monroe County Environmental Health Laboratory. Records of monthly precipitation totals are collected by the National Oceanic and Atmospheric Administration at the Rochester Monroe County airport. Water-quality records for this site for water year 2002 were collected and reported in local standard time.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

MONTHLY DUSTFALL

Date	PRECIP-ITATION TOTAL INCHES (00045)	PH WATER WHOLE LAB (STAND-ARD UNITS) (00403)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ACIDITY (MG/L AS CACO3) (00435)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)
SEP 28-OCT 31	2.28	6.6	51	2.2	.91	4.66	.31	4.4	2	9	1.1	3.1	.92
OCT 31-NOV 30	1.90	4.1	55	2.5	.42	.16	.21	3.6	.6	10	1.6	2.1	2.1
NOV 30-DEC 28	1.72	4.3	33	.6	.15	.04	.50	6.1	.8	3	.47	.47	.85
DEC 28-FEB 01	2.97	4.9	68	2.1	.06	.03	5.54	3.7	7	6	.13	1.5	2.2
FEB 01-27	1.61	4.4	74	1.9	.39	.13	6.67	6.9	7	6	1.4	1.9	2.7
FEB 27-MAR 29	2.09	4.1	60	2.5	.58	.13	2.19	5.5	3	6	.98	1.3	2.3
MAR 29-APR 30	3.44	5.6	43	3.1	.63	.47	.92	4.3	.3	8	.93	2.9	1.6
APR 30-MAY 29	5.87	5.0	51	2.8	.64	.65	.20	5.9	<.5	12	2.5	7.3	2.0
MAY 29-JUN 28	4.29	5.3	66	2.3	.83	2.93	.80	8.4	1	14	1.7	9.9	1.2
JUN 28-JUL 31	1.59	6.1	30	1.7	.80	1.85	.11	3.5	.4	5	.39	2.2	1.1
JUL 31-AUG 29	.84	3.9	29	2.2	.49	.79	.11	2.6	.4	6	.43	1.7	.93
AUG 29-OCT 01	2.61	6.1	34	.7	.84	7.32	.06	7.7	.9	<.5	.03	.40	.23

Date	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
SEP 28-OCT 31	.682	1.08	7	15
OCT 31-NOV 30	.015	.050	9	20
NOV 30-DEC 28	.005	.010	19	10
DEC 28-FEB 01	.005	.010	13	25
FEB 01-27	.014	.035	19	30
FEB 27-MAR 29	.024	.052	14	19
MAR 29-APR 30	.071	.241	14	32
APR 30-MAY 29	.176	.364	15	36
MAY 29-JUN 28	.195	.871	15	55
JUN 28-JUL 31	.114	.272	15	12
JUL 31-AUG 29	.010	.146	9	15
AUG 29-OCT 01	.624	.783	4	9

Note; Monthly dustfall samples are dissolved in one liter of deionized water for analysis and concentrations are reported on a per liter basis. Thus, a reported calcium concentration of 1.0 mg/L would mean that 1.0 mg of calcium accumulated in the sampler.

GENESEE RIVER BASIN

430117077350101 AT MENDON PONDS, ROCHESTER, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

MONTHLY WETFALL

Date	PRECIP-ITATION TOTAL INCHES (00045)	PH WATER WHOLE LAB (STAND-ARD UNITS) (00403)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ACIDITY (MG/L AS CACO3) (00435)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)
SEP 28-OCT 31	2.28	6.4	29	1.2	.66	3.52	.14	4.6	.1	9	.22	1.4	.43
OCT 31-NOV 30	1.90	4.5	16	.6	.10	.06	.02	3.6	.4	3	.31	.34	.47
NOV 30-DEC 28	1.72	4.3	36	.1	.16	.05	.32	8.5	.8	3	.42	.46	1.2
DEC 28-FEB 01	2.97	4.3	27	.4	.04	.14	.80	5.1	1	2	.03	.35	.56
FEB 01-27	1.61	5.6	22	.6	.06	.04	2.38	2.5	2	2	.17	.32	.73
FEB 27-MAR 29	2.09	6.0	29	1.6	.37	.13	2.11	2.4	3	3	.22	.45	.89
MAR 29-APR 30	3.44	4.3	34	.8	.14	.09	.20	5.7	.4	5	.76	1.2	.74
APR 30-MAY 29	5.87	4.2	31	.7	.16	.14	.06	5.4	<.5	6	.87	1.6	.90
MAY 29-JUN 28	4.29	3.9	49	.8	.27	.42	.08	9.8	.8	9	1.5	2.8	1.2
JUN 28-JUL 31	1.59	4.6	15	.6	.11	.12	.03	4.5	<.2	3	.29	.66	1.1

Date	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
SEP 28-OCT 31	.793	1.05	7	10
OCT 31-NOV 30	.008	.015	6	15
NOV 30-DEC 28	.003	.010	21	10
DEC 28-FEB 01	.003	.010	2	<5
FEB 01-27	<.003	.008	11	15
FEB 27-MAR 29	.008	.031	12	10
MAR 29-APR 30	.005	.051	4	17
APR 30-MAY 29	.008	.059	9	13
MAY 29-JUN 28	.056	.151	9	14
JUN 28-JUL 31	<.003	.031	5	11

GENESEE RIVER BASIN

430117077350101 AT MENDON PONDS, ROCHESTER, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

MONTHLY BULK

Date	PRECIP-ITATION TOTAL INCHES (00045)	PH WATER WHOLE LAB (STAND-ARD UNITS) (00403)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ACIDITY (MG/L AS CACO3) (00435)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)
SEP 28-OCT 31	2.28	6.1	3	<.2	<.01	.02	<.01	2.3	<.2	.6	.10	.15	.09
OCT 31-NOV 30	1.90	5.0	12	.6	.11	.06	.03	5.8	<.2	2	.43	.52	.54
NOV 30-DEC 28	1.72	4.8	13	.2	.09	.04	.19	2.2	.4	1	.27	.50	.32
DEC 28-FEB 01	2.97	4.4	29	.5	.04	.01	.99	2.8	1	2	.32	.38	.68
FEB 01-27	1.61	5.1	14	.4	.06	<.01	.77	2.4	1	1	.27	.38	.43
FEB 27-MAR 29	2.09	4.7	21	1.0	.18	.03	.79	3.2	1	2	.31	.43	.79
MAR 29-APR 30	3.44	4.6	15	.5	.06	.04	.20	2.8	.4	2	.35	.38	.39
APR 30-MAY 29	5.87	4.5	17	.3	.11	.05	.03	5.0	<.5	3	.45	.58	.54
MAY 29-JUN 28	4.29	4.4	49	<.2	.10	.09	.02	4.7	.2	2	.39	.88	.43
JUN 28-JUL 31	1.59	6.8	23	.8	.16	.49	.08	4.5	.4	2	1.6	2.5	.45
JUL 31-AUG 29	.84	6.2	19	1.3	.35	.18	.06	3.0	.4	3	.67	1.1	.65
AUG 29-OCT 01	2.61	5.9	13	.6	.24	1.26	.02	4.5	<.5	1	.14	.48	.43

Date	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
SEP 28-OCT 31	.005	.005	3	<5
OCT 31-NOV 30	.003	.010	4	10
NOV 30-DEC 28	.026	.045	3	<5
DEC 28-FEB 01	.026	.005	5	5
FEB 01-27	<.003	<.005	3	5
FEB 27-MAR 29	<.003	.010	5	5
MAR 29-APR 30	.003	.010	<2	<5
APR 30-MAY 29	<.003	.022	5	10
MAY 29-JUN 28	.009	.062	<2	4
JUN 28-JUL 31	.170	.203	3	5
JUL 31-AUG 29	.030	.076	3	10
AUG 29-OCT 01	.106	.146	3	9

430836077314101 AT INDIAN LANDING SCHOOL, ROCHESTER, NY

LOCATION.--Lat 43°08'36", long 77°31'41", Monroe County, Hydrologic Unit 04140101, at Indian Landing School, about 200 ft east of North Landing Road.

PERIOD OF RECORD.--Water years 1998 to current year.
Dustfall data: Water years 1998 to current year, monthly.
Wetfall data: Water years 1998 to current year, monthly.

INSTRUMENTATION.--Wet/dry precipitation collector used for wetfall and dustfall samples. An automatic sensor detects precipitation and activates a motor that removes the cover from the wetfall-collection vessel and covers the dustfall-collection vessel. When precipitation ceases, the cycle is reversed. The sampling vessels are polyethlyene and have a collection diameter of 11.26 inches and a capacity of about 3.4 gallons. The openings of the collectors are approximately 8 ft above ground level.

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

REMARKS.--Prior to the 1998 water year, data collected at a site (431021077315902) in the Irondequoit Wetlands 1,350 ft south of New York State Highway 404. Water-quality records for this site were collected and reported in local standard time.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

MONTHLY DUSTFALL

Date	PRECIP-ITATION TOTAL INCHES (00045)	PH WATER WHOLE LAB (STAND-ARD UNITS) (00403)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ACIDITY (MG/L AS CACO3) (00435)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)
SEP 28-OCT 31	--	6.2	18	1.4	.35	.54	.12	2.3	.37	3	.25	.84	.52
OCT 31-NOV 30	--	5.7	11	1.0	.17	.06	.08	1.8	<.20	2	.09	<.10	.39
NOV 30-DEC 28	--	4.5	25	.6	.28	.03	.29	4.5	.60	3	.53	.80	.67
DEC 28-FEB 01	--	4.3	43	1.1	.35	.03	1.69	4.8	3	4	.66	.80	.99
FEB 01-27	--	5.4	39	1.2	.67	.06	3.16	2.5	5	3	.83	1.2	1.1
FEB 27-APR 01	--	5.9	82	4.4	1.61	.46	3.62	4.2	6	12	1.4	2.9	2.8
APR 01-30	--	6.2	84	1.4	.36	.12	.41	5.2	2	16	3.0	5.2	2.4

Date	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
SEP 28-OCT 31	.099	.210	12	20
OCT 31-NOV 30	.006	.030	12	25
NOV 30-DEC 28	.006	.015	16	15
DEC 28-FEB 01	.006	.015	8	15
FEB 01-27	.007	.021	16	20
FEB 27-APR 01	.132	.210	19	48
APR 01-30	.227	.446	16	39

Note: Monthly dustfall samples are dissolved in one liter of deionized water for analysis and concentrations are reported on a per liter basis. Thus, a reported calcium concentration of 1.0 mg/L would mean that 1.0 mg of calcium accumulated in the sampler.

IRONDEQUOIT CREEK BASIN

430836077314101 AT INDIAN LANDING SCHOOL, ROCHESTER, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

MONTHLY WETFALL

Date	PRECIP- ITATION TOTAL INCHES (00045)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ACIDITY (MG/L AS CACO3) (00435)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)
SEP 28-OCT 31	--	4.5	32	1.0	.28	.21	.09	4.8	.40	5	.72	.90	.77
OCT 31-NOV 30	--	4.2	31	.6	.17	.04	.06	5.2	.40	4	.76	.69	.89
NOV 30-DEC 28	--	4.2	25	.3	.17	.03	.20	4.5	.40	2	.46	.42	.62
DEC 28-FEB 01	--	4.4	28	.6	.15	.03	.99	3.4	1	2	.48	.62	.69
FEB 01-27	--	5.5	78	2.8	.73	.15	8.97	2.5	11	7	1.3	3.0	1.9
FEB 27-APR 01	--	4.3	57	2.6	.87	.13	2.21	5.3	3	7	.97	1.6	1.8
APR 01-30	--	4.0	50	1.4	.37	.12	.41	7.1	.7	8	1.2	1.9	1.1
APR 30-MAY 29	--	5.3	50	2.3	.81	.57	.10	5.9	<.5	11	2.1	4.1	1.6
MAY 29-JUN 28	--	3.9	71	1.5	.40	.17	.12	10	.4	10	1.0	2.7	1.4
JUN 28-JUL 31	--	6.3	53	4.6	1.47	.29	.11	3.5	.5	13	.82	1.7	1.7
JUL 31-AUG 29	--	6.2	55	4.9	1.60	.18	.15	3.0	.5	14	.17	1.2	1.6
AUG 29-OCT 01	--	6.2	17	1.3	.48	.08	.01	2.7	<.5	3	.08	.29	.39

Date	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
SEP 28-OCT 31	.005	.030	13	10
OCT 31-NOV 30	<.003	.010	4	10
NOV 30-DEC 28	<.003	.010	16	10
DEC 28-FEB 01	<.003	.010	6	10
FEB 01-27	.099	.044	24	40
FEB 27-APR 01	.018	.052	18	24
APR 01-30	.010	.060	12	46
APR 30-MAY 29	.149	.029	8	42
MAY 29-JUN 28	<.003	.076	6	16
JUN 28-JUL 31	.022	.133	22	39
JUL 31-AUG 29	.005	.139	16	26
AUG 29-OCT 01	.004	.044	5	12